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Naval Facilities Engineering Command

Groundwater Sample Results
Level 2 Laboratory Report, Level 4 Laboratory Report, Data Validation Report, and the Sample Location Report, SDG 18-0497

Naval Air Station North Island
Coronado, California

December 2019

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Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-01				
Battelle ID	J7248-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.275				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	219.71	D	4.32	11.36	113.64
PFHpA	47.65		0.15	0.47	4.73
PFOA	46.73		0.17	0.47	4.73
PFNA	0.95	U	0.25	0.95	4.73
PFDA	0.47	U	0.15	0.47	4.73
PFUnA	0.95	U	0.27	0.95	4.73
PFDoA	0.47	U	0.17	0.47	4.73
PFTrDA	0.47	U	0.14	0.47	4.73
PFTeDA	0.95	U	0.24	0.95	4.73
NMeFOSAA	1.89	U	0.53	1.89	4.73
NEtFOSAA	0.95	U	0.46	0.95	4.73
PFBS	134.06	D	2.95	11.36	113.64
PFHxS	130.56	D	2.50	9.09	113.64
PFOS	0.82	J	0.18	0.47	4.73
Surrogate Recoveries (%)					
13C5-PFHxA	116	D			
13C4-PFHpA	120				
13C8-PFOA	94				
13C9-PFNA	95				
13C6-PFDA	113				
13C7-PFUnA	108				
13C2-PFDoA	95				
13C2-PFTeDA	90				
d3-MeFOSAA	113				
d5-EtFOSAA	100				
13C3-PFBS	140	D			
13C3-PFHxS	108	D			
13C8-PFOS	98				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-02				
Battelle ID	J7249-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.280				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	2199.76	D	21.21	55.80	558.04
PFHpA	671.85	D	3.57	11.16	111.61
PFOA	1988.81	D	20.09	55.80	558.04
PFNA	0.62	J	0.24	0.93	4.65
PFDA	0.46	U	0.15	0.46	4.65
PFUnA	0.93	U	0.27	0.93	4.65
PFDoA	0.46	U	0.17	0.46	4.65
PFTrDA	0.46	U	0.14	0.46	4.65
PFTeDA	0.93	U	0.23	0.93	4.65
NMeFOSAA	1.86	U	0.52	1.86	4.65
NEtFOSAA	0.93	U	0.46	0.93	4.65
PFBS	312.32	D	2.90	11.16	111.61
PFHxS	1069.93	D	2.46	8.93	111.61
PFOS	121.96	D	0.88	2.33	23.25
Surrogate Recoveries (%)					
13C5-PFHxA	108	D			
13C4-PFHpA	111	D			
13C8-PFOA	115	D			
13C9-PFNA	96	D			
13C6-PFDA	110				
13C7-PFUnA	112				
13C2-PFDoA	95				
13C2-PFTeDA	90				
d3-MeFOSAA	134				
d5-EtFOSAA	124				
13C3-PFBS	140	D			
13C3-PFHxS	121	D			
13C8-PFOS	74	D			

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-03				
Battelle ID	J7250-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.285				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	151.08	D	4.17	10.96	109.65
PFHpA	29.83		0.15	0.46	4.57
PFOA	33.32		0.16	0.46	4.57
PFNA	0.38	J	0.24	0.91	4.57
PFDA	0.46	U	0.15	0.46	4.57
PFUnA	0.91	U	0.26	0.91	4.57
PFDoA	0.46	U	0.16	0.46	4.57
PFTrDA	0.46	U	0.14	0.46	4.57
PFTeDA	0.91	U	0.23	0.91	4.57
NMeFOSAA	1.83	U	0.51	1.83	4.57
NEtFOSAA	0.91	U	0.45	0.91	4.57
PFBS	45.51		0.12	0.46	4.57
PFHxS	52.18		0.10	0.37	4.57
PFOS	4.88		0.17	0.46	4.57

Surrogate Recoveries (%)

13C5-PFHxA	101	D
13C4-PFHpA	91	
13C8-PFOA	84	
13C9-PFNA	91	
13C6-PFDA	101	
13C7-PFUnA	102	
13C2-PFDoA	95	
13C2-PFTeDA	101	
d3-MeFOSAA	133	
d5-EtFOSAA	119	
13C3-PFBS	70	
13C3-PFHxS	110	
13C8-PFOS	110	

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-04				
Battelle ID	J7251-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.285				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	848.37	D	4.17	10.96	109.65
PFHpA	49.66		0.15	0.46	4.57
PFOA	64.18		0.16	0.46	4.57
PFNA	0.53	J	0.24	0.91	4.57
PFDA	0.37	J	0.15	0.46	4.57
PFUnA	0.91	U	0.26	0.91	4.57
PFDoA	0.46	U	0.16	0.46	4.57
PFTrDA	0.46	U	0.14	0.46	4.57
PFTeDA	0.91	U	0.23	0.91	4.57
NMeFOSAA	1.83	U	0.51	1.83	4.57
NEtFOSAA	0.91	U	0.45	0.91	4.57
PFBS	180.63	D	2.85	10.96	109.65
PFHxS	201.18	D	2.41	8.77	109.65
PFOS	26.14		0.17	0.46	4.57
Surrogate Recoveries (%)					
13C5-PFHxA	118	D			
13C4-PFHpA	91				
13C8-PFOA	96				
13C9-PFNA	106				
13C6-PFDA	115				
13C7-PFUnA	107				
13C2-PFDoA	105				
13C2-PFTeDA	95				
d3-MeFOSAA	123				
d5-EtFOSAA	128				
13C3-PFBS	171	ND			
13C3-PFHxS	123	D			
13C8-PFOS	99				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-05				
Battelle ID	J7252-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.290				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	0.43	U	0.16	0.43	4.31
PFHpA	0.33	J	0.14	0.43	4.31
PFOA	1.26	J	0.16	0.43	4.31
PFNA	0.26	J	0.22	0.86	4.31
PFDA	0.27	J	0.14	0.43	4.31
PFUnA	0.86	U	0.25	0.86	4.31
PFDoA	0.43	U	0.16	0.43	4.31
PFTrDA	0.43	U	0.13	0.43	4.31
PFTeDA	0.86	U	0.22	0.86	4.31
NMeFOSAA	1.72	U	0.48	1.72	4.31
NEtFOSAA	0.86	U	0.42	0.86	4.31
PFBS	0.43	U	0.11	0.43	4.31
PFHxS	0.34	U	0.09	0.34	4.31
PFOS	0.38	J	0.16	0.43	4.31

Surrogate Recoveries (%)

13C5-PFHxA	98
13C4-PFHpA	102
13C8-PFOA	108
13C9-PFNA	104
13C6-PFDA	105
13C7-PFUnA	108
13C2-PFDoA	99
13C2-PFTeDA	92
d3-MeFOSAA	129
d5-EtFOSAA	110
13C3-PFBS	101
13C3-PFHxS	116
13C8-PFOS	111

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-06
Battelle ID	J7253-FS
Sample Type	SA
Collection Date	07/30/2018
Extraction Date	08/08/2018
Analysis Date	08/16/2018
Analytical Instrument	Sciex 5500 LC/MS/MS
% Moisture	NA
Matrix	GW
Sample Size	0.290
Size Unit-Basis	L

Units	ng/L		MDL	LOD	LOQ
PFHxA	0.43	U	0.16	0.43	4.31
PFHpA	0.33	J	0.14	0.43	4.31
PFOA	1.41	J	0.16	0.43	4.31
PFNA	0.28	J	0.22	0.86	4.31
PFDA	0.26	J	0.14	0.43	4.31
PFUnA	0.86	U	0.25	0.86	4.31
PFDoA	0.43	U	0.16	0.43	4.31
PFTrDA	0.43	U	0.13	0.43	4.31
PFTeDA	0.86	U	0.22	0.86	4.31
NMeFOSAA	1.72	U	0.48	1.72	4.31
NEtFOSAA	0.86	U	0.42	0.86	4.31
PFBS	0.43	U	0.11	0.43	4.31
PFHxS	0.12	J	0.09	0.34	4.31
PFOS	0.52	J	0.16	0.43	4.31

Surrogate Recoveries (%)

13C5-PFHxA	80
13C4-PFHpA	89
13C8-PFOA	92
13C9-PFNA	83
13C6-PFDA	110
13C7-PFUnA	102
13C2-PFDoA	93
13C2-PFTeDA	90
d3-MeFOSAA	99
d5-EtFOSAA	106
13C3-PFBS	98
13C3-PFHxS	95
13C8-PFOS	103

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-07				
Battelle ID	J7254-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.285				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	0.44	U	0.17	0.44	4.39
PFHpA	0.33	J	0.14	0.44	4.39
PFOA	1.48	J	0.16	0.44	4.39
PFNA	0.88	U	0.23	0.88	4.39
PFDA	0.44	U	0.14	0.44	4.39
PFUnA	0.88	U	0.25	0.88	4.39
PFDoA	0.44	U	0.16	0.44	4.39
PFTrDA	0.44	U	0.13	0.44	4.39
PFTeDA	0.88	U	0.22	0.88	4.39
NMeFOSAA	1.75	U	0.49	1.75	4.39
NEtFOSAA	0.88	U	0.43	0.88	4.39
PFBS	0.44	U	0.11	0.44	4.39
PFHxS	0.14	J	0.10	0.35	4.39
PFOS	0.62	J	0.17	0.44	4.39

Surrogate Recoveries (%)

13C5-PFHxA	59
13C4-PFHpA	65
13C8-PFOA	63
13C9-PFNA	63
13C6-PFDA	65
13C7-PFUnA	63
13C2-PFDoA	57
13C2-PFTeDA	59
d3-MeFOSAA	74
d5-EtFOSAA	57
13C3-PFBS	55
13C3-PFHxS	62
13C8-PFOS	70

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073118-01				
Battelle ID	J7255-FS				
Sample Type	SA				
Collection Date	07/31/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.290				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	1456.69	D	4.09	10.78	107.76
PFHpA	129.65		0.14	0.45	4.49
PFOA	80.81		0.16	0.45	4.49
PFNA	0.35	J	0.23	0.90	4.49
PFDA	0.45	U	0.14	0.45	4.49
PFUnA	0.90	U	0.26	0.90	4.49
PFDoA	0.45	U	0.16	0.45	4.49
PFTrDA	0.45	U	0.13	0.45	4.49
PFTeDA	0.90	U	0.22	0.90	4.49
NMeFOSAA	1.80	U	0.50	1.80	4.49
NEtFOSAA	0.90	U	0.44	0.90	4.49
PFBS	315.10	D	2.80	10.78	107.76
PFHxS	194.25	D	2.37	8.62	107.76
PFOS	4.33	J	0.17	0.45	4.49
Surrogate Recoveries (%)					
13C5-PFHxA	108	D			
13C4-PFHpA	77				
13C8-PFOA	78				
13C9-PFNA	88				
13C6-PFDA	86				
13C7-PFUnA	92				
13C2-PFDoA	86				
13C2-PFTeDA	69				
d3-MeFOSAA	90				
d5-EtFOSAA	113				
13C3-PFBS	134	D			
13C3-PFHxS	111	D			
13C8-PFOS	81				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073118-02				
Battelle ID	J7256-FS				
Sample Type	SA				
Collection Date	07/31/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.280				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	168.38	D	4.24	11.16	111.61
PFHpA	49.62		0.15	0.46	4.65
PFOA	8.01		0.17	0.46	4.65
PFNA	0.93	U	0.24	0.93	4.65
PFDA	0.46	U	0.15	0.46	4.65
PFUnA	0.93	U	0.27	0.93	4.65
PFDoA	0.46	U	0.17	0.46	4.65
PFTrDA	0.46	U	0.14	0.46	4.65
PFTeDA	0.93	U	0.23	0.93	4.65
NMeFOSAA	1.86	U	0.52	1.86	4.65
NEtFOSAA	0.93	U	0.46	0.93	4.65
PFBS	20.30		0.12	0.46	4.65
PFHxS	73.39		0.10	0.37	4.65
PFOS	0.94	J	0.18	0.46	4.65
Surrogate Recoveries (%)					
13C5-PFHxA	109	D			
13C4-PFHpA	108				
13C8-PFOA	101				
13C9-PFNA	104				
13C6-PFDA	106				
13C7-PFUnA	112				
13C2-PFDoA	91				
13C2-PFTeDA	80				
d3-MeFOSAA	103				
d5-EtFOSAA	98				
13C3-PFBS	62				
13C3-PFHxS	99				
13C8-PFOS	107				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073118-03				
Battelle ID	J7257-FS				
Sample Type	SA				
Collection Date	07/31/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.290				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	1982.36	D	40.95	107.76	1077.59
PFHpA	1173.74	D	3.45	10.78	107.76
PFOA	119.69	D	3.88	10.78	107.76
PFNA	0.35	J	0.23	0.90	4.49
PFDA	0.45	U	0.14	0.45	4.49
PFUnA	0.90	U	0.26	0.90	4.49
PFDoA	0.45	U	0.16	0.45	4.49
PFTrDA	0.45	U	0.13	0.45	4.49
PFTeDA	0.90	U	0.22	0.90	4.49
NMeFOSAA	1.80	U	0.50	1.80	4.49
NEtFOSAA	0.90	U	0.44	0.90	4.49
PFBS	202.01	D	2.80	10.78	107.76
PFHxS	1031.92	D	2.37	8.62	107.76
PFOS	2.91	J	0.17	0.45	4.49
Surrogate Recoveries (%)					
13C5-PFHxA	96	D			
13C4-PFHpA	132	D			
13C8-PFOA	120	D			
13C9-PFNA	106	D			
13C6-PFDA	123	D			
13C7-PFUnA	119	D			
13C2-PFDoA	111	D			
13C2-PFTeDA	109	D			
d3-MeFOSAA	143	D			
d5-EtFOSAA	141	D			
13C3-PFBS	148	D			
13C3-PFHxS	140	D			
13C8-PFOS	142	D			

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073118-04				
Battelle ID	J7258-FS				
Sample Type	SA				
Collection Date	07/31/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.280				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	533.80	D	4.24	11.16	111.61
PFHpA	41.94		0.15	0.46	4.65
PFOA	77.86		0.17	0.46	4.65
PFNA	1.36	J	0.24	0.93	4.65
PFDA	0.36	J	0.15	0.46	4.65
PFUnA	0.93	U	0.27	0.93	4.65
PFDoA	0.46	U	0.17	0.46	4.65
PFTrDA	0.46	U	0.14	0.46	4.65
PFTeDA	0.93	U	0.23	0.93	4.65
NMeFOSAA	1.86	U	0.52	1.86	4.65
NEtFOSAA	0.93	U	0.46	0.93	4.65
PFBS	453.11	D	2.90	11.16	111.61
PFHxS	354.89	D	2.46	8.93	111.61
PFOS	57.74		0.18	0.46	4.65
Surrogate Recoveries (%)					
13C5-PFHxA	107	D			
13C4-PFHpA	120	D			
13C8-PFOA	105	D			
13C9-PFNA	93	D			
13C6-PFDA	101				
13C7-PFUnA	100				
13C2-PFDoA	96				
13C2-PFTeDA	75				
d3-MeFOSAA	113				
d5-EtFOSAA	118				
13C3-PFBS	127	D			
13C3-PFHxS	122	D			
13C8-PFOS	98				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	080118-01
Battelle ID	J7259-FS
Sample Type	SA
Collection Date	08/01/2018
Extraction Date	08/08/2018
Analysis Date	08/16/2018
Analytical Instrument	Sciex 5500 LC/MS/MS
% Moisture	NA
Matrix	GW
Sample Size	0.275
Size Unit-Basis	L

Units	ng/L	MDL	LOD	LOQ
PFHxA	0.40 J	0.17	0.45	4.55
PFHpA	0.39 J	0.15	0.45	4.55
PFOA	1.64 J	0.16	0.45	4.55
PFNA	0.26 J	0.24	0.91	4.55
PFDA	0.30 J	0.15	0.45	4.55
PFUnA	0.91 U	0.26	0.91	4.55
PFDoA	0.45 U	0.16	0.45	4.55
PFTrDA	0.45 U	0.14	0.45	4.55
PFTeDA	0.91 U	0.23	0.91	4.55
NMeFOSAA	1.82 U	0.51	1.82	4.55
NEtFOSAA	0.91 U	0.45	0.91	4.55
PFBS	0.35 J	0.12	0.45	4.55
PFHxS	0.52 J	0.10	0.36	4.55
PFOS	0.79 J	0.17	0.45	4.55

Surrogate Recoveries (%)

13C5-PFHxA	128
13C4-PFHpA	132
13C8-PFOA	139
13C9-PFNA	127
13C6-PFDA	136
13C7-PFUnA	128
13C2-PFDoA	113
13C2-PFTeDA	107
d3-MeFOSAA	128
d5-EtFOSAA	140
13C3-PFBS	114
13C3-PFHxS	141
13C8-PFOS	147

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	080118-02			
Battelle ID	J7260-FS			
Sample Type	SA			
Collection Date	08/01/2018			
Extraction Date	08/08/2018			
Analysis Date	08/16/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.280			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFHxA	4.91	0.17	0.45	4.46
PFHpA	0.97 J	0.14	0.45	4.46
PFOA	1.98 J	0.16	0.45	4.46
PFNA	0.27 J	0.23	0.89	4.46
PFDA	0.27 J	0.14	0.45	4.46
PFUnA	0.89 U	0.26	0.89	4.46
PFDoA	0.45 U	0.16	0.45	4.46
PFTrDA	0.45 U	0.13	0.45	4.46
PFTeDA	0.89 U	0.22	0.89	4.46
NMeFOSAA	1.79 U	0.50	1.79	4.46
NEtFOSAA	0.89 U	0.44	0.89	4.46
PFBS	0.44 J	0.12	0.45	4.46
PFHxS	1.26 J	0.10	0.36	4.46
PFOS	2.43 J	0.17	0.45	4.46

Surrogate Recoveries (%)

13C5-PFHxA	107
13C4-PFHpA	120
13C8-PFOA	116
13C9-PFNA	128
13C6-PFDA	125
13C7-PFUnA	120
13C2-PFDoA	108
13C2-PFTeDA	104
d3-MeFOSAA	81
d5-EtFOSAA	86
13C3-PFBS	136
13C3-PFHxS	135
13C8-PFOS	124

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	080118-03
Battelle ID	J7261-FS
Sample Type	SA
Collection Date	08/01/2018
Extraction Date	08/08/2018
Analysis Date	08/16/2018
Analytical Instrument	Sciex 5500 LC/MS/MS
% Moisture	NA
Matrix	GW
Sample Size	0.280
Size Unit-Basis	L

Units	ng/L		MDL	LOD	LOQ
PFHxA	4.77		0.17	0.45	4.46
PFHpA	1.00	J	0.14	0.45	4.46
PFOA	2.37	J	0.16	0.45	4.46
PFNA	0.27	J	0.23	0.89	4.46
PFDA	0.27	J	0.14	0.45	4.46
PFUnA	0.89	U	0.26	0.89	4.46
PFDoA	0.45	U	0.16	0.45	4.46
PFTrDA	0.45	U	0.13	0.45	4.46
PFTeDA	0.89	U	0.22	0.89	4.46
NMeFOSAA	1.79	U	0.50	1.79	4.46
NEtFOSAA	0.89	U	0.44	0.89	4.46
PFBS	0.56	J	0.12	0.45	4.46
PFHxS	1.65	J	0.10	0.36	4.46
PFOS	5.08		0.17	0.45	4.46

Surrogate Recoveries (%)

13C5-PFHxA	103
13C4-PFHpA	108
13C8-PFOA	112
13C9-PFNA	115
13C6-PFDA	121
13C7-PFUnA	117
13C2-PFDoA	100
13C2-PFTeDA	97
d3-MeFOSAA	85
d5-EtFOSAA	92
13C3-PFBS	126
13C3-PFHxS	119
13C8-PFOS	130

Operable Unit 11 NAS North Island
Project No 100095675
PFAS by DoD QSM 5.1 Table B-15

GW

Batch 18-0497

Package DP-18-0212

Submitted to:
Battelle
505 King Ave.
Columbus, OH 43201 USA

Submitted by:
Battelle Norwell Operations
141 Longwater Drive Suite 202
Norwell, MA 02061

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Operable Unit 11 NAS North Island
Project No 100095675
PFAS by DoD QSM 5.1 Table B-15

GW

Batch 18-0497

Package DP-18-0212

Submitted to:
Battelle
505 King Ave.
Columbus, OH 43201 USA

NELAP Accreditation Number: E87856 (Florida Department of Health)
DoD-ELAP Accreditation Number: 91667

Submitted by:
Battelle Norwell Operations
141 Longwater Drive Suite 202
Norwell, MA 02061

Analyst Approval: Lauren M. Griffith — Lauren Griffith 2018.08.27 12:42:46 -04'00'

QC Chemist Approval: Carla Devine — Digitally signed by devinec@battelle.org DN: cn=devinec@battelle.org Date: 2018.08.30 16:34:06 -04'00'

Project Manager Approval: Digitally signed by Jonathan Thorn Date: 2018.08.30 23:19:47 -04'00'

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Operable Unit 11 NAS North Island
Project No 100095675
PFAS by DoD QSM 5.1 Table B-15

GW

Batch 18-0497

Package DP-18-0212

1	***Work Plan*** Laboratory Work Plan, Addendums To Work Plan, Memos From Project Manager, Special Instructions, Chain-of-Custody Reports.	1
2	***Tables*** Analytical Data Tables, Qualifier Definitions.	18
3	***Miscellaneous Documentation*** Case Narrative, Miscellaneous Documentation Form, Quality Control Summary, Example Calculations, Internal Standard Recovery Report, Retention Time Window Report.	41
4	***Sample Preparation Records*** Sample Preparation Records, Dilution Worksheets, Standard Preparation Records, Certificates Of Analysis, GPC Check Report.	207
5	***Analytical Calibrations*** Analytical Sequence, Analytical Method, Tune Report, Initial Calibration, Pesticide Degradation Report, RF Summary, Calibration Verifications, Independent Calibration Verification Check.	233
6	***Analytical Data*** Raw Data Quantification Reports.	475
7	***Chromatograms*** Sample And Standard Chromatograms.	675
8	***Unused Data***	943

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Signature Page

Battelle 2018 (1 of 2)
Signature Page

Name (Printed)	Signature	Initials	Date
Jonathan Thorn		JRT	4/4/2018
Robert Lizotte, Jr.		BL	4.4.2018
FRANCO PALA	Franco Pala	FP	4.4.2018
Carla Devine	Carla Devine	CRD	4/4/18
Denise Schumitz	Denise Schumitz	DMS	4/4/18
Carolus Brunmeay		CBM	4/4/2018
Rich Rostucci		RR	4/4/2018
Michael Mera			4/4/2018
Christie Usher	Christie Usher	CU	4/4/18
Kevin McInerney		KM	4/4/18
Stephanie Schultz		SAS	4/4/18
Jordan Tower	Jordan Tower	JCT	4/4/18
KRISTEN NICHOLS	K Nichols	KN	4/4/18
Quintico H Brown		CB	4/4/18
Matt Schumitz		MS	4-4-18
Sam Guimaraes		SG	4-4-18
Lauren Griffith	Lauren M Griffith	LMG	4.4.18

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Signature Page

Battelle 2018 (2 of 2)
Signature Page

Name (Printed)	Signature	Initials	Date
KAVITHA DASU		KD	04/04/18
Kayla Lamarre		KAL	04/04/18
Weidong Li		W.L	04/04/18
Tracy W Stenner		TWS	04/04/18
Ellyn M Fitch		EMF	12-April-2018
Gail DeRuzzo		GD	4/18/18
Zachary Willenberg		ZW	4/20/18

Sample Summary

Client: Battelle
SDG: 18-0497
Project/Site: Operable Unit 11, Naval Air Station North Island, Coronado, CA
CTO: N6247318F4159

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CR546PB-FS	Procedural Blank	WATER	8/8/2018	8/8/2018
CR547LCS-FS	Laboratory Control Sample	WATER	8/8/2018	8/8/2018
J7248-FS	073018-01	GW	7/30/2018	8/2/2018
J7249-FS	073018-02	GW	7/30/2018	8/2/2018
J7249MS-FS	073018-02	GW	7/30/2018	8/2/2018
J7249MSD-FS	073018-02	GW	7/30/2018	8/2/2018
J7250-FS	073018-03	GW	7/30/2018	8/2/2018
J7251-FS	073018-04	GW	7/30/2018	8/2/2018
J7252-FS	073018-05	GW	7/30/2018	8/2/2018
J7253-FS	073018-06	GW	7/30/2018	8/2/2018
J7254-FS	073018-07	GW	7/30/2018	8/2/2018
J7255-FS	073118-01	GW	7/31/2018	8/2/2018
J7256-FS	073118-02	GW	7/31/2018	8/2/2018
J7257-FS	073118-03	GW	7/31/2018	8/2/2018
J7258-FS	073118-04	GW	7/31/2018	8/2/2018
J7259-FS	080118-01	GW	8/1/2018	8/2/2018
J7260-FS	080118-02	GW	8/1/2018	8/2/2018
J7261-FS	080118-03	GW	8/1/2018	8/2/2018

Work Plan

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WORK/QUALITY ASSURANCE PROJECT PLAN

1.0 GENERAL PROJECT INFORMATION

Project Title:	OU 11 NAS North Island - PFAS Analysis
Project Number:	100095675
Client:	Battelle 505 King Avenue Columbus, OH 43201 USA
Client Contact Information:	Pamela Chang Program Manager (714) 313-9067(V) NA NA
Effective Date of QAPP:	8/8/2018
Version Number:	100095675(L)-01
Project Manager:	Thorn, Jonathan
Laboratory Task Manager:	Thorn, Jonathan
Deliverable Due Date:	8/31/2018

2.0 SCOPE OF WORK

Overview:	Analysis of non-potable water for PFAS from samples collected at Operable Unit 11, Naval Air Station North Island, Coronado, CA. Charge time to activity ID FZ02W81EURO.
Matrix:	Water

2.1 TECHNICAL APPROACH

2.1.1 Sample Receipt, Storage, and Handling

The list of samples for this project plan are presented in Attachment 1.

Storage Directions:	Store samples refrigerated.
Sub_Sampling:	None
Procedures:	NA
Contact:	NA
Comment:	None
Archiving:	Store unexpended samples for six months. Notify client prior to disposal of any samples.

Disposal: Dispose of excess samples in appropriate waste stream.

2.1.2 Sample Preparation

None

Samples Expected:	Samples Per Batch:	Batches Expected:
13	20	1

Batch quality control samples are defined in Table 1.

Target samples are presented in Attachment 1.

Table 1: Quality Control Samples

Type:	*Description:*	*Count:*	*Rgt:*	*Reference:*	*Comment:*
PB	Laboratory control reagent blank.	1 per batch	--	NA	
LCS	Laboratory Control Sample	1 per batch	No	NA	
MS	Spiked field sample for determining method accuracy in the presence of matrix.	1 per batch	--	NA	
MSD	Spiked field sample for determining method accuracy and precision in the presence of matrix.	1 per batch	--	NA	

2.1.3 Extraction/Preparation

2.1.3.1 Extraction

SOP No.-Rev: **5-370-06**

SOP Title: *Extraction of Poly and Perfluoroalkyl Substances from Environmental Matrices*

Sample Size: 250 ml

SIS and LCS/MS Compounds: Defined in Table 2.

Deviations: None

Comments: None

Table 2: SIS and LCS/MS Spiking Level

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - DoD Low Level Labelled	JY28 SIS	~ 0.250 ng	50 uL	NA

Standard Type	Standard Contents		Spike Amount (ng)	Volume (uL)	Comment
Extracted Internal Standards (SIS)					
PFAS - DoD Second Source LCS/MS Solution	JZ27	LCS/MS	~ 7.5 ng	150 uL	MS/MSD samples only
PFAS - DoD Second Source LCS/MS Solution	JZ27	LCS/MS	~ 2.50 ng	50 uL	LCS Sample only

2.1.3.2 Cleanup

None.

RIS spiking levels are presented in Table 3.

Extract PIV (uL): 500

Table 3: RIS Spiking Level

Standard Type	Standard Contents		Spike Amount (ng)	Volume (uL)	Comment
PFAS - DoD Internal Standard Spiking Solution	JY26	RIS	~ 0.125 ng	25 uL	NA

2.1.4 Instrumental Analysis

The list of analytes along with data quality criteria are presented in Attachment 2.

1) SOP_No-Rev: **5-369-06**

SOP_Title: *Analysis of Perfluoroalkyl Substances in Environmental Samples by Liquid Chromatography and Tandem Mass Spectrometry (LC-MS/MS)*

Deviations: None

Comments: None

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WORK/QUALITY ASSURANCE PROJECT PLAN

2.2. DELIVERABLES

Deliverables Due:	8/31/2018
LIMS Reports:	*Yes*
Histograms:	*No*
Excel Tables:	*Yes*
EICs:	*No*
Chromatograms:	*Yes*
EDDs:	*Yes*
Comments:	• Level IV validation package to QSM 5.1 Table B-15 • NIRIS EDD format

3.0 QUALITY

The Method Quality Objectives are defined in Attachment 3.

4.0 ORGANIZATION AND COMMUNICATION

4.1 ORGANIZATION

The project team is defined in Table 4. Supervisors may make substitutions with Project Manager concurrence.

Table 4: Project Team and Roles

Staff Member	Role	Comment
Jonathan R. Thorn	Project Manager	NA
Stephanie A. Schultz	Sample Preparation	NA
Denise M. Schumitz	LC-MS/MS Analysis	NA
Matt D. Schumitz	Sample Custody	NA
Carla R. Devine	Quality Control Officer	NA
Zachary J. Willenberg	Quality Assurance Officer	NA

4.2 COMMUNICATION

A kick-off meeting will be held to discuss project scope and goals.

5.0 SCHEDULE

The project schedule is presented in Table 5.

Table 5. Schedule of Laboratory Activities

Activity:	Start Date:	End Date:	TAT (days):	Comment:
Sample Receipt	08/02/2018	08/02/2018	0	NA
Sample Preparation	08/03/2018	08/07/2018	4	NA
Instrument Analysis	08/07/2018	08/17/2018	10	NA
Quality Control Review	08/17/2018	08/22/2018	5	NA
Final Data Reporting	08/28/2018	08/30/2018	2	NA
Quality Assurance Review	08/22/2018	08/28/2018	6	NA

6.0 BUDGET

The labor budget for the analytical task is presented in Table 6.

Table 6. Labor Budget (Laboratory Analytical Task)

Labor Activity:	Hours/ Batch:	Batches:	Total Hours:	Comment:
Sample Receipt	2	1	2	hours are for a batch of 20 samples.
Sample Preparation	8	1	8	hours are for a batch of 20 samples.
Instrument Analysis	8	1	8	hours are for a batch of 20 samples.
Quality Control Review	3	1	3	hours are for a batch of 20 samples.
Final Data Reporting	1	1	1	hours are for a batch of 20 samples.
Quality Assurance Review	1	1	1	hours are for a batch of 20 samples.

7.0 STAFF DEVELOPMENT

None anticipated.

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 1: Target Samples

Shipment: **SHP-180802-03**

Status: Pending

Description: NAS North Island, Coronado CA

Range: J7248-J7261

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	J7248	073018-01	07/30/2018 10:00 am	GW	R0119 (NA)			
2	J7249	073018-02	07/30/2018 11:30 am	GW	R0119 (NA)			MS-MSD
3	J7250	073018-03	07/30/2018 1:35 pm	GW	R0119 (NA)			
4	J7251	073018-04	07/30/2018 3:05 pm	GW	R0119 (NA)			
5	J7252	073018-05	07/30/2018 3:55 pm	GW	R0119 (NA)			
6	J7253	073018-06	07/30/2018 4:00 pm	GW	R0119 (NA)			
7	J7254	073018-07	07/30/2018 4:05 pm	GW	R0119 (NA)			
8	J7255	073118-01	07/31/2018 8:40 am	GW	R0119 (NA)			
9	J7256	073118-02	07/31/2018 11:00 am	GW	R0119 (NA)			
10	J7257	073118-03	07/31/2018 12:50 pm	GW	R0119 (NA)			
11	J7258	073118-04	07/31/2018 3:25 pm	GW	R0119 (NA)			
12	J7259	080118-01	08/01/2018 10:55 am	GW	R0119 (NA)			
13	J7260	080118-02	08/01/2018 1:15 pm	GW	R0119 (NA)			
14	J7261	080118-03	08/01/2018 3:00 pm	GW	R0119 (NA)			

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name:	Master_369
SOP Reference:	5-369 - Analysis of Perfluoroalkyl Substances in Environmental Samples by Liquid Chromatography and Tandem Mass Spectrometry (LC-MS/MS)
Description:	PFAS by DoD QSM 5.1 Table B-15
Matrix:	L - Liquid Samples, like water or sea water, prepared and anlyzed under the same class of detection limits.
Detection Limit Study:	5-369
Instrument:	LC-MS/MS
MQO Criteria	Universal_LC
Standard Report:	Standard Result Report

Method Specific Reporting				Holding Times (days)		Data Flags	
Result Units:	ng/L	***Unit Conversion:***	(none)	***Sample:***	14	***DL_Flag:***	U
Weight Basis:	LIQUID	***Result Format:***	Fixed Digits	***Frozen:***	14	***RL_Flag:***	J
Standard Basis:	SIS	***# of Figures/Digits:***	2	***Extract:***	28	***PB_Flag:***	B
Oil Weight Basis:	No	***Oil Weight Source:***	Oil Weight			***DIL_Flag:***	D
U-Value Substition:	U-Flag=MD	***Histograms:***	No			***HT_Flag:***	T
ECD_Reporting:	No						

No:	Analyte:	Report Name:	Type	RIS	SIS	Hidden:	Graph:
1	Perfluoro-n-hexanoic acid	PFHxA	T		13C5-PFHxA	No	No
2	Perfluoro-n-heptanoic Acid	PFHpA	T		13C4-PFHpA	No	No
3	Perfluoro-n-octanoic Acid	PFOA	T		13C8-PFOA	No	No
4	Perfluorononanoic Acid	PFNA	T		13C9-PFNA	No	No
5	Perfluoro-n-decanoic Acid	PFDA	T		13C6-PFDA	No	No
6	Perfluoro-n-undecanoic acid	PFUnA	T		13C7-PFUnA	No	No
7	Perfluoro-n-dodecanoic acid	PFDoA	T		13C2-PFDoA	No	No
8	Perfluoro-n-tridecanoic acid	PFTrDA	T		13C2-PFTeDA	No	No
9	Perfluoro-n-tetradecanoic acid	PFTeDA	T		13C2-PFTeDA	No	No
10	N-methylperfluoro-1-octanesulfonamidoacetic acid	NMeFOSAA	T		d3-MeFOSAA	No	No
11	N-ethylperfluoro-octanesulfonamidoacetic acid	NEtFOSAA	T		d5-EtFOSAA	No	No
12	Perfluoro-1-butanesulfonate	PFBS	T		13C3-PFBS	No	No
13	Perfluoro-1-hexanesulfonate	PFHxS	T		13C3-PFHxS	No	No
14	Perfluoro-1-octanesulfonate	PFOS	T		13C8-PFOS	No	No
1	13C5-PFHxA	13C5-PFHxA	SIS	13C2-PFOA		No	No
2	13C4-PFHpA	13C4-PFHpA	SIS	13C2-PFOA		No	No
3	13C8-PFOA	13C8-PFOA	SIS	13C2-PFOA		No	No
4	13C9-PFNA	13C9-PFNA	SIS	13C2-PFOA		No	No

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_369

No:	Analyte:	Report Name:	Type	RIS	SIS	Hidden:	Graph:
5	13C6-PFDA	13C6-PFDA	SIS	13C2-PFDA		No	No
6	13C7-PFUnA	13C7-PFUnA	SIS	13C2-PFDA		No	No
7	13C2-PFDoA	13C2-PFDoA	SIS	13C2-PFDA		No	No
8	13C2-PFTeDA	13C2-PFTeDA	SIS	13C2-PFDA		No	No
9	d3-MeFOSAA	d3-MeFOSAA	SIS	13C4-PFOS		No	No
10	d5-EtFOSAA	d5-EtFOSAA	SIS	13C4-PFOS		No	No
11	13C3-PFBS	13C3-PFBS	SIS	13C4-PFOS		No	No
12	13C3-PFHxS	13C3-PFHxS	SIS	13C4-PFOS		No	No
13	13C8-PFOS	13C8-PFOS	SIS	13C4-PFOS		No	No

Total Analytes: 27

Subtract Peaks:

None

Sum Peaks:

None

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_369

ICAL Acceptance Criteria:

Curve Fit:	Limit Mean(%):	Mean Qual:	Limit Ind.:	Ind. Qual:	Min Points:	Points Qual:	Comments:
Linear	NA	NA	0.99	N	5	N	y = Bx + C
Quadratic	NA	NA	0.99	N	6	N	y = Ax^2 + Bx + C

Continuing Calibration Verification Criteria:

CCV Name: 5-369

Frequency Hrs:	Mean PD(%):	Individual PD(%):	RIS/SIS RT Window (min):	Area Limit Low(%):	Area Limit High(%):	Comment:
12 (N)	30 (N)	30 (N)	0.04 (N)	-50	100 (N)	NA

Independent Calibration Verification:

ICC Name: 5-369

Mean PD Limit(%):	Ind. PD Limit(%):	RIS/SIS Window Limit (Secs):	Area Limit High(%):	Area Limit Low(%):	Comment:
30 (N)	30 (N)	0.04 (N)	-50	100 (N)	NA

Mass Discrimination Criteria:

None

Degredation Check Criteria:

None

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

MQO Application	***Universal_LC***		
MQO:	**Acceptance Criteria**	**Qual:**	**Corrective Action:**
Procedural Blank	Samples must be greater than five times the blank concentration (>5xPB).	B	Review with Project Manager; re-analyze or justify results in project records.
PB Measurement Quality Objective	Organic results in the Procedural Blank are less than 1/2 times the LOQ (<1/2xLOQ)	N	Review with Project Manager; re-analyze or justify results in project records.
Laboratory Control Sample	Recovery values 70-130%.	N	Review with project manager; re-analyze or justify reporting the results in project records.
Matrix Spike / Matrix Spike Duplicate Recovery	Organics 70-130%. Analyte concentration in MS/MSD must be greater than five times reported background concentration.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Target is less than 5 times the Original	n	
Matrix Spike/Spike Duplicate Precision	Organics results less than 30% Relative Percent Difference (RPD). Analyte concentration in MS/MSD must be greater than five times reported background concentration.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Target is less than 5 times the Original	n	
Standard Reference Material Accuracy	Organics Percent Difference less than 30% from a range of certified values on average. Analyte concentration must be greater than five times the Method Detection Limit (>5xMDL).	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Target is less than 5 times the MDL	n	
Analytical Duplicate Precision	Organics results less than 30% Relative Percent Difference (RPD). Analyte concentration must be > 5x MDL.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Original is less than 5 times the MDL	n	

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

MQO Application	***Universal_LC***		
MQO:	**Acceptance Criteria**	**Qual:**	**Corrective Action:**
Analytical Triplicate Precision	Organics results less than 30% Relative Standard Deviation (RSD). Analyte concentration must be > 5x MDL.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
	Organics Results in the Original is less than 5 times the MDL	n	
Surrogate Compound Recovery	Recovery results between 50% and 150%.	N	Review with Project Manager; re-analyze or justify reporting results in the project records.
Control Oil	RPD < 30% for at least 90% of analytes	N	Results examined by project manager, task leader, or subcontractor lab manager. Reextraction, reanalysis, or justification documented.
Instrument Calibration	5-369-6: R-squared greater than or equal to 0.990		Results examined by project manager, task leader, or subcontractor lab manager. Reextraction, reanalysis, or justification documented.
Independent Calibration Check Solution	5-369-6: Individual PD less than or equal to 30%. Mean Percent Difference less than or equal to 30%.	N	Review with Project Manager; re-analyze or justify in project records.
Continuing Calibration Verification	5-369-6: Individual PD less than or equal to 30%. Mean Percent Difference less than or equal to 30%.	N	Review with Project Manager; re-analyze or justify in project records.

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ShpNo SHP-180802-03

Battelle Project No:

Sample Receipt Form

Approved: ☐ Authorized ☐

Project Number: OU 11 PFAS **Client:** Battelle

Received by: Schumitz, Matt **Date/Time Received:** Thursday, August 02, 2018 10:00 AM

No. of Shipping Containers: 1

SHIPMENT

Method of Delivery: Commercial Carrier **Tracking Number:** 7728 7695 6561

COC Forms: ☑ Shipped with samples ☐ No Forms

Cooler(s)/Box(es)

Cntr	Type	Tracking No.	Seal	Seal	Container	Therm.	Temp C	Smps
1 of 1	Cooler	7728 7695 6561	Custody Seals	Intact	Intact	Therm_2	1.3	14

Samples

Sample Labels:
☑ Sample labels agree with COC forms
☐ Discrepancies (see Sample Custody Corrective Action Form)

Container Seals:
☐ Tape ☐ Custody Seals ☐ Other Seals (See sample Log)
☑ Seals intact for each shipping container
☐ Seals broken (See sample log for impacted samples)

Condition of Samples:
☑ Sample containers intact
☐ Sample containers broken/leaking (See Custody Corrective Action Form)

Temperature upon receipt (°C): 1.3 Temperature Blank used ☑ Yes ☐ No
(Note: If temperature upon receipt differs from required conditions, see sample log comment field)

Samples Acidified: ☐ Yes ☐ No ☑ Unknown

Initial pH 5-9?: ☐ Yes ☐ No ☑ NA
If no, individual sample adjustments on the Auxiliary Sample Receipt Form

Total Residual Chlorine Present?: ☐ Yes ☐ No ☑ NA
If yes, individual sample adjustments on the Auxiliary Sample Receipt Form

Head Space <1% in samples for water VOC analysis: ☐ Yes ☐ No ☑ NA
Individual sample deviations noted on sample log

Samples Containers:
Samples returned in PC-grade jars: ☐ Yes ☐ No ☑ Unknown /Lot No.: Unknown

Storage Location: Custody: Refrigerator - R0119 (NA) **BDO IDs Assigned:** J7248 - J7261

Samples logged in by: Schumitz, Matt **Date/Time:** 08/02/2018 10:00 AM

Approved By: **Approved On:**

Authorized By: **Authorized On:**

BATTELLE

It can be done

ShpNo SHP-180802-03

Battelle Project No:

Sample Receipt Form Details

Approved: ☐ Authorized ☐

Project Number: OU 11 PFAS **Client:** Battelle

Received by: Schumitz, Matt **Date/Time Received:** Thursday, August 02, 2018 10:00 AM

No. of Shipping Containers: 1

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
J7248	073018-01	07/30/18 10:00	08/02/18 11:22	2	GW	1.3	NA	NA	NA	R0119 (NA)			
J7249	073018-02	07/30/18 11:30	08/02/18 11:22	6	GW	1.3	NA	NA	NA	R0119 (NA)			MS-MSD
J7250	073018-03	07/30/18 13:35	08/02/18 11:23	2	GW	1.3	NA	NA	NA	R0119 (NA)			
J7251	073018-04	07/30/18 15:05	08/02/18 11:23	2	GW	1.3	NA	NA	NA	R0119 (NA)			
J7252	073018-05	07/30/18 15:55	08/02/18 11:23	2	GW	1.3	NA	NA	NA	R0119 (NA)			
J7253	073018-06	07/30/18 16:00	08/02/18 11:23	2	GW	1.3	NA	NA	NA	R0119 (NA)			
J7254	073018-07	07/30/18 16:05	08/02/18 11:23	2	GW	1.3	NA	NA	NA	R0119 (NA)			
J7255	073118-01	07/31/18 8:40	08/02/18 11:24	2	GW	1.3	NA	NA	NA	R0119 (NA)			
J7256	073118-02	07/31/18 11:00	08/02/18 11:24	2	GW	1.3	NA	NA	NA	R0119 (NA)			
J7257	073118-03	07/31/18 12:50	08/02/18 11:24	2	GW	1.3	NA	NA	NA	R0119 (NA)			
J7258	073118-04	07/31/18 15:25	08/02/18 11:24	2	GW	1.3	NA	NA	NA	R0119 (NA)			
J7259	080118-01	08/01/18 10:55	08/02/18 11:24	2	GW	1.3	NA	NA	NA	R0119 (NA)			
J7260	080118-02	08/01/18 13:15	08/02/18 11:25	2	GW	1.3	NA	NA	NA	R0119 (NA)			
J7261	080118-03	08/01/18 15:00	08/02/18 11:25	2	GW	1.3	NA	NA	NA	R0119 (NA)			

Total Samples: 14

1x Lg Cooler Page 1 of 2

Battelle
The Business of Innovation

Chain-of-Custody

Client Contact Information
Pamela Chang
Battelle
505 King Ave.
Columbus, OH 43201

Project Manager: Pamela Chang
Sampler Information (print name): QC and MES
Phone: 714-313-9067
Email: changp@battelle.org

Sampling Site: OU11
Site Information: NAS North Island, Coronado, CA

Project Name: OU 11 PFAS
Project No.:

Turnaround Time (TAT) Requested:
Normal X
Priority ☐
RUSH ☐
Time Zone: Pacific Standard Time (PST)

COC #
Page#

Preservative: N/A
Analysis: PFAS EPA 537

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS EPA 537	
073018-01 J7248	7/30/18	1000	Poly	GW	2	X	
073018-02 49	7/30/18	1130	Poly	GW	6	X	Level 4, MS/MSD
073018-03 50	7/30/18	1335	Poly	GW	2	X	
073018-04 51	7/30/18	1505	Poly	GW	2	X	
073018-05 52	7/30/18	1555	Poly	GW	2	X	
073018-06 53	7/30/18	1600	Poly	GW	2	X	
073018-07 54	7/30/18	1605	Poly	GW	2	X	
073118-01 55	7/31/18	0840	Poly	GW	2	X	
073118-02 56	7/31/18	1100	Poly	GW	2	X	
073118-03 57	7/31/18	1250	Poly	GW	2	X	
073118-04 J7258	7/31/18	1525	Poly	GW	2	X	

Receipt Temperature:(°C) 1.30
Samples Intact: Yes No
Samples on Ice: Yes No
Receipt Comments:

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Qihai Chen	EnSafe, Inc	8/1/18 1600	Matt Schumite	Battelle	8-2-18 1000

Comments: Select 073018-02 for Level 4 data package, rest Level 3.
email results to Pamela Chang (changp@battelle.org) & Qihai Chen (qchen@ensafe.com)

1 x Lg Cooler Page 2 of 2

Battelle
The Business of Innovation

Chain-of-Custody

Client Contact Information
Pamela Chang
Battelle
505 King Ave.
Columbus, OH 43201

Project Manager: Pamela Chang
Sampler Information (print name): QC and MES
Phone: 714-313-9067
Email: changp@battelle.org

Sampling Site: OU11

Site Information: NAS North Island, Coronado, CA

Project Name: OU 11 PFAS
Project No.:

Turnaround Time (TAT) Requested:
Normal X
Priority ☐
RUSH ☐
Time Zone: Pacific Standard Time (PST)

COC #

Page#

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Preservative: N/A	Analysis: PFAS EPA 537
080118-01 J7259	8/1/18	1055	Poly	GW	2		X
080118-02 J7260	8/1/18	1315	Poly	GW	2		X
080118-03 J7261	8/1/18	1500	Poly	GW	2		X

Receipt Temperature:(°C) 1.3°

Samples Intact: (Yes) - No

Samples on Ice: (Yes) - No

Receipt Comments:

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Qihai Chen	EnSite, Inc.	8/1/18 1600	Mary Schumite	Battelle	8-2-18 1000

Comments: Select 073018-02 for Level 4 data package, rest Level 3.
email results to Pamela Chang (changp@battelle.org) & Qihai Chen (qchen@ensate.com)

Therm. 2 MOS

ORIGIN ID:MYFA (858) 771-3559
QIHAI CHEN

6050 SANTO ROAD
SUITE 175
SAN DIEGO, CA 92124
UNITED STATES US

SHIP DATE: 01AUG18
ACTWGT: 50.00 LB
CAD: 110855338/INET4040
DIMS: 16x14x24 IN

BILL SENDER

TO MATT SCHUMITZ
BATTELLE LABS
141 LONGWATER DR
SUITE 202
NORWELL MA 02061
(781) 681-5444 REF
INV
PO 0888822230-06 DEPT

1.30

552J/13309/DCA5

FedEx Express

J182018072201uv

THU - 02 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7728 7695 6561

NB XPUA

02061
MA-US BOS

After printing this label:
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2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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Data Tables

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-01				
Battelle ID	J7248-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.275				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	219.71	D	4.32	11.36	113.64
PFHpA	47.65		0.15	0.47	4.73
PFOA	46.73		0.17	0.47	4.73
PFNA	0.95	U	0.25	0.95	4.73
PFDA	0.47	U	0.15	0.47	4.73
PFUnA	0.95	U	0.27	0.95	4.73
PFDoA	0.47	U	0.17	0.47	4.73
PFTrDA	0.47	U	0.14	0.47	4.73
PFTeDA	0.95	U	0.24	0.95	4.73
NMeFOSAA	1.89	U	0.53	1.89	4.73
NEtFOSAA	0.95	U	0.46	0.95	4.73
PFBS	134.06	D	2.95	11.36	113.64
PFHxS	130.56	D	2.50	9.09	113.64
PFOS	0.82	J	0.18	0.47	4.73
Surrogate Recoveries (%)					
13C5-PFHxA	116	D			
13C4-PFHpA	120				
13C8-PFOA	94				
13C9-PFNA	95				
13C6-PFDA	113				
13C7-PFUnA	108				
13C2-PFDoA	95				
13C2-PFTeDA	90				
d3-MeFOSAA	113				
d5-EtFOSAA	100				
13C3-PFBS	140	D			
13C3-PFHxS	108	D			
13C8-PFOS	98				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-02				
Battelle ID	J7249-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.280				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	2199.76	D	21.21	55.80	558.04
PFHpA	671.85	D	3.57	11.16	111.61
PFOA	1988.81	D	20.09	55.80	558.04
PFNA	0.62	J	0.24	0.93	4.65
PFDA	0.46	U	0.15	0.46	4.65
PFUnA	0.93	U	0.27	0.93	4.65
PFDoA	0.46	U	0.17	0.46	4.65
PFTrDA	0.46	U	0.14	0.46	4.65
PFTeDA	0.93	U	0.23	0.93	4.65
NMeFOSAA	1.86	U	0.52	1.86	4.65
NEtFOSAA	0.93	U	0.46	0.93	4.65
PFBS	312.32	D	2.90	11.16	111.61
PFHxS	1069.93	D	2.46	8.93	111.61
PFOS	121.96	D	0.88	2.33	23.25
Surrogate Recoveries (%)					
13C5-PFHxA	108	D			
13C4-PFHpA	111	D			
13C8-PFOA	115	D			
13C9-PFNA	96	D			
13C6-PFDA	110				
13C7-PFUnA	112				
13C2-PFDoA	95				
13C2-PFTeDA	90				
d3-MeFOSAA	134				
d5-EtFOSAA	124				
13C3-PFBS	140	D			
13C3-PFHxS	121	D			
13C8-PFOS	74	D			

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-03				
Battelle ID	J7250-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.285				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	151.08	D	4.17	10.96	109.65
PFHpA	29.83		0.15	0.46	4.57
PFOA	33.32		0.16	0.46	4.57
PFNA	0.38	J	0.24	0.91	4.57
PFDA	0.46	U	0.15	0.46	4.57
PFUnA	0.91	U	0.26	0.91	4.57
PFDoA	0.46	U	0.16	0.46	4.57
PFTrDA	0.46	U	0.14	0.46	4.57
PFTeDA	0.91	U	0.23	0.91	4.57
NMeFOSAA	1.83	U	0.51	1.83	4.57
NEtFOSAA	0.91	U	0.45	0.91	4.57
PFBS	45.51		0.12	0.46	4.57
PFHxS	52.18		0.10	0.37	4.57
PFOS	4.88		0.17	0.46	4.57
Surrogate Recoveries (%)					
13C5-PFHxA	101	D			
13C4-PFHpA	91				
13C8-PFOA	84				
13C9-PFNA	91				
13C6-PFDA	101				
13C7-PFUnA	102				
13C2-PFDoA	95				
13C2-PFTeDA	101				
d3-MeFOSAA	133				
d5-EtFOSAA	119				
13C3-PFBS	70				
13C3-PFHxS	110				
13C8-PFOS	110				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-04				
Battelle ID	J7251-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.285				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	848.37	D	4.17	10.96	109.65
PFHpA	49.66		0.15	0.46	4.57
PFOA	64.18		0.16	0.46	4.57
PFNA	0.53	J	0.24	0.91	4.57
PFDA	0.37	J	0.15	0.46	4.57
PFUnA	0.91	U	0.26	0.91	4.57
PFDoA	0.46	U	0.16	0.46	4.57
PFTrDA	0.46	U	0.14	0.46	4.57
PFTeDA	0.91	U	0.23	0.91	4.57
NMeFOSAA	1.83	U	0.51	1.83	4.57
NEtFOSAA	0.91	U	0.45	0.91	4.57
PFBS	180.63	D	2.85	10.96	109.65
PFHxS	201.18	D	2.41	8.77	109.65
PFOS	26.14		0.17	0.46	4.57
Surrogate Recoveries (%)					
13C5-PFHxA	118	D			
13C4-PFHpA	91				
13C8-PFOA	96				
13C9-PFNA	106				
13C6-PFDA	115				
13C7-PFUnA	107				
13C2-PFDoA	105				
13C2-PFTeDA	95				
d3-MeFOSAA	123				
d5-EtFOSAA	128				
13C3-PFBS	171	ND			
13C3-PFHxS	123	D			
13C8-PFOS	99				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-05			
Battelle ID	J7252-FS			
Sample Type	SA			
Collection Date	07/30/2018			
Extraction Date	08/08/2018			
Analysis Date	08/16/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.290			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFHxA	0.43 U	0.16	0.43	4.31
PFHpA	0.33 J	0.14	0.43	4.31
PFOA	1.26 J	0.16	0.43	4.31
PFNA	0.26 J	0.22	0.86	4.31
PFDA	0.27 J	0.14	0.43	4.31
PFUnA	0.86 U	0.25	0.86	4.31
PFDoA	0.43 U	0.16	0.43	4.31
PFTrDA	0.43 U	0.13	0.43	4.31
PFTeDA	0.86 U	0.22	0.86	4.31
NMeFOSAA	1.72 U	0.48	1.72	4.31
NEtFOSAA	0.86 U	0.42	0.86	4.31
PFBS	0.43 U	0.11	0.43	4.31
PFHxS	0.34 U	0.09	0.34	4.31
PFOS	0.38 J	0.16	0.43	4.31

Surrogate Recoveries (%)

13C5-PFHxA	98
13C4-PFHpA	102
13C8-PFOA	108
13C9-PFNA	104
13C6-PFDA	105
13C7-PFUnA	108
13C2-PFDoA	99
13C2-PFTeDA	92
d3-MeFOSAA	129
d5-EtFOSAA	110
13C3-PFBS	101
13C3-PFHxS	116
13C8-PFOS	111

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-06			
Battelle ID	J7253-FS			
Sample Type	SA			
Collection Date	07/30/2018			
Extraction Date	08/08/2018			
Analysis Date	08/16/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.290			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFHxA	0.43 U	0.16	0.43	4.31
PFHpA	0.33 J	0.14	0.43	4.31
PFOA	1.41 J	0.16	0.43	4.31
PFNA	0.28 J	0.22	0.86	4.31
PFDA	0.26 J	0.14	0.43	4.31
PFUnA	0.86 U	0.25	0.86	4.31
PFDoA	0.43 U	0.16	0.43	4.31
PFTrDA	0.43 U	0.13	0.43	4.31
PFTeDA	0.86 U	0.22	0.86	4.31
NMeFOSAA	1.72 U	0.48	1.72	4.31
NEtFOSAA	0.86 U	0.42	0.86	4.31
PFBS	0.43 U	0.11	0.43	4.31
PFHxS	0.12 J	0.09	0.34	4.31
PFOS	0.52 J	0.16	0.43	4.31

Surrogate Recoveries (%)

13C5-PFHxA	80
13C4-PFHpA	89
13C8-PFOA	92
13C9-PFNA	83
13C6-PFDA	110
13C7-PFUnA	102
13C2-PFDoA	93
13C2-PFTeDA	90
d3-MeFOSAA	99
d5-EtFOSAA	106
13C3-PFBS	98
13C3-PFHxS	95
13C8-PFOS	103

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-07				
Battelle ID	J7254-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.285				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	0.44	U	0.17	0.44	4.39
PFHpA	0.33	J	0.14	0.44	4.39
PFOA	1.48	J	0.16	0.44	4.39
PFNA	0.88	U	0.23	0.88	4.39
PFDA	0.44	U	0.14	0.44	4.39
PFUnA	0.88	U	0.25	0.88	4.39
PFDoA	0.44	U	0.16	0.44	4.39
PFTrDA	0.44	U	0.13	0.44	4.39
PFTeDA	0.88	U	0.22	0.88	4.39
NMeFOSAA	1.75	U	0.49	1.75	4.39
NEtFOSAA	0.88	U	0.43	0.88	4.39
PFBS	0.44	U	0.11	0.44	4.39
PFHxS	0.14	J	0.10	0.35	4.39
PFOS	0.62	J	0.17	0.44	4.39

Surrogate Recoveries (%)

13C5-PFHxA	59
13C4-PFHpA	65
13C8-PFOA	63
13C9-PFNA	63
13C6-PFDA	65
13C7-PFUnA	63
13C2-PFDoA	57
13C2-PFTeDA	59
d3-MeFOSAA	74
d5-EtFOSAA	57
13C3-PFBS	55
13C3-PFHxS	62
13C8-PFOS	70

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073118-01				
Battelle ID	J7255-FS				
Sample Type	SA				
Collection Date	07/31/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.290				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	1456.69	D	4.09	10.78	107.76
PFHpA	129.65		0.14	0.45	4.49
PFOA	80.81		0.16	0.45	4.49
PFNA	0.35	J	0.23	0.90	4.49
PFDA	0.45	U	0.14	0.45	4.49
PFUnA	0.90	U	0.26	0.90	4.49
PFDoA	0.45	U	0.16	0.45	4.49
PFTrDA	0.45	U	0.13	0.45	4.49
PFTeDA	0.90	U	0.22	0.90	4.49
NMeFOSAA	1.80	U	0.50	1.80	4.49
NEtFOSAA	0.90	U	0.44	0.90	4.49
PFBS	315.10	D	2.80	10.78	107.76
PFHxS	194.25	D	2.37	8.62	107.76
PFOS	4.33	J	0.17	0.45	4.49
Surrogate Recoveries (%)					
13C5-PFHxA	108	D			
13C4-PFHpA	77				
13C8-PFOA	78				
13C9-PFNA	88				
13C6-PFDA	86				
13C7-PFUnA	92				
13C2-PFDoA	86				
13C2-PFTeDA	69				
d3-MeFOSAA	90				
d5-EtFOSAA	113				
13C3-PFBS	134	D			
13C3-PFHxS	111	D			
13C8-PFOS	81				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073118-02				
Battelle ID	J7256-FS				
Sample Type	SA				
Collection Date	07/31/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.280				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	168.38	D	4.24	11.16	111.61
PFHpA	49.62		0.15	0.46	4.65
PFOA	8.01		0.17	0.46	4.65
PFNA	0.93	U	0.24	0.93	4.65
PFDA	0.46	U	0.15	0.46	4.65
PFUnA	0.93	U	0.27	0.93	4.65
PFDoA	0.46	U	0.17	0.46	4.65
PFTrDA	0.46	U	0.14	0.46	4.65
PFTeDA	0.93	U	0.23	0.93	4.65
NMeFOSAA	1.86	U	0.52	1.86	4.65
NEtFOSAA	0.93	U	0.46	0.93	4.65
PFBS	20.30		0.12	0.46	4.65
PFHxS	73.39		0.10	0.37	4.65
PFOS	0.94	J	0.18	0.46	4.65
Surrogate Recoveries (%)					
13C5-PFHxA	109	D			
13C4-PFHpA	108				
13C8-PFOA	101				
13C9-PFNA	104				
13C6-PFDA	106				
13C7-PFUnA	112				
13C2-PFDoA	91				
13C2-PFTeDA	80				
d3-MeFOSAA	103				
d5-EtFOSAA	98				
13C3-PFBS	62				
13C3-PFHxS	99				
13C8-PFOS	107				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073118-03				
Battelle ID	J7257-FS				
Sample Type	SA				
Collection Date	07/31/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.290				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	1982.36	D	40.95	107.76	1077.59
PFHpA	1173.74	D	3.45	10.78	107.76
PFOA	119.69	D	3.88	10.78	107.76
PFNA	0.35	J	0.23	0.90	4.49
PFDA	0.45	U	0.14	0.45	4.49
PFUnA	0.90	U	0.26	0.90	4.49
PFDoA	0.45	U	0.16	0.45	4.49
PFTrDA	0.45	U	0.13	0.45	4.49
PFTeDA	0.90	U	0.22	0.90	4.49
NMeFOSAA	1.80	U	0.50	1.80	4.49
NEtFOSAA	0.90	U	0.44	0.90	4.49
PFBS	202.01	D	2.80	10.78	107.76
PFHxS	1031.92	D	2.37	8.62	107.76
PFOS	2.91	J	0.17	0.45	4.49
Surrogate Recoveries (%)					
13C5-PFHxA	96	D			
13C4-PFHpA	132	D			
13C8-PFOA	120	D			
13C9-PFNA	106	D			
13C6-PFDA	123	D			
13C7-PFUnA	119	D			
13C2-PFDoA	111	D			
13C2-PFTeDA	109	D			
d3-MeFOSAA	143	D			
d5-EtFOSAA	141	D			
13C3-PFBS	148	D			
13C3-PFHxS	140	D			
13C8-PFOS	142	D			

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073118-04				
Battelle ID	J7258-FS				
Sample Type	SA				
Collection Date	07/31/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.280				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	533.80	D	4.24	11.16	111.61
PFHpA	41.94		0.15	0.46	4.65
PFOA	77.86		0.17	0.46	4.65
PFNA	1.36	J	0.24	0.93	4.65
PFDA	0.36	J	0.15	0.46	4.65
PFUnA	0.93	U	0.27	0.93	4.65
PFDoA	0.46	U	0.17	0.46	4.65
PFTrDA	0.46	U	0.14	0.46	4.65
PFTeDA	0.93	U	0.23	0.93	4.65
NMeFOSAA	1.86	U	0.52	1.86	4.65
NEtFOSAA	0.93	U	0.46	0.93	4.65
PFBS	453.11	D	2.90	11.16	111.61
PFHxS	354.89	D	2.46	8.93	111.61
PFOS	57.74		0.18	0.46	4.65
Surrogate Recoveries (%)					
13C5-PFHxA	107	D			
13C4-PFHpA	120	D			
13C8-PFOA	105	D			
13C9-PFNA	93	D			
13C6-PFDA	101				
13C7-PFUnA	100				
13C2-PFDoA	96				
13C2-PFTeDA	75				
d3-MeFOSAA	113				
d5-EtFOSAA	118				
13C3-PFBS	127	D			
13C3-PFHxS	122	D			
13C8-PFOS	98				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	080118-01			
Battelle ID	J7259-FS			
Sample Type	SA			
Collection Date	08/01/2018			
Extraction Date	08/08/2018			
Analysis Date	08/16/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.275			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFHxA	0.40 J	0.17	0.45	4.55
PFHpA	0.39 J	0.15	0.45	4.55
PFOA	1.64 J	0.16	0.45	4.55
PFNA	0.26 J	0.24	0.91	4.55
PFDA	0.30 J	0.15	0.45	4.55
PFUnA	0.91 U	0.26	0.91	4.55
PFDoA	0.45 U	0.16	0.45	4.55
PFTrDA	0.45 U	0.14	0.45	4.55
PFTeDA	0.91 U	0.23	0.91	4.55
NMeFOSAA	1.82 U	0.51	1.82	4.55
NEtFOSAA	0.91 U	0.45	0.91	4.55
PFBS	0.35 J	0.12	0.45	4.55
PFHxS	0.52 J	0.10	0.36	4.55
PFOS	0.79 J	0.17	0.45	4.55

Surrogate Recoveries (%)

13C5-PFHxA	128
13C4-PFHpA	132
13C8-PFOA	139
13C9-PFNA	127
13C6-PFDA	136
13C7-PFUnA	128
13C2-PFDoA	113
13C2-PFTeDA	107
d3-MeFOSAA	128
d5-EtFOSAA	140
13C3-PFBS	114
13C3-PFHxS	141
13C8-PFOS	147

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	080118-02			
Battelle ID	J7260-FS			
Sample Type	SA			
Collection Date	08/01/2018			
Extraction Date	08/08/2018			
Analysis Date	08/16/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.280			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFHxA	4.91	0.17	0.45	4.46
PFHpA	0.97 J	0.14	0.45	4.46
PFOA	1.98 J	0.16	0.45	4.46
PFNA	0.27 J	0.23	0.89	4.46
PFDA	0.27 J	0.14	0.45	4.46
PFUnA	0.89 U	0.26	0.89	4.46
PFDoA	0.45 U	0.16	0.45	4.46
PFTrDA	0.45 U	0.13	0.45	4.46
PFTeDA	0.89 U	0.22	0.89	4.46
NMeFOSAA	1.79 U	0.50	1.79	4.46
NEtFOSAA	0.89 U	0.44	0.89	4.46
PFBS	0.44 J	0.12	0.45	4.46
PFHxS	1.26 J	0.10	0.36	4.46
PFOS	2.43 J	0.17	0.45	4.46

Surrogate Recoveries (%)

13C5-PFHxA	107
13C4-PFHpA	120
13C8-PFOA	116
13C9-PFNA	128
13C6-PFDA	125
13C7-PFUnA	120
13C2-PFDoA	108
13C2-PFTeDA	104
d3-MeFOSAA	81
d5-EtFOSAA	86
13C3-PFBS	136
13C3-PFHxS	135
13C8-PFOS	124

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	080118-03			
Battelle ID	J7261-FS			
Sample Type	SA			
Collection Date	08/01/2018			
Extraction Date	08/08/2018			
Analysis Date	08/16/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.280			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFHxA	4.77	0.17	0.45	4.46
PFHpA	1.00 J	0.14	0.45	4.46
PFOA	2.37 J	0.16	0.45	4.46
PFNA	0.27 J	0.23	0.89	4.46
PFDA	0.27 J	0.14	0.45	4.46
PFUnA	0.89 U	0.26	0.89	4.46
PFDoA	0.45 U	0.16	0.45	4.46
PFTrDA	0.45 U	0.13	0.45	4.46
PFTeDA	0.89 U	0.22	0.89	4.46
NMeFOSAA	1.79 U	0.50	1.79	4.46
NEtFOSAA	0.89 U	0.44	0.89	4.46
PFBS	0.56 J	0.12	0.45	4.46
PFHxS	1.65 J	0.10	0.36	4.46
PFOS	5.08	0.17	0.45	4.46

Surrogate Recoveries (%)

13C5-PFHxA	103
13C4-PFHpA	108
13C8-PFOA	112
13C9-PFNA	115
13C6-PFDA	121
13C7-PFUnA	117
13C2-PFDoA	100
13C2-PFTeDA	97
d3-MeFOSAA	85
d5-EtFOSAA	92
13C3-PFBS	126
13C3-PFHxS	119
13C8-PFOS	130

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	JY46 IB			
Battelle ID	JY46 IB_08/15/2018			
Sample Type	IB			
Collection Date	NA			
Extraction Date	NA			
Analysis Date	08/15/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	Water			
Sample Size	0.250			
Size Unit-Basis	NA			
Units	ng/L	MDL	LOD	LOQ
PFHxA	0.34 J	0.19	0.50	5.00
PFHpA	0.41 J	0.16	0.50	5.00
PFOA	0.33 J	0.18	0.50	5.00
PFNA	0.37 J	0.26	1.00	5.00
PFDA	0.36 J	0.16	0.50	5.00
PFUnA	0.29 J	0.29	1.00	5.00
PFDoA	0.50 U	0.18	0.50	5.00
PFTrDA	0.50 U	0.15	0.50	5.00
PFTeDA	1.00 U	0.25	1.00	5.00
NMeFOSAA	2.00 U	0.56	2.00	5.00
NEtFOSAA	1.00 U	0.49	1.00	5.00
PFBS	0.28 J	0.13	0.50	5.00
PFHxS	0.20 J	0.11	0.40	5.00
PFOS	0.41 J	0.19	0.50	5.00

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	102
13C8-PFOA	100
13C9-PFNA	101
13C6-PFDA	107
13C7-PFUnA	108
13C2-PFDoA	99
13C2-PFTeDA	102
d3-MeFOSAA	101
d5-EtFOSAA	96
13C3-PFBS	95
13C3-PFHxS	95
13C8-PFOS	81

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	JY46 IB			
Battelle ID	JY46 IB_08/24/2018			
Sample Type	IB			
Collection Date	NA			
Extraction Date	NA			
Analysis Date	08/24/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	Water			
Sample Size	0.250			
Size Unit-Basis	NA			
Units	ng/L	MDL	LOD	LOQ
PFHxA	0.50 U	0.19	0.50	5.00
PFHpA	- -	-	-	-
PFOA	0.50 U	0.18	0.50	5.00
PFNA	- -	-	-	-
PFDA	- -	-	-	-
PFUnA	- -	-	-	-
PFDoA	- -	-	-	-
PFTrDA	- -	-	-	-
PFTeDA	- -	-	-	-
NMeFOSAA	- -	-	-	-
NEtFOSAA	- -	-	-	-
PFBS	- -	-	-	-
PFHxS	- -	-	-	-
PFOS	0.50 U	0.19	0.50	5.00

Surrogate Recoveries (%)

13C5-PFHxA	92
13C4-PFHpA	94
13C8-PFOA	108
13C9-PFNA	- -
13C6-PFDA	- -
13C7-PFUnA	- -
13C2-PFDoA	- -
13C2-PFTeDA	- -
d3-MeFOSAA	- -
d5-EtFOSAA	- -
13C3-PFBS	- -
13C3-PFHxS	- -
13C8-PFOS	89

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	JY46 IB			
Battelle ID	JY46 IB_08/28/2018			
Sample Type	IB			
Collection Date	NA			
Extraction Date	NA			
Analysis Date	08/28/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	Water			
Sample Size	0.250			
Size Unit-Basis	NA			
Units	ng/L	MDL	LOD	LOQ
PFHxA	- -	-	-	-
PFHpA	- -	-	-	-
PFOA	- -	-	-	-
PFNA	- -	-	-	-
PFDA	- -	-	-	-
PFUnA	- -	-	-	-
PFDoA	- -	-	-	-
PFTrDA	- -	-	-	-
PFTeDA	- -	-	-	-
NMeFOSAA	- -	-	-	-
NEtFOSAA	- -	-	-	-
PFBS	0.18 J	0.13	0.50	5.00
PFHxS	- -	-	-	-
PFOS	- -	-	-	-

Surrogate Recoveries (%)

13C5-PFHxA	- -
13C4-PFHpA	- -
13C8-PFOA	- -
13C9-PFNA	- -
13C6-PFDA	- -
13C7-PFUnA	- -
13C2-PFDoA	- -
13C2-PFTeDA	- -
d3-MeFOSAA	- -
d5-EtFOSAA	- -
13C3-PFBS	87
13C3-PFHxS	- -
13C8-PFOS	- -

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	Procedural Blank			
Battelle ID	CR546PB-FS			
Sample Type	PB			
Collection Date	08/08/2018			
Extraction Date	08/08/2018			
Analysis Date	08/16/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	WATER			
Sample Size	0.250			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFHxA	0.50 U	0.19	0.50	5.00
PFHpA	0.50 U	0.16	0.50	5.00
PFOA	0.31 J	0.18	0.50	5.00
PFNA	1.00 U	0.26	1.00	5.00
PFDA	0.50 U	0.16	0.50	5.00
PFUnA	1.00 U	0.29	1.00	5.00
PFDoA	0.50 U	0.18	0.50	5.00
PFTrDA	0.50 U	0.15	0.50	5.00
PFTeDA	1.00 U	0.25	1.00	5.00
NMeFOSAA	2.00 U	0.56	2.00	5.00
NEtFOSAA	1.00 U	0.49	1.00	5.00
PFBS	0.50 U	0.13	0.50	5.00
PFHxS	0.40 U	0.11	0.40	5.00
PFOS	0.44 J	0.19	0.50	5.00

Surrogate Recoveries (%)

13C5-PFHxA	94
13C4-PFHpA	96
13C8-PFOA	104
13C9-PFNA	105
13C6-PFDA	105
13C7-PFUnA	104
13C2-PFDoA	88
13C2-PFTeDA	83
d3-MeFOSAA	95
d5-EtFOSAA	85
13C3-PFBS	93
13C3-PFHxS	96
13C8-PFOS	98

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	Laboratory Control Sample					
Battelle ID	CR547LCS-FS					
Sample Type	LCS					
Collection Date	08/08/2018					
Extraction Date	08/08/2018					
Analysis Date	08/16/2018					
Analytical Instrument	Sciex 5500 LC/MS/MS					
% Moisture	NA					
Matrix	WATER					
Sample Size	0.250					
Size Unit-Basis	L				Control Limits	
Units	ng/L	Target	Recovery	Qual	Lower	Upper
PFHxA	9.91	10.10	98		51	137
PFHpA	8.96	10.00	90		48	136
PFOA	10.56	10.00	106		49	141
PFNA	10.15	10.00	102		58	122
PFDA	9.51	10.00	95		59	135
PFUnA	10.02	10.00	100		64	134
PFDoA	10.77	10.00	108		75	131
PFTrDA	10.47	10.00	105		42	148
PFTeDA	10.34	10.00	103		42	158
NMeFOSAA	11.95	10.00	120		50	146
NEtFOSAA	9.86	10.00	99		51	131
PFBS	9.41	10.10	93		56	134
PFHxS	10.30	10.10	102		52	128
PFOS	9.96	10.00	100		40	144

Surrogate Recoveries (%)

13C5-PFHxA	109
13C4-PFHpA	115
13C8-PFOA	118
13C9-PFNA	109
13C6-PFDA	129
13C7-PFUnA	127
13C2-PFDoA	121
13C2-PFTeDA	118
d3-MeFOSAA	90
d5-EtFOSAA	109
13C3-PFBS	109
13C3-PFHxS	109
13C8-PFOS	107

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-02		073018-02					
Battelle ID	J7249-FS		J7249MS-FS					
Sample Type	SA		MS					
Collection Date	07/30/2018		07/30/2018					
Extraction Date	08/08/2018		08/08/2018					
Analysis Date	08/16/2018		08/16/2018					
Analytical Instrument	Sciex 5500 LC/MS/MS		Sciex 5500 LC/MS/MS					
% Moisture	NA		NA					
Matrix	GW		GW					
Sample Size	0.280		0.280					
Size Unit-Basis	L		L				Control Limits	
Units	ng/L		ng/L	Target	Recovery	Qual	Lower	Upper
PFHxA	2199.76	D	2580.39	D	27.05	1407	N	51	137
PFHpA	671.85	D	640.63	D	26.79	0	N	48	136
PFOA	1988.81	D	2374.88	D	26.79	1441	N	49	141
PFNA	0.62	J	27.61		26.79	101		58	122
PFDA	0.46	U	24.25		26.79	91		59	135
PFUnA	0.93	U	24.84		26.79	93		64	134
PFDoA	0.46	U	29.90		26.79	112		75	131
PFTrDA	0.46	U	34.54		26.79	129		42	148
PFTeDA	0.93	U	31.01		26.79	116		42	158
NMeFOSAA	1.86	U	26.20		26.79	98		50	146
NEtFOSAA	0.93	U	27.99		26.79	104		51	131
PFBS	312.32	D	319.13	D	27.05	25	N	56	134
PFHxS	1069.93	D	972.63	D	27.05	0	N	52	128
PFOS	121.96	D	149.80	D	26.79	104		40	144
Surrogate Recoveries (%)									
13C5-PFHxA	108	D	98	D					
13C4-PFHpA	111	D	119	D					
13C8-PFOA	115	D	110	D					
13C9-PFNA	96	D	96	D					
13C6-PFDA	110		103	D					
13C7-PFUnA	112		111	D					
13C2-PFDoA	95		104	D					
13C2-PFTeDA	90		100	D					
d3-MeFOSAA	134		129	D					
d5-EtFOSAA	124		130	D					
13C3-PFBS	140	D	148	D					
13C3-PFHxS	121	D	137	D					
13C8-PFOS	74	D	84	D					

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-02
Battelle ID	J7249MSD-FS
Sample Type	MSD
Collection Date	07/30/2018
Extraction Date	08/08/2018
Analysis Date	08/16/2018
Analytical Instrument	Sciex 5500 LC/MS/MS
% Moisture	NA
Matrix	GW
Sample Size	0.275
Size Unit-Basis	L
Units	ng/L

					Control Limits				RPD
		Target	Recovery	Qual	Lower	Upper	RPD	Qual	Limit
PFHxA	2402.94 D	27.55	738	N	51	137	62.4	N	≤ 30
PFHpA	723.17 D	27.27	188	N	48	136	200.0	N	≤ 30
PFOA	2187.27 D	27.27	728	N	49	141	65.7	N	≤ 30
PFNA	23.53	27.27	84		58	122	18.4		≤ 30
PFDA	23.29	27.27	85		59	135	6.8		≤ 30
PFUnA	25.04	27.27	92		64	134	1.1		≤ 30
PFDoA	29.22	27.27	107		75	131	4.6		≤ 30
PFTrDA	30.11	27.27	110		42	148	15.9		≤ 30
PFTeDA	28.24	27.27	104		42	158	10.9		≤ 30
NMeFOSAA	23.39	27.27	86		50	146	13.0		≤ 30
NEtFOSAA	25.64	27.27	94		51	131	10.1		≤ 30
PFBS	345.19 D	27.55	119		56	134	130.6	N	≤ 30
PFHxS	1141.96 D	27.55	261	N	52	128	200.0	N	≤ 30
PFOS	125.76 D	27.27	14	N	40	144	152.5	N	≤ 30

Surrogate Recoveries (%)

13C5-PFHxA	104 D
13C4-PFHpA	117 D
13C8-PFOA	114 D
13C9-PFNA	101 D
13C6-PFDA	114
13C7-PFUnA	104
13C2-PFDoA	95
13C2-PFTeDA	87
d3-MeFOSAA	130
d5-EtFOSAA	129
13C3-PFBS	126 D
13C3-PFHxS	107 D
13C8-PFOS	105 D

Glossary of Data Qualifiers

Flag:	Application:
B	Analyte found in the sample at a concentration <10x the level found in the procedural blank
D	Dilution Run. Initial run outside the initial calibration range of the instrument
E	Estimate, result is greater than the highers concentration level in the calibration
H	Surrogate diluted out. Used when surrogate recovery is affected by excessive dilution of the sample extract.
J	Analyte detected below the Limit of Quantitation (LOQ)
ME	Significant Matrix Interference - Estimated value.
MI	Significant Matrix Interference - value could not be determined.
n	Quality Control (QC) value is outside the accuracy or precision Data Quality Objective (DQO), but meets secondary criteria
N	Quality Control (QC) value is outside the accuracy or precision Data Quality Objective (DQO)
NA	Not Applicable
T	Holding Time (HT) exceeded
U	Analyte not detected or detected below the Method detection limit (MDL) value, Limit of Detection (LOD) reported

Miscellaneous Documentation

QA/QC Summary
Batch 18-0497

Project:	Operational Unit Naval Air Station (NAS) North Island
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	GW
Data Set:	DP-18-0212
Analytical SOP:	5-369
Method Reference:	PFAS to QSM 5.1 Table B-15

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
7/30, 7/31, and 8/1/2018	8/2/2018	1.3
Corrective Actions	None.	
Sample Storage	The water samples were stored refrigerated until extraction.	
Related samples	NA	

	METHOD SUMMARIES
Sample Preparation	Water samples were spiked with surrogates in the original sample container from the field. The water was extracted using a weak ion exchange solid phase extraction (SPE) cartridge and eluted from the SPE with 0.4% NH_3 in methanol. Extracts were split and concentrated to dryness under nitrogen with a water bath set between 35 °C and 45 °C, reconstituted with 80:20 methanol/water (V/V) and fortified with internal standard. Extracts were transferred for LC-MS/MS analysis.
Prep comments	Samples 073018-02 (J7249MS-FS), 073018-02 (J7249MSD-FS), 073118-02 (J7256-FS), 073118-03 (J7257-FS), 073118-04 (J7258-FS), and 080118-02 (J7260-FS) needed the top filter of the SPE cartridge removed during the SPE process due to clogging of the filter. Samples 073018-01 (J7248-FS), 073018-02 (J7249-FS), 073018-02 (J7249MS-FS), 073018-02 (J7249MSD-FS), 073018-03 (J7250-FS), 073018-04 (J7251-FS), 073118-01 (J7255-FS), 073118-02 (J7256-FS), 073118-03 (J7257-FS), and 073118-04 (J7258-FS) all contained floating particulate matter in the sample container prior to extraction. Samples 080118-02 (J7260-FS) and 080118-03 (J7261-FS) had a yellow color prior to extraction. The extract for sample 073118-04 (J7258-FS) was orange post extraction.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/L concentrations.

QA/QC Summary
Batch 18-0497

Analysis Comments	Samples analyzed on Sciex 5500 LC-MS/MS. The ion ratio for PFHpA in Sample 073018-01 (lab ID J7248-FS-D(5)) in method 18-0497_BASE is above 50%RPD. There were no other detected results above the LOQ with ion ratios above 50% RPD. A file (Reporting Key) is included in the miscellaneous documentation section of the full data package to indicate what samples were reported from what extract and quantification method.

Holding Times	Extraction Date(s)	Analysis Date(s)
	8/8/2018	8/15, 24, and 28/2018

Procedural Blank (PB)	A PB was prepared with this analytical batch to ensure the sample extraction and analysis methods are free of contamination.
≤ ½ the LOQ Samples >10x PB	No exceedances noted.
	No comments.

Laboratory Control Spike (LCS)	A LCS was prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy.
Laboratory derived control limits for recovery	No exceedances noted.
	No comments.

Matrix Spike (MS) / Duplicate (MSD)	A MS/MSD were prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy. The relative percent difference was calculated to measure precision.
Laboratory derived control limits for recovery, RPD ≤ 30%	10 recovery and 6 RPD exceedances noted.
	Background sample levels greater than concentration spiked into MS/MSD sample. Extracts were diluted and re-run to verify.

Extracted Internal Standard Analytes	Labelled analog compounds were added prior to extraction. The recoveries are calculated to measure extraction efficiency.
50-150% of true value	1 exceedance noted.
	13C3-PFBS was over-recovered in sample 073018-04. This sample was re-run to confirm the recovery and the original value was reported. The re-analysis can be found in the unused data section of the full data package.

QA/QC Summary
Batch 18-0497

Internal Standard Analytes	Labelled analog compounds were added prior to analysis.
+/- 50% of the area of the L5 calibration point.	No exceedances noted.
	While there are documented exceedences for the 18-047_SIS quant method for several internal standards, no data was reported vs. the internal standards with exceedences, all reported results are vs. passing internal standard areas.

Initial Calibration (ICAL)	The LC-MS/MS was calibrated with multi-level calibration curve for all compounds using linear or quadradic curve fitting.
+/- 30% of true value, $R^2 \geq 0.99$	No exceedances noted.
	No comments.

Independent Calibration Check (ICC)	The independent check was run after each initial calibration to verify the calibration. This standard is from a different source than the ICAL.
+/- 30% of true value	No exceedances noted.
	No comments.

Continuing Calibration Verification (CCV)	Continuing calibration standards were run at the beginning and end of 10 injections and at the end of the sequence to ensure that initial calibration is still valid.
+/- 30% of true value	No exceedances noted.
	No comments.

Instrument Blank (IB)	Immediately following the highest standard analyzed and daily prior to sample analysis.
≤ ½ the LOQ	No exceedances noted.
	No comments.

BATTELLE
It can be done

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project Number: 100095675
Preparation Batch: 18-0497
Data Set: DP-18-0212
Test Code: Master_369

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	0	None
Laboratory Control Sample	0	None
Matrix Spike / Matrix Spike Duplicate Recovery	10	There were ten exceedences for Matrix Spike recovery. In each case the analyte was present in the authentic sample at a concentration that far exceeded the spike concentration. No further action was taken. LMG 8/27/18
Matrix Spike / Matrix Spike Duplicate Precision	6	There were six exceedences for MS/MSD Duplicate Precision. In each case the analyte was present in the authentic sample at a concentration that far exceeded the spike concentration. No further action was taken. LMG 8/27/18
Extracted Internal Standard Analytes (Surrogates)	1	Surrogate 13C3-PFBS was over-recovered in sample J7251. Examination of the chromatography indicated likely contribution to the surrogate from the sample, which had a high concentration of PFBS. Reanalysis confirmed the results. The original analysis was reported. LMG 8/29/18
Instrument Calibration	0	None
Instrument Blank	0	None
Independent Calibration Check	0	None
Continuing Calibration Verification	0	None

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM

Project Title:	Operable Unit 11 NAS North Island	**Data Set Number:**	DP-18-0212
Project Number:	100095675	**Prep Batch Number:**	18-0497
Entered By:	Lauren Griffith	**Entered On:**	08/27/2018
Test Code (Matrix Type):	Master_369(L)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE).
LMG 08/27/18

JY38 is not being used in method 18-0497_BASE. There is no impact on the data once this point is removed from the calibration curve.
LMG 08/27/18

JY44 is not being used in method 18-0497_BASE for NMeFOSAA. There is no impact on the data once this point is removed from the calibration curve.
LMG 08/27/18

The ion ratio for PFHpA for sample J7248-FS-D(5) in method 18-0497_BASE was>50%.
LMG 08/27/18

The area of internal standard 13C2-PFOA is high compared to the area of the L5 of the calibration in samples J7249-FS(4) and J7249MSD-FS(4) in method 18-0497_SIS. The surrogates typically reported vs. this internal standard were all reported from the dilution run. For consistency, J7249MS was also reported from the dilution for surrogates quantified vs. this internal standard.
LMG 08/27/18

The area of internal standard 13C2-PFOA is low compared to the area of the L5 of the calibration in samples J7257-FS(4) and J7258-FS(4) in method 18-0497_SIS. The surrogates typically reported vs. this internal standard were all reported from the dilution run.
LMG 08/27/18

The area of internal standard 13C2-PFDA is low compared to the area of the L5 of the calibration in samples J7249MS-FS(4) and J7257-FS(4) in method 18-0497_SIS. The surrogates typically reported vs. this internal standard were all reported from the dilution run.
LMG 08/27/18

The area of internal standard 13C4-PFOS is low compared to the area of the L5 of the calibration in samples J7249MS-FS(4) and J7257-FS(4) in method 18-0497_SIS. The surrogates typically reported vs. this internal standard were all reported from the dilution run.
LMG 08/27/18

The following analytes and their corresponding surrogates were reported from methods 18-0497A_SIS and 18-0497A_BASE:
PFHxA - samples J7249, J7249MS, J7249MSD and J7257
PFOA and PFOS - samples J7249, J7249MS and J7249MSD
All surrogates for sample J7257
The following analytes and their corresponding surrogates were reported from methods 18-0497B_SIS and 18-0497B_BASE:
PFBS - sample J7259
All other data not listed above was reported from 18-0497_SIS and 18-0497_BASE
LMG 08/27/18

Task Leader Approval:

SupervisorApproval:

PM Approval:

Digitally signed by Jonathan Thorn
Date: 2018.08.29 13:20:37 -04'00'

Reporting Key (extract name/number and method name - lists each sample extract and method reported for each sample)

Client ID	JY46 IB	JY46 IB
Battelle ID	JY46 IB_08/15/2018	JY46 IB_08/24/2018
PFHxA	Method: 18-0497_BASE	Method: 18-0497A_BASE
PFHpA	Method: 18-0497_BASE	-
PFOA	Method: 18-0497_BASE	Method: 18-0497A_BASE
PFNA	Method: 18-0497_BASE	-
PFDA	Method: 18-0497_BASE	-
PFUnA	Method: 18-0497_BASE	-
PFDoA	Method: 18-0497_BASE	-
PFTrDA	Method: 18-0497_BASE	-
PFTeDA	Method: 18-0497_BASE	-
NMeFOSAA	Method: 18-0497_BASE	-
NEtFOSAA	Method: 18-0497_BASE	-
PFBS	Method: 18-0497_BASE	-
PFHxS	Method: 18-0497_BASE	-
PFOS	Method: 18-0497_BASE	Method: 18-0497A_BASE
13C5-PFHxA	Method: 18-0497_SIS	Method: 18-0497A_SIS
13C4-PFHpA	Method: 18-0497_SIS	Method: 18-0497A_SIS
13C8-PFOA	Method: 18-0497_SIS	Method: 18-0497A_SIS
13C9-PFNA	Method: 18-0497_SIS	-
13C6-PFDA	Method: 18-0497_SIS	-
13C7-PFUnA	Method: 18-0497_SIS	-
13C2-PFDoA	Method: 18-0497_SIS	-
13C2-PFTeDA	Method: 18-0497_SIS	-
d3-MeFOSAA	Method: 18-0497_SIS	-
d5-EtFOSAA	Method: 18-0497_SIS	-
13C3-PFBS	Method: 18-0497_SIS	-
13C3-PFHxS	Method: 18-0497_SIS	-
13C8-PFOS	Method: 18-0497_SIS	Method: 18-0497A_SIS

Client ID	JY46 IB	Procedural Blank
Battelle ID	JY46 IB_08/28/2018	CR546PB-FS
PFHxA	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
PFHpA	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
PFOA	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
PFNA	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
PFDA	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
PFUnA	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
PFDoA	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
PFTrDA	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
PFTeDA	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
NMeFOSAA	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
NEtFOSAA	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
PFBS	Method: 18-0497B_BASE	Extract: CR546PB-FS(3) Method: 18-0497_BASE
PFHxS	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
PFOS	-	Extract: CR546PB-FS(3) Method: 18-0497_BASE
13C5-PFHxA	-	Extract: CR546PB-FS(3) Method: 18-0497_SIS
13C4-PFHpA	-	Extract: CR546PB-FS(3) Method: 18-0497_SIS
13C8-PFOA	-	Extract: CR546PB-FS(3) Method: 18-0497_SIS
13C9-PFNA	-	Extract: CR546PB-FS(3) Method: 18-0497_SIS
13C6-PFDA	-	Extract: CR546PB-FS(3) Method: 18-0497_SIS
13C7-PFUnA	-	Extract: CR546PB-FS(3) Method: 18-0497_SIS
13C2-PFDoA	-	Extract: CR546PB-FS(3) Method: 18-0497_SIS
13C2-PFTeDA	-	Extract: CR546PB-FS(3) Method: 18-0497_SIS
d3-MeFOSAA	-	Extract: CR546PB-FS(3) Method: 18-0497_SIS
d5-EtFOSAA	-	Extract: CR546PB-FS(3) Method: 18-0497_SIS
13C3-PFBS	Method: 18-0497B_SIS	Extract: CR546PB-FS(3) Method: 18-0497_SIS
13C3-PFHxS	-	Extract: CR546PB-FS(3) Method: 18-0497_SIS
13C8-PFOS	-	Extract: CR546PB-FS(3) Method: 18-0497_SIS

Client ID	Laboratory Control Sample
Battelle ID	CR547LCS-FS
PFHxA	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
PFHpA	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
PFOA	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
PFNA	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
PFDA	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
PFUnA	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
PFDoA	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
PFTrDA	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
PFTeDA	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
NMeFOSAA	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
NEtFOSAA	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
PFBS	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
PFHxS	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
PFOS	Extract: CR547LCS-FS(3) Method: 18-0497_BASE
13C5-PFHxA	Extract: CR547LCS-FS(3) Method: 18-0497_SIS
13C4-PFHpA	Extract: CR547LCS-FS(3) Method: 18-0497_SIS
13C8-PFOA	Extract: CR547LCS-FS(3) Method: 18-0497_SIS
13C9-PFNA	Extract: CR547LCS-FS(3) Method: 18-0497_SIS
13C6-PFDA	Extract: CR547LCS-FS(3) Method: 18-0497_SIS
13C7-PFUnA	Extract: CR547LCS-FS(3) Method: 18-0497_SIS
13C2-PFDoA	Extract: CR547LCS-FS(3) Method: 18-0497_SIS
13C2-PFTeDA	Extract: CR547LCS-FS(3) Method: 18-0497_SIS
d3-MeFOSAA	Extract: CR547LCS-FS(3) Method: 18-0497_SIS
d5-EtFOSAA	Extract: CR547LCS-FS(3) Method: 18-0497_SIS
13C3-PFBS	Extract: CR547LCS-FS(3) Method: 18-0497_SIS
13C3-PFHxS	Extract: CR547LCS-FS(3) Method: 18-0497_SIS
13C8-PFOS	Extract: CR547LCS-FS(3) Method: 18-0497_SIS

Client ID	073018-02
Battelle ID	J7249MS-FS
PFHxA	Extract: J7249MS-FS-D(9) Method: 18-0497A_BASE
PFHpA	Extract: J7249MS-FS-D(5) Method: 18-0497_BASE
PFOA	Extract: J7249MS-FS-D(9) Method: 18-0497A_BASE
PFNA	Extract: J7249MS-FS(4) Method: 18-0497_BASE
PFDA	Extract: J7249MS-FS(4) Method: 18-0497_BASE
PFUnA	Extract: J7249MS-FS(4) Method: 18-0497_BASE
PFDoA	Extract: J7249MS-FS(4) Method: 18-0497_BASE
PFTrDA	Extract: J7249MS-FS(4) Method: 18-0497_BASE
PFTeDA	Extract: J7249MS-FS(4) Method: 18-0497_BASE
NMeFOSAA	Extract: J7249MS-FS(4) Method: 18-0497_BASE
NEtFOSAA	Extract: J7249MS-FS(4) Method: 18-0497_BASE
PFBS	Extract: J7249MS-FS-D(5) Method: 18-0497_BASE
PFHxS	Extract: J7249MS-FS-D(5) Method: 18-0497_BASE
PFOS	Extract: J7249MS-FS-D(8) Method: 18-0497A_BASE
13C5-PFHxA	Extract: J7249MS-FS-D(9) Method: 18-0497A_SIS
13C4-PFHpA	Extract: J7249MS-FS-D(5) Method: 18-0497_SIS
13C8-PFOA	Extract: J7249MS-FS-D(9) Method: 18-0497A_SIS
13C9-PFNA	Extract: J7249MS-FS-D(5) Method: 18-0497_SIS
13C6-PFDA	Extract: J7249MS-FS-D(5) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7249MS-FS-D(5) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7249MS-FS-D(5) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7249MS-FS-D(5) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7249MS-FS-D(5) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7249MS-FS-D(5) Method: 18-0497_SIS
13C3-PFBS	Extract: J7249MS-FS-D(5) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7249MS-FS-D(5) Method: 18-0497_SIS
13C8-PFOS	Extract: J7249MS-FS-D(8) Method: 18-0497A_SIS

Client ID	073018-02
Battelle ID	J7249MSD-FS
PFHxA	Extract: J7249MSD-FS-D(9) Method: 18-0497A_BASE
PFHpA	Extract: J7249MSD-FS-D(5) Method: 18-0497_BASE
PFOA	Extract: J7249MSD-FS-D(9) Method: 18-0497A_BASE
PFNA	Extract: J7249MSD-FS(4) Method: 18-0497_BASE
PFDA	Extract: J7249MSD-FS(4) Method: 18-0497_BASE
PFUnA	Extract: J7249MSD-FS(4) Method: 18-0497_BASE
PFDoA	Extract: J7249MSD-FS(4) Method: 18-0497_BASE
PFTrDA	Extract: J7249MSD-FS(4) Method: 18-0497_BASE
PFTeDA	Extract: J7249MSD-FS(4) Method: 18-0497_BASE
NMeFOSAA	Extract: J7249MSD-FS(4) Method: 18-0497_BASE
NEtFOSAA	Extract: J7249MSD-FS(4) Method: 18-0497_BASE
PFBS	Extract: J7249MSD-FS-D(5) Method: 18-0497_BASE
PFHxS	Extract: J7249MSD-FS-D(5) Method: 18-0497_BASE
PFOS	Extract: J7249MSD-FS-D(8) Method: 18-0497A_BASE
13C5-PFHxA	Extract: J7249MSD-FS-D(9) Method: 18-0497A_SIS
13C4-PFHpA	Extract: J7249MSD-FS-D(5) Method: 18-0497_SIS
13C8-PFOA	Extract: J7249MSD-FS-D(9) Method: 18-0497A_SIS
13C9-PFNA	Extract: J7249MSD-FS-D(5) Method: 18-0497_SIS
13C6-PFDA	Extract: J7249MSD-FS(4) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7249MSD-FS(4) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7249MSD-FS(4) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7249MSD-FS(4) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7249MSD-FS(4) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7249MSD-FS(4) Method: 18-0497_SIS
13C3-PFBS	Extract: J7249MSD-FS-D(5) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7249MSD-FS-D(5) Method: 18-0497_SIS
13C8-PFOS	Extract: J7249MSD-FS-D(8) Method: 18-0497A_SIS

Client ID	073018-01
Battelle ID	J7248-FS
PFHxA	Extract: J7248-FS-D(5) Method: 18-0497_BASE
PFHpA	Extract: J7248-FS(4) Method: 18-0497_BASE
PFOA	Extract: J7248-FS(4) Method: 18-0497_BASE
PFNA	Extract: J7248-FS(4) Method: 18-0497_BASE
PFDA	Extract: J7248-FS(4) Method: 18-0497_BASE
PFUnA	Extract: J7248-FS(4) Method: 18-0497_BASE
PFDoA	Extract: J7248-FS(4) Method: 18-0497_BASE
PFTrDA	Extract: J7248-FS(4) Method: 18-0497_BASE
PFTeDA	Extract: J7248-FS(4) Method: 18-0497_BASE
NMeFOSAA	Extract: J7248-FS(4) Method: 18-0497_BASE
NEtFOSAA	Extract: J7248-FS(4) Method: 18-0497_BASE
PFBS	Extract: J7248-FS-D(5) Method: 18-0497_BASE
PFHxS	Extract: J7248-FS-D(5) Method: 18-0497_BASE
PFOS	Extract: J7248-FS(4) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7248-FS-D(5) Method: 18-0497_SIS
13C4-PFHpA	Extract: J7248-FS(4) Method: 18-0497_SIS
13C8-PFOA	Extract: J7248-FS(4) Method: 18-0497_SIS
13C9-PFNA	Extract: J7248-FS(4) Method: 18-0497_SIS
13C6-PFDA	Extract: J7248-FS(4) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7248-FS(4) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7248-FS(4) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7248-FS(4) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7248-FS(4) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7248-FS(4) Method: 18-0497_SIS
13C3-PFBS	Extract: J7248-FS-D(5) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7248-FS-D(5) Method: 18-0497_SIS
13C8-PFOS	Extract: J7248-FS(4) Method: 18-0497_SIS

Client ID	073018-02
Battelle ID	J7249-FS
PFHxA	Extract: J7249-FS-D(9) Method: 18-0497A_BASE
PFHpA	Extract: J7249-FS-D(5) Method: 18-0497_BASE
PFOA	Extract: J7249-FS-D(9) Method: 18-0497A_BASE
PFNA	Extract: J7249-FS(4) Method: 18-0497_BASE
PFDA	Extract: J7249-FS(4) Method: 18-0497_BASE
PFUnA	Extract: J7249-FS(4) Method: 18-0497_BASE
PFDoA	Extract: J7249-FS(4) Method: 18-0497_BASE
PFTrDA	Extract: J7249-FS(4) Method: 18-0497_BASE
PFTeDA	Extract: J7249-FS(4) Method: 18-0497_BASE
NMeFOSAA	Extract: J7249-FS(4) Method: 18-0497_BASE
NEtFOSAA	Extract: J7249-FS(4) Method: 18-0497_BASE
PFBS	Extract: J7249-FS-D(5) Method: 18-0497_BASE
PFHxS	Extract: J7249-FS-D(5) Method: 18-0497_BASE
PFOS	Extract: J7249-FS-D(8) Method: 18-0497A_BASE
13C5-PFHxA	Extract: J7249-FS-D(9) Method: 18-0497A_SIS
13C4-PFHpA	Extract: J7249-FS-D(5) Method: 18-0497_SIS
13C8-PFOA	Extract: J7249-FS-D(9) Method: 18-0497A_SIS
13C9-PFNA	Extract: J7249-FS-D(5) Method: 18-0497_SIS
13C6-PFDA	Extract: J7249-FS(4) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7249-FS(4) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7249-FS(4) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7249-FS(4) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7249-FS(4) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7249-FS(4) Method: 18-0497_SIS
13C3-PFBS	Extract: J7249-FS-D(5) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7249-FS-D(5) Method: 18-0497_SIS
13C8-PFOS	Extract: J7249-FS-D(8) Method: 18-0497A_SIS

Client ID	073018-03
Battelle ID	J7250-FS
PFHxA	Extract: J7250-FS-D(5) Method: 18-0497_BASE
PFHpA	Extract: J7250-FS(4) Method: 18-0497_BASE
PFOA	Extract: J7250-FS(4) Method: 18-0497_BASE
PFNA	Extract: J7250-FS(4) Method: 18-0497_BASE
PFDA	Extract: J7250-FS(4) Method: 18-0497_BASE
PFUnA	Extract: J7250-FS(4) Method: 18-0497_BASE
PFDoA	Extract: J7250-FS(4) Method: 18-0497_BASE
PFTrDA	Extract: J7250-FS(4) Method: 18-0497_BASE
PFTeDA	Extract: J7250-FS(4) Method: 18-0497_BASE
NMeFOSAA	Extract: J7250-FS(4) Method: 18-0497_BASE
NEtFOSAA	Extract: J7250-FS(4) Method: 18-0497_BASE
PFBS	Extract: J7250-FS(4) Method: 18-0497_BASE
PFHxS	Extract: J7250-FS(4) Method: 18-0497_BASE
PFOS	Extract: J7250-FS(4) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7250-FS-D(5) Method: 18-0497_SIS
13C4-PFHpA	Extract: J7250-FS(4) Method: 18-0497_SIS
13C8-PFOA	Extract: J7250-FS(4) Method: 18-0497_SIS
13C9-PFNA	Extract: J7250-FS(4) Method: 18-0497_SIS
13C6-PFDA	Extract: J7250-FS(4) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7250-FS(4) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7250-FS(4) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7250-FS(4) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7250-FS(4) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7250-FS(4) Method: 18-0497_SIS
13C3-PFBS	Extract: J7250-FS(4) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7250-FS(4) Method: 18-0497_SIS
13C8-PFOS	Extract: J7250-FS(4) Method: 18-0497_SIS

Client ID	073018-04
Battelle ID	J7251-FS
PFHxA	Extract: J7251-FS-D(5) Method: 18-0497_BASE
PFHpA	Extract: J7251-FS(4) Method: 18-0497_BASE
PFOA	Extract: J7251-FS(4) Method: 18-0497_BASE
PFNA	Extract: J7251-FS(4) Method: 18-0497_BASE
PFDA	Extract: J7251-FS(4) Method: 18-0497_BASE
PFUnA	Extract: J7251-FS(4) Method: 18-0497_BASE
PFDoA	Extract: J7251-FS(4) Method: 18-0497_BASE
PFTrDA	Extract: J7251-FS(4) Method: 18-0497_BASE
PFTeDA	Extract: J7251-FS(4) Method: 18-0497_BASE
NMeFOSAA	Extract: J7251-FS(4) Method: 18-0497_BASE
NEtFOSAA	Extract: J7251-FS(4) Method: 18-0497_BASE
PFBS	Extract: J7251-FS-D(5) Method: 18-0497_BASE
PFHxS	Extract: J7251-FS-D(5) Method: 18-0497_BASE
PFOS	Extract: J7251-FS(4) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7251-FS-D(5) Method: 18-0497_SIS
13C4-PFHpA	Extract: J7251-FS(4) Method: 18-0497_SIS
13C8-PFOA	Extract: J7251-FS(4) Method: 18-0497_SIS
13C9-PFNA	Extract: J7251-FS(4) Method: 18-0497_SIS
13C6-PFDA	Extract: J7251-FS(4) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7251-FS(4) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7251-FS(4) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7251-FS(4) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7251-FS(4) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7251-FS(4) Method: 18-0497_SIS
13C3-PFBS	Extract: J7251-FS-D(5) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7251-FS-D(5) Method: 18-0497_SIS
13C8-PFOS	Extract: J7251-FS(4) Method: 18-0497_SIS

Client ID	073018-05
Battelle ID	J7252-FS
PFHxA	Extract: J7252-FS(3) Method: 18-0497_BASE
PFHpA	Extract: J7252-FS(3) Method: 18-0497_BASE
PFOA	Extract: J7252-FS(3) Method: 18-0497_BASE
PFNA	Extract: J7252-FS(3) Method: 18-0497_BASE
PFDA	Extract: J7252-FS(3) Method: 18-0497_BASE
PFUnA	Extract: J7252-FS(3) Method: 18-0497_BASE
PFDoA	Extract: J7252-FS(3) Method: 18-0497_BASE
PFTrDA	Extract: J7252-FS(3) Method: 18-0497_BASE
PFTeDA	Extract: J7252-FS(3) Method: 18-0497_BASE
NMeFOSAA	Extract: J7252-FS(3) Method: 18-0497_BASE
NEtFOSAA	Extract: J7252-FS(3) Method: 18-0497_BASE
PFBS	Extract: J7252-FS(3) Method: 18-0497_BASE
PFHxS	Extract: J7252-FS(3) Method: 18-0497_BASE
PFOS	Extract: J7252-FS(3) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7252-FS(3) Method: 18-0497_SIS
13C4-PFHpA	Extract: J7252-FS(3) Method: 18-0497_SIS
13C8-PFOA	Extract: J7252-FS(3) Method: 18-0497_SIS
13C9-PFNA	Extract: J7252-FS(3) Method: 18-0497_SIS
13C6-PFDA	Extract: J7252-FS(3) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7252-FS(3) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7252-FS(3) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7252-FS(3) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7252-FS(3) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7252-FS(3) Method: 18-0497_SIS
13C3-PFBS	Extract: J7252-FS(3) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7252-FS(3) Method: 18-0497_SIS
13C8-PFOS	Extract: J7252-FS(3) Method: 18-0497_SIS

Client ID	073018-06
Battelle ID	J7253-FS
PFHxA	Extract: J7253-FS(3) Method: 18-0497_BASE
PFHpA	Extract: J7253-FS(3) Method: 18-0497_BASE
PFOA	Extract: J7253-FS(3) Method: 18-0497_BASE
PFNA	Extract: J7253-FS(3) Method: 18-0497_BASE
PFDA	Extract: J7253-FS(3) Method: 18-0497_BASE
PFUnA	Extract: J7253-FS(3) Method: 18-0497_BASE
PFDoA	Extract: J7253-FS(3) Method: 18-0497_BASE
PFTrDA	Extract: J7253-FS(3) Method: 18-0497_BASE
PFTeDA	Extract: J7253-FS(3) Method: 18-0497_BASE
NMeFOSAA	Extract: J7253-FS(3) Method: 18-0497_BASE
NEtFOSAA	Extract: J7253-FS(3) Method: 18-0497_BASE
PFBS	Extract: J7253-FS(3) Method: 18-0497_BASE
PFHxS	Extract: J7253-FS(3) Method: 18-0497_BASE
PFOS	Extract: J7253-FS(3) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7253-FS(3) Method: 18-0497_SIS
13C4-PFHpA	Extract: J7253-FS(3) Method: 18-0497_SIS
13C8-PFOA	Extract: J7253-FS(3) Method: 18-0497_SIS
13C9-PFNA	Extract: J7253-FS(3) Method: 18-0497_SIS
13C6-PFDA	Extract: J7253-FS(3) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7253-FS(3) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7253-FS(3) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7253-FS(3) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7253-FS(3) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7253-FS(3) Method: 18-0497_SIS
13C3-PFBS	Extract: J7253-FS(3) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7253-FS(3) Method: 18-0497_SIS
13C8-PFOS	Extract: J7253-FS(3) Method: 18-0497_SIS

Client ID	073018-07
Battelle ID	J7254-FS
PFHxA	Extract: J7254-FS(3) Method: 18-0497_BASE
PFHpA	Extract: J7254-FS(3) Method: 18-0497_BASE
PFOA	Extract: J7254-FS(3) Method: 18-0497_BASE
PFNA	Extract: J7254-FS(3) Method: 18-0497_BASE
PFDA	Extract: J7254-FS(3) Method: 18-0497_BASE
PFUnA	Extract: J7254-FS(3) Method: 18-0497_BASE
PFDoA	Extract: J7254-FS(3) Method: 18-0497_BASE
PFTrDA	Extract: J7254-FS(3) Method: 18-0497_BASE
PFTeDA	Extract: J7254-FS(3) Method: 18-0497_BASE
NMeFOSAA	Extract: J7254-FS(3) Method: 18-0497_BASE
NEtFOSAA	Extract: J7254-FS(3) Method: 18-0497_BASE
PFBS	Extract: J7254-FS(3) Method: 18-0497_BASE
PFHxS	Extract: J7254-FS(3) Method: 18-0497_BASE
PFOS	Extract: J7254-FS(3) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7254-FS(3) Method: 18-0497_SIS
13C4-PFHpA	Extract: J7254-FS(3) Method: 18-0497_SIS
13C8-PFOA	Extract: J7254-FS(3) Method: 18-0497_SIS
13C9-PFNA	Extract: J7254-FS(3) Method: 18-0497_SIS
13C6-PFDA	Extract: J7254-FS(3) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7254-FS(3) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7254-FS(3) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7254-FS(3) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7254-FS(3) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7254-FS(3) Method: 18-0497_SIS
13C3-PFBS	Extract: J7254-FS(3) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7254-FS(3) Method: 18-0497_SIS
13C8-PFOS	Extract: J7254-FS(3) Method: 18-0497_SIS

Client ID	073118-01
Battelle ID	J7255-FS
PFHxA	Extract: J7255-FS-D(5) Method: 18-0497_BASE
PFHpA	Extract: J7255-FS(4) Method: 18-0497_BASE
PFOA	Extract: J7255-FS(4) Method: 18-0497_BASE
PFNA	Extract: J7255-FS(4) Method: 18-0497_BASE
PFDA	Extract: J7255-FS(4) Method: 18-0497_BASE
PFUnA	Extract: J7255-FS(4) Method: 18-0497_BASE
PFDoA	Extract: J7255-FS(4) Method: 18-0497_BASE
PFTrDA	Extract: J7255-FS(4) Method: 18-0497_BASE
PFTeDA	Extract: J7255-FS(4) Method: 18-0497_BASE
NMeFOSAA	Extract: J7255-FS(4) Method: 18-0497_BASE
NEtFOSAA	Extract: J7255-FS(4) Method: 18-0497_BASE
PFBS	Extract: J7255-FS-D(5) Method: 18-0497_BASE
PFHxS	Extract: J7255-FS-D(5) Method: 18-0497_BASE
PFOS	Extract: J7255-FS(4) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7255-FS-D(5) Method: 18-0497_SIS
13C4-PFHpA	Extract: J7255-FS(4) Method: 18-0497_SIS
13C8-PFOA	Extract: J7255-FS(4) Method: 18-0497_SIS
13C9-PFNA	Extract: J7255-FS(4) Method: 18-0497_SIS
13C6-PFDA	Extract: J7255-FS(4) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7255-FS(4) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7255-FS(4) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7255-FS(4) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7255-FS(4) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7255-FS(4) Method: 18-0497_SIS
13C3-PFBS	Extract: J7255-FS-D(5) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7255-FS-D(5) Method: 18-0497_SIS
13C8-PFOS	Extract: J7255-FS(4) Method: 18-0497_SIS

Client ID	073118-02
Battelle ID	J7256-FS
PFHxA	Extract: J7256-FS-D(5) Method: 18-0497_BASE
PFHpA	Extract: J7256-FS(4) Method: 18-0497_BASE
PFOA	Extract: J7256-FS(4) Method: 18-0497_BASE
PFNA	Extract: J7256-FS(4) Method: 18-0497_BASE
PFDA	Extract: J7256-FS(4) Method: 18-0497_BASE
PFUnA	Extract: J7256-FS(4) Method: 18-0497_BASE
PFDoA	Extract: J7256-FS(4) Method: 18-0497_BASE
PFTrDA	Extract: J7256-FS(4) Method: 18-0497_BASE
PFTeDA	Extract: J7256-FS(4) Method: 18-0497_BASE
NMeFOSAA	Extract: J7256-FS(4) Method: 18-0497_BASE
NEtFOSAA	Extract: J7256-FS(4) Method: 18-0497_BASE
PFBS	Extract: J7256-FS(4) Method: 18-0497_BASE
PFHxS	Extract: J7256-FS(4) Method: 18-0497_BASE
PFOS	Extract: J7256-FS(4) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7256-FS-D(5) Method: 18-0497_SIS
13C4-PFHpA	Extract: J7256-FS(4) Method: 18-0497_SIS
13C8-PFOA	Extract: J7256-FS(4) Method: 18-0497_SIS
13C9-PFNA	Extract: J7256-FS(4) Method: 18-0497_SIS
13C6-PFDA	Extract: J7256-FS(4) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7256-FS(4) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7256-FS(4) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7256-FS(4) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7256-FS(4) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7256-FS(4) Method: 18-0497_SIS
13C3-PFBS	Extract: J7256-FS(4) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7256-FS(4) Method: 18-0497_SIS
13C8-PFOS	Extract: J7256-FS(4) Method: 18-0497_SIS

Client ID	073118-03
Battelle ID	J7257-FS
PFHxA	Extract: J7257-FS-D(9) Method: 18-0497A_BASE
PFHpA	Extract: J7257-FS-D(5) Method: 18-0497_BASE
PFOA	Extract: J7257-FS-D(5) Method: 18-0497_BASE
PFNA	Extract: J7257-FS(4) Method: 18-0497_BASE
PFDA	Extract: J7257-FS(4) Method: 18-0497_BASE
PFUnA	Extract: J7257-FS(4) Method: 18-0497_BASE
PFDoA	Extract: J7257-FS(4) Method: 18-0497_BASE
PFTrDA	Extract: J7257-FS(4) Method: 18-0497_BASE
PFTeDA	Extract: J7257-FS(4) Method: 18-0497_BASE
NMeFOSAA	Extract: J7257-FS(4) Method: 18-0497_BASE
NEtFOSAA	Extract: J7257-FS(4) Method: 18-0497_BASE
PFBS	Extract: J7257-FS-D(5) Method: 18-0497_BASE
PFHxS	Extract: J7257-FS-D(5) Method: 18-0497_BASE
PFOS	Extract: J7257-FS(4) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7257-FS-D(9) Method: 18-0497A_SIS
13C4-PFHpA	Extract: J7257-FS-D(5) Method: 18-0497_SIS
13C8-PFOA	Extract: J7257-FS-D(5) Method: 18-0497_SIS
13C9-PFNA	Extract: J7257-FS-D(5) Method: 18-0497_SIS
13C6-PFDA	Extract: J7257-FS-D(5) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7257-FS-D(5) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7257-FS-D(5) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7257-FS-D(5) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7257-FS-D(5) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7257-FS-D(5) Method: 18-0497_SIS
13C3-PFBS	Extract: J7257-FS-D(5) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7257-FS-D(5) Method: 18-0497_SIS
13C8-PFOS	Extract: J7257-FS-D(5) Method: 18-0497_SIS

Client ID	073118-04
Battelle ID	J7258-FS
PFHxA	Extract: J7258-FS-D(5) Method: 18-0497_BASE
PFHpA	Extract: J7258-FS(4) Method: 18-0497_BASE
PFOA	Extract: J7258-FS(4) Method: 18-0497_BASE
PFNA	Extract: J7258-FS(4) Method: 18-0497_BASE
PFDA	Extract: J7258-FS(4) Method: 18-0497_BASE
PFUnA	Extract: J7258-FS(4) Method: 18-0497_BASE
PFDoA	Extract: J7258-FS(4) Method: 18-0497_BASE
PFTrDA	Extract: J7258-FS(4) Method: 18-0497_BASE
PFTeDA	Extract: J7258-FS(4) Method: 18-0497_BASE
NMeFOSAA	Extract: J7258-FS(4) Method: 18-0497_BASE
NEtFOSAA	Extract: J7258-FS(4) Method: 18-0497_BASE
PFBS	Extract: J7258-FS-D(5) Method: 18-0497_BASE
PFHxS	Extract: J7258-FS-D(5) Method: 18-0497_BASE
PFOS	Extract: J7258-FS(4) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7258-FS-D(5) Method: 18-0497_SIS
13C4-PFHpA	Extract: J7258-FS-D(5) Method: 18-0497_SIS
13C8-PFOA	Extract: J7258-FS-D(5) Method: 18-0497_SIS
13C9-PFNA	Extract: J7258-FS-D(5) Method: 18-0497_SIS
13C6-PFDA	Extract: J7258-FS(4) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7258-FS(4) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7258-FS(4) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7258-FS(4) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7258-FS(4) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7258-FS(4) Method: 18-0497_SIS
13C3-PFBS	Extract: J7258-FS-D(5) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7258-FS-D(5) Method: 18-0497_SIS
13C8-PFOS	Extract: J7258-FS(4) Method: 18-0497_SIS

Client ID	080118-01
Battelle ID	J7259-FS
PFHxA	Extract: J7259-FS(3) Method: 18-0497_BASE
PFHpA	Extract: J7259-FS(3) Method: 18-0497_BASE
PFOA	Extract: J7259-FS(3) Method: 18-0497_BASE
PFNA	Extract: J7259-FS(3) Method: 18-0497_BASE
PFDA	Extract: J7259-FS(3) Method: 18-0497_BASE
PFUnA	Extract: J7259-FS(3) Method: 18-0497_BASE
PFDoA	Extract: J7259-FS(3) Method: 18-0497_BASE
PFTrDA	Extract: J7259-FS(3) Method: 18-0497_BASE
PFTeDA	Extract: J7259-FS(3) Method: 18-0497_BASE
NMeFOSAA	Extract: J7259-FS(3) Method: 18-0497_BASE
NEtFOSAA	Extract: J7259-FS(3) Method: 18-0497_BASE
PFBS	Extract: J7259-FS(2) Method: 18-0497B_BASE
PFHxS	Extract: J7259-FS(3) Method: 18-0497_BASE
PFOS	Extract: J7259-FS(3) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7259-FS(3) Method: 18-0497_SIS
13C4-PFHpA	Extract: J7259-FS(3) Method: 18-0497_SIS
13C8-PFOA	Extract: J7259-FS(3) Method: 18-0497_SIS
13C9-PFNA	Extract: J7259-FS(3) Method: 18-0497_SIS
13C6-PFDA	Extract: J7259-FS(3) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7259-FS(3) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7259-FS(3) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7259-FS(3) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7259-FS(3) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7259-FS(3) Method: 18-0497_SIS
13C3-PFBS	Extract: J7259-FS(2) Method: 18-0497B_SIS
13C3-PFHxS	Extract: J7259-FS(3) Method: 18-0497_SIS
13C8-PFOS	Extract: J7259-FS(3) Method: 18-0497_SIS

Client ID	080118-02
Battelle ID	J7260-FS
PFHxA	Extract: J7260-FS(3) Method: 18-0497_BASE
PFHpA	Extract: J7260-FS(3) Method: 18-0497_BASE
PFOA	Extract: J7260-FS(3) Method: 18-0497_BASE
PFNA	Extract: J7260-FS(3) Method: 18-0497_BASE
PFDA	Extract: J7260-FS(3) Method: 18-0497_BASE
PFUnA	Extract: J7260-FS(3) Method: 18-0497_BASE
PFDoA	Extract: J7260-FS(3) Method: 18-0497_BASE
PFTrDA	Extract: J7260-FS(3) Method: 18-0497_BASE
PFTeDA	Extract: J7260-FS(3) Method: 18-0497_BASE
NMeFOSAA	Extract: J7260-FS(3) Method: 18-0497_BASE
NEtFOSAA	Extract: J7260-FS(3) Method: 18-0497_BASE
PFBS	Extract: J7260-FS(3) Method: 18-0497_BASE
PFHxS	Extract: J7260-FS(3) Method: 18-0497_BASE
PFOS	Extract: J7260-FS(3) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7260-FS(3) Method: 18-0497_SIS
13C4-PFHpA	Extract: J7260-FS(3) Method: 18-0497_SIS
13C8-PFOA	Extract: J7260-FS(3) Method: 18-0497_SIS
13C9-PFNA	Extract: J7260-FS(3) Method: 18-0497_SIS
13C6-PFDA	Extract: J7260-FS(3) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7260-FS(3) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7260-FS(3) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7260-FS(3) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7260-FS(3) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7260-FS(3) Method: 18-0497_SIS
13C3-PFBS	Extract: J7260-FS(3) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7260-FS(3) Method: 18-0497_SIS
13C8-PFOS	Extract: J7260-FS(3) Method: 18-0497_SIS

Client ID	080118-03
Battelle ID	J7261-FS
PFHxA	Extract: J7261-FS(3) Method: 18-0497_BASE
PFHpA	Extract: J7261-FS(3) Method: 18-0497_BASE
PFOA	Extract: J7261-FS(3) Method: 18-0497_BASE
PFNA	Extract: J7261-FS(3) Method: 18-0497_BASE
PFDA	Extract: J7261-FS(3) Method: 18-0497_BASE
PFUnA	Extract: J7261-FS(3) Method: 18-0497_BASE
PFDoA	Extract: J7261-FS(3) Method: 18-0497_BASE
PFTrDA	Extract: J7261-FS(3) Method: 18-0497_BASE
PFTeDA	Extract: J7261-FS(3) Method: 18-0497_BASE
NMeFOSAA	Extract: J7261-FS(3) Method: 18-0497_BASE
NEtFOSAA	Extract: J7261-FS(3) Method: 18-0497_BASE
PFBS	Extract: J7261-FS(3) Method: 18-0497_BASE
PFHxS	Extract: J7261-FS(3) Method: 18-0497_BASE
PFOS	Extract: J7261-FS(3) Method: 18-0497_BASE
13C5-PFHxA	Extract: J7261-FS(3) Method: 18-0497_SIS
13C4-PFHpA	Extract: J7261-FS(3) Method: 18-0497_SIS
13C8-PFOA	Extract: J7261-FS(3) Method: 18-0497_SIS
13C9-PFNA	Extract: J7261-FS(3) Method: 18-0497_SIS
13C6-PFDA	Extract: J7261-FS(3) Method: 18-0497_SIS
13C7-PFUnA	Extract: J7261-FS(3) Method: 18-0497_SIS
13C2-PFDoA	Extract: J7261-FS(3) Method: 18-0497_SIS
13C2-PFTeDA	Extract: J7261-FS(3) Method: 18-0497_SIS
d3-MeFOSAA	Extract: J7261-FS(3) Method: 18-0497_SIS
d5-EtFOSAA	Extract: J7261-FS(3) Method: 18-0497_SIS
13C3-PFBS	Extract: J7261-FS(3) Method: 18-0497_SIS
13C3-PFHxS	Extract: J7261-FS(3) Method: 18-0497_SIS
13C8-PFOS	Extract: J7261-FS(3) Method: 18-0497_SIS

Example Calculation for PFAS

Calculation of final concentration from area:

$$Concentration = \left[\frac{PA - b}{m}\right] * C_{IS} * PIV * DF/S$$

Where:

PA = Area of target / area of internal standard
b = y intercept from calibration curve
CIS = concentration of internal standard (ng/L)
m = slope of calibration
DF = dilution factor
S = Sample Size
PIV = Pre-injection volume (L)

Sample ID:	J7252-FS(3)
Client Sample ID:	073018-05
Sample Size:	0.29
Units:	L
Dilution Factor:	2.000
PIV (L):	0.0005
Target Analyte:	PFDA
MRM Transition:	513.0 / 469.0
Data file:	18-0502.wiff
Result table:	18-0497_BASE
Area:	2,671.00
IS Name:	13C6-PFDA
IS Area:	87,695.76
IS Amount (ng/L):	250
y-intercept:	-0.34379
slope:	1.20581

$$\text{Concentration} = \frac{[(2671/87695.76) - -0.34379]}{1.20581} * 250 * 0.0005 * 2 / 0.29$$

ng/L = 0.27

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675
Preparation Batch: 18-0497
Data Set: DP-18-0212

	CR546PB-FS (Procedural Blank)	CR547LCS-FS (Laboratory Control Sample)	J7249MS-FS (073018-02)	J7249MSD-FS (073018-02)	J7248-FS (073018-01)	J7249-FS (073018-02)	J7250-FS (073018-03)	J7251-FS (073018-04)	J7252-FS (073018-05)
PFHxA	-	L	L	L	L	L	L	L	-
PFHpA	-	L	L	L	L	L	L	L	-
PFOA	-	L	L	L	L	L/Br	L/Br	L/Br	-
PFNA	-	L	L	L	-	-	-	-	-
PFDA	-	L	L	L	-	-	-	-	-
PFUnA	-	L	L	L	-	-	-	-	-
PFDoA	-	L	L	L	-	-	-	-	-
PFTrDA	-	L	L	L	-	-	-	-	-
PFTeDA	-	L	L	L	-	-	-	-	-
NMeFOSAA	-	L	L	L	-	-	-	-	-
NEtFOSAA	-	L	L	L	-	-	-	-	-
PFBS	-	L	L	L	L	L	L	L	-
PFHxS	-	L/Br	L/Br	L/Br	L	L	L	L	-
PFOS	-	L/Br	L/Br	L/Br	-	L/Br	L/Br	L/Br	-

"L" :Linear
"Br": branched
"L/Br": Linear/Branched
"-": Not detected

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675
Preparation Batch: 18-0497
Data Set: DP-18-0212

	J7253-FS (073018-06)	J7254-FS (073018-07)	J7255-FS (073118-01)	J7256-FS (073118-02)	J7257-FS (073118-03)	J7258-FS (073118-04)	J7259-FS (080118-01)	J7260-FS (080118-02)	J7261-FS (080118-03)
PFHxA	-	-	L	L	L	L	-	L	L
PFHpA	-	-	L	L	L	L	-	-	-
PFOA	-	-	L/Br	L/Br	L/Br	L/Br	-	-	-
PFNA	-	-	-	-	-	-	-	-	-
PFDA	-	-	-	-	-	-	-	-	-
PFUnA	-	-	-	-	-	-	-	-	-
PFDoA	-	-	-	-	-	-	-	-	-
PFTrDA	-	-	-	-	-	-	-	-	-
PFTeDA	-	-	-	-	-	-	-	-	-
NMeFOSAA	-	-	-	-	-	-	-	-	-
NEtFOSAA	-	-	-	-	-	-	-	-	-
PFBS	-	-	L	L	L	L	-	-	-
PFHxS	-	-	L	L	L	L	-	-	-
PFOS	-	-	-	-	-	L/Br	-	-	L/Br

"L" :Linear
"Br": branched
"L/Br": Linear/Branched
"-": Not detected

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/15/18 22:34	13C2-PFOA	98,100.16	49,050.08	147,150.24

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/15/18 21:50	13C2-PFOA	79,967.58	49,050.08	147,150.24	
JY39	L2	8/15/18 22:01	13C2-PFOA	77,934.35	49,050.08	147,150.24	
JY40	L3	8/15/18 22:12	13C2-PFOA	79,341.35	49,050.08	147,150.24	
JY41	L4	8/15/18 22:23	13C2-PFOA	62,038.00	49,050.08	147,150.24	
JY42	L5	8/15/18 22:34	13C2-PFOA	98,100.16	49,050.08	147,150.24	
JY43	L6	8/15/18 22:44	13C2-PFOA	93,716.61	49,050.08	147,150.24	
JY44	L7	8/15/18 22:55	13C2-PFOA	83,880.32	49,050.08	147,150.24	
JY46 IB	IB	8/15/18 23:06	13C2-PFOA	62,339.92	49,050.08	147,150.24	
JY45 ICC	ICC	8/15/18 23:17	13C2-PFOA	77,514.09	49,050.08	147,150.24	
JX41 CCV	CCV	8/16/18 0:22	13C2-PFOA	80,771.08	49,050.08	147,150.24	
CR546PB-FS(3)	Procedural Blank	8/16/18 0:44	13C2-PFOA	83,199.78	49,050.08	147,150.24	
CR547LCS-FS(3)	Laboratory Control Sample	8/16/18 0:55	13C2-PFOA	64,044.37	49,050.08	147,150.24	
J7259-FS(3)	080118-01	8/16/18 1:06	13C2-PFOA	55,764.78	49,050.08	147,150.24	
J7260-FS(3)	080118-02	8/16/18 1:17	13C2-PFOA	54,251.67	49,050.08	147,150.24	
J7261-FS(3)	080118-03	8/16/18 1:28	13C2-PFOA	62,994.82	49,050.08	147,150.24	
J7252-FS(3)	073018-05	8/16/18 1:39	13C2-PFOA	81,758.91	49,050.08	147,150.24	
J7253-FS(3)	073018-06	8/16/18 1:49	13C2-PFOA	72,663.72	49,050.08	147,150.24	
J7254-FS(3)	073018-07	8/16/18 2:00	13C2-PFOA	89,954.45	49,050.08	147,150.24	
JY42 CCV	CCV	8/16/18 2:11	13C2-PFOA	58,168.73	49,050.08	147,150.24	
J7248-FS(4)	073018-01	8/16/18 2:33	13C2-PFOA	74,561.63	49,050.08	147,150.24	
J7248-FS-D(5)	073018-01	8/16/18 2:44	13C2-PFOA	82,229.11	49,050.08	147,150.24	
~~J7249-FS(4)~~	~~073018-02~~	~~8/16/18 2:55~~	~~13C2-PFOA~~	~~191,575.03~~	~~49,050.08~~	~~147,150.24~~	~~N~~
J7249-FS-D(5)	073018-02	8/16/18 3:06	13C2-PFOA	103,402.84	49,050.08	147,150.24	
J7249MS-FS(4)	073018-02	8/16/18 3:16	13C2-PFOA	143,429.39	49,050.08	147,150.24	
J7249MS-FS-D(5)	073018-02	8/16/18 3:27	13C2-PFOA	84,003.60	49,050.08	147,150.24	
~~J7249MSD-FS(4)~~	~~073018-02~~	~~8/16/18 3:38~~	~~13C2-PFOA~~	~~162,017.46~~	~~49,050.08~~	~~147,150.24~~	~~N~~
J7249MSD-FS-D(5)	073018-02	8/16/18 3:49	13C2-PFOA	89,936.53	49,050.08	147,150.24	
J7250-FS(4)	073018-03	8/16/18 4:00	13C2-PFOA	75,630.77	49,050.08	147,150.24	
J7250-FS-D(5)	073018-03	8/16/18 4:11	13C2-PFOA	93,342.91	49,050.08	147,150.24	
JY41 CCV	CCV	8/16/18 4:22	13C2-PFOA	60,959.25	49,050.08	147,150.24	
J7251-FS(4)	073018-04	8/16/18 4:43	13C2-PFOA	56,929.08	49,050.08	147,150.24	
J7251-FS-D(5)	073018-04	8/16/18 4:54	13C2-PFOA	76,660.25	49,050.08	147,150.24	
J7255-FS(4)	073118-01	8/16/18 5:05	13C2-PFOA	57,215.81	49,050.08	147,150.24	
J7255-FS-D(5)	073118-01	8/16/18 5:16	13C2-PFOA	94,272.69	49,050.08	147,150.24	
J7256-FS(4)	073118-02	8/16/18 5:27	13C2-PFOA	67,754.06	49,050.08	147,150.24	
J7256-FS-D(5)	073118-02	8/16/18 5:38	13C2-PFOA	94,345.44	49,050.08	147,150.24	
~~J7257-FS(4)~~	~~073118-03~~	~~8/16/18 5:49~~	~~13C2-PFOA~~	~~46,112.17~~	~~49,050.08~~	~~147,150.24~~	~~N~~
J7257-FS-D(5)	073118-03	8/16/18 6:00	13C2-PFOA	68,013.85	49,050.08	147,150.24	
~~J7258-FS(4)~~	~~073118-04~~	~~8/16/18 6:10~~	~~13C2-PFOA~~	~~43,215.74~~	~~49,050.08~~	~~147,150.24~~	~~N~~
J7258-FS-D(5)	073118-04	8/16/18 6:21	13C2-PFOA	91,932.54	49,050.08	147,150.24	
JY42 CCV	CCV	8/16/18 6:32	13C2-PFOA	79,138.53	49,050.08	147,150.24	

Crossed out records were not used for reporting, a different extract was used to report results.

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/15/18 22:34	13C2-PFDA	100,964.90	50,482.45	151,447.35

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/15/18 21:50	13C2-PFDA	84,211.86	50,482.45	151,447.35	
JY39	L2	8/15/18 22:01	13C2-PFDA	81,697.75	50,482.45	151,447.35	
JY40	L3	8/15/18 22:12	13C2-PFDA	79,336.29	50,482.45	151,447.35	
JY41	L4	8/15/18 22:23	13C2-PFDA	71,247.08	50,482.45	151,447.35	
JY42	L5	8/15/18 22:34	13C2-PFDA	100,964.90	50,482.45	151,447.35	
JY43	L6	8/15/18 22:44	13C2-PFDA	96,517.57	50,482.45	151,447.35	
JY44	L7	8/15/18 22:55	13C2-PFDA	90,176.00	50,482.45	151,447.35	
JY46 IB	IB	8/15/18 23:06	13C2-PFDA	65,395.57	50,482.45	151,447.35	
JY45 ICC	ICC	8/15/18 23:17	13C2-PFDA	74,746.07	50,482.45	151,447.35	
JX41 CCV	CCV	8/16/18 0:22	13C2-PFDA	84,986.39	50,482.45	151,447.35	
CR546PB-FS(3)	Procedural Blank	8/16/18 0:44	13C2-PFDA	88,376.32	50,482.45	151,447.35	
CR547LCS-FS(3)	Laboratory Control Sample	8/16/18 0:55	13C2-PFDA	61,585.12	50,482.45	151,447.35	
J7259-FS(3)	080118-01	8/16/18 1:06	13C2-PFDA	63,332.19	50,482.45	151,447.35	
J7260-FS(3)	080118-02	8/16/18 1:17	13C2-PFDA	56,526.78	50,482.45	151,447.35	
J7261-FS(3)	080118-03	8/16/18 1:28	13C2-PFDA	63,671.69	50,482.45	151,447.35	
J7252-FS(3)	073018-05	8/16/18 1:39	13C2-PFDA	84,069.65	50,482.45	151,447.35	
J7253-FS(3)	073018-06	8/16/18 1:49	13C2-PFDA	68,722.75	50,482.45	151,447.35	
J7254-FS(3)	073018-07	8/16/18 2:00	13C2-PFDA	96,639.71	50,482.45	151,447.35	
JY42 CCV	CCV	8/16/18 2:11	13C2-PFDA	60,762.07	50,482.45	151,447.35	
J7248-FS(4)	073018-01	8/16/18 2:33	13C2-PFDA	70,689.66	50,482.45	151,447.35	
J7248-FS-D(5)	073018-01	8/16/18 2:44	13C2-PFDA	84,849.89	50,482.45	151,447.35	
J7249-FS(4)	073018-02	8/16/18 2:55	13C2-PFDA	86,505.89	50,482.45	151,447.35	
J7249-FS-D(5)	073018-02	8/16/18 3:06	13C2-PFDA	98,515.15	50,482.45	151,447.35	
~~J7249MS-FS(4)~~	~~073018-02~~	~~8/16/18 3:16~~	~~13C2-PFDA~~	~~43,009.43~~	~~50,482.45~~	~~151,447.35~~	~~N~~
J7249MS-FS-D(5)	073018-02	8/16/18 3:27	13C2-PFDA	81,949.61	50,482.45	151,447.35	
J7249MSD-FS(4)	073018-02	8/16/18 3:38	13C2-PFDA	67,984.21	50,482.45	151,447.35	
J7249MSD-FS-D(5)	073018-02	8/16/18 3:49	13C2-PFDA	88,190.98	50,482.45	151,447.35	
J7250-FS(4)	073018-03	8/16/18 4:00	13C2-PFDA	79,746.52	50,482.45	151,447.35	
J7250-FS-D(5)	073018-03	8/16/18 4:11	13C2-PFDA	95,164.06	50,482.45	151,447.35	
JY41 CCV	CCV	8/16/18 4:22	13C2-PFDA	67,793.57	50,482.45	151,447.35	
J7251-FS(4)	073018-04	8/16/18 4:43	13C2-PFDA	63,579.75	50,482.45	151,447.35	
J7251-FS-D(5)	073018-04	8/16/18 4:54	13C2-PFDA	80,803.35	50,482.45	151,447.35	
J7255-FS(4)	073118-01	8/16/18 5:05	13C2-PFDA	73,317.51	50,482.45	151,447.35	
J7255-FS-D(5)	073118-01	8/16/18 5:16	13C2-PFDA	90,398.27	50,482.45	151,447.35	
J7256-FS(4)	073118-02	8/16/18 5:27	13C2-PFDA	75,083.13	50,482.45	151,447.35	
J7256-FS-D(5)	073118-02	8/16/18 5:38	13C2-PFDA	94,756.09	50,482.45	151,447.35	
~~J7257-FS(4)~~	~~073118-03~~	~~8/16/18 5:49~~	~~13C2-PFDA~~	~~48,118.97~~	~~50,482.45~~	~~151,447.35~~	~~N~~
J7257-FS-D(5)	073118-03	8/16/18 6:00	13C2-PFDA	67,901.60	50,482.45	151,447.35	
J7258-FS(4)	073118-04	8/16/18 6:10	13C2-PFDA	62,262.99	50,482.45	151,447.35	
J7258-FS-D(5)	073118-04	8/16/18 6:21	13C2-PFDA	89,547.43	50,482.45	151,447.35	
JY42 CCV	CCV	8/16/18 6:32	13C2-PFDA	73,279.42	50,482.45	151,447.35	

Crossed out records were not used for reporting, a different extract was used to report results.

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/15/18 22:34	13C4-PFOS	30,257.21	15,128.61	45,385.82

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/15/18 21:50	13C4-PFOS	26,962.30	15,128.61	45,385.82	
JY39	L2	8/15/18 22:01	13C4-PFOS	26,319.54	15,128.61	45,385.82	
JY40	L3	8/15/18 22:12	13C4-PFOS	25,297.76	15,128.61	45,385.82	
JY41	L4	8/15/18 22:23	13C4-PFOS	21,987.16	15,128.61	45,385.82	
JY42	L5	8/15/18 22:34	13C4-PFOS	30,257.21	15,128.61	45,385.82	
JY43	L6	8/15/18 22:44	13C4-PFOS	31,810.06	15,128.61	45,385.82	
JY44	L7	8/15/18 22:55	13C4-PFOS	29,909.69	15,128.61	45,385.82	
JY46 IB	IB	8/15/18 23:06	13C4-PFOS	22,859.95	15,128.61	45,385.82	
JY45 ICC	ICC	8/15/18 23:17	13C4-PFOS	25,474.60	15,128.61	45,385.82	
JX41 CCV	CCV	8/16/18 0:22	13C4-PFOS	25,251.56	15,128.61	45,385.82	
CR546PB-FS(3)	Procedural Blank	8/16/18 0:44	13C4-PFOS	31,158.15	15,128.61	45,385.82	
CR547LCS-FS(3)	Laboratory Control Sample	8/16/18 0:55	13C4-PFOS	22,258.77	15,128.61	45,385.82	
J7259-FS(3)	080118-01	8/16/18 1:06	13C4-PFOS	17,442.89	15,128.61	45,385.82	
J7260-FS(3)	080118-02	8/16/18 1:17	13C4-PFOS	18,865.63	15,128.61	45,385.82	
J7261-FS(3)	080118-03	8/16/18 1:28	13C4-PFOS	20,743.48	15,128.61	45,385.82	
J7252-FS(3)	073018-05	8/16/18 1:39	13C4-PFOS	25,889.76	15,128.61	45,385.82	
J7253-FS(3)	073018-06	8/16/18 1:49	13C4-PFOS	23,306.45	15,128.61	45,385.82	
J7254-FS(3)	073018-07	8/16/18 2:00	13C4-PFOS	31,247.20	15,128.61	45,385.82	
JY42 CCV	CCV	8/16/18 2:11	13C4-PFOS	18,267.73	15,128.61	45,385.82	
J7248-FS(4)	073018-01	8/16/18 2:33	13C4-PFOS	23,886.94	15,128.61	45,385.82	
J7248-FS-D(5)	073018-01	8/16/18 2:44	13C4-PFOS	24,643.45	15,128.61	45,385.82	
J7249-FS(4)	073018-02	8/16/18 2:55	13C4-PFOS	24,018.48	15,128.61	45,385.82	
J7249-FS-D(5)	073018-02	8/16/18 3:06	13C4-PFOS	28,782.04	15,128.61	45,385.82	
~~J7249MS-FS(4)~~	~~073018-02~~	~~8/16/18 3:16~~	~~13C4-PFOS~~	~~12,880.43~~	~~15,128.61~~	~~45,385.82~~	~~N~~
J7249MS-FS-D(5)	073018-02	8/16/18 3:27	13C4-PFOS	23,403.46	15,128.61	45,385.82	
J7249MSD-FS(4)	073018-02	8/16/18 3:38	13C4-PFOS	19,072.07	15,128.61	45,385.82	
J7249MSD-FS-D(5)	073018-02	8/16/18 3:49	13C4-PFOS	27,501.29	15,128.61	45,385.82	
J7250-FS(4)	073018-03	8/16/18 4:00	13C4-PFOS	21,347.12	15,128.61	45,385.82	
J7250-FS-D(5)	073018-03	8/16/18 4:11	13C4-PFOS	31,568.52	15,128.61	45,385.82	
JY41 CCV	CCV	8/16/18 4:22	13C4-PFOS	23,415.35	15,128.61	45,385.82	
J7251-FS(4)	073018-04	8/16/18 4:43	13C4-PFOS	18,529.52	15,128.61	45,385.82	
J7251-FS-D(5)	073018-04	8/16/18 4:54	13C4-PFOS	23,616.61	15,128.61	45,385.82	
J7255-FS(4)	073118-01	8/16/18 5:05	13C4-PFOS	22,943.81	15,128.61	45,385.82	
J7255-FS-D(5)	073118-01	8/16/18 5:16	13C4-PFOS	28,534.19	15,128.61	45,385.82	
J7256-FS(4)	073118-02	8/16/18 5:27	13C4-PFOS	24,674.78	15,128.61	45,385.82	
J7256-FS-D(5)	073118-02	8/16/18 5:38	13C4-PFOS	30,548.60	15,128.61	45,385.82	
~~J7257-FS(4)~~	~~073118-03~~	~~8/16/18 5:49~~	~~13C4-PFOS~~	~~13,404.41~~	~~15,128.61~~	~~45,385.82~~	~~N~~
J7257-FS-D(5)	073118-03	8/16/18 6:00	13C4-PFOS	20,347.51	15,128.61	45,385.82	
J7258-FS(4)	073118-04	8/16/18 6:10	13C4-PFOS	17,309.43	15,128.61	45,385.82	
J7258-FS-D(5)	073118-04	8/16/18 6:21	13C4-PFOS	29,116.13	15,128.61	45,385.82	
JY42 CCV	CCV	8/16/18 6:32	13C4-PFOS	25,004.96	15,128.61	45,385.82	

Crossed out records were not used for reporting, a different extract was used to report results.

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 16:05	13C2-PFOA	89,837.59	44,918.80	134,756.39

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 15:22	13C2-PFOA	84,773.28	44,918.80	134,756.39	
JY39	L2	8/24/18 15:32	13C2-PFOA	98,778.59	44,918.80	134,756.39	
JY40	L3	8/24/18 15:43	13C2-PFOA	96,338.21	44,918.80	134,756.39	
JY41	L4	8/24/18 15:54	13C2-PFOA	98,639.63	44,918.80	134,756.39	
JY42	L5	8/24/18 16:05	13C2-PFOA	89,837.59	44,918.80	134,756.39	
JY43	L6	8/24/18 16:16	13C2-PFOA	103,289.85	44,918.80	134,756.39	
JY44	L7	8/24/18 16:27	13C2-PFOA	95,521.96	44,918.80	134,756.39	
JY46 IB	IB	8/24/18 16:38	13C2-PFOA	96,417.06	44,918.80	134,756.39	
JY45 ICC	ICC	8/24/18 16:49	13C2-PFOA	92,157.29	44,918.80	134,756.39	
JY42	L5	8/24/18 20:26	13C2-PFOA	72,064.11	44,918.80	134,756.39	
J7249-FS-D(8)	073018-02	8/24/18 20:48	13C2-PFOA	103,146.77	44,918.80	134,756.39	
J7249-FS-D(9)	073018-02	8/24/18 20:59	13C2-PFOA	67,522.56	44,918.80	134,756.39	
J7249MS-FS-D(8)	073018-02	8/24/18 21:09	13C2-PFOA	99,474.97	44,918.80	134,756.39	
J7249MS-FS-D(9)	073018-02	8/24/18 21:20	13C2-PFOA	60,800.39	44,918.80	134,756.39	
J7249MSD-FS-D(8)	073018-02	8/24/18 21:31	13C2-PFOA	111,536.30	44,918.80	134,756.39	
J7249MSD-FS-D(9)	073018-02	8/24/18 21:42	13C2-PFOA	66,024.41	44,918.80	134,756.39	
J7257-FS-D(9)	073118-03	8/24/18 21:53	13C2-PFOA	59,409.28	44,918.80	134,756.39	
JY41	L4	8/24/18 22:04	13C2-PFOA	102,212.86	44,918.80	134,756.39	

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 16:05	13C4-PFOS	33,306.40	16,653.20	49,959.60

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 15:22	13C4-PFOS	29,563.78	16,653.20	49,959.60	
JY39	L2	8/24/18 15:32	13C4-PFOS	35,273.66	16,653.20	49,959.60	
JY40	L3	8/24/18 15:43	13C4-PFOS	33,316.94	16,653.20	49,959.60	
JY41	L4	8/24/18 15:54	13C4-PFOS	34,253.41	16,653.20	49,959.60	
JY42	L5	8/24/18 16:05	13C4-PFOS	33,306.40	16,653.20	49,959.60	
JY43	L6	8/24/18 16:16	13C4-PFOS	33,916.67	16,653.20	49,959.60	
JY44	L7	8/24/18 16:27	13C4-PFOS	32,861.88	16,653.20	49,959.60	
JY46 IB	IB	8/24/18 16:38	13C4-PFOS	36,701.61	16,653.20	49,959.60	
JY45 ICC	ICC	8/24/18 16:49	13C4-PFOS	30,723.28	16,653.20	49,959.60	
JY42	L5	8/24/18 20:26	13C4-PFOS	28,581.61	16,653.20	49,959.60	
J7249-FS-D(8)	073018-02	8/24/18 20:48	13C4-PFOS	27,168.48	16,653.20	49,959.60	
J7249-FS-D(9)	073018-02	8/24/18 20:59	13C4-PFOS	21,431.62	16,653.20	49,959.60	
J7249MS-FS-D(8)	073018-02	8/24/18 21:09	13C4-PFOS	25,910.51	16,653.20	49,959.60	
J7249MS-FS-D(9)	073018-02	8/24/18 21:20	13C4-PFOS	19,608.80	16,653.20	49,959.60	
J7249MSD-FS-D(8)	073018-02	8/24/18 21:31	13C4-PFOS	25,008.91	16,653.20	49,959.60	
J7249MSD-FS-D(9)	073018-02	8/24/18 21:42	13C4-PFOS	23,130.40	16,653.20	49,959.60	
J7257-FS-D(9)	073118-03	8/24/18 21:53	13C4-PFOS	20,562.79	16,653.20	49,959.60	
JY41	L4	8/24/18 22:04	13C4-PFOS	32,755.83	16,653.20	49,959.60	

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/28/18 20:48	13C4-PFOS	30,907.19	15,453.60	46,360.79

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/28/18 20:04	13C4-PFOS	29,953.96	15,453.60	46,360.79	
JY39	L2	8/28/18 20:15	13C4-PFOS	28,891.71	15,453.60	46,360.79	
JY40	L3	8/28/18 20:26	13C4-PFOS	29,758.83	15,453.60	46,360.79	
JY41	L4	8/28/18 20:37	13C4-PFOS	23,457.09	15,453.60	46,360.79	
JY42	L5	8/28/18 20:48	13C4-PFOS	30,907.19	15,453.60	46,360.79	
JY43	L6	8/28/18 20:59	13C4-PFOS	27,142.68	15,453.60	46,360.79	
JY44	L7	8/28/18 21:09	13C4-PFOS	24,977.32	15,453.60	46,360.79	
JY46 IB	IB	8/28/18 21:20	13C4-PFOS	27,744.14	15,453.60	46,360.79	
JY45 ICC	ICC	8/28/18 21:31	13C4-PFOS	27,304.48	15,453.60	46,360.79	
JY42	L5	8/28/18 23:31	13C4-PFOS	23,118.25	15,453.60	46,360.79	
J7259-FS(2)	080118-01	8/29/18 0:14	13C4-PFOS	24,560.00	15,453.60	46,360.79	
J7251-FS(6)	073018-04	8/29/18 0:25	13C4-PFOS	18,035.80	15,453.60	46,360.79	
J7251-FS-D(7)	073018-04	8/29/18 0:36	13C4-PFOS	22,135.49	15,453.60	46,360.79	
JY41 CCV	CCV	8/29/18 0:58	13C4-PFOS	23,956.70	15,453.60	46,360.79	

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Mass Spectral Acquisition Rate Report

Created with Analyst Reporter
Printed: 29/08/2018 9:34:10 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 10:55:51 PM	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.55	49	>10
PFBS_2	298.9 / 99.0	1.55	46	>10
PFHxA_1	313.0 / 269.0	1.84	45	>10
PFHxA_2	313.0 / 119.0	1.84	44	>10
PFHpA_1	363.0 / 319.0	2.21	48	>10
PFHpA_2	363.0 / 169.0	2.21	40	>10
PFHxS_1	399.0 / 80.0	2.22	50	>10
PFHxS_2	399.0 / 99.0	2.22	55	>10
PFOA_1	413.0 / 369.0	2.58	35	>10
PFOA_2	413.0 / 169.0	2.58	49	>10
PFNA_1	463.0 / 419.0	2.96	53	>10
PFNA_2	463.0 / 219.0	2.96	49	>10
PFOS_1	499.0 / 80.0	2.95	37	>10
PFOS_2	499.0 / 99.0	2.95	39	>10
PFDA_1	513.0 / 469.0	3.31	55	>10
PFDA_2	513.0 / 219.0	3.31	39	>10
PFUnA_1	563.0 / 519.0	3.63	61	>10
PFUnA_2	563.0 / 269.0	3.63	56	>10
PFDoA_1	613.0 / 569.0	3.92	75	>10
PFDoA_2	613.0 / 319.0	3.92	46	>10
PFTrDA_1	663.0 / 619.0	4.17	84	>10
PFTrDA_2	663.0 / 169.0	4.17	61	>10
PFTeDA_1	713.0 / 669.0	4.40	87	>10
PFTeDA_2	713.0 / 169.0	4.40	60	>10
NMeFOSAA_1	570.0 / 419.0	3.47	46	>10
NMeFOSAA_2	570.0 / 512.0	3.47	44	>10
NEtFOSAA_1	584.0 / 419.0	3.63	55	>10
NEtFOSAA_2	584.0 / 483.0	3.63	28	>10

BATTELLE

Mass Spectral Acquisition Rate Report

Created with Analyst Reporter
Printed: 29/08/2018 9:33:28 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 10:55:51 PM	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C2-PFDoA	615.0 / 570.0	3.91	30	>10
d3-MeFOSAA	573.0 / 419.0	3.45	36	>10
d5-EtFOSAA	589.0 / 419.0	3.62	24	>10
13C5-PFHxA	318.0 / 273.0	1.83	34	>10
13C4-PFHpA	367.0 / 322.0	2.20	41	>10
13C8-PFOA	421.0 / 376.0	2.57	41	>10
13C9-PFNA	472.0 / 427.0	2.94	42	>10
13C6-PFDA	519.0 / 474.0	3.29	32	>10
13C7-PFUnA	570.0 / 525.0	3.61	45	>10
13C2-PFTeDA	715.0 / 670.0	4.39	50	>10
13C3-PFBS	302.0 / 99.0	1.53	33	>10
13C3-PFHxS	402.0 / 99.0	2.21	32	>10
13C8-PFOS	507.0 / 99.0	2.94	25	>10

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Mass Spectral Acquisition Rate Report

Created with Analyst Reporter
Printed: 29/08/2018 9:35:17 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 4:27:19 PM	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFHxA_1	313.0 / 269.0	1.90	25	>10
PFHxA_2	313.0 / 119.0	1.90	28	>10
PFOA_1	413.0 / 369.0	2.71	30	>10
PFOA_2	413.0 / 169.0	2.71	32	>10
PFOS_1	499.0 / 80.0	3.10	36	>10
PFOS_2	499.0 / 99.0	3.10	45	>10

BATTELLE

Mass Spectral Acquisition Rate Report

Created with Analyst Reporter
Printed: 29/08/2018 9:34:42 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 4:27:19 PM	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C5-PFHxA	318.0 / 273.0	1.88	37	>10
13C4-PFHpA	367.0 / 322.0	2.29	41	>10
13C8-PFOA	421.0 / 376.0	2.70	43	>10
13C8-PFOS	507.0 / 99.0	3.08	33	>10

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Mass Spectral Acquisition Rate Report

Created with Analyst Reporter
Printed: 29/08/2018 9:36:11 AM

Sample Name	JY44	**Injection Vial**	22
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	8/28/2018 9:09:59 PM	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.54	50	>10
PFBS_2	298.9 / 99.0	1.54	55	>10

BATTELLE

Mass Spectral Acquisition Rate Report

Created with Analyst Reporter
Printed: 29/08/2018 9:35:44 AM

Sample Name	JY44	**Injection Vial**	22
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	8/28/2018 9:09:59 PM	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C3-PFBS	302.0 / 99.0	1.52	45	>10

BATTELLE
It can be done

Precision and Bias at the LOQ for PFAS in non-potable Water

Analyte	CAS No.	Average (ng/L)	ST DEV	3 Sigma	n
PFBA	375-22-4	12.40	2.18	6.54	11
PFPeA	2706-90-3	10.73	1.51	4.53	9
PFHxA	307-24-4	10.07	1.25	3.75	30
PFHpA	375-85-9	9.51	1.71	5.13	30
PFOA	335-67-1	10.06	1.60	4.80	31
PFNA	375-95-1	9.70	1.23	3.69	30
PFDA	335-76-2	10.04	1.43	4.29	30
PFUnA	2058-94-8	9.95	1.45	4.35	30
PFDoA	307-55-1	11.03	1.28	3.84	30
PFTrDA	72629-94-8	11.52	1.50	4.50	30
PFTeDA	376-06-7	10.92	2.07	6.21	30
NMeFOSAA	2355-31-9	10.21	2.04	6.12	30
NEtFOSAA	2991-50-6	9.60	1.70	5.10	30
PFOSA	754-91-6	9.74	1.14	3.42	3
PFBS	375-73-5	10.25	1.55	4.65	31
PFPeS	BDO-2114	9.80	0.96	2.88	4
PFHxS	355-46-4	9.90	1.52	4.56	30
PFHpS	375-99-6	10.96	0.96	2.88	9
PFOS	1763-23-1	10.16	1.47	4.41	30
PFNS	98789-57-2	9.34	1.10	3.30	4
PFDS	2806-15-7	10.13	1.88	5.64	9
4:2FTS	BDO-2205	11.03	1.26	3.78	9
6:2FTS	27619-97-2	12.52	2.91	8.73	9
8:2FTS	39108-34-4	12.11	2.54	7.62	9

BATTELLE DETECTION LIMITS FOR PFAS IN NON-POTABLE WATER

Analytical SOP 5-369
Extraction SOP 5-370

PFAS by LC-MS/MS Compliant with QSM 5.1 Compliant Table B-15

Analyte	CAS No.	MDL (ng/L)	LOD (ng/L)	LOQ (ng/L)
PFBA	375-22-4	0.14	0.5	5.0
PFPeA	2706-90-3	0.31	1.0	5.0
PFHxA	307-24-4	0.19	0.5	5.0
PFHpA	375-85-9	0.16	0.5	5.0
PFOA	335-67-1	0.18	0.5	5.0
PFNA	375-95-1	0.26	1.0	5.0
PFDA	335-76-2	0.16	0.5	5.0
PFUnA	2058-94-8	0.29	1.0	5.0
PFDoA	307-55-1	0.18	0.5	5.0
PFTrDA	72629-94-8	0.15	0.5	5.0
PFTeDA	376-06-7	0.25	1.0	5.0
NMeFOSAA	2355-31-9	0.56	2.0	5.0
NEtFOSAA	2991-50-6	0.49	1.0	5.0
PFOSA	754-91-6	TBD	TBD	TBD
PFBS	375-73-5	0.13	0.5	5.0
PFPeS	BDO-2114	0.67	2.5	5.0
PFHxS	355-46-4	0.11	0.4	5.0
PFHpS	375-99-6	0.20	0.5	5.0
PFOS	1763-23-1	0.19	0.5	5.0
PFNS	98789-57-2	0.46	1.0	5.0
PFDS	2806-15-7	0.17	0.5	5.0
4:2FTS	BDO-2205	0.14	0.5	5.0
6:2FTS	27619-97-2	1.36	2.5	5.0
8:2FTS	39108-34-4	0.22	0.5	5.0

Analytes on NELAP and ELAP QSM 5.1 Scope of accreditation

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ID 596 04/18

Analytical Transitions for PFAS in non-potable water, solid, and tissue

EPA 537 MOD DoD QSM 5.1 compliant with Table B-15 requirements

Analyte	CAS No.	Type	Primary Transition	Secondary Transition
PFBA	375-22-4	Target	213.0 / 169.0	NA
PFPeA	2706-90-3	Target	263.0 / 219.0	NA
PFHxA	307-24-4	Target	313.0 / 269.0	313.0 / 119.0
PFHpA	375-85-9	Target	363.0 / 319.0	363.0 / 169.0
PFOA	335-67-1	Target	413.0 / 369.0	413.0 / 169.0
PFNA	375-95-1	Target	463.0 / 419.0	463.0 / 219.0
PFDA	335-76-2	Target	513.0 / 469.0	513.0 / 219.0
PFUnA	2058-94-8	Target	563.0 / 519.0	563.0 / 269.0
PFDoA	307-55-1	Target	613.0 / 569.0	613.0 / 319.0
PFTrDA	72629-94-8	Target	663.0 / 619.0	663.0 / 169.0
PFTeDA	376-06-7	Target	713.0 / 669.0	713.0 / 169.0
NMeFOSAA	2355-31-9	Target	570.0 / 419.0	570.0 / 512.0
NEtFOSAA	2991-50-6	Target	584.0 / 419.0	584.0 / 483.0
PFOSA	754-91-6	Target	498.0 / 78.0	498.0 / 83.0
PFBS	375-73-5	Target	299.0 / 80.0	299.0 / 99.0
PFPeS	BDO-2114	Target	349.0 / 99.0	249.0 / 80.0
PFHxS	355-46-4	Target	399.0 / 80.0	399.0 / 99.0
PFHpS	375-99-6	Target	449.0 / 80.0	449.0 / 99.0
PFOS	1763-23-1	Target	499.0 / 80.0	499.0 / 99.0
PFNS	98789-57-2	Target	549.0 / 99.0	549.0 / 80.0
PFDS	2806-15-7	Target	599.0 / 80.0	599.0 / 99.0
4:2FTS	BDO-2205	Target	327.0 / 307.0	327.0 / 80.0
6:2FTS	27619-97-2	Target	427.0 / 407.0	427.0 / 81.0
8:2FTS	39108-34-4	Target	527.0 / 507.0	527.0 / 487.0
13C4-PFBA	BDO-2105	SIS[1]	217.0 / 172.0	NA
13C5-PFPeA	BDO-2216	SIS[1]	268.0 / 223.0	NA
13C5-PFHxA	BDO-2217	SIS[1]	318.0 / 273.0	NA

Analyte	CAS No.	Type	Primary Transition	Secondary Transition
13C4-PFHpA	BDO-2218	SIS[1]	367.0 / 322.0	NA
13C8-PFOA	BDO-2219	SIS[1]	421.0 / 376.0	NA
13C9-PFNA	BDO-2221	SIS[1]	472.0 / 427.0	NA
13C6-PFDA	BDO-2222	SIS[1]	519.0 / 474.0	NA
13C7-PFUnA	BDO-2223	SIS[1]	570.0 / 525.0	NA
13C2-PFDoA	BDO-2112	SIS[1]	615.0 / 570.0	NA
13C2-PFTeDA	BDO-2224	SIS[1]	715.0 / 670.0	NA
d3-MeFOSAA	BDO-1838	SIS[1]	573.0 / 419.0	NA
d5-EtFOSAA	BDO-1839	SIS[1]	589.0 / 419.0	NA
13C8-FOSA	BDO-2225	SIS[1]	506.0 / 78.0	NA
13C3-PFBS	BDO-2226	SIS[1]	302.0 / 99.0	NA
13C3-PFHxS	BDO-2227	SIS[1]	402.0 / 99.0	NA
13C8-PFOS	BDO-2228	SIS[1]	507.0 / 99.0	NA
13C2-4:2FTS	BDO-2229	SIS[1]	329.0 / 81.0	NA
13C2-6:2FTS	BDO-2230	SIS[1]	429.0 / 81.0	NA
13C2-8:2FTS	BDO-2220	SIS[1]	529.0 / 81.0	NA
13C3-PFBA	BDO-2231	IS[2]	216.0 / 172.0	NA
13C2-PFOA	BDO-2107	IS[2]	415.0 / 370.0	NA
13C2-PFDA	BDO-2110	IS[2]	515.0 / 470.0	NA
13C4-PFOS	BDO-2121	IS[2]	503.0 / 99.0	NA

[1] – extracted internal standard (surrogate)
[2] – injection internal standard

Non-Potable Water Calibration to Sample Equivalents

ICAL (ng/L)	PIV (mL)	DF[1]	Sample Size (L)	Sample Equivalent (ng/L)[2]
25	0.5	2	0.250	0.1
50	0.5	2	0.250	0.2
100	0.5	2	0.250	0.4
250	0.5	2	0.250	1.0
500	0.5	2	0.250	2.0
1,000	0.5	2	0.250	4.0
2,500	0.5	2	0.250	10.0
10,000	0.5	2	0.250	40.0
20,000	0.5	2	0.250	80.0

[1] - base level dilution as part of the extraction procedure

[2] - calculated equivalent of a sample based on the ICAL concentration

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

QTRAP 5500
Preventive Maintenance Checklist

Preventive Maintenance Date:	12-June-2018

Request ID:	9749
Company Name:	Battelle Memorial Institute
Instrument ID:	X60666
Instrument Model:	QTRAP 5500
Instrument Serial Number:	AU23051004

☑ **PASS** ☐ **FAIL**

Any failure will lead to an automatic Service Call being open to investigate fault.

Preventive Maintenance is performed twice every year unless specified in the Service Contract. It is designed to help maintain optimum system performance and to help diagnose any system deficiencies.

Engineer is required the assigned Request ID for this PM otherwise making this job invalid.

Comments: Suspected issue with pulse gas manifold. TRAP testing in POSITIVE mode couldn't be finished because of pulse gas issue. The same issue will be taken care in separate service call.

Performed By: Kaustubh Dhayagude **Date:** 12-June-2018

Approved By :_____ **Date:** _____

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PRE PM PPG PERFORMANCE EVALUATION:

☑ Consult Customer concerning the unit overall performance.
☑ Check Logbook for Services recently performed.
☑ Check Vacuum Pressure:

CAD Settings	Vacuum Reading (x 10^{-5} Torr)	Acceptance Criteria
☑ CAD 0	0.6	0.4 to 1.1 x10^{-5} Torr
☑ CAD Low	1.3	Read Only
☑ CAD Medium	2.7	Read Only
☑ CAD High	3.7	Read Only
☑ CAD 12	3.7	2.4 to 4.5 x10^{-5} Torr

☑ Check for Front end contamination symptoms. Run Q1 POS PPG using PPG 2e-7for a few minutes and check for any TIC signal degradation or huge sensitivity drop where the sensitivity result can't pass specification

☑ No degradation or Sensitivity drop

☑ Check for Q3 contamination symptoms. Run Q3 POS PPG using PPG 2e-7for a few minutes and check for any TIC signal degradation or huge sensitivity drop where the sensitivity result can't pass specification

☑ No degradation or Sensitivity drop

Pre PM PPG Test: Perform each of the following tests. Optimize ion source position only. The specifications listed for these Pre PM tests are guidelines only, not required to be met.

☑ Perform Q1 POS using POS PPG 2e-7M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q1 Intensity		Q1 Width Value	Width Specs
	Value	Spec		
Q1 175.133	4.01 e6	Read Only	0.6998	Read Only
Q1 500.380	2.81 e7	Read Only	0.7038	Read Only
Q1 906.673	4.21 e7	Read Only	0.7071	Read Only

☑ Perform Q3 POS using POS PPG 2e-7M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q3 Intensity		Q3 Width Value	Width Specs
	Value	Spec		
Q3 175.133	5.45 e6	Read Only	0.6873	Read Only
Q3 500.380	2.69 e7	Read Only	0.7591	Read Only
Q3 906.673	4.50 e7	Read Only	0.7843	Read Only

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

☐ Perform MSMS POS in Product Ion scan with 609.3 parent and record daughter 195.1 using Reserpine 0.167 pmol/ul at the scan rate of 10 Da/s for 10 MCA. Calculate transmission efficiency comparing Q1POS 609 intensity. Transmission Efficiency: :__28.87%__ (Read Only)

Mass	MSMS Intensity		MSMS Width Value	Width Specs
	Value	Spec		
Q1 609.3	4.26 e7	Read Only	0.7011	Read Only
MS/MS 195.1	1.23 e7	Read Only	0.7069	Read Only

☑ Perform Q1 NEG using NEG PPG 3e-5M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q1 Intensity		Q1 Width Value	Width Specs
	Value	Spec		
Q1 933.636	1.42 e7	Read Only	0.7686	Read Only

☑ Perform Q3 NEG using NEG PPG 3e-5M. Scan Rate 10 Da/s. Record 10 mca.

Mass	Q3 Intensity		Q3 Width Value	Width Specs
	Value	Spec		
Q3 933.636	2.24 e7	Read Only	0.7243	Read Only

☑ Perform Product Ion scan using NEG PPG 3e-5M. Record10mca.

Mass	Scan Rate	MCA	MSMS Intensity		MSMS Width Value	Width Specs
			Value	Spec		
MSMS 45	10	10	3.31 e6	Read Only	0.6746	Read Only

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PREVENTIVE MAINTENANCE CHECKLIST:

☑ Check Cooling Fans for Turbo Pumps while MS is ON.
☑ Check QJet and QPS tuning voltage for reference.
☐ Record AC input Voltage while MS is OFF: _____(200-240VAC).
If Out-of-Range, notify customer.

☑ Clean Interface
- ☑ Curtain Plate
- ☑ Orifice Plate
- ☑ QJet
- ☑ Q0 Rods.

☑ Replace Roughing Pump Oil.
☑ Inspect Oil Exhaust Filter, if Applicable. ☐ N/A
☑ Clean and inspect built-in divert valve if used. ☐ N/A
☑ Check Multiplier Voltage, optimize if necessary.
☑ Replace four Air Filters at the bottom of the mass spectrometer.

☑Pump down overnight if possible. ☐ N/A

☑Perform Maintenance on Turbo V source.

☑Replace Electrode, if necessary. ☐ N/A
☑Check Turbo heaters resistances.
☑Check if Temperature is reached at 500C with TIS Probe installed.
☐Check if Temperature is reached at 500C with APCI Probe installed. ☑ N/A

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

POST PM PPG PERFORMANCE TESTS:

☑ Set-up Sample for Infusion.
☑ Check spray and adjust sprayer's position of the TIS source.
☑ Check Vacuum Pressure:

CAD Settings	Vacuum Reading (x 10^{-5} Torr)	Acceptance Criteria
☑ CAD 0	0.7	0.4 to 1.1 x10^{-5} Torr
☑ CAD Low	1.3	Read Only
☑ CAD Medium	2.7	Read Only
☑ CAD High	3.7	Read Only
☑ CAD 12	3.7	2.4 to 4.5 x10^{-5} Torr

☑ Perform Q1 POS using POS PPG 2e-7M. Mass calibrate to less than 0.1 amu.

Mass	Q1 Intensity		Q1 Width	Width Specs
	Value	Spec	Value	
Scan Rate 10 Da/s Record 10 mca				
Q1 175.133	5.04 e6	≥1.2^{e}6	0.6737	0.6 to 0.8
Q1 500.380	1.60 e7	≥9.0^{e}6	0.6961	0.6 to 0.8
Q1 906.673	2.84 e7	≥1.4^{e}7	0.7179	0.6 to 0.8
Scan Rate 1000 Da/s Record 50 mca				
Q1 906.673	1.33 e8	≥6.8^{e}7	0.7465	0.6 to 0.8

☑ Perform Q3 POS using POS PPG 2e-7M. Mass calibrate to less than 0.1 amu.

Mass	Q3 Intensity		Q3 Width	Width Specs
	Value	Spec	Value	
Scan Rate 10 Da/s Record 10 mca				
Q3 175.133	5.02 e6	≥1.2^{e}6	0.6719	0.6 to 0.8
Q3 500.380	1.72 e7	≥9.0^{e}6	0.7443	0.6 to 0.8
Q3 906.673	3.00 e7	≥1.4^{e}7	0.7504	0.6 to 0.8
Scan Rate 1000 Da/s Record 50 mca				
Q3 906.673	1.46 e8	≥6.8^{e}7	0.7202	0.6 to 0.8

☑ Perform "Product of 609.3" POS and record product ion 195.1 using Reserpine 0.167pmol/uL. Record 10 mca. Calculate Transmission efficiency comparing Q1POS 609 intensity.
Transmission Efficiency: 21.10% (≥ 10.0%)

Mass	MSMS Intensity		Width	Width Specs
	Value	Spec	Value	
Q1 609.3	5.78 e7	N/A	0.6888	Read Only
MS/MS 195.1	1.22 e7	N/A	0.7003	Read Only

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

☑ Perform Q1 NEG using NEG PPG 3e-5M. Mass calibrate to less than 0.1 amu.

Mass	Scan Rate	Mca	Q1 Intensity		Q1 Width Value	Width Specs
			Value	Spec		
Q1 933.636	10	10	1.35 e7	≥1.0^{e}7	0.7486	0.6 to 0.8
Q1 933.636	1000	50	7.52 e7	≥4.0^{e}7	0.7206	0.6 to 0.8

☑ Perform Q3 NEG using NEG PPG 3e-5M. Mass calibrate to less than 0.1 amu.

Mass	Scan Rate	Mca	Q3 Intensity		Q3 Width Value	Width Specs
			Value	Spec		
Q3 933.636	10	10	2.15 e7	≥8.0^{e}6	0.7492	0.6 to 0.8
Q3 933.636	1000	50	8.33 e7	≥4.0^{e}7	0.7299	0.6 to 0.8

☑ Perform Product Ion scan using NEG PPG 3e-5M.

Mass	Scan Rate	Mca	MSMS Intensity		MSMS Width Value	Width Specs
			Value	Spec		
MSMS 45	10	10	3.33 e6	Read Only	0.6387	Read Only

☑ Perform ER POS 118.087 and 922.01 using ESI Tuning Mix 1:100 in ES Tuning Dilution Solvent. Apply suggested Scan Rate and Record number of MCA. Mass calibrate to less than 0.1 amu.

Mass	Fill Time (ms)	ER Intensity		ER Width Value	Width Specs
		Value	Spec		
ScanRate : 1000 Da/s ; 50 Mca					
ER 118.087	0.05	8.54 e6	≥7.2 ^{e}6	0.1473	<0.35
ER 922.010	0.05	4.96 e7	≥2.8 ^{e}6	0.2434	<0.35
ScanRate : 10000 Da/s ; 50 Mca					
ER 118.087	0.05		≥2.4 ^{e}7		<0.65
ER 922.010	0.05		≥6.8 ^{e}7		<0.65

☑ Perform ER NEG 431.982 and 601.978 using ESI Tuning Mix 1:100 in ES Tuning Dilution Solvent. Apply suggested Scan Rate and Record number of MCA. Mass calibrate to less than 0.1 amu.

Mass	Fill Time (ms)	ER Intensity		ER Width Value	Width Specs
		Value	Spec		
ScanRate : 1000 Da/s ; 50 Mca					
ER 431.982	0.05	1.81 e8	≥4.4 ^{e}7	0.1862	<0.35
ER 601.978	0.05	1.70 e8	≥5.6 ^{e}7	0.1809	<0.35
ScanRate : 10000 Da/s ; 50 Mca					
ER 431.982	0.05	5.72 e8	≥1.2 ^{e}8	0.5102	<0.65
ER 601.978	0.05	4.52 e8	≥1.6 ^{e}8	0.6187	<0.65

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

☑ Perform EPI POS 397.2 using Reserpine 0.167pmol/uL. Record 20 mca.

Mass	Scan Rate (Da/s)	Q0 Trapping OFF		Q0 Trapping ON	
		Intensity	Spec	Intensity	Spec
EPI 397.2	10000	> 3.0 e6	≥2.0 e6	> 7.0 e6	≥6.4 e6

☑ Perform MS3 POS full scan Fragmentation ON & OFF using Reserpine 0.167pmol/uL. Record 20 mca.

Mass	Scan Rate (Da/s)	Fragamentation OFF		Fragmentation ON	
		Intensity	Spec	Intensity	Spec
MS3 397.2	1000	Yes	Contains only 397.2	N/A	N/A
☐ 236 OR ☑ 365	1000	Yes	Fragment Intensity	> 2.0 e6	≥1.6x 10e6

REVIEW:

☑ Attach all spectrums printouts to this procedure.
☑ If any parameter setting access modes were changed during the PM, ensure they are returned to their normal access mode and that their offsets are adjusted to match optimized values from the post-PM acquisition files.
☐ Empty tuning cache folder, if necessary. ☑ N/A
☑ Update Service Work Order status
☑ Fill and replace PM Label.

END OF PREVENTIVE MAINTENANCE CHECKLIST

Document history:

06 OCT 2016: Appendix ZEFPM003-2L: Removed requirements to fit Manufacturer's testing criteria.

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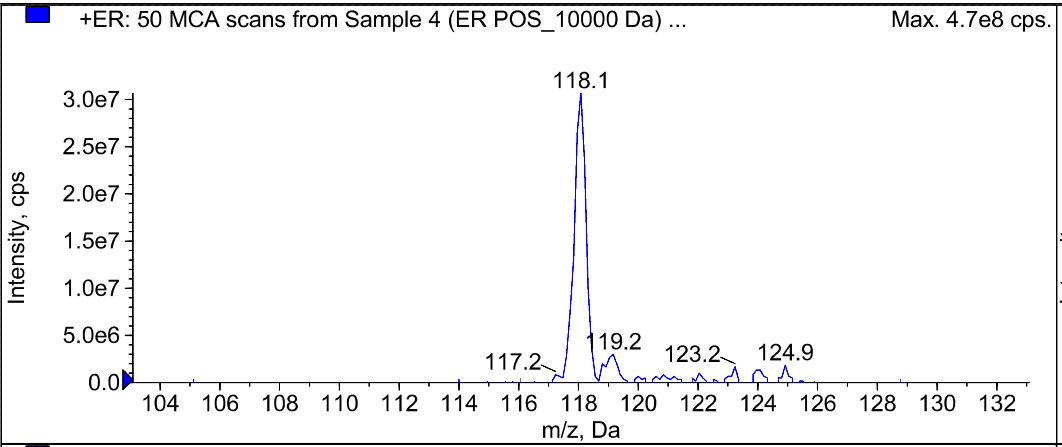

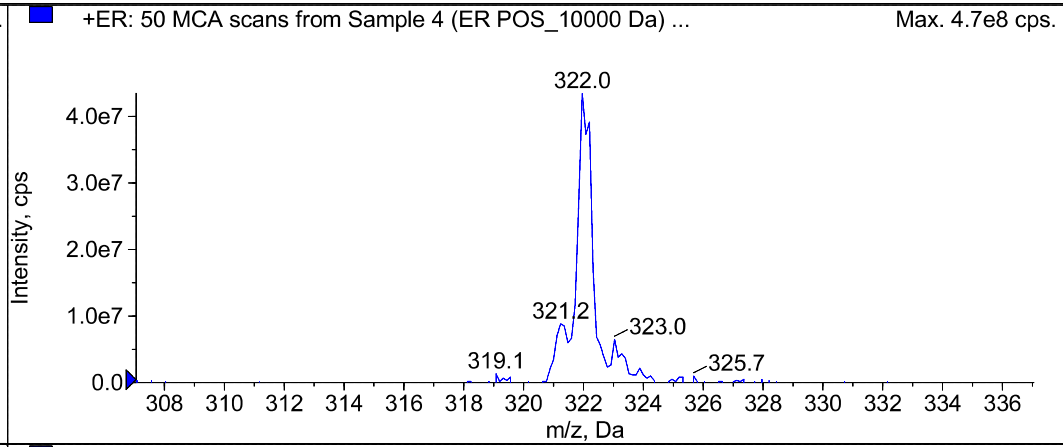

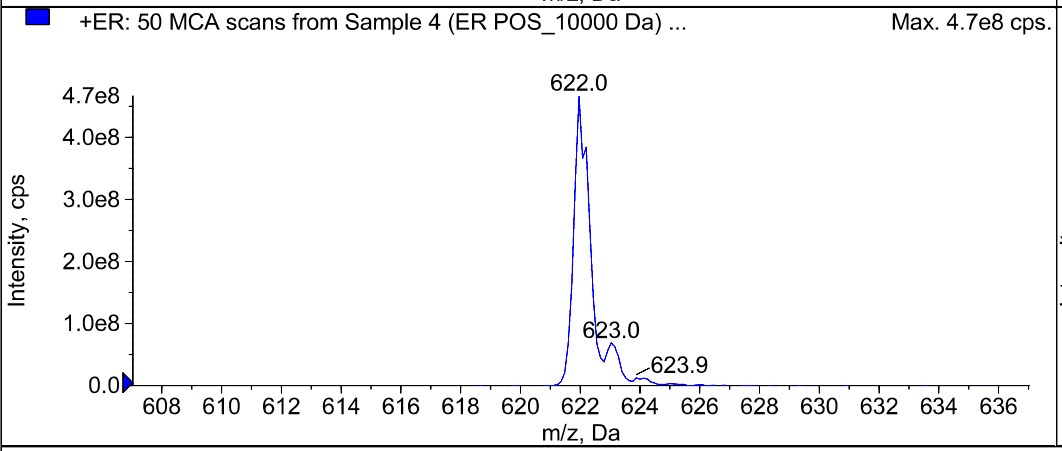

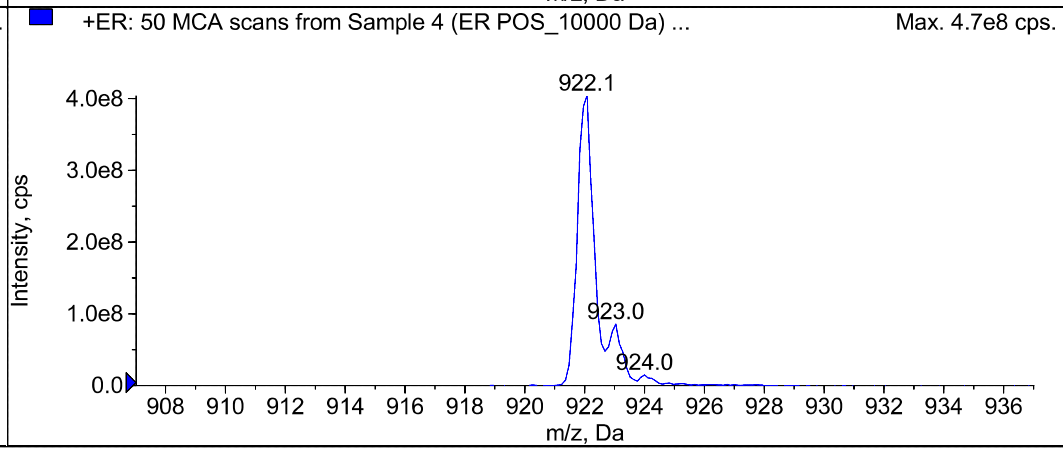

Peak List for " +ER: 50 MCA scans from Sample 4 (ER POS_10000 Da) of TRAP ER with NEW Pulse Manifold.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	118.0870	118.0702	3.0667e7	0.4146	0.0168
2	322.0490	322.0509	4.3500e7	0.4945	-1.9159e-3
3	622.0290	622.0370	4.6717e8	0.5757	-8.0044e-3
4	922.0100	922.0101	4.0400e8	0.5732	-1.4148e-4

Battelle Standard ID	Description	Intermediate Solutions	Battelle Reagent ID (purchased solutions)
JX29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-02
JX29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-03
JX29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-04
JX29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-06
JX29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-07
JY26	PFAS - DoD Internal Standard Spiking Solution	JY25	180726-04
JY28	PFAS - DoD Low Level Labelled Extracted Internal Standards (SIS)	JY27	180726-05
JY38	PFAS - DoD Calibration L1	JY27	180726-05
JY38	PFAS - DoD Calibration L1	JY25	180726-04
JY38	PFAS - DoD Calibration L1	JY23	180705-02
JY39	PFAS - DoD Calibration L2	JY23	180705-02
JY39	PFAS - DoD Calibration L2	JY25	180726-04
JY39	PFAS - DoD Calibration L2	JY27	180726-05
JY40	PFAS - DoD Calibration L3	JY27	180726-05
JY40	PFAS - DoD Calibration L3	JY25	180726-04
JY40	PFAS - DoD Calibration L3	JY24	180705-02
JY41	PFAS - DoD Calibration L4	JY24	180705-02
JY41	PFAS - DoD Calibration L4	JY25	180726-04
JY41	PFAS - DoD Calibration L4	JY27	180726-05
JY42	PFAS - DoD Calibration L5	JY27	180726-05
JY42	PFAS - DoD Calibration L5	JY25	180726-04
JY42	PFAS - DoD Calibration L5	JY24	180705-02
JY43	PFAS - DoD Calibration L6	JY24	180705-02
JY43	PFAS - DoD Calibration L6	JY25	180726-04
JY43	PFAS - DoD Calibration L6	JY27	180726-05
JY44	PFAS - DoD Calibration L7	JY27	180726-05
JY44	PFAS - DoD Calibration L7	JY25	180726-04
JY44	PFAS - DoD Calibration L7	JY24	180705-02
JY45	PFAS - DoD ICC	JZ27	171025-01
JY45	PFAS - DoD ICC	JY25	180726-04
JY45	PFAS - DoD ICC	JY27	180726-05
JY46	PFAS - DoD Instrument Blank	JY27	180726-05
JY46	PFAS - DoD Instrument Blank	JY25	180726-04
JZ27	PFAS - DoD Second Source LCS/MS Solution	-	171025-01

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JX28**

Description: PFAS Branched Standard Stock

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
180618-02	Branched NEtFOSAA Standard (50 µg/mL)	Neat	~50.000000	01/17/23	---	---	100 uL	1	10	~0.5000
180618-03	Branched NMeFOSAA Standard (50 µg/mL)	Neat	~50.000000	01/17/23	---	---	100 uL	1	10	~0.5000
180618-04	PFOA - Technical Mix	Neat	~50.000000	02/16/22	---	---	100 uL	1	10	~0.5000
180618-06	Branched PFHxS Standard (50 µg/mL)	Neat	~50.000000	01/04/22	---	---	100 uL	1	10	~0.5000
180618-07	Branched PFOS Standard (50 µg/mL)	Neat	~50.000000	01/12/22	---	---	100 uL	1	10	~0.5000

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 6/18/2018 **Expiration Date:** 6/18/2019

Solution Volume 25 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Balance ID:

Comment:

Solvent:	Lot:
Methanol (HPLC)	179315

Approved By: Thorn, Jonathan **Date:** 7/3/2018 8:10:00 AM

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JX28

Description: PFAS Branched Standard Stock

Stock Id: 180618-02

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
N-ethylperfluoro-octanesulfonamidoacetic acid	100	50.00	1	100.000	1	10	0.50000

Stock Id: 180618-03

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
N-methylperfluoro-1-octanesulfonamidoacetic acid	100	50.00	1	100.000	1	10	0.50000

Stock Id: 180618-04

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
Perfluoro-n-octanoic Acid	100	50.00	1	100.000	1	10	0.50000

Stock Id: 180618-06

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
Perfluoro-1-hexanesulfonate	100	50.00	1	100.000	1	10	0.50000

Stock Id: 180618-07

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
Perfluoro-1-octanesulfonate	100	50.00	1	100.000	1	10	0.50000

Final Concentrations:

Analyte:	Conc (ug/mL):
N-ethylperfluoro-octanesulfonamidoacetic acid	.50000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.50000
Perfluoro-1-hexanesulfonate	.50000
Perfluoro-1-octanesulfonate	.50000
Perfluoro-n-octanoic Acid	.50000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
180618-02	Pipette	I0793912B
180618-03	Pipette	I0793912B
180618-04	Pipette	I0793912B
180618-06	Pipette	I0793912B
180618-07	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 6/18/2018 **Expiration Date:** 6/18/2019

Solution Volume 25 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment:

Approved By: Thorn, Jonathan **Date:** 7/3/2018 8:10:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JX29**

Description: PFAS Branched Solution (~5,000 ng/L)

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JX28	PFAS Branched Standard Stock	Solution	~0	06/18/19	---	---	100 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 6/18/2018 **Expiration Date:** 6/18/2019

Solution Volume 25 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Balance ID:

Comment: 80:20 Methanol/Millipore Water

Approved By: Lizotte Jr, Robert **Date:** 7/2/2018 5:07:00 PM

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JX29

Description: PFAS Branched Solution (~5,000 ng/L)

Stock Id: JX28

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
N-ethylperfluoro-octanesulfonamidoacetic acid	100	0.50	---	---	1	10	0.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	100	0.50	---	---	1	10	0.00500
Perfluoro-1-hexanesulfonate	100	0.50	---	---	1	10	0.00500
Perfluoro-1-octanesulfonate	100	0.50	---	---	1	10	0.00500
Perfluoro-n-octanoic Acid	100	0.50	---	---	1	10	0.00500

Final Concentrations:

Analyte:	Conc (ug/mL):
N-ethylperfluoro-octanesulfonamidoacetic acid	.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00500
Perfluoro-1-hexanesulfonate	.00500
Perfluoro-1-octanesulfonate	.00500
Perfluoro-n-octanoic Acid	.00500

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JX28	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 6/18/2018 **Expiration Date:** 6/18/2019

Solution Volume 25 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80:20 Methanol/Millipore Water

Approved By: Lizotte Jr, Robert **Date:** 7/2/2018 5:07:00 PM

BATTELLE

It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
180705-02	PFOA - DOD	Neat	~1.000000	06/19/23	---	---	500 uL	1	100	~0.0050

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 mL X 4 Vials	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 96/4 Methanol/milli-q water

Approved By: Thorn, Jonathan **Date:** 8/29/2018 10:10:00 AM

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

Stock Id: 180705-02

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	500	1.01	1	100.000	1	100	0.00505
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	500	1.01	1	100.000	1	100	0.00505
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	500	1.00	1	100.000	1	100	0.00500
(Na) Perfluoro-1-decanesulfonate	500	1.01	1	100.000	1	100	0.00505
(NA) Perfluoro-1-heptanesulfonate	500	1.00	1	100.000	1	100	0.00500
(Na) Perfluoro-1-nonanesulfonate	500	1.01	1	100.000	1	100	0.00505
N-ethylperfluoro-octanesulfonamidoacetic acid	500	1.00	1	100.000	1	100	0.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	1.00	1	100.000	1	100	0.00500
Perfluoro-1-butanesulfonate	500	1.01	1	100.000	1	100	0.00505
Perfluoro-1-hexanesulfonate	500	1.01	1	100.000	1	100	0.00505
Perfluoro-1-octanesulfonamide	500	1.00	1	100.000	1	100	0.00500
Perfluoro-1-octanesulfonate	500	1.00	1	100.000	1	100	0.00500
Perfluoro-n-butanoic Acid	500	1.00	1	100.000	1	100	0.00500
Perfluoro-n-decanoic Acid	500	1.00	1	100.000	1	100	0.00500
Perfluoro-n-dodecanoic acid	500	1.00	1	100.000	1	100	0.00500
Perfluoro-n-heptanoic Acid	500	1.00	1	100.000	1	100	0.00500
Perfluoro-n-hexanoic acid	500	1.01	1	100.000	1	100	0.00505
Perfluoro-n-octanoic Acid	500	1.00	1	100.000	1	100	0.00500
Perfluorononanoic Acid	500	1.00	1	100.000	1	100	0.00500
Perfluoro-n-pentanoic acid	500	1.01	1	100.000	1	100	0.00505
Perfluoro-n-tetradecanoic acid	500	1.00	1	100.000	1	100	0.00500
Perfluoro-n-tridecanoic acid	500	1.00	1	100.000	1	100	0.00500
Perfluoro-n-undecanoic acid	500	1.00	1	100.000	1	100	0.00500
Sodium perfluoro-1-pentanesulfonate	500	1.00	1	100.000	1	100	0.00500

Final Concentrations:

Analyte:	Conc (ug/mL):
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	.00505
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	.00505
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.00500
(Na) Perfluoro-1-decanesulfonate	.00505
(NA) Perfluoro-1-heptanesulfonate	.00500
(Na) Perfluoro-1-nonanesulfonate	.00505
N-ethylperfluoro-octanesulfonamidoacetic acid	.00500
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00500
Perfluoro-1-butanesulfonate	.00505

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 4 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/milli-q water

Approved By: Thorn, Jonathan **Date:** 8/29/2018 10:10:00 AM

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

Perfluoro-1-hexanesulfonate	.00505
Perfluoro-1-octanesulfonamide	.00500
Perfluoro-1-octanesulfonate	.00500
Perfluoro-n-butanoic Acid	.00500
Perfluoro-n-decanoic Acid	.00500
Perfluoro-n-dodecanoic acid	.00500
Perfluoro-n-heptanoic Acid	.00500
Perfluoro-n-hexanoic acid	.00505
Perfluoro-n-octanoic Acid	.00500
Perfluorononanoic Acid	.00500
Perfluoro-n-pentanoic acid	.00505
Perfluoro-n-tetradecanoic acid	.00500
Perfluoro-n-tridecanoic acid	.00500
Perfluoro-n-undecanoic acid	.00500
Sodium perfluoro-1-pentanesulfonate	.00500

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
180705-02	Pipette	B820865811

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 4 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/milli-q water

Approved By: Thorn, Jonathan **Date:** 8/29/2018 10:10:00 AM

BATTELLE

It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JY24

Description: PFAS - DoD High ICAL Stock

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
180705-02	PFOA - DOD	Neat	~1.000000	06/19/23	---	---	500 uL	1	10	~0.0500

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Balance ID:

Comment: 96/4 Methanol/milli-q water

Approved By: Thorn, Jonathan **Date:** 8/29/2018 10:09:00 AM

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY24

Description: PFAS - DoD High ICAL Stock

Stock Id: 180705-02

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	500	1.01	1	100.000	1	10	0.05050
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	500	1.01	1	100.000	1	10	0.05050
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	500	1.00	1	100.000	1	10	0.05000
(Na) Perfluoro-1-decanesulfonate	500	1.01	1	100.000	1	10	0.05050
(NA) Perfluoro-1-heptanesulfonate	500	1.00	1	100.000	1	10	0.05000
(Na) Perfluoro-1-nonanesulfonate	500	1.01	1	100.000	1	10	0.05050
N-ethylperfluoro-octanesulfonamidoacetic acid	500	1.00	1	100.000	1	10	0.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	1.00	1	100.000	1	10	0.05000
Perfluoro-1-butanesulfonate	500	1.01	1	100.000	1	10	0.05050
Perfluoro-1-hexanesulfonate	500	1.01	1	100.000	1	10	0.05050
Perfluoro-1-octanesulfonamide	500	1.00	1	100.000	1	10	0.05000
Perfluoro-1-octanesulfonate	500	1.00	1	100.000	1	10	0.05000
Perfluoro-n-butanoic Acid	500	1.00	1	100.000	1	10	0.05000
Perfluoro-n-decanoic Acid	500	1.00	1	100.000	1	10	0.05000
Perfluoro-n-dodecanoic acid	500	1.00	1	100.000	1	10	0.05000
Perfluoro-n-heptanoic Acid	500	1.00	1	100.000	1	10	0.05000
Perfluoro-n-hexanoic acid	500	1.01	1	100.000	1	10	0.05050
Perfluoro-n-octanoic Acid	500	1.00	1	100.000	1	10	0.05000
Perfluorononanoic Acid	500	1.00	1	100.000	1	10	0.05000
Perfluoro-n-pentanoic acid	500	1.01	1	100.000	1	10	0.05050
Perfluoro-n-tetradecanoic acid	500	1.00	1	100.000	1	10	0.05000
Perfluoro-n-tridecanoic acid	500	1.00	1	100.000	1	10	0.05000
Perfluoro-n-undecanoic acid	500	1.00	1	100.000	1	10	0.05000
Sodium perfluoro-1-pentanesulfonate	500	1.00	1	100.000	1	10	0.05000

Final Concentrations:

Analyte:	Conc (ug/mL):
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	.05050
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	.05050
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.05000
(Na) Perfluoro-1-decanesulfonate	.05050
(NA) Perfluoro-1-heptanesulfonate	.05000
(Na) Perfluoro-1-nonanesulfonate	.05050
N-ethylperfluoro-octanesulfonamidoacetic acid	.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.05000
Perfluoro-1-butanesulfonate	.05050

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/milli-q water

Approved By: Thorn, Jonathan **Date:** 8/29/2018 10:09:00 AM

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY24

Description: PFAS - DoD High ICAL Stock

Perfluoro-1-hexanesulfonate	.05050
Perfluoro-1-octanesulfonamide	.05000
Perfluoro-1-octanesulfonate	.05000
Perfluoro-n-butanoic Acid	.05000
Perfluoro-n-decanoic Acid	.05000
Perfluoro-n-dodecanoic acid	.05000
Perfluoro-n-heptanoic Acid	.05000
Perfluoro-n-hexanoic acid	.05050
Perfluoro-n-octanoic Acid	.05000
Perfluorononanoic Acid	.05000
Perfluoro-n-pentanoic acid	.05050
Perfluoro-n-tetradecanoic acid	.05000
Perfluoro-n-tridecanoic acid	.05000
Perfluoro-n-undecanoic acid	.05000
Sodium perfluoro-1-pentanesulfonate	.05000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
180705-02	Pipette	B820865811

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/milli-q water

Approved By: Thorn, Jonathan **Date:** 8/29/2018 10:09:00 AM

BATTELLE

It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JY25

Description: PFAS - DoD Internal Standard Stock Solution

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
180726-04	Mass-labelled PFAS injection standards	Neat	~2.000000	05/02/22	---	---	625 uL	1	25	~0.0500

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 mL X 1 Vials	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID:

Comment: 96/4 Methanol/Milli-q water (RP-180803-1)

Approved By: Thorn, Jonathan **Date:** 8/29/2018 10:09:00 AM

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY25

Description: PFAS - DoD Internal Standard Stock Solution

Stock Id: 180726-04

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	625	2.00	1	100.000	1	25	0.05000
13C2-PFOA	625	2.00	1	100.000	1	25	0.05000
13C3-PFBA	625	2.00	1	100.000	1	25	0.05000
13C4-PFOS	625	1.91	1	100.000	1	25	0.04785

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFDA	.05000
13C2-PFOA	.05000
13C3-PFBA	.05000
13C4-PFOS	.04785

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
180726-04	Pipette	B820865811

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Milli-q water (RP-180803-1)

Approved By: Thorn, Jonathan **Date:** 8/29/2018 10:09:00 AM

BATTELLE

It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JY26

Description: PFAS - DoD Internal Standard Spiking Solution

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	2500 uL	1	25	~0.0000

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 **mL X** 1 **Vials**	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 96/4 Methanol/Milli-q water (RP-180803-1)

Approved By: Schumitz, Denise **Date:** 8/8/2018 9:16:00 AM

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY26

Description: PFAS - DoD Internal Standard Spiking Solution

Stock Id: JY25

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	2500	0.05	---	---	1	25	0.00500
13C2-PFOA	2500	0.05	---	---	1	25	0.00500
13C3-PFBA	2500	0.05	---	---	1	25	0.00500
13C4-PFOS	2500	0.05	---	---	1	25	0.00479

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-PFDA	.00500
13C2-PFOA	.00500
13C3-PFBA	.00500
13C4-PFOS	.00479

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	OU16914

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Milli-q water (RP-180803-1)

Approved By: Schumitz, Denise **Date:** 8/8/2018 9:16:00 AM

BATTELLE

It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JY27

Description: PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
180726-05	Mass-labelled PFAS Extraction Standard Solution	Neat	~1.000000	02/07/23	---	---	1000 uL	1	20	~0.0500

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 **mL X** 1 **Vials**	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 96/4 Methanol/Milli-q water (RP-180803-1)

Approved By: Schumitz, Denise **Date:** 8/8/2018 9:17:00 AM

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY27

Description: PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)

Stock Id: 180726-05

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	1000	0.94	1	100.000	1	20	0.04675
13C2-6:2FTS	1000	0.95	1	100.000	1	20	0.04745
13C2-8:2FTS	1000	0.96	1	100.000	1	20	0.04790
13C2-PFDoA	1000	1.00	1	100.000	1	20	0.05000
13C2-PFTeDA	1000	1.00	1	100.000	1	20	0.05000
13C3-PFBS	1000	0.93	1	100.000	1	20	0.04645
13C3-PFHxS	1000	0.95	1	100.000	1	20	0.04730
13C4-PFBA	1000	1.00	1	100.000	1	20	0.05000
13C4-PFHpA	1000	1.00	1	100.000	1	20	0.05000
13C5-PFHxA	1000	1.00	1	100.000	1	20	0.05000
13C5-PFPeA	1000	1.00	1	100.000	1	20	0.05000
13C6-PFDA	1000	1.00	1	100.000	1	20	0.05000
13C7-PFUnA	1000	1.00	1	100.000	1	20	0.05000
13C8-FOSA	1000	1.00	1	100.000	1	20	0.05000
13C8-PFOA	1000	1.00	1	100.000	1	20	0.05000
13C8-PFOS	1000	0.96	1	100.000	1	20	0.04785
13C9-PFNA	1000	1.00	1	100.000	1	20	0.05000
d3-MeFOSAA	1000	1.00	1	100.000	1	20	0.05000
d5-EtFOSAA	1000	1.00	1	100.000	1	20	0.05000

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-4:2FTS	.04675
13C2-6:2FTS	.04745
13C2-8:2FTS	.04790
13C2-PFDoA	.05000
13C2-PFTeDA	.05000
13C3-PFBS	.04645
13C3-PFHxS	.04730
13C4-PFBA	.05000
13C4-PFHpA	.05000
13C5-PFHxA	.05000
13C5-PFPeA	.05000
13C6-PFDA	.05000
13C7-PFUnA	.05000
13C8-FOSA	.05000

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Milli-q water (RP-180803-1)

Approved By: Schumitz, Denise **Date:** 8/8/2018 9:17:00 AM

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY27

Description: PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)

13C8-PFOA	.05000
13C8-PFOS	.04785
13C9-PFNA	.05000
d3-MeFOSAA	.05000
d5-EtFOSAA	.05000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
180726-05	Pipette	B820865811

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Milli-q water (RP-180803-1)

Approved By: Schumitz, Denise **Date:** 8/8/2018 9:17:00 AM

BATTELLE

It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JY28

Description: PFAS - DoD Low Level Labelled Extracted Internal Standards (SIS)

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	2500 uL	1	25	~0.0000

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Balance ID:

Comment: 96/4 Methanol/Milli-q water (RP-180803-1)

Approved By: Schumitz, Denise **Date:** 8/8/2018 9:17:00 AM

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY28

Description: PFAS - DoD Low Level Labelled Extracted Internal Standards (SIS)

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	2500	0.05	---	---	1	25	0.00468
13C2-6:2FTS	2500	0.05	---	---	1	25	0.00475
13C2-8:2FTS	2500	0.05	---	---	1	25	0.00479
13C2-PFDoA	2500	0.05	---	---	1	25	0.00500
13C2-PFTeDA	2500	0.05	---	---	1	25	0.00500
13C3-PFBS	2500	0.05	---	---	1	25	0.00465
13C3-PFHxS	2500	0.05	---	---	1	25	0.00473
13C4-PFBA	2500	0.05	---	---	1	25	0.00500
13C4-PFHpA	2500	0.05	---	---	1	25	0.00500
13C5-PFHxA	2500	0.05	---	---	1	25	0.00500
13C5-PFPeA	2500	0.05	---	---	1	25	0.00500
13C6-PFDA	2500	0.05	---	---	1	25	0.00500
13C7-PFUnA	2500	0.05	---	---	1	25	0.00500
13C8-FOSA	2500	0.05	---	---	1	25	0.00500
13C8-PFOA	2500	0.05	---	---	1	25	0.00500
13C8-PFOS	2500	0.05	---	---	1	25	0.00478
13C9-PFNA	2500	0.05	---	---	1	25	0.00500
d3-MeFOSAA	2500	0.05	---	---	1	25	0.00500
d5-EtFOSAA	2500	0.05	---	---	1	25	0.00500

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-4:2FTS	.00468
13C2-6:2FTS	.00475
13C2-8:2FTS	.00479
13C2-PFDoA	.00500
13C2-PFTeDA	.00500
13C3-PFBS	.00465
13C3-PFHxS	.00473
13C4-PFBA	.00500
13C4-PFHpA	.00500
13C5-PFHxA	.00500
13C5-PFPeA	.00500
13C6-PFDA	.00500
13C7-PFUnA	.00500
13C8-FOSA	.00500

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Milli-q water (RP-180803-1)

Approved By: Schumitz, Denise **Date:** 8/8/2018 9:17:00 AM

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY28**

Description: PFAS - DoD Low Level Labelled Extracted Internal Standards (SIS)

13C8-PFOA	.00500
13C8-PFOS	.00478
13C9-PFNA	.00500
d3-MeFOSAA	.00500
d5-EtFOSAA	.00500

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY27	Pipette	OU16914

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 96/4 Methanol/Milli-q water (RP-180803-1)

Approved By: Schumitz, Denise **Date:** 8/8/2018 9:17:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JY38**

Description: PFAS - DoD Calibration L1

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JY23	PFAS - DoD Low ICAL Stock	Solution	~0	07/16/19	---	---	200 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 **mL X** 1 **Vials**	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:47:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY38**

Description: PFAS - DoD Calibration L1

Stock Id: JY23

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	200	0.01	---	---	1	10	0.00010
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	200	0.01	---	---	1	10	0.00010
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	200	0.01	---	---	1	10	0.00010
(Na) Perfluoro-1-decanesulfonate	200	0.01	---	---	1	10	0.00010
(NA) Perfluoro-1-heptanesulfonate	200	0.01	---	---	1	10	0.00010
(Na) Perfluoro-1-nonanesulfonate	200	0.01	---	---	1	10	0.00010
N-ethylperfluoro-octanesulfonamidoacetic acid	200	0.01	---	---	1	10	0.00010
N-methylperfluoro-1-octanesulfonamidoacetic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-1-butanesulfonate	200	0.01	---	---	1	10	0.00010
Perfluoro-1-hexanesulfonate	200	0.01	---	---	1	10	0.00010
Perfluoro-1-octanesulfonamide	200	0.01	---	---	1	10	0.00010
Perfluoro-1-octanesulfonate	200	0.01	---	---	1	10	0.00010
Perfluoro-n-butanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-decanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-dodecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-heptanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-hexanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-octanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluorononanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-pentanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-tetradecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-tridecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-undecanoic acid	200	0.01	---	---	1	10	0.00010
Sodium perfluoro-1-pentanesulfonate	200	0.01	---	---	1	10	0.00010

Stock Id: JY25

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.05	---	---	1	10	0.00025
13C2-PFOA	50	0.05	---	---	1	10	0.00025
13C3-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFOS	50	0.05	---	---	1	10	0.00024

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	50	0.05	---	---	1	10	0.00023

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:47:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY38**

Description: PFAS - DoD Calibration L1

13C2-6:2FTS	50	0.05	---	---	1	10	0.00024
13C2-8:2FTS	50	0.05	---	---	1	10	0.00024
13C2-PFDoA	50	0.05	---	---	1	10	0.00025
13C2-PFTeDA	50	0.05	---	---	1	10	0.00025
13C3-PFBS	50	0.05	---	---	1	10	0.00023
13C3-PFHxS	50	0.05	---	---	1	10	0.00024
13C4-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFHpA	50	0.05	---	---	1	10	0.00025
13C5-PFHxA	50	0.05	---	---	1	10	0.00025
13C5-PFPeA	50	0.05	---	---	1	10	0.00025
13C6-PFDA	50	0.05	---	---	1	10	0.00025
13C7-PFUnA	50	0.05	---	---	1	10	0.00025
13C8-FOSA	50	0.05	---	---	1	10	0.00025
13C8-PFOA	50	0.05	---	---	1	10	0.00025
13C8-PFOS	50	0.05	---	---	1	10	0.00024
13C9-PFNA	50	0.05	---	---	1	10	0.00025
d3-MeFOSAA	50	0.05	---	---	1	10	0.00025
d5-EtFOSAA	50	0.05	---	---	1	10	0.00025

Final Concentrations:

Analyte:	Conc (ug/mL):
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	.00010
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	.00010
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.00010
(Na) Perfluoro-1-decanesulfonate	.00010
(NA) Perfluoro-1-heptanesulfonate	.00010
(Na) Perfluoro-1-nonanesulfonate	.00010
13C2-4:2FTS	.00023
13C2-6:2FTS	.00024
13C2-8:2FTS	.00024
13C2-PFDA	.00025
13C2-PFDoA	.00025
13C2-PFOA	.00025
13C2-PFTeDA	.00025
13C3-PFBA	.00025
13C3-PFBS	.00023
13C3-PFHxS	.00024
13C4-PFBA	.00025
13C4-PFHpA	.00025

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:47:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY38**

Description: PFAS - DoD Calibration L1

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00010
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00010
Perfluoro-1-butanesulfonate	.00010
Perfluoro-1-hexanesulfonate	.00010
Perfluoro-1-octanesulfonamide	.00010
Perfluoro-1-octanesulfonate	.00010
Perfluoro-n-butanoic Acid	.00010
Perfluoro-n-decanoic Acid	.00010
Perfluoro-n-dodecanoic acid	.00010
Perfluoro-n-heptanoic Acid	.00010
Perfluoro-n-hexanoic acid	.00010
Perfluoro-n-octanoic Acid	.00010
Perfluorononanoic Acid	.00010
Perfluoro-n-pentanoic acid	.00010
Perfluoro-n-tetradecanoic acid	.00010
Perfluoro-n-tridecanoic acid	.00010
Perfluoro-n-undecanoic acid	.00010
Sodium perfluoro-1-pentanesulfonate	.00010

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY23	Pipette	B814657482
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:47:00 PM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JY39**

Description: PFAS - DoD Calibration L2

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JY23	PFAS - DoD Low ICAL Stock	Solution	~0	07/16/19	---	---	500 uL	1	10	~0.0000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 **mL X** 1 **Vials**	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY39**

Description: PFAS - DoD Calibration L2

Stock Id: JY23

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	500	0.01	---	---	1	10	0.00025
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	500	0.01	---	---	1	10	0.00025
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	500	0.01	---	---	1	10	0.00025
(Na) Perfluoro-1-decanesulfonate	500	0.01	---	---	1	10	0.00025
(NA) Perfluoro-1-heptanesulfonate	500	0.01	---	---	1	10	0.00025
(Na) Perfluoro-1-nonanesulfonate	500	0.01	---	---	1	10	0.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	500	0.01	---	---	1	10	0.00025
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-1-butanesulfonate	500	0.01	---	---	1	10	0.00025
Perfluoro-1-hexanesulfonate	500	0.01	---	---	1	10	0.00025
Perfluoro-1-octanesulfonamide	500	0.01	---	---	1	10	0.00025
Perfluoro-1-octanesulfonate	500	0.01	---	---	1	10	0.00025
Perfluoro-n-butanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-decanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-dodecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-heptanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-hexanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-octanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluorononanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-pentanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-tetradecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-tridecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-undecanoic acid	500	0.01	---	---	1	10	0.00025
Sodium perfluoro-1-pentanesulfonate	500	0.01	---	---	1	10	0.00025

Stock Id: JY25

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.05	---	---	1	10	0.00025
13C2-PFOA	50	0.05	---	---	1	10	0.00025
13C3-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFOS	50	0.05	---	---	1	10	0.00024

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	50	0.05	---	---	1	10	0.00023

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY39**

Description: PFAS - DoD Calibration L2

13C2-6:2FTS	50	0.05	---	---	1	10	0.00024
13C2-8:2FTS	50	0.05	---	---	1	10	0.00024
13C2-PFDoA	50	0.05	---	---	1	10	0.00025
13C2-PFTeDA	50	0.05	---	---	1	10	0.00025
13C3-PFBS	50	0.05	---	---	1	10	0.00023
13C3-PFHxS	50	0.05	---	---	1	10	0.00024
13C4-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFHpA	50	0.05	---	---	1	10	0.00025
13C5-PFHxA	50	0.05	---	---	1	10	0.00025
13C5-PFPeA	50	0.05	---	---	1	10	0.00025
13C6-PFDA	50	0.05	---	---	1	10	0.00025
13C7-PFUnA	50	0.05	---	---	1	10	0.00025
13C8-FOSA	50	0.05	---	---	1	10	0.00025
13C8-PFOA	50	0.05	---	---	1	10	0.00025
13C8-PFOS	50	0.05	---	---	1	10	0.00024
13C9-PFNA	50	0.05	---	---	1	10	0.00025
d3-MeFOSAA	50	0.05	---	---	1	10	0.00025
d5-EtFOSAA	50	0.05	---	---	1	10	0.00025

Final Concentrations:

Analyte:	Conc (ug/mL):
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	.00025
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	.00025
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.00025
(Na) Perfluoro-1-decanesulfonate	.00025
(NA) Perfluoro-1-heptanesulfonate	.00025
(Na) Perfluoro-1-nonanesulfonate	.00025
13C2-4:2FTS	.00023
13C2-6:2FTS	.00024
13C2-8:2FTS	.00024
13C2-PFDA	.00025
13C2-PFDoA	.00025
13C2-PFOA	.00025
13C2-PFTeDA	.00025
13C3-PFBA	.00025
13C3-PFBS	.00023
13C3-PFHxS	.00024
13C4-PFBA	.00025
13C4-PFHpA	.00025

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY39**

Description: PFAS - DoD Calibration L2

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00025
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00025
Perfluoro-1-butanesulfonate	.00025
Perfluoro-1-hexanesulfonate	.00025
Perfluoro-1-octanesulfonamide	.00025
Perfluoro-1-octanesulfonate	.00025
Perfluoro-n-butanoic Acid	.00025
Perfluoro-n-decanoic Acid	.00025
Perfluoro-n-dodecanoic acid	.00025
Perfluoro-n-heptanoic Acid	.00025
Perfluoro-n-hexanoic acid	.00025
Perfluoro-n-octanoic Acid	.00025
Perfluorononanoic Acid	.00025
Perfluoro-n-pentanoic acid	.00025
Perfluoro-n-tetradecanoic acid	.00025
Perfluoro-n-tridecanoic acid	.00025
Perfluoro-n-undecanoic acid	.00025
Sodium perfluoro-1-pentanesulfonate	.00025

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY23	Pipette	B820865811
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JY40**

Description: PFAS - DoD Calibration L3

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JY24	PFAS - DoD High ICAL Stock	Solution	~1	07/16/19	---	---	100 uL	1	10	~0.0100
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 **mL X** 1 **Vials**	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY40**

Description: PFAS - DoD Calibration L3

Stock Id: JY24

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	100	0.05	---	---	1	10	0.00051
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	100	0.05	---	---	1	10	0.00051
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	100	0.05	---	---	1	10	0.00050
(Na) Perfluoro-1-decanesulfonate	100	0.05	---	---	1	10	0.00051
(NA) Perfluoro-1-heptanesulfonate	100	0.05	---	---	1	10	0.00050
(Na) Perfluoro-1-nonanesulfonate	100	0.05	---	---	1	10	0.00051
N-ethylperfluoro-octanesulfonamidoacetic acid	100	0.05	---	---	1	10	0.00050
N-methylperfluoro-1-octanesulfonamidoacetic acid	100	0.05	---	---	1	10	0.00050
Perfluoro-1-butanesulfonate	100	0.05	---	---	1	10	0.00051
Perfluoro-1-hexanesulfonate	100	0.05	---	---	1	10	0.00051
Perfluoro-1-octanesulfonamide	100	0.05	---	---	1	10	0.00050
Perfluoro-1-octanesulfonate	100	0.05	---	---	1	10	0.00050
Perfluoro-n-butanoic Acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-decanoic Acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-dodecanoic acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-heptanoic Acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-hexanoic acid	100	0.05	---	---	1	10	0.00051
Perfluoro-n-octanoic Acid	100	0.05	---	---	1	10	0.00050
Perfluorononanoic Acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-pentanoic acid	100	0.05	---	---	1	10	0.00051
Perfluoro-n-tetradecanoic acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-tridecanoic acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-undecanoic acid	100	0.05	---	---	1	10	0.00050
Sodium perfluoro-1-pentanesulfonate	100	0.05	---	---	1	10	0.00050

Stock Id: JY25

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.05	---	---	1	10	0.00025
13C2-PFOA	50	0.05	---	---	1	10	0.00025
13C3-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFOS	50	0.05	---	---	1	10	0.00024

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	50	0.05	---	---	1	10	0.00023

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY40**

Description: PFAS - DoD Calibration L3

13C2-6:2FTS	50	0.05	---	---	1	10	0.00024
13C2-8:2FTS	50	0.05	---	---	1	10	0.00024
13C2-PFDoA	50	0.05	---	---	1	10	0.00025
13C2-PFTeDA	50	0.05	---	---	1	10	0.00025
13C3-PFBS	50	0.05	---	---	1	10	0.00023
13C3-PFHxS	50	0.05	---	---	1	10	0.00024
13C4-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFHpA	50	0.05	---	---	1	10	0.00025
13C5-PFHxA	50	0.05	---	---	1	10	0.00025
13C5-PFPeA	50	0.05	---	---	1	10	0.00025
13C6-PFDA	50	0.05	---	---	1	10	0.00025
13C7-PFUnA	50	0.05	---	---	1	10	0.00025
13C8-FOSA	50	0.05	---	---	1	10	0.00025
13C8-PFOA	50	0.05	---	---	1	10	0.00025
13C8-PFOS	50	0.05	---	---	1	10	0.00024
13C9-PFNA	50	0.05	---	---	1	10	0.00025
d3-MeFOSAA	50	0.05	---	---	1	10	0.00025
d5-EtFOSAA	50	0.05	---	---	1	10	0.00025

Final Concentrations:

Analyte:	Conc (ug/mL):
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	.00051
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	.00051
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.00050
(Na) Perfluoro-1-decanesulfonate	.00051
(NA) Perfluoro-1-heptanesulfonate	.00050
(Na) Perfluoro-1-nonanesulfonate	.00051
13C2-4:2FTS	.00023
13C2-6:2FTS	.00024
13C2-8:2FTS	.00024
13C2-PFDA	.00025
13C2-PFDoA	.00025
13C2-PFOA	.00025
13C2-PFTeDA	.00025
13C3-PFBA	.00025
13C3-PFBS	.00023
13C3-PFHxS	.00024
13C4-PFBA	.00025
13C4-PFHpA	.00025

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY40**

Description: PFAS - DoD Calibration L3

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00050
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00050
Perfluoro-1-butanesulfonate	.00051
Perfluoro-1-hexanesulfonate	.00051
Perfluoro-1-octanesulfonamide	.00050
Perfluoro-1-octanesulfonate	.00050
Perfluoro-n-butanoic Acid	.00050
Perfluoro-n-decanoic Acid	.00050
Perfluoro-n-dodecanoic acid	.00050
Perfluoro-n-heptanoic Acid	.00050
Perfluoro-n-hexanoic acid	.00051
Perfluoro-n-octanoic Acid	.00050
Perfluorononanoic Acid	.00050
Perfluoro-n-pentanoic acid	.00051
Perfluoro-n-tetradecanoic acid	.00050
Perfluoro-n-tridecanoic acid	.00050
Perfluoro-n-undecanoic acid	.00050
Sodium perfluoro-1-pentanesulfonate	.00050

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY24	Pipette	I0793912B
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JY41**

Description: PFAS - DoD Calibration L4

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JY24	PFAS - DoD High ICAL Stock	Solution	~1	07/16/19	---	---	200 uL	1	10	~0.0200
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 **mL X** 1 **Vials**	**Refrigerator/Freezer No:** Storage Room: Refrigerator - R0105		

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY41**

Description: PFAS - DoD Calibration L4

Stock Id: JY24

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	200	0.05	---	---	1	10	0.00101
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	200	0.05	---	---	1	10	0.00101
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	200	0.05	---	---	1	10	0.00100
(Na) Perfluoro-1-decanesulfonate	200	0.05	---	---	1	10	0.00101
(NA) Perfluoro-1-heptanesulfonate	200	0.05	---	---	1	10	0.00100
(Na) Perfluoro-1-nonanesulfonate	200	0.05	---	---	1	10	0.00101
N-ethylperfluoro-octanesulfonamidoacetic acid	200	0.05	---	---	1	10	0.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-1-butanesulfonate	200	0.05	---	---	1	10	0.00101
Perfluoro-1-hexanesulfonate	200	0.05	---	---	1	10	0.00101
Perfluoro-1-octanesulfonamide	200	0.05	---	---	1	10	0.00100
Perfluoro-1-octanesulfonate	200	0.05	---	---	1	10	0.00100
Perfluoro-n-butanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-decanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-dodecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-heptanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-hexanoic acid	200	0.05	---	---	1	10	0.00101
Perfluoro-n-octanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluorononanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-pentanoic acid	200	0.05	---	---	1	10	0.00101
Perfluoro-n-tetradecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-tridecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-undecanoic acid	200	0.05	---	---	1	10	0.00100
Sodium perfluoro-1-pentanesulfonate	200	0.05	---	---	1	10	0.00100

Stock Id: JY25

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.05	---	---	1	10	0.00025
13C2-PFOA	50	0.05	---	---	1	10	0.00025
13C3-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFOS	50	0.05	---	---	1	10	0.00024

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	50	0.05	---	---	1	10	0.00023

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** Storage Room: Refrigerator - R0105

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY41**

Description: PFAS - DoD Calibration L4

13C2-6:2FTS	50	0.05	---	---	1	10	0.00024
13C2-8:2FTS	50	0.05	---	---	1	10	0.00024
13C2-PFDoA	50	0.05	---	---	1	10	0.00025
13C2-PFTeDA	50	0.05	---	---	1	10	0.00025
13C3-PFBS	50	0.05	---	---	1	10	0.00023
13C3-PFHxS	50	0.05	---	---	1	10	0.00024
13C4-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFHpA	50	0.05	---	---	1	10	0.00025
13C5-PFHxA	50	0.05	---	---	1	10	0.00025
13C5-PFPeA	50	0.05	---	---	1	10	0.00025
13C6-PFDA	50	0.05	---	---	1	10	0.00025
13C7-PFUnA	50	0.05	---	---	1	10	0.00025
13C8-FOSA	50	0.05	---	---	1	10	0.00025
13C8-PFOA	50	0.05	---	---	1	10	0.00025
13C8-PFOS	50	0.05	---	---	1	10	0.00024
13C9-PFNA	50	0.05	---	---	1	10	0.00025
d3-MeFOSAA	50	0.05	---	---	1	10	0.00025
d5-EtFOSAA	50	0.05	---	---	1	10	0.00025

Final Concentrations:

Analyte:	Conc (ug/mL):
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	.00101
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	.00101
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.00100
(Na) Perfluoro-1-decanesulfonate	.00101
(NA) Perfluoro-1-heptanesulfonate	.00100
(Na) Perfluoro-1-nonanesulfonate	.00101
13C2-4:2FTS	.00023
13C2-6:2FTS	.00024
13C2-8:2FTS	.00024
13C2-PFDA	.00025
13C2-PFDoA	.00025
13C2-PFOA	.00025
13C2-PFTeDA	.00025
13C3-PFBA	.00025
13C3-PFBS	.00023
13C3-PFHxS	.00024
13C4-PFBA	.00025
13C4-PFHpA	.00025

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** Storage Room: Refrigerator - R0105

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY41**

Description: PFAS - DoD Calibration L4

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00100
Perfluoro-1-butanesulfonate	.00101
Perfluoro-1-hexanesulfonate	.00101
Perfluoro-1-octanesulfonamide	.00100
Perfluoro-1-octanesulfonate	.00100
Perfluoro-n-butanoic Acid	.00100
Perfluoro-n-decanoic Acid	.00100
Perfluoro-n-dodecanoic acid	.00100
Perfluoro-n-heptanoic Acid	.00100
Perfluoro-n-hexanoic acid	.00101
Perfluoro-n-octanoic Acid	.00100
Perfluorononanoic Acid	.00100
Perfluoro-n-pentanoic acid	.00101
Perfluoro-n-tetradecanoic acid	.00100
Perfluoro-n-tridecanoic acid	.00100
Perfluoro-n-undecanoic acid	.00100
Sodium perfluoro-1-pentanesulfonate	.00100

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY24	Pipette	B814657482
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** Storage Room: Refrigerator - R0105

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JY42**

Description: PFAS - DoD Calibration L5

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JY24	PFAS - DoD High ICAL Stock	Solution	~1	07/16/19	---	---	500 uL	1	10	~0.0500
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 **mL X** 1 **Vials**	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY42**

Description: PFAS - DoD Calibration L5

Stock Id: JY24

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	500	0.05	---	---	1	10	0.00253
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	500	0.05	---	---	1	10	0.00253
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	500	0.05	---	---	1	10	0.00250
(Na) Perfluoro-1-decanesulfonate	500	0.05	---	---	1	10	0.00253
(NA) Perfluoro-1-heptanesulfonate	500	0.05	---	---	1	10	0.00250
(Na) Perfluoro-1-nonanesulfonate	500	0.05	---	---	1	10	0.00253
N-ethylperfluoro-octanesulfonamidoacetic acid	500	0.05	---	---	1	10	0.00250
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-1-butanesulfonate	500	0.05	---	---	1	10	0.00253
Perfluoro-1-hexanesulfonate	500	0.05	---	---	1	10	0.00253
Perfluoro-1-octanesulfonamide	500	0.05	---	---	1	10	0.00250
Perfluoro-1-octanesulfonate	500	0.05	---	---	1	10	0.00250
Perfluoro-n-butanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-decanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-dodecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-heptanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-hexanoic acid	500	0.05	---	---	1	10	0.00253
Perfluoro-n-octanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluorononanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-pentanoic acid	500	0.05	---	---	1	10	0.00253
Perfluoro-n-tetradecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-tridecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-undecanoic acid	500	0.05	---	---	1	10	0.00250
Sodium perfluoro-1-pentanesulfonate	500	0.05	---	---	1	10	0.00250

Stock Id: JY25

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.05	---	---	1	10	0.00025
13C2-PFOA	50	0.05	---	---	1	10	0.00025
13C3-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFOS	50	0.05	---	---	1	10	0.00024

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	50	0.05	---	---	1	10	0.00023

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY42**

Description: PFAS - DoD Calibration L5

13C2-6:2FTS	50	0.05	---	---	1	10	0.00024
13C2-8:2FTS	50	0.05	---	---	1	10	0.00024
13C2-PFDoA	50	0.05	---	---	1	10	0.00025
13C2-PFTeDA	50	0.05	---	---	1	10	0.00025
13C3-PFBS	50	0.05	---	---	1	10	0.00023
13C3-PFHxS	50	0.05	---	---	1	10	0.00024
13C4-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFHpA	50	0.05	---	---	1	10	0.00025
13C5-PFHxA	50	0.05	---	---	1	10	0.00025
13C5-PFPeA	50	0.05	---	---	1	10	0.00025
13C6-PFDA	50	0.05	---	---	1	10	0.00025
13C7-PFUnA	50	0.05	---	---	1	10	0.00025
13C8-FOSA	50	0.05	---	---	1	10	0.00025
13C8-PFOA	50	0.05	---	---	1	10	0.00025
13C8-PFOS	50	0.05	---	---	1	10	0.00024
13C9-PFNA	50	0.05	---	---	1	10	0.00025
d3-MeFOSAA	50	0.05	---	---	1	10	0.00025
d5-EtFOSAA	50	0.05	---	---	1	10	0.00025

Final Concentrations:

Analyte:	Conc (ug/mL):
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	.00253
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	.00253
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.00250
(Na) Perfluoro-1-decanesulfonate	.00253
(NA) Perfluoro-1-heptanesulfonate	.00250
(Na) Perfluoro-1-nonanesulfonate	.00253
13C2-4:2FTS	.00023
13C2-6:2FTS	.00024
13C2-8:2FTS	.00024
13C2-PFDA	.00025
13C2-PFDoA	.00025
13C2-PFOA	.00025
13C2-PFTeDA	.00025
13C3-PFBA	.00025
13C3-PFBS	.00023
13C3-PFHxS	.00024
13C4-PFBA	.00025
13C4-PFHpA	.00025

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY42**

Description: PFAS - DoD Calibration L5

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00250
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00250
Perfluoro-1-butanesulfonate	.00253
Perfluoro-1-hexanesulfonate	.00253
Perfluoro-1-octanesulfonamide	.00250
Perfluoro-1-octanesulfonate	.00250
Perfluoro-n-butanoic Acid	.00250
Perfluoro-n-decanoic Acid	.00250
Perfluoro-n-dodecanoic acid	.00250
Perfluoro-n-heptanoic Acid	.00250
Perfluoro-n-hexanoic acid	.00253
Perfluoro-n-octanoic Acid	.00250
Perfluorononanoic Acid	.00250
Perfluoro-n-pentanoic acid	.00253
Perfluoro-n-tetradecanoic acid	.00250
Perfluoro-n-tridecanoic acid	.00250
Perfluoro-n-undecanoic acid	.00250
Sodium perfluoro-1-pentanesulfonate	.00250

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY24	Pipette	B820865811
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JY43**

Description: PFAS - DoD Calibration L6

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JY24	PFAS - DoD High ICAL Stock	Solution	~1	07/16/19	---	---	1000 uL	1	5	~0.2000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	25 uL	1	5	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	25 uL	1	5	~0.0000

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 **mL X** 1 **Vials**	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

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It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY43**

Description: PFAS - DoD Calibration L6

Stock Id: JY24

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	1000	0.05	---	---	1	5	0.01010
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	1000	0.05	---	---	1	5	0.01010
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	1000	0.05	---	---	1	5	0.01000
(Na) Perfluoro-1-decanesulfonate	1000	0.05	---	---	1	5	0.01010
(NA) Perfluoro-1-heptanesulfonate	1000	0.05	---	---	1	5	0.01000
(Na) Perfluoro-1-nonanesulfonate	1000	0.05	---	---	1	5	0.01010
N-ethylperfluoro-octanesulfonamidoacetic acid	1000	0.05	---	---	1	5	0.01000
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-1-butanesulfonate	1000	0.05	---	---	1	5	0.01010
Perfluoro-1-hexanesulfonate	1000	0.05	---	---	1	5	0.01010
Perfluoro-1-octanesulfonamide	1000	0.05	---	---	1	5	0.01000
Perfluoro-1-octanesulfonate	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-butanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-decanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-dodecanoic acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-heptanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-hexanoic acid	1000	0.05	---	---	1	5	0.01010
Perfluoro-n-octanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluorononanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-pentanoic acid	1000	0.05	---	---	1	5	0.01010
Perfluoro-n-tetradecanoic acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-tridecanoic acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-undecanoic acid	1000	0.05	---	---	1	5	0.01000
Sodium perfluoro-1-pentanesulfonate	1000	0.05	---	---	1	5	0.01000

Stock Id: JY25

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	25	0.05	---	---	1	5	0.00025
13C2-PFOA	25	0.05	---	---	1	5	0.00025
13C3-PFBA	25	0.05	---	---	1	5	0.00025
13C4-PFOS	25	0.05	---	---	1	5	0.00024

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	25	0.05	---	---	1	5	0.00023

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

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It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY43**

Description: PFAS - DoD Calibration L6

13C2-6:2FTS	25	0.05	---	---	1	5	0.00024
13C2-8:2FTS	25	0.05	---	---	1	5	0.00024
13C2-PFDoA	25	0.05	---	---	1	5	0.00025
13C2-PFTeDA	25	0.05	---	---	1	5	0.00025
13C3-PFBS	25	0.05	---	---	1	5	0.00023
13C3-PFHxS	25	0.05	---	---	1	5	0.00024
13C4-PFBA	25	0.05	---	---	1	5	0.00025
13C4-PFHpA	25	0.05	---	---	1	5	0.00025
13C5-PFHxA	25	0.05	---	---	1	5	0.00025
13C5-PFPeA	25	0.05	---	---	1	5	0.00025
13C6-PFDA	25	0.05	---	---	1	5	0.00025
13C7-PFUnA	25	0.05	---	---	1	5	0.00025
13C8-FOSA	25	0.05	---	---	1	5	0.00025
13C8-PFOA	25	0.05	---	---	1	5	0.00025
13C8-PFOS	25	0.05	---	---	1	5	0.00024
13C9-PFNA	25	0.05	---	---	1	5	0.00025
d3-MeFOSAA	25	0.05	---	---	1	5	0.00025
d5-EtFOSAA	25	0.05	---	---	1	5	0.00025

Final Concentrations:

Analyte:	Conc (ug/mL):
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	.01010
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	.01010
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.01000
(Na) Perfluoro-1-decanesulfonate	.01010
(NA) Perfluoro-1-heptanesulfonate	.01000
(Na) Perfluoro-1-nonanesulfonate	.01010
13C2-4:2FTS	.00023
13C2-6:2FTS	.00024
13C2-8:2FTS	.00024
13C2-PFDA	.00025
13C2-PFDoA	.00025
13C2-PFOA	.00025
13C2-PFTeDA	.00025
13C3-PFBA	.00025
13C3-PFBS	.00023
13C3-PFHxS	.00024
13C4-PFBA	.00025
13C4-PFHpA	.00025

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY43**

Description: PFAS - DoD Calibration L6

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.01000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.01000
Perfluoro-1-butanesulfonate	.01010
Perfluoro-1-hexanesulfonate	.01010
Perfluoro-1-octanesulfonamide	.01000
Perfluoro-1-octanesulfonate	.01000
Perfluoro-n-butanoic Acid	.01000
Perfluoro-n-decanoic Acid	.01000
Perfluoro-n-dodecanoic acid	.01000
Perfluoro-n-heptanoic Acid	.01000
Perfluoro-n-hexanoic acid	.01010
Perfluoro-n-octanoic Acid	.01000
Perfluorononanoic Acid	.01000
Perfluoro-n-pentanoic acid	.01010
Perfluoro-n-tetradecanoic acid	.01000
Perfluoro-n-tridecanoic acid	.01000
Perfluoro-n-undecanoic acid	.01000
Sodium perfluoro-1-pentanesulfonate	.01000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY24	Pipette	B820865811
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JY44**

Description: PFAS - DoD Calibration L7

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JY24	PFAS - DoD High ICAL Stock	Solution	~1	07/16/19	---	---	2000 uL	1	5	~0.4000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	25 uL	1	5	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	25 uL	1	5	~0.0000

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 **mL X** 1 **Vials**	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY44**

Description: PFAS - DoD Calibration L7

Stock Id: JY24

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	2000	0.05	---	---	1	5	0.02020
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	2000	0.05	---	---	1	5	0.02020
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	2000	0.05	---	---	1	5	0.02000
(Na) Perfluoro-1-decanesulfonate	2000	0.05	---	---	1	5	0.02020
(NA) Perfluoro-1-heptanesulfonate	2000	0.05	---	---	1	5	0.02000
(Na) Perfluoro-1-nonanesulfonate	2000	0.05	---	---	1	5	0.02020
N-ethylperfluoro-octanesulfonamidoacetic acid	2000	0.05	---	---	1	5	0.02000
N-methylperfluoro-1-octanesulfonamidoacetic acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-1-butanesulfonate	2000	0.05	---	---	1	5	0.02020
Perfluoro-1-hexanesulfonate	2000	0.05	---	---	1	5	0.02020
Perfluoro-1-octanesulfonamide	2000	0.05	---	---	1	5	0.02000
Perfluoro-1-octanesulfonate	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-butanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-decanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-dodecanoic acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-heptanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-hexanoic acid	2000	0.05	---	---	1	5	0.02020
Perfluoro-n-octanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluorononanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-pentanoic acid	2000	0.05	---	---	1	5	0.02020
Perfluoro-n-tetradecanoic acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-tridecanoic acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-undecanoic acid	2000	0.05	---	---	1	5	0.02000
Sodium perfluoro-1-pentanesulfonate	2000	0.05	---	---	1	5	0.02000

Stock Id: JY25

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	25	0.05	---	---	1	5	0.00025
13C2-PFOA	25	0.05	---	---	1	5	0.00025
13C3-PFBA	25	0.05	---	---	1	5	0.00025
13C4-PFOS	25	0.05	---	---	1	5	0.00024

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	25	0.05	---	---	1	5	0.00023

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY44**

Description: PFAS - DoD Calibration L7

13C2-6:2FTS	25	0.05	---	---	1	5	0.00024
13C2-8:2FTS	25	0.05	---	---	1	5	0.00024
13C2-PFDoA	25	0.05	---	---	1	5	0.00025
13C2-PFTeDA	25	0.05	---	---	1	5	0.00025
13C3-PFBS	25	0.05	---	---	1	5	0.00023
13C3-PFHxS	25	0.05	---	---	1	5	0.00024
13C4-PFBA	25	0.05	---	---	1	5	0.00025
13C4-PFHpA	25	0.05	---	---	1	5	0.00025
13C5-PFHxA	25	0.05	---	---	1	5	0.00025
13C5-PFPeA	25	0.05	---	---	1	5	0.00025
13C6-PFDA	25	0.05	---	---	1	5	0.00025
13C7-PFUnA	25	0.05	---	---	1	5	0.00025
13C8-FOSA	25	0.05	---	---	1	5	0.00025
13C8-PFOA	25	0.05	---	---	1	5	0.00025
13C8-PFOS	25	0.05	---	---	1	5	0.00024
13C9-PFNA	25	0.05	---	---	1	5	0.00025
d3-MeFOSAA	25	0.05	---	---	1	5	0.00025
d5-EtFOSAA	25	0.05	---	---	1	5	0.00025

Final Concentrations:

Analyte:	Conc (ug/mL):
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	.02020
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	.02020
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.02000
(Na) Perfluoro-1-decanesulfonate	.02020
(NA) Perfluoro-1-heptanesulfonate	.02000
(Na) Perfluoro-1-nonanesulfonate	.02020
13C2-4:2FTS	.00023
13C2-6:2FTS	.00024
13C2-8:2FTS	.00024
13C2-PFDA	.00025
13C2-PFDoA	.00025
13C2-PFOA	.00025
13C2-PFTeDA	.00025
13C3-PFBA	.00025
13C3-PFBS	.00023
13C3-PFHxS	.00024
13C4-PFBA	.00025
13C4-PFHpA	.00025

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY44**

Description: PFAS - DoD Calibration L7

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.02000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.02000
Perfluoro-1-butanesulfonate	.02020
Perfluoro-1-hexanesulfonate	.02020
Perfluoro-1-octanesulfonamide	.02000
Perfluoro-1-octanesulfonate	.02000
Perfluoro-n-butanoic Acid	.02000
Perfluoro-n-decanoic Acid	.02000
Perfluoro-n-dodecanoic acid	.02000
Perfluoro-n-heptanoic Acid	.02000
Perfluoro-n-hexanoic acid	.02020
Perfluoro-n-octanoic Acid	.02000
Perfluorononanoic Acid	.02000
Perfluoro-n-pentanoic acid	.02020
Perfluoro-n-tetradecanoic acid	.02000
Perfluoro-n-tridecanoic acid	.02000
Perfluoro-n-undecanoic acid	.02000
Sodium perfluoro-1-pentanesulfonate	.02000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY24	Pipette	I0400533B
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JY45**

Description: PFAS - DoD ICC

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JZ27	PFAS - DoD Second Source LCS/MS Solution	Solution	~0	07/25/19	---	---	200 uL	1	10	~0.0000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 **mL X** 1 **Vials**	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY45**

Description: PFAS - DoD ICC

Stock Id: JY25

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.05	---	---	1	10	0.00025
13C2-PFOA	50	0.05	---	---	1	10	0.00025
13C3-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFOS	50	0.05	---	---	1	10	0.00024

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	50	0.05	---	---	1	10	0.00023
13C2-6:2FTS	50	0.05	---	---	1	10	0.00024
13C2-8:2FTS	50	0.05	---	---	1	10	0.00024
13C2-PFDoA	50	0.05	---	---	1	10	0.00025
13C2-PFTeDA	50	0.05	---	---	1	10	0.00025
13C3-PFBS	50	0.05	---	---	1	10	0.00023
13C3-PFHxS	50	0.05	---	---	1	10	0.00024
13C4-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFHpA	50	0.05	---	---	1	10	0.00025
13C5-PFHxA	50	0.05	---	---	1	10	0.00025
13C5-PFPeA	50	0.05	---	---	1	10	0.00025
13C6-PFDA	50	0.05	---	---	1	10	0.00025
13C7-PFUnA	50	0.05	---	---	1	10	0.00025
13C8-FOSA	50	0.05	---	---	1	10	0.00025
13C8-PFOA	50	0.05	---	---	1	10	0.00025
13C8-PFOS	50	0.05	---	---	1	10	0.00024
13C9-PFNA	50	0.05	---	---	1	10	0.00025
d3-MeFOSAA	50	0.05	---	---	1	10	0.00025
d5-EtFOSAA	50	0.05	---	---	1	10	0.00025

Stock Id: JZ27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	200	0.05	---	---	1	10	0.00101
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	200	0.05	---	---	1	10	0.00100
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	200	0.05	---	---	1	10	0.00100
(Na) Perfluoro-1-decanesulfonate	200	0.05	---	---	1	10	0.00101
(NA) Perfluoro-1-heptanesulfonate	200	0.05	---	---	1	10	0.00100
(Na) Perfluoro-1-nonanesulfonate	200	0.05	---	---	1	10	0.00101

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY45**

Description: PFAS - DoD ICC

N-ethylperfluoro-octanesulfonamidoacetic acid	200	0.05	---	---	1	10	0.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-1-butanesulfonate	200	0.05	---	---	1	10	0.00101
Perfluoro-1-hexanesulfonate	200	0.05	---	---	1	10	0.00101
Perfluoro-1-octanesulfonamide	200	0.05	---	---	1	10	0.00100
Perfluoro-1-octanesulfonate	200	0.05	---	---	1	10	0.00100
Perfluoro-n-butanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-decanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-dodecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-heptanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-hexanoic acid	200	0.05	---	---	1	10	0.00101
Perfluoro-n-octanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluorononanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-pentanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-tetradecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-tridecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-undecanoic acid	200	0.05	---	---	1	10	0.00100
Sodium perfluoro-1-pentanesulfonate	200	0.05	---	---	1	10	0.00100

Final Concentrations:

Analyte:	Conc (ug/mL):
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	.00101
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	.00100
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.00100
(Na) Perfluoro-1-decanesulfonate	.00101
(NA) Perfluoro-1-heptanesulfonate	.00100
(Na) Perfluoro-1-nonanesulfonate	.00101
13C2-4:2FTS	.00023
13C2-6:2FTS	.00024
13C2-8:2FTS	.00024
13C2-PFDA	.00025
13C2-PFDoA	.00025
13C2-PFOA	.00025
13C2-PFTeDA	.00025
13C3-PFBA	.00025
13C3-PFBS	.00023
13C3-PFHxS	.00024
13C4-PFBA	.00025
13C4-PFHpA	.00025

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY45**

Description: PFAS - DoD ICC

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00100
Perfluoro-1-butanesulfonate	.00101
Perfluoro-1-hexanesulfonate	.00101
Perfluoro-1-octanesulfonamide	.00100
Perfluoro-1-octanesulfonate	.00100
Perfluoro-n-butanoic Acid	.00100
Perfluoro-n-decanoic Acid	.00100
Perfluoro-n-dodecanoic acid	.00100
Perfluoro-n-heptanoic Acid	.00100
Perfluoro-n-hexanoic acid	.00101
Perfluoro-n-octanoic Acid	.00100
Perfluorononanoic Acid	.00100
Perfluoro-n-pentanoic acid	.00100
Perfluoro-n-tetradecanoic acid	.00100
Perfluoro-n-tridecanoic acid	.00100
Perfluoro-n-undecanoic acid	.00100
Sodium perfluoro-1-pentanesulfonate	.00100

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B
JZ27	Pipette	B814657482

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JY46**

Description: PFAS - DoD Instrument Blank

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/16/2018	**Expiration Date:**	7/16/2019
Solution Volume 40 **mL X** 1 **Vials**	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID:

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY46**

Description: PFAS - DoD Instrument Blank

Stock Id: JY25

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-PFDA	50	0.05	---	---	1	10	0.00025
13C2-PFOA	50	0.05	---	---	1	10	0.00025
13C3-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFOS	50	0.05	---	---	1	10	0.00024

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	50	0.05	---	---	1	10	0.00023
13C2-6:2FTS	50	0.05	---	---	1	10	0.00024
13C2-8:2FTS	50	0.05	---	---	1	10	0.00024
13C2-PFDoA	50	0.05	---	---	1	10	0.00025
13C2-PFTeDA	50	0.05	---	---	1	10	0.00025
13C3-PFBS	50	0.05	---	---	1	10	0.00023
13C3-PFHxS	50	0.05	---	---	1	10	0.00024
13C4-PFBA	50	0.05	---	---	1	10	0.00025
13C4-PFHpA	50	0.05	---	---	1	10	0.00025
13C5-PFHxA	50	0.05	---	---	1	10	0.00025
13C5-PFPeA	50	0.05	---	---	1	10	0.00025
13C6-PFDA	50	0.05	---	---	1	10	0.00025
13C7-PFUnA	50	0.05	---	---	1	10	0.00025
13C8-FOSA	50	0.05	---	---	1	10	0.00025
13C8-PFOA	50	0.05	---	---	1	10	0.00025
13C8-PFOS	50	0.05	---	---	1	10	0.00024
13C9-PFNA	50	0.05	---	---	1	10	0.00025
d3-MeFOSAA	50	0.05	---	---	1	10	0.00025
d5-EtFOSAA	50	0.05	---	---	1	10	0.00025

Final Concentrations:

Analyte:	Conc (ug/mL):
13C2-4:2FTS	.00023
13C2-6:2FTS	.00024
13C2-8:2FTS	.00024
13C2-PFDA	.00025
13C2-PFDoA	.00025
13C2-PFOA	.00025

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JY46**

Description: PFAS - DoD Instrument Blank

13C2-PFTeDA	.00025
13C3-PFBA	.00025
13C3-PFBS	.00023
13C3-PFHxS	.00024
13C4-PFBA	.00025
13C4-PFHpA	.00025
13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/16/2018 **Expiration Date:** 7/16/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JZ27**

Description: PFAS - DoD Second Source LCS/MS Solution

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
171025-01	PFOA - 2nd Source	Neat	~1.000000	03/22/22	---	---	1000 uL	1	20	~0.0500

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 7/25/2018	**Expiration Date:**	7/25/2019
Solution Volume 40 **mL X** 1 **Vials**	**Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Thorn, Jonathan **Date:** 7/26/2018 8:18:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JZ27**

Description: PFAS - DoD Second Source LCS/MS Solution

Stock Id: **171025-01**

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	1000	1.01	1	100.000	1	20	0.05050
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	1000	1.00	1	100.000	1	20	0.05000
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	1000	1.00	1	100.000	1	20	0.05000
(Na) Perfluoro-1-decanesulfonate	1000	1.01	1	100.000	1	20	0.05050
(NA) Perfluoro-1-heptanesulfonate	1000	1.00	1	100.000	1	20	0.05000
(Na) Perfluoro-1-nonanesulfonate	1000	1.01	1	100.000	1	20	0.05050
N-ethylperfluoro-octanesulfonamidoacetic acid	1000	1.00	1	100.000	1	20	0.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-1-butanesulfonate	1000	1.01	1	100.000	1	20	0.05050
Perfluoro-1-hexanesulfonate	1000	1.01	1	100.000	1	20	0.05050
Perfluoro-1-octanesulfonamide	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-1-octanesulfonate	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-butanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-decanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-dodecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-heptanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-hexanoic acid	1000	1.01	1	100.000	1	20	0.05050
Perfluoro-n-octanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluorononanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-pentanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-tetradecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-tridecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-undecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Sodium perfluoro-1-pentanesulfonate	1000	1.00	1	100.000	1	20	0.05000

Final Concentrations:

Analyte:	Conc (ug/mL):
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	.05050
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	.05000
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.05000
(Na) Perfluoro-1-decanesulfonate	.05050
(NA) Perfluoro-1-heptanesulfonate	.05000
(Na) Perfluoro-1-nonanesulfonate	.05050
N-ethylperfluoro-octanesulfonamidoacetic acid	.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.05000
Perfluoro-1-butanesulfonate	.05050

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/25/2018 **Expiration Date:** 7/25/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Thorn, Jonathan **Date:** 7/26/2018 8:18:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **JZ27**

Description: PFAS - DoD Second Source LCS/MS Solution

Perfluoro-1-hexanesulfonate	.05050
Perfluoro-1-octanesulfonamide	.05000
Perfluoro-1-octanesulfonate	.05000
Perfluoro-n-butanoic Acid	.05000
Perfluoro-n-decanoic Acid	.05000
Perfluoro-n-dodecanoic acid	.05000
Perfluoro-n-heptanoic Acid	.05000
Perfluoro-n-hexanoic acid	.05050
Perfluoro-n-octanoic Acid	.05000
Perfluorononanoic Acid	.05000
Perfluoro-n-pentanoic acid	.05000
Perfluoro-n-tetradecanoic acid	.05000
Perfluoro-n-tridecanoic acid	.05000
Perfluoro-n-undecanoic acid	.05000
Sodium perfluoro-1-pentanesulfonate	.05000

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
171025-01	Pipette	B820865811

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/25/2018 **Expiration Date:** 7/25/2019

Solution Volume 40 **mL X** 1 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Thorn, Jonathan **Date:** 7/26/2018 8:18:00 AM

BATTELLE

It can be done

BDO Id: 171025-01

Reagent Receipt Report

Approved: ☐ ☐

Name: PFOA - 2nd Source

Vendor: ABSOLUTE STANDARDS

Catalogue No: 99207

Type: Solution

Lot No: 032217

Quantity: 5 ea ml

% Moisture:

Description: PFOA-DOD

Received: 10/25/2017

Custodian: Schumitz, Matt

Expires: 3/22/2022

Consumed:

Stored In: LC Laboratory - F0111

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
(Na) 1H,1H,2H,2H-Perfluorodecane	39108-34-4	1.0100	100.00	--	--	☐			
(Na) 1H,1H,2H,2H-Perfluorohexane	BDO-2205	1.0000	100.00	--	--	☐			
(Na) 1H,1H,2H,2H-Perfluorooctane s	27619-97-2	1.0000	100.00	--	--	☐			
(Na) Perfluoro-1-decanesulfonate	2806-15-7	1.0100	100.00	--	--	☐			
(NA) Perfluoro-1-heptanesulfonate	375-92-8	1.0000	100.00	--	--	☐			
(Na) Perfluoro-1-nonanesulfonate	98789-57-2	1.0100	100.00	--	--	☐			
N-ethylperfluoro-octanesulfonamidoa	2991-50-6	1.0000	100.00	--	--	☐			
N-methylperfluoro-1-octanesulfonami	2355-31-9	1.0000	100.00	--	--	☐			
Perfluoro-1-butanesulfonic Acid	375-73-5	1.0100	100.00	--	--	☐			
Perfluoro-1-hexanesulfonic Acid	355-46-4	1.0100	100.00	--	--	☐			
Perfluoro-1-octanesulfonamide	754-91-6	1.0000	100.00	--	--	☐			
Perfluoro-1-octanesulphonic Acid	1763-23-1	1.0000	100.00	--	--	☐			
Perfluoro-n-butanoic Acid	375-22-4	1.0000	100.00	--	--	☐			
Perfluoro-n-decanoic Acid	335-76-2	1.0000	100.00	--	--	☐			
Perfluoro-n-dodecanoic acid	307-55-1	1.0000	100.00	--	--	☐			
Perfluoro-n-heptanoic Acid	375-85-9	1.0000	100.00	--	--	☐			
Perfluoro-n-hexanoic acid	307-24-4	1.0100	100.00	--	--	☐			
Perfluoro-n-octanoic Acid	335-67-1	1.0000	100.00	--	--	☐			
Perfluorononanoic Acid	375-95-1	1.0000	100.00	--	--	☐			
Perfluoro-n-pentanoic acid	2706-90-3	1.0000	100.00	--	--	☐			
Perfluoro-n-tetradecanoic acid	376-06-7	1.0000	100.00	--	--	☐			
Perfluoro-n-tridecanoic acid	72629-94-8	1.0000	100.00	--	--	☐			
Perfluoro-n-undecanoic acid	2058-94-8	1.0000	100.00	--	--	☐			
Sodium perfluoro-1-pentanesulfonat	BDO-2114	1.0000	100.00	--	--	☐			

Total Analytes: 24

Notes:

Approved by: _____ **Approved on:** _____

Authorized by: _____ **Authorized on:** _____

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Analytical Reference Material ARM

ISO 9001 QS Registered
ISO 17025-34-35-43 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

170285-02

Part Number: 99207
Lot Number: 101717
Description: PFOA - DOD
24 components
Expiration Date: 101722
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 1.0
NIST Test ID#: 2506734D

Solvent(s):	Lot#	
Methanol (1 mM KOH)	031317	(98%)
2-Propanol	23214	(2%)

5E-05 Balance Uncertainty
Volume(s) shown below were combined and diluted to (mL): 50.0 0.007 Flask Uncertainty

Formulated By:	Mario Luis	101717 DATE
Reviewed By:	Pedro L. Rentas	101717 DATE

Note: All assigned values are anion concentrations.

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc.(µg/mL)	Final Conc.(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Perfluoro-n-butanoic acid	3670	PFBA0516	0.02	1.00	0.004	50.0	1.00	0.01	375-22-4	N/A	N/A
2. Perfluoro-n-pentanoic acid	3669	PFPeA0617	0.02	1.00	0.004	50.0	1.00	0.01	2706-90-3	N/A	N/A
3. Perfluorohexanoic acid	99199	030617	0.02	1.00	0.004	50.3	1.01	0.01	307-24-4	N/A	N/A
4. Perfluoroheptanoic acid	99197	030517	0.02	1.00	0.004	50.1	1.00	0.01	375-85-9	N/A	N/A
5. Perfluorooctanoic acid	99202	030617	0.02	1.00	0.004	50.2	1.00	0.01	335-67-1	N/A	ipr-rat 189mg/kg
6. Perfluorononanoic acid	99200	030617	0.02	1.00	0.004	50.1	1.00	0.01	375-95-1	N/A	N/A
7. Perfluorodecanoic acid	99195	030617	0.02	1.00	0.004	50.1	1.00	0.01	335-76-2	N/A	orl-rat 57mg/kg
8. Perfluoroundecanoic acid	99205	030617	0.02	1.00	0.004	50.1	1.00	0.01	2058-94-8	N/A	N/A
9. Tricosafluorododecanoic acid	99196	030617	0.02	1.00	0.004	50.1	1.00	0.01	307-55-1	N/A	N/A
10. Perfluorotridecanoic acid	99204	030617	0.02	1.00	0.004	50.1	1.00	0.01	72629-94-8	N/A	N/A
11. Perfluorotetradecanoic acid	99203	030617	0.02	1.00	0.004	50.1	1.00	0.01	376-06-7	N/A	N/A
12. Perfluoro-1-octanesulfonamide	3677	FOSA0916I	0.02	1.00	0.004	50.0	1.00	0.01	754-91-6	N/A	N/A
13. N-Methylperfluoro-1-octanesulfonamidoacetic acid	3667	NMeFOSAA0117	0.02	1.00	0.004	50.0	1.00	0.01	2355-31-9	N/A	N/A
14. N-Ethylperfluoro-1-octanesulfonamidoacetic acid	3664	NEtFOSAA0117	0.02	1.00	0.004	50.0	1.00	0.01	2991-50-6	N/A	N/A
15. Perfluorobutanesulfonic acid	99194	031017	0.02	1.00	0.004	50.7	1.01	0.01	375-73-5	N/A	N/A
16. Perfluoro-1-pentanesulfonic acid	3956	LPFPeS0117	0.0214	1.07	0.004	46.9	1.00	0.01	630402-22-1	N/A	N/A
17. Perfluorohexanesulfonic acid (branched)	99198	030617	0.02	1.00	0.004	50.6	1.01	0.01	3871-99-6	N/A	N/A
18. Perfluoro-1-heptanesulfonic acid	3672	LPFHpS0817	0.021	1.05	0.004	47.6	1.00	0.01	375-92-8	N/A	N/A
19. Heptadecafluorooctanesulfonic acid (branched)	99201	030617	0.02	1.00	0.004	50.2	1.00	0.01	1763-23-1	N/A	N/A
20. Perfluoro-1-nonanesulfonic acid	3957	LPFNS0516	0.021	1.05	0.004	48.0	1.01	0.01	98789-57-2	N/A	N/A
21. Perfluoro-1-decanesulfonic acid	3671	LPFDS0217	0.021	1.05	0.004	48.2	1.01	0.01	2806-15-7	N/A	N/A
22. 1H,1H,2H,2H-Perfluorohexane sulfonic acid	3955	42FTS1216	0.0214	1.07	0.004	46.7	1.00	0.01	00-00-0	N/A	N/A
23. 1H,1H,2H,2H-Perfluorooctane sulfonic acid	3661	62FTS0616	0.021	1.05	0.004	47.4	1.00	0.01	27619-97-2	N/A	N/A
24. 1H,1H,2H,2H-Perfluorodecane sulfonic acid	3662	82FTS1216	0.021	1.05	0.004	47.9	1.01	0.01	39108-34-4	N/A	N/A

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

BATTELLE

It can be done

BDO Id: 180618-02

Reagent Receipt Report

Approved: ☐ Authorized ☐

Name:	Branched NEtFOSAA Standard (50 µ	Received:	6/18/2018
Vendor:	Wellington Laboratories	Custodian:	Thorn, Jonathan
Catalogue No:	br-NEtFOSAAA	Expires:	1/17/2023
Type:	Solution	Consumed:	
Lot No:	brNEtFOSAA0118	Stored In:	Sample Preparation - C0103
Quantity:	1 ea mL % Moisture: 0		
Description:	Branched NEtFOSAA Standard (50 µg/mL)		

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-02

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-NEtFOSAA

N-Ethylperfluorooctanesulfonamidoacetic Acid Solution/Mixture of Linear and Branched Isomers

PRODUCT CODE:	br-NEtFOSAA
LOT NUMBER:	brNEtFOSAA0118
CONCENTRATION:	50.0 ± 2.5 µg/ml
SOLVENT(S):	Methanol/Water (<1%)
DATE PREPARED: (mm/dd/yyyy)	01/10/2018
LAST TESTED: (mm/dd/yyyy)	01/17/2018
EXPIRY DATE: (mm/dd/yyyy)	01/17/2023
RECOMMENDED STORAGE:	Refrigerate ampoule

DESCRIPTION:

The chemical purity has been determined to be ≥98% N-ethylperfluorooctanesulfonamidoacetic acid (linear and branched isomers). The full name, structure and percent composition for each of the identified isomeric components are given in Table A.

DOCUMENTATION/ DATA ATTACHED:

Table A: Isomeric Components and Percent Composition by ^{19}F-NMR
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS Data (SIR)
Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the acetic acid moiety to its respective methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

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 $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

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 ±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; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **br-NEtFOSAA; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

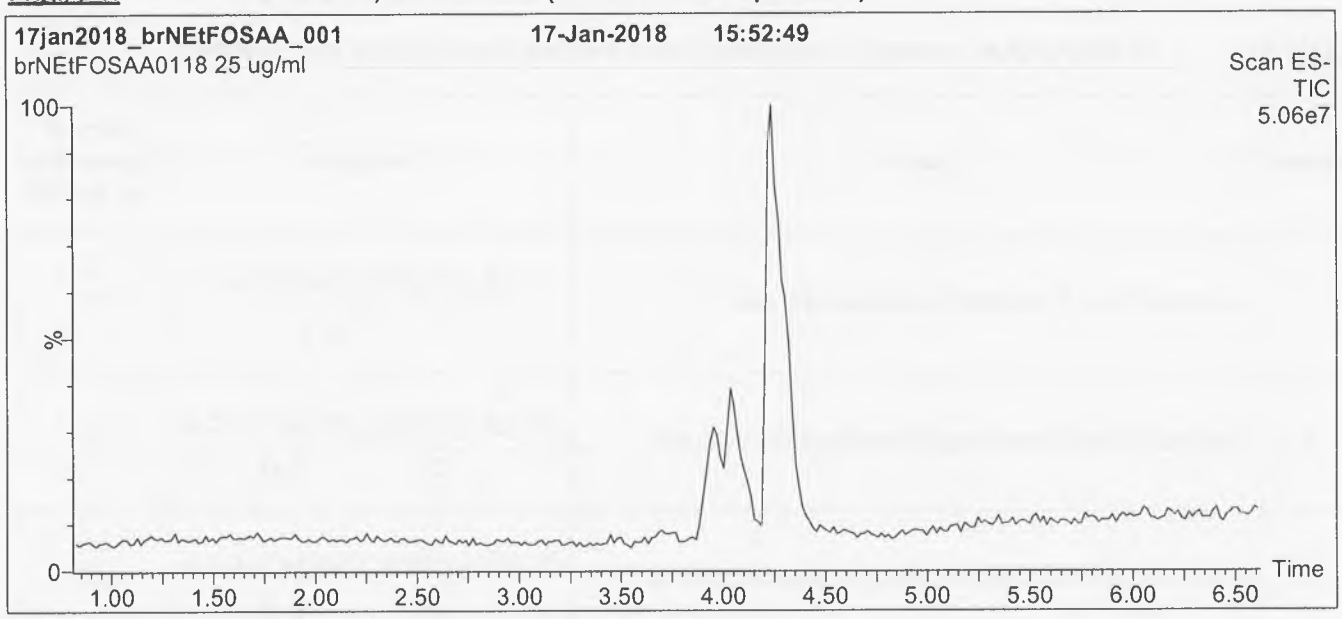
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	N-ethylperfluoro-1-octanesulfonamidoacetic acid	$CF_3(CF_2)_7SO_2N(C_2H_5)CH_2CO_2H$	77.5
2	N-ethylperfluoro-3-methylheptanesulfonamidoacetic acid	$CF_3(CF_2)_3CF(CF_3)(CF_2)_2SO_2N(C_2H_5)CH_2CO_2H$	2.3
3	N-ethylperfluoro-4-methylheptanesulfonamidoacetic acid	$CF_3(CF_2)_2CF(CF_3)(CF_2)_3SO_2N(C_2H_5)CH_2CO_2H$	2.2
4	N-ethylperfluoro-5-methylheptanesulfonamidoacetic acid	$CF_3CF_2CF(CF_3)(CF_2)_4SO_2N(C_2H_5)CH_2CO_2H$	5.4
5	N-ethylperfluoro-6-methylheptanesulfonamidoacetic acid	$CF_3CF(CF_3)(CF_2)_5SO_2N(C_2H_5)CH_2CO_2H$	10.4
6	N-ethylperfluoro-5,5-dimethylhexanesulfonamidoacetic acid	$CF_3C(CF_3)_2(CF_2)_4SO_2N(C_2H_5)CH_2CO_2H$	0.3
7	N-ethylperfluoro-4,5-dimethylhexanesulfonamidoacetic acid	$CF_3CF(CF_3)CF(CF_2)_3SO_2N(C_2H_5)CH_2CO_2H$	0.3
8	N-ethylperfluoro-3,5-dimethylhexanesulfonamidoacetic acid	$CF_3CF(CF_3)CF_2CF(CF_2)_2SO_2N(C_2H_5)CH_2CO_2H$	0.3
9	Other Unidentified Isomers		1.3

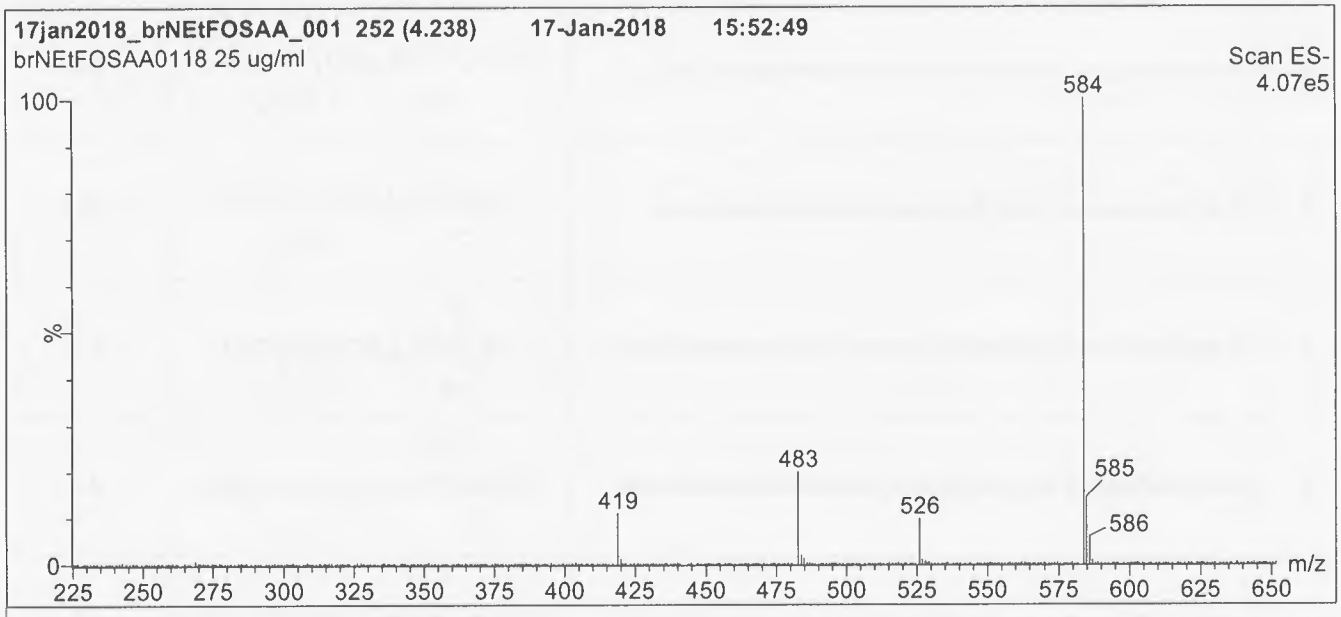
* Percent of total N-ethylperfluorooctanesulfonamidoacetic acid isomers only.

Certified By: _____ **Date:** 03/22/2018 (mm/dd/yyyy)

B.G. Chittim, General Manager

Figure 1: **br-NEtFOSAA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.

Time: 10 min

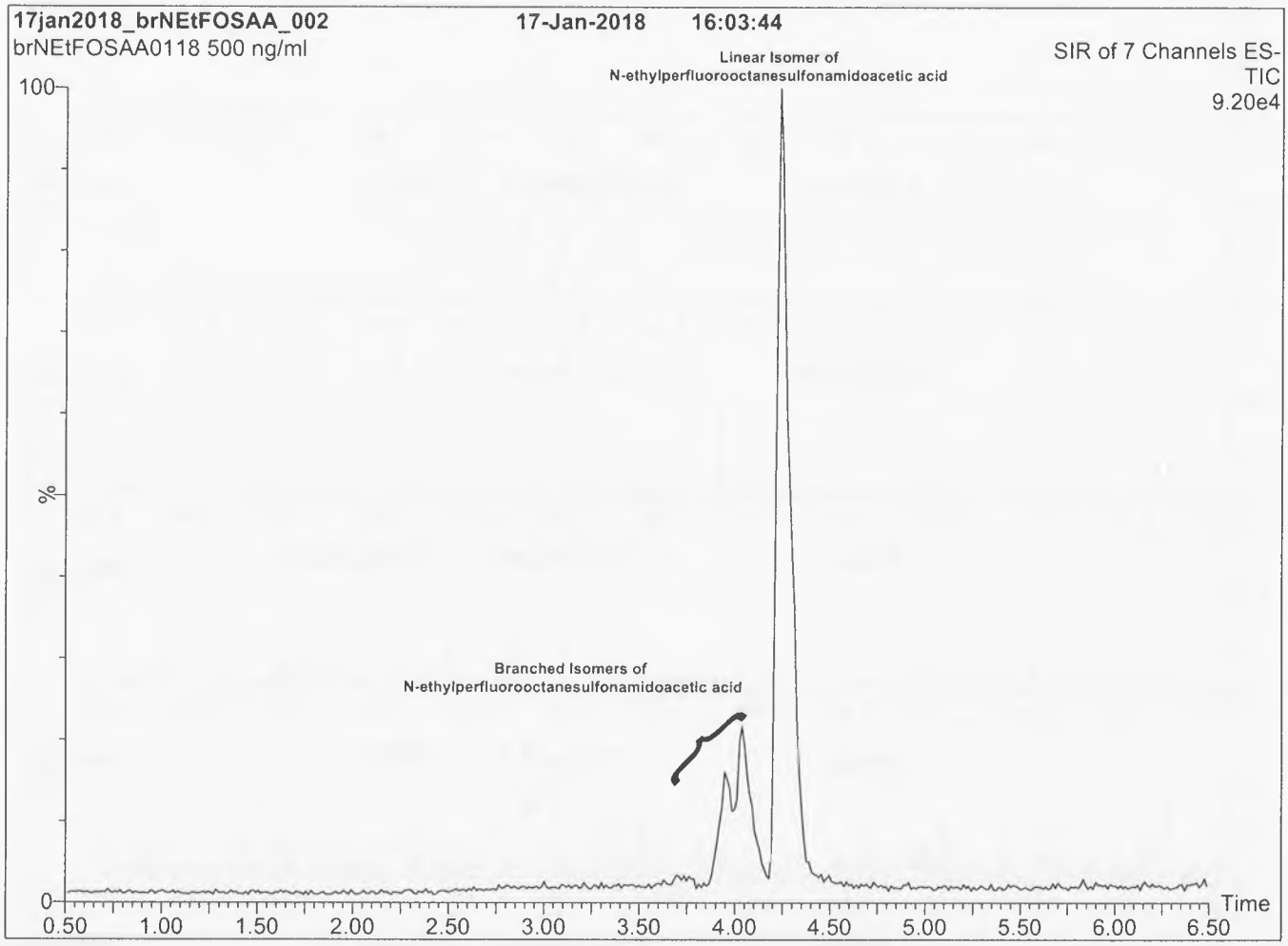
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 35.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **br-NEtFOSAA; LC/MS Data (SIR)**



Conditions for Figure 2:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.

Time: 10 min

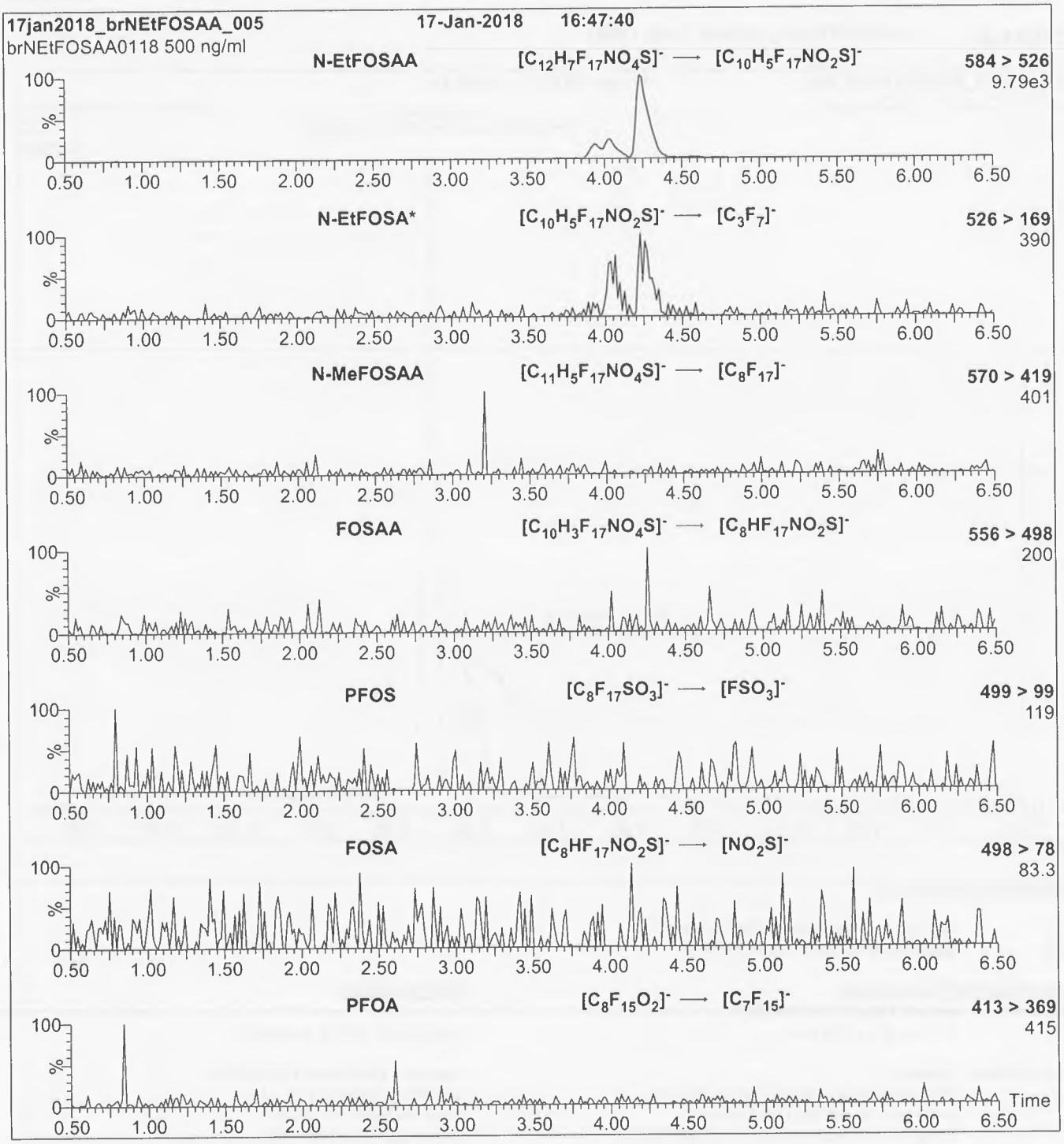
Flow: 300 µl/min

MS Parameters

Experiment: SIR (7 channels)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15-60
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 3: **br-NEtFOSAA; LC/MS/MS Data (Selected MRM Transitions)**



***Note**: N-EtFOSA is formed by in-source fragmentation.

Conditions for Figure 3:

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 11-40 (variable)

BATTELLE

It can be done

BDO Id: 180618-03

Reagent Receipt Report

Approved: ☐ Authorized ☐

Name:	Branched NMeFOSAA Standard (50	Received:	6/18/2018
Vendor:	Wellington Laboratories	Custodian:	Thorn, Jonathan
Catalogue No:	brNMeFOSAA	Expires:	1/17/2023
Type:	Solution	Consumed:	
Lot No:	brNMeFOSAA0118	Stored In:	Sample Preparation - C0103
Quantity:	1 ea mL % Moisture: 0		
Description:	Branched NMeFOSAA Standard (50 µg/mL)		

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-03

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-NMeFOSAA

N-Methylperfluorooctanesulfonamidoacetic Acid Solution/Mixture of Linear and Branched Isomers

PRODUCT CODE:	br-NMeFOSAA
LOT NUMBER:	brNMeFOSAA0118
CONCENTRATION:	50.0 ± 2.5 µg/ml
SOLVENT(S):	Methanol/Water (<1%)
DATE PREPARED: (mm/dd/yyyy)	01/10/2018
LAST TESTED: (mm/dd/yyyy)	01/17/2018
EXPIRY DATE: (mm/dd/yyyy)	01/17/2023
RECOMMENDED STORAGE:	Refrigerate ampoule

DESCRIPTION:

The chemical purity has been determined to be ≥98% N-methylperfluorooctanesulfonamidoacetic acid (linear and branched isomers). The full name, structure and percent composition for each of the identified isomeric components are given in Table A.

DOCUMENTATION/ DATA ATTACHED:

Table A: Isomeric Components and Percent Composition by ^{19}F-NMR
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS Data (SIR)
Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the acetic acid moiety to its respective methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

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 $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

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 ±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; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ACCREDITED ISO/IEC 17034 REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: **br-NMeFOSAA; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

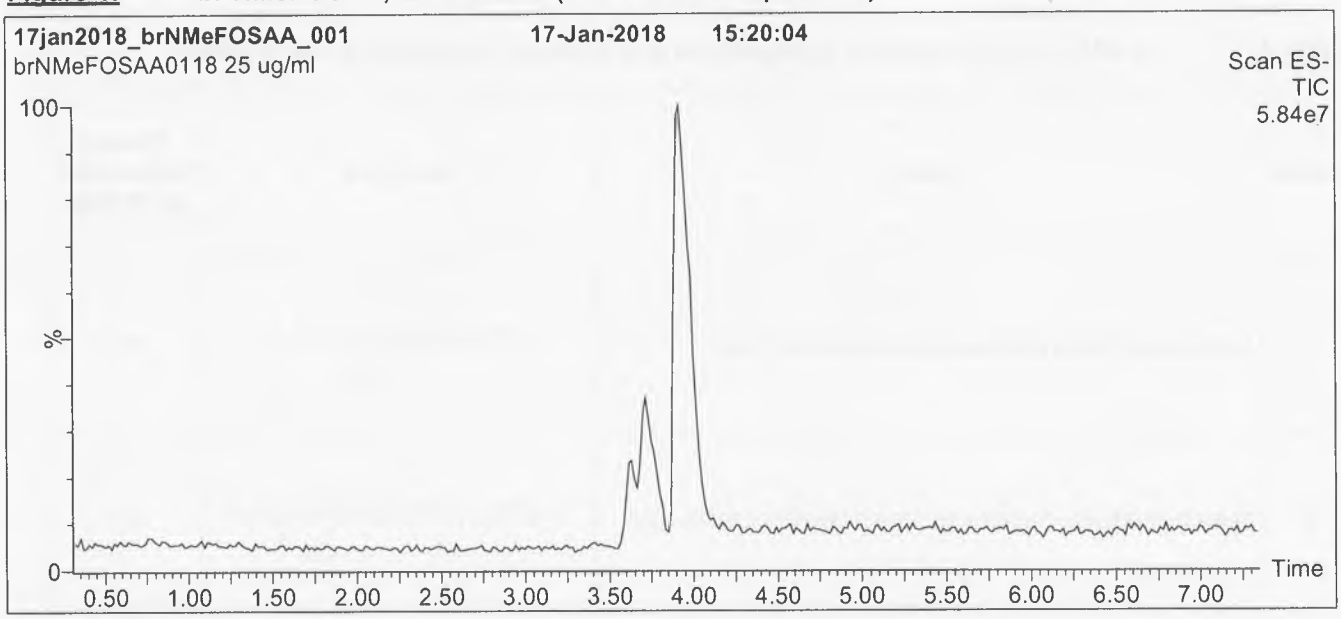
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	N-methylperfluoro-1-octanesulfonamidoacetic acid	$CF_3(CF_2)_7SO_2N(CH_3)CH_2CO_2H$	76.0
2	N-methylperfluoro-3-methylheptanesulfonamidoacetic acid	$CF_3(CF_2)_3CF(CF_3)(CF_2)_2SO_2N(CH_3)CH_2CO_2H$	0.7
3	N-methylperfluoro-4-methylheptanesulfonamidoacetic acid	$CF_3(CF_2)_2CF(CF_3)(CF_2)_3SO_2N(CH_3)CH_2CO_2H$	2.0
4	N-methylperfluoro-5-methylheptanesulfonamidoacetic acid	$CF_3CF_2CF(CF_3)(CF_2)_4SO_2N(CH_3)CH_2CO_2H$	6.0
5	N-methylperfluoro-6-methylheptanesulfonamidoacetic acid	$CF_3CF(CF_3)(CF_2)_5SO_2N(CH_3)CH_2CO_2H$	14.0
6	N-methylperfluoro-5,5-dimethylhexanesulfonamidoacetic acid	$CF_3C(CF_3)_2(CF_2)_4SO_2N(CH_3)CH_2CO_2H$	0.2
7	Other Unidentified Isomers		1.1

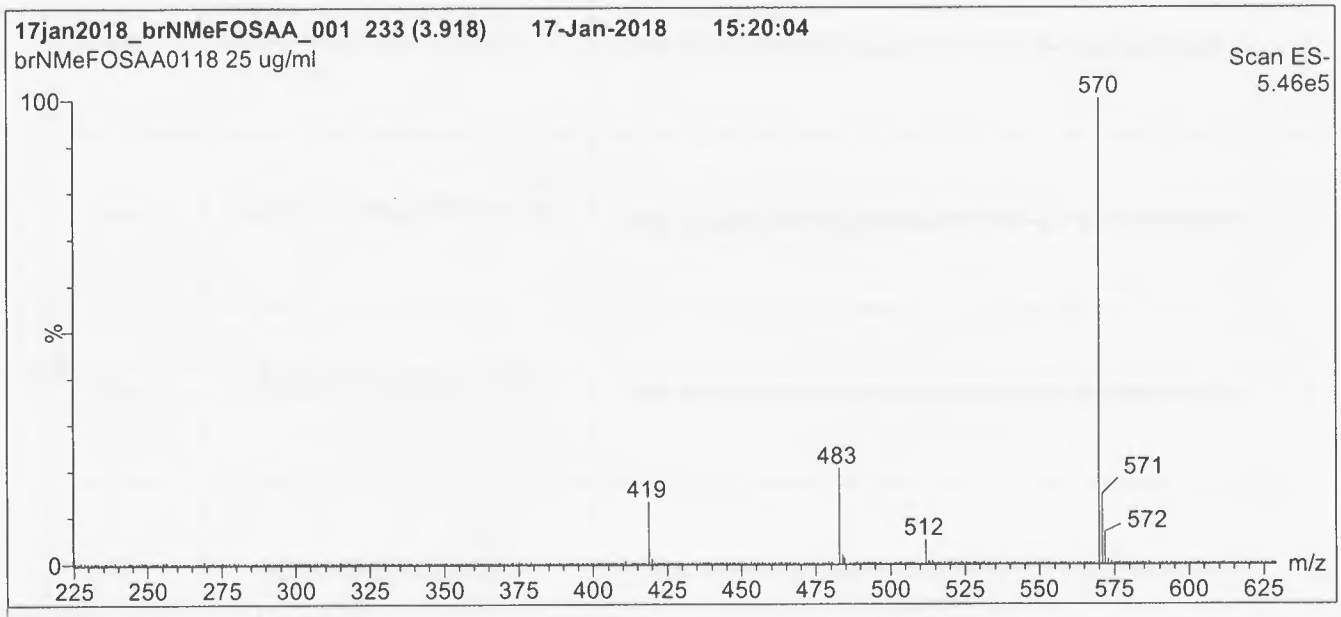
* Percent of total N-methylperfluorooctanesulfonamidoacetic acid isomers only.

Certified By: _____ **Date:** 03/22/2018 (mm/dd/yyyy)

B.G. Chittim, General Manager

Figure 1: **br-NMeFOSAA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.

Time: 10 min

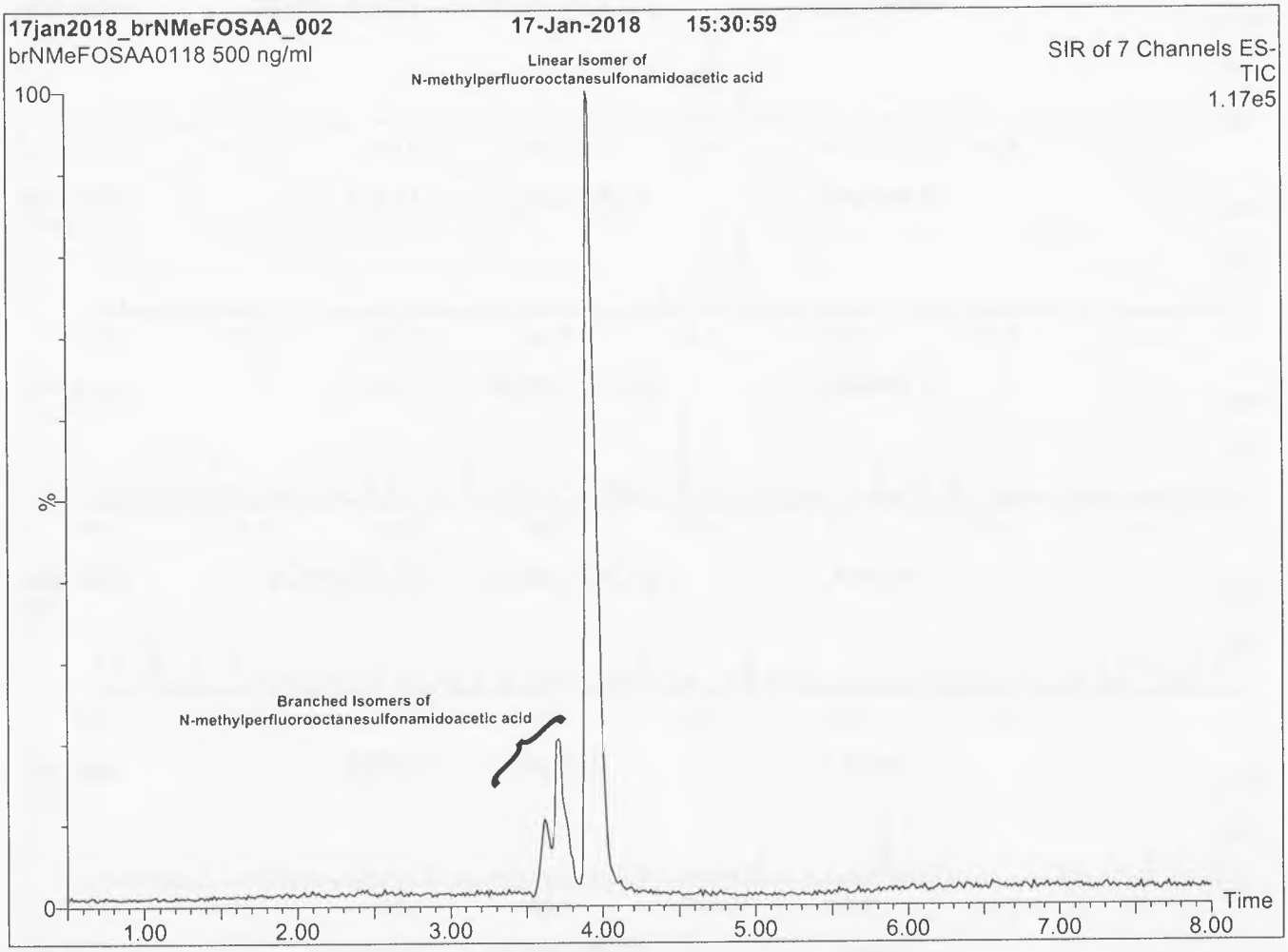
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 35.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **br-NMeFOSAA; LC/MS Data (SIR)**



Conditions for Figure 2:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.

Time: 10 min

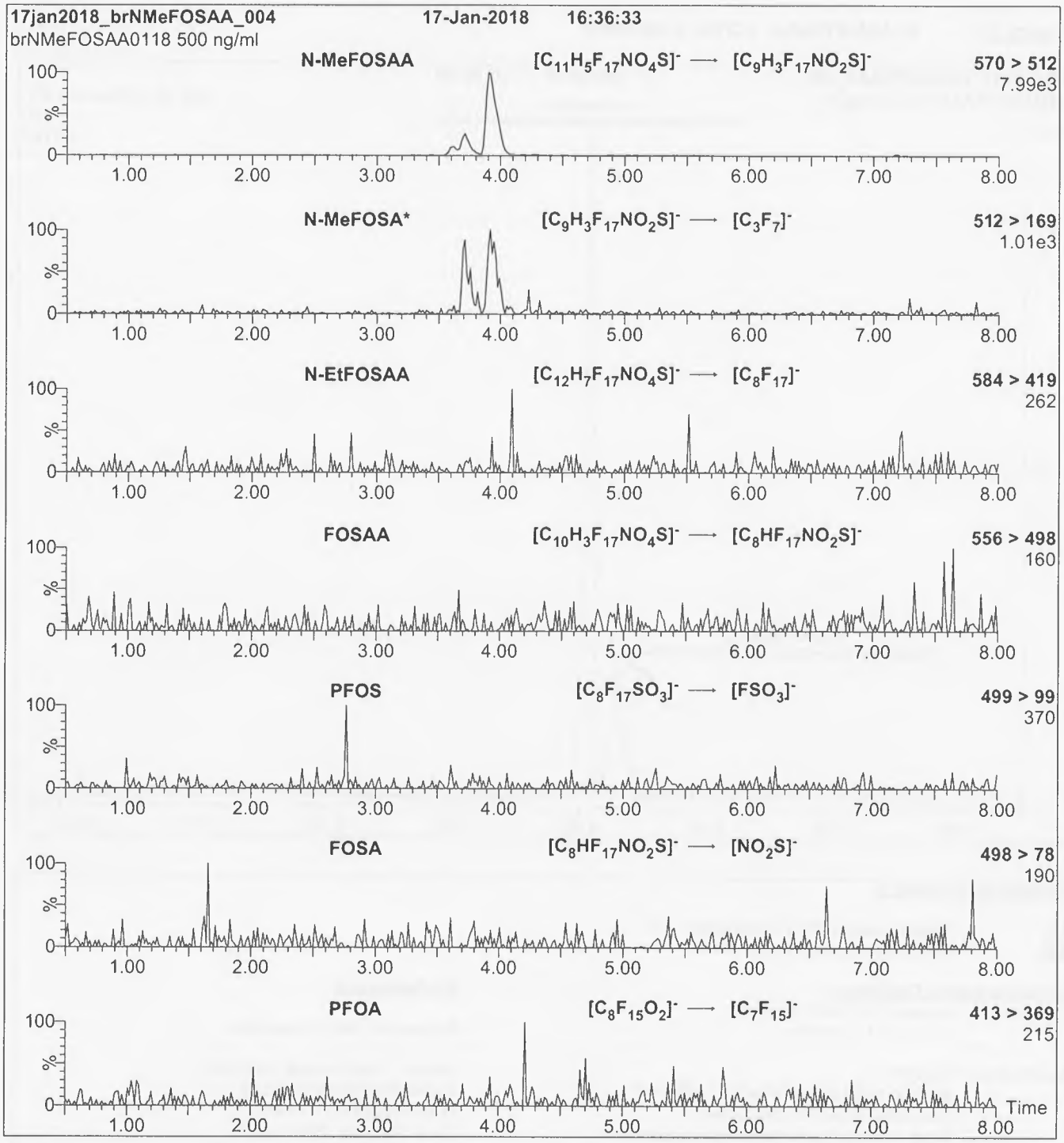
Flow: 300 µl/min

MS Parameters

Experiment: SIR (7 channels)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15-60
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 3: **br-NMeFOSAA; LC/MS/MS Data (Selected MRM Transitions)**



***Note**: N-MeFOSA is formed by in-source fragmentation.

Conditions for Figure 3:

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 11-40 (variable)

BATTELLE

It can be done

BDO Id: 180618-04

Reagent Receipt Report

Approved: ☐ Authorized ☐

Name:	PFOA - Technical Mix	Received:	6/18/2018
Vendor:	Wellington Laboratories	Custodian:	Thorn, Jonathan
Catalogue No:	T-PFOA	Expires:	2/16/2022
Type:	Solution	Consumed:	
Lot No:	TPFOA0217	Stored In:	Sample Preparation - C0103
Quantity:	1 ea mL % Moisture: 0		
Description:	PFOA - Technical Mix		

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-04

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: T-PFOA
LOT NUMBER: TPFOA0217
COMPOUND: Technical Ammonium Perfluorooctanoate

STRUCTURE: (see Table A)
CAS #: 95328-99-7 (for linear ammonium perfluorooctanoate)

MOLECULAR FORMULA: $C_8F_{15}O_2NH_4$
CONCENTRATION: 50 ± 2.5 µg/ml (gravimetric)
CHEMICAL PURITY: Technical material
SOLVENT(S): Methanol/Water (<1%)
LAST TESTED: (mm/dd/yyyy) 02/16/2017
EXPIRY DATE: (mm/dd/yyyy) 02/16/2022
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Table A: Isomeric Components and Percent Composition
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS Data (SIR)
Figure 3: LC/MS/MS Data (Selected MRM Transitions)
Figure 4: LC/MS Elution Profile of the Perfluorooctanoic Acid Isomers

ADDITIONAL INFORMATION:

- See page 2 for further details.
- This technical mixture is >97% ammonium perfluorooctanoate (branched and linear isomers). The remaining 3% consists of common impurities such as the perfluoroheptanoic and perfluorohexanoic acids.
- It is recommended that this solution be used as a *qualitative or semi-quantitative standard only*.
- Contains 4 mole eq. of NaOH to prevent conversion of any carboxylic acids to their corresponding methyl esters.
- The molecular weight of perfluoro-n-octanoic acid is 414.07 g/mol.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: B.G. Chittim **Date:** 02/22/2017 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used for the identification and/or semi-quantitative determination of the specific chemical compound(s) it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

CHARACTERIZATION / HOMOGENEITY:

This product is a technical mixture obtained from an industrial manufacturer. It has been characterized as to its content and components 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. Testing of samples in solution has shown it to be homogeneous. As this product is a technical mixture, it should not be used to quantitate any of the listed components.

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 $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

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 ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

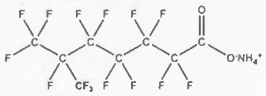
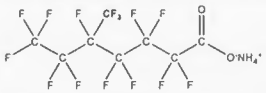
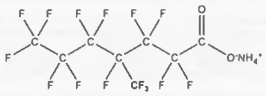
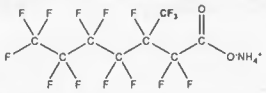
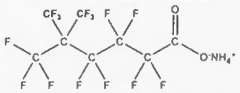
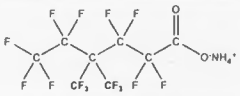
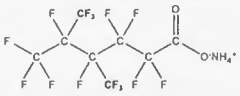
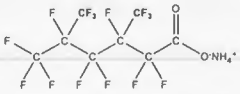
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A 1226

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER

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

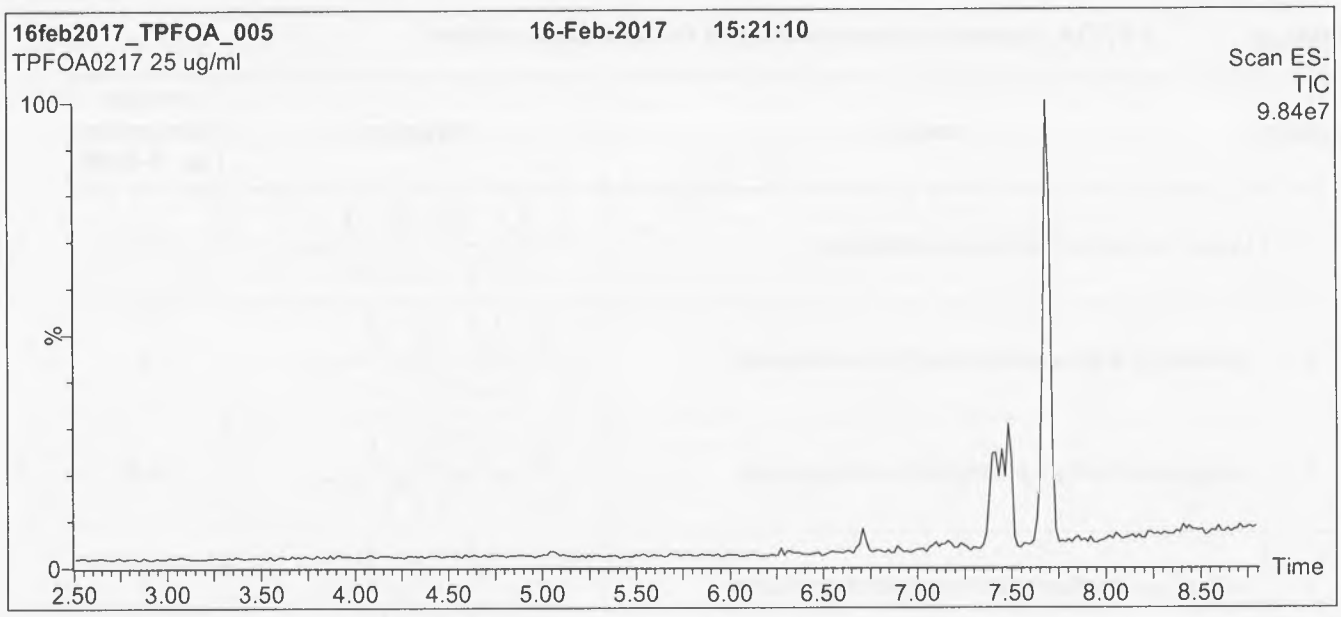
Table A: **T-PFOA; Isomeric Components and Percent Composition***

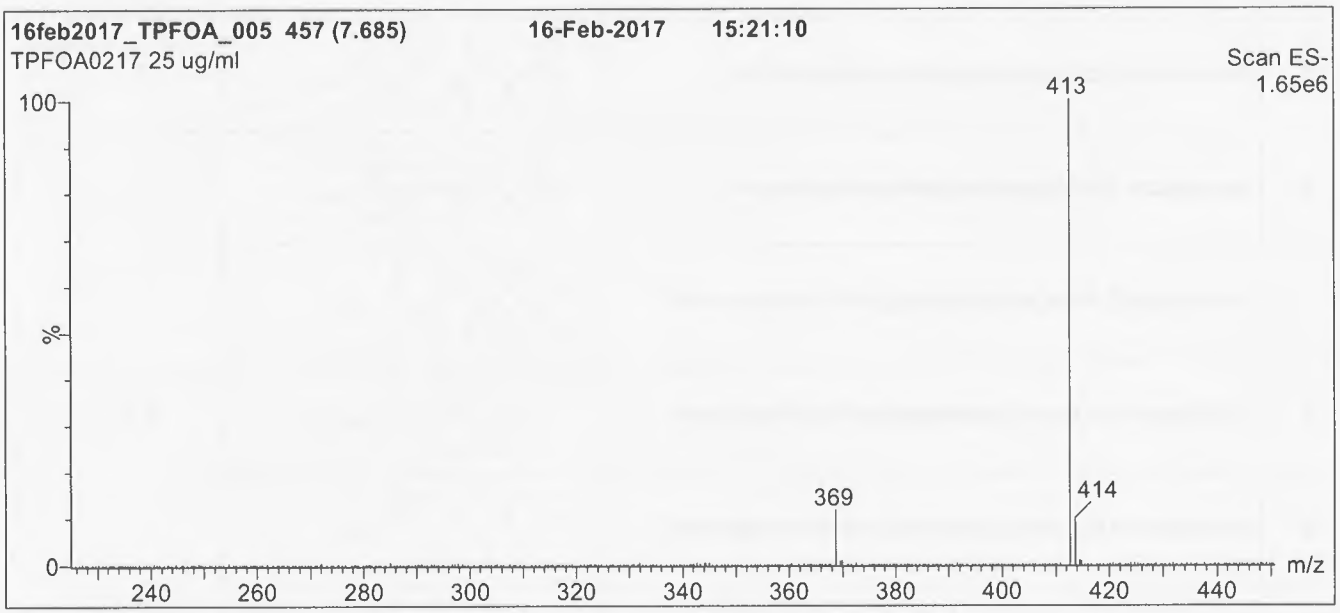
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Linear ammonium perfluoro-n-octanoate		79
2	Ammonium 6-trifluoromethylperfluoroheptanoate		9
3	Ammonium 5-trifluoromethylperfluoroheptanoate		4.5
4	Ammonium 4-trifluoromethylperfluoroheptanoate		4
5	Ammonium 3-trifluoromethylperfluoroheptanoate		3
6[a]	Ammonium 2-trifluoromethylperfluoroheptanoate		0.5
7	Ammonium 5,5-bis(trifluoromethyl)perfluorohexanoate		
8	Ammonium 4,4-bis(trifluoromethyl)perfluorohexanoate		
9[a]	Ammonium 4,5-bis(trifluoromethyl)perfluorohexanoate		
10	Ammonium 3,5-bis(trifluoromethyl)perfluorohexanoate		

* Percent Composition was determined by ^{19}F-NMR. The percentages displayed are of total ammonium perfluorooctanoate isomers only (isomers are labelled in Figure 4).

[a] Presence of this isomer could not be verified by LC/MS due to co-elution.

Figure 1: **T-PFOA; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions:

Column: Kinetex PFP
2.6 µm, 4.6 x 100 mm

Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 50% organic over 5 min. Ramp to 90% organic over 5 min and hold for 1.5 min.
Return to initial conditions over 0.5 min.
Time: 13 min

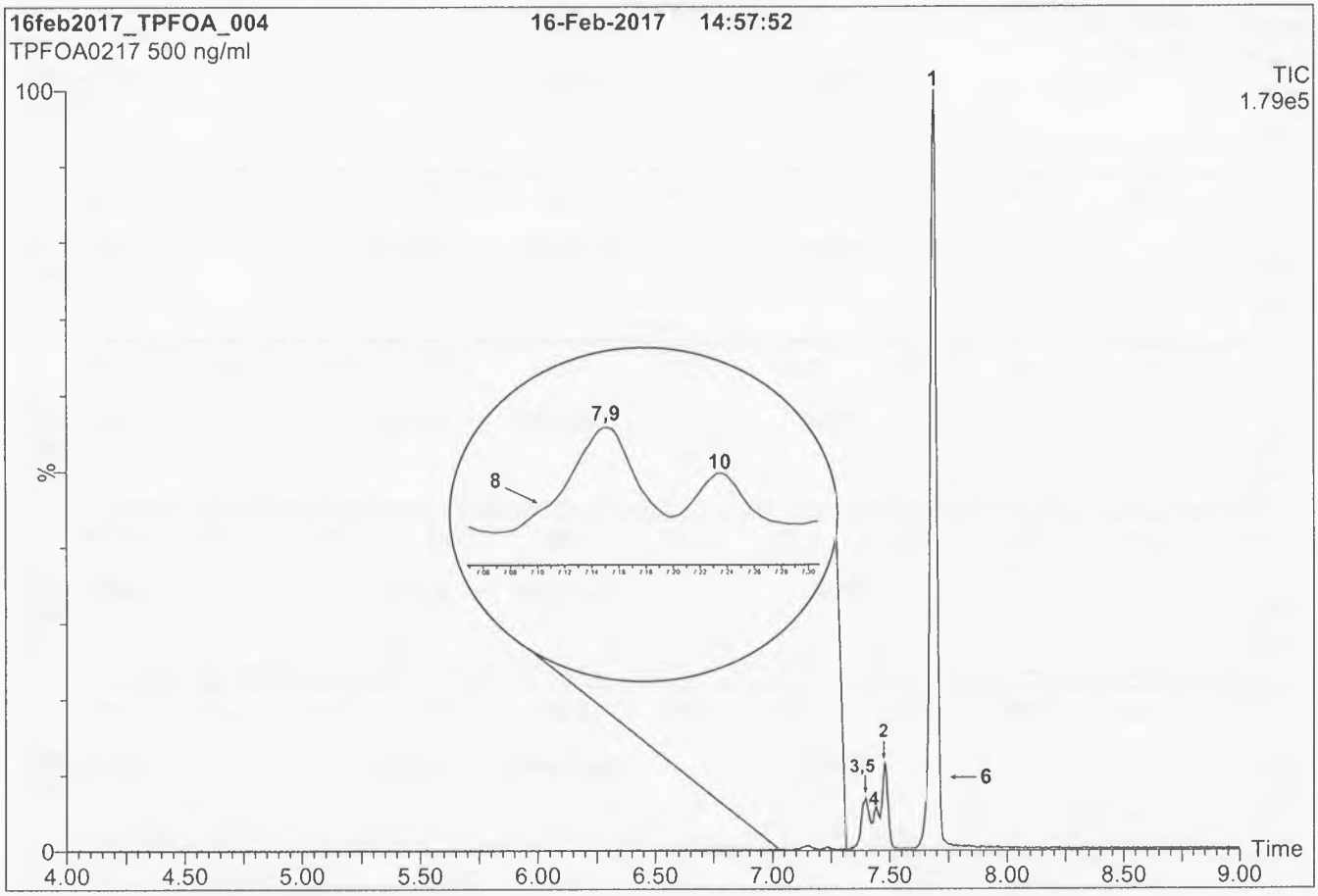
Flow: 1.0 ml/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **T-PFOA; LC/MS Data (SIR)**



Conditions for Figure 2:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions:

Column: Kinetex PFP
2.6 µm, 4.6 x 100 mm

Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 50% organic over 5 min. Ramp to 90% organic over 5 min and hold for 1.5 min.
Return to initial conditions over 0.5 min.
Time: 13 min

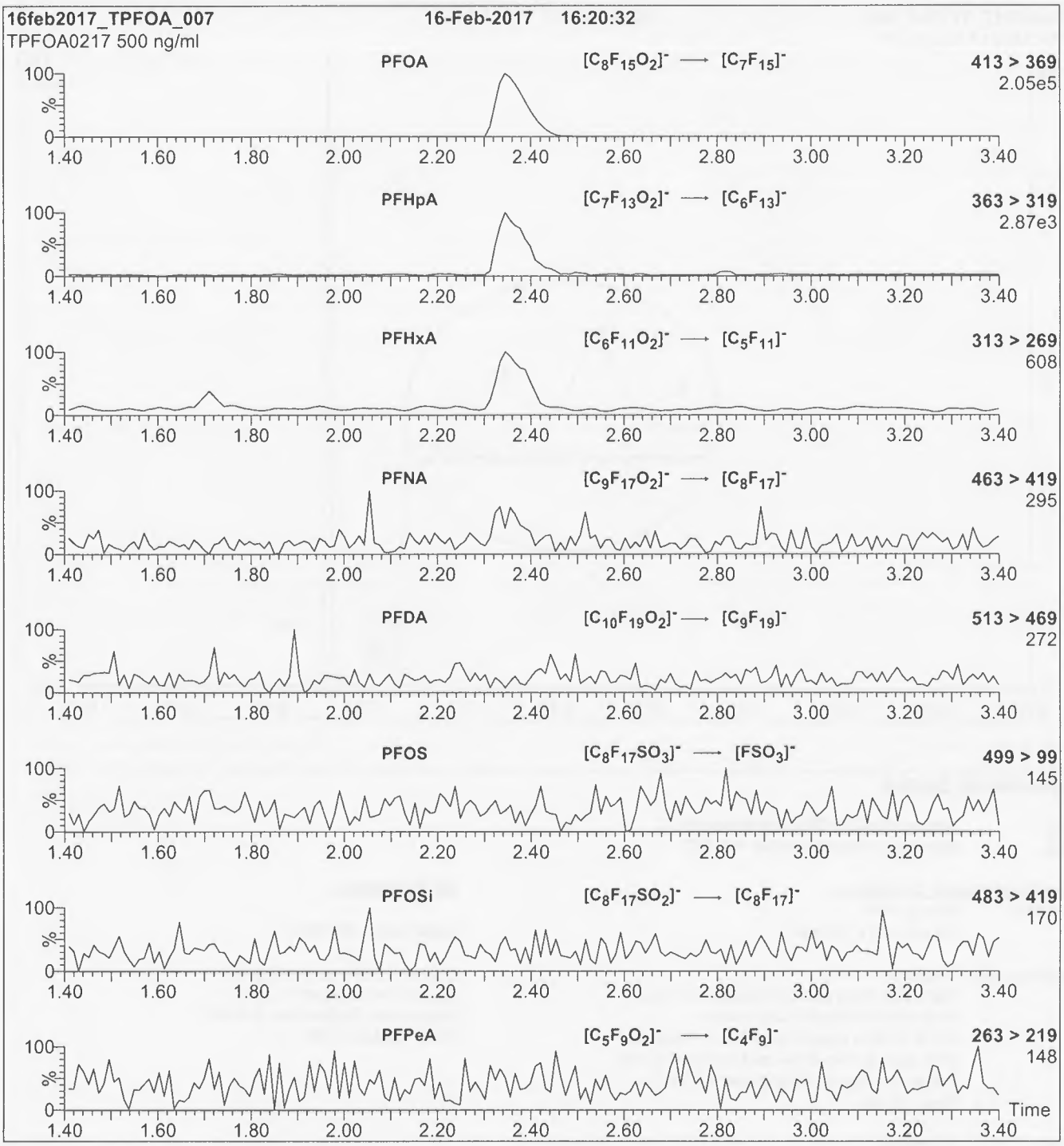
Flow: 1.0 ml/min

MS Parameters:

Experiment: SIR (ES^-)

Source conditions: see Figure 1
Source Temperature = 110 °C
Desolvation Temperature = 325 °C
Cone Voltage = 15V

Figure 3: **T-PFOA; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 3:

Injection: Direct loop injection
10 µl (500 ng/ml T-PFOA)

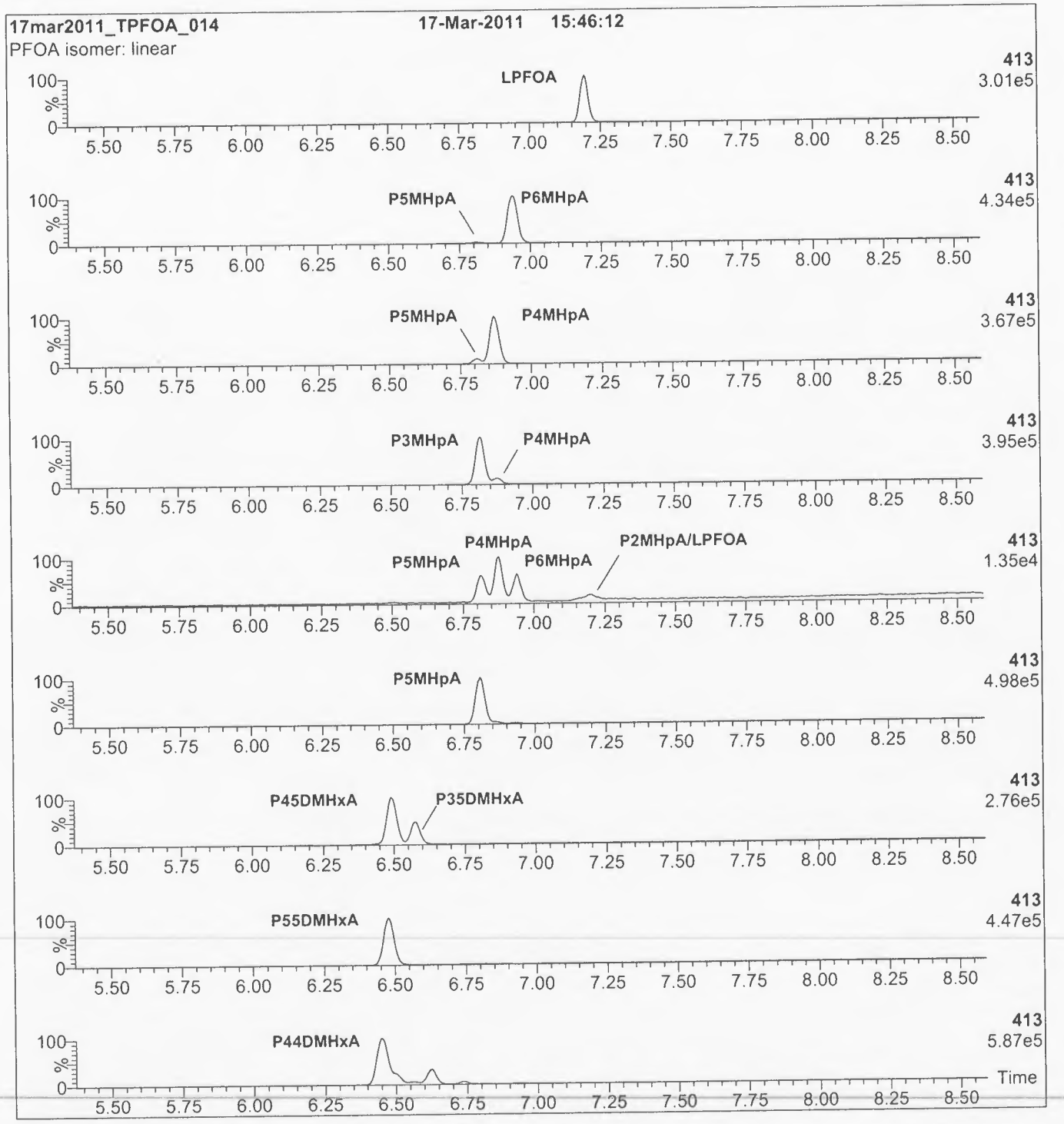
Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = variable (9-40)

Figure 4: **T-PFOA; LC/MS Elution Profile of the Perfluorooctanoic Acid Isomers**



Conditions for Figure 4:

Same as Figure 2.

BATTELLE

It can be done

BDO Id: 180618-06

Reagent Receipt Report

Approved: ☐ Authorized ☐

Name:	Branched PFHxS Standard (50 µg/m	Received:	6/18/2018
Vendor:	Wellington Laboratories	Custodian:	Thorn, Jonathan
Catalogue No:	br-PFHxSK	Expires:	1/4/2022
Type:	Solution	Consumed:	
Lot No:	brPFHxSK0117	Stored In:	Sample Preparation - C0103
Quantity:	1 ea mL % Moisture: 0		
Description:	Branched PFHxS Standard (50 µg/mL)		

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-06

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-PFHxSK

Potassium Perfluorohexanesulfonate Solution/Mixture of Linear and Branched Isomers

PRODUCT CODE:	br-PFHxSK
LOT NUMBER:	brPFHxSK0117
CONCENTRATION:	50.0 ± 2.5 µg/ml (total potassium salt)
	45.5 ± 2.3 µg/ml (total PFHxS anion)
SOLVENT(S):	Methanol
DATE PREPARED: (mm/dd/yyyy)	01/03/2017
LAST TESTED: (mm/dd/yyyy)	01/04/2017
EXPIRY DATE: (mm/dd/yyyy)	01/04/2022
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

The chemical purity has been determined to be ≥98% perfluorohexanesulfonate linear and branched isomers. The full name, structure and percent composition for each of the identified isomeric components are given in Table A.

DOCUMENTATION/ DATA ATTACHED:

Table A: Isomeric Components and Percent Composition by ^{19}F-NMR
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS Data (SIR)
Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.5% of perfluoro-1-pentanesulfonate and ~ 0.2% of perfluoro-1-octanesulfonate.
- CAS#: 3871-99-6 (for linear isomer; potassium salt).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

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 ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

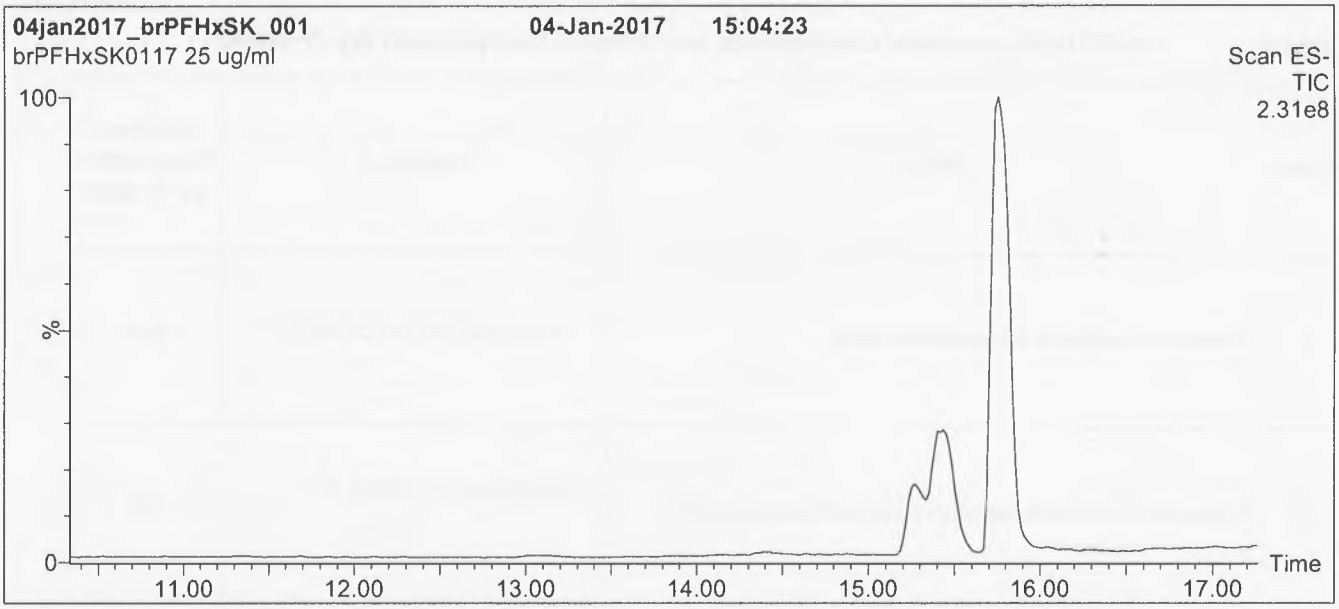
Table A: **br-PFHxSK; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

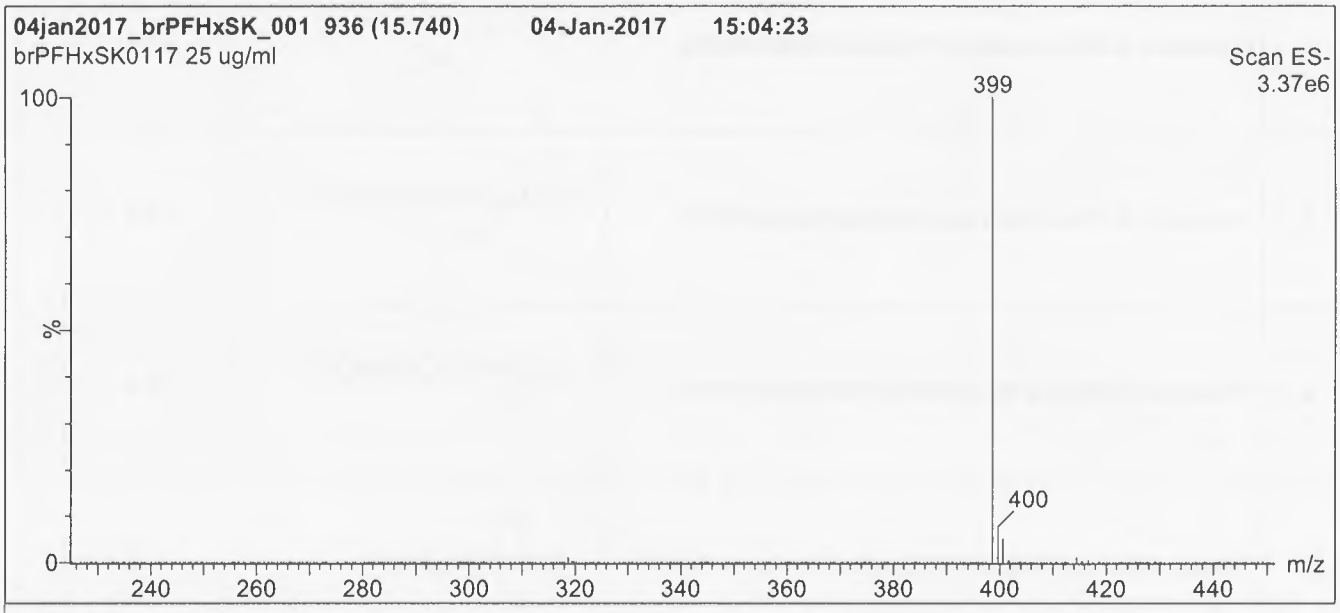
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Potassium perfluoro-1-hexanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	81.1
2	Potassium 1-trifluoromethylperfluoropentanesulfonate**	$CF_3CF_2CF_2CF_2CF(CF_3)SO_3^-K^+$	2.9
3	Potassium 2-trifluoromethylperfluoropentanesulfonate	$CF_3CF_2CF_2CF(CF_3)CF_2SO_3^-K^+$	1.4
4	Potassium 3-trifluoromethylperfluoropentanesulfonate	$CF_3CF_2CF(CF_3)CF_2CF_2SO_3^-K^+$	5.0
5	Potassium 4-trifluoromethylperfluoropentanesulfonate	$CF_3CF(CF_3)CF_2CF_2CF_2SO_3^-K^+$	8.9
6	Potassium 3,3-di(trifluoromethyl)perfluorobutanesulfonate	$CF_3C(CF_3)_2CF_2CF_2SO_3^-K^+$	0.2
7	Other Unidentified Isomers		0.5

* Percent of total perfluorohexanesulfonate isomers only.
** Systematic Name: Potassium perfluorohexane-2-sulfonate.

Certified By: B.G. Chittim **Date:** 01/20/2017 (mm/dd/yyyy)

Figure 1: **br-PFHxSK; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 20% (80:20 MeOH:ACN) / 80% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 50% organic over 14 min. Ramp to 90% organic over 3 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 20 min

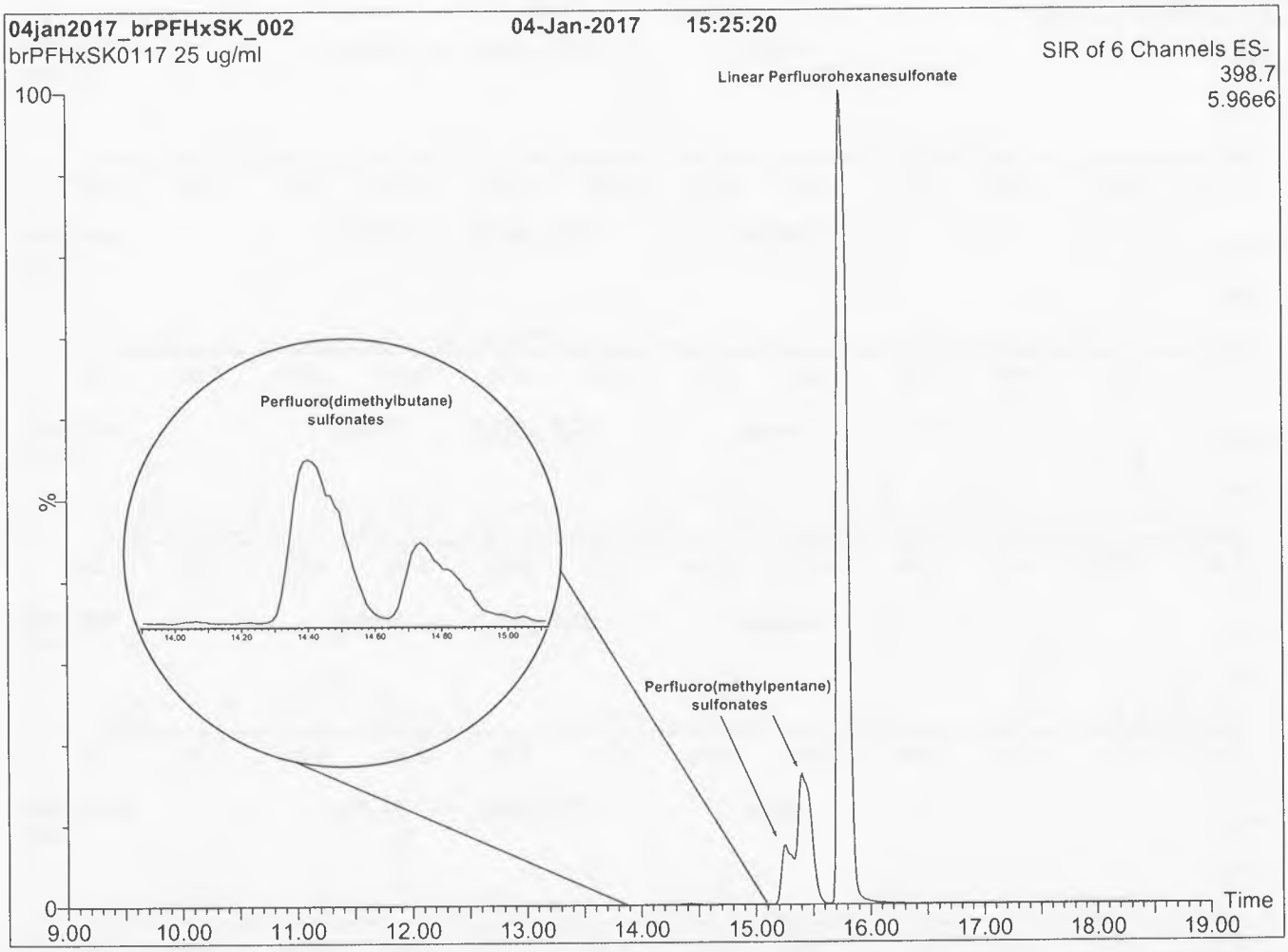
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: **br-PFHxSK; LC/MS Data (SIR)**



Conditions for Figure 2:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 20% (80:20 MeOH:ACN) / 80% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 50% organic over 14 min. Ramp to 90% organic over 3 min and hold for 1.5 min before returning to initial conditions in 0.5 min.
Time: 20 min

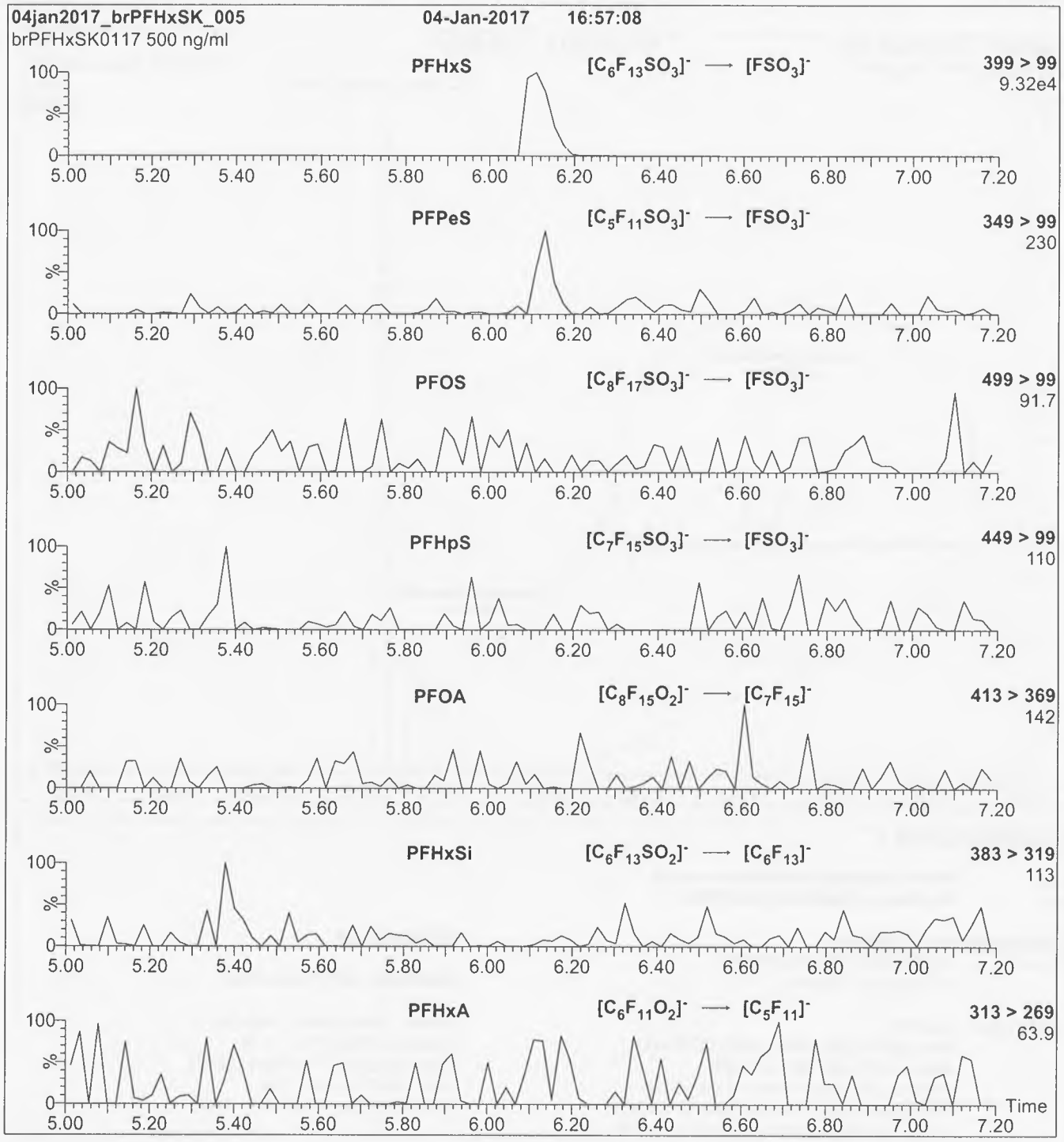
Flow: 300 µl/min

MS Parameters

Experiment: SIR (6 channels)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = variable (15-62)
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 3: **br-PFHxSK; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 3:

Injection: Direct loop injection
10 µl (500 ng/ml br-PFHxSK)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 30

BATTELLE

It can be done

BDO Id: 180618-07

Reagent Receipt Report

Approved: ☐ Authorized ☐

Name:	Branched PFOS Standard (50 µg/mL	Received:	6/18/2018
Vendor:	Wellington Laboratories	Custodian:	Thorn, Jonathan
Catalogue No:	br-PFOSK	Expires:	1/12/2022
Type:	Solution	Consumed:	
Lot No:	brPFOSK0117	Stored In:	Sample Preparation - C0103
Quantity:	1 ea mL % Moisture: 0		
Description:	Branched PFOS Standard (50 µg/mL)		

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-07

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-PFOSK

Potassium Perfluorooctanesulfonate Solution/Mixture of Linear and Branched Isomers

PRODUCT CODE:	br-PFOSK
LOT NUMBER:	brPFOSK0117
CONCENTRATION:	50 ± 2.5 µg/ml (total potassium salt)
	46.4 ± 2.3 µg/ml (total PFOS anion)
SOLVENT(S):	Methanol
DATE PREPARED: (mm/dd/yyyy)	01/09/2017
LAST TESTED: (mm/dd/yyyy)	01/12/2017
EXPIRY DATE: (mm/dd/yyyy)	01/12/2022
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

The chemical purity has been determined to be ≥98% perfluorooctanesulfonate linear and branched isomers. The full name, structure and percent composition for each of the isomeric components are given in Table A.

DOCUMENTATION/ DATA ATTACHED:

Table A: Isomeric Components and Percent Composition by ^{19}F-NMR
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS Data (SIR)
Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- A 5-point calibration curve was generated using linear PFOS (potassium salt) and mass-labelled PFOS as an internal standard to enable quantitation of br-PFOSK using isotopic dilution.
- CAS#: 2795-39-3 (for linear isomer; potassium salt).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

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 ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ACCREDITED INDEPENDENT REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

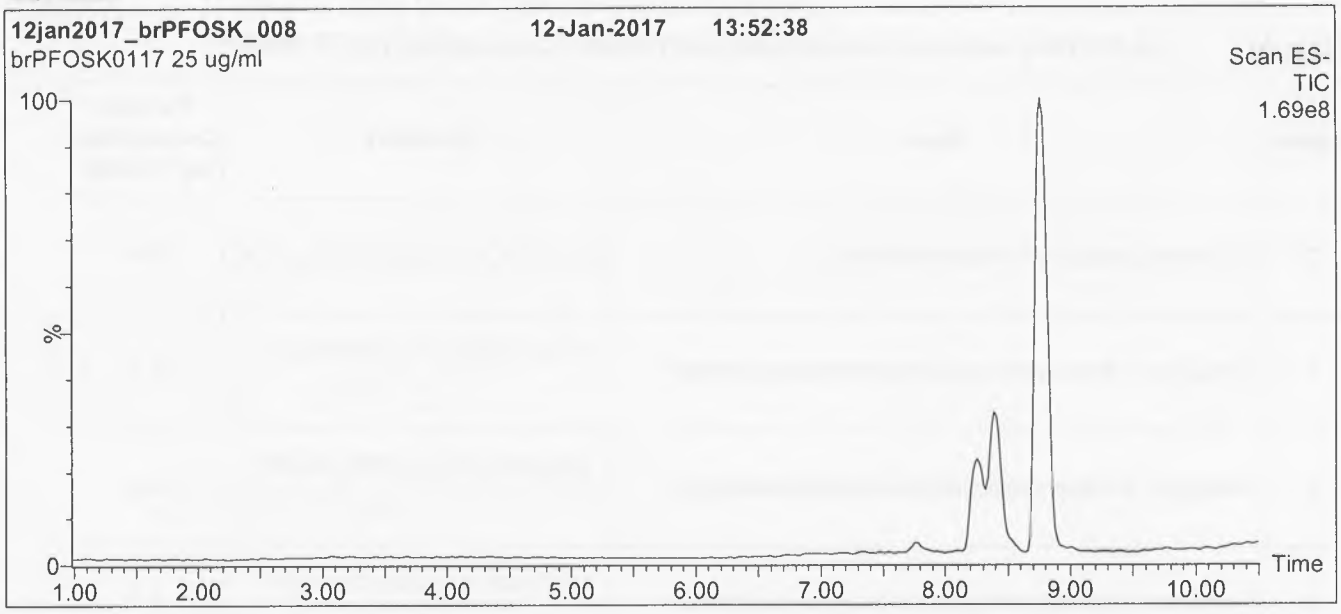
Table A: **br-PFOSK; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

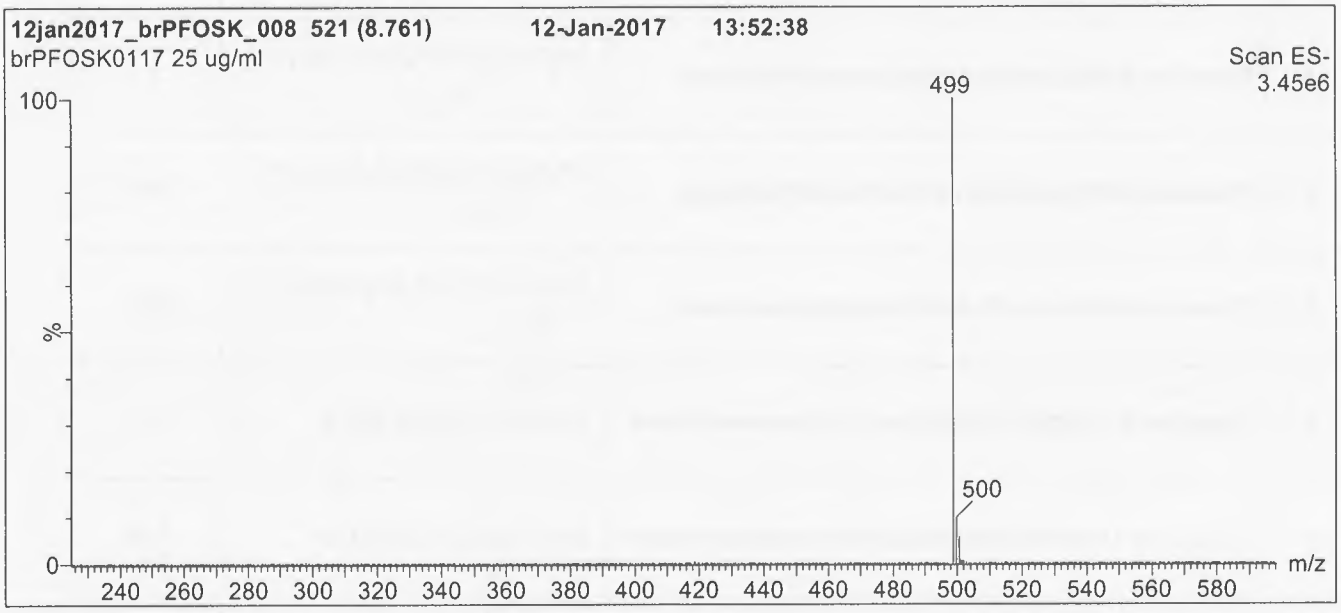
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Potassium perfluoro-1-octanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	78.8
2	Potassium 1-trifluoromethylperfluoroheptanesulfonate**	$CF_3CF_2CF_2CF_2CF_2CF_2CF(CF_3)SO_3^-K^+$	1.2
3	Potassium 2-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF(CF_3)CF_2SO_3^-K^+$	0.6
4	Potassium 3-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF_2CF_2CF(CF_3)CF_2CF_2SO_3^-K^+$	1.9
5	Potassium 4-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF_2CF(CF_3)CF_2CF_2CF_2SO_3^-K^+$	2.2
6	Potassium 5-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF(CF_3)CF_2CF_2CF_2CF_2SO_3^-K^+$	4.5
7	Potassium 6-trifluoromethylperfluoroheptanesulfonate	$CF_3CF(CF_3)CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	10.0
8	Potassium 5,5-di(trifluoromethyl)perfluorohexanesulfonate	$CF_3C(CF_3)(CF_3)CF_2CF_2CF_2CF_2SO_3^-K^+$	0.2
9	Potassium 4,4-di(trifluoromethyl)perfluorohexanesulfonate	$CF_3CF_2C(CF_3)(CF_3)CF_2CF_2CF_2SO_3^-K^+$	0.03
10	Potassium 4,5-di(trifluoromethyl)perfluorohexanesulfonate	$CF_3CF(CF_3)CF(CF_3)CF_2CF_2CF_2SO_3^-K^+$	0.4
11	Potassium 3,5-di(trifluoromethyl)perfluorohexanesulfonate	$CF_3CF(CF_3)CF_2CF(CF_3)CF_2CF_2SO_3^-K^+$	0.07

* Percent of total perfluorooctanesulfonate isomers only. Isomers are labelled in Figure 2.
** Systematic Name: Potassium perfluorooctane-2-sulfonate.

Certified By: B.G. Chittim **Date:** 01/20/2017 (mm/dd/yyyy)

Figure 1: **br-PFOSK; LC/MS Data (TIC and Mass Spectrum)**





Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% (80:20 MeOH:ACN) / 55% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 12 min and hold for 2 min.
Return to initial conditions over 0.5 min.
Time: 16 min

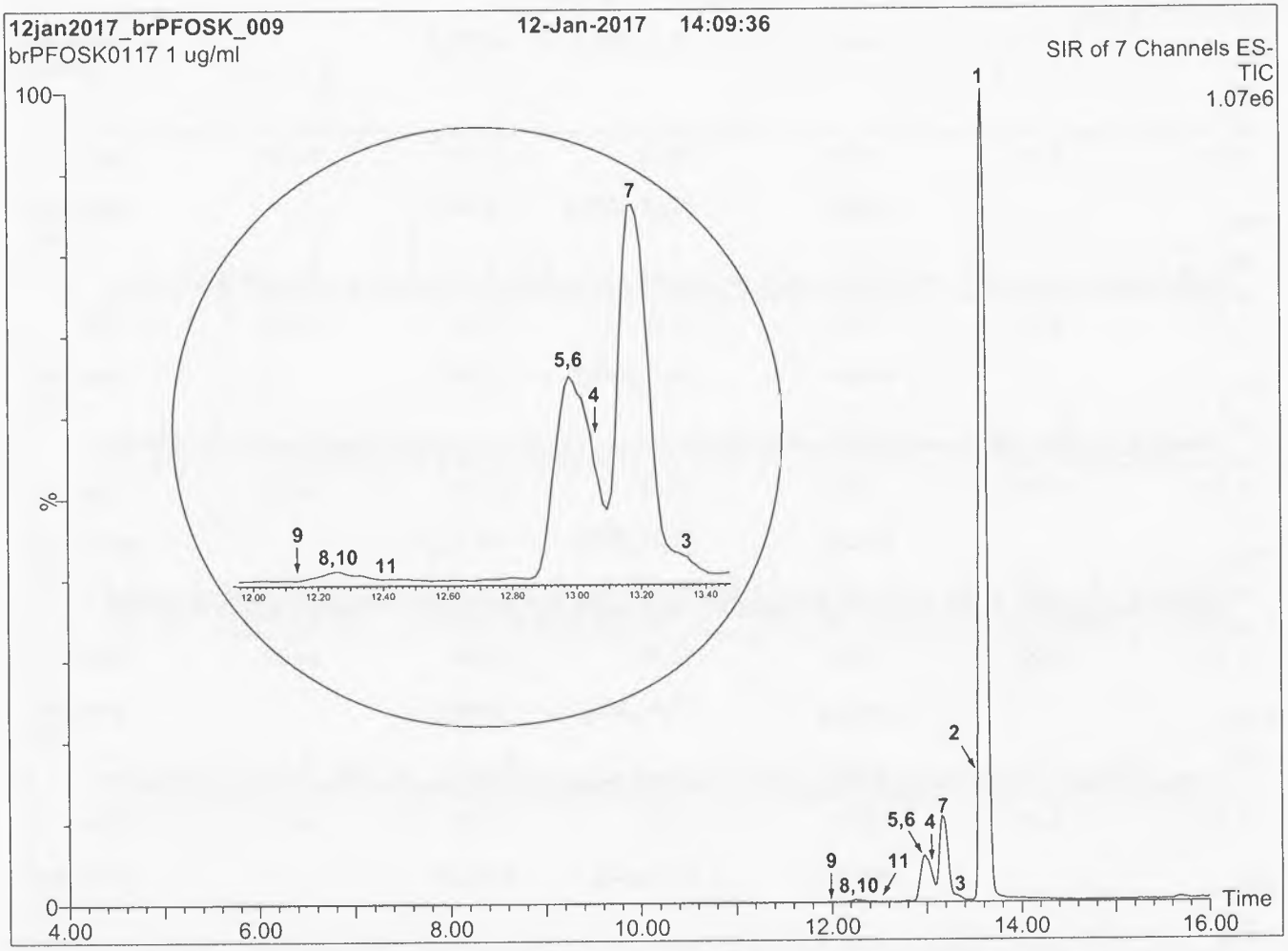
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **br-PFOSK; LC/MS Data (SIR)**



Conditions for Figure 2:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP_{18} (1.7 µm, 2.1 x 100 mm)

Injection: 1.0 µg/ml of br-PFOSK

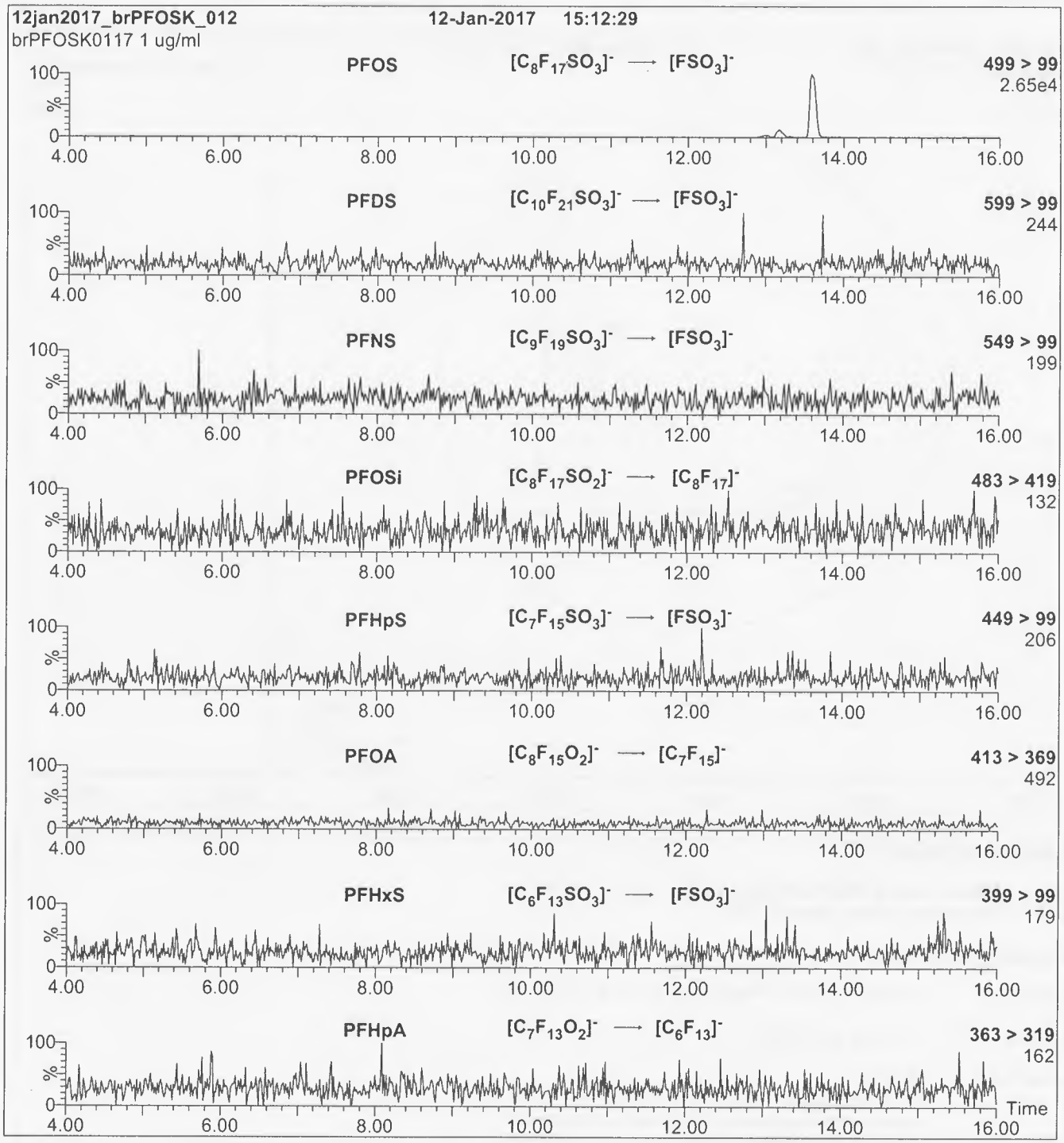
Mobile Phase: Gradient
45% (80:20 MeOH:ACN) / 55% H_2O (both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 15 min and hold for 3 min.
Return to initial conditions over 1 min.
Time: 20 min

Flow: 300 µl/min

MS Conditions:

SIR (ES^-)
Source = 110 °C
Desolvation = 325 °C
Cone Voltage = 60V

Figure 3: **br-PFOSK; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 3:

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 11-50 (variable)

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 9001 QS Registered
ISO 17025 34 05543 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

180705-02

Part Number: 99207
Lot Number: 061918
Description: PFOA - DOD
24 components
Expiration Date: 061923
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 1.0
NIST Test ID#: 2684186

Solvent(s):	Lot#	
Methanol (1 mM KOH)	061918	(98%)
2-Propanol	23214	(2%)

5E-05 Balance Uncertainty
Volume(s) shown below were combined and diluted to (mL): 50.0 0.007 Flask Uncertainty

Formulated By:	Mario Luis	061918 DATE
Reviewed By:	Pedro L. Rentas	061918 DATE

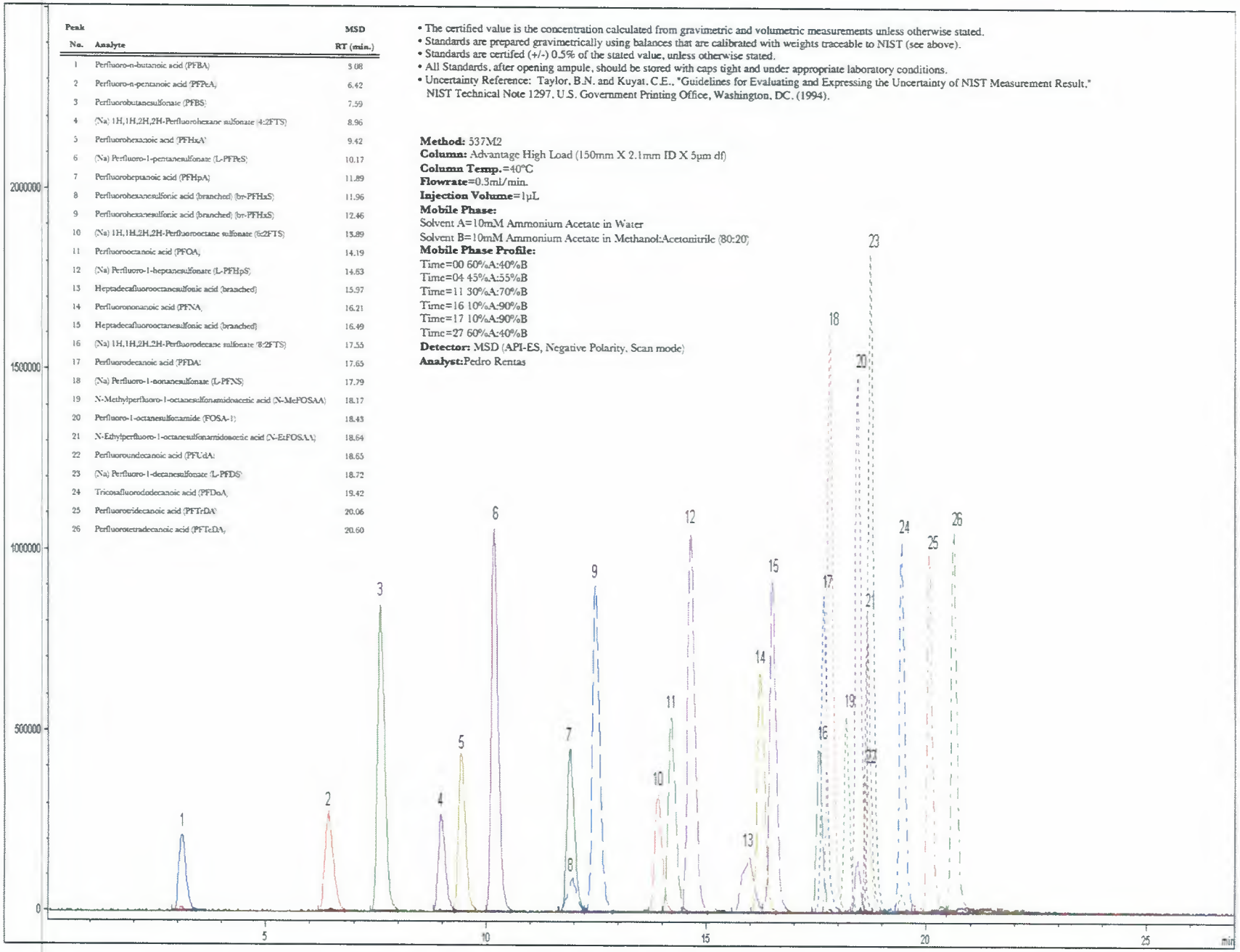
Note: All assigned values are anion concentrations.

	Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc.(µg/mL)	Final Conc.(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Perfluoro-n-butanoic acid (linear)	99542	110317	0.02	1.00	0.004	50.2	1.00	0.01	375-22-4	N/A	N/A
2.	Perfluoro-n-pentanoic acid	99543	110317	0.02	1.00	0.004	50.7	1.01	0.01	2706-90-3	N/A	N/A
3.	Perfluorohexanoic acid	99199	030617	0.02	1.00	0.004	50.3	1.01	0.01	307-24-4	N/A	N/A
4.	Perfluoroheptanoic acid	99197	030517	0.02	1.00	0.004	50.1	1.00	0.01	375-85-9	N/A	N/A
5.	Perfluorooctanoic acid	99202	030617	0.02	1.00	0.004	50.2	1.00	0.01	335-67-1	N/A	ipr-rat 189mg/kg
6.	Perfluorononanoic acid	99200	030617	0.02	1.00	0.004	50.1	1.00	0.01	375-95-1	N/A	N/A
7.	Perfluorodecanoic acid	99195	030617	0.02	1.00	0.004	50.1	1.00	0.01	335-76-2	N/A	orl-rat 57mg/kg
8.	Perfluoroundecanoic acid	99205	030617	0.02	1.00	0.004	50.1	1.00	0.01	2058-94-8	N/A	N/A
9.	Tricosafluorododecanoic acid	99196	030617	0.02	1.00	0.004	50.1	1.00	0.01	307-55-1	N/A	N/A
10.	Perfluorotridecanoic acid	99204	030617	0.02	1.00	0.004	50.1	1.00	0.01	72629-94-8	N/A	N/A
11.	Perfluorotetradecanoic acid	99203	030617	0.02	1.00	0.004	50.1	1.00	0.01	376-06-7	N/A	N/A
12.	Perfluoro-1-octanesulfonamide	3677	FOSA0817I	0.02	1.00	0.004	50.0	1.00	0.01	754-91-6	N/A	N/A
13.	N-Methylperfluoro-1-octanesulfonamidoacetic acid	3667	NMeFOSAA0118	0.02	1.00	0.004	50.0	1.00	0.01	2355-31-9	N/A	N/A
14.	N-Ethylperfluoro-1-octanesulfonamidoacetic acid	3664	NEtFOSAA0118	0.02	1.00	0.004	50.0	1.00	0.01	2991-50-6	N/A	N/A
15.	Perfluorobutanesulfonic acid	99194	031017	0.02	1.00	0.004	50.7	1.01	0.01	375-73-5	N/A	N/A
16.	Perfluoro-1-pentanesulfonate	99544	111017	0.02	0.98	0.004	51.3	1.00	0.01	630402-22-1	N/A	N/A
17.	Perfluorohexanesulfonic acid (branched)	99198	030617	0.02	1.00	0.004	50.6	1.01	0.01	3871-99-6	N/A	N/A
18.	Perfluoro-1-heptanesulfonic acid	3672	LPFHpS0817	0.021	1.05	0.004	47.6	1.00	0.01	375-92-8	N/A	N/A
19.	Heptadecafluorooctanesulfonic acid (branched)	99201	030617	0.02	1.00	0.004	50.2	1.00	0.01	1763-23-1	N/A	N/A
20.	Perfluoro-1-nonanesulfonic acid	3957	LPFNS0917	0.021	1.05	0.004	48.0	1.01	0.01	98789-57-2	N/A	N/A
21.	Perfluoro-1-decanesulfonic acid	3671	LPFDS0217	0.021	1.05	0.004	48.2	1.01	0.01	2806-15-7	N/A	N/A
22.	1H,1H,2H,2H-Perfluorohexane sulfonic acid	3955	42FTS1216	0.0214	1.07	0.004	46.7	1.00	0.01	00-00-0	N/A	N/A
23.	1H,1H,2H,2H-Perfluorooctane sulfonic acid	3661	62FTS0616	0.021	1.05	0.004	47.4	1.00	0.01	27619-97-2	N/A	N/A
24.	1H,1H,2H,2H-Perfluorodecane sulfonic acid	3662	82FTS1216	0.021	1.05	0.004	47.9	1.01	0.01	39108-34-4	N/A	N/A

Peak No.	Analyte	MSD RT (min.)
1	Perfluoro-n-butanoic acid (PFBA)	5.08
2	Perfluoro-n-pentanoic acid (PFPeA)	6.42
3	Perfluorobutanesulfonate (PFBS)	7.59
4	(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate (4:2FTS)	8.96
5	Perfluorohexanoic acid (PFHxA)	9.42
6	(Na) Perfluoro-1-pentanesulfonate (L-PFPeS)	10.17
7	Perfluoroheptanoic acid (PFHpA)	11.89
8	Perfluorohexanesulfonic acid (branched) (br-PFHxS)	11.96
9	Perfluorohexanesulfonic acid (branched) (br-PFHxS)	12.46
10	(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate (6:2FTS)	13.89
11	Perfluorooctanoic acid (PFOA)	14.19
12	(Na) Perfluoro-1-heptanesulfonate (L-PFHpS)	14.63
13	Heptadecafluorooctanesulfonic acid (branched)	15.97
14	Perfluorononanoic acid (PFNA)	16.21
15	Heptadecafluorooctanesulfonic acid (branched)	16.49
16	(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate (8:2FTS)	17.55
17	Perfluorodecanoic acid (PFDA)	17.65
18	(Na) Perfluoro-1-nonanesulfonate (L-PFNS)	17.79
19	N-Methylperfluoro-1-octanesulfonamidoacetic acid (N-MeFOSAA)	18.17
20	Perfluoro-1-octanesulfonamide (FOSA-1)	18.43
21	N-Ethylperfluoro-1-octanesulfonamidoacetic acid (N-EtFOSAA)	18.64
22	Perfluoroundecanoic acid (PFUdA)	18.65
23	(Na) Perfluoro-1-decanesulfonate (L-PFDS)	18.72
24	Tricosafluorododecanoic acid (PFDoA)	19.42
25	Perfluorotridecanoic acid (PFTrDA)	20.06
26	Perfluorotetradecanoic acid (PFTeDA)	20.60

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Method: 537M2
Column: Advantage High Load (150mm X 2.1mm ID X 5µm df)
Column Temp.=40°C
Flowrate=0.3mL/min.
Injection Volume=1µL
Mobile Phase:
Solvent A=10mM Ammonium Acetate in Water
Solvent B=10mM Ammonium Acetate in Methanol:Acetonitrile (80:20)
Mobile Phase Profile:
Time=00 60%A:40%B
Time=04 45%A:55%B
Time=11 30%A:70%B
Time=16 10%A:90%B
Time=17 10%A:90%B
Time=27 60%A:40%B
Detector: MSD (API-ES, Negative Polarity, Scan mode)
Analyst: Pedro Rentas



BATTELLE

It can be done

BDO Id: 180726-04

Reagent Receipt Report

Approved: ☑ Authorized ☐

Name:	Mass-labelled PFAS injection standar	**Received:**	7/26/2018
Vendor:	Wellington Laboratories	**Custodian:**	Thorn, Jonathan
Catalogue No:	MPFAC-C-IS	**Expires:**	5/2/2022
Type:	Solution	**Consumed:**	
Lot No:	MPFACCIS0516	**Stored In:**	LC Laboratory - R0107
Quantity:	2 ea 1.2 mL **% Moisture:** 0		
Description:	Mass-labelled PFAS injection standards		

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
13C2-PFDA	BDO-2110	2.0000	100.00	--	--	☐			
13C2-PFOA	BDO-2107	2.0000	100.00	--	--	☐			
13C3-PFBA	BDO-2231	2.0000	100.00	--	--	☐			
13C4-PFOS	BDO-2121	1.9140	100.00	--	--	☐			

Total Analytes: 4

Notes:

Approved by:	Lizotte Jr, Robert	**Approved on:**	7/27/2018 11:10:00 AM
Authorized by:		**Authorized on:**	

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

MPFAC-C-IS

Mass-Labelled Perfluorinated Compound Injection Standards Solution

PRODUCT CODE:	MPFAC-C-IS
LOT NUMBER:	MPFACCIS0516
SOLVENT(S):	Methanol / Water (<1%)
DATE PREPARED: (mm/dd/yyyy)	05/24/2016
LAST TESTED: (mm/dd/yyyy)	05/02/2017
EXPIRY DATE: (mm/dd/yyyy)	05/02/2022
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

MPFAC-C-IS is a solution/mixture of mass-labelled (^{13}C) perfluoroalkylcarboxylic acids and a mass-labelled (^{13}C) perfluoroalkylsulfonate. The components and their concentrations are given in Table A.

MPFAC-C-IS was designed for, and prepared to be used with, PFC-CVS-C.

The individual mass-labelled perfluoroalkylcarboxylic acids and mass-labelled perfluoroalkylsulfonate all have chemical purities of >98% and isotopic purities of ≥99%.

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.
- The mass-labelled perfluoroalkylsulfonate compound concentration is reported as the salt.
- 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

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar 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 $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

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 ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER

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

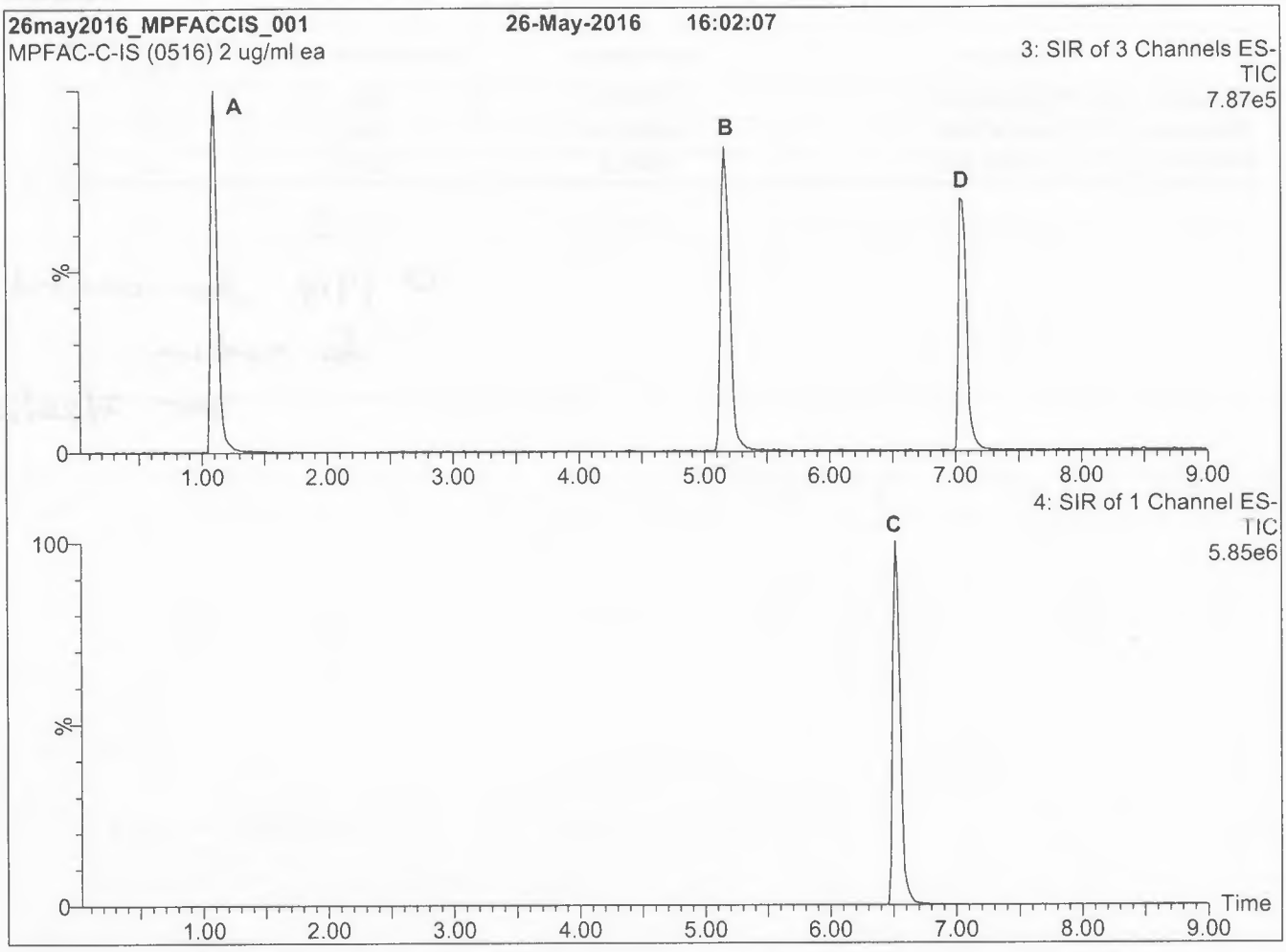
Table A: **MPFAC-C-IS; Components and Concentrations (ng/ml; ± 5% in Methanol / Water (<1%))**

Compound	Abbreviation	Concentration (ng/ml)	Peak Assignment in Figure 1
Perfluoro-n-[2,3,4-$^{13}C_3$]butanoic acid	M3PFBA	2000	A
Perfluoro-n-[1,2-$^{13}C_2$]octanoic acid	M2PFOA	2000	B
Perfluoro-n-[1,2-$^{13}C_2$]decanoic acid	MPFDA	2000	D
Sodium perfluoro-1-[1,2,3,4-$^{13}C_4$]octanesulfonate	MPFOS	2000 ①	C

① 1914 when corrected for sodium
JMT 7/26/2017

Certified By: _____ **Date:** 05/04/2017 (mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **MPFAC-C-IS; LC/MS Data (Total Ion Current Chromatogram; SIR)**



Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 8 min
and hold for 2 min before returning
to initial conditions in 1 min.
Time: 12 min

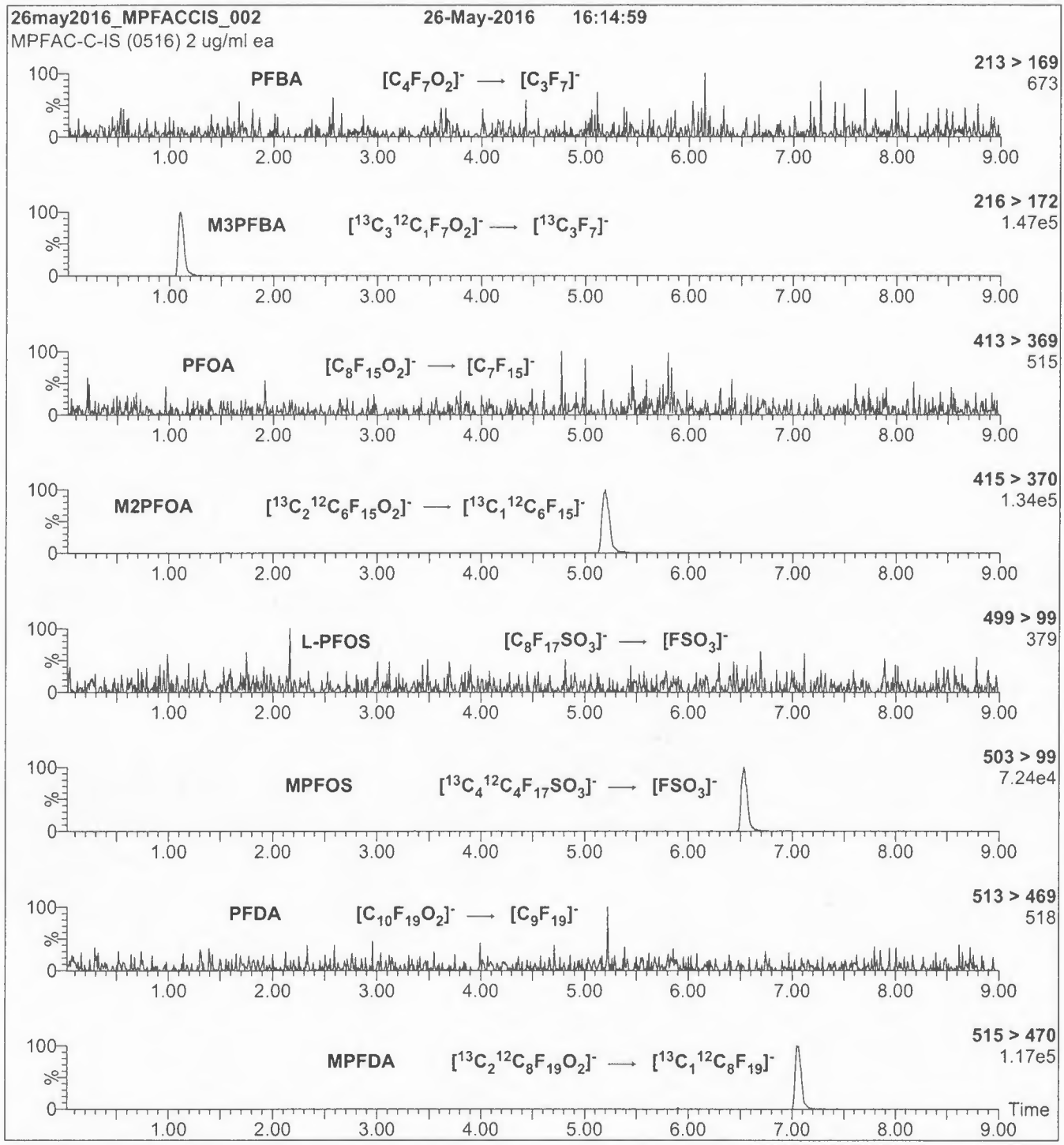
Flow: 300 µl/min

MS Parameters

Experiment: SIR

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = variable (10-80)
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFAC-C-IS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: On-column (MPFAC-C-IS)

Mobile phase: Same as Figure 1

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.50e-3

Collision Energy (eV) = 8-50 (variable)

BATTELLE

It can be done

BDO Id: 180726-05

Reagent Receipt Report

Approved: ☑ Authorized ☐

Name: Mass-labelled PFAS Extraction Stand

Vendor: Wellington Laboratories

Catalogue No: MPFAC-24ES

Type: Solution

Lot No: MPFAC24ES0218

Quantity: 2 ea 1.2 mL **% Moisture:** 0

Description: Mass-labelled PFAS Extraction Standard Solution

Received: 7/26/2018

Custodian: Thorn, Jonathan

Expires: 2/7/2023

Consumed:

Stored In: LC Laboratory - R0107

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
13C2-4:2FTS	BDO-2229	0.9350	100.00	--	--	☐			
13C2-6:2FTS	BDO-2230	0.9490	100.00	--	--	☐			
13C2-8:2FTS	BDO-2220	0.9580	100.00	--	--	☐			
13C2-PFDoA	BDO-2112	1.0000	100.00	--	--	☐			
13C2-PFTeDA	BDO-2224	1.0000	100.00	--	--	☐			
13C3-PFBS	BDO-2226	0.9290	100.00	--	--	☐			
13C3-PFHxS	BDO-2227	0.9460	100.00	--	--	☐			
13C4-PFBA	BDO-2105	1.0000	100.00	--	--	☐			
13C4-PFHpA	BDO-2218	1.0000	100.00	--	--	☐			
13C5-PFHxA	BDO-2217	1.0000	100.00	--	--	☐			
13C5-PFPeA	BDO-2216	1.0000	100.00	--	--	☐			
13C6-PFDA	BDO-2222	1.0000	100.00	--	--	☐			
13C7-PFUnA	BDO-2223	1.0000	100.00	--	--	☐			
13C8-FOSA	BDO-2225	1.0000	100.00	--	--	☐			
13C8-PFOA	BDO-2219	1.0000	100.00	--	--	☐			
13C8-PFOS	BDO-2228	0.9570	100.00	--	--	☐			
13C9-PFNA	BDO-2221	1.0000	100.00	--	--	☐			
d3-MeFOSAA	BDO-1838	1.0000	100.00	--	--	☐			
d5-EtFOSAA	BDO-1839	1.0000	100.00	--	--	☐			

Total Analytes: 19

Notes:

Approved by: Lizotte Jr, Robert **Approved on:** 7/27/2018 11:10:00 AM

Authorized by: **Authorized on:**

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

MPFAC-24ES

Mass-Labelled Per- and Poly-fluoroalkyl Substance Extraction Standard Solution

PRODUCT CODE:	MPFAC-24ES
LOT NUMBER:	MPFAC24ES0218
SOLVENT(S):	Methanol / Isopropanol (2%) / Water (<1%)
DATE PREPARED: (mm/dd/yyyy)	02/07/2018
LAST TESTED: (mm/dd/yyyy)	02/07/2018
EXPIRY DATE: (mm/dd/yyyy)	02/07/2023
RECOMMENDED STORAGE:	Refrigerate ampoule

DESCRIPTION:

MPFAC-24ES is a solution/mixture of ten mass-labelled (^{13}C) perfluoroalkylcarboxylic acids (C_4-C_{12} and C_{14}), three mass-labelled (^{13}C) perfluoroalkylsulfonates (C_4, C_6, and C_8), three mass-labelled (^{13}C) telomer sulfonates (4:2, 6:2, and 8:2), two mass-labelled (^{2}H) perfluorooctanesulfonamidoacetic acids, and perfluoro-1-[$^{13}C_8$]octanesulfonamide. The components and their concentrations are given in Table A.

The individual mass-labelled perfluoroalkylcarboxylic acids, mass-labelled perfluoroalkylsulfonates, mass-labelled telomer sulfonates, and perfluoro-1-[$^{13}C_8$]octanesulfonamide all have chemical purities of >98% and isotopic purities of ≥99%. The individual mass-labelled perfluorooctanesulfonamidoacetic acids all have chemical purities of >98% and isotopic 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.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

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 $x_1, x_2, \ldots x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \ldots x_n)) = \sqrt{\sum_{i=1}^{n} u(y, x_i)^2}$$

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 ±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; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

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: **MPFAC-24ES; Components and Concentrations (ng/ml, ± 5% in Methanol / Isopropanol (2%) / Water (<1%))**

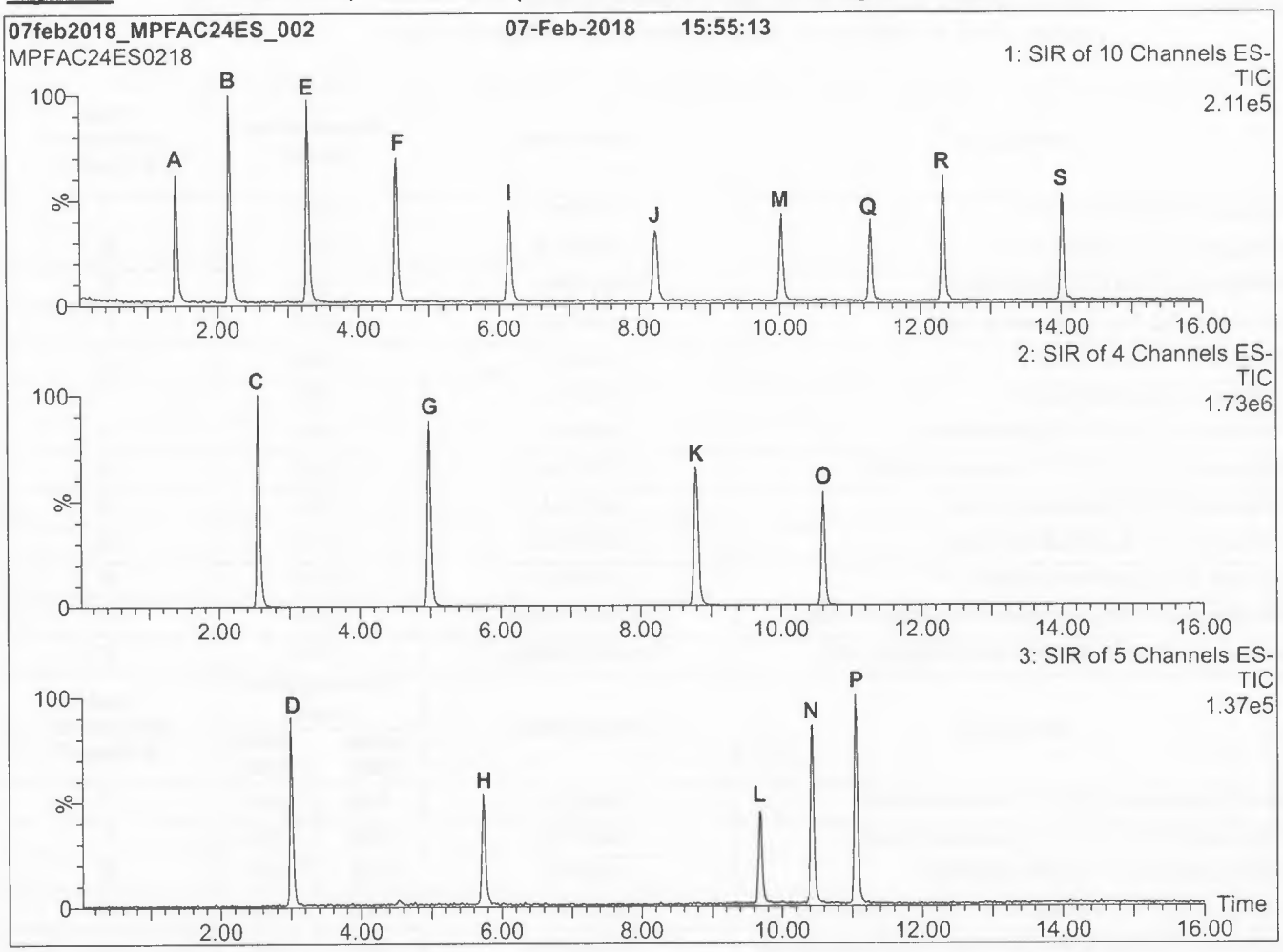
Compound	Abbreviation	Concentration (ng/ml)	Peak Assignment in Figure 1
Perfluoro-n-[$^{13}C_4$]butanoic acid	MPFBA	1000	A
Perfluoro-n-[$^{13}C_5$]pentanoic acid	M5PFPeA	1000	B
Perfluoro-n-[1,2,3,4,6-$^{13}C_5$]hexanoic acid	M5PFHxA	1000	E
Perfluoro-n-[1,2,3,4-$^{13}C_4$]heptanoic acid	M4PFHpA	1000	F
Perfluoro-n-[$^{13}C_8$]octanoic acid	M8PFOA	1000	I
Perfluoro-n-[$^{13}C_9$]nonanoic acid	M9PFNA	1000	J
Perfluoro-n-[1,2,3,4,5,6-$^{13}C_6$]decanoic acid	M6PFDA	1000	M
Perfluoro-n-[1,2,3,4,5,6,7-$^{13}C_7$]undecanoic acid	M7PFUdA	1000	Q
Perfluoro-n-[1,2-$^{13}C_2$]dodecanoic acid	MPFDoA	1000	R
Perfluoro-n-[1,2-$^{13}C_2$]tetradecanoic acid	M2PFTeDA	1000	S
Perfluoro-1-[$^{13}C_8$]octanesulfonamide	M8FOSA	1000	O
N-methyl-d_3-perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	1000	N
N-ethyl-d_5-perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	1000	P

Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Sodium perfluoro-1-[2,3,4-$^{13}C_3$]butanesulfonate	M3PFBS	1000	929	C
Sodium perfluoro-1-[1,2,3-$^{13}C_3$]hexanesulfonate	M3PFHxS	1000	946	G
Sodium perfluoro-1-[$^{13}C_8$]octanesulfonate	M8PFOS	1000	957	K
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-$^{13}C_2$]hexanesulfonate	M2-4:2FTS	1000	935	D
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-$^{13}C_2$]octanesulfonate	M2-6:2FTS	1000	949	H
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-$^{13}C_2$]decanesulfonate	M2-8:2FTS	1000	958	L

Certified By: _____ **Date:** 02/09/2018 (mm/dd/yyyy)

B.G. Chittim, General Manager

Figure 1: **MPFAC-24ES; LC/MS Data (Total Ion Current Chromatogram; SIR)**



Conditions for Figure 1:

LC: **Waters Acquity Ultra Performance LC**
MS: **Micromass Quattro *micro* API MS**

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP_{18}
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 55% organic over 3.5 min.
Ramp to 70% organic over 6.5 min.
Ramp to 85% organic over 5 min and hold for
1 min before returning to initial conditions in 0.5 min.
Time: 17 min

Flow: 300 µl/min

MS Parameters

Experiment: SIR

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = variable (10-60)
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)**

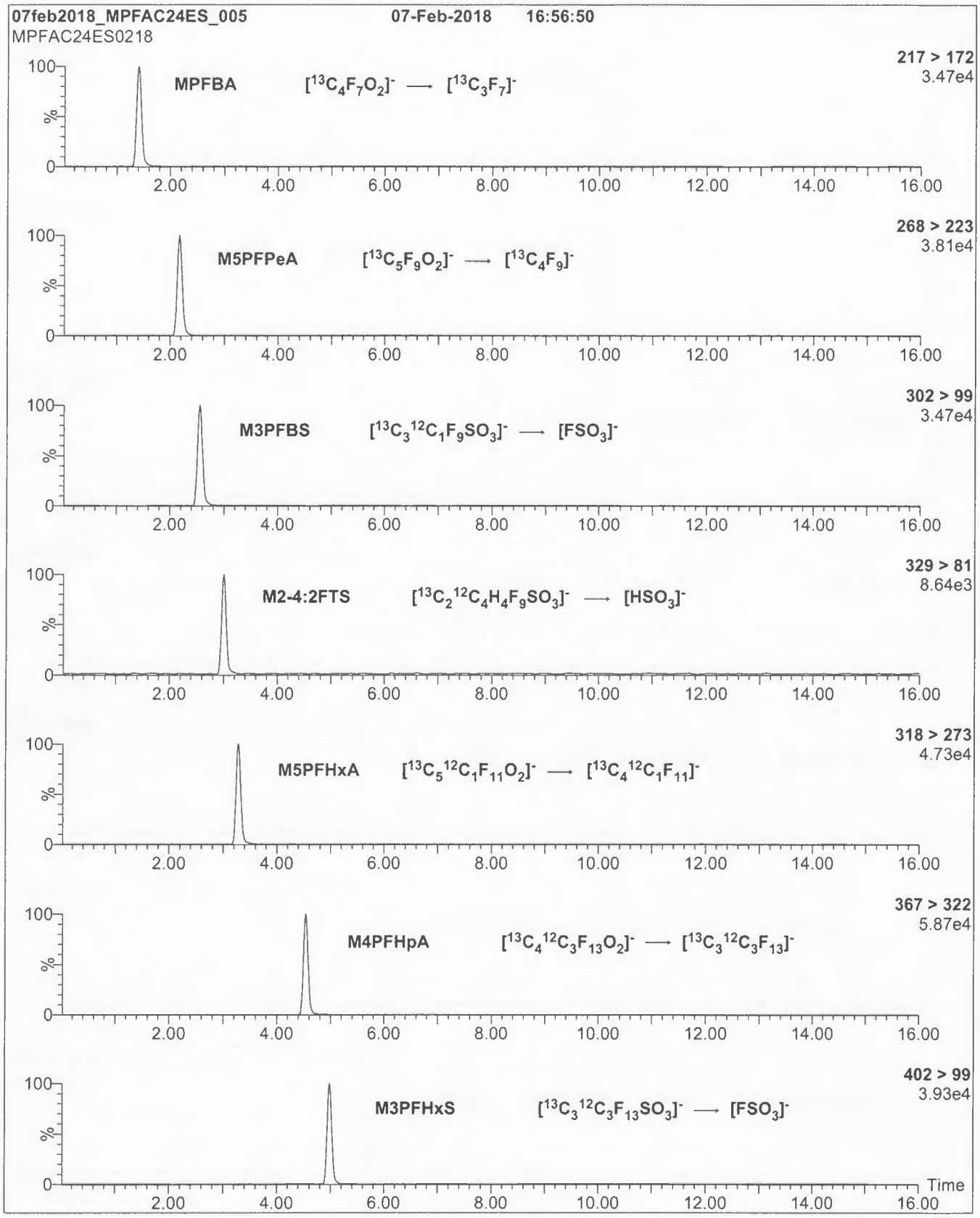


Figure 2: **MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)**

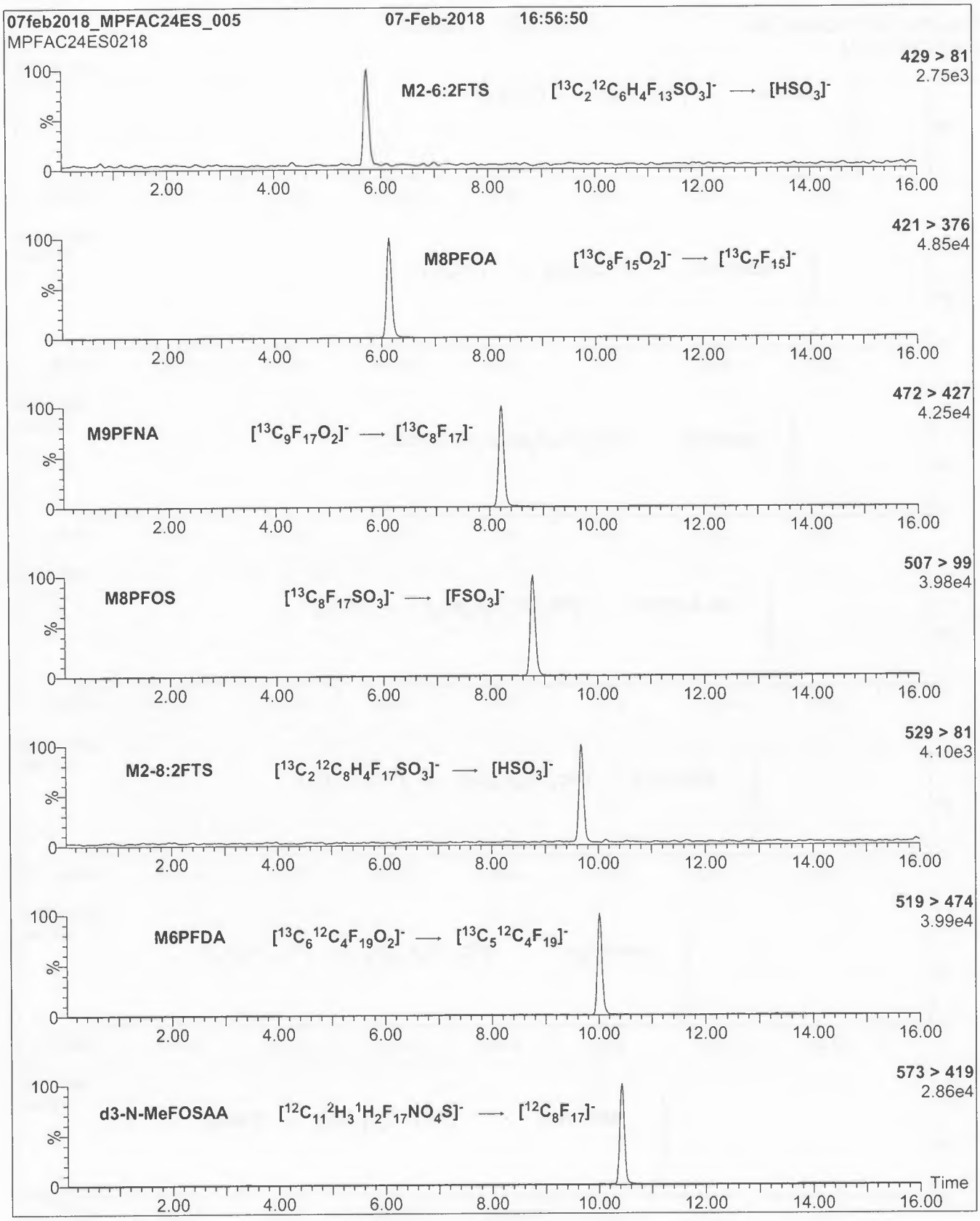
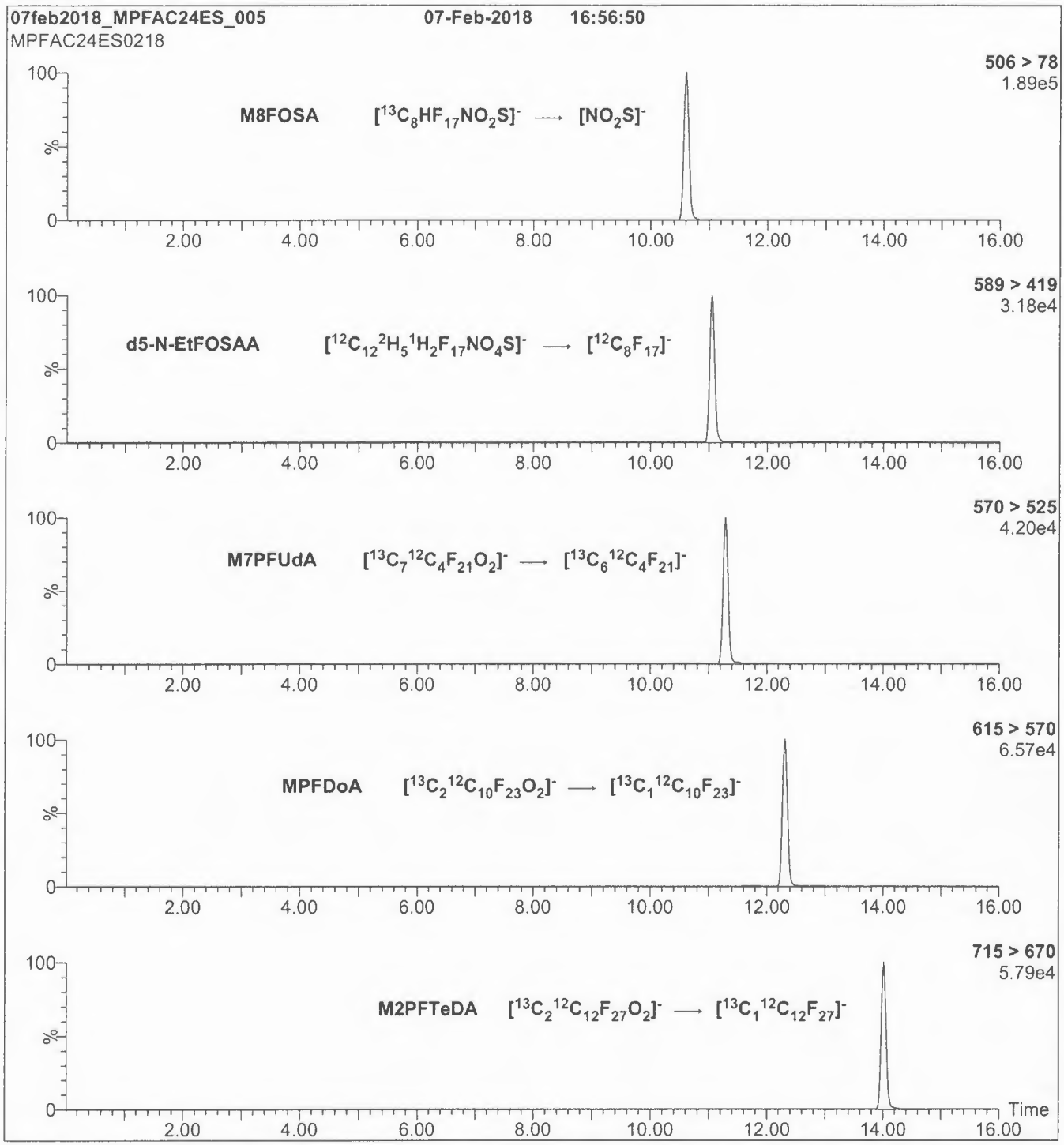


Figure 2: **MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: On-column (MPFAC-24ES)

Mobile phase: Same as Figure 1

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.28e-3

Collision Energy (eV) = 8-40 (variable)

Sample Preparation

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
SAMPLE PREPARATION RECORDS

Project Title(s)	**Project No.(s)**
Operable Unit 11 NAS North Island	100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

SOP Numbers (see workplan for modifications)

ExtractionSOP No. 5-370

This Batch Contains The Following Samples:		
CR546PB-FS	J7250-FS	J7256-FS
CR547LCS-FS	J7251-FS	J7257-FS
J7248-FS	J7252-FS	J7258-FS
J7249-FS	J7253-FS	J7259-FS
J7249MS-FS	J7254-FS	J7260-FS
J7249MSD-FS	J7255-FS	J7261-FS

Laboratory Preparation Records

COMPLETE AND VALIDATED

Prep Task Leader: Stephanie Schultz

Approved By:	Date	Initials
Denise Schumitz	08/29/2018	DMS

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
SAMPLE IDENTIFICATION PAGE

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Sample ID	Description
CR546PB-FS	Procedural Blank
CR547LCS-FS	Laboratory Control Sample
J7248-FS	073018-01
J7249-FS	073018-02
J7249MS-FS	Matrix Spike of 073018-02
J7249MSD-FS	Matrix Spike Duplicate of 073018-02
J7250-FS	073018-03
J7251-FS	073018-04
J7252-FS	073018-05
J7253-FS	073018-06
J7254-FS	073018-07
J7255-FS	073118-01
J7256-FS	073118-02
J7257-FS	073118-03
J7258-FS	073118-04
J7259-FS	080118-01
J7260-FS	080118-02
J7261-FS	080118-03

Samples Assigned By: Stephanie Schultz Date : August 8, 2018

Comments:

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
SAMPLE CUSTODY LOG

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Requested On/By:	08/08/2018 SAS	**Purpose:**	Sample Preparation
Relinquished On/By:	08/08/2018 MDS	**Last Activity:**	Transfer

Accepted On/By:	08/08/2018 SAS	**Returned On/To:**	
Stored In Facility:	Sample Preparation	**Returned To Facility:**	
Stored Until	08/08/2018		
Stored Comment:	NA	**Returned Comment:**	NA

No.	BDO-ID:	Ctrs	*	Condition:	Custody Comment:
1	J7248	1	C	Consumed	NA
2	J7249	1	C	Consumed	NA
3	J7250	1	C	Consumed	NA
4	J7251	1	C	Consumed	NA
5	J7252	1	C	Consumed	NA
6	J7253	1	C	Consumed	NA
7	J7254	1	C	Consumed	NA
8	J7255	1	C	Consumed	NA
9	J7256	1	C	Consumed	NA
10	J7257	1	C	Consumed	NA
11	J7258	1	C	Consumed	NA
12	J7259	1	C	Consumed	NA
13	J7260	1	C	Consumed	NA
14	J7261	1	C	Consumed	NA

Total Samples 14 * "C" = Consumed Container

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It can be done

BATTELLE - NORWELL OPERATIONS
LIQUID SAMPLE ID FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Sample ID	Description	Volume (mL)	Bottles	*	Date Initials
CR546PB-FS	Procedural Blank	250.0	NA	--	08/08/18 SAS
CR547LCS-FS	Laboratory Control Sample	250.0	NA	--	08/08/18 SAS
J7248-FS	073018-01	275.0	1	C	08/09/18 SAS
J7249-FS	073018-02	280.0	1	C	08/09/18 SAS
J7249MS-FS	Matrix Spike	280.0	3	C	08/09/18 SAS
J7249MSD-FS	Matrix Spike Duplicate	275.0	5	C	08/09/18 SAS
J7250-FS	073018-03	285.0	1	C	08/09/18 SAS
J7251-FS	073018-04	285.0	1	C	08/09/18 SAS
J7252-FS	073018-05	290.0	1	C	08/09/18 SAS
J7253-FS	073018-06	290.0	1	C	08/09/18 SAS
J7254-FS	073018-07	285.0	1	C	08/09/18 SAS
J7255-FS	073118-01	290.0	1	C	08/09/18 SAS
J7256-FS	073118-02	280.0	1	C	08/09/18 SAS
J7257-FS	073118-03	290.0	1	C	08/09/18 SAS
J7258-FS	073118-04	280.0	1	C	08/09/18 SAS
J7259-FS	080118-01	275.0	1	C	08/09/18 SAS
J7260-FS	080118-02	280.0	1	C	08/09/18 SAS
J7261-FS	080118-03	280.0	1	C	08/09/18 SAS

Comments:

Samples Assigned By Stephanie Schultz Date : August 8, 2018

* - "C" = Sample is Consumed

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BATTELLE - NORWELL OPERATIONS
SURROGATE SPIKE FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment
CR546PB-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
CR547LCS-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
CR547LCS-FS	JZ27	LCS/MS	1	50	08/08/18 SAS	LMG	NA
J7248-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7249-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7249MS-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7249MS-FS	JZ27	LCS/MS	1	150	08/08/18 SAS	LMG	NA
J7249MSD-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7249MSD-FS	JZ27	LCS/MS	1	150	08/08/18 SAS	LMG	NA
J7250-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7251-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7252-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7253-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7254-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7255-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7256-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7257-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7258-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7259-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7260-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA
J7261-FS	JY28	SIS	1	50	08/08/18 SAS	LMG	NA

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BATTELLE - NORWELL OPERATIONS
SURROGATE SPIKE FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
JY28	Pipette	I0793912B
JZ27	Pipette	B814657482
JZ27	Pipette	I0793912B

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BATTELLE - NORWELL OPERATIONS
SAMPLE EXTRACTION FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Sample ID	1st Extraction	2nd Extraction	3rd Extraction	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comment
CR546PB-FS	08/08/18 SAS	NA	NA	NA	NA	NA	NA	NA
CR547LCS-FS	08/08/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7248-FS	08/08/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7249-FS	08/08/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7249MS-FS	08/08/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7249MSD-FS	08/08/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7250-FS	08/08/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7251-FS	08/08/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7252-FS	08/08/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7253-FS	08/08/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7254-FS	08/08/18 LMG	NA	NA	NA	NA	NA	NA	NA
J7255-FS	08/08/18 LMG	NA	NA	NA	NA	NA	NA	NA
J7256-FS	08/08/18 LMG	NA	NA	NA	NA	NA	NA	NA
J7257-FS	08/08/18 LMG	NA	NA	NA	NA	NA	NA	NA
J7258-FS	08/08/18 LMG	NA	NA	NA	NA	NA	NA	NA
J7259-FS	08/08/18 LMG	NA	NA	NA	NA	NA	NA	NA
J7260-FS	08/08/18 LMG	NA	NA	NA	NA	NA	NA	NA
J7261-FS	08/08/18 LMG	NA	NA	NA	NA	NA	NA	NA

Solvents/Reagent Preparations:

Name	ID	Expires	Lot No	Procedure	Comments
0.4% NH3 in Methanol	RP-180808-3	08/08/18	181704	Per 100 mL, 3.5 mL ammonia solution brought to 100 mL with methanol	
0.4% NH3 in Methanol	RP-180808-3	08/08/18	SHBJ0412	Per 100 mL, 3.5 mL ammonia solution brought to 100 mL with methanol	
Pre-packed SPE Column	RP-180808-4	08/08/18	003537220A	Pre-packed SPE Column	

Solvents/Reagents:

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BATTELLE - NORWELL OPERATIONS
EXTRACT SPIKE FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Extract Id	DF	Std. ID	Type	Vial No.	Vol. Added (uL)	Conc (ug/mL)	Added (ng)	Date Spiked/ Spiked By	Witn'd By
J7248-FS-D(5)	50	JY28	SIS	1	24	0	0	08/15/18 SAS	DMS
J7249-FS-D(5)	50	JY28	SIS	1	24	0	0	08/15/18 SAS	DMS
J7249-FS-D(7)	10	JY28	SIS	1	20	0	0	08/23/18 LMG	RR
J7249-FS-D(9)	250	JY28	SIS	1	24	0	0	08/23/18 LMG	RR
J7249MS-FS-D(5)	50	JY28	SIS	1	24	0	0	08/15/18 SAS	DMS
J7249MS-FS-D(7)	10	JY28	SIS	1	20	0	0	08/23/18 LMG	RR
J7249MS-FS-D(9)	250	JY28	SIS	1	24	0	0	08/23/18 LMG	RR
J7249MSD-FS-D(5)	50	JY28	SIS	1	24	0	0	08/15/18 SAS	DMS
J7249MSD-FS-D(7)	10	JY28	SIS	1	20	0	0	08/23/18 LMG	RR
J7249MSD-FS-D(9)	250	JY28	SIS	1	24	0	0	08/23/18 LMG	RR
J7250-FS-D(5)	50	JY28	SIS	1	24	0	0	08/15/18 SAS	DMS
J7251-FS-D(5)	50	JY28	SIS	1	24	0	0	08/15/18 SAS	DMS
J7251-FS-D(7)	50	JY28	SIS	1	24	0	0	08/28/18 LMG	SAS
J7255-FS-D(5)	50	JY28	SIS	1	24	0	0	08/15/18 SAS	DMS
J7256-FS-D(5)	50	JY28	SIS	1	24	0	0	08/15/18 SAS	DMS
J7257-FS-D(5)	50	JY28	SIS	1	24	0	0	08/15/18 SAS	DMS
J7257-FS-D(7)	20	JY28	SIS	1	23	0	0	08/23/18 LMG	RR
J7257-FS-D(9)	500	JY28	SIS	1	24	0	0	08/23/18 LMG	RR
J7258-FS-D(5)	50	JY28	SIS	1	24	0	0	08/15/18 SAS	DMS

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BATTELLE - NORWELL OPERATIONS
EXTRACT SPIKE FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
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18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Extract Id	DF	Std. ID	Type	Vial No.	Vol. Added (uL)	Conc (ug/mL)	Added (ng)	Date Spiked/ Spiked By	Witn'd By

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
JY26	Pipette	B814659662
JY26	Pipette	I0793912B
JY28	Pipette	B814659662
JY28	Pipette	I0793912B

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It can be done

BATTELLE - NORWELL OPERATIONS
INTERNAL STANDARD SPIKING FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

(N/A Fraction)

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm. (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution *	Date Spiked/ Spiked By	Witn'd By
CR546PB-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
CR547LCS-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7248-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7248-FS-D(5)	476	24	JY26	25	1	500	50.000	08/15/18 SAS	DMS
J7249-FS(2)	475	25	JY26	25	1	500	2.000	08/23/18 LMG	RR
J7249-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7249-FS-D(5)	476	24	JY26	25	1	500	50.000	08/15/18 SAS	DMS
J7249-FS-D(7)	480	20	JY26	25	1	500	10.000	08/23/18 LMG	RR
J7249-FS-D(9)	476	24	JY26	25	1	500	250.000	08/23/18 LMG	RR
J7249MS-FS(2)	475	25	JY26	25	1	500	2.000	08/23/18 LMG	RR
J7249MS-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7249MS-FS-D(5)	476	24	JY26	25	1	500	50.000	08/15/18 SAS	DMS
J7249MS-FS-D(7)	480	20	JY26	25	1	500	10.000	08/23/18 LMG	RR
J7249MS-FS-D(9)	476	24	JY26	25	1	500	250.000	08/23/18 LMG	RR
J7249MSD-FS(2)	475	25	JY26	25	1	500	2.000	08/23/18 LMG	RR
J7249MSD-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7249MSD-FS-D(5)	476	24	JY26	25	1	500	50.000	08/15/18 SAS	DMS
J7249MSD-FS-D(7)	480	20	JY26	25	1	500	10.000	08/23/18 LMG	RR
J7249MSD-FS-D(9)	476	24	JY26	25	1	500	250.000	08/23/18 LMG	RR

* - Final Dilution is any HPLC, dilutions, or other manipulation

^ - Pre Injection Volume (PIV) includes any RIS spikes.

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BATTELLE - NORWELL OPERATIONS
INTERNAL STANDARD SPIKING FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

(N/A Fraction)

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm. (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution *	Date Spiked/ Spiked By	Witn'd By
J7250-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7250-FS-D(5)	476	24	JY26	25	1	500	50.000	08/15/18 SAS	DMS
J7251-FS(2)	475	25	JY26	25	1	500	2.000	08/28/18 LMG	SAS
J7251-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7251-FS-D(5)	476	24	JY26	25	1	500	50.000	08/15/18 SAS	DMS
J7251-FS-D(7)	476	24	JY26	25	1	500	50.000	08/28/18 LMG	SAS
J7252-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7253-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7254-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7255-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7255-FS-D(5)	476	24	JY26	25	1	500	50.000	08/15/18 SAS	DMS
J7256-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7256-FS-D(5)	476	24	JY26	25	1	500	50.000	08/15/18 SAS	DMS
J7257-FS(2)	475	25	JY26	25	1	500	2.000	08/23/18 LMG	RR
J7257-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7257-FS-D(5)	476	24	JY26	25	1	500	50.000	08/15/18 SAS	DMS
J7257-FS-D(7)	477	23	JY26	25.5	1	500	20.000	08/23/18 LMG	RR
J7257-FS-D(9)	476	24	JY26	25.02	1	500	500.000	08/23/18 LMG	RR
J7258-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG

* - Final Dilution is any HPLC, dilutions, or other manipulation

^ - Pre Injection Volume (PIV) includes any RIS spikes.

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BATTELLE - NORWELL OPERATIONS
INTERNAL STANDARD SPIKING FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

(N/A Fraction)

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm. (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution *	Date Spiked/ Spiked By	Witn'd By
J7258-FS-D(5)	476	24	JY26	25	1	500	50.000	08/15/18 SAS	DMS
J7259-FS(2)	475	25	JY26	25	1	500	2.000	08/28/18 LMG	SAS
J7259-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7260-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG
J7261-FS(3)	475	25	JY26	25	1	500	2.000	08/13/18 SAS	LMG

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
JY26	Pipette	B814659662
JY26	Pipette	I0793912B
JY28	Pipette	B814659662
JY28	Pipette	I0793912B

Extract Id:	Comments:
CR546PB-FS	Samples reconstituted in 80/20 Methanol/Milli-q water (RP-180813-5)

* - Final Dilution is any HPLC, dilutions, or other manipulation

^ - Pre Injection Volume (PIV) includes any RIS spikes.

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BATTELLE - NORWELL OPERATIONS
PREPARATION EXTRACT SPLIT FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
CR546PB-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 SAS
CR546PB-FS	2	--	8/9/2018 1:29:00 PM	CR546PB-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
CR546PB-FS	3	--	8/9/2018 1:29:00 PM	CR546PB-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
CR547LCS-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 SAS
CR547LCS-FS	2	--	8/9/2018 1:29:00 PM	CR547LCS-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
CR547LCS-FS	3	--	8/9/2018 1:29:00 PM	CR547LCS-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7248-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 SAS
J7248-FS	2	--	8/9/2018 1:29:00 PM	J7248-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7248-FS	3	C	8/9/2018 1:29:00 PM	J7248-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7248-FS	4	--	8/15/2018 3:25:00 PM	J7248-FS	3	500	480	1.042	2.083	08/15/18 SAS
J7248-FS-D	5	--	8/15/2018 3:25:00 PM	J7248-FS	3	500	20	25.000	50.000	08/15/18 SAS
J7249-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 SAS
J7249-FS	2	C	8/9/2018 1:29:00 PM	J7249-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7249-FS	3	C	8/9/2018 1:29:00 PM	J7249-FS	0	10000	5000	2.000	2.000	08/09/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
PREPARATION EXTRACT SPLIT FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J7249-FS	4	--	8/15/2018 3:25:00 PM	J7249-FS	3	500	480	1.042	2.083	08/15/18 SAS
J7249-FS-D	5	--	8/15/2018 3:25:00 PM	J7249-FS	3	500	20	25.000	50.000	08/15/18 SAS
J7249-FS	6	--	8/23/2018 10:47:00 AM	J7249-FS	2	500	400	1.250	2.500	08/23/18 LMG
J7249-FS-D	7	C	8/23/2018 10:47:00 AM	J7249-FS	2	500	100	5.000	10.000	08/23/18 LMG
J7249-FS-D	8	--	8/23/2018 10:56:00 AM	J7249-FS-D	7	500	480	1.042	10.417	08/23/18 LMG
J7249-FS-D	9	--	8/23/2018 10:56:00 AM	J7249-FS-D	7	500	20	25.000	250.000	08/23/18 LMG
J7249MS-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 SAS
J7249MS-FS	2	C	8/9/2018 1:29:00 PM	J7249MS-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7249MS-FS	3	C	8/9/2018 1:29:00 PM	J7249MS-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7249MS-FS	4	--	8/15/2018 3:25:00 PM	J7249MS-FS	3	500	480	1.042	2.083	08/15/18 SAS
J7249MS-FS-D	5	--	8/15/2018 3:25:00 PM	J7249MS-FS	3	500	20	25.000	50.000	08/15/18 SAS
J7249MS-FS	6	--	8/23/2018 10:47:00 AM	J7249MS-FS	2	500	400	1.250	2.500	08/23/18 LMG
J7249MS-FS-D	7	C	8/23/2018 10:47:00 AM	J7249MS-FS	2	500	100	5.000	10.000	08/23/18 LMG
J7249MS-FS-D	8	--	8/23/2018 10:56:00 AM	J7249MS-FS-D	7	500	480	1.042	10.417	08/23/18 LMG

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
PREPARATION EXTRACT SPLIT FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J7249MS-FS-D	9	--	8/23/2018 10:56:00 AM	J7249MS-FS-D	7	500	20	25.000	250.000	08/23/18 LMG
J7249MSD-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 SAS
J7249MSD-FS	2	C	8/9/2018 1:29:00 PM	J7249MSD-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7249MSD-FS	3	C	8/9/2018 1:29:00 PM	J7249MSD-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7249MSD-FS	4	--	8/15/2018 3:25:00 PM	J7249MSD-FS	3	500	480	1.042	2.083	08/15/18 SAS
J7249MSD-FS-D	5	--	8/15/2018 3:25:00 PM	J7249MSD-FS	3	500	20	25.000	50.000	08/15/18 SAS
J7249MSD-FS	6	--	8/23/2018 10:47:00 AM	J7249MSD-FS	2	500	400	1.250	2.500	08/23/18 LMG
J7249MSD-FS-D	7	C	8/23/2018 10:47:00 AM	J7249MSD-FS	2	500	100	5.000	10.000	08/23/18 LMG
J7249MSD-FS-D	8	--	8/23/2018 10:56:00 AM	J7249MSD-FS-D	7	500	480	1.042	10.417	08/23/18 LMG
J7249MSD-FS-D	9	--	8/23/2018 10:56:00 AM	J7249MSD-FS-D	7	500	20	25.000	250.000	08/23/18 LMG
J7250-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 SAS
J7250-FS	2	--	8/9/2018 1:29:00 PM	J7250-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7250-FS	3	C	8/9/2018 1:29:00 PM	J7250-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7250-FS	4	--	8/15/2018 3:25:00 PM	J7250-FS	3	500	480	1.042	2.083	08/15/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
PREPARATION EXTRACT SPLIT FORM

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J7250-FS-D	5	--	8/15/2018 3:25:00 PM	J7250-FS	3	500	20	25.000	50.000	08/15/18 SAS
J7251-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 SAS
J7251-FS	2	C	8/9/2018 1:29:00 PM	J7251-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7251-FS	3	C	8/9/2018 1:29:00 PM	J7251-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7251-FS	4	--	8/15/2018 3:25:00 PM	J7251-FS	3	500	480	1.042	2.083	08/15/18 SAS
J7251-FS-D	5	--	8/15/2018 3:25:00 PM	J7251-FS	3	500	20	25.000	50.000	08/15/18 SAS
J7251-FS	6	--	8/28/2018 1:29:00 PM	J7251-FS	2	500	480	1.042	2.083	08/28/18 LMG
J7251-FS-D	7	--	8/28/2018 1:29:00 PM	J7251-FS	2	500	20	25.000	50.000	08/28/18 LMG
J7252-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 SAS
J7252-FS	2	--	8/9/2018 1:29:00 PM	J7252-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7252-FS	3	--	8/9/2018 1:29:00 PM	J7252-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7253-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 SAS
J7253-FS	2	--	8/9/2018 1:29:00 PM	J7253-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7253-FS	3	--	8/9/2018 1:29:00 PM	J7253-FS	0	10000	5000	2.000	2.000	08/09/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

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BATTELLE - NORWELL OPERATIONS
PREPARATION EXTRACT SPLIT FORM

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GW

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J7254-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 LMG
J7254-FS	2	--	8/9/2018 1:29:00 PM	J7254-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7254-FS	3	--	8/9/2018 1:29:00 PM	J7254-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7255-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 LMG
J7255-FS	2	--	8/9/2018 1:29:00 PM	J7255-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7255-FS	3	C	8/9/2018 1:29:00 PM	J7255-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7255-FS	4	--	8/15/2018 3:25:00 PM	J7255-FS	3	500	480	1.042	2.083	08/15/18 SAS
J7255-FS-D	5	--	8/15/2018 3:25:00 PM	J7255-FS	3	500	20	25.000	50.000	08/15/18 SAS
J7256-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 LMG
J7256-FS	2	--	8/9/2018 1:29:00 PM	J7256-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7256-FS	3	C	8/9/2018 1:29:00 PM	J7256-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7256-FS	4	--	8/15/2018 3:25:00 PM	J7256-FS	3	500	480	1.042	2.083	08/15/18 SAS
J7256-FS-D	5	--	8/15/2018 3:25:00 PM	J7256-FS	3	500	20	25.000	50.000	08/15/18 SAS
J7257-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 LMG

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

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BATTELLE - NORWELL OPERATIONS
PREPARATION EXTRACT SPLIT FORM

Project Title(s)
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OU 11 NAS North Island - PFAS Analysis

GW

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J7257-FS	2	C	8/9/2018 1:29:00 PM	J7257-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7257-FS	3	C	8/9/2018 1:29:00 PM	J7257-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7257-FS	4	--	8/15/2018 3:25:00 PM	J7257-FS	3	500	480	1.042	2.083	08/15/18 SAS
J7257-FS-D	5	--	8/15/2018 3:25:00 PM	J7257-FS	3	500	20	25.000	50.000	08/15/18 SAS
J7257-FS	6	--	8/23/2018 10:49:00 AM	J7257-FS	2	500	450	1.111	2.222	08/23/18 LMG
J7257-FS-D	7	C	8/23/2018 10:49:00 AM	J7257-FS	2	500	50	10.000	20.000	08/23/18 LMG
J7257-FS-D	8	--	8/23/2018 10:56:00 AM	J7257-FS-D	7	500	480	1.042	20.833	08/23/18 LMG
J7257-FS-D	9	--	8/23/2018 10:56:00 AM	J7257-FS-D	7	500	20	25.000	500.000	08/23/18 LMG
J7258-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 LMG
J7258-FS	2	--	8/9/2018 1:29:00 PM	J7258-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7258-FS	3	C	8/9/2018 1:29:00 PM	J7258-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7258-FS	4	--	8/15/2018 3:25:00 PM	J7258-FS	3	500	480	1.042	2.083	08/15/18 SAS
J7258-FS-D	5	--	8/15/2018 3:25:00 PM	J7258-FS	3	500	20	25.000	50.000	08/15/18 SAS
J7259-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 LMG

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

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BATTELLE - NORWELL OPERATIONS
PREPARATION EXTRACT SPLIT FORM

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OU 11 NAS North Island - PFAS Analysis

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Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J7259-FS	2	--	8/9/2018 1:29:00 PM	J7259-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7259-FS	3	--	8/9/2018 1:29:00 PM	J7259-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7260-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 LMG
J7260-FS	2	--	8/9/2018 1:29:00 PM	J7260-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7260-FS	3	--	8/9/2018 1:29:00 PM	J7260-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7261-FS	0	C	8/8/2018 1:20:00 PM	NA		NA	NA	1.000	1.000	08/08/18 LMG
J7261-FS	2	--	8/9/2018 1:29:00 PM	J7261-FS	0	10000	5000	2.000	2.000	08/09/18 SAS
J7261-FS	3	--	8/9/2018 1:29:00 PM	J7261-FS	0	10000	5000	2.000	2.000	08/09/18 SAS

Extract Id:	**Comments:**
CR546PB-FS	Samples reconstituted in 80/20 Methanol/Milli-q water (RP-180813-5)

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

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BATTELLE - NORWELL OPERATIONS
EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

Project Title(s)
Operable Unit 11 NAS North Island

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18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Purpose:	LC-MS/MS TRANSFER	**Last Activity:**	Prep->Inst
Relinquished On/By:	Aug 14 2018 4:22PM SAS	**Received On/By:**	Aug 14 2018 5:20PM DMS
Relinquished From:	Sample Preparation: NA	**Received Location:**	LC Laboratory: NA
Relinquish Comment:	NA	**Received Comment:**	NA

No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	CR546PB-FS(3)	500	2	Intact	NA
2	CR547LCS-FS(3)	500	2	Intact	NA
3	J7248-FS(3)	500	2	Intact	NA
4	J7249-FS(3)	500	2	Intact	NA
5	J7249MS-FS(3)	500	2	Intact	NA
6	J7249MSD-FS(3)	500	2	Intact	NA
7	J7250-FS(3)	500	2	Intact	NA
8	J7251-FS(3)	500	2	Intact	NA
9	J7252-FS(3)	500	2	Intact	NA
10	J7253-FS(3)	500	2	Intact	NA
11	J7254-FS(3)	500	2	Intact	NA
12	J7255-FS(3)	500	2	Intact	NA
13	J7256-FS(3)	500	2	Intact	NA
14	J7257-FS(3)	500	2	Intact	NA
15	J7258-FS(3)	500	2	Intact	NA
16	J7259-FS(3)	500	2	Intact	NA
17	J7260-FS(3)	500	2	Intact	NA
18	J7261-FS(3)	500	2	Intact	NA

Total Extracts: 18

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EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

Project Title(s)
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OU 11 NAS North Island - PFAS Analysis

GW

Purpose:	LC-MS/MS TRANSFER	**Last Activity:**	Prep->Inst
Relinquished On/By:	Aug 15 2018 5:01PM SAS	**Received On/By:**	Aug 15 2018 5:01PM LMG
Relinquished From:	Sample Preparation: NA	**Received Location:**	LC Laboratory: NA
Relinquish Comment:	NA	**Received Comment:**	NA

No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	CR546PB-FS(3)	500	2	Intact	NA
2	CR547LCS-FS(3)	500	2	Intact	NA
3	J7248-FS(4)	500	2.083	Intact	NA
4	J7248-FS-D(5)	500	50	Intact	NA
5	J7249-FS(4)	500	2.083	Intact	NA
6	J7249-FS-D(5)	500	50	Intact	NA
7	J7249MS-FS(4)	500	2.083	Intact	NA
8	J7249MS-FS-D(5)	500	50	Intact	NA
9	J7249MSD-FS(4)	500	2.083	Intact	NA
10	J7249MSD-FS-D(5)	500	50	Intact	NA
11	J7250-FS(4)	500	2.083	Intact	NA
12	J7250-FS-D(5)	500	50	Intact	NA
13	J7251-FS(4)	500	2.083	Intact	NA
14	J7251-FS-D(5)	500	50	Intact	NA
15	J7252-FS(3)	500	2	Intact	NA
16	J7253-FS(3)	500	2	Intact	NA
17	J7254-FS(3)	500	2	Intact	NA
18	J7255-FS(4)	500	2.083	Intact	NA
19	J7255-FS-D(5)	500	50	Intact	NA
20	J7256-FS(4)	500	2.083	Intact	NA
21	J7256-FS-D(5)	500	50	Intact	NA
22	J7257-FS(4)	500	2.083	Intact	NA
23	J7257-FS-D(5)	500	50	Intact	NA
24	J7258-FS(4)	500	2.083	Intact	NA
25	J7258-FS-D(5)	500	50	Intact	NA
26	J7259-FS(3)	500	2	Intact	NA
27	J7260-FS(3)	500	2	Intact	NA
28	J7261-FS(3)	500	2	Intact	NA

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BATTELLE - NORWELL OPERATIONS
EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

Project Title(s)
Operable Unit 11 NAS North Island

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OU 11 NAS North Island - PFAS Analysis

GW

Total Extracts: 28

Purpose: LC-MS/MS TRANSFER
Last Activity: Prep->Inst

Relinquished On/By: Aug 23 2018 11:39AM LMG
Relinquished From: Sample Preparation: NA
Relinquish Comment: NA

Received On/By: Aug 23 2018 11:39AM LMG
Received Location: LC Laboratory: NA
Received Comment: NA

No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	J7249-FS-D(8)	500	10.417	Intact	NA
2	J7249-FS-D(9)	500	250	Intact	NA
3	J7249MS-FS-D(8)	500	10.417	Intact	NA
4	J7249MS-FS-D(9)	500	250	Intact	NA
5	J7249MSD-FS-D(8)	500	10.417	Intact	NA
6	J7249MSD-FS-D(9)	500	250	Intact	NA
7	J7257-FS-D(8)	500	20.833	Intact	NA
8	J7257-FS-D(9)	500	500	Intact	NA

Total Extracts: 8

Purpose: LC-MS/MS TRANSFER
Last Activity: Prep->Inst

Relinquished On/By: Aug 28 2018 1:42PM LMG
Relinquished From: Sample Preparation: NA
Relinquish Comment: NA

Received On/By: Aug 28 2018 1:42PM LMG
Received Location: LC Laboratory: NA
Received Comment: NA

No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	J7251-FS(6)	500	2.083	Intact	NA
2	J7251-FS-D(7)	500	50	Intact	NA
3	J7259-FS(2)	500	2	Intact	NA

Total Extracts: 3

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BATTELLE - NORWELL OPERATIONS
SAMPLE SPECIFIC COMMENTS

Project Title(s)
Operable Unit 11 NAS North Island

Project No.(s)
100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Sample ID:	Comment:	Date/Initials:
CR546PB-FS	Sample extraction for all samples began at 1:20pm (half by SAS, half by LMG)	08/08/18 SAS
CR546PB-FS	Sample extraction ended at 2:30pm	08/08/18 SAS
CR547LCS-FS	Sample extraction ended at 2:19pm	08/08/18 SAS
J7248-FS	Sample contained floating particulates.	08/08/18 SAS
J7248-FS	Sample extraction ended at 3:01pm	08/08/18 SAS
J7249-FS	Sample contained floating particulates.	08/08/18 SAS
J7249-FS	Sample extraction ended at 4:30pm	08/08/18 SAS
J7249MS-FS	Sample contained floating particulates.	08/08/18 SAS
J7249MS-FS	Due to sample clogging the filter, the filter of the SPE was popped off	08/08/18 SAS
J7249MS-FS	Sample extraction ended at 4:18pm	08/08/18 SAS
J7249MSD-FS	Sample contained floating particulates.	08/08/18 SAS
J7249MSD-FS	Due to sample clogging the filter, the filter of the SPE was popped off	08/08/18 SAS
J7249MSD-FS	Sample extraction ended at 4:23pm	08/08/18 SAS
J7250-FS	Sample contained floating particulates.	08/08/18 SAS
J7250-FS	Sample extraction ended at 4:33pm	08/08/18 SAS
J7251-FS	Sample contained floating particulates.	08/08/18 SAS
J7251-FS	Sample extraction ended at 2:50pm	08/08/18 SAS
J7252-FS	Sample extraction ended at 2:28pm	08/08/18 SAS
J7253-FS	Sample extraction ended at 2:30pm	08/08/18 SAS
J7254-FS	Sample extraction ended at 2:17pm	08/08/18 LMG
J7255-FS	Sample contained floating particulates.	08/08/18 SAS
J7255-FS	Sample extraction ended at 3:46pm	08/08/18 LMG
J7256-FS	Sample contained floating particulates.	08/08/18 SAS
J7256-FS	Due to sample clogging the filter, the filter of the SPE was popped off	08/08/18 LMG
J7256-FS	Sample extraction ended at 4:24pm	08/08/18 LMG
J7257-FS	Sample contained floating particulates.	08/08/18 SAS
J7257-FS	Due to sample clogging the filter, the filter of the SPE was popped off	08/08/18 LMG
J7257-FS	Sample extraction ended at 4:35pm	08/08/18 SAS
J7258-FS	Sample contained floating particulates.	08/08/18 SAS
J7258-FS	Due to sample clogging the filter, the filter of the SPE was popped off	08/08/18 LMG

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BATTELLE - NORWELL OPERATIONS
SAMPLE SPECIFIC COMMENTS

Project Title(s)
Operable Unit 11 NAS North Island

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OU 11 NAS North Island - PFAS Analysis

GW

Sample ID:	Comment:	Date/Initials:
J7258-FS	Sample extraction ended at 4:21pm	08/08/18 LMG
J7258-FS	There was an orangle line present on the cartridge filter after extraction, and the resultanat extract was orange	08/08/18 LMG
J7259-FS	Sample extraction ended at 2:27pm	08/08/18 LMG
J7260-FS	Sample was a bright yellow color.	08/08/18 SAS
J7260-FS	Due to sample clogging the filter, the filter of the SPE was popped off	08/08/18 LMG
J7260-FS	Sample extraction ended at 4:19pm	08/08/18 LMG
J7261-FS	Sample was a bright yellow color.	08/08/18 SAS
J7261-FS	Sample extraction ended at 3:24pm	08/08/18 LMG

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BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM

Project Title(s)	**Project No.(s)**
Operable Unit 11 NAS North Island	100095675

18-0497

OU 11 NAS North Island - PFAS Analysis

GW

Entered By:	On:

Task Leader Approval:	On:
SupervisorApproval:	On:
PM Approval:	On:

Analytical Calibrations

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Sequence Report

Created with Analyst Reporter
Printed: 29/08/2018 9:37:52 AM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
2	JY38	L1	8/15/2018 9:50:38 PM	5-0369.dam	18-0502.wiff
3	JY39	L2	8/15/2018 10:01:29 PM	5-0369.dam	18-0502.wiff
4	JY40	L3	8/15/2018 10:12:22 PM	5-0369.dam	18-0502.wiff
5	JY41	L4	8/15/2018 10:23:14 PM	5-0369.dam	18-0502.wiff
6	JY42	L5	8/15/2018 10:34:06 PM	5-0369.dam	18-0502.wiff
7	JY43	L6	8/15/2018 10:44:59 PM	5-0369.dam	18-0502.wiff
8	JY44	L7	8/15/2018 10:55:51 PM	5-0369.dam	18-0502.wiff
9	JY46 IB	IB	8/15/2018 11:06:44 PM	5-0369.dam	18-0502.wiff
10	JY45 ICC	ICC	8/15/2018 11:17:37 PM	5-0369.dam	18-0502.wiff
11	JX29 Branch	BRANCH	8/15/2018 11:28:31 PM	5-0369.dam	18-0502.wiff
12	MeOH		8/15/2018 11:39:25 PM	5-0369.dam	18-0502.wiff
5	JX41 CCV	CCV	8/16/2018 12:22:55 AM	5-0369.dam	18-0502.wiff
16	MeOH		8/16/2018 12:33:48 AM	5-0369.dam	18-0502.wiff
17	CR546PB-FS(3)	Procedural Blank	8/16/2018 12:44:41 AM	5-0369.dam	18-0502.wiff
18	CR547LCS-FS(3)	Laboratory Control Sample	8/16/2018 12:55:32 AM	5-0369.dam	18-0502.wiff
19	J7259-FS(3)	080118-01	8/16/2018 1:06:25 AM	5-0369.dam	18-0502.wiff
20	J7260-FS(3)	080118-02	8/16/2018 1:17:18 AM	5-0369.dam	18-0502.wiff
21	J7261-FS(3)	080118-03	8/16/2018 1:28:10 AM	5-0369.dam	18-0502.wiff
22	J7252-FS(3)	073018-05	8/16/2018 1:39:03 AM	5-0369.dam	18-0502.wiff
23	J7253-FS(3)	073018-06	8/16/2018 1:49:56 AM	5-0369.dam	18-0502.wiff
24	J7254-FS(3)	073018-07	8/16/2018 2:00:47 AM	5-0369.dam	18-0502.wiff
25	JY42 CCV	CCV	8/16/2018 2:11:39 AM	5-0369.dam	18-0502.wiff
26	MeOH		8/16/2018 2:22:31 AM	5-0369.dam	18-0502.wiff
27	J7248-FS(4)	073018-01	8/16/2018 2:33:23 AM	5-0369.dam	18-0502.wiff
28	J7248-FS-D(5)	073018-01	8/16/2018 2:44:16 AM	5-0369.dam	18-0502.wiff
29	J7249-FS(4)	073018-02	8/16/2018 2:55:09 AM	5-0369.dam	18-0502.wiff
30	J7249-FS-D(5)	073018-02	8/16/2018 3:06:01	5-0369.dam	18-0502.wiff

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Sequence Report

Created with Analyst Reporter
Printed: 29/08/2018 9:37:52 AM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
			AM		
31	J7249MS-FS(4)	073018-02	8/16/2018 3:16:53 AM	5-0369.dam	18-0502.wiff
32	J7249MS-FS-D(5)	073018-02	8/16/2018 3:27:47 AM	5-0369.dam	18-0502.wiff
33	J7249MSD-FS(4)	073018-02	8/16/2018 3:38:39 AM	5-0369.dam	18-0502.wiff
34	J7248MSD-FS-D(5)	073018-02	8/16/2018 3:49:33 AM	5-0369.dam	18-0502.wiff
35	J7250-FS(4)	073018-03	8/16/2018 4:00:25 AM	5-0369.dam	18-0502.wiff
36	J7250-FS-D(5)	073018-03	8/16/2018 4:11:17 AM	5-0369.dam	18-0502.wiff
37	JY41 CCV	CCV	8/16/2018 4:22:10 AM	5-0369.dam	18-0502.wiff
38	MeOH		8/16/2018 4:33:02 AM	5-0369.dam	18-0502.wiff
39	J7251-FS(4)	073018-04	8/16/2018 4:43:54 AM	5-0369.dam	18-0502.wiff
40	J7251-FS-D(5)	073018-04	8/16/2018 4:54:47 AM	5-0369.dam	18-0502.wiff
41	J7255-FS(4)	073118-01	8/16/2018 5:05:39 AM	5-0369.dam	18-0502.wiff
42	J7255-FS-D(5)	073118-01	8/16/2018 5:16:32 AM	5-0369.dam	18-0502.wiff
43	J7256-FS(4)	073118-02	8/16/2018 5:27:25 AM	5-0369.dam	18-0502.wiff
44	J7256-FS-D(5)	073118-02	8/16/2018 5:38:18 AM	5-0369.dam	18-0502.wiff
45	J7257-FS(4)	073118-03	8/16/2018 5:49:10 AM	5-0369.dam	18-0502.wiff
46	J7257-FS-D(5)	073118-03	8/16/2018 6:00:02 AM	5-0369.dam	18-0502.wiff
47	J7258-FS(4)	073118-04	8/16/2018 6:10:55 AM	5-0369.dam	18-0502.wiff
48	J7258-FS-D(5)	073118-04	8/16/2018 6:21:47 AM	5-0369.dam	18-0502.wiff
49	JY42 CCV	CCV	8/16/2018 6:32:39 AM	5-0369.dam	18-0502.wiff

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Sequence Report

Created with Analyst Reporter
Printed: 29/08/2018 9:38:07 AM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
2	JY38	L1	8/24/2018 3:22:05 PM	5-0369.dam	18-0499-18-0497.wiff
3	JY39	L2	8/24/2018 3:32:58 PM	5-0369.dam	18-0499-18-0497.wiff
4	JY40	L3	8/24/2018 3:43:51 PM	5-0369.dam	18-0499-18-0497.wiff
5	JY41	L4	8/24/2018 3:54:43 PM	5-0369.dam	18-0499-18-0497.wiff
6	JY42	L5	8/24/2018 4:05:35 PM	5-0369.dam	18-0499-18-0497.wiff
7	JY43	L6	8/24/2018 4:16:27 PM	5-0369.dam	18-0499-18-0497.wiff
8	JY44	L7	8/24/2018 4:27:19 PM	5-0369.dam	18-0499-18-0497.wiff
9	JY46 IB	IB	8/24/2018 4:38:11 PM	5-0369.dam	18-0499-18-0497.wiff
10	JY45 ICC	ICC	8/24/2018 4:49:03 PM	5-0369.dam	18-0499-18-0497.wiff
11	JX29 BRANCH	BRANCH	8/24/2018 4:59:56 PM	5-0369.dam	18-0499-18-0497.wiff
1	MEOH		8/24/2018 5:10:47 PM	5-0369.dam	18-0499-18-0497.wiff
54	JY42	CCV	8/24/2018 8:26:28 PM	5-0369.dam	18-0499-18-0497.wiff
1	MEOH		8/24/2018 8:37:20 PM	5-0369.dam	18-0499-18-0497.wiff
27	J7249-FS-D(8)	073018-02	8/24/2018 8:48:13 PM	5-0369.dam	18-0499-18-0497.wiff
28	J7249-FS-D(9)	073018-02	8/24/2018 8:59:04 PM	5-0369.dam	18-0499-18-0497.wiff
29	J7249MS-FS-D(8)	073018-02	8/24/2018 9:09:56 PM	5-0369.dam	18-0499-18-0497.wiff
30	J7249MS-FS-D(9)	073018-02	8/24/2018 9:20:48 PM	5-0369.dam	18-0499-18-0497.wiff
31	J7249MSD-FS-D(8)	073018-02	8/24/2018 9:31:41 PM	5-0369.dam	18-0499-18-0497.wiff
32	J7249MSD-FS-D(9)	073018-02	8/24/2018 9:42:34 PM	5-0369.dam	18-0499-18-0497.wiff
33	J7257-FS-D(9)	073118-03	8/24/2018 9:53:25 PM	5-0369.dam	18-0499-18-0497.wiff
53	JY41	CCV	8/24/2018 10:04:18 PM	5-0369.dam	18-0499-18-0497.wiff

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Sequence Report

Created with Analyst Reporter
Printed: 29/08/2018 9:38:44 AM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
16	JY38	L1	8/28/2018 8:04:50 PM	5-0369.dam	18-0511_18-0517.wiff
17	JY39	L2	8/28/2018 8:15:41 PM	5-0369.dam	18-0511_18-0517.wiff
18	JY40	L3	8/28/2018 8:26:32 PM	5-0369.dam	18-0511_18-0517.wiff
19	JY41	L4	8/28/2018 8:37:24 PM	5-0369.dam	18-0511_18-0517.wiff
20	JY42	L5	8/28/2018 8:48:15 PM	5-0369.dam	18-0511_18-0517.wiff
21	JY43	L6	8/28/2018 8:59:08 PM	5-0369.dam	18-0511_18-0517.wiff
22	JY44	L7	8/28/2018 9:09:59 PM	5-0369.dam	18-0511_18-0517.wiff
23	JY46 IB	IB	8/28/2018 9:20:49 PM	5-0369.dam	18-0511_18-0517.wiff
24	JY45 ICC	ICC	8/28/2018 9:31:41 PM	5-0369.dam	18-0511_18-0517.wiff
25	JX29	BRANCH	8/28/2018 9:42:33 PM	5-0369.dam	18-0511_18-0517.wiff
1	MeOH		8/28/2018 9:53:25 PM	5-0369.dam	18-0511_18-0517.wiff
20	JY42	CCV	8/28/2018 11:31:08 PM	5-0369.dam	18-0511_18-0517.wiff
1	MeOH		8/29/2018 12:03:44 AM	5-0369.dam	18-0511_18-0517.wiff
34	J7259-FS(2)	080118-01	8/29/2018 12:14:37 AM	5-0369.dam	18-0511_18-0517.wiff
19	JY41 CCV	073018-04	8/29/2018 12:58:01 AM	5-0369.dam	18-0511_18-0517.wiff

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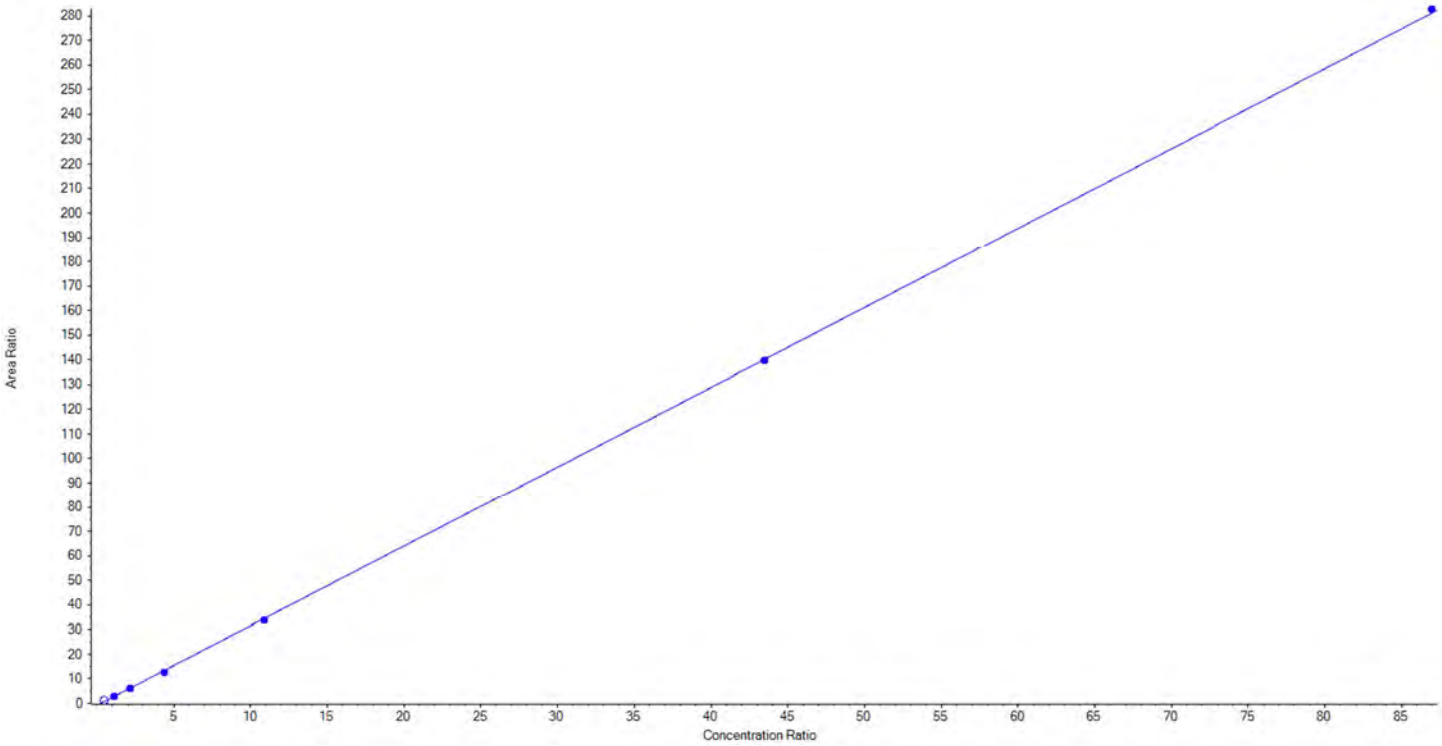
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFBS_1	**Data File**	18-0502.wiff
MRM Transition	298.9 / 80.0	**Result Table**	18-0497_BASE
Internal Standard	13C3-PFBS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 3.24056 x + -0.76869 (r = 0.99991) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	101.00	135.654185	134.3
3	JY39	L2	True	252.50	268.759329	106.4
4	JY40	L3	True	505.00	505.142578	100.0
5	JY41	L4	True	1010.00	959.418036	95.0
6	JY42	L5	True	2525.00	2483.667958	98.4
7	JY43	L6	True	10100.00	10060.334093	99.6
8	JY44	L7	True	20200.00	20315.178006	100.6



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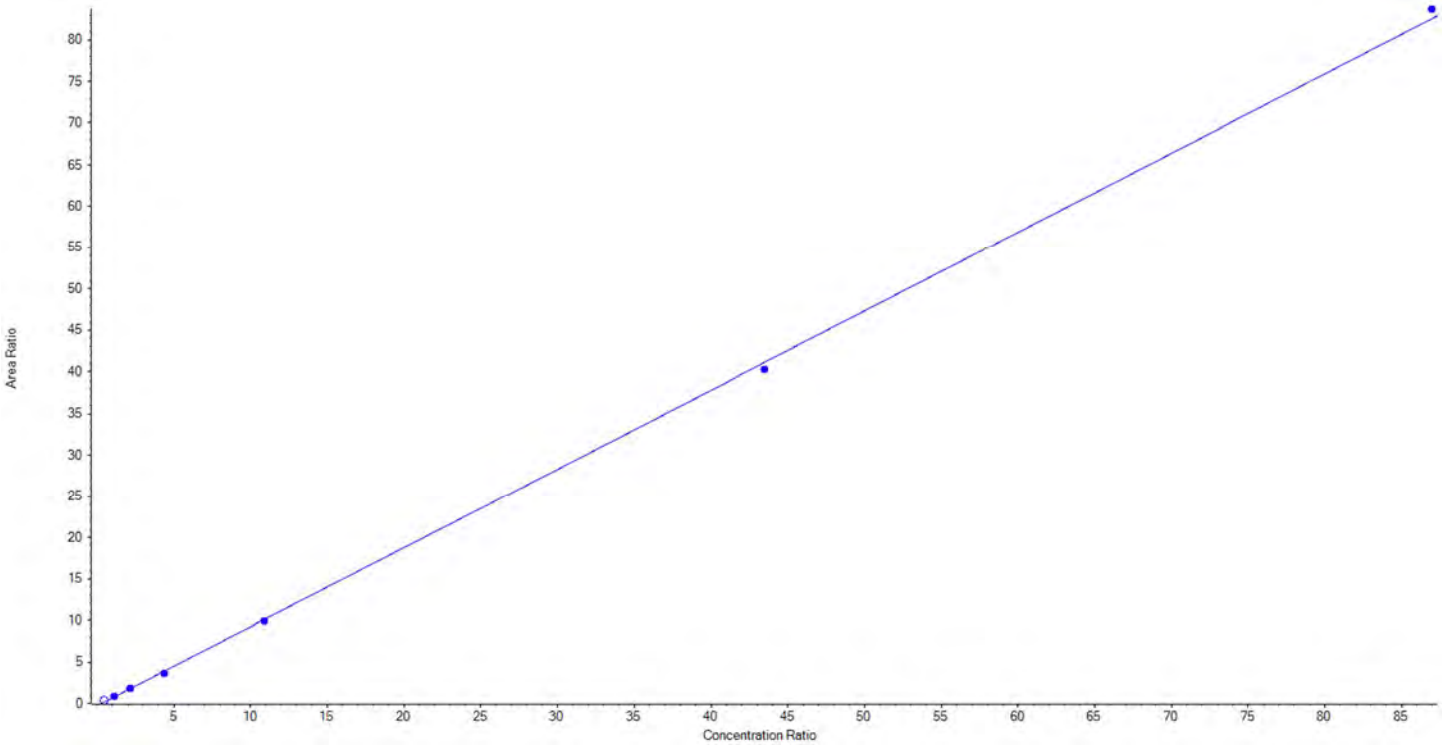
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFBS_2	**Data File**	18-0502.wiff
MRM Transition	298.9 / 99.0	**Result Table**	18-0497_BASE
Internal Standard	13C3-PFBS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.95223 x + -0.28386 (r = 0.99978) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	101.00	156.683042	155.1
3	JY39	L2	True	252.50	271.908488	107.7
4	JY40	L3	True	505.00	505.039835	100.0
5	JY41	L4	True	1010.00	952.901852	94.4
6	JY42	L5	True	2525.00	2490.356618	98.6
7	JY43	L6	True	10100.00	9892.544382	98.0
8	JY44	L7	True	20200.00	20479.748825	101.4



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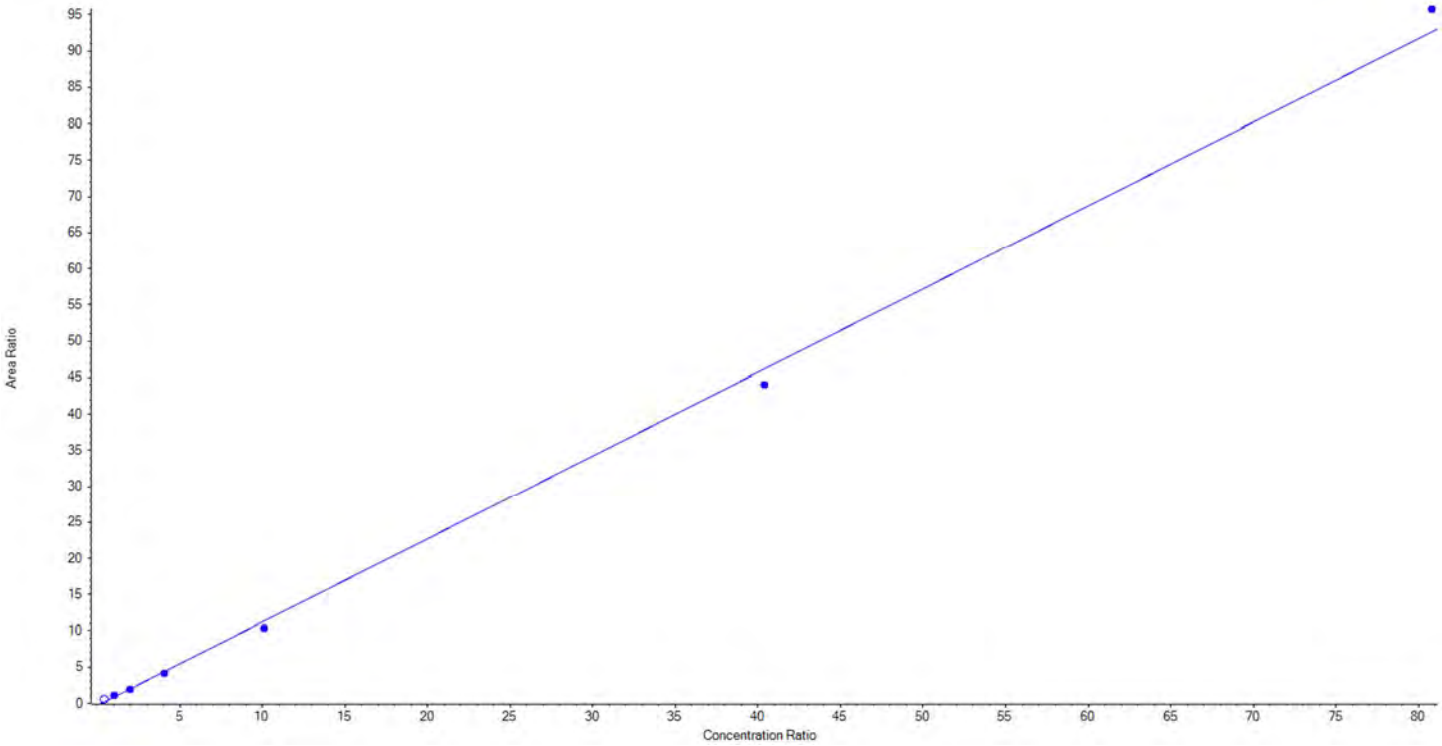
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFHxA_1	**Data File**	18-0502.wiff
MRM Transition	313.0 / 269.0	**Result Table**	18-0497_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.14999 x + -0.30382 (r = 0.99886) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	101.00	174.990526	173.3
3	JY39	L2	True	252.50	291.947056	115.6
4	JY40	L3	True	505.00	489.149825	96.9
5	JY41	L4	True	1010.00	978.218129	96.9
6	JY42	L5	True	2525.00	2320.616744	91.9
7	JY43	L6	True	10100.00	9636.377790	95.4
8	JY44	L7	True	20200.00	20876.190457	103.4



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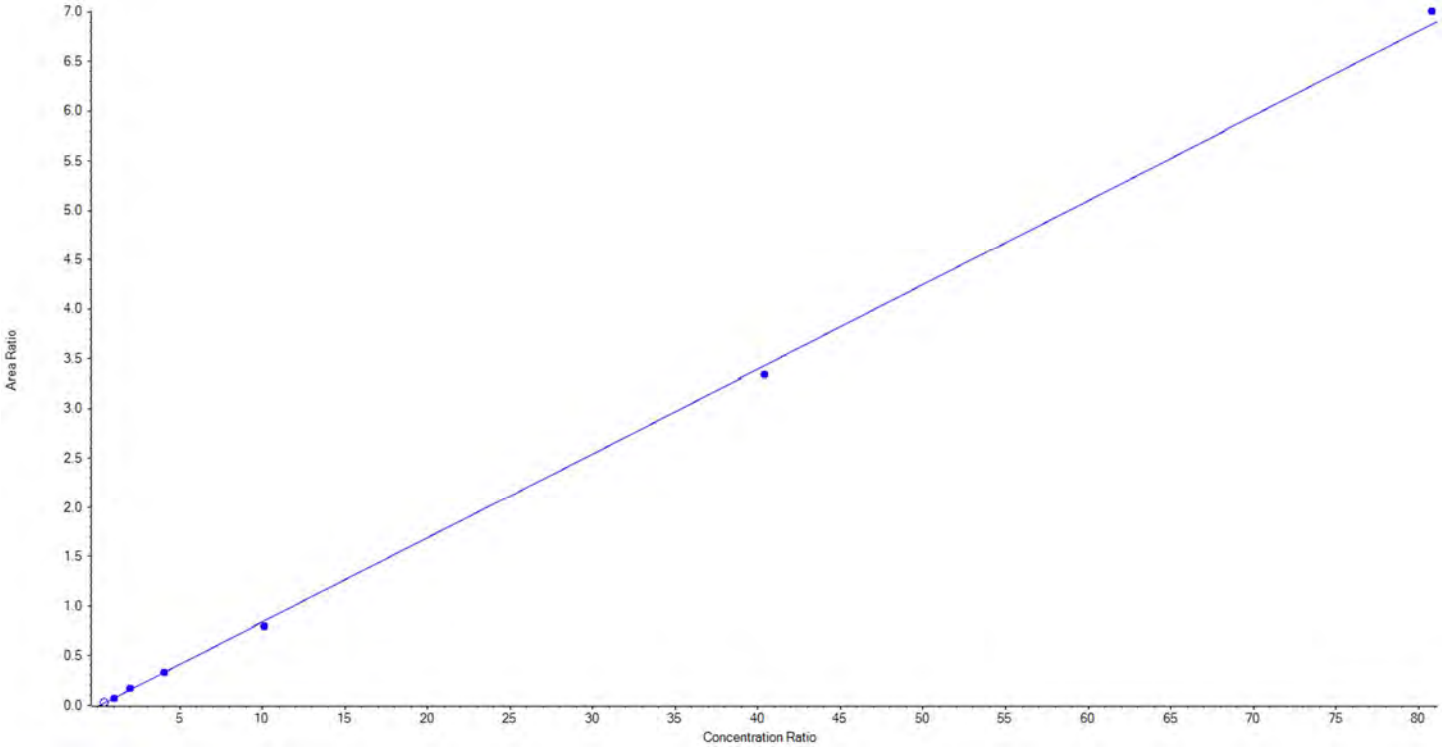
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFHxA_2	**Data File**	18-0502.wiff
MRM Transition	313.0 / 119.0	**Result Table**	18-0497_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.08525 x + -0.01320 (r = 0.99956) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	101.00	127.342926	126.1
3	JY39	L2	True	252.50	250.887990	99.4
4	JY40	L3	True	505.00	541.934287	107.3
5	JY41	L4	True	1010.00	1010.020041	100.0
6	JY42	L5	True	2525.00	2376.434269	94.1
7	JY43	L6	True	10100.00	9826.490984	97.3
8	JY44	L7	True	20200.00	20586.732430	101.9



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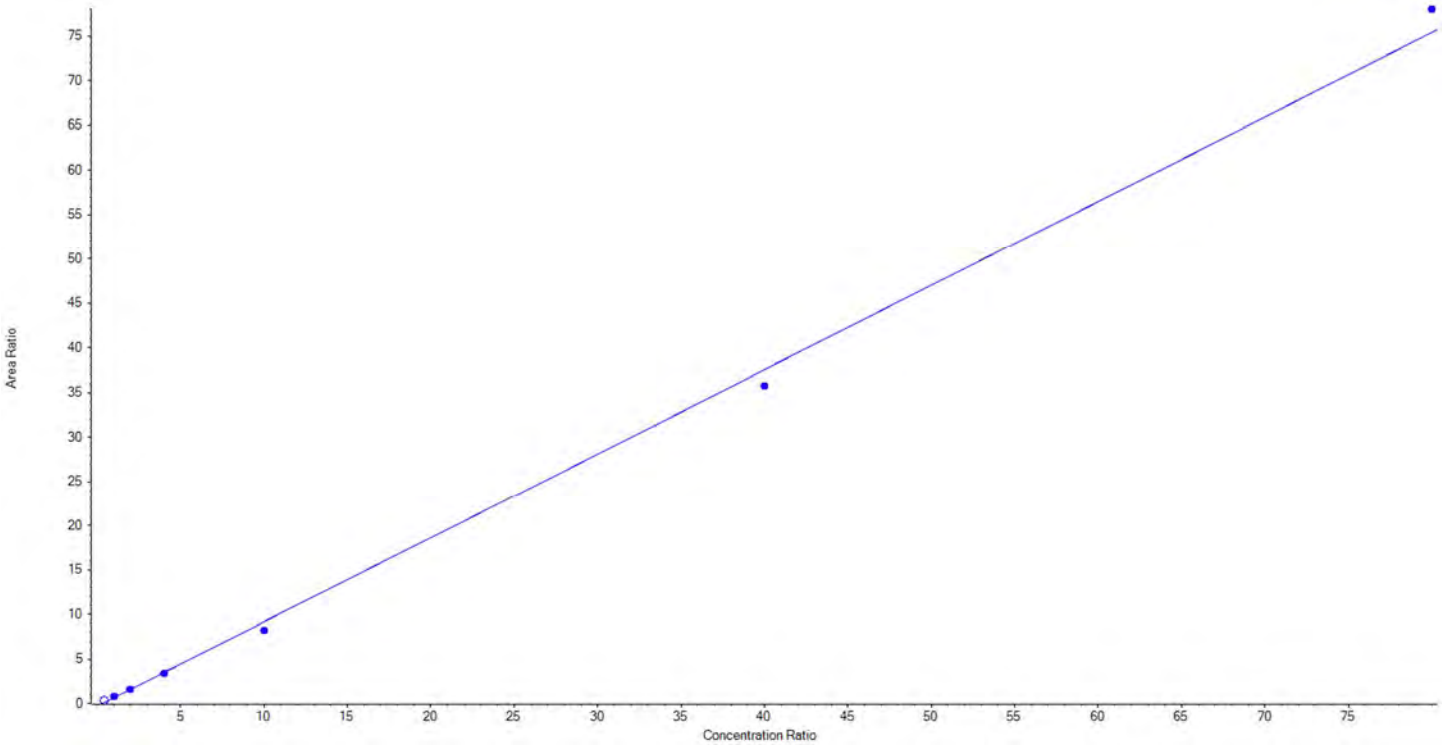
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFHpA_1	**Data File**	18-0502.wiff
MRM Transition	363.0 / 319.0	**Result Table**	18-0497_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.94646 x + -0.31771 (r = 0.99877) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	177.027113	177.0
3	JY39	L2	True	250.00	280.574779	112.2
4	JY40	L3	True	500.00	502.958430	100.6
5	JY41	L4	True	1000.00	978.842328	97.9
6	JY42	L5	True	2500.00	2262.496812	90.5
7	JY43	L6	True	10000.00	9533.731802	95.3
8	JY44	L7	True	20000.00	20691.395849	103.5



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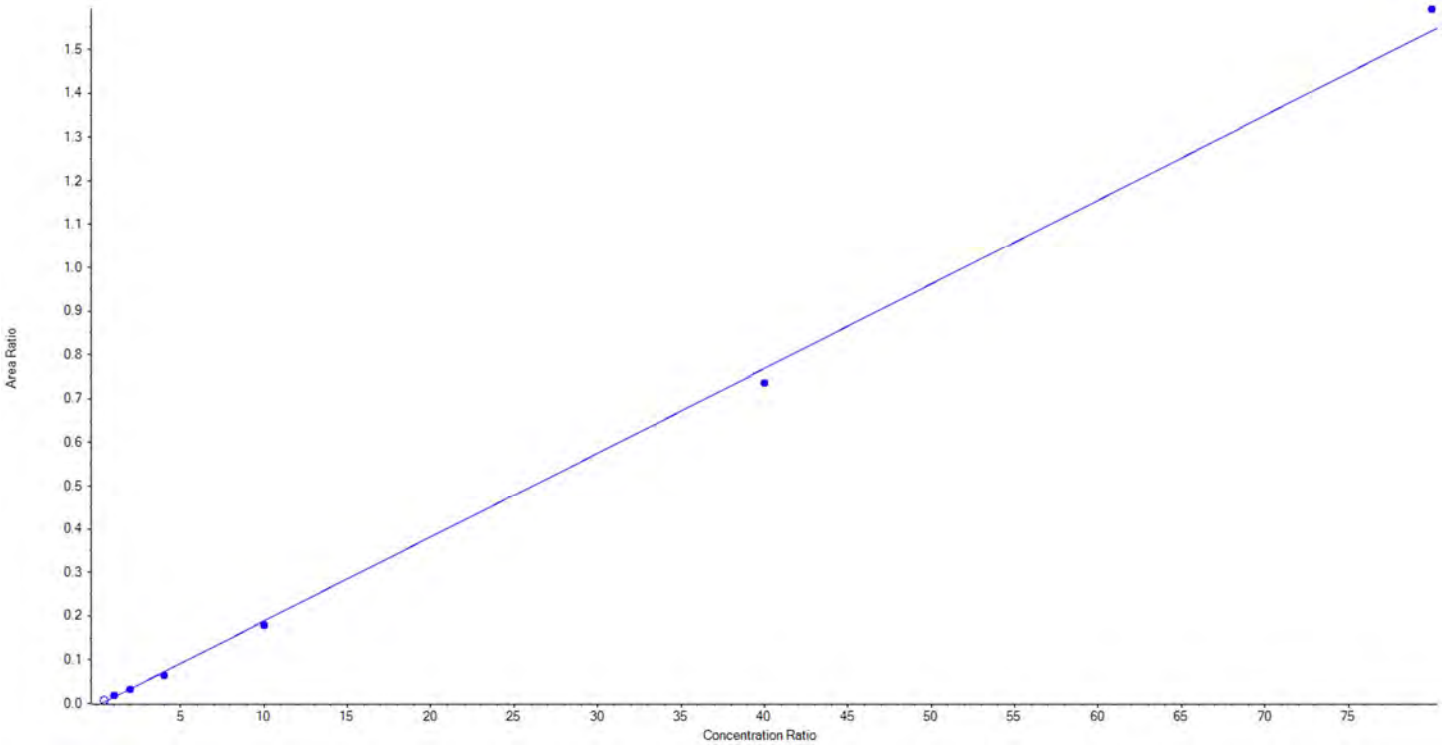
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFHpA_2	**Data File**	18-0502.wiff
MRM Transition	363.0 / 169.0	**Result Table**	18-0497_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.01935 x + -0.00527 (r = 0.99878) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	146.442720	146.4
3	JY39	L2	True	250.00	305.849531	122.3
4	JY40	L3	True	500.00	476.481767	95.3
5	JY41	L4	True	1000.00	887.405718	88.7
6	JY42	L5	True	2500.00	2367.250288	94.7
7	JY43	L6	True	10000.00	9573.637496	95.7
8	JY44	L7	True	20000.00	20639.375200	103.2



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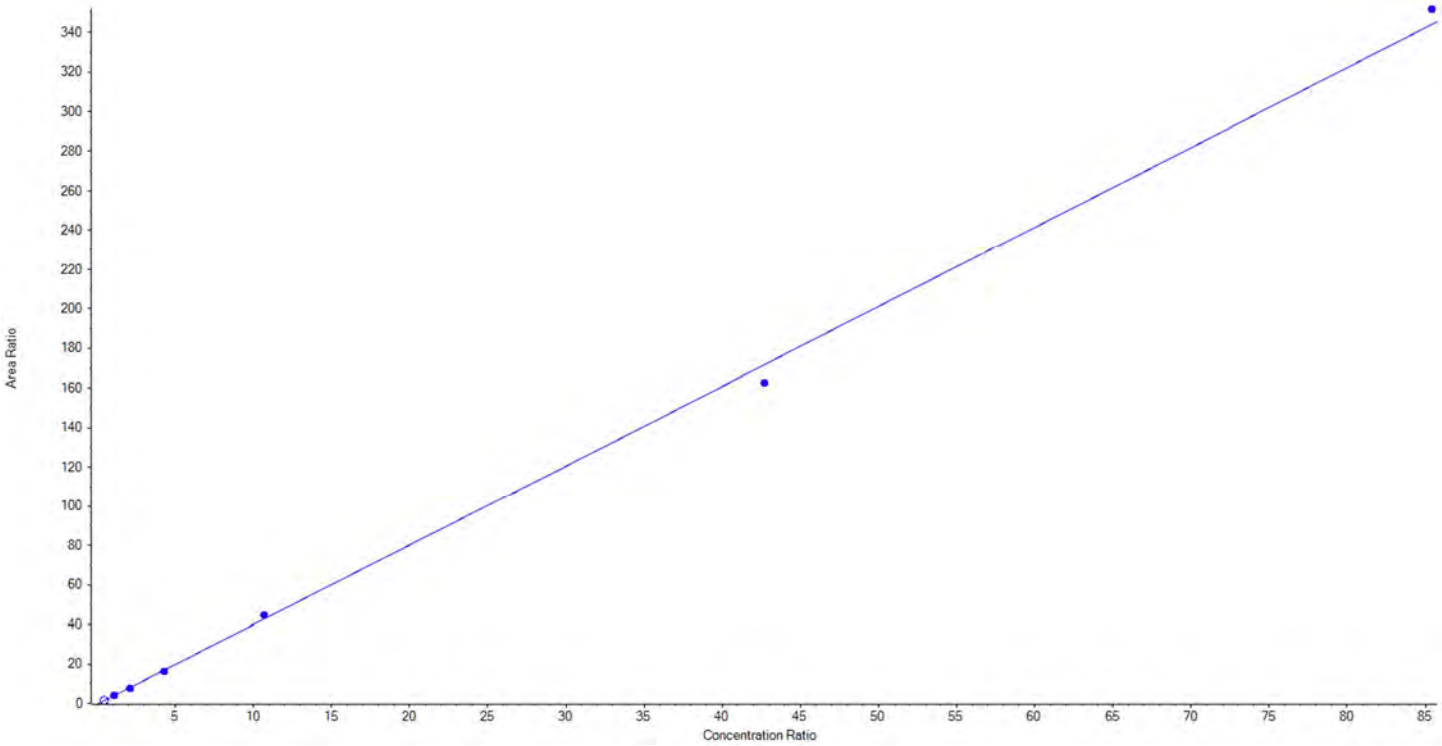
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFHxS_1	**Data File**	18-0502.wiff
MRM Transition	399.0 / 80.0	**Result Table**	18-0497_BASE
Internal Standard	13C3-PFHxS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 4.03264 x + -0.47041 (r = 0.99926) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	101.00	108.136149	107.1
3	JY39	L2	True	252.50	266.961544	105.7
4	JY40	L3	True	505.00	487.735819	96.6
5	JY41	L4	True	1010.00	974.127262	96.5
6	JY42	L5	True	2525.00	2629.624533	104.1
7	JY43	L6	True	10100.00	9580.051421	94.9
8	JY44	L7	True	20200.00	20653.999422	102.3



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Calibration Summary Report

Created with Analyst Reporter
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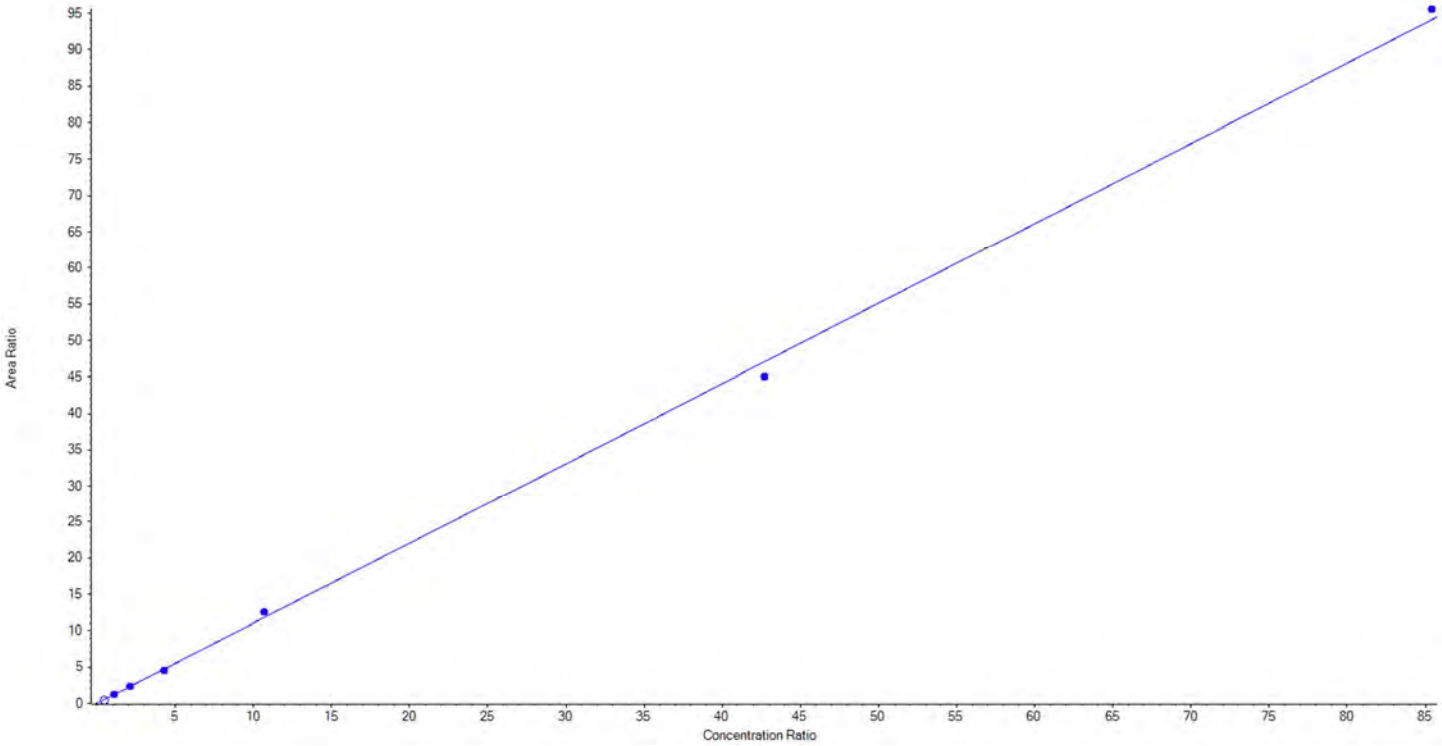
Analyte Name	PFHxS_2	**Data File**	18-0502.wiff
MRM Transition	399.0 / 99.0	**Result Table**	18-0497_BASE
Internal Standard	13C3-PFHxS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.10189 x + 0.00734 (r = 0.99942) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	101.00	92.036044	91.1
3	JY39	L2	True	252.50	253.624633	100.5
4	JY40	L3	True	505.00	502.533899	99.5
5	JY41	L4	True	1010.00	974.655409	96.5
6	JY42	L5	True	2525.00	2683.678953	106.3
7	JY43	L6	True	10100.00	9668.126531	95.7
8	JY44	L7	True	20200.00	20509.880576	101.5



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Calibration Summary Report

Created with Analyst Reporter
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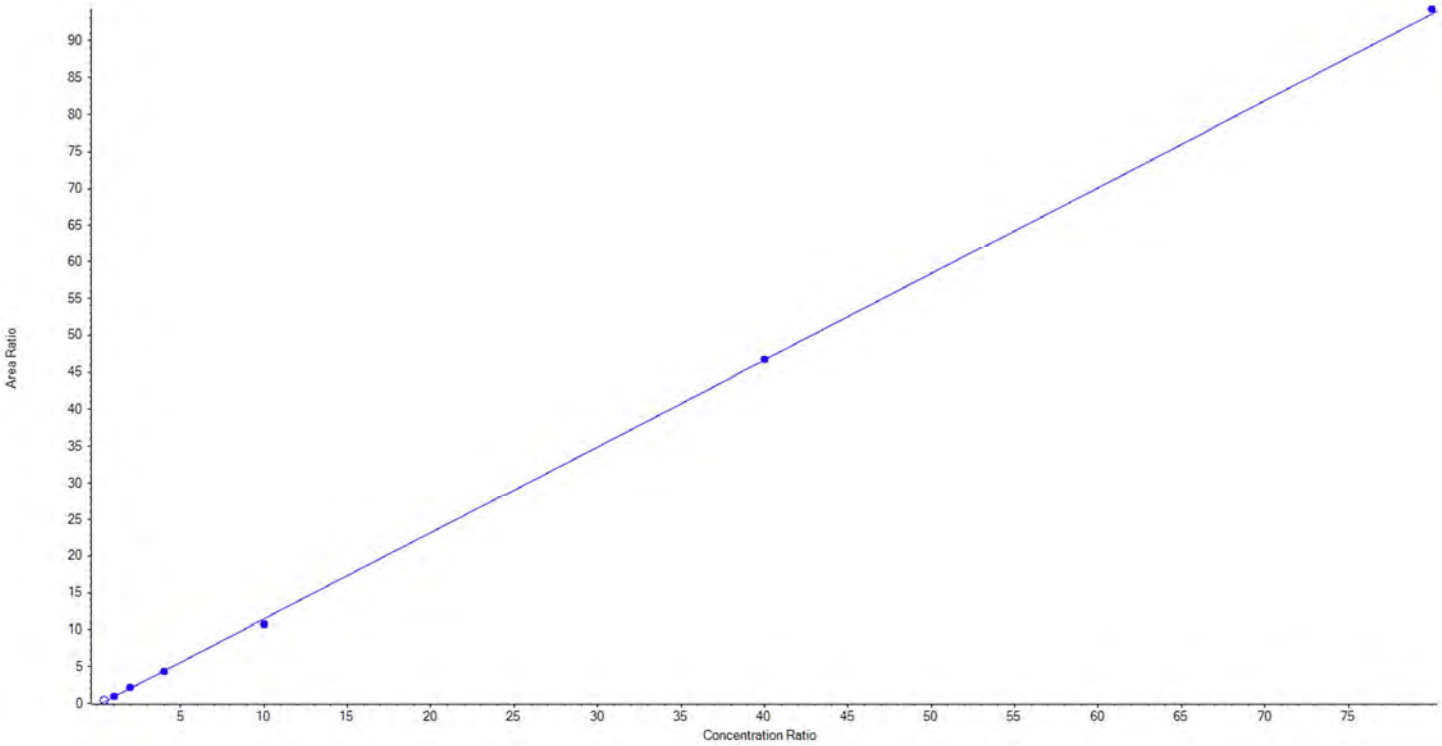
Analyte Name	PFOA_1	**Data File**	18-0502.wiff
MRM Transition	413.0 / 369.0	**Result Table**	18-0497_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.17349 x + -0.29516 (r = 0.99979) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	156.129732	156.1
3	JY39	L2	True	250.00	259.191977	103.7
4	JY40	L3	True	500.00	518.041345	103.6
5	JY41	L4	True	1000.00	983.491763	98.4
6	JY42	L5	True	2500.00	2339.263345	93.6
7	JY43	L6	True	10000.00	10009.034425	100.1
8	JY44	L7	True	20000.00	20140.977145	100.7



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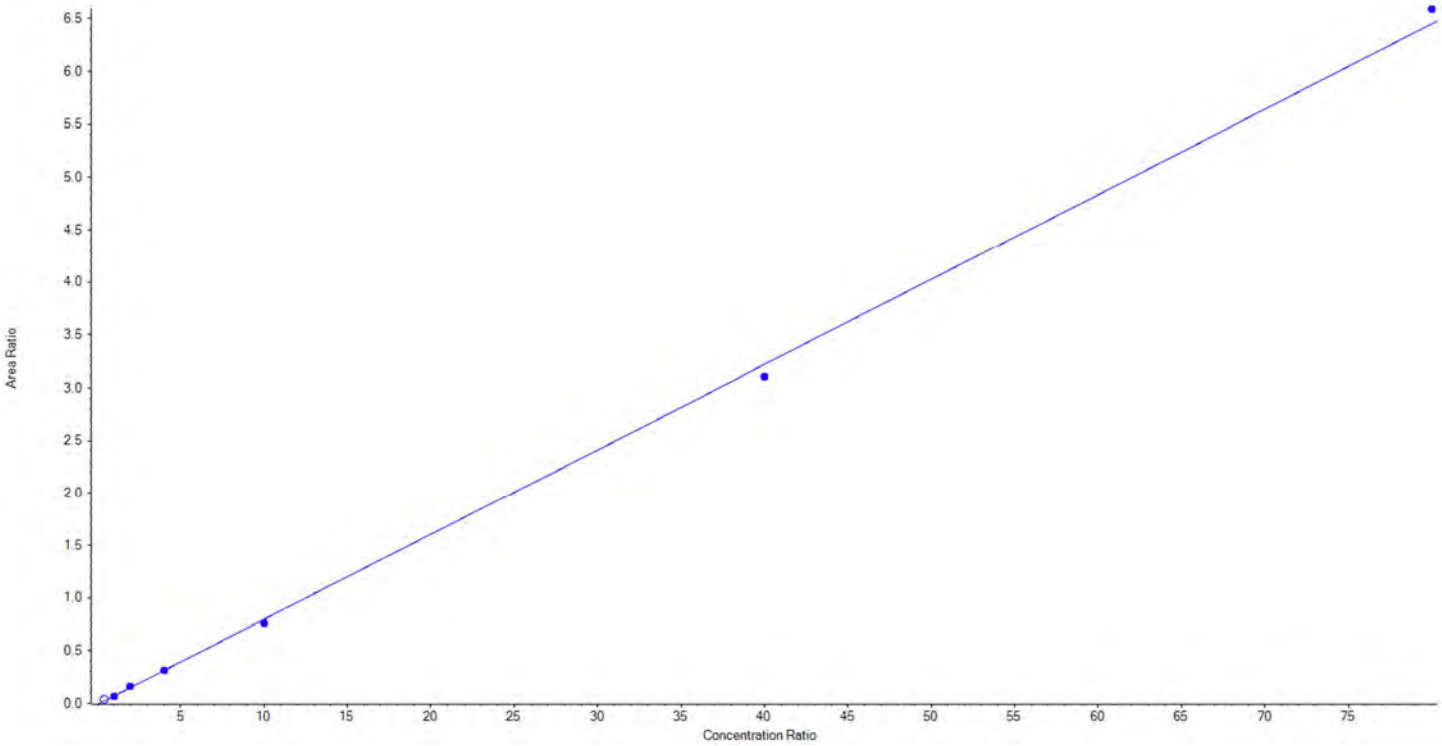
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFOA_2	**Data File**	18-0502.wiff
MRM Transition	413.0 / 169.0	**Result Table**	18-0497_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.08078 x + -0.01159 (r = 0.99952) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	147.030101	147.0
3	JY39	L2	True	250.00	247.216201	98.9
4	JY40	L3	True	500.00	525.555571	105.1
5	JY41	L4	True	1000.00	1017.818733	101.8
6	JY42	L5	True	2500.00	2392.302090	95.7
7	JY43	L6	True	10000.00	9638.582291	96.4
8	JY44	L7	True	20000.00	20428.525114	102.1



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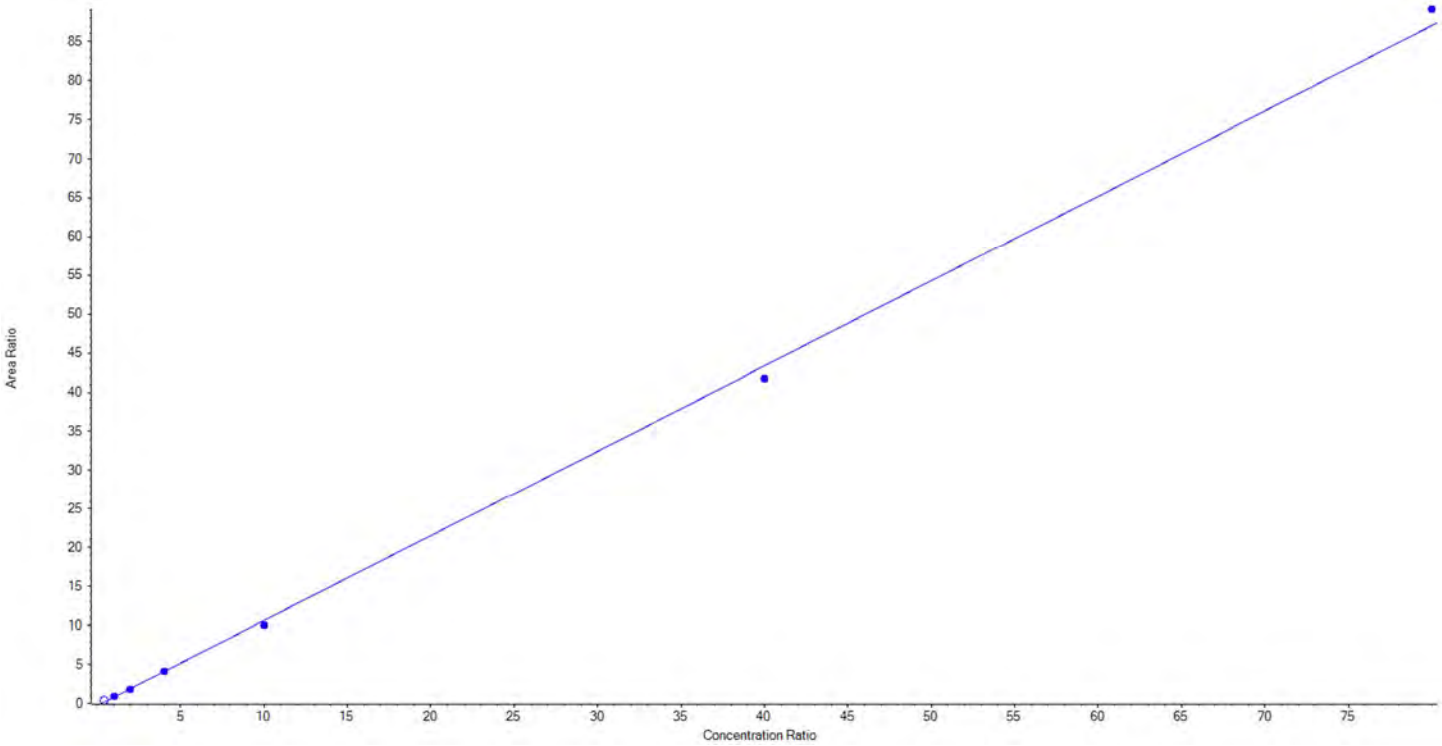
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFNA_1	**Data File**	18-0502.wiff
MRM Transition	463.0 / 419.0	**Result Table**	18-0497_BASE
Internal Standard	13C9-PFNA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.09149 x + -0.29729 (r = 0.99942) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	165.112195	165.1
3	JY39	L2	True	250.00	265.550745	106.2
4	JY40	L3	True	500.00	490.156122	98.0
5	JY41	L4	True	1000.00	1023.061982	102.3
6	JY42	L5	True	2500.00	2371.314183	94.9
7	JY43	L6	True	10000.00	9618.025469	96.2
8	JY44	L7	True	20000.00	20481.891500	102.4



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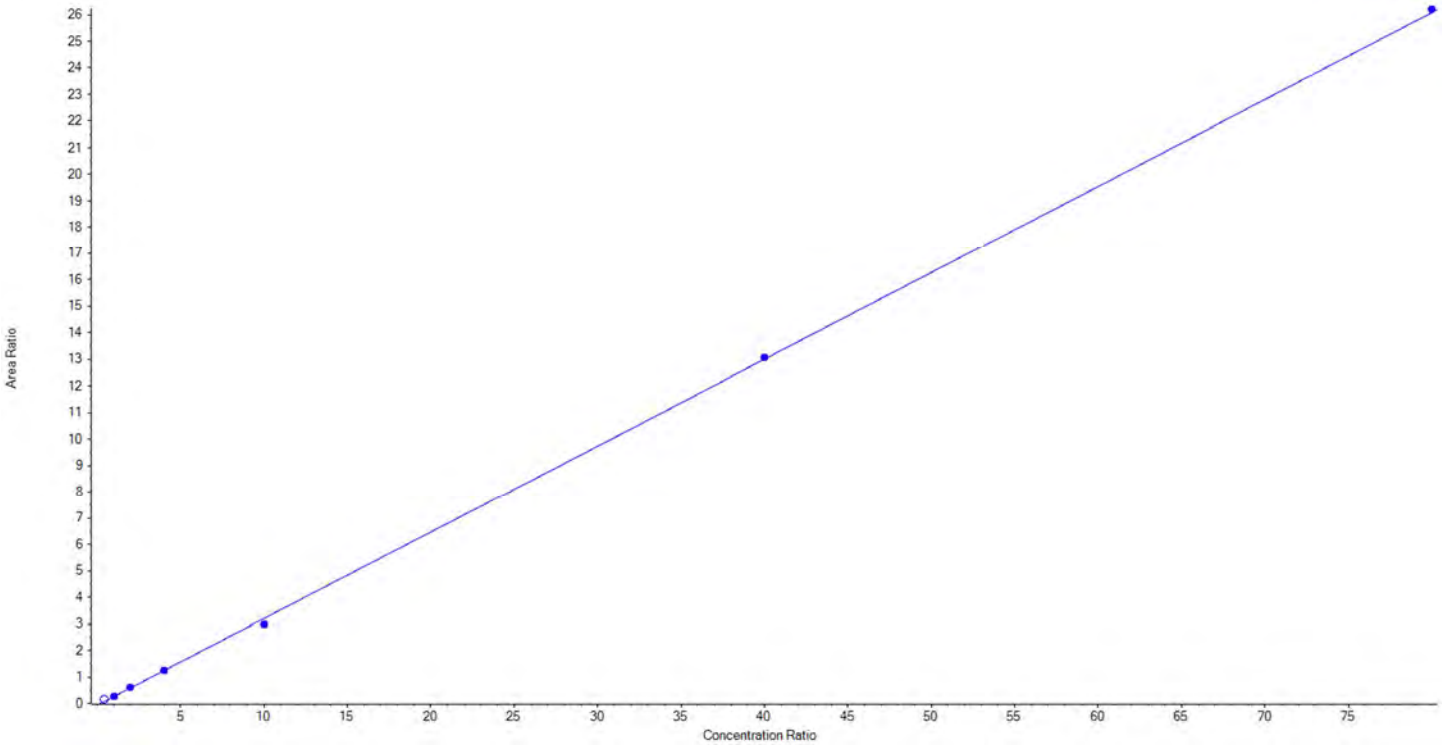
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFNA_2	**Data File**	18-0502.wiff
MRM Transition	463.0 / 219.0	**Result Table**	18-0497_BASE
Internal Standard	13C9-PFNA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.32687 x + -0.07112 (r = 0.99977) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	158.516244	158.5
3	JY39	L2	True	250.00	256.456427	102.6
4	JY40	L3	True	500.00	515.539225	103.1
5	JY41	L4	True	1000.00	1003.179630	100.3
6	JY42	L5	True	2500.00	2324.672680	93.0
7	JY43	L6	True	10000.00	10050.790767	100.5
8	JY44	L7	True	20000.00	20099.361271	100.5



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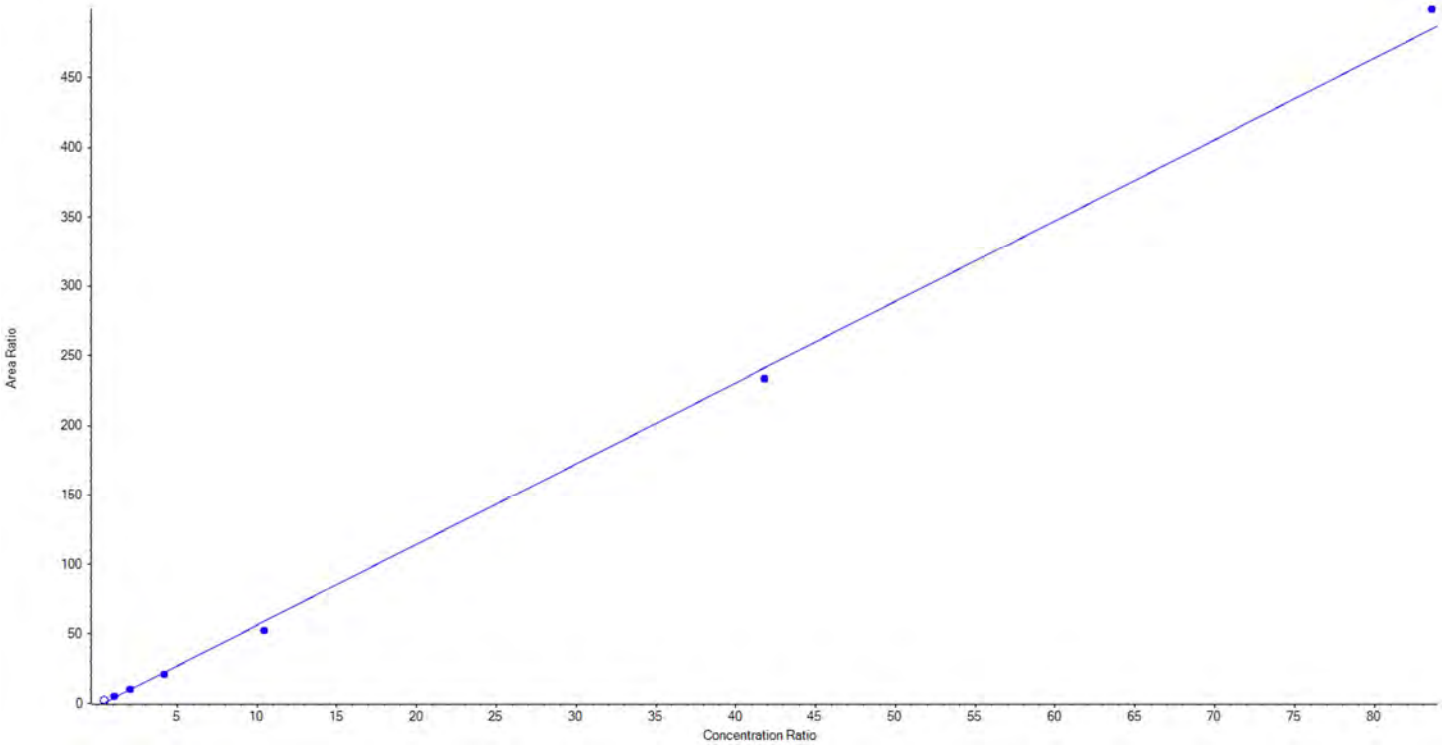
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFOS_1	**Data File**	18-0502.wiff
MRM Transition	499.0 / 80.0	**Result Table**	18-0497_BASE
Internal Standard	13C8-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 5.82643 x + -2.24203 (r = 0.99895) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	174.803508	174.8
3	JY39	L2	True	250.00	286.457180	114.6
4	JY40	L3	True	500.00	500.961956	100.2
5	JY41	L4	True	1000.00	960.661633	96.1
6	JY42	L5	True	2500.00	2235.404856	89.4
7	JY43	L6	True	10000.00	9681.961468	96.8
8	JY44	L7	True	20000.00	20584.552906	102.9



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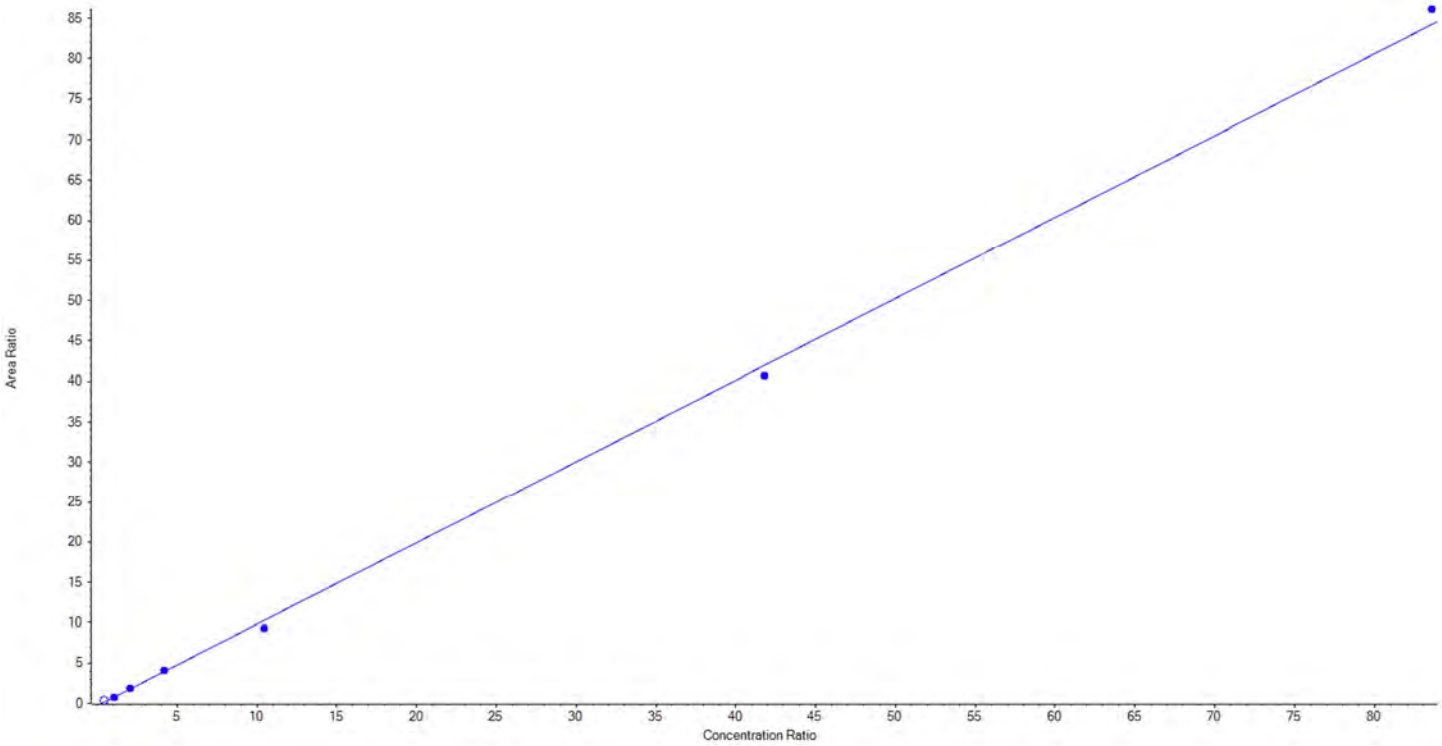
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFOS_2	**Data File**	18-0502.wiff
MRM Transition	499.0 / 99.0	**Result Table**	18-0497_BASE
Internal Standard	13C8-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.01137 x + -0.30813 (r = 0.99931) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	175.186482	175.2
3	JY39	L2	True	250.00	255.222576	102.1
4	JY40	L3	True	500.00	510.735843	102.2
5	JY41	L4	True	1000.00	1051.578549	105.2
6	JY42	L5	True	2500.00	2284.084734	91.4
7	JY43	L6	True	10000.00	9700.133052	97.0
8	JY44	L7	True	20000.00	20448.245246	102.2



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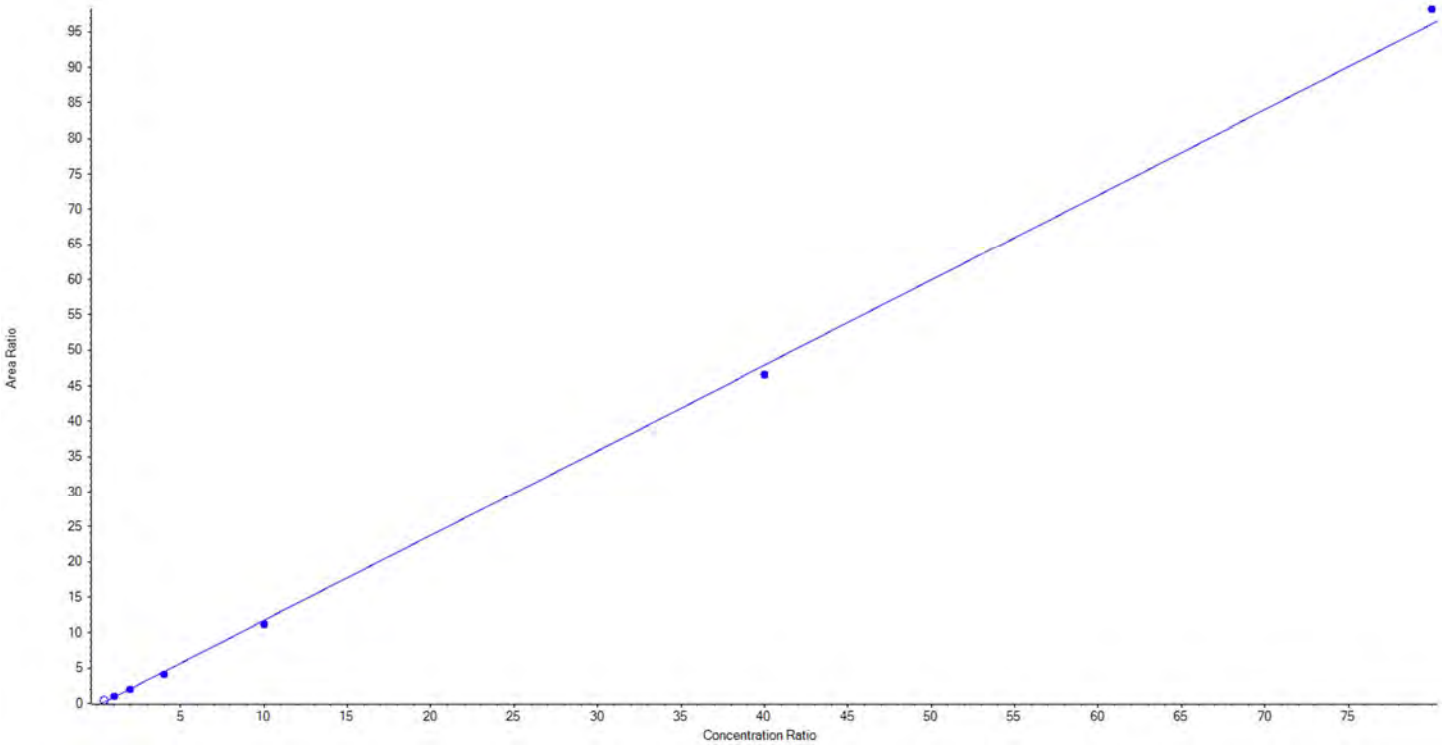
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFDA_1	**Data File**	18-0502.wiff
MRM Transition	513.0 / 469.0	**Result Table**	18-0497_BASE
Internal Standard	13C6-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.20581 x + -0.34379 (r = 0.99943) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	164.110850	164.1
3	JY39	L2	True	250.00	287.040165	114.8
4	JY40	L3	True	500.00	487.650488	97.5
5	JY41	L4	True	1000.00	926.872895	92.7
6	JY42	L5	True	2500.00	2388.969491	95.6
7	JY43	L6	True	10000.00	9722.086453	97.2
8	JY44	L7	True	20000.00	20437.380507	102.2



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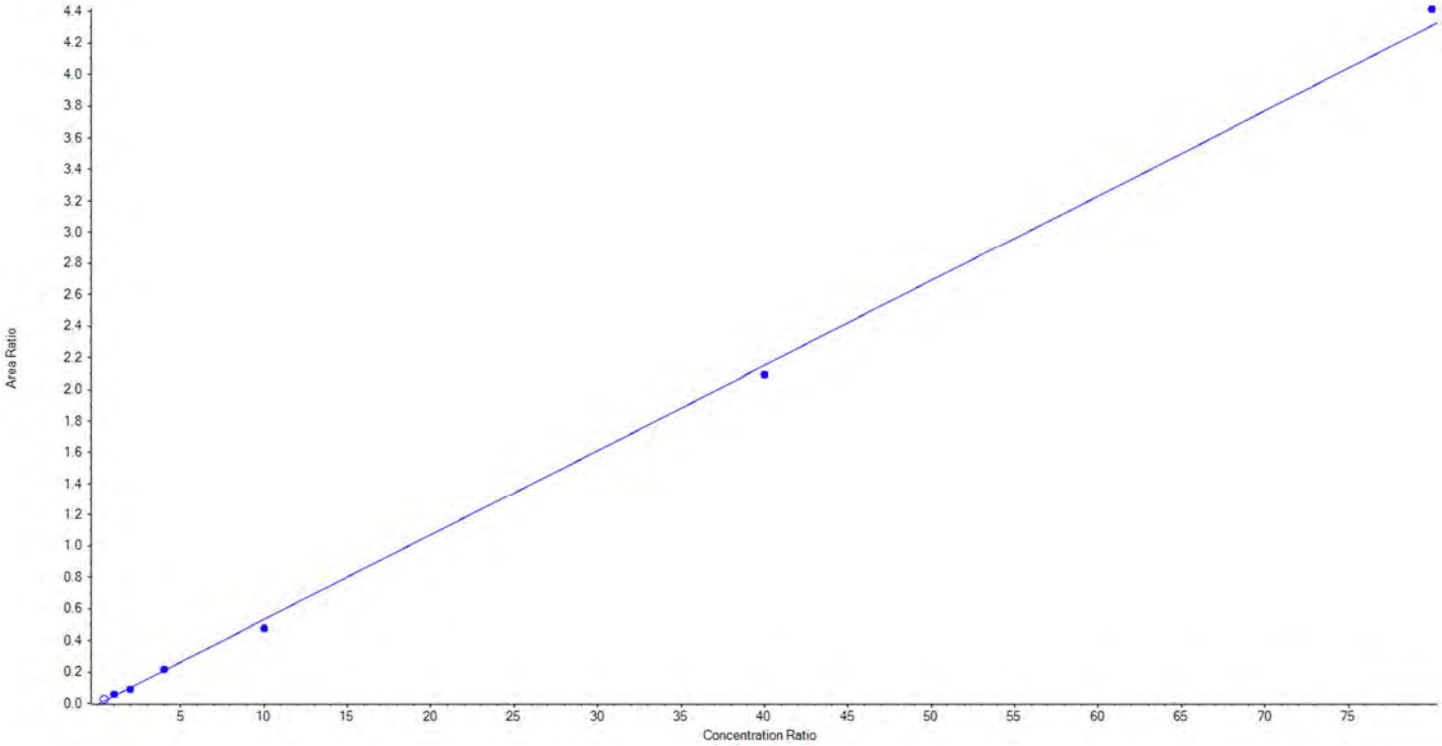
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFDA_2	**Data File**	18-0502.wiff
MRM Transition	513.0 / 219.0	**Result Table**	18-0497_BASE
Internal Standard	13C6-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.05397 x + -0.00761 (r = 0.99906) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	160.811104	160.8
3	JY39	L2	True	250.00	287.970681	115.2
4	JY40	L3	True	500.00	456.046666	91.2
5	JY41	L4	True	1000.00	1038.927338	103.9
6	JY42	L5	True	2500.00	2248.780308	90.0
7	JY43	L6	True	10000.00	9733.414651	97.3
8	JY44	L7	True	20000.00	20484.860356	102.4



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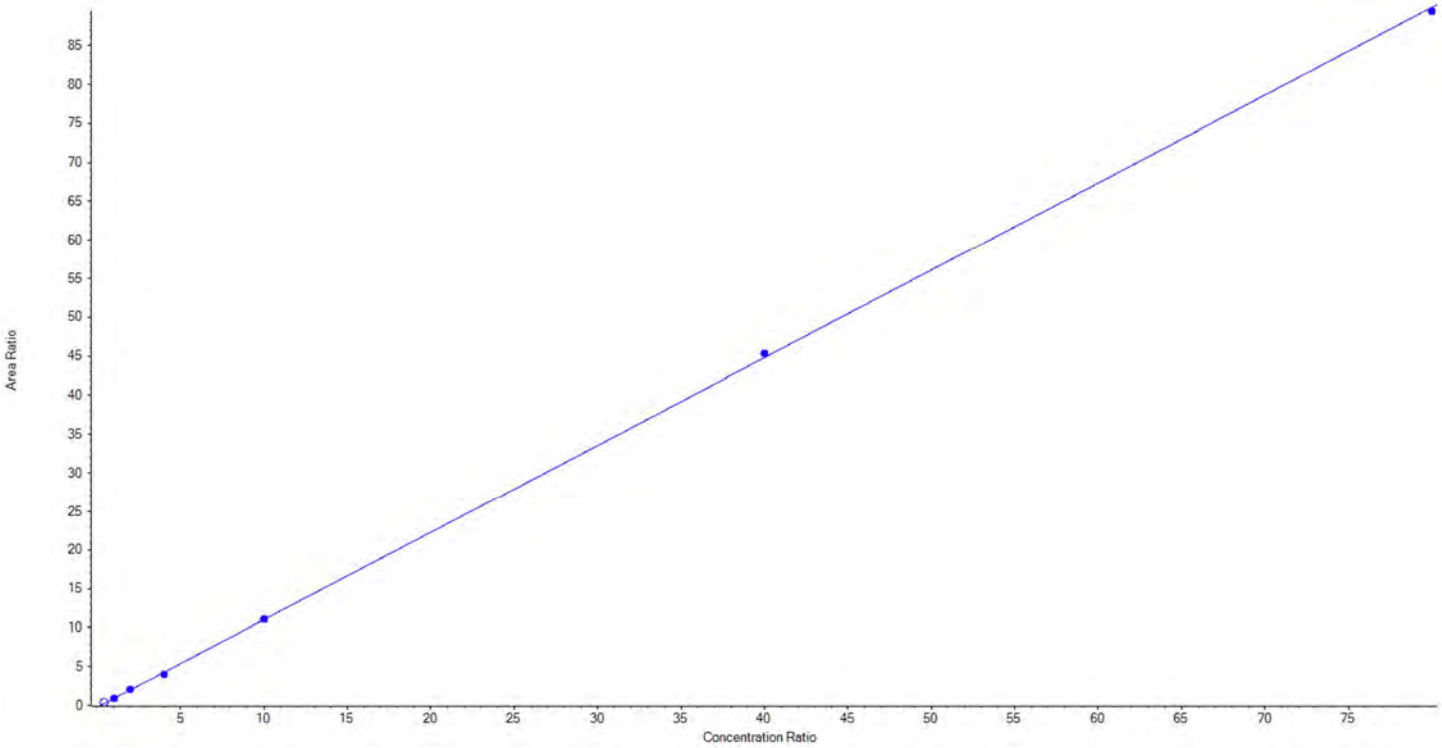
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFUnA_1	**Data File**	18-0502.wiff
MRM Transition	563.0 / 519.0	**Result Table**	18-0497_BASE
Internal Standard	13C7-PFUnA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.12679 x + -0.25197 (r = 0.99991) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	139.156274	139.2
3	JY39	L2	True	250.00	252.109363	100.8
4	JY40	L3	True	500.00	513.733395	102.8
5	JY41	L4	True	1000.00	951.239009	95.1
6	JY42	L5	True	2500.00	2513.668899	100.6
7	JY43	L6	True	10000.00	10128.534474	101.3
8	JY44	L7	True	20000.00	19890.714860	99.5



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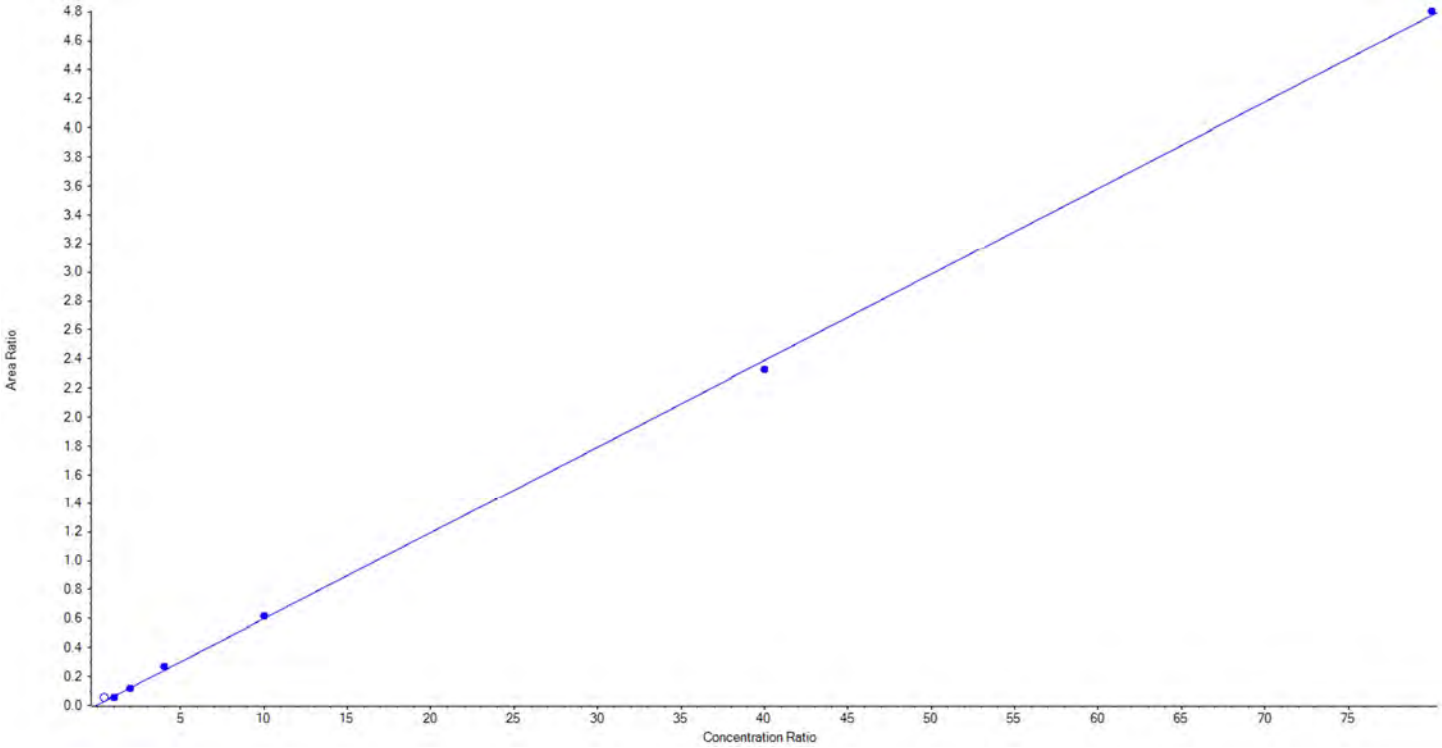
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFUnA_2	**Data File**	18-0502.wiff
MRM Transition	563.0 / 269.0	**Result Table**	18-0497_BASE
Internal Standard	13C7-PFUnA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.05966 x + 0.00234 (r = 0.99956) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	218.182014	218.2
3	JY39	L2	True	250.00	232.503826	93.0
4	JY40	L3	True	500.00	473.861270	94.8
5	JY41	L4	True	1000.00	1109.853513	111.0
6	JY42	L5	True	2500.00	2583.990108	103.4
7	JY43	L6	True	10000.00	9726.460712	97.3
8	JY44	L7	True	20000.00	20123.330571	100.6



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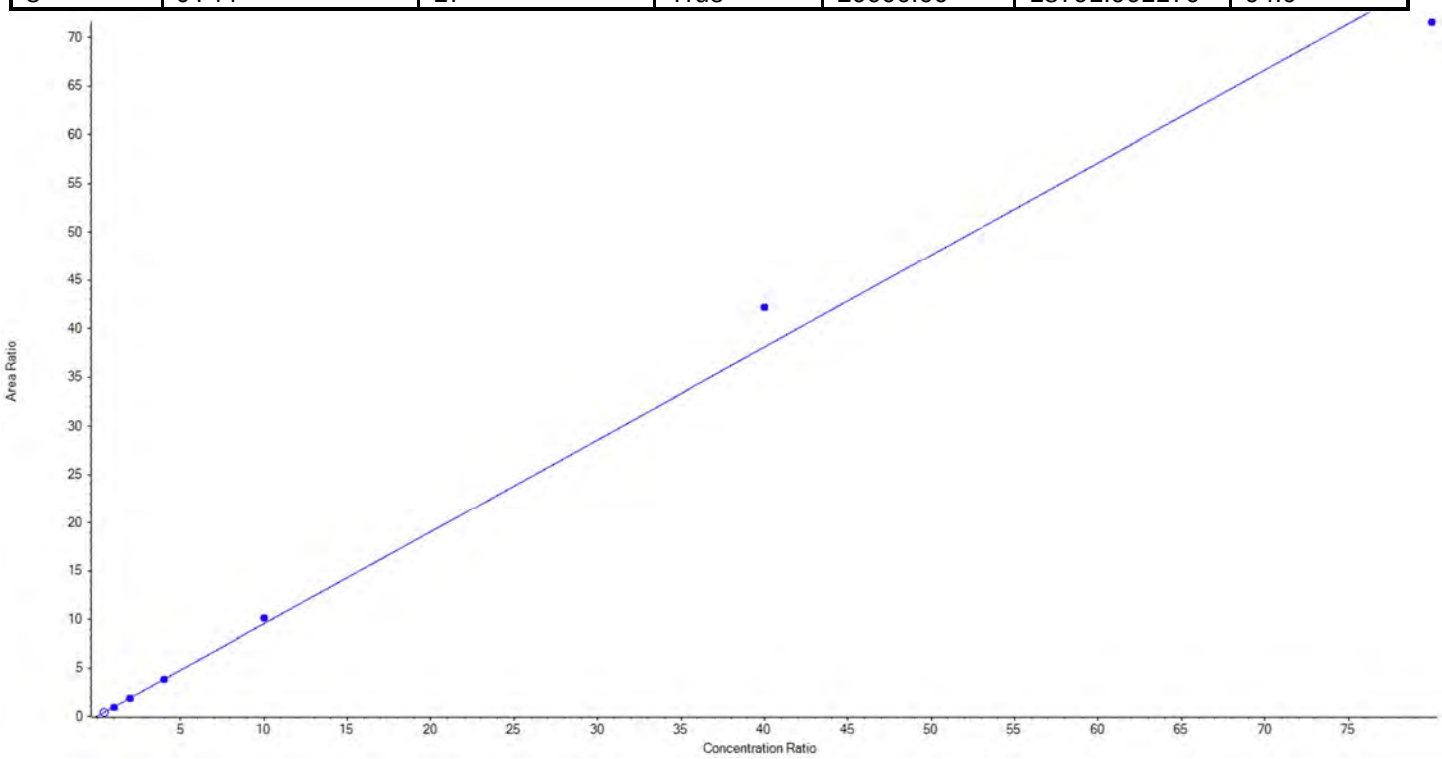
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFDoA_1	**Data File**	18-0502.wiff
MRM Transition	613.0 / 569.0	**Result Table**	18-0497_BASE
Internal Standard	13C2-PFDoA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.95215 x + 0.00890 (r = 0.99657) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	98.469335	98.5
3	JY39	L2	True	250.00	229.598564	91.8
4	JY40	L3	True	500.00	486.565941	97.3
5	JY41	L4	True	1000.00	996.246656	99.6
6	JY42	L5	True	2500.00	2660.211269	106.4
7	JY43	L6	True	10000.00	11085.476401	110.9
8	JY44	L7	True	20000.00	18791.901170	94.0



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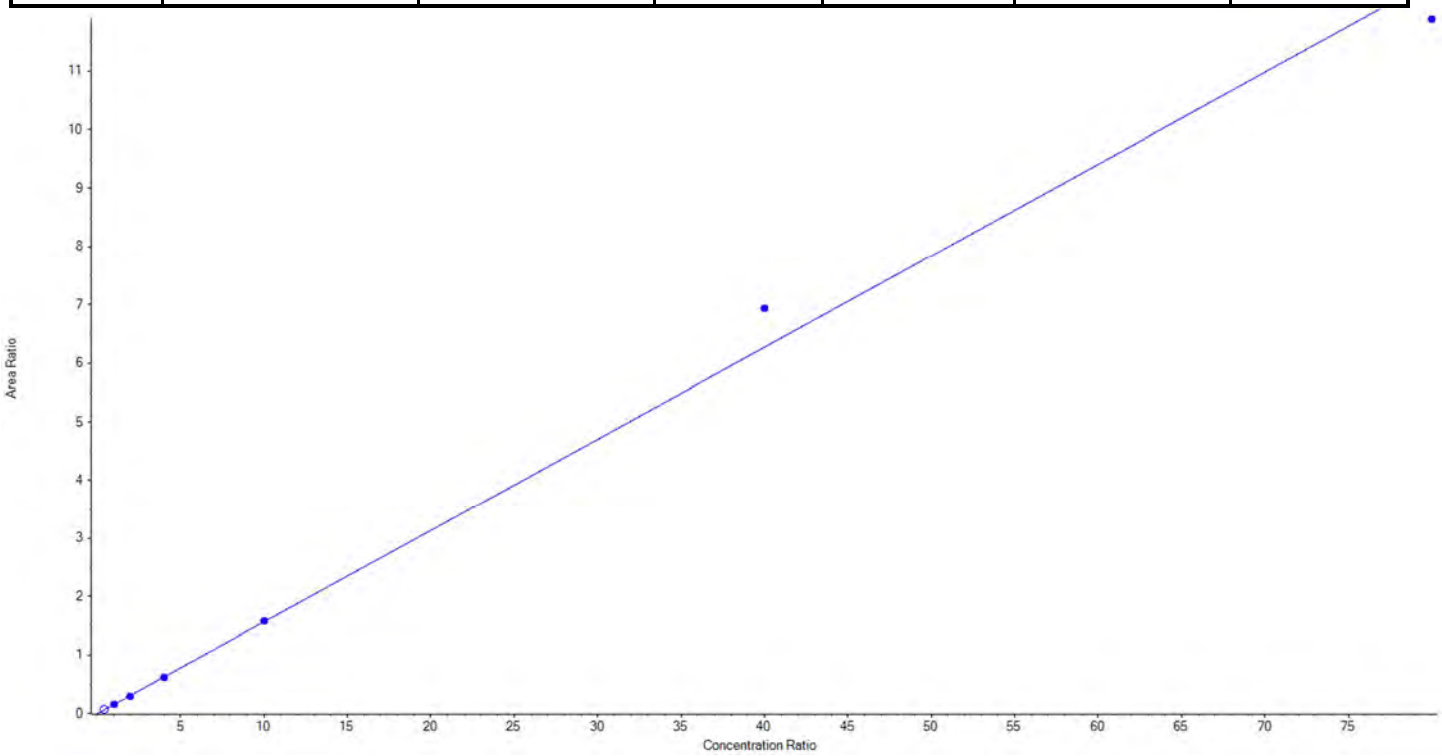
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFDoA_2	**Data File**	18-0502.wiff
MRM Transition	613.0 / 319.0	**Result Table**	18-0497_BASE
Internal Standard	13C2-PFDoA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.15690 x + -0.00622 (r = 0.99714) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	127.001464	127.0
3	JY39	L2	True	250.00	248.305177	99.3
4	JY40	L3	True	500.00	471.922918	94.4
5	JY41	L4	True	1000.00	996.920305	99.7
6	JY42	L5	True	2500.00	2532.911678	101.3
7	JY43	L6	True	10000.00	11057.029714	110.6
8	JY44	L7	True	20000.00	18942.910209	94.7



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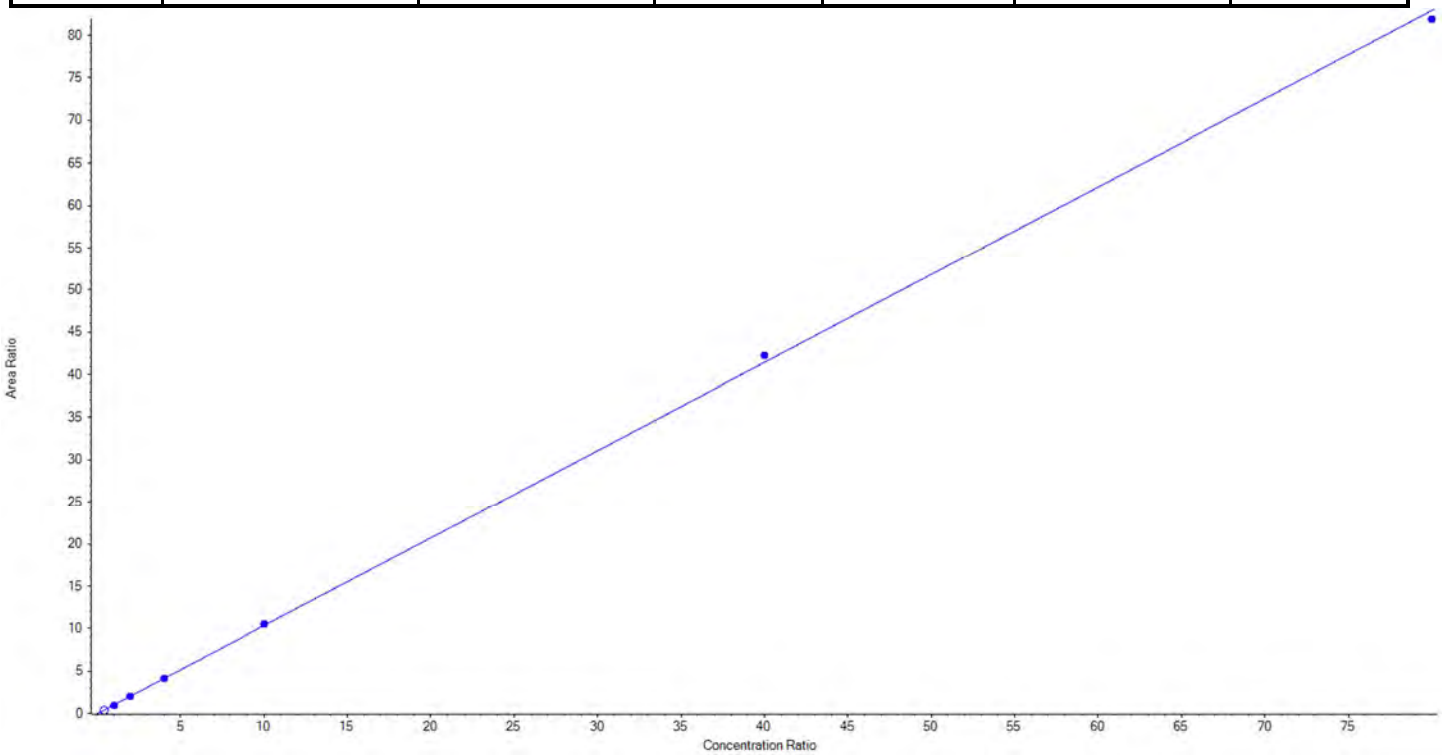
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFTrDA_1	**Data File**	18-0502.wiff
MRM Transition	663.0 / 619.0	**Result Table**	18-0497_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.03685 x + -0.03933 (r = 0.99985) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	106.979080	107.0
3	JY39	L2	True	250.00	249.851321	99.9
4	JY40	L3	True	500.00	482.162880	96.4
5	JY41	L4	True	1000.00	1008.070757	100.8
6	JY42	L5	True	2500.00	2549.785717	102.0
7	JY43	L6	True	10000.00	10205.548933	102.1
8	JY44	L7	True	20000.00	19754.580391	98.8



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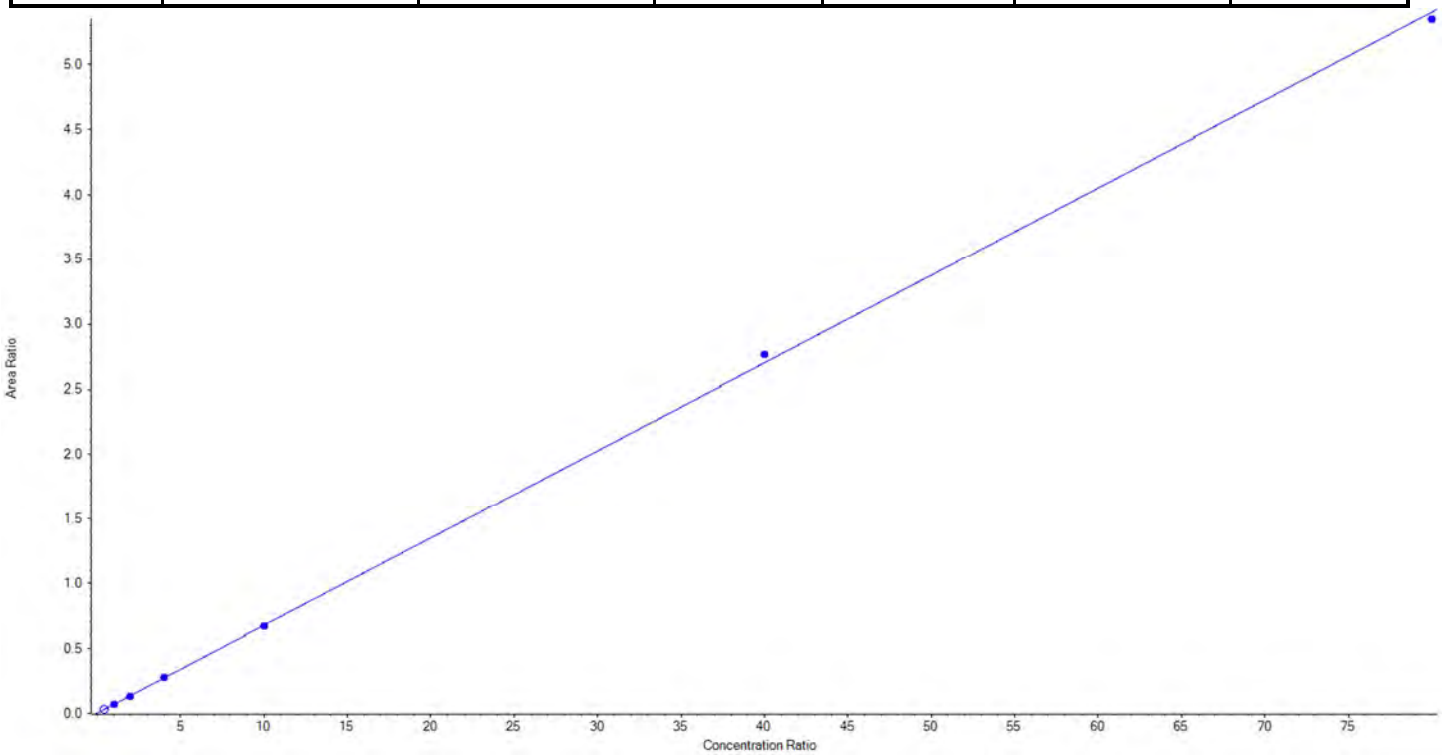
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFTrDA_2	**Data File**	18-0502.wiff
MRM Transition	663.0 / 169.0	**Result Table**	18-0497_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.06750 x + 0.00233 (r = 0.99982) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	104.444834	104.4
3	JY39	L2	True	250.00	260.890168	104.4
4	JY40	L3	True	500.00	467.862252	93.6
5	JY41	L4	True	1000.00	1018.888644	101.9
6	JY42	L5	True	2500.00	2471.917553	98.9
7	JY43	L6	True	10000.00	10230.741796	102.3
8	JY44	L7	True	20000.00	19799.699587	99.0



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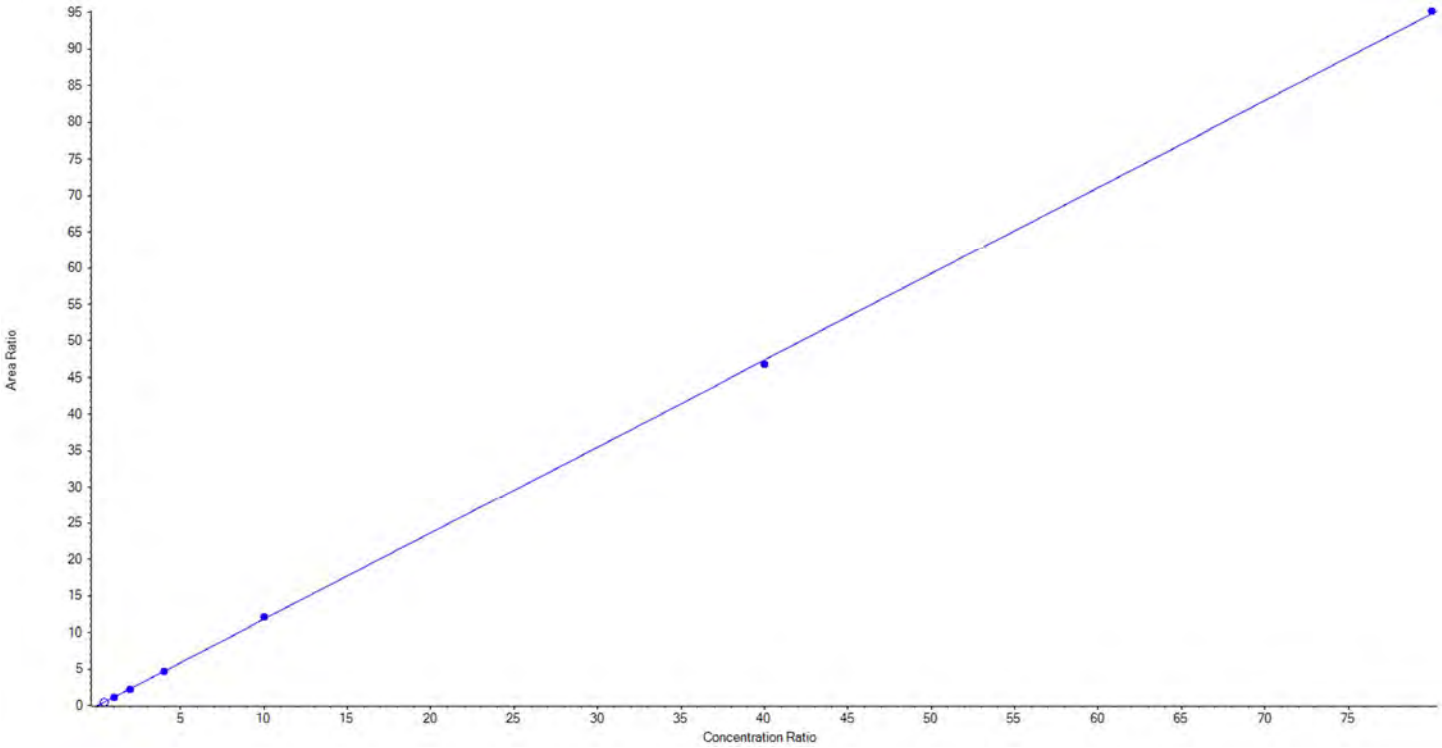
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFTeDA_1	**Data File**	18-0502.wiff
MRM Transition	713.0 / 669.0	**Result Table**	18-0497_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.18613 x + -0.06899 (r = 0.99991) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	108.059139	108.1
3	JY39	L2	True	250.00	256.069714	102.4
4	JY40	L3	True	500.00	478.569125	95.7
5	JY41	L4	True	1000.00	999.440227	99.9
6	JY42	L5	True	2500.00	2571.232448	102.9
7	JY43	L6	True	10000.00	9868.305221	98.7
8	JY44	L7	True	20000.00	20076.383264	100.4



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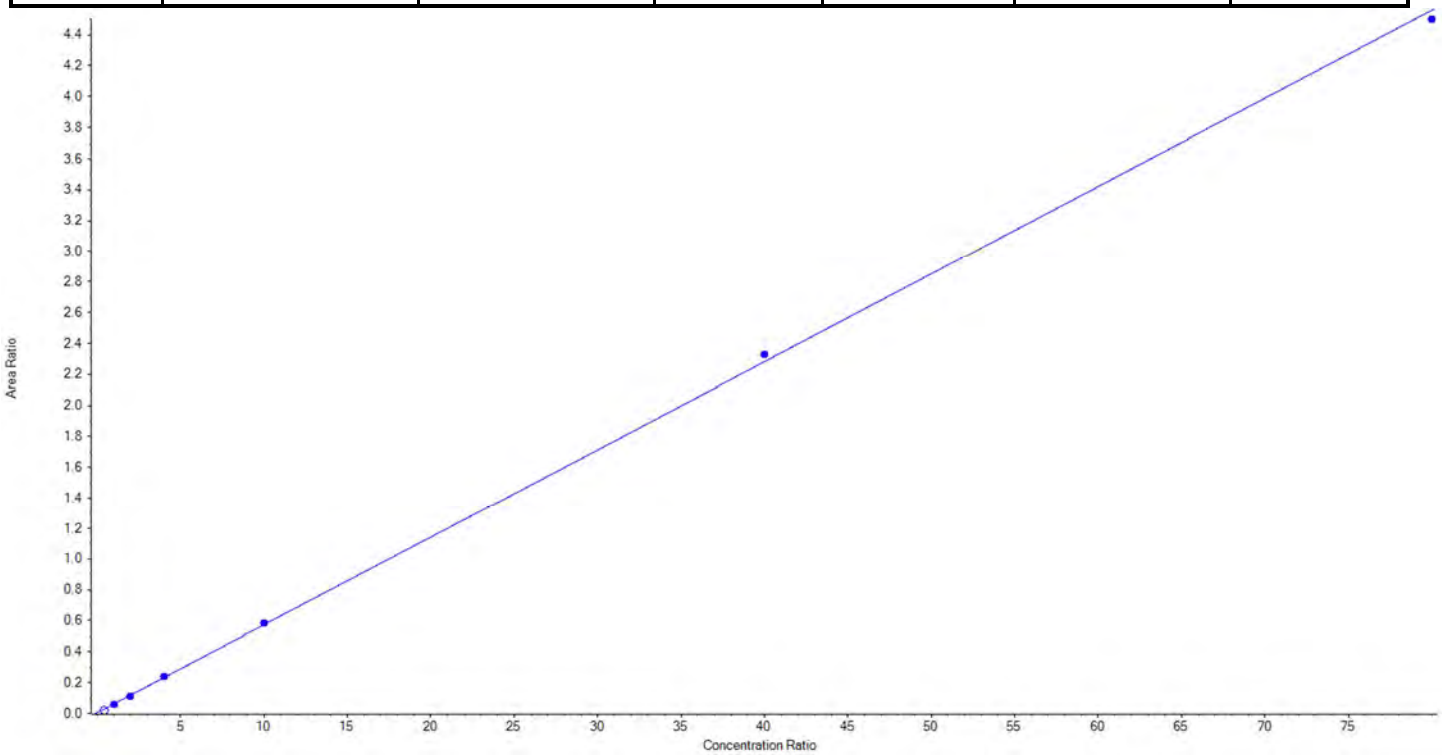
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	PFTeDA_2	**Data File**	18-0502.wiff
MRM Transition	713.0 / 169.0	**Result Table**	18-0497_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.05694 x + 0.00419 (r = 0.99981) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	76.854868	76.9
3	JY39	L2	True	250.00	245.476217	98.2
4	JY40	L3	True	500.00	474.931986	95.0
5	JY41	L4	True	1000.00	1042.553592	104.3
6	JY42	L5	True	2500.00	2547.305265	101.9
7	JY43	L6	True	10000.00	10195.376311	102.0
8	JY44	L7	True	20000.00	19744.356629	98.7



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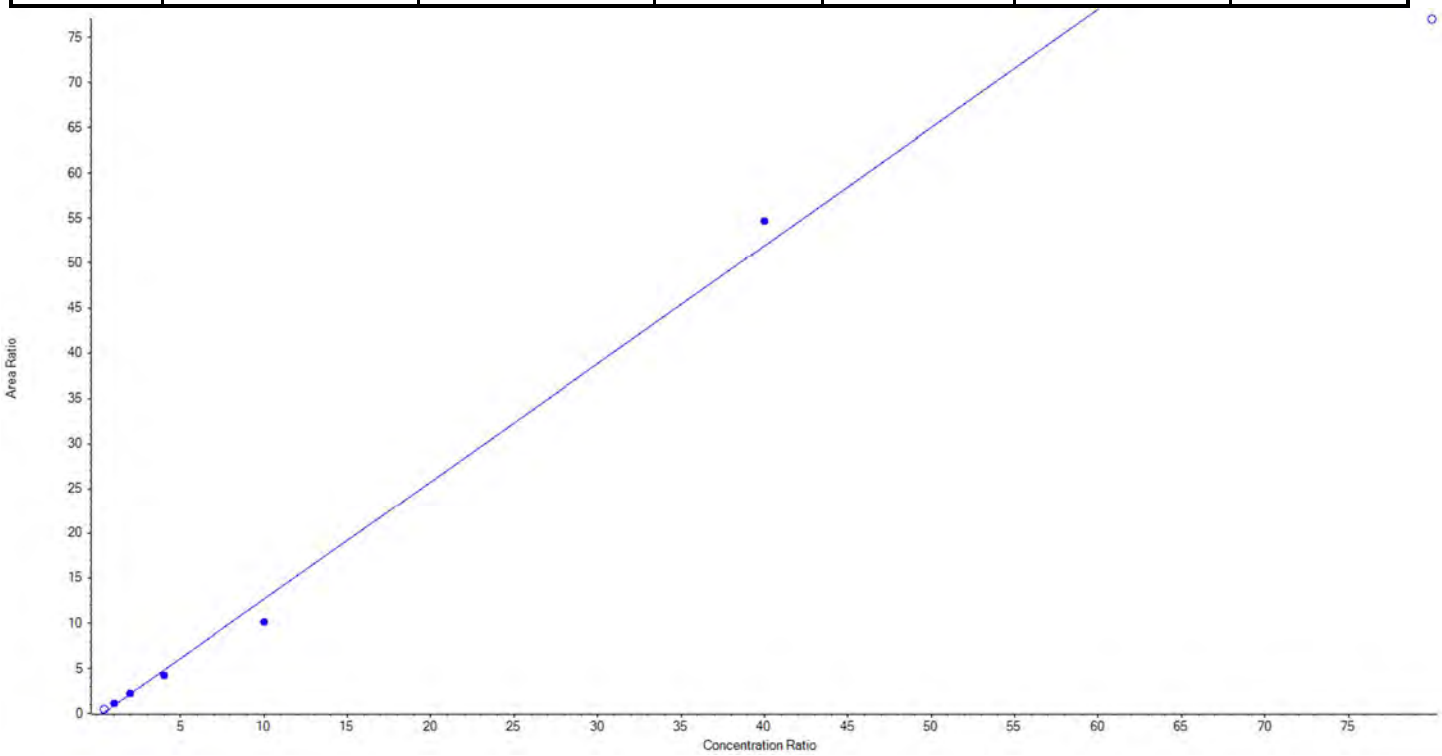
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	NMeFOSAA_1	**Data File**	18-0502.wiff
MRM Transition	570.0 / 419.0	**Result Table**	18-0497_BASE
Internal Standard	d3-MeFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.30958 x + -0.44777 (r = 0.99350) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	170.737902	170.7
3	JY39	L2	True	250.00	306.062837	122.4
4	JY40	L3	True	500.00	512.508677	102.5
5	JY41	L4	True	1000.00	889.954348	89.0
6	JY42	L5	True	2500.00	2022.098451	80.9
7	JY43	L6	True	10000.00	10519.375687	105.2
8	JY44	L7	False	20000.00	14788.044041	73.9



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Calibration Summary Report

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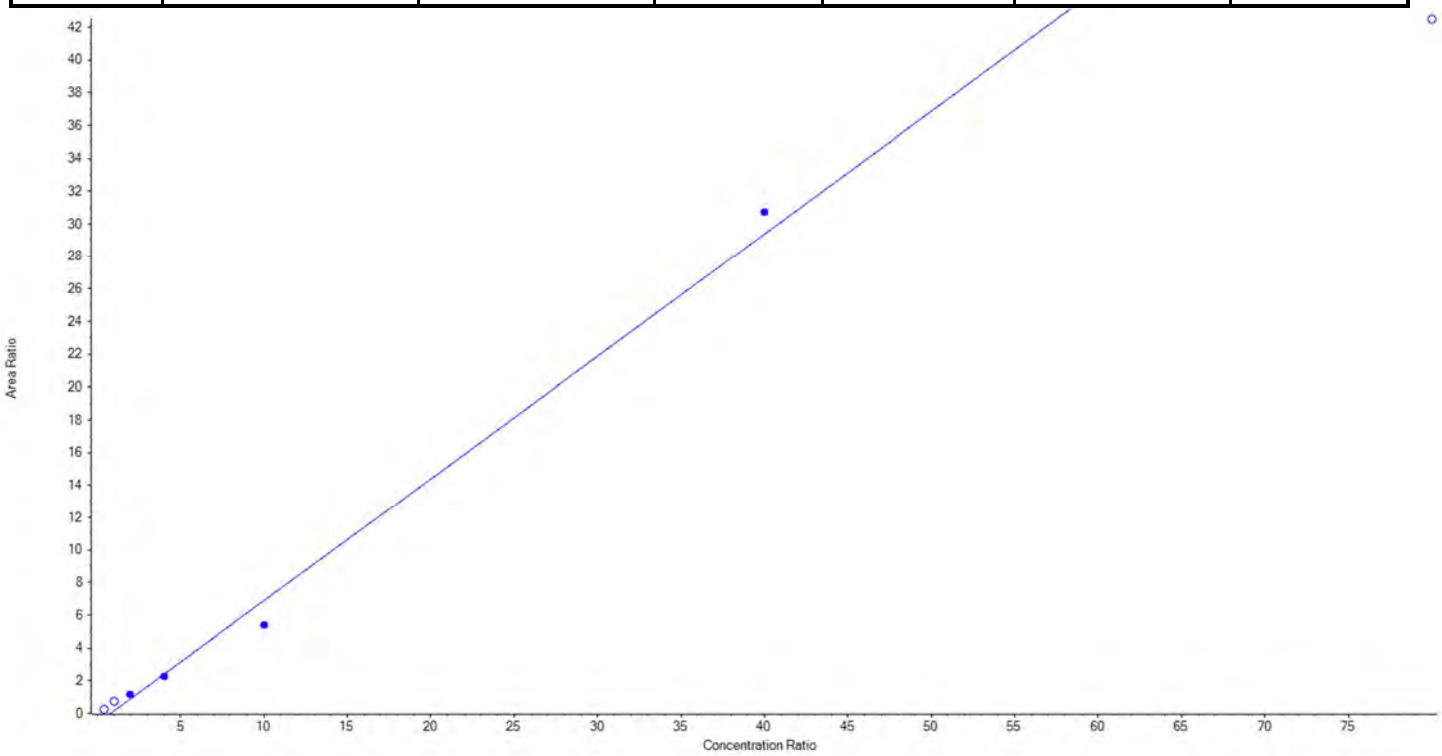
Printed: 29/08/2018 9:40:07 AM

Analyte Name	NMeFOSAA_2	**Data File**	18-0502.wiff
MRM Transition	570.0 / 512.0	**Result Table**	18-0497_BASE
Internal Standard	d3-MeFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.74965 x + -0.60585 (r = 0.99259) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	290.976974	291.0
3	JY39	L2	False	250.00	441.012037	176.4
4	JY40	L3	True	500.00	598.474341	119.7
5	JY41	L4	True	1000.00	959.174852	95.9
6	JY42	L5	True	2500.00	1998.804617	80.0
7	JY43	L6	True	10000.00	10443.546189	104.4
8	JY44	L7	False	20000.00	14374.449053	71.9



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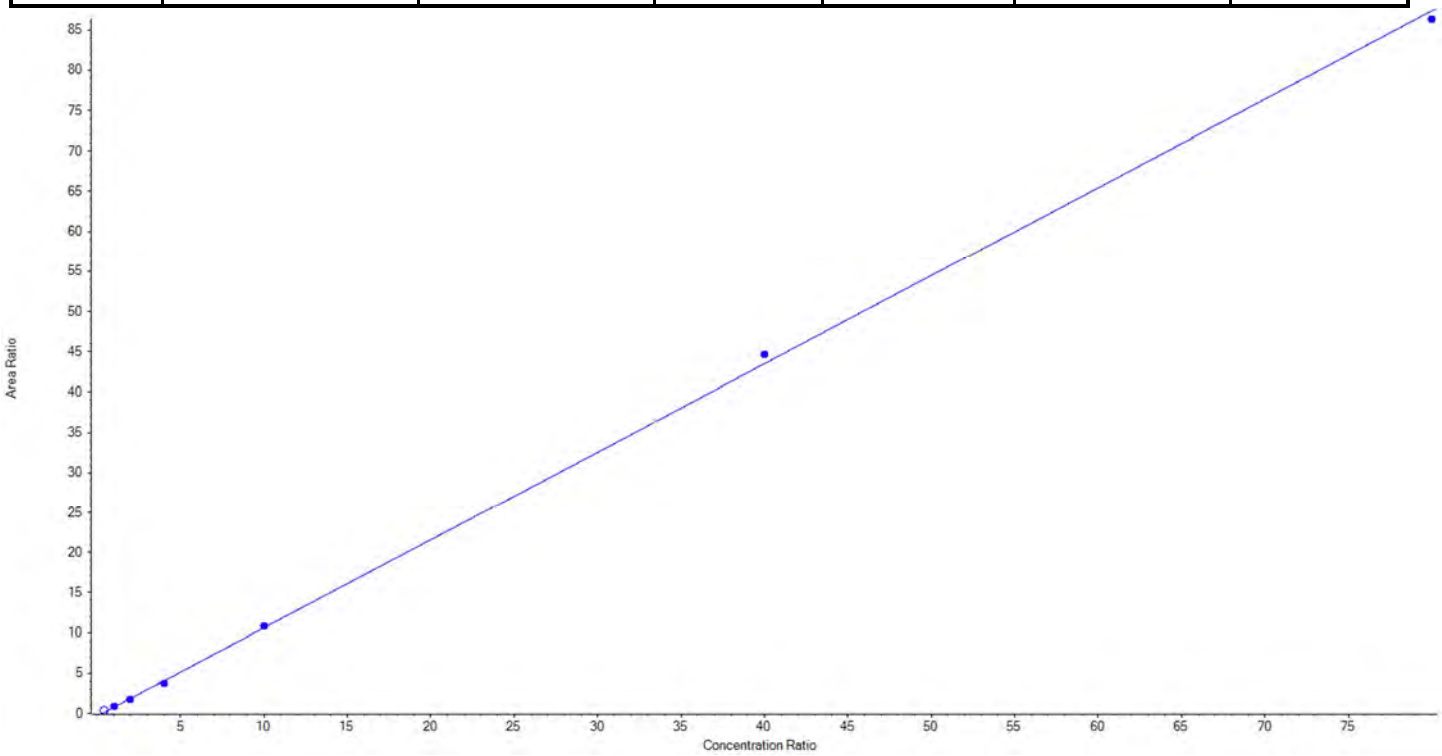
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:40:07 AM

Analyte Name	NEtFOSAA_1	**Data File**	18-0502.wiff
MRM Transition	584.0 / 419.0	**Result Table**	18-0497_BASE
Internal Standard	d5-EtFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.09631 x + -0.34163 (r = 0.99969) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	163.169684	163.2
3	JY39	L2	True	250.00	267.523858	107.0
4	JY40	L3	True	500.00	484.385121	96.9
5	JY41	L4	True	1000.00	924.336446	92.4
6	JY42	L5	True	2500.00	2558.422693	102.3
7	JY43	L6	True	10000.00	10253.244148	102.5
8	JY44	L7	True	20000.00	19762.087734	98.8



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Calibration Summary Report

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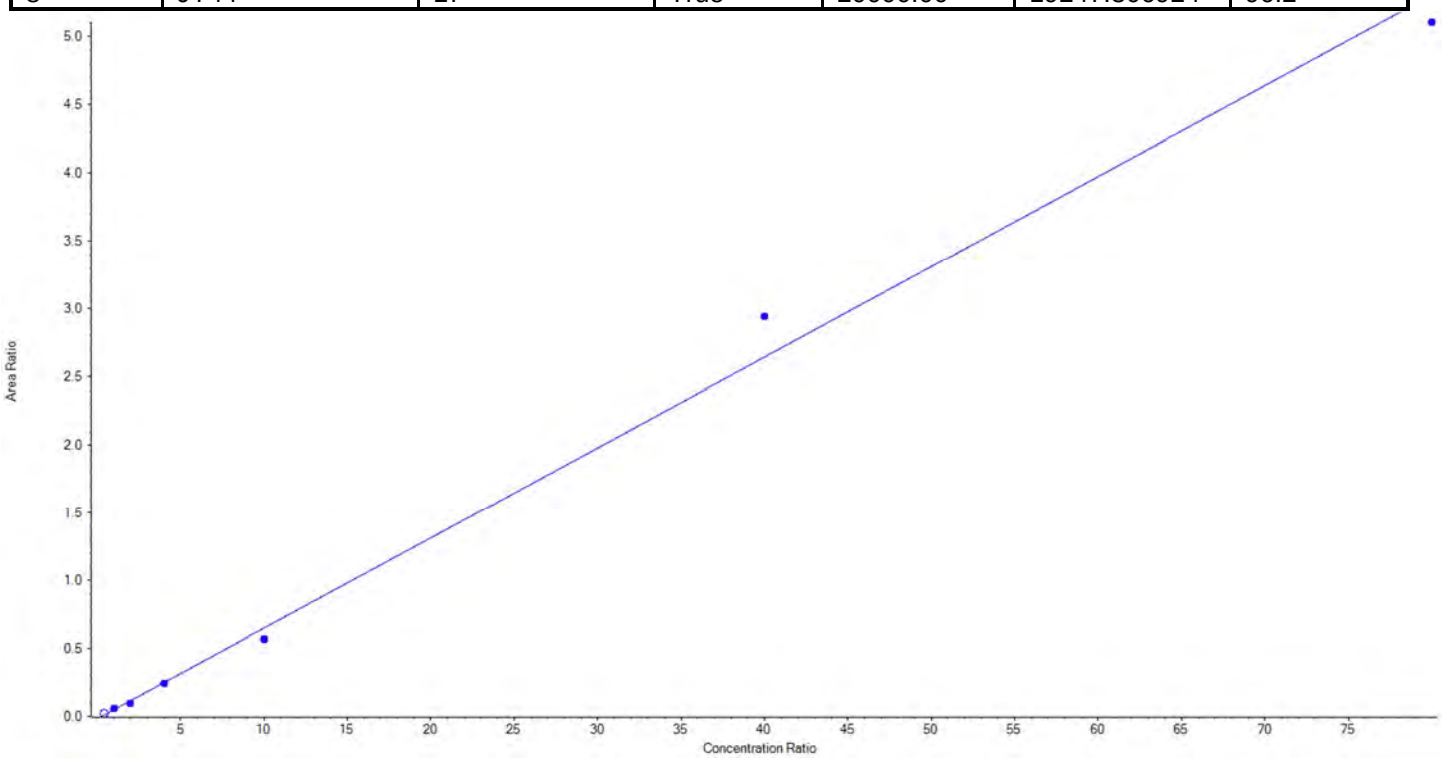
Analyte Name	NEtFOSAA_2	**Data File**	18-0502.wiff
MRM Transition	584.0 / 483.0	**Result Table**	18-0497_BASE
Internal Standard	d5-EtFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.06656 x + -0.01795 (r = 0.99643) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	158.049742	158.1
3	JY39	L2	True	250.00	302.102110	120.8
4	JY40	L3	True	500.00	438.958176	87.8
5	JY41	L4	True	1000.00	967.149387	96.7
6	JY42	L5	True	2500.00	2182.373775	87.3
7	JY43	L6	True	10000.00	11112.109627	111.1
8	JY44	L7	True	20000.00	19247.306924	96.2



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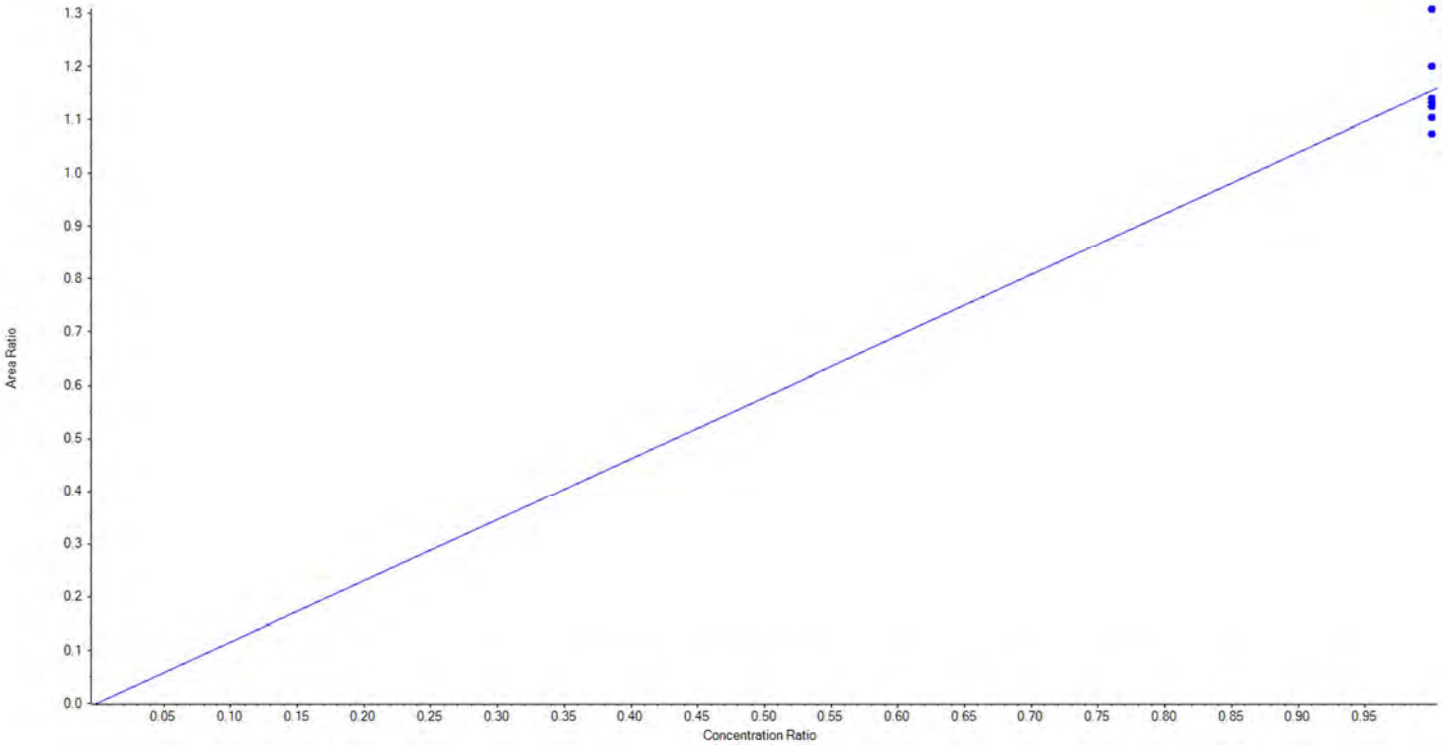
Calibration Summary Report

Analyte Name	13C2-PFDoA	**Data File**	18-0502.wiff
MRM Transition	615.0 / 570.0	**Result Table**	18-0497_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.15452 x (std. dev. = 0.07777) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	232.468530	93.0
3	JY39	L2	True	250.00	246.843878	98.7
4	JY40	L3	True	250.00	259.934077	104.0
5	JY41	L4	True	250.00	243.415350	97.4
6	JY42	L5	True	250.00	245.337790	98.1
7	JY43	L6	True	250.00	238.881144	95.6
8	JY44	L7	True	250.00	283.119231	113.3



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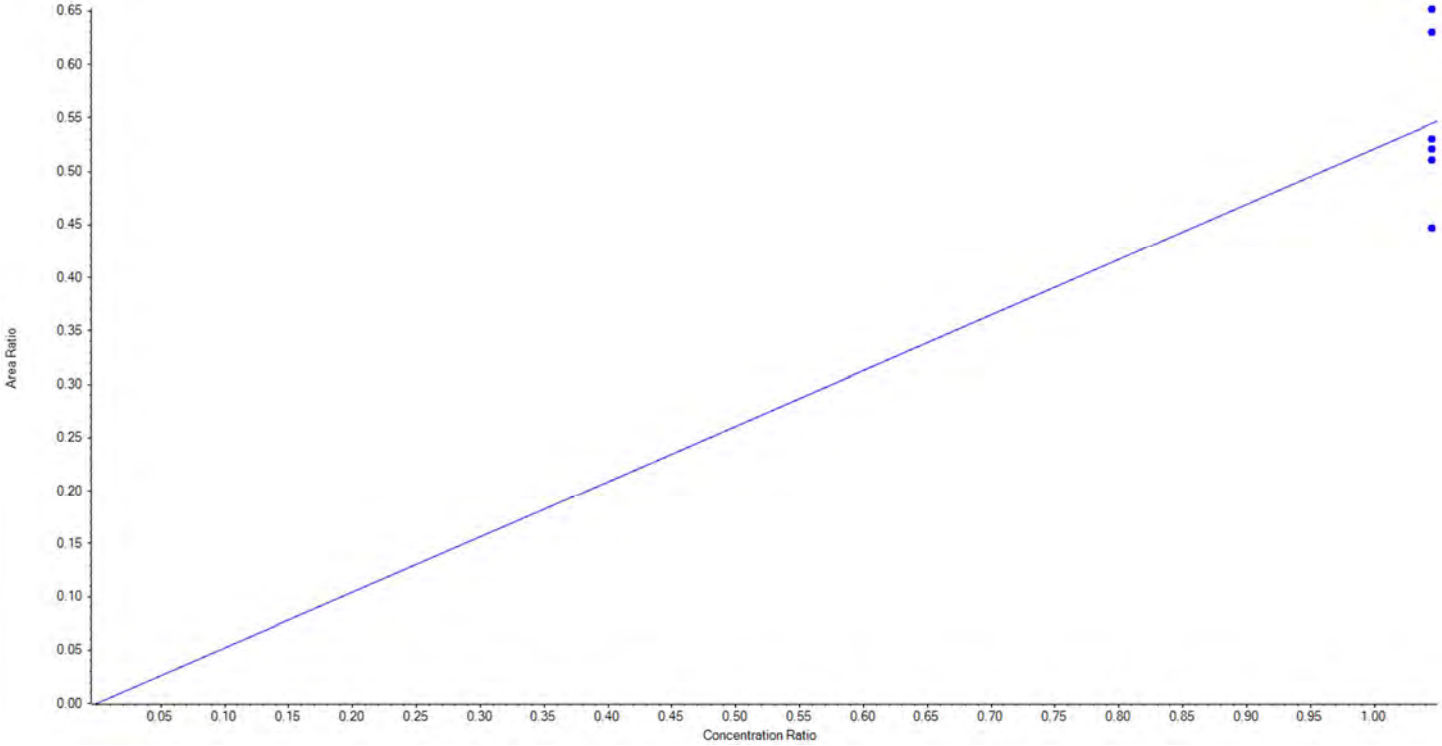
Printed: 27/08/2018 11:34:30 AM

Calibration Summary Report

Analyte Name	d3-MeFOSAA	**Data File**	18-0502.wiff
MRM Transition	573.0 / 419.0	**Result Table**	18-0497_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.52126 x (std. dev. = 0.06855) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	243.495270	97.4
3	JY39	L2	True	250.00	234.649166	93.9
4	JY40	L3	True	250.00	239.233555	95.7
5	JY41	L4	True	250.00	239.223813	95.7
6	JY42	L5	True	250.00	299.109861	119.6
7	JY43	L6	True	250.00	205.028621	82.0
8	JY44	L7	True	250.00	289.259715	115.7



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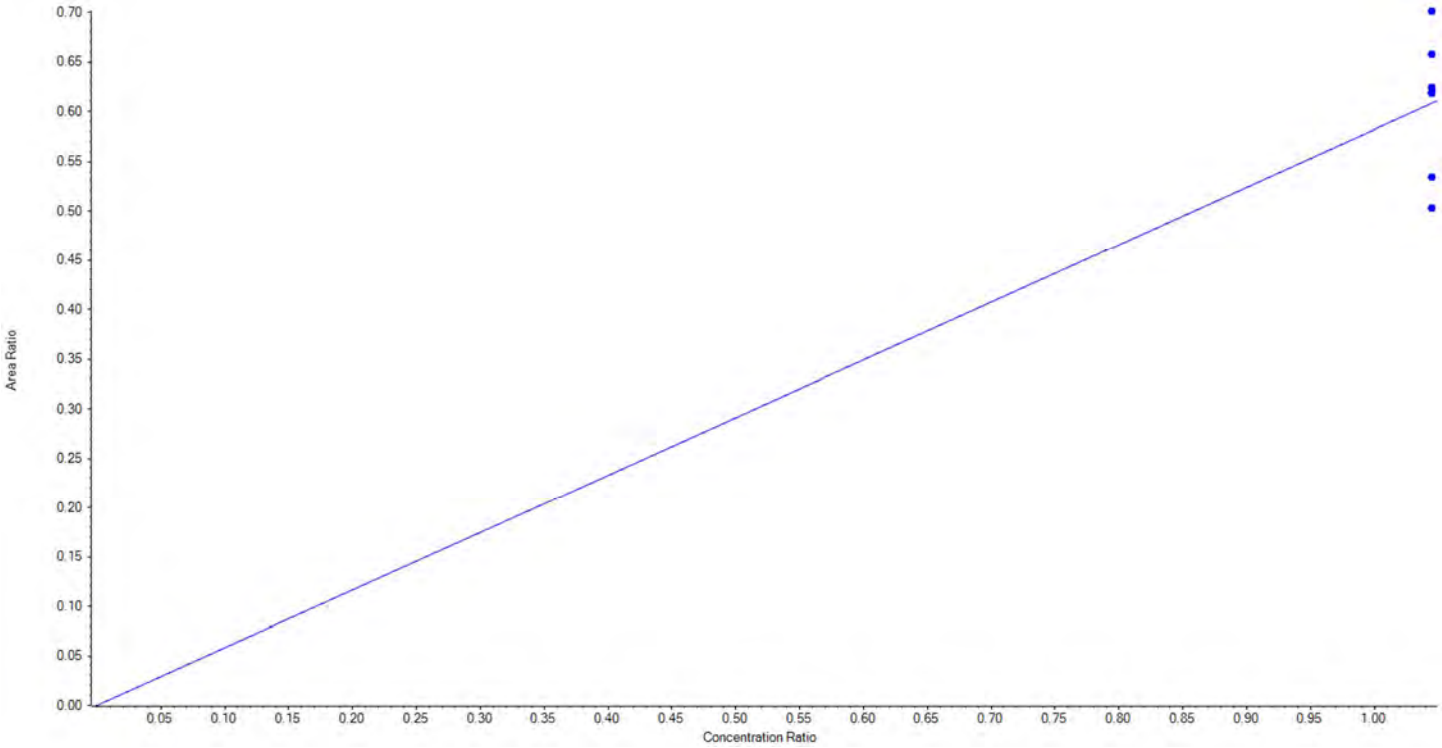
Calibration Summary Report

Analyte Name	d5-EtFOSAA	**Data File**	18-0502.wiff
MRM Transition	589.0 / 419.0	**Result Table**	18-0497_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.58218 x (std. dev. = 0.06542) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	270.156457	108.1
3	JY39	L2	True	250.00	256.700505	102.7
4	JY40	L3	True	250.00	288.145666	115.3
5	JY41	L4	True	250.00	253.999502	101.6
6	JY42	L5	True	250.00	254.585798	101.8
7	JY43	L6	True	250.00	206.737800	82.7
8	JY44	L7	True	250.00	219.674272	87.9



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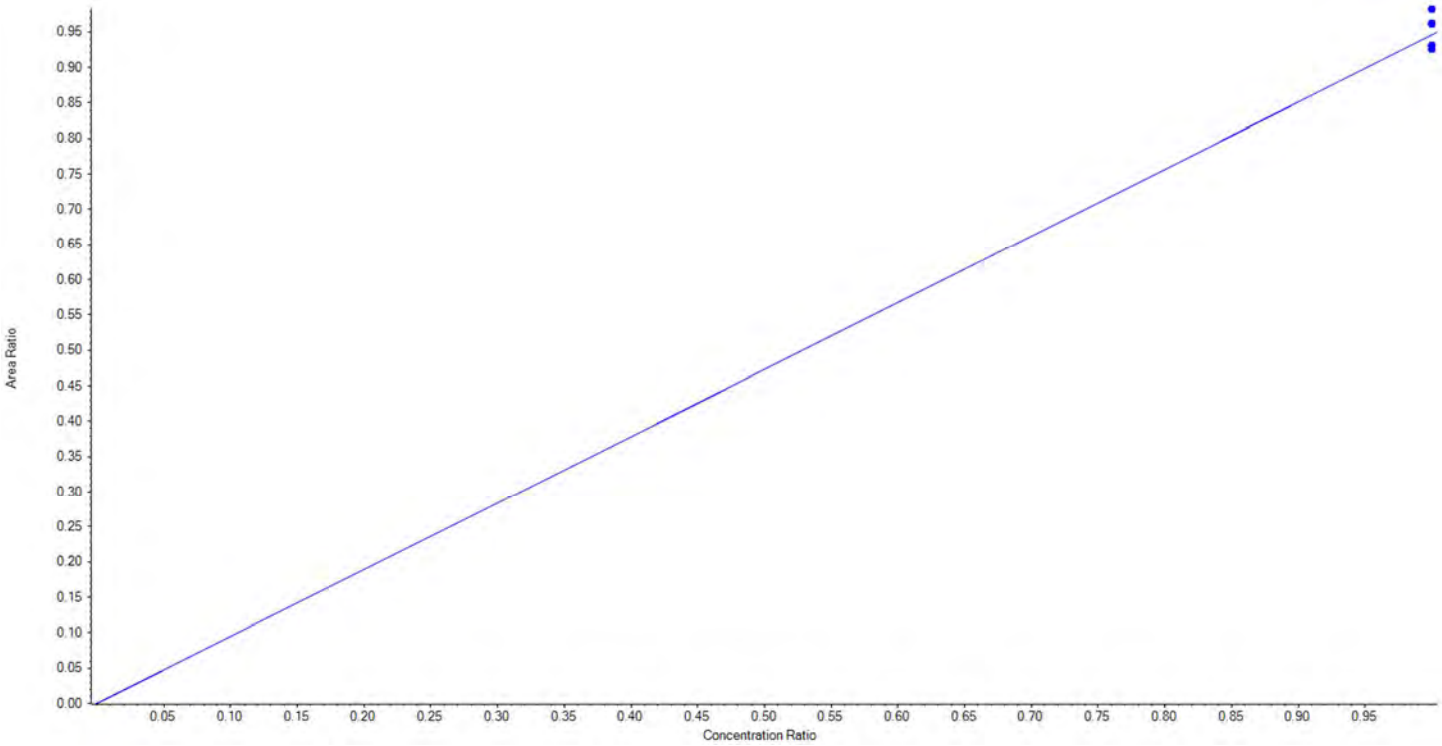
Calibration Summary Report

Analyte Name	13C5-PFHxA	**Data File**	18-0502.wiff
MRM Transition	318.0 / 273.0	**Result Table**	18-0497_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.94579 x (std. dev. = 0.02227) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	244.563162	97.8
3	JY39	L2	True	250.00	245.643769	98.3
4	JY40	L3	True	250.00	245.648453	98.3
5	JY41	L4	True	250.00	259.657644	103.9
6	JY42	L5	True	250.00	253.910055	101.6
7	JY43	L6	True	250.00	246.307339	98.5
8	JY44	L7	True	250.00	254.269578	101.7



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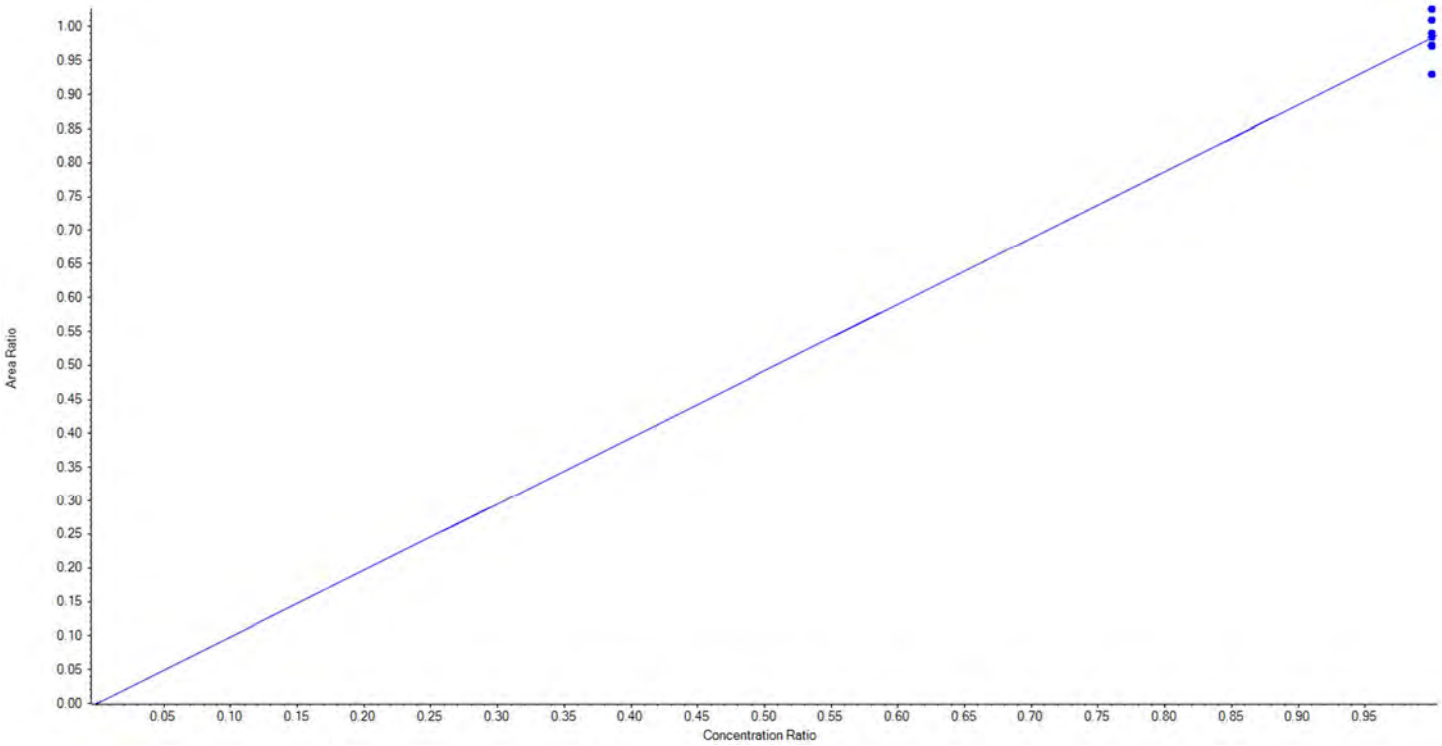
Calibration Summary Report

Analyte Name	13C4-PFHpA	**Data File**	18-0502.wiff
MRM Transition	367.0 / 322.0	**Result Table**	18-0497_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.98343 x (std. dev. = 0.03094) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	260.785731	104.3
3	JY39	L2	True	250.00	250.178607	100.1
4	JY40	L3	True	250.00	247.017316	98.8
5	JY41	L4	True	250.00	251.652024	100.7
6	JY42	L5	True	250.00	236.218506	94.5
7	JY43	L6	True	250.00	247.344117	98.9
8	JY44	L7	True	250.00	256.803699	102.7



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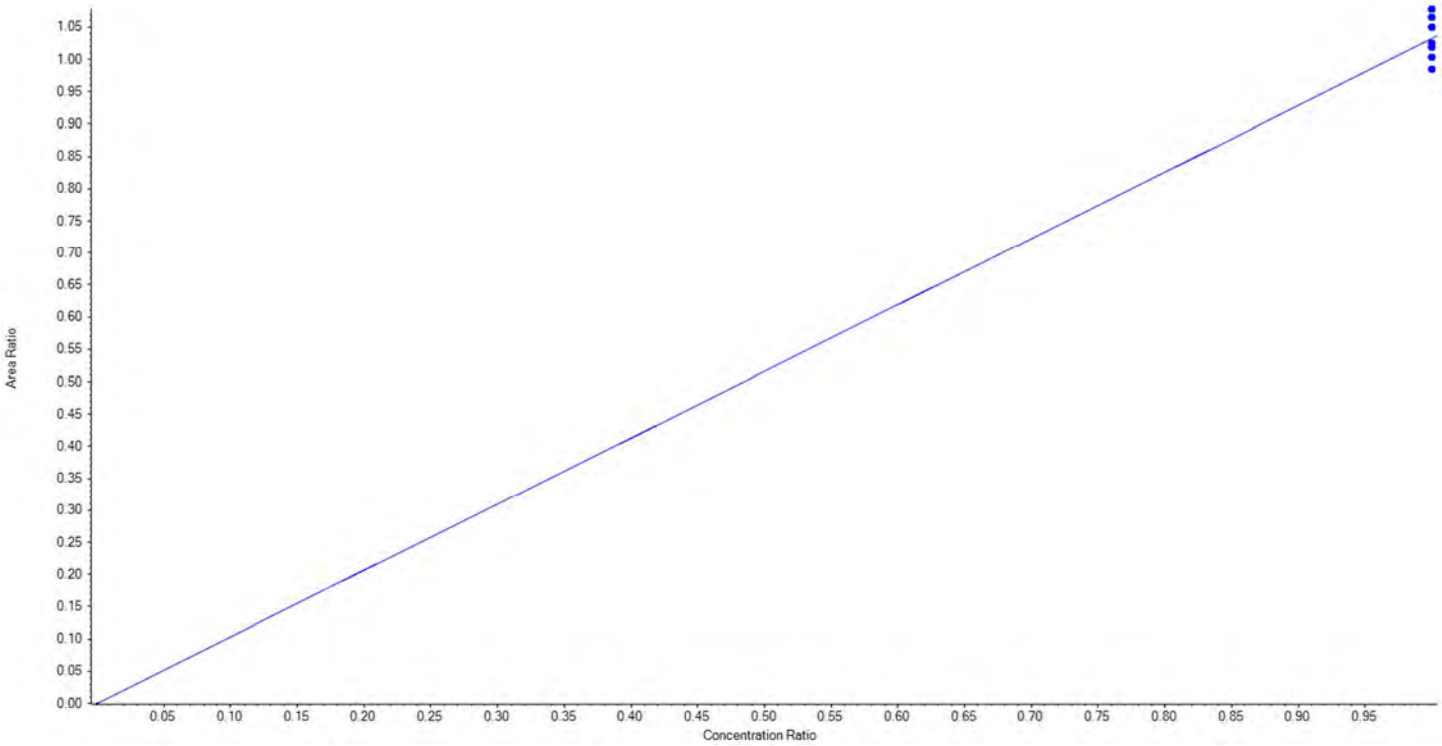
Calibration Summary Report

Analyte Name	13C8-PFOA	**Data File**	18-0502.wiff
MRM Transition	421.0 / 376.0	**Result Table**	18-0497_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.03181 x (std. dev. = 0.03370) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	243.162875	97.3
3	JY39	L2	True	250.00	258.230127	103.3
4	JY40	L3	True	250.00	246.762135	98.7
5	JY41	L4	True	250.00	261.058828	104.4
6	JY42	L5	True	250.00	254.159348	101.7
7	JY43	L6	True	250.00	238.511554	95.4
8	JY44	L7	True	250.00	248.115132	99.3



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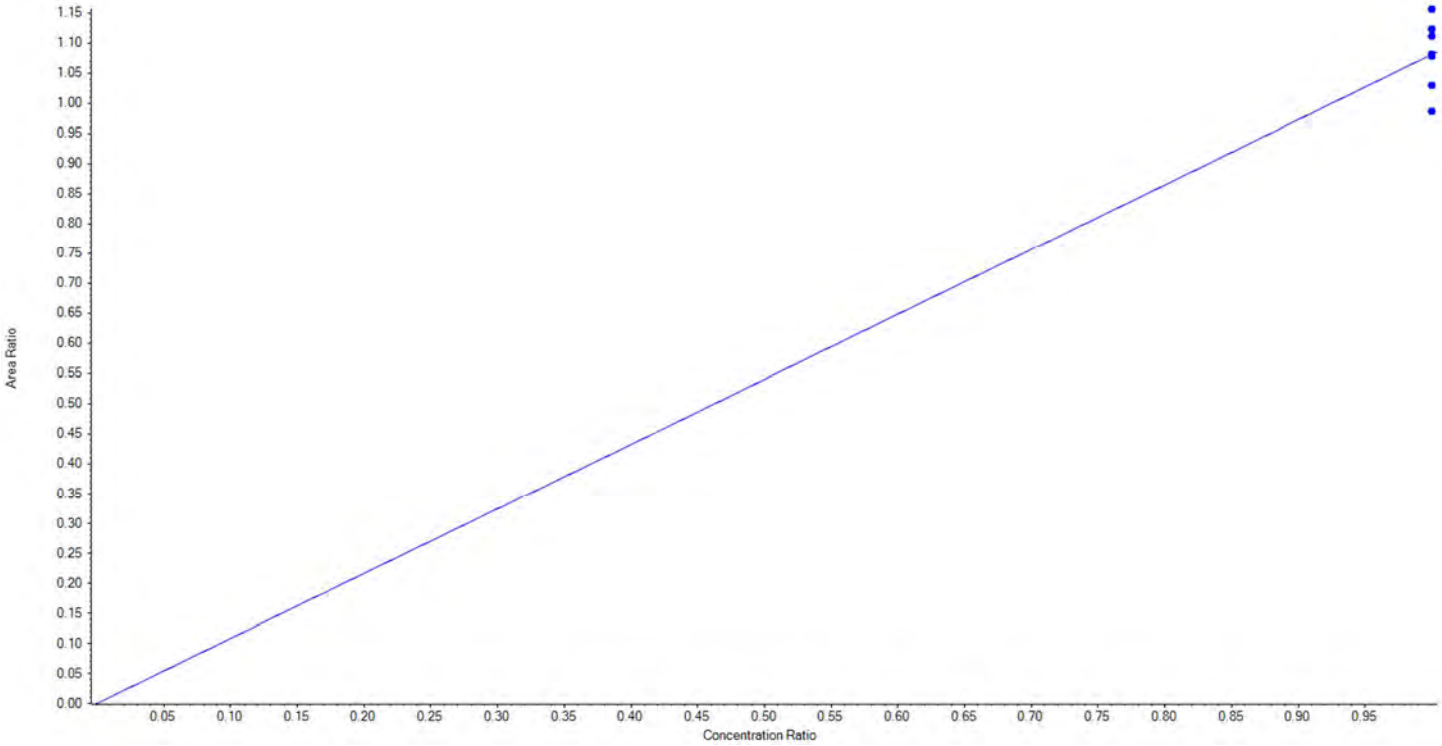
Calibration Summary Report

Analyte Name	13C9-PFNA	**Data File**	18-0502.wiff
MRM Transition	472.0 / 427.0	**Result Table**	18-0497_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.08070 x (std. dev. = 0.05768) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	237.955874	95.2
3	JY39	L2	True	250.00	257.200840	102.9
4	JY40	L3	True	250.00	267.422375	107.0
5	JY41	L4	True	250.00	259.824973	103.9
6	JY42	L5	True	250.00	250.105945	100.0
7	JY43	L6	True	250.00	228.306558	91.3
8	JY44	L7	True	250.00	249.183434	99.7



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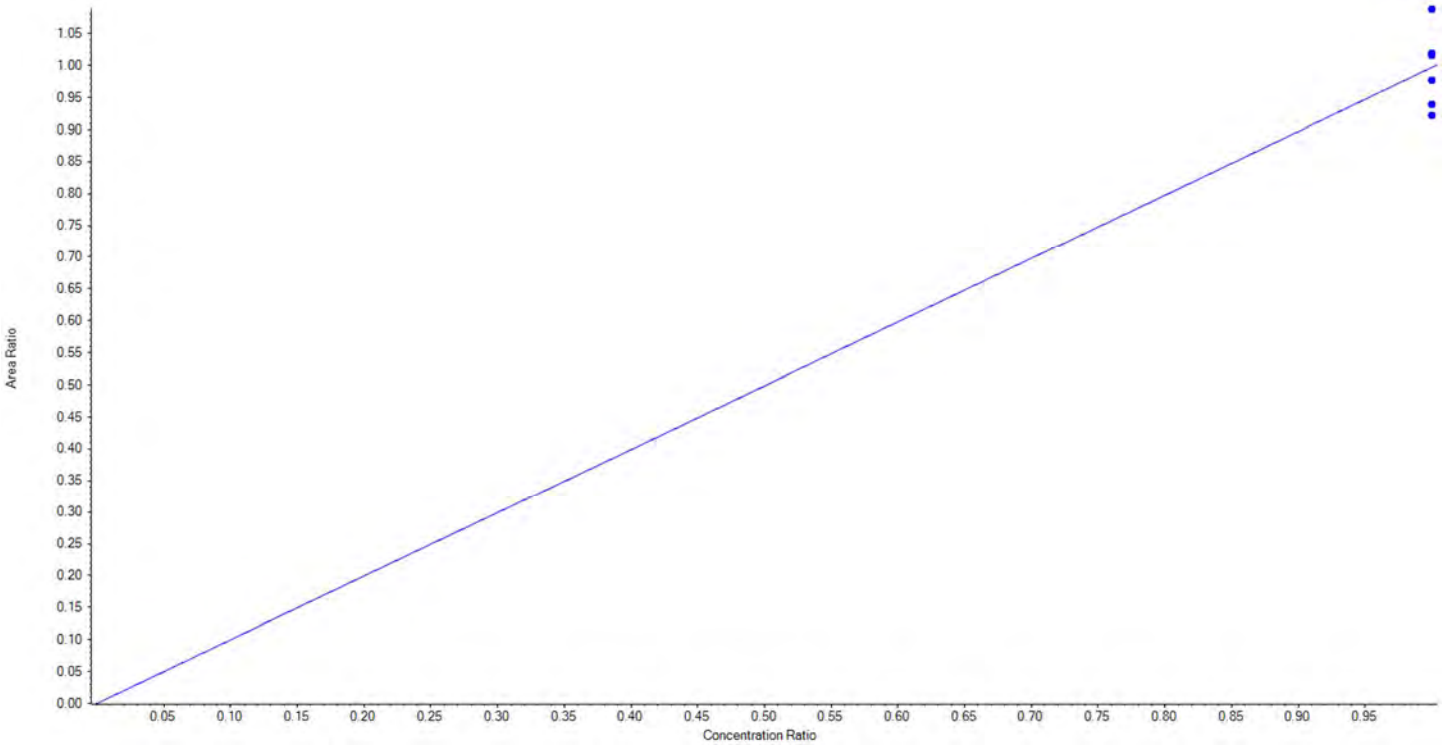
Calibration Summary Report

Analyte Name	13C6-PFDA	**Data File**	18-0502.wiff
MRM Transition	519.0 / 474.0	**Result Table**	18-0497_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.99684 x (std. dev. = 0.05637) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	254.855381	101.9
3	JY39	L2	True	250.00	255.441557	102.2
4	JY40	L3	True	250.00	272.851021	109.1
5	JY41	L4	True	250.00	244.783883	97.9
6	JY42	L5	True	250.00	255.430332	102.2
7	JY43	L6	True	250.00	235.634353	94.3
8	JY44	L7	True	250.00	231.003473	92.4



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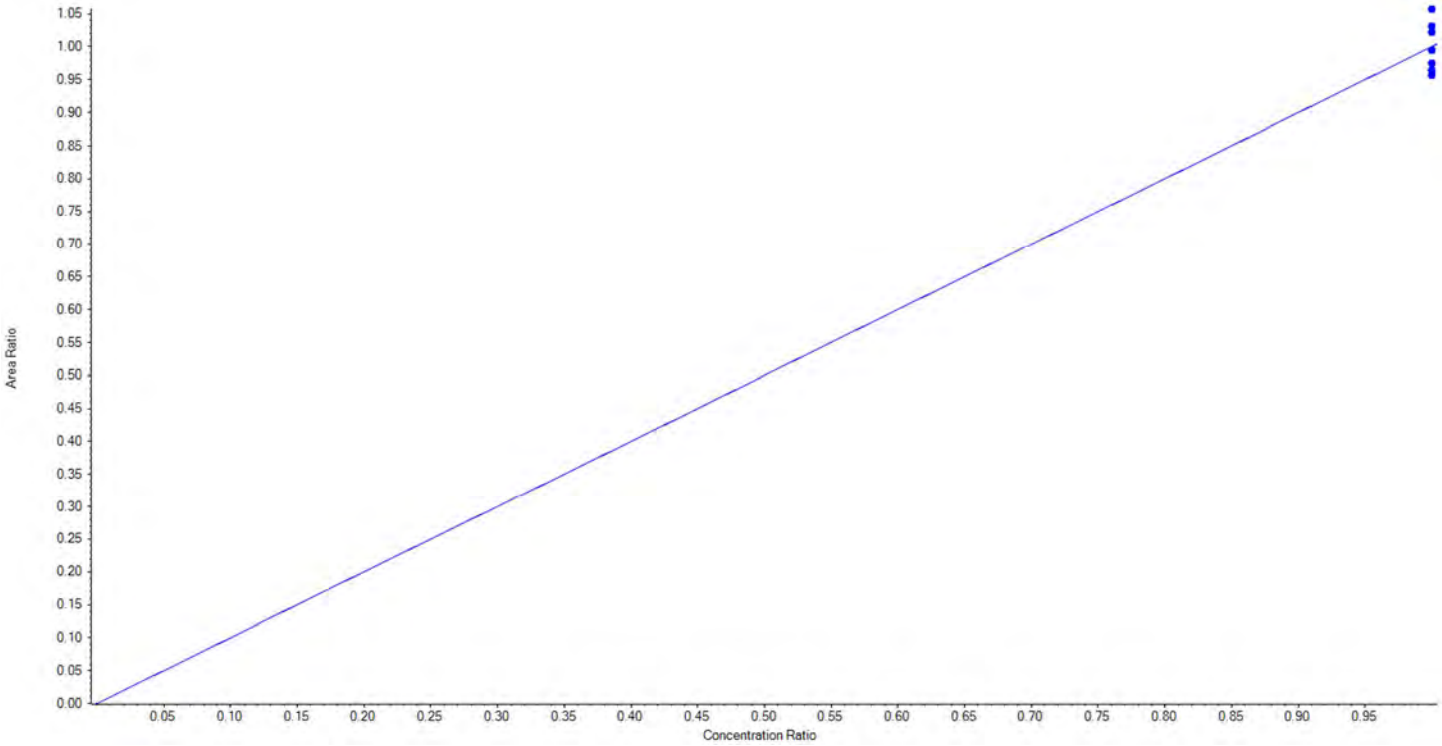
Calibration Summary Report

Analyte Name	13C7-PFUnA	**Data File**	18-0502.wiff
MRM Transition	570.0 / 525.0	**Result Table**	18-0497_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.99997 x (std. dev. = 0.03766) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	257.663215	103.1
3	JY39	L2	True	250.00	264.257810	105.7
4	JY40	L3	True	250.00	255.558158	102.2
5	JY41	L4	True	250.00	243.813014	97.5
6	JY42	L5	True	250.00	248.527911	99.4
7	JY43	L6	True	250.00	239.058066	95.6
8	JY44	L7	True	250.00	241.121826	96.5



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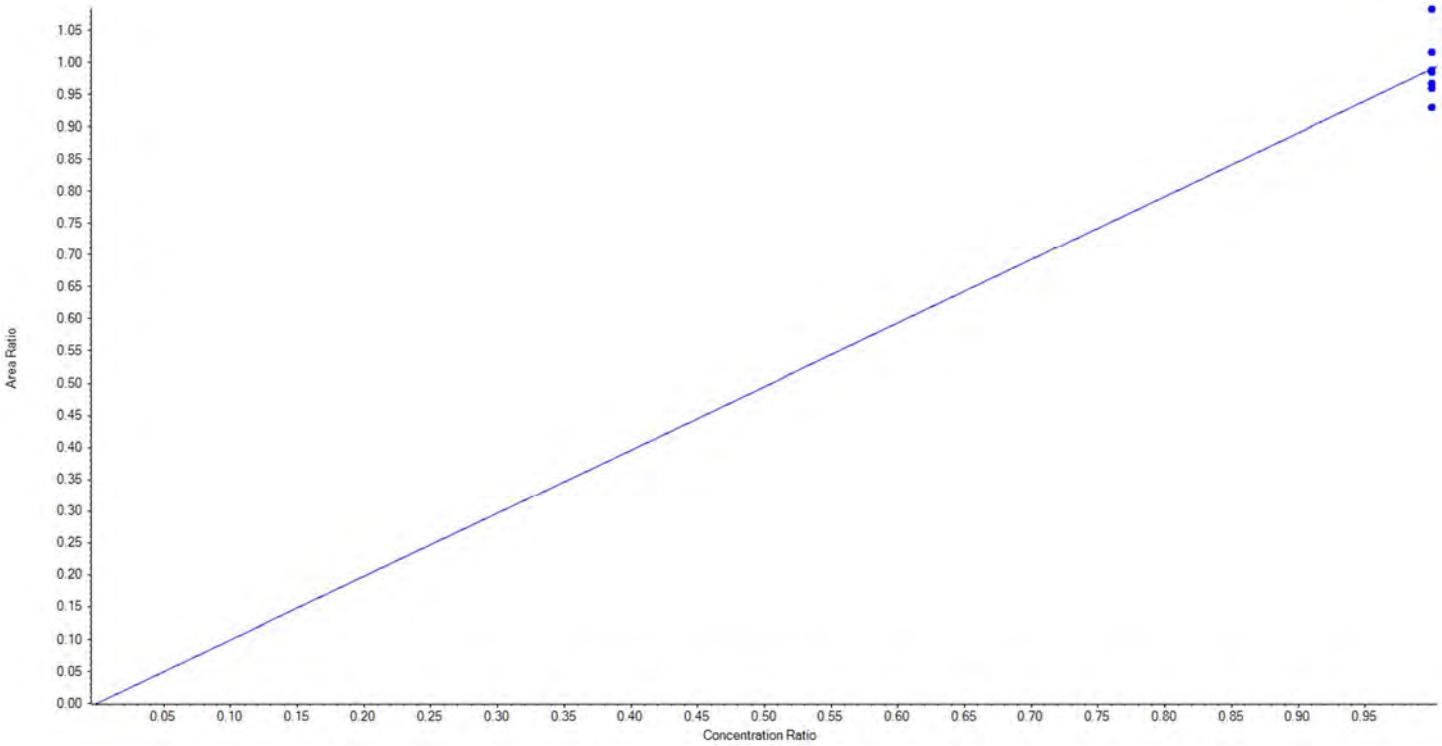
Calibration Summary Report

Analyte Name	13C2-PFTeDA	**Data File**	18-0502.wiff
MRM Transition	715.0 / 670.0	**Result Table**	18-0497_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.98957 x (std. dev. = 0.04903) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	244.302726	97.7
3	JY39	L2	True	250.00	242.246977	96.9
4	JY40	L3	True	250.00	256.652714	102.7
5	JY41	L4	True	250.00	234.882778	94.0
6	JY42	L5	True	250.00	248.807783	99.5
7	JY43	L6	True	250.00	249.579585	99.8
8	JY44	L7	True	250.00	273.527435	109.4



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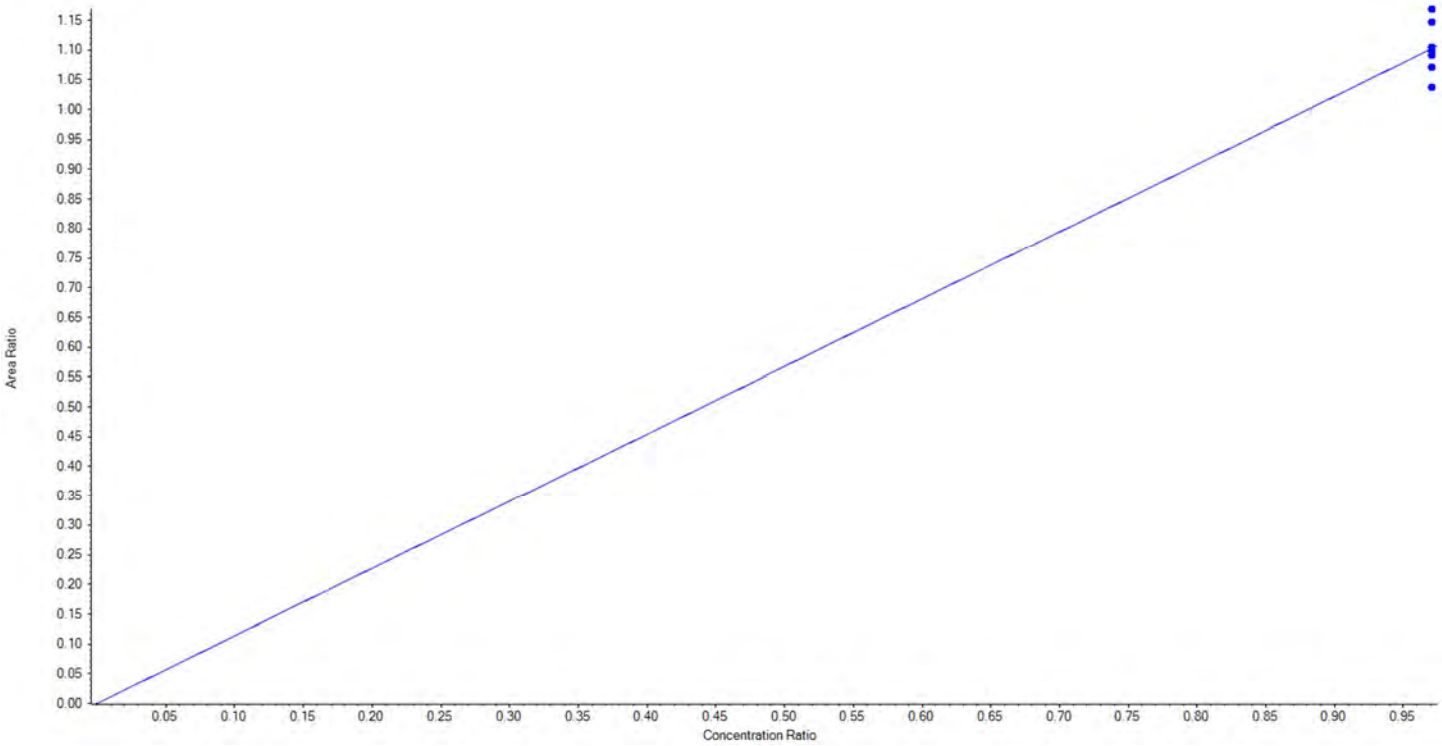
Calibration Summary Report

Analyte Name	13C3-PFBS	**Data File**	18-0502.wiff
MRM Transition	302.0 / 99.0	**Result Table**	18-0497_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.13540 x (std. dev. = 0.04546) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	232.25	218.580557	94.1
3	JY39	L2	True	232.25	241.471002	104.0
4	JY40	L3	True	232.25	229.920710	99.0
5	JY41	L4	True	232.25	231.465036	99.7
6	JY42	L5	True	232.25	246.227056	106.0
7	JY43	L6	True	232.25	225.504623	97.1
8	JY44	L7	True	232.25	232.581015	100.1



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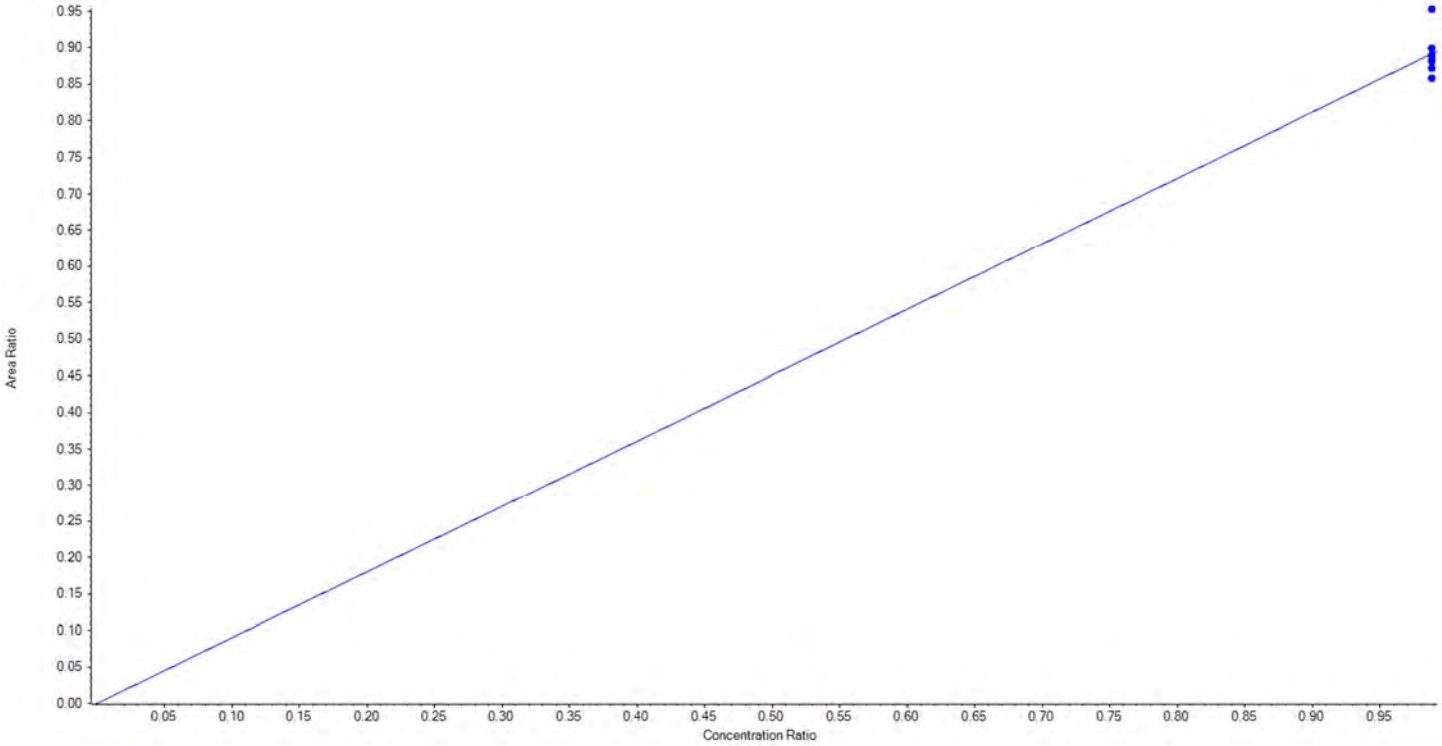
Calibration Summary Report

Analyte Name	13C3-PFHxS	**Data File**	18-0502.wiff
MRM Transition	402.0 / 99.0	**Result Table**	18-0497_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.90188 x (std. dev. = 0.03048) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	236.50	252.702607	106.9
3	JY39	L2	True	236.50	231.193842	97.8
4	JY40	L3	True	236.50	238.597597	100.9
5	JY41	L4	True	236.50	236.113553	99.8
6	JY42	L5	True	236.50	235.647293	99.6
7	JY43	L6	True	236.50	233.646371	98.8
8	JY44	L7	True	236.50	227.598737	96.2



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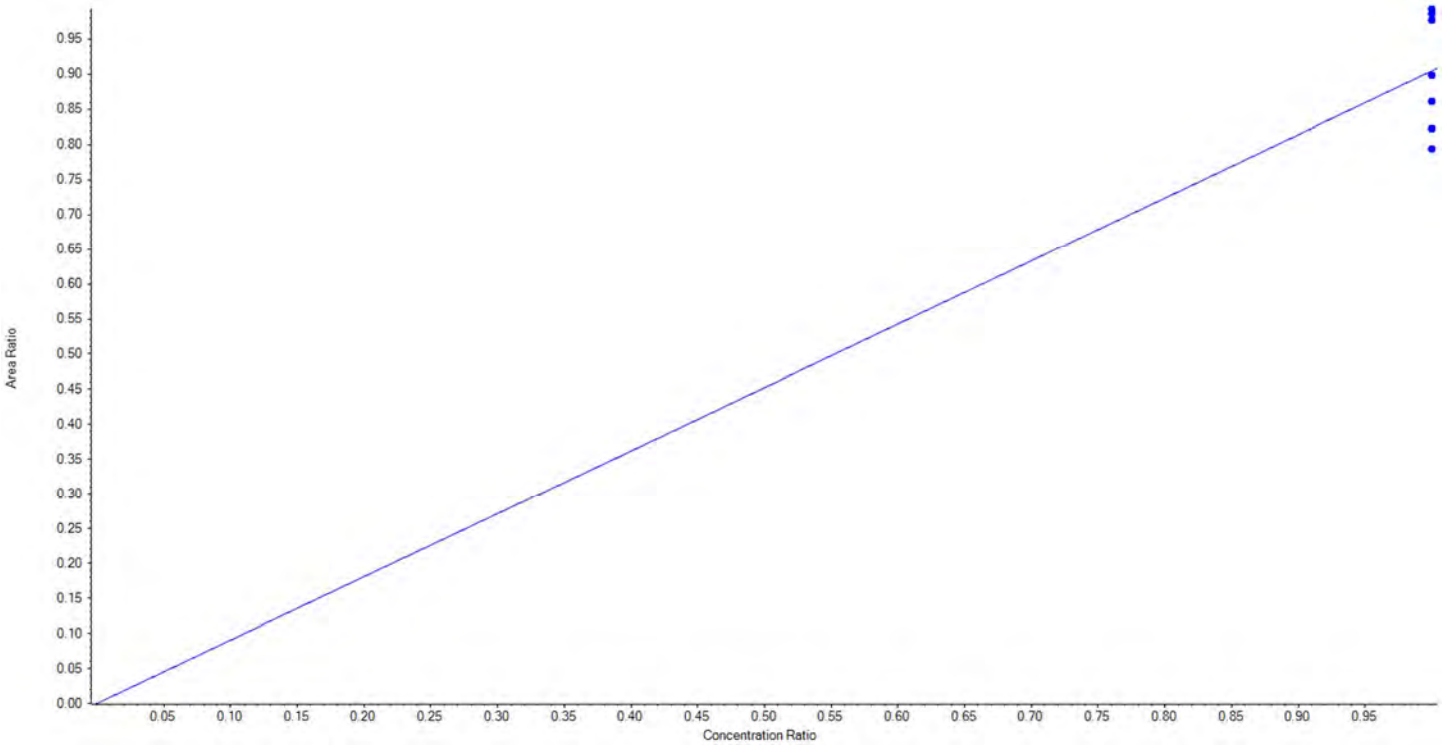
Printed: 27/08/2018 11:34:30 AM

Calibration Summary Report

Analyte Name	13C8-PFOS	**Data File**	18-0502.wiff
MRM Transition	507.0 / 99.0	**Result Table**	18-0497_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/15/2018 9:50:38 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.90459 x (std. dev. = 0.08217) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	239.25	258.340401	108.0
3	JY39	L2	True	239.25	227.928699	95.3
4	JY40	L3	True	239.25	262.562021	109.7
5	JY41	L4	True	239.25	237.644403	99.3
6	JY42	L5	True	239.25	260.792356	109.0
7	JY43	L6	True	239.25	217.604533	91.0
8	JY44	L7	True	239.25	209.877587	87.7



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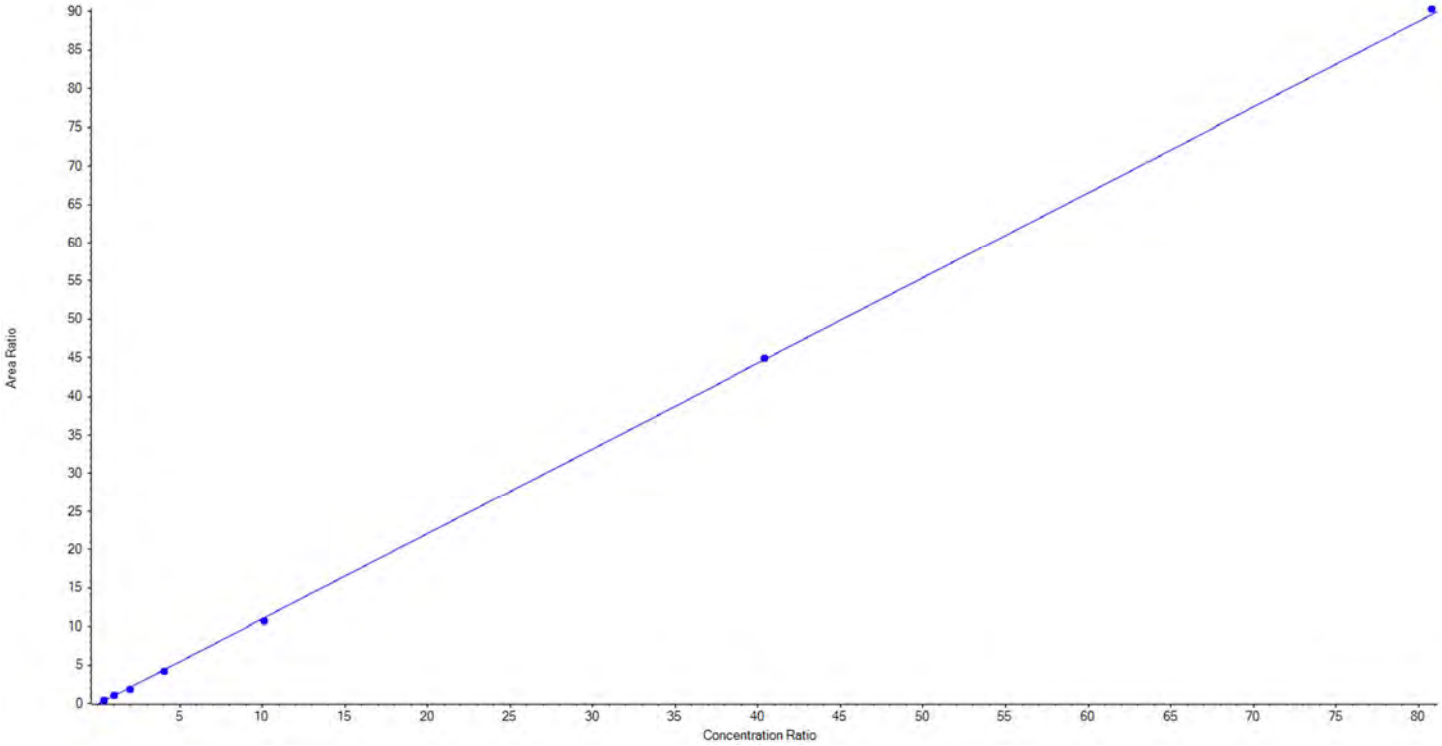
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/08/2018 1:14:54 PM

Analyte Name	PFHxA_1	**Data File**	18-0499-18-0497.wiff
MRM Transition	313.0 / 269.0	**Result Table**	18-0497A_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.11076 x + -0.13308 (r = 0.99974) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	117.614761	116.5
3	JY39	L2	True	252.50	258.698417	102.5
4	JY40	L3	True	505.00	448.629574	88.8
5	JY41	L4	True	1010.00	960.813494	95.1
6	JY42	L5	True	2525.00	2426.762636	96.1
7	JY43	L6	True	10100.00	10124.639308	100.2
8	JY44	L7	True	20200.00	20356.341810	100.8



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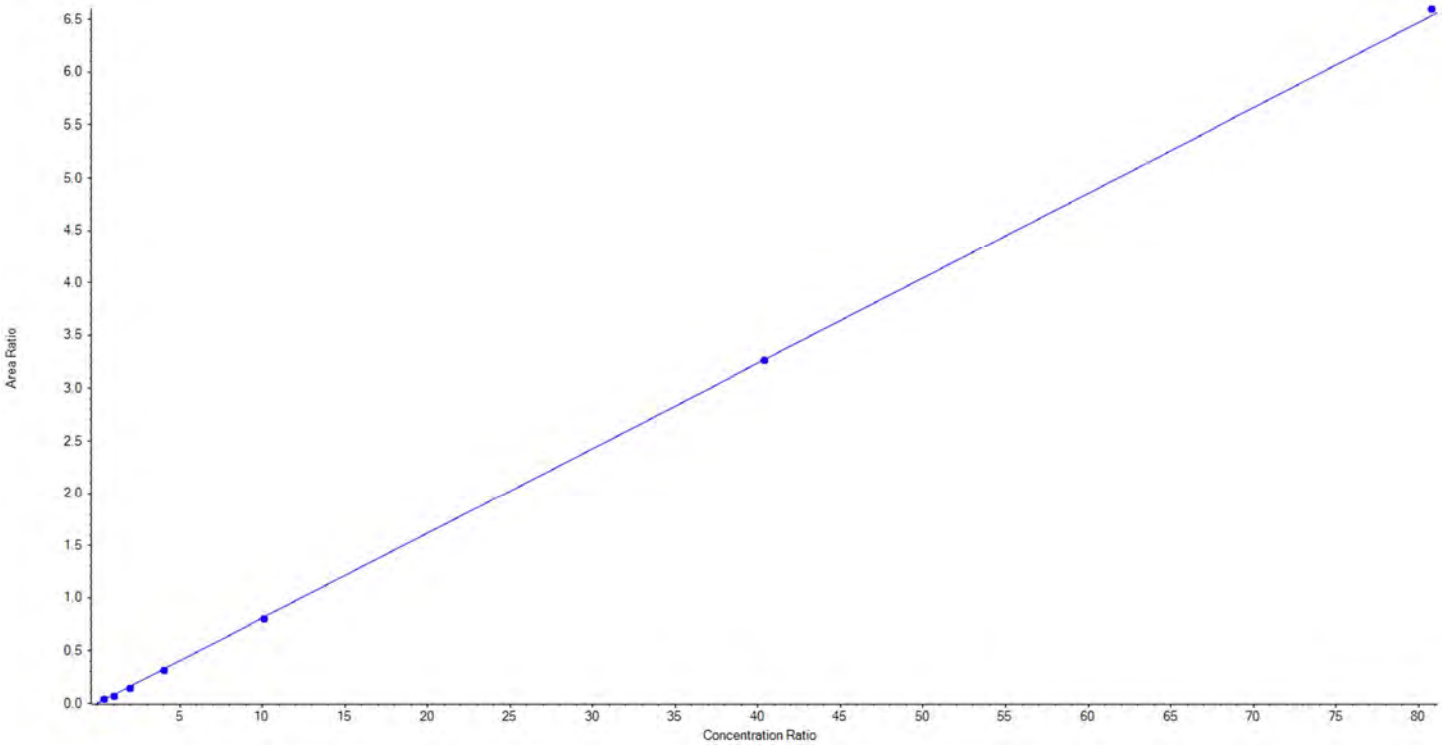
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/08/2018 1:14:54 PM

Analyte Name	PFHxA_2	**Data File**	18-0499-18-0497.wiff
MRM Transition	313.0 / 119.0	**Result Table**	18-0497A_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.08090 x + -4.16022e-5 (r = 0.99961) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	131.288798	130.0
3	JY39	L2	True	252.50	220.326158	87.3
4	JY40	L3	True	505.00	446.557348	88.4
5	JY41	L4	True	1010.00	967.754802	95.8
6	JY42	L5	True	2525.00	2471.882588	97.9
7	JY43	L6	True	10100.00	10068.006887	99.7
8	JY44	L7	True	20200.00	20387.683420	100.9



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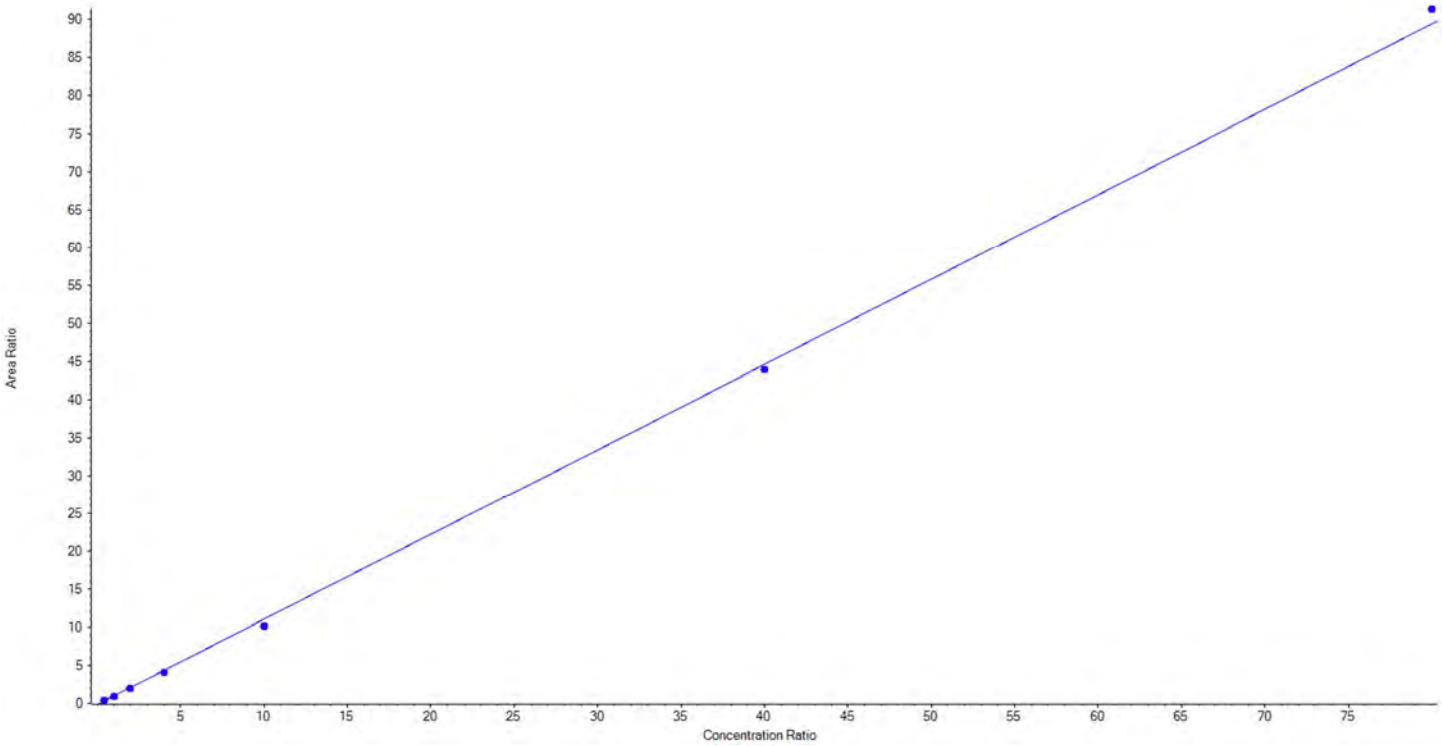
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/08/2018 1:14:54 PM

Analyte Name	PFOA_1	**Data File**	18-0499-18-0497.wiff
MRM Transition	413.0 / 369.0	**Result Table**	18-0497A_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.11957 x + -0.14507 (r = 0.99942) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	121.113434	121.1
3	JY39	L2	True	250.00	242.981438	97.2
4	JY40	L3	True	500.00	473.276906	94.7
5	JY41	L4	True	1000.00	944.360671	94.4
6	JY42	L5	True	2500.00	2302.456541	92.1
7	JY43	L6	True	10000.00	9835.045171	98.4
8	JY44	L7	True	20000.00	20430.765839	102.2



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Calibration Summary Report

Created with Analyst Reporter
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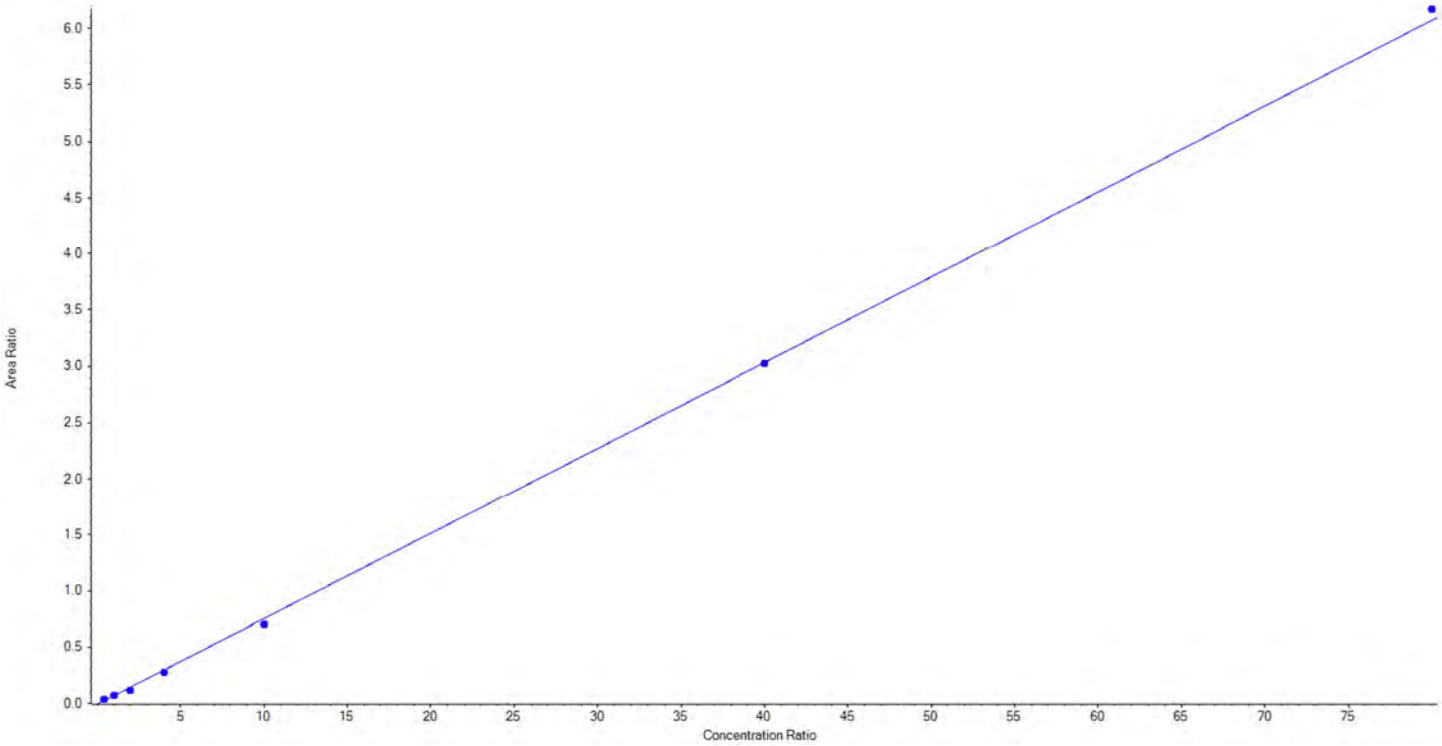
Analyte Name	PFOA_2	**Data File**	18-0499-18-0497.wiff
MRM Transition	413.0 / 169.0	**Result Table**	18-0497A_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.07600 x + -0.00788 (r = 0.99925) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	128.970589	129.0
3	JY39	L2	True	250.00	255.929619	102.4
4	JY40	L3	True	500.00	405.855245	81.2
5	JY41	L4	True	1000.00	925.403115	92.5
6	JY42	L5	True	2500.00	2341.285594	93.7
7	JY43	L6	True	10000.00	9966.400046	99.7
8	JY44	L7	True	20000.00	20326.155793	101.6



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Calibration Summary Report

Created with Analyst Reporter
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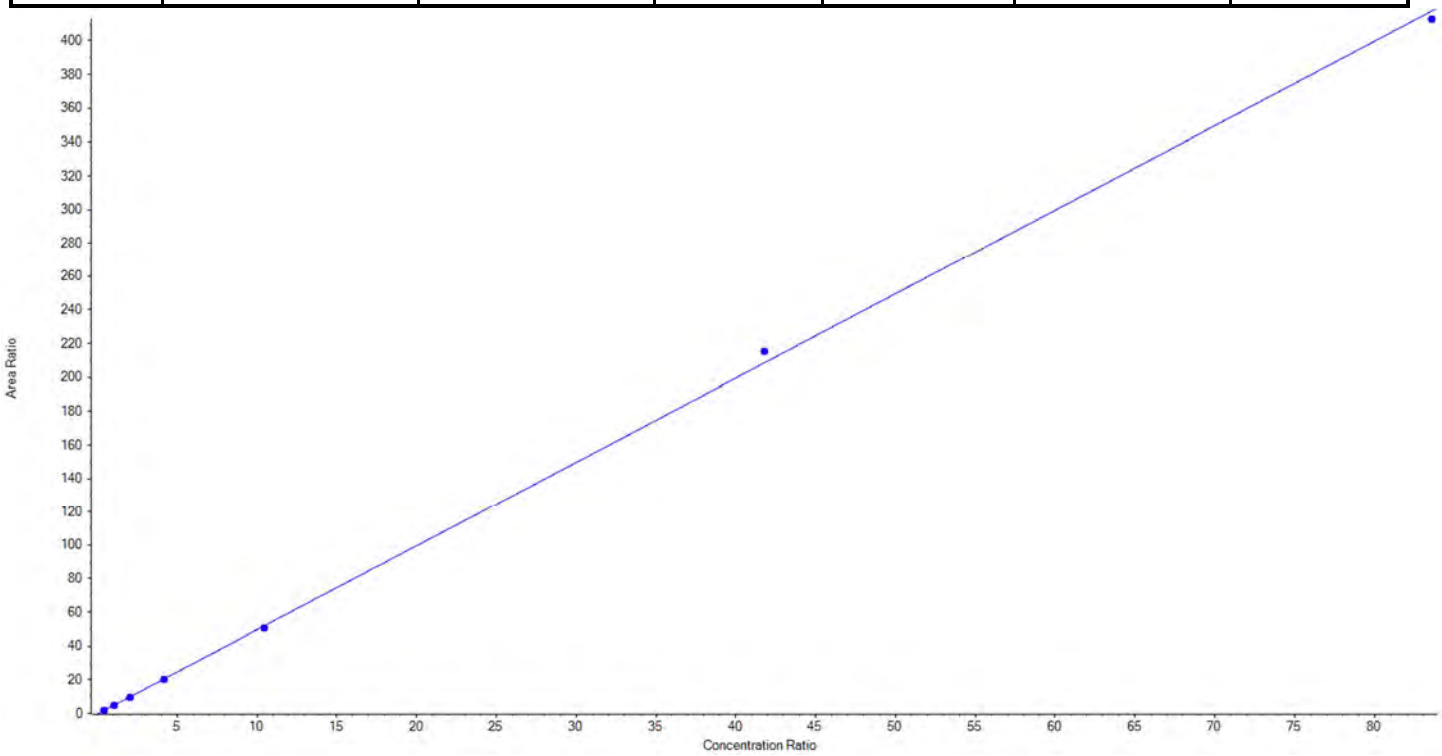
Analyte Name	PFOS_1	**Data File**	18-0499-18-0497.wiff
MRM Transition	499.0 / 80.0	**Result Table**	18-0497A_BASE
Internal Standard	13C8-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 5.00025 x + -0.44440 (r = 0.99975) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	104.637764	104.6
3	JY39	L2	True	250.00	248.291926	99.3
4	JY40	L3	True	500.00	490.362317	98.1
5	JY41	L4	True	1000.00	987.858062	98.8
6	JY42	L5	True	2500.00	2428.135996	97.1
7	JY43	L6	True	10000.00	10321.637282	103.2
8	JY44	L7	True	20000.00	19769.076652	98.9



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Calibration Summary Report

Created with Analyst Reporter
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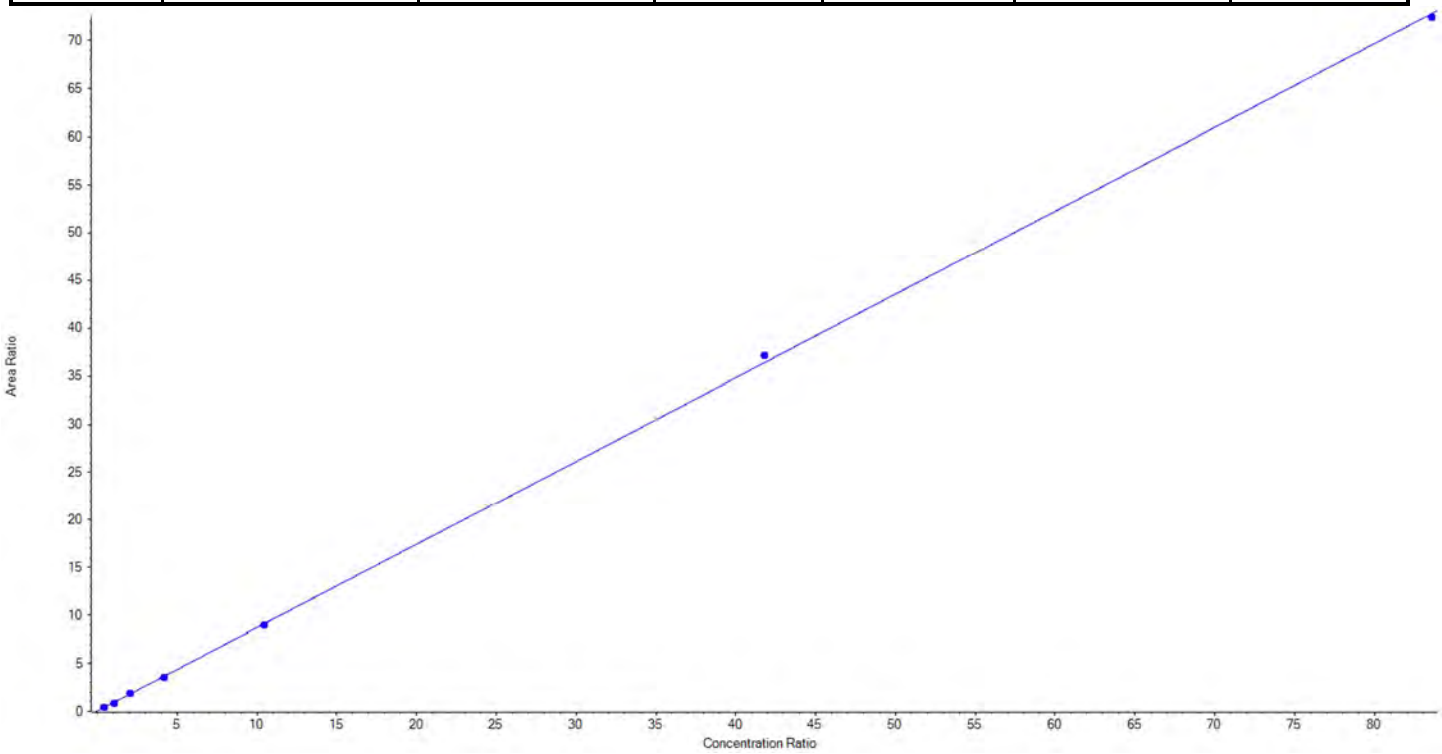
Analyte Name	PFOS_2	**Data File**	18-0499-18-0497.wiff
MRM Transition	499.0 / 99.0	**Result Table**	18-0497A_BASE
Internal Standard	13C8-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.87064 x + 0.01042 (r = 0.99977) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	116.636822	116.6
3	JY39	L2	True	250.00	213.988200	85.6
4	JY40	L3	True	500.00	510.451344	102.1
5	JY41	L4	True	1000.00	959.221052	95.9
6	JY42	L5	True	2500.00	2458.214761	98.3
7	JY43	L6	True	10000.00	10193.898958	101.9
8	JY44	L7	True	20000.00	19897.588864	99.5



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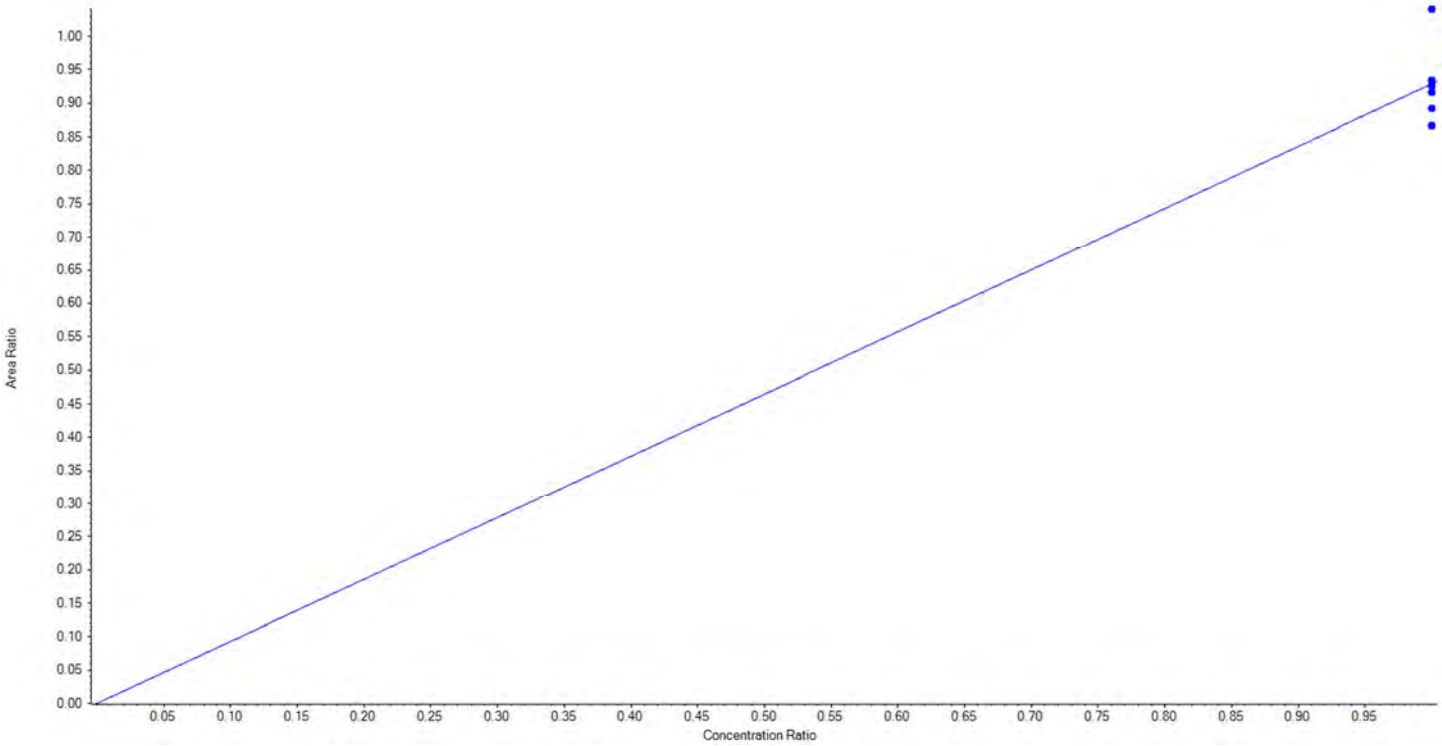
Calibration Summary Report

Analyte Name	13C5-PFHxA	**Data File**	18-0499-18-0497.wiff
MRM Transition	318.0 / 273.0	**Result Table**	18-0497A_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.92892 x (std. dev. = 0.05455) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	280.075990	112.0
3	JY39	L2	True	250.00	251.357490	100.5
4	JY40	L3	True	250.00	249.116801	99.7
5	JY41	L4	True	250.00	233.445288	93.4
6	JY42	L5	True	250.00	249.370561	99.8
7	JY43	L6	True	250.00	239.997239	96.0
8	JY44	L7	True	250.00	246.636631	98.7



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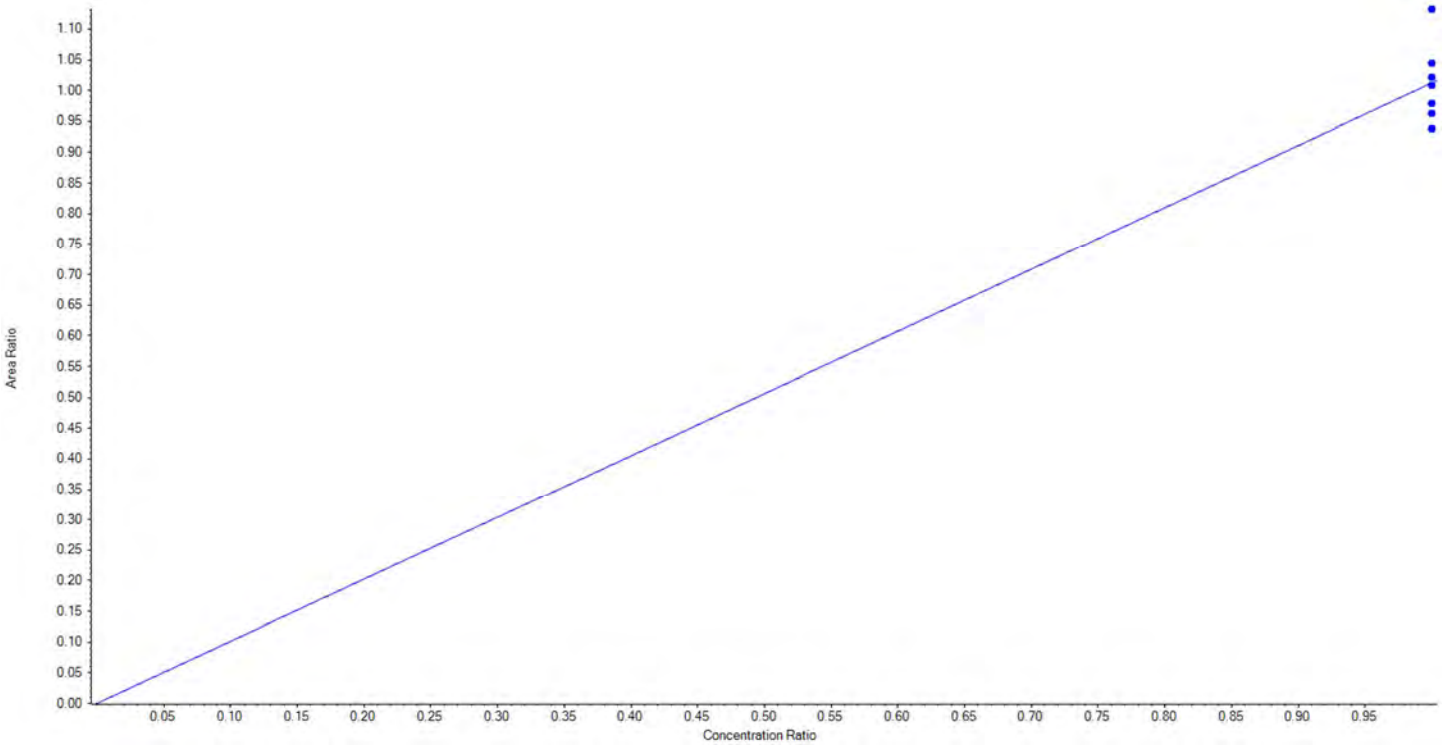
Calibration Summary Report

Analyte Name	13C4-PFHpA	**Data File**	18-0499-18-0497.wiff
MRM Transition	367.0 / 322.0	**Result Table**	18-0497A_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.01233 x (std. dev. = 0.06396) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	279.659826	111.9
3	JY39	L2	True	250.00	249.099832	99.6
4	JY40	L3	True	250.00	252.065681	100.8
5	JY41	L4	True	250.00	241.677687	96.7
6	JY42	L5	True	250.00	257.888683	103.2
7	JY43	L6	True	250.00	231.747381	92.7
8	JY44	L7	True	250.00	237.860912	95.1



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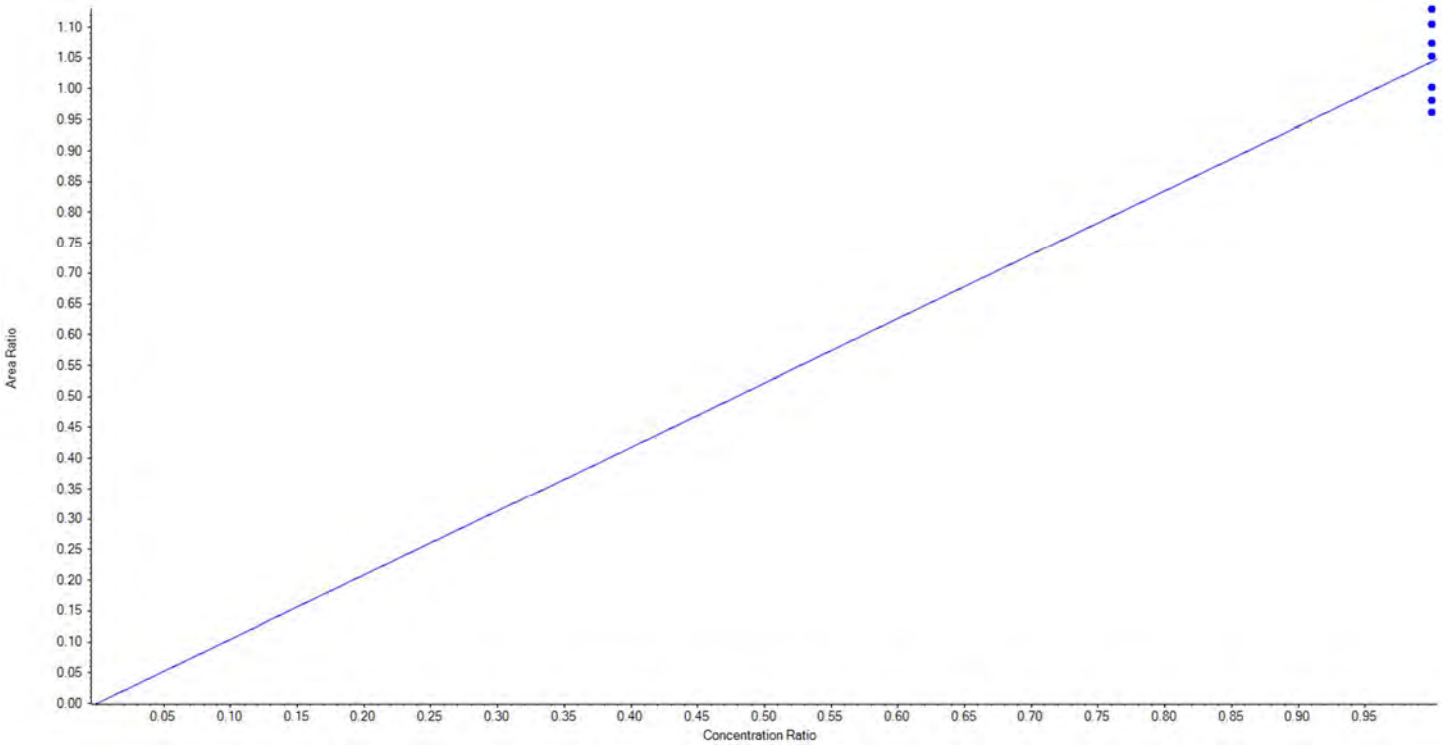
Calibration Summary Report

Analyte Name	13C8-PFOA	**Data File**	18-0499-18-0497.wiff
MRM Transition	421.0 / 376.0	**Result Table**	18-0497A_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.04388 x (std. dev. = 0.06349) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	270.469593	108.2
3	JY39	L2	True	250.00	257.167976	102.9
4	JY40	L3	True	250.00	252.262807	100.9
5	JY41	L4	True	250.00	240.255610	96.1
6	JY42	L5	True	250.00	264.429951	105.8
7	JY43	L6	True	250.00	235.000561	94.0
8	JY44	L7	True	250.00	230.413501	92.2



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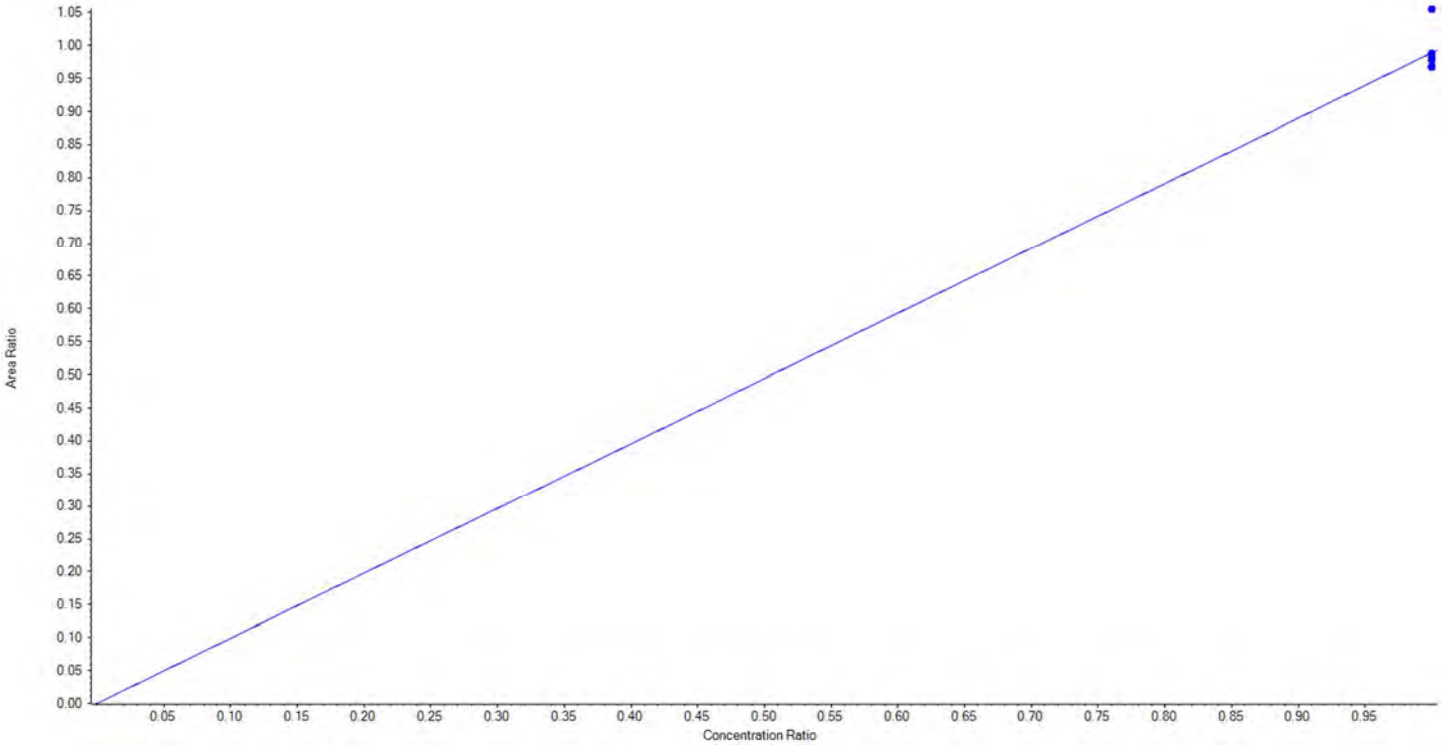
Calibration Summary Report

Analyte Name	13C8-PFOS	**Data File**	18-0499-18-0497.wiff
MRM Transition	507.0 / 99.0	**Result Table**	18-0497A_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.98881 x (std. dev. = 0.03026) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	239.25	237.602564	99.3
3	JY39	L2	True	239.25	234.055779	97.8
4	JY40	L3	True	239.25	236.354073	98.8
5	JY41	L4	True	239.25	234.109112	97.9
6	JY42	L5	True	239.25	238.284765	99.6
7	JY43	L6	True	239.25	255.257396	106.7
8	JY44	L7	True	239.25	239.086310	99.9



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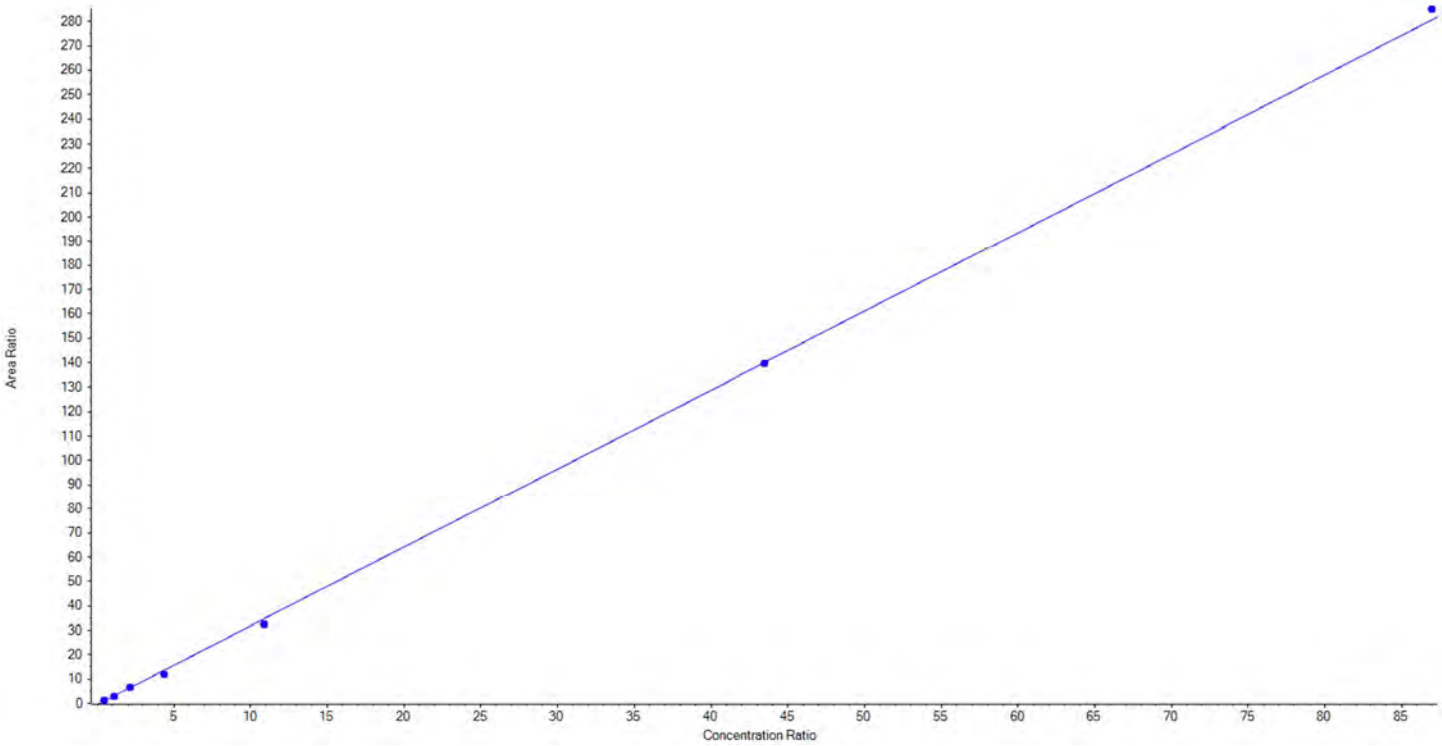
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:41:33 AM

Analyte Name	PFBS_1	**Data File**	18-0511_18-0517.wiff
MRM Transition	298.9 / 80.0	**Result Table**	18-0497B_BASE
Internal Standard	13C3-PFBS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/28/2018 8:04:50 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 3.23171 x + -0.49806 (r = 0.99947) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	119.143551	118.0
17	JY39	L2	True	252.50	254.701746	100.9
18	JY40	L3	True	505.00	497.430653	98.5
19	JY41	L4	True	1010.00	890.457094	88.2
20	JY42	L5	True	2525.00	2357.071583	93.4
21	JY43	L6	True	10100.00	10057.514027	99.6
22	JY44	L7	True	20200.00	20517.181346	101.6



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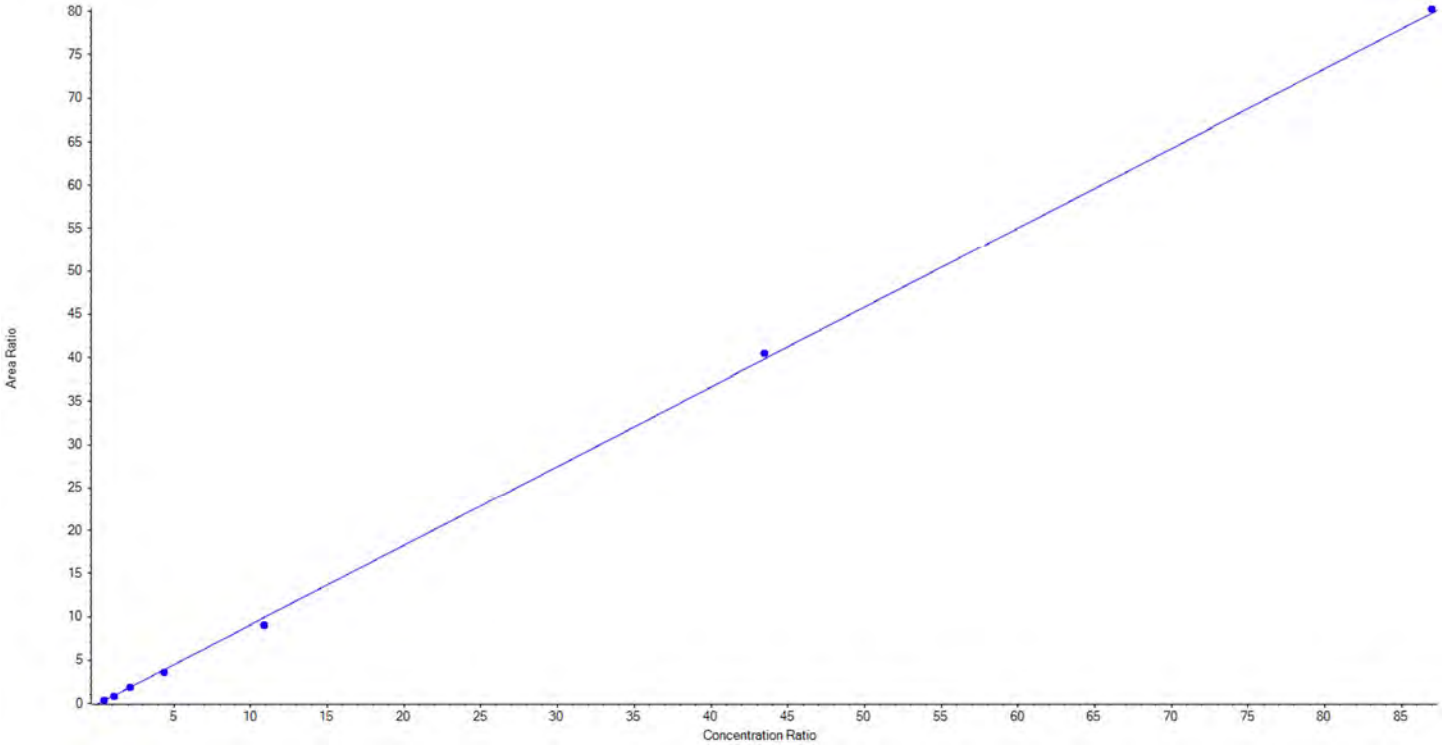
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:41:33 AM

Analyte Name	PFBS_2	**Data File**	18-0511_18-0517.wiff
MRM Transition	298.9 / 99.0	**Result Table**	18-0497B_BASE
Internal Standard	13C3-PFBS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/28/2018 8:04:50 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.91866 x + -0.11165 (r = 0.99952) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	117.630528	116.5
17	JY39	L2	True	252.50	244.365287	96.8
18	JY40	L3	True	505.00	510.228071	101.0
19	JY41	L4	True	1010.00	928.235183	91.9
20	JY42	L5	True	2525.00	2313.575234	91.6
21	JY43	L6	True	10100.00	10262.777442	101.6
22	JY44	L7	True	20200.00	20316.688256	100.6



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Calibration Summary Report

Created with Analyst Reporter
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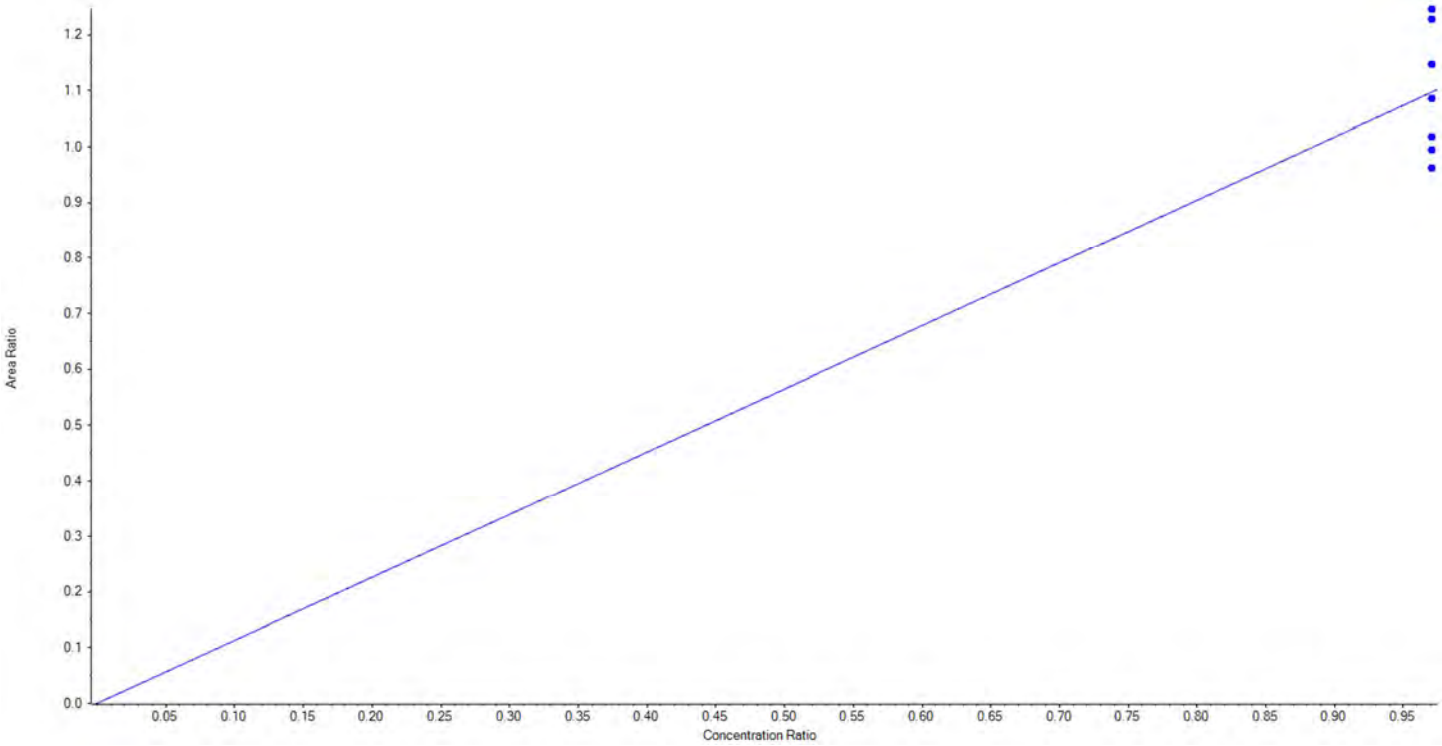
Analyte Name	13C3-PFBS	**Data File**	18-0511_18-0517.wiff
MRM Transition	302.0 / 99.0	**Result Table**	18-0497B_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/28/2018 8:04:50 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.13039 x (std. dev. = 0.11681) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	232.25	229.728024	98.9
17	JY39	L2	True	232.25	215.407920	92.8
18	JY40	L3	True	232.25	210.598836	90.7
19	JY41	L4	True	232.25	259.993260	112.0
20	JY42	L5	True	232.25	203.492368	87.6
21	JY43	L6	True	232.25	242.842221	104.6
22	JY44	L7	True	232.25	263.687371	113.5



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	Isotope Dilution Calibration Curve Concentrations (ng/L)						
	JY38	JY39	JY40	JY41	JY42	JY43	JY44
PFBA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFPeA	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
PFHxA	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
PFHpA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFOA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFNA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFDA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFUnA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFDoA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFTrDA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFTeDA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
NMeFOSAA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
NEtFOSAA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFOSA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFBS	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
PFPeS	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFHxS (Branched)	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
PFHpS	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFOS (Branched)	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFDS	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
PFNS	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
4:2FTS	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
6:2FTS	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
8:2FTS	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
	Surrogates / Extracted Internal Standards						
13C4-PFBA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C5-PFPeA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C5-PFHxA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C4-PFHpA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C8-PFOA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C9-PFNA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C6-PFDA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C7-PFUnA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C2-PFDoA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C2-PFTeDA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
d3-MeFOSAA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
d5-EtFOSAA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C8-FOSA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C3-PFBS	232.25	232.25	232.25	232.25	232.25	232.25	232.25
13C3-PFHxS	236.50	236.50	236.50	236.50	236.50	236.50	236.50
13C8-PFOS	239.25	239.25	239.25	239.25	239.25	239.25	239.25
13C2-4:2FTS	233.75	233.75	233.75	233.75	233.75	233.75	233.75
13C2-6:2FTS	237.25	237.25	237.25	237.25	237.25	237.25	237.25
13C2-8:2FTS	239.50	239.50	239.50	239.50	239.50	239.50	239.50
	Internal Standards						
13C3-PFBA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C2-PFOA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C2-PFDA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C4-PFOS	239.25	239.25	239.25	239.25	239.25	239.25	239.25

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Summary Quant Report

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Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T21:50:38	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	31438.59	135.654185	70.3	false
PFBS_2	298.9 / 99.0	1.54	10027.80	156.683042	71.4	false
PFHxA_1	313.0 / 269.0	1.83	37077.37	174.990526	51.8	false
PFHxA_2	313.0 / 119.0	1.83	2235.82	127.342926	44.1	false
PFHpA_1	363.0 / 319.0	2.19	27150.04	177.027113	62.3	false
PFHpA_2	363.0 / 169.0	2.19	467.27	146.442720	15.1	false
PFHxS_1	399.0 / 80.0	2.21	35275.94	108.136149	69.3	false
PFHxS_2	399.0 / 99.0	2.21	11202.13	92.036044	95.9	false
PFOA_1	413.0 / 369.0	2.57	33713.95	156.129732	59.0	false
PFOA_2	413.0 / 169.0	2.57	2766.75	147.030101	24.0	false
PFNA_1	463.0 / 419.0	2.94	34842.76	165.112195	75.1	false
PFNA_2	463.0 / 219.0	2.94	11198.08	158.516244	85.9	false
PFOS_1	499.0 / 80.0	2.93	52539.40	174.803508	58.0	true
PFOS_2	499.0 / 99.0	2.93	11275.43	175.186482	89.2	false
PFDA_1	513.0 / 469.0	3.29	38317.31	164.110850	90.8	false
PFDA_2	513.0 / 219.0	3.30	2319.78	160.811104	25.5	false
PFUnA_1	563.0 / 519.0	3.61	32566.43	139.156274	76.0	false
PFUnA_2	563.0 / 269.0	3.59	4722.10	218.182014	41.4	false
PFDoA_1	613.0 / 569.0	3.90	34709.84	98.469335	119.2	false
PFDoA_2	613.0 / 319.0	3.90	6643.97	127.001464	91.0	false
PFTrDA_1	663.0 / 619.0	4.15	32928.29	106.979080	182.7	false
PFTrDA_2	663.0 / 169.0	4.14	2485.94	104.444834	65.8	false
PFTeDA_1	713.0 / 669.0	4.36	36132.46	108.059139	266.9	false
PFTeDA_2	713.0 / 169.0	4.36	1767.18	76.854868	96.3	false
NMeFOSAA_1	570.0 / 419.0	3.45	6388.22	170.737902	137.5	false
NMeFOSAA_2	570.0 / 512.0	3.45	3814.47	290.976974	85.4	false
NEtFOSAA_1	584.0 / 419.0	3.61	6627.41	163.169684	152.4	false
NEtFOSAA_2	584.0 / 483.0	3.62	427.75	158.049742	22.1	false

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Summary Quant Report

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Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:01:29	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	89917.49	268.759329	159.3	false
PFBS_2	298.9 / 99.0	1.55	25062.54	271.908488	120.9	false
PFHxA_1	313.0 / 269.0	1.84	75258.66	291.947056	73.0	false
PFHxA_2	313.0 / 119.0	1.84	5239.65	250.887990	78.3	false
PFHpA_1	363.0 / 319.0	2.21	60766.07	280.574779	90.6	false
PFHpA_2	363.0 / 169.0	2.21	1502.09	305.849531	62.5	false
PFHxS_1	399.0 / 80.0	2.22	93623.72	266.961544	94.4	false
PFHxS_2	399.0 / 99.0	2.21	27273.49	253.624633	120.8	false
PFOA_1	413.0 / 369.0	2.58	75210.38	259.191977	107.5	false
PFOA_2	413.0 / 169.0	2.58	5573.89	247.216201	47.6	false
PFNA_1	463.0 / 419.0	2.95	74700.14	265.550745	95.3	false
PFNA_2	463.0 / 219.0	2.95	22891.96	256.456427	122.5	false
PFOS_1	499.0 / 80.0	2.94	104576.17	286.457180	56.3	true
PFOS_2	499.0 / 99.0	2.94	17026.29	255.222576	102.8	false
PFDA_1	513.0 / 469.0	3.30	86596.87	287.040165	144.6	false
PFDA_2	513.0 / 219.0	3.30	4539.91	287.970681	52.3	false
PFUnA_1	563.0 / 519.0	3.62	76365.67	252.109363	124.1	false
PFUnA_2	563.0 / 269.0	3.62	4993.51	232.503826	46.5	false
PFDoA_1	613.0 / 569.0	3.91	82267.57	229.598564	169.9	false
PFDoA_2	613.0 / 319.0	3.91	13934.49	248.305177	127.2	false
PFTrDA_1	663.0 / 619.0	4.16	78095.34	249.851321	227.8	false
PFTrDA_2	663.0 / 169.0	4.15	5700.66	260.890168	113.8	false
PFTeDA_1	713.0 / 669.0	4.37	89770.82	256.069714	441.2	false
PFTeDA_2	713.0 / 169.0	4.37	4708.81	245.476217	235.1	false
NMeFOSAA_1	570.0 / 419.0	3.45	15547.71	306.062837	354.9	false
NMeFOSAA_2	570.0 / 512.0	3.45	9641.86	441.012037	165.1	false
NEtFOSAA_1	584.0 / 419.0	3.62	13670.64	267.523858	257.1	false
NEtFOSAA_2	584.0 / 483.0	3.61	1027.30	302.102110	55.7	false

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Summary Quant Report

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Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:12:22	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	173334.19	505.142578	228.0	false
PFBS_2	298.9 / 99.0	1.55	49321.50	505.039835	202.8	false
PFHxA_1	313.0 / 269.0	1.84	143504.75	489.149825	100.5	false
PFHxA_2	313.0 / 119.0	1.84	12651.89	541.934287	117.5	false
PFHpA_1	363.0 / 319.0	2.20	127439.74	502.958430	129.7	false
PFHpA_2	363.0 / 169.0	2.20	2539.23	476.481767	80.0	false
PFHxS_1	399.0 / 80.0	2.21	178525.63	487.735819	122.0	false
PFHxS_2	399.0 / 99.0	2.21	53441.47	502.533899	188.0	false
PFOA_1	413.0 / 369.0	2.57	171629.01	518.041345	139.3	false
PFOA_2	413.0 / 169.0	2.57	12710.37	525.555571	104.5	false
PFNA_1	463.0 / 419.0	2.94	169013.48	490.156122	166.4	false
PFNA_2	463.0 / 219.0	2.94	55301.26	515.539225	173.3	false
PFOS_1	499.0 / 80.0	2.94	239739.82	500.961956	80.4	true
PFOS_2	499.0 / 99.0	2.94	44560.83	510.735843	182.8	false
PFDA_1	513.0 / 469.0	3.29	173342.24	487.650488	177.0	false
PFDA_2	513.0 / 219.0	3.29	7840.91	456.046666	95.9	false
PFUnA_1	563.0 / 519.0	3.61	167345.92	513.733395	154.5	false
PFUnA_2	563.0 / 269.0	3.61	9360.56	473.861270	99.4	false
PFDoA_1	613.0 / 569.0	3.90	177332.05	486.565941	199.8	false
PFDoA_2	613.0 / 319.0	3.90	27615.23	471.922918	187.3	false
PFTrDA_1	663.0 / 619.0	4.15	158002.50	482.162880	316.3	false
PFTrDA_2	663.0 / 169.0	4.15	10369.37	467.862252	169.1	false
PFTeDA_1	713.0 / 669.0	4.37	177443.20	478.569125	587.0	false
PFTeDA_2	713.0 / 169.0	4.37	9057.05	474.931986	375.4	false
NMeFOSAA_1	570.0 / 419.0	3.45	29495.68	512.508677	259.3	false
NMeFOSAA_2	570.0 / 512.0	3.45	15674.55	598.474341	209.1	false
NEtFOSAA_1	584.0 / 419.0	3.61	31618.12	484.385121	353.4	false
NEtFOSAA_2	584.0 / 483.0	3.61	1754.69	438.958176	83.2	false

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Summary Quant Report

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Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:23:14	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	304748.89	959.418036	251.2	false
PFBS_2	298.9 / 99.0	1.55	87503.75	952.901852	215.2	false
PFHxA_1	313.0 / 269.0	1.84	255707.06	978.218129	109.4	false
PFHxA_2	313.0 / 119.0	1.84	20183.73	1010.020041	137.8	false
PFHpA_1	363.0 / 319.0	2.20	222635.50	978.842328	170.3	false
PFHpA_2	363.0 / 169.0	2.20	4166.92	887.405718	111.9	false
PFHxS_1	399.0 / 80.0	2.22	315851.90	974.127262	165.8	false
PFHxS_2	399.0 / 99.0	2.22	89011.90	974.655409	258.2	false
PFOA_1	413.0 / 369.0	2.58	283961.78	983.491763	247.8	false
PFOA_2	413.0 / 169.0	2.58	20848.82	1017.818733	195.1	false
PFNA_1	463.0 / 419.0	2.96	290519.23	1023.061982	189.2	false
PFNA_2	463.0 / 219.0	2.95	86438.71	1003.179630	198.4	false
PFOS_1	499.0 / 80.0	2.95	414962.23	960.661633	114.8	true
PFOS_2	499.0 / 99.0	2.95	81160.06	1051.578549	316.2	false
PFDA_1	513.0 / 469.0	3.31	286974.13	926.872895	175.7	false
PFDA_2	513.0 / 219.0	3.31	15067.25	1038.927338	122.0	false
PFUnA_1	563.0 / 519.0	3.63	280388.02	951.239009	205.3	false
PFUnA_2	563.0 / 269.0	3.63	18565.28	1109.853513	125.6	false
PFDoA_1	613.0 / 569.0	3.92	304599.53	996.246656	272.6	false
PFDoA_2	613.0 / 319.0	3.92	49612.96	996.920305	264.9	false
PFTrDA_1	663.0 / 619.0	4.17	274336.36	1008.070757	447.4	false
PFTrDA_2	663.0 / 169.0	4.17	18377.90	1018.888644	246.2	false
PFTeDA_1	713.0 / 669.0	4.40	309533.01	999.440227	892.8	false
PFTeDA_2	713.0 / 169.0	4.40	16007.98	1042.553592	451.1	false
NMeFOSAA_1	570.0 / 419.0	3.46	48292.84	889.954348	390.6	false
NMeFOSAA_2	570.0 / 512.0	3.46	26017.67	959.174852	314.2	false
NEtFOSAA_1	584.0 / 419.0	3.63	50442.47	924.336446	480.3	false
NEtFOSAA_2	584.0 / 483.0	3.63	3255.43	967.149387	118.5	false

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Summary Quant Report

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Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:34:06	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	1198060.84	2483.667958	556.9	false
PFBS_2	298.9 / 99.0	1.55	350965.64	2490.356618	590.3	false
PFHxA_1	313.0 / 269.0	1.84	977284.91	2320.616744	185.2	false
PFHxA_2	313.0 / 119.0	1.84	75115.62	2376.434269	220.9	false
PFHpA_1	363.0 / 319.0	2.21	848073.86	2262.496812	311.0	false
PFHpA_2	363.0 / 169.0	2.21	18296.71	2367.250288	190.8	false
PFHxS_1	399.0 / 80.0	2.22	1192502.95	2629.624533	285.0	false
PFHxS_2	399.0 / 99.0	2.22	336265.51	2683.678953	415.6	false
PFOA_1	413.0 / 369.0	2.58	1098703.46	2339.263345	465.0	false
PFOA_2	413.0 / 169.0	2.58	78288.05	2392.302090	379.0	false
PFNA_1	463.0 / 419.0	2.96	1066538.32	2371.314183	315.9	false
PFNA_2	463.0 / 219.0	2.96	314829.39	2324.672680	378.4	false
PFOS_1	499.0 / 80.0	2.95	1551574.93	2235.404856	186.4	false
PFOS_2	499.0 / 99.0	2.95	277854.19	2284.084734	558.5	false
PFDA_1	513.0 / 469.0	3.31	1149537.31	2388.969491	349.4	false
PFDA_2	513.0 / 219.0	3.31	49137.79	2248.780308	215.8	false
PFUnA_1	563.0 / 519.0	3.63	1111823.82	2513.668899	415.0	false
PFUnA_2	563.0 / 269.0	3.63	62125.84	2583.990108	230.5	false
PFDoA_1	613.0 / 569.0	3.92	1160011.43	2660.211269	518.5	false
PFDoA_2	613.0 / 319.0	3.92	181138.30	2532.911678	492.5	false
PFTrDA_1	663.0 / 619.0	4.18	1047607.62	2549.785717	774.2	false
PFTrDA_2	663.0 / 169.0	4.18	66600.08	2471.917553	437.0	false
PFTeDA_1	713.0 / 669.0	4.40	1206172.51	2571.232448	1518.0	false
PFTeDA_2	713.0 / 169.0	4.40	58111.07	2547.305265	956.1	false
NMeFOSAA_1	570.0 / 419.0	3.47	200032.54	2022.098451	670.8	false
NMeFOSAA_2	570.0 / 512.0	3.47	106236.52	1998.804617	479.0	false
NEtFOSAA_1	584.0 / 419.0	3.63	203895.65	2558.422693	723.9	false
NEtFOSAA_2	584.0 / 483.0	3.63	10554.90	2182.373775	236.2	false

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Summary Quant Report

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Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:44:59	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	4752367.51	10060.334093	1007.3	false
PFBS_2	298.9 / 99.0	1.55	1371074.25	9892.544382	1101.1	false
PFHxA_1	313.0 / 269.0	1.84	3844403.73	9636.377790	352.5	false
PFHxA_2	313.0 / 119.0	1.84	291452.00	9826.490984	406.8	false
PFHpA_1	363.0 / 319.0	2.21	3281557.32	9533.731802	577.6	false
PFHpA_2	363.0 / 169.0	2.21	67479.53	9573.637496	526.6	false
PFHxS_1	399.0 / 80.0	2.22	4563453.02	9580.051421	495.3	false
PFHxS_2	399.0 / 99.0	2.22	1262240.63	9668.126531	820.3	false
PFOA_1	413.0 / 369.0	2.58	4282391.04	10009.034425	822.1	false
PFOA_2	413.0 / 169.0	2.58	284595.79	9638.582291	633.1	false
PFNA_1	463.0 / 419.0	2.95	3856403.20	9618.025469	697.4	false
PFNA_2	463.0 / 219.0	2.95	1208874.72	10050.790767	811.5	false
PFOS_1	499.0 / 80.0	2.95	6018397.28	9681.961468	355.4	true
PFOS_2	499.0 / 99.0	2.95	1048763.54	9700.133052	850.9	false
PFDA_1	513.0 / 469.0	3.31	4221173.13	9722.086453	584.6	false
PFDA_2	513.0 / 219.0	3.31	189854.13	9733.414651	335.5	false
PFUnA_1	563.0 / 519.0	3.63	4189891.29	10128.534474	707.2	false
PFUnA_2	563.0 / 269.0	3.63	214433.47	9726.460712	496.7	false
PFDoA_1	613.0 / 569.0	3.92	4496391.56	11085.476401	868.8	false
PFDoA_2	613.0 / 319.0	3.92	738235.48	11057.029714	711.9	false
PFTrDA_1	663.0 / 619.0	4.17	4032058.27	10205.548933	1247.6	false
PFTrDA_2	663.0 / 169.0	4.17	263623.47	10230.741796	781.8	false
PFTeDA_1	713.0 / 669.0	4.40	4457734.67	9868.305221	2084.5	false
PFTeDA_2	713.0 / 169.0	4.40	221828.50	10195.376311	1736.4	false
NMeFOSAA_1	570.0 / 419.0	3.46	776644.70	10519.375687	1102.0	false
NMeFOSAA_2	570.0 / 512.0	3.46	436381.83	10443.546189	796.5	false
NEtFOSAA_1	584.0 / 419.0	3.63	714061.84	10253.244148	883.3	false
NEtFOSAA_2	584.0 / 483.0	3.63	47057.20	11112.109627	419.3	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:22:14 PM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:55:51	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	9332328.11	20315.178006	1614.4	false
PFBS_2	298.9 / 99.0	1.55	2762634.15	20479.748825	1414.3	false
PFHxA_1	313.0 / 269.0	1.84	7723919.34	20876.190457	472.5	false
PFHxA_2	313.0 / 119.0	1.84	565345.12	20586.732430	490.4	false
PFHpA_1	363.0 / 319.0	2.21	6710387.46	20691.395849	765.5	false
PFHpA_2	363.0 / 169.0	2.21	136937.20	20639.375200	645.3	false
PFHxS_1	399.0 / 80.0	2.22	9025269.23	20653.999422	618.9	false
PFHxS_2	399.0 / 99.0	2.22	2452357.92	20509.880576	882.1	false
PFOA_1	413.0 / 369.0	2.58	8106243.34	20140.977145	1176.3	false
PFOA_2	413.0 / 169.0	2.58	566727.05	20428.525114	766.4	false
PFNA_1	463.0 / 419.0	2.96	8052862.48	20481.891500	892.9	false
PFNA_2	463.0 / 219.0	2.96	2368031.86	20099.361271	941.0	false
PFOS_1	499.0 / 80.0	2.95	11761318.49	20584.552906	487.6	true
PFOS_2	499.0 / 99.0	2.95	2029903.05	20448.245246	1167.4	false
PFDA_1	513.0 / 469.0	3.31	8159092.78	20437.380507	757.2	false
PFDA_2	513.0 / 219.0	3.31	366673.69	20484.860356	430.3	false
PFUnA_1	563.0 / 519.0	3.63	7775093.63	19890.714860	814.9	false
PFUnA_2	563.0 / 269.0	3.63	417858.42	20123.330571	691.6	false
PFDoA_1	613.0 / 569.0	3.92	8439467.30	18791.901170	1014.7	false
PFDoA_2	613.0 / 319.0	3.92	1400997.46	18942.910209	979.8	false
PFTrDA_1	663.0 / 619.0	4.17	7995209.61	19754.580391	1593.8	false
PFTrDA_2	663.0 / 169.0	4.17	522198.26	19799.699587	1153.5	false
PFTeDA_1	713.0 / 669.0	4.40	9293071.11	20076.383264	2524.3	false
PFTeDA_2	713.0 / 169.0	4.40	439495.66	19744.356629	2199.6	false
NMeFOSAA_1	570.0 / 419.0	3.47	1451743.60	14788.044041	1289.6	false
NMeFOSAA_2	570.0 / 512.0	3.47	801064.54	14374.449053	997.5	false
NEtFOSAA_1	584.0 / 419.0	3.63	1380101.79	19762.087734	1027.8	false
NEtFOSAA_2	584.0 / 483.0	3.63	81644.17	19247.306924	508.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:43:10 AM

Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T21:50:38	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.89	90406.60	232.468530	912.7	false
d3-MeFOSAA	573.0 / 419.0	3.44	14303.88	243.495270	169.6	false
d5-EtFOSAA	589.0 / 419.0	3.60	17724.76	270.156457	165.1	false
13C5-PFHxA	318.0 / 273.0	1.82	73987.69	244.563162	498.5	false
13C4-PFHpA	367.0 / 322.0	2.18	82035.38	260.785731	666.4	false
13C8-PFOA	421.0 / 376.0	2.56	80254.51	243.162875	978.9	false
13C9-PFNA	472.0 / 427.0	2.93	82257.75	237.955874	966.9	false
13C6-PFDA	519.0 / 474.0	3.28	85576.08	254.855381	884.7	false
13C7-PFUnA	570.0 / 525.0	3.59	86790.52	257.663215	599.2	false
13C2-PFTeDA	715.0 / 670.0	4.35	81434.10	244.302726	1340.2	false
13C3-PFBS	302.0 / 99.0	1.53	27968.34	218.580557	444.5	false
13C3-PFHxS	402.0 / 99.0	2.20	25684.03	252.702607	237.0	false
13C8-PFOS	507.0 / 99.0	2.92	26335.89	258.340401	203.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:43:15 AM

Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:01:29	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	93131.19	246.843878	1026.0	false
d3-MeFOSAA	573.0 / 419.0	3.45	13455.61	234.649166	117.6	false
d5-EtFOSAA	589.0 / 419.0	3.61	16440.43	256.700505	143.9	false
13C5-PFHxA	318.0 / 273.0	1.83	72425.11	245.643769	414.5	false
13C4-PFHpA	367.0 / 322.0	2.19	76697.73	250.178607	500.3	false
13C8-PFOA	421.0 / 376.0	2.57	83060.42	258.230127	2803.1	false
13C9-PFNA	472.0 / 427.0	2.94	86649.84	257.200840	809.5	false
13C6-PFDA	519.0 / 474.0	3.29	83212.19	255.441557	828.0	false
13C7-PFUnA	570.0 / 525.0	3.60	86354.42	264.257810	480.5	false
13C2-PFTeDA	715.0 / 670.0	4.36	78338.13	242.246977	1510.6	false
13C3-PFBS	302.0 / 99.0	1.54	30160.70	241.471002	381.9	false
13C3-PFHxS	402.0 / 99.0	2.21	22937.76	231.193842	213.8	false
13C8-PFOS	507.0 / 99.0	2.93	22681.72	227.928699	165.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:43:19 AM

Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:12:22	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.89	95235.27	259.934077	1018.4	false
d3-MeFOSAA	573.0 / 419.0	3.44	13185.92	239.233555	116.7	false
d5-EtFOSAA	589.0 / 419.0	3.60	17737.91	288.145666	153.1	false
13C5-PFHxA	318.0 / 273.0	1.82	73734.05	245.648453	446.2	false
13C4-PFHpA	367.0 / 322.0	2.19	77095.74	247.017316	799.7	false
13C8-PFOA	421.0 / 376.0	2.56	80804.65	246.762135	668.3	false
13C9-PFNA	472.0 / 427.0	2.93	91719.94	267.422375	700.8	false
13C6-PFDA	519.0 / 474.0	3.28	86314.31	272.851021	668.4	false
13C7-PFUnA	570.0 / 525.0	3.60	81097.65	255.558158	702.3	false
13C2-PFTeDA	715.0 / 670.0	4.36	80597.67	256.652714	1433.5	false
13C3-PFBS	302.0 / 99.0	1.53	27603.14	229.920710	359.8	false
13C3-PFHxS	402.0 / 99.0	2.20	22753.32	238.597597	241.2	false
13C8-PFOS	507.0 / 99.0	2.93	25113.82	262.562021	202.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:43:42 AM

Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:23:14	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.91	80089.90	243.415350	870.6	false
d3-MeFOSAA	573.0 / 419.0	3.46	11459.87	239.223813	101.8	false
d5-EtFOSAA	589.0 / 419.0	3.62	13589.71	253.999502	140.4	false
13C5-PFHxA	318.0 / 273.0	1.83	60941.53	259.657644	385.7	false
13C4-PFHpA	367.0 / 322.0	2.19	61413.19	251.652024	466.1	false
13C8-PFOA	421.0 / 376.0	2.57	66842.77	261.058828	1115.4	false
13C9-PFNA	472.0 / 427.0	2.94	69679.51	259.824973	905.7	false
13C6-PFDA	519.0 / 474.0	3.29	69540.08	244.783883	1507.0	false
13C7-PFUnA	570.0 / 525.0	3.61	69481.72	243.813014	560.6	false
13C2-PFTeDA	715.0 / 670.0	4.39	66240.41	234.882778	1063.5	false
13C3-PFBS	302.0 / 99.0	1.53	24151.98	231.465036	537.2	false
13C3-PFHxS	402.0 / 99.0	2.21	19569.81	236.113553	219.7	false
13C8-PFOS	507.0 / 99.0	2.94	19755.83	237.644403	161.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:43:45 AM

Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:34:06	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.91	114392.51	245.337790	1131.9	false
d3-MeFOSAA	573.0 / 419.0	3.46	19718.14	299.109861	103.9	false
d5-EtFOSAA	589.0 / 419.0	3.62	18744.38	254.585798	157.6	false
13C5-PFHxA	318.0 / 273.0	1.83	94233.23	253.910055	603.5	false
13C4-PFHpA	367.0 / 322.0	2.20	91156.37	236.218506	725.8	false
13C8-PFOA	421.0 / 376.0	2.57	102904.42	254.159348	1066.0	false
13C9-PFNA	472.0 / 427.0	2.95	106062.08	250.105945	975.8	false
13C6-PFDA	519.0 / 474.0	3.29	102831.98	255.430332	1053.8	false
13C7-PFUnA	570.0 / 525.0	3.61	100367.30	248.527911	567.3	false
13C2-PFTeDA	715.0 / 670.0	4.39	99434.97	248.807783	1179.1	false
13C3-PFBS	302.0 / 99.0	1.53	35355.98	246.227056	500.9	false
13C3-PFHxS	402.0 / 99.0	2.21	26877.44	235.647293	239.8	false
13C8-PFOS	507.0 / 99.0	2.94	29834.75	260.792356	217.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:43:49 AM

Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:44:59	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.91	106475.81	238.881144	1277.9	false
d3-MeFOSAA	573.0 / 419.0	3.46	14209.71	205.028621	58.3	false
d5-EtFOSAA	589.0 / 419.0	3.62	16002.67	206.737800	135.1	false
13C5-PFHxA	318.0 / 273.0	1.83	87326.97	246.307339	484.5	false
13C4-PFHpA	367.0 / 322.0	2.19	91184.62	247.344117	653.9	false
13C8-PFOA	421.0 / 376.0	2.57	92253.79	238.511554	1508.2	false
13C9-PFNA	472.0 / 427.0	2.94	92491.41	228.306558	967.6	false
13C6-PFDA	519.0 / 474.0	3.29	90683.92	235.634353	763.5	false
13C7-PFUnA	570.0 / 525.0	3.61	92290.37	239.058066	661.9	false
13C2-PFTeDA	715.0 / 670.0	4.39	95349.88	249.579585	1040.9	false
13C3-PFBS	302.0 / 99.0	1.53	34042.24	225.504623	494.6	false
13C3-PFHxS	402.0 / 99.0	2.21	28016.90	233.646371	230.8	false
13C8-PFOS	507.0 / 99.0	2.94	26171.65	217.604533	173.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:43:53 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:55:51	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.91	117902.50	283.119231	1425.6	false
d3-MeFOSAA	573.0 / 419.0	3.45	18849.77	289.259715	68.3	false
d5-EtFOSAA	589.0 / 419.0	3.62	15988.19	219.674272	133.9	false
13C5-PFHxA	318.0 / 273.0	1.83	80688.00	254.269578	554.5	false
13C4-PFHpA	367.0 / 322.0	2.20	84735.38	256.803699	594.3	false
13C8-PFOA	421.0 / 376.0	2.57	85895.73	248.115132	1151.8	false
13C9-PFNA	472.0 / 427.0	2.94	90353.65	249.183434	1000.0	false
13C6-PFDA	519.0 / 474.0	3.29	83060.54	231.003473	853.4	false
13C7-PFUnA	570.0 / 525.0	3.61	86970.93	241.121826	572.2	false
13C2-PFTeDA	715.0 / 670.0	4.39	97632.99	273.527435	1265.8	false
13C3-PFBS	302.0 / 99.0	1.53	33012.96	232.581015	458.7	false
13C3-PFHxS	402.0 / 99.0	2.21	25661.28	227.598737	355.8	false
13C8-PFOS	507.0 / 99.0	2.94	23734.31	209.877587	164.2	false

Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:40:51 AM

Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:22:05	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.92	34361.12	117.614761	11.5	false
PFHxA_2	313.0 / 119.0	1.91	3744.58	131.288798	12.8	false
PFOA_1	413.0 / 369.0	2.73	38060.98	121.113434	36.2	false
PFOA_2	413.0 / 169.0	2.74	3000.75	128.970589	28.4	false
PFOS_1	499.0 / 80.0	3.13	50967.34	104.637764	51.4	false
PFOS_2	499.0 / 99.0	3.13	12719.65	116.636822	89.2	false

Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:40:55 AM

Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:32:58	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.92	93761.93	258.698417	26.7	false
PFHxA_2	313.0 / 119.0	1.92	6574.05	220.326158	26.7	false
PFOA_1	413.0 / 369.0	2.74	99734.44	242.981438	75.9	false
PFOA_2	413.0 / 169.0	2.74	7394.31	255.929619	63.6	false
PFOS_1	499.0 / 80.0	3.12	162435.66	248.291926	110.2	true
PFOS_2	499.0 / 99.0	3.12	27015.27	213.988200	158.5	false

Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:40:59 AM

Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:43:51	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.91	165881.91	448.629574	37.7	false
PFHxA_2	313.0 / 119.0	1.92	12883.08	446.557348	38.3	false
PFOA_1	413.0 / 369.0	2.73	199500.38	473.276906	108.4	false
PFOA_2	413.0 / 169.0	2.73	11670.13	405.855245	62.8	false
PFOS_1	499.0 / 80.0	3.12	305558.26	490.362317	175.5	true
PFOS_2	499.0 / 99.0	3.12	58218.17	510.451344	282.4	false

Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:41:05 AM

Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:54:43	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.90	353866.47	960.813494	64.7	false
PFHxA_2	313.0 / 119.0	1.90	26792.30	967.754802	55.5	false
PFOA_1	413.0 / 369.0	2.72	402954.95	944.360671	206.3	false
PFOA_2	413.0 / 169.0	2.72	26978.81	925.403115	154.3	false
PFOS_1	499.0 / 80.0	3.11	654359.27	987.858062	202.6	false
PFOS_2	499.0 / 99.0	3.11	113404.45	959.221052	361.5	false

Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:41:09 AM

Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:05:35	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.90	886451.19	2426.762636	106.6	false
PFHxA_2	313.0 / 119.0	1.90	66584.69	2471.882588	101.2	false
PFOA_1	413.0 / 369.0	2.72	1005223.97	2302.456541	422.3	false
PFOA_2	413.0 / 169.0	2.72	69598.46	2341.285594	279.8	false
PFOS_1	499.0 / 80.0	3.10	1629576.02	2428.135996	314.0	true
PFOS_2	499.0 / 99.0	3.11	290129.46	2458.214761	557.1	false

Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:41:16 AM

Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:16:27	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.90	4131184.65	10124.639308	278.2	false
PFHxA_2	313.0 / 119.0	1.90	300101.17	10068.006887	267.5	false
PFOA_1	413.0 / 369.0	2.72	4433994.57	9835.045171	989.2	false
PFOA_2	413.0 / 169.0	2.72	305221.69	9966.400046	788.9	false
PFOS_1	499.0 / 80.0	3.10	7319765.72	10321.637282	642.0	true
PFOS_2	499.0 / 99.0	3.10	1261686.14	10193.898958	1181.2	false

Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:41:39 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:27:19	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.90	7905673.66	20356.341810	409.0	false
PFHxA_2	313.0 / 119.0	1.90	577552.89	20387.683420	370.7	false
PFOA_1	413.0 / 369.0	2.71	8381114.70	20430.765839	1100.5	false
PFOA_2	413.0 / 169.0	2.71	566192.35	20326.155793	790.3	false
PFOS_1	499.0 / 80.0	3.10	13518180.38	19769.076652	836.6	true
PFOS_2	499.0 / 99.0	3.10	2371958.05	19897.588864	1523.7	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:45:11 AM

Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:22:05	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.91	88221.32	280.075990	708.2	false
13C4-PFHpA	367.0 / 322.0	2.32	96000.12	279.659826	779.3	false
13C8-PFOA	421.0 / 376.0	2.73	95739.00	270.469593	955.3	false
13C8-PFOS	507.0 / 99.0	3.12	29031.56	237.602564	173.7	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:45:15 AM

Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:32:58	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.90	92255.73	251.357490	635.3	false
13C4-PFHpA	367.0 / 322.0	2.32	99636.62	249.099832	698.5	false
13C8-PFOA	421.0 / 376.0	2.73	106069.66	257.167976	15095.5	false
13C8-PFOS	507.0 / 99.0	3.11	34121.59	234.055779	169.5	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:45:18 AM

Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:43:51	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.90	89174.43	249.116801	557.4	false
13C4-PFHpA	367.0 / 322.0	2.31	98332.04	252.065681	746.1	false
13C8-PFOA	421.0 / 376.0	2.72	101475.99	252.262807	4920.5	false
13C8-PFOS	507.0 / 99.0	3.10	32545.24	236.354073	191.8	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:45:22 AM

Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:54:43	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.89	85560.89	233.445288	642.9	false
13C4-PFHpA	367.0 / 322.0	2.30	96531.88	241.677687	803.7	false
13C8-PFOA	421.0 / 376.0	2.71	98954.71	240.255610	1129.4	false
13C8-PFOS	507.0 / 99.0	3.10	33142.21	234.109112	187.0	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:45:26 AM

Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:05:35	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.89	83241.90	249.370561	583.7	false
13C4-PFHpA	367.0 / 322.0	2.30	93815.19	257.888683	735.8	false
13C8-PFOA	421.0 / 376.0	2.71	99192.82	264.429951	1454.9	false
13C8-PFOS	507.0 / 99.0	3.09	32800.72	238.284765	213.6	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:45:30 AM

Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:16:27	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.89	92109.12	239.997239	581.6	false
13C4-PFHpA	367.0 / 322.0	2.30	96929.34	231.747381	873.8	false
13C8-PFOA	421.0 / 376.0	2.70	101353.34	235.000561	1530.1	false
13C8-PFOS	507.0 / 99.0	3.09	35780.87	255.257396	219.1	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:45:34 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:27:19	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.88	87538.58	246.636631	547.2	false
13C4-PFHpA	367.0 / 322.0	2.29	92004.50	237.860912	632.5	false
13C8-PFOA	421.0 / 376.0	2.70	91901.51	230.413501	913.4	false
13C8-PFOS	507.0 / 99.0	3.08	32471.80	239.086310	224.2	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:24:48 PM

Sample Name	JY38	**Injection Vial**	16
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	37707.51	119.143551	95.5	false
PFBS_2	298.9 / 99.0	1.53	11497.52	117.630528	77.4	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:24:53 PM

Sample Name	JY39	**Injection Vial**	17
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	89567.39	254.701746	194.1	false
PFBS_2	298.9 / 99.0	1.54	25138.78	244.365287	131.0	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:24:57 PM

Sample Name	JY40	**Injection Vial**	18
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	190206.41	497.430653	265.0	false
PFBS_2	298.9 / 99.0	1.53	56454.16	510.228071	197.1	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:25:02 PM

Sample Name	JY41	**Injection Vial**	19
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	342676.23	890.457094	339.4	false
PFBS_2	298.9 / 99.0	1.53	102578.96	928.235183	326.7	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:25:06 PM

Sample Name	JY42	**Injection Vial**	20
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	959814.48	2357.071583	535.3	false
PFBS_2	298.9 / 99.0	1.53	268618.10	2313.575234	521.5	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:25:11 PM

Sample Name	JY43	**Injection Vial**	21
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	4342817.41	10057.514027	1008.6	false
PFBS_2	298.9 / 99.0	1.53	1260725.84	10262.777442	1001.9	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:25:17 PM

Sample Name	JY44	**Injection Vial**	22
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	8868434.35	20517.181346	1643.5	false
PFBS_2	298.9 / 99.0	1.54	2497234.13	20316.688256	1344.3	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:25:51 PM

Sample Name	JY38	**Injection Vial**	16
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.51	32512.04	229.728024	499.0	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:25:56 PM

Sample Name	JY39	**Injection Vial**	17
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.52	29404.30	215.407920	383.7	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:26:00 PM

Sample Name	JY40	**Injection Vial**	18
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.52	29610.64	210.598836	419.0	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:26:05 PM

Sample Name	JY41	**Injection Vial**	19
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.52	28814.58	259.993260	542.3	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:26:10 PM

Sample Name	JY42	**Injection Vial**	20
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.51	29715.54	203.492368	361.5	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:26:15 PM

Sample Name	JY43	**Injection Vial**	21
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.51	31142.46	242.842221	494.6	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 1:26:19 PM

Sample Name	JY44	**Injection Vial**	22
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.52	31117.96	263.687371	441.2	false

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:47:07 AM

Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T21:50:38	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.320	0.288	ü
PFHxA_1	313.0 / 269.0	1.83	PFHxA			
PFHxA_2	313.0 / 119.0	1.83	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.19	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.320	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.080	0.072	ü
PFNA_1	463.0 / 419.0	2.94	PFNA			
PFNA_2	463.0 / 219.0	2.94	PFNA	0.320	0.306	ü
PFOS_1	499.0 / 80.0	2.93	PFOS			
PFOS_2	499.0 / 99.0	2.93	PFOS	0.210	0.178	ü
PFDA_1	513.0 / 469.0	3.29	PFDA			
PFDA_2	513.0 / 219.0	3.30	PFDA	0.060	0.047	ü
PFUnA_1	563.0 / 519.0	3.61	PFUnA			
PFUnA_2	563.0 / 269.0	3.59	PFUnA	0.140	0.058	
PFDoA_1	613.0 / 569.0	3.90	PFDoA			
PFDoA_2	613.0 / 319.0	3.90	PFDoA	0.190	0.162	ü
PFTrDA_1	663.0 / 619.0	4.15	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.14	PFTrDA	0.080	0.067	ü
PFTeDA_1	713.0 / 669.0	4.36	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.36	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.45	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.45	NMeFOSAA	0.600	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.61	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.62	NEtFOSAA	0.060	0.062	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:47:11 AM

Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:01:29	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.280	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.21	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.290	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.95	PFNA			
PFNA_2	463.0 / 219.0	2.95	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	2.94	PFOS	0.160	0.178	ü
PFDA_1	513.0 / 469.0	3.30	PFDA			
PFDA_2	513.0 / 219.0	3.30	PFDA	0.050	0.047	ü
PFUnA_1	563.0 / 519.0	3.62	PFUnA			
PFUnA_2	563.0 / 269.0	3.62	PFUnA	0.070	0.058	ü
PFDoA_1	613.0 / 569.0	3.91	PFDoA			
PFDoA_2	613.0 / 319.0	3.91	PFDoA	0.170	0.162	ü
PFTrDA_1	663.0 / 619.0	4.16	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.15	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.37	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.37	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.45	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.45	NMeFOSAA	0.620	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.62	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.61	NEtFOSAA	0.080	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:47:16 AM

Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:12:22	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.280	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.090	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.20	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.300	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.94	PFNA			
PFNA_2	463.0 / 219.0	2.94	PFNA	0.330	0.306	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	2.94	PFOS	0.190	0.178	ü
PFDA_1	513.0 / 469.0	3.29	PFDA			
PFDA_2	513.0 / 219.0	3.29	PFDA	0.050	0.047	ü
PFUnA_1	563.0 / 519.0	3.61	PFUnA			
PFUnA_2	563.0 / 269.0	3.61	PFUnA	0.060	0.058	ü
PFDoA_1	613.0 / 569.0	3.90	PFDoA			
PFDoA_2	613.0 / 319.0	3.90	PFDoA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.15	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.15	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.37	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.37	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.45	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.45	NMeFOSAA	0.530	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.61	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.61	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:47:21 AM

Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:23:14	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.290	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.20	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	PFHxS	0.280	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.96	PFNA			
PFNA_2	463.0 / 219.0	2.95	PFNA	0.300	0.306	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	2.95	PFOS	0.200	0.178	ü
PFDA_1	513.0 / 469.0	3.31	PFDA			
PFDA_2	513.0 / 219.0	3.31	PFDA	0.050	0.047	ü
PFUnA_1	563.0 / 519.0	3.63	PFUnA			
PFUnA_2	563.0 / 269.0	3.63	PFUnA	0.070	0.058	ü
PFDoA_1	613.0 / 569.0	3.92	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	PFDoA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.17	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.17	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.40	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.40	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.46	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.46	NMeFOSAA	0.540	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.63	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.63	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

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Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:34:06	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.290	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.21	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	PFHxS	0.280	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.96	PFNA			
PFNA_2	463.0 / 219.0	2.96	PFNA	0.300	0.306	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	2.95	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.31	PFDA			
PFDA_2	513.0 / 219.0	3.31	PFDA	0.040	0.047	ü
PFUnA_1	563.0 / 519.0	3.63	PFUnA			
PFUnA_2	563.0 / 269.0	3.63	PFUnA	0.060	0.058	ü
PFDoA_1	613.0 / 569.0	3.92	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	PFDoA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.18	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.18	PFTrDA	0.060	0.067	ü
PFTeDA_1	713.0 / 669.0	4.40	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.40	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.47	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.47	NMeFOSAA	0.530	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.63	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.63	NEtFOSAA	0.050	0.062	ü

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Summary Ion Ratio Report

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Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:44:59	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.290	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.21	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	PFHxS	0.280	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.95	PFNA			
PFNA_2	463.0 / 219.0	2.95	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	2.95	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	3.31	PFDA			
PFDA_2	513.0 / 219.0	3.31	PFDA	0.040	0.047	ü
PFUnA_1	563.0 / 519.0	3.63	PFUnA			
PFUnA_2	563.0 / 269.0	3.63	PFUnA	0.050	0.058	ü
PFDoA_1	613.0 / 569.0	3.92	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	PFDoA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.17	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.17	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.40	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.40	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.46	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.46	NMeFOSAA	0.560	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.63	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.63	NEtFOSAA	0.070	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:47:35 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:55:51	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.300	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.21	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	PFHxS	0.270	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.96	PFNA			
PFNA_2	463.0 / 219.0	2.96	PFNA	0.290	0.306	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	2.95	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	3.31	PFDA			
PFDA_2	513.0 / 219.0	3.31	PFDA	0.040	0.047	ü
PFUnA_1	563.0 / 519.0	3.63	PFUnA			
PFUnA_2	563.0 / 269.0	3.63	PFUnA	0.050	0.058	ü
PFDoA_1	613.0 / 569.0	3.92	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	PFDoA	0.170	0.162	ü
PFTrDA_1	663.0 / 619.0	4.17	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.17	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.40	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.40	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.47	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.47	NMeFOSAA	0.550	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.63	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.63	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:16:05 AM

Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:22:05	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.92	PFHxA			
PFHxA_2	313.0 / 119.0	1.91	PFHxA	0.110	0.079	ü
PFOA_1	413.0 / 369.0	2.73	PFOA			
PFOA_2	413.0 / 169.0	2.74	PFOA	0.080	0.069	ü
PFOS_1	499.0 / 80.0	3.13	PFOS			
PFOS_2	499.0 / 99.0	3.13	PFOS	0.250	0.187	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:16:12 AM

Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:32:58	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.92	PFHxA			
PFHxA_2	313.0 / 119.0	1.92	PFHxA	0.070	0.079	ü
PFOA_1	413.0 / 369.0	2.74	PFOA			
PFOA_2	413.0 / 169.0	2.74	PFOA	0.070	0.069	ü
PFOS_1	499.0 / 80.0	3.12	PFOS			
PFOS_2	499.0 / 99.0	3.12	PFOS	0.170	0.187	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:16:17 AM

Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:43:51	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.91	PFHxA			
PFHxA_2	313.0 / 119.0	1.92	PFHxA	0.080	0.079	ü
PFOA_1	413.0 / 369.0	2.73	PFOA			
PFOA_2	413.0 / 169.0	2.73	PFOA	0.060	0.069	ü
PFOS_1	499.0 / 80.0	3.12	PFOS			
PFOS_2	499.0 / 99.0	3.12	PFOS	0.190	0.187	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:16:21 AM

Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:54:43	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.90	PFHxA			
PFHxA_2	313.0 / 119.0	1.90	PFHxA	0.080	0.079	ü
PFOA_1	413.0 / 369.0	2.72	PFOA			
PFOA_2	413.0 / 169.0	2.72	PFOA	0.070	0.069	ü
PFOS_1	499.0 / 80.0	3.11	PFOS			
PFOS_2	499.0 / 99.0	3.11	PFOS	0.170	0.187	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:16:29 AM

Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:05:35	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.90	PFHxA			
PFHxA_2	313.0 / 119.0	1.90	PFHxA	0.080	0.079	ü
PFOA_1	413.0 / 369.0	2.72	PFOA			
PFOA_2	413.0 / 169.0	2.72	PFOA	0.070	0.069	ü
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.11	PFOS	0.180	0.187	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:16:34 AM

Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:16:27	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.90	PFHxA			
PFHxA_2	313.0 / 119.0	1.90	PFHxA	0.070	0.079	ü
PFOA_1	413.0 / 369.0	2.72	PFOA			
PFOA_2	413.0 / 169.0	2.72	PFOA	0.070	0.069	ü
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.10	PFOS	0.170	0.187	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:16:39 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:27:19	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.90	PFHxA			
PFHxA_2	313.0 / 119.0	1.90	PFHxA	0.070	0.079	ü
PFOA_1	413.0 / 369.0	2.71	PFOA			
PFOA_2	413.0 / 169.0	2.71	PFOA	0.070	0.069	ü
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.10	PFOS	0.180	0.187	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:48:41 AM

Sample Name	JY38	**Injection Vial**	16
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.291	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:48:45 AM

Sample Name	JY39	**Injection Vial**	17
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.280	0.291	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:48:48 AM

Sample Name	JY40	**Injection Vial**	18
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.291	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:48:52 AM

Sample Name	JY41	**Injection Vial**	19
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.291	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:48:56 AM

Sample Name	JY42	**Injection Vial**	20
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.280	0.291	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:49:02 AM

Sample Name	JY43	**Injection Vial**	21
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.291	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:49:07 AM

Sample Name	JY44	**Injection Vial**	22
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.280	0.291	ü

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:49:48 AM

Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T21:50:38	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	27968.34	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	27968.34	232.25
PFHxA_1	313.0 / 269.0	1.83	13C5-PFHxA	318.0 / 273.0	73987.69	250.00
PFHxA_2	313.0 / 119.0	1.83	13C5-PFHxA	318.0 / 273.0	73987.69	250.00
PFHpA_1	363.0 / 319.0	2.19	13C8-PFOA	421.0 / 376.0	77023.81	250.00
PFHpA_2	363.0 / 169.0	2.19	13C8-PFOA	421.0 / 376.0	77023.81	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	25684.03	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	25684.03	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	77023.81	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	77023.81	250.00
PFNA_1	463.0 / 419.0	2.94	13C9-PFNA	472.0 / 427.0	82257.75	250.00
PFNA_2	463.0 / 219.0	2.94	13C9-PFNA	472.0 / 427.0	82257.75	250.00
PFOS_1	499.0 / 80.0	2.93	13C8-PFOS	507.0 / 99.0	26074.86	239.25
PFOS_2	499.0 / 99.0	2.93	13C8-PFOS	507.0 / 99.0	26074.86	239.25
PFDA_1	513.0 / 469.0	3.29	13C6-PFDA	519.0 / 474.0	85576.08	250.00
PFDA_2	513.0 / 219.0	3.30	13C6-PFDA	519.0 / 474.0	85576.08	250.00
PFUnA_1	563.0 / 519.0	3.61	13C7-PFUnA	570.0 / 525.0	86790.52	250.00
PFUnA_2	563.0 / 269.0	3.59	13C7-PFUnA	570.0 / 525.0	86790.52	250.00
PFDoA_1	613.0 / 569.0	3.90	13C2-PFDoA	615.0 / 570.0	90406.60	250.00
PFDoA_2	613.0 / 319.0	3.90	13C2-PFDoA	615.0 / 570.0	90406.60	250.00
PFTrDA_1	663.0 / 619.0	4.15	13C2-PFTeDA	715.0 / 670.0	81434.10	250.00
PFTrDA_2	663.0 / 169.0	4.14	13C2-PFTeDA	715.0 / 670.0	81434.10	250.00
PFTeDA_1	713.0 / 669.0	4.36	13C2-PFTeDA	715.0 / 670.0	81434.10	250.00
PFTeDA_2	713.0 / 169.0	4.36	13C2-PFTeDA	715.0 / 670.0	81434.10	250.00
NMeFOSAA_1	570.0 / 419.0	3.45	d3-MeFOSAA	573.0 / 419.0	14303.88	250.00
NMeFOSAA_2	570.0 / 512.0	3.45	d3-MeFOSAA	573.0 / 419.0	14303.88	250.00
NEtFOSAA_1	584.0 / 419.0	3.61	d5-EtFOSAA	589.0 / 419.0	17724.76	250.00
NEtFOSAA_2	584.0 / 483.0	3.62	d5-EtFOSAA	589.0 / 419.0	17724.76	250.00

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Summary Internal Standard Report

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Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:01:29	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	30160.70	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	30160.70	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	72425.11	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	72425.11	250.00
PFHpA_1	363.0 / 319.0	2.21	13C8-PFOA	421.0 / 376.0	81619.35	250.00
PFHpA_2	363.0 / 169.0	2.21	13C8-PFOA	421.0 / 376.0	81619.35	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	22937.76	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	22937.76	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	81619.35	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	81619.35	250.00
PFNA_1	463.0 / 419.0	2.95	13C9-PFNA	472.0 / 427.0	86649.84	250.00
PFNA_2	463.0 / 219.0	2.95	13C9-PFNA	472.0 / 427.0	86649.84	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	22090.27	239.25
PFOS_2	499.0 / 99.0	2.94	13C8-PFOS	507.0 / 99.0	22090.27	239.25
PFDA_1	513.0 / 469.0	3.30	13C6-PFDA	519.0 / 474.0	83212.19	250.00
PFDA_2	513.0 / 219.0	3.30	13C6-PFDA	519.0 / 474.0	83212.19	250.00
PFUnA_1	563.0 / 519.0	3.62	13C7-PFUnA	570.0 / 525.0	86354.42	250.00
PFUnA_2	563.0 / 269.0	3.62	13C7-PFUnA	570.0 / 525.0	86354.42	250.00
PFDoA_1	613.0 / 569.0	3.91	13C2-PFDoA	615.0 / 570.0	93131.19	250.00
PFDoA_2	613.0 / 319.0	3.91	13C2-PFDoA	615.0 / 570.0	93131.19	250.00
PFTrDA_1	663.0 / 619.0	4.16	13C2-PFTeDA	715.0 / 670.0	78338.13	250.00
PFTrDA_2	663.0 / 169.0	4.15	13C2-PFTeDA	715.0 / 670.0	78338.13	250.00
PFTeDA_1	713.0 / 669.0	4.37	13C2-PFTeDA	715.0 / 670.0	78338.13	250.00
PFTeDA_2	713.0 / 169.0	4.37	13C2-PFTeDA	715.0 / 670.0	78338.13	250.00
NMeFOSAA_1	570.0 / 419.0	3.45	d3-MeFOSAA	573.0 / 419.0	13455.61	250.00
NMeFOSAA_2	570.0 / 512.0	3.45	d3-MeFOSAA	573.0 / 419.0	13455.61	250.00
NEtFOSAA_1	584.0 / 419.0	3.62	d5-EtFOSAA	589.0 / 419.0	16440.43	250.00
NEtFOSAA_2	584.0 / 483.0	3.61	d5-EtFOSAA	589.0 / 419.0	16440.43	250.00

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Summary Internal Standard Report

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Printed: 29/08/2018 9:50:03 AM

Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:12:22	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	27603.14	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	27603.14	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	73734.05	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	73734.05	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	80331.73	250.00
PFHpA_2	363.0 / 169.0	2.20	13C8-PFOA	421.0 / 376.0	80331.73	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	22753.32	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	22753.32	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	80331.73	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	80331.73	250.00
PFNA_1	463.0 / 419.0	2.94	13C9-PFNA	472.0 / 427.0	91719.94	250.00
PFNA_2	463.0 / 219.0	2.94	13C9-PFNA	472.0 / 427.0	91719.94	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	24075.45	239.25
PFOS_2	499.0 / 99.0	2.94	13C8-PFOS	507.0 / 99.0	24075.45	239.25
PFDA_1	513.0 / 469.0	3.29	13C6-PFDA	519.0 / 474.0	86314.31	250.00
PFDA_2	513.0 / 219.0	3.29	13C6-PFDA	519.0 / 474.0	86314.31	250.00
PFUnA_1	563.0 / 519.0	3.61	13C7-PFUnA	570.0 / 525.0	81097.65	250.00
PFUnA_2	563.0 / 269.0	3.61	13C7-PFUnA	570.0 / 525.0	81097.65	250.00
PFDoA_1	613.0 / 569.0	3.90	13C2-PFDoA	615.0 / 570.0	95235.27	250.00
PFDoA_2	613.0 / 319.0	3.90	13C2-PFDoA	615.0 / 570.0	95235.27	250.00
PFTrDA_1	663.0 / 619.0	4.15	13C2-PFTeDA	715.0 / 670.0	80597.67	250.00
PFTrDA_2	663.0 / 169.0	4.15	13C2-PFTeDA	715.0 / 670.0	80597.67	250.00
PFTeDA_1	713.0 / 669.0	4.37	13C2-PFTeDA	715.0 / 670.0	80597.67	250.00
PFTeDA_2	713.0 / 169.0	4.37	13C2-PFTeDA	715.0 / 670.0	80597.67	250.00
NMeFOSAA_1	570.0 / 419.0	3.45	d3-MeFOSAA	573.0 / 419.0	13185.92	250.00
NMeFOSAA_2	570.0 / 512.0	3.45	d3-MeFOSAA	573.0 / 419.0	13185.92	250.00
NEtFOSAA_1	584.0 / 419.0	3.61	d5-EtFOSAA	589.0 / 419.0	17737.91	250.00
NEtFOSAA_2	584.0 / 483.0	3.61	d5-EtFOSAA	589.0 / 419.0	17737.91	250.00

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:50:08 AM

Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:23:14	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	24151.98	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	24151.98	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	60941.53	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	60941.53	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	65712.04	250.00
PFHpA_2	363.0 / 169.0	2.20	13C8-PFOA	421.0 / 376.0	65712.04	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	19569.81	236.50
PFHxS_2	399.0 / 99.0	2.22	13C3-PFHxS	402.0 / 99.0	19569.81	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	65712.04	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	65712.04	250.00
PFNA_1	463.0 / 419.0	2.96	13C9-PFNA	472.0 / 427.0	69679.51	250.00
PFNA_2	463.0 / 219.0	2.95	13C9-PFNA	472.0 / 427.0	69679.51	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	19617.29	239.25
PFOS_2	499.0 / 99.0	2.95	13C8-PFOS	507.0 / 99.0	19617.29	239.25
PFDA_1	513.0 / 469.0	3.31	13C6-PFDA	519.0 / 474.0	69540.08	250.00
PFDA_2	513.0 / 219.0	3.31	13C6-PFDA	519.0 / 474.0	69540.08	250.00
PFUnA_1	563.0 / 519.0	3.63	13C7-PFUnA	570.0 / 525.0	69481.72	250.00
PFUnA_2	563.0 / 269.0	3.63	13C7-PFUnA	570.0 / 525.0	69481.72	250.00
PFDoA_1	613.0 / 569.0	3.92	13C2-PFDoA	615.0 / 570.0	80089.90	250.00
PFDoA_2	613.0 / 319.0	3.92	13C2-PFDoA	615.0 / 570.0	80089.90	250.00
PFTrDA_1	663.0 / 619.0	4.17	13C2-PFTeDA	715.0 / 670.0	66240.41	250.00
PFTrDA_2	663.0 / 169.0	4.17	13C2-PFTeDA	715.0 / 670.0	66240.41	250.00
PFTeDA_1	713.0 / 669.0	4.40	13C2-PFTeDA	715.0 / 670.0	66240.41	250.00
PFTeDA_2	713.0 / 169.0	4.40	13C2-PFTeDA	715.0 / 670.0	66240.41	250.00
NMeFOSAA_1	570.0 / 419.0	3.46	d3-MeFOSAA	573.0 / 419.0	11459.87	250.00
NMeFOSAA_2	570.0 / 512.0	3.46	d3-MeFOSAA	573.0 / 419.0	11459.87	250.00
NEtFOSAA_1	584.0 / 419.0	3.63	d5-EtFOSAA	589.0 / 419.0	13589.71	250.00
NEtFOSAA_2	584.0 / 483.0	3.63	d5-EtFOSAA	589.0 / 419.0	13589.71	250.00

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:50:13 AM

Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:34:06	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	35355.98	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	35355.98	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	94233.23	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	94233.23	250.00
PFHpA_1	363.0 / 319.0	2.21	13C8-PFOA	421.0 / 376.0	102824.50	250.00
PFHpA_2	363.0 / 169.0	2.21	13C8-PFOA	421.0 / 376.0	102824.50	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	26877.44	236.50
PFHxS_2	399.0 / 99.0	2.22	13C3-PFHxS	402.0 / 99.0	26877.44	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	102824.50	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	102824.50	250.00
PFNA_1	463.0 / 419.0	2.96	13C9-PFNA	472.0 / 427.0	106062.08	250.00
PFNA_2	463.0 / 219.0	2.96	13C9-PFNA	472.0 / 427.0	106062.08	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	29725.60	239.25
PFOS_2	499.0 / 99.0	2.95	13C8-PFOS	507.0 / 99.0	29725.60	239.25
PFDA_1	513.0 / 469.0	3.31	13C6-PFDA	519.0 / 474.0	102831.98	250.00
PFDA_2	513.0 / 219.0	3.31	13C6-PFDA	519.0 / 474.0	102831.98	250.00
PFUnA_1	563.0 / 519.0	3.63	13C7-PFUnA	570.0 / 525.0	100367.30	250.00
PFUnA_2	563.0 / 269.0	3.63	13C7-PFUnA	570.0 / 525.0	100367.30	250.00
PFDoA_1	613.0 / 569.0	3.92	13C2-PFDoA	615.0 / 570.0	114392.51	250.00
PFDoA_2	613.0 / 319.0	3.92	13C2-PFDoA	615.0 / 570.0	114392.51	250.00
PFTrDA_1	663.0 / 619.0	4.18	13C2-PFTeDA	715.0 / 670.0	99434.97	250.00
PFTrDA_2	663.0 / 169.0	4.18	13C2-PFTeDA	715.0 / 670.0	99434.97	250.00
PFTeDA_1	713.0 / 669.0	4.40	13C2-PFTeDA	715.0 / 670.0	99434.97	250.00
PFTeDA_2	713.0 / 169.0	4.40	13C2-PFTeDA	715.0 / 670.0	99434.97	250.00
NMeFOSAA_1	570.0 / 419.0	3.47	d3-MeFOSAA	573.0 / 419.0	19718.14	250.00
NMeFOSAA_2	570.0 / 512.0	3.47	d3-MeFOSAA	573.0 / 419.0	19718.14	250.00
NEtFOSAA_1	584.0 / 419.0	3.63	d5-EtFOSAA	589.0 / 419.0	18744.38	250.00
NEtFOSAA_2	584.0 / 483.0	3.63	d5-EtFOSAA	589.0 / 419.0	18744.38	250.00

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Summary Internal Standard Report

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Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:44:59	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	34042.24	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	34042.24	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	87326.97	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	87326.97	250.00
PFHpA_1	363.0 / 319.0	2.21	13C8-PFOA	421.0 / 376.0	91726.03	250.00
PFHpA_2	363.0 / 169.0	2.21	13C8-PFOA	421.0 / 376.0	91726.03	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	28016.90	236.50
PFHxS_2	399.0 / 99.0	2.22	13C3-PFHxS	402.0 / 99.0	28016.90	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	91726.03	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	91726.03	250.00
PFNA_1	463.0 / 419.0	2.95	13C9-PFNA	472.0 / 427.0	92491.41	250.00
PFNA_2	463.0 / 219.0	2.95	13C9-PFNA	472.0 / 427.0	92491.41	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	25770.09	239.25
PFOS_2	499.0 / 99.0	2.95	13C8-PFOS	507.0 / 99.0	25770.09	239.25
PFDA_1	513.0 / 469.0	3.31	13C6-PFDA	519.0 / 474.0	90683.92	250.00
PFDA_2	513.0 / 219.0	3.31	13C6-PFDA	519.0 / 474.0	90683.92	250.00
PFUnA_1	563.0 / 519.0	3.63	13C7-PFUnA	570.0 / 525.0	92290.37	250.00
PFUnA_2	563.0 / 269.0	3.63	13C7-PFUnA	570.0 / 525.0	92290.37	250.00
PFDoA_1	613.0 / 569.0	3.92	13C2-PFDoA	615.0 / 570.0	106475.81	250.00
PFDoA_2	613.0 / 319.0	3.92	13C2-PFDoA	615.0 / 570.0	106475.81	250.00
PFTrDA_1	663.0 / 619.0	4.17	13C2-PFTeDA	715.0 / 670.0	95349.88	250.00
PFTrDA_2	663.0 / 169.0	4.17	13C2-PFTeDA	715.0 / 670.0	95349.88	250.00
PFTeDA_1	713.0 / 669.0	4.40	13C2-PFTeDA	715.0 / 670.0	95349.88	250.00
PFTeDA_2	713.0 / 169.0	4.40	13C2-PFTeDA	715.0 / 670.0	95349.88	250.00
NMeFOSAA_1	570.0 / 419.0	3.46	d3-MeFOSAA	573.0 / 419.0	14209.71	250.00
NMeFOSAA_2	570.0 / 512.0	3.46	d3-MeFOSAA	573.0 / 419.0	14209.71	250.00
NEtFOSAA_1	584.0 / 419.0	3.63	d5-EtFOSAA	589.0 / 419.0	16002.67	250.00
NEtFOSAA_2	584.0 / 483.0	3.63	d5-EtFOSAA	589.0 / 419.0	16002.67	250.00

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Summary Internal Standard Report

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Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:55:51	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	33012.96	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	33012.96	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	80688.00	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	80688.00	250.00
PFHpA_1	363.0 / 319.0	2.21	13C8-PFOA	421.0 / 376.0	86011.90	250.00
PFHpA_2	363.0 / 169.0	2.21	13C8-PFOA	421.0 / 376.0	86011.90	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	25661.28	236.50
PFHxS_2	399.0 / 99.0	2.22	13C3-PFHxS	402.0 / 99.0	25661.28	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	86011.90	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	86011.90	250.00
PFNA_1	463.0 / 419.0	2.96	13C9-PFNA	472.0 / 427.0	90353.65	250.00
PFNA_2	463.0 / 219.0	2.96	13C9-PFNA	472.0 / 427.0	90353.65	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	23567.33	239.25
PFOS_2	499.0 / 99.0	2.95	13C8-PFOS	507.0 / 99.0	23567.33	239.25
PFDA_1	513.0 / 469.0	3.31	13C6-PFDA	519.0 / 474.0	83060.54	250.00
PFDA_2	513.0 / 219.0	3.31	13C6-PFDA	519.0 / 474.0	83060.54	250.00
PFUnA_1	563.0 / 519.0	3.63	13C7-PFUnA	570.0 / 525.0	86970.93	250.00
PFUnA_2	563.0 / 269.0	3.63	13C7-PFUnA	570.0 / 525.0	86970.93	250.00
PFDoA_1	613.0 / 569.0	3.92	13C2-PFDoA	615.0 / 570.0	117902.50	250.00
PFDoA_2	613.0 / 319.0	3.92	13C2-PFDoA	615.0 / 570.0	117902.50	250.00
PFTrDA_1	663.0 / 619.0	4.17	13C2-PFTeDA	715.0 / 670.0	97632.99	250.00
PFTrDA_2	663.0 / 169.0	4.17	13C2-PFTeDA	715.0 / 670.0	97632.99	250.00
PFTeDA_1	713.0 / 669.0	4.40	13C2-PFTeDA	715.0 / 670.0	97632.99	250.00
PFTeDA_2	713.0 / 169.0	4.40	13C2-PFTeDA	715.0 / 670.0	97632.99	250.00
NMeFOSAA_1	570.0 / 419.0	3.47	d3-MeFOSAA	573.0 / 419.0	18849.77	250.00
NMeFOSAA_2	570.0 / 512.0	3.47	d3-MeFOSAA	573.0 / 419.0	18849.77	250.00
NEtFOSAA_1	584.0 / 419.0	3.63	d5-EtFOSAA	589.0 / 419.0	15988.19	250.00
NEtFOSAA_2	584.0 / 483.0	3.63	d5-EtFOSAA	589.0 / 419.0	15988.19	250.00

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Summary Internal Standard Report

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Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T21:50:38	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.89	13C2-PFDA	515.0 / 470.0	84211.86	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	26962.30	239.25
d5-EtFOSAA	589.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	26962.30	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	79967.58	250.00
13C4-PFHpA	367.0 / 322.0	2.18	13C2-PFOA	415.0 / 370.0	79967.58	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	79967.58	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	79967.58	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	84211.86	250.00
13C7-PFUnA	570.0 / 525.0	3.59	13C2-PFDA	515.0 / 470.0	84211.86	250.00
13C2-PFTeDA	715.0 / 670.0	4.35	13C2-PFDA	515.0 / 470.0	84211.86	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	26962.30	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	26962.30	239.25
13C8-PFOS	507.0 / 99.0	2.92	13C4-PFOS	503.0 / 99.0	26962.30	239.25

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Summary Internal Standard Report

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Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:01:29	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	81697.75	250.00
d3-MeFOSAA	573.0 / 419.0	3.45	13C4-PFOS	503.0 / 99.0	26319.54	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	26319.54	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	77934.35	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	77934.35	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	77934.35	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	77934.35	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	81697.75	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	81697.75	250.00
13C2-PFTeDA	715.0 / 670.0	4.36	13C2-PFDA	515.0 / 470.0	81697.75	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	26319.54	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	26319.54	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	26319.54	239.25

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Summary Internal Standard Report

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Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:12:22	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.89	13C2-PFDA	515.0 / 470.0	79336.29	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	25297.76	239.25
d5-EtFOSAA	589.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	25297.76	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	79341.35	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	79341.35	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	79341.35	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	79341.35	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	79336.29	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	79336.29	250.00
13C2-PFTeDA	715.0 / 670.0	4.36	13C2-PFDA	515.0 / 470.0	79336.29	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	25297.76	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	25297.76	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	25297.76	239.25

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Summary Internal Standard Report

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Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:23:14	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.91	13C2-PFDA	515.0 / 470.0	71247.08	250.00
d3-MeFOSAA	573.0 / 419.0	3.46	13C4-PFOS	503.0 / 99.0	21987.16	239.25
d5-EtFOSAA	589.0 / 419.0	3.62	13C4-PFOS	503.0 / 99.0	21987.16	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	62038.00	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	62038.00	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	62038.00	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	62038.00	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	71247.08	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	71247.08	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	71247.08	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	21987.16	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	21987.16	239.25
13C8-PFOS	507.0 / 99.0	2.94	13C4-PFOS	503.0 / 99.0	21987.16	239.25

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Summary Internal Standard Report

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Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:34:06	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.91	13C2-PFDA	515.0 / 470.0	100964.90	250.00
d3-MeFOSAA	573.0 / 419.0	3.46	13C4-PFOS	503.0 / 99.0	30257.21	239.25
d5-EtFOSAA	589.0 / 419.0	3.62	13C4-PFOS	503.0 / 99.0	30257.21	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	98100.16	250.00
13C4-PFHpA	367.0 / 322.0	2.20	13C2-PFOA	415.0 / 370.0	98100.16	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	98100.16	250.00
13C9-PFNA	472.0 / 427.0	2.95	13C2-PFOA	415.0 / 370.0	98100.16	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	100964.90	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	100964.90	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	100964.90	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	30257.21	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	30257.21	239.25
13C8-PFOS	507.0 / 99.0	2.94	13C4-PFOS	503.0 / 99.0	30257.21	239.25

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Summary Internal Standard Report

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Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:44:59	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.91	13C2-PFDA	515.0 / 470.0	96517.57	250.00
d3-MeFOSAA	573.0 / 419.0	3.46	13C4-PFOS	503.0 / 99.0	31810.06	239.25
d5-EtFOSAA	589.0 / 419.0	3.62	13C4-PFOS	503.0 / 99.0	31810.06	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	93716.61	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	93716.61	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	93716.61	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	93716.61	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	96517.57	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	96517.57	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	96517.57	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	31810.06	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	31810.06	239.25
13C8-PFOS	507.0 / 99.0	2.94	13C4-PFOS	503.0 / 99.0	31810.06	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 11:49:58 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:55:51	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.91	13C2-PFDA	515.0 / 470.0	90176.00	250.00
d3-MeFOSAA	573.0 / 419.0	3.45	13C4-PFOS	503.0 / 99.0	29909.69	239.25
d5-EtFOSAA	589.0 / 419.0	3.62	13C4-PFOS	503.0 / 99.0	29909.69	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	83880.32	250.00
13C4-PFHpA	367.0 / 322.0	2.20	13C2-PFOA	415.0 / 370.0	83880.32	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	83880.32	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	83880.32	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	90176.00	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	90176.00	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	90176.00	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	29909.69	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	29909.69	239.25
13C8-PFOS	507.0 / 99.0	2.94	13C4-PFOS	503.0 / 99.0	29909.69	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:17:29 AM

Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:22:05	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.92	13C5-PFHxA	318.0 / 273.0	88221.32	250.00
PFHxA_2	313.0 / 119.0	1.91	13C5-PFHxA	318.0 / 273.0	88221.32	250.00
PFOA_1	413.0 / 369.0	2.73	13C8-PFOA	421.0 / 376.0	95798.07	250.00
PFOA_2	413.0 / 169.0	2.74	13C8-PFOA	421.0 / 376.0	95798.07	250.00
PFOS_1	499.0 / 80.0	3.13	13C8-PFOS	507.0 / 99.0	29249.70	239.25
PFOS_2	499.0 / 99.0	3.13	13C8-PFOS	507.0 / 99.0	29249.70	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:17:34 AM

Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:32:58	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.92	13C5-PFHxA	318.0 / 273.0	92255.73	250.00
PFHxA_2	313.0 / 119.0	1.92	13C5-PFHxA	318.0 / 273.0	92255.73	250.00
PFOA_1	413.0 / 369.0	2.74	13C8-PFOA	421.0 / 376.0	105756.09	250.00
PFOA_2	413.0 / 169.0	2.74	13C8-PFOA	421.0 / 376.0	105756.09	250.00
PFOS_1	499.0 / 80.0	3.12	13C8-PFOS	507.0 / 99.0	34234.34	239.25
PFOS_2	499.0 / 99.0	3.12	13C8-PFOS	507.0 / 99.0	34234.34	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:17:40 AM

Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:43:51	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.91	13C5-PFHxA	318.0 / 273.0	89174.43	250.00
PFHxA_2	313.0 / 119.0	1.92	13C5-PFHxA	318.0 / 273.0	89174.43	250.00
PFOA_1	413.0 / 369.0	2.73	13C8-PFOA	421.0 / 376.0	101044.36	250.00
PFOA_2	413.0 / 169.0	2.73	13C8-PFOA	421.0 / 376.0	101044.36	250.00
PFOS_1	499.0 / 80.0	3.12	13C8-PFOS	507.0 / 99.0	31166.66	239.25
PFOS_2	499.0 / 99.0	3.12	13C8-PFOS	507.0 / 99.0	31166.66	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:17:45 AM

Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:54:43	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.90	13C5-PFHxA	318.0 / 273.0	85560.89	250.00
PFHxA_2	313.0 / 119.0	1.90	13C5-PFHxA	318.0 / 273.0	85560.89	250.00
PFOA_1	413.0 / 369.0	2.72	13C8-PFOA	421.0 / 376.0	98666.25	250.00
PFOA_2	413.0 / 169.0	2.72	13C8-PFOA	421.0 / 376.0	98666.25	250.00
PFOS_1	499.0 / 80.0	3.11	13C8-PFOS	507.0 / 99.0	32391.60	239.25
PFOS_2	499.0 / 99.0	3.11	13C8-PFOS	507.0 / 99.0	32391.60	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:17:50 AM

Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:05:35	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.90	13C5-PFHxA	318.0 / 273.0	83241.90	250.00
PFHxA_2	313.0 / 119.0	1.90	13C5-PFHxA	318.0 / 273.0	83241.90	250.00
PFOA_1	413.0 / 369.0	2.72	13C8-PFOA	421.0 / 376.0	98881.68	250.00
PFOA_2	413.0 / 169.0	2.72	13C8-PFOA	421.0 / 376.0	98881.68	250.00
PFOS_1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	32395.30	239.25
PFOS_2	499.0 / 99.0	3.11	13C8-PFOS	507.0 / 99.0	32395.30	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:17:56 AM

Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:16:27	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.90	13C5-PFHxA	318.0 / 273.0	92109.12	250.00
PFHxA_2	313.0 / 119.0	1.90	13C5-PFHxA	318.0 / 273.0	92109.12	250.00
PFOA_1	413.0 / 369.0	2.72	13C8-PFOA	421.0 / 376.0	101004.86	250.00
PFOA_2	413.0 / 169.0	2.72	13C8-PFOA	421.0 / 376.0	101004.86	250.00
PFOS_1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	34002.01	239.25
PFOS_2	499.0 / 99.0	3.10	13C8-PFOS	507.0 / 99.0	34002.01	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:18:01 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:27:19	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.90	13C5-PFHxA	318.0 / 273.0	87538.58	250.00
PFHxA_2	313.0 / 119.0	1.90	13C5-PFHxA	318.0 / 273.0	87538.58	250.00
PFOA_1	413.0 / 369.0	2.71	13C8-PFOA	421.0 / 376.0	91748.06	250.00
PFOA_2	413.0 / 169.0	2.71	13C8-PFOA	421.0 / 376.0	91748.06	250.00
PFOS_1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	32753.65	239.25
PFOS_2	499.0 / 99.0	3.10	13C8-PFOS	507.0 / 99.0	32753.65	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 11:51:26 AM

Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:22:05	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.91	13C2-PFOA	415.0 / 370.0	84773.28	250.00
13C4-PFHpA	367.0 / 322.0	2.32	13C2-PFOA	415.0 / 370.0	84773.28	250.00
13C8-PFOA	421.0 / 376.0	2.73	13C2-PFOA	415.0 / 370.0	84773.28	250.00
13C8-PFOS	507.0 / 99.0	3.12	13C4-PFOS	503.0 / 99.0	29563.78	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 11:51:29 AM

Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:32:58	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.90	13C2-PFOA	415.0 / 370.0	98778.59	250.00
13C4-PFHpA	367.0 / 322.0	2.32	13C2-PFOA	415.0 / 370.0	98778.59	250.00
13C8-PFOA	421.0 / 376.0	2.73	13C2-PFOA	415.0 / 370.0	98778.59	250.00
13C8-PFOS	507.0 / 99.0	3.11	13C4-PFOS	503.0 / 99.0	35273.66	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 11:51:33 AM

Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:43:51	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.90	13C2-PFOA	415.0 / 370.0	96338.21	250.00
13C4-PFHpA	367.0 / 322.0	2.31	13C2-PFOA	415.0 / 370.0	96338.21	250.00
13C8-PFOA	421.0 / 376.0	2.72	13C2-PFOA	415.0 / 370.0	96338.21	250.00
13C8-PFOS	507.0 / 99.0	3.10	13C4-PFOS	503.0 / 99.0	33316.94	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 11:51:37 AM

Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:54:43	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.89	13C2-PFOA	415.0 / 370.0	98639.63	250.00
13C4-PFHpA	367.0 / 322.0	2.30	13C2-PFOA	415.0 / 370.0	98639.63	250.00
13C8-PFOA	421.0 / 376.0	2.71	13C2-PFOA	415.0 / 370.0	98639.63	250.00
13C8-PFOS	507.0 / 99.0	3.10	13C4-PFOS	503.0 / 99.0	34253.41	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 11:51:40 AM

Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:05:35	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.89	13C2-PFOA	415.0 / 370.0	89837.59	250.00
13C4-PFHpA	367.0 / 322.0	2.30	13C2-PFOA	415.0 / 370.0	89837.59	250.00
13C8-PFOA	421.0 / 376.0	2.71	13C2-PFOA	415.0 / 370.0	89837.59	250.00
13C8-PFOS	507.0 / 99.0	3.09	13C4-PFOS	503.0 / 99.0	33306.40	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 11:51:44 AM

Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:16:27	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.89	13C2-PFOA	415.0 / 370.0	103289.85	250.00
13C4-PFHpA	367.0 / 322.0	2.30	13C2-PFOA	415.0 / 370.0	103289.85	250.00
13C8-PFOA	421.0 / 376.0	2.70	13C2-PFOA	415.0 / 370.0	103289.85	250.00
13C8-PFOS	507.0 / 99.0	3.09	13C4-PFOS	503.0 / 99.0	33916.67	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 11:51:48 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:27:19	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.88	13C2-PFOA	415.0 / 370.0	95521.96	250.00
13C4-PFHpA	367.0 / 322.0	2.29	13C2-PFOA	415.0 / 370.0	95521.96	250.00
13C8-PFOA	421.0 / 376.0	2.70	13C2-PFOA	415.0 / 370.0	95521.96	250.00
13C8-PFOS	507.0 / 99.0	3.08	13C4-PFOS	503.0 / 99.0	32861.88	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:53:07 AM

Sample Name	JY38	**Injection Vial**	16
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	32512.04	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	32512.04	232.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:53:11 AM

Sample Name	JY39	**Injection Vial**	17
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	29404.30	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	29404.30	232.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:53:16 AM

Sample Name	JY40	**Injection Vial**	18
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	29610.64	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	29610.64	232.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:53:21 AM

Sample Name	JY41	**Injection Vial**	19
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	28814.58	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	28814.58	232.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:53:25 AM

Sample Name	JY42	**Injection Vial**	20
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	29715.54	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	29715.54	232.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:53:30 AM

Sample Name	JY43	**Injection Vial**	21
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	31142.46	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	31142.46	232.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:53:35 AM

Sample Name	JY44	**Injection Vial**	22
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	31117.96	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	31117.96	232.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:52:08 AM

Sample Name	JY38	**Injection Vial**	16
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	29953.96	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:52:12 AM

Sample Name	JY39	**Injection Vial**	17
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	28891.71	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:52:17 AM

Sample Name	JY40	**Injection Vial**	18
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	29758.83	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:52:21 AM

Sample Name	JY41	**Injection Vial**	19
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	23457.09	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:52:30 AM

Sample Name	JY42	**Injection Vial**	20
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	30907.19	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:52:34 AM

Sample Name	JY43	**Injection Vial**	21
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	27142.68	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:52:39 AM

Sample Name	JY44	**Injection Vial**	22
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	24977.32	239.25

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QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:54:13 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:17:37	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.56	1042.001508	1010.00	103.17
PFBS_2	298.9 / 99.0	1.55	1061.572577	1010.00	105.11
PFHxA_1	313.0 / 269.0	1.84	940.305580	1010.00	93.10
PFHxA_2	313.0 / 119.0	1.84	1013.486048	1010.00	100.35
PFHpA_1	363.0 / 319.0	2.21	951.166589	1000.00	95.12
PFHpA_2	363.0 / 169.0	2.21	933.476141	1000.00	93.35
PFHxS_1	399.0 / 80.0	2.22	896.915676	1010.00	88.80
PFHxS_2	399.0 / 99.0	2.22	908.280146	1010.00	89.93
PFOA_1	413.0 / 369.0	2.58	978.600374	1000.00	97.86
PFOA_2	413.0 / 169.0	2.58	847.693262	1000.00	84.77
PFNA_1	463.0 / 419.0	2.95	951.224513	1000.00	95.12
PFNA_2	463.0 / 219.0	2.95	954.912823	1000.00	95.49
PFOS_1	499.0 / 80.0	2.95	873.056763	1000.00	87.31
PFOS_2	499.0 / 99.0	2.95	882.965044	1000.00	88.30
PFDA_1	513.0 / 469.0	3.31	1011.245865	1000.00	101.12
PFDA_2	513.0 / 219.0	3.31	989.281120	1000.00	98.93
PFUnA_1	563.0 / 519.0	3.63	990.591829	1000.00	99.06
PFUnA_2	563.0 / 269.0	3.63	1031.753087	1000.00	103.18
PFDoA_1	613.0 / 569.0	3.92	1019.527846	1000.00	101.95
PFDoA_2	613.0 / 319.0	3.92	972.949417	1000.00	97.29
PFTrDA_1	663.0 / 619.0	4.18	1012.637124	1000.00	101.26
PFTrDA_2	663.0 / 169.0	4.17	1020.491357	1000.00	102.05
PFTeDA_1	713.0 / 669.0	4.40	993.428529	1000.00	99.34
PFTeDA_2	713.0 / 169.0	4.40	965.997586	1000.00	96.60
NMeFOSAA_1	570.0 / 419.0	3.46	934.997134	1000.00	93.50
NMeFOSAA_2	570.0 / 512.0	3.46	964.187841	1000.00	96.42
NEtFOSAA_1	584.0 / 419.0	3.63	1074.293809	1000.00	107.43
NEtFOSAA_2	584.0 / 483.0	3.63	1003.633485	1000.00	100.36

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QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:54:18 AM

Sample Name	JX41 CCV	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:22:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.56	934.925185	1010.00	92.57
PFBS_2	298.9 / 99.0	1.56	940.387335	1010.00	93.11
PFHxA_1	313.0 / 269.0	1.85	1004.918533	1010.00	99.50
PFHxA_2	313.0 / 119.0	1.84	967.583328	1010.00	95.80
PFHpA_1	363.0 / 319.0	2.21	1046.110372	1000.00	104.61
PFHpA_2	363.0 / 169.0	2.21	911.382537	1000.00	91.14
PFHxS_1	399.0 / 80.0	2.23	878.004290	1010.00	86.93
PFHxS_2	399.0 / 99.0	2.23	856.027661	1010.00	84.76
PFOA_1	413.0 / 369.0	2.58	994.352225	1000.00	99.44
PFOA_2	413.0 / 169.0	2.58	945.736964	1000.00	94.57
PFNA_1	463.0 / 419.0	2.96	1012.205715	1000.00	101.22
PFNA_2	463.0 / 219.0	2.96	1050.690004	1000.00	105.07
PFOS_1	499.0 / 80.0	2.95	867.267471	1000.00	86.73
PFOS_2	499.0 / 99.0	2.95	917.747314	1000.00	91.77
PFDA_1	513.0 / 469.0	3.31	964.072909	1000.00	96.41
PFDA_2	513.0 / 219.0	3.31	1038.280575	1000.00	103.83
PFUnA_1	563.0 / 519.0	3.63	1029.388062	1000.00	102.94
PFUnA_2	563.0 / 269.0	3.63	1059.935604	1000.00	105.99
PFDoA_1	613.0 / 569.0	3.92	1081.561774	1000.00	108.16
PFDoA_2	613.0 / 319.0	3.92	991.096393	1000.00	99.11
PFTrDA_1	663.0 / 619.0	4.17	1036.723017	1000.00	103.67
PFTrDA_2	663.0 / 169.0	4.17	1014.051474	1000.00	101.41
PFTeDA_1	713.0 / 669.0	4.40	1001.283011	1000.00	100.13
PFTeDA_2	713.0 / 169.0	4.40	996.904969	1000.00	99.69
NMeFOSAA_1	570.0 / 419.0	3.47	906.380733	1000.00	90.64
NMeFOSAA_2	570.0 / 512.0	3.46	1030.089355	1000.00	103.01
NEtFOSAA_1	584.0 / 419.0	3.63	920.612889	1000.00	92.06
NEtFOSAA_2	584.0 / 483.0	3.63	906.014845	1000.00	90.60

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QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:54:23 AM

Sample Name	JY42 CCV	**Injection Vial**	25
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:11:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.56	2303.747512	2525.00	91.24
PFBS_2	298.9 / 99.0	1.56	2280.414904	2525.00	90.31
PFHxA_1	313.0 / 269.0	1.85	2349.821714	2525.00	93.06
PFHxA_2	313.0 / 119.0	1.85	2415.064672	2525.00	95.65
PFHpA_1	363.0 / 319.0	2.21	2437.890996	2500.00	97.52
PFHpA_2	363.0 / 169.0	2.21	2741.420407	2500.00	109.66
PFHxS_1	399.0 / 80.0	2.22	2470.220024	2525.00	97.83
PFHxS_2	399.0 / 99.0	2.22	2572.859285	2525.00	101.90
PFOA_1	413.0 / 369.0	2.58	2453.759647	2500.00	98.15
PFOA_2	413.0 / 169.0	2.58	2362.144933	2500.00	94.49
PFNA_1	463.0 / 419.0	2.95	2411.353756	2500.00	96.45
PFNA_2	463.0 / 219.0	2.95	2489.350336	2500.00	99.57
PFOS_1	499.0 / 80.0	2.95	2230.342947	2500.00	89.21
PFOS_2	499.0 / 99.0	2.95	2385.907056	2500.00	95.44
PFDA_1	513.0 / 469.0	3.30	2174.534717	2500.00	86.98
PFDA_2	513.0 / 219.0	3.30	2254.623772	2500.00	90.18
PFUnA_1	563.0 / 519.0	3.62	2487.471345	2500.00	99.50
PFUnA_2	563.0 / 269.0	3.62	2220.422214	2500.00	88.82
PFDoA_1	613.0 / 569.0	3.91	2616.136474	2500.00	104.65
PFDoA_2	613.0 / 319.0	3.91	2338.160234	2500.00	93.53
PFTrDA_1	663.0 / 619.0	4.17	2575.925830	2500.00	103.04
PFTrDA_2	663.0 / 169.0	4.16	2569.490022	2500.00	102.78
PFTeDA_1	713.0 / 669.0	4.40	2504.829528	2500.00	100.19
PFTeDA_2	713.0 / 169.0	4.39	2530.870252	2500.00	101.23
NMeFOSAA_1	570.0 / 419.0	3.46	2209.476352	2500.00	88.38
NMeFOSAA_2	570.0 / 512.0	3.46	2142.158412	2500.00	85.69
NEtFOSAA_1	584.0 / 419.0	3.62	2345.755731	2500.00	93.83
NEtFOSAA_2	584.0 / 483.0	3.62	2404.286966	2500.00	96.17

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QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:54:28 AM

Sample Name	JY41 CCV	**Injection Vial**	37
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:22:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.56	940.115015	1010.00	93.08
PFBS_2	298.9 / 99.0	1.56	966.550396	1010.00	95.70
PFHxA_1	313.0 / 269.0	1.85	1030.527626	1010.00	102.03
PFHxA_2	313.0 / 119.0	1.85	999.503410	1010.00	98.96
PFHpA_1	363.0 / 319.0	2.21	971.784510	1000.00	97.18
PFHpA_2	363.0 / 169.0	2.20	885.165314	1000.00	88.52
PFHxS_1	399.0 / 80.0	2.22	976.022427	1010.00	96.64
PFHxS_2	399.0 / 99.0	2.22	916.340885	1010.00	90.73
PFOA_1	413.0 / 369.0	2.57	937.488122	1000.00	93.75
PFOA_2	413.0 / 169.0	2.57	1049.864102	1000.00	104.99
PFNA_1	463.0 / 419.0	2.95	985.265570	1000.00	98.53
PFNA_2	463.0 / 219.0	2.95	1036.831691	1000.00	103.68
PFOS_1	499.0 / 80.0	2.94	945.054037	1000.00	94.51
PFOS_2	499.0 / 99.0	2.94	959.832112	1000.00	95.98
PFDA_1	513.0 / 469.0	3.29	978.089354	1000.00	97.81
PFDA_2	513.0 / 219.0	3.30	863.805328	1000.00	86.38
PFUnA_1	563.0 / 519.0	3.62	1001.369010	1000.00	100.14
PFUnA_2	563.0 / 269.0	3.62	1018.569288	1000.00	101.86
PFDoA_1	613.0 / 569.0	3.91	1004.958418	1000.00	100.50
PFDoA_2	613.0 / 319.0	3.91	966.304585	1000.00	96.63
PFTrDA_1	663.0 / 619.0	4.16	1015.766836	1000.00	101.58
PFTrDA_2	663.0 / 169.0	4.16	940.775955	1000.00	94.08
PFTeDA_1	713.0 / 669.0	4.39	1025.089645	1000.00	102.51
PFTeDA_2	713.0 / 169.0	4.39	996.593841	1000.00	99.66
NMeFOSAA_1	570.0 / 419.0	3.45	802.372466	1000.00	80.24
NMeFOSAA_2	570.0 / 512.0	3.45	918.246699	1000.00	91.82
NEtFOSAA_1	584.0 / 419.0	3.61	1041.321994	1000.00	104.13
NEtFOSAA_2	584.0 / 483.0	3.61	945.368410	1000.00	94.54

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QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:54:34 AM

Sample Name	JY42 CCV	**Injection Vial**	49
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:32:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.56	2330.639660	2525.00	92.30
PFBS_2	298.9 / 99.0	1.56	2345.854849	2525.00	92.91
PFHxA_1	313.0 / 269.0	1.84	2555.013113	2525.00	101.19
PFHxA_2	313.0 / 119.0	1.84	2537.852023	2525.00	100.51
PFHpA_1	363.0 / 319.0	2.20	2211.538787	2500.00	88.46
PFHpA_2	363.0 / 169.0	2.20	2426.473520	2500.00	97.06
PFHxS_1	399.0 / 80.0	2.21	2562.562030	2525.00	101.49
PFHxS_2	399.0 / 99.0	2.21	2589.393575	2525.00	102.55
PFOA_1	413.0 / 369.0	2.56	2354.989461	2500.00	94.20
PFOA_2	413.0 / 169.0	2.56	2203.734994	2500.00	88.15
PFNA_1	463.0 / 419.0	2.93	2547.263382	2500.00	101.89
PFNA_2	463.0 / 219.0	2.93	2579.682914	2500.00	103.19
PFOS_1	499.0 / 80.0	2.93	2157.265049	2500.00	86.29
PFOS_2	499.0 / 99.0	2.92	2132.416415	2500.00	85.30
PFDA_1	513.0 / 469.0	3.28	2411.494789	2500.00	96.46
PFDA_2	513.0 / 219.0	3.28	2390.257671	2500.00	95.61
PFUnA_1	563.0 / 519.0	3.60	2482.438554	2500.00	99.30
PFUnA_2	563.0 / 269.0	3.60	2593.339138	2500.00	103.73
PFDoA_1	613.0 / 569.0	3.89	2596.430230	2500.00	103.86
PFDoA_2	613.0 / 319.0	3.89	2598.888598	2500.00	103.96
PFTrDA_1	663.0 / 619.0	4.15	2505.328917	2500.00	100.21
PFTrDA_2	663.0 / 169.0	4.14	2501.240317	2500.00	100.05
PFTeDA_1	713.0 / 669.0	4.38	2512.668261	2500.00	100.51
PFTeDA_2	713.0 / 169.0	4.37	2456.535044	2500.00	98.26
NMeFOSAA_1	570.0 / 419.0	3.43	2228.744713	2500.00	89.15
NMeFOSAA_2	570.0 / 512.0	3.43	2071.052650	2500.00	82.84
NEtFOSAA_1	584.0 / 419.0	3.60	2557.677647	2500.00	102.31
NEtFOSAA_2	584.0 / 483.0	3.60	2688.787007	2500.00	107.55

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QC Summary Report

Created with Analyst Reporter
Printed: 27/08/2018 11:53:41 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:17:37	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	3.91	262.517888	250.00	105.01
d3-MeFOSAA	573.0 / 419.0	3.46	258.014291	250.00	103.21
d5-EtFOSAA	589.0 / 419.0	3.62	234.541593	250.00	93.82
13C5-PFHxA	318.0 / 273.0	1.83	249.312039	250.00	99.72
13C4-PFHpA	367.0 / 322.0	2.20	243.382537	250.00	97.35
13C8-PFOA	421.0 / 376.0	2.57	244.472611	250.00	97.79
13C9-PFNA	472.0 / 427.0	2.94	257.374981	250.00	102.95
13C6-PFDA	519.0 / 474.0	3.29	261.962451	250.00	104.78
13C7-PFUnA	570.0 / 525.0	3.61	270.467546	250.00	108.19
13C2-PFTeDA	715.0 / 670.0	4.39	263.984921	250.00	105.59
13C3-PFBS	302.0 / 99.0	1.54	212.039858	232.25	91.30
13C3-PFHxS	402.0 / 99.0	2.21	248.660576	236.50	105.14
13C8-PFOS	507.0 / 99.0	2.94	266.666466	239.25	111.46

BATTELLE

QC Summary Report

Created with Analyst Reporter
Printed: 27/08/2018 11:53:46 AM

Sample Name	JX41 CCV	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:22:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	3.91	245.251773	250.00	98.10
d3-MeFOSAA	573.0 / 419.0	3.46	269.137138	250.00	107.65
d5-EtFOSAA	589.0 / 419.0	3.62	305.435964	250.00	122.17
13C5-PFHxA	318.0 / 273.0	1.83	251.205161	250.00	100.48
13C4-PFHpA	367.0 / 322.0	2.20	269.426596	250.00	107.77
13C8-PFOA	421.0 / 376.0	2.57	243.301875	250.00	97.32
13C9-PFNA	472.0 / 427.0	2.95	243.737685	250.00	97.50
13C6-PFDA	519.0 / 474.0	3.29	256.799036	250.00	102.72
13C7-PFUnA	570.0 / 525.0	3.61	242.111194	250.00	96.84
13C2-PFTeDA	715.0 / 670.0	4.39	250.095391	250.00	100.04
13C3-PFBS	302.0 / 99.0	1.54	253.518835	232.25	109.16
13C3-PFHxS	402.0 / 99.0	2.21	272.633789	236.50	115.28
13C8-PFOS	507.0 / 99.0	2.94	279.081375	239.25	116.65

BATTELLE

QC Summary Report

Created with Analyst Reporter
Printed: 27/08/2018 11:53:51 AM

Sample Name	JY42 CCV	**Injection Vial**	25
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:11:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	3.90	261.614758	250.00	104.65
d3-MeFOSAA	573.0 / 419.0	3.45	284.573624	250.00	113.83
d5-EtFOSAA	589.0 / 419.0	3.61	299.276386	250.00	119.71
13C5-PFHxA	318.0 / 273.0	1.84	259.906060	250.00	103.96
13C4-PFHpA	367.0 / 322.0	2.20	265.850213	250.00	106.34
13C8-PFOA	421.0 / 376.0	2.57	250.598821	250.00	100.24
13C9-PFNA	472.0 / 427.0	2.94	253.754070	250.00	101.50
13C6-PFDA	519.0 / 474.0	3.29	270.899529	250.00	108.36
13C7-PFUnA	570.0 / 525.0	3.61	248.810708	250.00	99.52
13C2-PFTeDA	715.0 / 670.0	4.39	253.821166	250.00	101.53
13C3-PFBS	302.0 / 99.0	1.54	253.573242	232.25	109.18
13C3-PFHxS	402.0 / 99.0	2.21	247.741934	236.50	104.75
13C8-PFOS	507.0 / 99.0	2.93	269.711987	239.25	112.73

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QC Summary Report

Created with Analyst Reporter
Printed: 27/08/2018 11:53:56 AM

Sample Name	JY41 CCV	**Injection Vial**	37
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:22:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	3.89	271.119248	250.00	108.45
d3-MeFOSAA	573.0 / 419.0	3.44	274.111005	250.00	109.64
d5-EtFOSAA	589.0 / 419.0	3.60	247.078051	250.00	98.83
13C5-PFHxA	318.0 / 273.0	1.83	256.867754	250.00	102.75
13C4-PFHpA	367.0 / 322.0	2.19	274.098967	250.00	109.64
13C8-PFOA	421.0 / 376.0	2.56	281.618948	250.00	112.65
13C9-PFNA	472.0 / 427.0	2.93	262.486301	250.00	104.99
13C6-PFDA	519.0 / 474.0	3.28	265.876688	250.00	106.35
13C7-PFUnA	570.0 / 525.0	3.60	250.697820	250.00	100.28
13C2-PFTeDA	715.0 / 670.0	4.38	247.056281	250.00	98.82
13C3-PFBS	302.0 / 99.0	1.54	220.185750	232.25	94.81
13C3-PFHxS	402.0 / 99.0	2.21	227.921138	236.50	96.37
13C8-PFOS	507.0 / 99.0	2.93	230.525141	239.25	96.35

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QC Summary Report

Created with Analyst Reporter
Printed: 27/08/2018 11:54:00 AM

Sample Name	JY42 CCV	**Injection Vial**	49
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:32:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	3.88	274.262293	250.00	109.70
d3-MeFOSAA	573.0 / 419.0	3.43	292.741855	250.00	117.10
d5-EtFOSAA	589.0 / 419.0	3.59	265.721202	250.00	106.29
13C5-PFHxA	318.0 / 273.0	1.83	235.830911	250.00	94.33
13C4-PFHpA	367.0 / 322.0	2.18	261.250645	250.00	104.50
13C8-PFOA	421.0 / 376.0	2.55	258.193191	250.00	103.28
13C9-PFNA	472.0 / 427.0	2.92	232.202425	250.00	92.88
13C6-PFDA	519.0 / 474.0	3.26	281.840763	250.00	112.74
13C7-PFUnA	570.0 / 525.0	3.58	270.004888	250.00	108.00
13C2-PFTeDA	715.0 / 670.0	4.37	274.523789	250.00	109.81
13C3-PFBS	302.0 / 99.0	1.54	249.276775	232.25	107.33
13C3-PFHxS	402.0 / 99.0	2.20	233.417340	236.50	98.70
13C8-PFOS	507.0 / 99.0	2.91	267.563586	239.25	111.83

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QC Summary Report

Created with Analyst Reporter
Printed: 27/09/2018 7:18:43 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFHxA_1	313.0 / 269.0	1.89	957.254480	1010.00	94.78
PFHxA_2	313.0 / 119.0	1.89	988.261083	1010.00	97.85
PFOA_1	413.0 / 369.0	2.70	932.302440	1000.00	93.23
PFOA_2	413.0 / 169.0	2.70	923.265259	1000.00	92.33
PFOS_1	499.0 / 80.0	3.09	932.535469	1000.00	93.25
PFOS_2	499.0 / 99.0	3.09	990.797882	1000.00	99.08

QC Summary Report

Created with Analyst Reporter
Printed: 27/09/2018 7:18:47 AM

Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFHxA_1	313.0 / 269.0	1.88	2486.083265	2525.00	98.46
PFHxA_2	313.0 / 119.0	1.87	2432.544088	2525.00	96.34
PFOA_1	413.0 / 369.0	2.68	2352.803111	2500.00	94.11
PFOA_2	413.0 / 169.0	2.68	2164.487983	2500.00	86.58
PFOS_1	499.0 / 80.0	3.07	2356.826612	2500.00	94.27
PFOS_2	499.0 / 99.0	3.07	2497.400902	2500.00	99.90

BATTELLE

QC Summary Report

Created with Analyst Reporter
Printed: 27/09/2018 7:18:53 AM

Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFHxA_1	313.0 / 269.0	1.87	1037.603882	1010.00	102.73
PFHxA_2	313.0 / 119.0	1.86	1065.497656	1010.00	105.49
PFOA_1	413.0 / 369.0	2.67	960.136158	1000.00	96.01
PFOA_2	413.0 / 169.0	2.67	907.938546	1000.00	90.79
PFOS_1	499.0 / 80.0	3.06	969.147565	1000.00	96.91
PFOS_2	499.0 / 99.0	3.06	971.701475	1000.00	97.17

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QC Summary Report

Created with Analyst Reporter
Printed: 27/08/2018 11:54:53 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C5-PFHxA	318.0 / 273.0	1.88	238.049118	250.00	95.22
13C4-PFHpA	367.0 / 322.0	2.28	259.420778	250.00	103.77
13C8-PFOA	421.0 / 376.0	2.69	259.366956	250.00	103.75
13C8-PFOS	507.0 / 99.0	3.07	253.427753	239.25	105.93

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QC Summary Report

Created with Analyst Reporter
Printed: 27/08/2018 11:54:57 AM

Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C5-PFHxA	318.0 / 273.0	1.86	250.873431	250.00	100.35
13C4-PFHpA	367.0 / 322.0	2.27	272.056888	250.00	108.82
13C8-PFOA	421.0 / 376.0	2.67	287.540951	250.00	115.02
13C8-PFOS	507.0 / 99.0	3.06	245.456356	239.25	102.59

BATTELLE

QC Summary Report

Created with Analyst Reporter
Printed: 27/08/2018 11:55:03 AM

Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C5-PFHxA	318.0 / 273.0	1.85	230.010124	250.00	92.00
13C4-PFHpA	367.0 / 322.0	2.25	238.295831	250.00	95.32
13C8-PFOA	421.0 / 376.0	2.66	263.945124	250.00	105.58
13C8-PFOS	507.0 / 99.0	3.04	275.927617	239.25	115.33

BATTELLE

QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:56:50 AM

Sample Name	JY45 ICC	**Injection Vial**	24
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	899.175195	1010.00	89.03
PFBS_2	298.9 / 99.0	1.53	941.677693	1010.00	93.24

BATTELLE

QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:56:55 AM

Sample Name	JY42	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T23:31:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	2478.624307	2525.00	98.16
PFBS_2	298.9 / 99.0	1.54	2570.698783	2525.00	101.81

BATTELLE

QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:56:59 AM

Sample Name	JY41 CCV	**Injection Vial**	19
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	946.628592	1010.00	93.73
PFBS_2	298.9 / 99.0	1.53	975.673279	1010.00	96.60

BATTELLE

QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:55:27 AM

Sample Name	JY45 ICC	**Injection Vial**	24
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C3-PFBS	302.0 / 99.0	1.52	234.521477	232.25	100.98

BATTELLE

QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:55:32 AM

Sample Name	JY42	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T23:31:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C3-PFBS	302.0 / 99.0	1.52	267.955720	232.25	115.37

BATTELLE

QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:55:49 AM

Sample Name	JY41 CCV	**Injection Vial**	19
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C3-PFBS	302.0 / 99.0	1.52	264.603165	232.25	113.93

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:57:47 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:17:37	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	352991.98	1042.001508	281.0	false
PFBS_2	298.9 / 99.0	1.55	104296.06	1061.572577	286.7	false
PFHxA_1	313.0 / 269.0	1.84	294016.21	940.305580	116.8	false
PFHxA_2	313.0 / 119.0	1.84	24300.40	1013.486048	129.7	false
PFHpA_1	363.0 / 319.0	2.21	257184.82	951.166589	195.1	false
PFHpA_2	363.0 / 169.0	2.21	5246.46	933.476141	156.4	false
PFHxS_1	399.0 / 80.0	2.22	353958.80	896.915676	168.5	false
PFHxS_2	399.0 / 99.0	2.22	101226.06	908.280146	286.9	false
PFOA_1	413.0 / 369.0	2.58	336697.52	978.600374	272.2	false
PFOA_2	413.0 / 169.0	2.58	20547.03	847.693262	139.4	false
PFNA_1	463.0 / 419.0	2.95	332521.15	951.224513	216.1	false
PFNA_2	463.0 / 219.0	2.95	101540.95	954.912823	222.5	false
PFOS_1	499.0 / 80.0	2.95	485146.47	873.056763	124.6	true
PFOS_2	499.0 / 99.0	2.95	87349.19	882.965044	322.3	false
PFDA_1	513.0 / 469.0	3.31	353968.89	1011.245865	191.0	false
PFDA_2	513.0 / 219.0	3.31	16079.78	989.281120	126.0	false
PFUnA_1	563.0 / 519.0	3.63	340659.17	990.591829	201.9	false
PFUnA_2	563.0 / 269.0	3.63	20099.22	1031.753087	115.1	false
PFDoA_1	613.0 / 569.0	3.92	352671.60	1019.527846	305.4	false
PFDoA_2	613.0 / 319.0	3.92	54770.89	972.949417	307.4	false
PFTrDA_1	663.0 / 619.0	4.18	324948.14	1012.637124	501.2	false
PFTrDA_2	663.0 / 169.0	4.17	21703.12	1020.491357	294.3	false
PFTeDA_1	713.0 / 669.0	4.40	362741.48	993.428529	943.4	false
PFTeDA_2	713.0 / 169.0	4.40	17512.99	965.997586	518.6	false
NMeFOSAA_1	570.0 / 419.0	3.46	63726.55	934.997134	406.0	false
NMeFOSAA_2	570.0 / 512.0	3.46	32727.45	964.187841	255.1	false
NEtFOSAA_1	584.0 / 419.0	3.63	63527.05	1074.293809	468.5	false
NEtFOSAA_2	584.0 / 483.0	3.63	3624.06	1003.633485	114.5	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:57:51 AM

Sample Name	JX41 CCV	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:22:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	372959.18	934.925185	298.8	false
PFBS_2	298.9 / 99.0	1.56	108511.58	940.387335	263.2	false
PFHxA_1	313.0 / 269.0	1.85	331511.18	1004.918533	125.0	false
PFHxA_2	313.0 / 119.0	1.84	24312.26	967.583328	142.3	false
PFHpA_1	363.0 / 319.0	2.21	295745.20	1046.110372	176.0	false
PFHpA_2	363.0 / 169.0	2.21	5298.94	911.382537	126.6	false
PFHxS_1	399.0 / 80.0	2.23	376317.35	878.004290	156.5	false
PFHxS_2	399.0 / 99.0	2.23	103695.44	856.027661	252.0	false
PFOA_1	413.0 / 369.0	2.58	354977.56	994.352225	220.1	false
PFOA_2	413.0 / 169.0	2.58	23868.14	945.736964	203.1	false
PFNA_1	463.0 / 419.0	2.96	350791.76	1012.205715	237.7	false
PFNA_2	463.0 / 219.0	2.96	110858.40	1050.690004	222.4	false
PFOS_1	499.0 / 80.0	2.95	489478.26	867.267471	115.1	true
PFOS_2	499.0 / 99.0	2.95	92599.55	917.747314	287.8	false
PFDA_1	513.0 / 469.0	3.31	374730.57	964.072909	248.3	false
PFDA_2	513.0 / 219.0	3.31	18842.86	1038.280575	125.8	false
PFUnA_1	563.0 / 519.0	3.63	361112.93	1029.388062	231.2	false
PFUnA_2	563.0 / 269.0	3.63	21010.43	1059.935604	146.5	false
PFDoA_1	613.0 / 569.0	3.92	397356.21	1081.561774	399.2	false
PFDoA_2	613.0 / 319.0	3.92	59274.98	991.096393	249.3	false
PFTrDA_1	663.0 / 619.0	4.17	358431.25	1036.723017	527.1	false
PFTrDA_2	663.0 / 169.0	4.17	23231.83	1014.051474	271.8	false
PFTeDA_1	713.0 / 669.0	4.40	393872.44	1001.283011	998.2	false
PFTeDA_2	713.0 / 169.0	4.40	19456.90	996.904969	511.1	false
NMeFOSAA_1	570.0 / 419.0	3.47	63672.14	906.380733	452.9	false
NMeFOSAA_2	570.0 / 512.0	3.46	36765.45	1030.089355	274.4	false
NEtFOSAA_1	584.0 / 419.0	3.63	69356.62	920.612889	546.4	false
NEtFOSAA_2	584.0 / 483.0	3.63	4190.39	906.014845	154.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:57:56 AM

Sample Name	JY42 CCV	**Injection Vial**	25
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:11:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	689720.93	2303.747512	438.5	false
PFBS_2	298.9 / 99.0	1.56	199294.53	2280.414904	431.4	false
PFHxA_1	313.0 / 269.0	1.85	600851.49	2349.821714	162.2	false
PFHxA_2	313.0 / 119.0	1.85	46345.19	2415.064672	221.8	false
PFHpA_1	363.0 / 319.0	2.21	537051.84	2437.890996	264.5	false
PFHpA_2	363.0 / 169.0	2.21	12468.38	2741.420407	206.2	false
PFHxS_1	399.0 / 80.0	2.22	710553.59	2470.220024	234.4	false
PFHxS_2	399.0 / 99.0	2.22	204631.03	2572.859285	367.6	false
PFOA_1	413.0 / 369.0	2.58	676312.02	2453.759647	491.3	false
PFOA_2	413.0 / 169.0	2.58	45295.59	2362.144933	306.5	false
PFNA_1	463.0 / 419.0	2.95	652785.19	2411.353756	282.0	false
PFNA_2	463.0 / 219.0	2.95	203140.34	2489.350336	282.5	false
PFOS_1	499.0 / 80.0	2.95	952203.88	2230.342947	149.7	true
PFOS_2	499.0 / 99.0	2.95	178793.98	2385.907056	398.5	false
PFDA_1	513.0 / 469.0	3.30	665821.24	2174.534717	265.0	false
PFDA_2	513.0 / 219.0	3.30	31445.50	2254.623772	160.3	false
PFUnA_1	563.0 / 519.0	3.62	662732.03	2487.471345	313.2	false
PFUnA_2	563.0 / 269.0	3.62	32184.14	2220.422214	161.2	false
PFDoA_1	613.0 / 569.0	3.91	732104.16	2616.136474	419.4	false
PFDoA_2	613.0 / 319.0	3.91	107271.01	2338.160234	373.4	false
PFTrDA_1	663.0 / 619.0	4.17	649786.63	2575.925830	521.2	false
PFTrDA_2	663.0 / 169.0	4.16	42496.82	2569.490022	362.1	false
PFTeDA_1	713.0 / 669.0	4.40	721284.79	2504.829528	973.8	false
PFTeDA_2	713.0 / 169.0	4.39	35448.18	2530.870252	588.0	false
NMeFOSAA_1	570.0 / 419.0	3.46	126017.23	2209.476352	618.7	false
NMeFOSAA_2	570.0 / 512.0	3.46	65891.67	2142.158412	410.2	false
NEtFOSAA_1	584.0 / 419.0	3.62	132304.32	2345.755731	710.3	false
NEtFOSAA_2	584.0 / 483.0	3.62	8277.15	2404.286966	169.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:58:01 AM

Sample Name	JY41 CCV	**Injection Vial**	37
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:22:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	302139.18	940.115015	281.4	false
PFBS_2	298.9 / 99.0	1.56	90015.77	966.550396	248.7	false
PFHxA_1	313.0 / 269.0	1.85	262815.09	1030.527626	112.3	false
PFHxA_2	313.0 / 119.0	1.85	19407.24	999.503410	131.8	false
PFHpA_1	363.0 / 319.0	2.21	238806.08	971.784510	175.7	false
PFHpA_2	363.0 / 169.0	2.20	4492.79	885.165314	134.7	false
PFHxS_1	399.0 / 80.0	2.22	325347.47	976.022427	184.9	false
PFHxS_2	399.0 / 99.0	2.22	86038.71	916.340885	261.4	false
PFOA_1	413.0 / 369.0	2.57	291666.46	937.488122	186.3	false
PFOA_2	413.0 / 169.0	2.57	23276.49	1049.864102	117.7	false
PFNA_1	463.0 / 419.0	2.95	276977.36	985.265570	225.0	false
PFNA_2	463.0 / 219.0	2.95	88849.07	1036.831691	213.9	false
PFOS_1	499.0 / 80.0	2.94	410122.28	945.054037	96.2	true
PFOS_2	499.0 / 99.0	2.94	74024.00	959.832112	225.8	false
PFDA_1	513.0 / 469.0	3.29	314347.76	978.089354	228.4	false
PFDA_2	513.0 / 219.0	3.30	12855.27	863.805328	142.5	false
PFUnA_1	563.0 / 519.0	3.62	289690.64	1001.369010	202.9	false
PFUnA_2	563.0 / 269.0	3.62	16683.32	1018.569288	134.8	true
PFDoA_1	613.0 / 569.0	3.91	325638.27	1004.958418	297.0	false
PFDoA_2	613.0 / 319.0	3.91	50950.02	966.304585	271.5	false
PFTrDA_1	663.0 / 619.0	4.16	276683.83	1015.766836	465.7	false
PFTrDA_2	663.0 / 169.0	4.16	16995.10	940.775955	234.5	false
PFTeDA_1	713.0 / 669.0	4.39	317861.94	1025.089645	709.7	false
PFTeDA_2	713.0 / 169.0	4.39	15327.45	996.593841	379.2	false
NMeFOSAA_1	570.0 / 419.0	3.45	52514.38	802.372466	494.1	false
NMeFOSAA_2	570.0 / 512.0	3.45	30032.20	918.246699	246.1	false
NEtFOSAA_1	584.0 / 419.0	3.61	59477.37	1041.321994	469.0	false
NEtFOSAA_2	584.0 / 483.0	3.61	3290.77	945.368410	142.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:58:05 AM

Sample Name	JY42 CCV	**Injection Vial**	49
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:32:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	939196.70	2330.639660	359.0	false
PFBS_2	298.9 / 99.0	1.56	276109.89	2345.854849	376.5	false
PFHxA_1	313.0 / 269.0	1.84	808380.13	2555.013113	161.5	false
PFHxA_2	313.0 / 119.0	1.84	60168.22	2537.852023	202.8	false
PFHpA_1	363.0 / 319.0	2.20	680865.33	2211.538787	284.2	false
PFHpA_2	363.0 / 169.0	2.20	15428.54	2426.473520	230.0	false
PFHxS_1	399.0 / 80.0	2.21	951015.60	2562.562030	257.7	false
PFHxS_2	399.0 / 99.0	2.21	265599.44	2589.393575	416.6	false
PFOA_1	413.0 / 369.0	2.56	909446.28	2354.989461	510.9	false
PFOA_2	413.0 / 169.0	2.56	59207.89	2203.734994	264.9	false
PFNA_1	463.0 / 419.0	2.93	859821.33	2547.263382	321.6	false
PFNA_2	463.0 / 219.0	2.93	262281.86	2579.682914	395.6	false
PFOS_1	499.0 / 80.0	2.93	1254461.27	2157.265049	171.0	true
PFOS_2	499.0 / 99.0	2.92	217155.44	2132.416415	450.3	false
PFDA_1	513.0 / 469.0	3.28	929536.59	2411.494789	332.7	false
PFDA_2	513.0 / 219.0	3.28	41866.37	2390.257671	219.1	false
PFUnA_1	563.0 / 519.0	3.60	865546.07	2482.438554	379.9	false
PFUnA_2	563.0 / 269.0	3.60	49163.51	2593.339138	243.3	false
PFDoA_1	613.0 / 569.0	3.89	918640.16	2596.430230	514.8	false
PFDoA_2	613.0 / 319.0	3.89	150811.50	2598.888598	455.6	false
PFTrDA_1	663.0 / 619.0	4.15	824249.30	2505.328917	722.3	false
PFTrDA_2	663.0 / 169.0	4.14	53964.25	2501.240317	415.0	false
PFTeDA_1	713.0 / 669.0	4.38	943785.52	2512.668261	1254.7	false
PFTeDA_2	713.0 / 169.0	4.37	44889.39	2456.535044	710.4	false
NMeFOSAA_1	570.0 / 419.0	3.43	179053.94	2228.744713	713.2	false
NMeFOSAA_2	570.0 / 512.0	3.43	89381.25	2071.052650	395.3	false
NEtFOSAA_1	584.0 / 419.0	3.60	175819.45	2557.677647	771.7	false
NEtFOSAA_2	584.0 / 483.0	3.60	11284.18	2688.787007	295.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:56:03 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:17:37	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.91	90617.06	262.517888	922.5	false
d3-MeFOSAA	573.0 / 419.0	3.46	14320.48	258.014291	117.3	false
d5-EtFOSAA	589.0 / 419.0	3.62	14539.03	234.541593	149.6	false
13C5-PFHxA	318.0 / 273.0	1.83	73110.27	249.312039	453.4	false
13C4-PFHpA	367.0 / 322.0	2.20	74211.89	243.382537	632.8	false
13C8-PFOA	421.0 / 376.0	2.57	78211.23	244.472611	834.2	false
13C9-PFNA	472.0 / 427.0	2.94	86240.92	257.374981	1029.2	false
13C6-PFDA	519.0 / 474.0	3.29	78075.14	261.962451	678.1	false
13C7-PFUnA	570.0 / 525.0	3.61	80863.06	270.467546	635.4	false
13C2-PFTeDA	715.0 / 670.0	4.39	78103.82	263.984921	1150.6	false
13C3-PFBS	302.0 / 99.0	1.54	25634.40	212.039858	352.9	false
13C3-PFHxS	402.0 / 99.0	2.21	23878.71	248.660576	233.1	false
13C8-PFOS	507.0 / 99.0	2.94	25684.70	266.666466	200.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:56:08 AM

Sample Name	JX41 CCV	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:22:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.91	96255.20	245.251773	946.1	false
d3-MeFOSAA	573.0 / 419.0	3.46	14807.03	269.137138	131.7	false
d5-EtFOSAA	589.0 / 419.0	3.62	18767.93	305.435964	207.8	false
13C5-PFHxA	318.0 / 273.0	1.83	76760.70	251.205161	525.8	false
13C4-PFHpA	367.0 / 322.0	2.20	85605.13	269.426596	800.5	false
13C8-PFOA	421.0 / 376.0	2.57	81107.24	243.301875	840.1	false
13C9-PFNA	472.0 / 427.0	2.95	85103.03	243.737685	1214.3	false
13C6-PFDA	519.0 / 474.0	3.29	87021.80	256.799036	575.7	false
13C7-PFUnA	570.0 / 525.0	3.61	82302.09	242.111194	653.0	false
13C2-PFTeDA	715.0 / 670.0	4.39	84131.73	250.095391	1361.4	false
13C3-PFBS	302.0 / 99.0	1.54	30380.62	253.518835	361.5	false
13C3-PFHxS	402.0 / 99.0	2.21	25951.61	272.633789	280.3	false
13C8-PFOS	507.0 / 99.0	2.94	26645.12	279.081375	185.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:56:13 AM

Sample Name	JY42 CCV	**Injection Vial**	25
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:11:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	73410.38	261.614758	859.0	false
d3-MeFOSAA	573.0 / 419.0	3.45	11326.23	284.573624	82.2	false
d5-EtFOSAA	589.0 / 419.0	3.61	13303.47	299.276386	149.8	false
13C5-PFHxA	318.0 / 273.0	1.84	57195.31	259.906060	574.0	false
13C4-PFHpA	367.0 / 322.0	2.20	60831.71	265.850213	562.5	false
13C8-PFOA	421.0 / 376.0	2.57	60162.63	250.598821	830.1	false
13C9-PFNA	472.0 / 427.0	2.94	63807.10	253.754070	814.4	false
13C6-PFDA	519.0 / 474.0	3.29	65633.58	270.899529	703.2	false
13C7-PFUnA	570.0 / 525.0	3.61	60471.15	248.810708	402.1	false
13C2-PFTeDA	715.0 / 670.0	4.39	61047.11	253.821166	1062.0	false
13C3-PFBS	302.0 / 99.0	1.54	21982.96	253.573242	362.4	false
13C3-PFHxS	402.0 / 99.0	2.21	17060.06	247.741934	202.0	false
13C8-PFOS	507.0 / 99.0	2.93	18628.74	269.711987	160.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:56:18 AM

Sample Name	JY41 CCV	**Injection Vial**	37
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:22:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.89	84881.21	271.119248	1161.9	false
d3-MeFOSAA	573.0 / 419.0	3.44	13984.06	274.111005	119.0	false
d5-EtFOSAA	589.0 / 419.0	3.60	14078.06	247.078051	133.0	false
13C5-PFHxA	318.0 / 273.0	1.83	59238.45	256.867754	431.0	false
13C4-PFHpA	367.0 / 322.0	2.19	65728.01	274.098967	613.1	false
13C8-PFOA	421.0 / 376.0	2.56	70853.25	281.618948	771.9	false
13C9-PFNA	472.0 / 427.0	2.93	69169.20	262.486301	794.1	false
13C6-PFDA	519.0 / 474.0	3.28	71871.06	265.876688	600.2	false
13C7-PFUnA	570.0 / 525.0	3.60	67980.71	250.697820	743.0	false
13C2-PFTeDA	715.0 / 670.0	4.38	66296.28	247.056281	1007.0	false
13C3-PFBS	302.0 / 99.0	1.54	24467.42	220.185750	525.9	false
13C3-PFHxS	402.0 / 99.0	2.21	20117.86	227.921138	334.4	false
13C8-PFOS	507.0 / 99.0	2.93	20408.81	230.525141	147.7	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 11:56:24 AM

Sample Name	JY42 CCV	**Injection Vial**	49
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:32:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.88	92813.43	274.262293	1232.9	false
d3-MeFOSAA	573.0 / 419.0	3.43	15948.41	292.741855	96.1	false
d5-EtFOSAA	589.0 / 419.0	3.59	16168.16	265.721202	169.3	false
13C5-PFHxA	318.0 / 273.0	1.83	70606.26	235.830911	473.0	false
13C4-PFHpA	367.0 / 322.0	2.18	81329.63	261.250645	1049.2	false
13C8-PFOA	421.0 / 376.0	2.55	84331.73	258.193191	861.2	false
13C9-PFNA	472.0 / 427.0	2.92	79436.69	232.202425	562.2	false
13C6-PFDA	519.0 / 474.0	3.26	82351.43	281.840763	1055.6	false
13C7-PFUnA	570.0 / 525.0	3.58	79140.77	270.004888	582.9	false
13C2-PFTeDA	715.0 / 670.0	4.37	79628.18	274.523789	1365.6	false
13C3-PFBS	302.0 / 99.0	1.54	29580.55	249.276775	506.7	false
13C3-PFHxS	402.0 / 99.0	2.20	22001.68	233.417340	243.7	false
13C8-PFOS	507.0 / 99.0	2.91	25296.01	267.563586	191.8	false

Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:19:30 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.89	335842.36	957.254480	60.5	false
PFHxA_2	313.0 / 119.0	1.89	26066.17	988.261083	59.6	false
PFOA_1	413.0 / 369.0	2.70	401794.24	932.302440	252.4	false
PFOA_2	413.0 / 169.0	2.70	27196.76	923.265259	187.1	false
PFOS_1	499.0 / 80.0	3.09	627044.42	932.535469	198.2	true
PFOS_2	499.0 / 99.0	3.09	119051.16	990.797882	377.9	false

Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:19:35 AM

Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.88	733066.07	2486.083265	119.2	false
PFHxA_2	313.0 / 119.0	1.87	52878.28	2432.544088	109.7	false
PFOA_1	413.0 / 369.0	2.68	901818.02	2352.803111	521.8	false
PFOA_2	413.0 / 169.0	2.68	56419.90	2164.487983	330.3	false
PFOS_1	499.0 / 80.0	3.07	1381813.83	2356.826612	269.9	false
PFOS_2	499.0 / 99.0	3.07	257566.12	2497.400902	534.5	false

Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:19:40 AM

Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	391093.68	1037.603882	85.0	false
PFHxA_2	313.0 / 119.0	1.86	30117.46	1065.497656	77.6	false
PFOA_1	413.0 / 369.0	2.67	471461.77	960.136158	278.0	false
PFOA_2	413.0 / 169.0	2.67	30426.29	907.938546	195.7	false
PFOS_1	499.0 / 80.0	3.06	727695.12	969.147565	215.9	true
PFOS_2	499.0 / 99.0	3.06	130271.67	971.701475	432.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:00:18 PM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.88	81514.52	238.049118	608.0	false
13C4-PFHpA	367.0 / 322.0	2.28	96809.33	259.420778	575.6	false
13C8-PFOA	421.0 / 376.0	2.69	99805.81	259.366956	904.4	false
13C8-PFOS	507.0 / 99.0	3.07	32179.63	253.427753	195.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:00:23 PM

Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.86	67175.74	250.873431	616.6	false
13C4-PFHpA	367.0 / 322.0	2.27	79389.22	272.056888	543.0	false
13C8-PFOA	421.0 / 376.0	2.67	86522.74	287.540951	1707.7	false
13C8-PFOS	507.0 / 99.0	3.06	28994.81	245.456356	192.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:00:31 PM

Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.85	87355.69	230.010124	576.5	false
13C4-PFHpA	367.0 / 322.0	2.25	98629.02	238.295831	789.7	false
13C8-PFOA	421.0 / 376.0	2.66	112649.87	263.945124	1182.0	false
13C8-PFOS	507.0 / 99.0	3.04	37354.52	275.927617	237.1	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:59:41 AM

Sample Name	JY45 ICC	**Injection Vial**	24
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	363472.84	899.175195	347.1	false
PFBS_2	298.9 / 99.0	1.53	109314.38	941.677693	333.2	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:59:45 AM

Sample Name	JY42	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T23:31:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	994864.09	2478.624307	594.2	false
PFBS_2	298.9 / 99.0	1.54	294339.97	2570.698783	466.4	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:59:50 AM

Sample Name	JY41 CCV	**Injection Vial**	19
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	379589.53	946.628592	393.8	false
PFBS_2	298.9 / 99.0	1.53	112241.15	975.673279	306.7	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:59:15 AM

Sample Name	JY45 ICC	**Injection Vial**	24
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.52	30254.68	234.521477	529.7	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:59:19 AM

Sample Name	JY42	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T23:31:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.52	29268.06	267.955720	333.0	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:59:23 AM

Sample Name	JY41 CCV	**Injection Vial**	19
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.52	29950.08	264.603165	398.3	false

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:00:39 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:17:37	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.300	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.21	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	PFHxS	0.290	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.060	0.072	ü
PFNA_1	463.0 / 419.0	2.95	PFNA			
PFNA_2	463.0 / 219.0	2.95	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	2.95	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.31	PFDA			
PFDA_2	513.0 / 219.0	3.31	PFDA	0.050	0.047	ü
PFUnA_1	563.0 / 519.0	3.63	PFUnA			
PFUnA_2	563.0 / 269.0	3.63	PFUnA	0.060	0.058	ü
PFDoA_1	613.0 / 569.0	3.92	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	PFDoA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.18	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.17	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.40	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.40	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.46	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.46	NMeFOSAA	0.510	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.63	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.63	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:00:44 AM

Sample Name	JX41 CCV	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:22:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.290	0.288	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.21	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.23	PFHxS			
PFHxS_2	399.0 / 99.0	2.23	PFHxS	0.280	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.96	PFNA			
PFNA_2	463.0 / 219.0	2.96	PFNA	0.320	0.306	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	2.95	PFOS	0.190	0.178	ü
PFDA_1	513.0 / 469.0	3.31	PFDA			
PFDA_2	513.0 / 219.0	3.31	PFDA	0.050	0.047	ü
PFUnA_1	563.0 / 519.0	3.63	PFUnA			
PFUnA_2	563.0 / 269.0	3.63	PFUnA	0.060	0.058	ü
PFDoA_1	613.0 / 569.0	3.92	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	PFDoA	0.150	0.162	ü
PFTrDA_1	663.0 / 619.0	4.17	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.17	PFTrDA	0.060	0.067	ü
PFTeDA_1	713.0 / 669.0	4.40	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.40	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.47	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.46	NMeFOSAA	0.580	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.63	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.63	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:00:49 AM

Sample Name	JY42 CCV	**Injection Vial**	25
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:11:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.290	0.288	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.21	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	PFHxS	0.290	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.95	PFNA			
PFNA_2	463.0 / 219.0	2.95	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	2.95	PFOS	0.190	0.178	ü
PFDA_1	513.0 / 469.0	3.30	PFDA			
PFDA_2	513.0 / 219.0	3.30	PFDA	0.050	0.047	ü
PFUnA_1	563.0 / 519.0	3.62	PFUnA			
PFUnA_2	563.0 / 269.0	3.62	PFUnA	0.050	0.058	ü
PFDoA_1	613.0 / 569.0	3.91	PFDoA			
PFDoA_2	613.0 / 319.0	3.91	PFDoA	0.150	0.162	ü
PFTrDA_1	663.0 / 619.0	4.17	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.16	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.40	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.39	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.46	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.46	NMeFOSAA	0.520	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.62	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.62	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:00:54 AM

Sample Name	JY41 CCV	**Injection Vial**	37
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:22:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.300	0.288	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.21	PFHpA			
PFHpA_2	363.0 / 169.0	2.20	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	PFHxS	0.260	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.080	0.072	ü
PFNA_1	463.0 / 419.0	2.95	PFNA			
PFNA_2	463.0 / 219.0	2.95	PFNA	0.320	0.306	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	2.94	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.29	PFDA			
PFDA_2	513.0 / 219.0	3.30	PFDA	0.040	0.047	ü
PFUnA_1	563.0 / 519.0	3.62	PFUnA			
PFUnA_2	563.0 / 269.0	3.62	PFUnA	0.060	0.058	ü
PFDoA_1	613.0 / 569.0	3.91	PFDoA			
PFDoA_2	613.0 / 319.0	3.91	PFDoA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.16	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.16	PFTrDA	0.060	0.067	ü
PFTeDA_1	713.0 / 669.0	4.39	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.39	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.45	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.45	NMeFOSAA	0.570	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.61	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.61	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:00:59 AM

Sample Name	JY42 CCV	**Injection Vial**	49
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:32:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.290	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.20	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.280	0.284	ü
PFOA_1	413.0 / 369.0	2.56	PFOA			
PFOA_2	413.0 / 169.0	2.56	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.93	PFNA			
PFNA_2	463.0 / 219.0	2.93	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	2.93	PFOS			
PFOS_2	499.0 / 99.0	2.92	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	3.28	PFDA			
PFDA_2	513.0 / 219.0	3.28	PFDA	0.050	0.047	ü
PFUnA_1	563.0 / 519.0	3.60	PFUnA			
PFUnA_2	563.0 / 269.0	3.60	PFUnA	0.060	0.058	ü
PFDoA_1	613.0 / 569.0	3.89	PFDoA			
PFDoA_2	613.0 / 319.0	3.89	PFDoA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.15	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.14	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.38	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.37	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.43	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.43	NMeFOSAA	0.500	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.60	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.60	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:20:15 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.89	PFHxA			
PFHxA_2	313.0 / 119.0	1.89	PFHxA	0.080	0.079	ü
PFOA_1	413.0 / 369.0	2.70	PFOA			
PFOA_2	413.0 / 169.0	2.70	PFOA	0.070	0.069	ü
PFOS_1	499.0 / 80.0	3.09	PFOS			
PFOS_2	499.0 / 99.0	3.09	PFOS	0.190	0.187	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:20:19 AM

Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.88	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.079	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.069	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.190	0.187	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:20:25 AM

Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.080	0.079	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.069	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.180	0.187	ü

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:01:57 AM

Sample Name	JY45 ICC	**Injection Vial**	24
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.291	ü

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:02:01 AM

Sample Name	JY42	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T23:31:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.300	0.291	ü

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:02:06 AM

Sample Name	JY41 CCV	**Injection Vial**	19
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.291	ü

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:02:59 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:17:37	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	25634.40	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	25634.40	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	73110.27	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	73110.27	250.00
PFHpA_1	363.0 / 319.0	2.21	13C8-PFOA	421.0 / 376.0	78331.90	250.00
PFHpA_2	363.0 / 169.0	2.21	13C8-PFOA	421.0 / 376.0	78331.90	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	23878.71	236.50
PFHxS_2	399.0 / 99.0	2.22	13C3-PFHxS	402.0 / 99.0	23878.71	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	78331.90	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	78331.90	250.00
PFNA_1	463.0 / 419.0	2.95	13C9-PFNA	472.0 / 427.0	86240.92	250.00
PFNA_2	463.0 / 219.0	2.95	13C9-PFNA	472.0 / 427.0	86240.92	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	25507.92	239.25
PFOS_2	499.0 / 99.0	2.95	13C8-PFOS	507.0 / 99.0	25507.92	239.25
PFDA_1	513.0 / 469.0	3.31	13C6-PFDA	519.0 / 474.0	78075.14	250.00
PFDA_2	513.0 / 219.0	3.31	13C6-PFDA	519.0 / 474.0	78075.14	250.00
PFUnA_1	563.0 / 519.0	3.63	13C7-PFUnA	570.0 / 525.0	80863.06	250.00
PFUnA_2	563.0 / 269.0	3.63	13C7-PFUnA	570.0 / 525.0	80863.06	250.00
PFDoA_1	613.0 / 569.0	3.92	13C2-PFDoA	615.0 / 570.0	90617.06	250.00
PFDoA_2	613.0 / 319.0	3.92	13C2-PFDoA	615.0 / 570.0	90617.06	250.00
PFTrDA_1	663.0 / 619.0	4.18	13C2-PFTeDA	715.0 / 670.0	78103.82	250.00
PFTrDA_2	663.0 / 169.0	4.17	13C2-PFTeDA	715.0 / 670.0	78103.82	250.00
PFTeDA_1	713.0 / 669.0	4.40	13C2-PFTeDA	715.0 / 670.0	78103.82	250.00
PFTeDA_2	713.0 / 169.0	4.40	13C2-PFTeDA	715.0 / 670.0	78103.82	250.00
NMeFOSAA_1	570.0 / 419.0	3.46	d3-MeFOSAA	573.0 / 419.0	14320.48	250.00
NMeFOSAA_2	570.0 / 512.0	3.46	d3-MeFOSAA	573.0 / 419.0	14320.48	250.00
NEtFOSAA_1	584.0 / 419.0	3.63	d5-EtFOSAA	589.0 / 419.0	14539.03	250.00
NEtFOSAA_2	584.0 / 483.0	3.63	d5-EtFOSAA	589.0 / 419.0	14539.03	250.00

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:03:03 AM

Sample Name	JX41 CCV	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:22:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	30380.62	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	30380.62	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	76760.70	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	76760.70	250.00
PFHpA_1	363.0 / 319.0	2.21	13C8-PFOA	421.0 / 376.0	81188.14	250.00
PFHpA_2	363.0 / 169.0	2.21	13C8-PFOA	421.0 / 376.0	81188.14	250.00
PFHxS_1	399.0 / 80.0	2.23	13C3-PFHxS	402.0 / 99.0	25951.61	236.50
PFHxS_2	399.0 / 99.0	2.23	13C3-PFHxS	402.0 / 99.0	25951.61	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	81188.14	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	81188.14	250.00
PFNA_1	463.0 / 419.0	2.96	13C9-PFNA	472.0 / 427.0	85103.03	250.00
PFNA_2	463.0 / 219.0	2.96	13C9-PFNA	472.0 / 427.0	85103.03	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	25927.87	239.25
PFOS_2	499.0 / 99.0	2.95	13C8-PFOS	507.0 / 99.0	25927.87	239.25
PFDA_1	513.0 / 469.0	3.31	13C6-PFDA	519.0 / 474.0	87021.80	250.00
PFDA_2	513.0 / 219.0	3.31	13C6-PFDA	519.0 / 474.0	87021.80	250.00
PFUnA_1	563.0 / 519.0	3.63	13C7-PFUnA	570.0 / 525.0	82302.09	250.00
PFUnA_2	563.0 / 269.0	3.63	13C7-PFUnA	570.0 / 525.0	82302.09	250.00
PFDoA_1	613.0 / 569.0	3.92	13C2-PFDoA	615.0 / 570.0	96255.20	250.00
PFDoA_2	613.0 / 319.0	3.92	13C2-PFDoA	615.0 / 570.0	96255.20	250.00
PFTrDA_1	663.0 / 619.0	4.17	13C2-PFTeDA	715.0 / 670.0	84131.73	250.00
PFTrDA_2	663.0 / 169.0	4.17	13C2-PFTeDA	715.0 / 670.0	84131.73	250.00
PFTeDA_1	713.0 / 669.0	4.40	13C2-PFTeDA	715.0 / 670.0	84131.73	250.00
PFTeDA_2	713.0 / 169.0	4.40	13C2-PFTeDA	715.0 / 670.0	84131.73	250.00
NMeFOSAA_1	570.0 / 419.0	3.47	d3-MeFOSAA	573.0 / 419.0	14807.03	250.00
NMeFOSAA_2	570.0 / 512.0	3.46	d3-MeFOSAA	573.0 / 419.0	14807.03	250.00
NEtFOSAA_1	584.0 / 419.0	3.63	d5-EtFOSAA	589.0 / 419.0	18767.93	250.00
NEtFOSAA_2	584.0 / 483.0	3.63	d5-EtFOSAA	589.0 / 419.0	18767.93	250.00

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:03:08 AM

Sample Name	JY42 CCV	**Injection Vial**	25
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:11:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	21982.96	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	21982.96	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	57195.31	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	57195.31	250.00
PFHpA_1	363.0 / 319.0	2.21	13C8-PFOA	421.0 / 376.0	60263.02	250.00
PFHpA_2	363.0 / 169.0	2.21	13C8-PFOA	421.0 / 376.0	60263.02	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	17060.06	236.50
PFHxS_2	399.0 / 99.0	2.22	13C3-PFHxS	402.0 / 99.0	17060.06	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	60263.02	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	60263.02	250.00
PFNA_1	463.0 / 419.0	2.95	13C9-PFNA	472.0 / 427.0	63807.10	250.00
PFNA_2	463.0 / 219.0	2.95	13C9-PFNA	472.0 / 427.0	63807.10	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	18285.83	239.25
PFOS_2	499.0 / 99.0	2.95	13C8-PFOS	507.0 / 99.0	18285.83	239.25
PFDA_1	513.0 / 469.0	3.30	13C6-PFDA	519.0 / 474.0	65633.58	250.00
PFDA_2	513.0 / 219.0	3.30	13C6-PFDA	519.0 / 474.0	65633.58	250.00
PFUnA_1	563.0 / 519.0	3.62	13C7-PFUnA	570.0 / 525.0	60471.15	250.00
PFUnA_2	563.0 / 269.0	3.62	13C7-PFUnA	570.0 / 525.0	60471.15	250.00
PFDoA_1	613.0 / 569.0	3.91	13C2-PFDoA	615.0 / 570.0	73410.38	250.00
PFDoA_2	613.0 / 319.0	3.91	13C2-PFDoA	615.0 / 570.0	73410.38	250.00
PFTrDA_1	663.0 / 619.0	4.17	13C2-PFTeDA	715.0 / 670.0	61047.11	250.00
PFTrDA_2	663.0 / 169.0	4.16	13C2-PFTeDA	715.0 / 670.0	61047.11	250.00
PFTeDA_1	713.0 / 669.0	4.40	13C2-PFTeDA	715.0 / 670.0	61047.11	250.00
PFTeDA_2	713.0 / 169.0	4.39	13C2-PFTeDA	715.0 / 670.0	61047.11	250.00
NMeFOSAA_1	570.0 / 419.0	3.46	d3-MeFOSAA	573.0 / 419.0	11326.23	250.00
NMeFOSAA_2	570.0 / 512.0	3.46	d3-MeFOSAA	573.0 / 419.0	11326.23	250.00
NEtFOSAA_1	584.0 / 419.0	3.62	d5-EtFOSAA	589.0 / 419.0	13303.47	250.00
NEtFOSAA_2	584.0 / 483.0	3.62	d5-EtFOSAA	589.0 / 419.0	13303.47	250.00

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:03:12 AM

Sample Name	JY41 CCV	**Injection Vial**	37
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:22:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	24467.42	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	24467.42	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	59238.45	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	59238.45	250.00
PFHpA_1	363.0 / 319.0	2.21	13C8-PFOA	421.0 / 376.0	71045.17	250.00
PFHpA_2	363.0 / 169.0	2.20	13C8-PFOA	421.0 / 376.0	71045.17	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	20117.86	236.50
PFHxS_2	399.0 / 99.0	2.22	13C3-PFHxS	402.0 / 99.0	20117.86	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	71045.17	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	71045.17	250.00
PFNA_1	463.0 / 419.0	2.95	13C9-PFNA	472.0 / 427.0	69169.20	250.00
PFNA_2	463.0 / 219.0	2.95	13C9-PFNA	472.0 / 427.0	69169.20	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	19743.25	239.25
PFOS_2	499.0 / 99.0	2.94	13C8-PFOS	507.0 / 99.0	19743.25	239.25
PFDA_1	513.0 / 469.0	3.29	13C6-PFDA	519.0 / 474.0	71871.06	250.00
PFDA_2	513.0 / 219.0	3.30	13C6-PFDA	519.0 / 474.0	71871.06	250.00
PFUnA_1	563.0 / 519.0	3.62	13C7-PFUnA	570.0 / 525.0	67980.71	250.00
PFUnA_2	563.0 / 269.0	3.62	13C7-PFUnA	570.0 / 525.0	67980.71	250.00
PFDoA_1	613.0 / 569.0	3.91	13C2-PFDoA	615.0 / 570.0	84881.21	250.00
PFDoA_2	613.0 / 319.0	3.91	13C2-PFDoA	615.0 / 570.0	84881.21	250.00
PFTrDA_1	663.0 / 619.0	4.16	13C2-PFTeDA	715.0 / 670.0	66296.28	250.00
PFTrDA_2	663.0 / 169.0	4.16	13C2-PFTeDA	715.0 / 670.0	66296.28	250.00
PFTeDA_1	713.0 / 669.0	4.39	13C2-PFTeDA	715.0 / 670.0	66296.28	250.00
PFTeDA_2	713.0 / 169.0	4.39	13C2-PFTeDA	715.0 / 670.0	66296.28	250.00
NMeFOSAA_1	570.0 / 419.0	3.45	d3-MeFOSAA	573.0 / 419.0	13984.06	250.00
NMeFOSAA_2	570.0 / 512.0	3.45	d3-MeFOSAA	573.0 / 419.0	13984.06	250.00
NEtFOSAA_1	584.0 / 419.0	3.61	d5-EtFOSAA	589.0 / 419.0	14078.06	250.00
NEtFOSAA_2	584.0 / 483.0	3.61	d5-EtFOSAA	589.0 / 419.0	14078.06	250.00

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:03:17 AM

Sample Name	JY42 CCV	**Injection Vial**	49
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:32:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	29580.55	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	29580.55	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	70606.26	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	70606.26	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	84528.51	250.00
PFHpA_2	363.0 / 169.0	2.20	13C8-PFOA	421.0 / 376.0	84528.51	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	22001.68	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	22001.68	236.50
PFOA_1	413.0 / 369.0	2.56	13C8-PFOA	421.0 / 376.0	84528.51	250.00
PFOA_2	413.0 / 169.0	2.56	13C8-PFOA	421.0 / 376.0	84528.51	250.00
PFNA_1	463.0 / 419.0	2.93	13C9-PFNA	472.0 / 427.0	79436.69	250.00
PFNA_2	463.0 / 219.0	2.93	13C9-PFNA	472.0 / 427.0	79436.69	250.00
PFOS_1	499.0 / 80.0	2.93	13C8-PFOS	507.0 / 99.0	24942.73	239.25
PFOS_2	499.0 / 99.0	2.92	13C8-PFOS	507.0 / 99.0	24942.73	239.25
PFDA_1	513.0 / 469.0	3.28	13C6-PFDA	519.0 / 474.0	82351.43	250.00
PFDA_2	513.0 / 219.0	3.28	13C6-PFDA	519.0 / 474.0	82351.43	250.00
PFUnA_1	563.0 / 519.0	3.60	13C7-PFUnA	570.0 / 525.0	79140.77	250.00
PFUnA_2	563.0 / 269.0	3.60	13C7-PFUnA	570.0 / 525.0	79140.77	250.00
PFDoA_1	613.0 / 569.0	3.89	13C2-PFDoA	615.0 / 570.0	92813.43	250.00
PFDoA_2	613.0 / 319.0	3.89	13C2-PFDoA	615.0 / 570.0	92813.43	250.00
PFTrDA_1	663.0 / 619.0	4.15	13C2-PFTeDA	715.0 / 670.0	79628.18	250.00
PFTrDA_2	663.0 / 169.0	4.14	13C2-PFTeDA	715.0 / 670.0	79628.18	250.00
PFTeDA_1	713.0 / 669.0	4.38	13C2-PFTeDA	715.0 / 670.0	79628.18	250.00
PFTeDA_2	713.0 / 169.0	4.37	13C2-PFTeDA	715.0 / 670.0	79628.18	250.00
NMeFOSAA_1	570.0 / 419.0	3.43	d3-MeFOSAA	573.0 / 419.0	15948.41	250.00
NMeFOSAA_2	570.0 / 512.0	3.43	d3-MeFOSAA	573.0 / 419.0	15948.41	250.00
NEtFOSAA_1	584.0 / 419.0	3.60	d5-EtFOSAA	589.0 / 419.0	16168.16	250.00
NEtFOSAA_2	584.0 / 483.0	3.60	d5-EtFOSAA	589.0 / 419.0	16168.16	250.00

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Summary Internal Standard Report

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Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:17:37	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.91	13C2-PFDA	515.0 / 470.0	74746.07	250.00
d3-MeFOSAA	573.0 / 419.0	3.46	13C4-PFOS	503.0 / 99.0	25474.60	239.25
d5-EtFOSAA	589.0 / 419.0	3.62	13C4-PFOS	503.0 / 99.0	25474.60	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	77514.09	250.00
13C4-PFHpA	367.0 / 322.0	2.20	13C2-PFOA	415.0 / 370.0	77514.09	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	77514.09	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	77514.09	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	74746.07	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	74746.07	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	74746.07	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	25474.60	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	25474.60	239.25
13C8-PFOS	507.0 / 99.0	2.94	13C4-PFOS	503.0 / 99.0	25474.60	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 12:03:35 PM

Sample Name	JX41 CCV	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:22:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.91	13C2-PFDA	515.0 / 470.0	84986.39	250.00
d3-MeFOSAA	573.0 / 419.0	3.46	13C4-PFOS	503.0 / 99.0	25251.56	239.25
d5-EtFOSAA	589.0 / 419.0	3.62	13C4-PFOS	503.0 / 99.0	25251.56	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	80771.08	250.00
13C4-PFHpA	367.0 / 322.0	2.20	13C2-PFOA	415.0 / 370.0	80771.08	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	80771.08	250.00
13C9-PFNA	472.0 / 427.0	2.95	13C2-PFOA	415.0 / 370.0	80771.08	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	84986.39	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	84986.39	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	84986.39	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	25251.56	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	25251.56	239.25
13C8-PFOS	507.0 / 99.0	2.94	13C4-PFOS	503.0 / 99.0	25251.56	239.25

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Summary Internal Standard Report

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Printed: 27/08/2018 12:03:39 PM

Sample Name	JY42 CCV	**Injection Vial**	25
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:11:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	60762.07	250.00
d3-MeFOSAA	573.0 / 419.0	3.45	13C4-PFOS	503.0 / 99.0	18267.73	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	18267.73	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	58168.73	250.00
13C4-PFHpA	367.0 / 322.0	2.20	13C2-PFOA	415.0 / 370.0	58168.73	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	58168.73	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	58168.73	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	60762.07	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	60762.07	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	60762.07	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	18267.73	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	18267.73	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	18267.73	239.25

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Summary Internal Standard Report

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Sample Name	JY41 CCV	**Injection Vial**	37
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:22:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.89	13C2-PFDA	515.0 / 470.0	67793.57	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	23415.35	239.25
d5-EtFOSAA	589.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	23415.35	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	60959.25	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	60959.25	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	60959.25	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	60959.25	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	67793.57	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	67793.57	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	67793.57	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	23415.35	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	23415.35	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	23415.35	239.25

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Summary Internal Standard Report

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Sample Name	JY42 CCV	**Injection Vial**	49
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:32:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.88	13C2-PFDA	515.0 / 470.0	73279.42	250.00
d3-MeFOSAA	573.0 / 419.0	3.43	13C4-PFOS	503.0 / 99.0	25004.96	239.25
d5-EtFOSAA	589.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	25004.96	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	79138.53	250.00
13C4-PFHpA	367.0 / 322.0	2.18	13C2-PFOA	415.0 / 370.0	79138.53	250.00
13C8-PFOA	421.0 / 376.0	2.55	13C2-PFOA	415.0 / 370.0	79138.53	250.00
13C9-PFNA	472.0 / 427.0	2.92	13C2-PFOA	415.0 / 370.0	79138.53	250.00
13C6-PFDA	519.0 / 474.0	3.26	13C2-PFDA	515.0 / 470.0	73279.42	250.00
13C7-PFUnA	570.0 / 525.0	3.58	13C2-PFDA	515.0 / 470.0	73279.42	250.00
13C2-PFTeDA	715.0 / 670.0	4.37	13C2-PFDA	515.0 / 470.0	73279.42	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	25004.96	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	25004.96	239.25
13C8-PFOS	507.0 / 99.0	2.91	13C4-PFOS	503.0 / 99.0	25004.96	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:21:15 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.89	13C5-PFHxA	318.0 / 273.0	81514.52	250.00
PFHxA_2	313.0 / 119.0	1.89	13C5-PFHxA	318.0 / 273.0	81514.52	250.00
PFOA_1	413.0 / 369.0	2.70	13C8-PFOA	421.0 / 376.0	99700.30	250.00
PFOA_2	413.0 / 169.0	2.70	13C8-PFOA	421.0 / 376.0	99700.30	250.00
PFOS_1	499.0 / 80.0	3.09	13C8-PFOS	507.0 / 99.0	32923.87	239.25
PFOS_2	499.0 / 99.0	3.09	13C8-PFOS	507.0 / 99.0	32923.87	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:21:24 AM

Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.88	13C5-PFHxA	318.0 / 273.0	67175.74	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	67175.74	250.00
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	86785.10	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	86785.10	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	28308.60	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	28308.60	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:21:30 AM

Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	87355.69	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	87355.69	250.00
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	113477.64	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	113477.64	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	36732.86	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	36732.86	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 12:04:47 PM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.88	13C2-PFOA	415.0 / 370.0	92157.29	250.00
13C4-PFHpA	367.0 / 322.0	2.28	13C2-PFOA	415.0 / 370.0	92157.29	250.00
13C8-PFOA	421.0 / 376.0	2.69	13C2-PFOA	415.0 / 370.0	92157.29	250.00
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	30723.28	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 12:04:51 PM

Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	72064.11	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	72064.11	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	72064.11	250.00
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	28581.61	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 12:04:55 PM

Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	102212.86	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	102212.86	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	102212.86	250.00
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	32755.83	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:04:58 AM

Sample Name	JY45 ICC	**Injection Vial**	24
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	30254.68	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	30254.68	232.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:05:02 AM

Sample Name	JY42	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T23:31:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	29268.06	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	29268.06	232.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:05:06 AM

Sample Name	JY41 CCV	**Injection Vial**	19
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	29950.08	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	29950.08	232.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:04:25 AM

Sample Name	JY45 ICC	**Injection Vial**	24
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	27304.48	239.25

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Summary Internal Standard Report

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Printed: 29/08/2018 10:04:30 AM

Sample Name	JY42	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T23:31:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	23118.25	239.25

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Summary Internal Standard Report

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Printed: 29/08/2018 10:04:35 AM

Sample Name	JY41 CCV	**Injection Vial**	19
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	23956.70	239.25

Raw Analytical Data

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It can be done

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Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:06:33 AM

Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:06:44	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	4598.99	68.910355	17.7	true
PFBS_2	298.9 / 99.0	1.55	1682.35	86.436816	14.9	true
PFHxA_1	313.0 / 269.0	1.86	4876.64	84.196881	16.0	false
PFHxA_2	313.0 / 119.0	1.85	772.69	77.512904	14.9	false
PFHpA_1	363.0 / 319.0	2.20	4571.35	102.626679	24.1	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.23	6973.66	48.767851	26.0	false
PFHxS_2	399.0 / 99.0	2.21	2651.43	27.895928	36.7	false
PFOA_1	413.0 / 369.0	2.58	5914.26	82.399894	21.5	false
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	2.95	7053.37	91.731630	25.3	false
PFNA_2	463.0 / 219.0	2.94	2481.54	82.167520	27.7	false
PFOS_1	499.0 / 80.0	2.95	3966.42	101.637890	12.0	true
PFOS_2	499.0 / 99.0	2.82	910.43	85.551757	8.7	true
PFDA_1	513.0 / 469.0	3.30	6289.18	90.055681	31.0	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.62	5513.30	73.292240	28.4	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	3.92	5193.08	15.855395	36.0	false
PFDoA_2	613.0 / 319.0	3.92	1118.51	33.685445	28.5	false
PFTrDA_1	663.0 / 619.0	4.17	5741.08	30.483959	60.0	false
PFTrDA_2	663.0 / 169.0	4.17	316.78	9.188094	14.4	false
PFTeDA_1	713.0 / 669.0	4.40	6417.58	35.061635	136.7	false
PFTeDA_2	713.0 / 169.0	4.38	537.67	17.395424	31.6	false
NMeFOSAA_1	570.0 / 419.0	3.46	2080.71	117.045951	74.0	false
NMeFOSAA_2	570.0 / 512.0	3.46	1244.91	235.037172	39.4	false
NEtFOSAA_1	584.0 / 419.0	3.62	2418.39	119.253177	62.3	false
NEtFOSAA_2	584.0 / 483.0	3.51	129.57	103.895238	9.0	false

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Summary Quant Report

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Sample Name	CR546PB-FS(3)	**Injection Vial**	17
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:44:41	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	2.58	6088.71	77.339351	12.3	true
PFOA_2	413.0 / 169.0	2.55	1193.02	77.014334	10.2	false
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	2.96	1154.65	63.791748	16.1	false
PFOS_1	499.0 / 80.0	2.95	11236.13	108.961390	20.3	true
PFOS_2	499.0 / 99.0	2.95	3070.66	99.494674	28.1	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.40	724.14	16.630821	18.8	true
PFTeDA_2	713.0 / 169.0	4.41	93.35	< 0	6.6	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	CR547LCS-FS(3)	**Injection Vial**	18
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:55:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	856971.76	2352.705620	400.7	false
PFBS_2	298.9 / 99.0	1.56	261058.48	2451.156628	357.9	false
PFHxA_1	313.0 / 269.0	1.85	735042.02	2478.213545	165.3	false
PFHxA_2	313.0 / 119.0	1.85	54066.37	2432.262020	187.9	false
PFHpA_1	363.0 / 319.0	2.21	635507.46	2240.227931	239.5	false
PFHpA_2	363.0 / 169.0	2.21	12992.19	2224.488331	165.6	false
PFHxS_1	399.0 / 80.0	2.22	939738.24	2575.763543	243.1	false
PFHxS_2	399.0 / 99.0	2.23	262360.67	2602.001167	442.7	false
PFOA_1	413.0 / 369.0	2.58	941664.26	2639.865134	442.0	false
PFOA_2	413.0 / 169.0	2.58	63582.72	2563.710647	286.7	false
PFNA_1	463.0 / 419.0	2.95	816649.35	2538.287696	317.1	false
PFNA_2	463.0 / 219.0	2.95	249339.00	2572.827201	376.4	false
PFOS_1	499.0 / 80.0	2.95	1249891.16	2489.564853	179.8	true
PFOS_2	499.0 / 99.0	2.95	216603.12	2466.441638	516.0	false
PFDA_1	513.0 / 469.0	3.31	880811.03	2378.564040	318.8	false
PFDA_2	513.0 / 219.0	3.31	39984.76	2375.437438	178.4	false
PFUnA_1	563.0 / 519.0	3.63	864703.88	2505.491447	296.4	false
PFUnA_2	563.0 / 269.0	3.63	49258.40	2625.706293	243.2	false
PFDoA_1	613.0 / 569.0	3.92	883241.17	2691.608074	522.5	false
PFDoA_2	613.0 / 319.0	3.92	137890.99	2562.125528	345.6	false
PFTrDA_1	663.0 / 619.0	4.17	779148.68	2616.954897	590.6	false
PFTrDA_2	663.0 / 169.0	4.17	54129.87	2773.785074	446.5	false
PFTeDA_1	713.0 / 669.0	4.40	878550.30	2584.629035	1184.7	false
PFTeDA_2	713.0 / 169.0	4.40	42242.72	2555.622124	653.1	false
NMeFOSAA_1	570.0 / 419.0	3.46	165249.70	2988.454318	701.4	false
NMeFOSAA_2	570.0 / 512.0	3.46	80788.14	2681.309588	388.5	false
NEtFOSAA_1	584.0 / 419.0	3.63	154822.08	2464.710733	542.5	false
NEtFOSAA_2	584.0 / 483.0	3.63	9317.53	2433.327258	188.3	false

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Summary Quant Report

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Sample Name	J7259-FS(3)	**Injection Vial**	19
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:06:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	27000.04	114.844352	32.3	true
PFBS_2	298.9 / 99.0	1.54	5653.18	111.810160	38.6	true
PFHxA_1	313.0 / 269.0	1.84	13482.77	109.415718	23.7	false
PFHxA_2	313.0 / 119.0	1.84	1125.40	87.553074	13.3	false
PFHpA_1	363.0 / 319.0	2.20	7269.69	107.957514	25.7	false
PFHpA_2	363.0 / 169.0	2.19	89.46	82.524694	5.7	true
PFHxS_1	399.0 / 80.0	2.22	44379.20	142.123826	90.5	false
PFHxS_2	399.0 / 99.0	2.22	13698.28	127.807975	126.5	false
PFOA_1	413.0 / 369.0	2.58	145454.88	450.781795	162.7	false
PFOA_2	413.0 / 169.0	2.58	9674.72	410.680865	75.6	false
PFNA_1	463.0 / 419.0	2.97	1394.21	72.265457	10.2	false
PFNA_2	463.0 / 219.0	2.96	1232.19	66.709125	15.7	false
PFOS_1	499.0 / 80.0	2.95	74098.84	216.852477	63.4	true
PFOS_2	499.0 / 99.0	2.95	14513.19	213.696745	117.4	true
PFDA_1	513.0 / 469.0	3.30	4192.99	81.406990	20.1	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.64	1119.45	58.978557	12.8	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	3.91	3688.11	9.362393	34.3	false
PFDoA_2	613.0 / 319.0	3.91	509.03	19.706489	16.3	false
PFTrDA_1	663.0 / 619.0	4.18	1666.67	15.492394	31.6	false
PFTrDA_2	663.0 / 169.0	4.19	117.38	< 0	6.3	false
PFTeDA_1	713.0 / 669.0	4.40	1178.29	18.254251	42.6	false
PFTeDA_2	713.0 / 169.0	4.43	299.09	1.220289	18.2	false
NMeFOSAA_1	570.0 / 419.0	3.44	316.56	90.276685	28.3	false
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	3.63	639.05	87.360282	39.9	false
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7260-FS(3)	**Injection Vial**	20
Sample ID	080118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:17:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	26401.30	122.037027	38.2	false
PFBS_2	298.9 / 99.0	1.56	8150.94	139.570807	54.1	false
PFHxA_1	313.0 / 269.0	1.84	329700.25	1373.463805	105.7	false
PFHxA_2	313.0 / 119.0	1.84	23636.69	1303.165175	113.6	false
PFHpA_1	363.0 / 319.0	2.20	47020.69	272.912467	81.7	false
PFHpA_2	363.0 / 169.0	2.21	1249.89	313.804223	45.3	false
PFHxS_1	399.0 / 80.0	2.22	126556.72	354.092718	129.6	false
PFHxS_2	399.0 / 99.0	2.22	38751.97	364.312217	189.3	false
PFOA_1	413.0 / 369.0	2.58	151233.57	553.142725	171.2	false
PFOA_2	413.0 / 169.0	2.57	10463.40	528.632736	88.9	false
PFNA_1	463.0 / 419.0	2.95	2521.27	75.788032	12.7	false
PFNA_2	463.0 / 219.0	2.96	1007.18	64.661029	13.3	false
PFOS_1	499.0 / 80.0	2.94	306442.83	680.807376	99.9	true
PFOS_2	499.0 / 99.0	2.94	58938.72	725.223677	266.3	false
PFDA_1	513.0 / 469.0	3.29	1695.30	76.286154	13.3	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.62	2515.24	64.144393	16.3	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	3.92	1341.40	2.679307	14.6	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.17	941.63	13.399729	18.7	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.39	961.08	18.035054	24.7	false
PFTeDA_2	713.0 / 169.0	4.40	230.81	< 0	10.4	false
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	3.65	163.37	81.667468	12.3	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7261-FS(3)	**Injection Vial**	21
Sample ID	080118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:28:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	41030.79	157.330348	58.2	false
PFBS_2	298.9 / 99.0	1.55	9653.21	151.091224	64.6	true
PFHxA_1	313.0 / 269.0	1.84	359164.82	1334.516446	105.8	false
PFHxA_2	313.0 / 119.0	1.85	22968.23	1133.009920	131.6	false
PFHpA_1	363.0 / 319.0	2.20	54031.70	278.953732	85.4	false
PFHpA_2	363.0 / 169.0	2.21	1853.62	395.354284	49.0	false
PFHxS_1	399.0 / 80.0	2.21	163600.26	462.713298	145.1	false
PFHxS_2	399.0 / 99.0	2.22	44172.04	428.383872	208.0	false
PFOA_1	413.0 / 369.0	2.57	206658.79	664.524779	159.7	false
PFOA_2	413.0 / 169.0	2.57	16726.16	743.279487	106.4	true
PFNA_1	463.0 / 419.0	2.93	2613.16	75.766798	11.3	false
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.94	787092.02	1421.138165	140.8	true
PFOS_2	499.0 / 99.0	2.94	138485.15	1420.048538	346.0	false
PFDA_1	513.0 / 469.0	3.29	1386.75	75.025444	15.7	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.16	702.36	12.242989	16.0	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Printed: 29/08/2018 10:06:59 AM

Sample Name	J7252-FS(3)	**Injection Vial**	22
Sample ID	073018-05	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:39:03	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	2.21	4315.66	96.490877	21.5	false
PFHpA_2	363.0 / 169.0	2.16	482.92	136.864267	15.7	false
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	2.58	128469.48	364.689354	134.4	false
PFOA_2	413.0 / 169.0	2.58	8986.53	342.561186	75.1	false
PFNA_1	463.0 / 419.0	2.95	2758.99	74.987216	14.3	false
PFNA_2	463.0 / 219.0	2.94	1022.13	62.925183	16.4	false
PFOS_1	499.0 / 80.0	2.94	11011.32	109.290842	28.3	false
PFOS_2	499.0 / 99.0	2.95	2276.05	93.405526	25.2	false
PFDA_1	513.0 / 469.0	3.32	2671.00	77.592364	19.1	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	3.92	1524.12	1.812683	16.3	false
PFDoA_2	613.0 / 319.0	3.87	212.99	13.426647	4.0	false
PFTrDA_1	663.0 / 619.0	4.17	738.54	11.819925	14.9	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	3.46	2409.57	110.733241	68.1	false
NMeFOSAA_2	570.0 / 512.0	3.46	1354.91	226.850557	31.2	false
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7253-FS(3)	**Injection Vial**	23
Sample ID	073018-06	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:49:56	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	2.21	2871.16	94.992874	15.6	false
PFHpA_2	363.0 / 169.0	2.23	75.04	82.211716	4.8	true
PFHxS_1	399.0 / 80.0	2.22	2398.75	34.723427	12.1	false
PFHxS_2	399.0 / 99.0	2.24	1461.00	14.330415	16.2	false
PFOA_1	413.0 / 369.0	2.58	111105.31	408.461772	136.6	false
PFOA_2	413.0 / 169.0	2.58	7120.71	357.618695	79.2	false
PFNA_1	463.0 / 419.0	2.93	3425.99	80.197820	13.6	false
PFNA_2	463.0 / 219.0	2.97	921.50	65.268731	15.4	false
PFOS_1	499.0 / 80.0	2.94	31749.90	151.520858	50.2	true
PFOS_2	499.0 / 99.0	2.94	4058.98	116.681335	58.1	false
PFDA_1	513.0 / 469.0	3.29	1543.46	75.513511	14.5	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.61	2654.80	64.277006	16.1	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.16	938.49	13.175044	18.6	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.40	579.73	16.534074	13.6	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7254-FS(3)	**Injection Vial**	24
Sample ID	073018-07	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:00:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	2.21	2475.62	95.125299	16.6	false
PFHpA_2	363.0 / 169.0	2.20	126.66	96.097711	4.9	true
PFHxS_1	399.0 / 80.0	2.23	3457.13	39.417070	20.3	false
PFHxS_2	399.0 / 99.0	2.21	978.72	10.680877	16.8	false
PFOA_1	413.0 / 369.0	2.58	98634.02	422.943399	158.5	false
PFOA_2	413.0 / 169.0	2.57	5946.58	351.222810	68.6	false
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.94	40333.08	176.203748	42.8	true
PFOS_2	499.0 / 99.0	2.94	8327.41	172.970550	68.6	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.16	655.83	12.280316	14.5	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.39	523.22	16.491329	11.0	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	3.46	562.69	93.959913	19.9	false
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	3.64	328.49	84.870506	18.7	false
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7248-FS(4)	**Injection Vial**	27
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:33:23	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	14506528.37	42146.733576	350.1	false
PFBS_2	298.9 / 99.0	1.56	4187602.90	41419.390526	744.6	false
PFHxA_1	313.0 / 269.0	1.84	21773592.32	68820.361002	266.0	false
PFHxA_2	313.0 / 119.0	1.84	1308955.32	55797.534174	429.7	false
PFHpA_1	363.0 / 319.0	2.19	3437140.28	12582.597730	189.8	false
PFHpA_2	363.0 / 169.0	2.14	112751.04	20124.357352	540.1	false
PFHxS_1	399.0 / 80.0	2.21	13374797.60	34546.592544	348.8	false
PFHxS_2	399.0 / 99.0	2.21	3604164.81	34041.188026	891.2	false
PFOA_1	413.0 / 369.0	2.57	4186039.97	12339.982925	181.1	false
PFOA_2	413.0 / 169.0	2.57	198406.77	8489.544019	217.8	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.95	60526.48	216.669157	29.1	true
PFOS_2	499.0 / 99.0	2.94	12868.29	225.508856	59.1	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	3.31	638.98	72.469749	10.6	true
PFUnA_1	563.0 / 519.0	3.62	3801.26	66.973947	20.5	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	3.91	4707.89	13.641402	35.7	false
PFDoA_2	613.0 / 319.0	3.91	946.37	29.398537	22.0	true
PFTrDA_1	663.0 / 619.0	4.17	5625.35	30.927236	63.4	false
PFTrDA_2	663.0 / 169.0	4.17	300.73	8.997924	18.5	false
PFTeDA_1	713.0 / 669.0	4.39	4773.90	30.448561	67.1	false
PFTeDA_2	713.0 / 169.0	4.38	236.11	< 0	19.6	false
NMeFOSAA_1	570.0 / 419.0	3.46	1343.36	102.956832	31.9	false
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	3.62	1090.43	94.945388	39.8	false
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7248-FS-D(5)	**Injection Vial**	28
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:44:16	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	752645.25	1474.661826	245.6	false
PFBS_2	298.9 / 99.0	1.56	226216.10	1521.243142	290.4	false
PFHxA_1	313.0 / 269.0	1.84	977128.89	2416.813193	165.2	false
PFHxA_2	313.0 / 119.0	1.84	60572.91	2004.589798	217.3	false
PFHpA_1	363.0 / 319.0	2.19	136225.65	453.728253	118.2	false
PFHpA_2	363.0 / 169.0	2.15	4984.01	729.905851	104.0	false
PFHxS_1	399.0 / 80.0	2.21	570182.53	1436.170454	232.3	false
PFHxS_2	399.0 / 99.0	2.21	152042.55	1373.044864	318.7	false
PFOA_1	413.0 / 369.0	2.57	198253.83	496.955148	97.1	false
PFOA_2	413.0 / 169.0	2.57	7774.30	283.143043	46.6	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.94	4859.04	98.937810	10.3	true
PFOS_2	499.0 / 99.0	2.94	900.94	80.234393	8.1	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.17	896.27	11.961669	16.2	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7249-FS(4)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:55:09	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	18534043.63	86533.757702	126.0	true
PFBS_2	298.9 / 99.0	1.53	5153947.74	81907.816939	389.6	false
PFHxA_1	313.0 / 269.0	1.82	81181671.46	604972.493138	187.4	false
PFHxA_2	313.0 / 119.0	1.82	6154467.27	618680.908112	439.0	false
PFHpA_1	363.0 / 319.0	2.18	33186086.49	149813.144310	244.1	false
PFHpA_2	363.0 / 169.0	2.15	911860.15	201321.017759	803.7	false
PFHxS_1	399.0 / 80.0	2.20	78386063.05	212770.221482	316.3	false
PFHxS_2	399.0 / 99.0	2.20	26464701.87	262862.840730	1086.1	false
PFOA_1	413.0 / 369.0	2.55	109729583.55	399363.492940	473.1	false
PFOA_2	413.0 / 169.0	2.56	8417611.35	445038.244052	565.0	true
PFNA_1	463.0 / 419.0	2.93	36582.97	165.833988	43.6	false
PFNA_2	463.0 / 219.0	2.94	9502.92	139.177749	45.9	false
PFOS_1	499.0 / 80.0	2.81	12672740.82	23519.931728	137.3	true
PFOS_2	499.0 / 99.0	2.88	1782914.60	19061.096650	394.5	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.16	995.68	12.588509	15.5	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.39	850.56	16.859523	24.8	false
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	3.45	375.75	89.582144	23.2	false
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7249-FS-D(5)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:06:01	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	2140214.40	3498.025284	160.3	true
PFBS_2	298.9 / 99.0	1.55	646705.26	3609.672544	372.4	false
PFHxA_1	313.0 / 269.0	1.84	13269962.30	28132.811176	189.4	false
PFHxA_2	313.0 / 119.0	1.84	855825.34	24457.650042	408.6	false
PFHpA_1	363.0 / 319.0	2.20	2905244.05	7524.676837	211.4	false
PFHpA_2	363.0 / 169.0	2.16	83262.12	10499.524440	408.1	false
PFHxS_1	399.0 / 80.0	2.21	6353401.25	11983.268001	312.3	false
PFHxS_2	399.0 / 99.0	2.21	1820098.19	12533.066944	852.1	false
PFOA_1	413.0 / 369.0	2.57	11938754.21	24724.363675	533.1	false
PFOA_2	413.0 / 169.0	2.57	605740.97	18213.782888	412.4	true
PFNA_1	463.0 / 419.0	2.93	3591.67	75.766075	12.2	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.81	667157.09	1110.563631	92.3	true
PFOS_2	499.0 / 99.0	2.88	92309.67	884.733351	156.0	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7249MS-FS(4)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:16:53	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	16263091.12	100885.290537	150.8	true
PFBS_2	298.9 / 99.0	1.55	4491707.44	94840.848536	486.6	false
PFHxA_1	313.0 / 269.0	1.83	71763594.52	611164.710758	193.1	false
PFHxA_2	313.0 / 119.0	1.83	5386526.55	618816.626426	442.6	false
PFHpA_1	363.0 / 319.0	2.19	28308817.45	166710.378100	233.0	false
PFHpA_2	363.0 / 169.0	2.16	768182.56	221250.262722	730.6	false
PFHxS_1	399.0 / 80.0	2.21	65002785.12	266961.728747	312.3	false
PFHxS_2	399.0 / 99.0	2.21	20580100.39	309290.478527	1108.6	false
PFOA_1	413.0 / 369.0	2.57	95434372.48	453119.800876	398.9	false
PFOA_2	413.0 / 169.0	2.57	6279311.26	433104.941967	566.8	true
PFNA_1	463.0 / 419.0	2.95	1907909.71	7422.171133	225.7	false
PFNA_2	463.0 / 219.0	2.94	589422.33	7640.892405	384.3	false
PFOS_1	499.0 / 80.0	2.84	11948762.88	33187.796714	154.8	true
PFOS_2	499.0 / 99.0	2.93	1731951.67	27708.942563	437.0	true
PFDA_1	513.0 / 469.0	3.29	2031176.46	6520.195584	286.9	false
PFDA_2	513.0 / 219.0	3.29	80326.97	5733.470026	262.2	false
PFUnA_1	563.0 / 519.0	3.62	1905503.59	6677.029940	424.7	false
PFUnA_2	563.0 / 269.0	3.61	104094.21	6821.572303	259.8	false
PFDoA_1	613.0 / 569.0	3.91	1909604.78	8037.873796	593.7	false
PFDoA_2	613.0 / 319.0	3.90	311001.33	7956.092143	495.2	false
PFTrDA_1	663.0 / 619.0	4.16	1599517.46	9286.337661	838.9	false
PFTrDA_2	663.0 / 169.0	4.16	105179.79	9361.110063	576.6	false
PFTeDA_1	713.0 / 669.0	4.39	1641496.63	8336.659084	1515.9	false
PFTeDA_2	713.0 / 169.0	4.39	77180.13	8132.024956	906.8	false
NMeFOSAA_1	570.0 / 419.0	3.45	345238.10	7043.472508	796.7	false
NMeFOSAA_2	570.0 / 512.0	3.45	190130.78	6896.118925	465.9	false
NEtFOSAA_1	584.0 / 419.0	3.61	384859.29	7524.198680	885.3	false
NEtFOSAA_2	584.0 / 483.0	3.61	23647.96	7603.508516	339.9	false

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Summary Quant Report

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Sample Name	J7249MS-FS-D(5)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:27:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	1881845.51	3574.214784	175.7	true
PFBS_2	298.9 / 99.0	1.55	584202.70	3787.096738	343.7	false
PFHxA_1	313.0 / 269.0	1.84	10136298.13	24500.410705	227.0	false
PFHxA_2	313.0 / 119.0	1.84	685200.83	22320.935302	379.7	false
PFHpA_1	363.0 / 319.0	2.20	2409002.82	7175.099682	205.6	false
PFHpA_2	363.0 / 169.0	2.16	66452.38	9636.805720	300.4	false
PFHxS_1	399.0 / 80.0	2.21	5291131.55	10893.497026	344.8	false
PFHxS_2	399.0 / 99.0	2.21	1451412.35	10906.734066	734.7	false
PFOA_1	413.0 / 369.0	2.57	9314370.45	22176.527645	405.0	false
PFOA_2	413.0 / 169.0	2.57	494152.31	17079.596821	387.8	true
PFNA_1	463.0 / 419.0	2.94	91650.93	307.933442	110.6	false
PFNA_2	463.0 / 219.0	2.94	31737.84	331.733095	149.5	false
PFOS_1	499.0 / 80.0	2.85	707741.49	1187.961631	79.8	true
PFOS_2	499.0 / 99.0	2.91	99567.78	961.080889	184.1	true
PFDA_1	513.0 / 469.0	3.29	95894.89	307.332320	132.8	false
PFDA_2	513.0 / 219.0	3.29	6038.39	367.345462	68.4	false
PFUnA_1	563.0 / 519.0	3.61	93771.48	285.358128	137.3	false
PFUnA_2	563.0 / 269.0	3.61	7533.52	338.352922	94.1	false
PFDoA_1	613.0 / 569.0	3.90	93899.70	247.187199	157.6	false
PFDoA_2	613.0 / 319.0	3.90	14912.04	250.375943	144.6	false
PFTrDA_1	663.0 / 619.0	4.16	77992.18	241.210710	234.7	false
PFTrDA_2	663.0 / 169.0	4.16	5728.04	252.795666	132.0	false
PFTeDA_1	713.0 / 669.0	4.39	82880.94	229.800785	407.4	false
PFTeDA_2	713.0 / 169.0	4.39	4294.06	213.888884	170.8	false
NMeFOSAA_1	570.0 / 419.0	3.45	18684.54	303.180505	255.5	false
NMeFOSAA_2	570.0 / 512.0	3.45	11141.77	428.824022	158.0	false
NEtFOSAA_1	584.0 / 419.0	3.61	19336.37	316.982344	274.9	false
NEtFOSAA_2	584.0 / 483.0	3.61	1161.25	303.892451	63.1	false

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Summary Quant Report

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Printed: 29/08/2018 10:07:36 AM

Sample Name	J7249MSD-FS(4)	**Injection Vial**	33
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:38:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	16818328.20	86185.644766	129.5	true
PFBS_2	298.9 / 99.0	1.54	4844890.80	84507.186840	468.9	false
PFHxA_1	313.0 / 269.0	1.83	75343968.35	501702.413660	160.2	false
PFHxA_2	313.0 / 119.0	1.83	5671355.05	509423.779288	476.4	false
PFHpA_1	363.0 / 319.0	2.19	29959945.99	160594.476495	249.6	false
PFHpA_2	363.0 / 169.0	2.16	808323.36	211909.638916	716.4	false
PFHxS_1	399.0 / 80.0	2.20	69594560.14	256220.624519	306.0	false
PFHxS_2	399.0 / 99.0	2.21	22850370.95	307845.049787	1128.6	false
PFOA_1	413.0 / 369.0	2.56	100650587.26	434978.093257	434.0	false
PFOA_2	413.0 / 169.0	2.56	7272274.19	456551.596556	454.6	true
PFNA_1	463.0 / 419.0	2.94	1965335.70	6211.955621	198.9	false
PFNA_2	463.0 / 219.0	2.94	624741.31	6575.921912	364.9	false
PFOS_1	499.0 / 80.0	2.84	13302811.25	29857.514384	129.0	true
PFOS_2	499.0 / 99.0	2.92	1960248.76	25340.921206	474.3	true
PFDA_1	513.0 / 469.0	3.29	2264611.77	6149.203301	326.6	false
PFDA_2	513.0 / 219.0	3.29	103979.79	6270.433697	282.3	false
PFUnA_1	563.0 / 519.0	3.61	2095190.30	6611.033584	458.9	false
PFUnA_2	563.0 / 269.0	3.61	117385.48	6926.557398	236.8	false
PFDoA_1	613.0 / 569.0	3.90	2193716.56	7714.232814	671.9	false
PFDoA_2	613.0 / 319.0	3.90	359130.07	7675.893146	499.8	false
PFTrDA_1	663.0 / 619.0	4.16	1923581.87	7949.266688	1035.7	false
PFTrDA_2	663.0 / 169.0	4.16	129043.53	8172.586043	605.9	false
PFTeDA_1	713.0 / 669.0	4.39	2062732.09	7457.111056	1970.6	false
PFTeDA_2	713.0 / 169.0	4.39	102716.35	7701.301371	1050.4	false
NMeFOSAA_1	570.0 / 419.0	3.45	429670.98	6175.119299	860.1	false
NMeFOSAA_2	570.0 / 512.0	3.45	229694.50	5888.989225	502.4	false
NEtFOSAA_1	584.0 / 419.0	3.61	439458.64	6769.831570	1015.6	false
NEtFOSAA_2	584.0 / 483.0	3.61	27253.72	6902.964114	392.8	false

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Summary Quant Report

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Printed: 29/08/2018 10:07:40 AM

Sample Name	J7248MSD-FS-D(5)	**Injection Vial**	34
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:49:33	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	1991178.13	3797.048125	171.4	true
PFBS_2	298.9 / 99.0	1.55	624904.92	4065.752753	347.5	false
PFHxA_1	313.0 / 269.0	1.84	11341053.82	27050.061183	184.3	false
PFHxA_2	313.0 / 119.0	1.84	760203.53	24439.396137	366.2	false
PFHpA_1	363.0 / 319.0	2.20	2689082.36	7954.854201	230.4	false
PFHpA_2	363.0 / 169.0	2.17	74891.68	10791.127694	352.5	false
PFHxS_1	399.0 / 80.0	2.22	5629976.00	12561.518267	347.7	false
PFHxS_2	399.0 / 99.0	2.22	1588913.48	12944.260858	740.8	false
PFOA_1	413.0 / 369.0	2.57	10318229.97	24421.522427	445.7	false
PFOA_2	413.0 / 169.0	2.57	519551.21	17854.450714	355.5	true
PFNA_1	463.0 / 419.0	2.94	104284.10	312.300450	125.1	false
PFNA_2	463.0 / 219.0	2.95	35970.29	335.670131	130.5	false
PFOS_1	499.0 / 80.0	2.84	759701.71	1259.723688	92.6	true
PFOS_2	499.0 / 99.0	2.92	111543.52	1060.554820	213.7	true
PFDA_1	513.0 / 469.0	3.30	112792.12	315.411698	155.4	false
PFDA_2	513.0 / 219.0	3.29	6629.10	355.823946	87.6	false
PFUnA_1	563.0 / 519.0	3.61	111836.34	311.068755	143.7	false
PFUnA_2	563.0 / 269.0	3.62	7827.32	327.485169	95.5	true
PFDoA_1	613.0 / 569.0	3.90	109148.39	273.247882	183.3	false
PFDoA_2	613.0 / 319.0	3.90	19750.60	312.522587	154.7	false
PFTrDA_1	663.0 / 619.0	4.16	96979.53	266.210433	305.7	false
PFTrDA_2	663.0 / 169.0	4.16	7142.84	281.822443	186.0	false
PFTeDA_1	713.0 / 669.0	4.39	106368.66	260.683913	602.7	false
PFTeDA_2	713.0 / 169.0	4.39	5002.41	222.704581	224.6	false
NMeFOSAA_1	570.0 / 419.0	3.45	21773.23	320.936909	286.8	false
NMeFOSAA_2	570.0 / 512.0	3.45	12971.04	447.083863	152.6	false
NEtFOSAA_1	584.0 / 419.0	3.61	24879.83	372.452307	331.3	false
NEtFOSAA_2	584.0 / 483.0	3.61	1566.72	372.908263	62.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:07:44 AM

Sample Name	J7250-FS(4)	**Injection Vial**	35
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:00:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	2855647.12	12453.504306	72.4	true
PFBS_2	298.9 / 99.0	1.54	744222.14	11065.454181	239.4	false
PFHxA_1	313.0 / 269.0	1.83	10522951.92	45584.376766	85.0	false
PFHxA_2	313.0 / 119.0	1.83	625795.43	36556.129236	179.7	false
PFHpA_1	363.0 / 319.0	2.19	1971187.56	8163.089214	113.7	false
PFHpA_2	363.0 / 169.0	2.17	44184.88	8926.875951	262.1	false
PFHxS_1	399.0 / 80.0	2.21	5089749.26	14279.223895	141.6	false
PFHxS_2	399.0 / 99.0	2.21	1314429.65	13468.027878	431.7	false
PFOA_1	413.0 / 369.0	2.56	2739148.00	9117.702967	145.4	false
PFOA_2	413.0 / 169.0	2.56	166954.03	8053.718054	187.7	false
PFNA_1	463.0 / 419.0	2.93	11358.57	103.171273	26.4	true
PFNA_2	463.0 / 219.0	2.93	2755.81	82.815673	20.3	true
PFOS_1	499.0 / 80.0	2.89	640669.77	1335.510634	48.4	true
PFOS_2	499.0 / 99.0	2.93	107997.31	1280.419532	196.4	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	3.26	1251.21	107.255840	15.8	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	3.90	1624.59	2.519890	13.0	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.15	835.21	12.004136	13.7	true
PFTrDA_2	663.0 / 169.0	4.14	279.53	4.351614	10.3	false
PFTeDA_1	713.0 / 669.0	4.39	1524.29	18.562949	36.3	false
PFTeDA_2	713.0 / 169.0	4.36	101.88	< 0	10.2	true
NMeFOSAA_1	570.0 / 419.0	3.43	206.46	88.036365	11.5	true
NMeFOSAA_2	570.0 / 512.0	3.49	488.65	212.614844	12.8	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:07:48 AM

Sample Name	J7250-FS-D(5)	**Injection Vial**	36
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:11:17	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	234787.49	468.258367	81.5	true
PFBS_2	298.9 / 99.0	1.55	62449.00	443.219916	130.9	false
PFHxA_1	313.0 / 269.0	1.84	679295.49	1722.333344	114.7	false
PFHxA_2	313.0 / 119.0	1.84	41311.34	1397.548334	124.1	false
PFHpA_1	363.0 / 319.0	2.20	103140.91	349.169427	76.6	false
PFHpA_2	363.0 / 169.0	2.17	3291.34	482.111855	92.2	false
PFHxS_1	399.0 / 80.0	2.21	232675.82	517.424898	117.9	false
PFHxS_2	399.0 / 99.0	2.22	58531.77	449.388085	219.0	false
PFOA_1	413.0 / 369.0	2.57	142637.04	358.736741	109.2	false
PFOA_2	413.0 / 169.0	2.57	6478.51	231.074301	41.7	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.88	35529.24	145.594980	25.3	true
PFOS_2	499.0 / 99.0	2.94	6166.13	126.412878	38.9	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.38	723.92	16.194454	25.3	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:07:52 AM

Sample Name	J7251-FS(4)	**Injection Vial**	39
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:43:54	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	14791396.31	14402.720624	135.6	false
PFBS_2	298.9 / 99.0	1.55	3316591.72	11017.422577	338.1	false
PFHxA_1	313.0 / 269.0	1.83	38293832.11	200339.381692	167.0	false
PFHxA_2	313.0 / 119.0	1.84	2267700.90	160030.958654	368.8	false
PFHpA_1	363.0 / 319.0	2.19	2926043.17	13589.282285	119.0	false
PFHpA_2	363.0 / 169.0	2.16	71466.93	16203.989921	247.9	false
PFHxS_1	399.0 / 80.0	2.21	16248520.57	45575.679312	195.4	false
PFHxS_2	399.0 / 99.0	2.21	4313103.77	44246.601686	585.4	false
PFOA_1	413.0 / 369.0	2.57	4700769.99	17562.161655	164.3	false
PFOA_2	413.0 / 169.0	2.57	270521.65	14666.062471	256.5	false
PFNA_1	463.0 / 419.0	2.94	21844.06	145.087023	35.0	false
PFNA_2	463.0 / 219.0	2.94	9572.70	167.064809	39.0	false
PFOS_1	499.0 / 80.0	2.92	2899029.42	7154.084449	77.2	true
PFOS_2	499.0 / 99.0	2.94	515084.51	7301.355521	315.9	true
PFDA_1	513.0 / 469.0	3.30	10645.25	101.664561	21.4	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.37	661.87	16.886488	16.6	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	3.43	326.79	90.522667	18.8	false
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	3.61	814.30	90.772243	39.5	false
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Printed: 29/08/2018 10:07:56 AM

Sample Name	J7251-FS-D(5)	**Injection Vial**	40
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:54:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	1242643.14	2059.142413	139.9	true
PFBS_2	298.9 / 99.0	1.55	353027.63	2006.772290	230.4	false
PFHxA_1	313.0 / 269.0	1.84	3775418.54	9671.453998	175.8	false
PFHxA_2	313.0 / 119.0	1.84	235061.38	8106.439072	226.6	false
PFHpA_1	363.0 / 319.0	2.20	224550.35	767.864797	109.7	false
PFHpA_2	363.0 / 169.0	2.15	6246.72	998.783196	93.1	false
PFHxS_1	399.0 / 80.0	2.21	1001857.71	2293.457633	188.4	false
PFHxS_2	399.0 / 99.0	2.21	268130.64	2217.768048	355.2	false
PFOA_1	413.0 / 369.0	2.57	307129.37	817.371506	109.9	false
PFOA_2	413.0 / 169.0	2.57	19060.72	716.106874	111.0	false
PFNA_1	463.0 / 419.0	2.93	3379.40	76.812906	14.2	false
PFNA_2	463.0 / 219.0	2.95	919.39	62.318294	14.7	false
PFOS_1	499.0 / 80.0	2.92	165085.95	368.937627	48.9	true
PFOS_2	499.0 / 99.0	2.93	28684.17	350.035703	97.4	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	3.46	193.43	88.269298	10.4	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7255-FS(4)	**Injection Vial**	41
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:05:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	15797478.96	87950.434261	117.9	true
PFBS_2	298.9 / 99.0	1.54	4595060.29	87075.109440	389.9	false
PFHxA_1	313.0 / 269.0	1.83	50115837.41	430329.701947	132.3	false
PFHxA_2	313.0 / 119.0	1.83	3017331.73	349502.019399	319.0	false
PFHpA_1	363.0 / 319.0	2.19	6367231.19	36100.584160	132.3	false
PFHpA_2	363.0 / 169.0	2.18	113408.10	31448.599508	351.7	false
PFHxS_1	399.0 / 80.0	2.20	13831379.81	43790.900362	147.7	false
PFHxS_2	399.0 / 99.0	2.21	3642548.43	42177.701685	508.7	false
PFOA_1	413.0 / 369.0	2.56	4918273.25	22501.246420	165.3	false
PFOA_2	413.0 / 169.0	2.56	272637.27	18105.975634	251.7	false
PFNA_1	463.0 / 419.0	2.94	7260.76	98.753313	14.0	false
PFNA_2	463.0 / 219.0	2.94	1955.42	81.969398	16.7	false
PFOS_1	499.0 / 80.0	2.93	474321.74	1206.974578	56.9	true
PFOS_2	499.0 / 99.0	2.93	95508.96	1366.200875	225.9	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.39	596.76	17.048384	14.4	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	3.44	2017.50	119.856908	51.1	false
NMeFOSAA_2	570.0 / 512.0	3.45	857.09	227.556824	20.4	false
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7255-FS-D(5)	**Injection Vial**	42
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:16:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	2121917.40	3655.192140	167.5	true
PFBS_2	298.9 / 99.0	1.55	612930.66	3608.203261	267.1	false
PFHxA_1	313.0 / 269.0	1.84	7466543.13	16897.618820	181.9	false
PFHxA_2	313.0 / 119.0	1.84	444922.46	13569.045750	307.2	false
PFHpA_1	363.0 / 319.0	2.20	576707.75	1514.148467	113.7	false
PFHpA_2	363.0 / 169.0	2.19	13407.56	1694.588332	159.6	false
PFHxS_1	399.0 / 80.0	2.21	1075320.83	2253.348130	148.1	false
PFHxS_2	399.0 / 99.0	2.21	276288.82	2091.345480	337.7	false
PFOA_1	413.0 / 369.0	2.57	408043.63	879.052621	113.2	false
PFOA_2	413.0 / 169.0	2.56	23995.93	733.140281	101.5	false
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.93	39005.92	151.383808	37.4	true
PFOS_2	499.0 / 99.0	2.93	8017.57	143.134985	66.1	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7256-FS(4)	**Injection Vial**	43
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:27:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	1268172.32	5456.602372	80.2	true
PFBS_2	298.9 / 99.0	1.55	419499.67	6149.854353	224.6	false
PFHxA_1	313.0 / 269.0	1.84	8804984.85	38922.468797	146.0	false
PFHxA_2	313.0 / 119.0	1.84	575054.61	34273.072136	263.9	false
PFHpA_1	363.0 / 319.0	2.20	3600569.45	13340.627663	153.9	false
PFHpA_2	363.0 / 169.0	2.19	74192.93	13430.641849	395.5	false
PFHxS_1	399.0 / 80.0	2.21	7329740.48	19730.356034	161.6	false
PFHxS_2	399.0 / 99.0	2.21	1777574.64	17485.436939	499.4	false
PFOA_1	413.0 / 369.0	2.56	704176.63	2153.965867	50.6	false
PFOA_2	413.0 / 169.0	2.56	26663.01	1186.117438	77.4	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.93	90142.00	251.914644	28.7	true
PFOS_2	499.0 / 99.0	2.93	17247.72	249.093726	101.6	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.62	2184.01	61.676688	11.7	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.15	766.65	12.578721	17.8	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.38	710.14	17.047177	14.6	false
PFTeDA_2	713.0 / 169.0	4.40	99.96	< 0	6.3	true
NMeFOSAA_1	570.0 / 419.0	3.45	854.66	97.267870	26.5	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7256-FS-D(5)	**Injection Vial**	44
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:38:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	150354.51	310.266460	77.7	true
PFBS_2	298.9 / 99.0	1.55	47418.73	343.107879	119.3	false
PFHxA_1	313.0 / 269.0	1.83	815964.38	1885.896538	108.9	false
PFHxA_2	313.0 / 119.0	1.84	48795.28	1506.837376	149.7	false
PFHpA_1	363.0 / 319.0	2.19	237624.73	691.134015	118.4	false
PFHpA_2	363.0 / 169.0	2.18	5036.71	697.649550	127.0	false
PFHxS_1	399.0 / 80.0	2.20	401767.24	786.746098	145.6	false
PFHxS_2	399.0 / 99.0	2.20	96170.12	663.463769	241.1	false
PFOA_1	413.0 / 369.0	2.55	44541.52	154.679897	33.8	false
PFOA_2	413.0 / 169.0	2.55	2115.49	99.196655	16.2	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.92	6836.53	100.244566	11.3	true
PFOS_2	499.0 / 99.0	2.91	1535.33	83.475797	19.2	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7257-FS(4)	**Injection Vial**	45
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:49:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	11139701.12	48931.371076	152.9	true
PFBS_2	298.9 / 99.0	1.55	3309402.69	49483.631684	374.3	false
PFHxA_1	313.0 / 269.0	1.83	81629069.00	533361.251975	228.1	false
PFHxA_2	313.0 / 119.0	1.83	7930961.19	699023.152472	584.0	false
PFHpA_1	363.0 / 319.0	2.19	48869817.09	219037.851107	405.1	false
PFHpA_2	363.0 / 169.0	2.19	1029969.20	225803.513565	940.7	false
PFHxS_1	399.0 / 80.0	2.20	69008214.84	231333.607813	401.9	false
PFHxS_2	399.0 / 99.0	2.20	21973983.44	269551.350969	1215.3	false
PFOA_1	413.0 / 369.0	2.55	8437927.22	30554.010380	228.1	false
PFOA_2	413.0 / 169.0	2.55	501580.19	26367.340389	371.2	false
PFNA_1	463.0 / 419.0	2.92	7808.33	96.913654	22.5	false
PFNA_2	463.0 / 219.0	2.93	3246.15	94.405470	30.4	false
PFOS_1	499.0 / 80.0	2.82	297220.16	809.136377	29.9	true
PFOS_2	499.0 / 99.0	2.91	39273.60	618.746181	67.0	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.37	709.34	17.515047	15.9	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7257-FS-D(5)	**Injection Vial**	46
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:00:02	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	1081537.78	2343.357272	172.0	true
PFBS_2	298.9 / 99.0	1.56	342166.03	2532.894904	285.9	false
PFHxA_1	313.0 / 269.0	1.84	11708162.14	30104.073219	292.1	false
PFHxA_2	313.0 / 119.0	1.84	793567.06	27504.069651	430.4	false
PFHpA_1	363.0 / 319.0	2.20	4335252.95	13615.397607	427.9	false
PFHpA_2	363.0 / 169.0	2.19	86114.69	13216.414092	501.7	false
PFHxS_1	399.0 / 80.0	2.21	5176019.57	11970.297468	390.1	false
PFHxS_2	399.0 / 99.0	2.21	1387685.59	11716.253839	755.8	false
PFOA_1	413.0 / 369.0	2.56	526559.92	1388.455253	151.7	false
PFOA_2	413.0 / 169.0	2.56	27813.18	1053.051287	99.6	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.77	19551.09	122.831543	12.9	true
PFOS_2	499.0 / 99.0	2.87	3557.90	105.147758	18.0	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	3.90	1212.98	1.337461	19.6	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7258-FS(4)	**Injection Vial**	47
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:10:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	25260723.87	124606.575068	138.2	false
PFBS_2	298.9 / 99.0	1.55	5746205.18	96488.435754	511.9	false
PFHxA_1	313.0 / 269.0	1.82	18065716.06	104847.620332	111.1	false
PFHxA_2	313.0 / 119.0	1.83	984473.75	77067.446636	193.7	false
PFHpA_1	363.0 / 319.0	2.18	1923314.67	11274.626314	121.1	false
PFHpA_2	363.0 / 169.0	2.17	42003.80	12023.321210	239.2	false
PFHxS_1	399.0 / 80.0	2.20	27283663.54	101858.877699	213.7	false
PFHxS_2	399.0 / 99.0	2.20	7836424.89	107038.313787	850.4	false
PFOA_1	413.0 / 369.0	2.55	4447174.78	20932.620981	139.9	false
PFOA_2	413.0 / 169.0	2.55	251561.48	17186.254832	286.4	false
PFNA_1	463.0 / 419.0	2.92	70032.20	365.343943	44.4	false
PFNA_2	463.0 / 219.0	2.92	15178.86	269.530616	65.6	false
PFOS_1	499.0 / 80.0	2.80	5423029.23	15521.960497	126.7	true
PFOS_2	499.0 / 99.0	2.89	728617.42	12015.846257	376.2	true
PFDA_1	513.0 / 469.0	3.29	7441.73	95.810426	21.1	false
PFDA_2	513.0 / 219.0	3.28	1191.91	123.030646	17.1	false
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	3.89	1566.67	3.600935	15.3	false
PFDoA_2	613.0 / 319.0	3.92	567.83	22.966803	12.2	false
PFTrDA_1	663.0 / 619.0	4.14	1952.99	19.682522	31.0	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.38	1196.76	20.003913	27.8	true
PFTeDA_2	713.0 / 169.0	4.39	72.79	< 0	5.8	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J7258-FS-D(5)	**Injection Vial**	48
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:21:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	2852779.51	5074.829789	173.4	false
PFBS_2	298.9 / 99.0	1.55	723395.31	4401.028450	347.2	false
PFHxA_1	313.0 / 269.0	1.83	2534801.09	5978.577459	103.4	false
PFHxA_2	313.0 / 119.0	1.83	145689.05	4623.043128	150.2	false
PFHpA_1	363.0 / 319.0	2.19	220594.04	673.288761	104.0	false
PFHpA_2	363.0 / 169.0	2.18	5021.70	724.363178	99.6	false
PFHxS_1	399.0 / 80.0	2.20	2128451.48	3974.795830	230.7	false
PFHxS_2	399.0 / 99.0	2.20	586459.68	3978.704004	509.4	false
PFOA_1	413.0 / 369.0	2.56	372950.67	866.536344	101.1	false
PFOA_2	413.0 / 169.0	2.55	20667.48	682.854698	98.1	true
PFNA_1	463.0 / 419.0	2.92	5402.74	81.522950	19.2	false
PFNA_2	463.0 / 219.0	2.95	2069.33	71.572931	23.2	false
PFOS_1	499.0 / 80.0	2.81	381756.58	634.806195	78.6	true
PFOS_2	499.0 / 99.0	2.89	54741.29	521.238014	117.2	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:06:46 PM

Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:06:44	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.91	74951.83	248.182510	880.5	false
d3-MeFOSAA	573.0 / 419.0	3.45	12583.40	252.648441	117.2	false
d5-EtFOSAA	589.0 / 419.0	3.61	13337.56	239.769067	122.4	false
13C5-PFHxA	318.0 / 273.0	1.83	58415.40	247.688951	439.2	false
13C4-PFHpA	367.0 / 322.0	2.20	62236.62	253.791085	832.5	false
13C8-PFOA	421.0 / 376.0	2.57	64342.10	250.075263	729.1	false
13C9-PFNA	472.0 / 427.0	2.94	68344.62	253.613106	830.6	false
13C6-PFDA	519.0 / 474.0	3.29	69439.02	266.299224	513.0	false
13C7-PFUnA	570.0 / 525.0	3.61	70349.42	268.946292	609.7	false
13C2-PFTeDA	715.0 / 670.0	4.39	65913.22	254.635785	1406.4	false
13C3-PFBS	302.0 / 99.0	1.54	23852.68	219.868825	361.1	false
13C3-PFHxS	402.0 / 99.0	2.21	19309.61	224.079281	272.8	false
13C8-PFOS	507.0 / 99.0	2.93	16690.91	193.110580	141.3	false

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Summary Quant Report

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Printed: 27/08/2018 12:06:50 PM

Sample Name	CR546PB-FS(3)	**Injection Vial**	17
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:44:41	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.91	89746.04	219.895679	897.2	false
d3-MeFOSAA	573.0 / 419.0	3.46	16140.14	237.754832	165.6	false
d5-EtFOSAA	589.0 / 419.0	3.61	16019.41	211.284002	155.1	false
13C5-PFHxA	318.0 / 273.0	1.83	73723.53	234.222950	554.7	false
13C4-PFHpA	367.0 / 322.0	2.20	78692.78	240.441419	790.4	false
13C8-PFOA	421.0 / 376.0	2.58	89480.24	260.583381	1005.1	false
13C9-PFNA	472.0 / 427.0	2.95	94002.54	261.367118	1294.3	false
13C6-PFDA	519.0 / 474.0	3.29	92317.07	261.975547	1038.8	false
13C7-PFUnA	570.0 / 525.0	3.61	91502.40	258.851060	743.6	false
13C2-PFTeDA	715.0 / 670.0	4.39	73007.22	208.701302	1570.8	false
13C3-PFBS	302.0 / 99.0	1.54	31822.59	215.211565	464.6	false
13C3-PFHxS	402.0 / 99.0	2.21	26616.91	226.615394	227.6	false
13C8-PFOS	507.0 / 99.0	2.94	27629.43	234.531724	174.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:06:54 PM

Sample Name	CR547LCS-FS(3)	**Injection Vial**	18
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:55:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.91	86084.18	302.680776	848.1	false
d3-MeFOSAA	573.0 / 419.0	3.46	10866.93	224.078096	83.0	false
d5-EtFOSAA	589.0 / 419.0	3.62	14791.81	273.093971	156.7	false
13C5-PFHxA	318.0 / 273.0	1.84	66244.74	273.410999	510.5	false
13C4-PFHpA	367.0 / 322.0	2.20	72244.95	286.762987	802.2	false
13C8-PFOA	421.0 / 376.0	2.57	77692.42	293.926957	988.2	false
13C9-PFNA	472.0 / 427.0	2.94	75722.29	273.511986	895.7	false
13C6-PFDA	519.0 / 474.0	3.29	79148.39	322.315309	634.0	false
13C7-PFUnA	570.0 / 525.0	3.61	78319.70	317.942509	713.5	false
13C2-PFTeDA	715.0 / 670.0	4.39	72048.78	295.560296	1314.2	false
13C3-PFBS	302.0 / 99.0	1.54	26731.61	253.061372	374.1	false
13C3-PFHxS	402.0 / 99.0	2.21	21628.15	257.763661	260.6	false
13C8-PFOS	507.0 / 99.0	2.94	21538.81	255.930456	147.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:06:58 PM

Sample Name	J7259-FS(3)	**Injection Vial**	19
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:06:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.91	82774.29	283.014196	879.1	false
d3-MeFOSAA	573.0 / 419.0	3.45	12598.14	320.465921	156.4	false
d5-EtFOSAA	589.0 / 419.0	3.61	15412.21	351.025430	195.7	false
13C5-PFHxA	318.0 / 273.0	1.83	67586.98	320.367565	374.2	false
13C4-PFHpA	367.0 / 322.0	2.19	72364.08	329.882754	542.1	false
13C8-PFOA	421.0 / 376.0	2.57	79759.11	346.546917	909.4	false
13C9-PFNA	472.0 / 427.0	2.94	76544.84	317.533434	751.5	false
13C6-PFDA	519.0 / 474.0	3.29	85822.64	339.853721	1638.5	false
13C7-PFUnA	570.0 / 525.0	3.61	80790.81	318.926662	554.7	false
13C2-PFTeDA	715.0 / 670.0	4.39	66867.77	266.739642	925.3	false
13C3-PFBS	302.0 / 99.0	1.53	32385.00	378.205204	571.2	false
13C3-PFHxS	402.0 / 99.0	2.21	22723.69	334.090483	219.2	false
13C8-PFOS	507.0 / 99.0	2.94	23914.81	350.550060	207.6	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:07:02 PM

Sample Name	J7260-FS(3)	**Injection Vial**	20
Sample ID	080118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:17:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	70219.70	268.993639	1213.8	false
d3-MeFOSAA	573.0 / 419.0	3.45	8356.93	203.314929	120.0	false
d5-EtFOSAA	589.0 / 419.0	3.61	9901.86	215.693697	133.3	false
13C5-PFHxA	318.0 / 273.0	1.83	54821.63	267.106459	345.4	false
13C4-PFHpA	367.0 / 322.0	2.19	64130.20	300.501119	526.4	false
13C8-PFOA	421.0 / 376.0	2.57	65173.59	291.071927	694.0	false
13C9-PFNA	472.0 / 427.0	2.94	75051.89	320.023666	1043.6	false
13C6-PFDA	519.0 / 474.0	3.29	70177.02	311.354634	592.9	false
13C7-PFUnA	570.0 / 525.0	3.60	67724.45	299.532978	516.1	false
13C2-PFTeDA	715.0 / 670.0	4.39	57961.72	259.049211	975.7	false
13C3-PFBS	302.0 / 99.0	1.54	28264.52	315.698212	304.6	false
13C3-PFHxS	402.0 / 99.0	2.21	22731.98	319.646080	325.8	false
13C8-PFOS	507.0 / 99.0	2.93	21204.65	297.276920	182.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:07:07 PM

Sample Name	J7261-FS(3)	**Injection Vial**	21
Sample ID	080118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:28:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	73482.91	249.906322	908.0	false
d3-MeFOSAA	573.0 / 419.0	3.44	9623.22	212.927748	143.0	false
d5-EtFOSAA	589.0 / 419.0	3.61	11664.08	231.079182	148.4	false
13C5-PFHxA	318.0 / 273.0	1.83	61554.60	258.286206	328.6	false
13C4-PFHpA	367.0 / 322.0	2.19	67196.05	271.166122	581.8	false
13C8-PFOA	421.0 / 376.0	2.56	72973.05	280.672213	888.7	false
13C9-PFNA	472.0 / 427.0	2.93	78002.49	286.442328	810.7	false
13C6-PFDA	519.0 / 474.0	3.28	76714.97	302.167978	823.8	false
13C7-PFUnA	570.0 / 525.0	3.60	74613.34	292.970231	522.2	false
13C2-PFTeDA	715.0 / 670.0	4.38	61350.27	243.425104	1715.3	false
13C3-PFBS	302.0 / 99.0	1.54	28762.80	292.180444	363.2	false
13C3-PFHxS	402.0 / 99.0	2.21	22050.13	281.989499	264.8	false
13C8-PFOS	507.0 / 99.0	2.93	24305.40	309.900605	179.6	false

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Summary Quant Report

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Sample Name	J7252-FS(3)	**Injection Vial**	22
Sample ID	073018-05	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:39:03	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	96449.71	248.427118	682.3	false
d3-MeFOSAA	573.0 / 419.0	3.45	18214.95	322.919041	192.1	false
d5-EtFOSAA	589.0 / 419.0	3.61	17401.55	276.217823	139.7	false
13C5-PFHxA	318.0 / 273.0	1.83	75973.73	245.625755	433.7	false
13C4-PFHpA	367.0 / 322.0	2.20	81718.84	254.087715	625.2	false
13C8-PFOA	421.0 / 376.0	2.57	90881.14	269.327315	1110.2	false
13C9-PFNA	472.0 / 427.0	2.94	91668.96	259.370628	6941.3	false
13C6-PFDA	519.0 / 474.0	3.29	87695.76	261.609818	747.5	false
13C7-PFUnA	570.0 / 525.0	3.61	91035.18	270.721912	716.2	false
13C2-PFTeDA	715.0 / 670.0	4.39	76187.03	228.948095	1187.1	false
13C3-PFBS	302.0 / 99.0	1.54	28751.92	234.013260	400.3	false
13C3-PFHxS	402.0 / 99.0	2.21	26765.72	274.254863	309.7	false
13C8-PFOS	507.0 / 99.0	2.93	25946.89	265.068777	240.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:07:16 PM

Sample Name	J7253-FS(3)	**Injection Vial**	23
Sample ID	073018-06	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:49:56	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	73441.20	231.407015	838.3	false
d3-MeFOSAA	573.0 / 419.0	3.45	12536.38	246.882132	142.3	false
d5-EtFOSAA	589.0 / 419.0	3.61	14984.88	264.222041	149.2	false
13C5-PFHxA	318.0 / 273.0	1.83	55311.89	201.208515	402.2	false
13C4-PFHpA	367.0 / 322.0	2.19	63886.14	223.504137	852.7	false
13C8-PFOA	421.0 / 376.0	2.57	68668.88	228.972879	891.6	false
13C9-PFNA	472.0 / 427.0	2.94	64828.78	206.387664	878.9	false
13C6-PFDA	519.0 / 474.0	3.29	75545.96	275.692796	658.1	false
13C7-PFUnA	570.0 / 525.0	3.61	70349.90	255.927143	660.1	false
13C2-PFTeDA	715.0 / 670.0	4.39	61283.40	225.287733	1006.9	false
13C3-PFBS	302.0 / 99.0	1.53	25091.01	226.852639	552.5	false
13C3-PFHxS	402.0 / 99.0	2.21	19714.66	224.396781	250.4	false
13C8-PFOS	507.0 / 99.0	2.93	21625.39	245.408282	179.6	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:07:21 PM

Sample Name	J7254-FS(3)	**Injection Vial**	24
Sample ID	073018-07	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:00:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	63240.54	141.702406	924.4	false
d3-MeFOSAA	573.0 / 419.0	3.45	12667.16	186.063848	145.9	false
d5-EtFOSAA	589.0 / 419.0	3.61	10754.10	141.434369	121.1	false
13C5-PFHxA	318.0 / 273.0	1.83	50130.53	147.307604	381.5	false
13C4-PFHpA	367.0 / 322.0	2.20	57387.19	162.176851	684.4	false
13C8-PFOA	421.0 / 376.0	2.57	58104.94	156.506418	749.2	false
13C9-PFNA	472.0 / 427.0	2.94	61008.84	156.893024	634.6	false
13C6-PFDA	519.0 / 474.0	3.28	62815.32	163.013893	710.9	false
13C7-PFUnA	570.0 / 525.0	3.60	60789.03	157.261691	521.3	false
13C2-PFTeDA	715.0 / 670.0	4.39	56522.05	147.760208	1017.8	false
13C3-PFBS	302.0 / 99.0	1.54	19118.42	128.926635	358.4	false
13C3-PFHxS	402.0 / 99.0	2.21	17139.42	145.508487	283.7	false
13C8-PFOS	507.0 / 99.0	2.93	19656.15	166.375220	175.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:07:26 PM

Sample Name	J7248-FS(4)	**Injection Vial**	27
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:33:23	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	77364.60	236.986534	1014.7	false
d3-MeFOSAA	573.0 / 419.0	3.45	14673.44	281.945535	155.3	false
d5-EtFOSAA	589.0 / 419.0	3.61	14592.28	251.046721	129.4	false
13C5-PFHxA	318.0 / 273.0	1.83	68845.64	244.065576	159.9	false
13C4-PFHpA	367.0 / 322.0	2.19	87836.31	299.471332	275.1	false
13C8-PFOA	421.0 / 376.0	2.57	72637.44	236.040677	404.4	false
13C9-PFNA	472.0 / 427.0	2.94	76456.80	237.210679	464.4	false
13C6-PFDA	519.0 / 474.0	3.28	79502.29	282.057995	586.6	false
13C7-PFUnA	570.0 / 525.0	3.60	76188.84	269.456582	427.5	false
13C2-PFTeDA	715.0 / 670.0	4.39	63249.47	226.045674	1124.3	false
13C3-PFBS	302.0 / 99.0	1.54	24700.36	217.893610	234.0	false
13C3-PFHxS	402.0 / 99.0	2.21	22723.27	252.355998	174.2	false
13C8-PFOS	507.0 / 99.0	2.93	21137.06	234.037430	140.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:07:30 PM

Sample Name	J7248-FS-D(5)	**Injection Vial**	28
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:44:16	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	100386.64	256.189851	810.1	false
d3-MeFOSAA	573.0 / 419.0	3.44	17968.89	334.667605	152.6	false
d5-EtFOSAA	589.0 / 419.0	3.61	18225.79	303.932216	145.1	false
13C5-PFHxA	318.0 / 273.0	1.83	90362.65	290.475107	415.7	false
13C4-PFHpA	367.0 / 322.0	2.19	87690.24	271.095480	532.6	false
13C8-PFOA	421.0 / 376.0	2.56	97122.14	286.176792	1073.3	false
13C9-PFNA	472.0 / 427.0	2.93	89472.04	251.707031	920.6	false
13C6-PFDA	519.0 / 474.0	3.28	93667.85	276.856002	690.8	false
13C7-PFUnA	570.0 / 525.0	3.60	88462.43	260.651933	514.3	false
13C2-PFTeDA	715.0 / 670.0	4.39	87171.84	259.549478	1265.2	false
13C3-PFBS	302.0 / 99.0	1.54	37998.74	324.914857	384.4	false
13C3-PFHxS	402.0 / 99.0	2.21	23739.60	255.549717	205.3	false
13C8-PFOS	507.0 / 99.0	2.93	29181.26	313.187158	193.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:07:35 PM

Sample Name	J7249-FS(4)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:55:09	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	95080.37	238.003037	680.7	false
d3-MeFOSAA	573.0 / 419.0	3.44	17485.21	334.132927	128.6	false
d5-EtFOSAA	589.0 / 419.0	3.60	18116.98	309.979014	137.1	false
13C5-PFHxA	318.0 / 273.0	1.81	29175.35	40.255264	52.0	false
13C4-PFHpA	367.0 / 322.0	2.17	52269.02	69.358872	144.3	false
13C8-PFOA	421.0 / 376.0	2.56	58773.26	74.333171	228.5	false
13C9-PFNA	472.0 / 427.0	2.93	85728.28	103.518688	300.1	false
13C6-PFDA	519.0 / 474.0	3.28	94610.23	274.288195	623.6	false
13C7-PFUnA	570.0 / 525.0	3.60	96635.16	279.281938	627.4	false
13C2-PFTeDA	715.0 / 670.0	4.38	77296.15	225.739433	1185.1	false
13C3-PFBS	302.0 / 99.0	1.52	15360.20	134.757593	147.1	false
13C3-PFHxS	402.0 / 99.0	2.19	21608.58	238.662496	127.4	false
13C8-PFOS	507.0 / 99.0	2.92	24211.59	266.611706	150.6	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:07:40 PM

Sample Name	J7249-FS-D(5)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:06:01	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	115864.83	254.674743	3611.7	false
d3-MeFOSAA	573.0 / 419.0	3.44	18821.46	300.141052	186.4	false
d5-EtFOSAA	589.0 / 419.0	3.61	22076.70	315.213161	264.6	false
13C5-PFHxA	318.0 / 273.0	1.83	102783.56	262.746351	208.6	false
13C4-PFHpA	367.0 / 322.0	2.19	112432.01	276.410212	451.5	false
13C8-PFOA	421.0 / 376.0	2.56	103379.29	242.238309	655.2	false
13C9-PFNA	472.0 / 427.0	2.93	107221.02	239.872797	560.1	false
13C6-PFDA	519.0 / 474.0	3.28	103631.57	263.817565	925.0	false
13C7-PFUnA	570.0 / 525.0	3.60	100360.39	254.690463	806.1	false
13C2-PFTeDA	715.0 / 670.0	4.38	95345.95	244.508792	1102.8	false
13C3-PFBS	302.0 / 99.0	1.53	44551.71	326.170372	409.6	false
13C3-PFHxS	402.0 / 99.0	2.21	31165.48	287.247104	192.9	false
13C8-PFOS	507.0 / 99.0	2.92	28597.19	262.786523	170.6	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:07:44 PM

Sample Name	J7249MS-FS(4)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:16:53	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.89	62360.38	313.965838	689.0	false
d3-MeFOSAA	573.0 / 419.0	3.44	9472.05	334.180490	84.2	false
d5-EtFOSAA	589.0 / 419.0	3.61	11786.02	372.308119	102.0	false
13C5-PFHxA	318.0 / 273.0	1.82	25529.31	47.048580	61.4	false
13C4-PFHpA	367.0 / 322.0	2.19	43210.30	76.585349	173.7	false
13C8-PFOA	421.0 / 376.0	2.56	44222.96	74.705307	208.4	false
13C9-PFNA	472.0 / 427.0	2.93	59422.21	95.839439	280.9	false
13C6-PFDA	519.0 / 474.0	3.28	64286.33	374.860460	391.3	true
13C7-PFUnA	570.0 / 525.0	3.60	63851.99	371.162553	485.2	false
13C2-PFTeDA	715.0 / 670.0	4.38	41573.28	244.200079	1208.4	false
13C3-PFBS	302.0 / 99.0	1.53	11559.74	187.237676	111.4	false
13C3-PFHxS	402.0 / 99.0	2.21	14281.36	291.216799	114.2	false
13C8-PFOS	507.0 / 99.0	2.93	15143.90	307.880635	92.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:07:48 PM

Sample Name	J7249MS-FS-D(5)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:27:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.89	98806.44	261.081243	1195.3	false
d3-MeFOSAA	573.0 / 419.0	3.44	16384.45	321.325758	140.3	false
d5-EtFOSAA	589.0 / 419.0	3.60	18443.45	323.857491	169.3	false
13C5-PFHxA	318.0 / 273.0	1.83	90182.99	283.773788	172.6	false
13C4-PFHpA	367.0 / 322.0	2.19	98456.85	297.950823	474.2	false
13C8-PFOA	421.0 / 376.0	2.56	89341.51	257.689739	636.2	false
13C9-PFNA	472.0 / 427.0	2.93	87525.53	241.029628	634.9	false
13C6-PFDA	519.0 / 474.0	3.28	84225.51	257.757570	576.3	false
13C7-PFUnA	570.0 / 525.0	3.60	90671.76	276.616773	608.9	false
13C2-PFTeDA	715.0 / 670.0	4.38	81151.84	250.176617	1086.7	false
13C3-PFBS	302.0 / 99.0	1.54	38325.27	345.069718	322.8	false
13C3-PFHxS	402.0 / 99.0	2.21	28557.77	323.703665	274.3	false
13C8-PFOS	507.0 / 99.0	2.92	26890.46	303.892089	234.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:07:52 PM

Sample Name	J7249MSD-FS(4)	**Injection Vial**	33
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:38:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.89	74642.98	237.748712	691.4	false
d3-MeFOSAA	573.0 / 419.0	3.44	13469.57	324.152771	93.4	false
d5-EtFOSAA	589.0 / 419.0	3.60	14975.19	322.675872	135.0	false
13C5-PFHxA	318.0 / 273.0	1.81	32651.70	53.270829	69.1	false
13C4-PFHpA	367.0 / 322.0	2.18	50132.87	78.660615	149.6	false
13C8-PFOA	421.0 / 376.0	2.55	48894.17	73.120131	210.8	false
13C9-PFNA	472.0 / 427.0	2.93	73268.03	104.613142	284.5	false
13C6-PFDA	519.0 / 474.0	3.28	77250.13	284.974378	587.0	false
13C7-PFUnA	570.0 / 525.0	3.60	70915.10	260.785858	671.5	false
13C2-PFTeDA	715.0 / 670.0	4.38	58415.49	217.077684	1184.2	false
13C3-PFBS	302.0 / 99.0	1.52	13994.63	154.619876	130.3	false
13C3-PFHxS	402.0 / 99.0	2.20	15931.25	221.592735	109.9	false
13C8-PFOS	507.0 / 99.0	2.92	19422.12	269.339657	130.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:07:56 PM

Sample Name	J7249MSD-FS-D(5)	**Injection Vial**	34
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:49:33	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	103990.96	255.334039	875.9	false
d3-MeFOSAA	573.0 / 419.0	3.44	17653.07	294.619243	154.8	false
d5-EtFOSAA	589.0 / 419.0	3.61	19261.84	287.830469	181.3	false
13C5-PFHxA	318.0 / 273.0	1.83	91367.80	268.536017	163.1	false
13C4-PFHpA	367.0 / 322.0	2.19	103630.61	292.919635	464.6	false
13C8-PFOA	421.0 / 376.0	2.56	90175.51	242.937300	568.5	false
13C9-PFNA	472.0 / 427.0	2.93	97809.14	251.580437	739.5	false
13C6-PFDA	519.0 / 474.0	3.28	95788.02	272.396600	737.5	false
13C7-PFUnA	570.0 / 525.0	3.60	97243.22	275.669376	430.5	false
13C2-PFTeDA	715.0 / 670.0	4.38	91082.12	260.918108	1412.3	false
13C3-PFBS	302.0 / 99.0	1.54	38137.05	292.210545	311.0	false
13C3-PFHxS	402.0 / 99.0	2.21	26342.75	254.104030	251.3	false
13C8-PFOS	507.0 / 99.0	2.93	26242.21	252.376373	169.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:08:00 PM

Sample Name	J7250-FS(4)	**Injection Vial**	35
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:00:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	87835.72	238.504585	1024.1	false
d3-MeFOSAA	573.0 / 419.0	3.44	15416.24	331.461407	113.6	false
d5-EtFOSAA	589.0 / 419.0	3.60	15490.61	298.209269	122.3	false
13C5-PFHxA	318.0 / 273.0	1.82	50257.12	175.648555	103.1	false
13C4-PFHpA	367.0 / 322.0	2.18	67881.02	228.163635	205.0	false
13C8-PFOA	421.0 / 376.0	2.56	65675.00	210.398820	286.9	false
13C9-PFNA	472.0 / 427.0	2.93	74167.21	226.854276	352.8	false
13C6-PFDA	519.0 / 474.0	3.28	80481.36	253.103578	663.4	false
13C7-PFUnA	570.0 / 525.0	3.60	81312.17	254.916056	632.6	false
13C2-PFTeDA	715.0 / 670.0	4.38	79865.25	253.012165	1126.6	false
13C3-PFBS	302.0 / 99.0	1.53	16507.23	162.943346	121.3	false
13C3-PFHxS	402.0 / 99.0	2.20	20944.67	260.278110	127.8	false
13C8-PFOS	507.0 / 99.0	2.92	21246.40	263.237272	133.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:08:04 PM

Sample Name	J7250-FS-D(5)	**Injection Vial**	36
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:11:17	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.89	110453.82	251.330430	838.2	false
d3-MeFOSAA	573.0 / 419.0	3.44	17660.15	256.763800	155.8	false
d5-EtFOSAA	589.0 / 419.0	3.60	19995.76	260.300845	219.4	false
13C5-PFHxA	318.0 / 273.0	1.83	89159.98	252.484173	244.0	false
13C4-PFHpA	367.0 / 322.0	2.19	96626.21	263.154137	508.4	false
13C8-PFOA	421.0 / 376.0	2.56	102539.48	266.165348	1032.6	false
13C9-PFNA	472.0 / 427.0	2.93	100709.41	249.587199	661.3	false
13C6-PFDA	519.0 / 474.0	3.28	100731.45	265.464717	612.7	false
13C7-PFUnA	570.0 / 525.0	3.60	96116.11	252.508851	805.9	false
13C2-PFTeDA	715.0 / 670.0	4.38	92237.60	244.867010	1408.5	false
13C3-PFBS	302.0 / 99.0	1.54	40727.29	271.852335	301.5	false
13C3-PFHxS	402.0 / 99.0	2.20	27857.45	234.094143	253.1	false
13C8-PFOS	507.0 / 99.0	2.93	27781.69	232.758586	181.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:08:09 PM

Sample Name	J7251-FS(4)	**Injection Vial**	39
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:43:54	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.90	76829.09	261.664109	745.1	false
d3-MeFOSAA	573.0 / 419.0	3.45	12370.70	306.424805	87.9	false
d5-EtFOSAA	589.0 / 419.0	3.61	14431.35	320.062492	114.1	false
13C5-PFHxA	318.0 / 273.0	1.82	41567.32	193.002696	94.6	false
13C4-PFHpA	367.0 / 322.0	2.19	50995.87	227.718028	184.1	false
13C8-PFOA	421.0 / 376.0	2.56	56457.93	240.288263	212.2	false
13C9-PFNA	472.0 / 427.0	2.93	64982.88	264.057409	304.5	false
13C6-PFDA	519.0 / 474.0	3.28	72632.29	286.500641	468.8	false
13C7-PFUnA	570.0 / 525.0	3.60	68275.00	268.470303	447.9	false
13C2-PFTeDA	715.0 / 670.0	4.38	59457.44	236.255869	1179.4	false
13C3-PFBS	302.0 / 99.0	1.44	81840.64	930.693502	199.8	false
13C3-PFHxS	402.0 / 99.0	2.20	20921.15	299.519298	117.5	false
13C8-PFOS	507.0 / 99.0	2.93	16528.47	235.922756	96.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:08:12 PM

Sample Name	J7251-FS-D(5)	**Injection Vial**	40
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:54:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.89	97385.27	260.976390	900.6	false
d3-MeFOSAA	573.0 / 419.0	3.44	13237.21	257.260273	161.7	false
d5-EtFOSAA	589.0 / 419.0	3.60	18604.28	323.733058	188.7	false
13C5-PFHxA	318.0 / 273.0	1.83	85446.78	294.625940	205.7	false
13C4-PFHpA	367.0 / 322.0	2.19	87469.07	290.055347	482.3	false
13C8-PFOA	421.0 / 376.0	2.56	86676.59	273.951294	609.3	false
13C9-PFNA	472.0 / 427.0	2.93	88772.06	267.879611	531.3	false
13C6-PFDA	519.0 / 474.0	3.28	90421.14	280.643714	635.9	false
13C7-PFUnA	570.0 / 525.0	3.60	89385.91	276.562368	655.4	false
13C2-PFTeDA	715.0 / 670.0	4.38	79024.22	247.073456	1098.3	false
13C3-PFBS	302.0 / 99.0	1.53	44439.94	396.513162	315.6	false
13C3-PFHxS	402.0 / 99.0	2.21	25930.62	291.272002	214.0	false
13C8-PFOS	507.0 / 99.0	2.92	24569.89	275.160992	177.1	false

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Summary Quant Report

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Printed: 27/08/2018 12:08:16 PM

Sample Name	J7255-FS(4)	**Injection Vial**	41
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:05:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.89	72913.92	215.347598	776.7	false
d3-MeFOSAA	573.0 / 419.0	3.43	11203.49	224.120504	116.5	false
d5-EtFOSAA	589.0 / 419.0	3.60	15752.01	282.138411	119.5	false
13C5-PFHxA	318.0 / 273.0	1.82	25321.34	116.981200	54.8	false
13C4-PFHpA	367.0 / 322.0	2.18	43573.65	193.599603	152.4	false
13C8-PFOA	421.0 / 376.0	2.56	45997.85	194.788449	229.2	false
13C9-PFNA	472.0 / 427.0	2.93	54241.67	219.306023	274.1	false
13C6-PFDA	519.0 / 474.0	3.28	62742.62	214.619716	454.0	false
13C7-PFUnA	570.0 / 525.0	3.60	67590.33	230.478404	558.1	false
13C2-PFTeDA	715.0 / 670.0	4.38	50148.31	172.800056	911.0	false
13C3-PFBS	302.0 / 99.0	1.52	12881.24	118.302465	96.5	false
13C3-PFHxS	402.0 / 99.0	2.20	18535.19	214.306332	98.1	false
13C8-PFOS	507.0 / 99.0	2.92	16850.00	194.238601	98.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:08:20 PM

Sample Name	J7255-FS-D(5)	**Injection Vial**	42
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:16:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.89	111961.33	268.191638	957.7	false
d3-MeFOSAA	573.0 / 419.0	3.44	21740.89	349.707946	240.0	false
d5-EtFOSAA	589.0 / 419.0	3.60	23862.13	343.665212	169.3	false
13C5-PFHxA	318.0 / 273.0	1.83	96436.45	270.396361	159.8	false
13C4-PFHpA	367.0 / 322.0	2.19	109087.60	294.161655	491.2	false
13C8-PFOA	421.0 / 376.0	2.56	106501.51	273.723202	1008.8	false
13C9-PFNA	472.0 / 427.0	2.93	112881.41	276.993810	779.4	false
13C6-PFDA	519.0 / 474.0	3.28	98744.20	273.946767	910.2	false
13C7-PFUnA	570.0 / 525.0	3.60	108436.92	299.895845	1147.2	false
13C2-PFTeDA	715.0 / 670.0	4.38	91665.87	256.178591	1374.8	false
13C3-PFBS	302.0 / 99.0	1.53	42242.50	311.950591	288.7	false
13C3-PFHxS	402.0 / 99.0	2.20	28333.58	263.414328	217.1	false
13C8-PFOS	507.0 / 99.0	2.92	27548.95	255.352935	207.5	false

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Summary Quant Report

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Printed: 27/08/2018 12:08:24 PM

Sample Name	J7256-FS(4)	**Injection Vial**	43
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:27:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.89	78958.79	227.716982	776.5	false
d3-MeFOSAA	573.0 / 419.0	3.44	13840.72	257.453588	133.0	false
d5-EtFOSAA	589.0 / 419.0	3.60	14764.00	245.890981	118.8	false
13C5-PFHxA	318.0 / 273.0	1.83	49262.01	192.186243	111.2	false
13C4-PFHpA	367.0 / 322.0	2.19	71993.66	270.119237	257.1	false
13C8-PFOA	421.0 / 376.0	2.56	70724.65	252.916517	229.8	false
13C9-PFNA	472.0 / 427.0	2.93	76107.24	259.850877	267.9	false
13C6-PFDA	519.0 / 474.0	3.28	79138.15	264.337162	792.7	false
13C7-PFUnA	570.0 / 525.0	3.60	83945.55	279.517305	681.1	false
13C2-PFTeDA	715.0 / 670.0	4.37	59704.61	200.891122	896.0	false
13C3-PFBS	302.0 / 99.0	1.54	16826.69	143.696832	174.9	false
13C3-PFHxS	402.0 / 99.0	2.20	21817.41	234.559653	144.6	false
13C8-PFOS	507.0 / 99.0	2.92	23809.11	255.206179	127.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:08:28 PM

Sample Name	J7256-FS-D(5)	**Injection Vial**	44
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:38:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.88	111601.57	255.035410	1301.3	false
d3-MeFOSAA	573.0 / 419.0	3.42	18505.88	278.043222	178.5	false
d5-EtFOSAA	589.0 / 419.0	3.59	20174.11	271.390696	164.0	false
13C5-PFHxA	318.0 / 273.0	1.82	97472.55	273.090732	255.7	false
13C4-PFHpA	367.0 / 322.0	2.18	103663.76	279.320394	537.1	false
13C8-PFOA	421.0 / 376.0	2.55	103792.38	266.554677	1283.1	false
13C9-PFNA	472.0 / 427.0	2.91	104347.42	255.855286	740.1	false
13C6-PFDA	519.0 / 474.0	3.26	98005.58	259.393081	743.8	false
13C7-PFUnA	570.0 / 525.0	3.58	104339.89	275.293927	823.7	false
13C2-PFTeDA	715.0 / 670.0	4.36	95008.82	253.309841	1261.1	false
13C3-PFBS	302.0 / 99.0	1.53	42229.38	291.289751	340.9	false
13C3-PFHxS	402.0 / 99.0	2.19	31037.30	269.523205	237.9	false
13C8-PFOS	507.0 / 99.0	2.91	33306.64	288.363889	207.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:08:32 PM

Sample Name	J7257-FS(4)	**Injection Vial**	45
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:49:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.88	65608.65	295.244698	716.5	false
d3-MeFOSAA	573.0 / 419.0	3.43	13013.40	445.591679	98.9	false
d5-EtFOSAA	589.0 / 419.0	3.59	14583.21	447.092414	143.0	false
13C5-PFHxA	318.0 / 273.0	1.82	33275.41	190.745094	87.9	false
13C4-PFHpA	367.0 / 322.0	2.18	50348.19	277.565101	183.7	false
13C8-PFOA	421.0 / 376.0	2.55	58845.10	309.197860	302.8	false
13C9-PFNA	472.0 / 427.0	2.91	62055.84	311.315429	296.6	false
13C6-PFDA	519.0 / 474.0	3.26	60982.35	317.835583	459.2	false
13C7-PFUnA	570.0 / 525.0	3.58	61674.56	320.437356	507.9	false
13C2-PFTeDA	715.0 / 670.0	4.37	50257.44	263.863510	1141.8	false
13C3-PFBS	302.0 / 99.0	1.53	16334.70	256.782426	107.4	false
13C3-PFHxS	402.0 / 99.0	2.20	17496.68	346.267367	136.5	false
13C8-PFOS	507.0 / 99.0	2.91	17919.44	353.572322	118.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:08:35 PM

Sample Name	J7257-FS-D(5)	**Injection Vial**	46
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:00:02	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.88	86688.84	276.452483	810.3	false
d3-MeFOSAA	573.0 / 419.0	3.43	15897.47	358.600252	210.8	false
d5-EtFOSAA	589.0 / 419.0	3.58	17461.32	352.661227	184.2	false
13C5-PFHxA	318.0 / 273.0	1.83	84735.16	329.315209	228.1	false
13C4-PFHpA	367.0 / 322.0	2.18	88064.17	329.153464	661.3	false
13C8-PFOA	421.0 / 376.0	2.55	84409.15	300.700328	702.6	false
13C9-PFNA	472.0 / 427.0	2.92	77955.78	265.145663	649.1	false
13C6-PFDA	519.0 / 474.0	3.26	83421.65	308.115453	4804.1	false
13C7-PFUnA	570.0 / 525.0	3.58	80626.34	296.859090	546.2	false
13C2-PFTeDA	715.0 / 670.0	4.37	72977.10	271.520016	1417.1	false
13C3-PFBS	302.0 / 99.0	1.54	33267.36	344.515560	335.9	true
13C3-PFHxS	402.0 / 99.0	2.20	25417.62	331.380593	248.3	false
13C8-PFOS	507.0 / 99.0	2.91	26126.68	339.605187	177.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:08:39 PM

Sample Name	J7258-FS(4)	**Injection Vial**	47
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:10:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.88	69281.70	240.949397	826.3	false
d3-MeFOSAA	573.0 / 419.0	3.42	10610.76	281.356695	107.8	false
d5-EtFOSAA	589.0 / 419.0	3.58	12399.30	294.378567	118.1	false
13C5-PFHxA	318.0 / 273.0	1.82	37481.46	229.255685	73.4	false
13C4-PFHpA	367.0 / 322.0	2.17	40839.67	240.235317	149.7	false
13C8-PFOA	421.0 / 376.0	2.54	45214.28	253.498480	224.6	false
13C9-PFNA	472.0 / 427.0	2.91	53962.82	288.859202	248.5	false
13C6-PFDA	519.0 / 474.0	3.26	62890.81	253.321407	522.2	false
13C7-PFUnA	570.0 / 525.0	3.58	62324.65	250.255288	522.7	false
13C2-PFTeDA	715.0 / 670.0	4.36	46166.79	187.324683	1243.1	false
13C3-PFBS	302.0 / 99.0	1.53	14535.59	176.950395	105.4	false
13C3-PFHxS	402.0 / 99.0	2.19	15713.15	240.815203	104.5	false
13C8-PFOS	507.0 / 99.0	2.91	15350.27	234.549457	106.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:08:42 PM

Sample Name	J7258-FS-D(5)	**Injection Vial**	48
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:21:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.88	109519.85	264.835997	801.4	false
d3-MeFOSAA	573.0 / 419.0	3.42	19620.49	309.292953	157.3	false
d5-EtFOSAA	589.0 / 419.0	3.59	21265.05	300.140515	164.8	false
13C5-PFHxA	318.0 / 273.0	1.82	93200.21	267.974304	178.6	false
13C4-PFHpA	367.0 / 322.0	2.18	108073.68	298.845864	557.1	false
13C8-PFOA	421.0 / 376.0	2.55	99555.62	262.384572	784.8	false
13C9-PFNA	472.0 / 427.0	2.91	92146.39	231.868976	600.0	false
13C6-PFDA	519.0 / 474.0	3.26	99001.21	277.269461	668.2	false
13C7-PFUnA	570.0 / 525.0	3.58	99599.12	278.071022	683.4	false
13C2-PFTeDA	715.0 / 670.0	4.36	87924.22	248.056523	1140.8	false
13C3-PFBS	302.0 / 99.0	1.53	40730.79	294.775247	247.5	false
13C3-PFHxS	402.0 / 99.0	2.20	31623.91	288.127953	237.8	false
13C8-PFOS	507.0 / 99.0	2.91	29378.20	266.865800	184.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:22:39 AM

Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:38:11	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	true
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:22:43 AM

Sample Name	J7249-FS-D(8)	**Injection Vial**	27
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:48:13	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.86	43254201.28	155641.997588	201.6	false
PFHxA_2	313.0 / 119.0	1.87	2937171.75	145076.362656	491.0	false
PFOA_1	413.0 / 369.0	2.68	42665250.60	156309.646908	701.2	false
PFOA_2	413.0 / 169.0	2.67	2187745.41	118074.684148	599.6	true
PFOS_1	499.0 / 80.0	2.93	2773091.23	6556.255645	147.0	false
PFOS_2	499.0 / 99.0	3.01	352003.01	4761.253870	255.1	true

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:22:49 AM

Sample Name	J7249-FS-D(9)	**Injection Vial**	28
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:59:04	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	1480547.40	4927.451466	133.1	false
PFHxA_2	313.0 / 119.0	1.87	94933.14	4311.564388	166.8	false
PFOA_1	413.0 / 369.0	2.68	1610171.52	4454.935613	367.4	false
PFOA_2	413.0 / 169.0	2.68	77223.10	3150.499265	187.9	true
PFOS_1	499.0 / 80.0	2.94	119319.27	245.416378	64.3	true
PFOS_2	499.0 / 99.0	3.04	18558.82	197.370962	69.3	true

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:22:55 AM

Sample Name	J7249MS-FS-D(8)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:09:56	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	45550679.89	164134.640822	202.1	false
PFHxA_2	313.0 / 119.0	1.87	3042356.04	150483.384797	497.2	false
PFOA_1	413.0 / 369.0	2.68	45260263.66	147409.614228	571.3	false
PFOA_2	413.0 / 169.0	2.67	2227563.30	106878.874974	601.9	true
PFOS_1	499.0 / 80.0	2.97	3726126.51	8053.127545	129.4	false
PFOS_2	499.0 / 99.0	3.05	539915.69	6681.189166	281.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:23:00 AM

Sample Name	J7249MS-FS-D(9)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:20:48	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	1413821.99	5780.063655	131.4	false
PFHxA_2	313.0 / 119.0	1.88	91738.59	5122.671353	134.0	false
PFOA_1	413.0 / 369.0	2.68	1650526.07	5319.725578	409.1	false
PFOA_2	413.0 / 169.0	2.68	78988.83	3753.475680	185.7	true
PFOS_1	499.0 / 80.0	2.99	141570.36	372.722973	56.0	true
PFOS_2	499.0 / 99.0	3.06	21647.72	305.789111	92.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:23:05 AM

Sample Name	J7249MSD-FS-D(8)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:31:41	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.86	46835313.43	138566.156518	216.9	false
PFHxA_2	313.0 / 119.0	1.86	3168742.45	128685.390915	436.2	false
PFOA_1	413.0 / 369.0	2.67	46510814.90	130665.937807	520.3	false
PFOA_2	413.0 / 169.0	2.67	2373235.43	98219.882705	570.3	true
PFOS_1	499.0 / 80.0	2.97	3845823.95	6640.049058	124.7	true
PFOS_2	499.0 / 99.0	3.05	543967.58	5373.852350	336.6	true

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:23:10 AM

Sample Name	J7249MSD-FS-D(9)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:42:34	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.86	1494847.51	5286.463636	116.9	false
PFHxA_2	313.0 / 119.0	1.87	95704.34	4620.579445	156.7	false
PFOA_1	413.0 / 369.0	2.67	1695235.12	4811.989164	321.0	false
PFOA_2	413.0 / 169.0	2.67	75943.88	3180.187326	226.4	true
PFOS_1	499.0 / 80.0	2.98	143696.37	283.049448	58.3	true
PFOS_2	499.0 / 99.0	3.06	20729.51	214.028868	103.3	true

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/09/2018 7:23:16 AM

Sample Name	J7257-FS-D(9)	**Injection Vial**	33
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:53:25	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	534479.23	2299.543175	91.8	false
PFHxA_2	313.0 / 119.0	1.87	37481.17	2185.281936	86.5	false
PFOA_1	413.0 / 369.0	2.67	30129.38	130.905852	35.9	false
PFOA_2	413.0 / 169.0	2.67	2771.34	159.413742	30.7	false
PFOS_1	499.0 / 80.0	3.06	7785.90	36.875242	19.2	true
PFOS_2	499.0 / 99.0	3.09	3123.27	33.103248	17.8	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:12:06 PM

Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:38:11	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.88	82645.68	230.689360	486.0	false
13C4-PFHpA	367.0 / 322.0	2.29	91870.89	235.310489	751.5	false
13C8-PFOA	421.0 / 376.0	2.70	108650.54	269.877407	1267.8	false
13C8-PFOS	507.0 / 99.0	3.08	32462.24	214.010007	245.0	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:12:10 PM

Sample Name	J7249-FS-D(8)	**Injection Vial**	27
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:48:13	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.86	62561.33	163.234369	133.8	false
13C4-PFHpA	367.0 / 322.0	2.26	78439.78	187.801043	312.7	false
13C8-PFOA	421.0 / 376.0	2.67	60678.93	140.886963	312.0	false
13C8-PFOS	507.0 / 99.0	3.05	19884.71	177.090273	130.8	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:12:16 PM

Sample Name	J7249-FS-D(9)	**Injection Vial**	28
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:59:04	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.86	68040.71	271.194711	306.4	false
13C4-PFHpA	367.0 / 322.0	2.26	71492.75	261.475114	431.4	false
13C8-PFOA	421.0 / 376.0	2.67	80840.63	286.727488	1365.7	false
13C8-PFOS	507.0 / 99.0	3.05	25318.52	285.840580	204.3	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:12:19 PM

Sample Name	J7249MS-FS-D(8)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:09:56	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.86	62473.34	169.021611	128.9	false
13C4-PFHpA	367.0 / 322.0	2.26	84589.58	210.000483	282.4	false
13C8-PFOA	421.0 / 376.0	2.67	68835.77	165.725314	401.2	false
13C8-PFOS	507.0 / 99.0	3.05	21446.53	200.272729	157.5	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:12:24 PM

Sample Name	J7249MS-FS-D(9)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:20:48	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.86	55340.02	244.959488	255.5	false
13C4-PFHpA	367.0 / 322.0	2.27	60374.16	245.223460	591.8	false
13C8-PFOA	421.0 / 376.0	2.67	69511.74	273.804337	1215.7	false
13C8-PFOS	507.0 / 99.0	3.05	18535.60	228.715816	223.4	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:12:28 PM

Sample Name	J7249MSD-FS-D(8)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:31:41	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.85	76090.60	183.601437	126.4	false
13C4-PFHpA	367.0 / 322.0	2.26	97397.49	215.649663	286.9	false
13C8-PFOA	421.0 / 376.0	2.66	79023.83	169.679884	429.5	false
13C8-PFOS	507.0 / 99.0	3.05	26018.03	251.721546	177.9	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:12:32 PM

Sample Name	J7249MSD-FS-D(9)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:42:34	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.86	64005.92	260.901693	347.9	false
13C4-PFHpA	367.0 / 322.0	2.26	71188.98	266.271982	730.5	false
13C8-PFOA	421.0 / 376.0	2.66	78447.43	284.552670	1004.5	false
13C8-PFOS	507.0 / 99.0	3.04	26588.44	278.131701	226.6	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 27/08/2018 12:12:36 PM

Sample Name	J7257-FS-D(9)	**Injection Vial**	33
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:53:25	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.86	53003.45	240.110475	364.6	false
13C4-PFHpA	367.0 / 322.0	2.26	64890.79	269.740430	898.1	false
13C8-PFOA	421.0 / 376.0	2.66	67703.67	272.926958	1088.3	false
13C8-PFOS	507.0 / 99.0	3.05	23406.15	275.415604	223.5	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:10:23 AM

Sample Name	JY46 IB	**Injection Vial**	23
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	3634.27	45.645356	18.6	true
PFBS_2	298.9 / 99.0	1.54	1541.45	42.925702	19.9	true

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 30/08/2018 4:29:42 PM

Sample Name	J7259-FS(2)	**Injection Vial**	34
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:14:37	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.52	25659.91	95.576651	39.3	true
PFBS_2	298.9 / 99.0	1.52	7298.00	88.040204	50.1	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:09:55 AM

Sample Name	JY46 IB	**Injection Vial**	23
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.52	26510.06	202.238330	426.2	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:09:59 AM

Sample Name	J7259-FS(2)	**Injection Vial**	34
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:14:37	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.51	30845.95	265.823699	493.3	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:10:03 AM

Sample Name	J7251-FS(6)	**Injection Vial**	35
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:25:28	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.41	73079.03	857.593426	207.6	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:10:06 AM

Sample Name	J7251-FS-D(7)	**Injection Vial**	36
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:36:19	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.51	37313.03	356.775769	311.8	false

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:11:00 AM

Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:06:44	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.370	0.288	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.160	0.077	
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.021	
PFHxS_1	399.0 / 80.0	2.23	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.380	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.072	
PFNA_1	463.0 / 419.0	2.95	PFNA			
PFNA_2	463.0 / 219.0	2.94	PFNA	0.350	0.306	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	2.82	PFOS	0.230	0.178	ü
PFDA_1	513.0 / 469.0	3.30	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	
PFUnA_1	563.0 / 519.0	3.62	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	
PFDoA_1	613.0 / 569.0	3.92	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	PFDoA	0.220	0.162	ü
PFTrDA_1	663.0 / 619.0	4.17	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.17	PFTrDA	0.060	0.067	ü
PFTeDA_1	713.0 / 669.0	4.40	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.38	PFTeDA	0.080	0.050	
NMeFOSAA_1	570.0 / 419.0	3.46	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.46	NMeFOSAA	0.600	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.62	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.51	NEtFOSAA	0.050	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:11:04 AM

Sample Name	CR546PB-FS(3)	**Injection Vial**	17
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:44:41	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.288	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.021	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.55	PFOA	0.200	0.072	
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	2.96	PFNA	N/A	0.306	
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	2.95	PFOS	0.270	0.178	
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	4.40	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.41	PFTeDA	0.130	0.050	
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:11:08 AM

Sample Name	CR547LCS-FS(3)	**Injection Vial**	18
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:55:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.300	0.288	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.21	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.23	PFHxS	0.280	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.95	PFNA			
PFNA_2	463.0 / 219.0	2.95	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	2.95	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	3.31	PFDA			
PFDA_2	513.0 / 219.0	3.31	PFDA	0.050	0.047	ü
PFUnA_1	563.0 / 519.0	3.63	PFUnA			
PFUnA_2	563.0 / 269.0	3.63	PFUnA	0.060	0.058	ü
PFDoA_1	613.0 / 569.0	3.92	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	PFDoA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.17	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.17	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.40	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.40	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.46	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.46	NMeFOSAA	0.490	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.63	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.63	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:11:12 AM

Sample Name	J7259-FS(3)	**Injection Vial**	19
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:06:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.210	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	PFHpA	0.010	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	PFHxS	0.310	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.97	PFNA			
PFNA_2	463.0 / 219.0	2.96	PFNA	0.880	0.306	
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	2.95	PFOS	0.200	0.178	ü
PFDA_1	513.0 / 469.0	3.30	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	
PFUnA_1	563.0 / 519.0	3.64	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	
PFDoA_1	613.0 / 569.0	3.91	PFDoA			
PFDoA_2	613.0 / 319.0	3.91	PFDoA	0.140	0.162	ü
PFTrDA_1	663.0 / 619.0	4.18	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.19	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.40	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.43	PFTeDA	0.250	0.050	
NMeFOSAA_1	570.0 / 419.0	3.44	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	
NEtFOSAA_1	584.0 / 419.0	3.63	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Printed: 29/08/2018 10:11:16 AM

Sample Name	J7260-FS(3)	**Injection Vial**	20
Sample ID	080118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:17:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.310	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.030	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	PFHxS	0.310	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.95	PFNA			
PFNA_2	463.0 / 219.0	2.96	PFNA	0.400	0.306	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	2.94	PFOS	0.190	0.178	ü
PFDA_1	513.0 / 469.0	3.29	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	
PFUnA_1	563.0 / 519.0	3.62	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	
PFDoA_1	613.0 / 569.0	3.92	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	
PFTrDA_1	663.0 / 619.0	4.17	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	
PFTeDA_1	713.0 / 669.0	4.39	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.40	PFTeDA	0.240	0.050	
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.65	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J7261-FS(3)	**Injection Vial**	21
Sample ID	080118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:28:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.240	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.030	0.021	
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	PFHxS	0.270	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.080	0.072	ü
PFNA_1	463.0 / 419.0	2.93	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.306	
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	2.94	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.29	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	4.16	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J7252-FS(3)	**Injection Vial**	22
Sample ID	073018-05	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:39:03	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.288	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	ü
PFHpA_1	363.0 / 319.0	2.21	PFHpA			
PFHpA_2	363.0 / 169.0	2.16	PFHpA	0.110	0.021	
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.95	PFNA			
PFNA_2	463.0 / 219.0	2.94	PFNA	0.370	0.306	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	2.95	PFOS	0.210	0.178	ü
PFDA_1	513.0 / 469.0	3.32	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	3.92	PFDoA			
PFDoA_2	613.0 / 319.0	3.87	PFDoA	0.140	0.162	ü
PFTrDA_1	663.0 / 619.0	4.17	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.46	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.46	NMeFOSAA	0.560	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J7253-FS(3)	**Injection Vial**	23
Sample ID	073018-06	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:49:56	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.288	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	ü
PFHpA_1	363.0 / 319.0	2.21	PFHpA			
PFHpA_2	363.0 / 169.0	2.23	PFHpA	0.030	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.24	PFHxS	0.610	0.284	
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.060	0.072	ü
PFNA_1	463.0 / 419.0	2.93	PFNA			
PFNA_2	463.0 / 219.0	2.97	PFNA	0.270	0.306	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	2.94	PFOS	0.130	0.178	ü
PFDA_1	513.0 / 469.0	3.29	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	
PFUnA_1	563.0 / 519.0	3.61	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	4.16	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	
PFTeDA_1	713.0 / 669.0	4.40	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J7254-FS(3)	**Injection Vial**	24
Sample ID	073018-07	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:00:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.288	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	ü
PFHpA_1	363.0 / 319.0	2.21	PFHpA			
PFHpA_2	363.0 / 169.0	2.20	PFHpA	0.050	0.021	
PFHxS_1	399.0 / 80.0	2.23	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.280	0.284	ü
PFOA_1	413.0 / 369.0	2.58	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.060	0.072	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	2.94	PFOS	0.210	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	4.16	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	
PFTeDA_1	713.0 / 669.0	4.39	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	
NMeFOSAA_1	570.0 / 419.0	3.46	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	
NEtFOSAA_1	584.0 / 419.0	3.64	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J7248-FS(4)	**Injection Vial**	27
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:33:23	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.290	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.19	PFHpA			
PFHpA_2	363.0 / 169.0	2.14	PFHpA	0.030	0.021	
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.270	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.050	0.072	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	2.94	PFOS	0.210	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	3.31	PFDA	N/A	0.047	
PFUnA_1	563.0 / 519.0	3.62	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	
PFDoA_1	613.0 / 569.0	3.91	PFDoA			
PFDoA_2	613.0 / 319.0	3.91	PFDoA	0.200	0.162	ü
PFTrDA_1	663.0 / 619.0	4.17	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.17	PFTrDA	0.050	0.067	ü
PFTeDA_1	713.0 / 669.0	4.39	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.38	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.46	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	
NEtFOSAA_1	584.0 / 419.0	3.62	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Printed: 29/08/2018 10:11:42 AM

Sample Name	J7248-FS-D(5)	**Injection Vial**	28
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:44:16	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.300	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.19	PFHpA			
PFHpA_2	363.0 / 169.0	2.15	PFHpA	0.040	0.021	
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.270	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.040	0.072	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	2.94	PFOS	0.190	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	4.17	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:11:46 AM

Sample Name	J7249-FS(4)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:55:09	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.280	0.288	ü
PFHxA_1	313.0 / 269.0	1.82	PFHxA			
PFHxA_2	313.0 / 119.0	1.82	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.18	PFHpA			
PFHpA_2	363.0 / 169.0	2.15	PFHpA	0.030	0.021	ü
PFHxS_1	399.0 / 80.0	2.20	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	PFHxS	0.340	0.284	ü
PFOA_1	413.0 / 369.0	2.55	PFOA			
PFOA_2	413.0 / 169.0	2.56	PFOA	0.080	0.072	ü
PFNA_1	463.0 / 419.0	2.93	PFNA			
PFNA_2	463.0 / 219.0	2.94	PFNA	0.260	0.306	ü
PFOS_1	499.0 / 80.0	2.81	PFOS			
PFOS_2	499.0 / 99.0	2.88	PFOS	0.140	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	4.16	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	
PFTeDA_1	713.0 / 669.0	4.39	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	
NMeFOSAA_1	570.0 / 419.0	3.45	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Printed: 29/08/2018 10:11:50 AM

Sample Name	J7249-FS-D(5)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:06:01	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.300	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.16	PFHpA	0.030	0.021	ü
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.290	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.050	0.072	ü
PFNA_1	463.0 / 419.0	2.93	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.306	
PFOS_1	499.0 / 80.0	2.81	PFOS			
PFOS_2	499.0 / 99.0	2.88	PFOS	0.140	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Printed: 29/08/2018 10:11:54 AM

Sample Name	J7249MS-FS(4)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:16:53	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.280	0.288	ü
PFHxA_1	313.0 / 269.0	1.83	PFHxA			
PFHxA_2	313.0 / 119.0	1.83	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.19	PFHpA			
PFHpA_2	363.0 / 169.0	2.16	PFHpA	0.030	0.021	ü
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.320	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.95	PFNA			
PFNA_2	463.0 / 219.0	2.94	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	2.84	PFOS			
PFOS_2	499.0 / 99.0	2.93	PFOS	0.140	0.178	ü
PFDA_1	513.0 / 469.0	3.29	PFDA			
PFDA_2	513.0 / 219.0	3.29	PFDA	0.040	0.047	ü
PFUnA_1	563.0 / 519.0	3.62	PFUnA			
PFUnA_2	563.0 / 269.0	3.61	PFUnA	0.050	0.058	ü
PFDoA_1	613.0 / 569.0	3.91	PFDoA			
PFDoA_2	613.0 / 319.0	3.90	PFDoA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.16	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.16	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.39	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.39	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.45	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.45	NMeFOSAA	0.550	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.61	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.61	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

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Printed: 29/08/2018 10:12:00 AM

Sample Name	J7249MS-FS-D(5)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:27:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.310	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.16	PFHpA	0.030	0.021	ü
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.270	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.050	0.072	ü
PFNA_1	463.0 / 419.0	2.94	PFNA			
PFNA_2	463.0 / 219.0	2.94	PFNA	0.350	0.306	ü
PFOS_1	499.0 / 80.0	2.85	PFOS			
PFOS_2	499.0 / 99.0	2.91	PFOS	0.140	0.178	ü
PFDA_1	513.0 / 469.0	3.29	PFDA			
PFDA_2	513.0 / 219.0	3.29	PFDA	0.060	0.047	ü
PFUnA_1	563.0 / 519.0	3.61	PFUnA			
PFUnA_2	563.0 / 269.0	3.61	PFUnA	0.080	0.058	ü
PFDoA_1	613.0 / 569.0	3.90	PFDoA			
PFDoA_2	613.0 / 319.0	3.90	PFDoA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.16	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.16	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.39	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.39	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.45	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.45	NMeFOSAA	0.600	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.61	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.61	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J7249MSD-FS(4)	**Injection Vial**	33
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:38:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.290	0.288	ü
PFHxA_1	313.0 / 269.0	1.83	PFHxA			
PFHxA_2	313.0 / 119.0	1.83	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.19	PFHpA			
PFHpA_2	363.0 / 169.0	2.16	PFHpA	0.030	0.021	ü
PFHxS_1	399.0 / 80.0	2.20	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.330	0.284	ü
PFOA_1	413.0 / 369.0	2.56	PFOA			
PFOA_2	413.0 / 169.0	2.56	PFOA	0.070	0.072	ü
PFNA_1	463.0 / 419.0	2.94	PFNA			
PFNA_2	463.0 / 219.0	2.94	PFNA	0.320	0.306	ü
PFOS_1	499.0 / 80.0	2.84	PFOS			
PFOS_2	499.0 / 99.0	2.92	PFOS	0.150	0.178	ü
PFDA_1	513.0 / 469.0	3.29	PFDA			
PFDA_2	513.0 / 219.0	3.29	PFDA	0.050	0.047	ü
PFUnA_1	563.0 / 519.0	3.61	PFUnA			
PFUnA_2	563.0 / 269.0	3.61	PFUnA	0.060	0.058	ü
PFDoA_1	613.0 / 569.0	3.90	PFDoA			
PFDoA_2	613.0 / 319.0	3.90	PFDoA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.16	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.16	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.39	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.39	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.45	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.45	NMeFOSAA	0.530	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.61	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.61	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

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Printed: 29/08/2018 10:12:09 AM

Sample Name	J7248MSD-FS-D(5)	**Injection Vial**	34
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:49:33	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.310	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.17	PFHpA	0.030	0.021	ü
PFHxS_1	399.0 / 80.0	2.22	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	PFHxS	0.280	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.050	0.072	ü
PFNA_1	463.0 / 419.0	2.94	PFNA			
PFNA_2	463.0 / 219.0	2.95	PFNA	0.340	0.306	ü
PFOS_1	499.0 / 80.0	2.84	PFOS			
PFOS_2	499.0 / 99.0	2.92	PFOS	0.150	0.178	ü
PFDA_1	513.0 / 469.0	3.30	PFDA			
PFDA_2	513.0 / 219.0	3.29	PFDA	0.060	0.047	ü
PFUnA_1	563.0 / 519.0	3.61	PFUnA			
PFUnA_2	563.0 / 269.0	3.62	PFUnA	0.070	0.058	ü
PFDoA_1	613.0 / 569.0	3.90	PFDoA			
PFDoA_2	613.0 / 319.0	3.90	PFDoA	0.180	0.162	ü
PFTrDA_1	663.0 / 619.0	4.16	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.16	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.39	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.39	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.45	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.45	NMeFOSAA	0.600	0.541	ü
NEtFOSAA_1	584.0 / 419.0	3.61	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.61	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

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Printed: 29/08/2018 10:12:16 AM

Sample Name	J7250-FS(4)	**Injection Vial**	35
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:00:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.260	0.288	ü
PFHxA_1	313.0 / 269.0	1.83	PFHxA			
PFHxA_2	313.0 / 119.0	1.83	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.19	PFHpA			
PFHpA_2	363.0 / 169.0	2.17	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.260	0.284	ü
PFOA_1	413.0 / 369.0	2.56	PFOA			
PFOA_2	413.0 / 169.0	2.56	PFOA	0.060	0.072	ü
PFNA_1	463.0 / 419.0	2.93	PFNA			
PFNA_2	463.0 / 219.0	2.93	PFNA	0.240	0.306	ü
PFOS_1	499.0 / 80.0	2.89	PFOS			
PFOS_2	499.0 / 99.0	2.93	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	3.26	PFDA	N/A	0.047	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	3.90	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	
PFTrDA_1	663.0 / 619.0	4.15	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.14	PFTrDA	0.330	0.067	
PFTeDA_1	713.0 / 669.0	4.39	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.36	PFTeDA	0.070	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.43	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.49	NMeFOSAA	2.370	0.541	
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Printed: 29/08/2018 10:12:22 AM

Sample Name	J7250-FS-D(5)	**Injection Vial**	36
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:11:17	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.270	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.17	PFHpA	0.030	0.021	
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.22	PFHxS	0.250	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.050	0.072	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	2.88	PFOS			
PFOS_2	499.0 / 99.0	2.94	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	4.38	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Printed: 29/08/2018 10:12:26 AM

Sample Name	J7251-FS(4)	**Injection Vial**	39
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:43:54	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.220	0.288	ü
PFHxA_1	313.0 / 269.0	1.83	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.19	PFHpA			
PFHpA_2	363.0 / 169.0	2.16	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.270	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.060	0.072	ü
PFNA_1	463.0 / 419.0	2.94	PFNA			
PFNA_2	463.0 / 219.0	2.94	PFNA	0.440	0.306	ü
PFOS_1	499.0 / 80.0	2.92	PFOS			
PFOS_2	499.0 / 99.0	2.94	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.30	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	4.37	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	
NMeFOSAA_1	570.0 / 419.0	3.43	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	
NEtFOSAA_1	584.0 / 419.0	3.61	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J7251-FS-D(5)	**Injection Vial**	40
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:54:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.280	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.15	PFHpA	0.030	0.021	ü
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.270	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.57	PFOA	0.060	0.072	ü
PFNA_1	463.0 / 419.0	2.93	PFNA			
PFNA_2	463.0 / 219.0	2.95	PFNA	0.270	0.306	ü
PFOS_1	499.0 / 80.0	2.92	PFOS			
PFOS_2	499.0 / 99.0	2.93	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.46	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J7255-FS(4)	**Injection Vial**	41
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:05:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.290	0.288	ü
PFHxA_1	313.0 / 269.0	1.83	PFHxA			
PFHxA_2	313.0 / 119.0	1.83	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.19	PFHpA			
PFHpA_2	363.0 / 169.0	2.18	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.20	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.260	0.284	ü
PFOA_1	413.0 / 369.0	2.56	PFOA			
PFOA_2	413.0 / 169.0	2.56	PFOA	0.060	0.072	ü
PFNA_1	463.0 / 419.0	2.94	PFNA			
PFNA_2	463.0 / 219.0	2.94	PFNA	0.270	0.306	ü
PFOS_1	499.0 / 80.0	2.93	PFOS			
PFOS_2	499.0 / 99.0	2.93	PFOS	0.200	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	4.39	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	
NMeFOSAA_1	570.0 / 419.0	3.44	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.45	NMeFOSAA	0.420	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J7255-FS-D(5)	**Injection Vial**	42
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:16:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.290	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.260	0.284	ü
PFOA_1	413.0 / 369.0	2.57	PFOA			
PFOA_2	413.0 / 169.0	2.56	PFOA	0.060	0.072	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	2.93	PFOS			
PFOS_2	499.0 / 99.0	2.93	PFOS	0.210	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Printed: 29/08/2018 10:12:49 AM

Sample Name	J7256-FS(4)	**Injection Vial**	43
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:27:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.330	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.240	0.284	ü
PFOA_1	413.0 / 369.0	2.56	PFOA			
PFOA_2	413.0 / 169.0	2.56	PFOA	0.040	0.072	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	2.93	PFOS			
PFOS_2	499.0 / 99.0	2.93	PFOS	0.190	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	3.62	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	4.15	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	
PFTeDA_1	713.0 / 669.0	4.38	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.40	PFTeDA	0.140	0.050	
NMeFOSAA_1	570.0 / 419.0	3.45	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J7256-FS-D(5)	**Injection Vial**	44
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:38:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.320	0.288	ü
PFHxA_1	313.0 / 269.0	1.83	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.19	PFHpA			
PFHpA_2	363.0 / 169.0	2.18	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.20	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	PFHxS	0.240	0.284	ü
PFOA_1	413.0 / 369.0	2.55	PFOA			
PFOA_2	413.0 / 169.0	2.55	PFOA	0.050	0.072	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	2.92	PFOS			
PFOS_2	499.0 / 99.0	2.91	PFOS	0.220	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Printed: 29/08/2018 10:12:57 AM

Sample Name	J7257-FS(4)	**Injection Vial**	45
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:49:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.300	0.288	ü
PFHxA_1	313.0 / 269.0	1.83	PFHxA			
PFHxA_2	313.0 / 119.0	1.83	PFHxA	0.100	0.077	ü
PFHpA_1	363.0 / 319.0	2.19	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.20	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	PFHxS	0.320	0.284	ü
PFOA_1	413.0 / 369.0	2.55	PFOA			
PFOA_2	413.0 / 169.0	2.55	PFOA	0.060	0.072	ü
PFNA_1	463.0 / 419.0	2.92	PFNA			
PFNA_2	463.0 / 219.0	2.93	PFNA	0.420	0.306	ü
PFOS_1	499.0 / 80.0	2.82	PFOS			
PFOS_2	499.0 / 99.0	2.91	PFOS	0.130	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	4.37	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J7257-FS-D(5)	**Injection Vial**	46
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:00:02	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.320	0.288	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.20	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.21	PFHxS			
PFHxS_2	399.0 / 99.0	2.21	PFHxS	0.270	0.284	ü
PFOA_1	413.0 / 369.0	2.56	PFOA			
PFOA_2	413.0 / 169.0	2.56	PFOA	0.050	0.072	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	2.77	PFOS			
PFOS_2	499.0 / 99.0	2.87	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	3.90	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Printed: 29/08/2018 10:13:09 AM

Sample Name	J7258-FS(4)	**Injection Vial**	47
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:10:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.230	0.288	ü
PFHxA_1	313.0 / 269.0	1.82	PFHxA			
PFHxA_2	313.0 / 119.0	1.83	PFHxA	0.050	0.077	ü
PFHpA_1	363.0 / 319.0	2.18	PFHpA			
PFHpA_2	363.0 / 169.0	2.17	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.20	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	PFHxS	0.290	0.284	ü
PFOA_1	413.0 / 369.0	2.55	PFOA			
PFOA_2	413.0 / 169.0	2.55	PFOA	0.060	0.072	ü
PFNA_1	463.0 / 419.0	2.92	PFNA			
PFNA_2	463.0 / 219.0	2.92	PFNA	0.220	0.306	ü
PFOS_1	499.0 / 80.0	2.80	PFOS			
PFOS_2	499.0 / 99.0	2.89	PFOS	0.130	0.178	ü
PFDA_1	513.0 / 469.0	3.29	PFDA			
PFDA_2	513.0 / 219.0	3.28	PFDA	0.160	0.047	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	3.89	PFDoA			
PFDoA_2	613.0 / 319.0	3.92	PFDoA	0.360	0.162	
PFTrDA_1	663.0 / 619.0	4.14	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	
PFTeDA_1	713.0 / 669.0	4.38	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.39	PFTeDA	0.060	0.050	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:13:18 AM

Sample Name	J7258-FS-D(5)	**Injection Vial**	48
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:21:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.250	0.288	ü
PFHxA_1	313.0 / 269.0	1.83	PFHxA			
PFHxA_2	313.0 / 119.0	1.83	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.19	PFHpA			
PFHpA_2	363.0 / 169.0	2.18	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.20	PFHxS			
PFHxS_2	399.0 / 99.0	2.20	PFHxS	0.280	0.284	ü
PFOA_1	413.0 / 369.0	2.56	PFOA			
PFOA_2	413.0 / 169.0	2.55	PFOA	0.060	0.072	ü
PFNA_1	463.0 / 419.0	2.92	PFNA			
PFNA_2	463.0 / 219.0	2.95	PFNA	0.380	0.306	ü
PFOS_1	499.0 / 80.0	2.81	PFOS			
PFOS_2	499.0 / 99.0	2.89	PFOS	0.140	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.047	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.541	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:23:48 AM

Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:38:11	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.079	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.069	ü
PFOS_1	499.0 / 80.0	N/A	PFOS			
PFOS_2	499.0 / 99.0	N/A	PFOS	N/A	0.187	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:24:11 AM

Sample Name	J7249-FS-D(8)	**Injection Vial**	27
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:48:13	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.079	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.050	0.069	ü
PFOS_1	499.0 / 80.0	2.93	PFOS			
PFOS_2	499.0 / 99.0	3.01	PFOS	0.130	0.187	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:24:16 AM

Sample Name	J7249-FS-D(9)	**Injection Vial**	28
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:59:04	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.060	0.079	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.050	0.069	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.160	0.187	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:24:21 AM

Sample Name	J7249MS-FS-D(8)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:09:56	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.079	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.050	0.069	ü
PFOS_1	499.0 / 80.0	2.97	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.140	0.187	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:24:26 AM

Sample Name	J7249MS-FS-D(9)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:20:48	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.88	PFHxA	0.060	0.079	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.050	0.069	ü
PFOS_1	499.0 / 80.0	2.99	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.150	0.187	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:24:32 AM

Sample Name	J7249MSD-FS-D(8)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:31:41	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.079	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.050	0.069	ü
PFOS_1	499.0 / 80.0	2.97	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.140	0.187	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:24:37 AM

Sample Name	J7249MSD-FS-D(9)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:42:34	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.060	0.079	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.040	0.069	ü
PFOS_1	499.0 / 80.0	2.98	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.140	0.187	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 27/09/2018 7:24:43 AM

Sample Name	J7257-FS-D(9)	**Injection Vial**	33
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:53:25	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.079	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.090	0.069	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.09	PFOS	0.400	0.187	

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:14:56 AM

Sample Name	JY46 IB	**Injection Vial**	23
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.420	0.291	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 30/08/2018 4:31:30 PM

Sample Name	J7259-FS(2)	**Injection Vial**	34
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:14:37	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.52	PFBS			
PFBS_2	298.9 / 99.0	1.52	PFBS	0.280	0.291	ü

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:15:58 AM

Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:06:44	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	23852.68	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	23852.68	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	58415.40	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	58415.40	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	64549.33	250.00
PFHpA_2	363.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	64549.33	250.00
PFHxS_1	399.0 / 80.0	2.23	13C3-PFHxS	402.0 / 99.0	19309.61	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	19309.61	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	64549.33	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	64549.33	250.00
PFNA_1	463.0 / 419.0	2.95	13C9-PFNA	472.0 / 427.0	68344.62	250.00
PFNA_2	463.0 / 219.0	2.94	13C9-PFNA	472.0 / 427.0	68344.62	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	17012.38	239.25
PFOS_2	499.0 / 99.0	2.82	13C8-PFOS	507.0 / 99.0	17012.38	239.25
PFDA_1	513.0 / 469.0	3.30	13C6-PFDA	519.0 / 474.0	69439.02	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	69439.02	250.00
PFUnA_1	563.0 / 519.0	3.62	13C7-PFUnA	570.0 / 525.0	70349.42	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	70349.42	250.00
PFDoA_1	613.0 / 569.0	3.92	13C2-PFDoA	615.0 / 570.0	74951.83	250.00
PFDoA_2	613.0 / 319.0	3.92	13C2-PFDoA	615.0 / 570.0	74951.83	250.00
PFTrDA_1	663.0 / 619.0	4.17	13C2-PFTeDA	715.0 / 670.0	65913.22	250.00
PFTrDA_2	663.0 / 169.0	4.17	13C2-PFTeDA	715.0 / 670.0	65913.22	250.00
PFTeDA_1	713.0 / 669.0	4.40	13C2-PFTeDA	715.0 / 670.0	65913.22	250.00
PFTeDA_2	713.0 / 169.0	4.38	13C2-PFTeDA	715.0 / 670.0	65913.22	250.00
NMeFOSAA_1	570.0 / 419.0	3.46	d3-MeFOSAA	573.0 / 419.0	12583.40	250.00
NMeFOSAA_2	570.0 / 512.0	3.46	d3-MeFOSAA	573.0 / 419.0	12583.40	250.00
NEtFOSAA_1	584.0 / 419.0	3.62	d5-EtFOSAA	589.0 / 419.0	13337.56	250.00
NEtFOSAA_2	584.0 / 483.0	3.51	d5-EtFOSAA	589.0 / 419.0	13337.56	250.00

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:16:03 AM

Sample Name	CR546PB-FS(3)	**Injection Vial**	17
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:44:41	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	31822.59	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	31822.59	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	73723.53	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	73723.53	250.00
PFHpA_1	363.0 / 319.0	N/A	13C8-PFOA	421.0 / 376.0	89711.43	250.00
PFHpA_2	363.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	89711.43	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	26616.91	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	26616.91	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	89711.43	250.00
PFOA_2	413.0 / 169.0	2.55	13C8-PFOA	421.0 / 376.0	89711.43	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	94002.54	250.00
PFNA_2	463.0 / 219.0	2.96	13C9-PFNA	472.0 / 427.0	94002.54	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	27305.46	239.25
PFOS_2	499.0 / 99.0	2.95	13C8-PFOS	507.0 / 99.0	27305.46	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	92317.07	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	92317.07	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	91502.40	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	91502.40	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	89746.04	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	89746.04	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	73007.22	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	73007.22	250.00
PFTeDA_1	713.0 / 669.0	4.40	13C2-PFTeDA	715.0 / 670.0	73007.22	250.00
PFTeDA_2	713.0 / 169.0	4.41	13C2-PFTeDA	715.0 / 670.0	73007.22	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16140.14	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16140.14	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	16019.41	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	16019.41	250.00

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:16:06 AM

Sample Name	CR547LCS-FS(3)	**Injection Vial**	18
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:55:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	26731.61	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	26731.61	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	66244.74	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	66244.74	250.00
PFHpA_1	363.0 / 319.0	2.21	13C8-PFOA	421.0 / 376.0	77847.68	250.00
PFHpA_2	363.0 / 169.0	2.21	13C8-PFOA	421.0 / 376.0	77847.68	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	21628.15	236.50
PFHxS_2	399.0 / 99.0	2.23	13C3-PFHxS	402.0 / 99.0	21628.15	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	77847.68	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	77847.68	250.00
PFNA_1	463.0 / 419.0	2.95	13C9-PFNA	472.0 / 427.0	75722.29	250.00
PFNA_2	463.0 / 219.0	2.95	13C9-PFNA	472.0 / 427.0	75722.29	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	21407.33	239.25
PFOS_2	499.0 / 99.0	2.95	13C8-PFOS	507.0 / 99.0	21407.33	239.25
PFDA_1	513.0 / 469.0	3.31	13C6-PFDA	519.0 / 474.0	79148.39	250.00
PFDA_2	513.0 / 219.0	3.31	13C6-PFDA	519.0 / 474.0	79148.39	250.00
PFUnA_1	563.0 / 519.0	3.63	13C7-PFUnA	570.0 / 525.0	78319.70	250.00
PFUnA_2	563.0 / 269.0	3.63	13C7-PFUnA	570.0 / 525.0	78319.70	250.00
PFDoA_1	613.0 / 569.0	3.92	13C2-PFDoA	615.0 / 570.0	86084.18	250.00
PFDoA_2	613.0 / 319.0	3.92	13C2-PFDoA	615.0 / 570.0	86084.18	250.00
PFTrDA_1	663.0 / 619.0	4.17	13C2-PFTeDA	715.0 / 670.0	72048.78	250.00
PFTrDA_2	663.0 / 169.0	4.17	13C2-PFTeDA	715.0 / 670.0	72048.78	250.00
PFTeDA_1	713.0 / 669.0	4.40	13C2-PFTeDA	715.0 / 670.0	72048.78	250.00
PFTeDA_2	713.0 / 169.0	4.40	13C2-PFTeDA	715.0 / 670.0	72048.78	250.00
NMeFOSAA_1	570.0 / 419.0	3.46	d3-MeFOSAA	573.0 / 419.0	10866.93	250.00
NMeFOSAA_2	570.0 / 512.0	3.46	d3-MeFOSAA	573.0 / 419.0	10866.93	250.00
NEtFOSAA_1	584.0 / 419.0	3.63	d5-EtFOSAA	589.0 / 419.0	14791.81	250.00
NEtFOSAA_2	584.0 / 483.0	3.63	d5-EtFOSAA	589.0 / 419.0	14791.81	250.00

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Summary Internal Standard Report

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Sample Name	J7259-FS(3)	**Injection Vial**	19
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:06:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	32385.00	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	32385.00	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	67586.98	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	67586.98	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	79885.57	250.00
PFHpA_2	363.0 / 169.0	2.19	13C8-PFOA	421.0 / 376.0	79885.57	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	22723.69	236.50
PFHxS_2	399.0 / 99.0	2.22	13C3-PFHxS	402.0 / 99.0	22723.69	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	79885.57	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	79885.57	250.00
PFNA_1	463.0 / 419.0	2.97	13C9-PFNA	472.0 / 427.0	76544.84	250.00
PFNA_2	463.0 / 219.0	2.96	13C9-PFNA	472.0 / 427.0	76544.84	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	24382.96	239.25
PFOS_2	499.0 / 99.0	2.95	13C8-PFOS	507.0 / 99.0	24382.96	239.25
PFDA_1	513.0 / 469.0	3.30	13C6-PFDA	519.0 / 474.0	85822.64	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	85822.64	250.00
PFUnA_1	563.0 / 519.0	3.64	13C7-PFUnA	570.0 / 525.0	80790.81	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	80790.81	250.00
PFDoA_1	613.0 / 569.0	3.91	13C2-PFDoA	615.0 / 570.0	82774.29	250.00
PFDoA_2	613.0 / 319.0	3.91	13C2-PFDoA	615.0 / 570.0	82774.29	250.00
PFTrDA_1	663.0 / 619.0	4.18	13C2-PFTeDA	715.0 / 670.0	66867.77	250.00
PFTrDA_2	663.0 / 169.0	4.19	13C2-PFTeDA	715.0 / 670.0	66867.77	250.00
PFTeDA_1	713.0 / 669.0	4.40	13C2-PFTeDA	715.0 / 670.0	66867.77	250.00
PFTeDA_2	713.0 / 169.0	4.43	13C2-PFTeDA	715.0 / 670.0	66867.77	250.00
NMeFOSAA_1	570.0 / 419.0	3.44	d3-MeFOSAA	573.0 / 419.0	12598.14	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	12598.14	250.00
NEtFOSAA_1	584.0 / 419.0	3.63	d5-EtFOSAA	589.0 / 419.0	15412.21	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	15412.21	250.00

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Summary Internal Standard Report

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Sample Name	J7260-FS(3)	**Injection Vial**	20
Sample ID	080118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:17:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	28264.52	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	28264.52	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	54821.63	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	54821.63	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	65717.50	250.00
PFHpA_2	363.0 / 169.0	2.21	13C8-PFOA	421.0 / 376.0	65717.50	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	22731.98	236.50
PFHxS_2	399.0 / 99.0	2.22	13C3-PFHxS	402.0 / 99.0	22731.98	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	65717.50	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	65717.50	250.00
PFNA_1	463.0 / 419.0	2.95	13C9-PFNA	472.0 / 427.0	75051.89	250.00
PFNA_2	463.0 / 219.0	2.96	13C9-PFNA	472.0 / 427.0	75051.89	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	21373.35	239.25
PFOS_2	499.0 / 99.0	2.94	13C8-PFOS	507.0 / 99.0	21373.35	239.25
PFDA_1	513.0 / 469.0	3.29	13C6-PFDA	519.0 / 474.0	70177.02	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	70177.02	250.00
PFUnA_1	563.0 / 519.0	3.62	13C7-PFUnA	570.0 / 525.0	67724.45	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	67724.45	250.00
PFDoA_1	613.0 / 569.0	3.92	13C2-PFDoA	615.0 / 570.0	70219.70	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	70219.70	250.00
PFTrDA_1	663.0 / 619.0	4.17	13C2-PFTeDA	715.0 / 670.0	57961.72	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	57961.72	250.00
PFTeDA_1	713.0 / 669.0	4.39	13C2-PFTeDA	715.0 / 670.0	57961.72	250.00
PFTeDA_2	713.0 / 169.0	4.40	13C2-PFTeDA	715.0 / 670.0	57961.72	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	8356.93	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	8356.93	250.00
NEtFOSAA_1	584.0 / 419.0	3.65	d5-EtFOSAA	589.0 / 419.0	9901.86	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	9901.86	250.00

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Summary Internal Standard Report

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Sample Name	J7261-FS(3)	**Injection Vial**	21
Sample ID	080118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:28:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	28762.80	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	28762.80	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	61554.60	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	61554.60	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	73177.13	250.00
PFHpA_2	363.0 / 169.0	2.21	13C8-PFOA	421.0 / 376.0	73177.13	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	22050.13	236.50
PFHxS_2	399.0 / 99.0	2.22	13C3-PFHxS	402.0 / 99.0	22050.13	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	73177.13	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	73177.13	250.00
PFNA_1	463.0 / 419.0	2.93	13C9-PFNA	472.0 / 427.0	78002.49	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	78002.49	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	24317.86	239.25
PFOS_2	499.0 / 99.0	2.94	13C8-PFOS	507.0 / 99.0	24317.86	239.25
PFDA_1	513.0 / 469.0	3.29	13C6-PFDA	519.0 / 474.0	76714.97	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	76714.97	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	74613.34	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	74613.34	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	73482.91	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	73482.91	250.00
PFTrDA_1	663.0 / 619.0	4.16	13C2-PFTeDA	715.0 / 670.0	61350.27	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	61350.27	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	61350.27	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	61350.27	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	9623.22	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	9623.22	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	11664.08	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	11664.08	250.00

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Summary Internal Standard Report

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Sample Name	J7252-FS(3)	**Injection Vial**	22
Sample ID	073018-05	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:39:03	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	28751.92	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	28751.92	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	75973.73	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	75973.73	250.00
PFHpA_1	363.0 / 319.0	2.21	13C8-PFOA	421.0 / 376.0	90683.69	250.00
PFHpA_2	363.0 / 169.0	2.16	13C8-PFOA	421.0 / 376.0	90683.69	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	26765.72	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	26765.72	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	90683.69	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	90683.69	250.00
PFNA_1	463.0 / 419.0	2.95	13C9-PFNA	472.0 / 427.0	91668.96	250.00
PFNA_2	463.0 / 219.0	2.94	13C9-PFNA	472.0 / 427.0	91668.96	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	26247.38	239.25
PFOS_2	499.0 / 99.0	2.95	13C8-PFOS	507.0 / 99.0	26247.38	239.25
PFDA_1	513.0 / 469.0	3.32	13C6-PFDA	519.0 / 474.0	87695.76	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	87695.76	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	91035.18	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	91035.18	250.00
PFDoA_1	613.0 / 569.0	3.92	13C2-PFDoA	615.0 / 570.0	96449.71	250.00
PFDoA_2	613.0 / 319.0	3.87	13C2-PFDoA	615.0 / 570.0	96449.71	250.00
PFTrDA_1	663.0 / 619.0	4.17	13C2-PFTeDA	715.0 / 670.0	76187.03	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	76187.03	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	76187.03	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	76187.03	250.00
NMeFOSAA_1	570.0 / 419.0	3.46	d3-MeFOSAA	573.0 / 419.0	18214.95	250.00
NMeFOSAA_2	570.0 / 512.0	3.46	d3-MeFOSAA	573.0 / 419.0	18214.95	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17401.55	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17401.55	250.00

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Summary Internal Standard Report

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Sample Name	J7253-FS(3)	**Injection Vial**	23
Sample ID	073018-06	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:49:56	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	25091.01	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	25091.01	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	55311.89	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	55311.89	250.00
PFHpA_1	363.0 / 319.0	2.21	13C8-PFOA	421.0 / 376.0	68492.95	250.00
PFHpA_2	363.0 / 169.0	2.23	13C8-PFOA	421.0 / 376.0	68492.95	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	19714.66	236.50
PFHxS_2	399.0 / 99.0	2.24	13C3-PFHxS	402.0 / 99.0	19714.66	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	68492.95	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	68492.95	250.00
PFNA_1	463.0 / 419.0	2.93	13C9-PFNA	472.0 / 427.0	64828.78	250.00
PFNA_2	463.0 / 219.0	2.97	13C9-PFNA	472.0 / 427.0	64828.78	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	21927.57	239.25
PFOS_2	499.0 / 99.0	2.94	13C8-PFOS	507.0 / 99.0	21927.57	239.25
PFDA_1	513.0 / 469.0	3.29	13C6-PFDA	519.0 / 474.0	75545.96	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	75545.96	250.00
PFUnA_1	563.0 / 519.0	3.61	13C7-PFUnA	570.0 / 525.0	70349.90	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	70349.90	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	73441.20	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	73441.20	250.00
PFTrDA_1	663.0 / 619.0	4.16	13C2-PFTeDA	715.0 / 670.0	61283.40	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	61283.40	250.00
PFTeDA_1	713.0 / 669.0	4.40	13C2-PFTeDA	715.0 / 670.0	61283.40	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	61283.40	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	12536.38	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	12536.38	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	14984.88	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	14984.88	250.00

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Summary Internal Standard Report

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Sample Name	J7254-FS(3)	**Injection Vial**	24
Sample ID	073018-07	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:00:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	19118.42	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	19118.42	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	50130.53	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	50130.53	250.00
PFHpA_1	363.0 / 319.0	2.21	13C8-PFOA	421.0 / 376.0	58359.24	250.00
PFHpA_2	363.0 / 169.0	2.20	13C8-PFOA	421.0 / 376.0	58359.24	250.00
PFHxS_1	399.0 / 80.0	2.23	13C3-PFHxS	402.0 / 99.0	17139.42	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	17139.42	236.50
PFOA_1	413.0 / 369.0	2.58	13C8-PFOA	421.0 / 376.0	58359.24	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	58359.24	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	61008.84	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	61008.84	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	19683.84	239.25
PFOS_2	499.0 / 99.0	2.94	13C8-PFOS	507.0 / 99.0	19683.84	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	62815.32	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	62815.32	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	60789.03	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	60789.03	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	63240.54	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	63240.54	250.00
PFTrDA_1	663.0 / 619.0	4.16	13C2-PFTeDA	715.0 / 670.0	56522.05	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	56522.05	250.00
PFTeDA_1	713.0 / 669.0	4.39	13C2-PFTeDA	715.0 / 670.0	56522.05	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	56522.05	250.00
NMeFOSAA_1	570.0 / 419.0	3.46	d3-MeFOSAA	573.0 / 419.0	12667.16	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	12667.16	250.00
NEtFOSAA_1	584.0 / 419.0	3.64	d5-EtFOSAA	589.0 / 419.0	10754.10	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	10754.10	250.00

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Summary Internal Standard Report

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Sample Name	J7248-FS(4)	**Injection Vial**	27
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:33:23	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	24700.36	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	24700.36	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	68845.64	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	68845.64	250.00
PFHpA_1	363.0 / 319.0	2.19	13C8-PFOA	421.0 / 376.0	72638.84	250.00
PFHpA_2	363.0 / 169.0	2.14	13C8-PFOA	421.0 / 376.0	72638.84	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	22723.27	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	22723.27	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	72638.84	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	72638.84	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	76456.80	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	76456.80	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	19946.14	239.25
PFOS_2	499.0 / 99.0	2.94	13C8-PFOS	507.0 / 99.0	19946.14	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	79502.29	250.00
PFDA_2	513.0 / 219.0	3.31	13C6-PFDA	519.0 / 474.0	79502.29	250.00
PFUnA_1	563.0 / 519.0	3.62	13C7-PFUnA	570.0 / 525.0	76188.84	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	76188.84	250.00
PFDoA_1	613.0 / 569.0	3.91	13C2-PFDoA	615.0 / 570.0	77364.60	250.00
PFDoA_2	613.0 / 319.0	3.91	13C2-PFDoA	615.0 / 570.0	77364.60	250.00
PFTrDA_1	663.0 / 619.0	4.17	13C2-PFTeDA	715.0 / 670.0	63249.47	250.00
PFTrDA_2	663.0 / 169.0	4.17	13C2-PFTeDA	715.0 / 670.0	63249.47	250.00
PFTeDA_1	713.0 / 669.0	4.39	13C2-PFTeDA	715.0 / 670.0	63249.47	250.00
PFTeDA_2	713.0 / 169.0	4.38	13C2-PFTeDA	715.0 / 670.0	63249.47	250.00
NMeFOSAA_1	570.0 / 419.0	3.46	d3-MeFOSAA	573.0 / 419.0	14673.44	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14673.44	250.00
NEtFOSAA_1	584.0 / 419.0	3.62	d5-EtFOSAA	589.0 / 419.0	14592.28	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	14592.28	250.00

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Summary Internal Standard Report

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Sample Name	J7248-FS-D(5)	**Injection Vial**	28
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:44:16	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	37998.74	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	37998.74	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	90362.65	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	90362.65	250.00
PFHpA_1	363.0 / 319.0	2.19	13C8-PFOA	421.0 / 376.0	97301.25	250.00
PFHpA_2	363.0 / 169.0	2.15	13C8-PFOA	421.0 / 376.0	97301.25	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	23739.60	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	23739.60	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	97301.25	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	97301.25	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	89472.04	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	89472.04	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	29027.53	239.25
PFOS_2	499.0 / 99.0	2.94	13C8-PFOS	507.0 / 99.0	29027.53	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	93667.85	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	93667.85	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	88462.43	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	88462.43	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	100386.64	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	100386.64	250.00
PFTrDA_1	663.0 / 619.0	4.17	13C2-PFTeDA	715.0 / 670.0	87171.84	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	87171.84	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	87171.84	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	87171.84	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17968.89	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17968.89	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18225.79	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18225.79	250.00

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Summary Internal Standard Report

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Sample Name	J7249-FS(4)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:55:09	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	15360.20	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	15360.20	232.25
PFHxA_1	313.0 / 269.0	1.82	13C5-PFHxA	318.0 / 273.0	29175.35	250.00
PFHxA_2	313.0 / 119.0	1.82	13C5-PFHxA	318.0 / 273.0	29175.35	250.00
PFHpA_1	363.0 / 319.0	2.18	13C8-PFOA	421.0 / 376.0	58544.38	250.00
PFHpA_2	363.0 / 169.0	2.15	13C8-PFOA	421.0 / 376.0	58544.38	250.00
PFHxS_1	399.0 / 80.0	2.20	13C3-PFHxS	402.0 / 99.0	21608.58	236.50
PFHxS_2	399.0 / 99.0	2.20	13C3-PFHxS	402.0 / 99.0	21608.58	236.50
PFOA_1	413.0 / 369.0	2.55	13C8-PFOA	421.0 / 376.0	58544.38	250.00
PFOA_2	413.0 / 169.0	2.56	13C8-PFOA	421.0 / 376.0	58544.38	250.00
PFNA_1	463.0 / 419.0	2.93	13C9-PFNA	472.0 / 427.0	85728.28	250.00
PFNA_2	463.0 / 219.0	2.94	13C9-PFNA	472.0 / 427.0	85728.28	250.00
PFOS_1	499.0 / 80.0	2.81	13C8-PFOS	507.0 / 99.0	22211.96	239.25
PFOS_2	499.0 / 99.0	2.88	13C8-PFOS	507.0 / 99.0	22211.96	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	94610.23	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	94610.23	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	96635.16	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	96635.16	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	95080.37	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	95080.37	250.00
PFTrDA_1	663.0 / 619.0	4.16	13C2-PFTeDA	715.0 / 670.0	77296.15	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	77296.15	250.00
PFTeDA_1	713.0 / 669.0	4.39	13C2-PFTeDA	715.0 / 670.0	77296.15	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	77296.15	250.00
NMeFOSAA_1	570.0 / 419.0	3.45	d3-MeFOSAA	573.0 / 419.0	17485.21	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17485.21	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18116.98	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18116.98	250.00

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Summary Internal Standard Report

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Sample Name	J7249-FS-D(5)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:06:01	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	44551.71	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	44551.71	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	102783.56	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	102783.56	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	103133.86	250.00
PFHpA_2	363.0 / 169.0	2.16	13C8-PFOA	421.0 / 376.0	103133.86	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	31165.48	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	31165.48	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	103133.86	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	103133.86	250.00
PFNA_1	463.0 / 419.0	2.93	13C9-PFNA	472.0 / 427.0	107221.02	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	107221.02	250.00
PFOS_1	499.0 / 80.0	2.81	13C8-PFOS	507.0 / 99.0	26897.78	239.25
PFOS_2	499.0 / 99.0	2.88	13C8-PFOS	507.0 / 99.0	26897.78	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	103631.57	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	103631.57	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	100360.39	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	100360.39	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	115864.83	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	115864.83	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	95345.95	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	95345.95	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	95345.95	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	95345.95	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18821.46	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18821.46	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	22076.70	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	22076.70	250.00

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Summary Internal Standard Report

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Printed: 29/08/2018 10:17:02 AM

Sample Name	J7249MS-FS(4)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:16:53	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	11559.74	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	11559.74	232.25
PFHxA_1	313.0 / 269.0	1.83	13C5-PFHxA	318.0 / 273.0	25529.31	250.00
PFHxA_2	313.0 / 119.0	1.83	13C5-PFHxA	318.0 / 273.0	25529.31	250.00
PFHpA_1	363.0 / 319.0	2.19	13C8-PFOA	421.0 / 376.0	44875.93	250.00
PFHpA_2	363.0 / 169.0	2.16	13C8-PFOA	421.0 / 376.0	44875.93	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	14281.36	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	14281.36	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	44875.93	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	44875.93	250.00
PFNA_1	463.0 / 419.0	2.95	13C9-PFNA	472.0 / 427.0	59422.21	250.00
PFNA_2	463.0 / 219.0	2.94	13C9-PFNA	472.0 / 427.0	59422.21	250.00
PFOS_1	499.0 / 80.0	2.84	13C8-PFOS	507.0 / 99.0	14825.18	239.25
PFOS_2	499.0 / 99.0	2.93	13C8-PFOS	507.0 / 99.0	14825.18	239.25
PFDA_1	513.0 / 469.0	3.29	13C6-PFDA	519.0 / 474.0	65301.27	250.00
PFDA_2	513.0 / 219.0	3.29	13C6-PFDA	519.0 / 474.0	65301.27	250.00
PFUnA_1	563.0 / 519.0	3.62	13C7-PFUnA	570.0 / 525.0	63851.99	250.00
PFUnA_2	563.0 / 269.0	3.61	13C7-PFUnA	570.0 / 525.0	63851.99	250.00
PFDoA_1	613.0 / 569.0	3.91	13C2-PFDoA	615.0 / 570.0	62360.38	250.00
PFDoA_2	613.0 / 319.0	3.90	13C2-PFDoA	615.0 / 570.0	62360.38	250.00
PFTrDA_1	663.0 / 619.0	4.16	13C2-PFTeDA	715.0 / 670.0	41573.28	250.00
PFTrDA_2	663.0 / 169.0	4.16	13C2-PFTeDA	715.0 / 670.0	41573.28	250.00
PFTeDA_1	713.0 / 669.0	4.39	13C2-PFTeDA	715.0 / 670.0	41573.28	250.00
PFTeDA_2	713.0 / 169.0	4.39	13C2-PFTeDA	715.0 / 670.0	41573.28	250.00
NMeFOSAA_1	570.0 / 419.0	3.45	d3-MeFOSAA	573.0 / 419.0	9472.05	250.00
NMeFOSAA_2	570.0 / 512.0	3.45	d3-MeFOSAA	573.0 / 419.0	9472.05	250.00
NEtFOSAA_1	584.0 / 419.0	3.61	d5-EtFOSAA	589.0 / 419.0	11786.02	250.00
NEtFOSAA_2	584.0 / 483.0	3.61	d5-EtFOSAA	589.0 / 419.0	11786.02	250.00

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Summary Internal Standard Report

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Sample Name	J7249MS-FS-D(5)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:27:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	38325.27	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	38325.27	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	90182.99	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	90182.99	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	89733.49	250.00
PFHpA_2	363.0 / 169.0	2.16	13C8-PFOA	421.0 / 376.0	89733.49	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	28557.77	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	28557.77	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	89733.49	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	89733.49	250.00
PFNA_1	463.0 / 419.0	2.94	13C9-PFNA	472.0 / 427.0	87525.53	250.00
PFNA_2	463.0 / 219.0	2.94	13C9-PFNA	472.0 / 427.0	87525.53	250.00
PFOS_1	499.0 / 80.0	2.85	13C8-PFOS	507.0 / 99.0	26518.80	239.25
PFOS_2	499.0 / 99.0	2.91	13C8-PFOS	507.0 / 99.0	26518.80	239.25
PFDA_1	513.0 / 469.0	3.29	13C6-PFDA	519.0 / 474.0	84225.51	250.00
PFDA_2	513.0 / 219.0	3.29	13C6-PFDA	519.0 / 474.0	84225.51	250.00
PFUnA_1	563.0 / 519.0	3.61	13C7-PFUnA	570.0 / 525.0	90671.76	250.00
PFUnA_2	563.0 / 269.0	3.61	13C7-PFUnA	570.0 / 525.0	90671.76	250.00
PFDoA_1	613.0 / 569.0	3.90	13C2-PFDoA	615.0 / 570.0	98806.44	250.00
PFDoA_2	613.0 / 319.0	3.90	13C2-PFDoA	615.0 / 570.0	98806.44	250.00
PFTrDA_1	663.0 / 619.0	4.16	13C2-PFTeDA	715.0 / 670.0	81151.84	250.00
PFTrDA_2	663.0 / 169.0	4.16	13C2-PFTeDA	715.0 / 670.0	81151.84	250.00
PFTeDA_1	713.0 / 669.0	4.39	13C2-PFTeDA	715.0 / 670.0	81151.84	250.00
PFTeDA_2	713.0 / 169.0	4.39	13C2-PFTeDA	715.0 / 670.0	81151.84	250.00
NMeFOSAA_1	570.0 / 419.0	3.45	d3-MeFOSAA	573.0 / 419.0	16384.45	250.00
NMeFOSAA_2	570.0 / 512.0	3.45	d3-MeFOSAA	573.0 / 419.0	16384.45	250.00
NEtFOSAA_1	584.0 / 419.0	3.61	d5-EtFOSAA	589.0 / 419.0	18443.45	250.00
NEtFOSAA_2	584.0 / 483.0	3.61	d5-EtFOSAA	589.0 / 419.0	18443.45	250.00

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Summary Internal Standard Report

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Sample Name	J7249MSD-FS(4)	**Injection Vial**	33
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:38:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	13994.63	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	13994.63	232.25
PFHxA_1	313.0 / 269.0	1.83	13C5-PFHxA	318.0 / 273.0	32651.70	250.00
PFHxA_2	313.0 / 119.0	1.83	13C5-PFHxA	318.0 / 273.0	32651.70	250.00
PFHpA_1	363.0 / 319.0	2.19	13C8-PFOA	421.0 / 376.0	49302.98	250.00
PFHpA_2	363.0 / 169.0	2.16	13C8-PFOA	421.0 / 376.0	49302.98	250.00
PFHxS_1	399.0 / 80.0	2.20	13C3-PFHxS	402.0 / 99.0	15931.25	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	15931.25	236.50
PFOA_1	413.0 / 369.0	2.56	13C8-PFOA	421.0 / 376.0	49302.98	250.00
PFOA_2	413.0 / 169.0	2.56	13C8-PFOA	421.0 / 376.0	49302.98	250.00
PFNA_1	463.0 / 419.0	2.94	13C9-PFNA	472.0 / 427.0	73268.03	250.00
PFNA_2	463.0 / 219.0	2.94	13C9-PFNA	472.0 / 427.0	73268.03	250.00
PFOS_1	499.0 / 80.0	2.84	13C8-PFOS	507.0 / 99.0	18351.86	239.25
PFOS_2	499.0 / 99.0	2.92	13C8-PFOS	507.0 / 99.0	18351.86	239.25
PFDA_1	513.0 / 469.0	3.29	13C6-PFDA	519.0 / 474.0	77250.13	250.00
PFDA_2	513.0 / 219.0	3.29	13C6-PFDA	519.0 / 474.0	77250.13	250.00
PFUnA_1	563.0 / 519.0	3.61	13C7-PFUnA	570.0 / 525.0	70915.10	250.00
PFUnA_2	563.0 / 269.0	3.61	13C7-PFUnA	570.0 / 525.0	70915.10	250.00
PFDoA_1	613.0 / 569.0	3.90	13C2-PFDoA	615.0 / 570.0	74642.98	250.00
PFDoA_2	613.0 / 319.0	3.90	13C2-PFDoA	615.0 / 570.0	74642.98	250.00
PFTrDA_1	663.0 / 619.0	4.16	13C2-PFTeDA	715.0 / 670.0	58415.49	250.00
PFTrDA_2	663.0 / 169.0	4.16	13C2-PFTeDA	715.0 / 670.0	58415.49	250.00
PFTeDA_1	713.0 / 669.0	4.39	13C2-PFTeDA	715.0 / 670.0	58415.49	250.00
PFTeDA_2	713.0 / 169.0	4.39	13C2-PFTeDA	715.0 / 670.0	58415.49	250.00
NMeFOSAA_1	570.0 / 419.0	3.45	d3-MeFOSAA	573.0 / 419.0	13469.57	250.00
NMeFOSAA_2	570.0 / 512.0	3.45	d3-MeFOSAA	573.0 / 419.0	13469.57	250.00
NEtFOSAA_1	584.0 / 419.0	3.61	d5-EtFOSAA	589.0 / 419.0	14975.19	250.00
NEtFOSAA_2	584.0 / 483.0	3.61	d5-EtFOSAA	589.0 / 419.0	14975.19	250.00

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Summary Internal Standard Report

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Sample Name	J7248MSD-FS-D(5)	**Injection Vial**	34
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:49:33	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	38137.05	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	38137.05	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	91367.80	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	91367.80	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	90243.01	250.00
PFHpA_2	363.0 / 169.0	2.17	13C8-PFOA	421.0 / 376.0	90243.01	250.00
PFHxS_1	399.0 / 80.0	2.22	13C3-PFHxS	402.0 / 99.0	26342.75	236.50
PFHxS_2	399.0 / 99.0	2.22	13C3-PFHxS	402.0 / 99.0	26342.75	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	90243.01	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	90243.01	250.00
PFNA_1	463.0 / 419.0	2.94	13C9-PFNA	472.0 / 427.0	97809.14	250.00
PFNA_2	463.0 / 219.0	2.95	13C9-PFNA	472.0 / 427.0	97809.14	250.00
PFOS_1	499.0 / 80.0	2.84	13C8-PFOS	507.0 / 99.0	26716.28	239.25
PFOS_2	499.0 / 99.0	2.92	13C8-PFOS	507.0 / 99.0	26716.28	239.25
PFDA_1	513.0 / 469.0	3.30	13C6-PFDA	519.0 / 474.0	95788.02	250.00
PFDA_2	513.0 / 219.0	3.29	13C6-PFDA	519.0 / 474.0	95788.02	250.00
PFUnA_1	563.0 / 519.0	3.61	13C7-PFUnA	570.0 / 525.0	97243.22	250.00
PFUnA_2	563.0 / 269.0	3.62	13C7-PFUnA	570.0 / 525.0	97243.22	250.00
PFDoA_1	613.0 / 569.0	3.90	13C2-PFDoA	615.0 / 570.0	103990.96	250.00
PFDoA_2	613.0 / 319.0	3.90	13C2-PFDoA	615.0 / 570.0	103990.96	250.00
PFTrDA_1	663.0 / 619.0	4.16	13C2-PFTeDA	715.0 / 670.0	91082.12	250.00
PFTrDA_2	663.0 / 169.0	4.16	13C2-PFTeDA	715.0 / 670.0	91082.12	250.00
PFTeDA_1	713.0 / 669.0	4.39	13C2-PFTeDA	715.0 / 670.0	91082.12	250.00
PFTeDA_2	713.0 / 169.0	4.39	13C2-PFTeDA	715.0 / 670.0	91082.12	250.00
NMeFOSAA_1	570.0 / 419.0	3.45	d3-MeFOSAA	573.0 / 419.0	17653.07	250.00
NMeFOSAA_2	570.0 / 512.0	3.45	d3-MeFOSAA	573.0 / 419.0	17653.07	250.00
NEtFOSAA_1	584.0 / 419.0	3.61	d5-EtFOSAA	589.0 / 419.0	19261.84	250.00
NEtFOSAA_2	584.0 / 483.0	3.61	d5-EtFOSAA	589.0 / 419.0	19261.84	250.00

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Summary Internal Standard Report

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Sample Name	J7250-FS(4)	**Injection Vial**	35
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:00:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	16507.23	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	16507.23	232.25
PFHxA_1	313.0 / 269.0	1.83	13C5-PFHxA	318.0 / 273.0	50257.12	250.00
PFHxA_2	313.0 / 119.0	1.83	13C5-PFHxA	318.0 / 273.0	50257.12	250.00
PFHpA_1	363.0 / 319.0	2.19	13C8-PFOA	421.0 / 376.0	64446.15	250.00
PFHpA_2	363.0 / 169.0	2.17	13C8-PFOA	421.0 / 376.0	64446.15	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	20944.67	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	20944.67	236.50
PFOA_1	413.0 / 369.0	2.56	13C8-PFOA	421.0 / 376.0	64446.15	250.00
PFOA_2	413.0 / 169.0	2.56	13C8-PFOA	421.0 / 376.0	64446.15	250.00
PFNA_1	463.0 / 419.0	2.93	13C9-PFNA	472.0 / 427.0	74167.21	250.00
PFNA_2	463.0 / 219.0	2.93	13C9-PFNA	472.0 / 427.0	74167.21	250.00
PFOS_1	499.0 / 80.0	2.89	13C8-PFOS	507.0 / 99.0	21157.10	239.25
PFOS_2	499.0 / 99.0	2.93	13C8-PFOS	507.0 / 99.0	21157.10	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	80481.36	250.00
PFDA_2	513.0 / 219.0	3.26	13C6-PFDA	519.0 / 474.0	80481.36	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	81312.17	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	81312.17	250.00
PFDoA_1	613.0 / 569.0	3.90	13C2-PFDoA	615.0 / 570.0	87835.72	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	87835.72	250.00
PFTrDA_1	663.0 / 619.0	4.15	13C2-PFTeDA	715.0 / 670.0	79865.25	250.00
PFTrDA_2	663.0 / 169.0	4.14	13C2-PFTeDA	715.0 / 670.0	79865.25	250.00
PFTeDA_1	713.0 / 669.0	4.39	13C2-PFTeDA	715.0 / 670.0	79865.25	250.00
PFTeDA_2	713.0 / 169.0	4.36	13C2-PFTeDA	715.0 / 670.0	79865.25	250.00
NMeFOSAA_1	570.0 / 419.0	3.43	d3-MeFOSAA	573.0 / 419.0	15416.24	250.00
NMeFOSAA_2	570.0 / 512.0	3.49	d3-MeFOSAA	573.0 / 419.0	15416.24	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	15490.61	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	15490.61	250.00

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Summary Internal Standard Report

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Sample Name	J7250-FS-D(5)	**Injection Vial**	36
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:11:17	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	40727.29	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	40727.29	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	89159.98	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	89159.98	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	102710.01	250.00
PFHpA_2	363.0 / 169.0	2.17	13C8-PFOA	421.0 / 376.0	102710.01	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	27857.45	236.50
PFHxS_2	399.0 / 99.0	2.22	13C3-PFHxS	402.0 / 99.0	27857.45	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	102710.01	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	102710.01	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	100709.41	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	100709.41	250.00
PFOS_1	499.0 / 80.0	2.88	13C8-PFOS	507.0 / 99.0	27254.04	239.25
PFOS_2	499.0 / 99.0	2.94	13C8-PFOS	507.0 / 99.0	27254.04	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	100731.45	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	100731.45	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	96116.11	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	96116.11	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	110453.82	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	110453.82	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	92237.60	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	92237.60	250.00
PFTeDA_1	713.0 / 669.0	4.38	13C2-PFTeDA	715.0 / 670.0	92237.60	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	92237.60	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17660.15	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17660.15	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19995.76	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19995.76	250.00

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Summary Internal Standard Report

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Sample Name	J7251-FS(4)	**Injection Vial**	39
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:43:54	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	73886.44	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	73886.44	232.25
PFHxA_1	313.0 / 269.0	1.83	13C5-PFHxA	318.0 / 273.0	41567.32	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	41567.32	250.00
PFHpA_1	363.0 / 319.0	2.19	13C8-PFOA	421.0 / 376.0	57228.22	250.00
PFHpA_2	363.0 / 169.0	2.16	13C8-PFOA	421.0 / 376.0	57228.22	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	20921.15	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	20921.15	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	57228.22	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	57228.22	250.00
PFNA_1	463.0 / 419.0	2.94	13C9-PFNA	472.0 / 427.0	64982.88	250.00
PFNA_2	463.0 / 219.0	2.94	13C9-PFNA	472.0 / 427.0	64982.88	250.00
PFOS_1	499.0 / 80.0	2.92	13C8-PFOS	507.0 / 99.0	16856.71	239.25
PFOS_2	499.0 / 99.0	2.94	13C8-PFOS	507.0 / 99.0	16856.71	239.25
PFDA_1	513.0 / 469.0	3.30	13C6-PFDA	519.0 / 474.0	72632.29	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	72632.29	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	68275.00	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	68275.00	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	76829.09	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	76829.09	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	59457.44	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	59457.44	250.00
PFTeDA_1	713.0 / 669.0	4.37	13C2-PFTeDA	715.0 / 670.0	59457.44	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	59457.44	250.00
NMeFOSAA_1	570.0 / 419.0	3.43	d3-MeFOSAA	573.0 / 419.0	12370.70	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	12370.70	250.00
NEtFOSAA_1	584.0 / 419.0	3.61	d5-EtFOSAA	589.0 / 419.0	14431.35	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	14431.35	250.00

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Summary Internal Standard Report

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Sample Name	J7251-FS-D(5)	**Injection Vial**	40
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:54:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	44439.94	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	44439.94	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	85446.78	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	85446.78	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	86721.87	250.00
PFHpA_2	363.0 / 169.0	2.15	13C8-PFOA	421.0 / 376.0	86721.87	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	25930.62	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	25930.62	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	86721.87	250.00
PFOA_2	413.0 / 169.0	2.57	13C8-PFOA	421.0 / 376.0	86721.87	250.00
PFNA_1	463.0 / 419.0	2.93	13C9-PFNA	472.0 / 427.0	88772.06	250.00
PFNA_2	463.0 / 219.0	2.95	13C9-PFNA	472.0 / 427.0	88772.06	250.00
PFOS_1	499.0 / 80.0	2.92	13C8-PFOS	507.0 / 99.0	24483.74	239.25
PFOS_2	499.0 / 99.0	2.93	13C8-PFOS	507.0 / 99.0	24483.74	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	90421.14	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	90421.14	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	89385.91	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	89385.91	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	97385.27	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	97385.27	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	79024.22	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79024.22	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	79024.22	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79024.22	250.00
NMeFOSAA_1	570.0 / 419.0	3.46	d3-MeFOSAA	573.0 / 419.0	13237.21	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	13237.21	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18604.28	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18604.28	250.00

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Summary Internal Standard Report

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Sample Name	J7255-FS(4)	**Injection Vial**	41
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:05:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	12881.24	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	12881.24	232.25
PFHxA_1	313.0 / 269.0	1.83	13C5-PFHxA	318.0 / 273.0	25321.34	250.00
PFHxA_2	313.0 / 119.0	1.83	13C5-PFHxA	318.0 / 273.0	25321.34	250.00
PFHpA_1	363.0 / 319.0	2.19	13C8-PFOA	421.0 / 376.0	46696.34	250.00
PFHpA_2	363.0 / 169.0	2.18	13C8-PFOA	421.0 / 376.0	46696.34	250.00
PFHxS_1	399.0 / 80.0	2.20	13C3-PFHxS	402.0 / 99.0	18535.19	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	18535.19	236.50
PFOA_1	413.0 / 369.0	2.56	13C8-PFOA	421.0 / 376.0	46696.34	250.00
PFOA_2	413.0 / 169.0	2.56	13C8-PFOA	421.0 / 376.0	46696.34	250.00
PFNA_1	463.0 / 419.0	2.94	13C9-PFNA	472.0 / 427.0	54241.67	250.00
PFNA_2	463.0 / 219.0	2.94	13C9-PFNA	472.0 / 427.0	54241.67	250.00
PFOS_1	499.0 / 80.0	2.93	13C8-PFOS	507.0 / 99.0	17469.57	239.25
PFOS_2	499.0 / 99.0	2.93	13C8-PFOS	507.0 / 99.0	17469.57	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	62742.62	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	62742.62	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	67590.33	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	67590.33	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	72913.92	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	72913.92	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	50148.31	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	50148.31	250.00
PFTeDA_1	713.0 / 669.0	4.39	13C2-PFTeDA	715.0 / 670.0	50148.31	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	50148.31	250.00
NMeFOSAA_1	570.0 / 419.0	3.44	d3-MeFOSAA	573.0 / 419.0	11203.49	250.00
NMeFOSAA_2	570.0 / 512.0	3.45	d3-MeFOSAA	573.0 / 419.0	11203.49	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	15752.01	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	15752.01	250.00

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Summary Internal Standard Report

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Sample Name	J7255-FS-D(5)	**Injection Vial**	42
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:16:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	42242.50	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	42242.50	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	96436.45	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	96436.45	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	106508.97	250.00
PFHpA_2	363.0 / 169.0	2.19	13C8-PFOA	421.0 / 376.0	106508.97	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	28333.58	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	28333.58	236.50
PFOA_1	413.0 / 369.0	2.57	13C8-PFOA	421.0 / 376.0	106508.97	250.00
PFOA_2	413.0 / 169.0	2.56	13C8-PFOA	421.0 / 376.0	106508.97	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	112881.41	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	112881.41	250.00
PFOS_1	499.0 / 80.0	2.93	13C8-PFOS	507.0 / 99.0	27001.06	239.25
PFOS_2	499.0 / 99.0	2.93	13C8-PFOS	507.0 / 99.0	27001.06	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	98744.20	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	98744.20	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	108436.92	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	108436.92	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	111961.33	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	111961.33	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	91665.87	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	91665.87	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	91665.87	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	91665.87	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	21740.89	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	21740.89	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	23862.13	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	23862.13	250.00

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Summary Internal Standard Report

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Sample Name	J7256-FS(4)	**Injection Vial**	43
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:27:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	16826.69	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	16826.69	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	49262.01	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	49262.01	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	71741.63	250.00
PFHpA_2	363.0 / 169.0	2.19	13C8-PFOA	421.0 / 376.0	71741.63	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	21817.41	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	21817.41	236.50
PFOA_1	413.0 / 369.0	2.56	13C8-PFOA	421.0 / 376.0	71741.63	250.00
PFOA_2	413.0 / 169.0	2.56	13C8-PFOA	421.0 / 376.0	71741.63	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	76107.24	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	76107.24	250.00
PFOS_1	499.0 / 80.0	2.93	13C8-PFOS	507.0 / 99.0	23155.93	239.25
PFOS_2	499.0 / 99.0	2.93	13C8-PFOS	507.0 / 99.0	23155.93	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	79138.15	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	79138.15	250.00
PFUnA_1	563.0 / 519.0	3.62	13C7-PFUnA	570.0 / 525.0	83945.55	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	83945.55	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	78958.79	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	78958.79	250.00
PFTrDA_1	663.0 / 619.0	4.15	13C2-PFTeDA	715.0 / 670.0	59704.61	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	59704.61	250.00
PFTeDA_1	713.0 / 669.0	4.38	13C2-PFTeDA	715.0 / 670.0	59704.61	250.00
PFTeDA_2	713.0 / 169.0	4.40	13C2-PFTeDA	715.0 / 670.0	59704.61	250.00
NMeFOSAA_1	570.0 / 419.0	3.45	d3-MeFOSAA	573.0 / 419.0	13840.72	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	13840.72	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	14764.00	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	14764.00	250.00

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Summary Internal Standard Report

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Sample Name	J7256-FS-D(5)	**Injection Vial**	44
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:38:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	42229.38	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	42229.38	232.25
PFHxA_1	313.0 / 269.0	1.83	13C5-PFHxA	318.0 / 273.0	97472.55	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	97472.55	250.00
PFHpA_1	363.0 / 319.0	2.19	13C8-PFOA	421.0 / 376.0	103367.93	250.00
PFHpA_2	363.0 / 169.0	2.18	13C8-PFOA	421.0 / 376.0	103367.93	250.00
PFHxS_1	399.0 / 80.0	2.20	13C3-PFHxS	402.0 / 99.0	31037.30	236.50
PFHxS_2	399.0 / 99.0	2.20	13C3-PFHxS	402.0 / 99.0	31037.30	236.50
PFOA_1	413.0 / 369.0	2.55	13C8-PFOA	421.0 / 376.0	103367.93	250.00
PFOA_2	413.0 / 169.0	2.55	13C8-PFOA	421.0 / 376.0	103367.93	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	104347.42	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	104347.42	250.00
PFOS_1	499.0 / 80.0	2.92	13C8-PFOS	507.0 / 99.0	34316.93	239.25
PFOS_2	499.0 / 99.0	2.91	13C8-PFOS	507.0 / 99.0	34316.93	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	98005.58	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	98005.58	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	104339.89	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	104339.89	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	111601.57	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	111601.57	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	95008.82	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	95008.82	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	95008.82	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	95008.82	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18505.88	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18505.88	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20174.11	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20174.11	250.00

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Summary Internal Standard Report

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Sample Name	J7257-FS(4)	**Injection Vial**	45
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:49:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	16334.70	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	16334.70	232.25
PFHxA_1	313.0 / 269.0	1.83	13C5-PFHxA	318.0 / 273.0	33275.41	250.00
PFHxA_2	313.0 / 119.0	1.83	13C5-PFHxA	318.0 / 273.0	33275.41	250.00
PFHpA_1	363.0 / 319.0	2.19	13C8-PFOA	421.0 / 376.0	58955.41	250.00
PFHpA_2	363.0 / 169.0	2.19	13C8-PFOA	421.0 / 376.0	58955.41	250.00
PFHxS_1	399.0 / 80.0	2.20	13C3-PFHxS	402.0 / 99.0	17496.68	236.50
PFHxS_2	399.0 / 99.0	2.20	13C3-PFHxS	402.0 / 99.0	17496.68	236.50
PFOA_1	413.0 / 369.0	2.55	13C8-PFOA	421.0 / 376.0	58955.41	250.00
PFOA_2	413.0 / 169.0	2.55	13C8-PFOA	421.0 / 376.0	58955.41	250.00
PFNA_1	463.0 / 419.0	2.92	13C9-PFNA	472.0 / 427.0	62055.84	250.00
PFNA_2	463.0 / 219.0	2.93	13C9-PFNA	472.0 / 427.0	62055.84	250.00
PFOS_1	499.0 / 80.0	2.82	13C8-PFOS	507.0 / 99.0	17020.19	239.25
PFOS_2	499.0 / 99.0	2.91	13C8-PFOS	507.0 / 99.0	17020.19	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	60982.35	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	60982.35	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	61674.56	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	61674.56	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	65608.65	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	65608.65	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	50257.44	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	50257.44	250.00
PFTeDA_1	713.0 / 669.0	4.37	13C2-PFTeDA	715.0 / 670.0	50257.44	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	50257.44	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	13013.40	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	13013.40	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	14583.21	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	14583.21	250.00

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Summary Internal Standard Report

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Sample Name	J7257-FS-D(5)	**Injection Vial**	46
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:00:02	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	33874.35	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	33874.35	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	84735.16	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	84735.16	250.00
PFHpA_1	363.0 / 319.0	2.20	13C8-PFOA	421.0 / 376.0	84626.22	250.00
PFHpA_2	363.0 / 169.0	2.19	13C8-PFOA	421.0 / 376.0	84626.22	250.00
PFHxS_1	399.0 / 80.0	2.21	13C3-PFHxS	402.0 / 99.0	25417.62	236.50
PFHxS_2	399.0 / 99.0	2.21	13C3-PFHxS	402.0 / 99.0	25417.62	236.50
PFOA_1	413.0 / 369.0	2.56	13C8-PFOA	421.0 / 376.0	84626.22	250.00
PFOA_2	413.0 / 169.0	2.56	13C8-PFOA	421.0 / 376.0	84626.22	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	77955.78	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	77955.78	250.00
PFOS_1	499.0 / 80.0	2.77	13C8-PFOS	507.0 / 99.0	26093.31	239.25
PFOS_2	499.0 / 99.0	2.87	13C8-PFOS	507.0 / 99.0	26093.31	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	83421.65	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	83421.65	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	80626.34	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	80626.34	250.00
PFDoA_1	613.0 / 569.0	3.90	13C2-PFDoA	615.0 / 570.0	86688.84	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	86688.84	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	72977.10	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	72977.10	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	72977.10	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	72977.10	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15897.47	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15897.47	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17461.32	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17461.32	250.00

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Summary Internal Standard Report

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Sample Name	J7258-FS(4)	**Injection Vial**	47
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:10:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	14535.59	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	14535.59	232.25
PFHxA_1	313.0 / 269.0	1.82	13C5-PFHxA	318.0 / 273.0	37481.46	250.00
PFHxA_2	313.0 / 119.0	1.83	13C5-PFHxA	318.0 / 273.0	37481.46	250.00
PFHpA_1	363.0 / 319.0	2.18	13C8-PFOA	421.0 / 376.0	45397.15	250.00
PFHpA_2	363.0 / 169.0	2.17	13C8-PFOA	421.0 / 376.0	45397.15	250.00
PFHxS_1	399.0 / 80.0	2.20	13C3-PFHxS	402.0 / 99.0	15713.15	236.50
PFHxS_2	399.0 / 99.0	2.20	13C3-PFHxS	402.0 / 99.0	15713.15	236.50
PFOA_1	413.0 / 369.0	2.55	13C8-PFOA	421.0 / 376.0	45397.15	250.00
PFOA_2	413.0 / 169.0	2.55	13C8-PFOA	421.0 / 376.0	45397.15	250.00
PFNA_1	463.0 / 419.0	2.92	13C9-PFNA	472.0 / 427.0	53962.82	250.00
PFNA_2	463.0 / 219.0	2.92	13C9-PFNA	472.0 / 427.0	53962.82	250.00
PFOS_1	499.0 / 80.0	2.80	13C8-PFOS	507.0 / 99.0	14432.05	239.25
PFOS_2	499.0 / 99.0	2.89	13C8-PFOS	507.0 / 99.0	14432.05	239.25
PFDA_1	513.0 / 469.0	3.29	13C6-PFDA	519.0 / 474.0	62890.81	250.00
PFDA_2	513.0 / 219.0	3.28	13C6-PFDA	519.0 / 474.0	62890.81	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	62324.65	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	62324.65	250.00
PFDoA_1	613.0 / 569.0	3.89	13C2-PFDoA	615.0 / 570.0	69281.70	250.00
PFDoA_2	613.0 / 319.0	3.92	13C2-PFDoA	615.0 / 570.0	69281.70	250.00
PFTrDA_1	663.0 / 619.0	4.14	13C2-PFTeDA	715.0 / 670.0	46166.79	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	46166.79	250.00
PFTeDA_1	713.0 / 669.0	4.38	13C2-PFTeDA	715.0 / 670.0	46166.79	250.00
PFTeDA_2	713.0 / 169.0	4.39	13C2-PFTeDA	715.0 / 670.0	46166.79	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	10610.76	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	10610.76	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	12399.30	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	12399.30	250.00

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Summary Internal Standard Report

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Sample Name	J7258-FS-D(5)	**Injection Vial**	48
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:21:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	40730.79	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	40730.79	232.25
PFHxA_1	313.0 / 269.0	1.83	13C5-PFHxA	318.0 / 273.0	93200.21	250.00
PFHxA_2	313.0 / 119.0	1.83	13C5-PFHxA	318.0 / 273.0	93200.21	250.00
PFHpA_1	363.0 / 319.0	2.19	13C8-PFOA	421.0 / 376.0	98865.02	250.00
PFHpA_2	363.0 / 169.0	2.18	13C8-PFOA	421.0 / 376.0	98865.02	250.00
PFHxS_1	399.0 / 80.0	2.20	13C3-PFHxS	402.0 / 99.0	31623.91	236.50
PFHxS_2	399.0 / 99.0	2.20	13C3-PFHxS	402.0 / 99.0	31623.91	236.50
PFOA_1	413.0 / 369.0	2.56	13C8-PFOA	421.0 / 376.0	98865.02	250.00
PFOA_2	413.0 / 169.0	2.55	13C8-PFOA	421.0 / 376.0	98865.02	250.00
PFNA_1	463.0 / 419.0	2.92	13C9-PFNA	472.0 / 427.0	92146.39	250.00
PFNA_2	463.0 / 219.0	2.95	13C9-PFNA	472.0 / 427.0	92146.39	250.00
PFOS_1	499.0 / 80.0	2.81	13C8-PFOS	507.0 / 99.0	28882.99	239.25
PFOS_2	499.0 / 99.0	2.89	13C8-PFOS	507.0 / 99.0	28882.99	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	99001.21	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	99001.21	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	99599.12	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	99599.12	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	109519.85	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	109519.85	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	87924.22	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	87924.22	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	87924.22	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	87924.22	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	19620.49	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	19620.49	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	21265.05	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	21265.05	250.00

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Summary Internal Standard Report

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Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:06:44	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.91	13C2-PFDA	515.0 / 470.0	65395.57	250.00
d3-MeFOSAA	573.0 / 419.0	3.45	13C4-PFOS	503.0 / 99.0	22859.95	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	22859.95	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	62339.92	250.00
13C4-PFHpA	367.0 / 322.0	2.20	13C2-PFOA	415.0 / 370.0	62339.92	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	62339.92	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	62339.92	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	65395.57	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	65395.57	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	65395.57	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	22859.95	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	22859.95	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	22859.95	239.25

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Summary Internal Standard Report

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Sample Name	CR546PB-FS(3)	**Injection Vial**	17
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:44:41	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.91	13C2-PFDA	515.0 / 470.0	88376.32	250.00
d3-MeFOSAA	573.0 / 419.0	3.46	13C4-PFOS	503.0 / 99.0	31158.15	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	31158.15	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	83199.78	250.00
13C4-PFHpA	367.0 / 322.0	2.20	13C2-PFOA	415.0 / 370.0	83199.78	250.00
13C8-PFOA	421.0 / 376.0	2.58	13C2-PFOA	415.0 / 370.0	83199.78	250.00
13C9-PFNA	472.0 / 427.0	2.95	13C2-PFOA	415.0 / 370.0	83199.78	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	88376.32	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	88376.32	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	88376.32	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	31158.15	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	31158.15	239.25
13C8-PFOS	507.0 / 99.0	2.94	13C4-PFOS	503.0 / 99.0	31158.15	239.25

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Summary Internal Standard Report

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Sample Name	CR547LCS-FS(3)	**Injection Vial**	18
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:55:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.91	13C2-PFDA	515.0 / 470.0	61585.12	250.00
d3-MeFOSAA	573.0 / 419.0	3.46	13C4-PFOS	503.0 / 99.0	22258.77	239.25
d5-EtFOSAA	589.0 / 419.0	3.62	13C4-PFOS	503.0 / 99.0	22258.77	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	64044.37	250.00
13C4-PFHpA	367.0 / 322.0	2.20	13C2-PFOA	415.0 / 370.0	64044.37	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	64044.37	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	64044.37	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	61585.12	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	61585.12	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	61585.12	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	22258.77	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	22258.77	239.25
13C8-PFOS	507.0 / 99.0	2.94	13C4-PFOS	503.0 / 99.0	22258.77	239.25

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Sample Name	J7259-FS(3)	**Injection Vial**	19
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:06:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.91	13C2-PFDA	515.0 / 470.0	63332.19	250.00
d3-MeFOSAA	573.0 / 419.0	3.45	13C4-PFOS	503.0 / 99.0	18043.39	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	18043.39	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	55764.78	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	55764.78	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	55764.78	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	55764.78	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	63332.19	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	63332.19	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	63332.19	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	18043.39	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	18043.39	239.25
13C8-PFOS	507.0 / 99.0	2.94	13C4-PFOS	503.0 / 99.0	18043.39	239.25

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Summary Internal Standard Report

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Sample Name	J7260-FS(3)	**Injection Vial**	20
Sample ID	080118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:17:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	56526.78	250.00
d3-MeFOSAA	573.0 / 419.0	3.45	13C4-PFOS	503.0 / 99.0	18865.63	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	18865.63	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	54251.67	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	54251.67	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	54251.67	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	54251.67	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	56526.78	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	56526.78	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	56526.78	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	18865.63	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	18865.63	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	18865.63	239.25

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Summary Internal Standard Report

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Sample Name	J7261-FS(3)	**Injection Vial**	21
Sample ID	080118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:28:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	63671.69	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	20743.48	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	20743.48	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	62994.82	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	62994.82	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	62994.82	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	62994.82	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	63671.69	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	63671.69	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	63671.69	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	20743.48	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	20743.48	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	20743.48	239.25

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Summary Internal Standard Report

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Sample Name	J7252-FS(3)	**Injection Vial**	22
Sample ID	073018-05	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:39:03	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	84069.65	250.00
d3-MeFOSAA	573.0 / 419.0	3.45	13C4-PFOS	503.0 / 99.0	25889.76	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	25889.76	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	81758.91	250.00
13C4-PFHpA	367.0 / 322.0	2.20	13C2-PFOA	415.0 / 370.0	81758.91	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	81758.91	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	81758.91	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	84069.65	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	84069.65	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	84069.65	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	25889.76	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	25889.76	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	25889.76	239.25

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Summary Internal Standard Report

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Sample Name	J7253-FS(3)	**Injection Vial**	23
Sample ID	073018-06	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:49:56	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	68722.75	250.00
d3-MeFOSAA	573.0 / 419.0	3.45	13C4-PFOS	503.0 / 99.0	23306.45	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	23306.45	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	72663.72	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	72663.72	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	72663.72	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	72663.72	250.00
13C6-PFDA	519.0 / 474.0	3.29	13C2-PFDA	515.0 / 470.0	68722.75	250.00
13C7-PFUnA	570.0 / 525.0	3.61	13C2-PFDA	515.0 / 470.0	68722.75	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	68722.75	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	23306.45	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	23306.45	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	23306.45	239.25

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Summary Internal Standard Report

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Sample Name	J7254-FS(3)	**Injection Vial**	24
Sample ID	073018-07	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:00:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	96639.71	250.00
d3-MeFOSAA	573.0 / 419.0	3.45	13C4-PFOS	503.0 / 99.0	31247.20	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	31247.20	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	89954.45	250.00
13C4-PFHpA	367.0 / 322.0	2.20	13C2-PFOA	415.0 / 370.0	89954.45	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	89954.45	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	89954.45	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	96639.71	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	96639.71	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	96639.71	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	31247.20	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	31247.20	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	31247.20	239.25

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Summary Internal Standard Report

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Sample Name	J7248-FS(4)	**Injection Vial**	27
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:33:23	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	70689.66	250.00
d3-MeFOSAA	573.0 / 419.0	3.45	13C4-PFOS	503.0 / 99.0	23886.94	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	23886.94	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	74561.63	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	74561.63	250.00
13C8-PFOA	421.0 / 376.0	2.57	13C2-PFOA	415.0 / 370.0	74561.63	250.00
13C9-PFNA	472.0 / 427.0	2.94	13C2-PFOA	415.0 / 370.0	74561.63	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	70689.66	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	70689.66	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	70689.66	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	23886.94	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	23886.94	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	23886.94	239.25

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Summary Internal Standard Report

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Sample Name	J7248-FS-D(5)	**Injection Vial**	28
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:44:16	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	84849.89	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	24643.45	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	24643.45	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	82229.11	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	82229.11	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	82229.11	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	82229.11	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	84849.89	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	84849.89	250.00
13C2-PFTeDA	715.0 / 670.0	4.39	13C2-PFDA	515.0 / 470.0	84849.89	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	24643.45	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	24643.45	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	24643.45	239.25

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Summary Internal Standard Report

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Sample Name	J7249-FS(4)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:55:09	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	86505.89	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	24018.48	239.25
d5-EtFOSAA	589.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	24018.48	239.25
13C5-PFHxA	318.0 / 273.0	1.81	13C2-PFOA	415.0 / 370.0	191575.03	250.00
13C4-PFHpA	367.0 / 322.0	2.17	13C2-PFOA	415.0 / 370.0	191575.03	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	191575.03	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	191575.03	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	86505.89	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	86505.89	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	86505.89	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	24018.48	239.25
13C3-PFHxS	402.0 / 99.0	2.19	13C4-PFOS	503.0 / 99.0	24018.48	239.25
13C8-PFOS	507.0 / 99.0	2.92	13C4-PFOS	503.0 / 99.0	24018.48	239.25

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Summary Internal Standard Report

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Sample Name	J7249-FS-D(5)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:06:01	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	98515.15	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	28782.04	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	28782.04	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	103402.84	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	103402.84	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	103402.84	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	103402.84	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	98515.15	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	98515.15	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	98515.15	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	28782.04	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	28782.04	239.25
13C8-PFOS	507.0 / 99.0	2.92	13C4-PFOS	503.0 / 99.0	28782.04	239.25

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Summary Internal Standard Report

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Sample Name	J7249MS-FS(4)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:16:53	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.89	13C2-PFDA	515.0 / 470.0	43009.43	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	13009.38	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	13009.38	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	143429.39	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	143429.39	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	143429.39	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	143429.39	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	43009.43	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	43009.43	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	43009.43	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	13009.38	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	13009.38	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	13009.38	239.25

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Summary Internal Standard Report

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Sample Name	J7249MS-FS-D(5)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:27:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.89	13C2-PFDA	515.0 / 470.0	81949.61	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	23403.46	239.25
d5-EtFOSAA	589.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	23403.46	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	84003.60	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	84003.60	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	84003.60	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	84003.60	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	81949.61	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	81949.61	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	81949.61	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	23403.46	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	23403.46	239.25
13C8-PFOS	507.0 / 99.0	2.92	13C4-PFOS	503.0 / 99.0	23403.46	239.25

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Summary Internal Standard Report

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Sample Name	J7249MSD-FS(4)	**Injection Vial**	33
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:38:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.89	13C2-PFDA	515.0 / 470.0	67984.21	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	19072.07	239.25
d5-EtFOSAA	589.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	19072.07	239.25
13C5-PFHxA	318.0 / 273.0	1.81	13C2-PFOA	415.0 / 370.0	162017.46	250.00
13C4-PFHpA	367.0 / 322.0	2.18	13C2-PFOA	415.0 / 370.0	162017.46	250.00
13C8-PFOA	421.0 / 376.0	2.55	13C2-PFOA	415.0 / 370.0	162017.46	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	162017.46	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	67984.21	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	67984.21	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	67984.21	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	19072.07	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	19072.07	239.25
13C8-PFOS	507.0 / 99.0	2.92	13C4-PFOS	503.0 / 99.0	19072.07	239.25

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Summary Internal Standard Report

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Sample Name	J7249MSD-FS-D(5)	**Injection Vial**	34
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:49:33	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	88190.98	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	27501.29	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	27501.29	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	89936.53	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	89936.53	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	89936.53	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	89936.53	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	88190.98	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	88190.98	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	88190.98	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	27501.29	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	27501.29	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	27501.29	239.25

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Summary Internal Standard Report

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Sample Name	J7250-FS(4)	**Injection Vial**	35
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:00:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	79746.52	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	21347.12	239.25
d5-EtFOSAA	589.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	21347.12	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	75630.77	250.00
13C4-PFHpA	367.0 / 322.0	2.18	13C2-PFOA	415.0 / 370.0	75630.77	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	75630.77	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	75630.77	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	79746.52	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	79746.52	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	79746.52	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	21347.12	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	21347.12	239.25
13C8-PFOS	507.0 / 99.0	2.92	13C4-PFOS	503.0 / 99.0	21347.12	239.25

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Summary Internal Standard Report

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Sample Name	J7250-FS-D(5)	**Injection Vial**	36
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:11:17	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.89	13C2-PFDA	515.0 / 470.0	95164.06	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	31568.52	239.25
d5-EtFOSAA	589.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	31568.52	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	93342.91	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	93342.91	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	93342.91	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	93342.91	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	95164.06	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	95164.06	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	95164.06	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	31568.52	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	31568.52	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	31568.52	239.25

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Summary Internal Standard Report

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Sample Name	J7251-FS(4)	**Injection Vial**	39
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:43:54	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.90	13C2-PFDA	515.0 / 470.0	63579.75	250.00
d3-MeFOSAA	573.0 / 419.0	3.45	13C4-PFOS	503.0 / 99.0	18529.52	239.25
d5-EtFOSAA	589.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	18529.52	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	56929.08	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	56929.08	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	56929.08	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	56929.08	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	63579.75	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	63579.75	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	63579.75	250.00
13C3-PFBS	302.0 / 99.0	1.44	13C4-PFOS	503.0 / 99.0	18529.52	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	18529.52	239.25
13C8-PFOS	507.0 / 99.0	2.93	13C4-PFOS	503.0 / 99.0	18529.52	239.25

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Summary Internal Standard Report

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Sample Name	J7251-FS-D(5)	**Injection Vial**	40
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:54:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.89	13C2-PFDA	515.0 / 470.0	80803.35	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	23616.61	239.25
d5-EtFOSAA	589.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	23616.61	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	76660.25	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	76660.25	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	76660.25	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	76660.25	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	80803.35	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	80803.35	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	80803.35	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	23616.61	239.25
13C3-PFHxS	402.0 / 99.0	2.21	13C4-PFOS	503.0 / 99.0	23616.61	239.25
13C8-PFOS	507.0 / 99.0	2.92	13C4-PFOS	503.0 / 99.0	23616.61	239.25

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Summary Internal Standard Report

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Sample Name	J7255-FS(4)	**Injection Vial**	41
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:05:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.89	13C2-PFDA	515.0 / 470.0	73317.51	250.00
d3-MeFOSAA	573.0 / 419.0	3.43	13C4-PFOS	503.0 / 99.0	22943.81	239.25
d5-EtFOSAA	589.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	22943.81	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	57215.81	250.00
13C4-PFHpA	367.0 / 322.0	2.18	13C2-PFOA	415.0 / 370.0	57215.81	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	57215.81	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	57215.81	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	73317.51	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	73317.51	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	73317.51	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	22943.81	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	22943.81	239.25
13C8-PFOS	507.0 / 99.0	2.92	13C4-PFOS	503.0 / 99.0	22943.81	239.25

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Summary Internal Standard Report

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Sample Name	J7255-FS-D(5)	**Injection Vial**	42
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:16:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.89	13C2-PFDA	515.0 / 470.0	90398.27	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	28534.19	239.25
d5-EtFOSAA	589.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	28534.19	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	94272.69	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	94272.69	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	94272.69	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	94272.69	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	90398.27	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	90398.27	250.00
13C2-PFTeDA	715.0 / 670.0	4.38	13C2-PFDA	515.0 / 470.0	90398.27	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	28534.19	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	28534.19	239.25
13C8-PFOS	507.0 / 99.0	2.92	13C4-PFOS	503.0 / 99.0	28534.19	239.25

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Summary Internal Standard Report

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Sample Name	J7256-FS(4)	**Injection Vial**	43
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:27:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.89	13C2-PFDA	515.0 / 470.0	75083.13	250.00
d3-MeFOSAA	573.0 / 419.0	3.44	13C4-PFOS	503.0 / 99.0	24674.78	239.25
d5-EtFOSAA	589.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	24674.78	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	67754.06	250.00
13C4-PFHpA	367.0 / 322.0	2.19	13C2-PFOA	415.0 / 370.0	67754.06	250.00
13C8-PFOA	421.0 / 376.0	2.56	13C2-PFOA	415.0 / 370.0	67754.06	250.00
13C9-PFNA	472.0 / 427.0	2.93	13C2-PFOA	415.0 / 370.0	67754.06	250.00
13C6-PFDA	519.0 / 474.0	3.28	13C2-PFDA	515.0 / 470.0	75083.13	250.00
13C7-PFUnA	570.0 / 525.0	3.60	13C2-PFDA	515.0 / 470.0	75083.13	250.00
13C2-PFTeDA	715.0 / 670.0	4.37	13C2-PFDA	515.0 / 470.0	75083.13	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	24674.78	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	24674.78	239.25
13C8-PFOS	507.0 / 99.0	2.92	13C4-PFOS	503.0 / 99.0	24674.78	239.25

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Summary Internal Standard Report

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Sample Name	J7256-FS-D(5)	**Injection Vial**	44
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:38:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.88	13C2-PFDA	515.0 / 470.0	94756.09	250.00
d3-MeFOSAA	573.0 / 419.0	3.42	13C4-PFOS	503.0 / 99.0	30548.60	239.25
d5-EtFOSAA	589.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	30548.60	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	94345.44	250.00
13C4-PFHpA	367.0 / 322.0	2.18	13C2-PFOA	415.0 / 370.0	94345.44	250.00
13C8-PFOA	421.0 / 376.0	2.55	13C2-PFOA	415.0 / 370.0	94345.44	250.00
13C9-PFNA	472.0 / 427.0	2.91	13C2-PFOA	415.0 / 370.0	94345.44	250.00
13C6-PFDA	519.0 / 474.0	3.26	13C2-PFDA	515.0 / 470.0	94756.09	250.00
13C7-PFUnA	570.0 / 525.0	3.58	13C2-PFDA	515.0 / 470.0	94756.09	250.00
13C2-PFTeDA	715.0 / 670.0	4.36	13C2-PFDA	515.0 / 470.0	94756.09	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	30548.60	239.25
13C3-PFHxS	402.0 / 99.0	2.19	13C4-PFOS	503.0 / 99.0	30548.60	239.25
13C8-PFOS	507.0 / 99.0	2.91	13C4-PFOS	503.0 / 99.0	30548.60	239.25

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Summary Internal Standard Report

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Sample Name	J7257-FS(4)	**Injection Vial**	45
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:49:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.88	13C2-PFDA	515.0 / 470.0	48118.97	250.00
d3-MeFOSAA	573.0 / 419.0	3.43	13C4-PFOS	503.0 / 99.0	13404.41	239.25
d5-EtFOSAA	589.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	13404.41	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	46112.17	250.00
13C4-PFHpA	367.0 / 322.0	2.18	13C2-PFOA	415.0 / 370.0	46112.17	250.00
13C8-PFOA	421.0 / 376.0	2.55	13C2-PFOA	415.0 / 370.0	46112.17	250.00
13C9-PFNA	472.0 / 427.0	2.91	13C2-PFOA	415.0 / 370.0	46112.17	250.00
13C6-PFDA	519.0 / 474.0	3.26	13C2-PFDA	515.0 / 470.0	48118.97	250.00
13C7-PFUnA	570.0 / 525.0	3.58	13C2-PFDA	515.0 / 470.0	48118.97	250.00
13C2-PFTeDA	715.0 / 670.0	4.37	13C2-PFDA	515.0 / 470.0	48118.97	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	13404.41	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	13404.41	239.25
13C8-PFOS	507.0 / 99.0	2.91	13C4-PFOS	503.0 / 99.0	13404.41	239.25

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Summary Internal Standard Report

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Sample Name	J7257-FS-D(5)	**Injection Vial**	46
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:00:02	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.88	13C2-PFDA	515.0 / 470.0	67901.60	250.00
d3-MeFOSAA	573.0 / 419.0	3.43	13C4-PFOS	503.0 / 99.0	20347.51	239.25
d5-EtFOSAA	589.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	20347.51	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	68013.85	250.00
13C4-PFHpA	367.0 / 322.0	2.18	13C2-PFOA	415.0 / 370.0	68013.85	250.00
13C8-PFOA	421.0 / 376.0	2.55	13C2-PFOA	415.0 / 370.0	68013.85	250.00
13C9-PFNA	472.0 / 427.0	2.92	13C2-PFOA	415.0 / 370.0	68013.85	250.00
13C6-PFDA	519.0 / 474.0	3.26	13C2-PFDA	515.0 / 470.0	67901.60	250.00
13C7-PFUnA	570.0 / 525.0	3.58	13C2-PFDA	515.0 / 470.0	67901.60	250.00
13C2-PFTeDA	715.0 / 670.0	4.37	13C2-PFDA	515.0 / 470.0	67901.60	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	20347.51	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	20347.51	239.25
13C8-PFOS	507.0 / 99.0	2.91	13C4-PFOS	503.0 / 99.0	20347.51	239.25

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Summary Internal Standard Report

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Sample Name	J7258-FS(4)	**Injection Vial**	47
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:10:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.88	13C2-PFDA	515.0 / 470.0	62262.99	250.00
d3-MeFOSAA	573.0 / 419.0	3.42	13C4-PFOS	503.0 / 99.0	17309.43	239.25
d5-EtFOSAA	589.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	17309.43	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	43215.74	250.00
13C4-PFHpA	367.0 / 322.0	2.17	13C2-PFOA	415.0 / 370.0	43215.74	250.00
13C8-PFOA	421.0 / 376.0	2.54	13C2-PFOA	415.0 / 370.0	43215.74	250.00
13C9-PFNA	472.0 / 427.0	2.91	13C2-PFOA	415.0 / 370.0	43215.74	250.00
13C6-PFDA	519.0 / 474.0	3.26	13C2-PFDA	515.0 / 470.0	62262.99	250.00
13C7-PFUnA	570.0 / 525.0	3.58	13C2-PFDA	515.0 / 470.0	62262.99	250.00
13C2-PFTeDA	715.0 / 670.0	4.36	13C2-PFDA	515.0 / 470.0	62262.99	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	17309.43	239.25
13C3-PFHxS	402.0 / 99.0	2.19	13C4-PFOS	503.0 / 99.0	17309.43	239.25
13C8-PFOS	507.0 / 99.0	2.91	13C4-PFOS	503.0 / 99.0	17309.43	239.25

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Summary Internal Standard Report

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Sample Name	J7258-FS-D(5)	**Injection Vial**	48
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:21:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.88	13C2-PFDA	515.0 / 470.0	89547.43	250.00
d3-MeFOSAA	573.0 / 419.0	3.42	13C4-PFOS	503.0 / 99.0	29116.13	239.25
d5-EtFOSAA	589.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	29116.13	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	91932.54	250.00
13C4-PFHpA	367.0 / 322.0	2.18	13C2-PFOA	415.0 / 370.0	91932.54	250.00
13C8-PFOA	421.0 / 376.0	2.55	13C2-PFOA	415.0 / 370.0	91932.54	250.00
13C9-PFNA	472.0 / 427.0	2.91	13C2-PFOA	415.0 / 370.0	91932.54	250.00
13C6-PFDA	519.0 / 474.0	3.26	13C2-PFDA	515.0 / 470.0	89547.43	250.00
13C7-PFUnA	570.0 / 525.0	3.58	13C2-PFDA	515.0 / 470.0	89547.43	250.00
13C2-PFTeDA	715.0 / 670.0	4.36	13C2-PFDA	515.0 / 470.0	89547.43	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	29116.13	239.25
13C3-PFHxS	402.0 / 99.0	2.20	13C4-PFOS	503.0 / 99.0	29116.13	239.25
13C8-PFOS	507.0 / 99.0	2.91	13C4-PFOS	503.0 / 99.0	29116.13	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:25:13 AM

Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:38:11	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	82645.68	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	82645.68	250.00
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	107810.82	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	107810.82	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	32192.10	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	32192.10	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:25:18 AM

Sample Name	J7249-FS-D(8)	**Injection Vial**	27
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:48:13	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	62561.33	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	62561.33	250.00
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	60963.40	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	60963.40	250.00
PFOS_1	499.0 / 80.0	2.93	13C8-PFOS	507.0 / 99.0	20303.90	239.25
PFOS_2	499.0 / 99.0	3.01	13C8-PFOS	507.0 / 99.0	20303.90	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:25:23 AM

Sample Name	J7249-FS-D(9)	**Injection Vial**	28
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:59:04	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	68040.71	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	68040.71	250.00
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	81300.07	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	81300.07	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	25469.89	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	25469.89	239.25

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Summary Internal Standard Report

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Sample Name	J7249MS-FS-D(8)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:09:56	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	62473.34	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	62473.34	250.00
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	68576.82	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	68576.82	250.00
PFOS_1	499.0 / 80.0	2.97	13C8-PFOS	507.0 / 99.0	22197.38	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	22197.38	239.25

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/09/2018 7:25:33 AM

Sample Name	J7249MS-FS-D(9)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:20:48	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	55340.02	250.00
PFHxA_2	313.0 / 119.0	1.88	13C5-PFHxA	318.0 / 273.0	55340.02	250.00
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	69707.02	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	69707.02	250.00
PFOS_1	499.0 / 80.0	2.99	13C8-PFOS	507.0 / 99.0	19273.37	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	19273.37	239.25

Summary Internal Standard Report

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Printed: 27/09/2018 7:25:38 AM

Sample Name	J7249MSD-FS-D(8)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:31:41	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	76090.60	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	76090.60	250.00
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	79504.16	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	79504.16	250.00
PFOS_1	499.0 / 80.0	2.97	13C8-PFOS	507.0 / 99.0	27801.71	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	27801.71	239.25

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Summary Internal Standard Report

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Sample Name	J7249MSD-FS-D(9)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:42:34	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	64005.92	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	64005.92	250.00
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	79200.79	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	79200.79	250.00
PFOS_1	499.0 / 80.0	2.98	13C8-PFOS	507.0 / 99.0	26263.96	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	26263.96	239.25

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Summary Internal Standard Report

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Sample Name	J7257-FS-D(9)	**Injection Vial**	33
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:53:25	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	53003.45	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	53003.45	250.00
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	68296.25	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	68296.25	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	23862.90	239.25
PFOS_2	499.0 / 99.0	3.09	13C8-PFOS	507.0 / 99.0	23862.90	239.25

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Summary Internal Standard Report

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Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:38:11	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.88	13C2-PFOA	415.0 / 370.0	96417.06	250.00
13C4-PFHpA	367.0 / 322.0	2.29	13C2-PFOA	415.0 / 370.0	96417.06	250.00
13C8-PFOA	421.0 / 376.0	2.70	13C2-PFOA	415.0 / 370.0	96417.06	250.00
13C8-PFOS	507.0 / 99.0	3.08	13C4-PFOS	503.0 / 99.0	36701.61	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 12:23:53 PM

Sample Name	J7249-FS-D(8)	**Injection Vial**	27
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:48:13	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	103146.77	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	103146.77	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	103146.77	250.00
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	27168.48	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 12:23:57 PM

Sample Name	J7249-FS-D(9)	**Injection Vial**	28
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:59:04	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	67522.56	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	67522.56	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	67522.56	250.00
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	21431.62	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 12:24:01 PM

Sample Name	J7249MS-FS-D(8)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:09:56	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	99474.97	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	99474.97	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	99474.97	250.00
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	25910.51	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 12:24:08 PM

Sample Name	J7249MS-FS-D(9)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:20:48	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	60800.39	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	60800.39	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	60800.39	250.00
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	19608.80	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 12:24:12 PM

Sample Name	J7249MSD-FS-D(8)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:31:41	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	111536.30	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	111536.30	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	111536.30	250.00
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	25008.91	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 12:24:17 PM

Sample Name	J7249MSD-FS-D(9)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:42:34	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	66024.41	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	66024.41	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	66024.41	250.00
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	23130.40	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 27/08/2018 12:24:23 PM

Sample Name	J7257-FS-D(9)	**Injection Vial**	33
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:53:25	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	59409.28	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	59409.28	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	59409.28	250.00
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	20562.79	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:20:21 AM

Sample Name	JY46 IB	**Injection Vial**	23
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	26510.06	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	26510.06	232.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:20:28 AM

Sample Name	J7259-FS(2)	**Injection Vial**	34
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:14:37	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.21	13C3-PFBS	302.0 / 99.0	30845.95	232.25
PFBS_2	298.9 / 99.0	1.52	13C3-PFBS	302.0 / 99.0	30845.95	232.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:19:41 AM

Sample Name	JY46 IB	**Injection Vial**	23
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	27744.14	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:19:47 AM

Sample Name	J7259-FS(2)	**Injection Vial**	34
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:14:37	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	24560.00	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:19:54 AM

Sample Name	J7251-FS(6)	**Injection Vial**	35
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:25:28	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.41	13C4-PFOS	503.0 / 99.0	18035.80	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:19:59 AM

Sample Name	J7251-FS-D(7)	**Injection Vial**	36
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:36:19	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	22135.49	239.25

Chromatograms

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:21:34 AM

Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T21:50:38	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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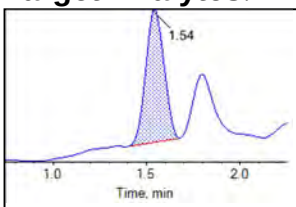

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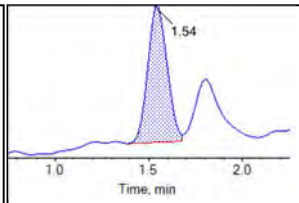
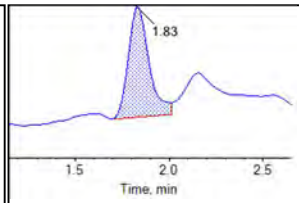


PFBS_2



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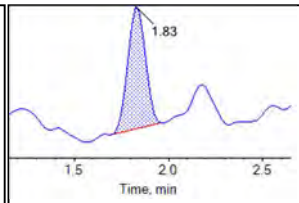

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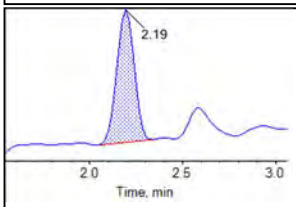

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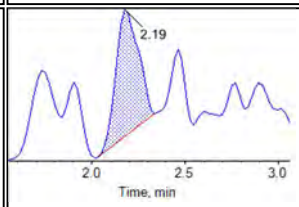

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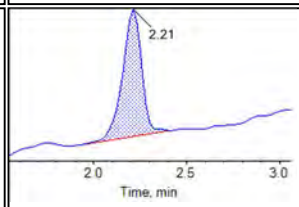

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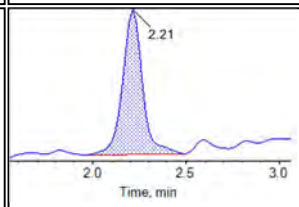

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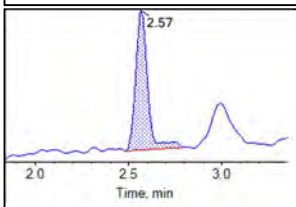

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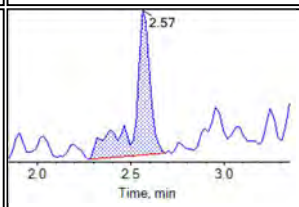

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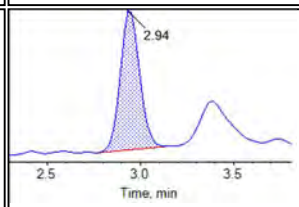

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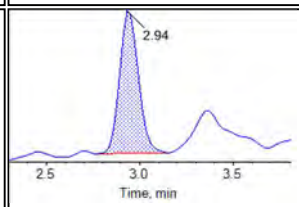

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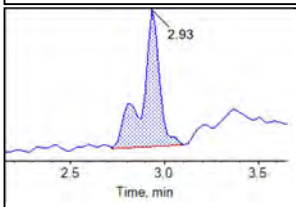

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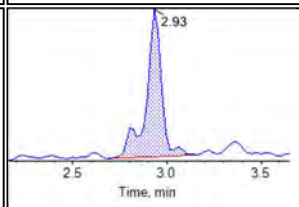

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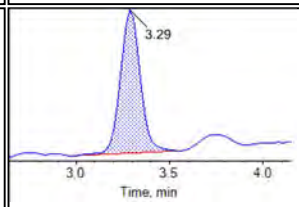

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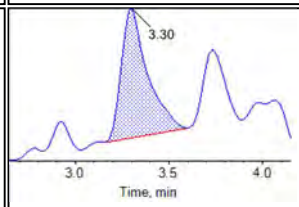

PFDA_2

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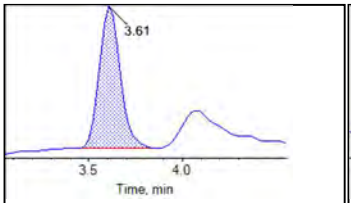
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:21:34 AM



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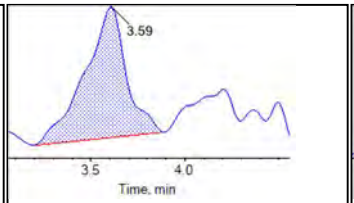

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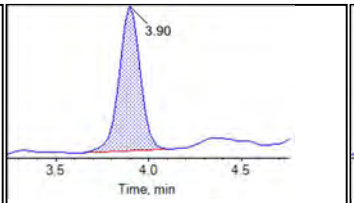

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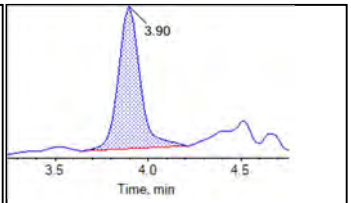

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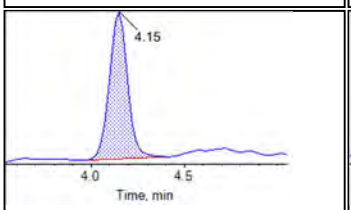

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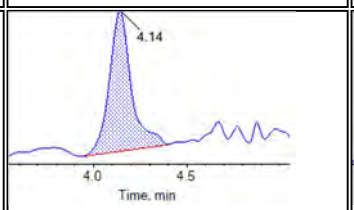

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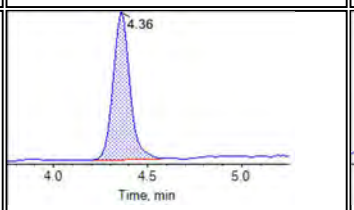

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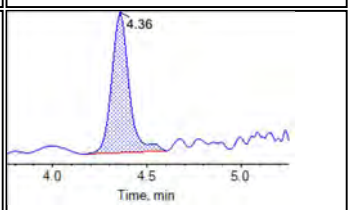

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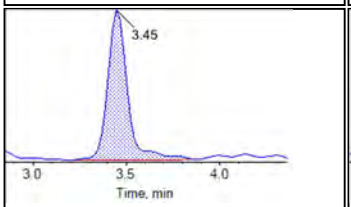

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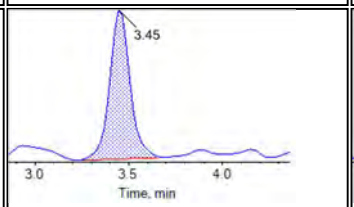

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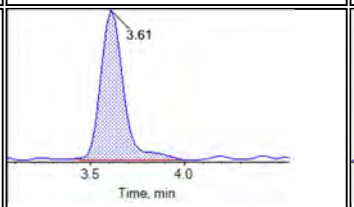

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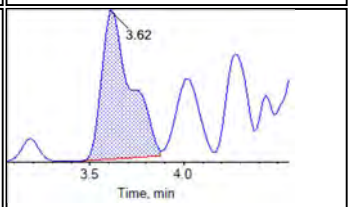

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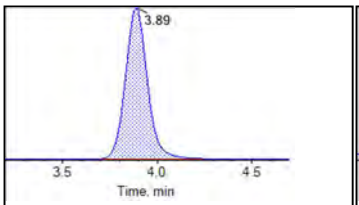

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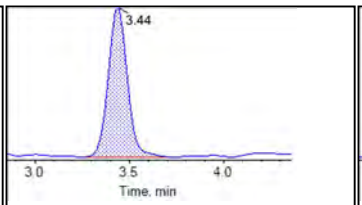

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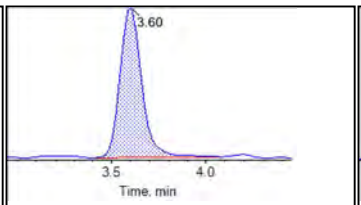

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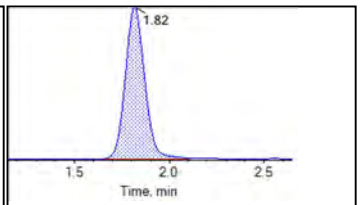

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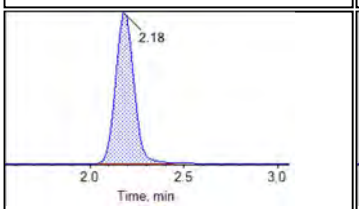
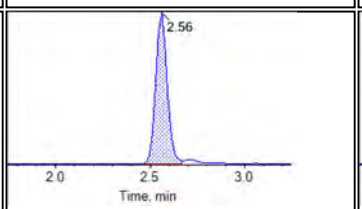
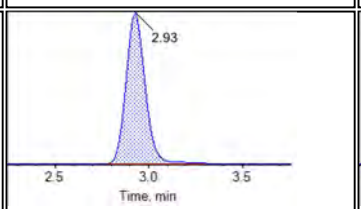


13C4-PFHpA



13C8-PFOA



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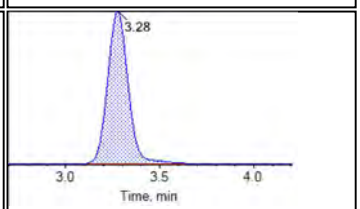

13C6-PFDA

Chromatogram Report

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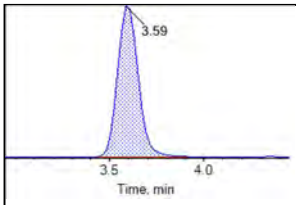

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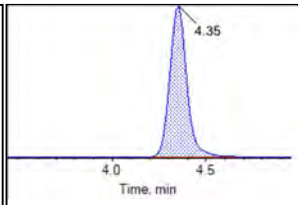

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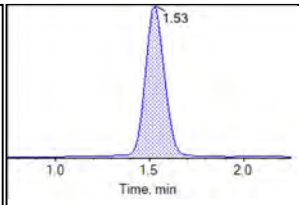
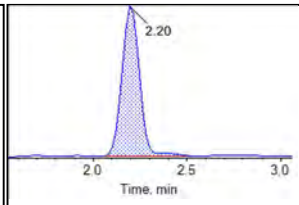


13C3-PFBS



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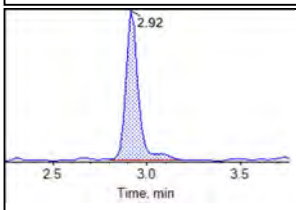

13C8-PFOS

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Chromatogram Report

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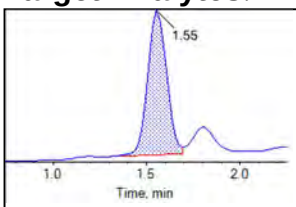
Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:01:29	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



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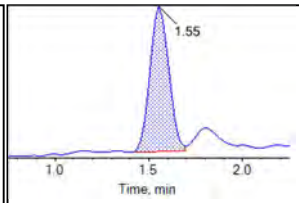

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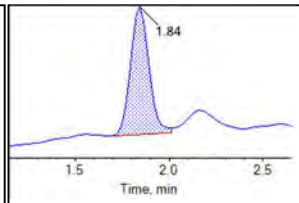

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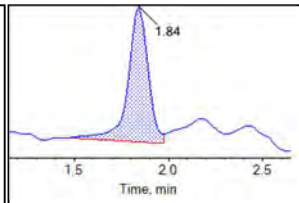

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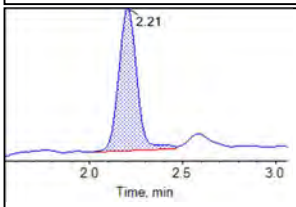

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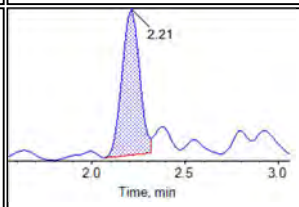

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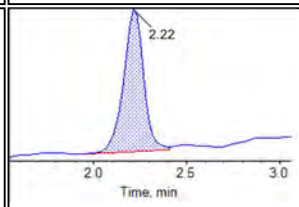

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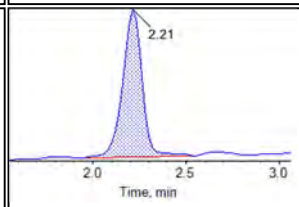

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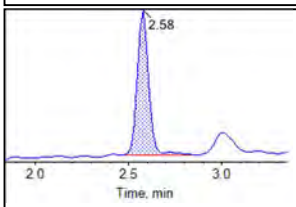

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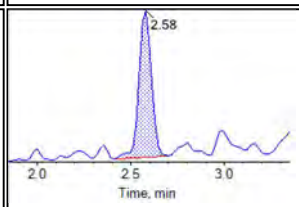

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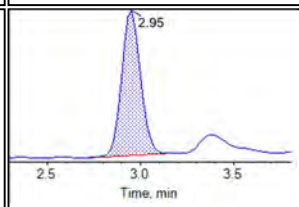

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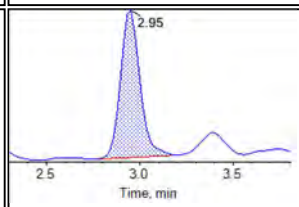

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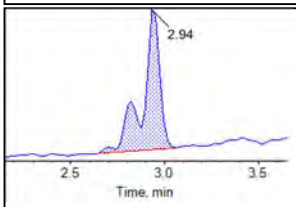

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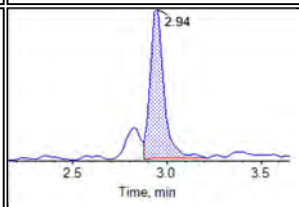

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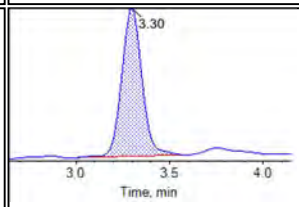

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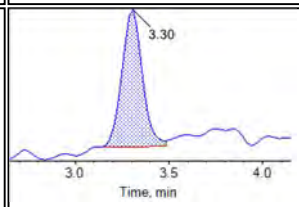

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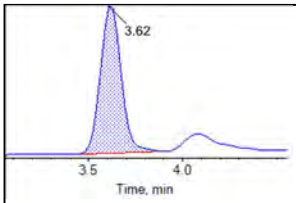

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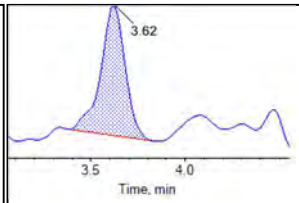

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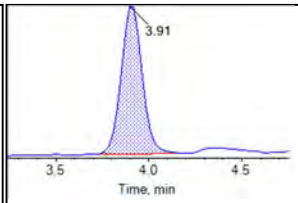

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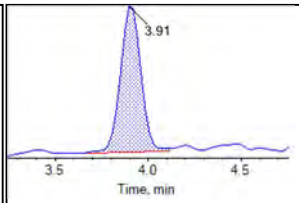

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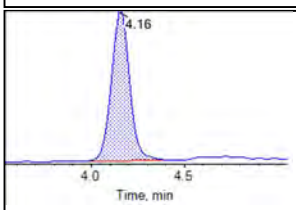

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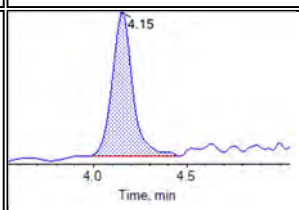

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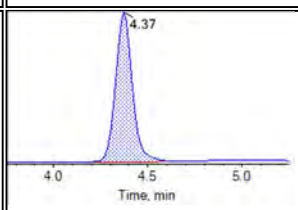

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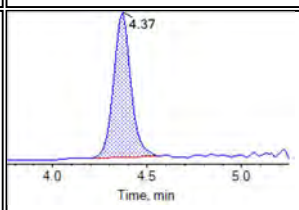

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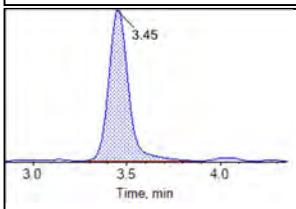

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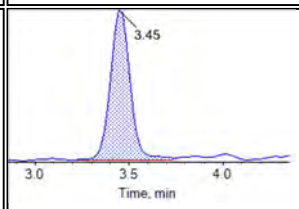

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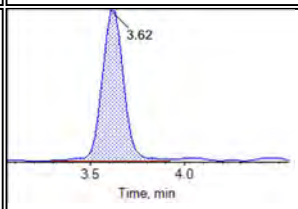

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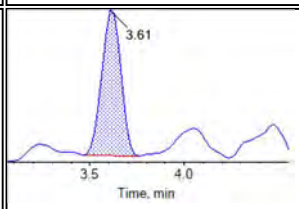

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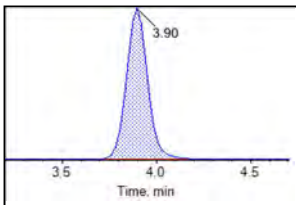

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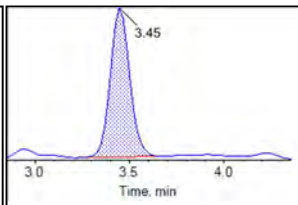

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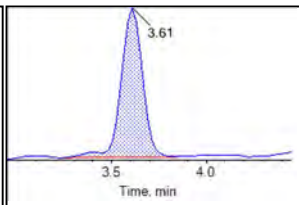

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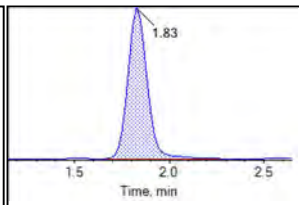

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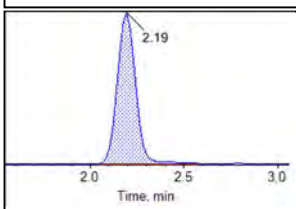

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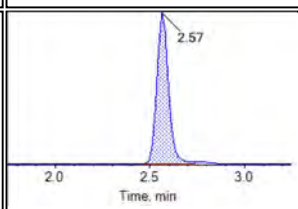

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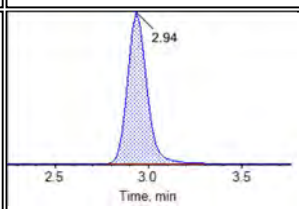

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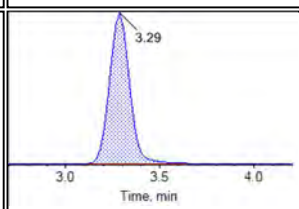

13C6-PFDA

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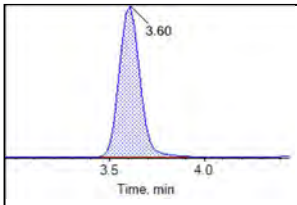
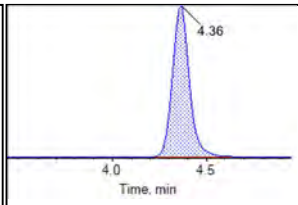
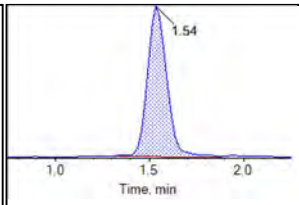


13C7-PFUnA



13C2-PFTeDA



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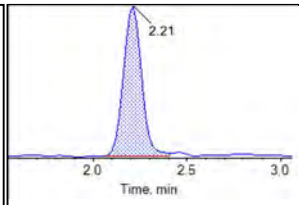

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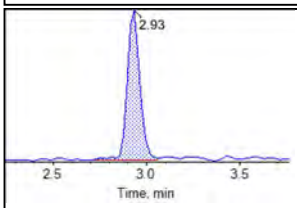

13C8-PFOS

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Chromatogram Report

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Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:12:22	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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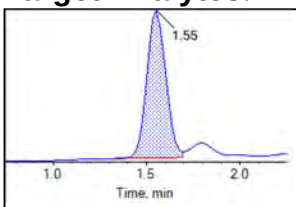
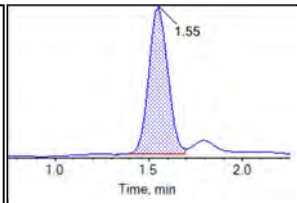
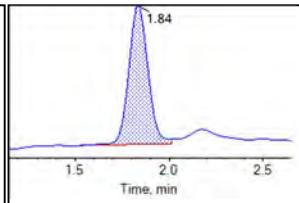


PFBS_1



PFBS_2



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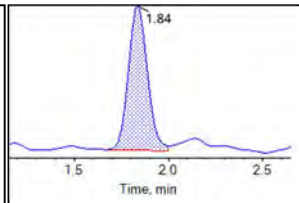

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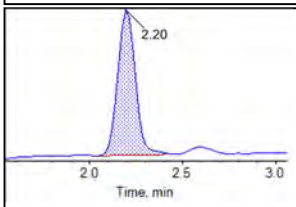

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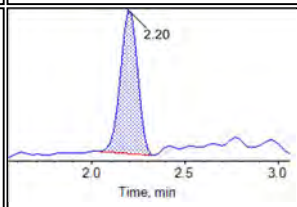

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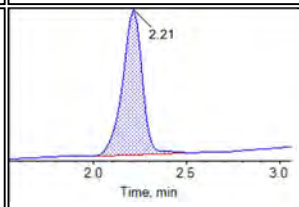

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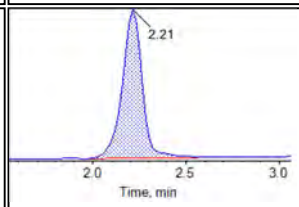

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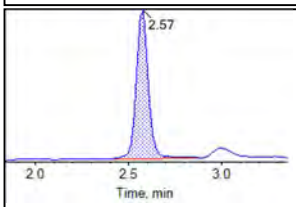

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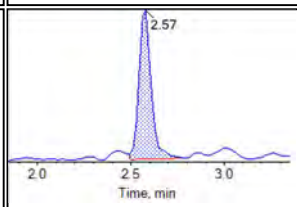

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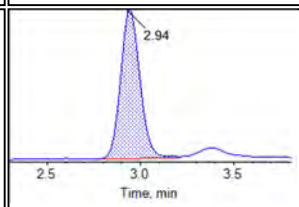

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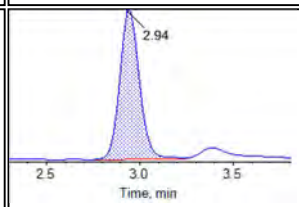

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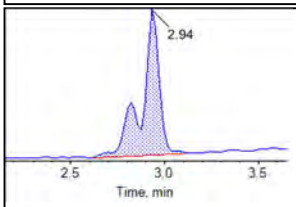

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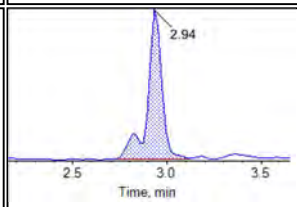

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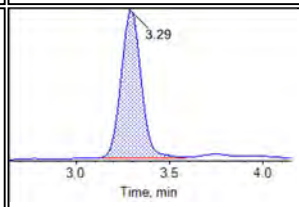

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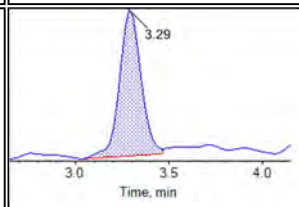

PFDA_2

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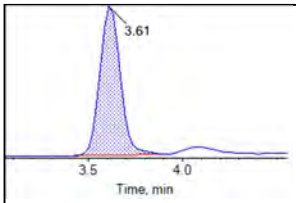

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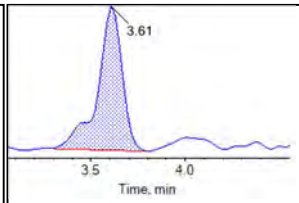

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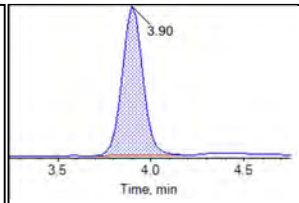

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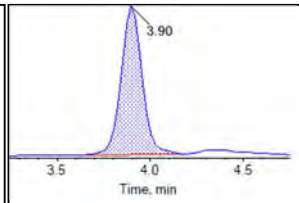

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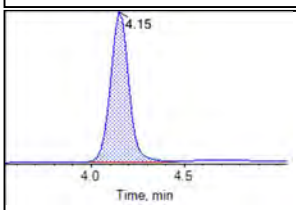

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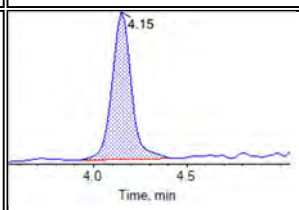

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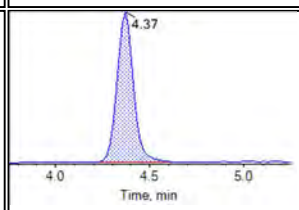

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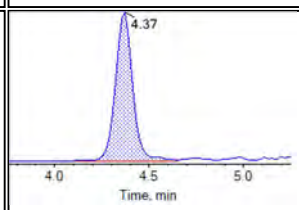

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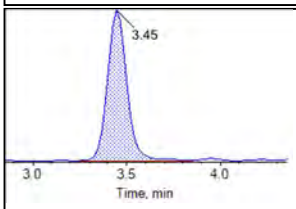

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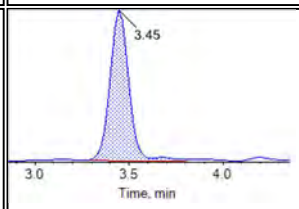

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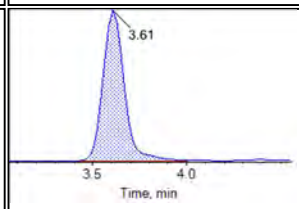

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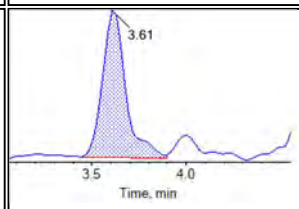

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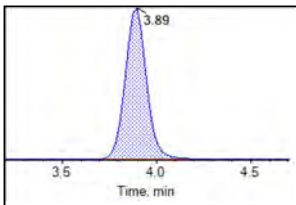
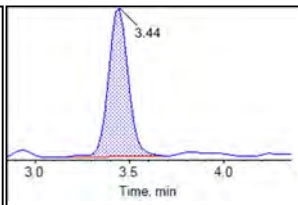
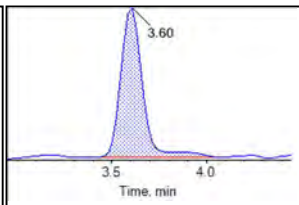
Internal Standards:



13C2-PFDoA



d3-MeFOSAA



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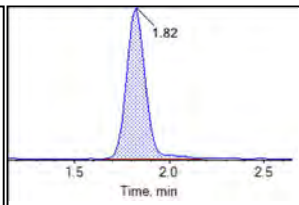
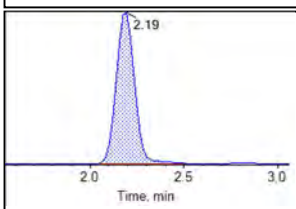


13C5-PFHxA



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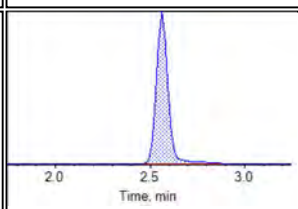
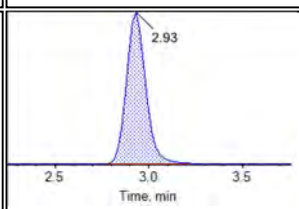


13C8-PFOA



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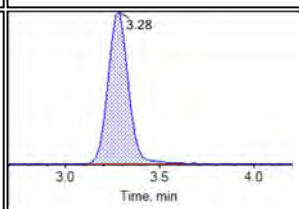

13C6-PFDA

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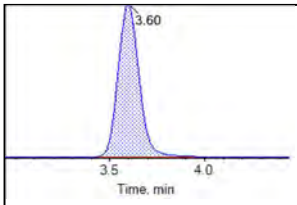

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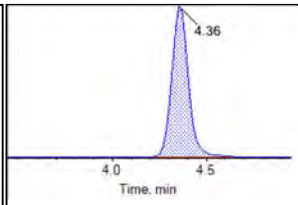
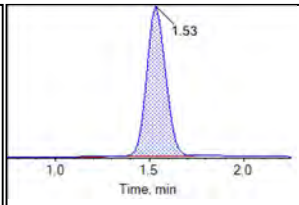
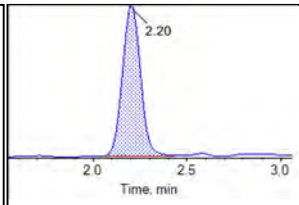


13C2-PFTeDA



13C3-PFBS



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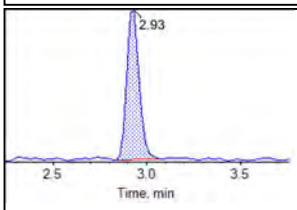

13C8-PFOS

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Chromatogram Report

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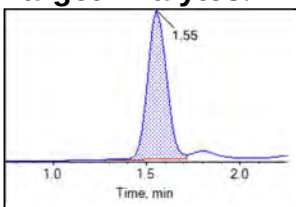
Printed: 29/08/2018 10:21:55 AM

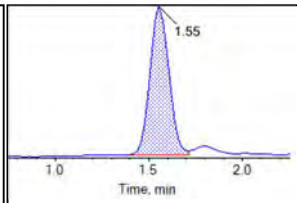
Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:23:14	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



PFBS_1



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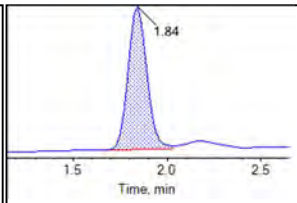

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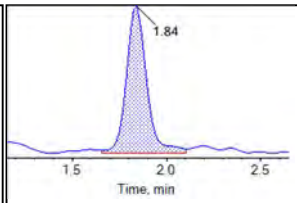

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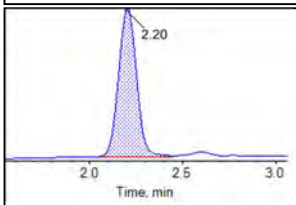

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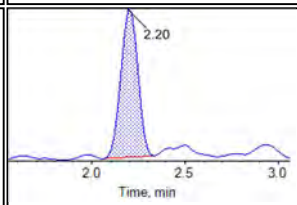

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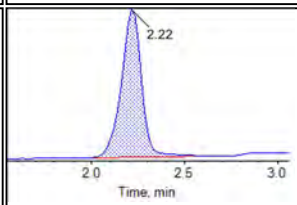

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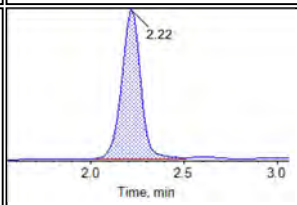

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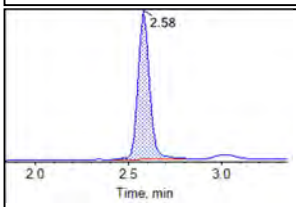

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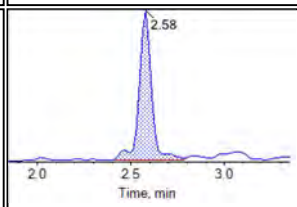

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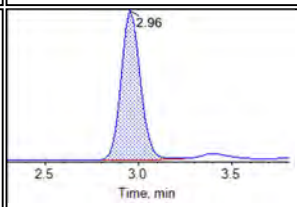

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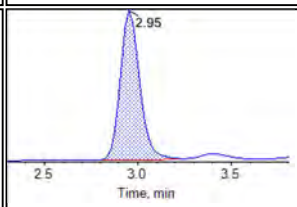

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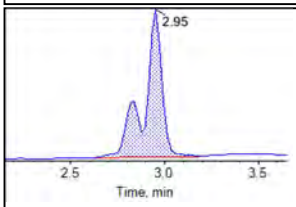

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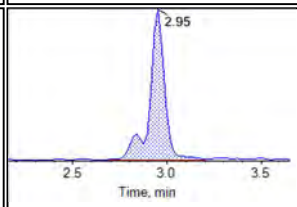

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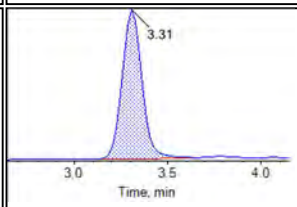

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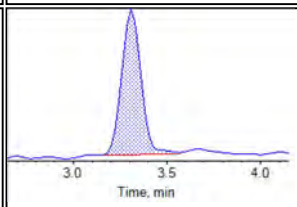

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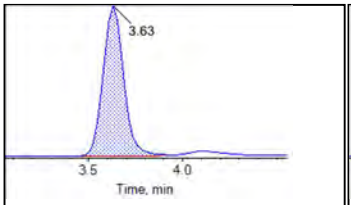

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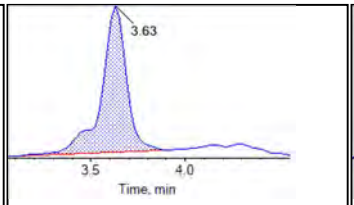

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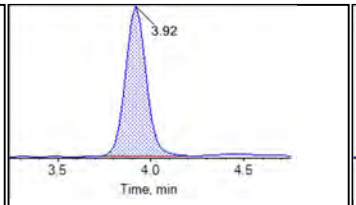

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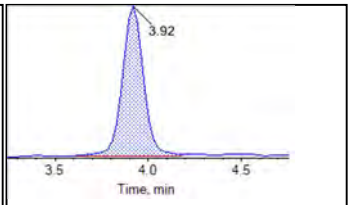

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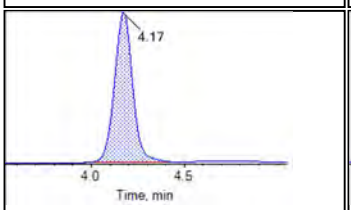

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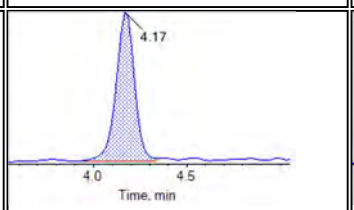

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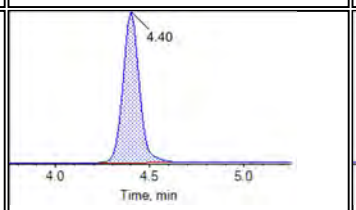

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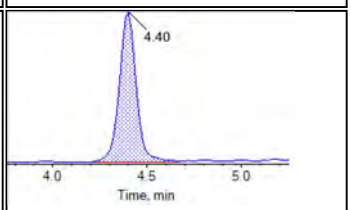

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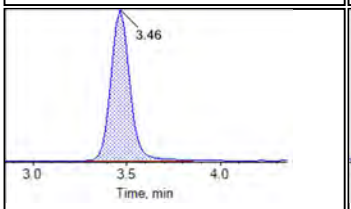

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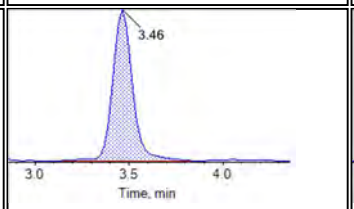

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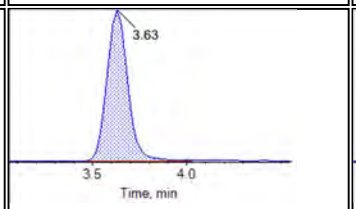

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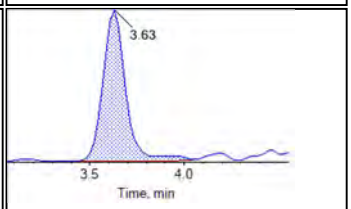

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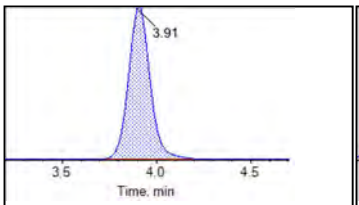

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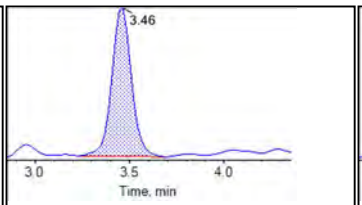

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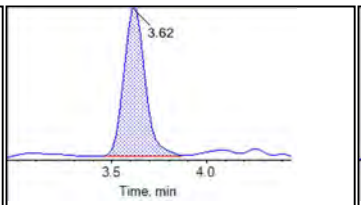

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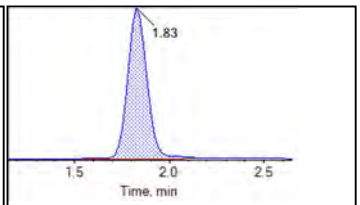

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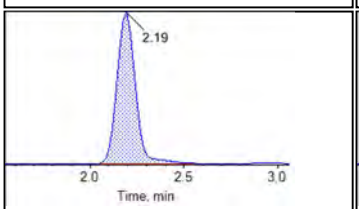

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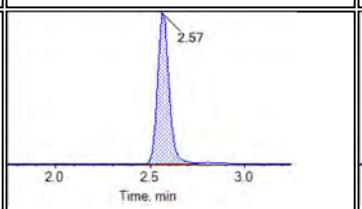

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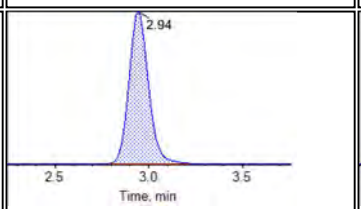

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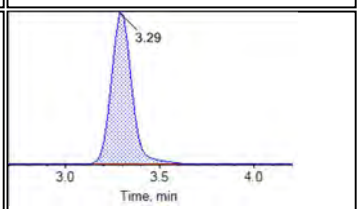

13C6-PFDA

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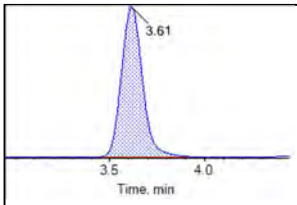

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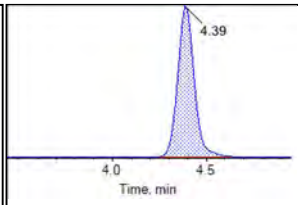

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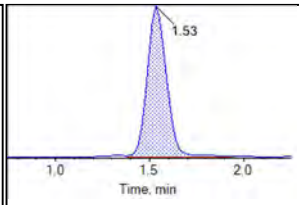

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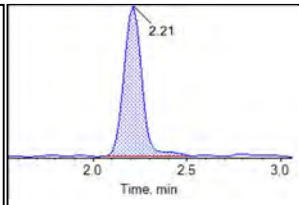

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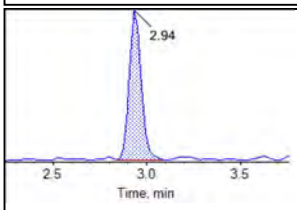

13C8-PFOS

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Chromatogram Report

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Printed: 29/08/2018 10:22:03 AM

Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:34:06	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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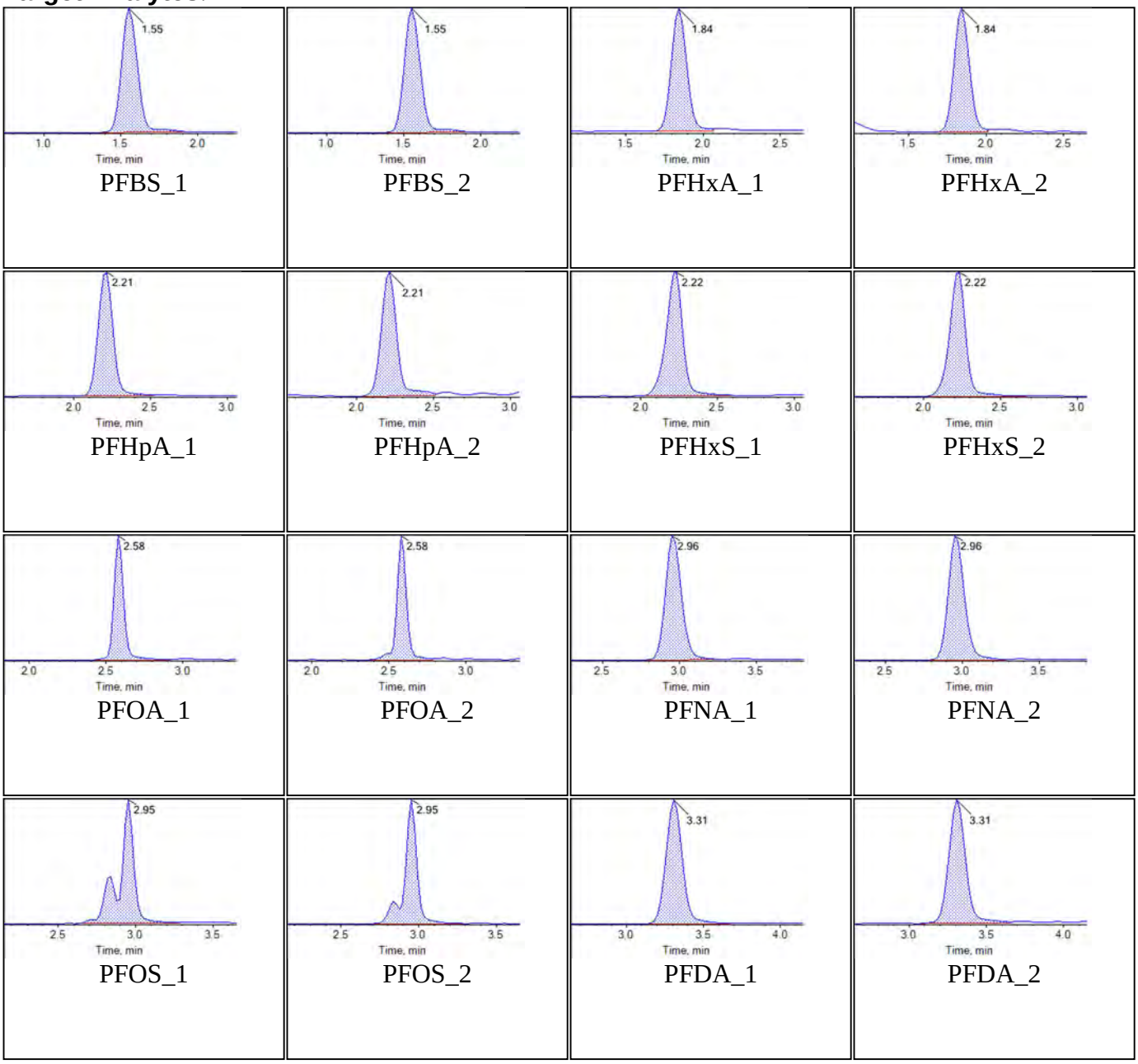

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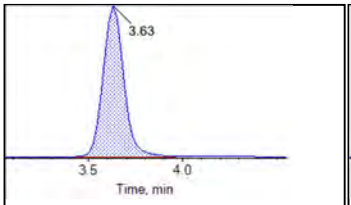

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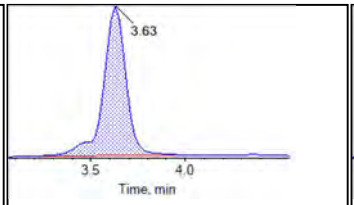

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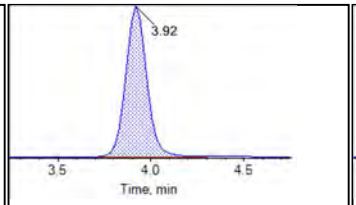

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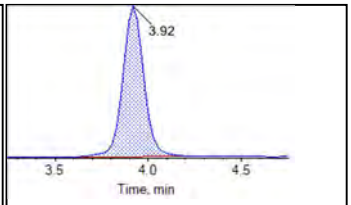

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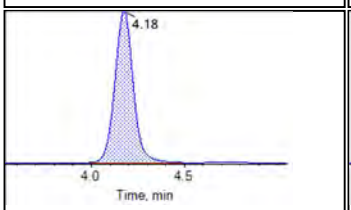

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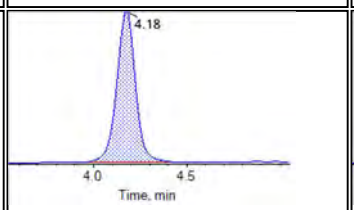

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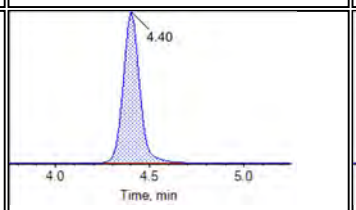

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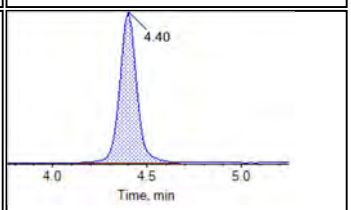

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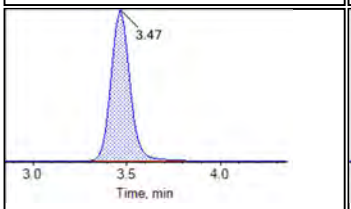

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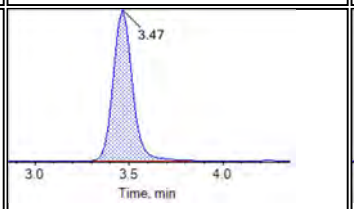

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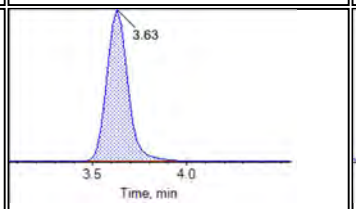

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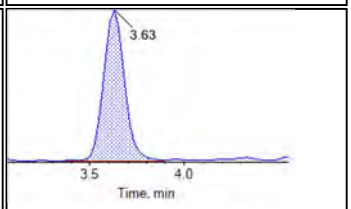

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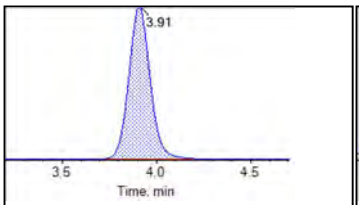

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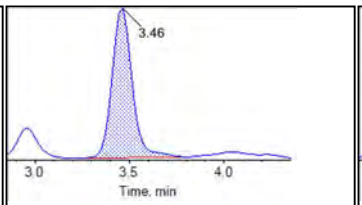
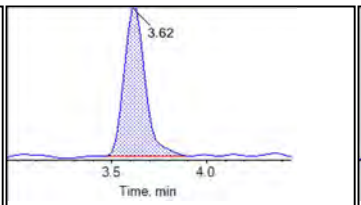
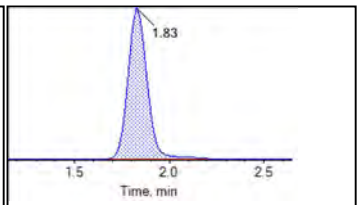


d3-MeFOSAA



d5-EtFOSAA



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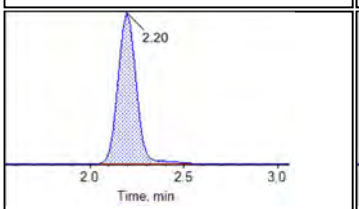

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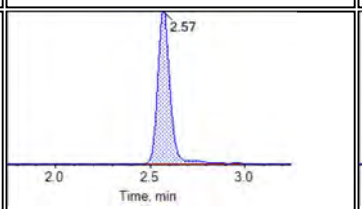
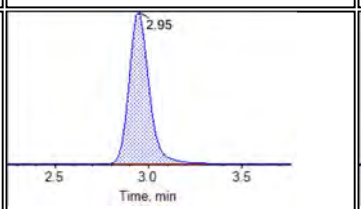
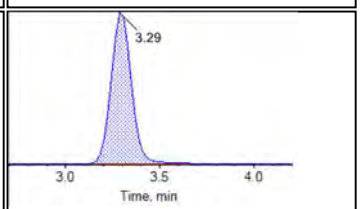


13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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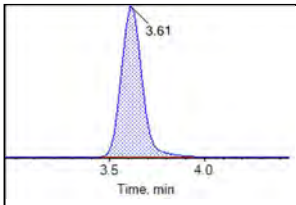
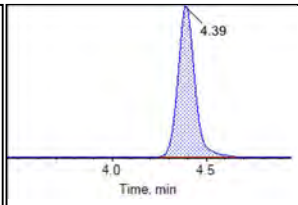
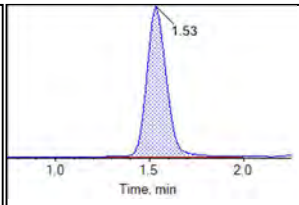


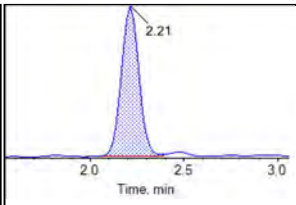
13C7-PFUnA



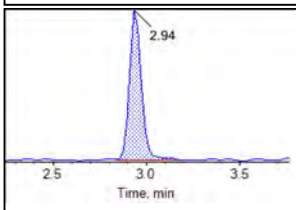
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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Printed: 29/08/2018 10:22:09 AM

Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:44:59	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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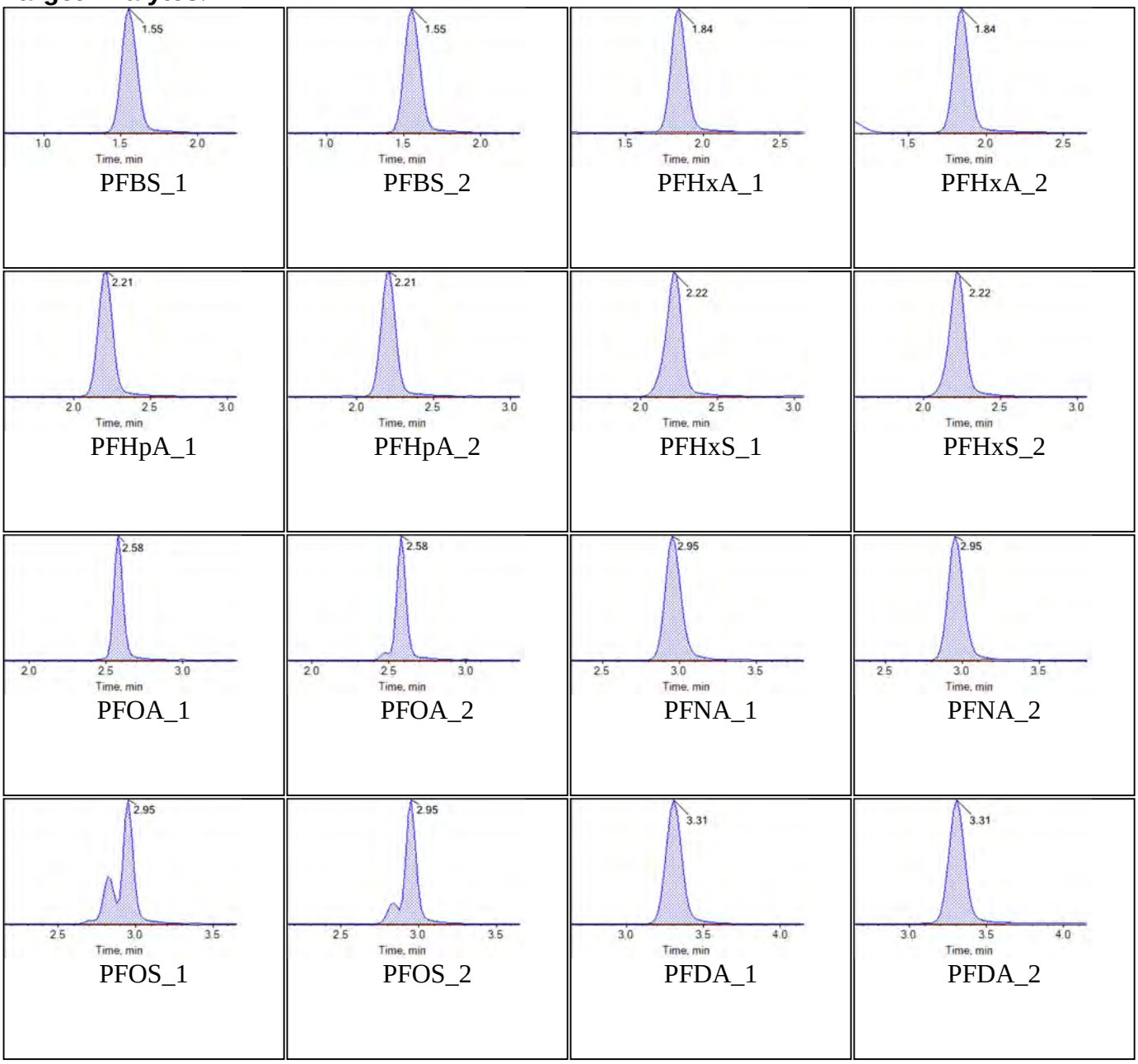
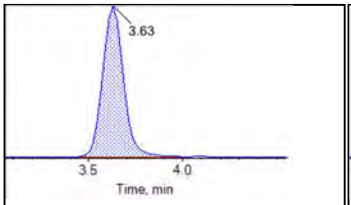


BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:22:09 AM



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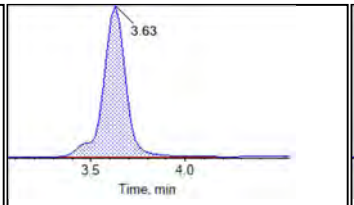
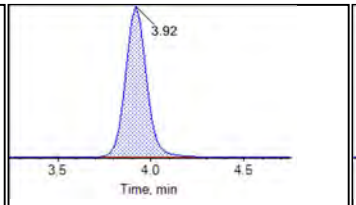


PFUnA_2



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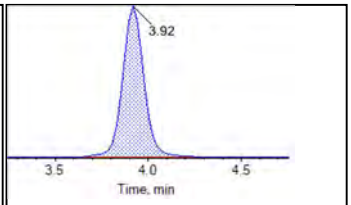
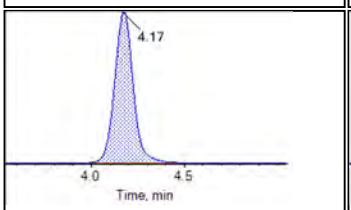
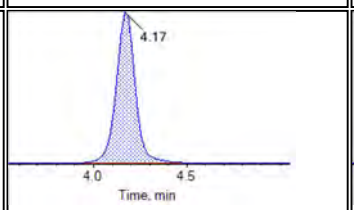


PFDoA_2



PFTrDA_1



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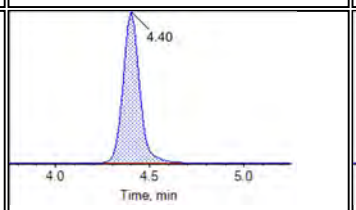

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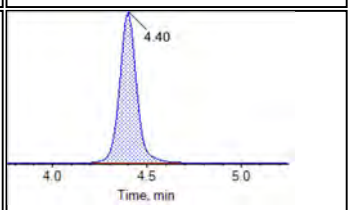
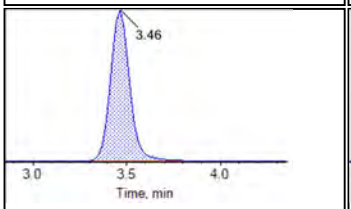
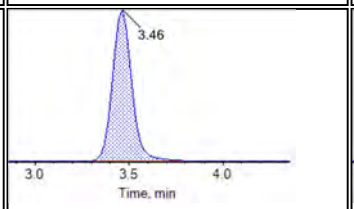


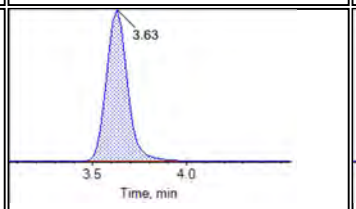
PFTeDA_2



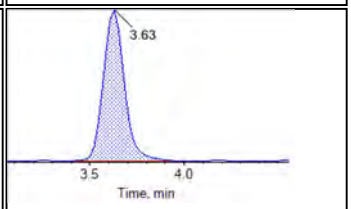
NMeFOSAA_1



NMeFOSAA_2

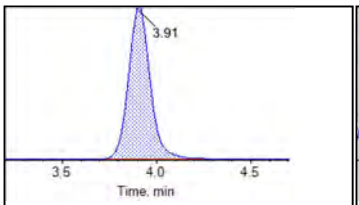


NEtFOSAA_1

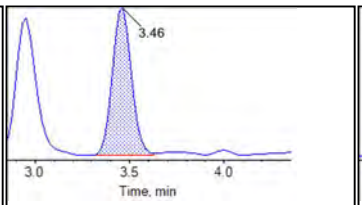


NEtFOSAA_2

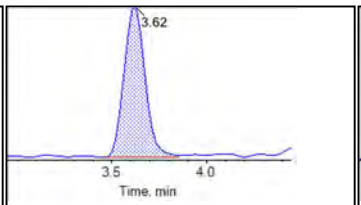
Internal Standards:



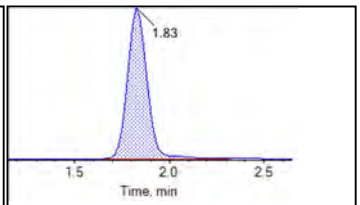
13C2-PFDoA



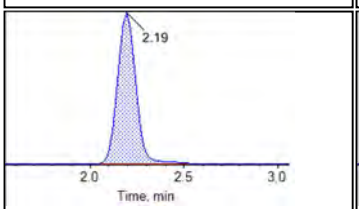
d3-MeFOSAA



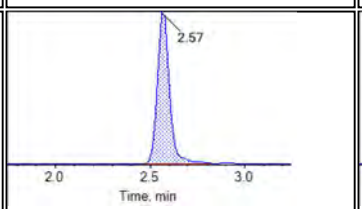
d5-EtFOSAA



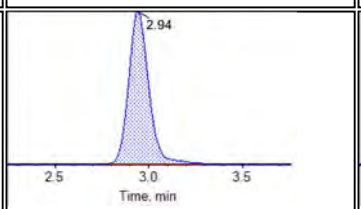
13C5-PFHxA



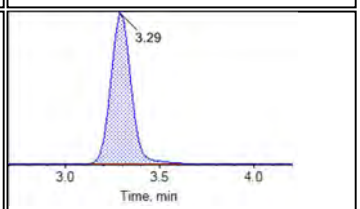
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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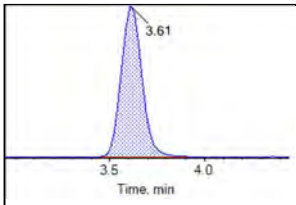
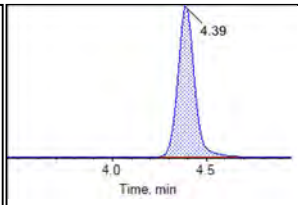
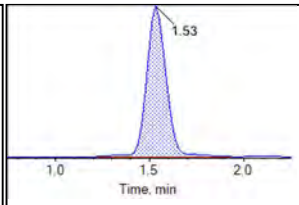


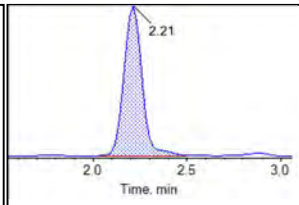
13C7-PFUnA



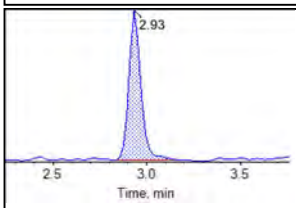
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

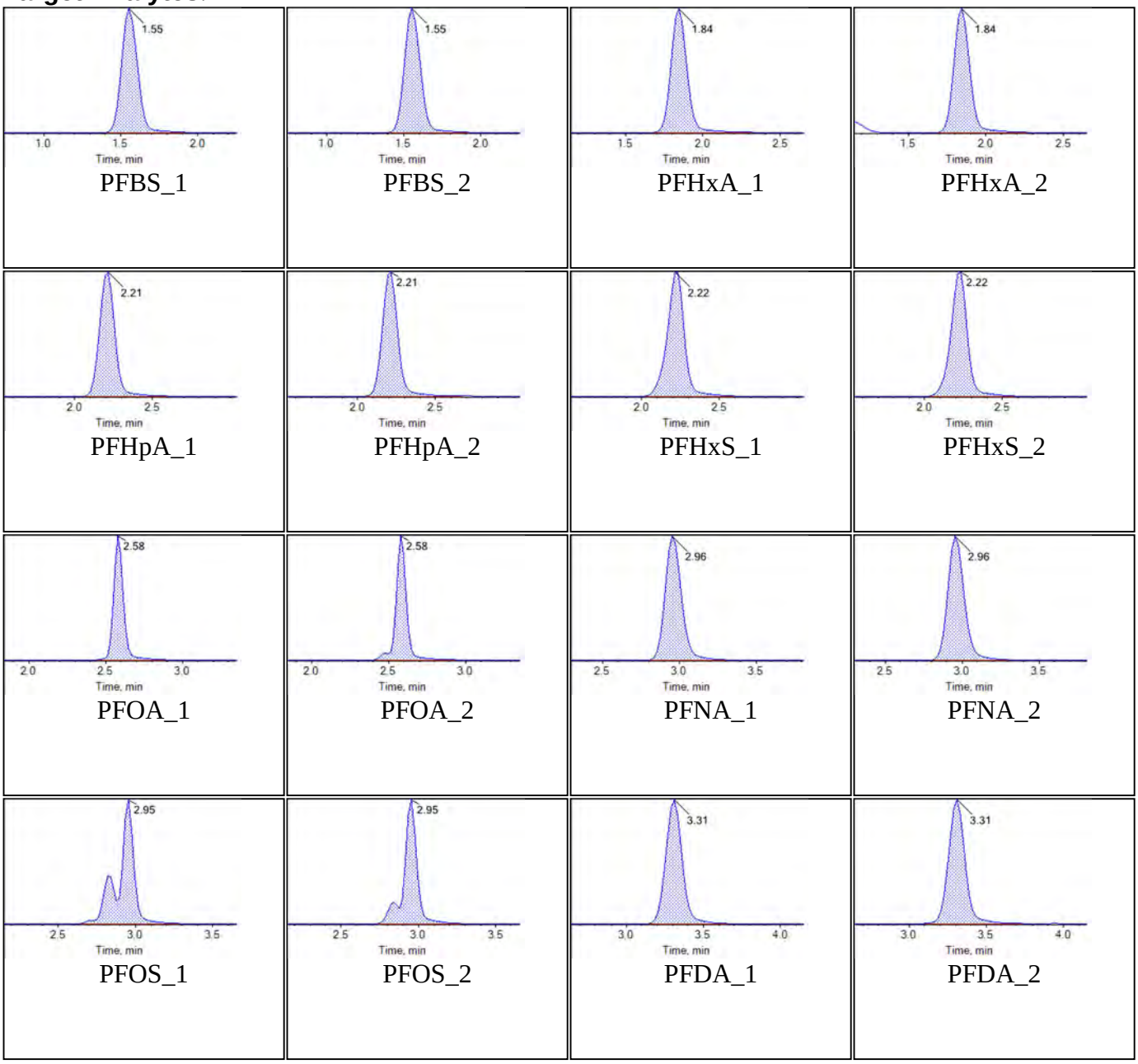
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:22:14 AM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:55:51	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



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Chromatogram Report

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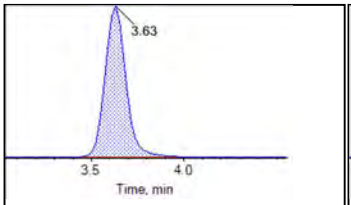
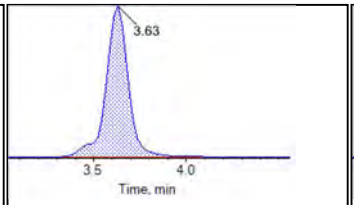
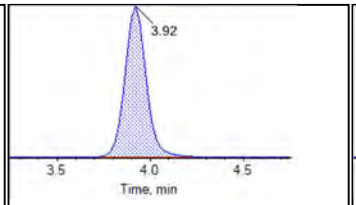


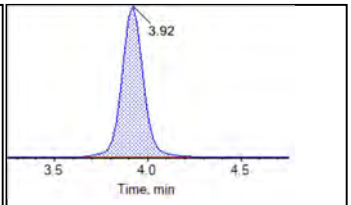
PFUnA_1



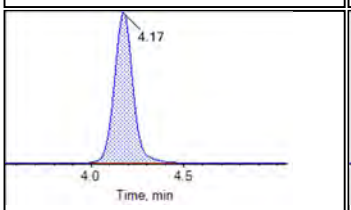
PFUnA_2



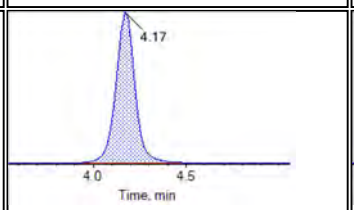
PFDoA_1



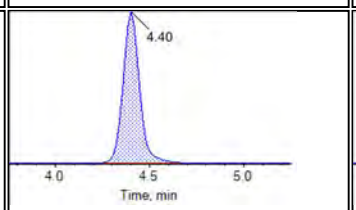
PFDoA_2



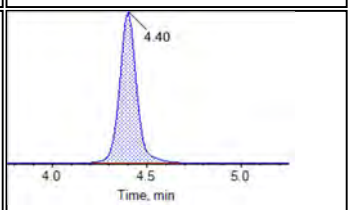
PFTrDA_1



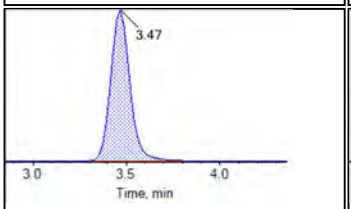
PFTrDA_2



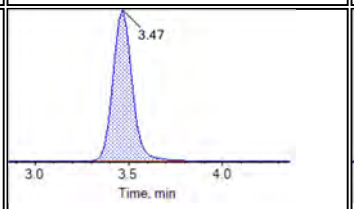
PFTeDA_1



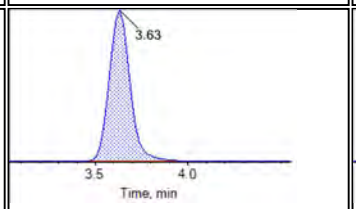
PFTeDA_2



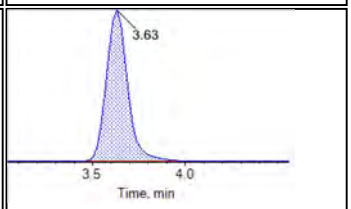
NMeFOSAA_1



NMeFOSAA_2

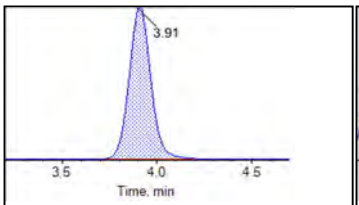


NEtFOSAA_1

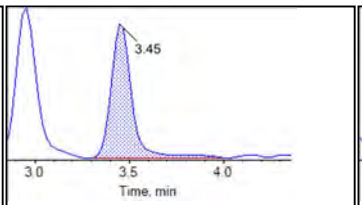


NEtFOSAA_2

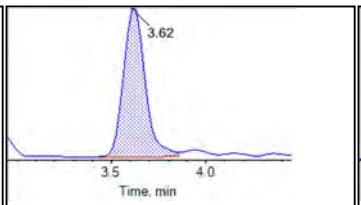
Internal Standards:



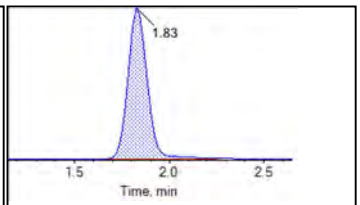
13C2-PFDoA



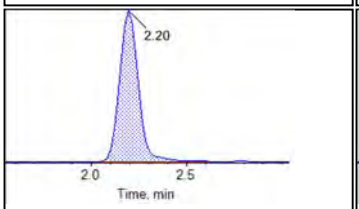
d3-MeFOSAA



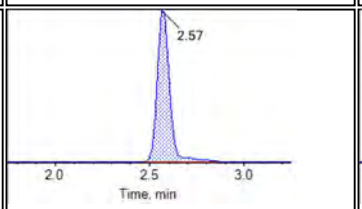
d5-EtFOSAA



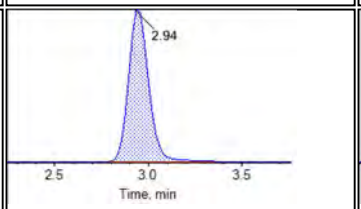
13C5-PFHxA



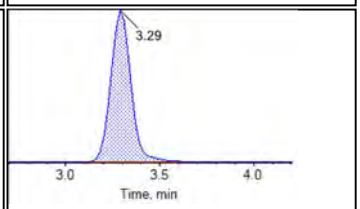
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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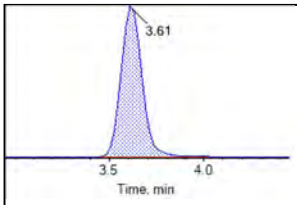
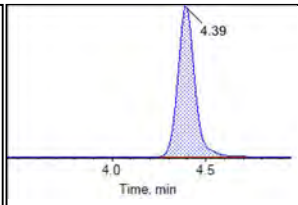


13C7-PFUnA



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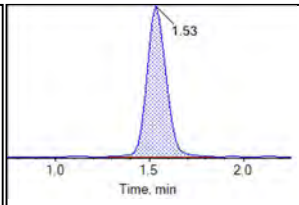
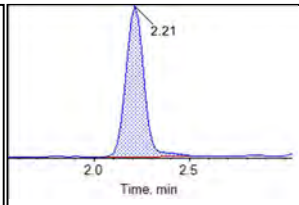
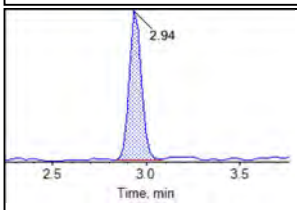


13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:06:44	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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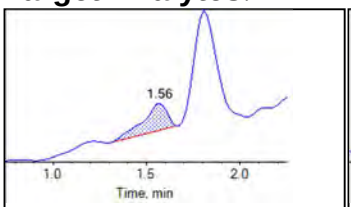
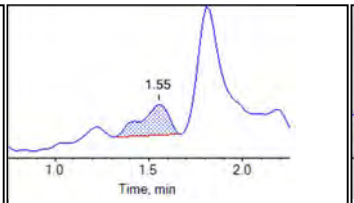


PFBS_1



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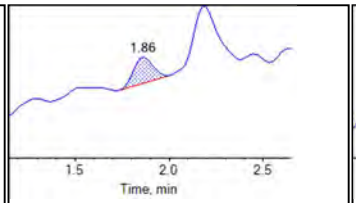

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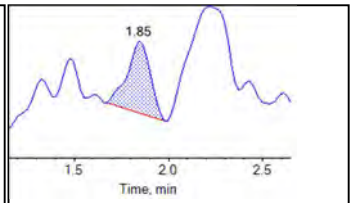

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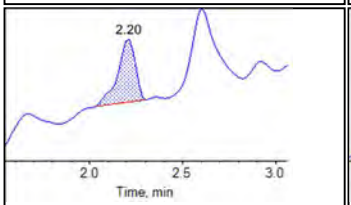

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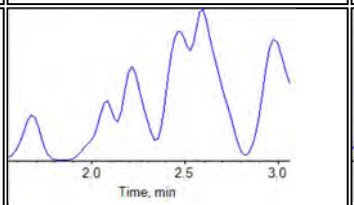

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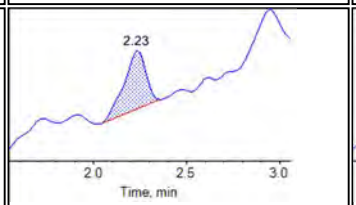

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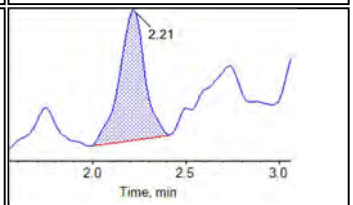

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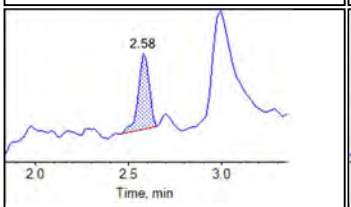
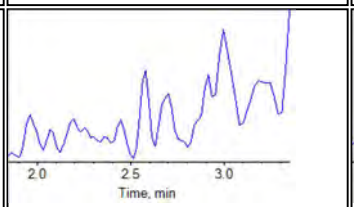


PFOA_1



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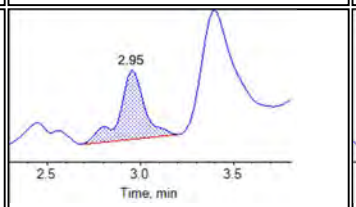

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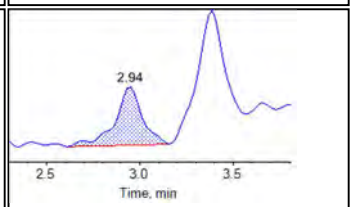

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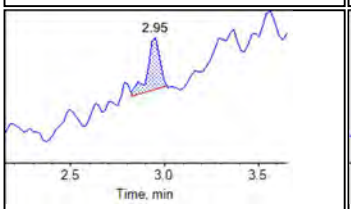

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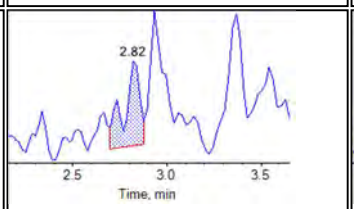

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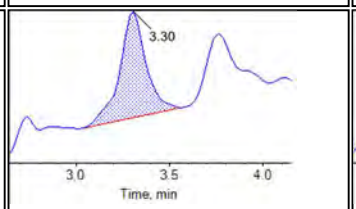

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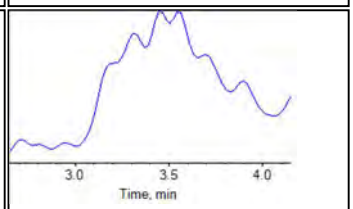

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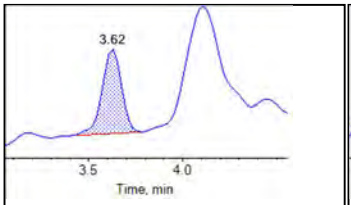
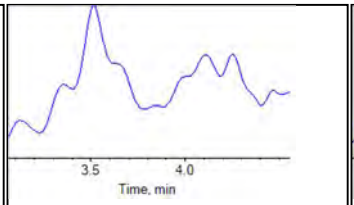


PFUnA_1



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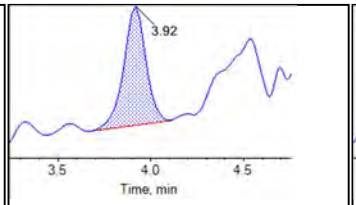

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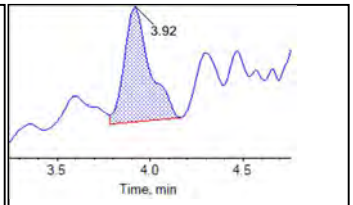

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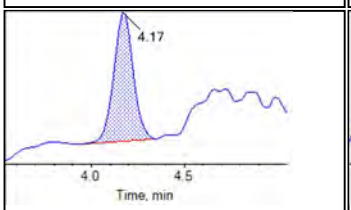

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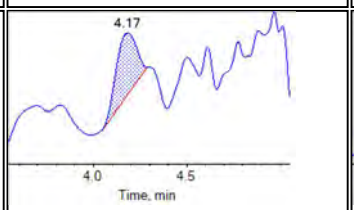

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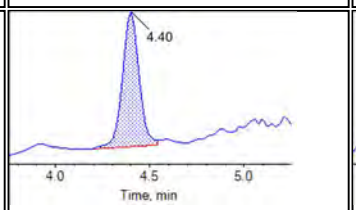

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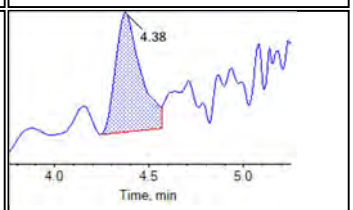

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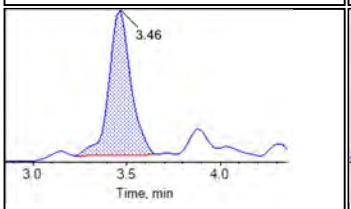

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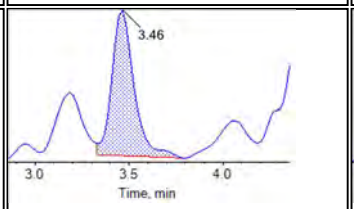

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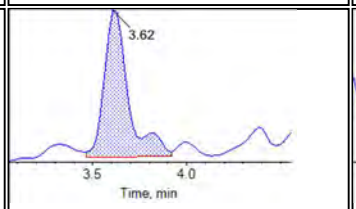

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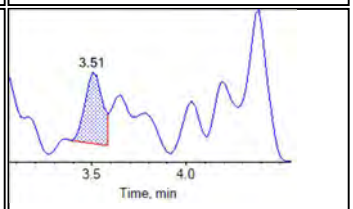
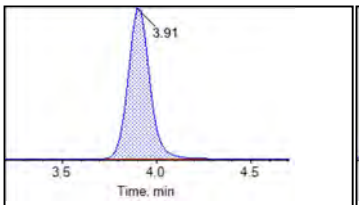


NEtFOSAA_2

Internal Standards:



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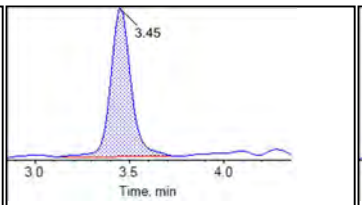
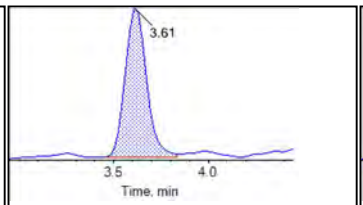
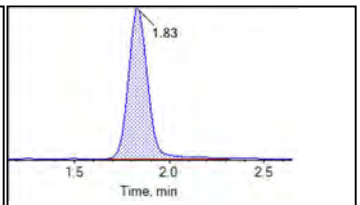


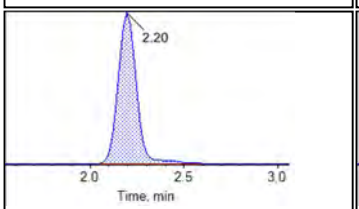
d3-MeFOSAA



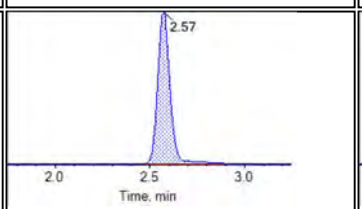
d5-EtFOSAA



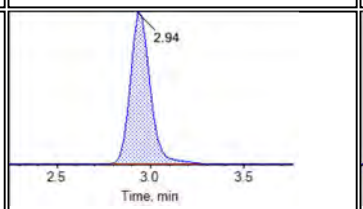
13C5-PFHxA



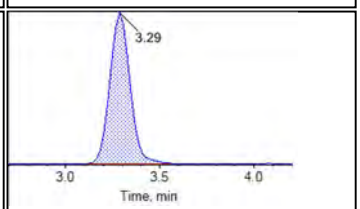
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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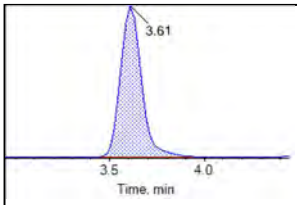
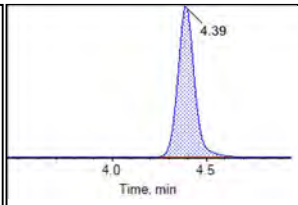
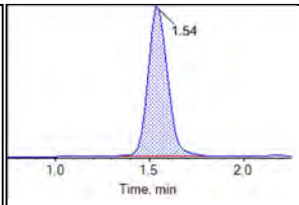


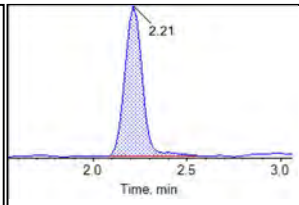
13C7-PFUnA



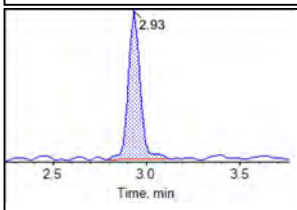
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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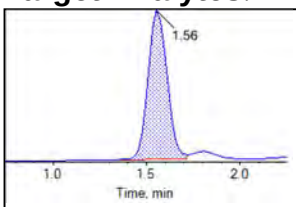
Printed: 29/08/2018 10:22:27 AM

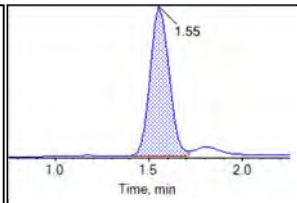
Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:17:37	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



PFBS_1



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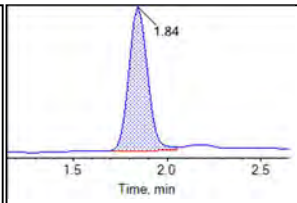

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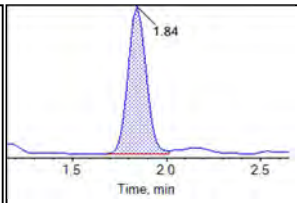

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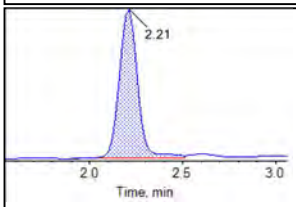

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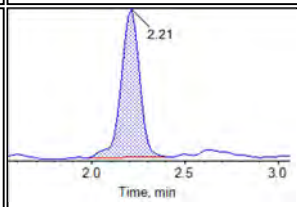

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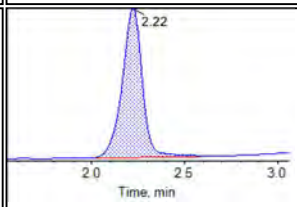

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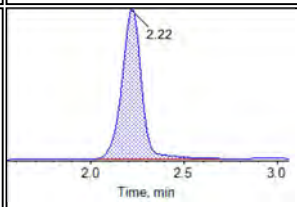

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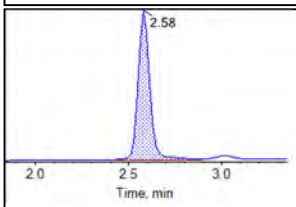

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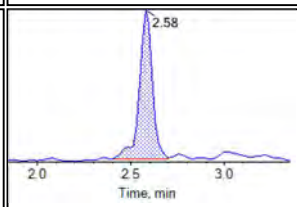

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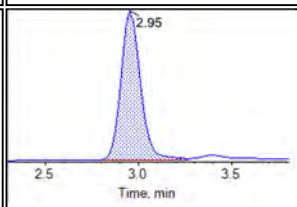

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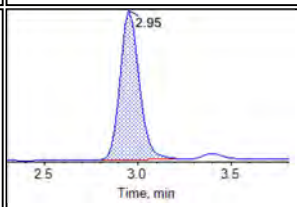

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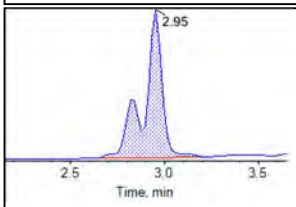

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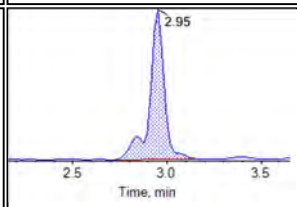

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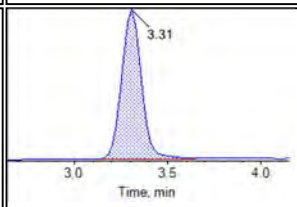

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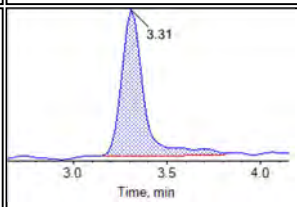

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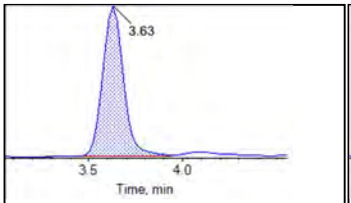

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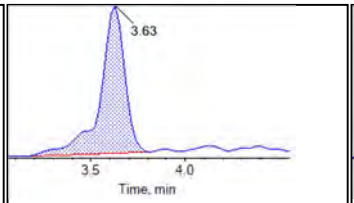

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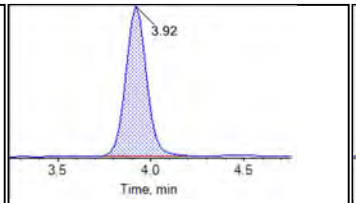

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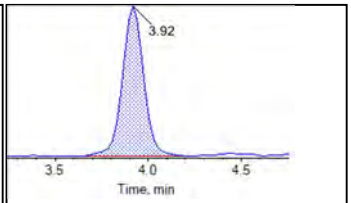

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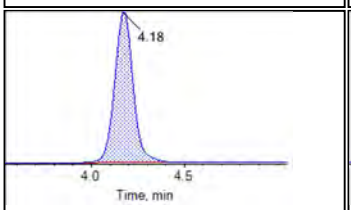

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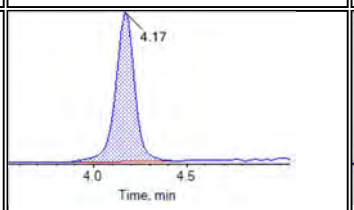

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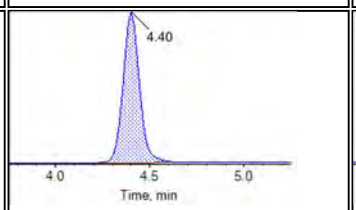

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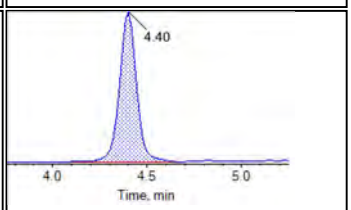

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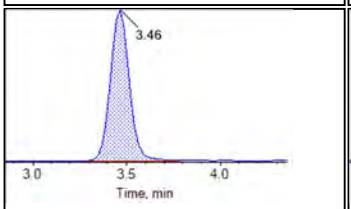

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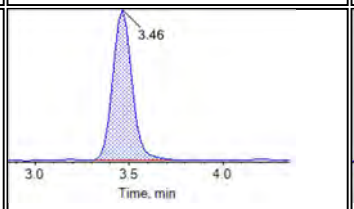

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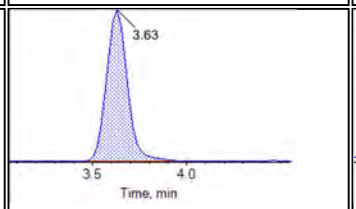

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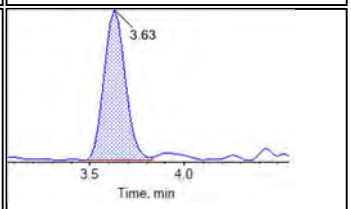

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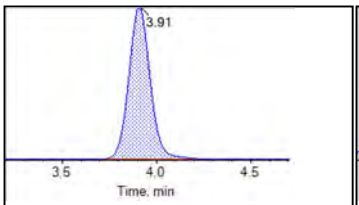

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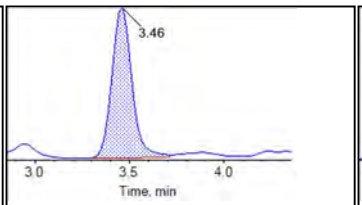

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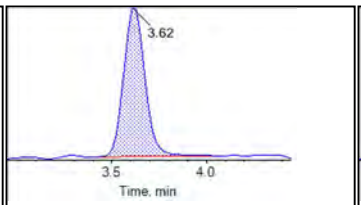

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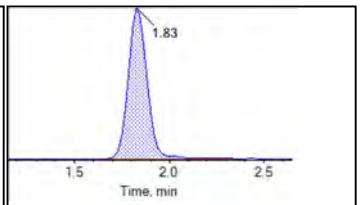

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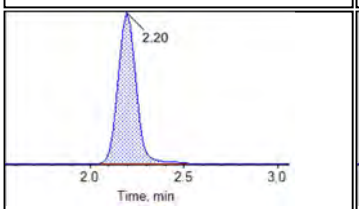

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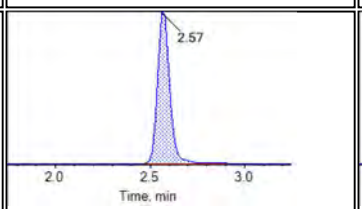

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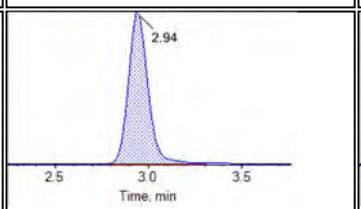

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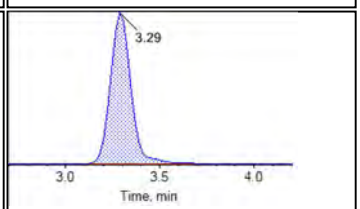

13C6-PFDA

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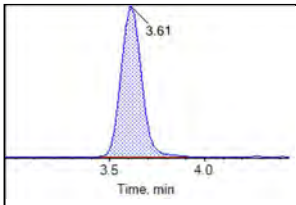

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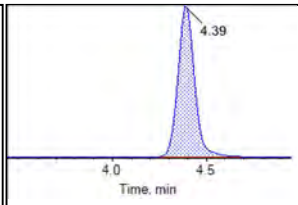

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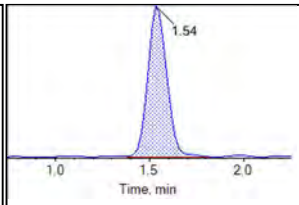

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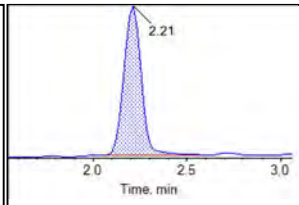

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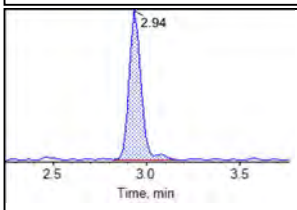

13C8-PFOS

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Chromatogram Report

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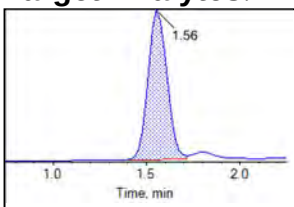
Sample Name	JX41 CCV	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:22:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



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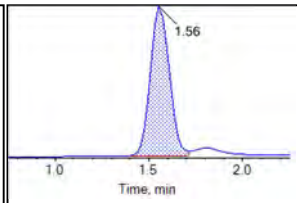

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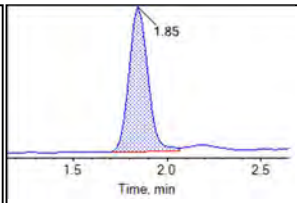

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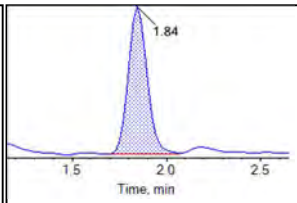

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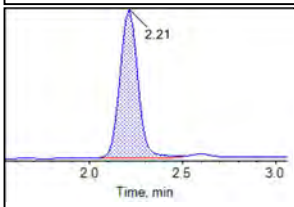

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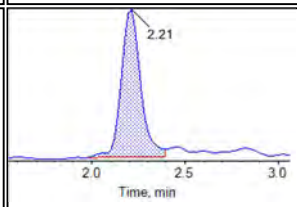

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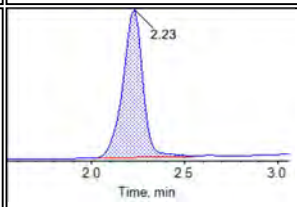

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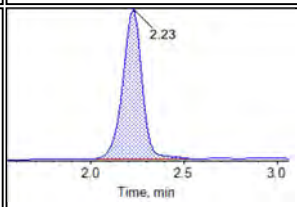

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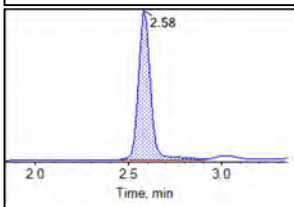

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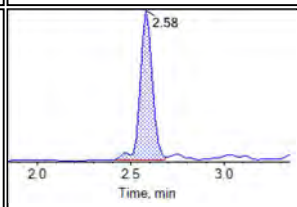

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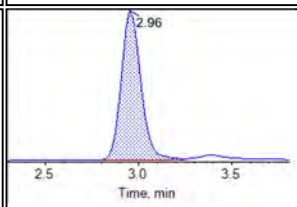

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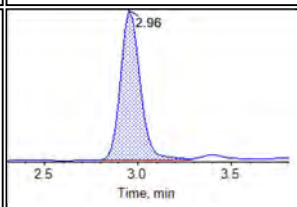

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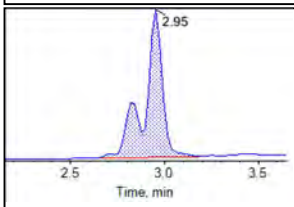

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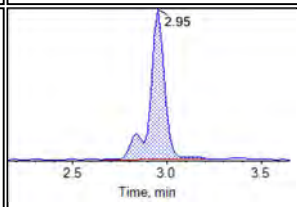

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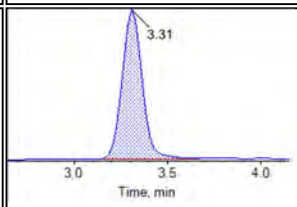
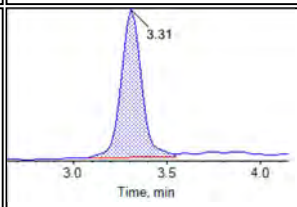


PFDA_1



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Chromatogram Report

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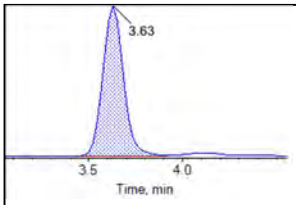

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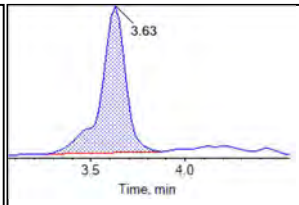

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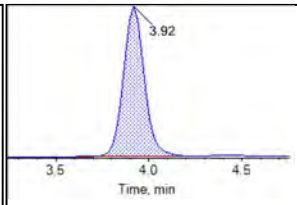

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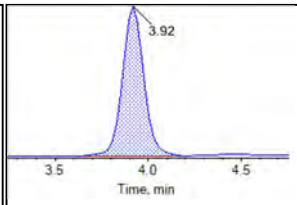

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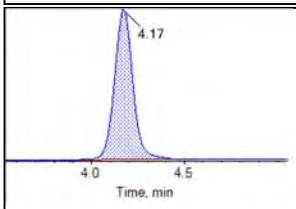

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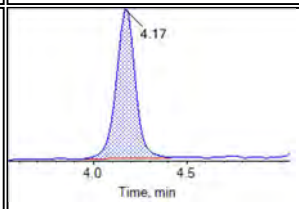

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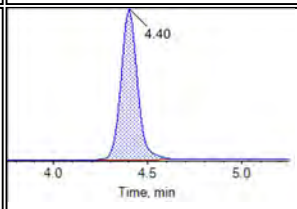

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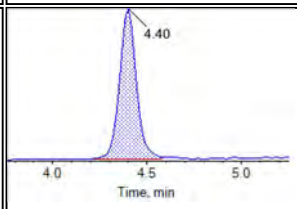

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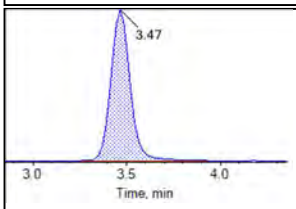

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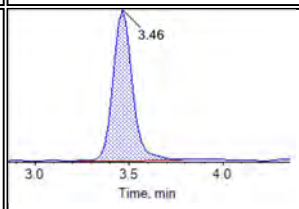

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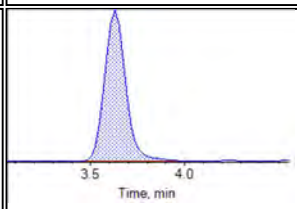

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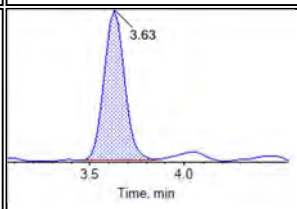

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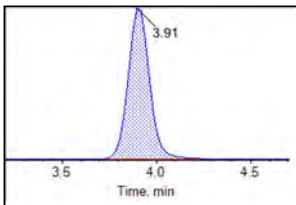

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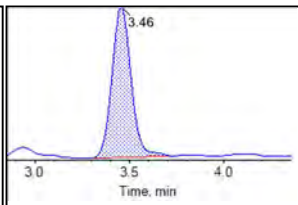

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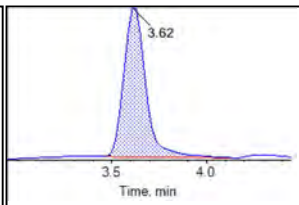

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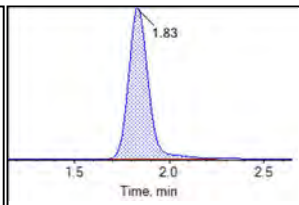

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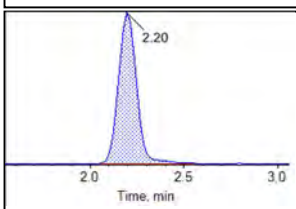

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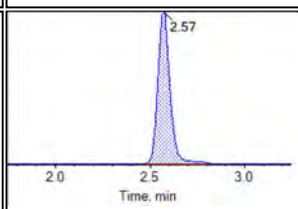

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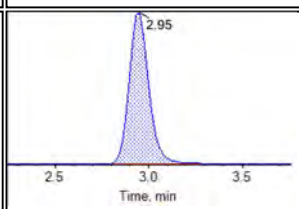

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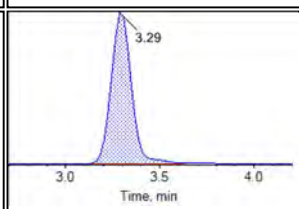

13C6-PFDA

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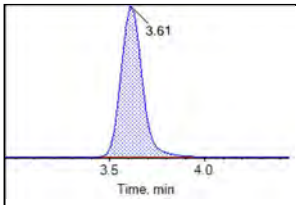
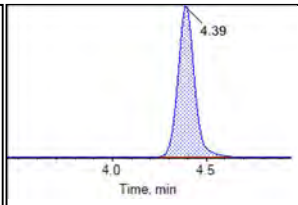


13C7-PFUnA



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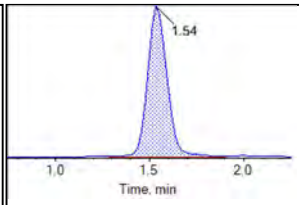

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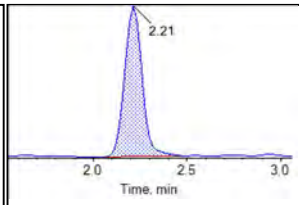

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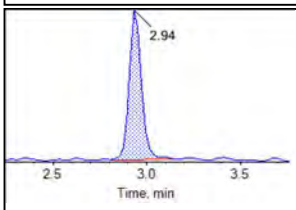

13C8-PFOS

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Chromatogram Report

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Sample Name	CR546PB-FS(3)	**Injection Vial**	17
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:44:41	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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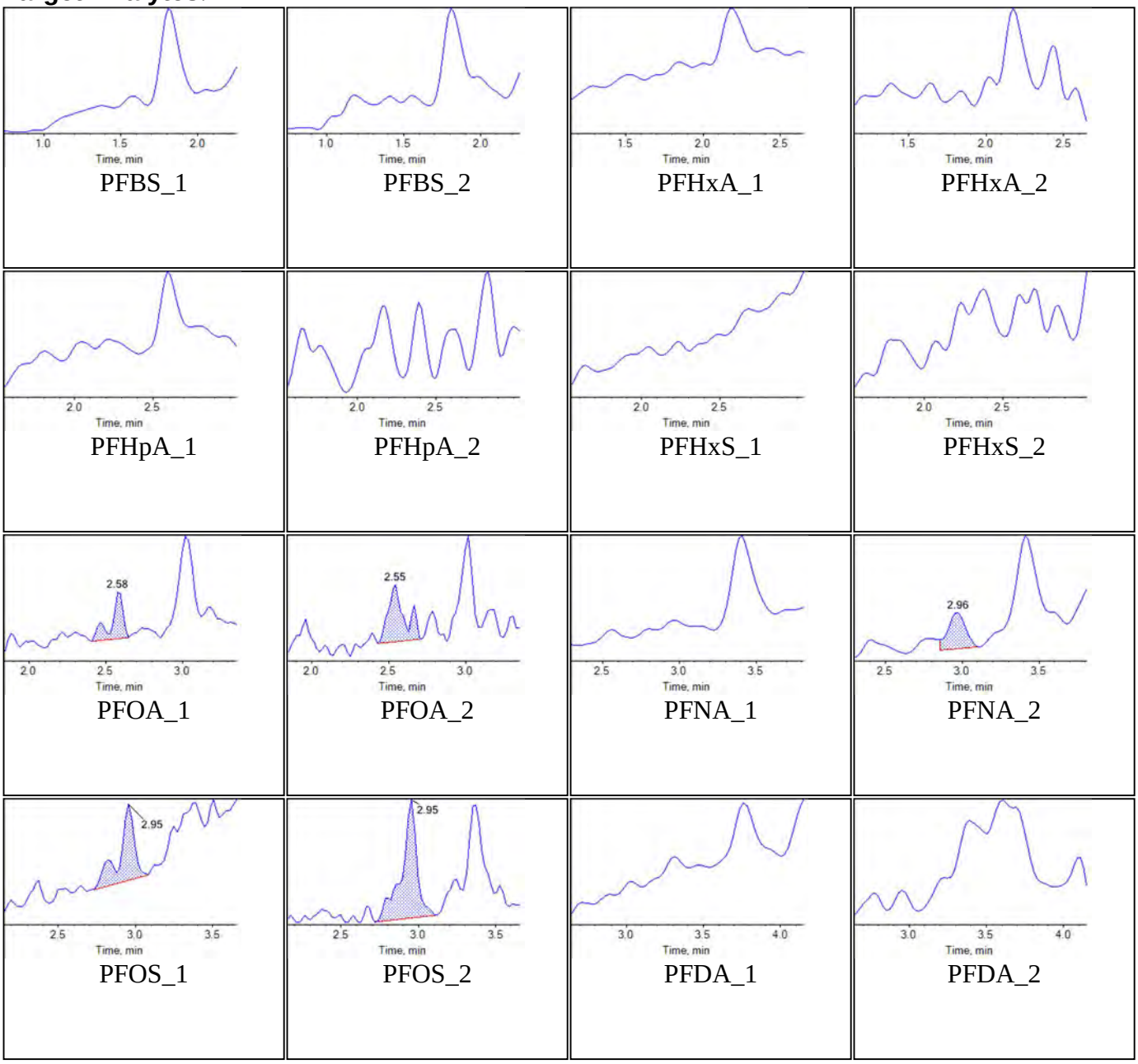

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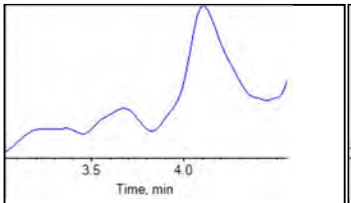

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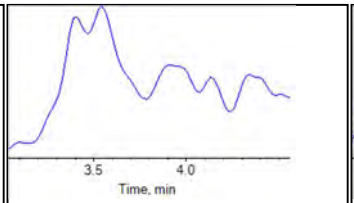

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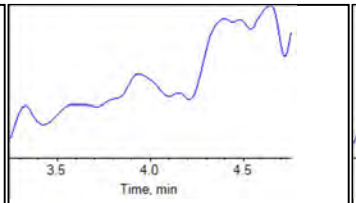

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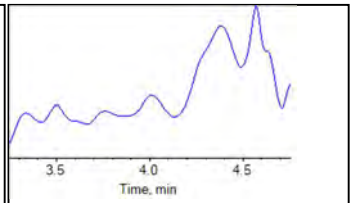

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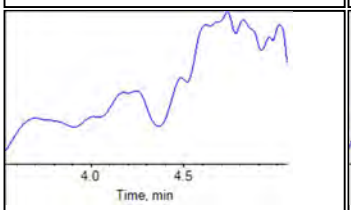

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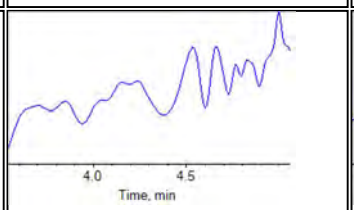

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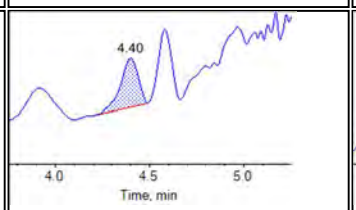

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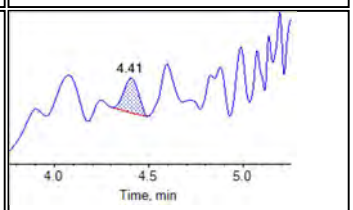

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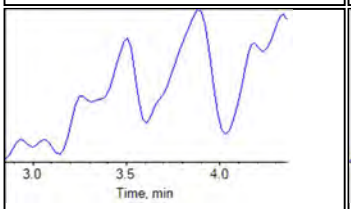

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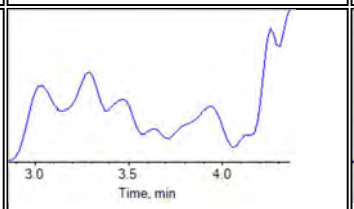

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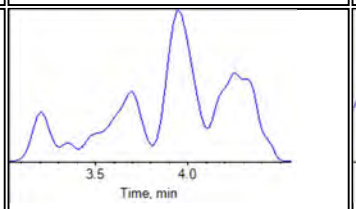

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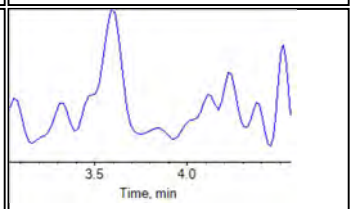

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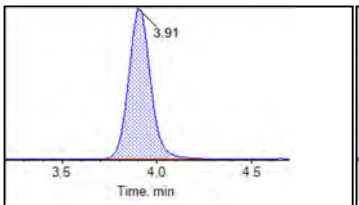

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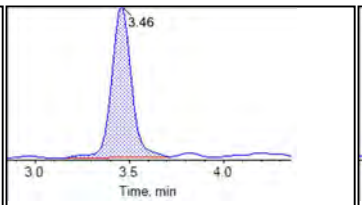

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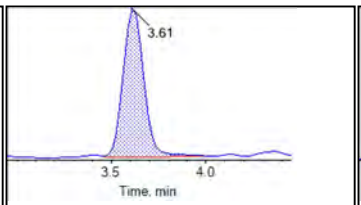

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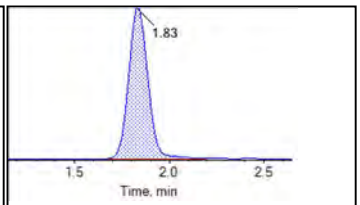

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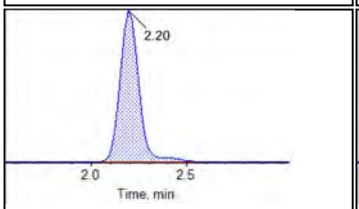

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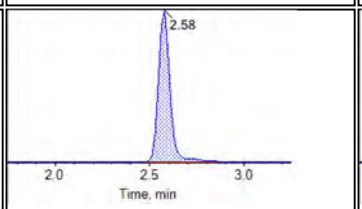

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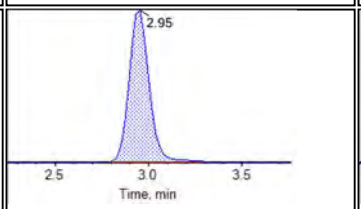

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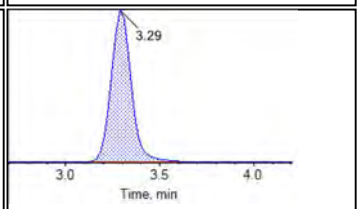

13C6-PFDA

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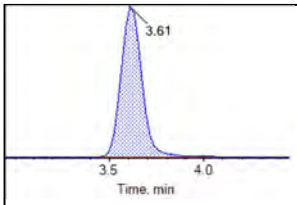
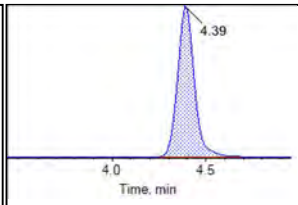


13C7-PFUnA



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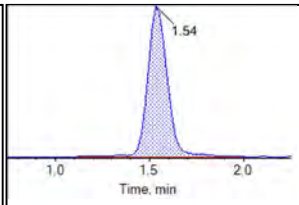

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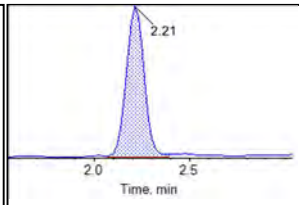

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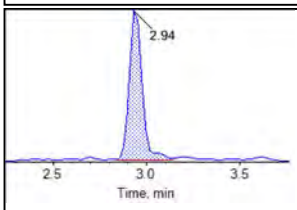

13C8-PFOS

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Chromatogram Report

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Sample Name	CR547LCS-FS(3)	**Injection Vial**	18
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:55:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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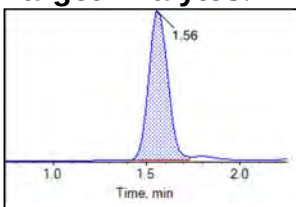

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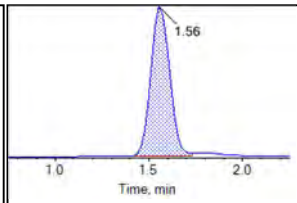

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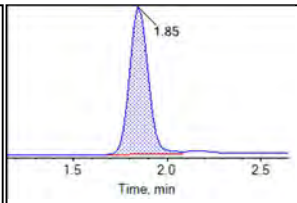

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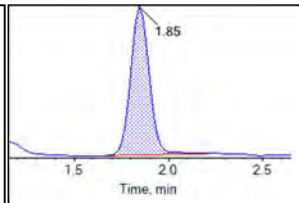

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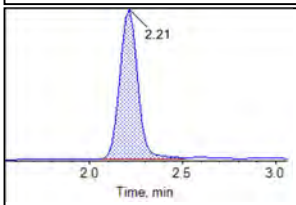

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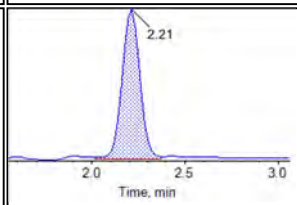

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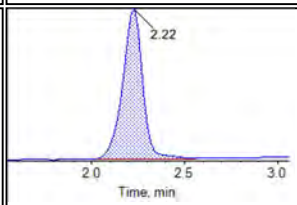

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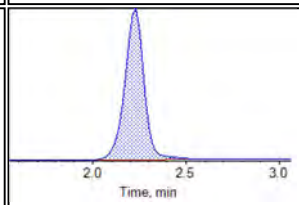

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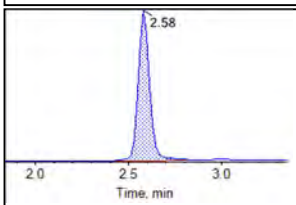

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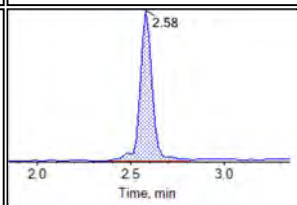

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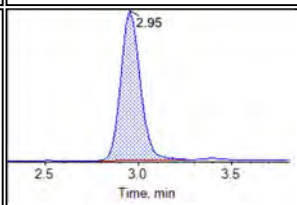

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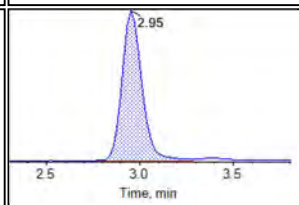

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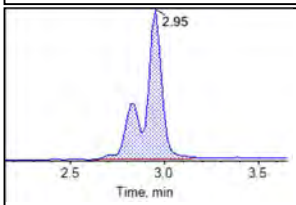

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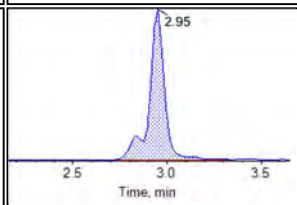

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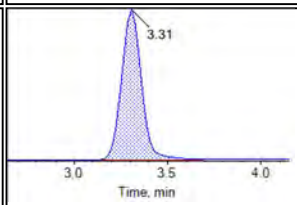

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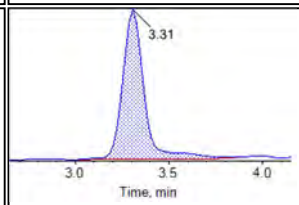

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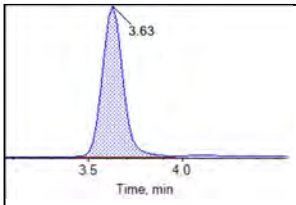

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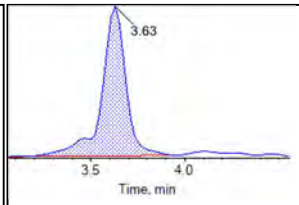

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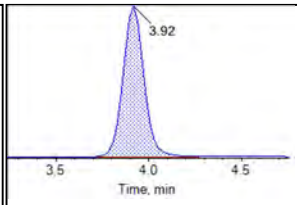

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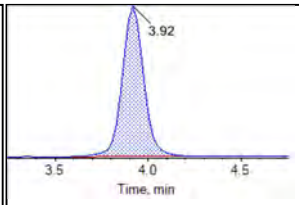

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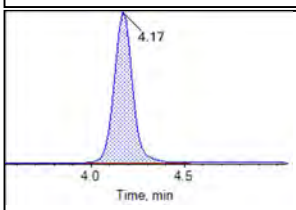

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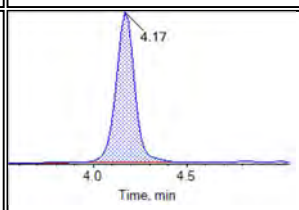

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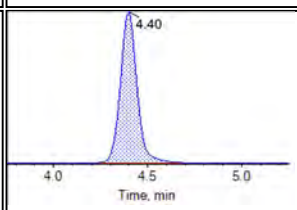

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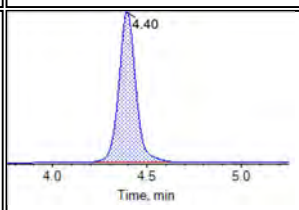

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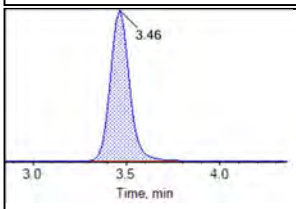

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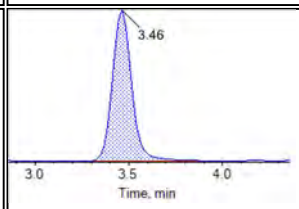

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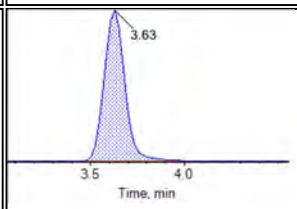

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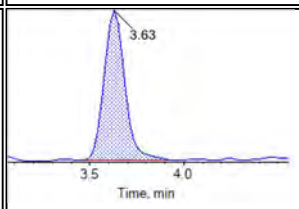

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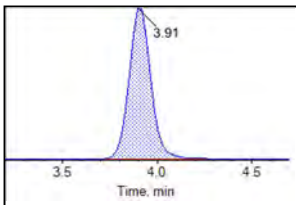

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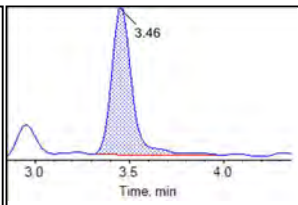

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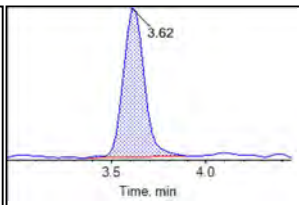

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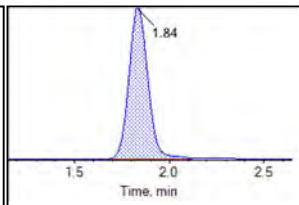

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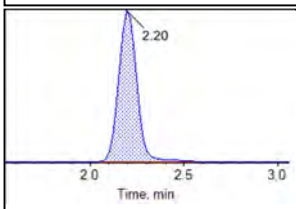

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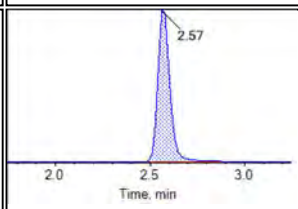
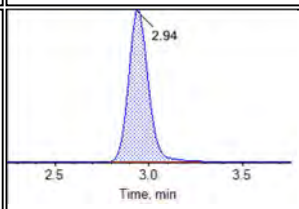


13C8-PFOA



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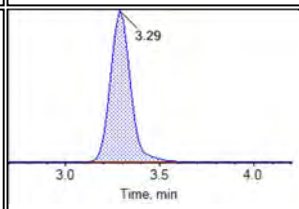

13C6-PFDA

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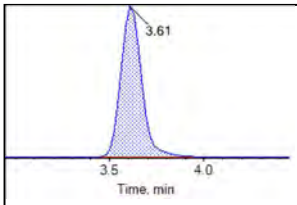

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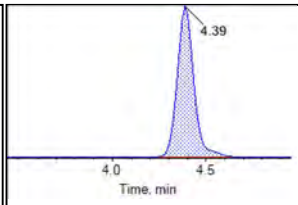
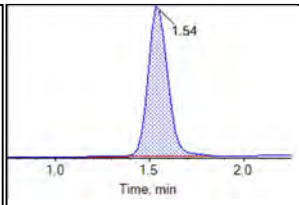
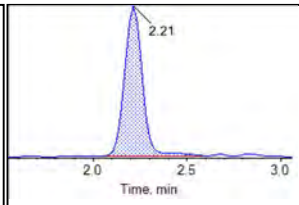


13C2-PFTeDA



13C3-PFBS



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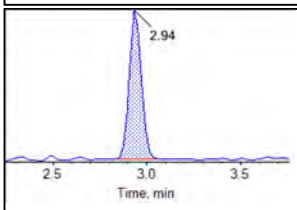

13C8-PFOS

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Chromatogram Report

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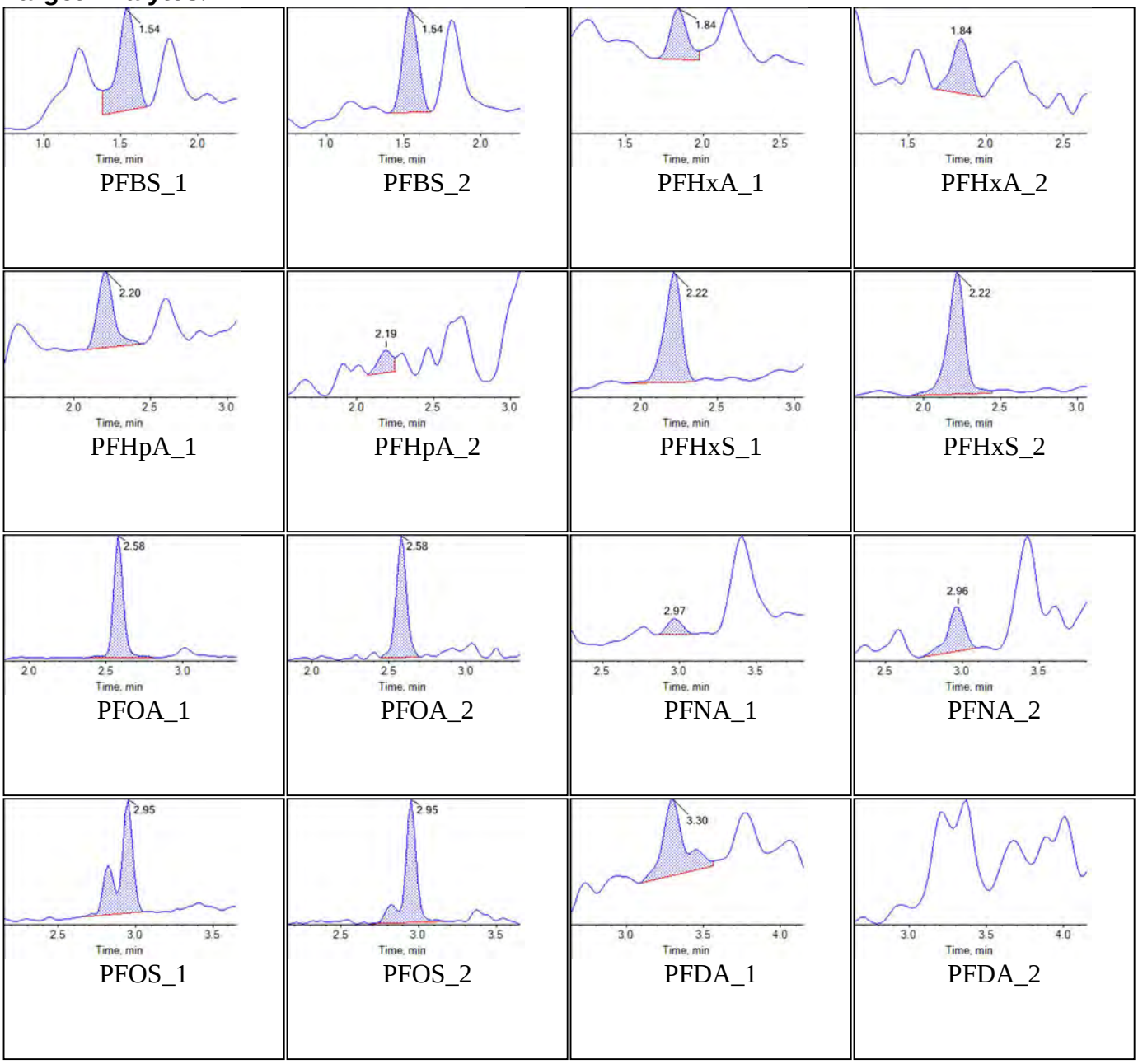
Sample Name	J7259-FS(3)	**Injection Vial**	19
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:06:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



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Chromatogram Report

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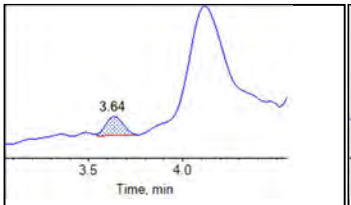

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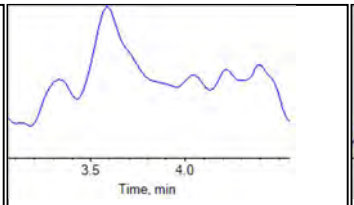

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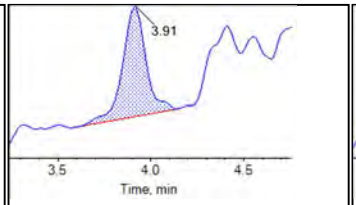

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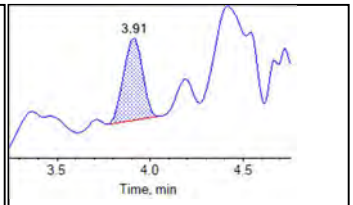

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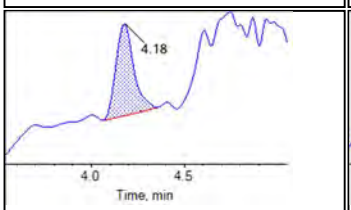

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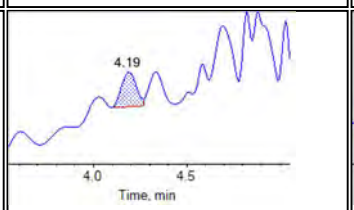

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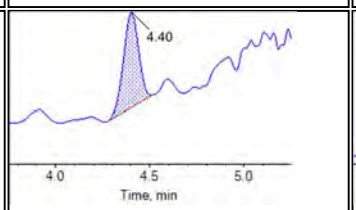

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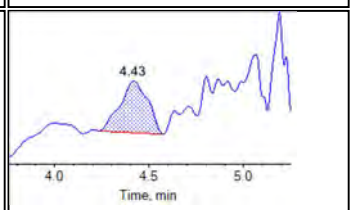

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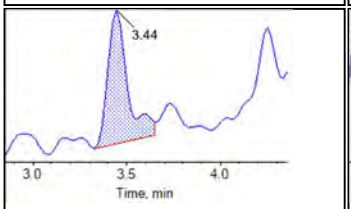

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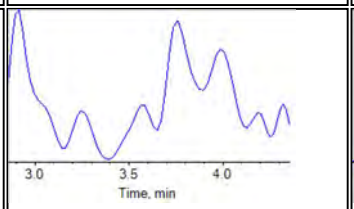

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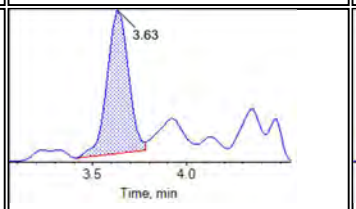

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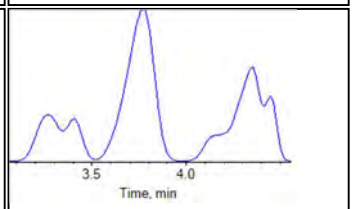

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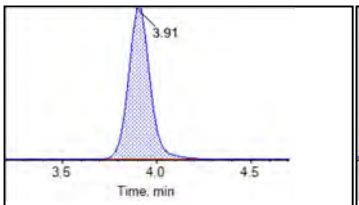

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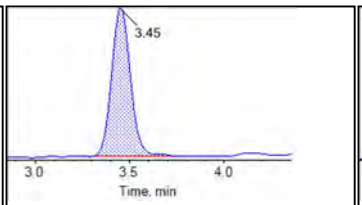

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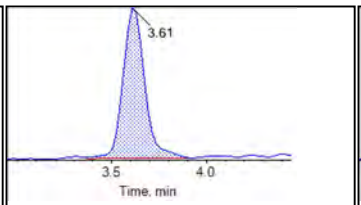

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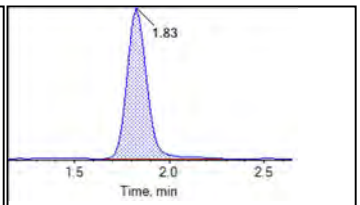

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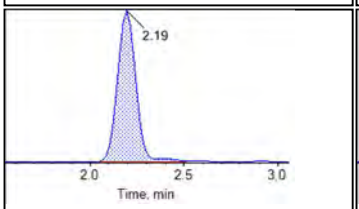
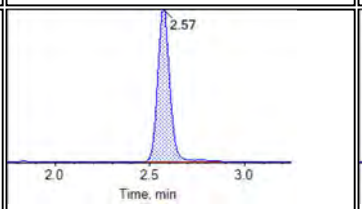
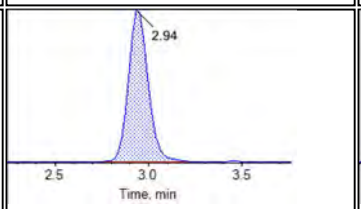


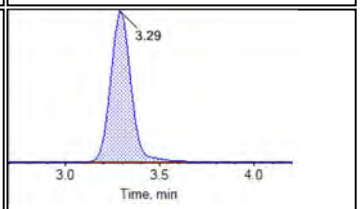
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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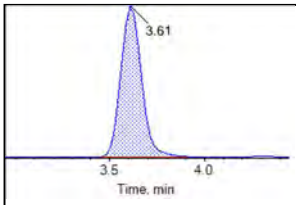
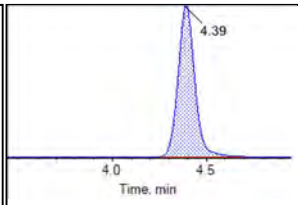


13C7-PFUnA



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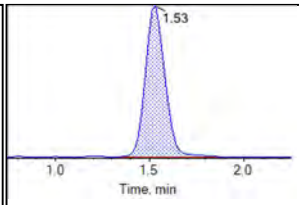
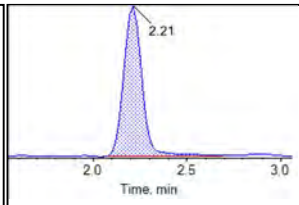


13C3-PFBS



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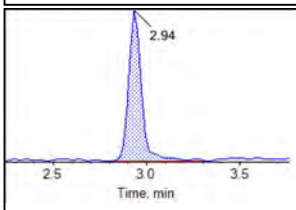

13C8-PFOS

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Chromatogram Report

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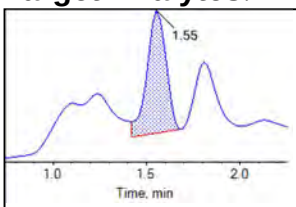
Sample Name	J7260-FS(3)	**Injection Vial**	20
Sample ID	080118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:17:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



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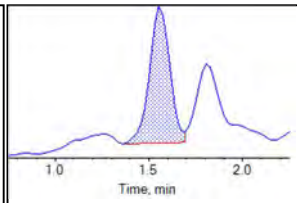

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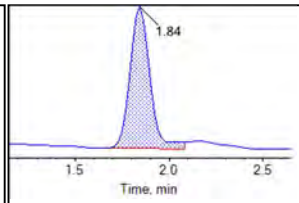

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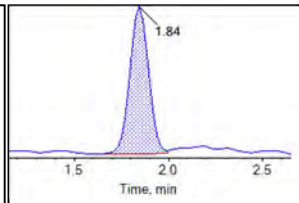

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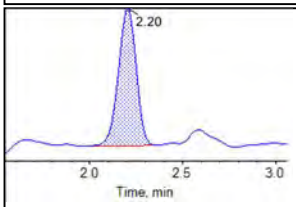

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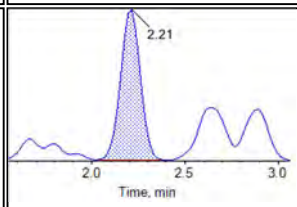

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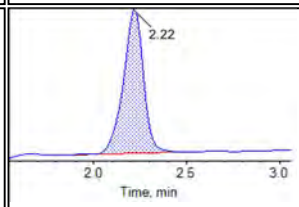

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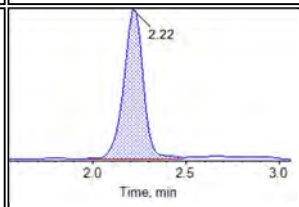

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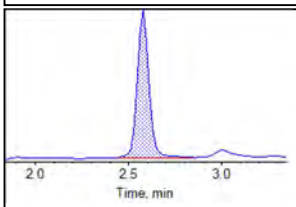

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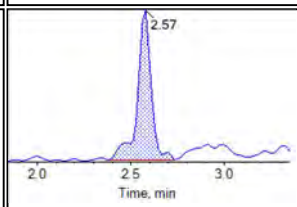

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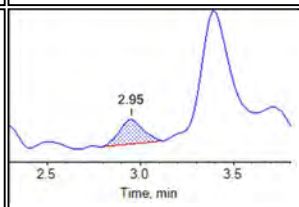

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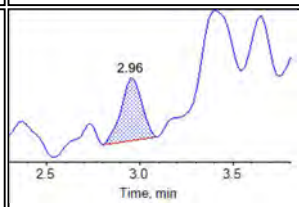

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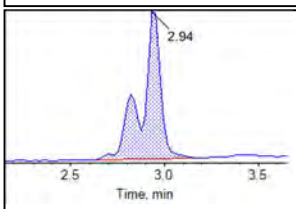

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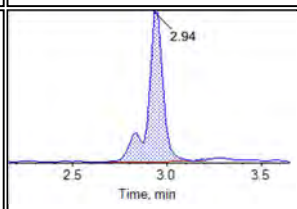

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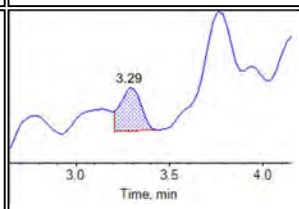

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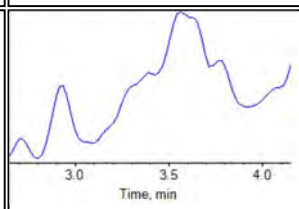

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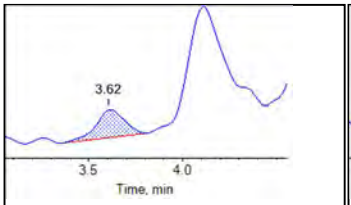

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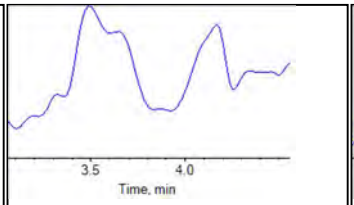

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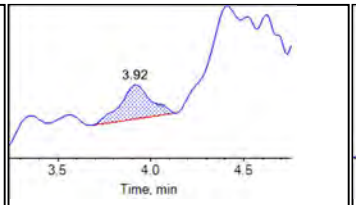

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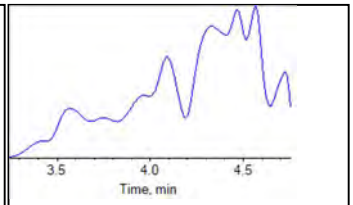

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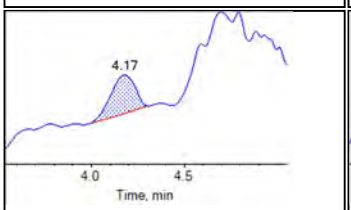

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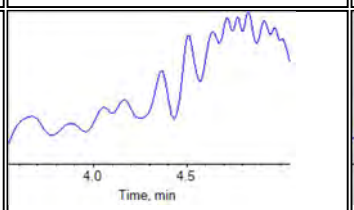

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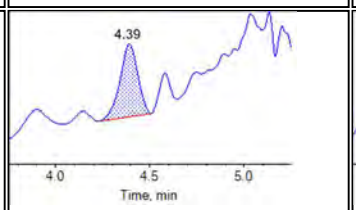

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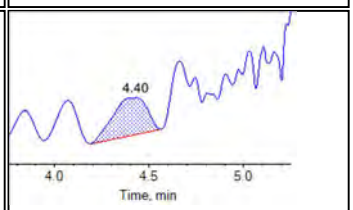

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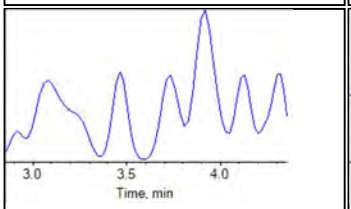

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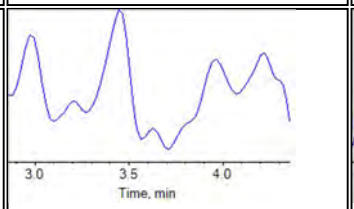

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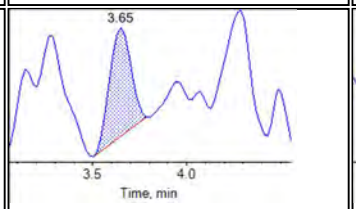

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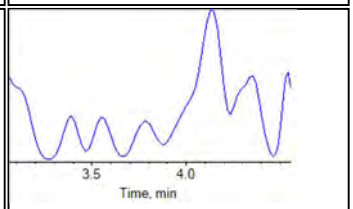

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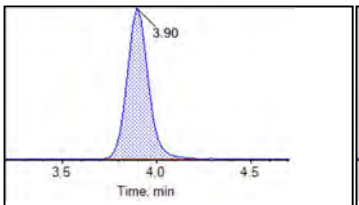

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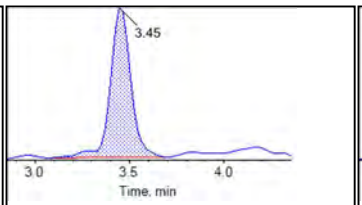

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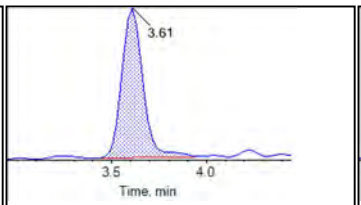

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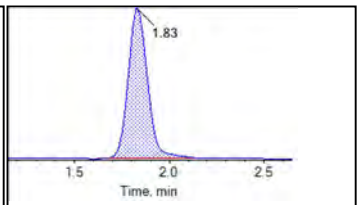

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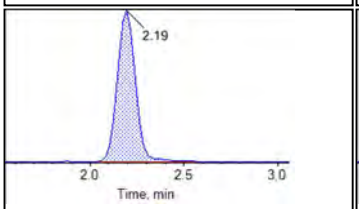

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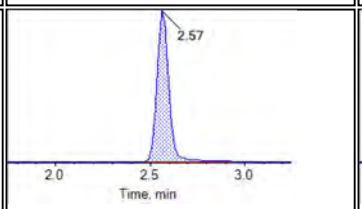
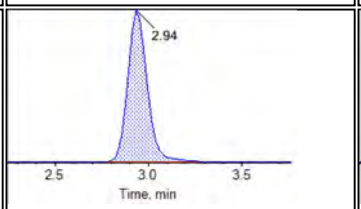


13C8-PFOA



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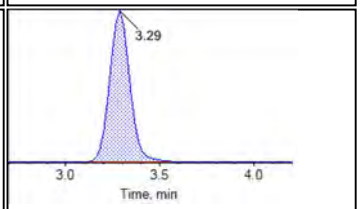

13C6-PFDA

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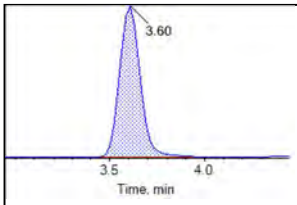
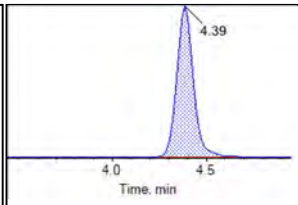


13C7-PFUnA



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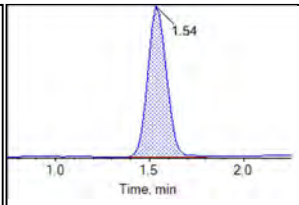
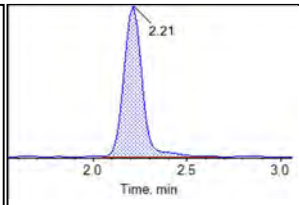
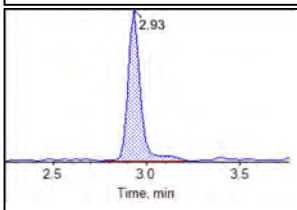


13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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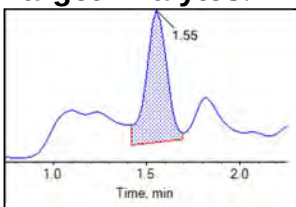
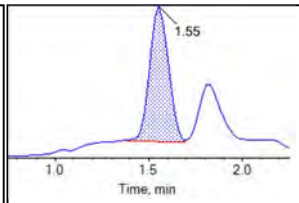
Sample Name	J7261-FS(3)	**Injection Vial**	21
Sample ID	080118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:28:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



PFBS_1



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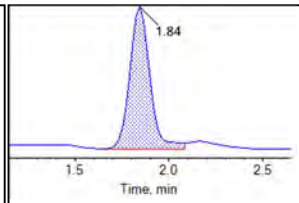

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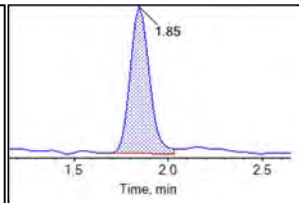

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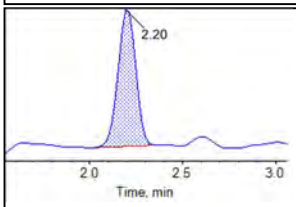

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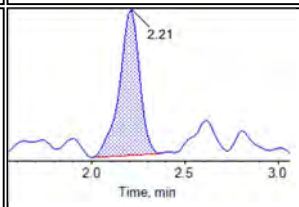

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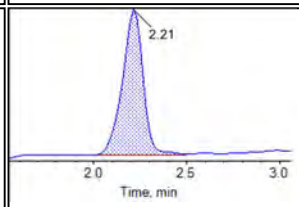

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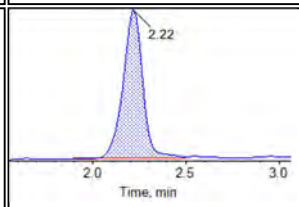

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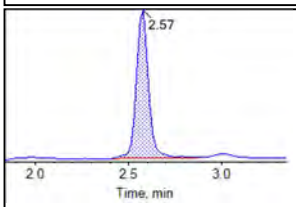

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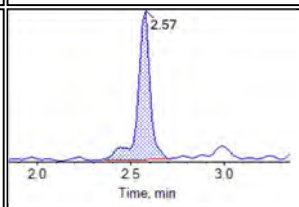

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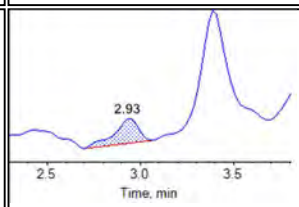

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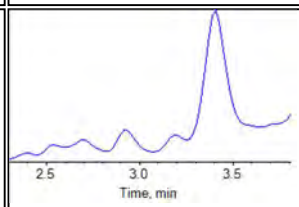

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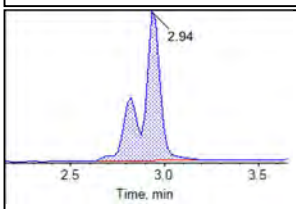

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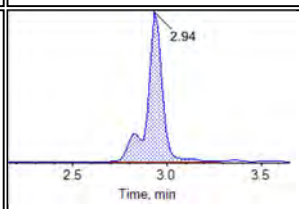

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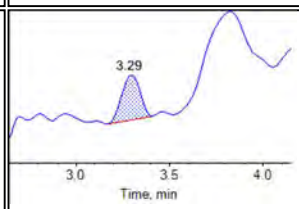

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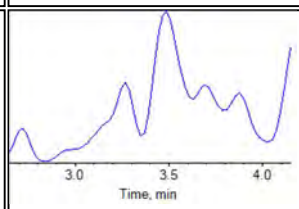

PFDA_2

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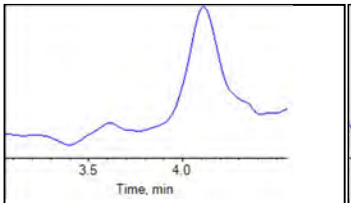
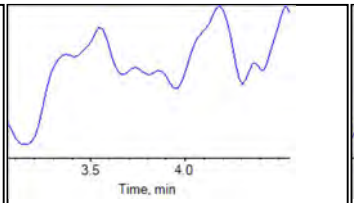


PFUnA_1



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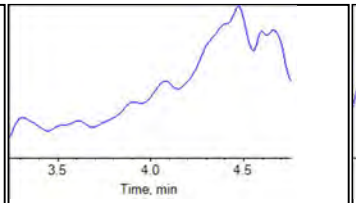

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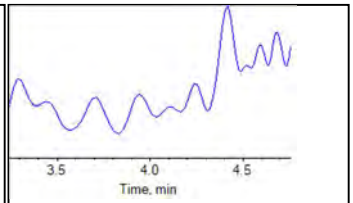

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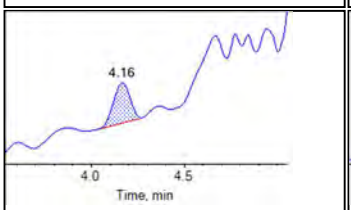

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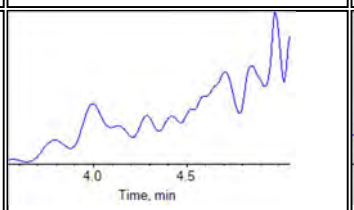

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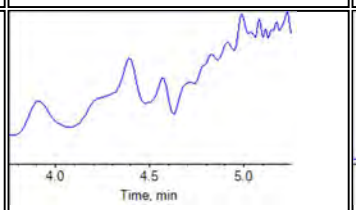

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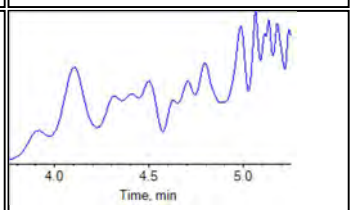

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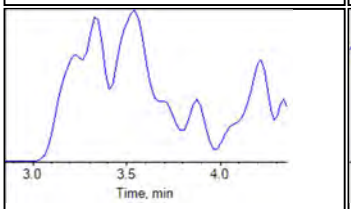

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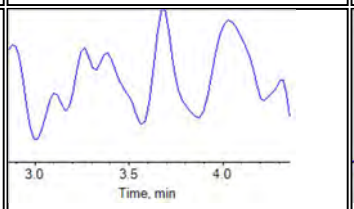

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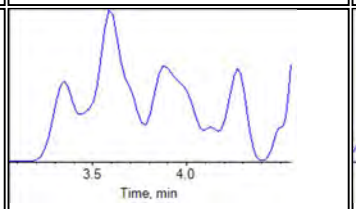

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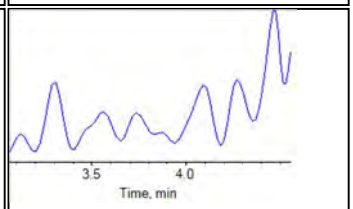
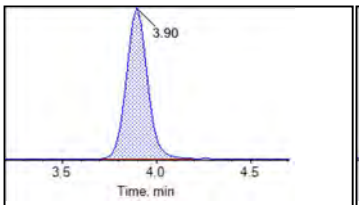
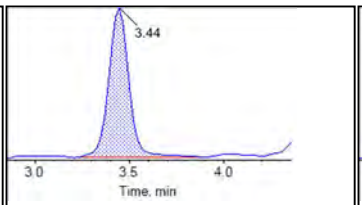


NEtFOSAA_2

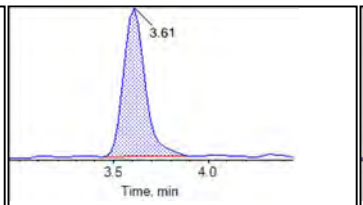
Internal Standards:



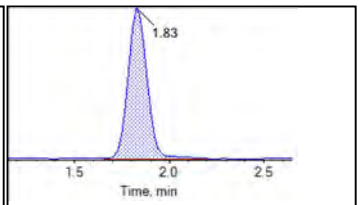
13C2-PFDoA



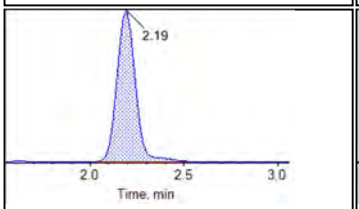
d3-MeFOSAA



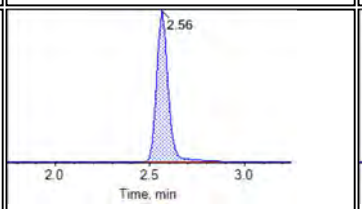
d5-EtFOSAA



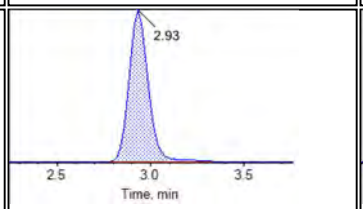
13C5-PFHxA



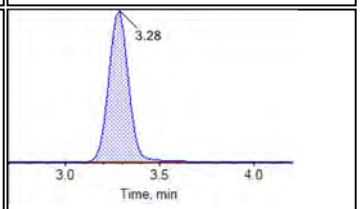
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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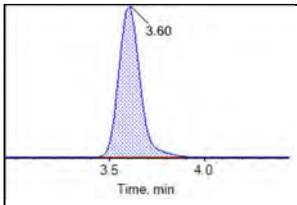
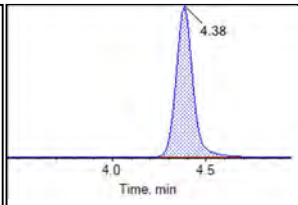
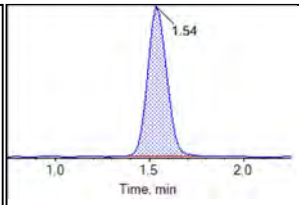


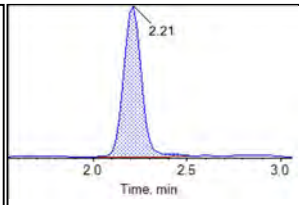
13C7-PFUnA



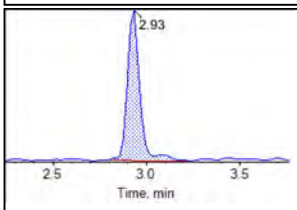
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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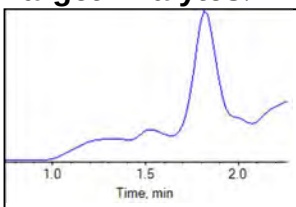
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:23:26 AM

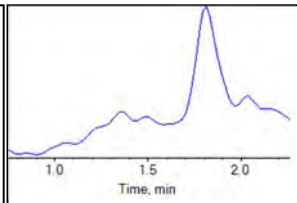
Sample Name	J7252-FS(3)	**Injection Vial**	22
Sample ID	073018-05	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:39:03	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

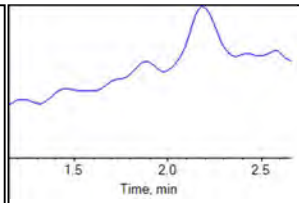
Target Analytes:



PFBS_1



PFBS_2



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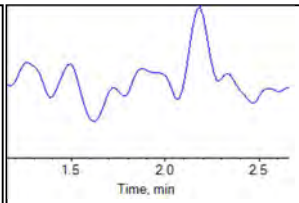
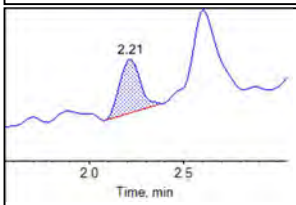


PFHxA_2



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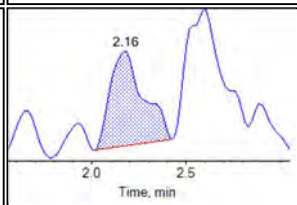
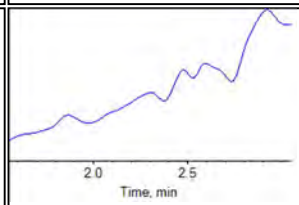
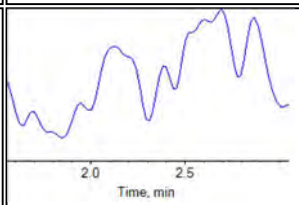


PFHpA_2



PFHxS_1



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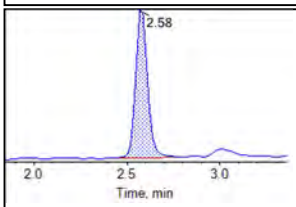
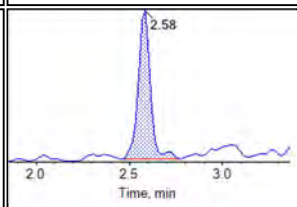


PFOA_1



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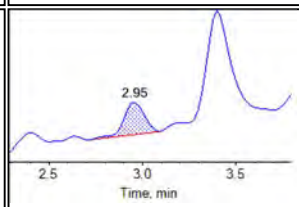

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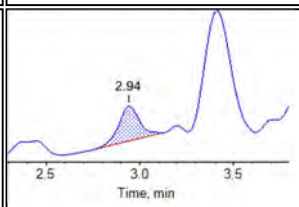

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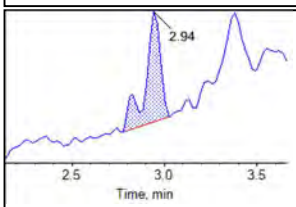

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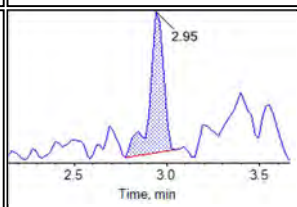

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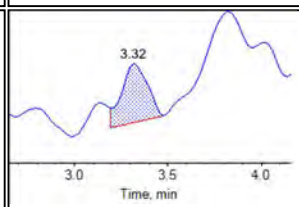

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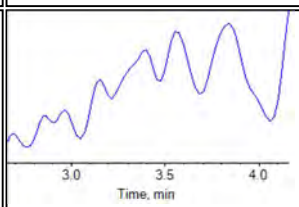

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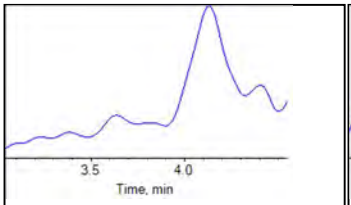

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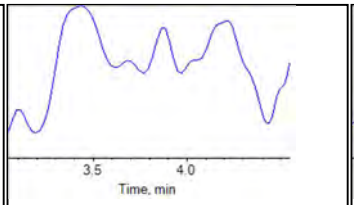

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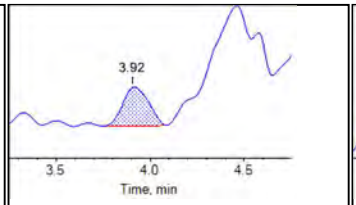

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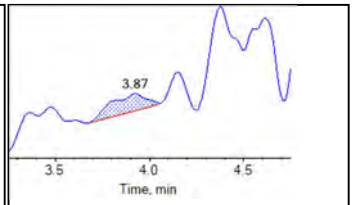

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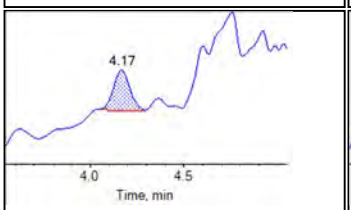

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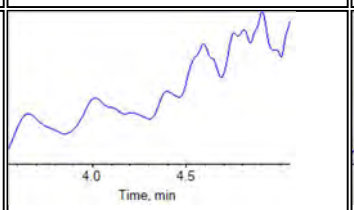

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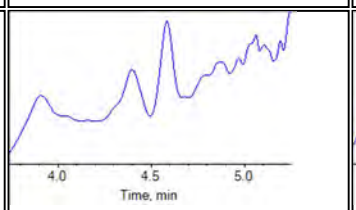

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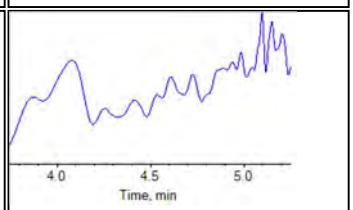

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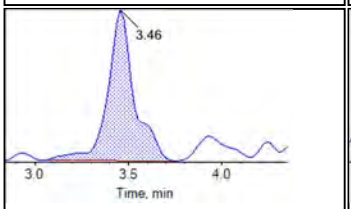

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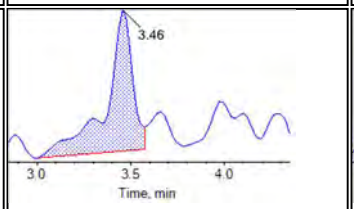

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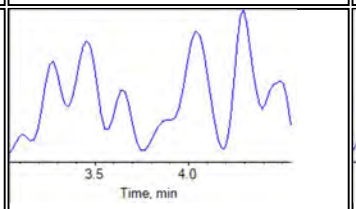

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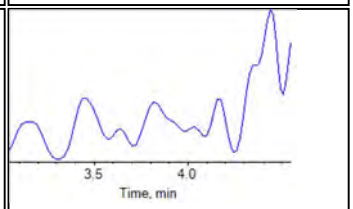

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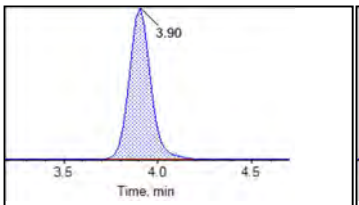

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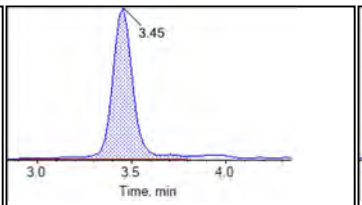

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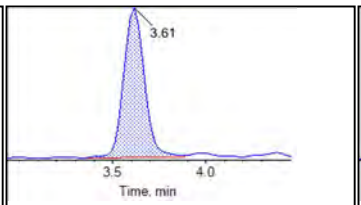

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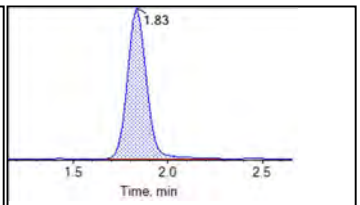

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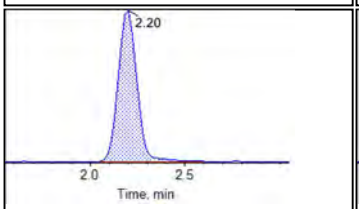

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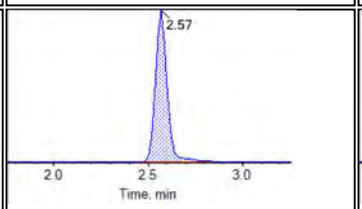

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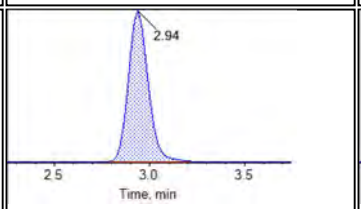

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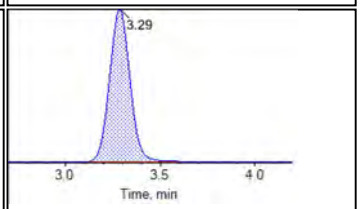

13C6-PFDA

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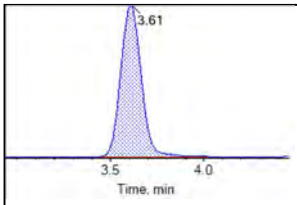

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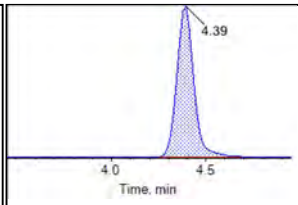

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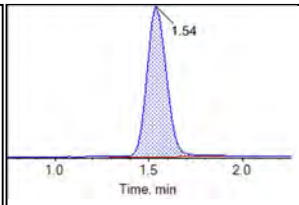

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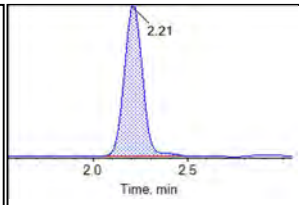

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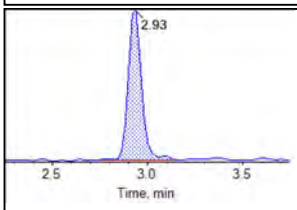

13C8-PFOS

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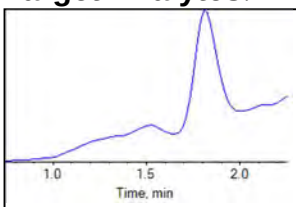
Sample Name	J7253-FS(3)	**Injection Vial**	23
Sample ID	073018-06	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:49:56	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



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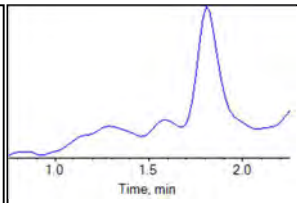

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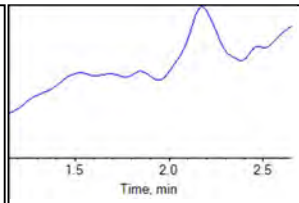

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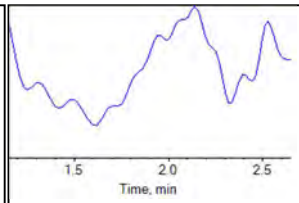

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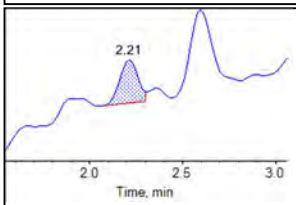

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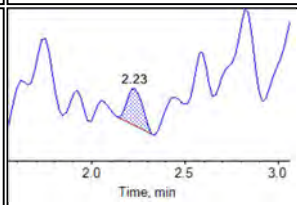

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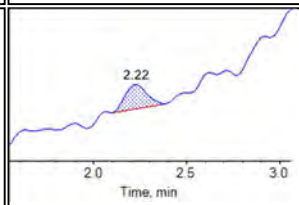

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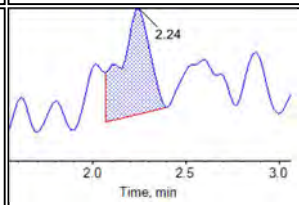

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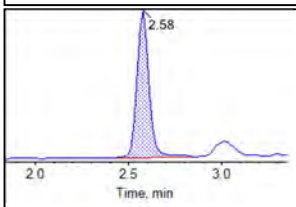

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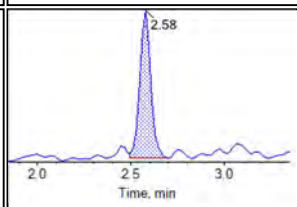

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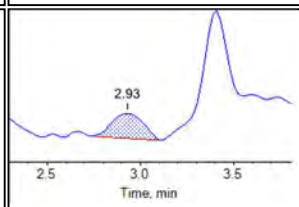

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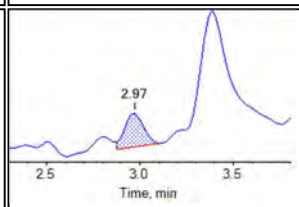

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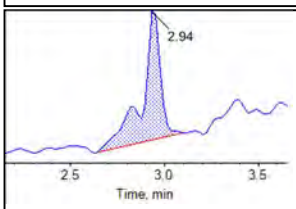

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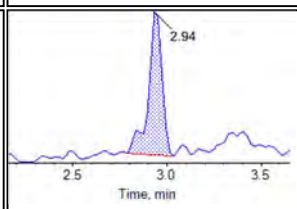

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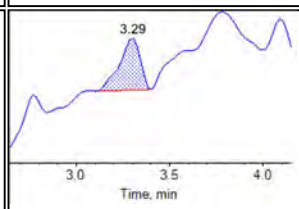

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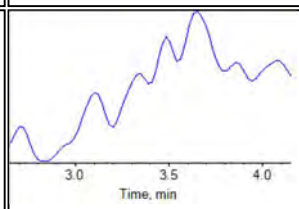

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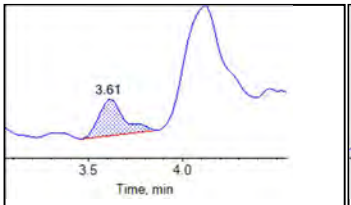

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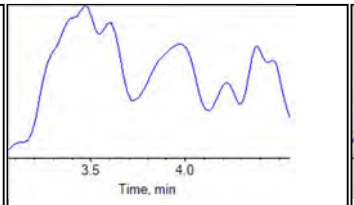

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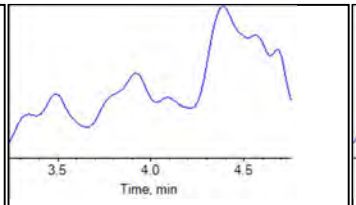

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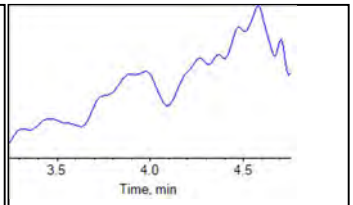

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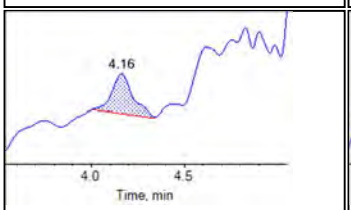
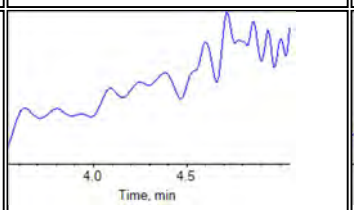


PFTrDA_1



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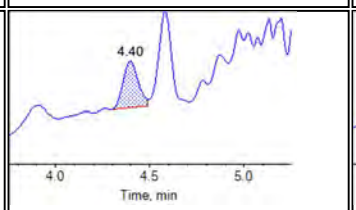

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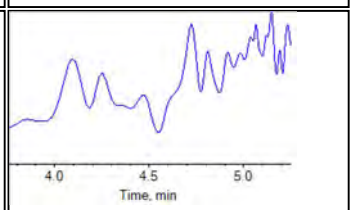

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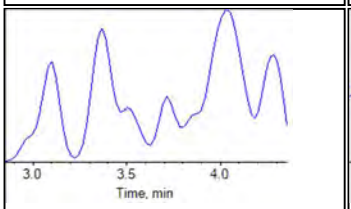

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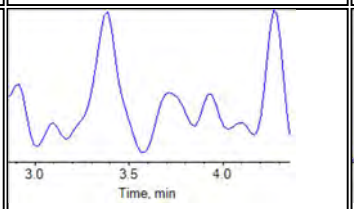

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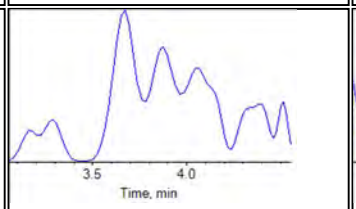

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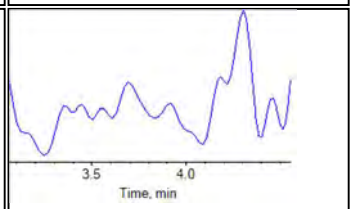

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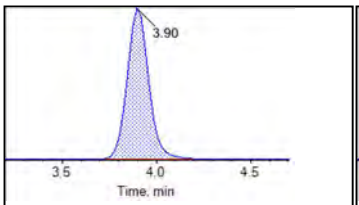
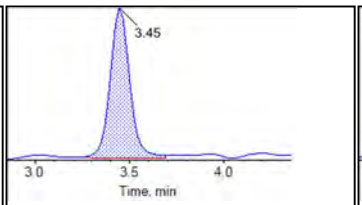


13C2-PFDoA



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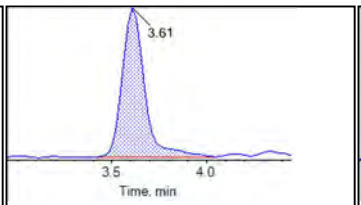

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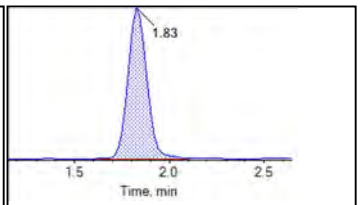
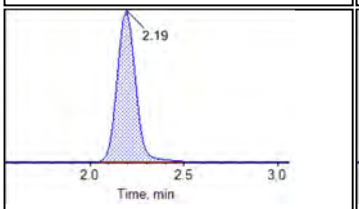
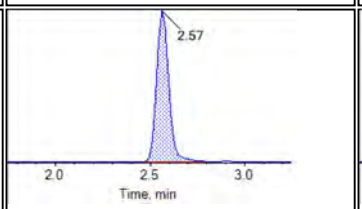


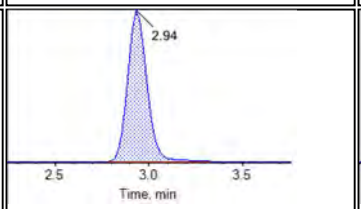
13C5-PFHxA



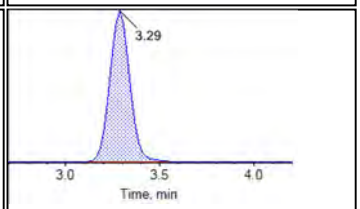
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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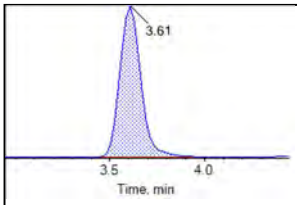
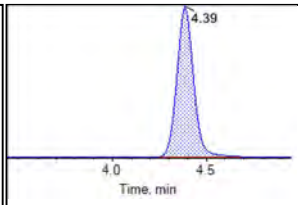
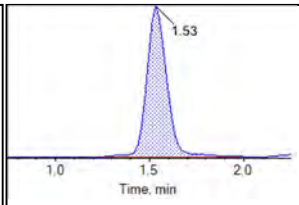


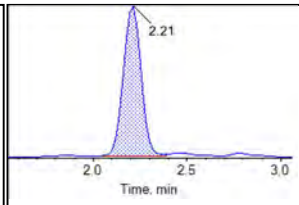
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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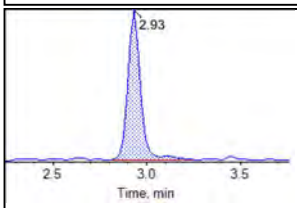

13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:23:37 AM

Sample Name	J7254-FS(3)	**Injection Vial**	24
Sample ID	073018-07	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:00:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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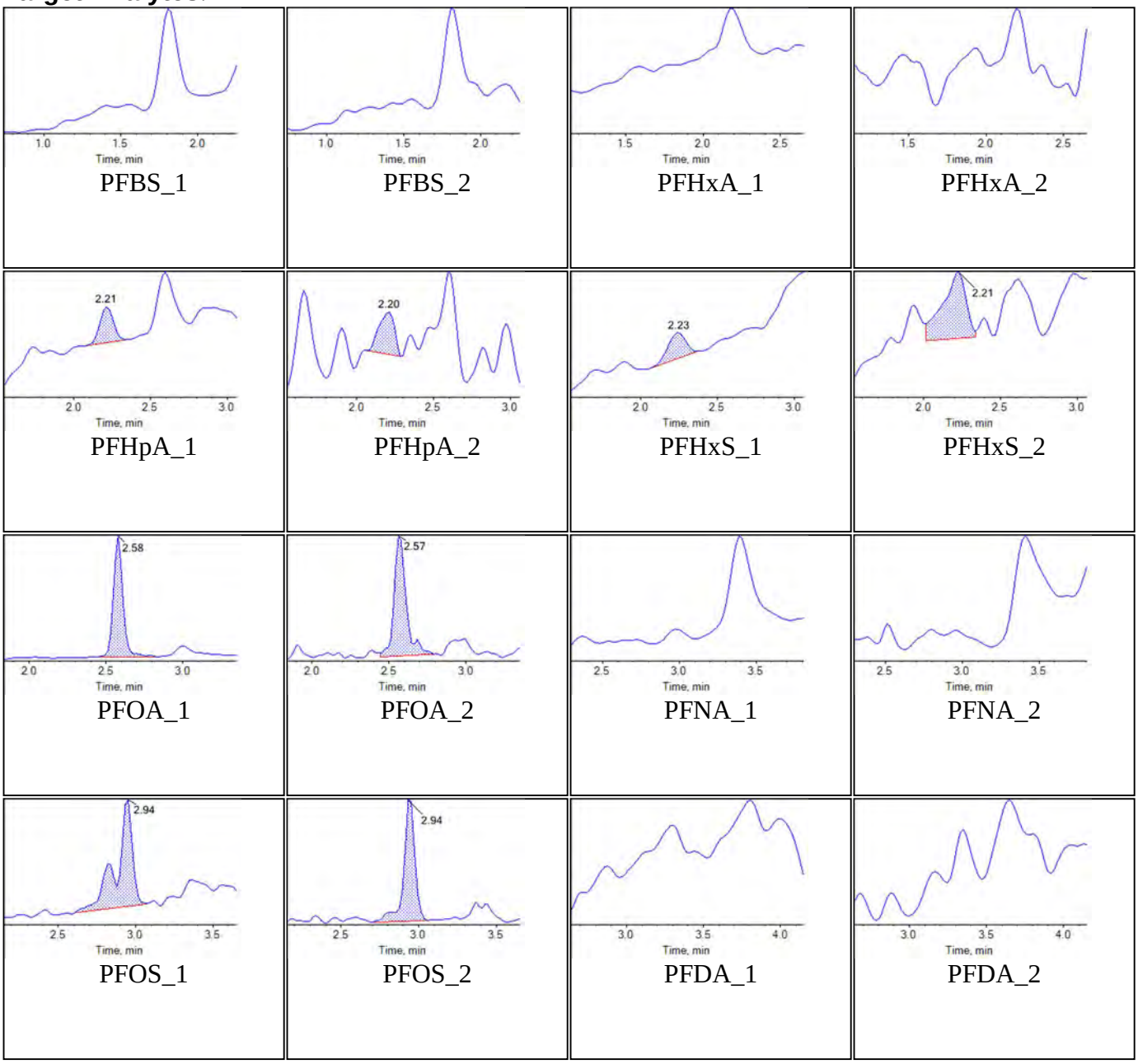

BATTELLE

Chromatogram Report

Created with Analyst Reporter
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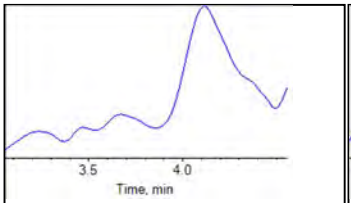

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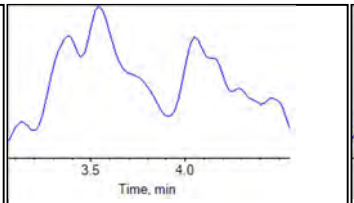

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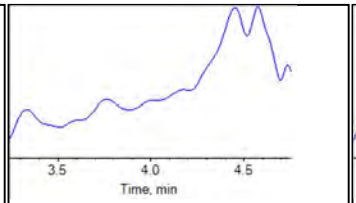
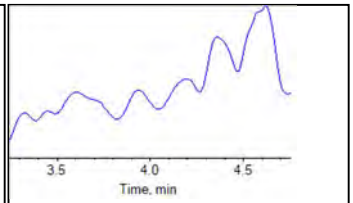
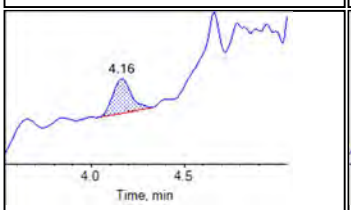


PFDoA_1



PFDoA_2



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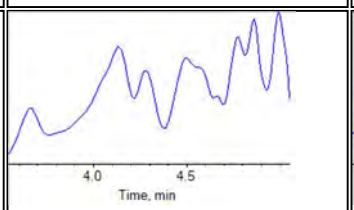

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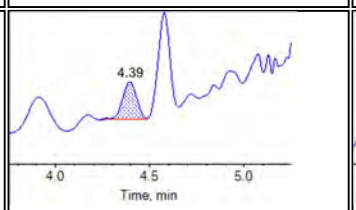

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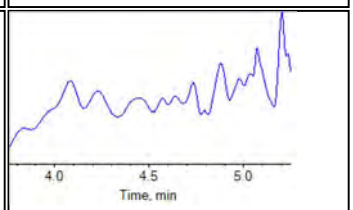

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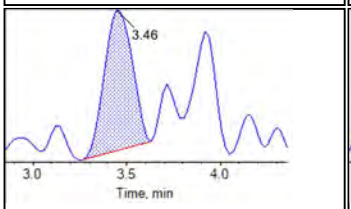
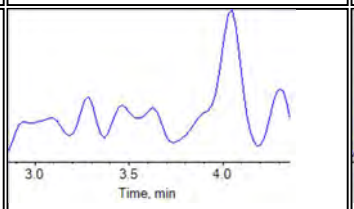


NMeFOSAA_1



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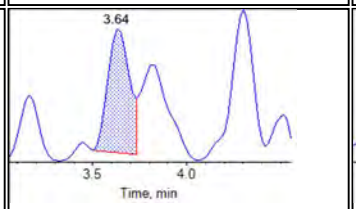

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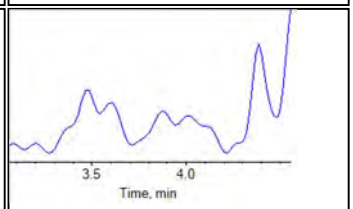

NEtFOSAA_2

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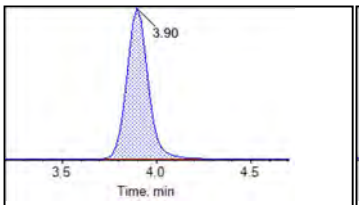
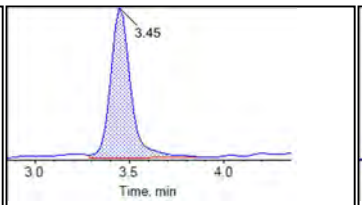
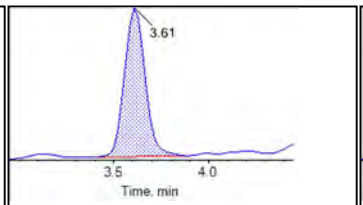


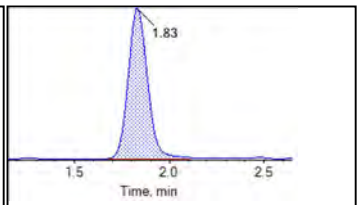
13C2-PFDoA



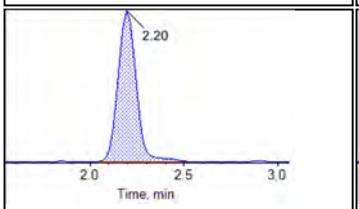
d3-MeFOSAA



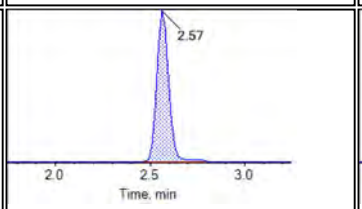
d5-EtFOSAA



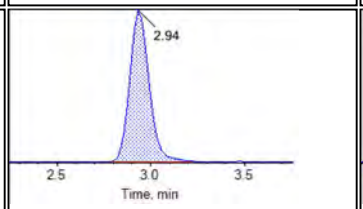
13C5-PFHxA



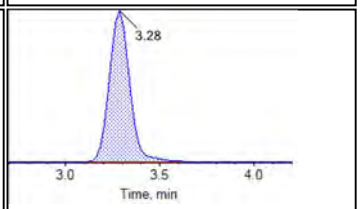
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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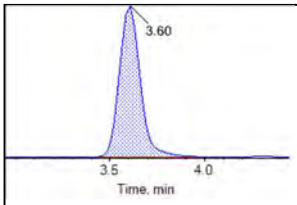
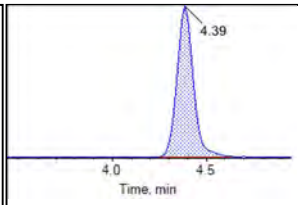
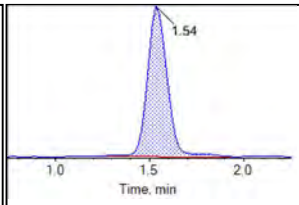


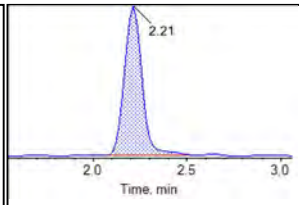
13C7-PFUnA



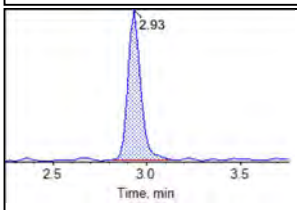
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:23:45 AM

Sample Name	JY42 CCV	**Injection Vial**	25
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:11:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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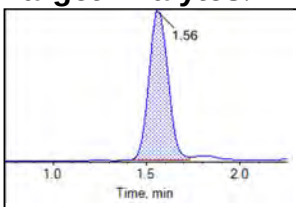
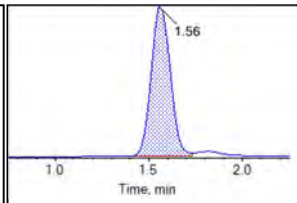
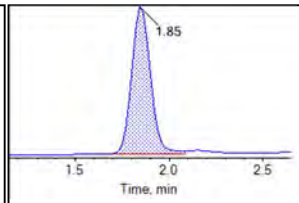


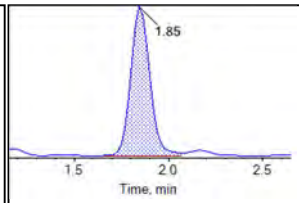
PFBS_1



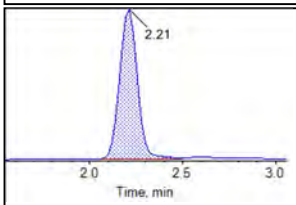
PFBS_2



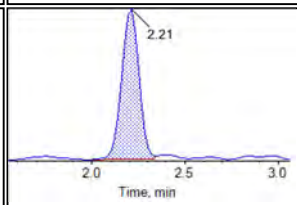
PFHxA_1



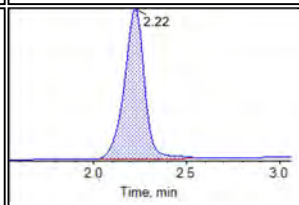
PFHxA_2



PFHpA_1



PFHpA_2



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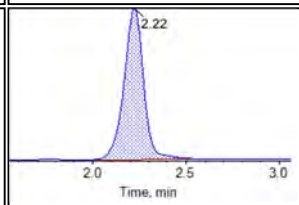

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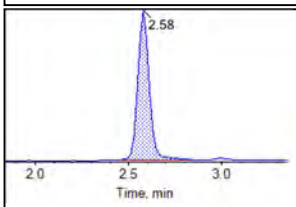

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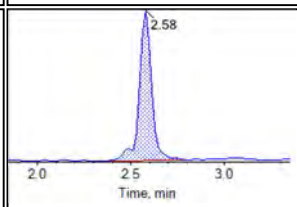

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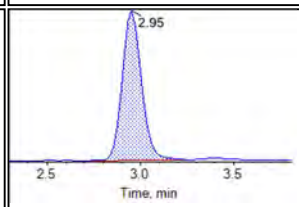

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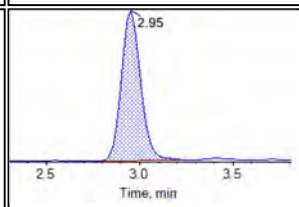

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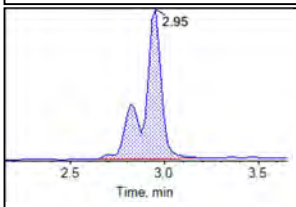

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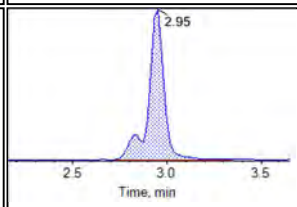

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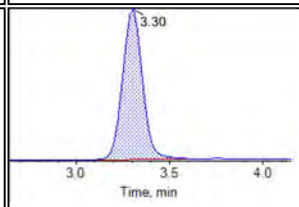

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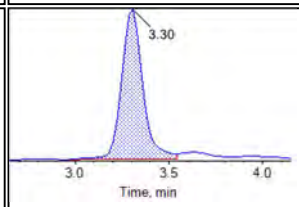

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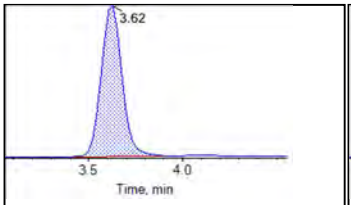

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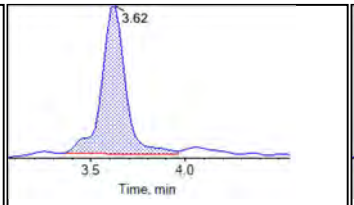

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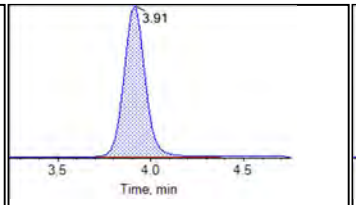

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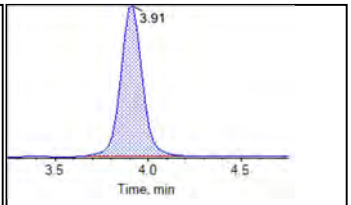

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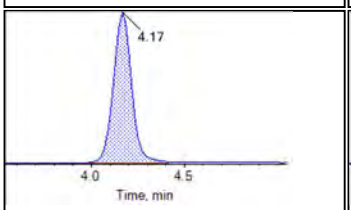

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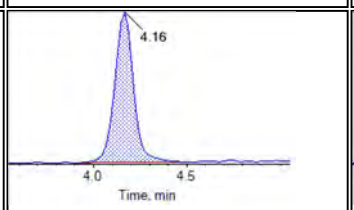

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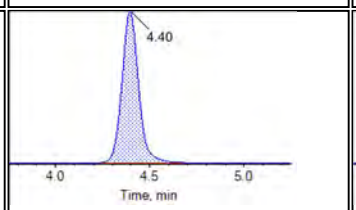

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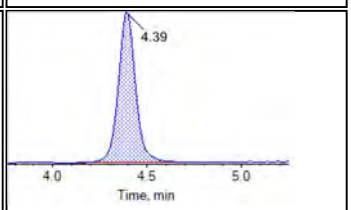

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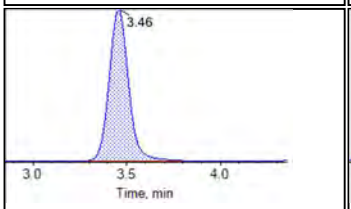

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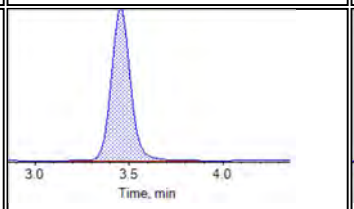

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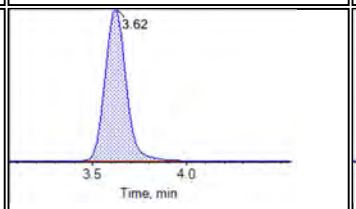

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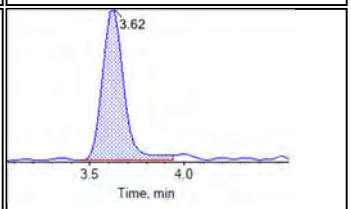

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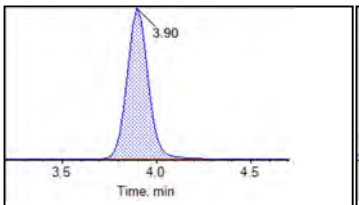

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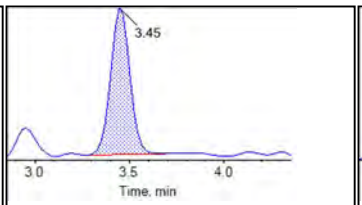

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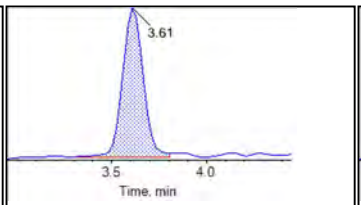

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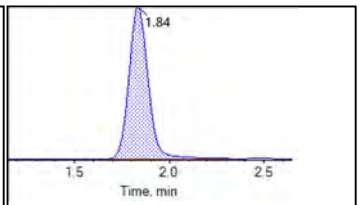

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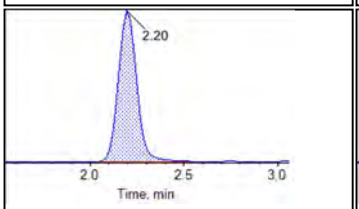

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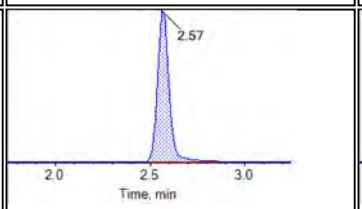

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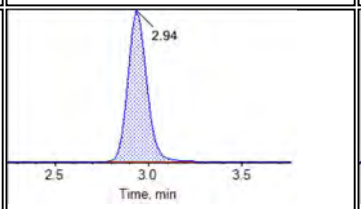

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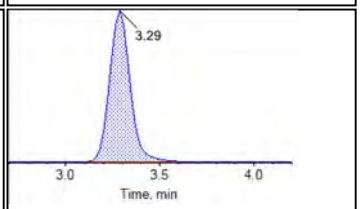

13C6-PFDA

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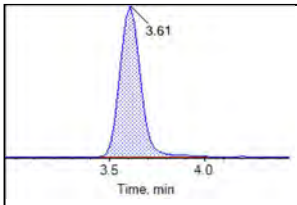

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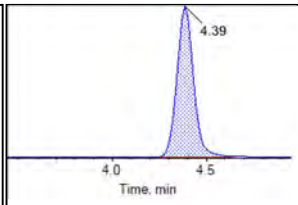

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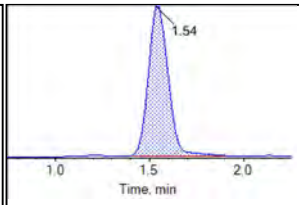

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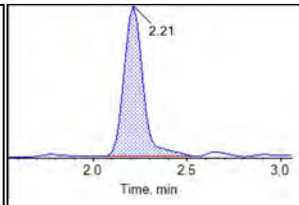

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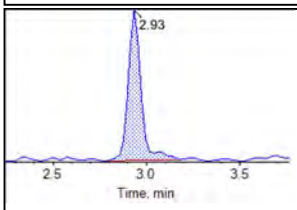

13C8-PFOS

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Sample Name	J7248-FS(4)	**Injection Vial**	27
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:33:23	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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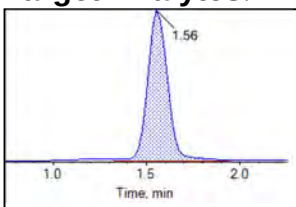

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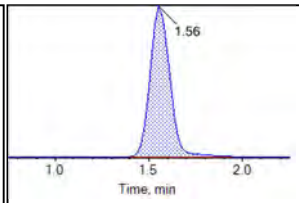

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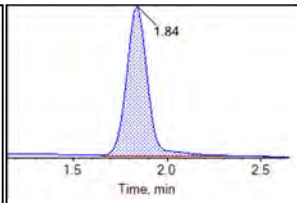

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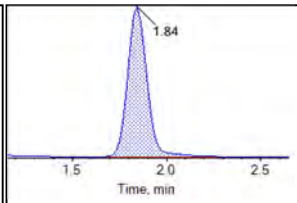

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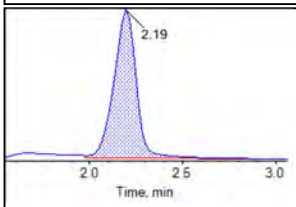

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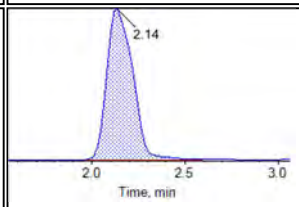

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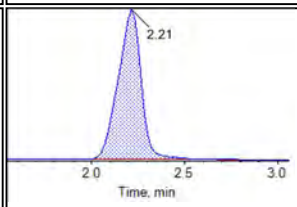

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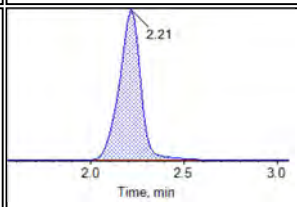

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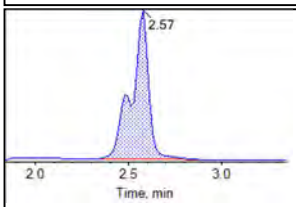

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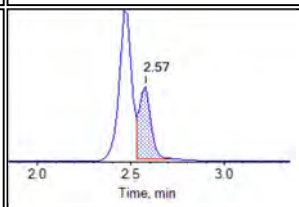

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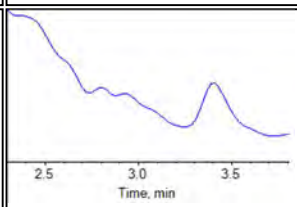

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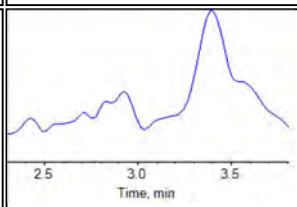

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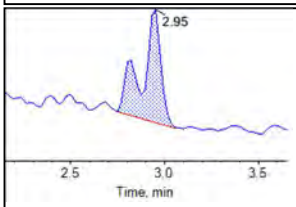

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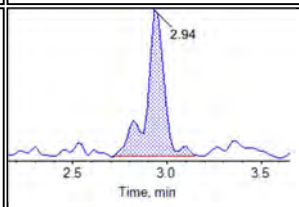

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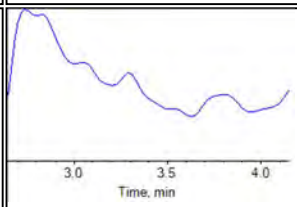

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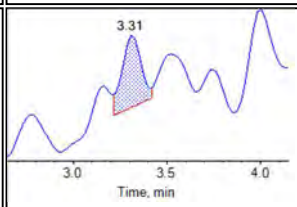

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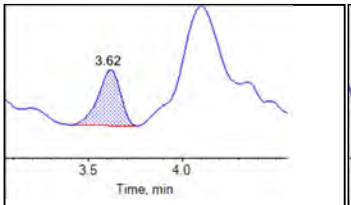

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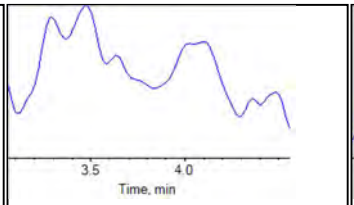

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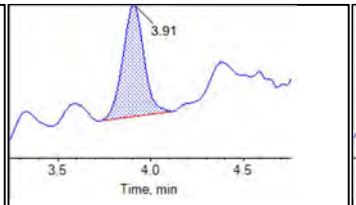

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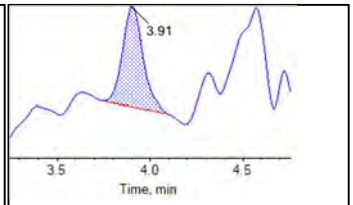

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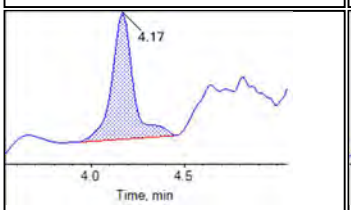

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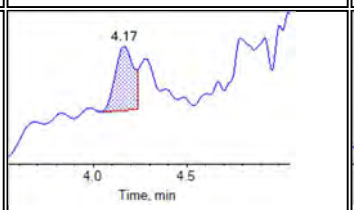

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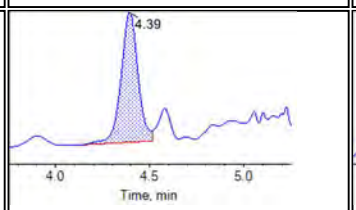

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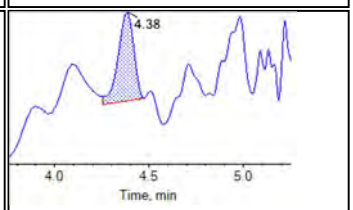

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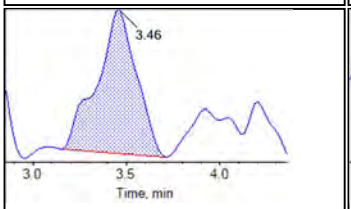

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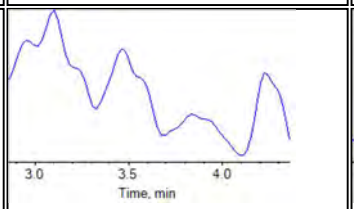

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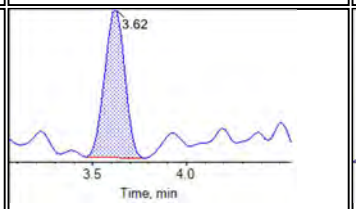

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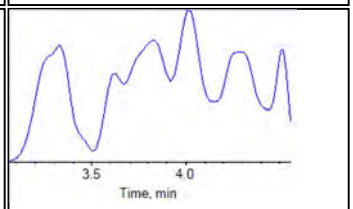

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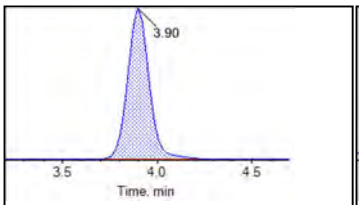
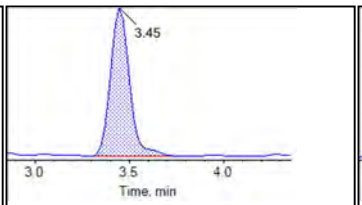
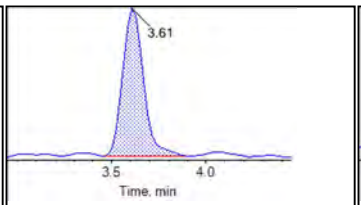


13C2-PFDoA



d3-MeFOSAA



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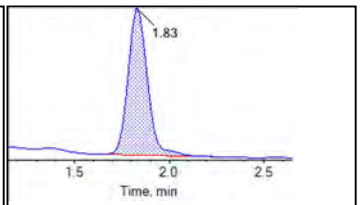
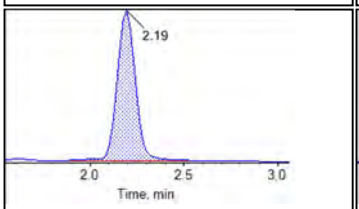
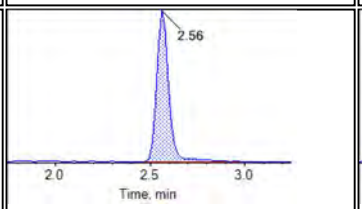


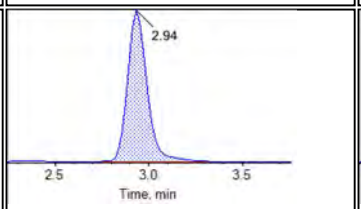
13C5-PFHxA



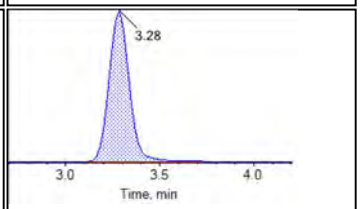
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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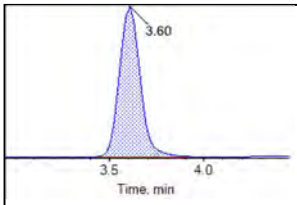
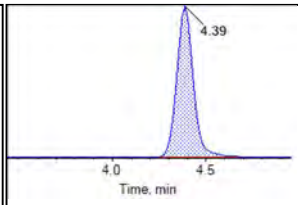
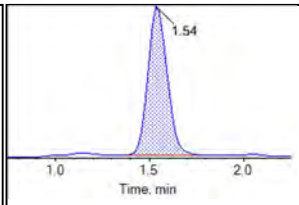


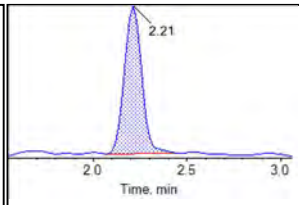
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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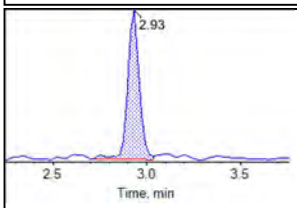

13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:24:02 AM

Sample Name	J7248-FS-D(5)	**Injection Vial**	28
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:44:16	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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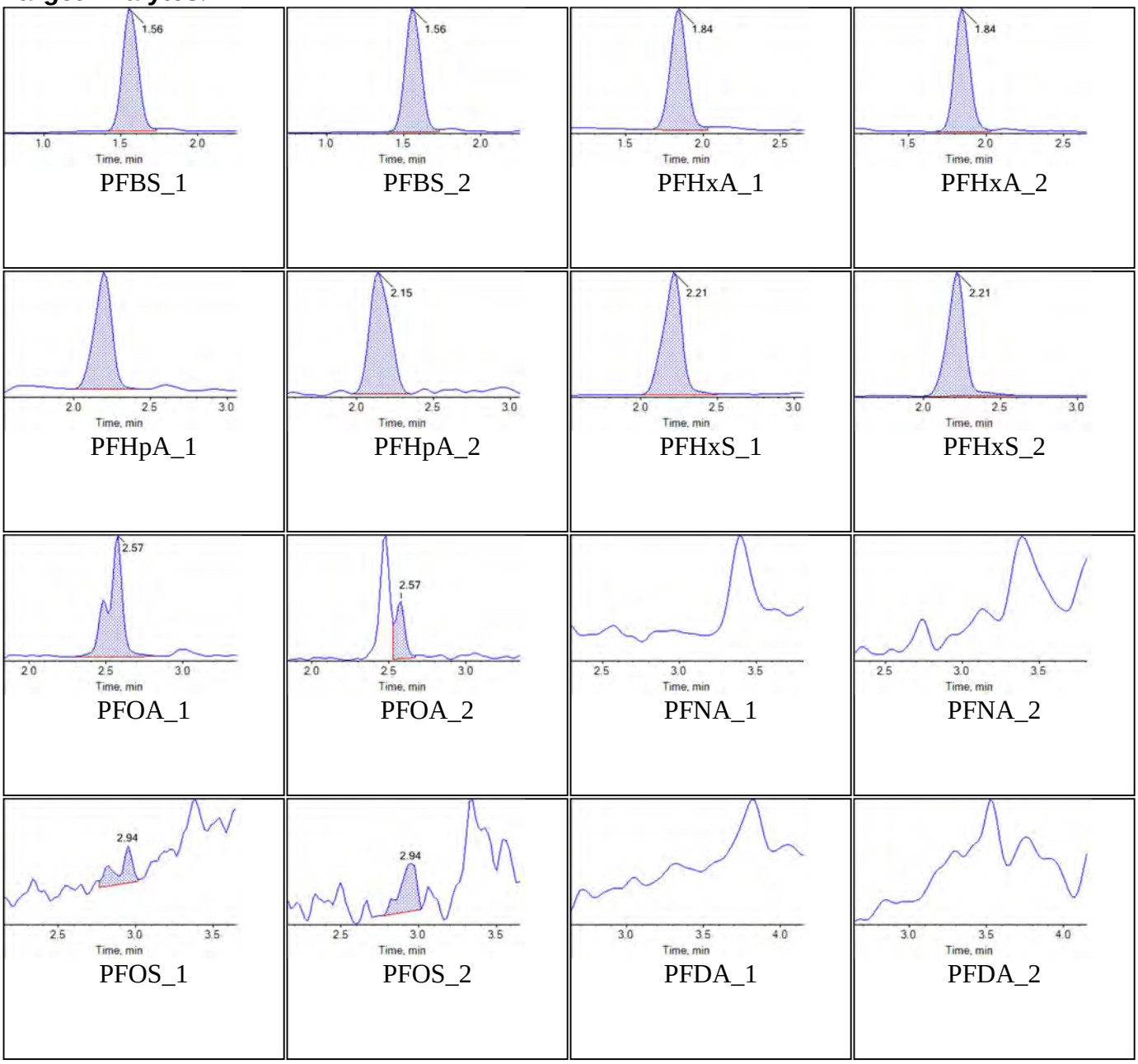

BATTELLE

Chromatogram Report

Created with Analyst Reporter
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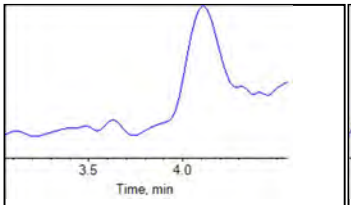

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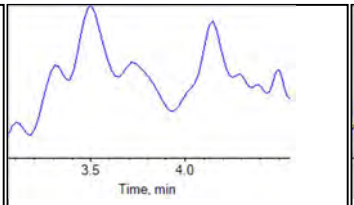

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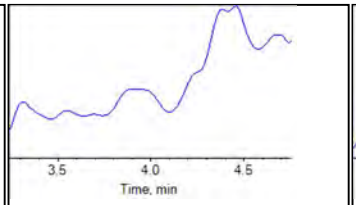
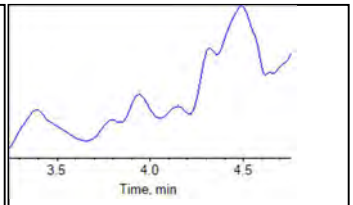
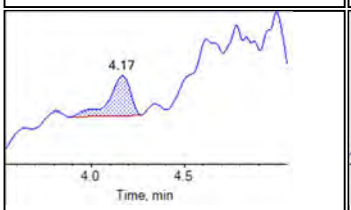


PFDoA_1



PFDoA_2



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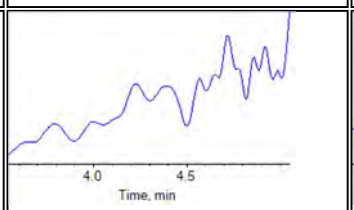

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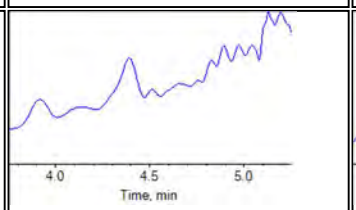

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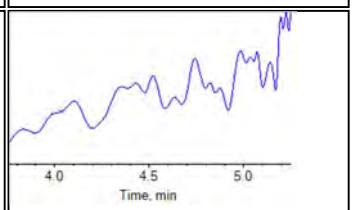

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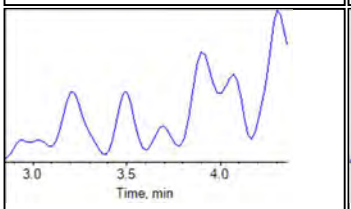
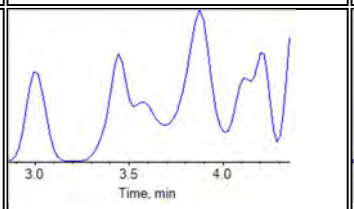


NMeFOSAA_1



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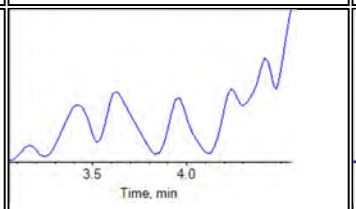

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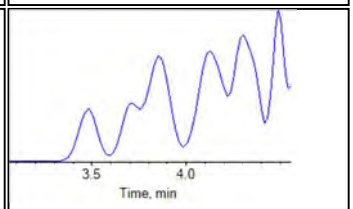

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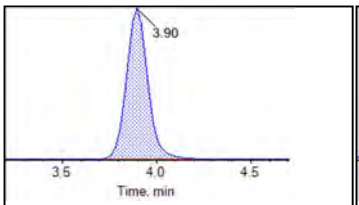
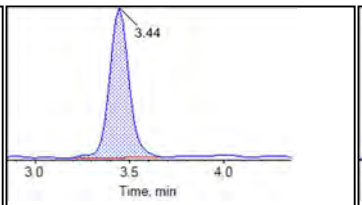
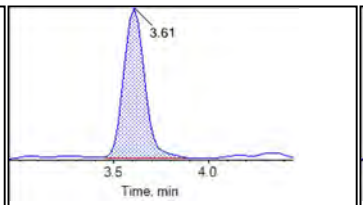


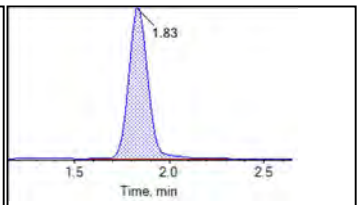
13C2-PFDoA



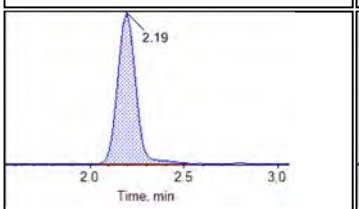
d3-MeFOSAA



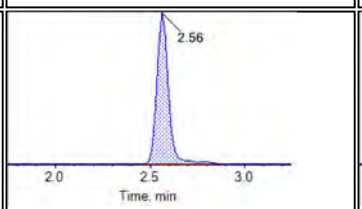
d5-EtFOSAA



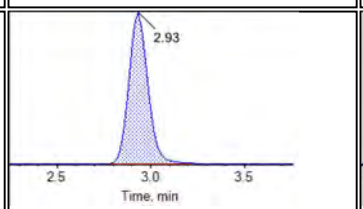
13C5-PFHxA



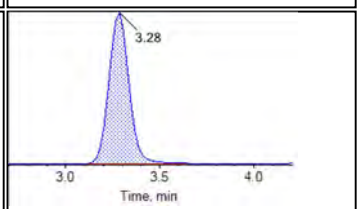
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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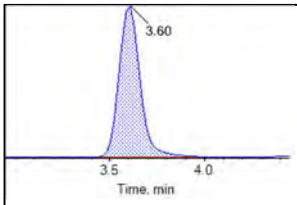
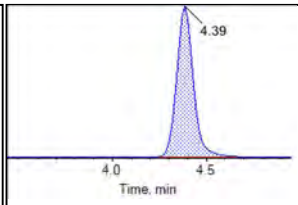
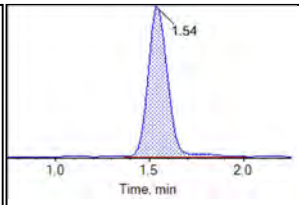
Printed: 29/08/2018 10:24:02 AM



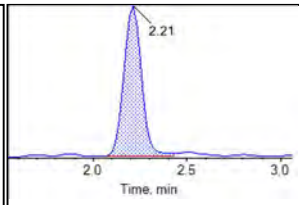
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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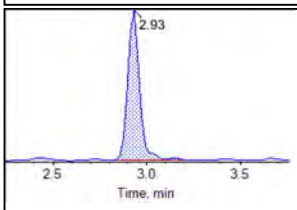

13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:24:14 AM

Sample Name	J7249-FS(4)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:55:09	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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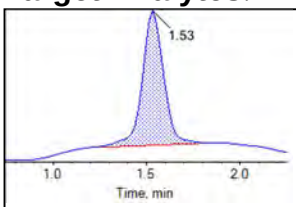

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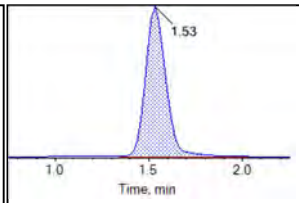
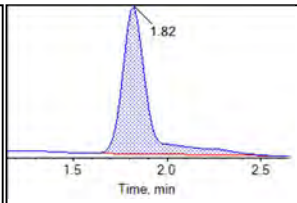


PFBS_2



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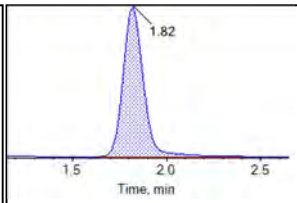

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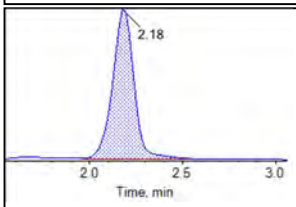

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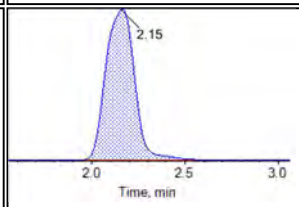

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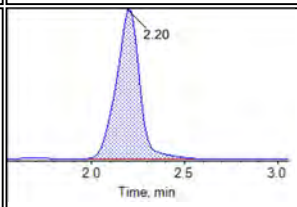

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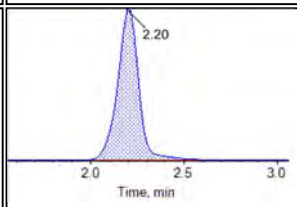

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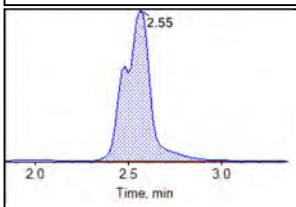

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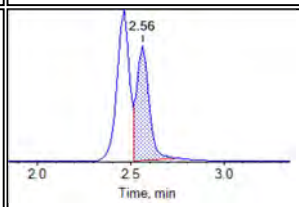

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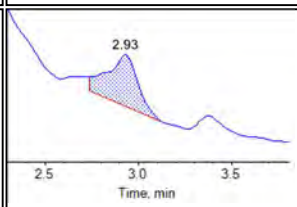

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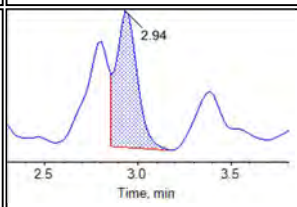

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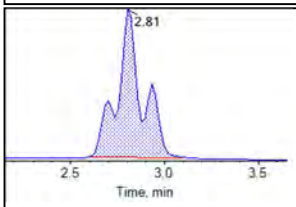

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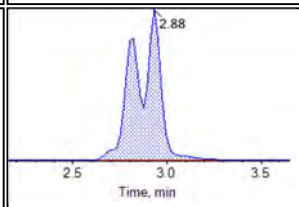

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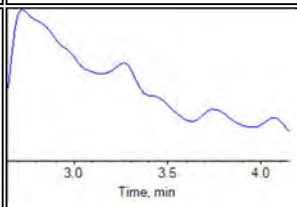

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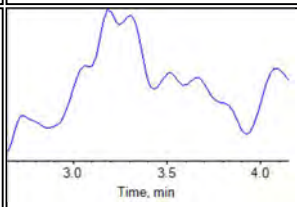

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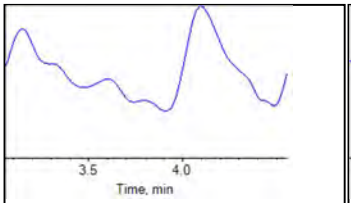

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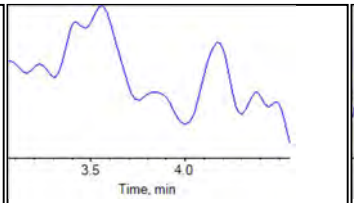

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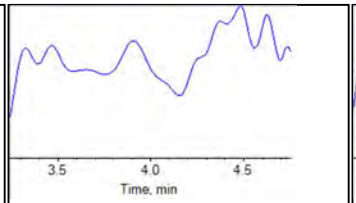

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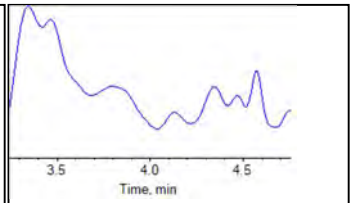

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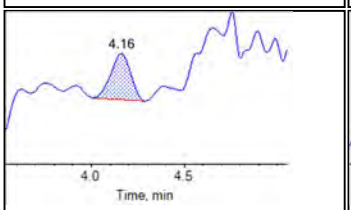

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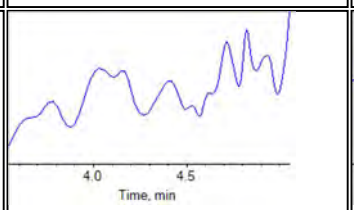

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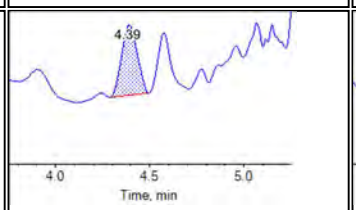

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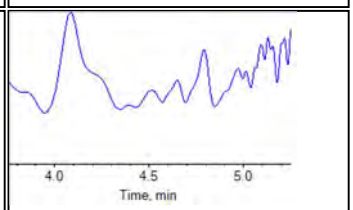

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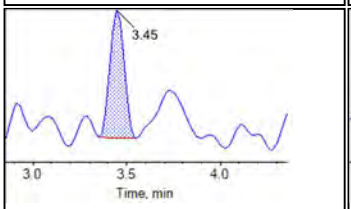

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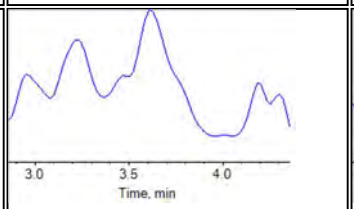

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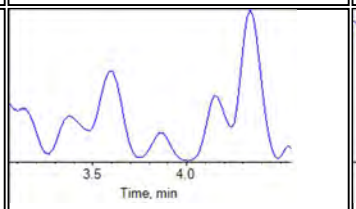

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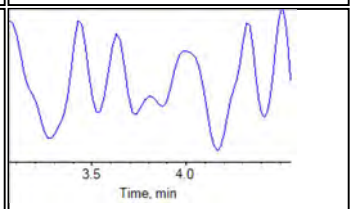

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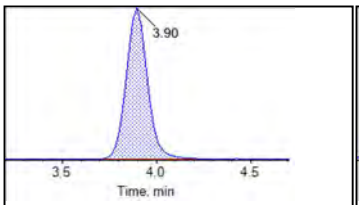

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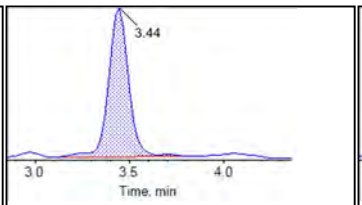

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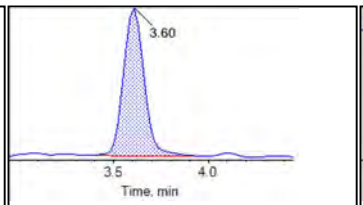

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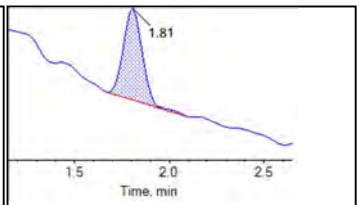

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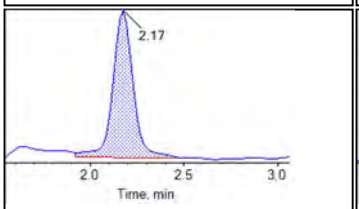

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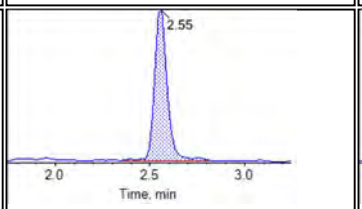

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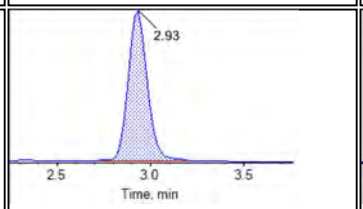

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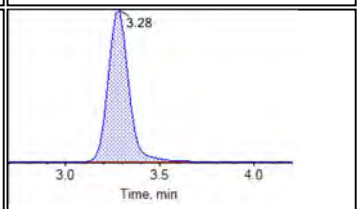

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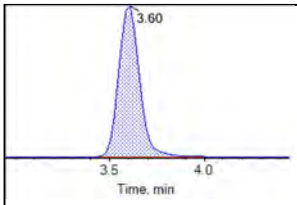

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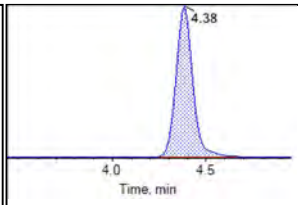

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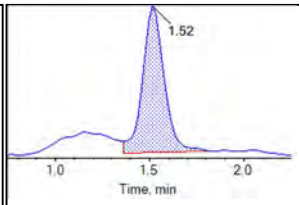

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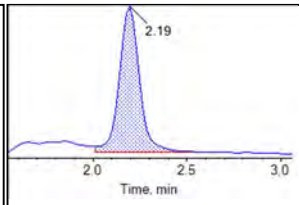

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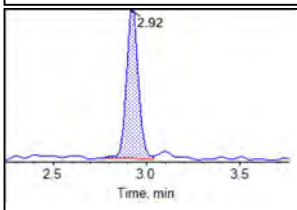

13C8-PFOS

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Chromatogram Report

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Sample Name	J7249-FS-D(5)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:06:01	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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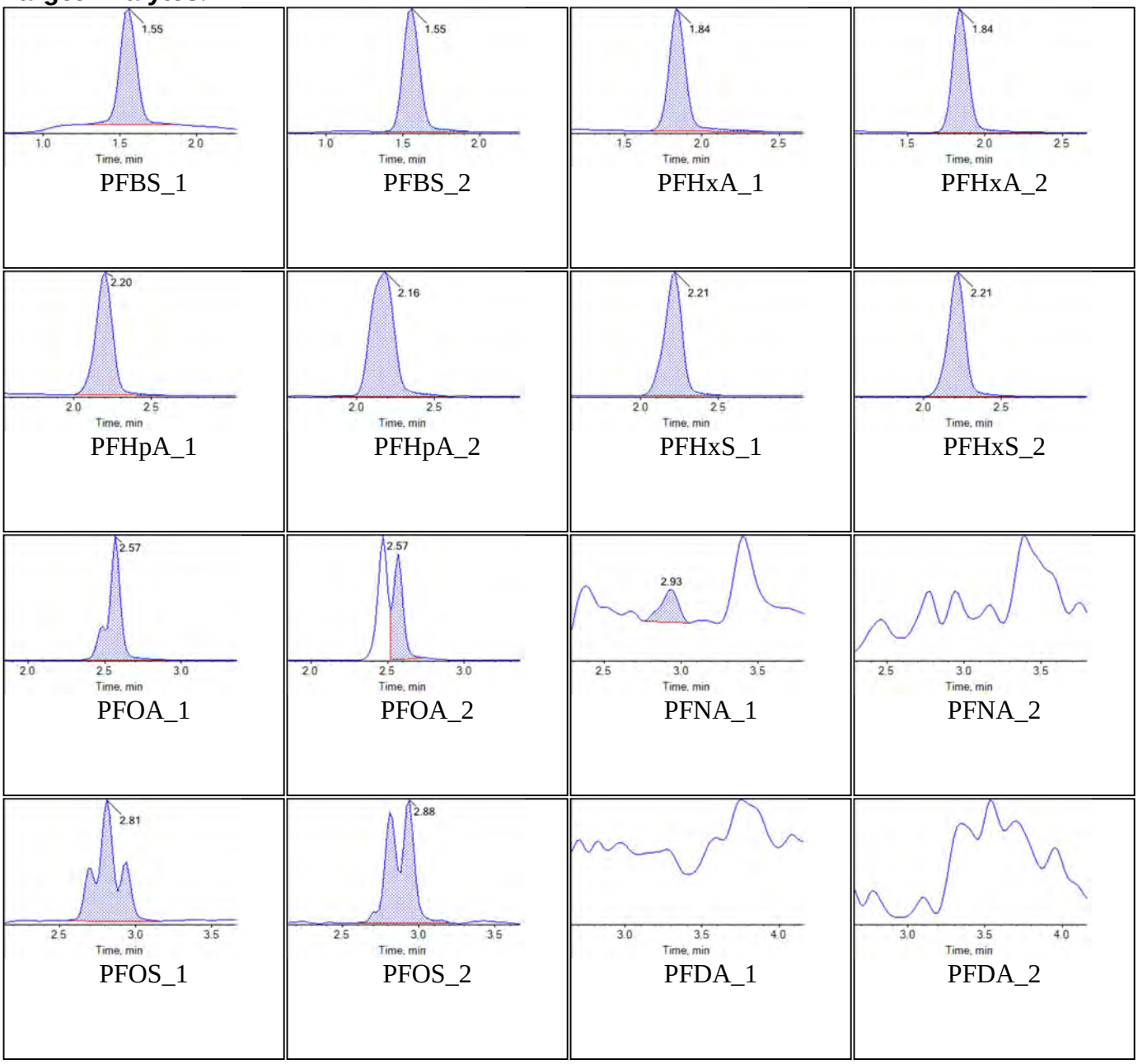

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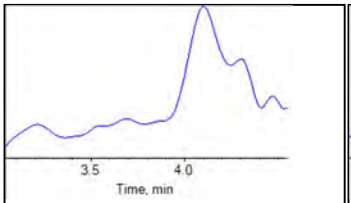

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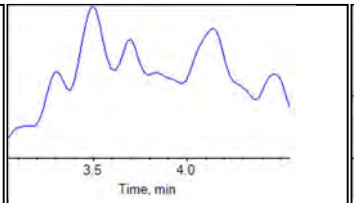

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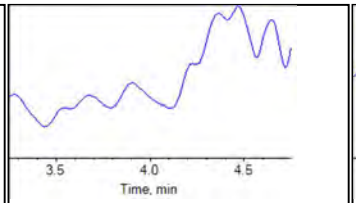

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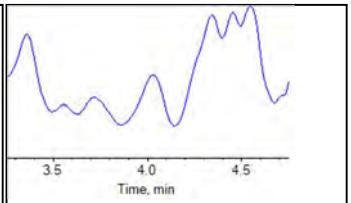

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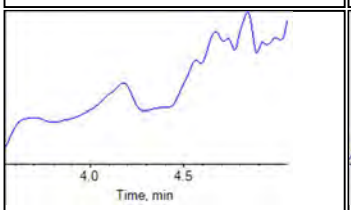

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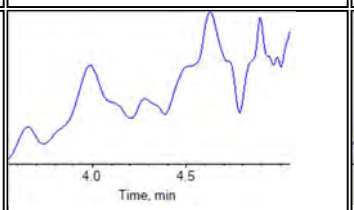

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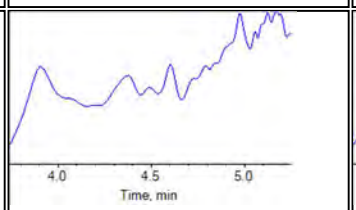

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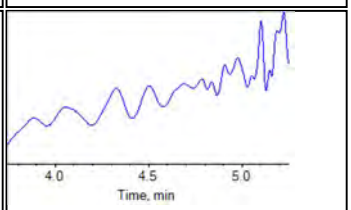

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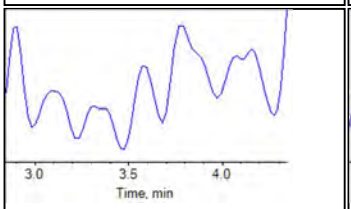

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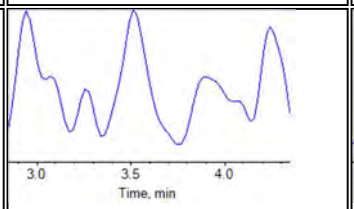

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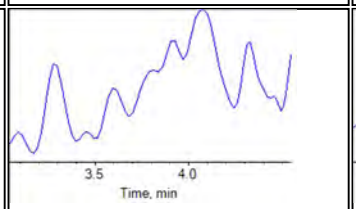

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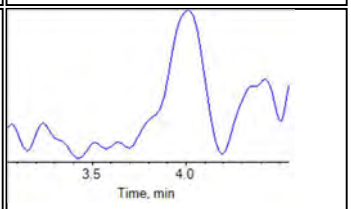

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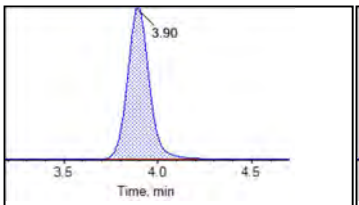

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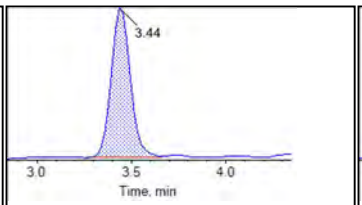
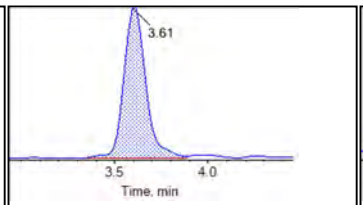
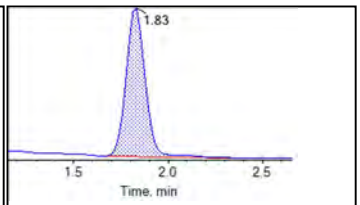


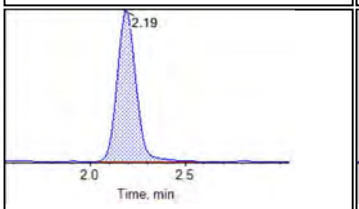
d3-MeFOSAA



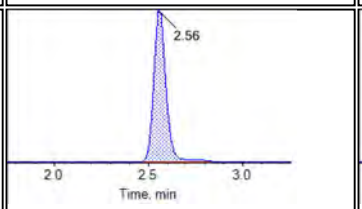
d5-EtFOSAA



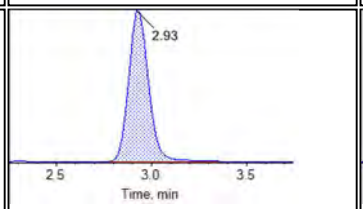
13C5-PFHxA



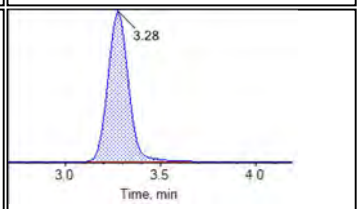
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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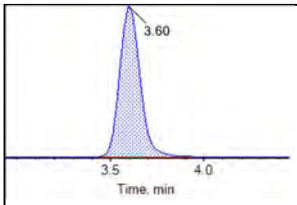
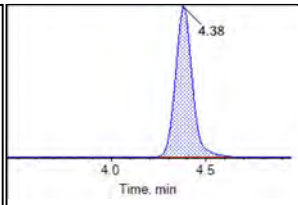
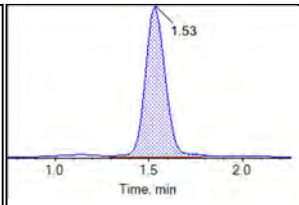


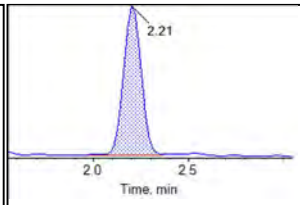
13C7-PFUnA



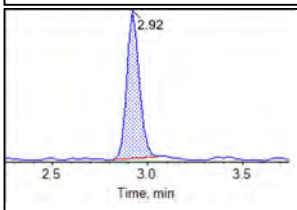
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

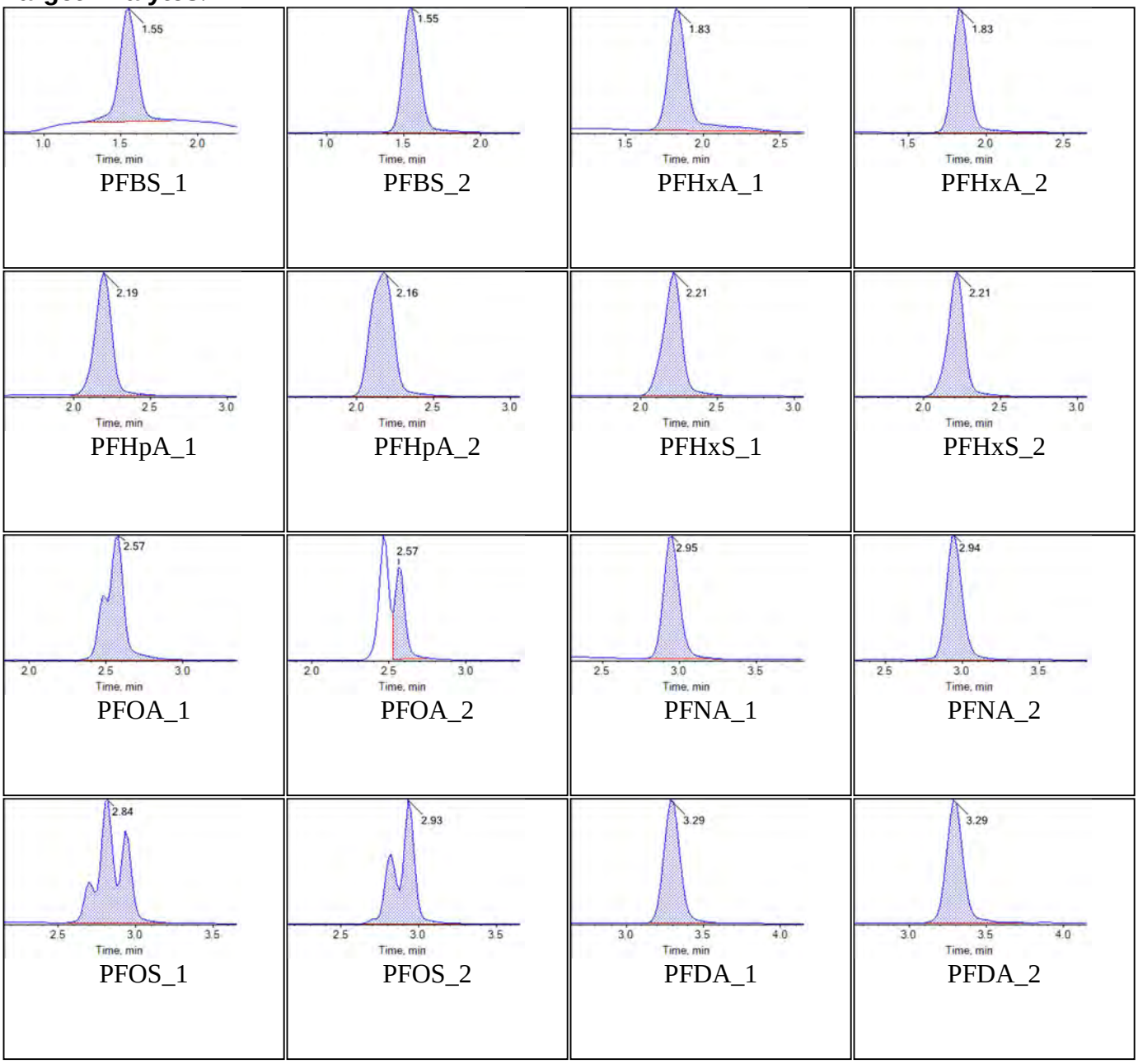
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:24:25 AM

Sample Name	J7249MS-FS(4)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:16:53	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

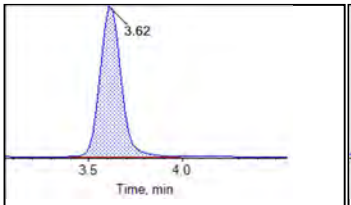
Target Analytes:



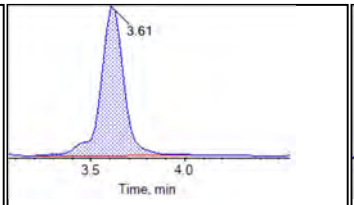
BATTELLE

Chromatogram Report

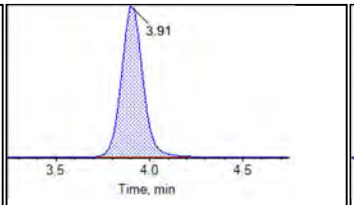
Created with Analyst Reporter
Printed: 29/08/2018 10:24:25 AM



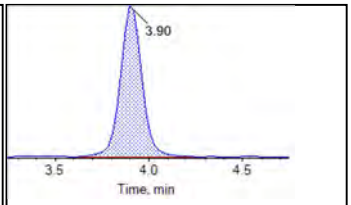
PFUnA_1



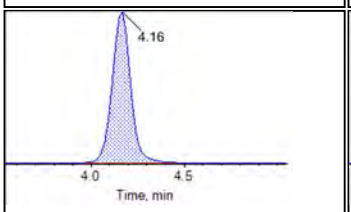
PFUnA_2



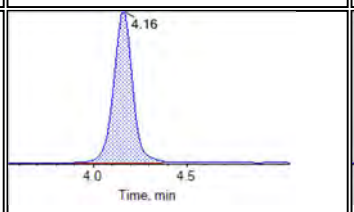
PFDoA_1



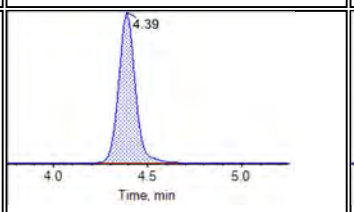
PFDoA_2



PFTrDA_1



PFTrDA_2



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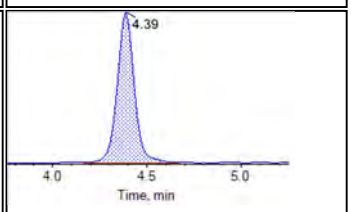
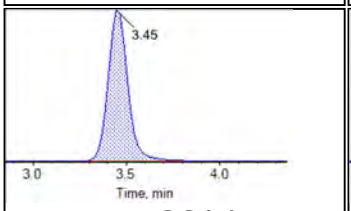
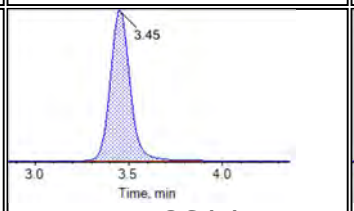


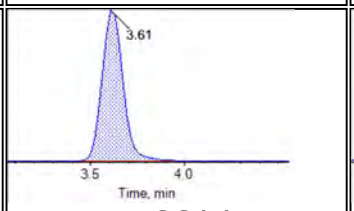
PFTeDA_2



NMeFOSAA_1



NMeFOSAA_2



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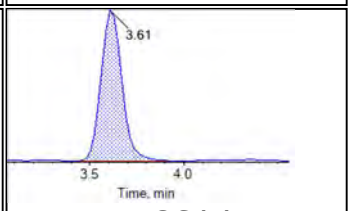
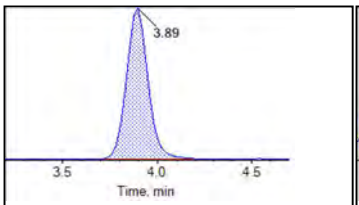
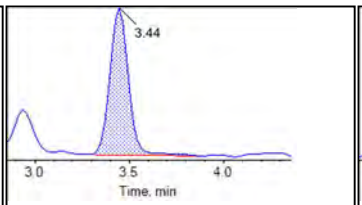


NEtFOSAA_2

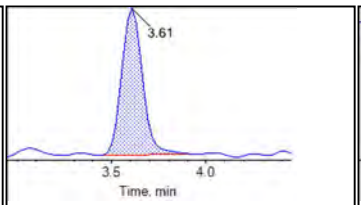
Internal Standards:



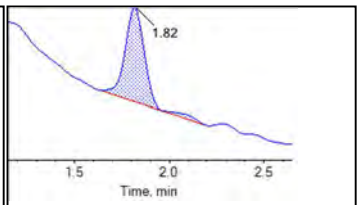
13C2-PFDoA



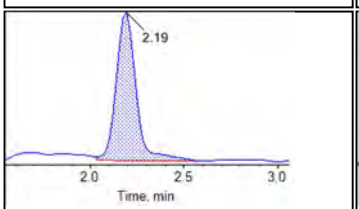
d3-MeFOSAA



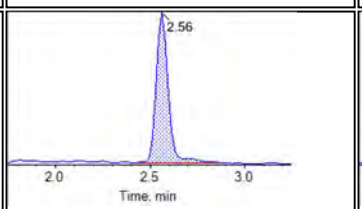
d5-EtFOSAA



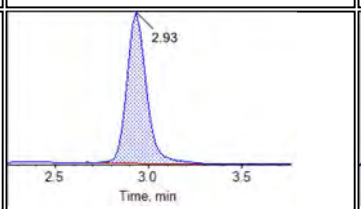
13C5-PFHxA



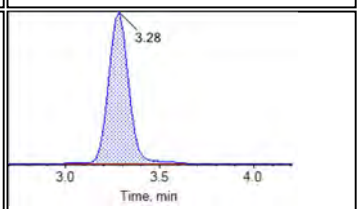
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

Chromatogram Report

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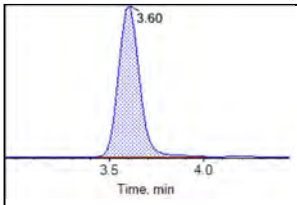
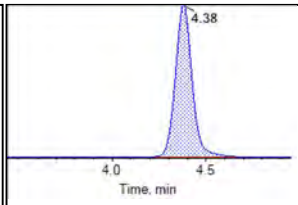
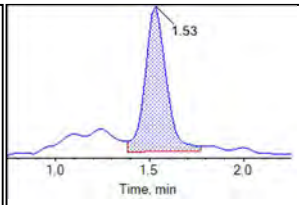


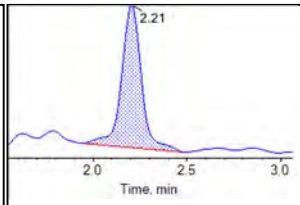
13C7-PFUnA



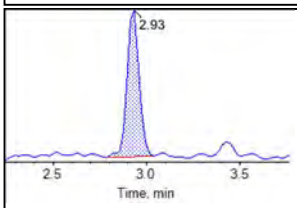
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:24:33 AM

Sample Name	J7249MS-FS-D(5)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:27:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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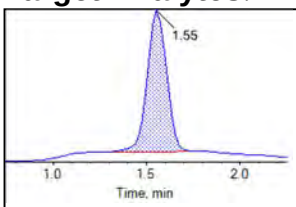
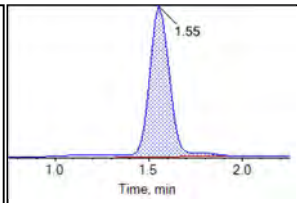
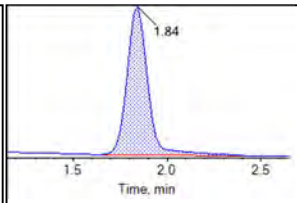


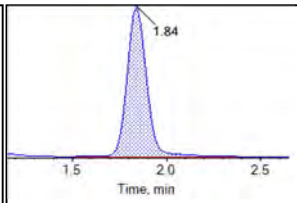
PFBS_1



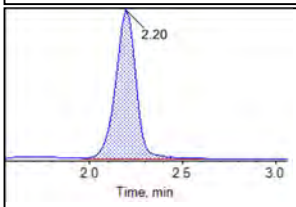
PFBS_2



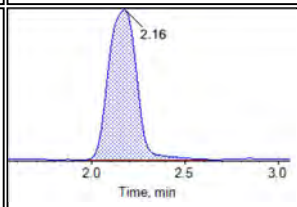
PFHxA_1



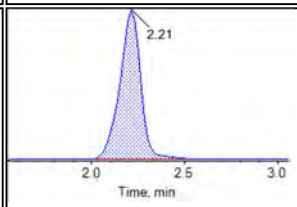
PFHxA_2



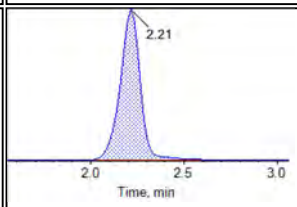
PFHpA_1



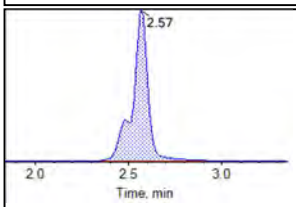
PFHpA_2



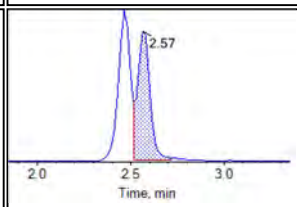
PFHxS_1



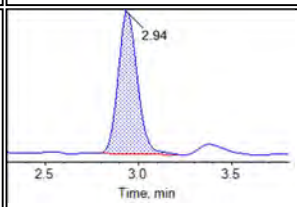
PFHxS_2



PFOA_1



PFOA_2



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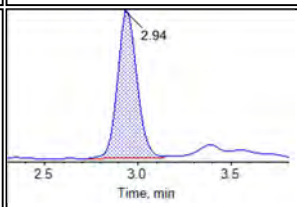
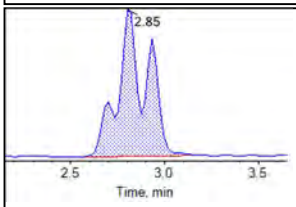
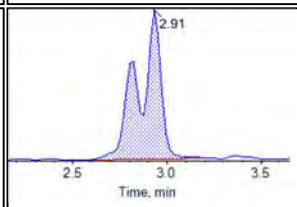


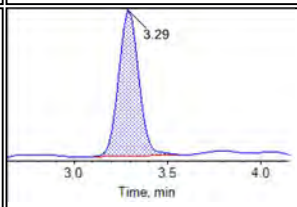
PFNA_2



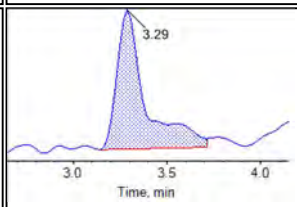
PFOS_1



PFOS_2



PFDA_1



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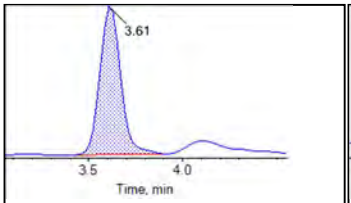

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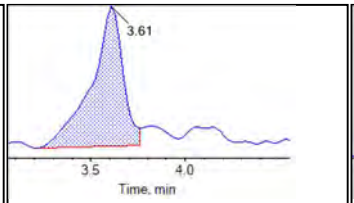

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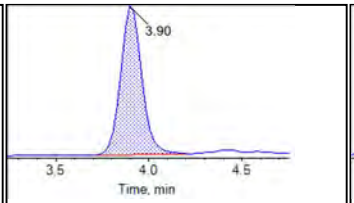

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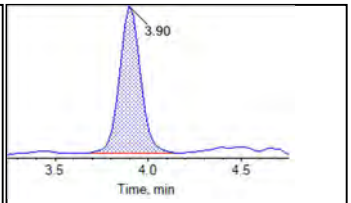

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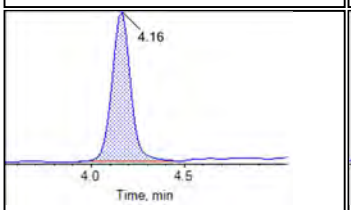

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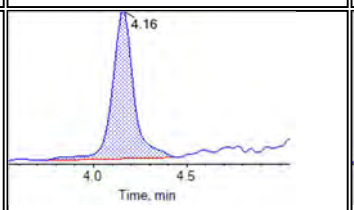

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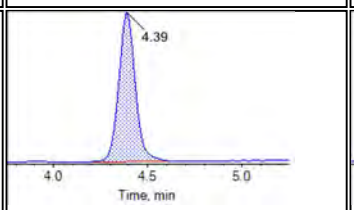

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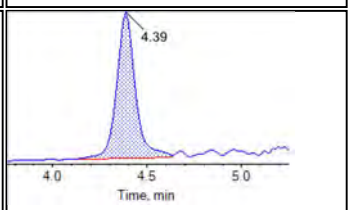

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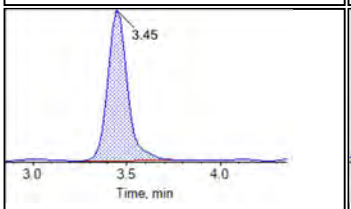

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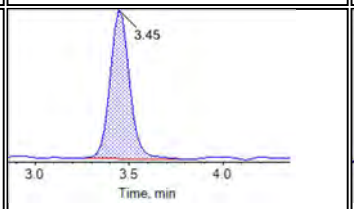

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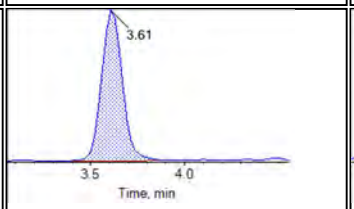

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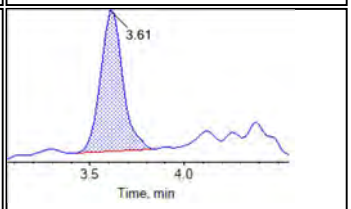

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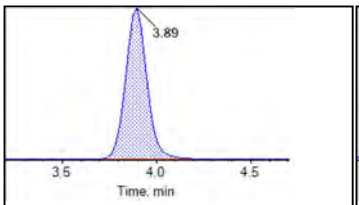

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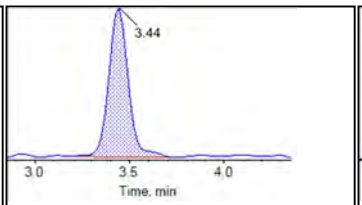

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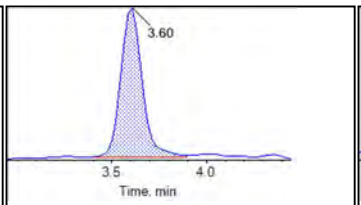

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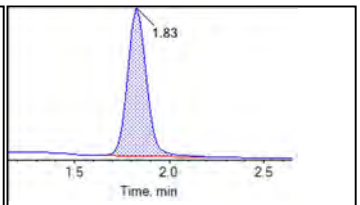

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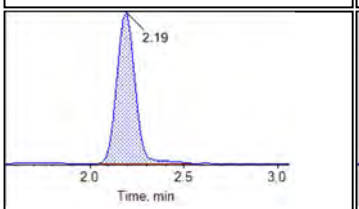

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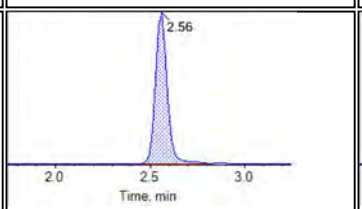

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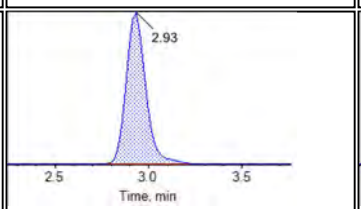

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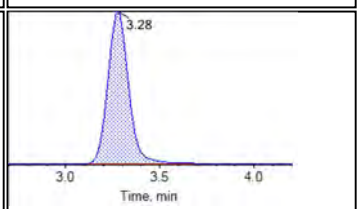

13C6-PFDA

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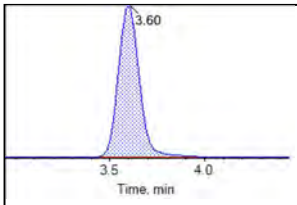
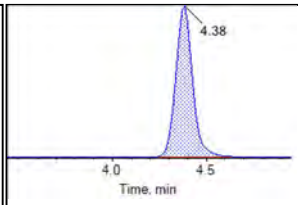


13C7-PFUnA



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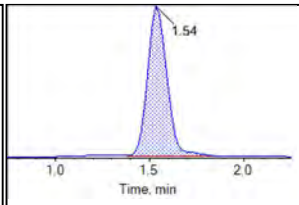

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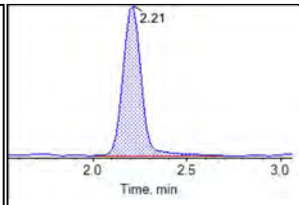

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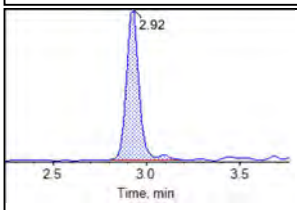

13C8-PFOS

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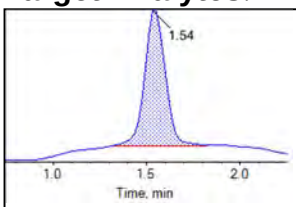
Sample Name	J7249MSD-FS(4)	**Injection Vial**	33
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:38:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



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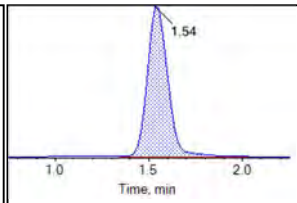

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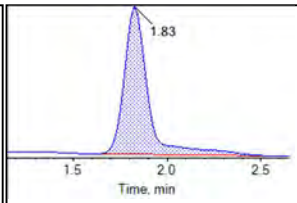

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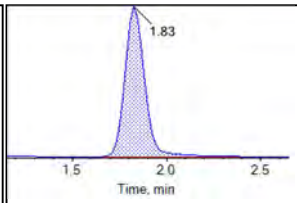

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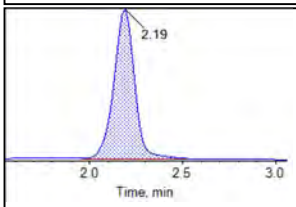

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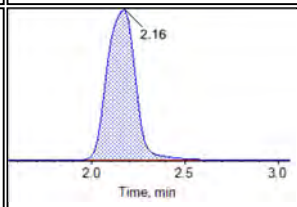

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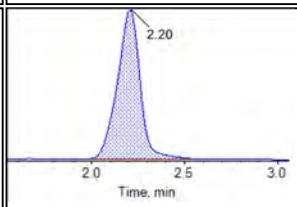

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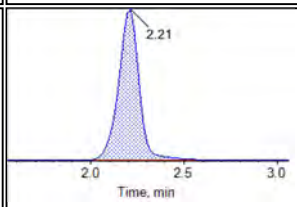

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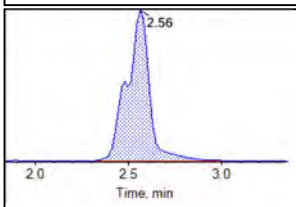

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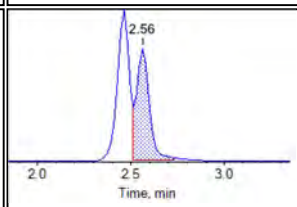

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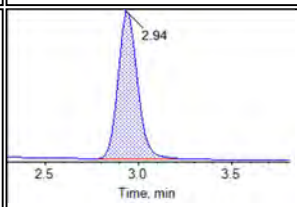

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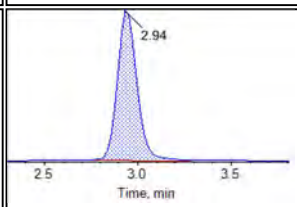

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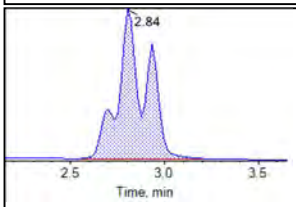

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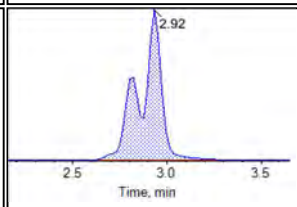

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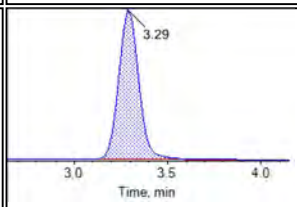

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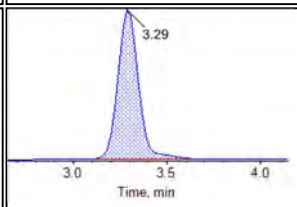

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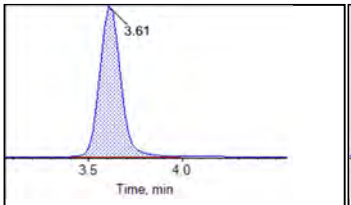

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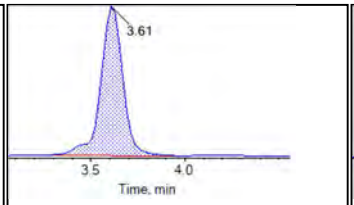

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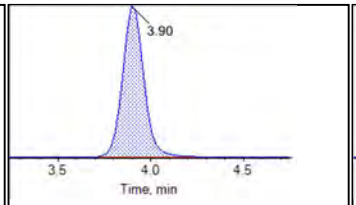

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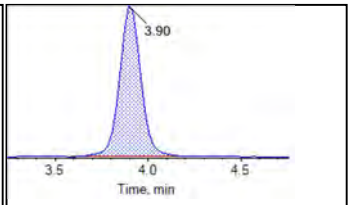

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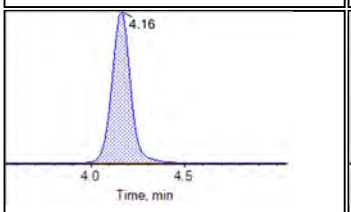

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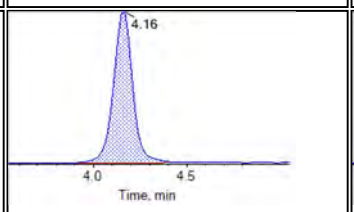

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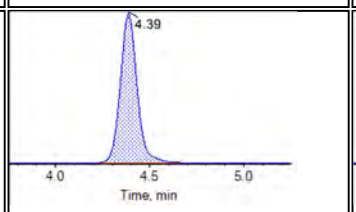

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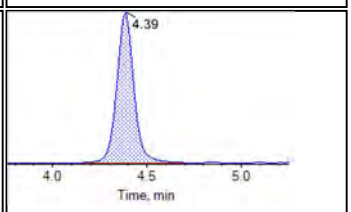

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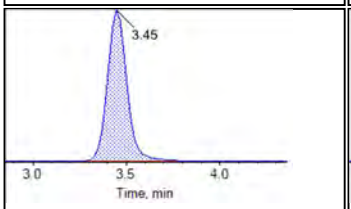

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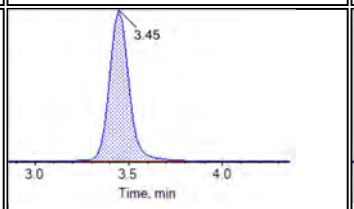

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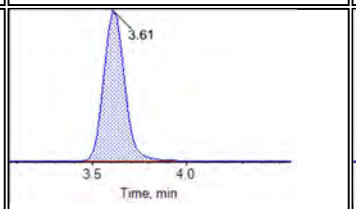

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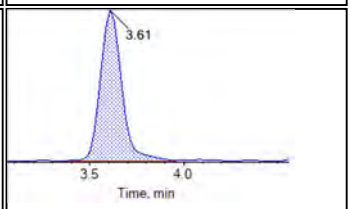

NEtFOSAA_2

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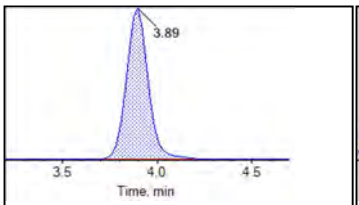
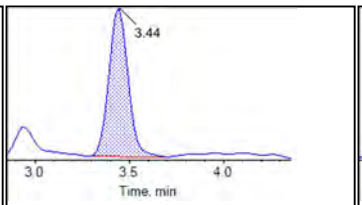
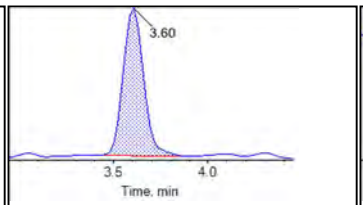


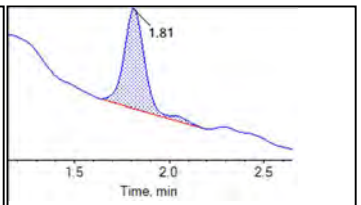
13C2-PFDoA



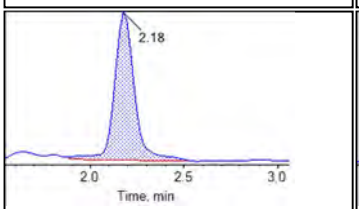
d3-MeFOSAA



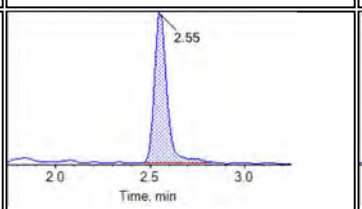
d5-EtFOSAA



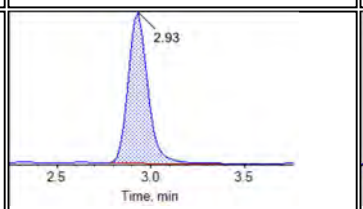
13C5-PFHxA



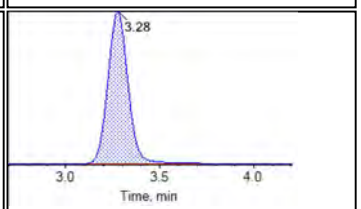
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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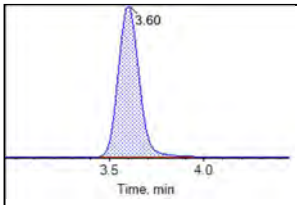
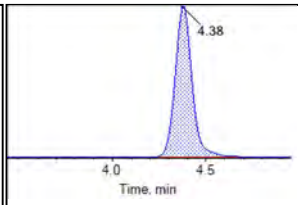
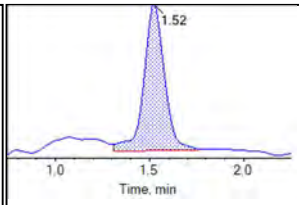
Printed: 29/08/2018 10:24:38 AM



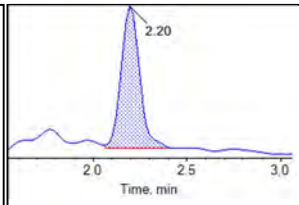
13C7-PFUnA



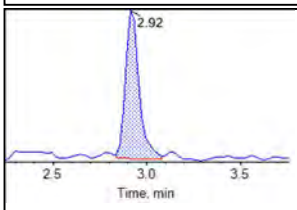
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
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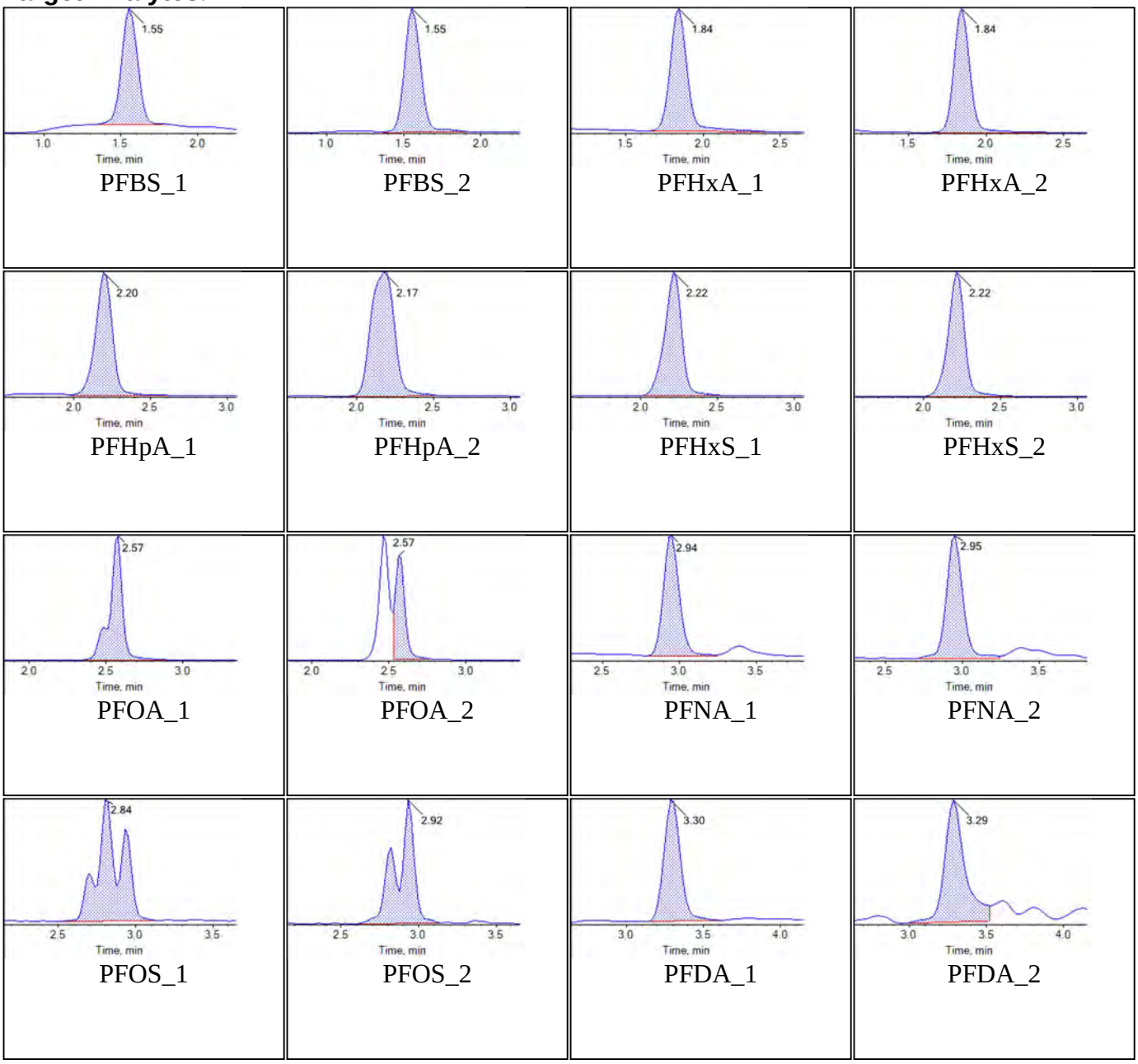
Sample Name	J7248MSD-FS-D(5)	**Injection Vial**	34
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:49:33	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



BATTELLE

Chromatogram Report

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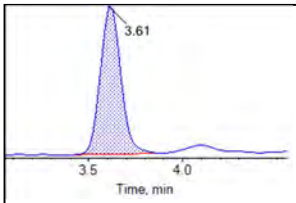
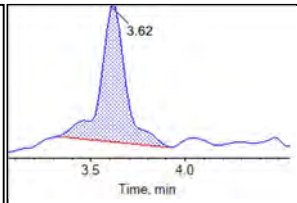
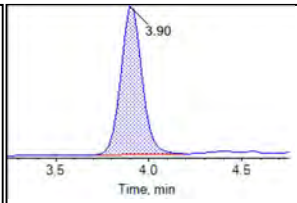


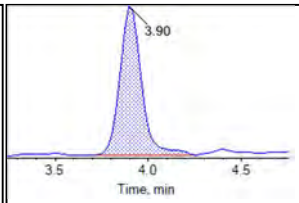
PFUnA_1



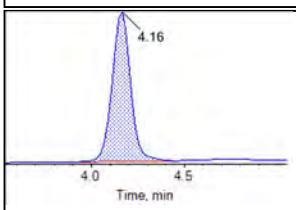
PFUnA_2



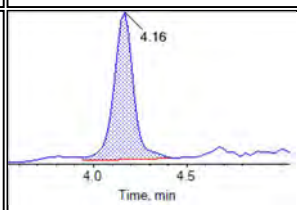
PFDoA_1



PFDoA_2



PFTrDA_1



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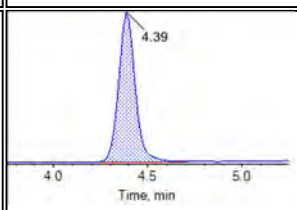

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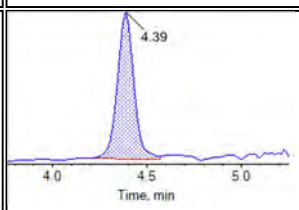

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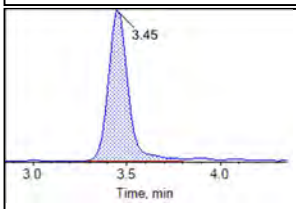
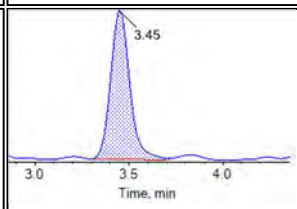


NMeFOSAA_1



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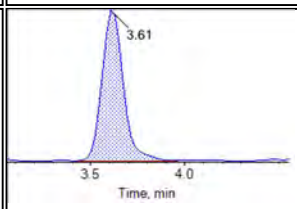

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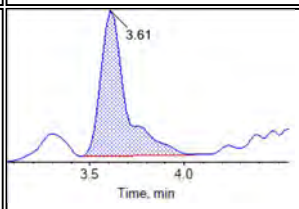
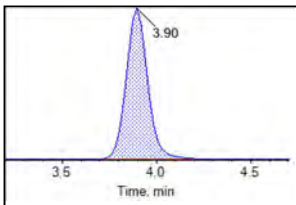


NEtFOSAA_2

Internal Standards:



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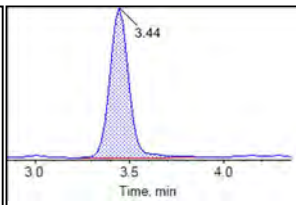
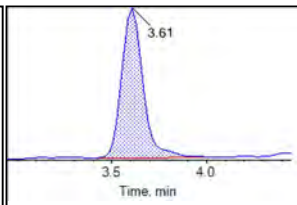
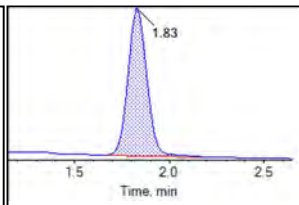


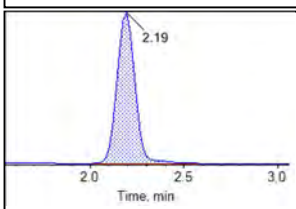
d3-MeFOSAA



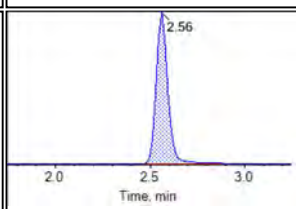
d5-EtFOSAA



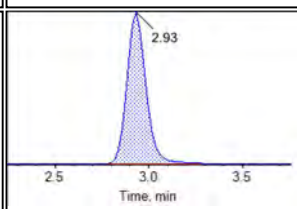
13C5-PFHxA



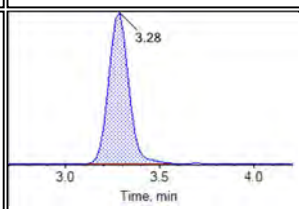
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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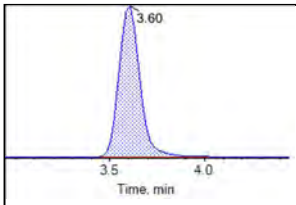
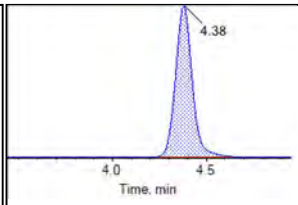
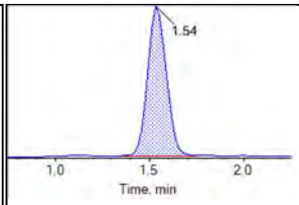


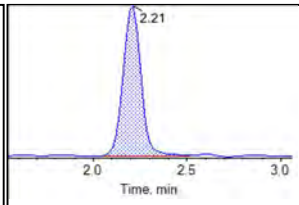
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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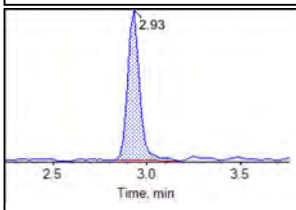

13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:24:48 AM

Sample Name	J7250-FS(4)	**Injection Vial**	35
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:00:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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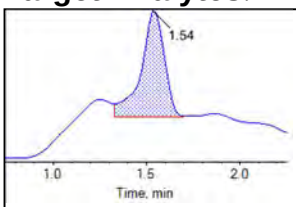

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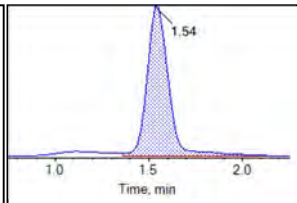
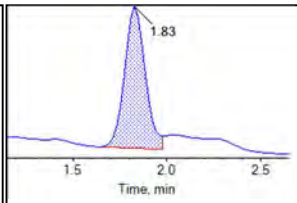
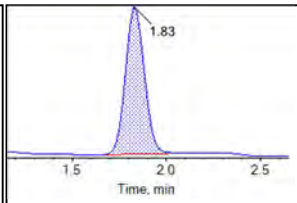


PFBS_2



PFHxA_1



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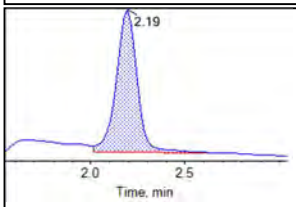
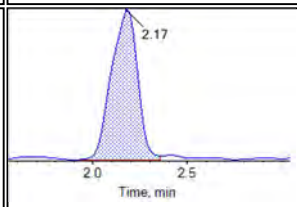
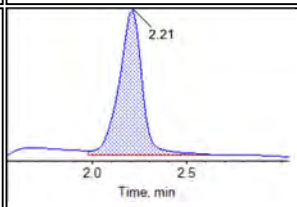


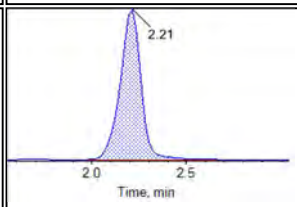
PFHpA_1



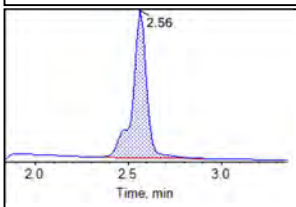
PFHpA_2



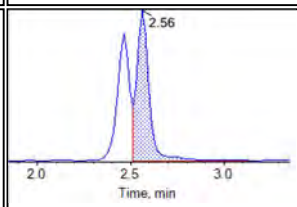
PFHxS_1



PFHxS_2



PFOA_1



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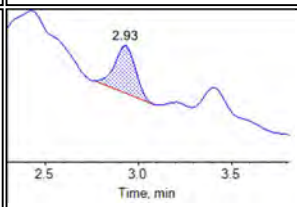
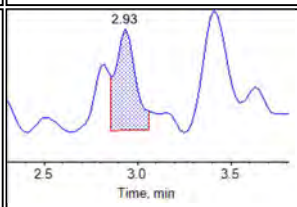


PFNA_1



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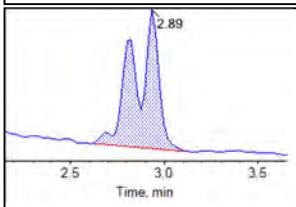

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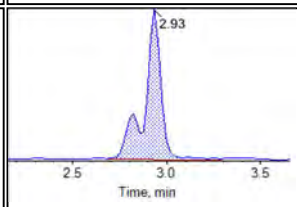

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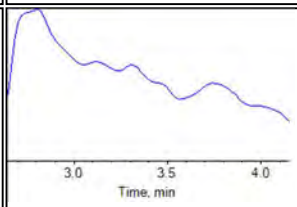

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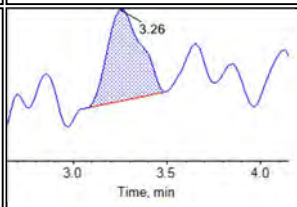

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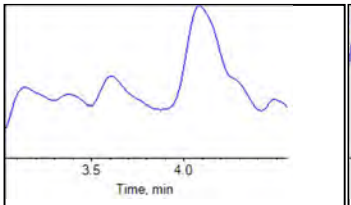

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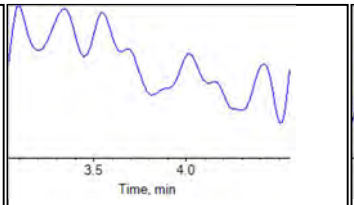

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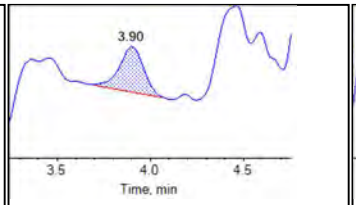

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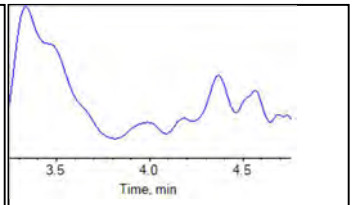

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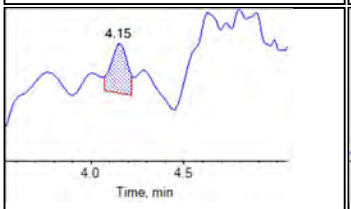

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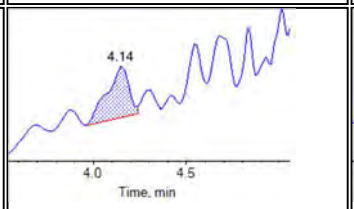

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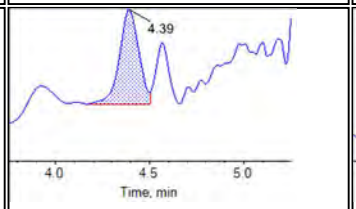

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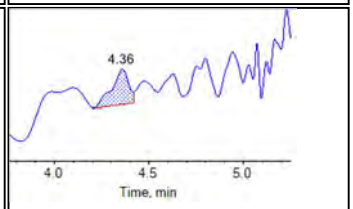

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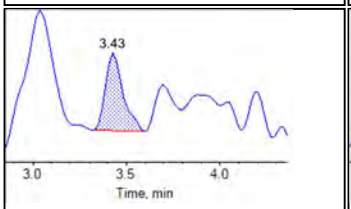

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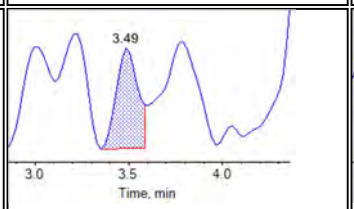

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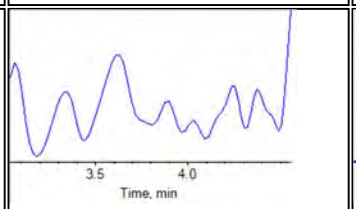

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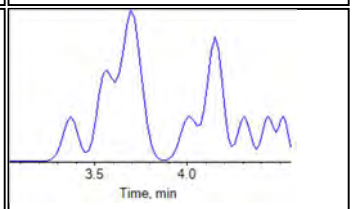

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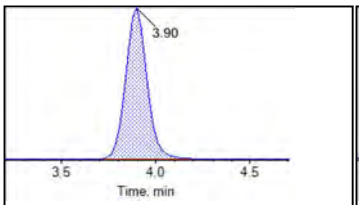

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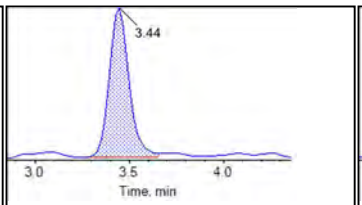

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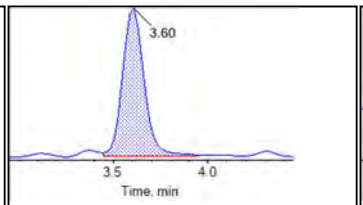

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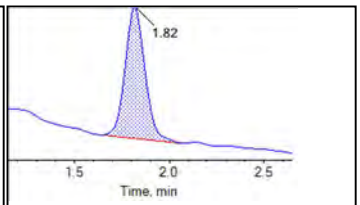

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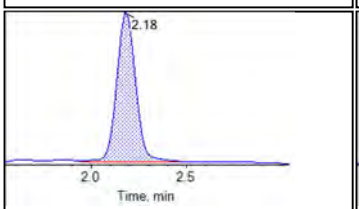

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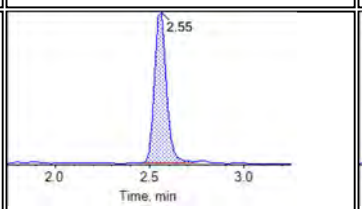

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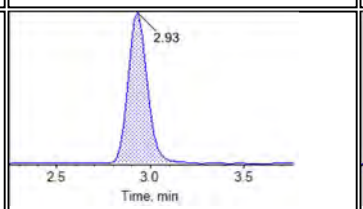

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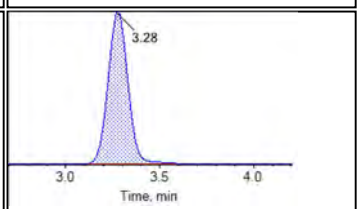

13C6-PFDA

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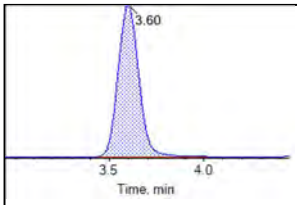
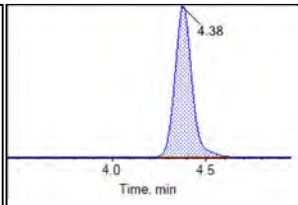


13C7-PFUnA



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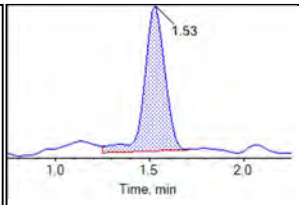

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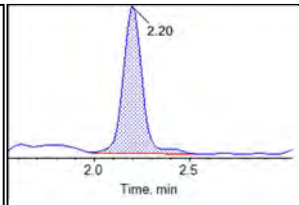

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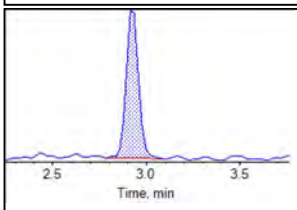

13C8-PFOS

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Sample Name	J7250-FS-D(5)	**Injection Vial**	36
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:11:17	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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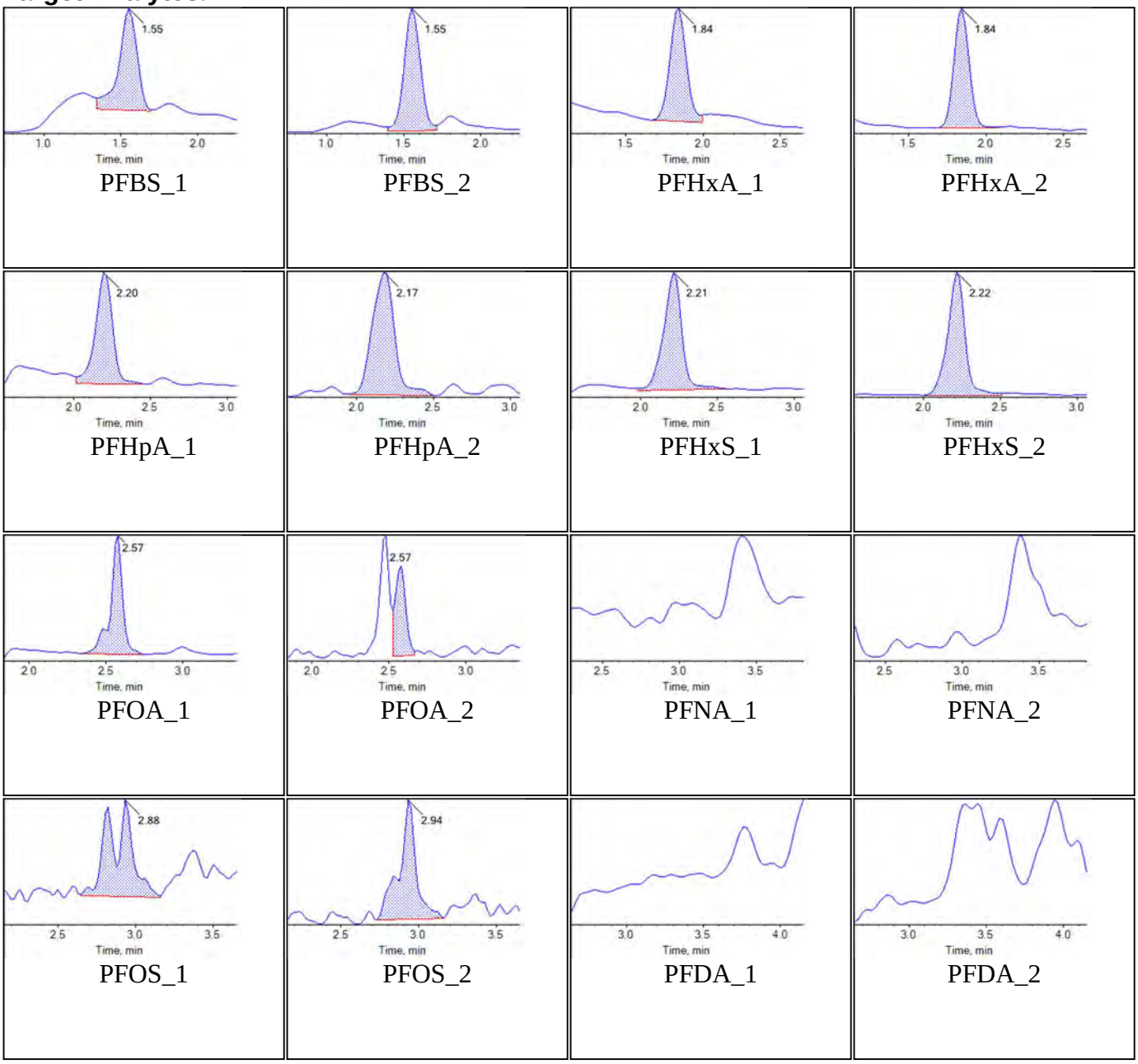

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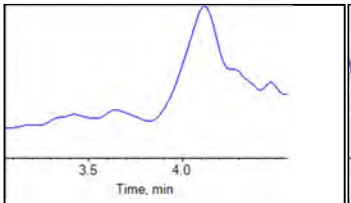

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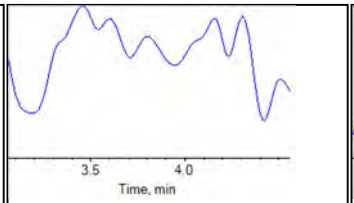

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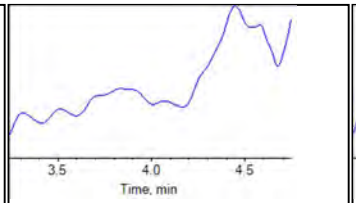

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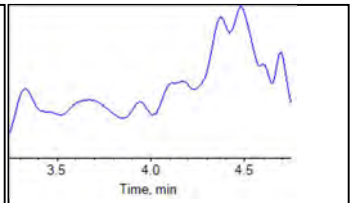

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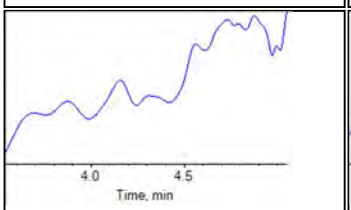

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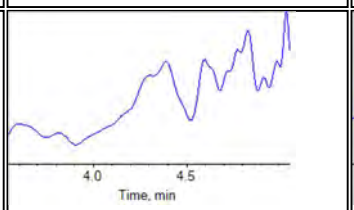

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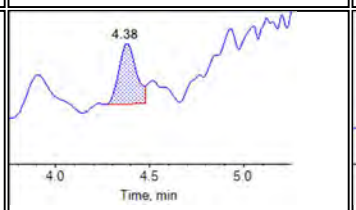

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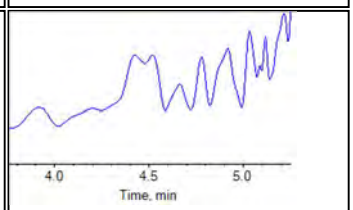

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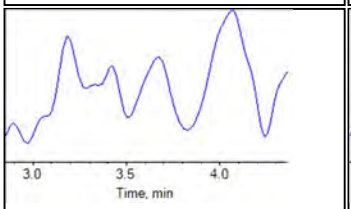

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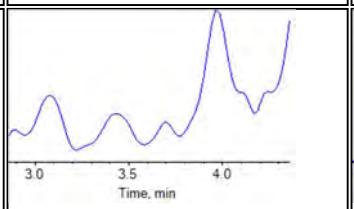

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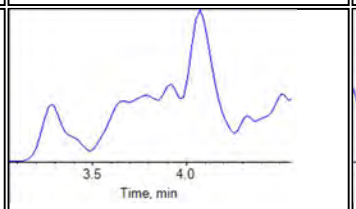

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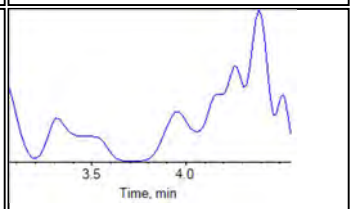

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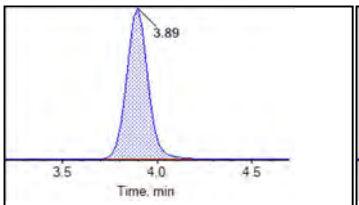

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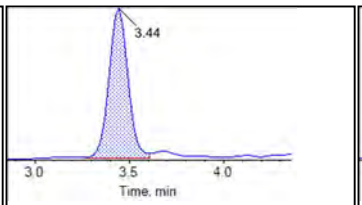

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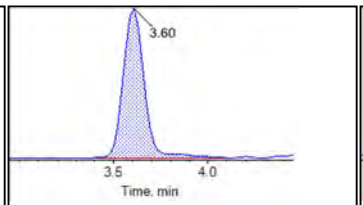

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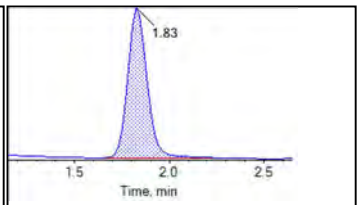
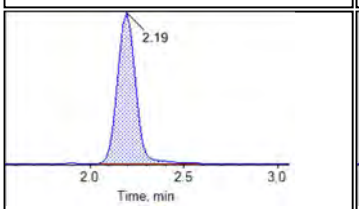


13C5-PFHxA



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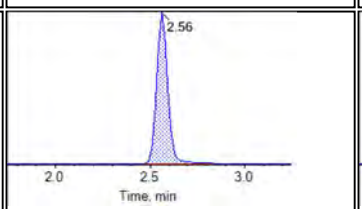

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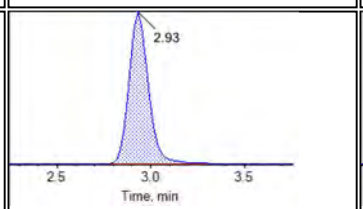

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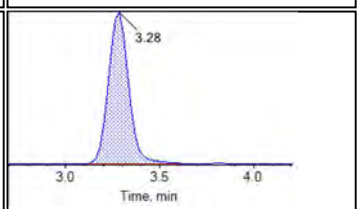

13C6-PFDA

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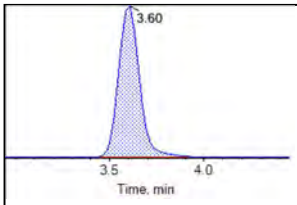
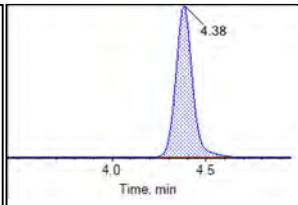
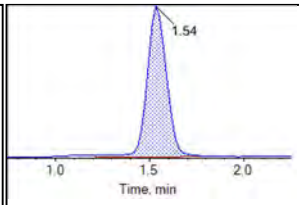


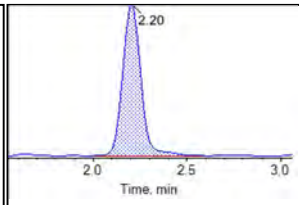
13C7-PFUnA



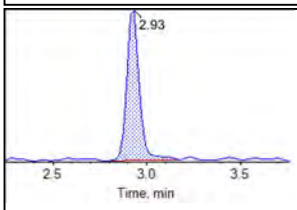
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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Sample Name	JY41 CCV	**Injection Vial**	37
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:22:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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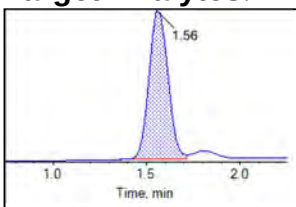

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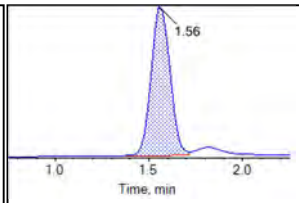

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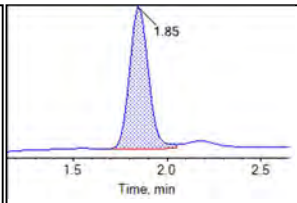

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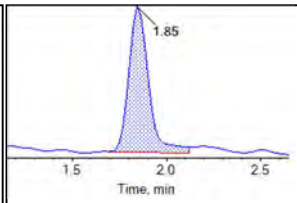

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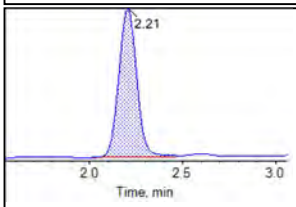

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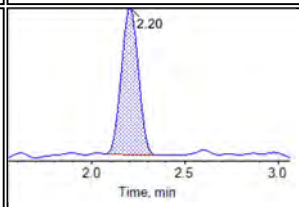

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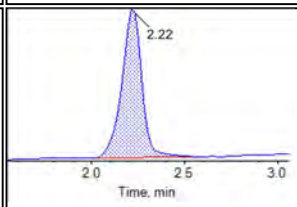

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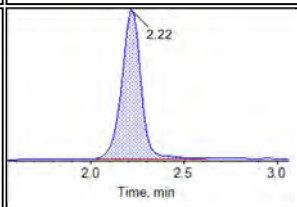

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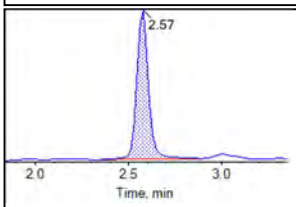

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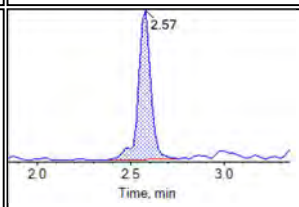

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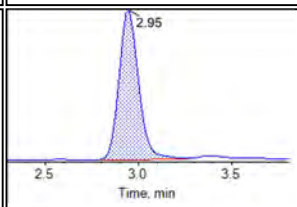

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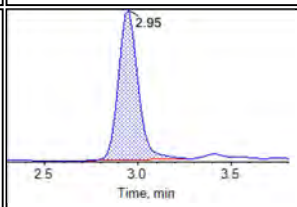

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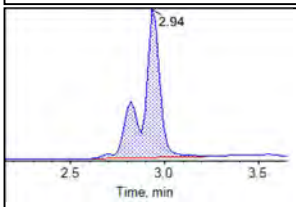

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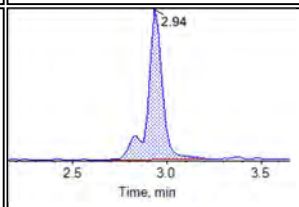

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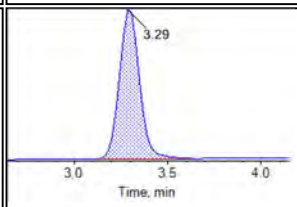

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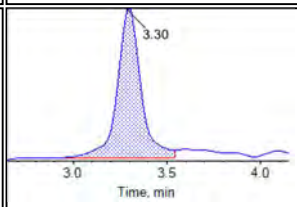

PFDA_2

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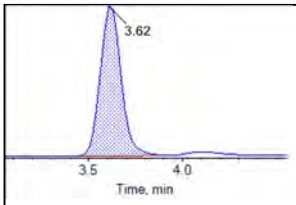

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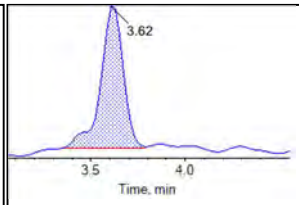

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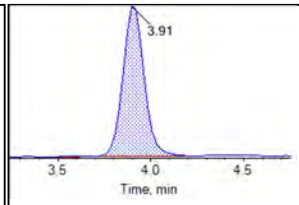

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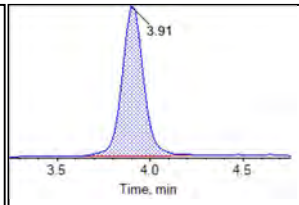

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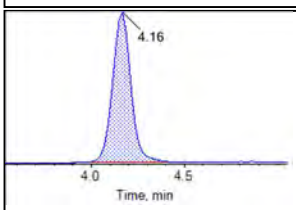

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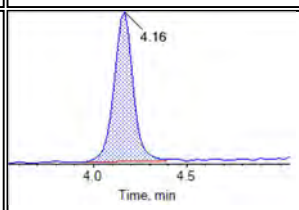

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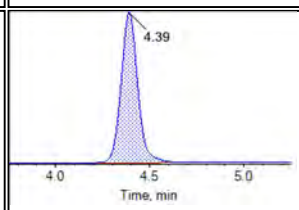

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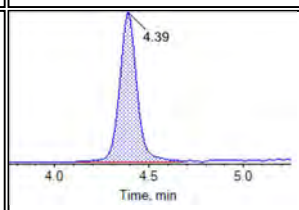

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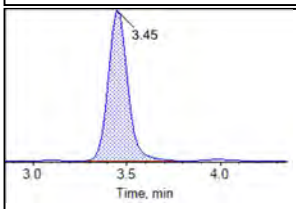

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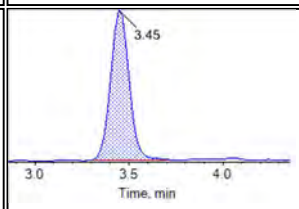

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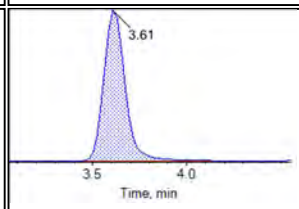

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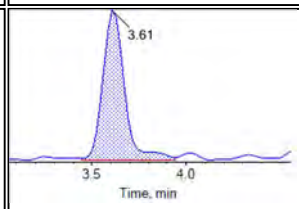
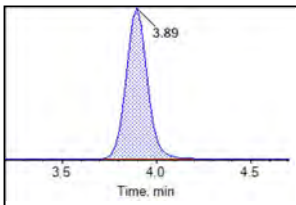
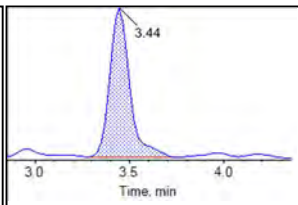


NEtFOSAA_2

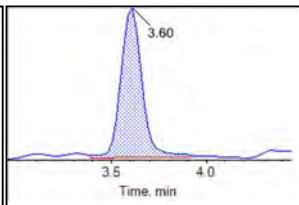
Internal Standards:



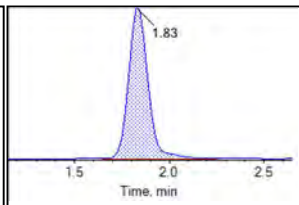
13C2-PFDoA



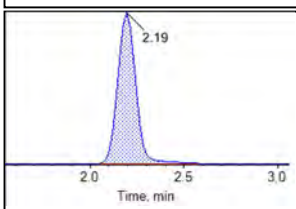
d3-MeFOSAA



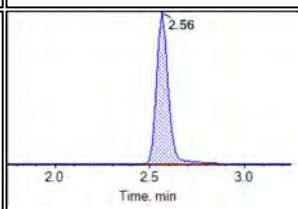
d5-EtFOSAA



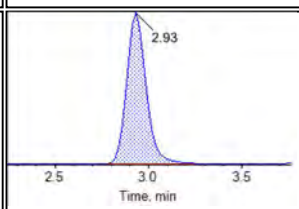
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



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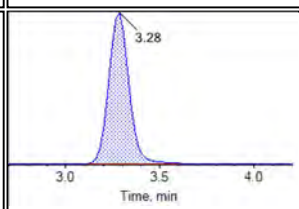

13C6-PFDA

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Chromatogram Report

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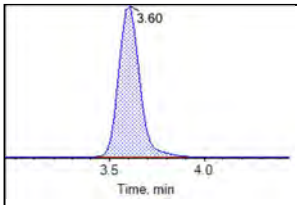
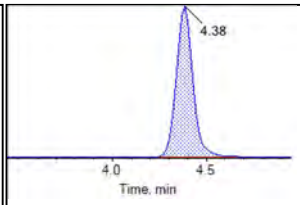
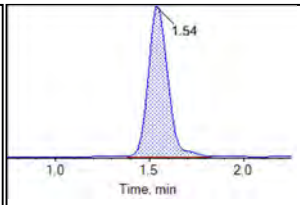


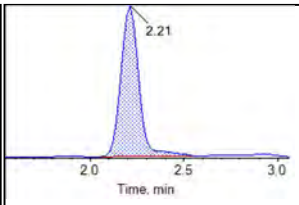
13C7-PFUnA



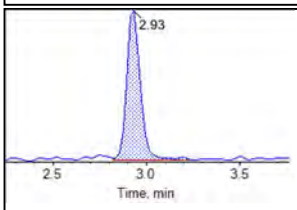
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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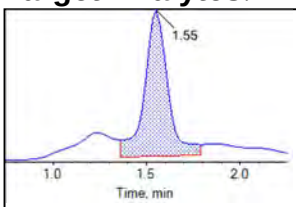
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:25:09 AM

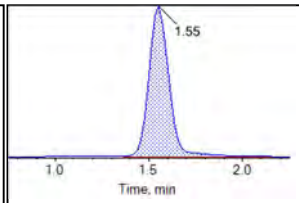
Sample Name	J7251-FS(4)	**Injection Vial**	39
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:43:54	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



PFBS_1



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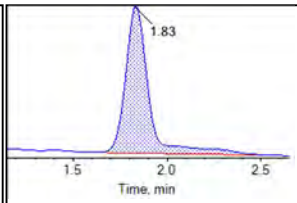

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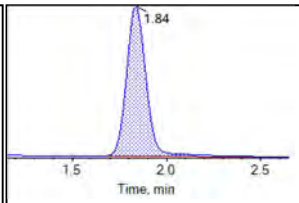

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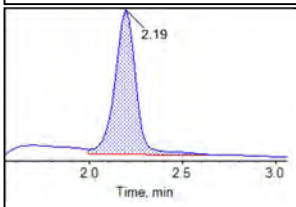

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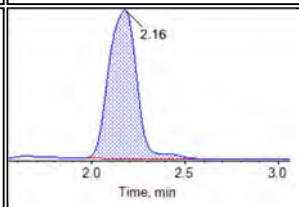

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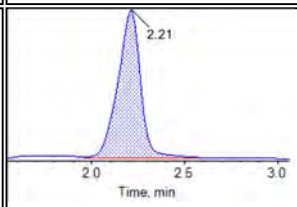
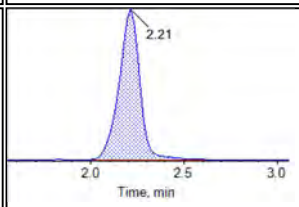


PFHxS_1



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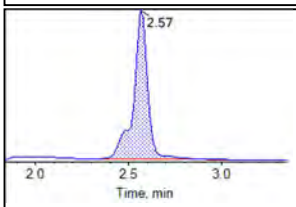

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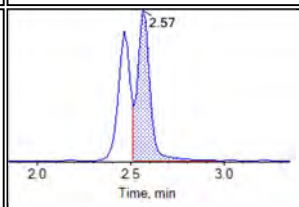

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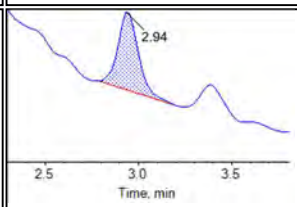

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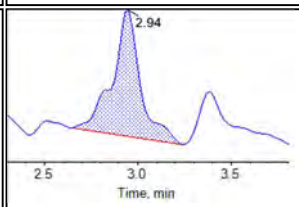

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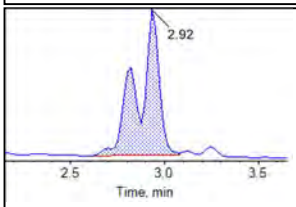

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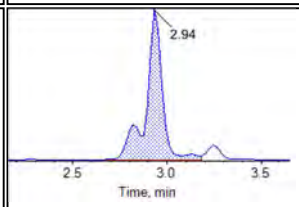

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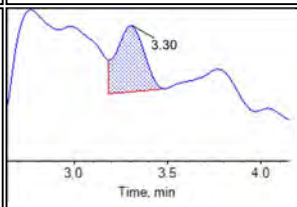

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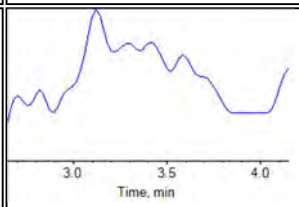

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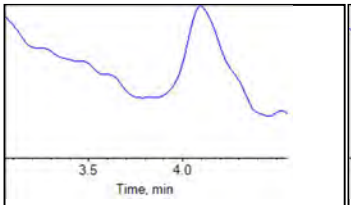

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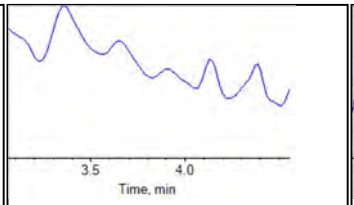

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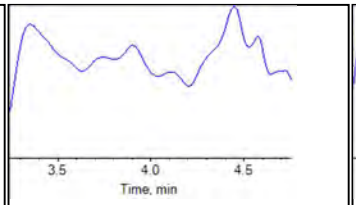

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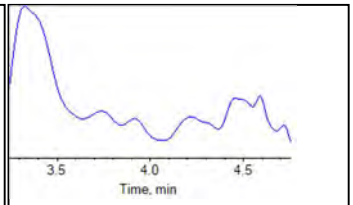

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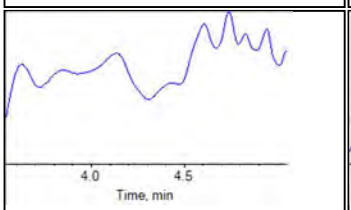

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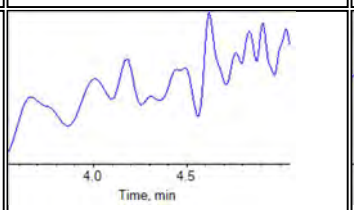

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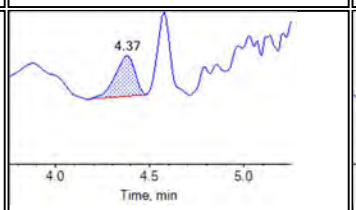

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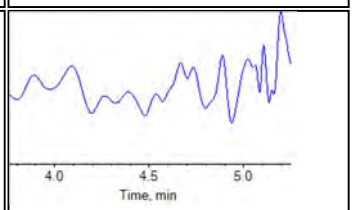

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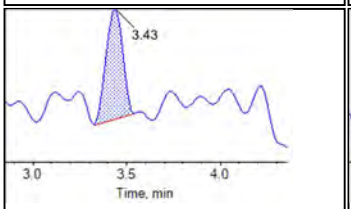

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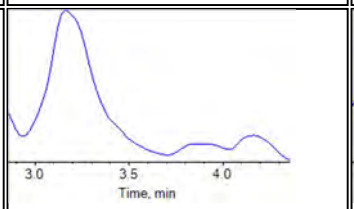

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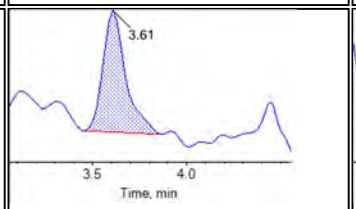

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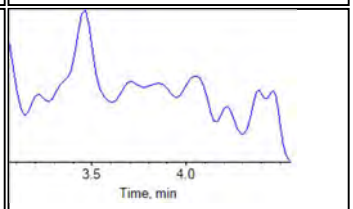

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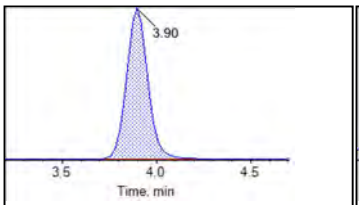

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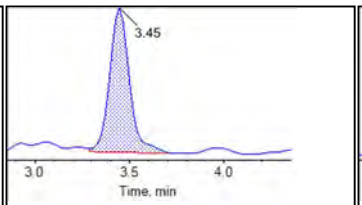

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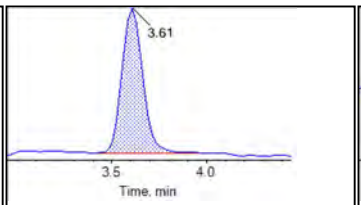

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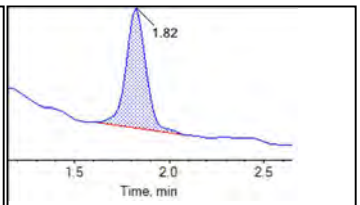

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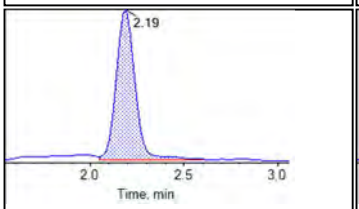

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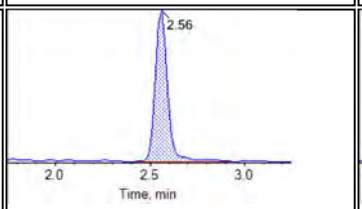

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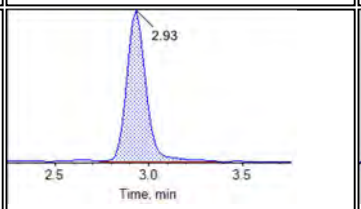

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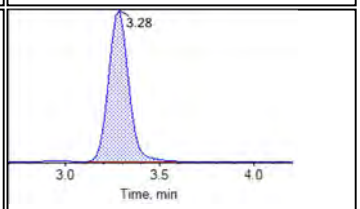

13C6-PFDA

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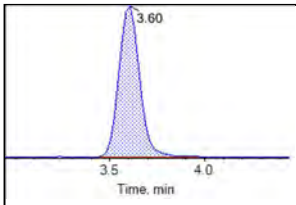

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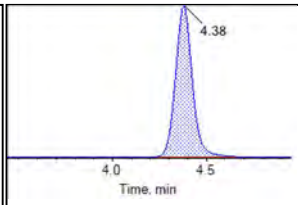

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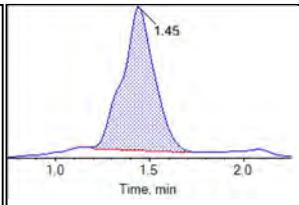

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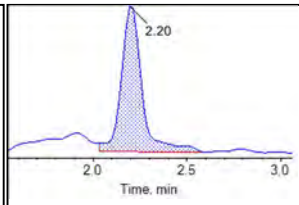

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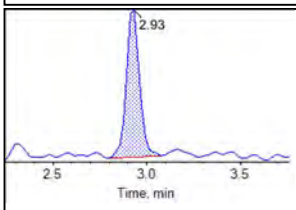

13C8-PFOS

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Sample Name	J7251-FS-D(5)	**Injection Vial**	40
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:54:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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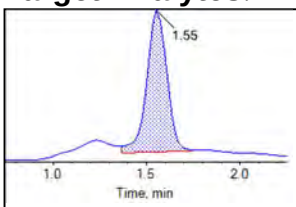

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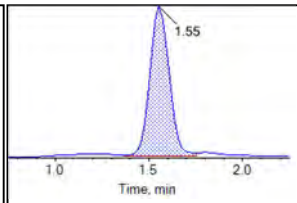

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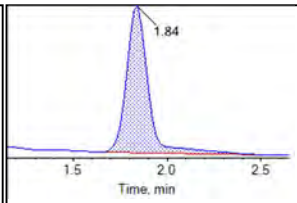

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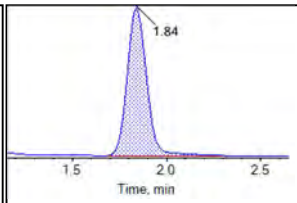

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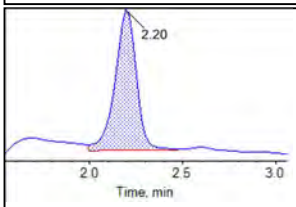

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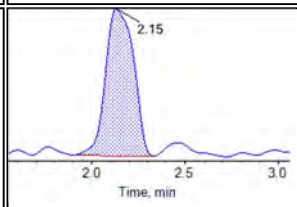

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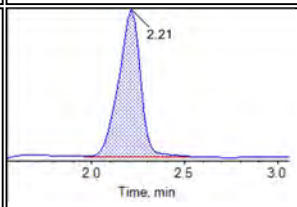

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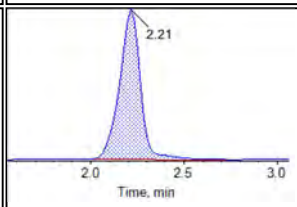

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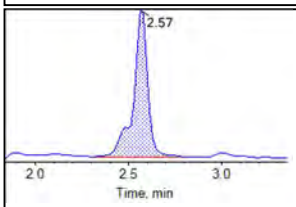

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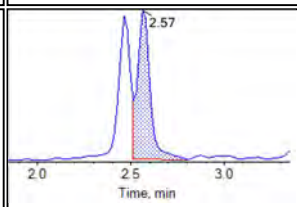

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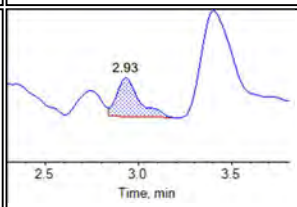

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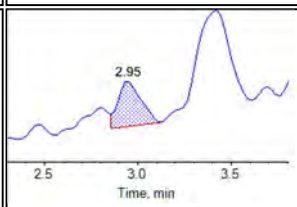

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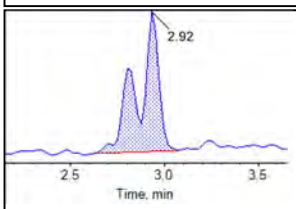

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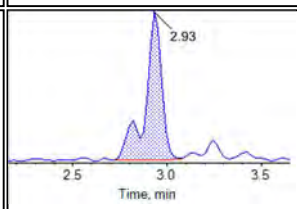

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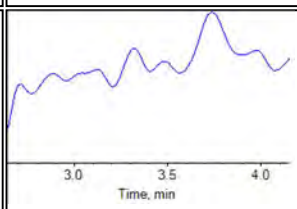

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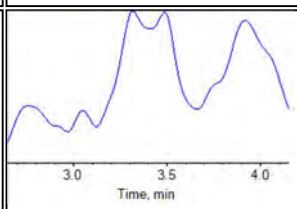

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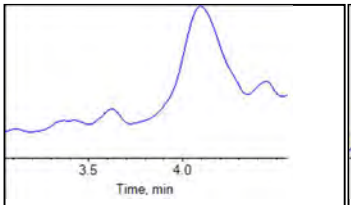

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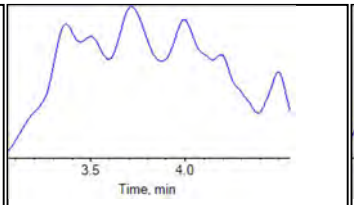

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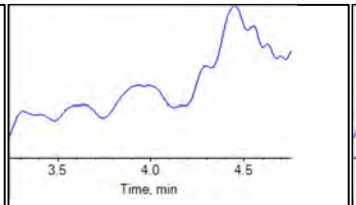

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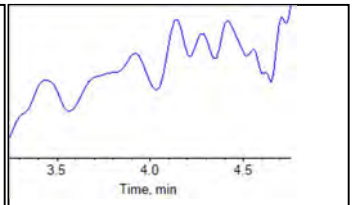
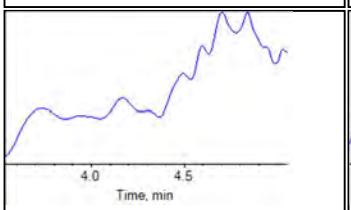
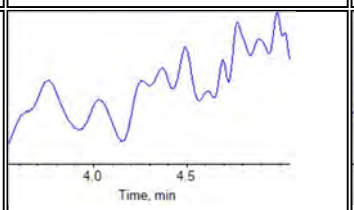


PFDoA_2



PFTrDA_1



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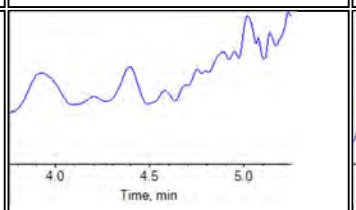

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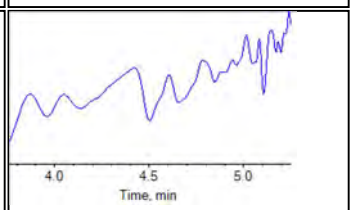

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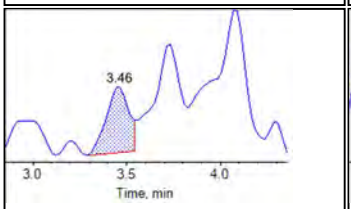

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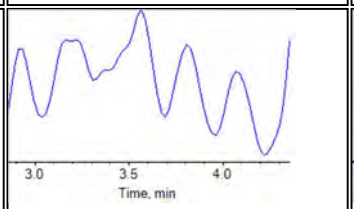

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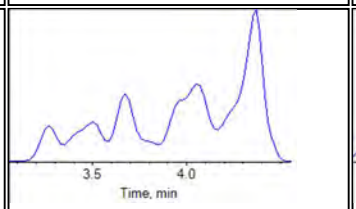

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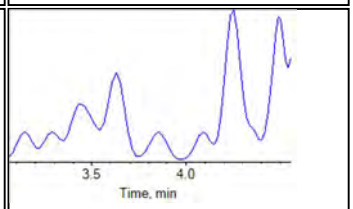

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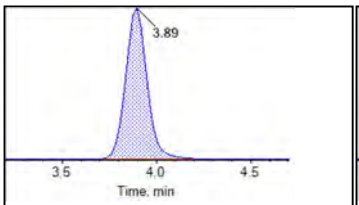
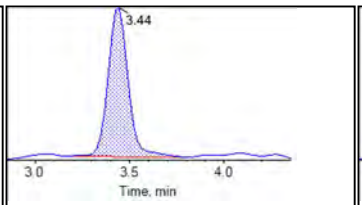
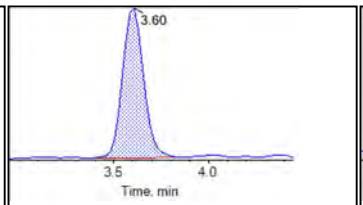


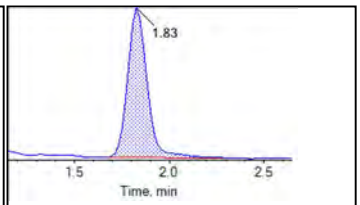
13C2-PFDoA



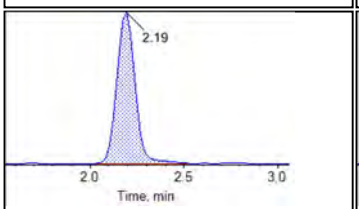
d3-MeFOSAA



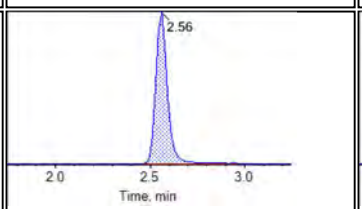
d5-EtFOSAA



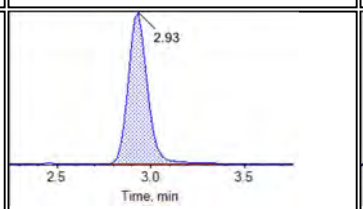
13C5-PFHxA



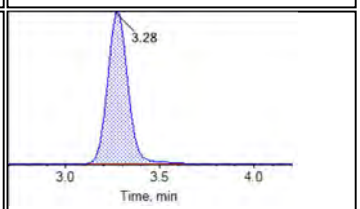
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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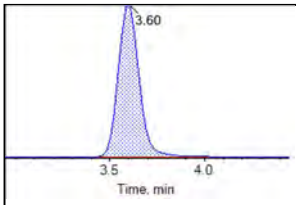
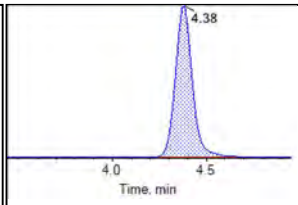
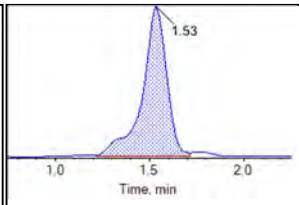


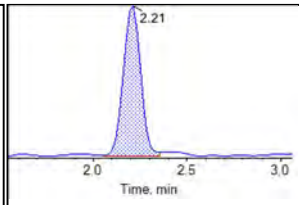
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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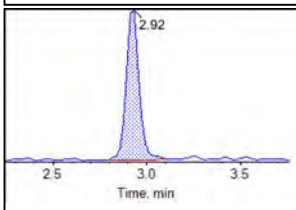

13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:25:24 AM

Sample Name	J7255-FS(4)	**Injection Vial**	41
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:05:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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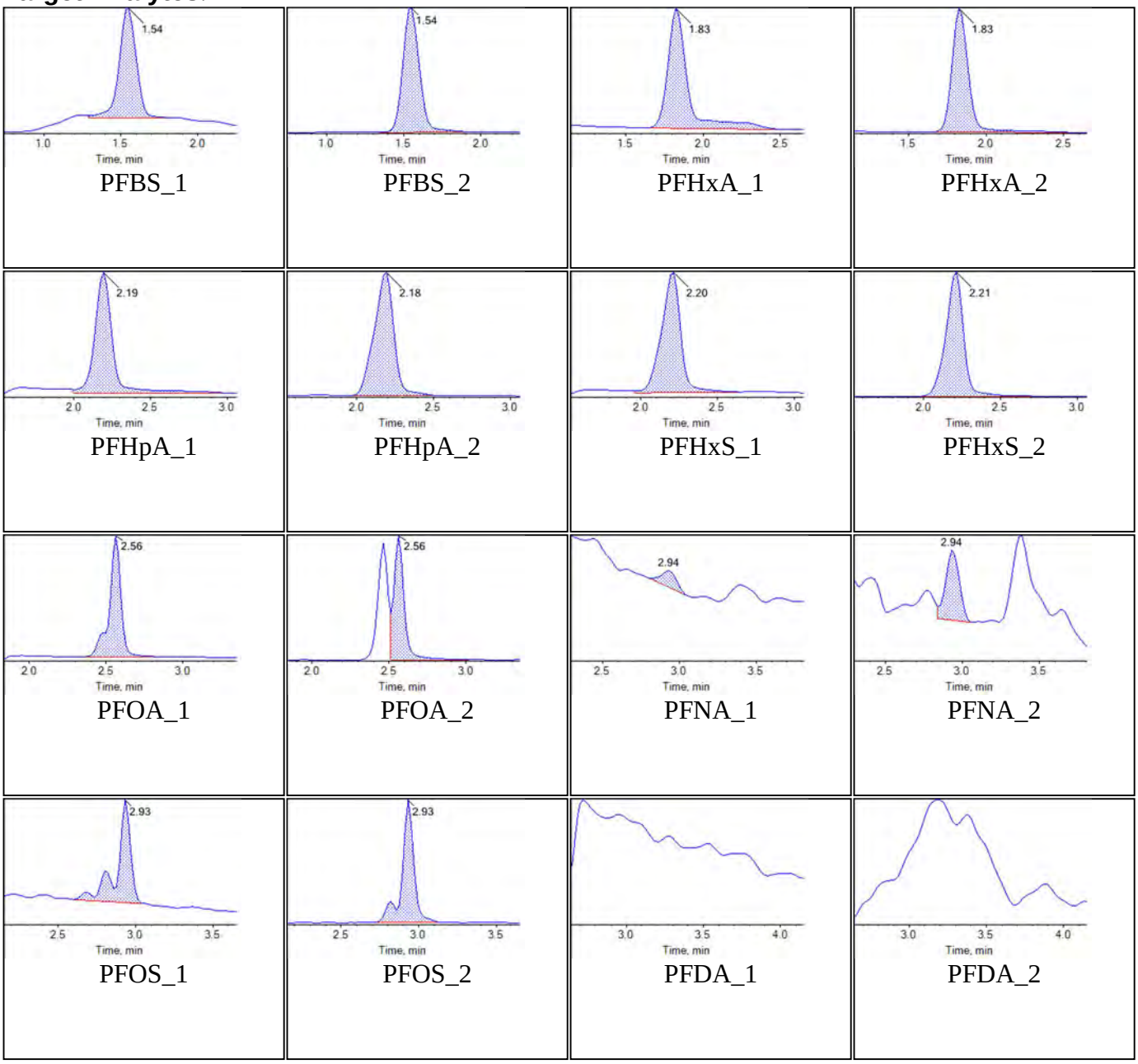

BATTELLE

Chromatogram Report

Created with Analyst Reporter
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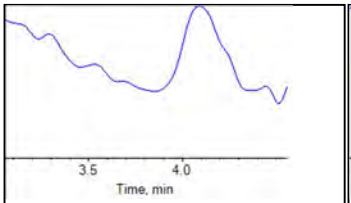

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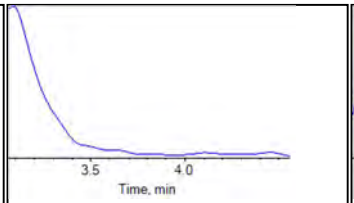

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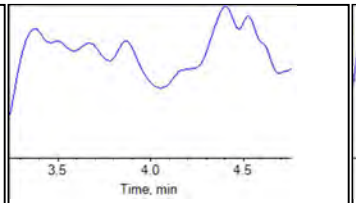
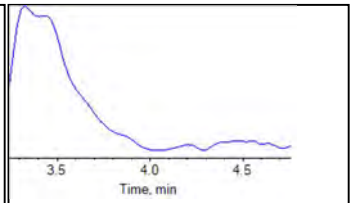
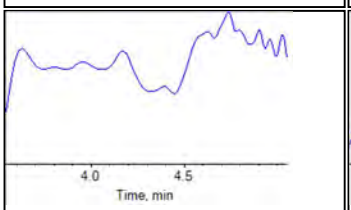


PFDoA_1



PFDoA_2



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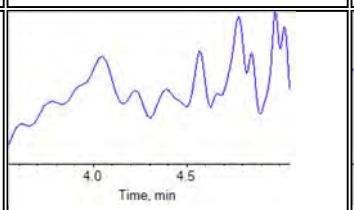

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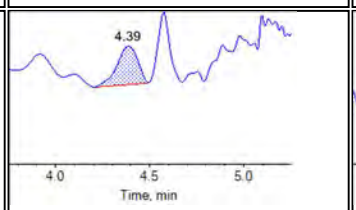

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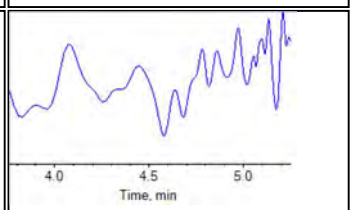

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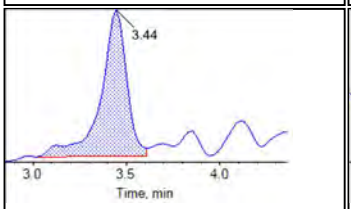

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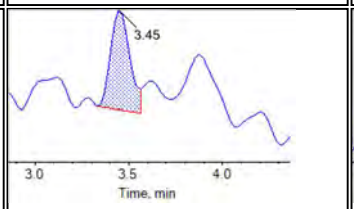

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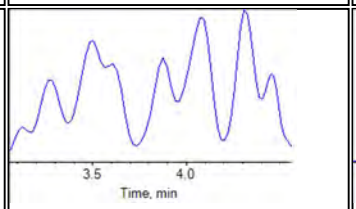

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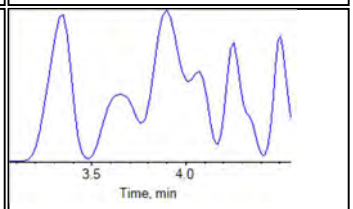

NEtFOSAA_2

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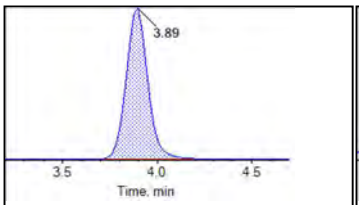
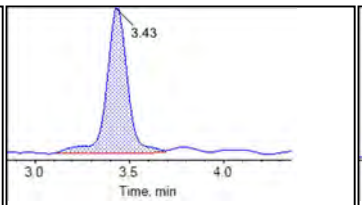
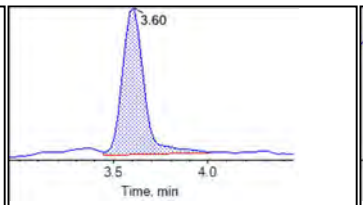


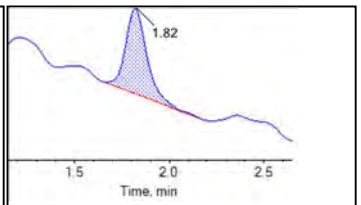
13C2-PFDoA



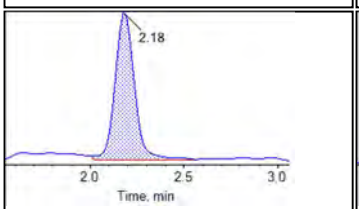
d3-MeFOSAA



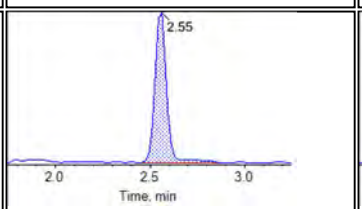
d5-EtFOSAA



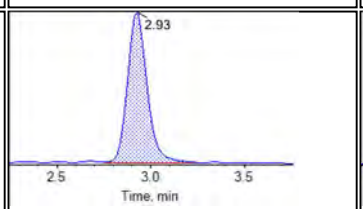
13C5-PFHxA



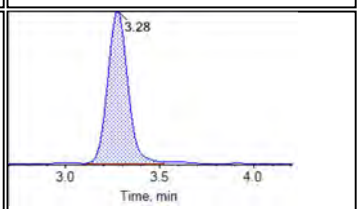
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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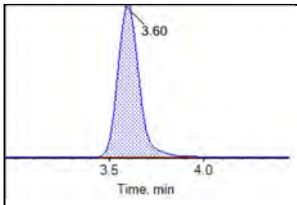
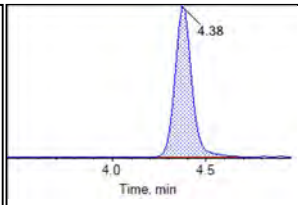
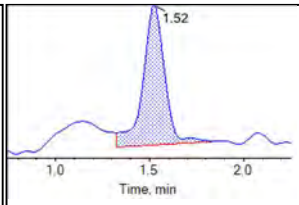


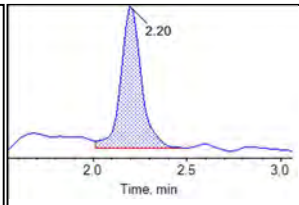
13C7-PFUnA



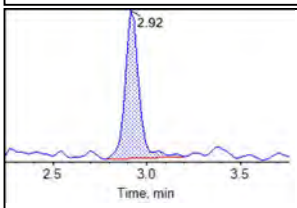
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:25:29 AM

Sample Name	J7255-FS-D(5)	**Injection Vial**	42
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:16:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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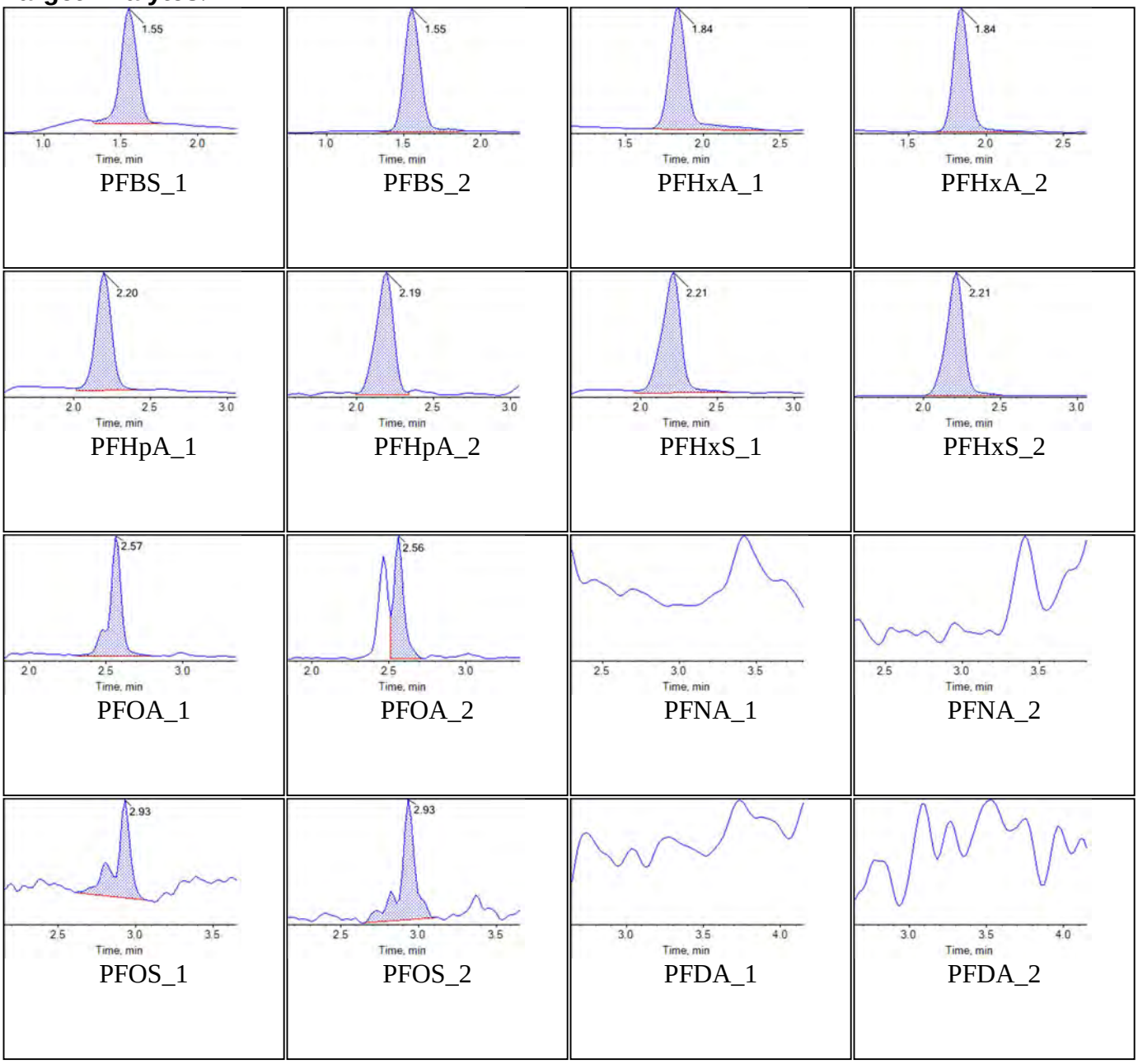

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Chromatogram Report

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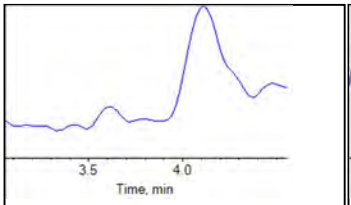
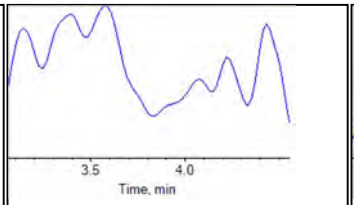
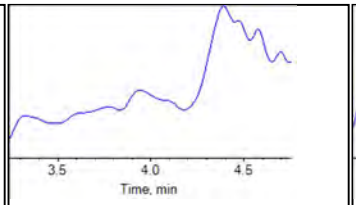


PFUnA_1



PFUnA_2



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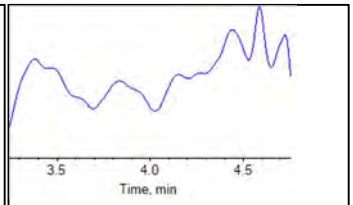

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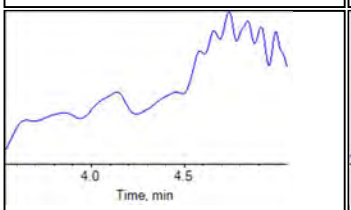

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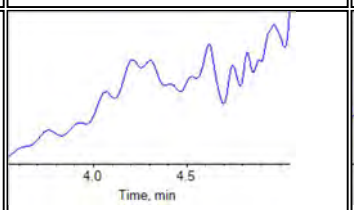

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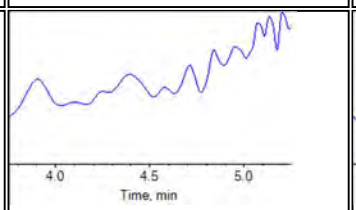

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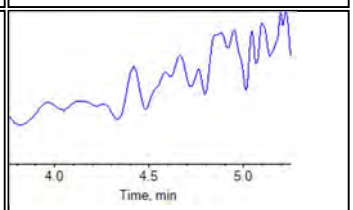

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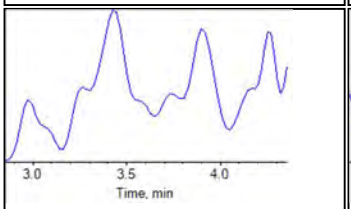

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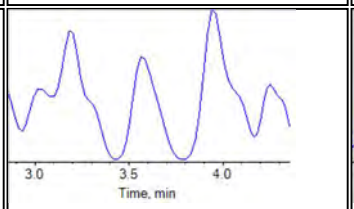

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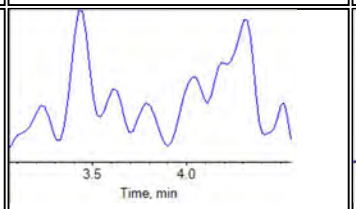

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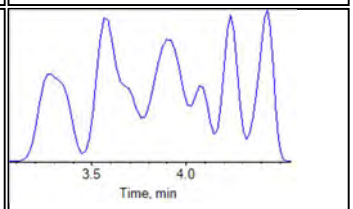

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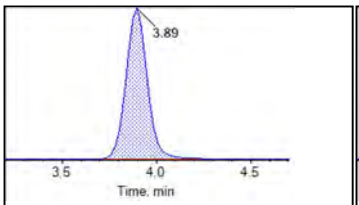

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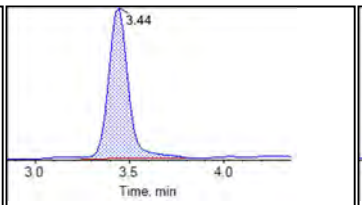

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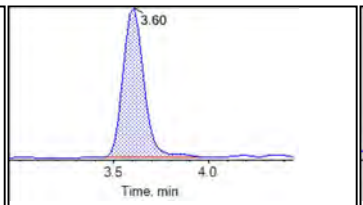

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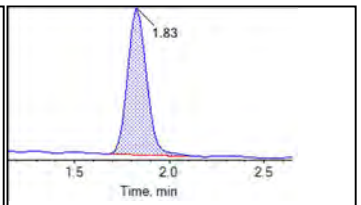

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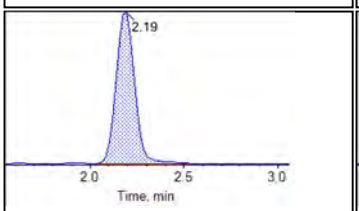
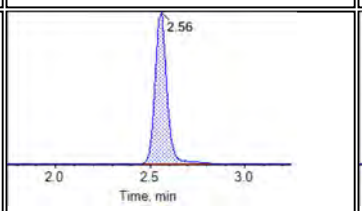


13C4-PFHpA



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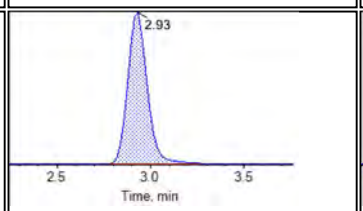

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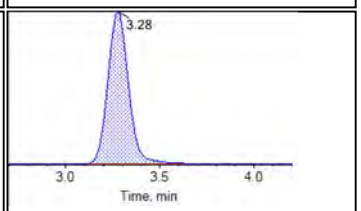

13C6-PFDA

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Chromatogram Report

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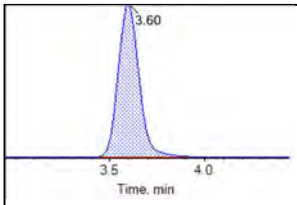
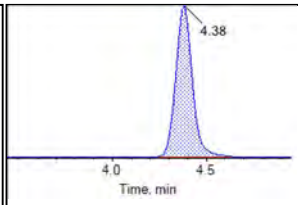


13C7-PFUnA



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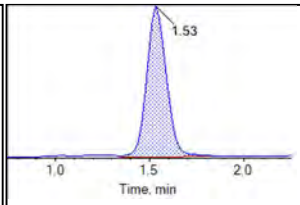
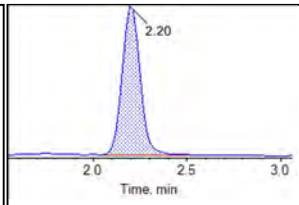


13C3-PFBS



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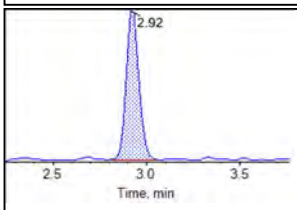

13C8-PFOS

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Chromatogram Report

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Sample Name	J7256-FS(4)	**Injection Vial**	43
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:27:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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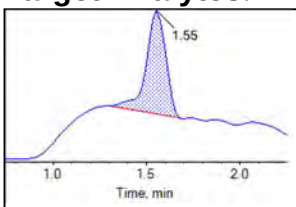

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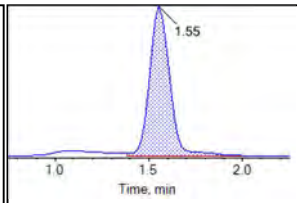

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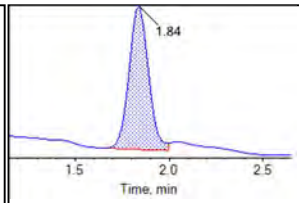

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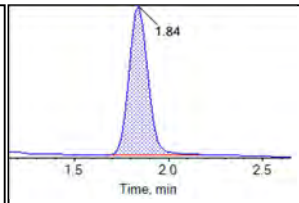

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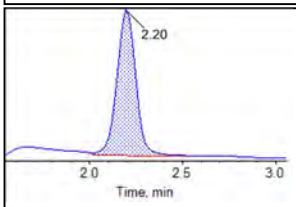

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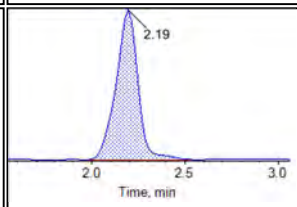

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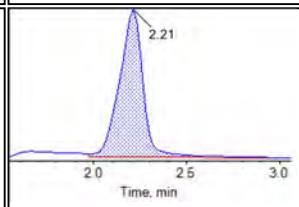

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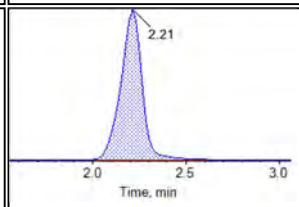

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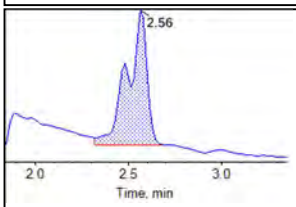

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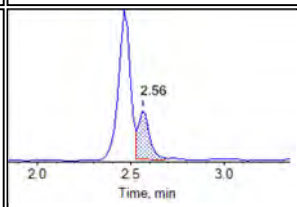

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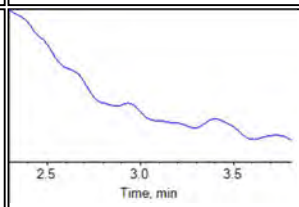

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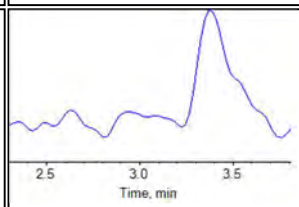

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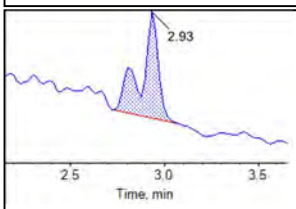

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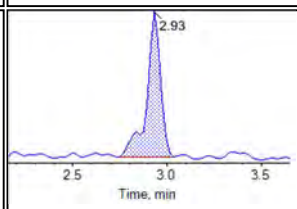

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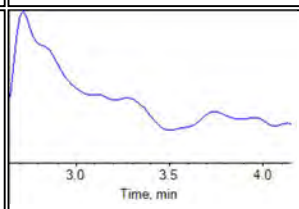

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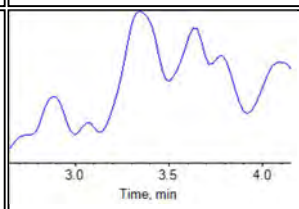

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Chromatogram Report

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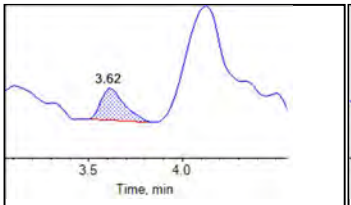

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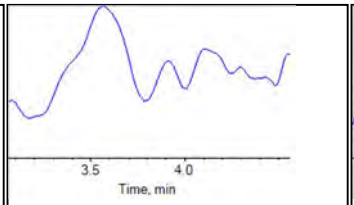

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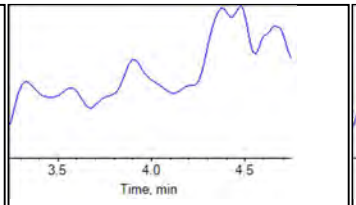

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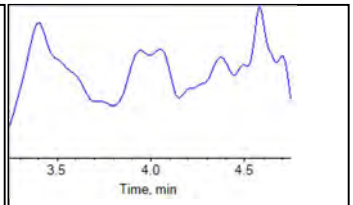

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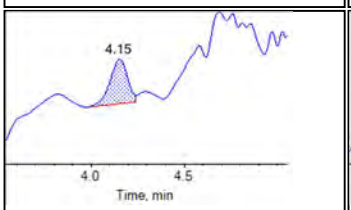

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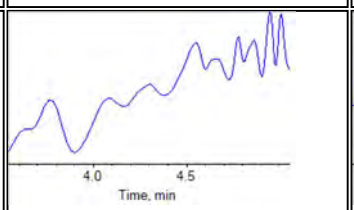

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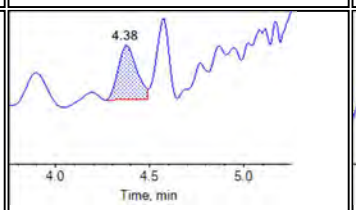

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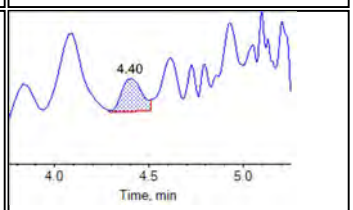

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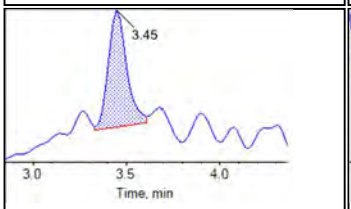

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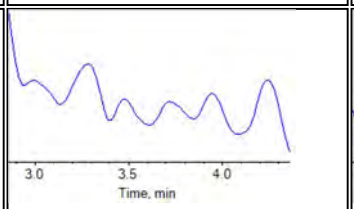

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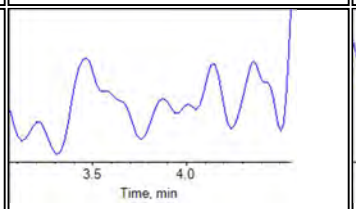

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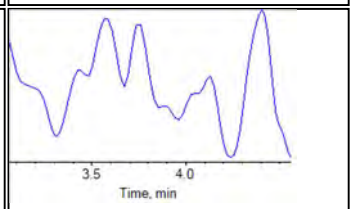

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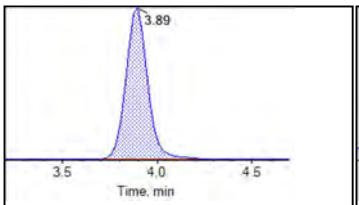

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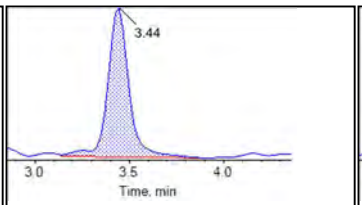
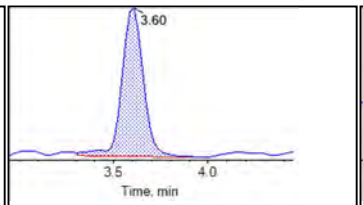
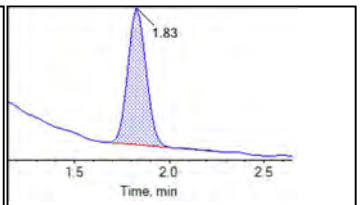


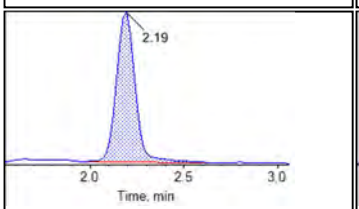
d3-MeFOSAA



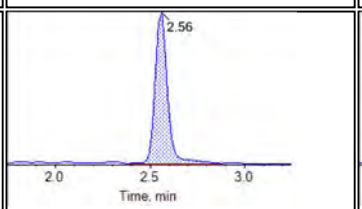
d5-EtFOSAA



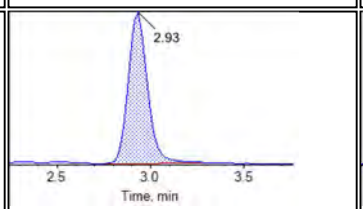
13C5-PFHxA



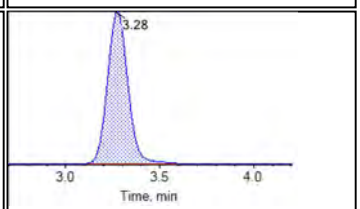
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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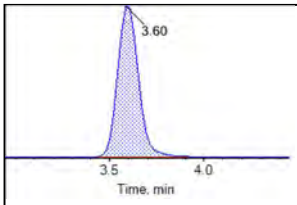
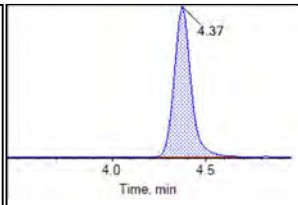
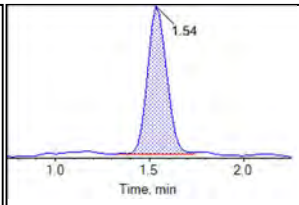


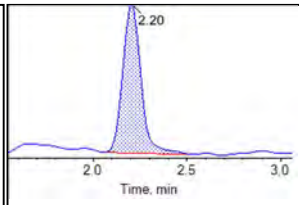
13C7-PFUnA



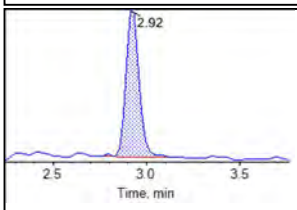
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:25:42 AM

Sample Name	J7256-FS-D(5)	**Injection Vial**	44
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:38:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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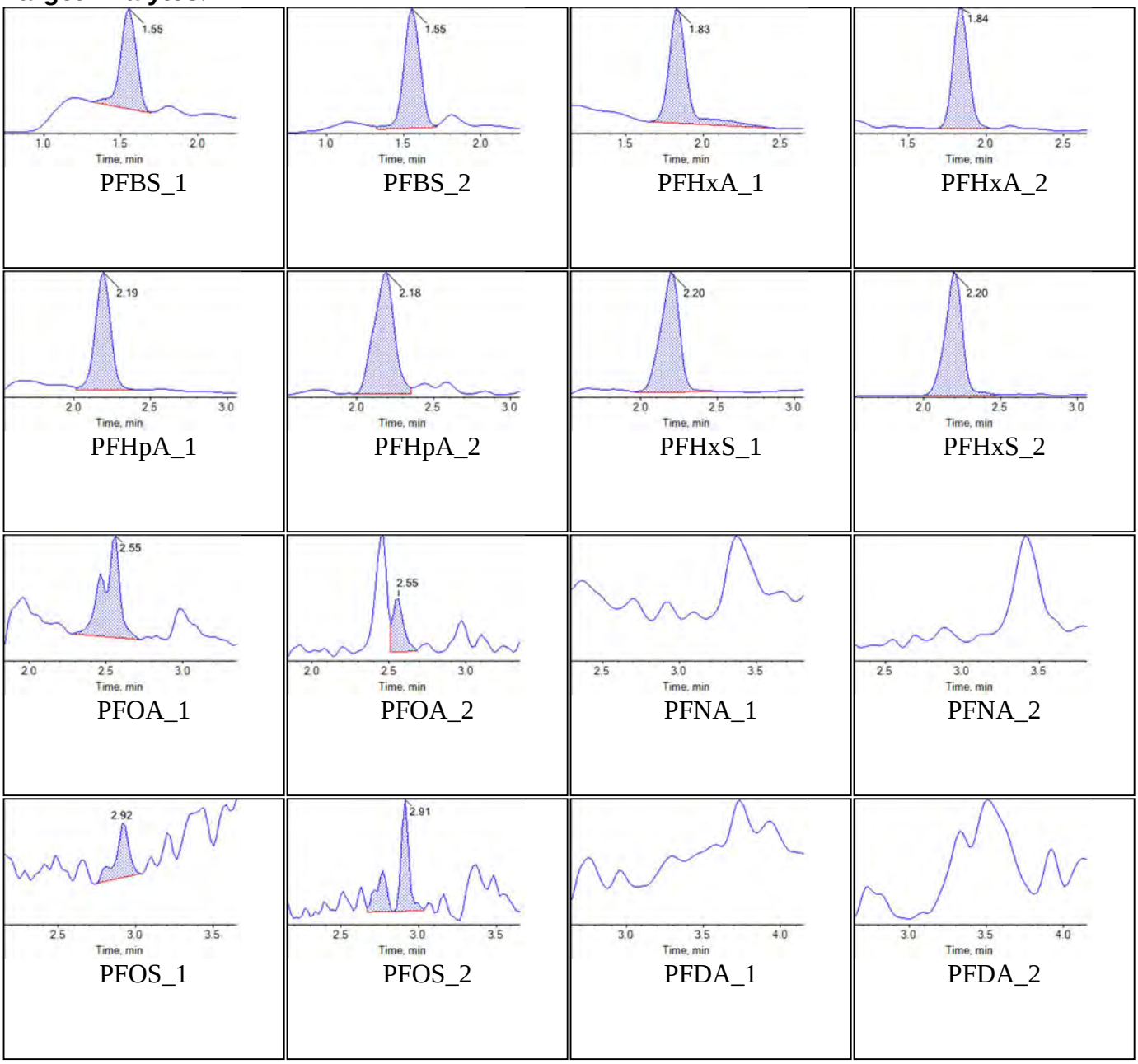

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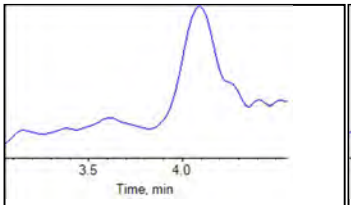
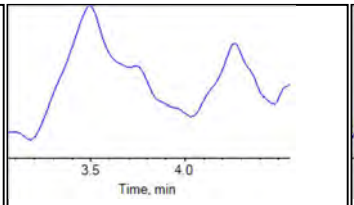
Chromatogram Report

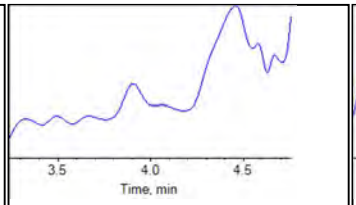
Created with Analyst Reporter
Printed: 29/08/2018 10:25:42 AM



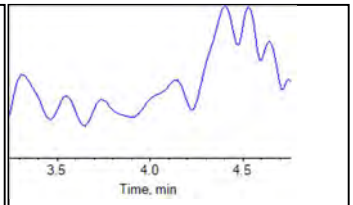
PFUnA_1



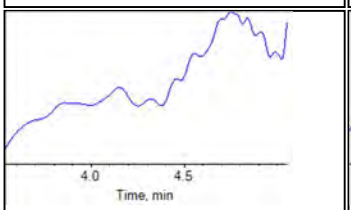
PFUnA_2



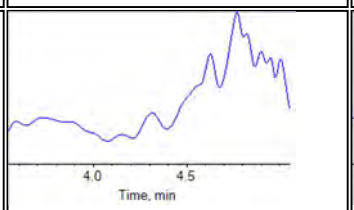
PFDoA_1



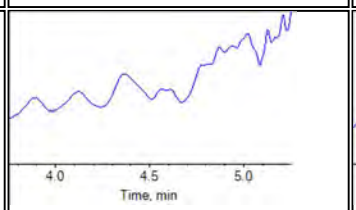
PFDoA_2



PFTrDA_1



PFTrDA_2



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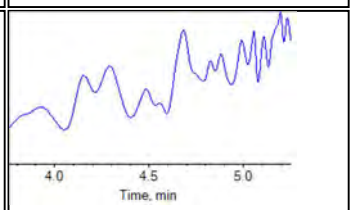
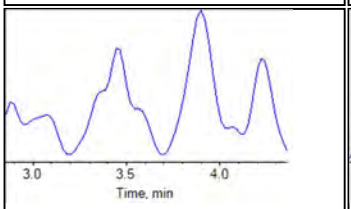
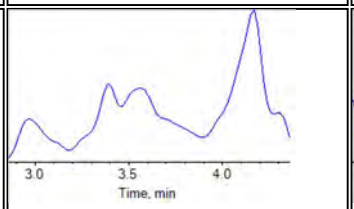


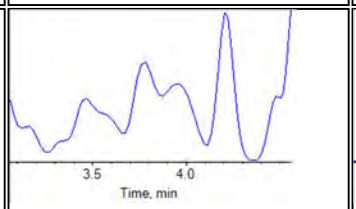
PFTeDA_2



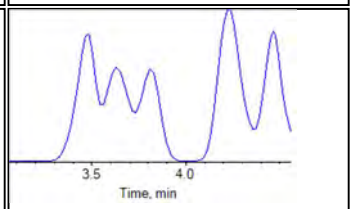
NMeFOSAA_1



NMeFOSAA_2

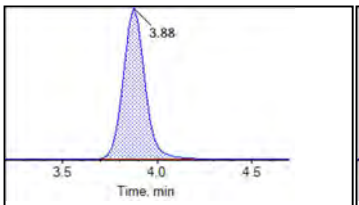


NEtFOSAA_1

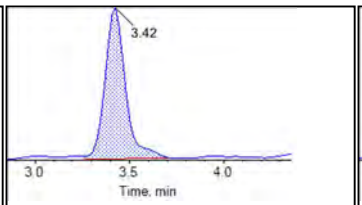


NEtFOSAA_2

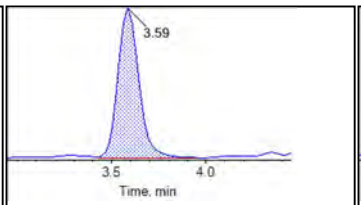
Internal Standards:



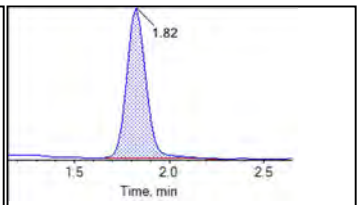
13C2-PFDoA



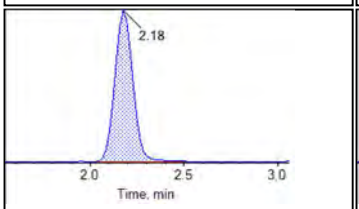
d3-MeFOSAA



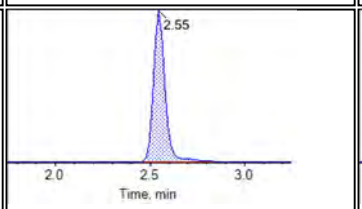
d5-EtFOSAA



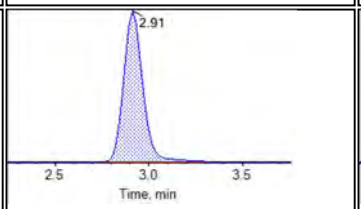
13C5-PFHxA



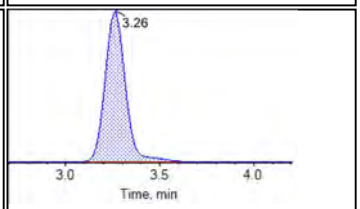
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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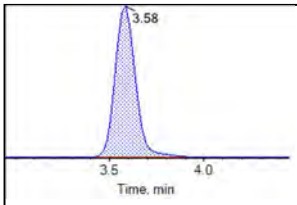
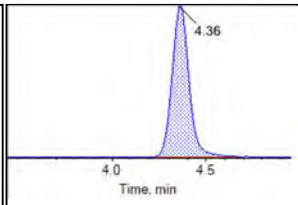
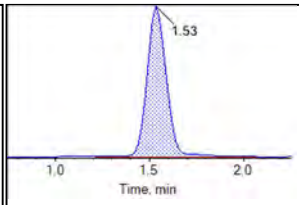


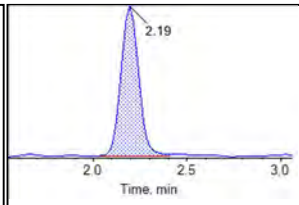
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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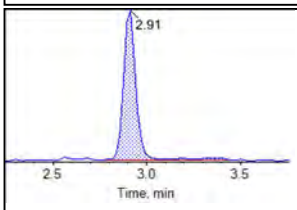

13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:25:48 AM

Sample Name	J7257-FS(4)	**Injection Vial**	45
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:49:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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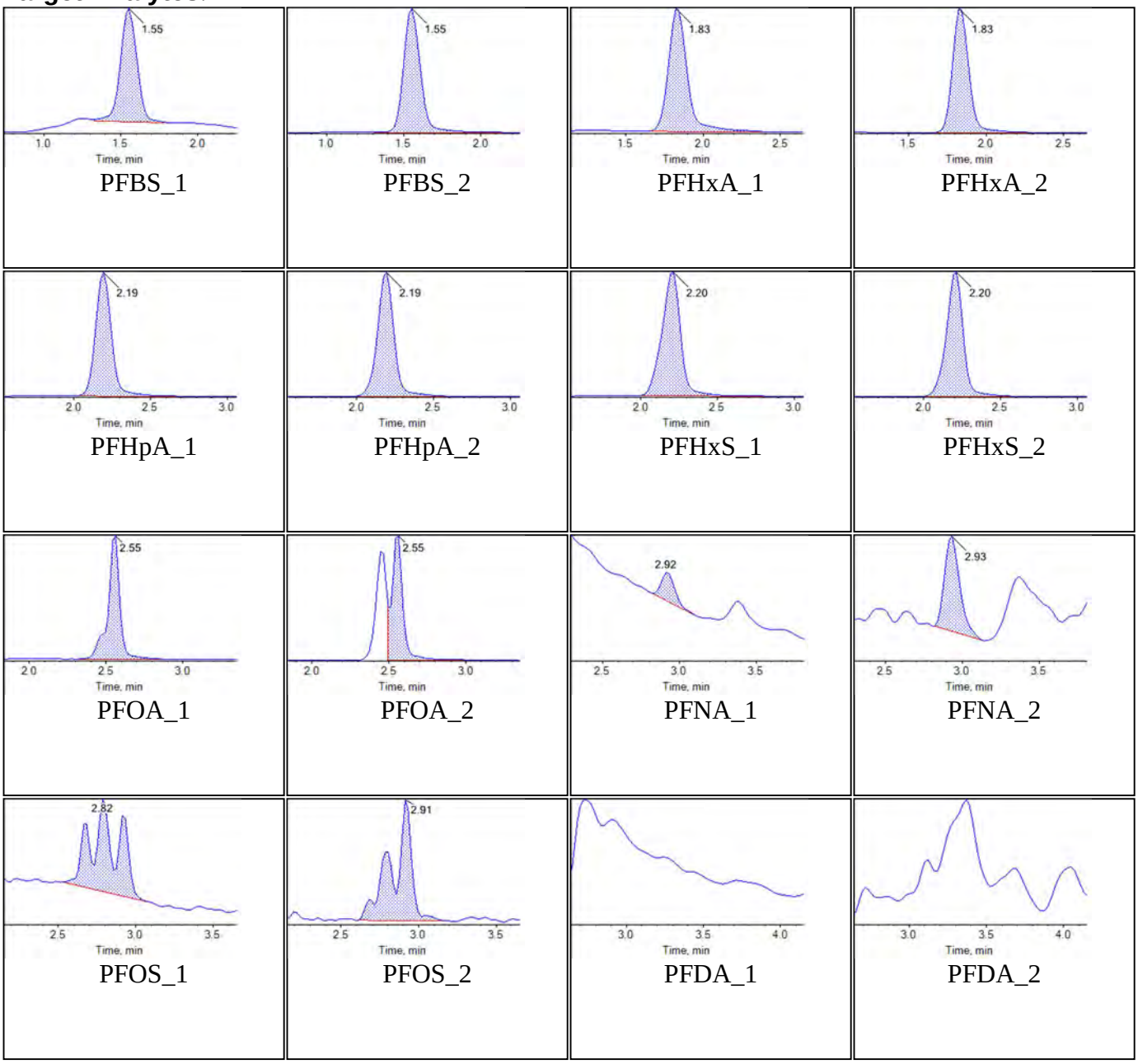

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Chromatogram Report

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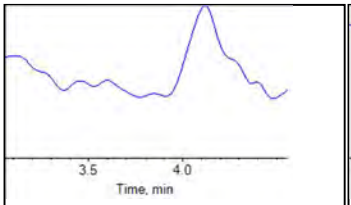
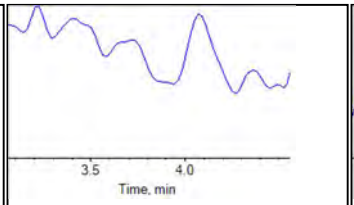
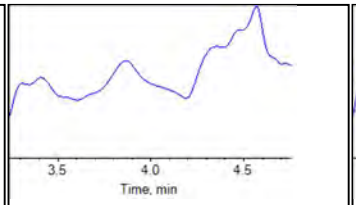


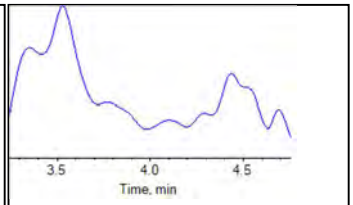
PFUnA_1



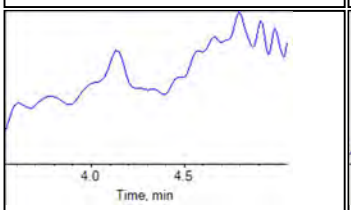
PFUnA_2



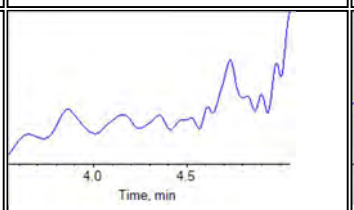
PFDoA_1



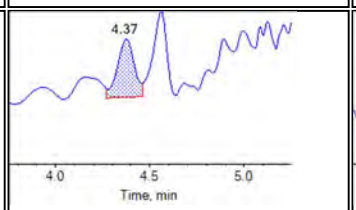
PFDoA_2



PFTrDA_1



PFTrDA_2



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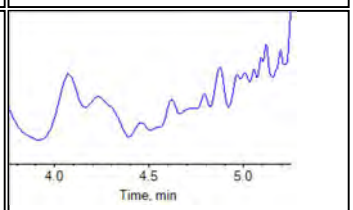
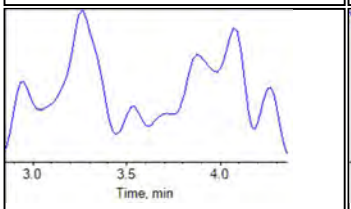
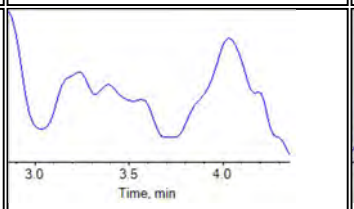


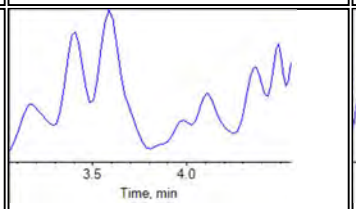
PFTeDA_2



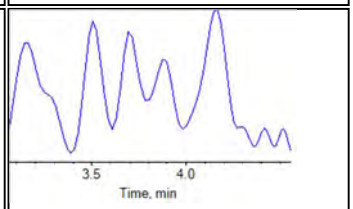
NMeFOSAA_1



NMeFOSAA_2

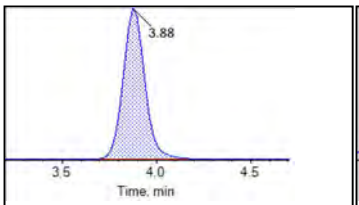


NEtFOSAA_1

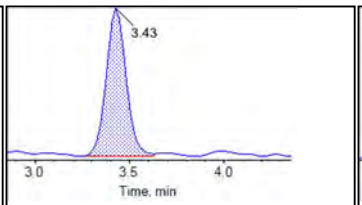


NEtFOSAA_2

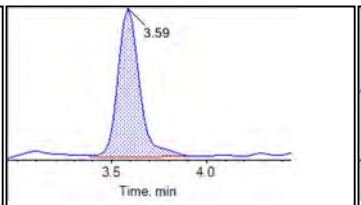
Internal Standards:



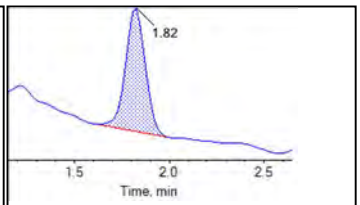
13C2-PFDoA



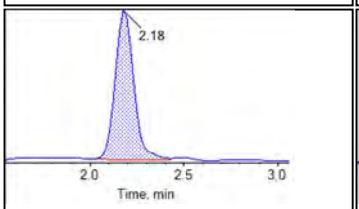
d3-MeFOSAA



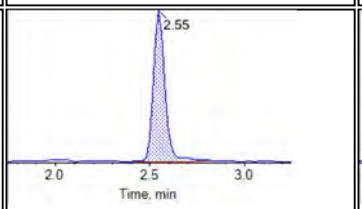
d5-EtFOSAA



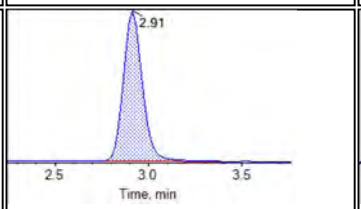
13C5-PFHxA



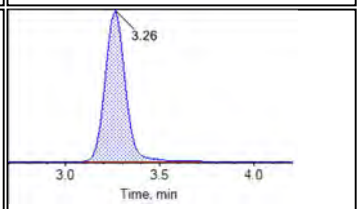
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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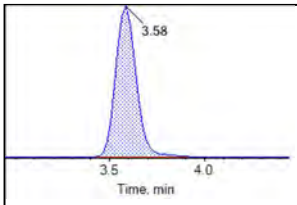
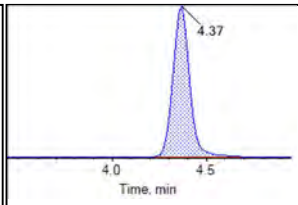
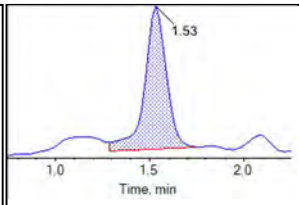


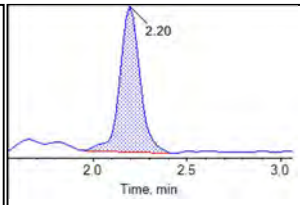
13C7-PFUnA



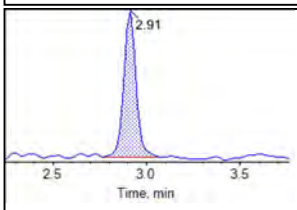
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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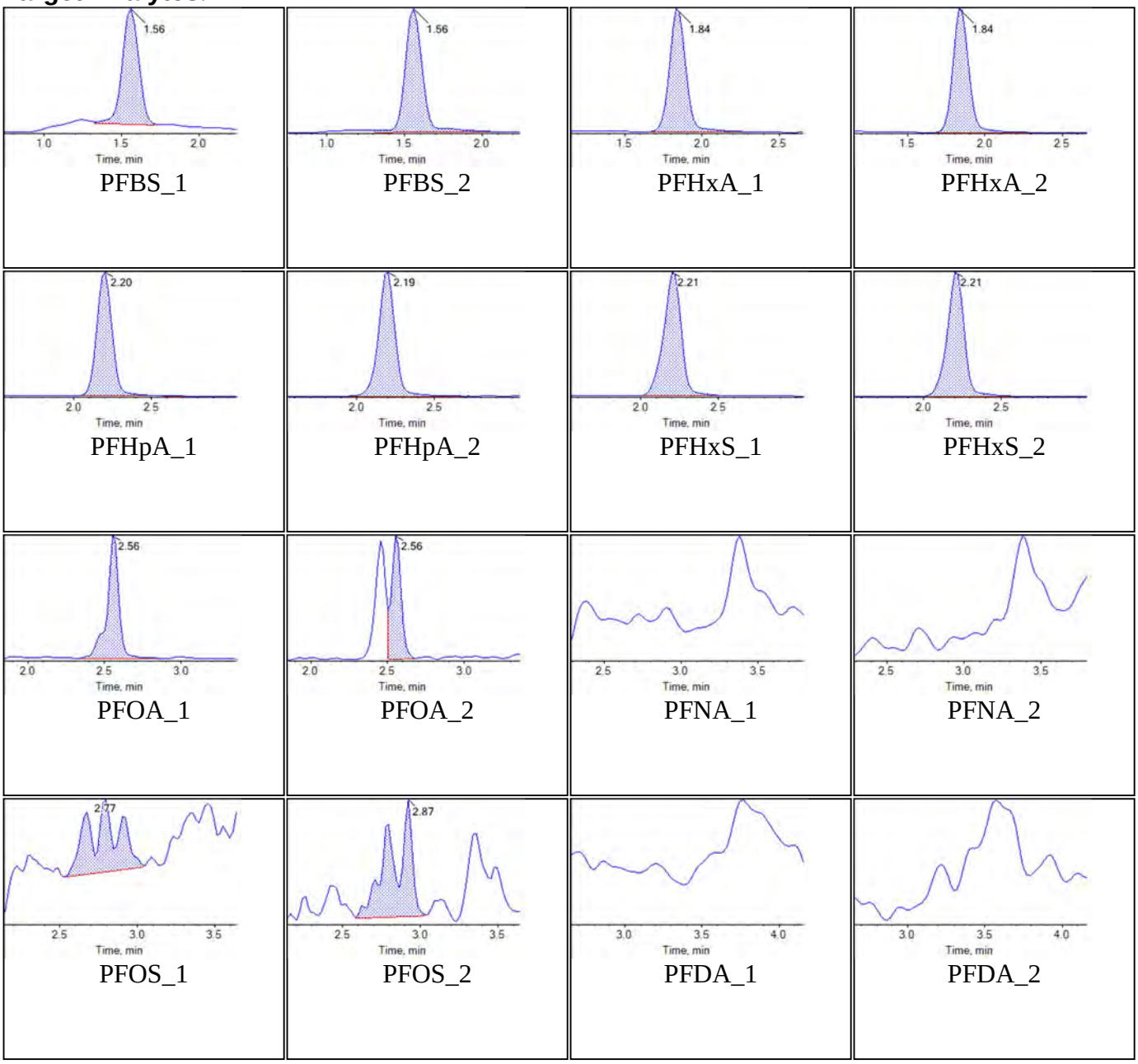
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:25:54 AM

Sample Name	J7257-FS-D(5)	**Injection Vial**	46
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:00:02	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

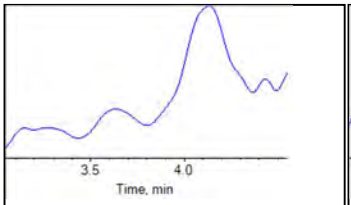
Target Analytes:



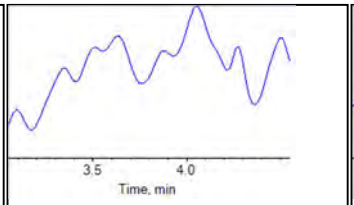
BATTELLE

Chromatogram Report

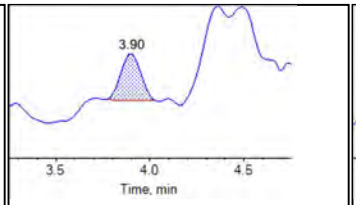
Created with Analyst Reporter
Printed: 29/08/2018 10:25:54 AM



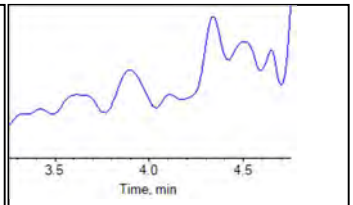
PFUnA_1



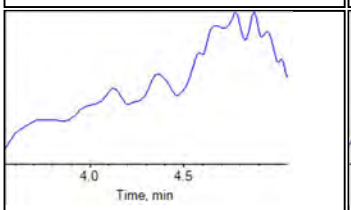
PFUnA_2



PFDoA_1



PFDoA_2



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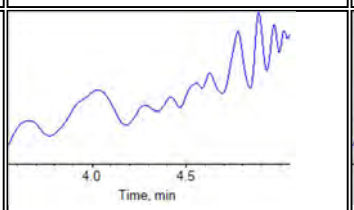

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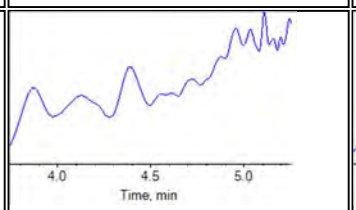

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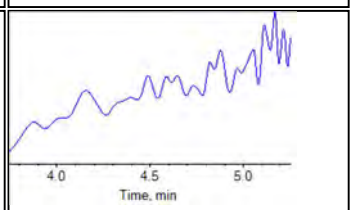

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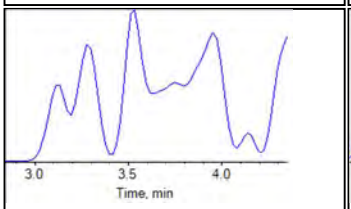

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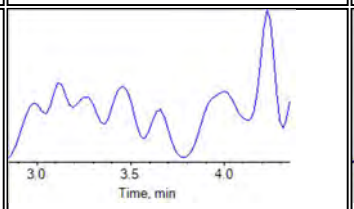

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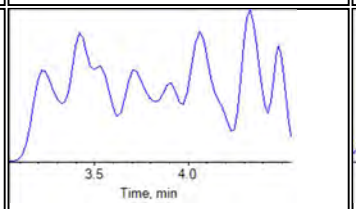

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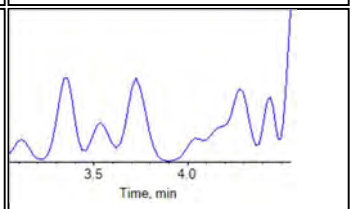
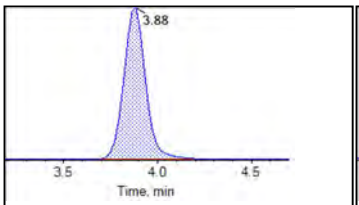
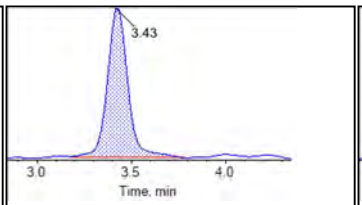


NEtFOSAA_2

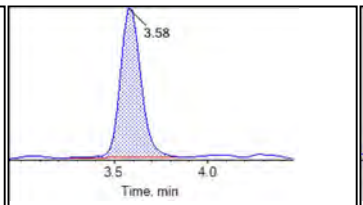
Internal Standards:



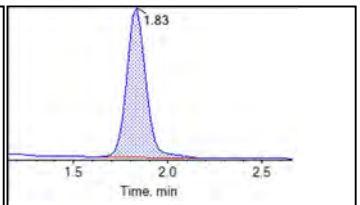
13C2-PFDoA



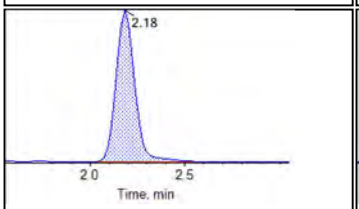
d3-MeFOSAA



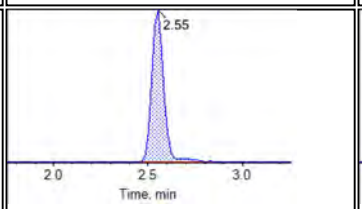
d5-EtFOSAA



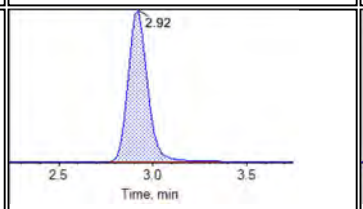
13C5-PFHxA



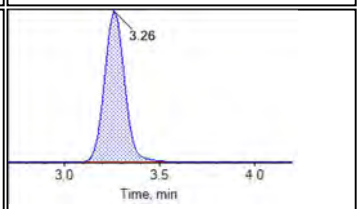
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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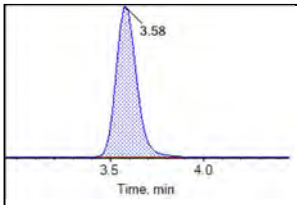
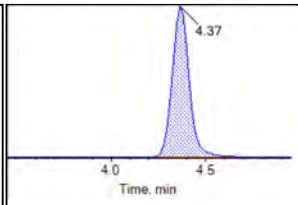
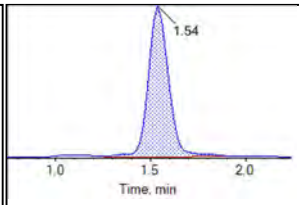


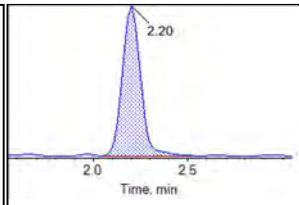
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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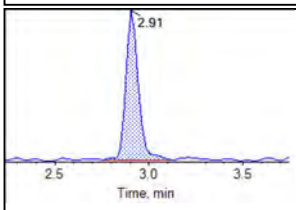

13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:26:04 AM

Sample Name	J7258-FS(4)	**Injection Vial**	47
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:10:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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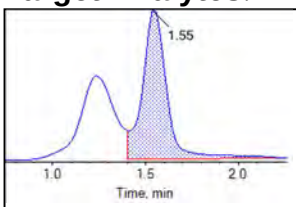
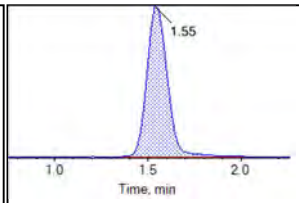
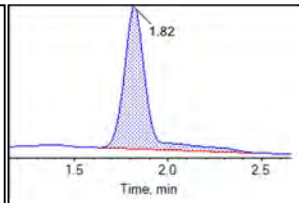


PFBS_1



PFBS_2



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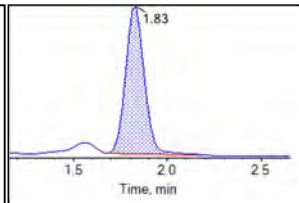
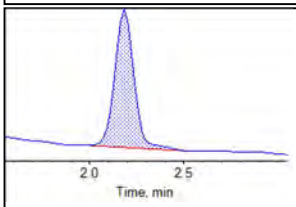
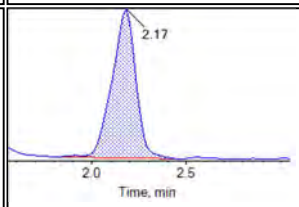


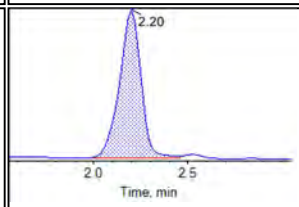
PFHxA_2



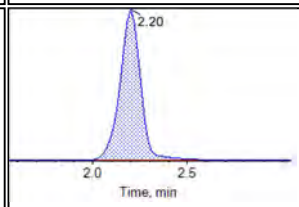
PFHpA_1



PFHpA_2



PFHxS_1



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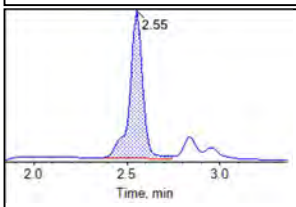
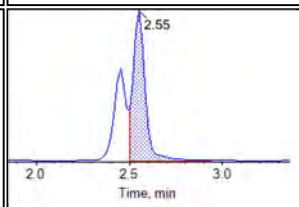
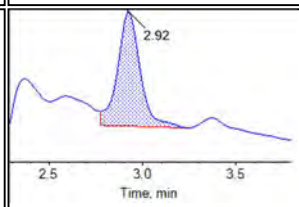


PFOA_1



PFOA_2



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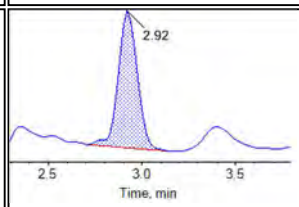

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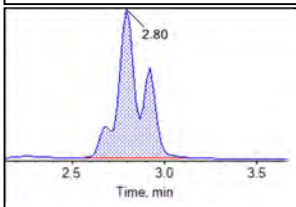
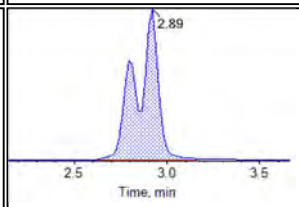
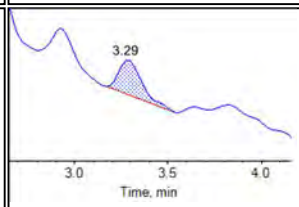


PFOS_1



PFOS_2



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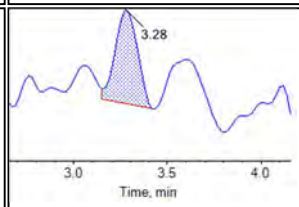

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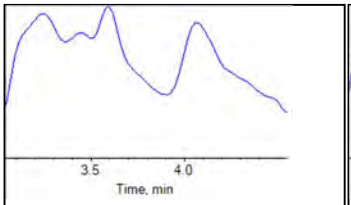

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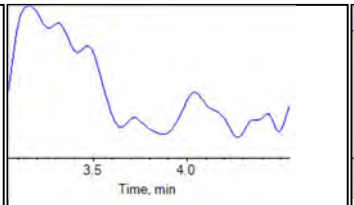

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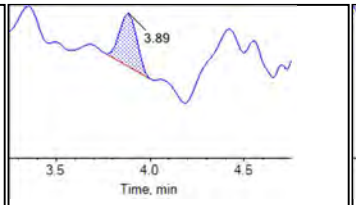

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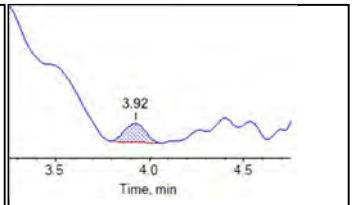

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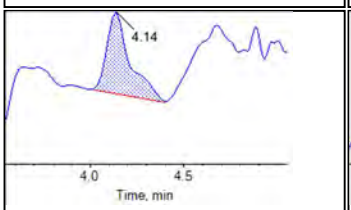

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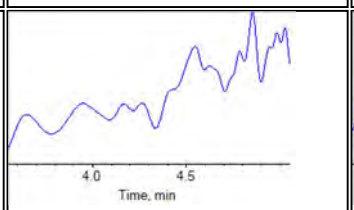

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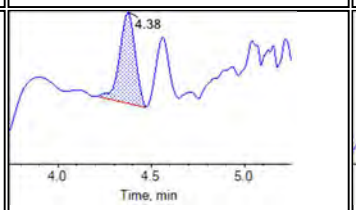

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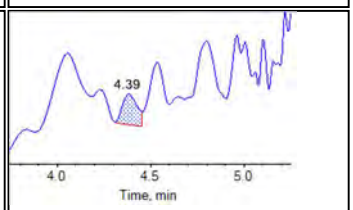

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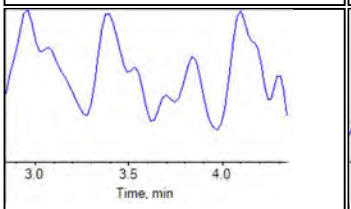

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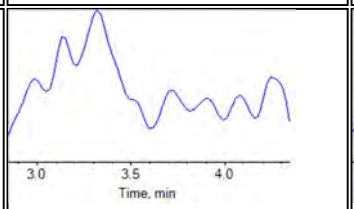

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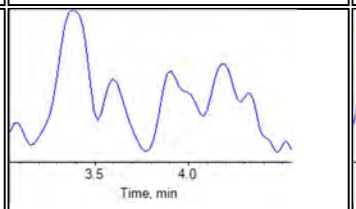

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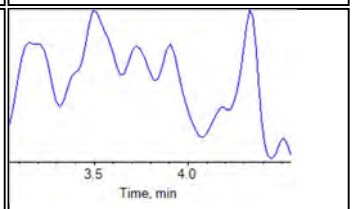

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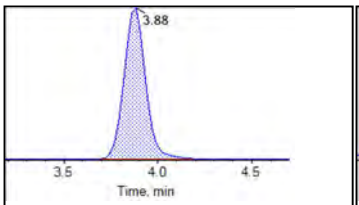

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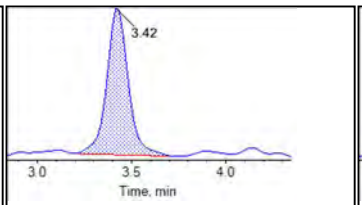

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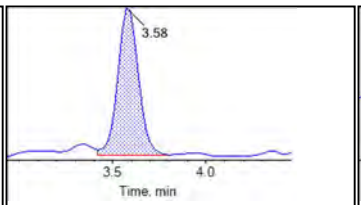

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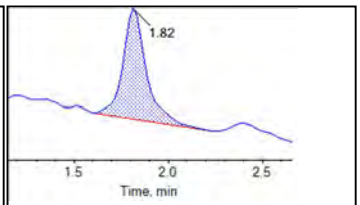

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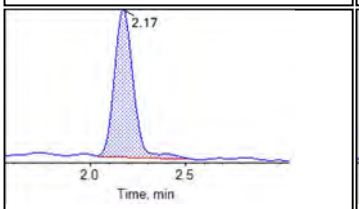

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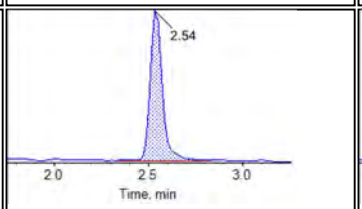

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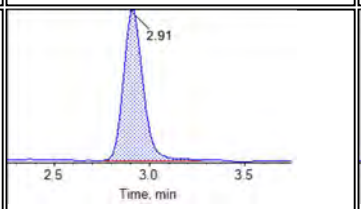

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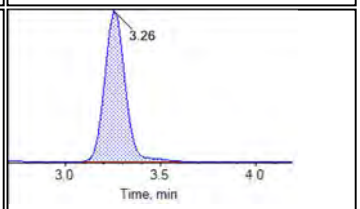

13C6-PFDA

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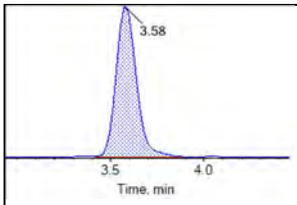

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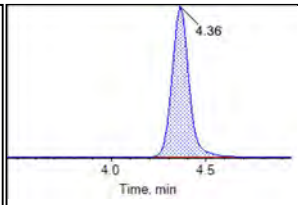

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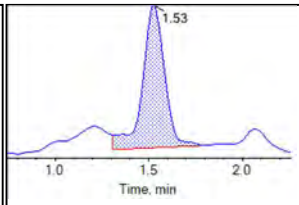

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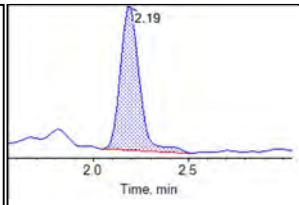

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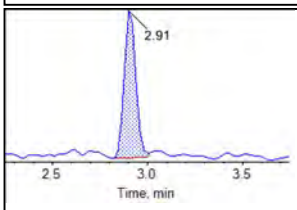

13C8-PFOS

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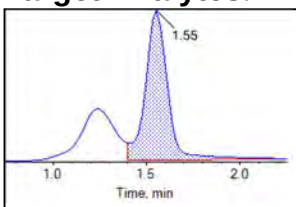
Sample Name	J7258-FS-D(5)	**Injection Vial**	48
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:21:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

Target Analytes:



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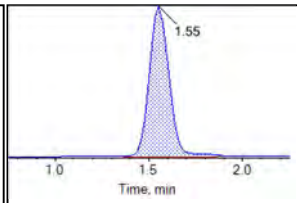

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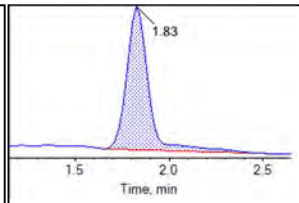

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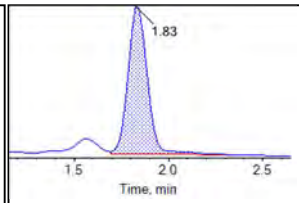

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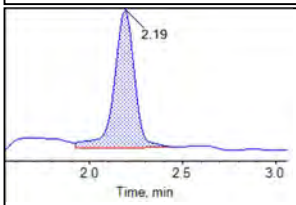

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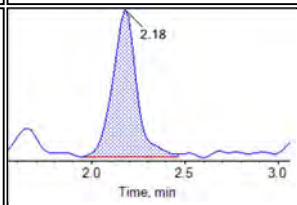

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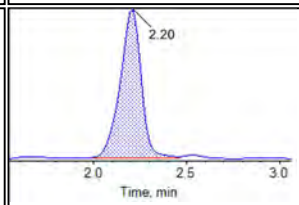

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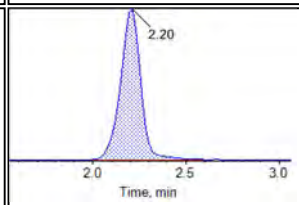

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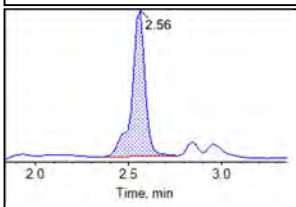

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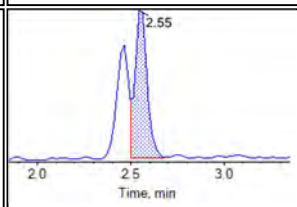

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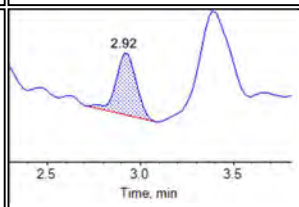

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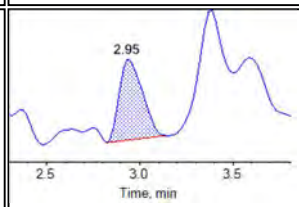

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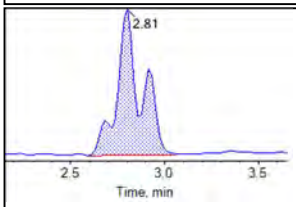

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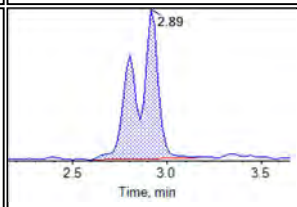

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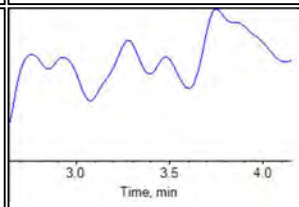

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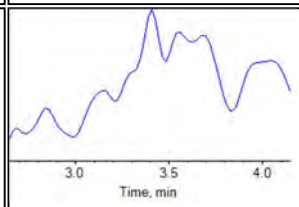

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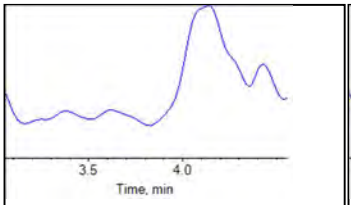

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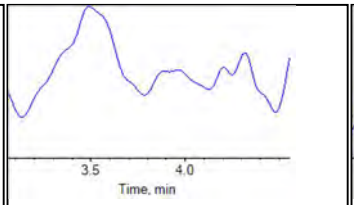

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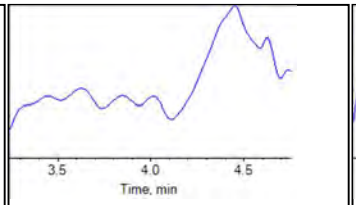

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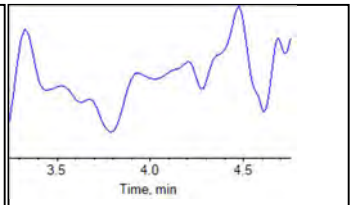

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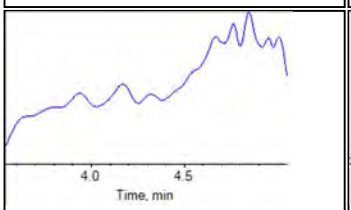

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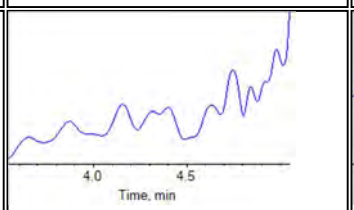

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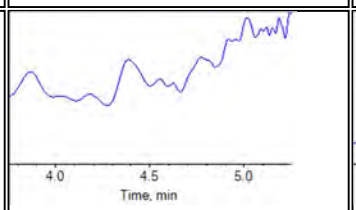

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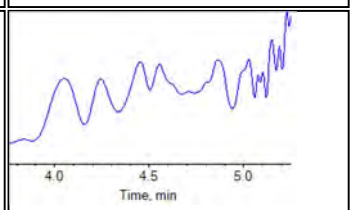

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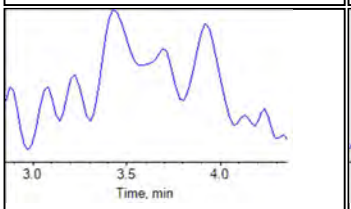

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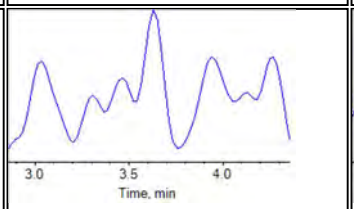

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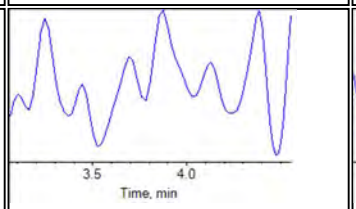

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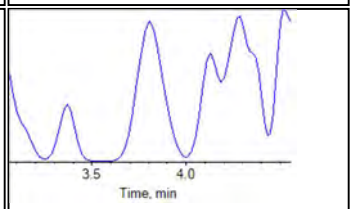

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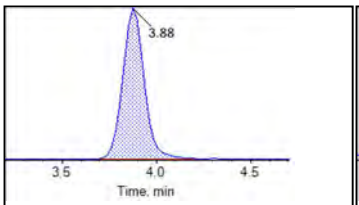

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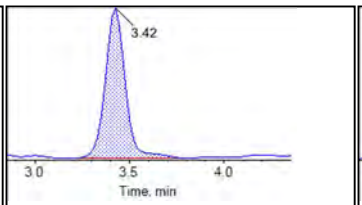

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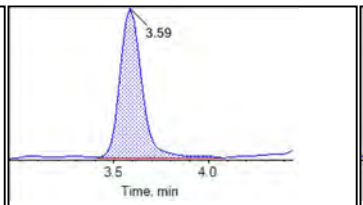

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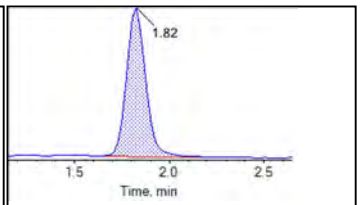

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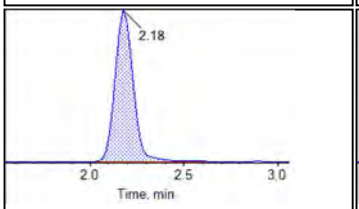

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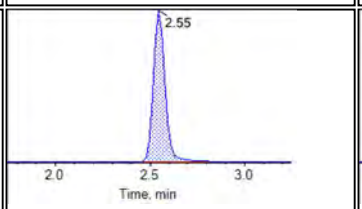

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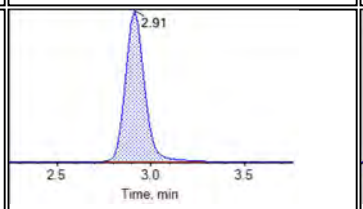
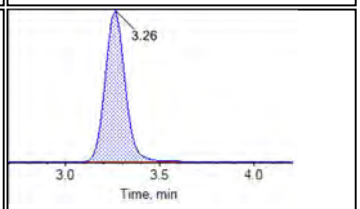


13C9-PFNA



13C6-PFDA

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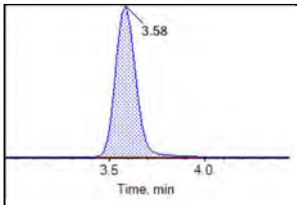
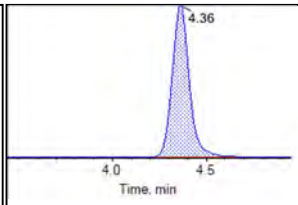


13C7-PFUnA



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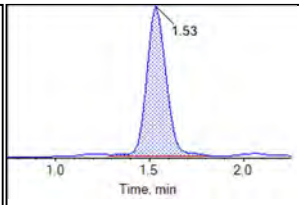

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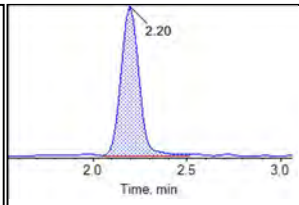

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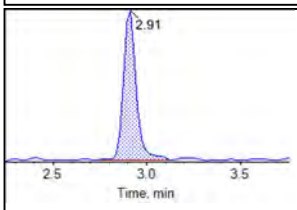

13C8-PFOS

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Chromatogram Report

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Sample Name	JY42 CCV	**Injection Vial**	49
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:32:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_BASE
Sample Comment			

Chromatograms

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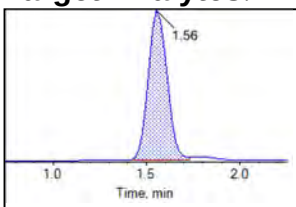

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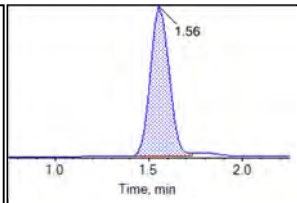

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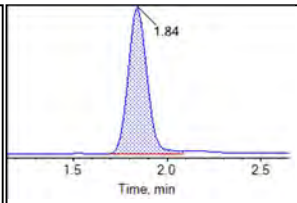

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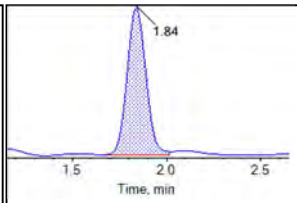

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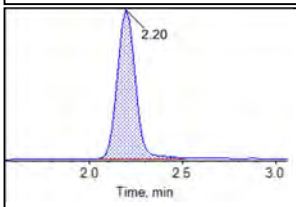

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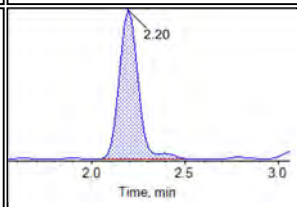

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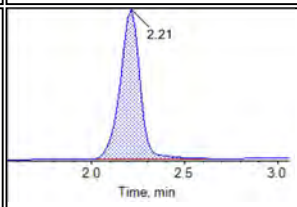

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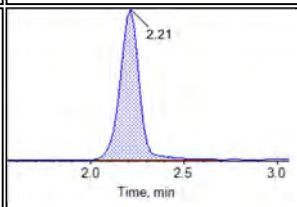

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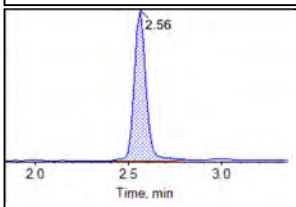

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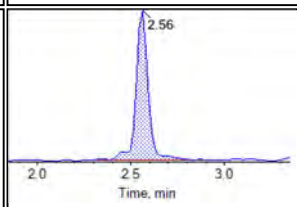

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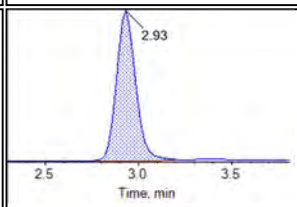

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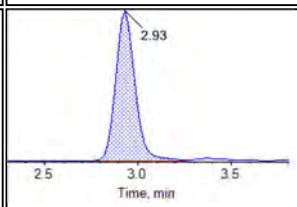

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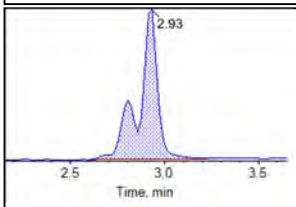

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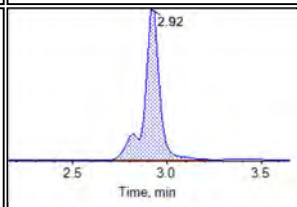

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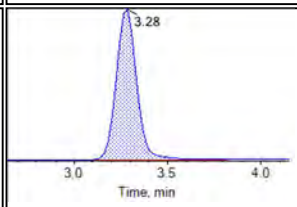

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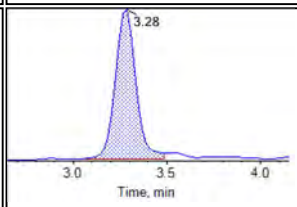

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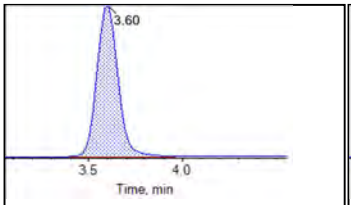

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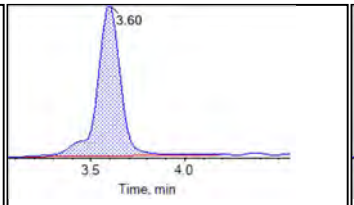

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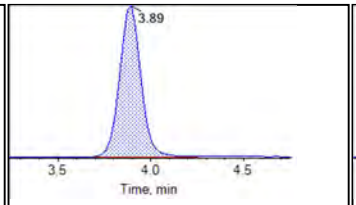

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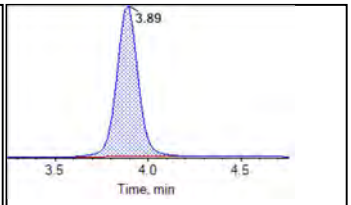

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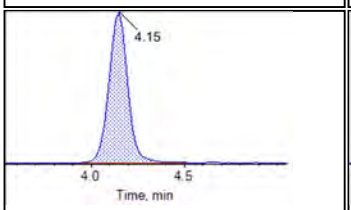

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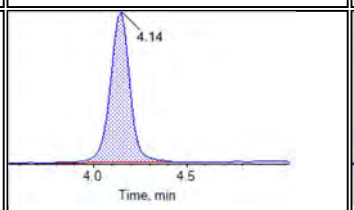

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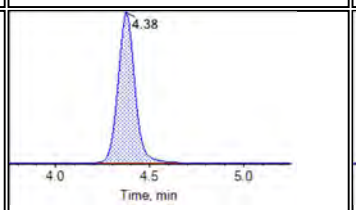

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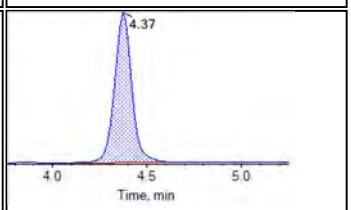

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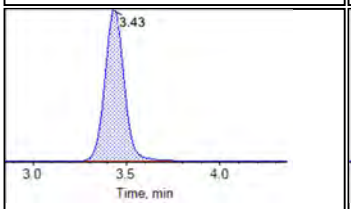

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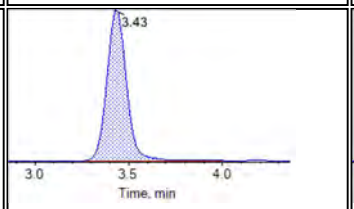

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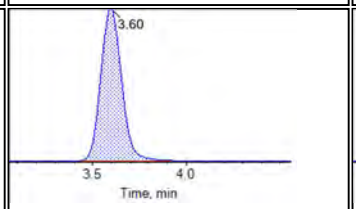

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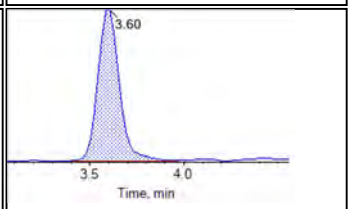

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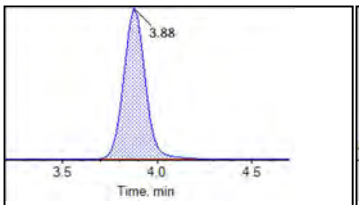

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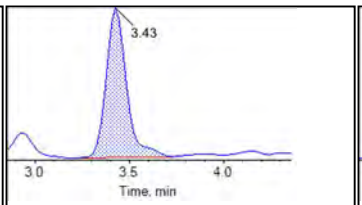

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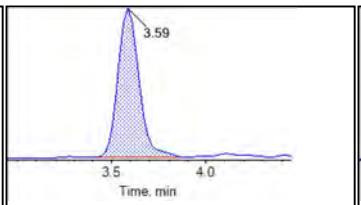

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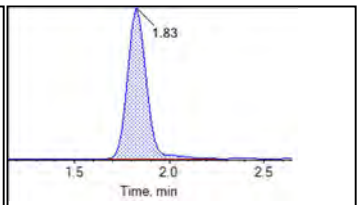

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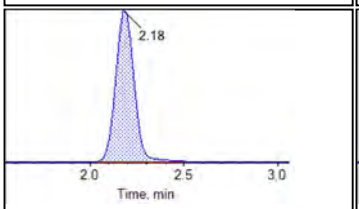

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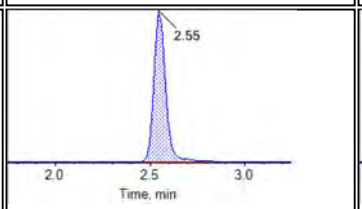

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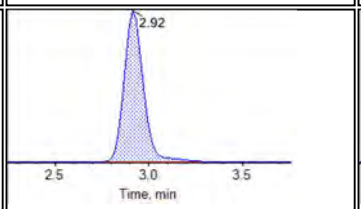

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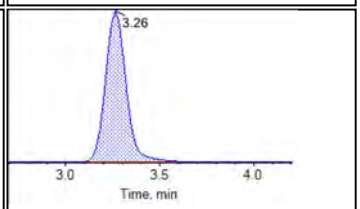

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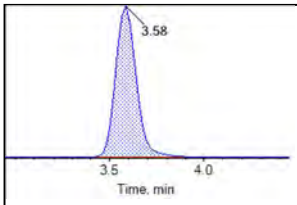

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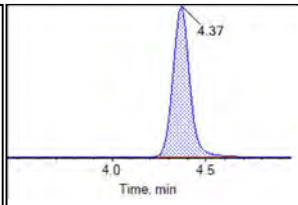
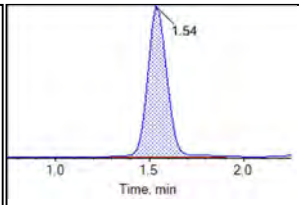
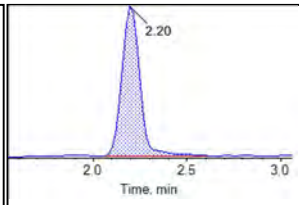


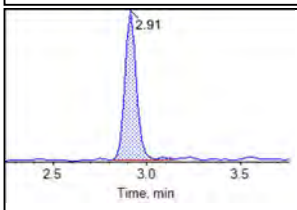
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

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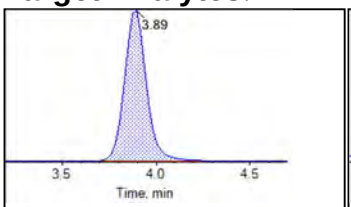
Printed: 27/08/2018 12:26:56 PM

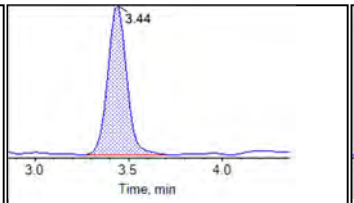
Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T21:50:38	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

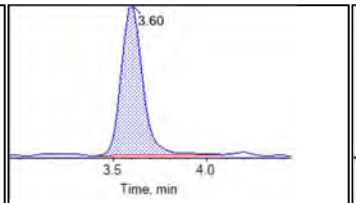
Target Analytes:



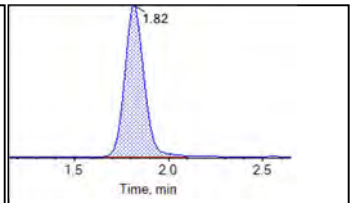
13C2-PFDoA



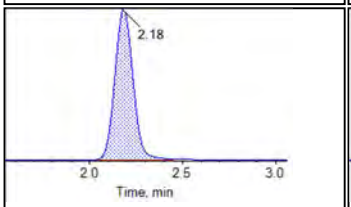
d3-MeFOSAA



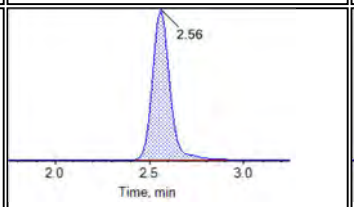
d5-EtFOSAA



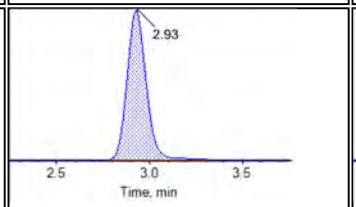
13C5-PFHxA



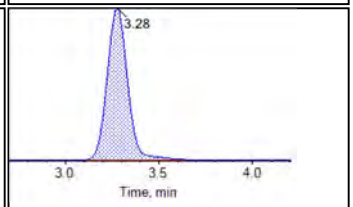
13C4-PFHpA



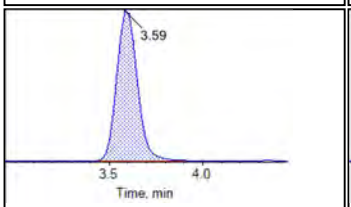
13C8-PFOA



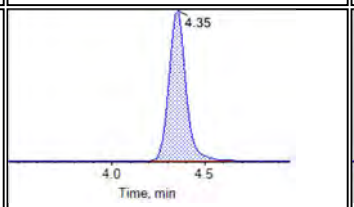
13C9-PFNA



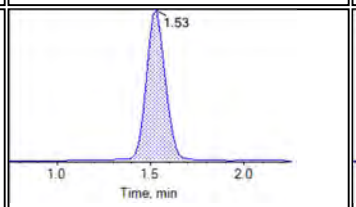
13C6-PFDA



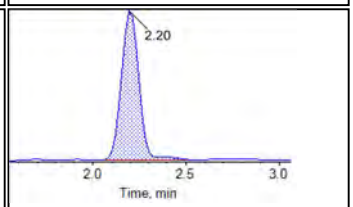
13C7-PFUnA



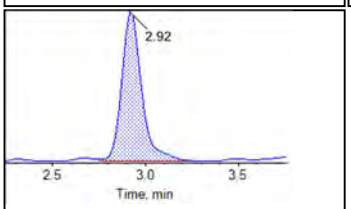
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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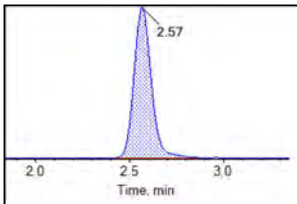
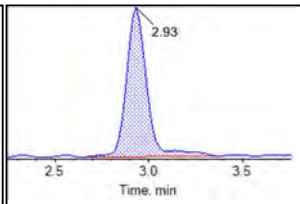
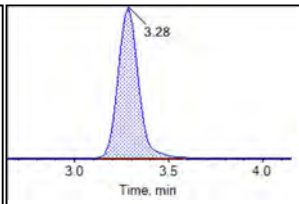
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

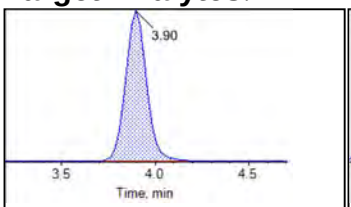
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:01 PM

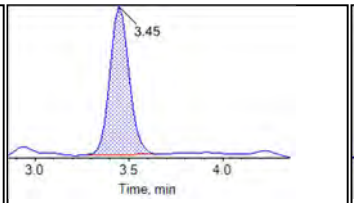
Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:01:29	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

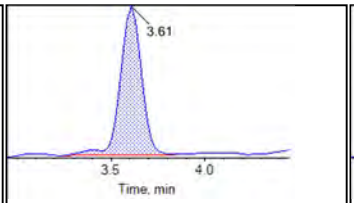
Target Analytes:



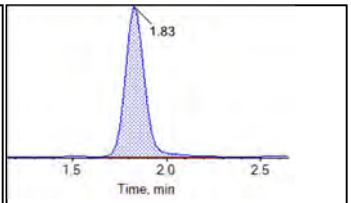
13C2-PFDoA



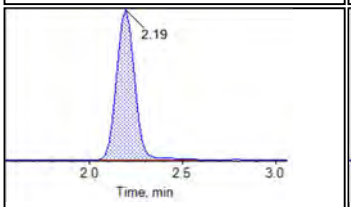
d3-MeFOSAA



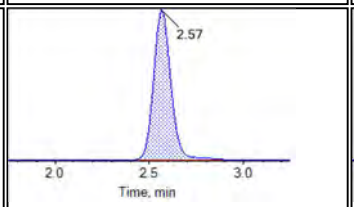
d5-EtFOSAA



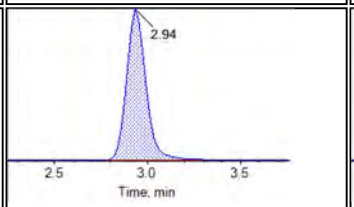
13C5-PFHxA



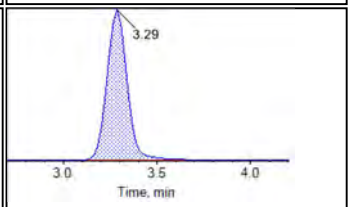
13C4-PFHpA



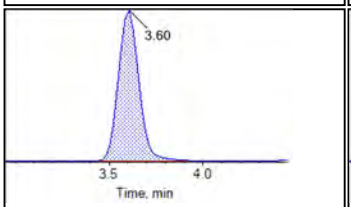
13C8-PFOA



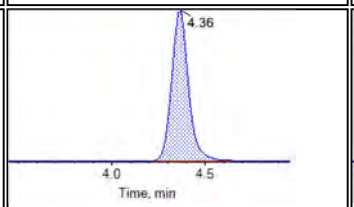
13C9-PFNA



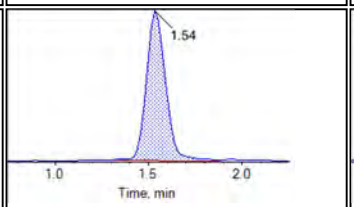
13C6-PFDA



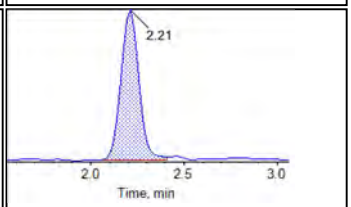
13C7-PFUnA



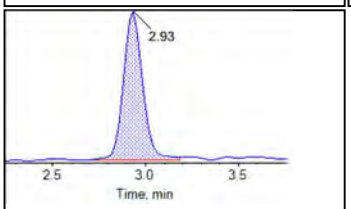
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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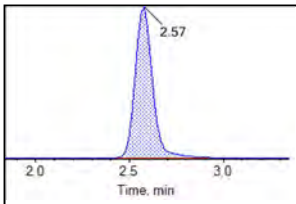
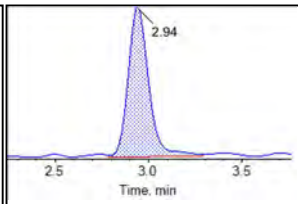
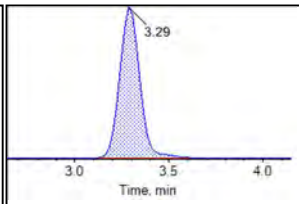
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

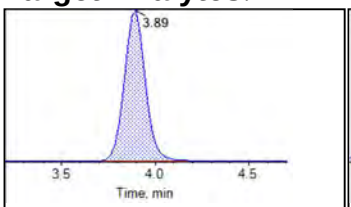
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:05 PM

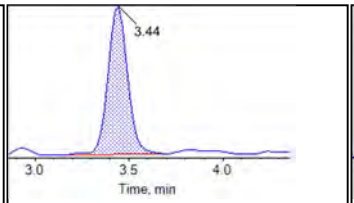
Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:12:22	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

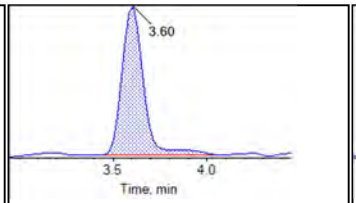
Target Analytes:



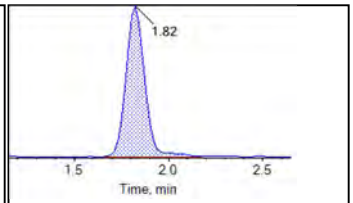
13C2-PFDoA



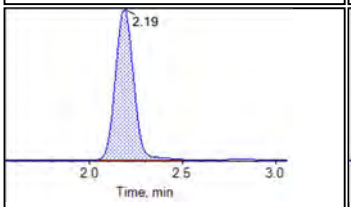
d3-MeFOSAA



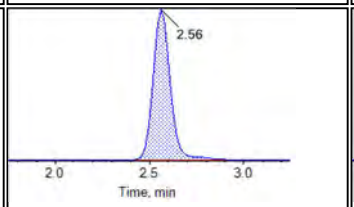
d5-EtFOSAA



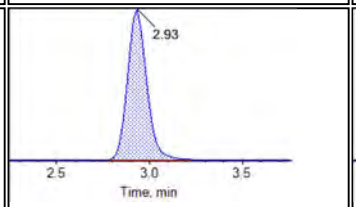
13C5-PFHxA



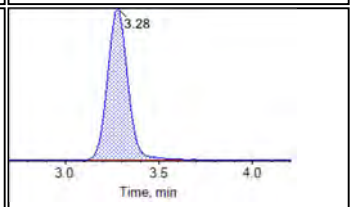
13C4-PFHpA



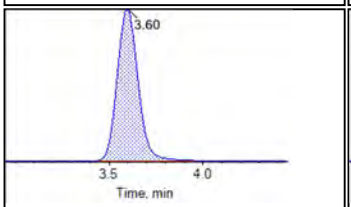
13C8-PFOA



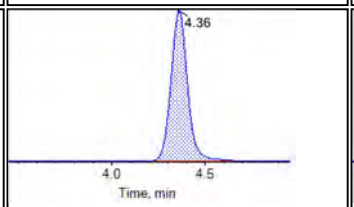
13C9-PFNA



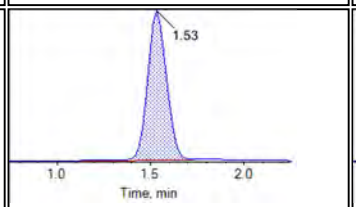
13C6-PFDA



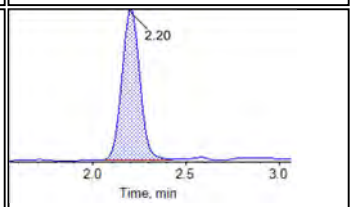
13C7-PFUnA



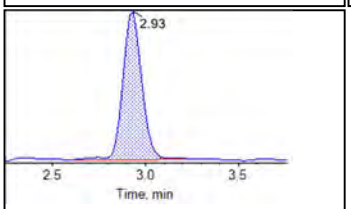
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

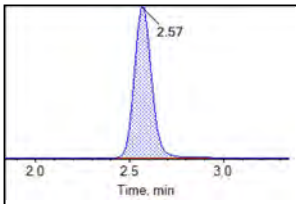


13C8-PFOS

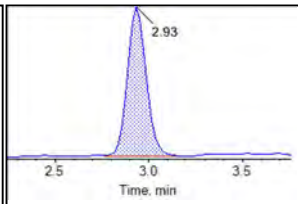
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:05 PM

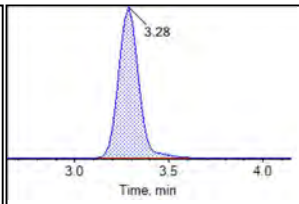
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

Chromatogram Report

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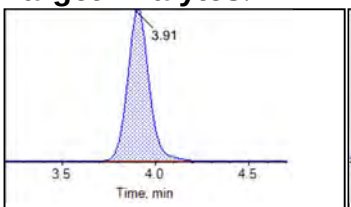
Printed: 27/08/2018 12:27:10 PM

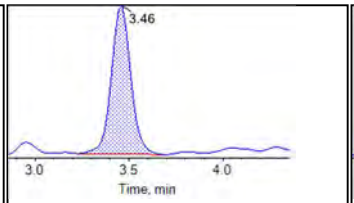
Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:23:14	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

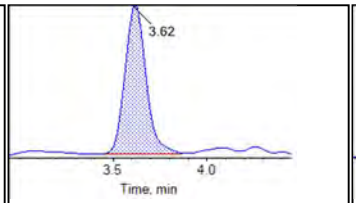
Target Analytes:



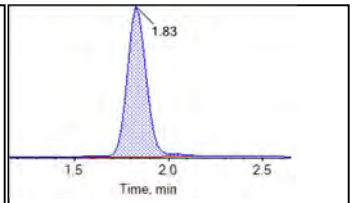
13C2-PFDoA



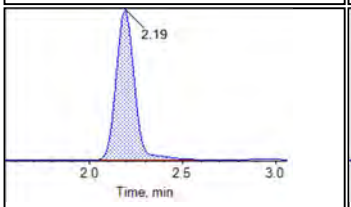
d3-MeFOSAA



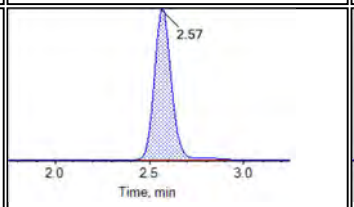
d5-EtFOSAA



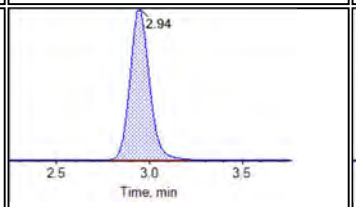
13C5-PFHxA



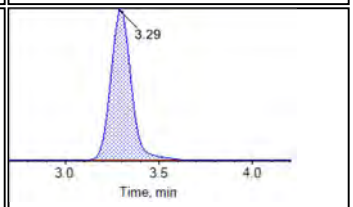
13C4-PFHpA



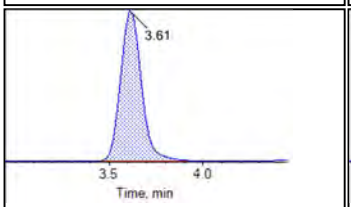
13C8-PFOA



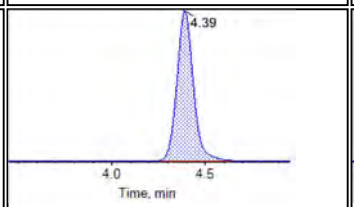
13C9-PFNA



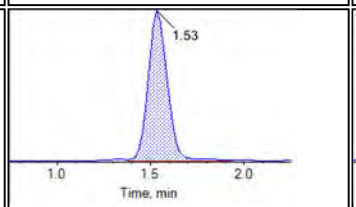
13C6-PFDA



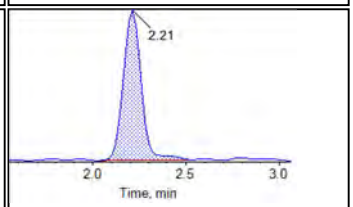
13C7-PFUnA



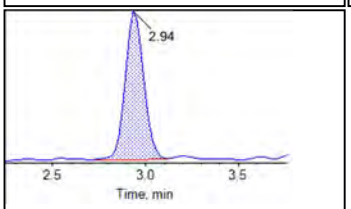
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

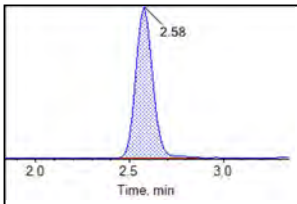


13C8-PFOS

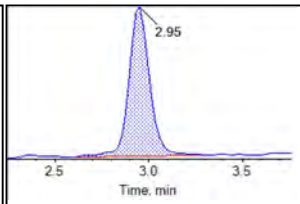
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:10 PM

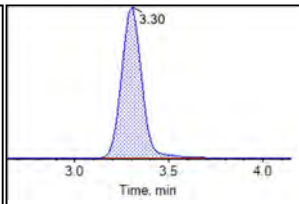
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

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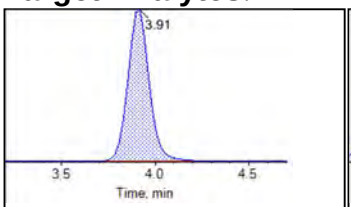
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:14 PM

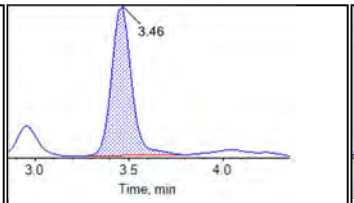
Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:34:06	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

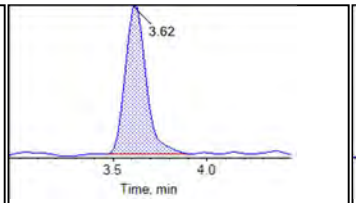
Target Analytes:



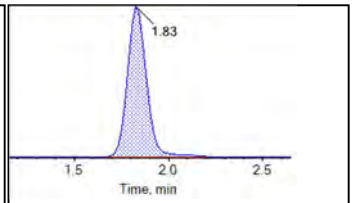
13C2-PFDoA



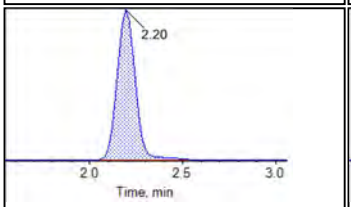
d3-MeFOSAA



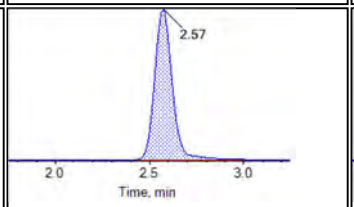
d5-EtFOSAA



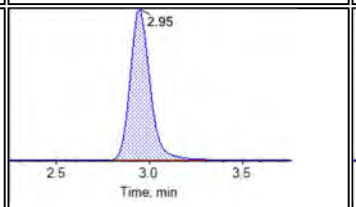
13C5-PFHxA



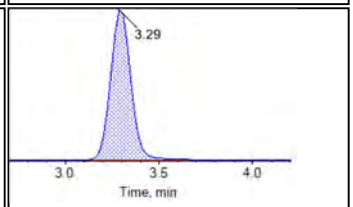
13C4-PFHpA



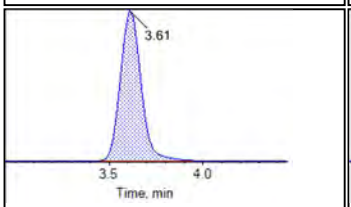
13C8-PFOA



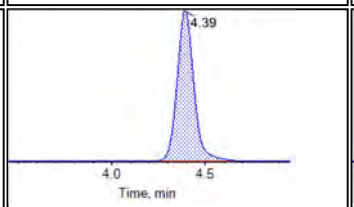
13C9-PFNA



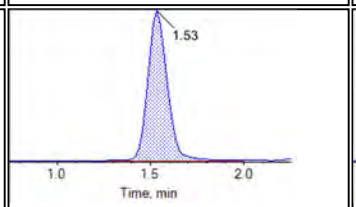
13C6-PFDA



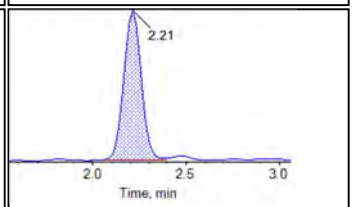
13C7-PFUnA



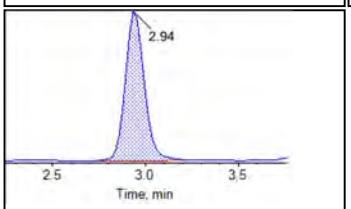
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

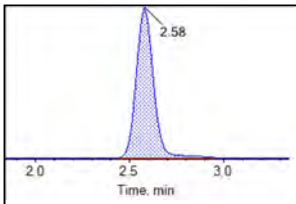


13C8-PFOS

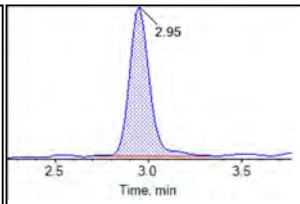
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:14 PM

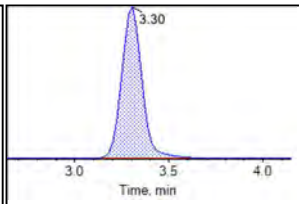
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

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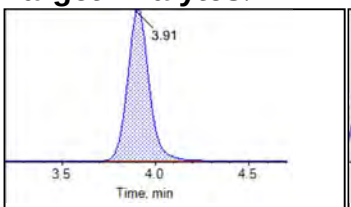
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:19 PM

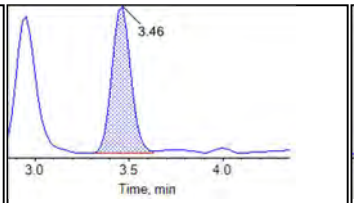
Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:44:59	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

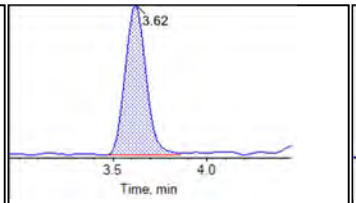
Target Analytes:



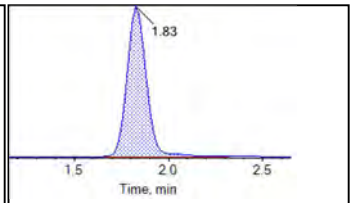
13C2-PFDoA



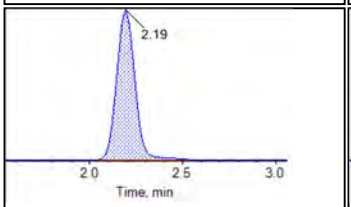
d3-MeFOSAA



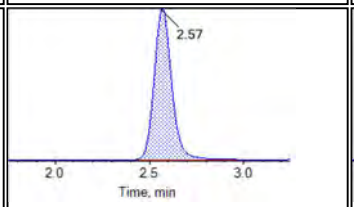
d5-EtFOSAA



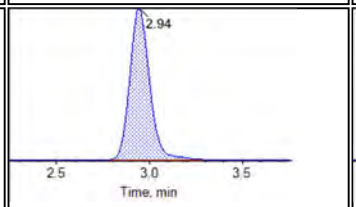
13C5-PFHxA



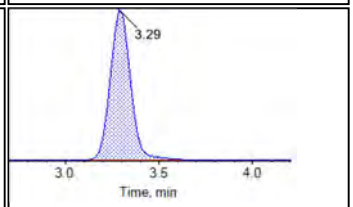
13C4-PFHpA



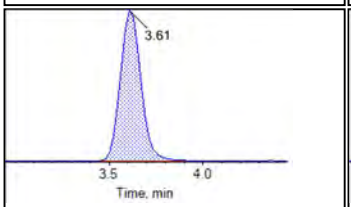
13C8-PFOA



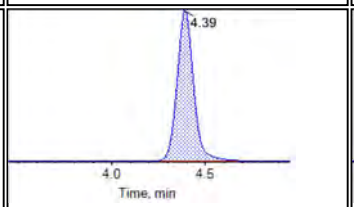
13C9-PFNA



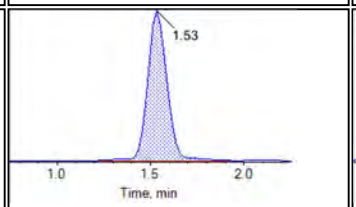
13C6-PFDA



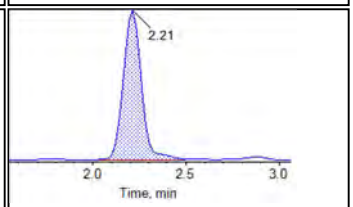
13C7-PFUnA



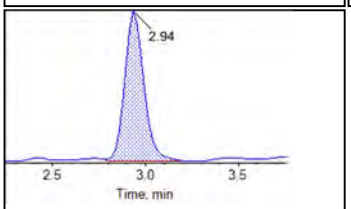
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

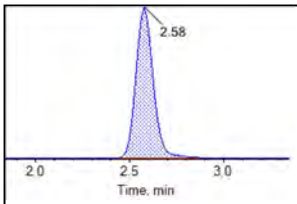


13C8-PFOS

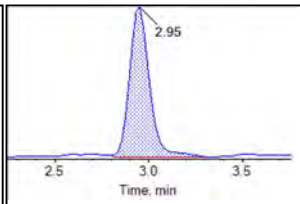
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:19 PM

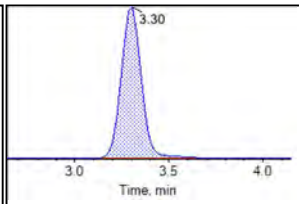
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

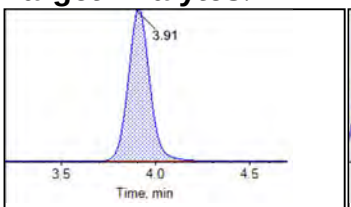
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:24 PM

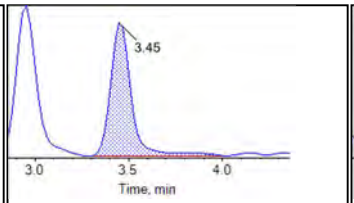
Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T22:55:51	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

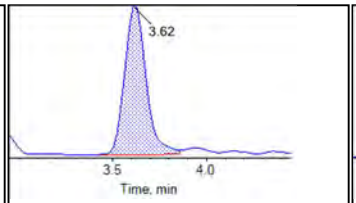
Target Analytes:



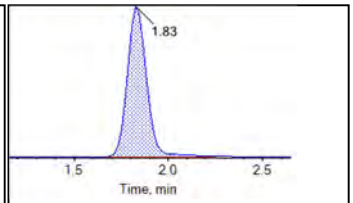
13C2-PFDoA



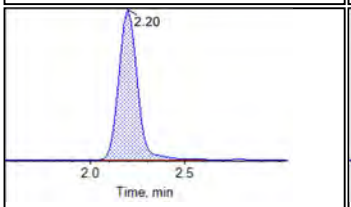
d3-MeFOSAA



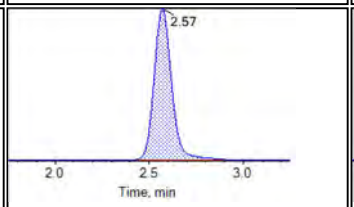
d5-EtFOSAA



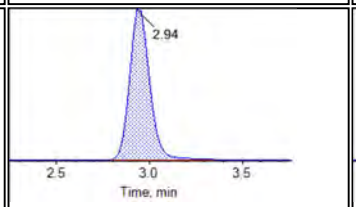
13C5-PFHxA



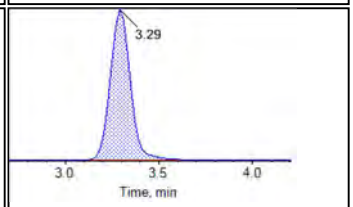
13C4-PFHpA



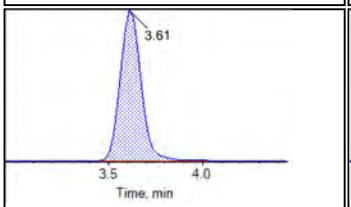
13C8-PFOA



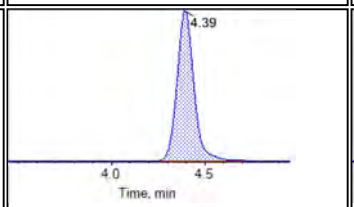
13C9-PFNA



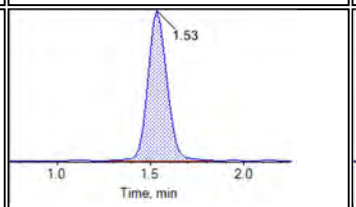
13C6-PFDA



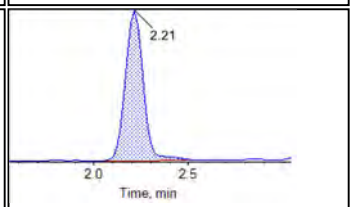
13C7-PFUnA



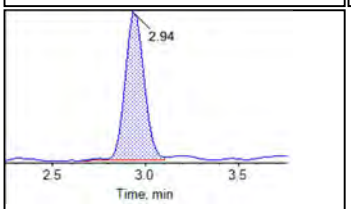
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

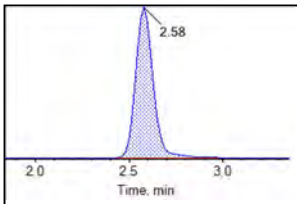


13C8-PFOS

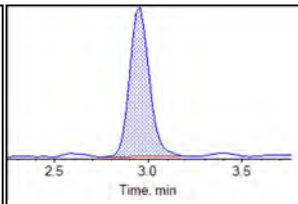
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:24 PM

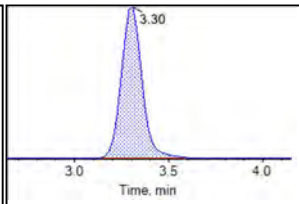
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

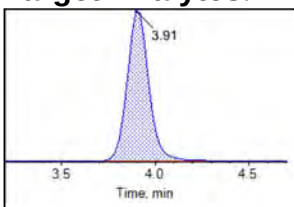
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:29 PM

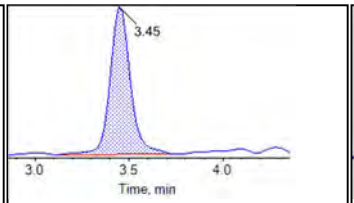
Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:06:44	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

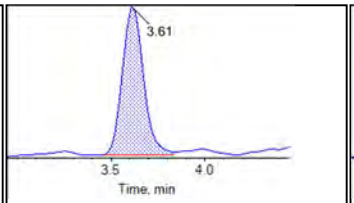
Target Analytes:



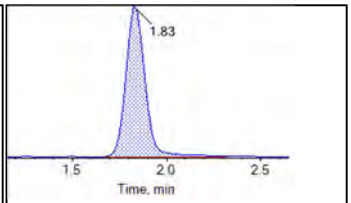
13C2-PFDoA



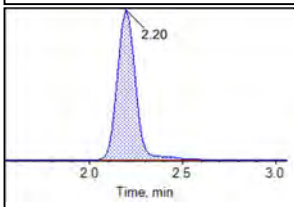
d3-MeFOSAA



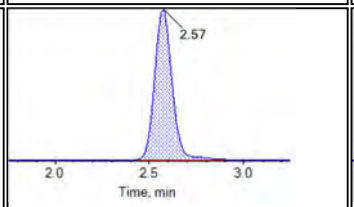
d5-EtFOSAA



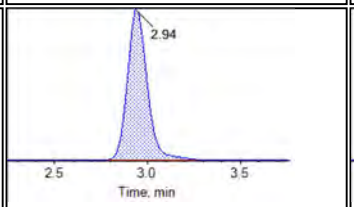
13C5-PFHxA



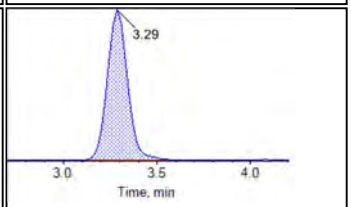
13C4-PFHpA



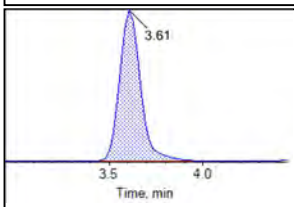
13C8-PFOA



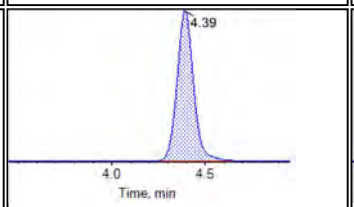
13C9-PFNA



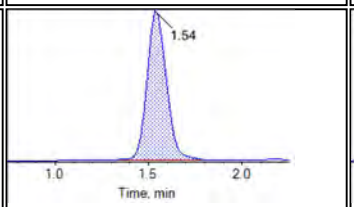
13C6-PFDA



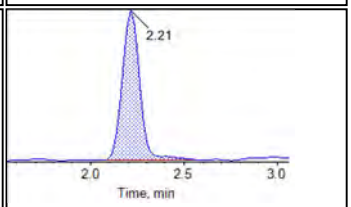
13C7-PFUnA



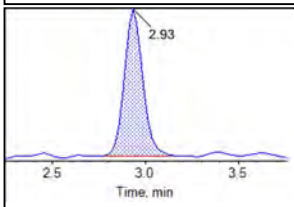
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

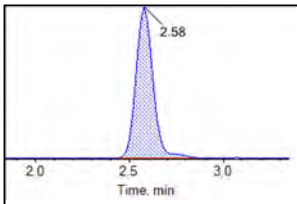


13C8-PFOS

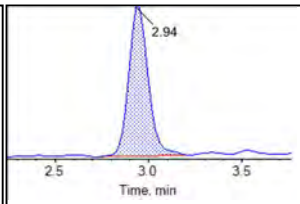
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:29 PM

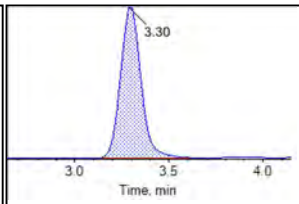
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

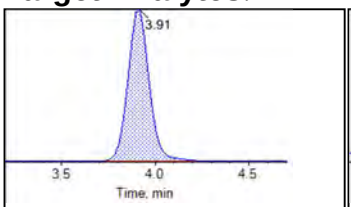
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:33 PM

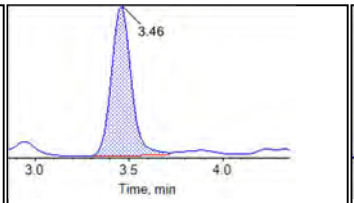
Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-15T23:17:37	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

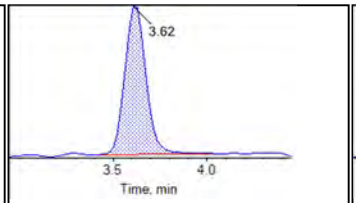
Target Analytes:



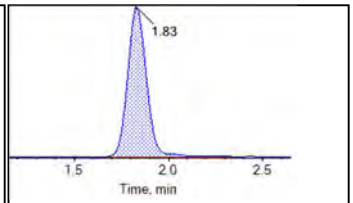
13C2-PFDoA



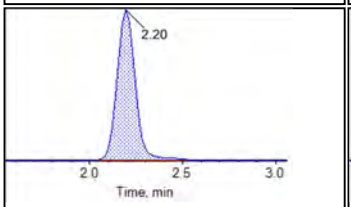
d3-MeFOSAA



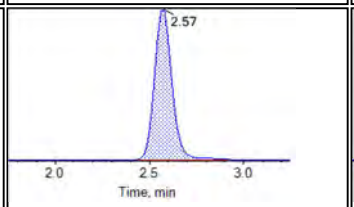
d5-EtFOSAA



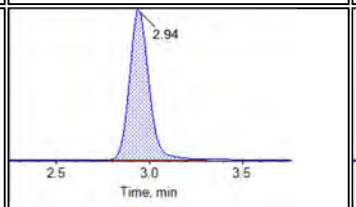
13C5-PFHxA



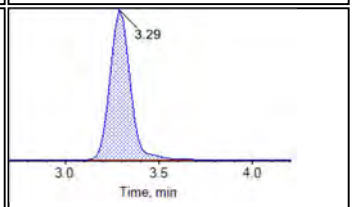
13C4-PFHpA



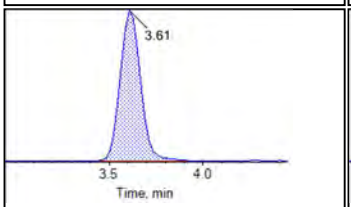
13C8-PFOA



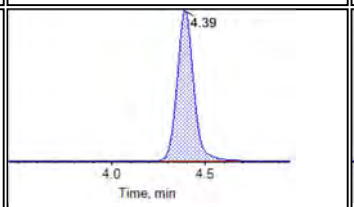
13C9-PFNA



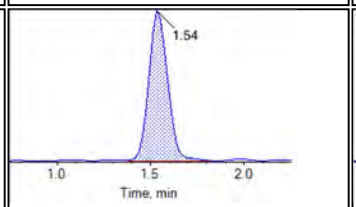
13C6-PFDA



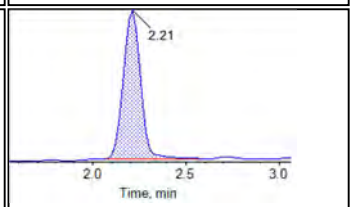
13C7-PFUnA



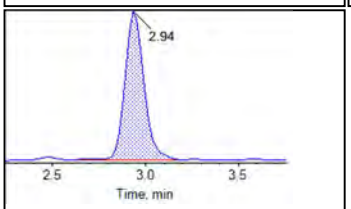
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

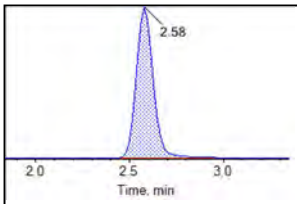


13C8-PFOS

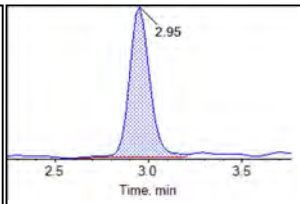
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:33 PM

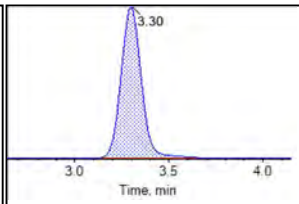
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

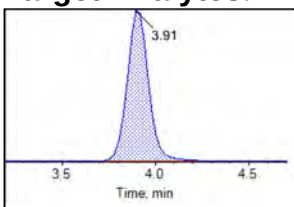
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:48 PM

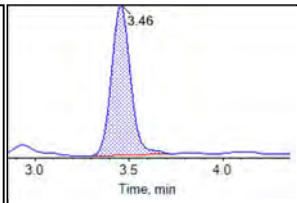
Sample Name	JX41 CCV	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:22:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

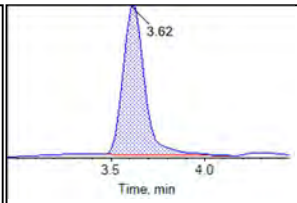
Target Analytes:



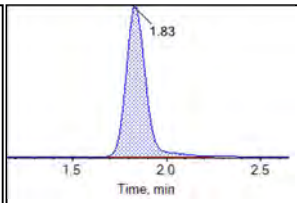
13C2-PFDoA



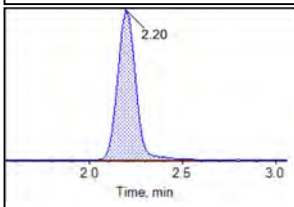
d3-MeFOSAA



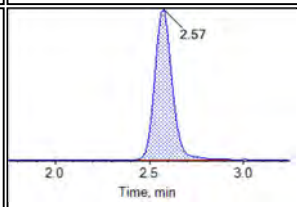
d5-EtFOSAA



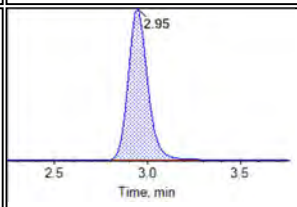
13C5-PFHxA



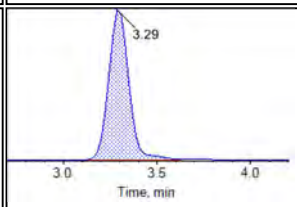
13C4-PFHpA



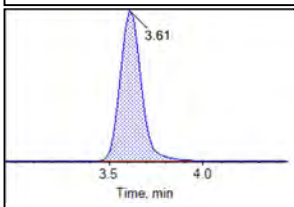
13C8-PFOA



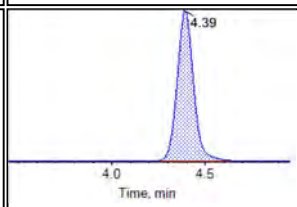
13C9-PFNA



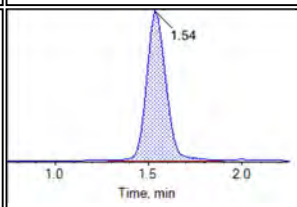
13C6-PFDA



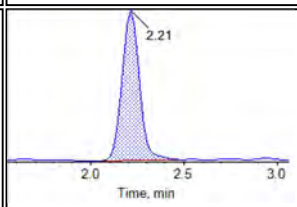
13C7-PFUnA



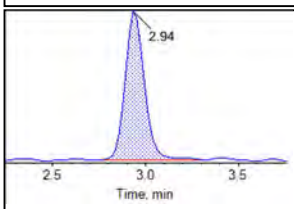
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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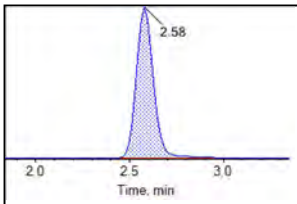
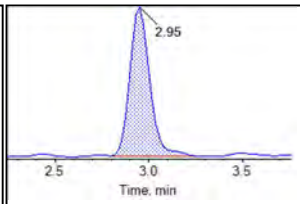
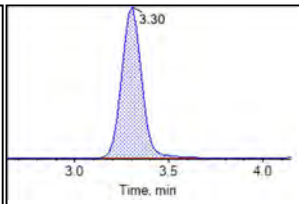
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

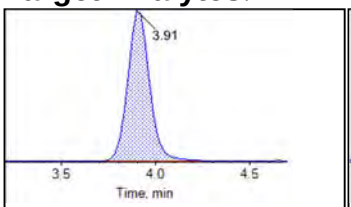
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:27:58 PM

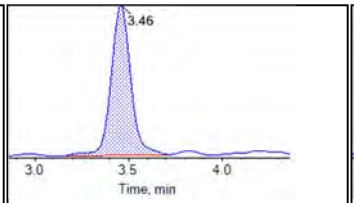
Sample Name	CR546PB-FS(3)	**Injection Vial**	17
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:44:41	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

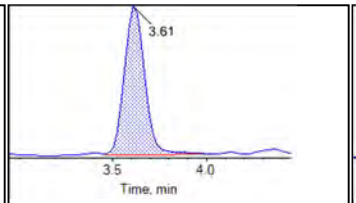
Target Analytes:



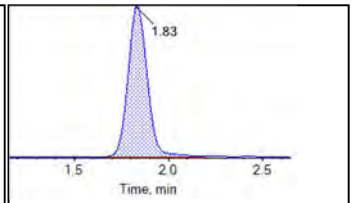
13C2-PFDoA



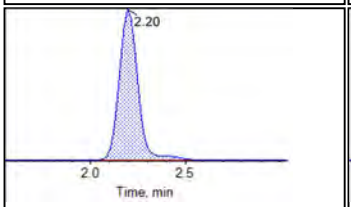
d3-MeFOSAA



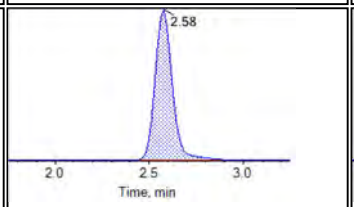
d5-EtFOSAA



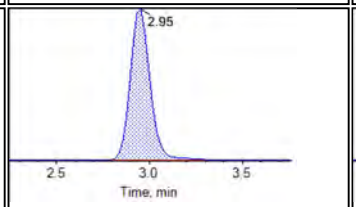
13C5-PFHxA



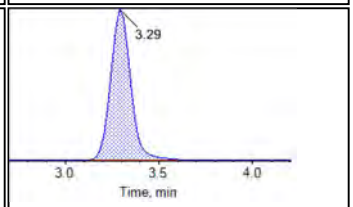
13C4-PFHpA



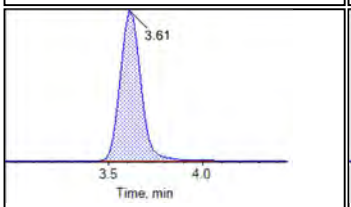
13C8-PFOA



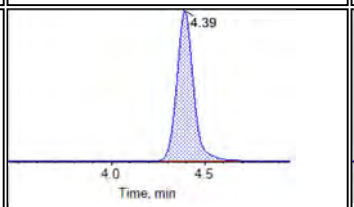
13C9-PFNA



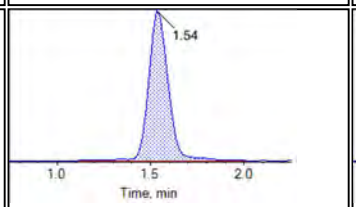
13C6-PFDA



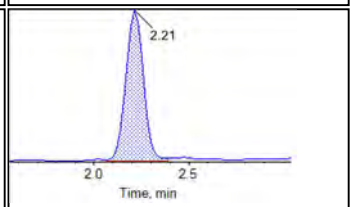
13C7-PFUnA



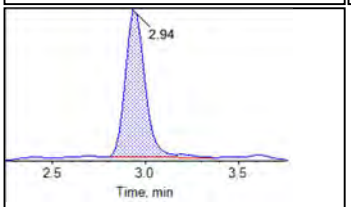
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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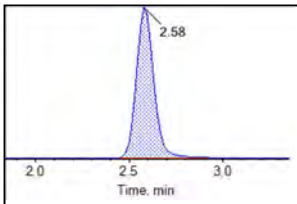
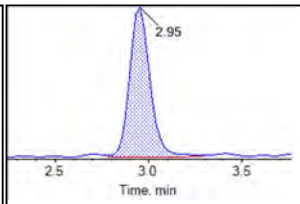
Printed: 27/08/2018 12:27:58 PM

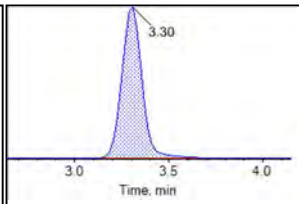
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:02 PM

Sample Name	CR547LCS-FS(3)	**Injection Vial**	18
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T00:55:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

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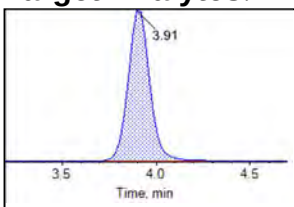
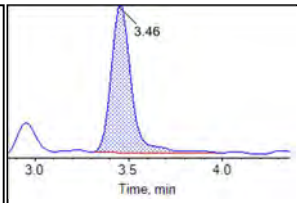
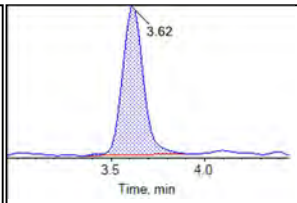


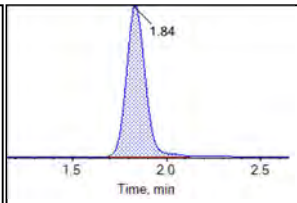
13C2-PFDoA



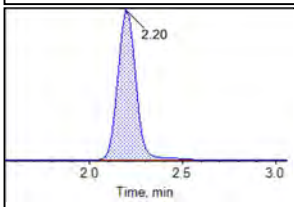
d3-MeFOSAA



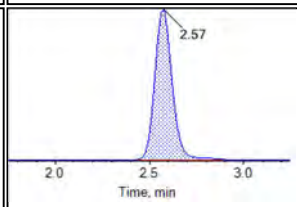
d5-EtFOSAA



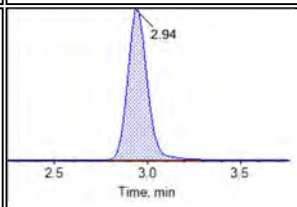
13C5-PFHxA



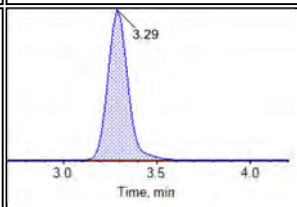
13C4-PFHpA



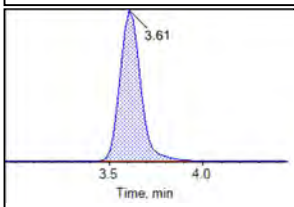
13C8-PFOA



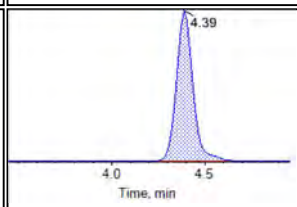
13C9-PFNA



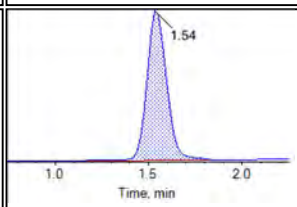
13C6-PFDA



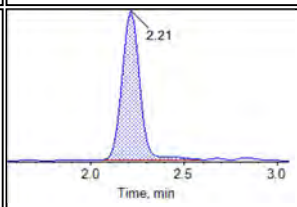
13C7-PFUnA



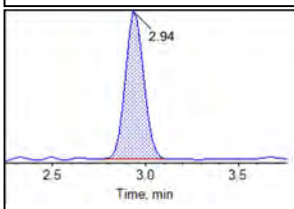
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

Created with Analyst Reporter
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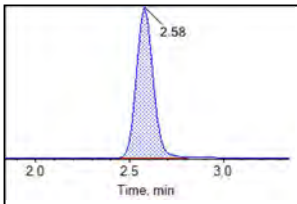
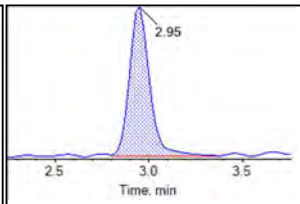
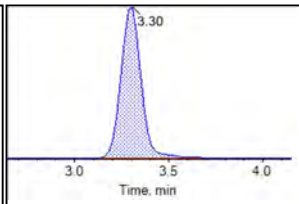
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

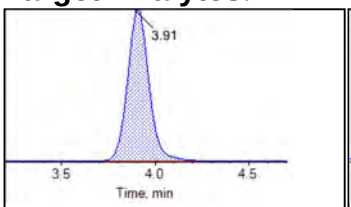
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:07 PM

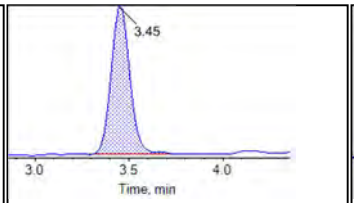
Sample Name	J7259-FS(3)	**Injection Vial**	19
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:06:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

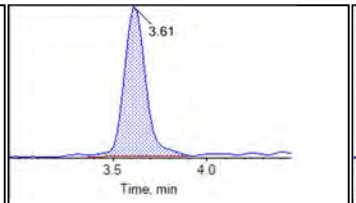
Target Analytes:



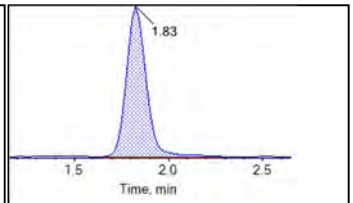
13C2-PFDoA



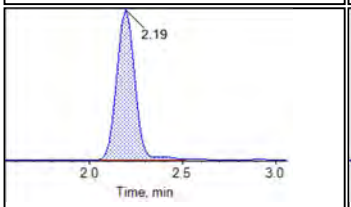
d3-MeFOSAA



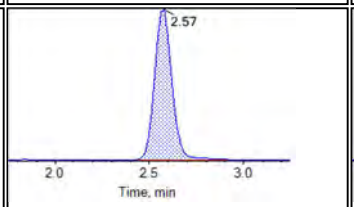
d5-EtFOSAA



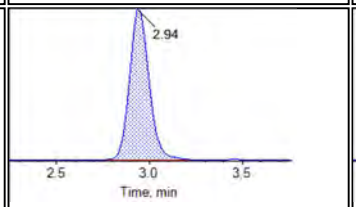
13C5-PFHxA



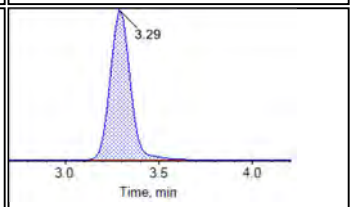
13C4-PFHpA



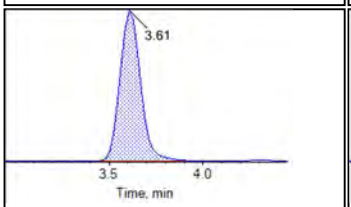
13C8-PFOA



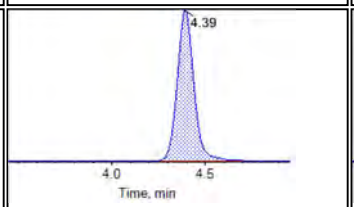
13C9-PFNA



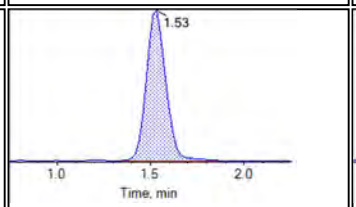
13C6-PFDA



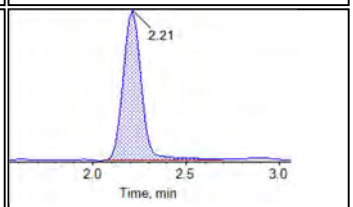
13C7-PFUnA



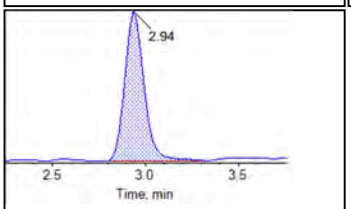
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

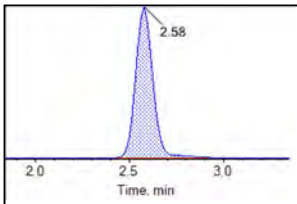


13C8-PFOS

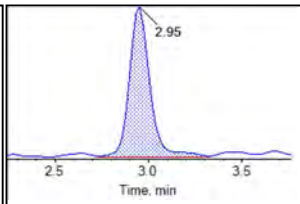
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:07 PM

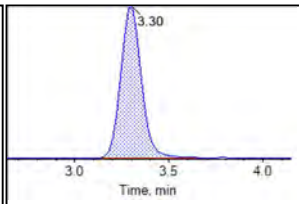
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

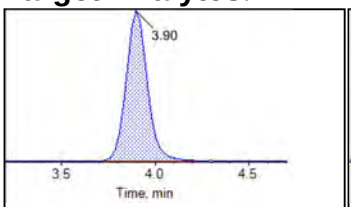
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:12 PM

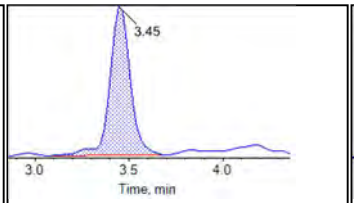
Sample Name	J7260-FS(3)	**Injection Vial**	20
Sample ID	080118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:17:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

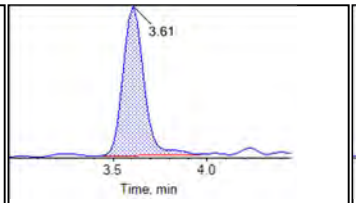
Target Analytes:



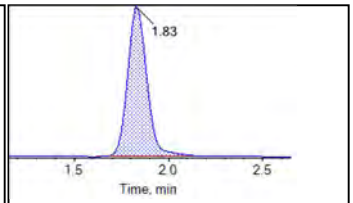
13C2-PFDoA



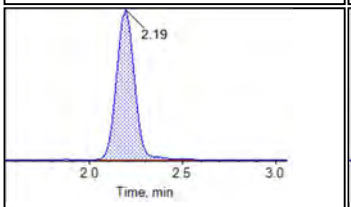
d3-MeFOSAA



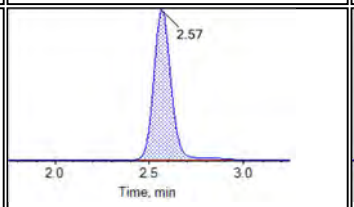
d5-EtFOSAA



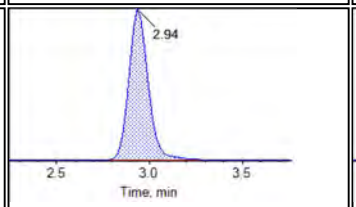
13C5-PFHxA



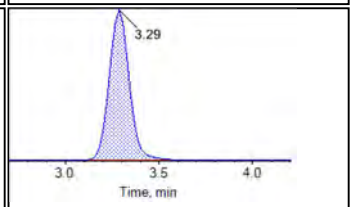
13C4-PFHpA



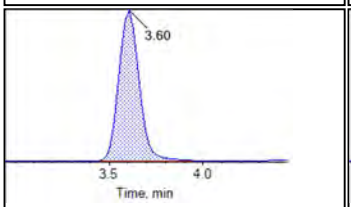
13C8-PFOA



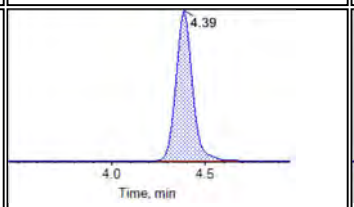
13C9-PFNA



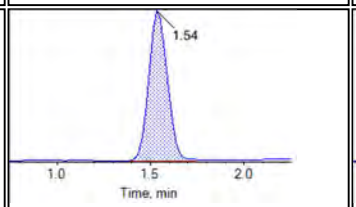
13C6-PFDA



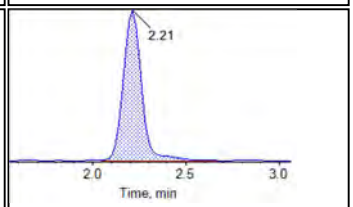
13C7-PFUnA



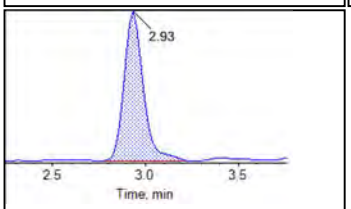
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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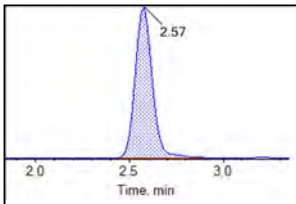
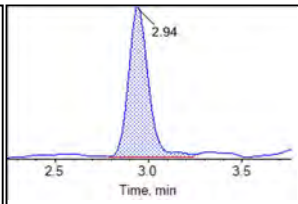
Printed: 27/08/2018 12:28:12 PM

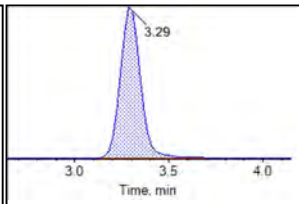
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

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Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:16 PM

Sample Name	J7261-FS(3)	**Injection Vial**	21
Sample ID	080118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:28:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

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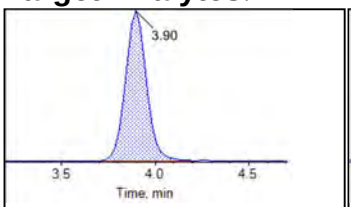
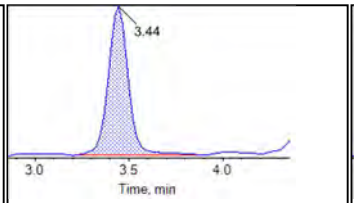
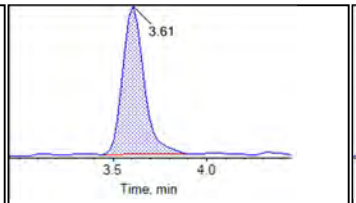


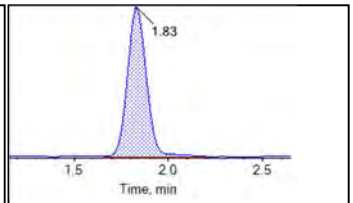
13C2-PFDoA



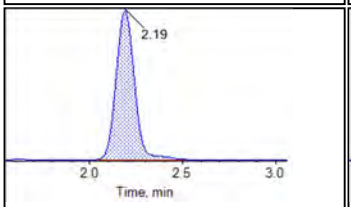
d3-MeFOSAA



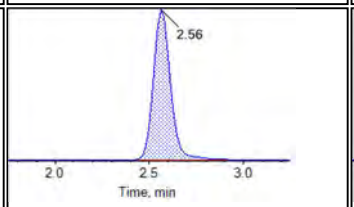
d5-EtFOSAA



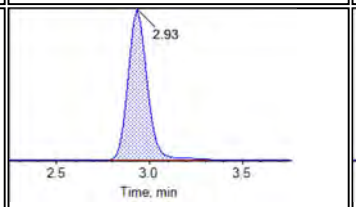
13C5-PFHxA



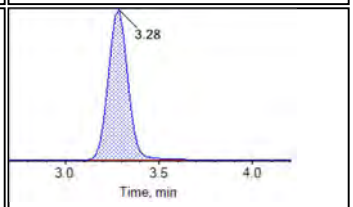
13C4-PFHpA



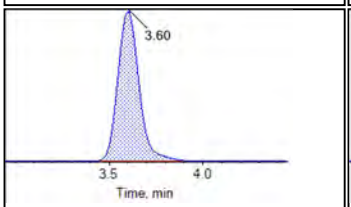
13C8-PFOA



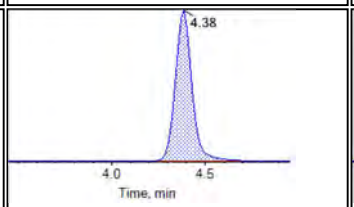
13C9-PFNA



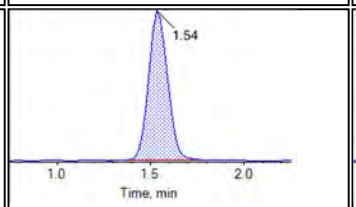
13C6-PFDA



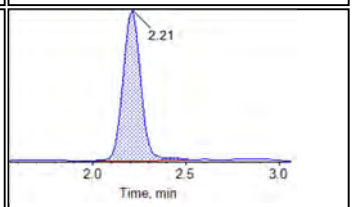
13C7-PFUnA



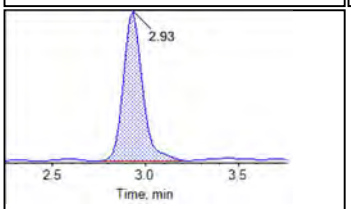
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

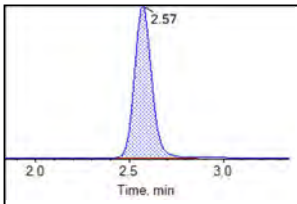


13C8-PFOS

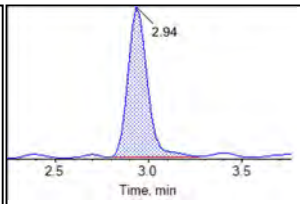
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:16 PM

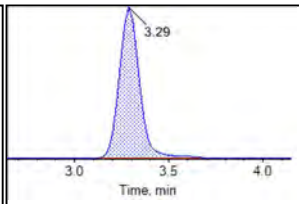
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

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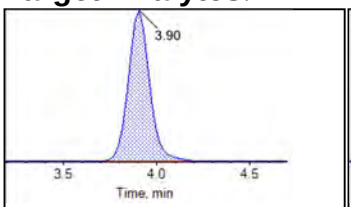
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:21 PM

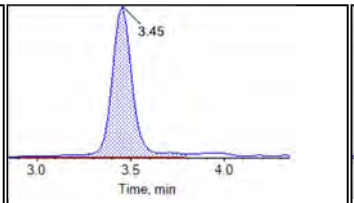
Sample Name	J7252-FS(3)	**Injection Vial**	22
Sample ID	073018-05	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:39:03	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

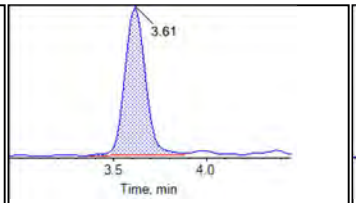
Target Analytes:



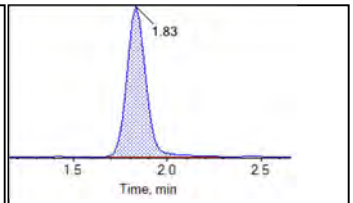
13C2-PFDoA



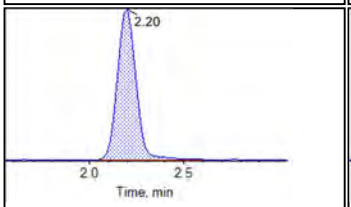
d3-MeFOSAA



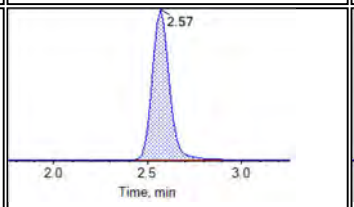
d5-EtFOSAA



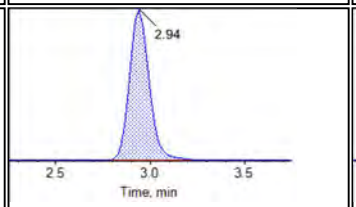
13C5-PFHxA



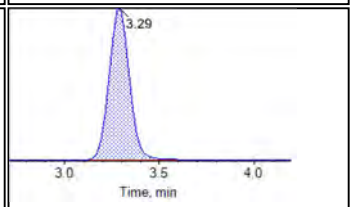
13C4-PFHpA



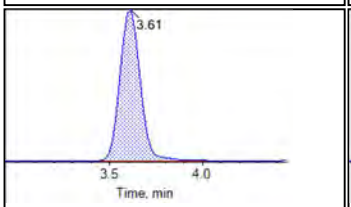
13C8-PFOA



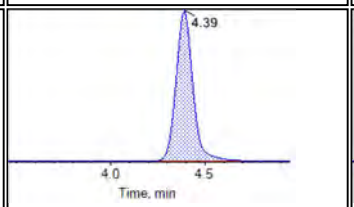
13C9-PFNA



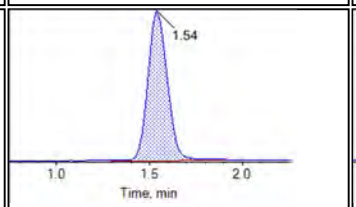
13C6-PFDA



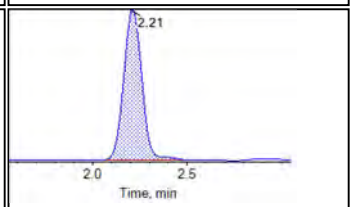
13C7-PFUnA



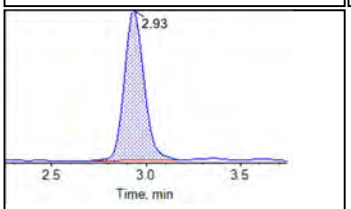
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

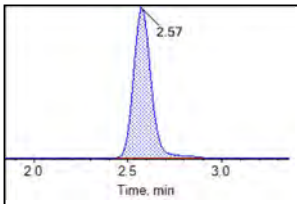


13C8-PFOS

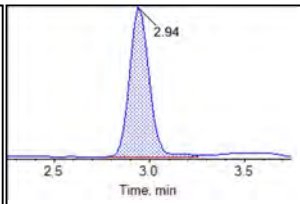
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:21 PM

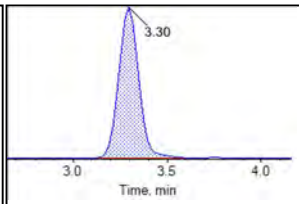
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

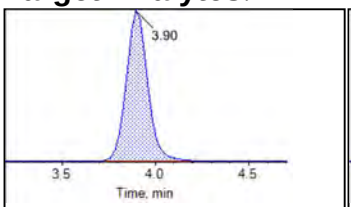
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:26 PM

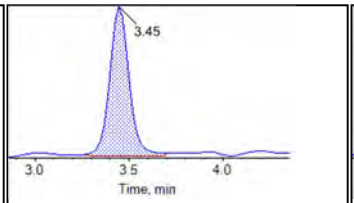
Sample Name	J7253-FS(3)	**Injection Vial**	23
Sample ID	073018-06	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T01:49:56	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

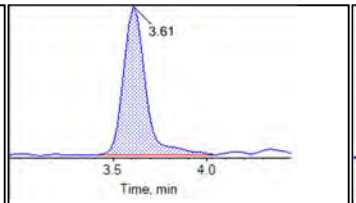
Target Analytes:



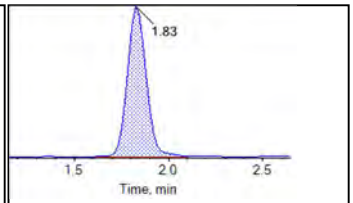
13C2-PFDoA



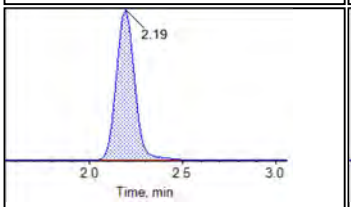
d3-MeFOSAA



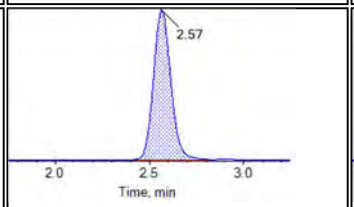
d5-EtFOSAA



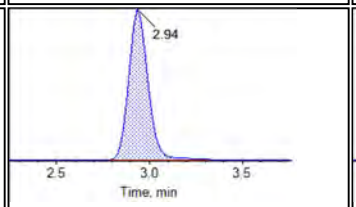
13C5-PFHxA



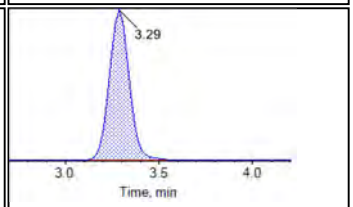
13C4-PFHpA



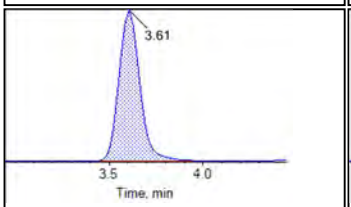
13C8-PFOA



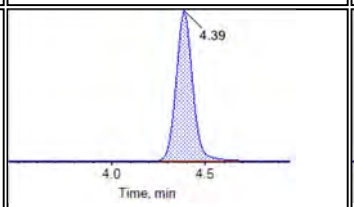
13C9-PFNA



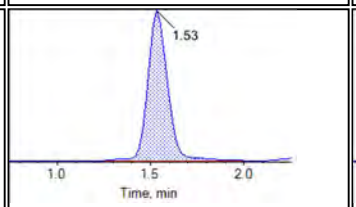
13C6-PFDA



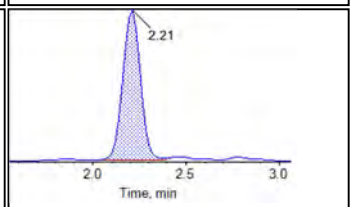
13C7-PFUnA



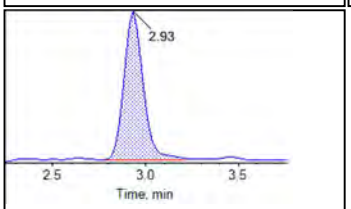
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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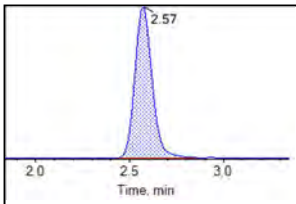
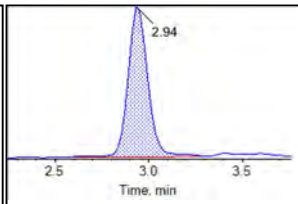
Printed: 27/08/2018 12:28:26 PM

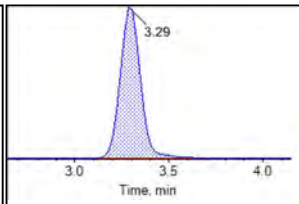
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

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Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:32 PM

Sample Name	J7254-FS(3)	**Injection Vial**	24
Sample ID	073018-07	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:00:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

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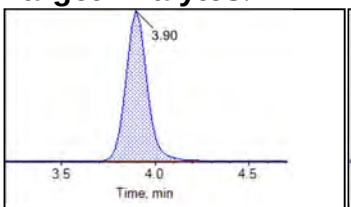
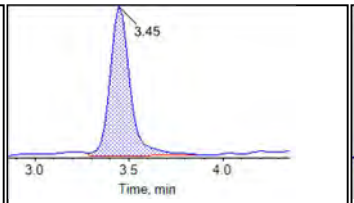
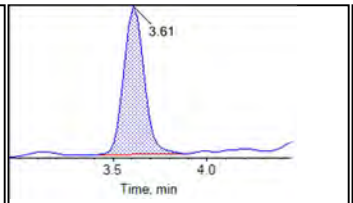


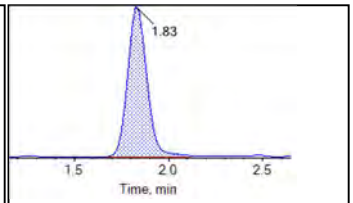
13C2-PFDoA



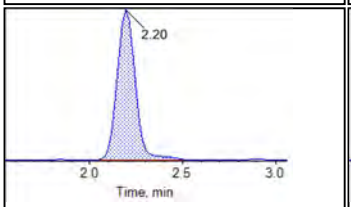
d3-MeFOSAA



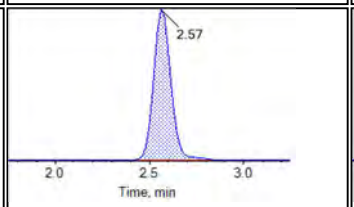
d5-EtFOSAA



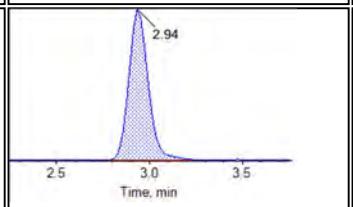
13C5-PFHxA



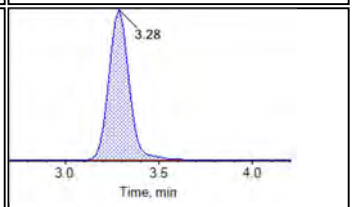
13C4-PFHpA



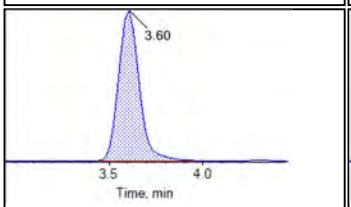
13C8-PFOA



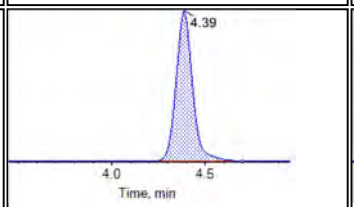
13C9-PFNA



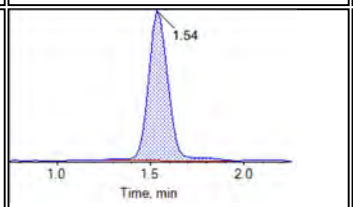
13C6-PFDA



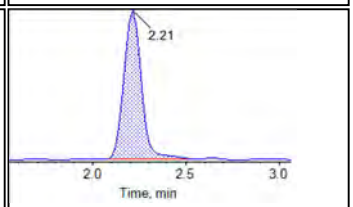
13C7-PFUnA



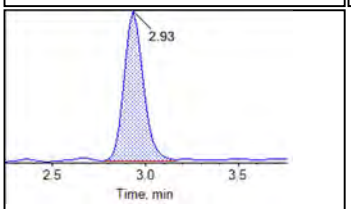
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

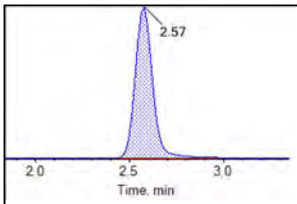


13C8-PFOS

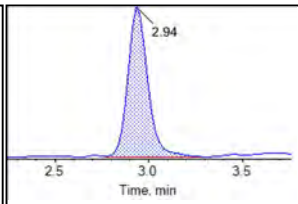
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:32 PM

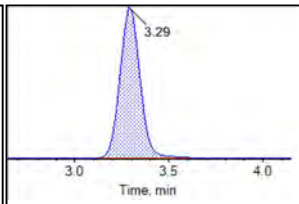
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

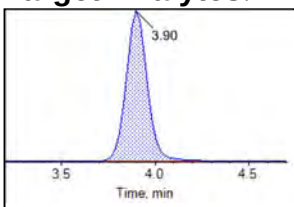
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:37 PM

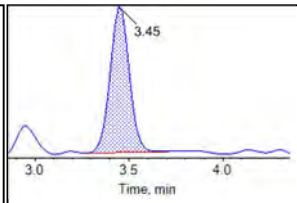
Sample Name	JY42 CCV	**Injection Vial**	25
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:11:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

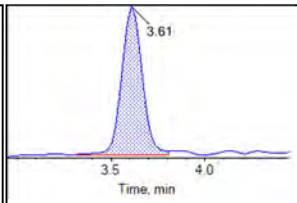
Target Analytes:



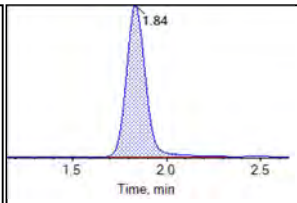
13C2-PFDoA



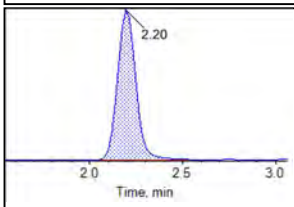
d3-MeFOSAA



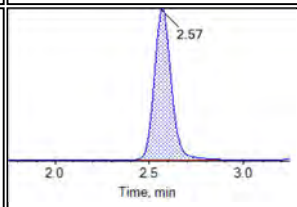
d5-EtFOSAA



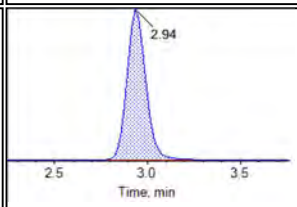
13C5-PFHxA



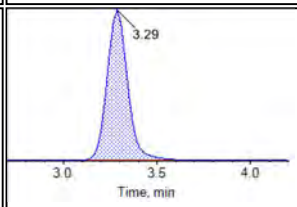
13C4-PFHpA



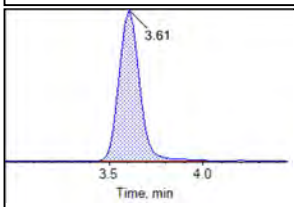
13C8-PFOA



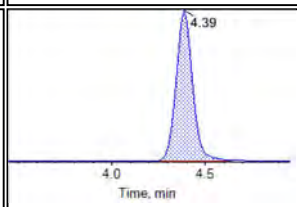
13C9-PFNA



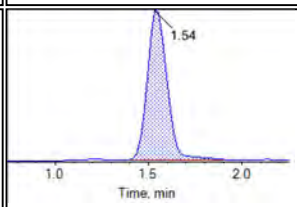
13C6-PFDA



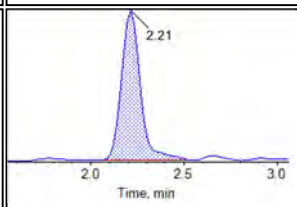
13C7-PFUnA



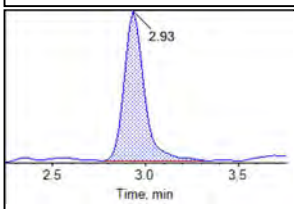
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

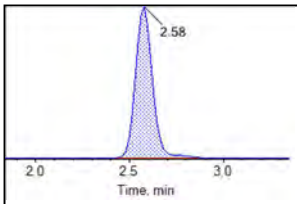


13C8-PFOS

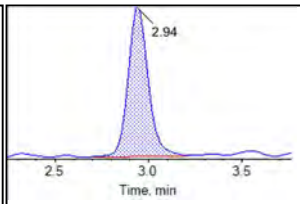
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:37 PM

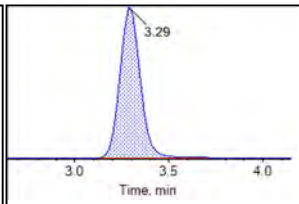
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

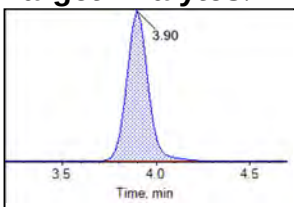
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:48 PM

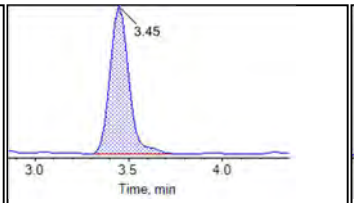
Sample Name	J7248-FS(4)	**Injection Vial**	27
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:33:23	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

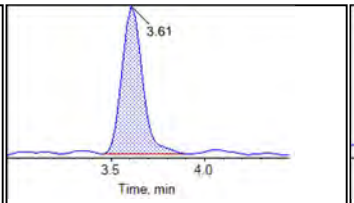
Target Analytes:



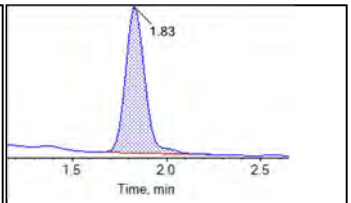
13C2-PFDoA



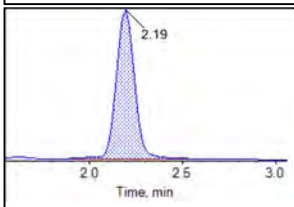
d3-MeFOSAA



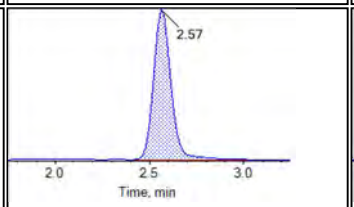
d5-EtFOSAA



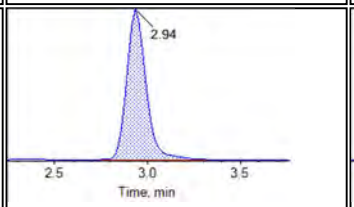
13C5-PFHxA



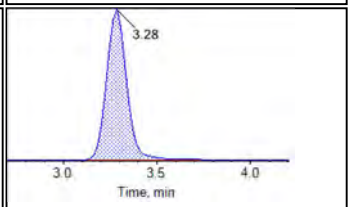
13C4-PFHpA



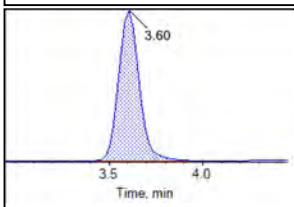
13C8-PFOA



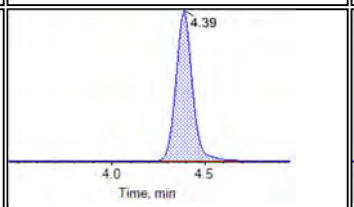
13C9-PFNA



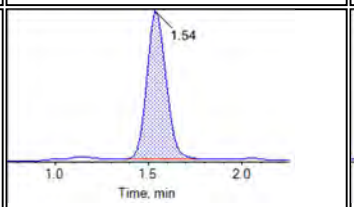
13C6-PFDA



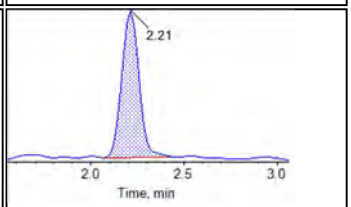
13C7-PFUnA



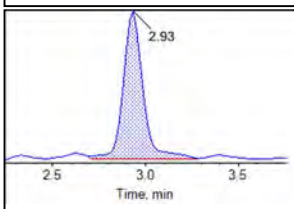
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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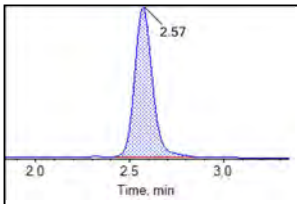
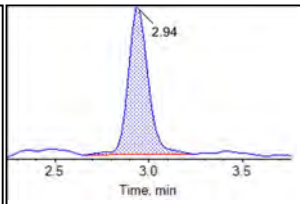
Printed: 27/08/2018 12:28:48 PM

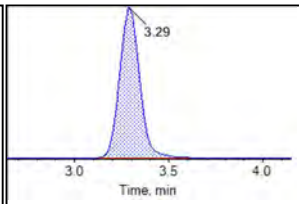
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

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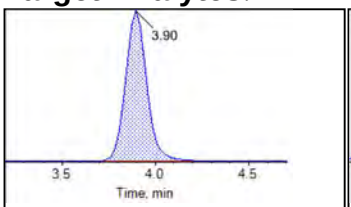
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:52 PM

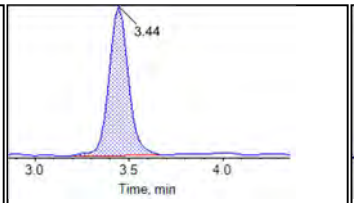
Sample Name	J7248-FS-D(5)	**Injection Vial**	28
Sample ID	073018-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:44:16	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

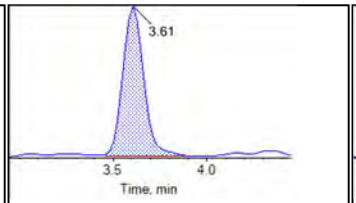
Target Analytes:



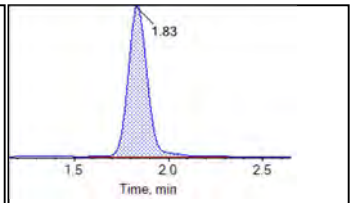
13C2-PFDoA



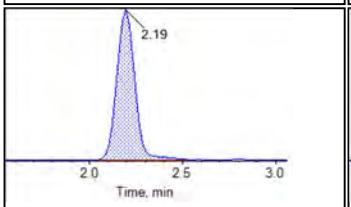
d3-MeFOSAA



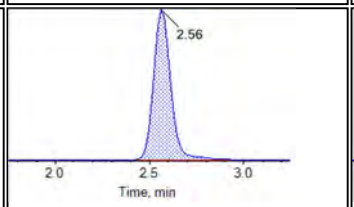
d5-EtFOSAA



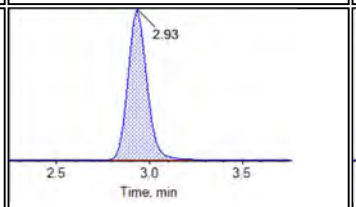
13C5-PFHxA



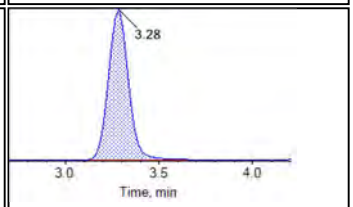
13C4-PFHpA



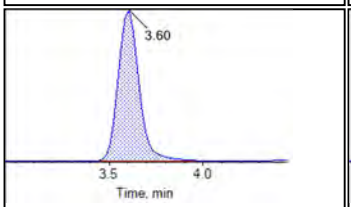
13C8-PFOA



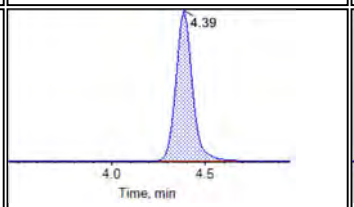
13C9-PFNA



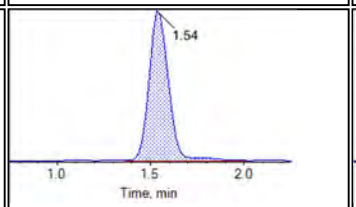
13C6-PFDA



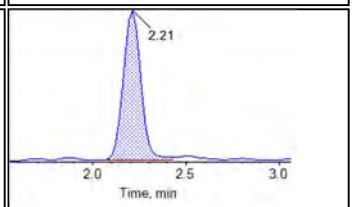
13C7-PFUnA



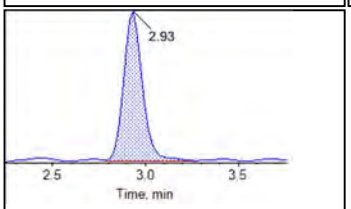
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

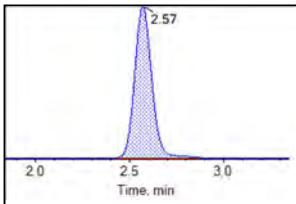


13C8-PFOS

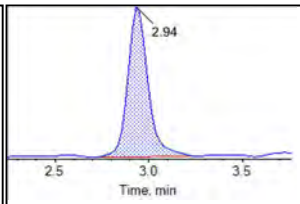
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:52 PM

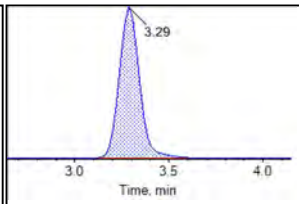
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

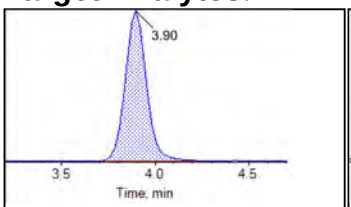
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:28:57 PM

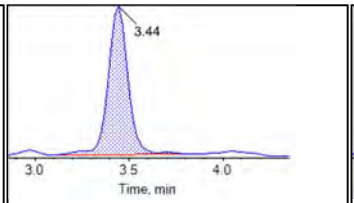
Sample Name	J7249-FS(4)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T02:55:09	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

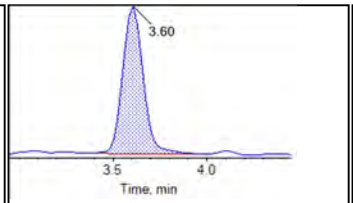
Target Analytes:



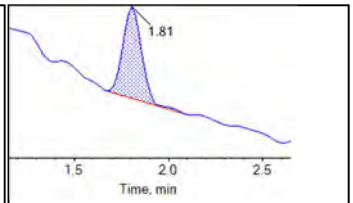
13C2-PFDoA



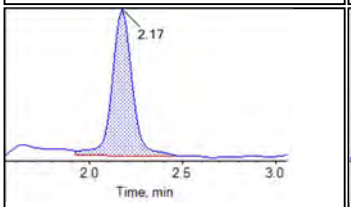
d3-MeFOSAA



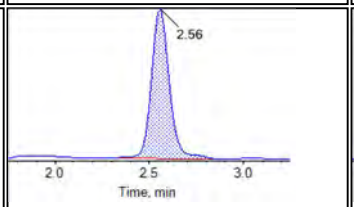
d5-EtFOSAA



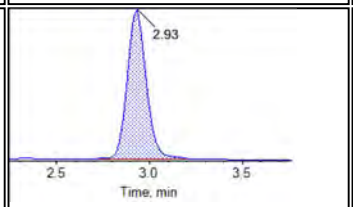
13C5-PFHxA



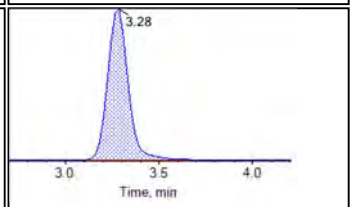
13C4-PFHpA



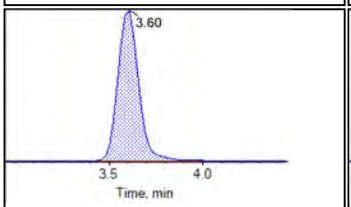
13C8-PFOA



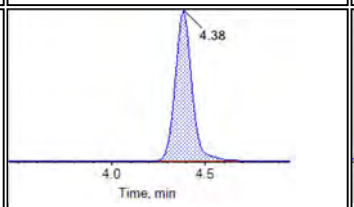
13C9-PFNA



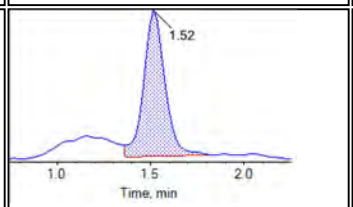
13C6-PFDA



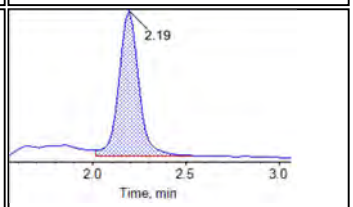
13C7-PFUnA



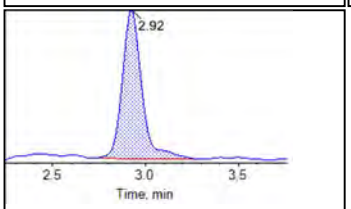
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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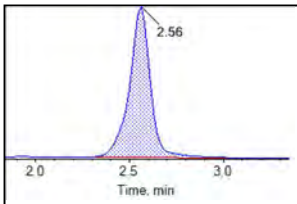
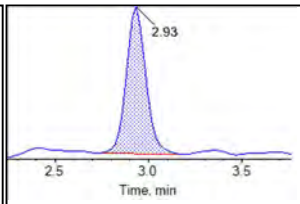
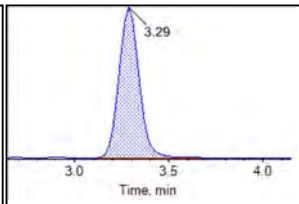
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

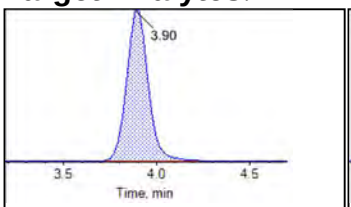
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:01 PM

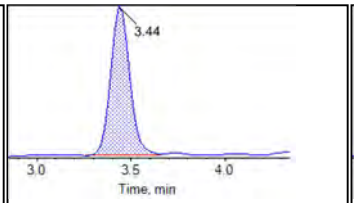
Sample Name	J7249-FS-D(5)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:06:01	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

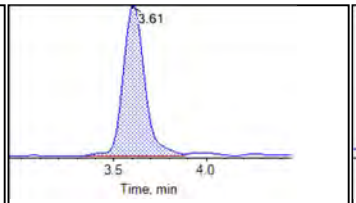
Target Analytes:



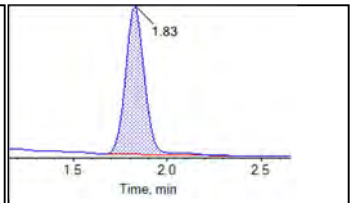
13C2-PFDoA



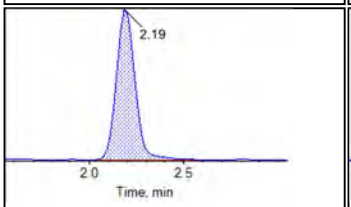
d3-MeFOSAA



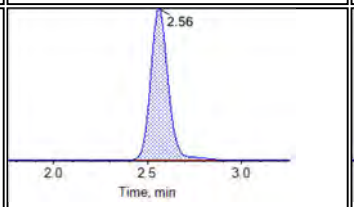
d5-EtFOSAA



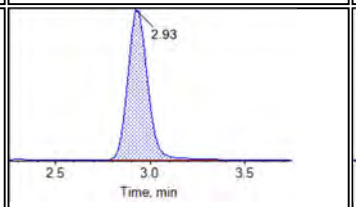
13C5-PFHxA



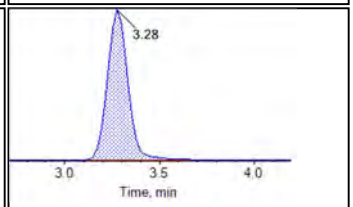
13C4-PFHpA



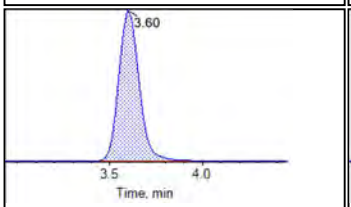
13C8-PFOA



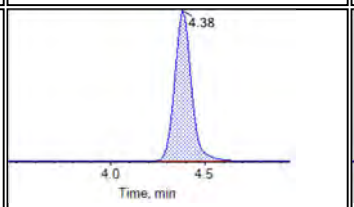
13C9-PFNA



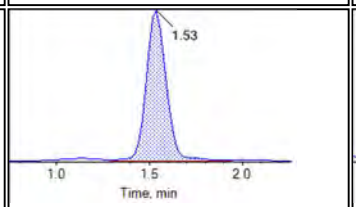
13C6-PFDA



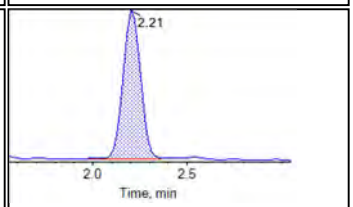
13C7-PFUnA



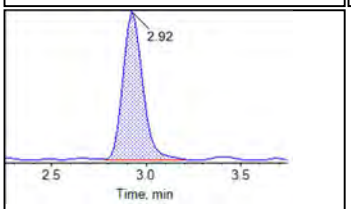
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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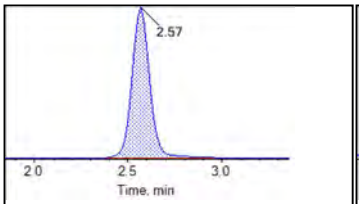
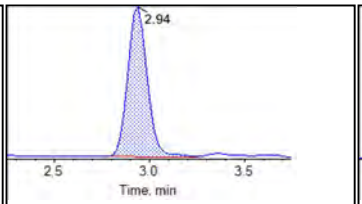
Printed: 27/08/2018 12:29:01 PM

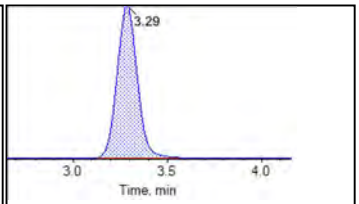
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

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Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:05 PM

Sample Name	J7249MS-FS(4)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:16:53	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

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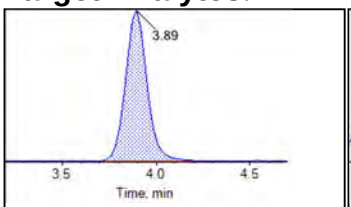
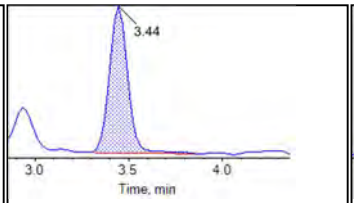
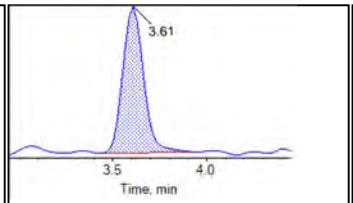


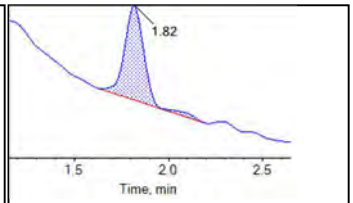
13C2-PFDoA



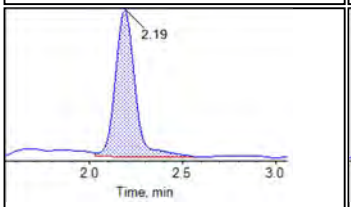
d3-MeFOSAA



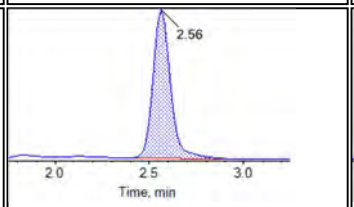
d5-EtFOSAA



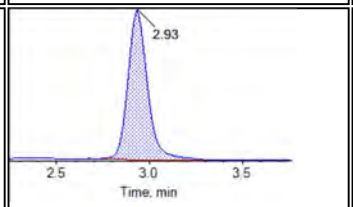
13C5-PFHxA



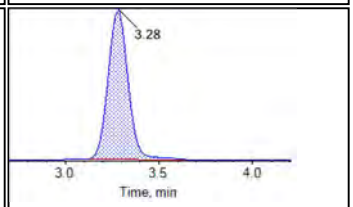
13C4-PFHpA



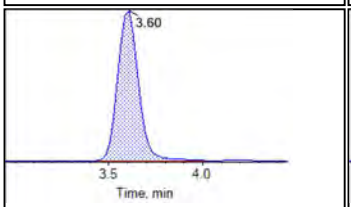
13C8-PFOA



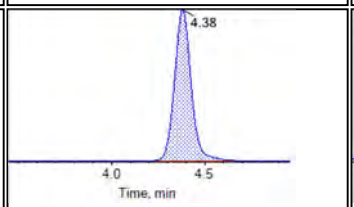
13C9-PFNA



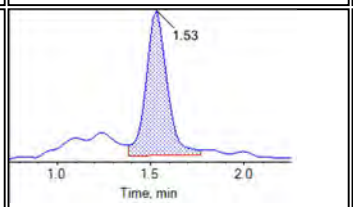
13C6-PFDA



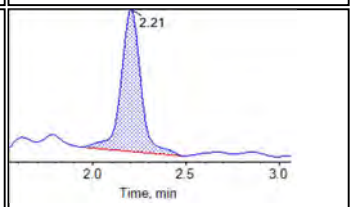
13C7-PFUnA



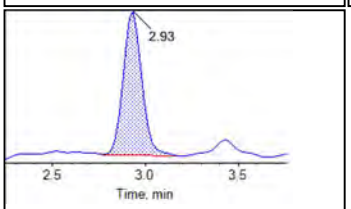
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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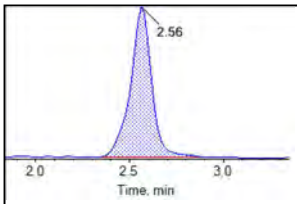
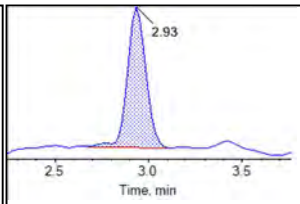
Printed: 27/08/2018 12:29:05 PM

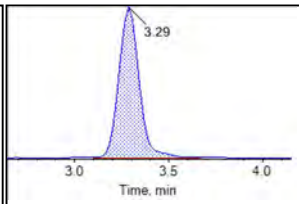
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

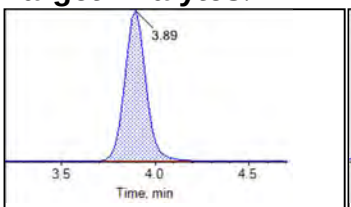
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:09 PM

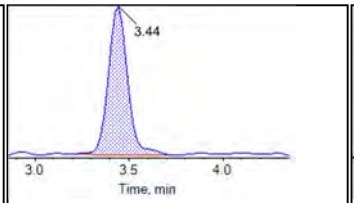
Sample Name	J7249MS-FS-D(5)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:27:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

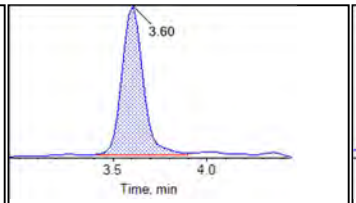
Target Analytes:



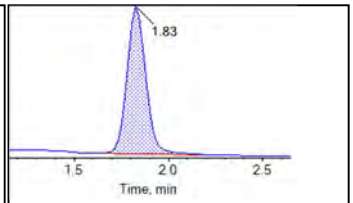
13C2-PFDoA



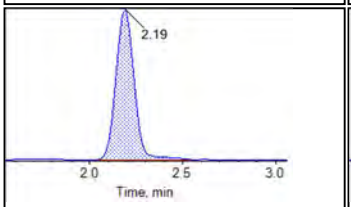
d3-MeFOSAA



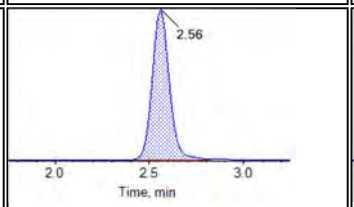
d5-EtFOSAA



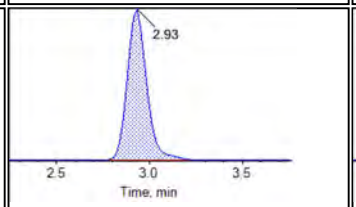
13C5-PFHxA



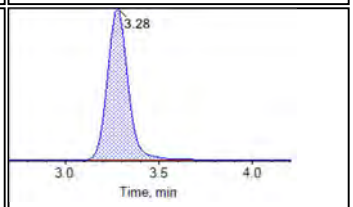
13C4-PFHpA



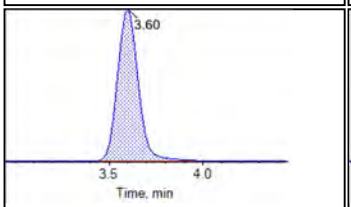
13C8-PFOA



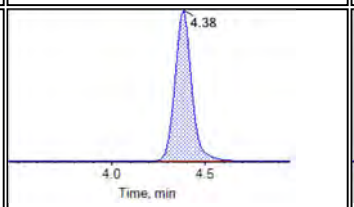
13C9-PFNA



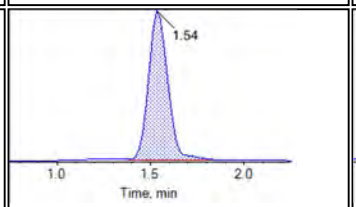
13C6-PFDA



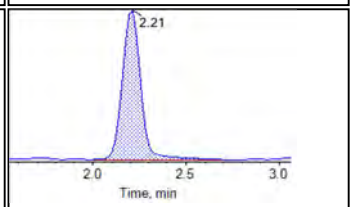
13C7-PFUnA



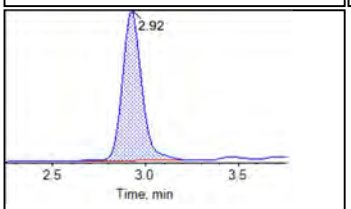
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

Created with Analyst Reporter
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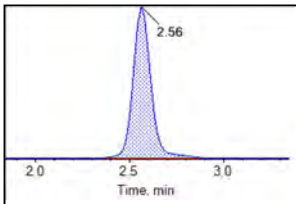
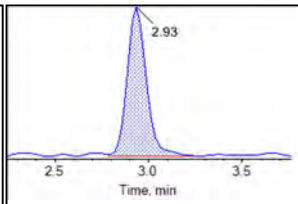
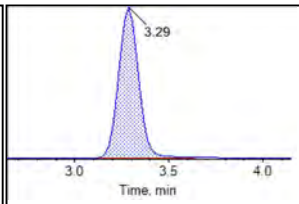
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

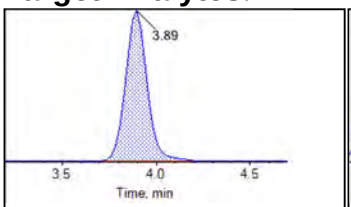
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:16 PM

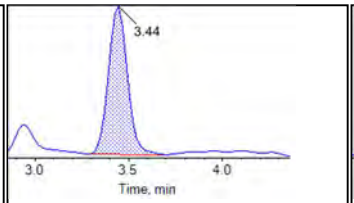
Sample Name	J7249MSD-FS(4)	**Injection Vial**	33
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:38:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

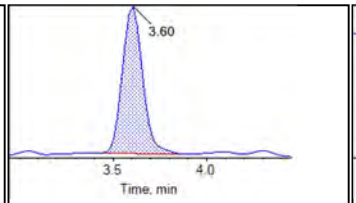
Target Analytes:



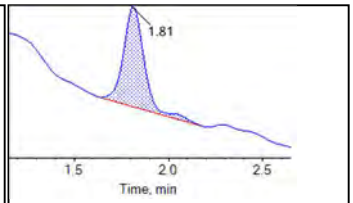
13C2-PFDoA



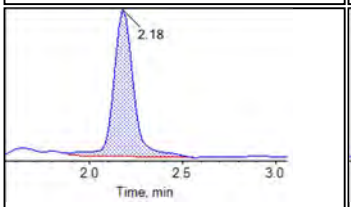
d3-MeFOSAA



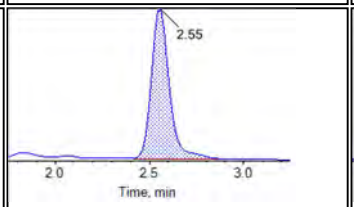
d5-EtFOSAA



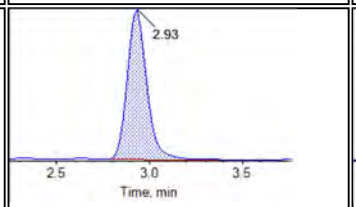
13C5-PFHxA



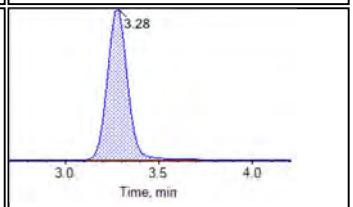
13C4-PFHpA



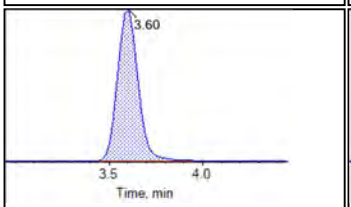
13C8-PFOA



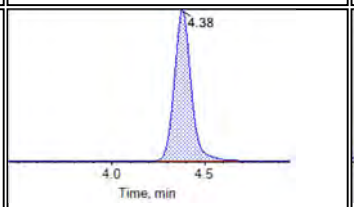
13C9-PFNA



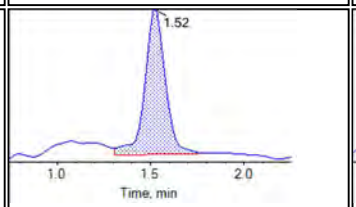
13C6-PFDA



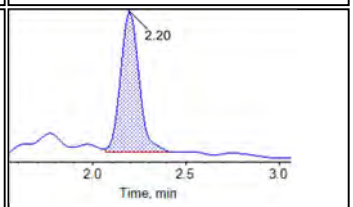
13C7-PFUnA



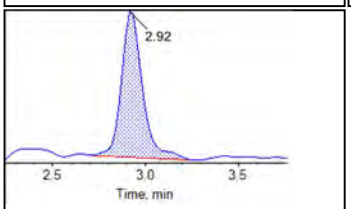
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

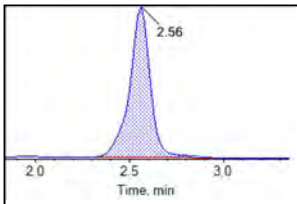


13C8-PFOS

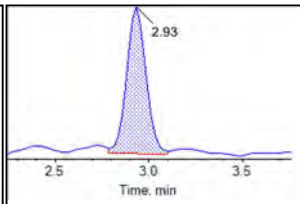
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:16 PM

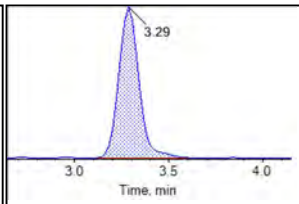
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

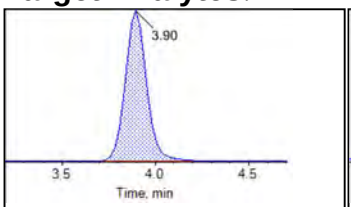
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:20 PM

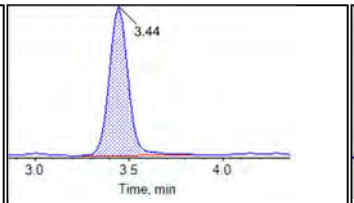
Sample Name	J7249MSD-FS-D(5)	**Injection Vial**	34
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T03:49:33	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

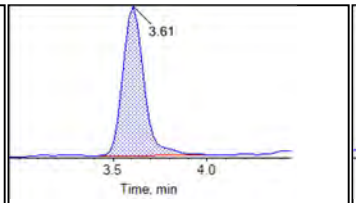
Target Analytes:



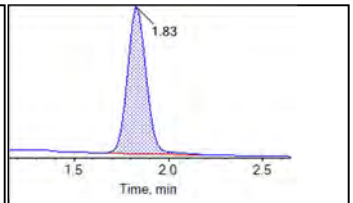
13C2-PFDoA



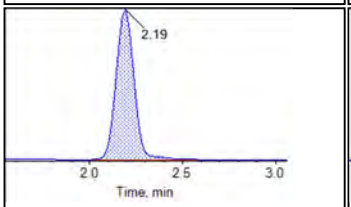
d3-MeFOSAA



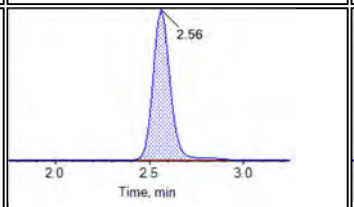
d5-EtFOSAA



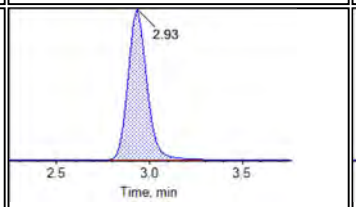
13C5-PFHxA



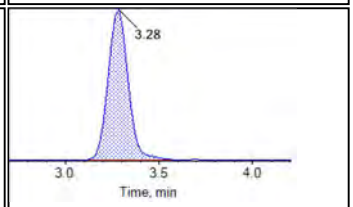
13C4-PFHpA



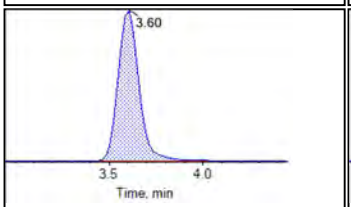
13C8-PFOA



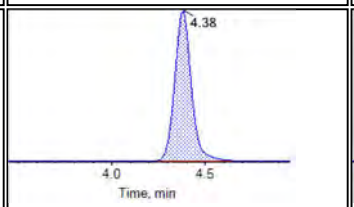
13C9-PFNA



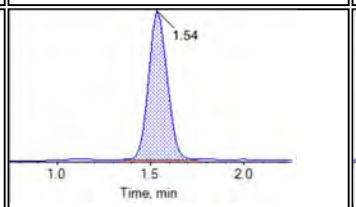
13C6-PFDA



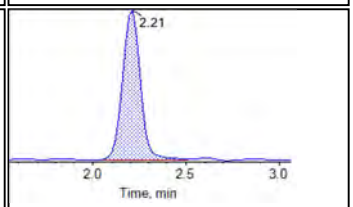
13C7-PFUnA



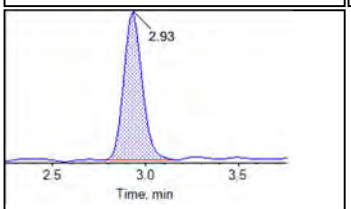
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

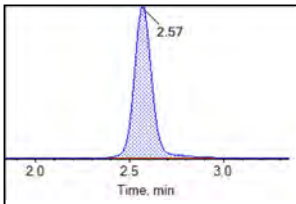


13C8-PFOS

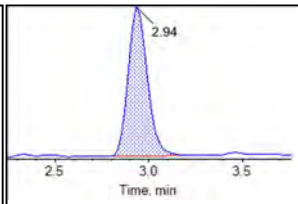
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:20 PM

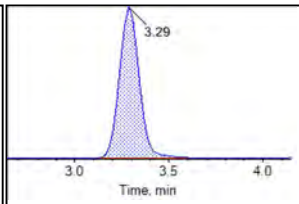
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

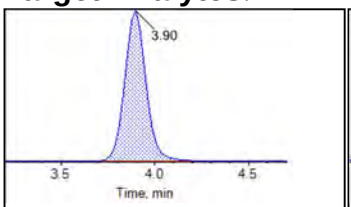
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:24 PM

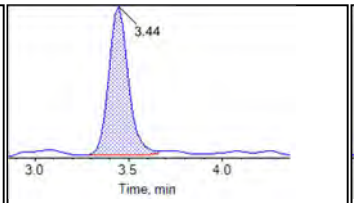
Sample Name	J7250-FS(4)	**Injection Vial**	35
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:00:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

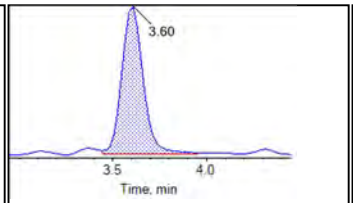
Target Analytes:



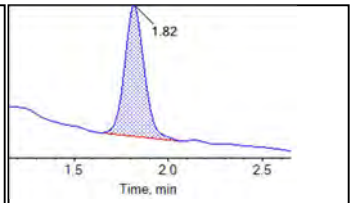
13C2-PFDoA



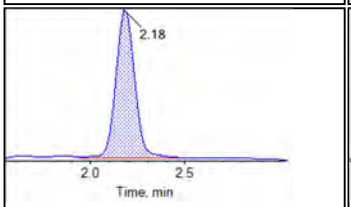
d3-MeFOSAA



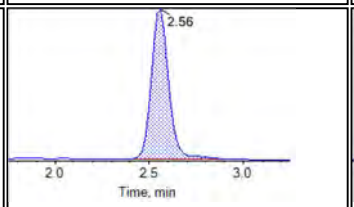
d5-EtFOSAA



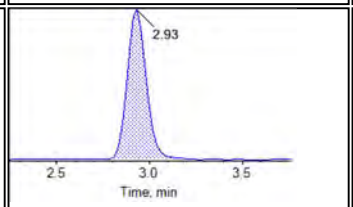
13C5-PFHxA



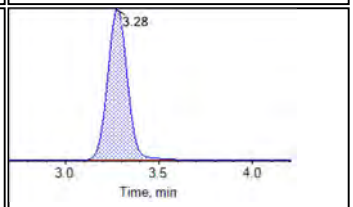
13C4-PFHpA



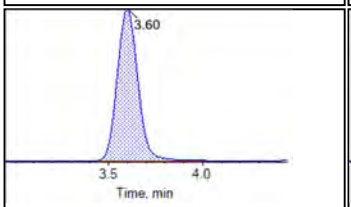
13C8-PFOA



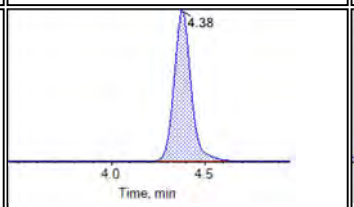
13C9-PFNA



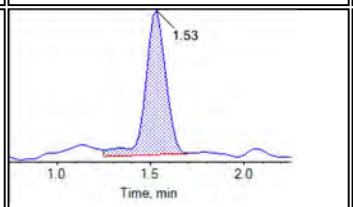
13C6-PFDA



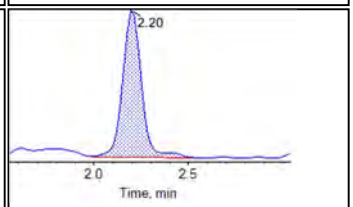
13C7-PFUnA



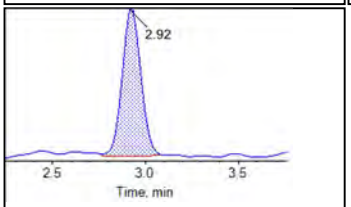
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

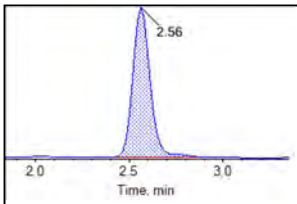


13C8-PFOS

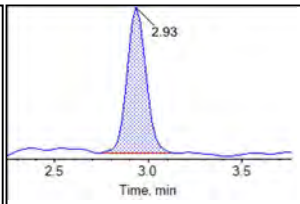
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:24 PM

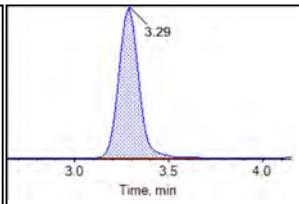
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

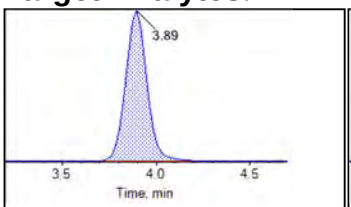
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:28 PM

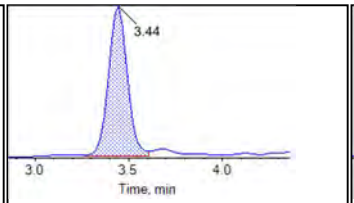
Sample Name	J7250-FS-D(5)	**Injection Vial**	36
Sample ID	073018-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:11:17	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

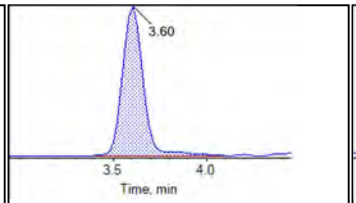
Target Analytes:



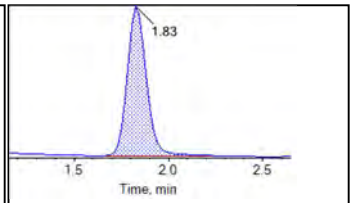
13C2-PFDoA



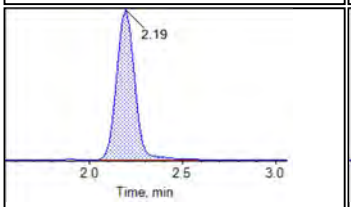
d3-MeFOSAA



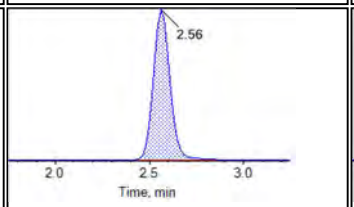
d5-EtFOSAA



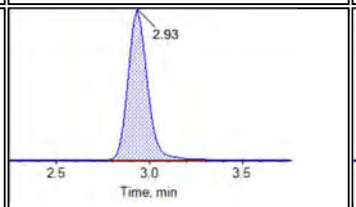
13C5-PFHxA



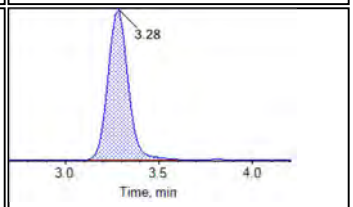
13C4-PFHpA



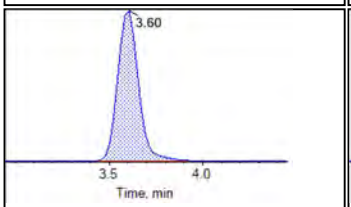
13C8-PFOA



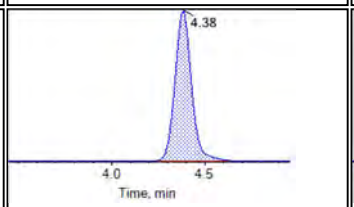
13C9-PFNA



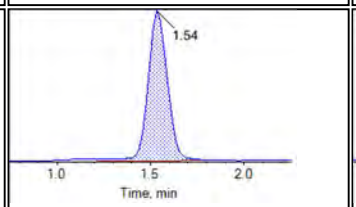
13C6-PFDA



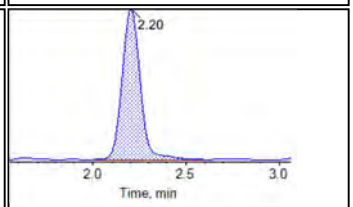
13C7-PFUnA



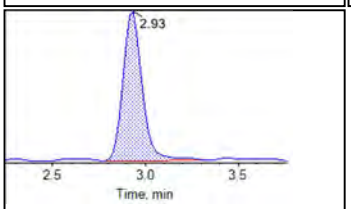
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

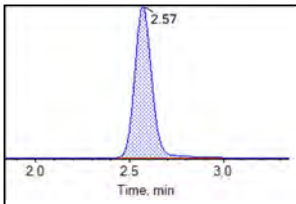


13C8-PFOS

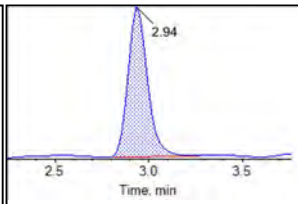
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:28 PM

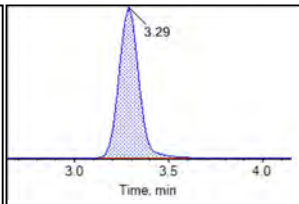
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

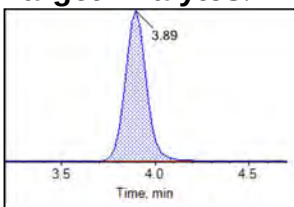
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:32 PM

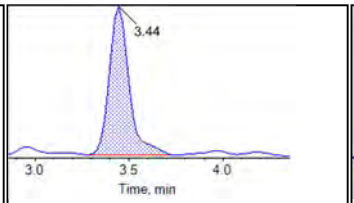
Sample Name	JY41 CCV	**Injection Vial**	37
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:22:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

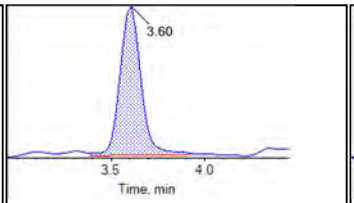
Target Analytes:



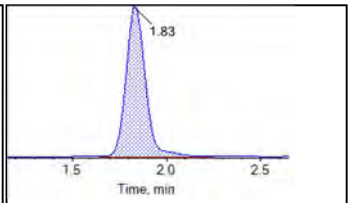
13C2-PFDoA



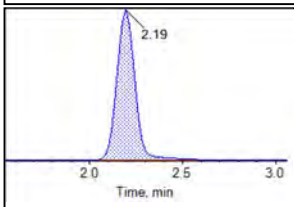
d3-MeFOSAA



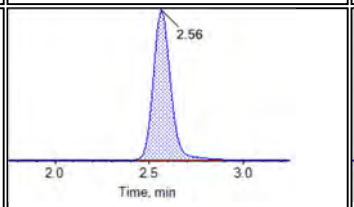
d5-EtFOSAA



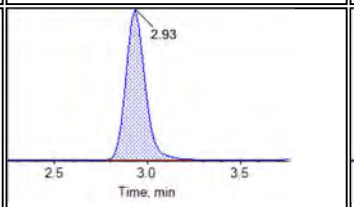
13C5-PFHxA



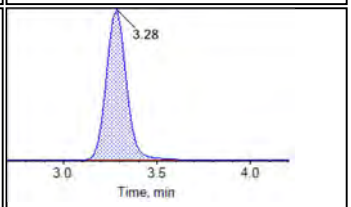
13C4-PFHpA



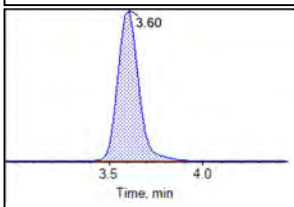
13C8-PFOA



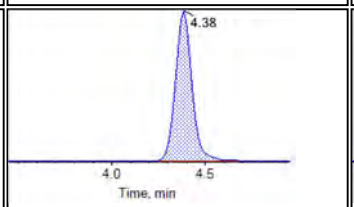
13C9-PFNA



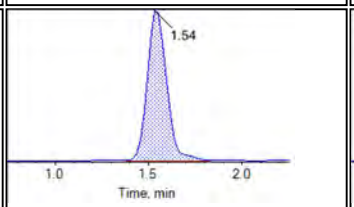
13C6-PFDA



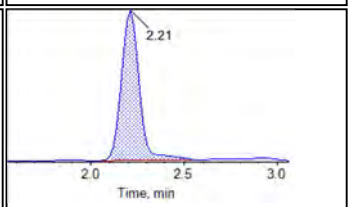
13C7-PFUnA



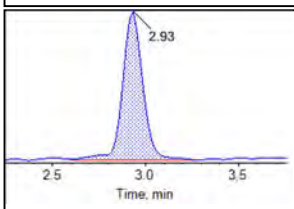
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

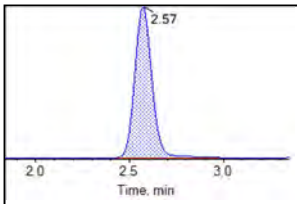


13C8-PFOS

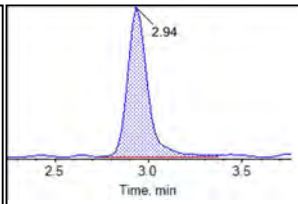
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:32 PM

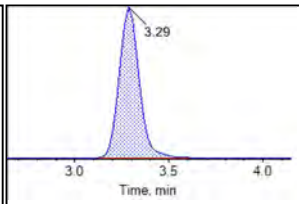
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:40 PM

Sample Name	J7251-FS(4)	**Injection Vial**	39
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:43:54	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

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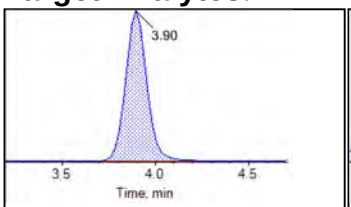
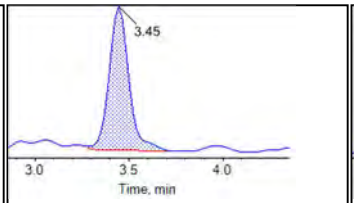
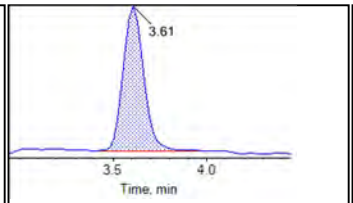


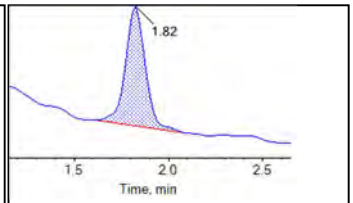
13C2-PFDoA



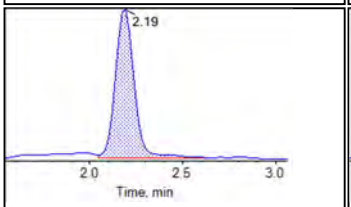
d3-MeFOSAA



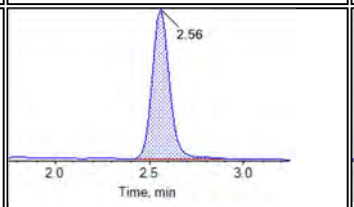
d5-EtFOSAA



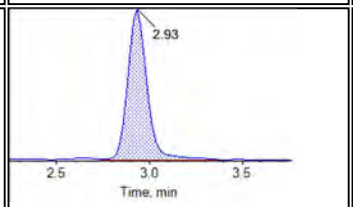
13C5-PFHxA



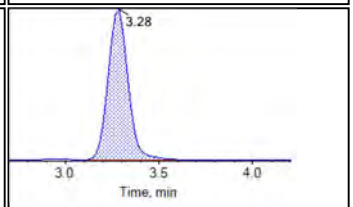
13C4-PFHpA



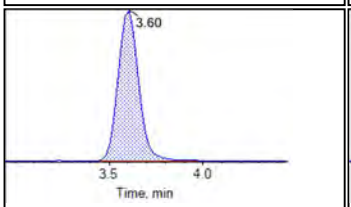
13C8-PFOA



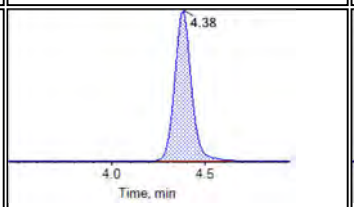
13C9-PFNA



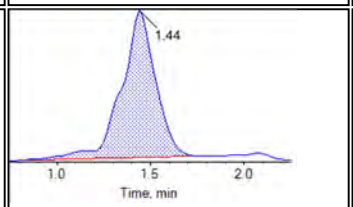
13C6-PFDA



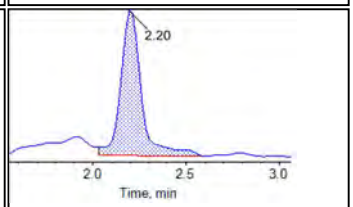
13C7-PFUnA



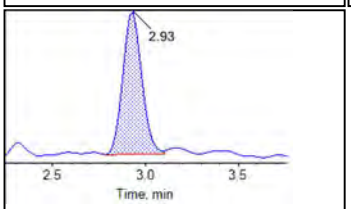
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

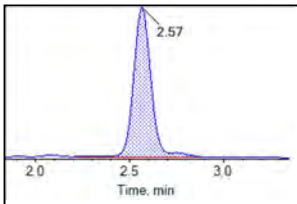


13C8-PFOS

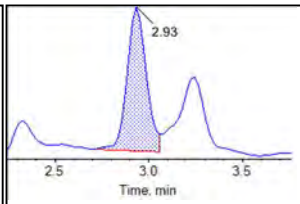
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:40 PM

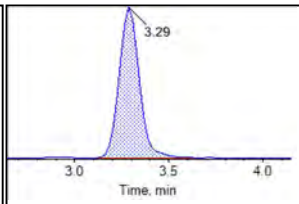
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

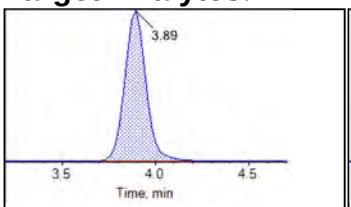
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:44 PM

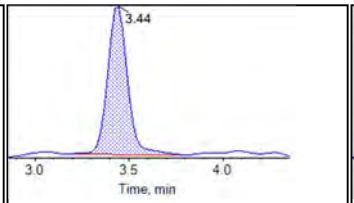
Sample Name	J7251-FS-D(5)	**Injection Vial**	40
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T04:54:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

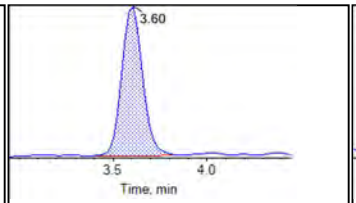
Target Analytes:



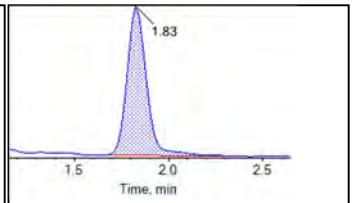
13C2-PFDoA



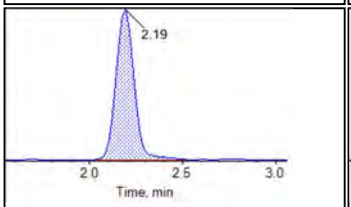
d3-MeFOSAA



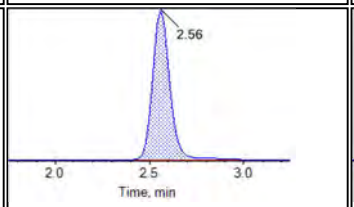
d5-EtFOSAA



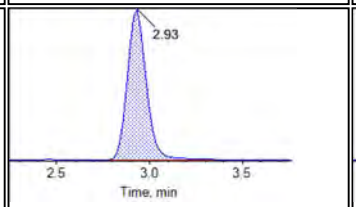
13C5-PFHxA



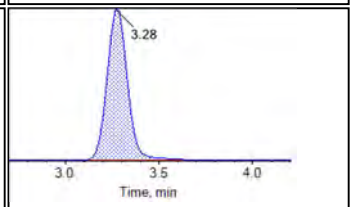
13C4-PFHpA



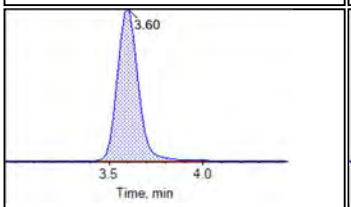
13C8-PFOA



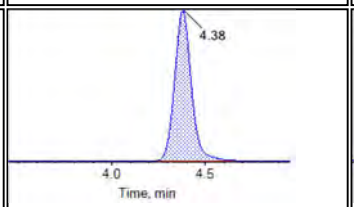
13C9-PFNA



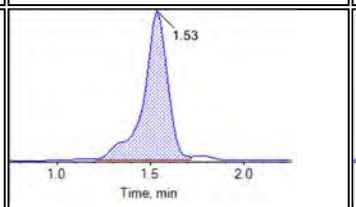
13C6-PFDA



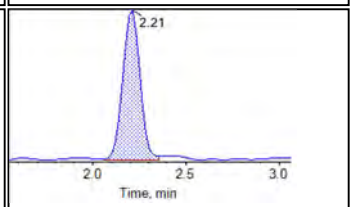
13C7-PFUnA



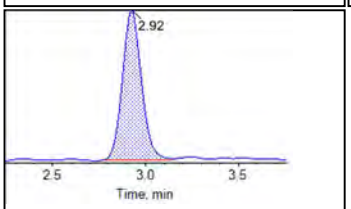
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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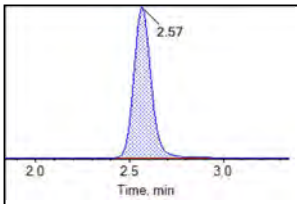
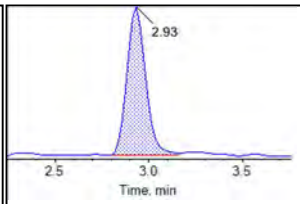
Printed: 27/08/2018 12:29:44 PM

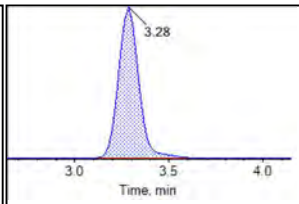
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

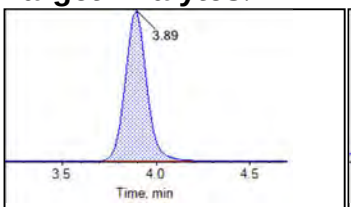
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:50 PM

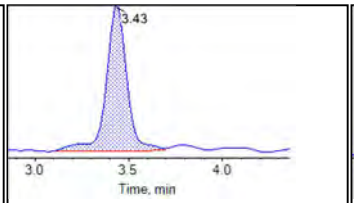
Sample Name	J7255-FS(4)	**Injection Vial**	41
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:05:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

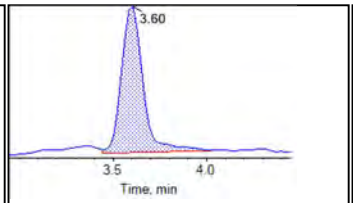
Target Analytes:



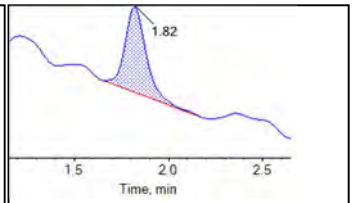
13C2-PFDoA



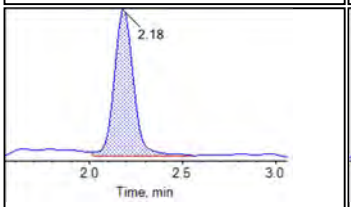
d3-MeFOSAA



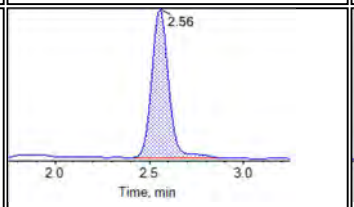
d5-EtFOSAA



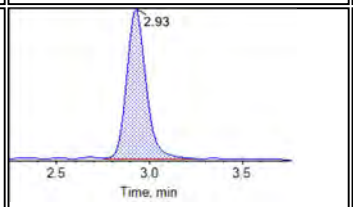
13C5-PFHxA



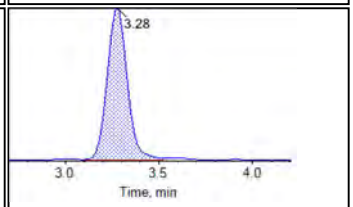
13C4-PFHpA



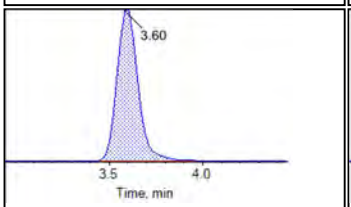
13C8-PFOA



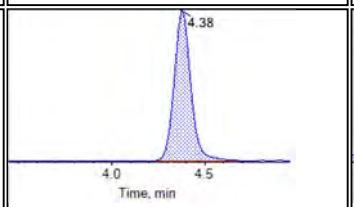
13C9-PFNA



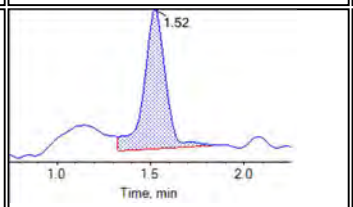
13C6-PFDA



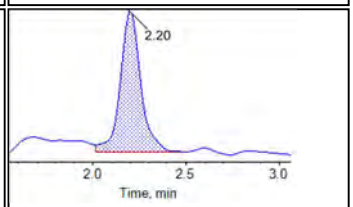
13C7-PFUnA



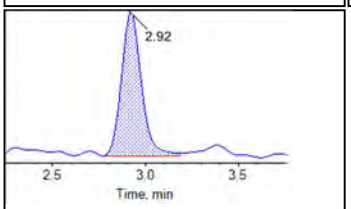
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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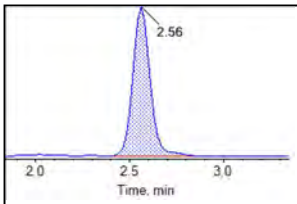
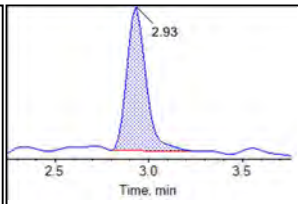
Printed: 27/08/2018 12:29:50 PM

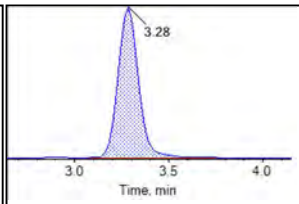
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

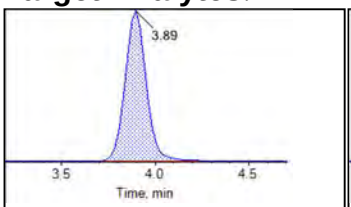
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:54 PM

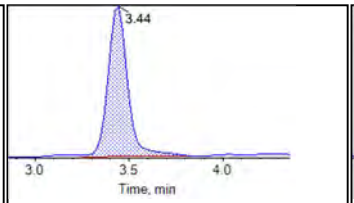
Sample Name	J7255-FS-D(5)	**Injection Vial**	42
Sample ID	073118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:16:32	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

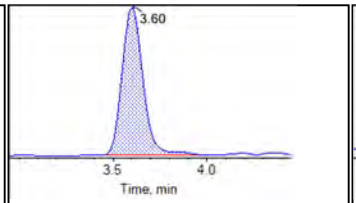
Target Analytes:



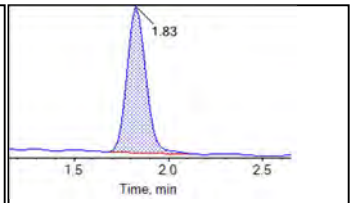
13C2-PFDoA



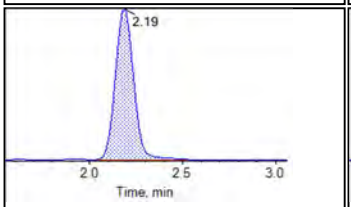
d3-MeFOSAA



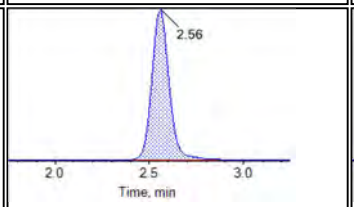
d5-EtFOSAA



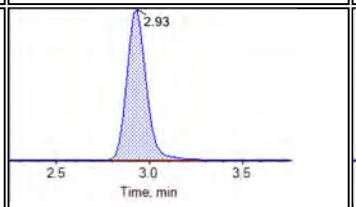
13C5-PFHxA



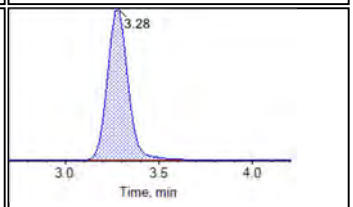
13C4-PFHpA



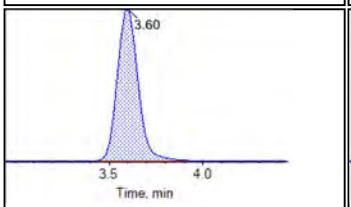
13C8-PFOA



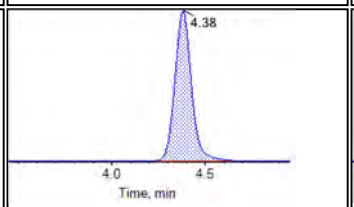
13C9-PFNA



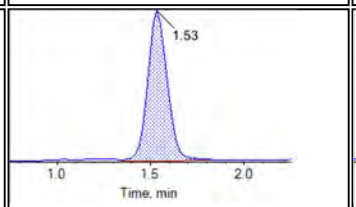
13C6-PFDA



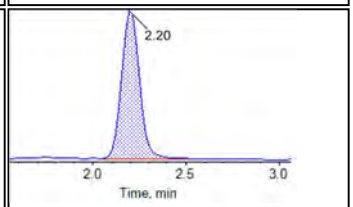
13C7-PFUnA



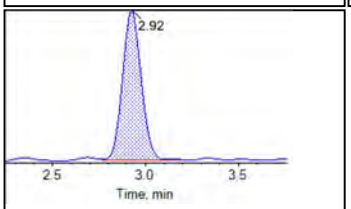
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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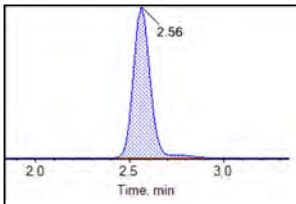
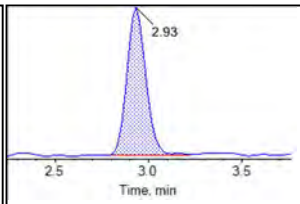
Printed: 27/08/2018 12:29:54 PM

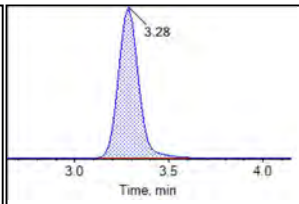
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

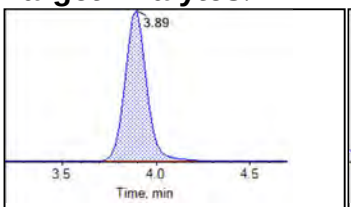
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:58 PM

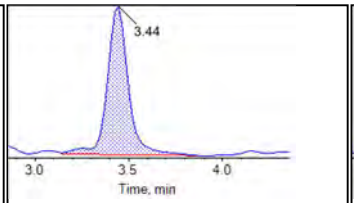
Sample Name	J7256-FS(4)	**Injection Vial**	43
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:27:25	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

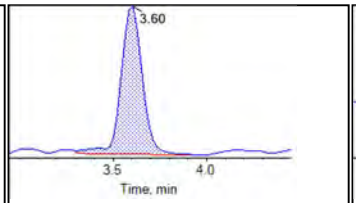
Target Analytes:



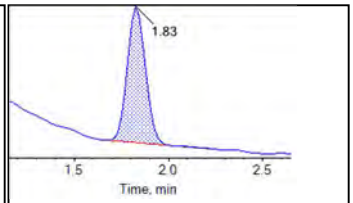
13C2-PFDoA



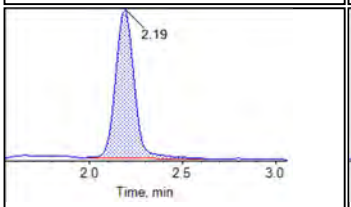
d3-MeFOSAA



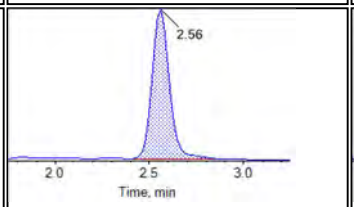
d5-EtFOSAA



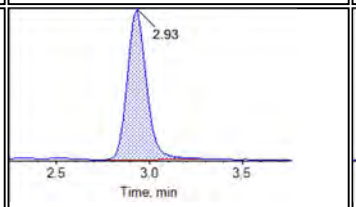
13C5-PFHxA



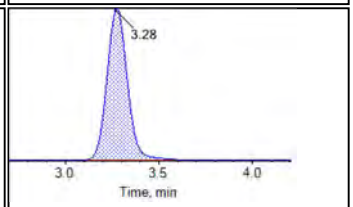
13C4-PFHpA



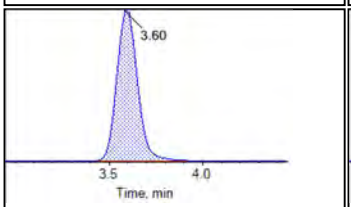
13C8-PFOA



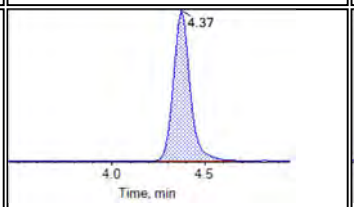
13C9-PFNA



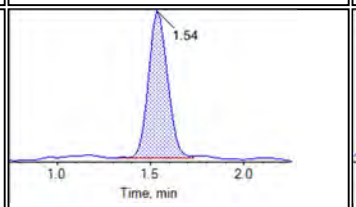
13C6-PFDA



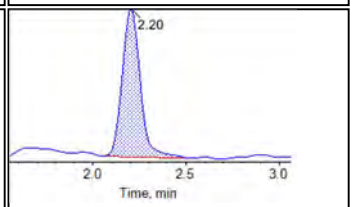
13C7-PFUnA



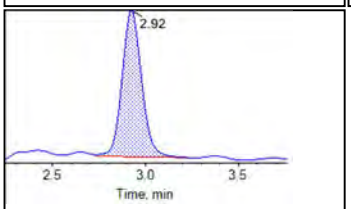
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

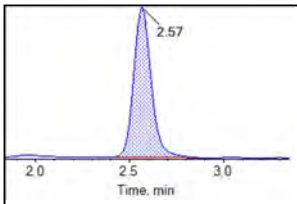


13C8-PFOS

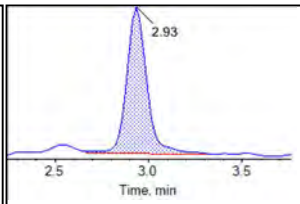
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:29:58 PM

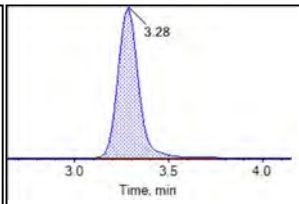
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

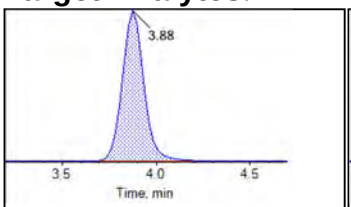
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:30:03 PM

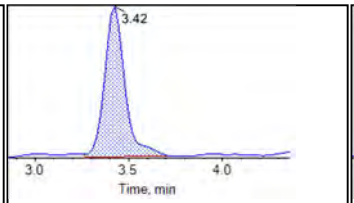
Sample Name	J7256-FS-D(5)	**Injection Vial**	44
Sample ID	073118-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:38:18	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

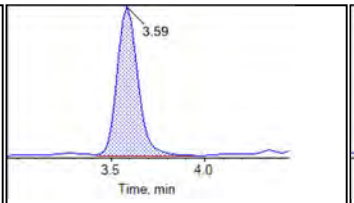
Target Analytes:



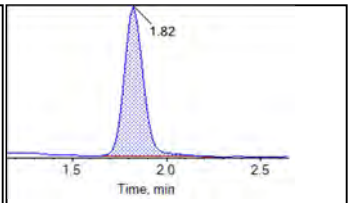
13C2-PFDoA



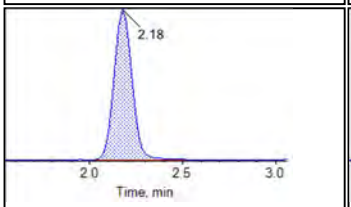
d3-MeFOSAA



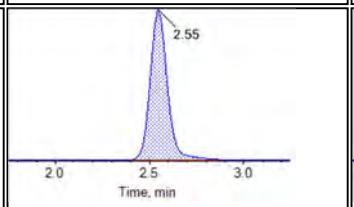
d5-EtFOSAA



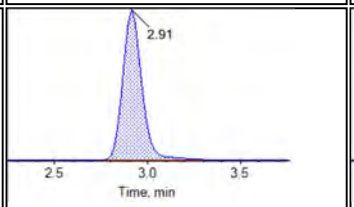
13C5-PFHxA



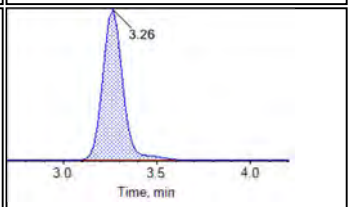
13C4-PFHpA



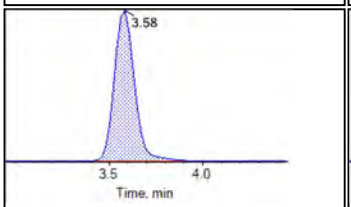
13C8-PFOA



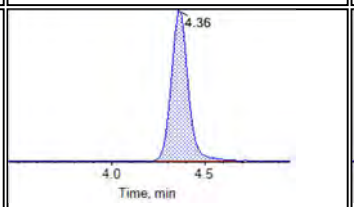
13C9-PFNA



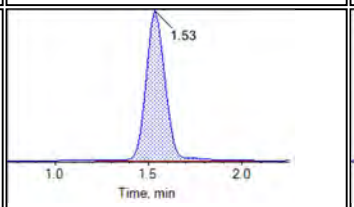
13C6-PFDA



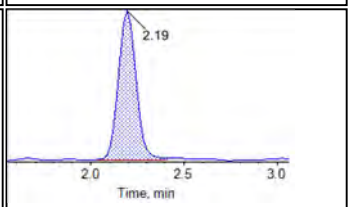
13C7-PFUnA



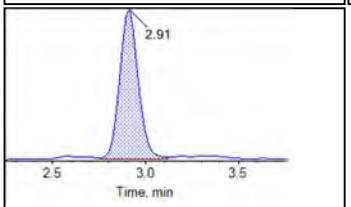
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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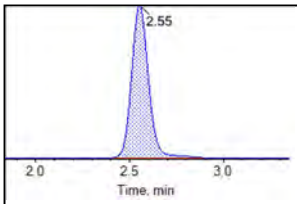
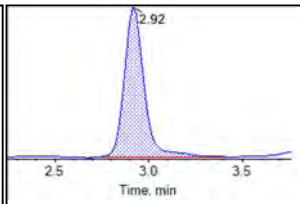
Printed: 27/08/2018 12:30:03 PM

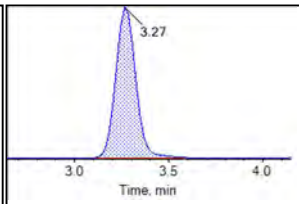
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:30:08 PM

Sample Name	J7257-FS(4)	**Injection Vial**	45
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T05:49:10	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

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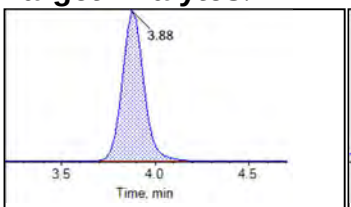
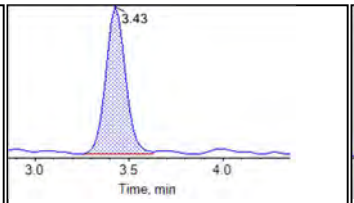
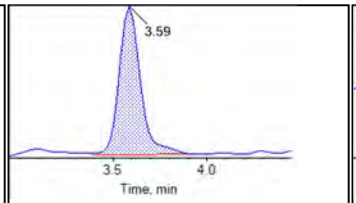


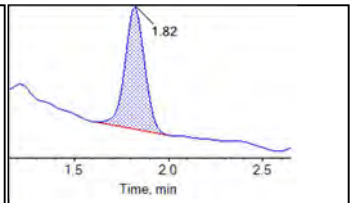
13C2-PFDoA



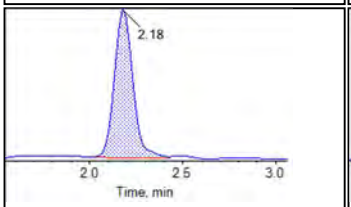
d3-MeFOSAA



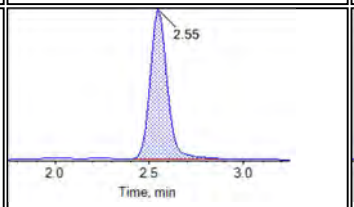
d5-EtFOSAA



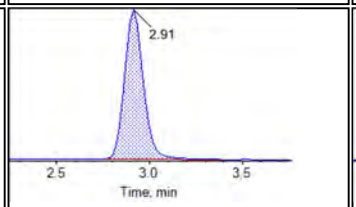
13C5-PFHxA



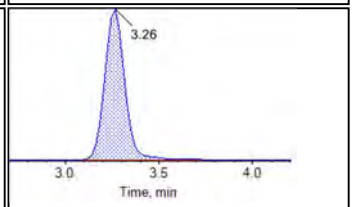
13C4-PFHpA



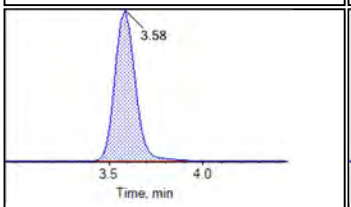
13C8-PFOA



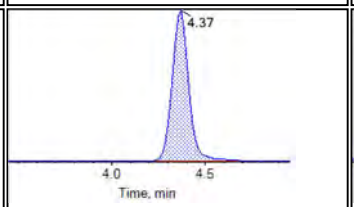
13C9-PFNA



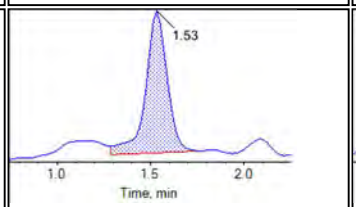
13C6-PFDA



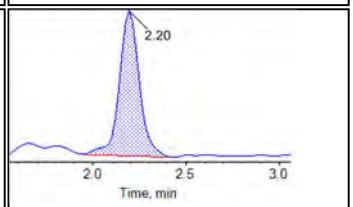
13C7-PFUnA



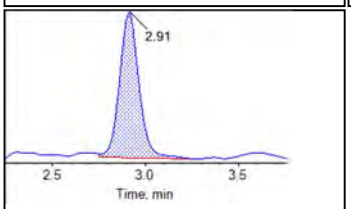
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

Created with Analyst Reporter
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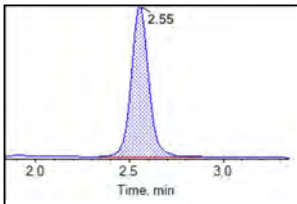
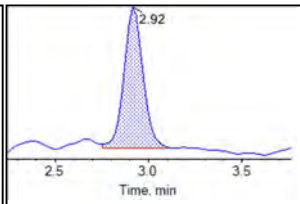
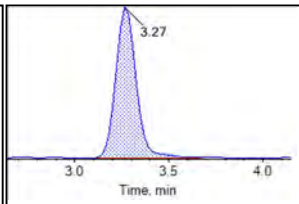
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

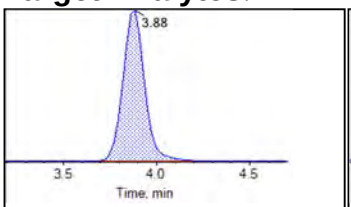
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:30:13 PM

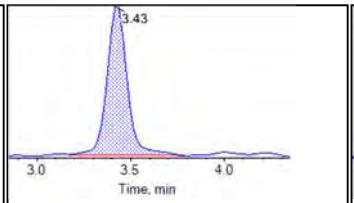
Sample Name	J7257-FS-D(5)	**Injection Vial**	46
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:00:02	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

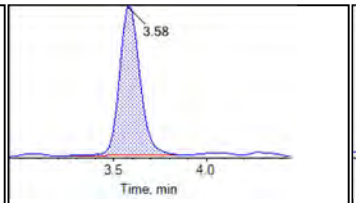
Target Analytes:



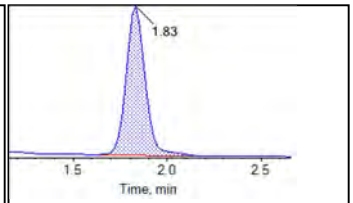
13C2-PFDoA



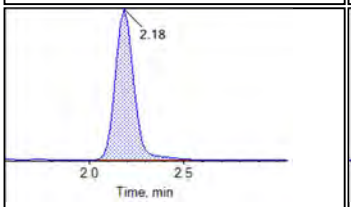
d3-MeFOSAA



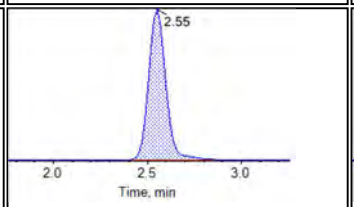
d5-EtFOSAA



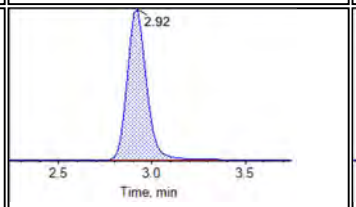
13C5-PFHxA



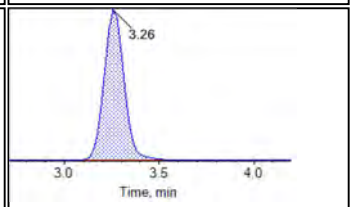
13C4-PFHpA



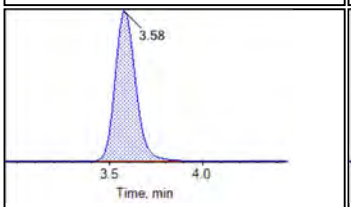
13C8-PFOA



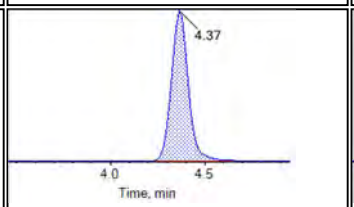
13C9-PFNA



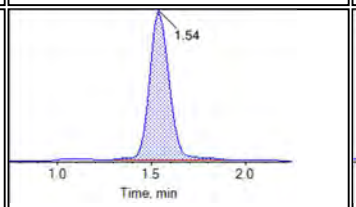
13C6-PFDA



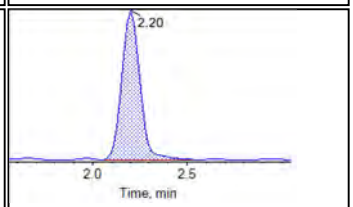
13C7-PFUnA



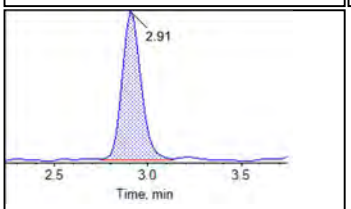
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

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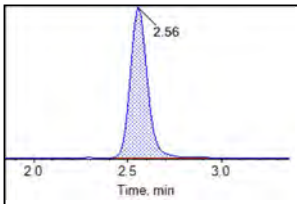
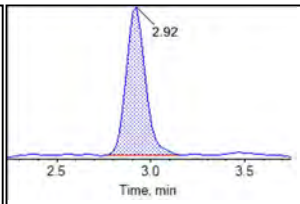
Printed: 27/08/2018 12:30:13 PM

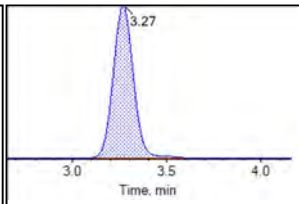
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

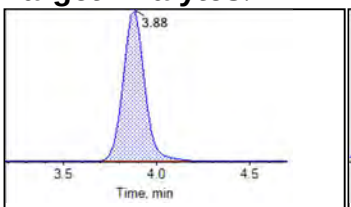
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:30:17 PM

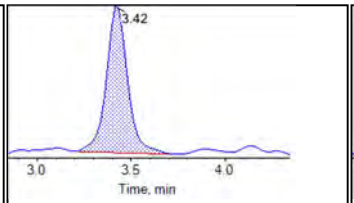
Sample Name	J7258-FS(4)	**Injection Vial**	47
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:10:55	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

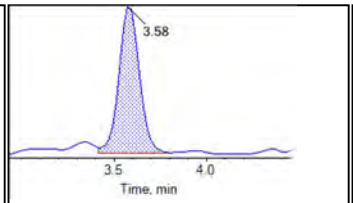
Target Analytes:



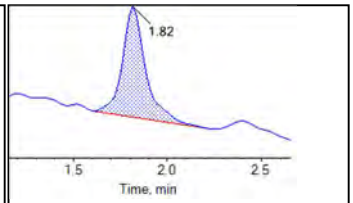
13C2-PFDoA



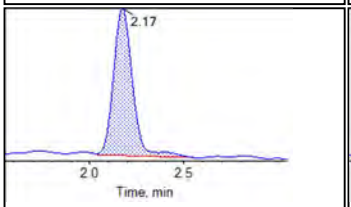
d3-MeFOSAA



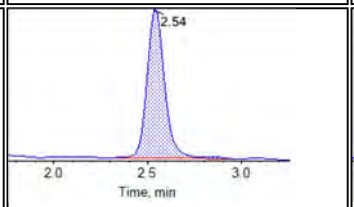
d5-EtFOSAA



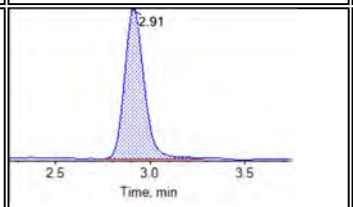
13C5-PFHxA



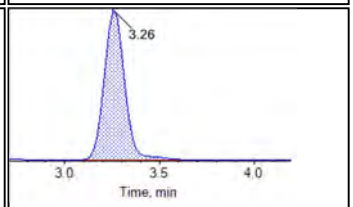
13C4-PFHpA



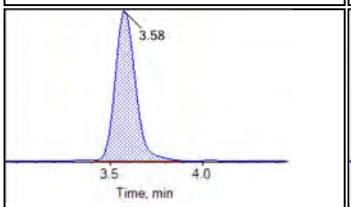
13C8-PFOA



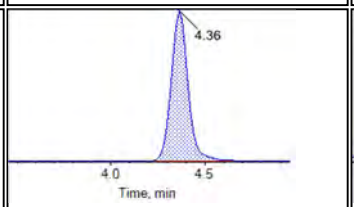
13C9-PFNA



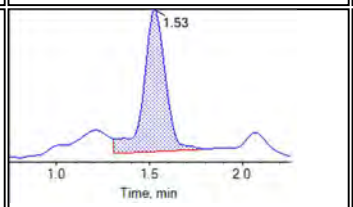
13C6-PFDA



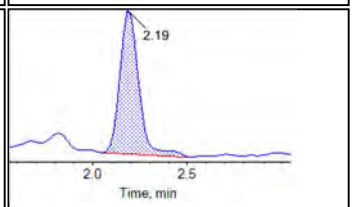
13C7-PFUnA



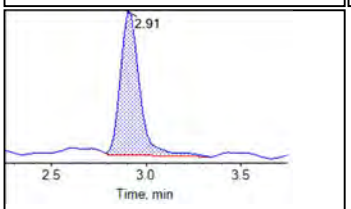
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

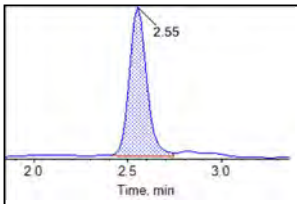


13C8-PFOS

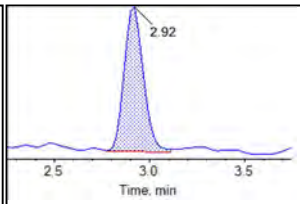
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:30:17 PM

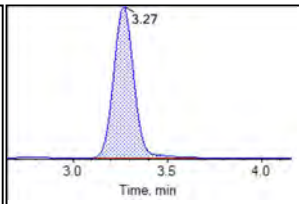
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

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Chromatogram Report

Created with Analyst Reporter
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Sample Name	J7258-FS-D(5)	**Injection Vial**	48
Sample ID	073118-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:21:47	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

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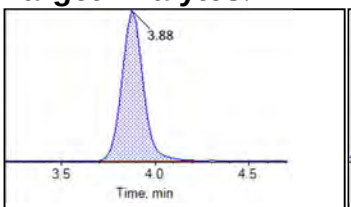
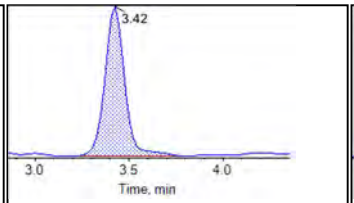
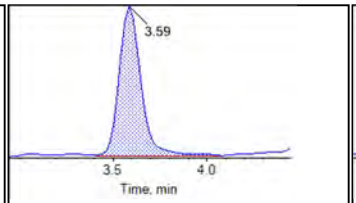


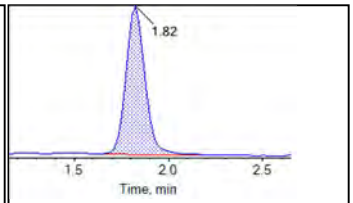
13C2-PFDoA



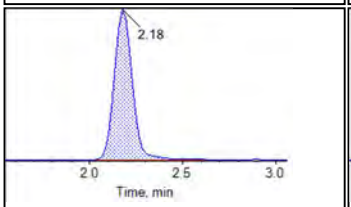
d3-MeFOSAA



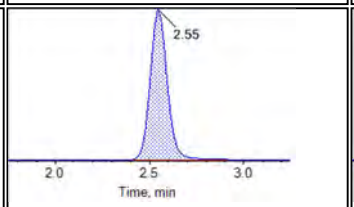
d5-EtFOSAA



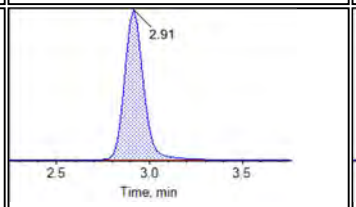
13C5-PFHxA



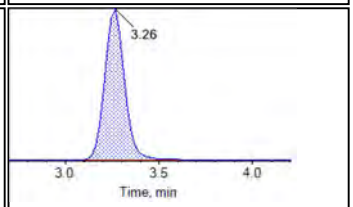
13C4-PFHpA



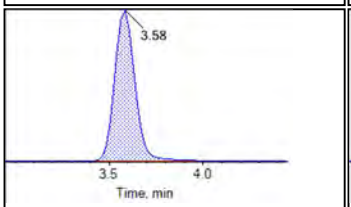
13C8-PFOA



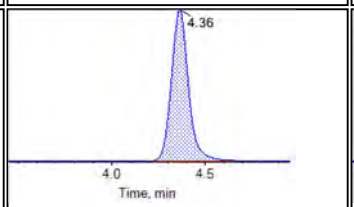
13C9-PFNA



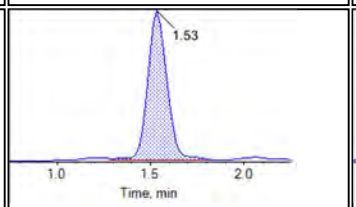
13C6-PFDA



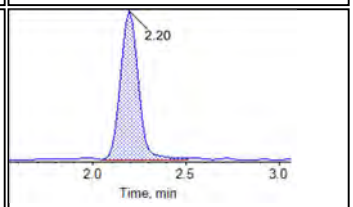
13C7-PFUnA



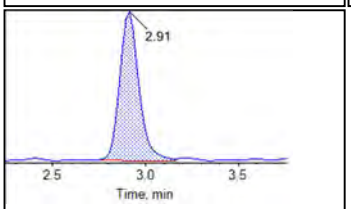
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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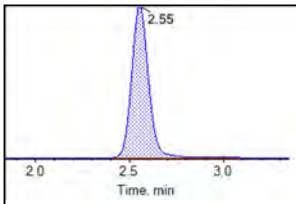
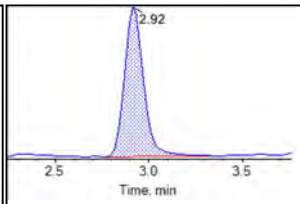
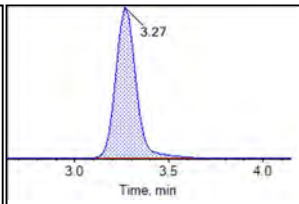


13C2-PFOA



13C4-PFOS



13C2-PFDA

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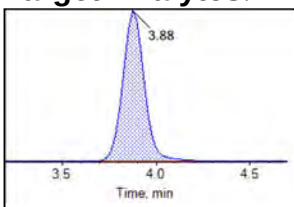
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:30:31 PM

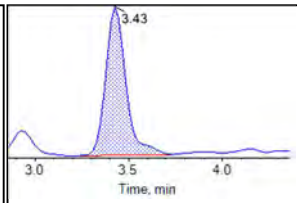
Sample Name	JY42 CCV	**Injection Vial**	49
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-16T06:32:39	**Data File**	18-0502.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497_SIS
Sample Comment			

Chromatograms

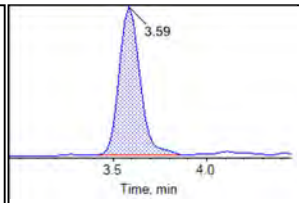
Target Analytes:



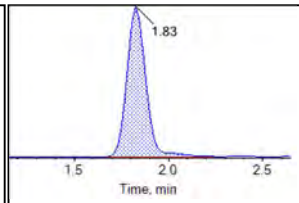
13C2-PFDoA



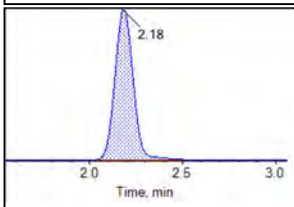
d3-MeFOSAA



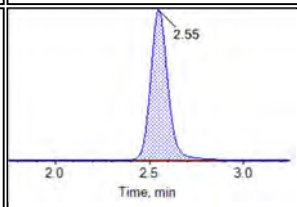
d5-EtFOSAA



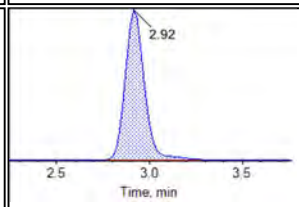
13C5-PFHxA



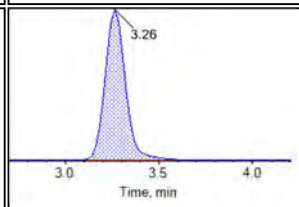
13C4-PFHpA



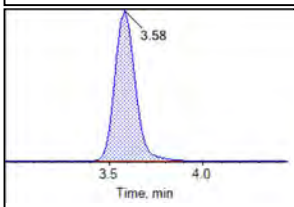
13C8-PFOA



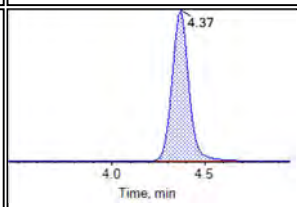
13C9-PFNA



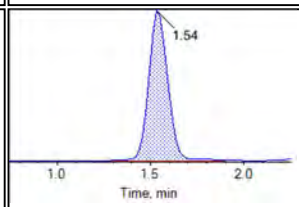
13C6-PFDA



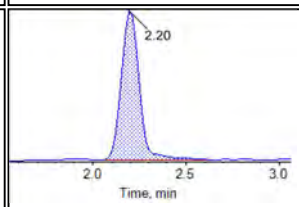
13C7-PFUnA



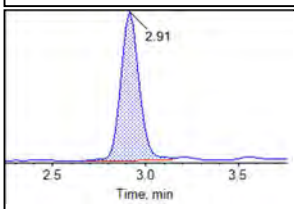
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

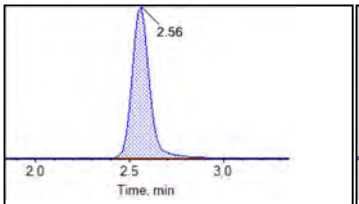


13C8-PFOS

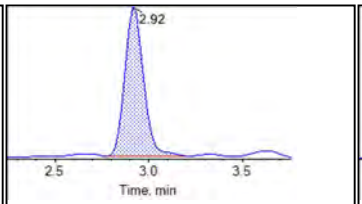
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:30:31 PM

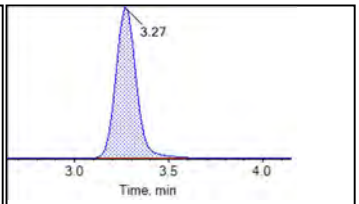
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

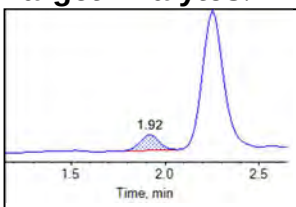
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:26:36 AM

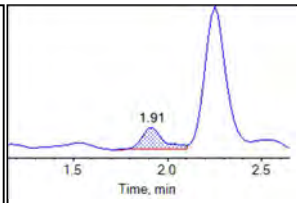
Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:22:05	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

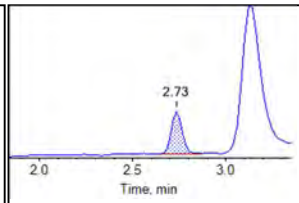
Target Analytes:



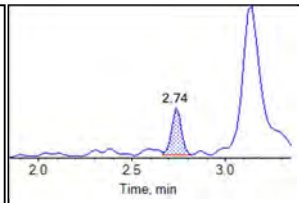
PFHxA_1



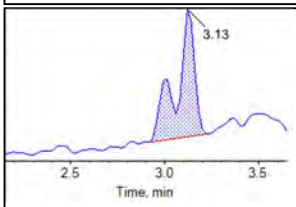
PFHxA_2



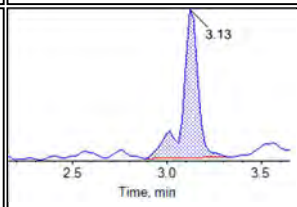
PFOA_1



PFOA_2

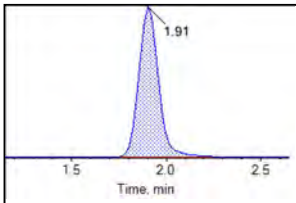


PFOS_1

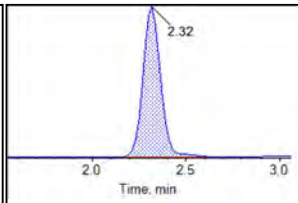


PFOS_2

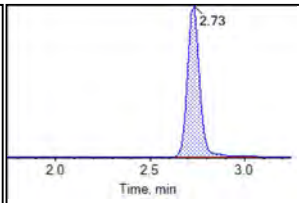
Internal Standards:



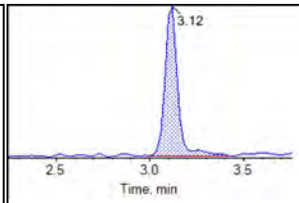
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

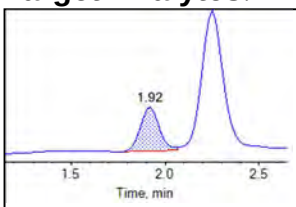
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:26:44 AM

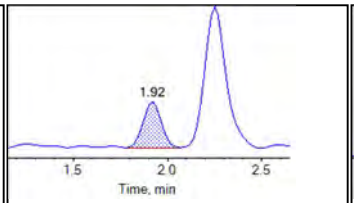
Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:32:58	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

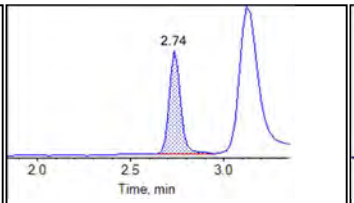
Target Analytes:



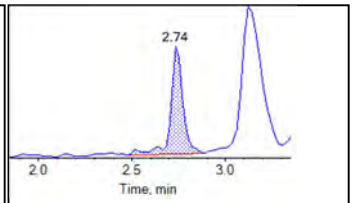
PFHxA_1



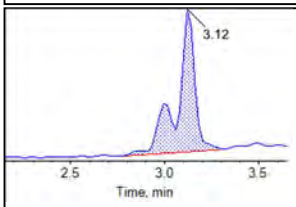
PFHxA_2



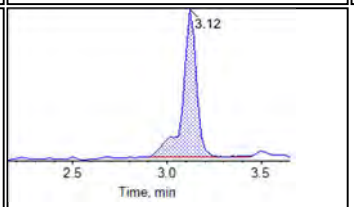
PFOA_1



PFOA_2

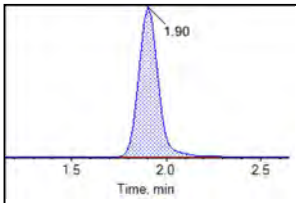


PFOS_1

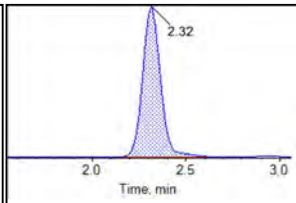


PFOS_2

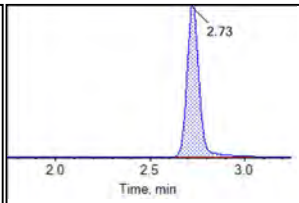
Internal Standards:



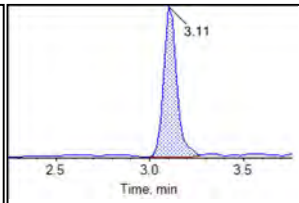
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

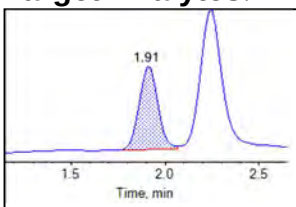
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:26:50 AM

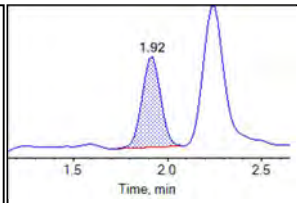
Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:43:51	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

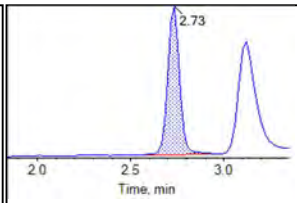
Target Analytes:



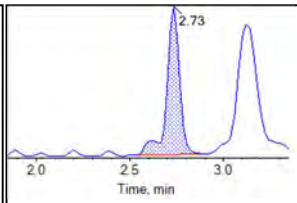
PFHxA_1



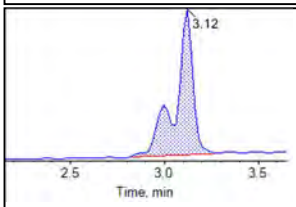
PFHxA_2



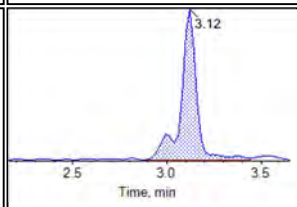
PFOA_1



PFOA_2

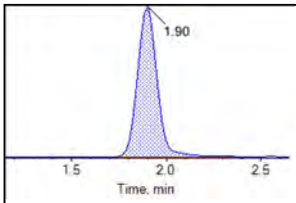


PFOS_1

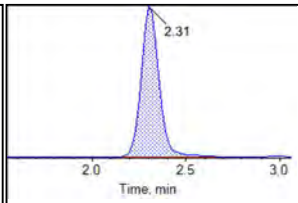


PFOS_2

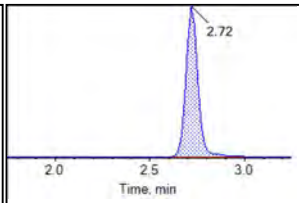
Internal Standards:



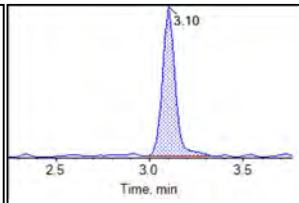
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

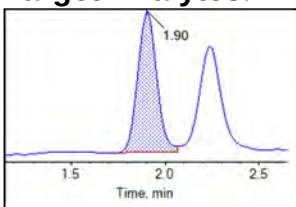
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:26:55 AM

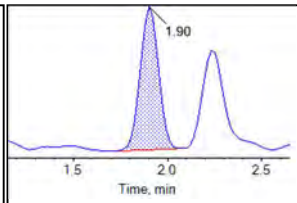
Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:54:43	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

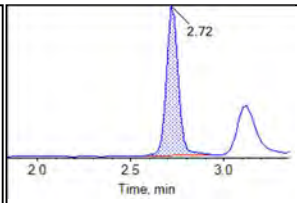
Target Analytes:



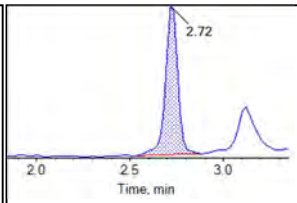
PFHxA_1



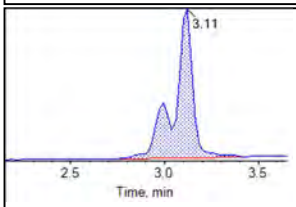
PFHxA_2



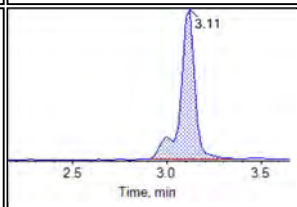
PFOA_1



PFOA_2

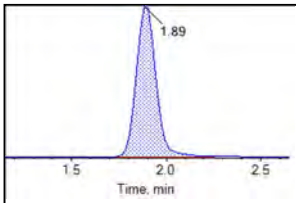


PFOS_1

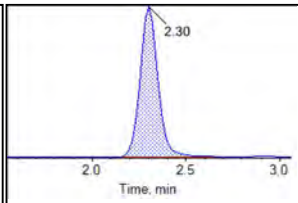


PFOS_2

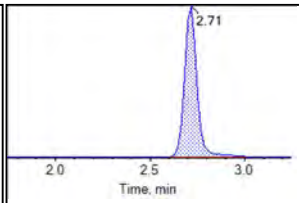
Internal Standards:



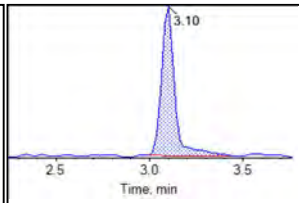
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

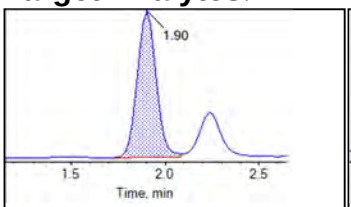
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:27:03 AM

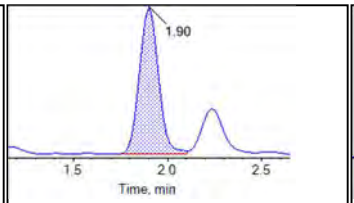
Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:05:35	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

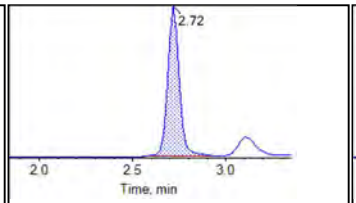
Target Analytes:



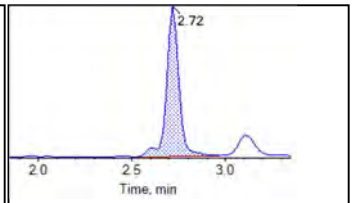
PFHxA_1



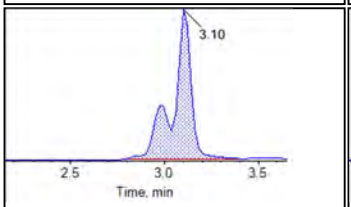
PFHxA_2



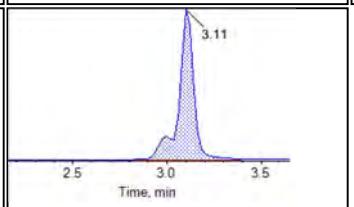
PFOA_1



PFOA_2

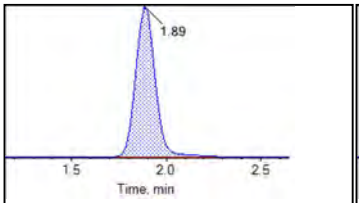


PFOS_1

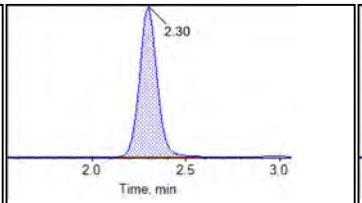


PFOS_2

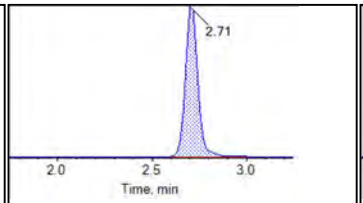
Internal Standards:



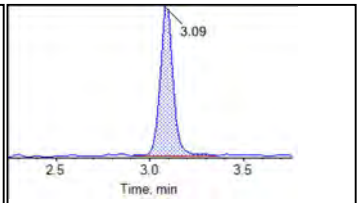
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

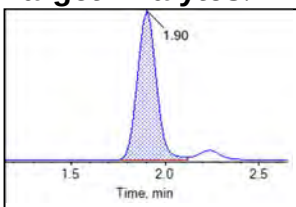
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:27:09 AM

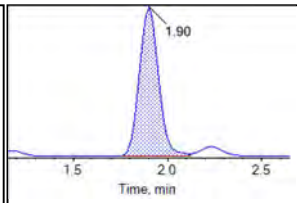
Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:16:27	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

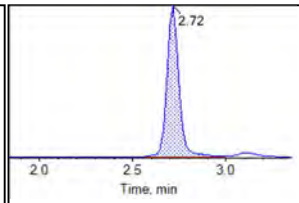
Target Analytes:



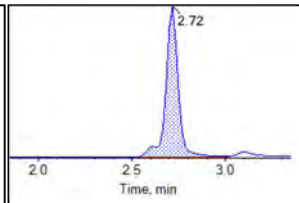
PFHxA_1



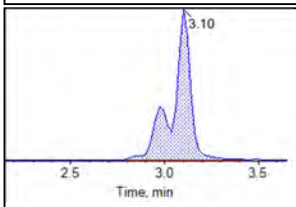
PFHxA_2



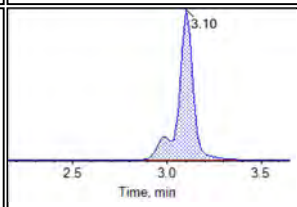
PFOA_1



PFOA_2

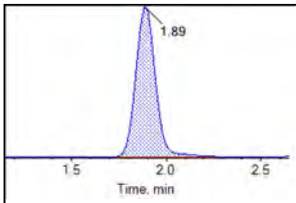


PFOS_1

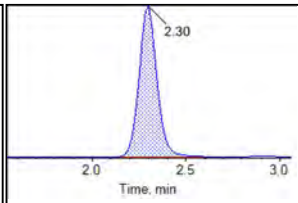


PFOS_2

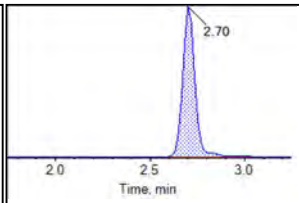
Internal Standards:



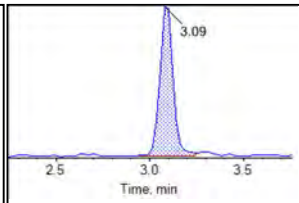
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

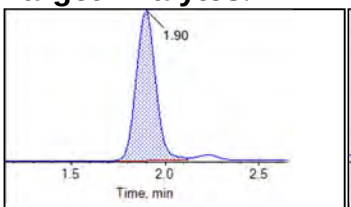
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:27:16 AM

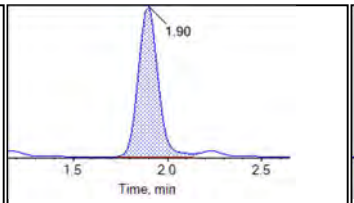
Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:27:19	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

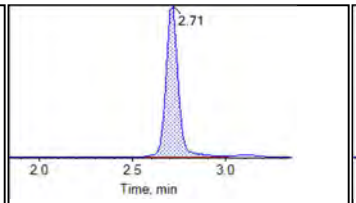
Target Analytes:



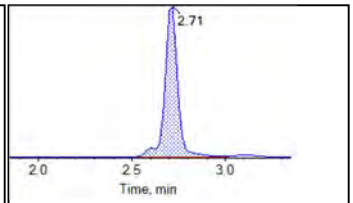
PFHxA_1



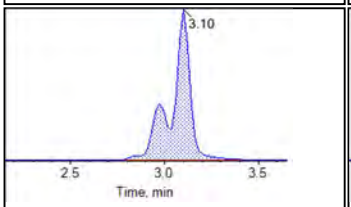
PFHxA_2



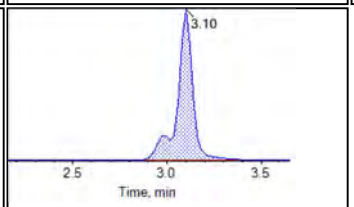
PFOA_1



PFOA_2

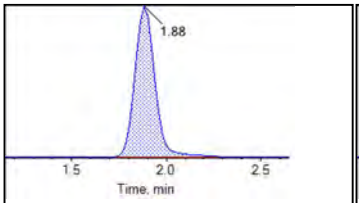


PFOS_1

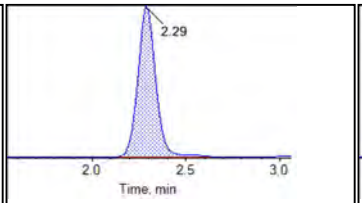


PFOS_2

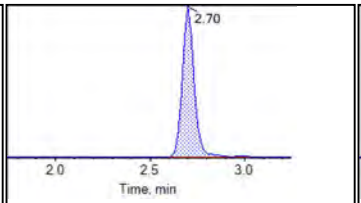
Internal Standards:



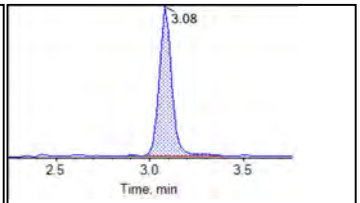
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

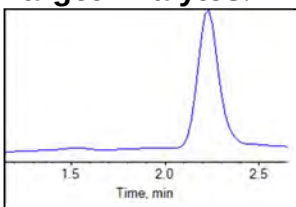
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:27:22 AM

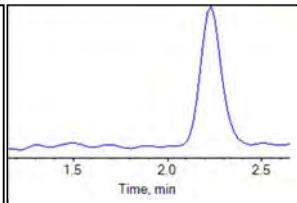
Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:38:11	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

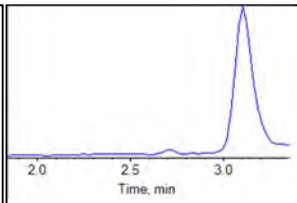
Target Analytes:



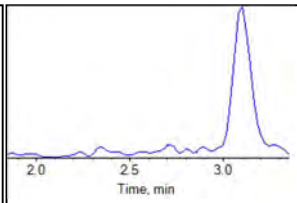
PFHxA_1



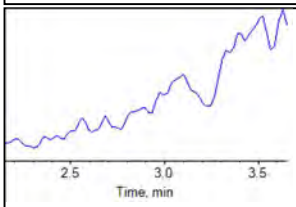
PFHxA_2



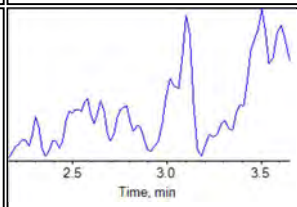
PFOA_1



PFOA_2

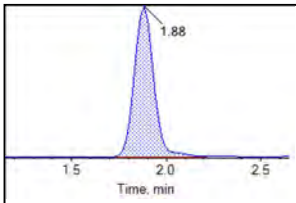


PFOS_1

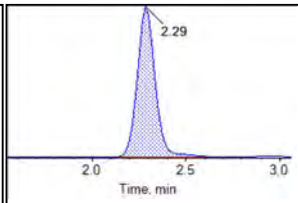


PFOS_2

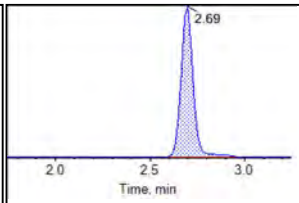
Internal Standards:



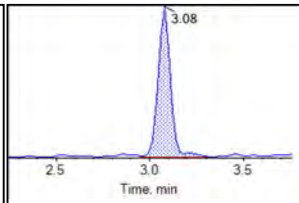
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

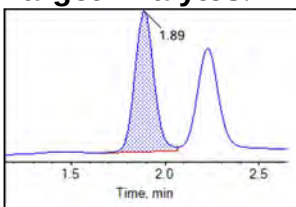
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:27:27 AM

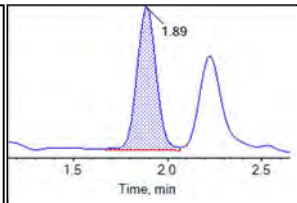
Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

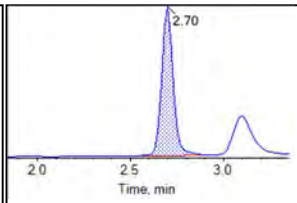
Target Analytes:



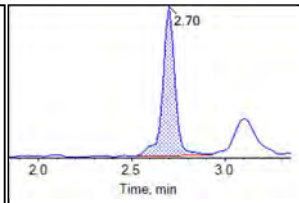
PFHxA_1



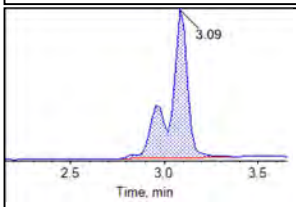
PFHxA_2



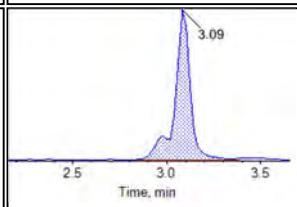
PFOA_1



PFOA_2

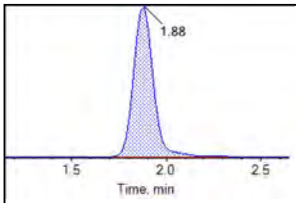


PFOS_1

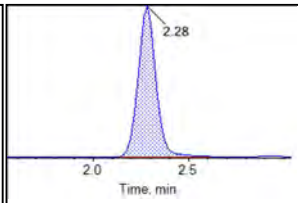


PFOS_2

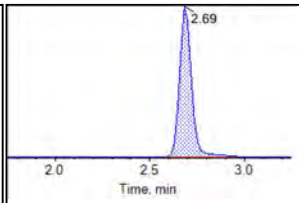
Internal Standards:



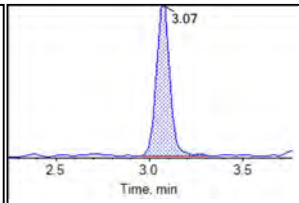
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

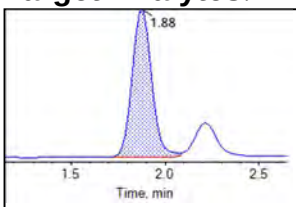
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:27:43 AM

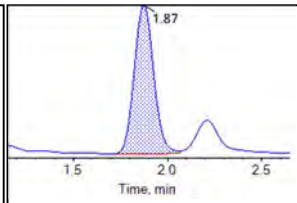
Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

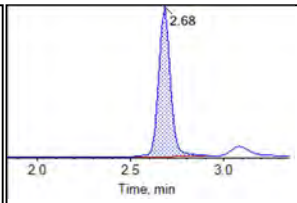
Target Analytes:



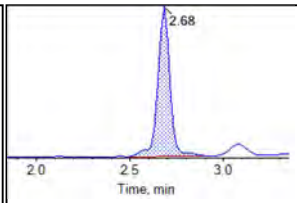
PFHxA_1



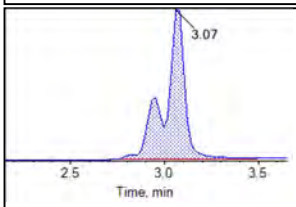
PFHxA_2



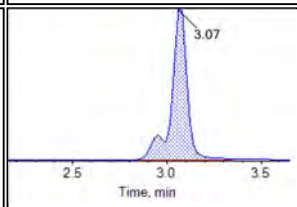
PFOA_1



PFOA_2

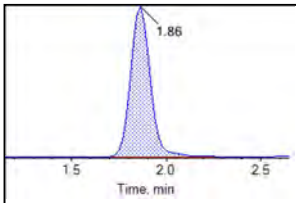


PFOS_1

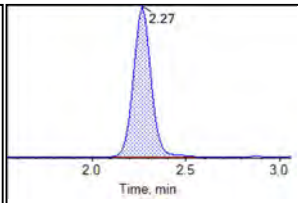


PFOS_2

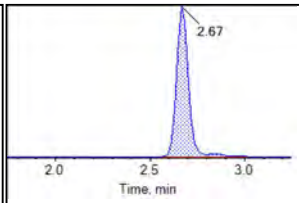
Internal Standards:



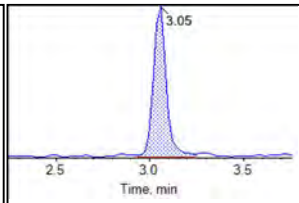
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

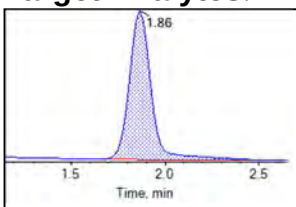
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:27:54 AM

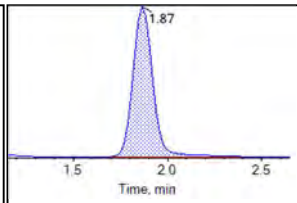
Sample Name	J7249-FS-D(8)	**Injection Vial**	27
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:48:13	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

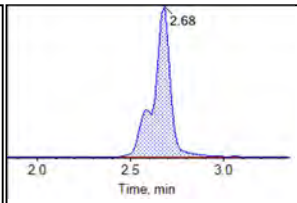
Target Analytes:



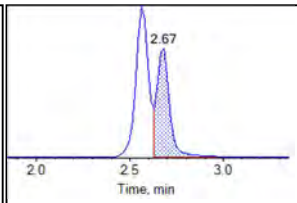
PFHxA_1



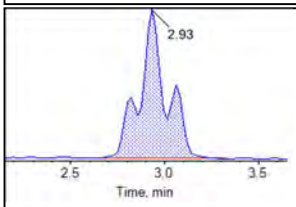
PFHxA_2



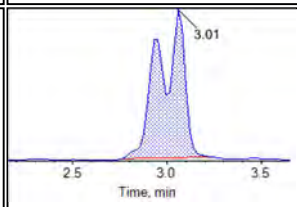
PFOA_1



PFOA_2

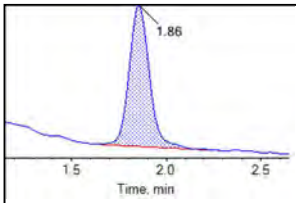


PFOS_1

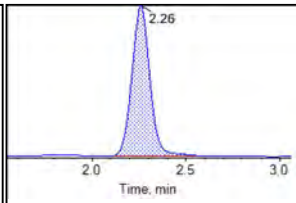


PFOS_2

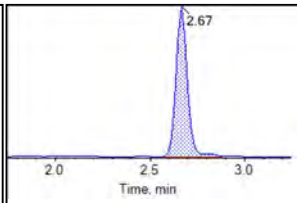
Internal Standards:



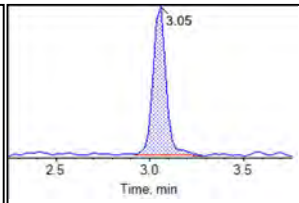
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

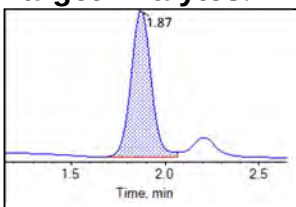
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:27:59 AM

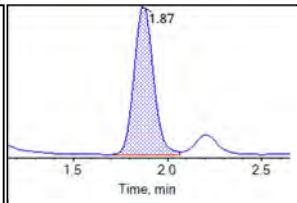
Sample Name	J7249-FS-D(9)	**Injection Vial**	28
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:59:04	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

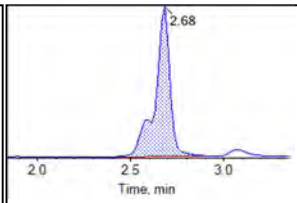
Target Analytes:



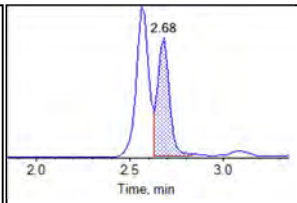
PFHxA_1



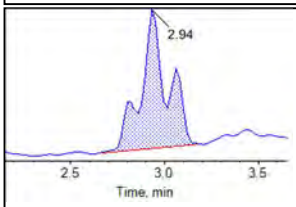
PFHxA_2



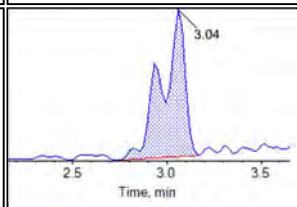
PFOA_1



PFOA_2

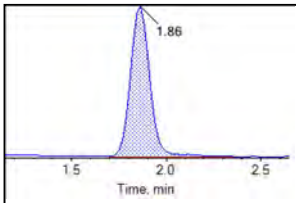


PFOS_1

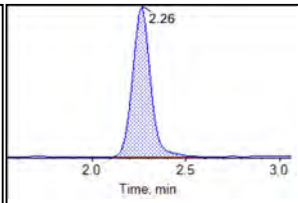


PFOS_2

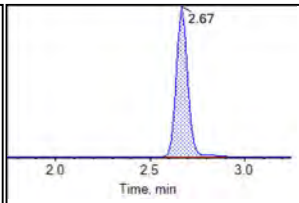
Internal Standards:



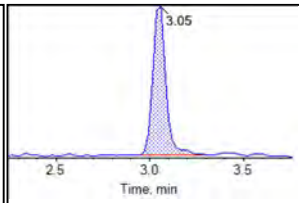
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

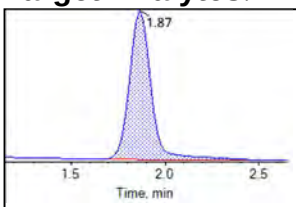
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:28:04 AM

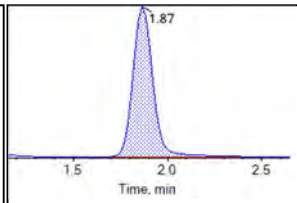
Sample Name	J7249MS-FS-D(8)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:09:56	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

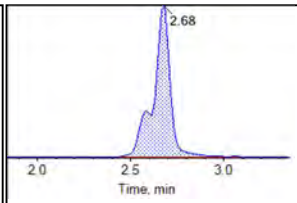
Target Analytes:



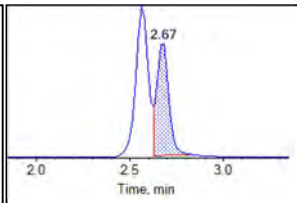
PFHxA_1



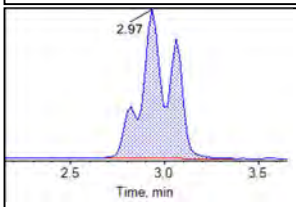
PFHxA_2



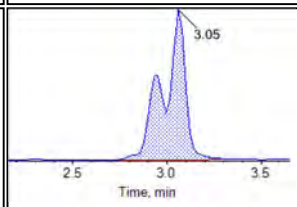
PFOA_1



PFOA_2

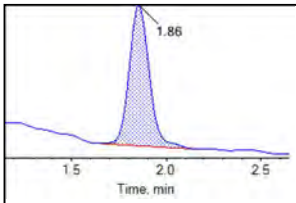


PFOS_1

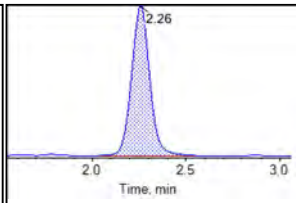


PFOS_2

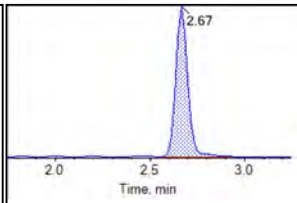
Internal Standards:



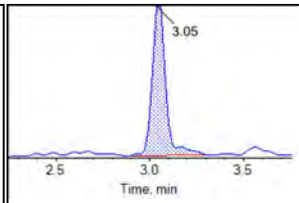
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

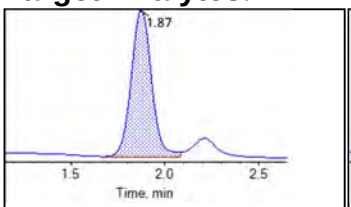
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:28:10 AM

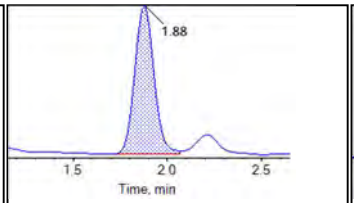
Sample Name	J7249MS-FS-D(9)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:20:48	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

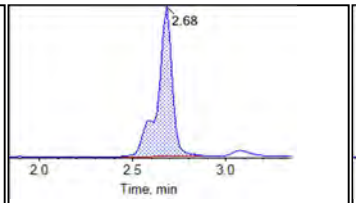
Target Analytes:



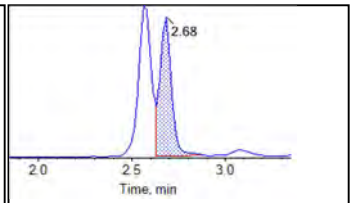
PFHxA_1



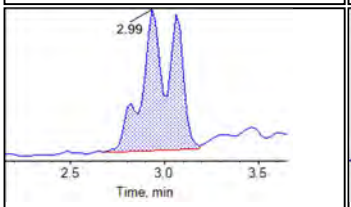
PFHxA_2



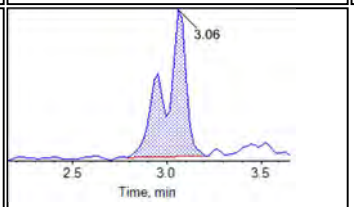
PFOA_1



PFOA_2

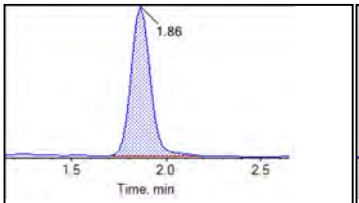


PFOS_1

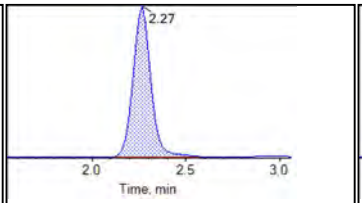


PFOS_2

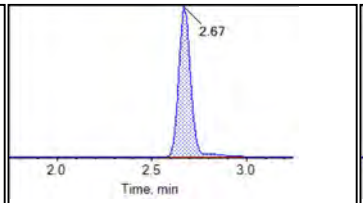
Internal Standards:



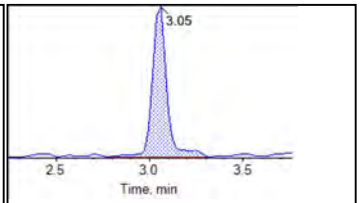
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

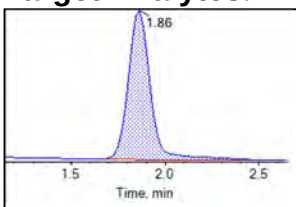
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:28:15 AM

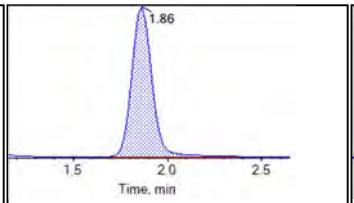
Sample Name	J7249MSD-FS-D(8)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:31:41	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

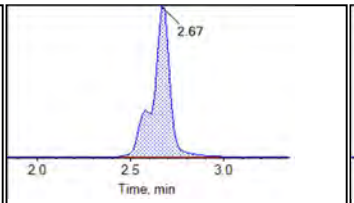
Target Analytes:



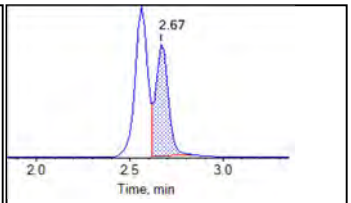
PFHxA_1



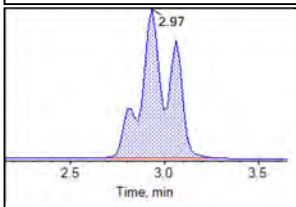
PFHxA_2



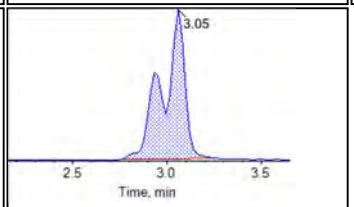
PFOA_1



PFOA_2

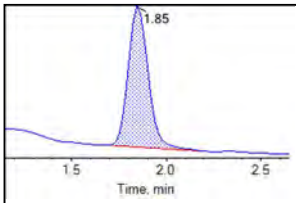


PFOS_1

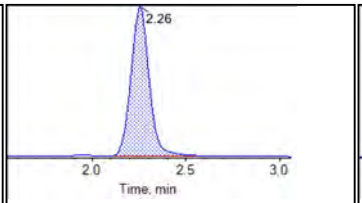


PFOS_2

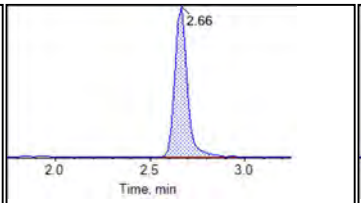
Internal Standards:



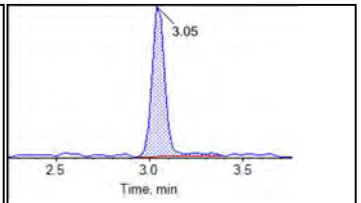
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

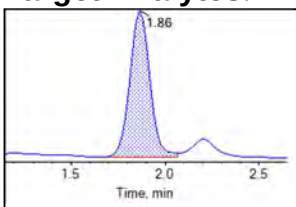
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:28:20 AM

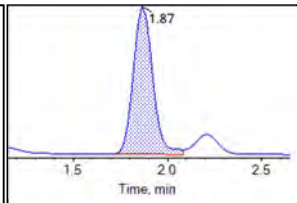
Sample Name	J7249MSD-FS-D(9)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:42:34	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

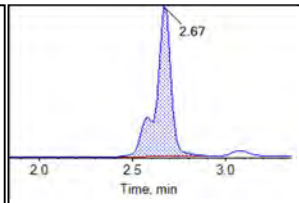
Target Analytes:



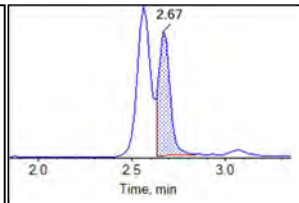
PFHxA_1



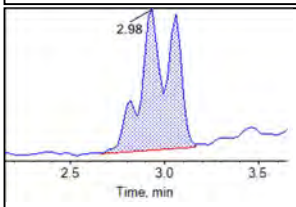
PFHxA_2



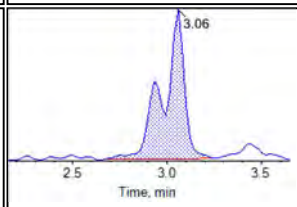
PFOA_1



PFOA_2

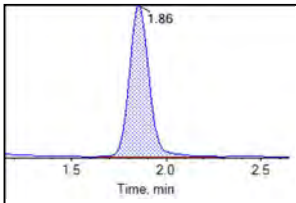


PFOS_1

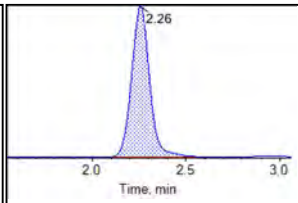


PFOS_2

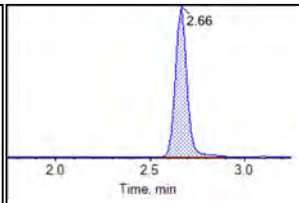
Internal Standards:



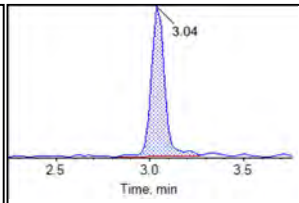
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

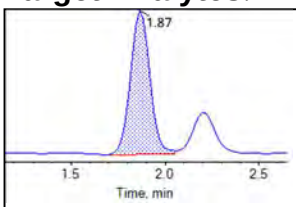
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:28:26 AM

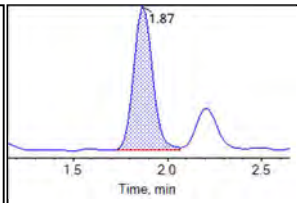
Sample Name	J7257-FS-D(9)	**Injection Vial**	33
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:53:25	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

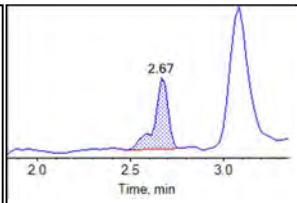
Target Analytes:



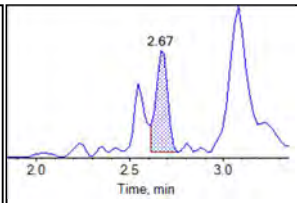
PFHxA_1



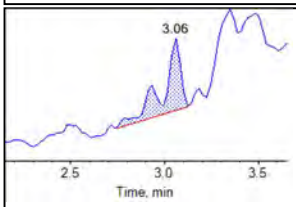
PFHxA_2



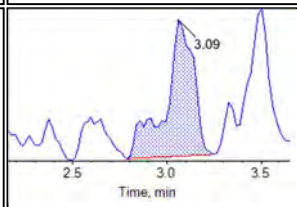
PFOA_1



PFOA_2

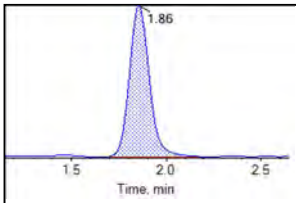


PFOS_1

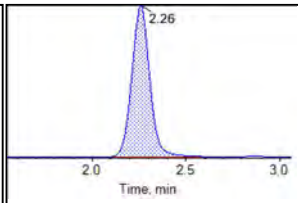


PFOS_2

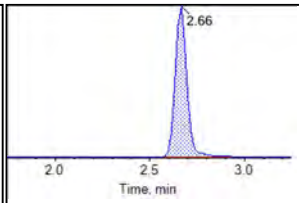
Internal Standards:



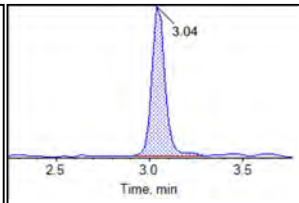
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

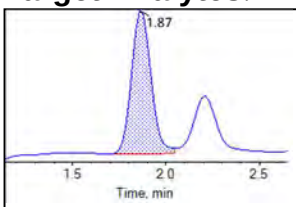
Chromatogram Report

Created with Analyst Reporter
Printed: 27/09/2018 7:28:31 AM

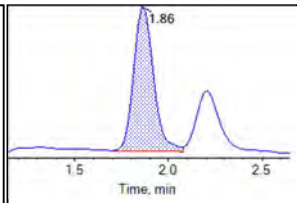
Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

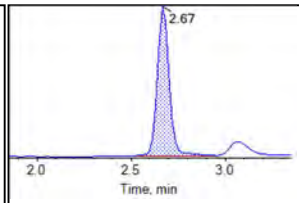
Target Analytes:



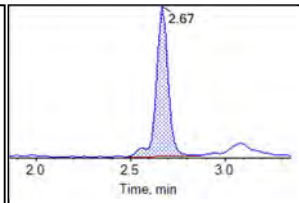
PFHxA_1



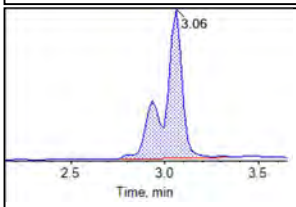
PFHxA_2



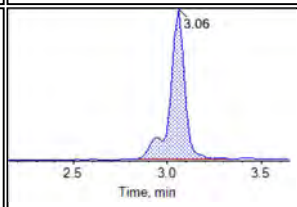
PFOA_1



PFOA_2

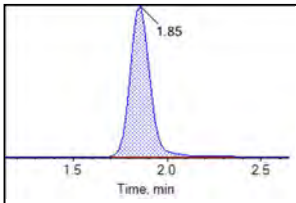


PFOS_1

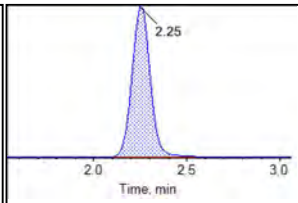


PFOS_2

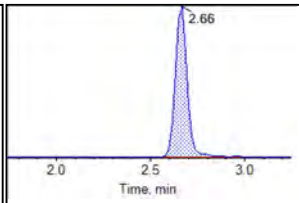
Internal Standards:



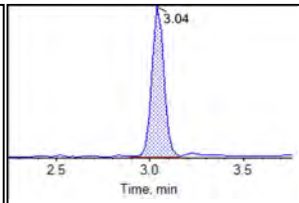
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

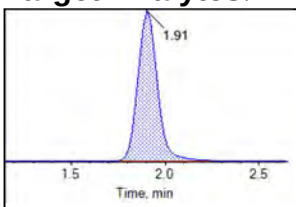
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:36:23 PM

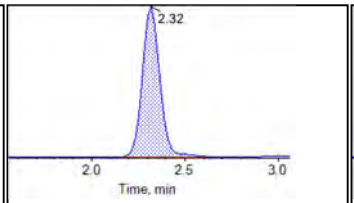
Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:22:05	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

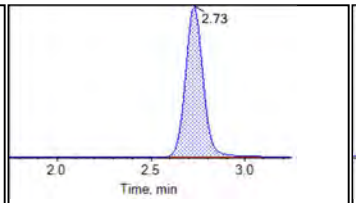
Target Analytes:



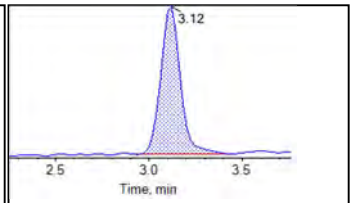
13C5-PFHxA



13C4-PFHpA

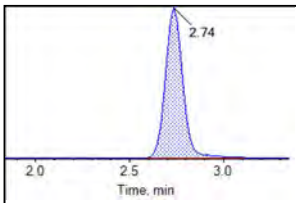


13C8-PFOA

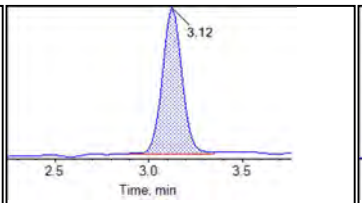


13C8-PFOS

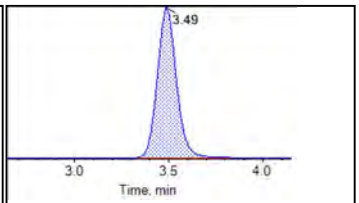
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

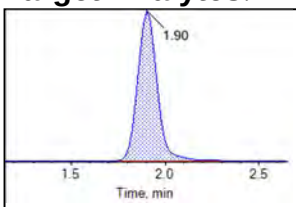
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:36:27 PM

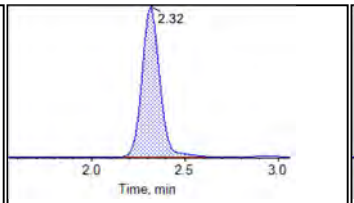
Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:32:58	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

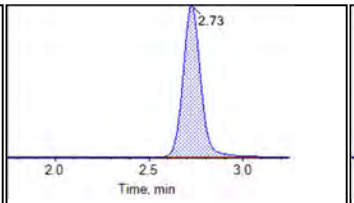
Target Analytes:



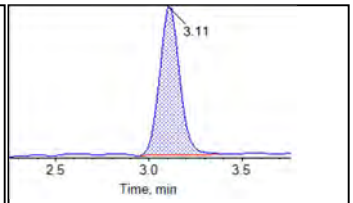
13C5-PFHxA



13C4-PFHpA

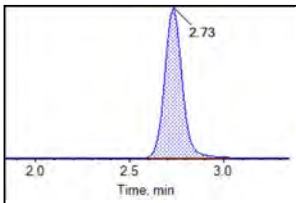


13C8-PFOA

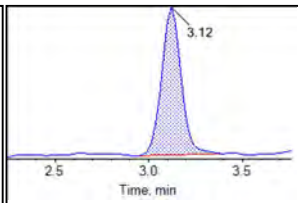


13C8-PFOS

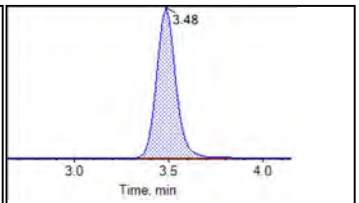
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

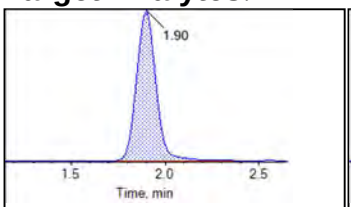
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:36:31 PM

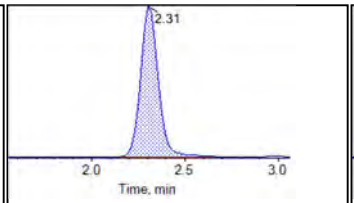
Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:43:51	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

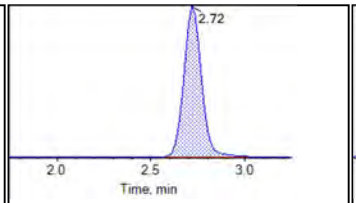
Target Analytes:



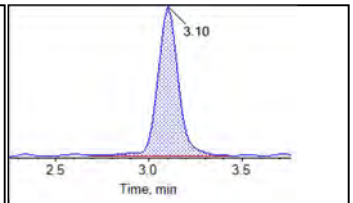
13C5-PFHxA



13C4-PFHpA

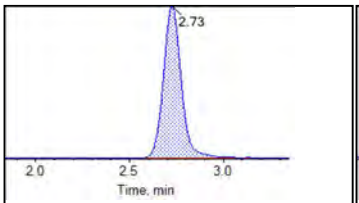


13C8-PFOA

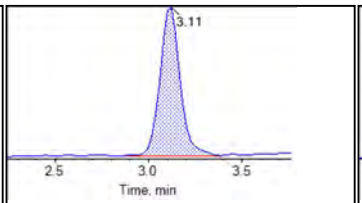


13C8-PFOS

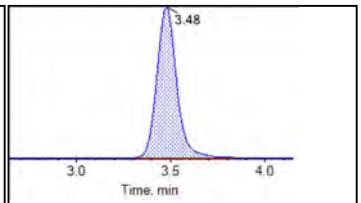
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

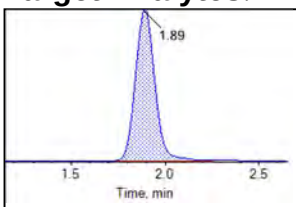
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:36:35 PM

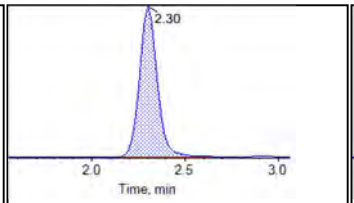
Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:54:43	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

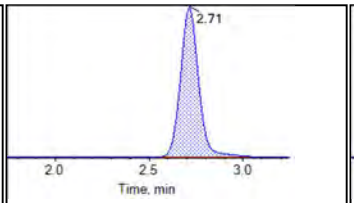
Target Analytes:



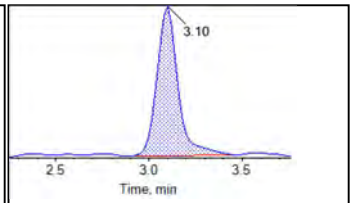
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

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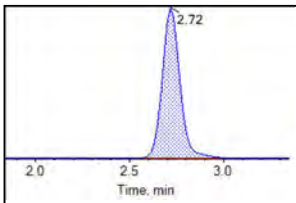
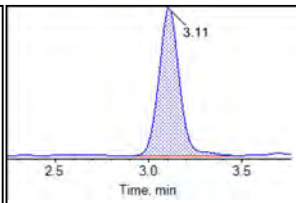
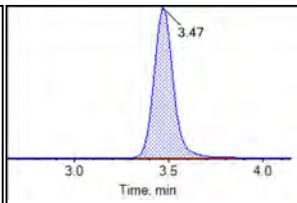


13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

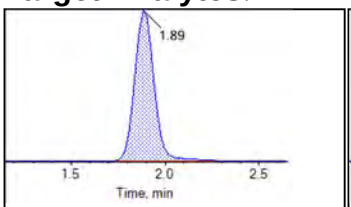
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:36:39 PM

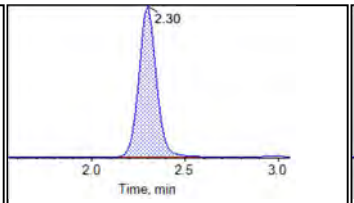
Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:05:35	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

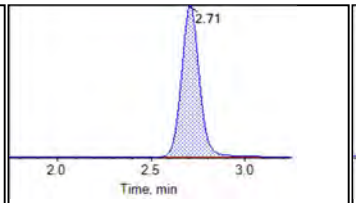
Target Analytes:



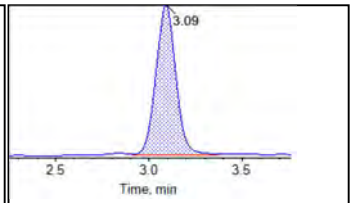
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

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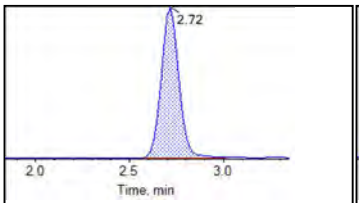
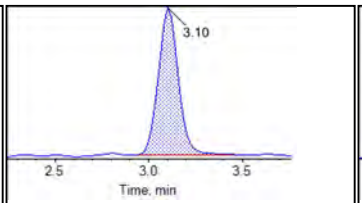
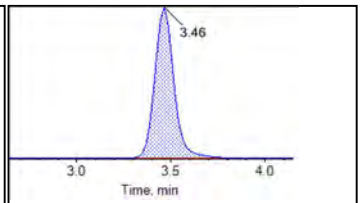


13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

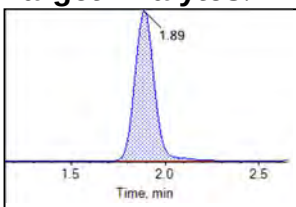
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:36:43 PM

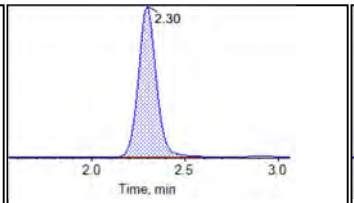
Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:16:27	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

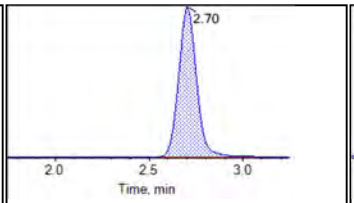
Target Analytes:



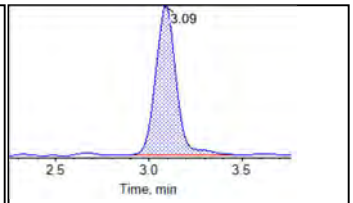
13C5-PFHxA



13C4-PFHpA

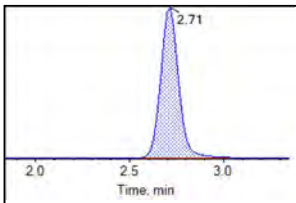


13C8-PFOA

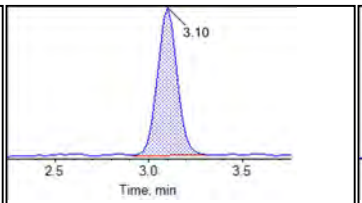


13C8-PFOS

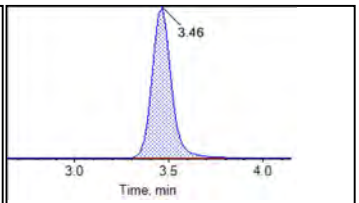
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

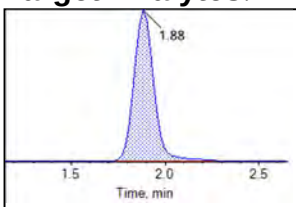
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:36:47 PM

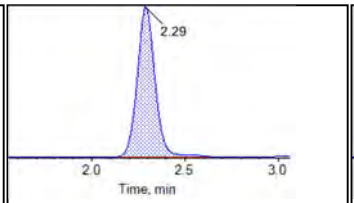
Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:27:19	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

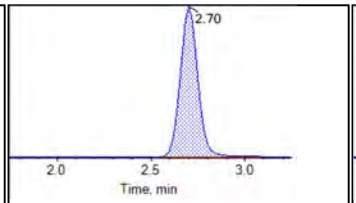
Target Analytes:



13C5-PFHxA



13C4-PFHpA



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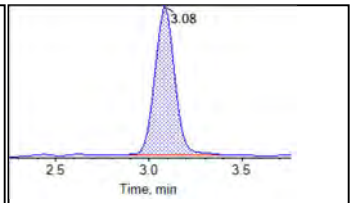
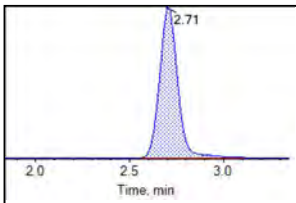
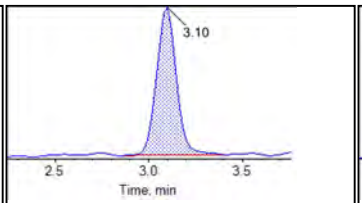


13C8-PFOS

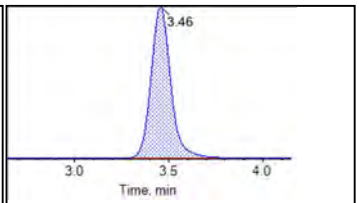
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

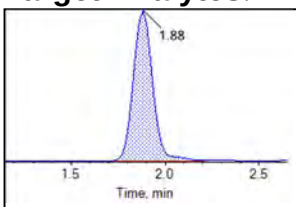
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:36:51 PM

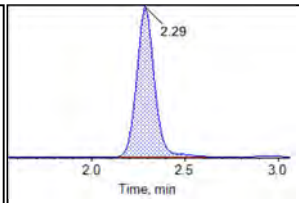
Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:38:11	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

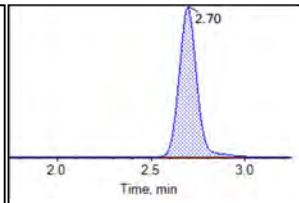
Target Analytes:



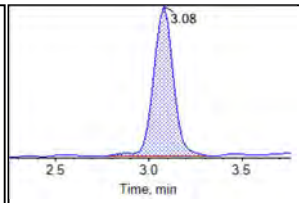
13C5-PFHxA



13C4-PFHpA

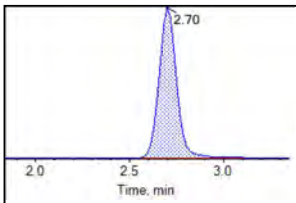


13C8-PFOA

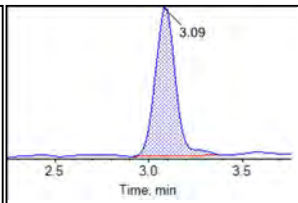


13C8-PFOS

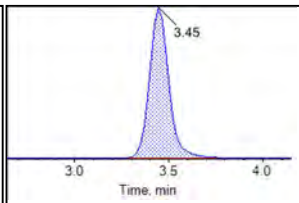
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

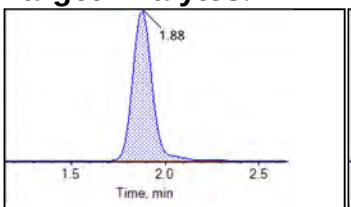
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:36:55 PM

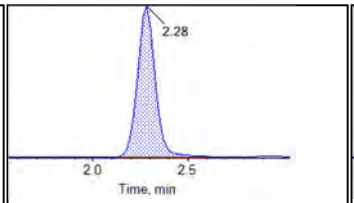
Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

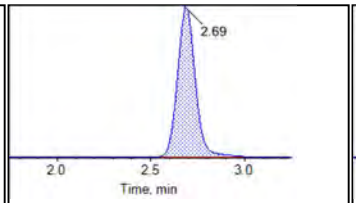
Target Analytes:



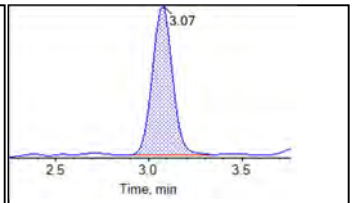
13C5-PFHxA



13C4-PFHpA

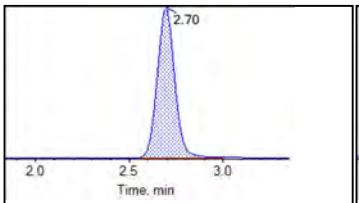


13C8-PFOA

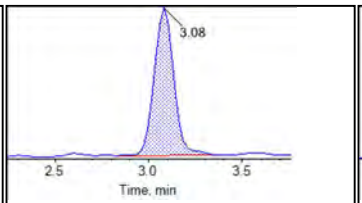


13C8-PFOS

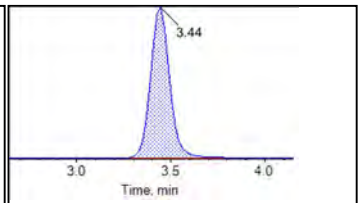
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

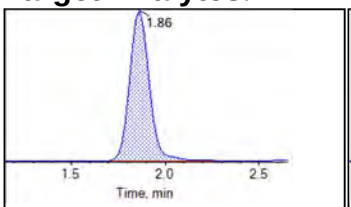
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:37:07 PM

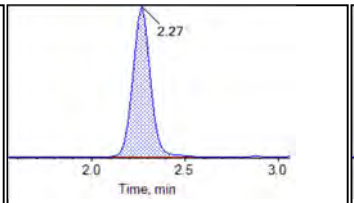
Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

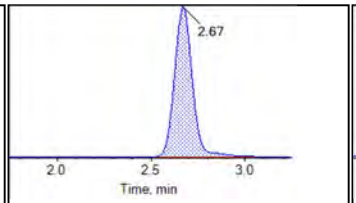
Target Analytes:



13C5-PFHxA



13C4-PFHpA



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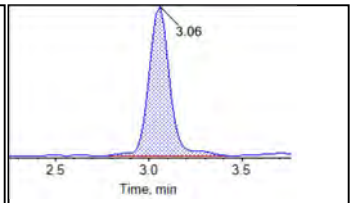
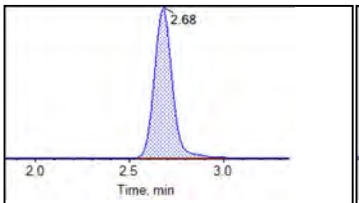
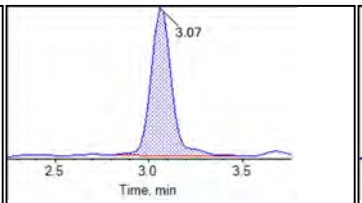


13C8-PFOS

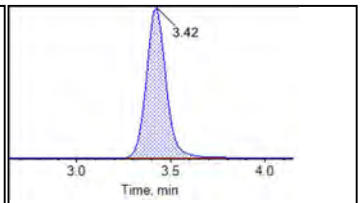
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

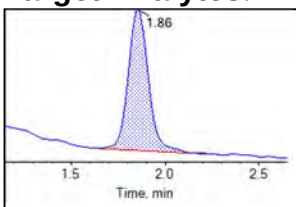
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:37:15 PM

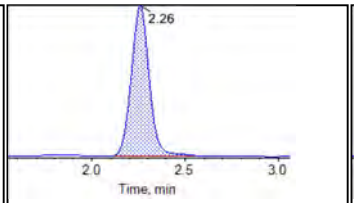
Sample Name	J7249-FS-D(8)	**Injection Vial**	27
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:48:13	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

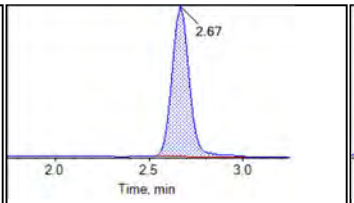
Target Analytes:



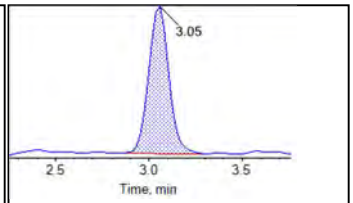
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

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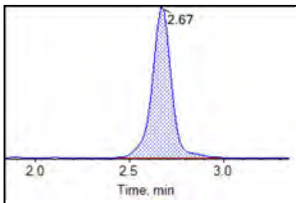
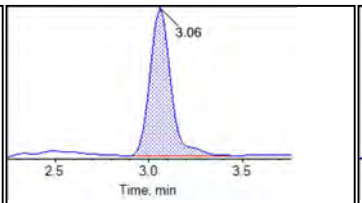
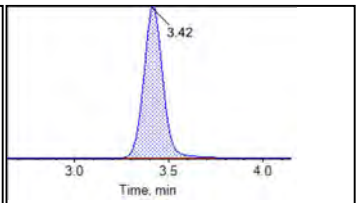


13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

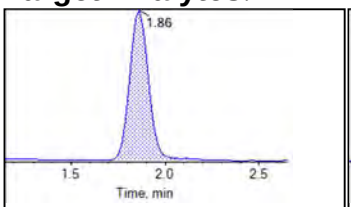
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:37:20 PM

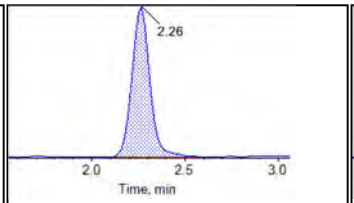
Sample Name	J7249-FS-D(9)	**Injection Vial**	28
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:59:04	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

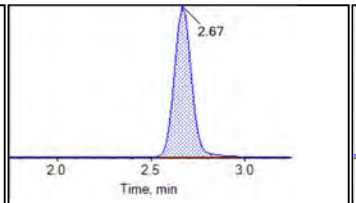
Target Analytes:



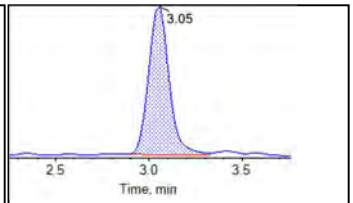
13C5-PFHxA



13C4-PFHpA

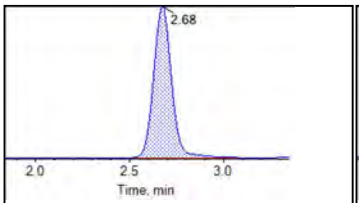


13C8-PFOA

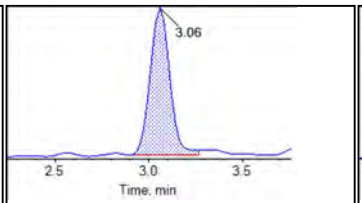


13C8-PFOS

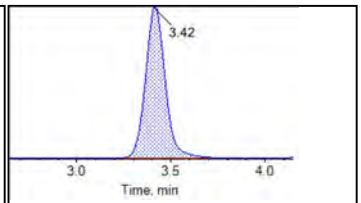
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

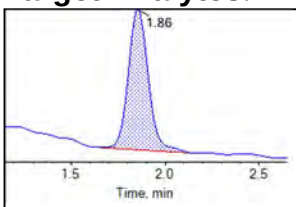
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:37:24 PM

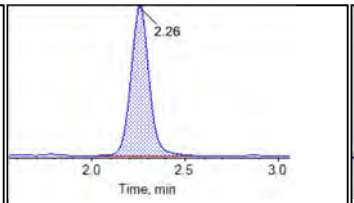
Sample Name	J7249MS-FS-D(8)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:09:56	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

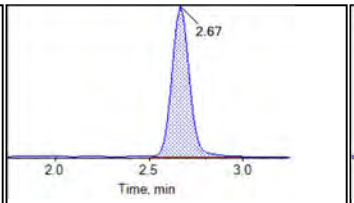
Target Analytes:



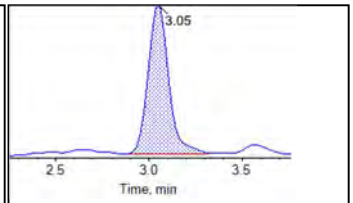
13C5-PFHxA



13C4-PFHpA

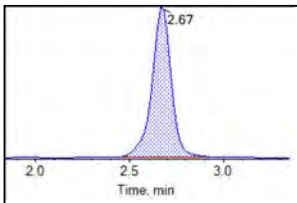


13C8-PFOA

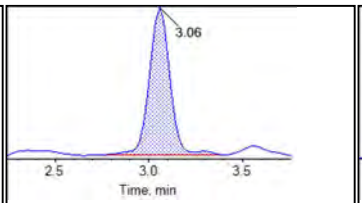


13C8-PFOS

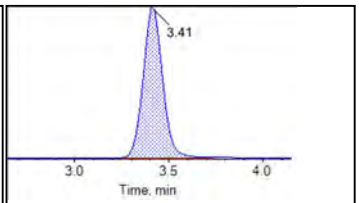
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

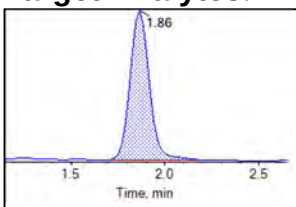
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:37:30 PM

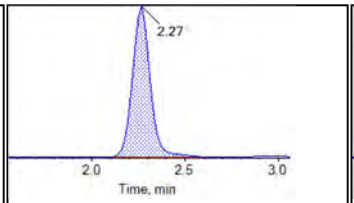
Sample Name	J7249MS-FS-D(9)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:20:48	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

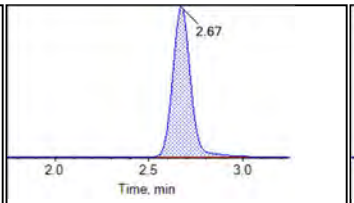
Target Analytes:



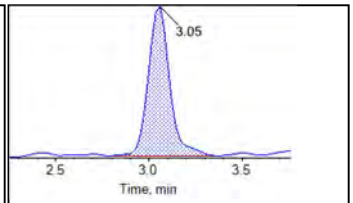
13C5-PFHxA



13C4-PFHpA

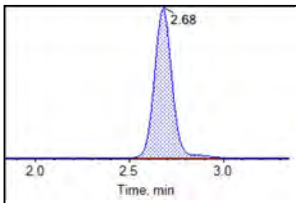


13C8-PFOA

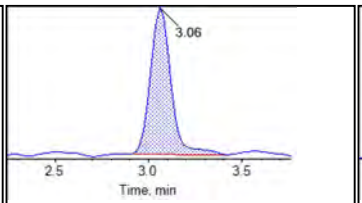


13C8-PFOS

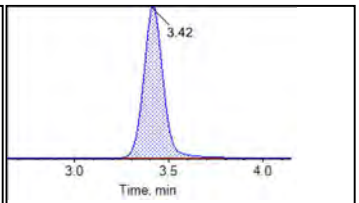
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

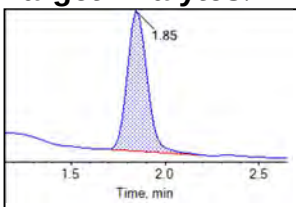
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:37:35 PM

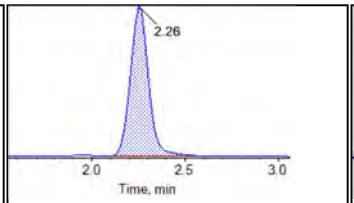
Sample Name	J7249MSD-FS-D(8)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:31:41	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

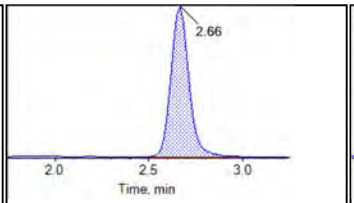
Target Analytes:



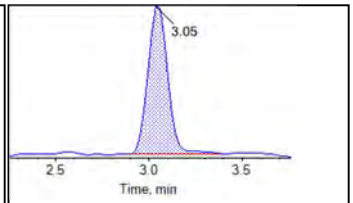
13C5-PFHxA



13C4-PFHpA

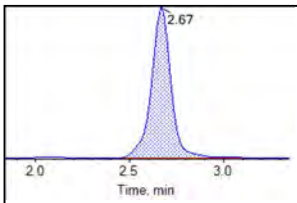


13C8-PFOA

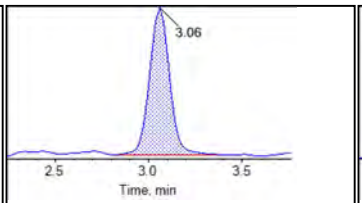


13C8-PFOS

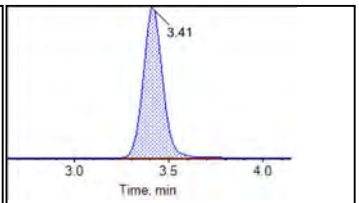
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

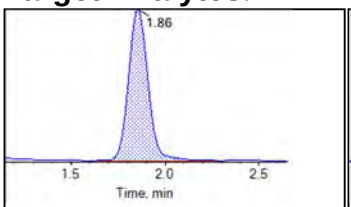
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:37:42 PM

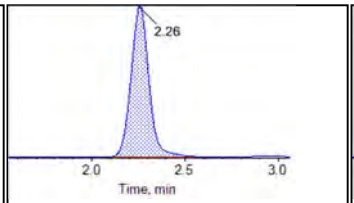
Sample Name	J7249MSD-FS-D(9)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:42:34	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

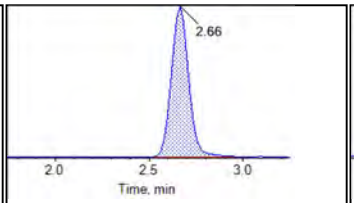
Target Analytes:



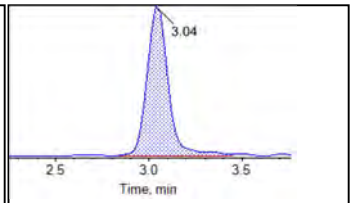
13C5-PFHxA



13C4-PFHpA

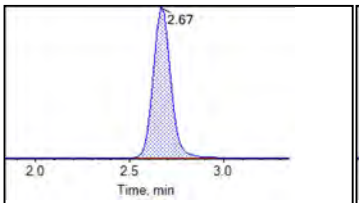


13C8-PFOA

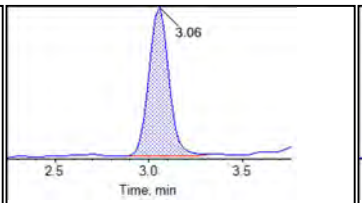


13C8-PFOS

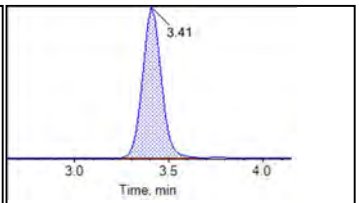
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

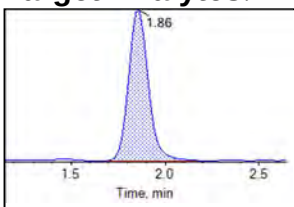
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:37:46 PM

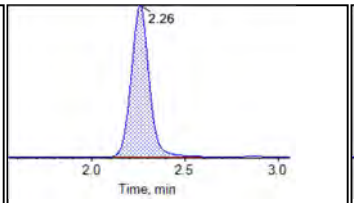
Sample Name	J7257-FS-D(9)	**Injection Vial**	33
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:53:25	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

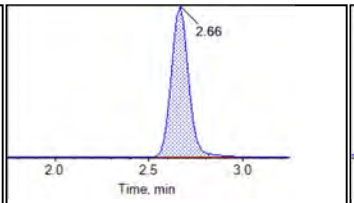
Target Analytes:



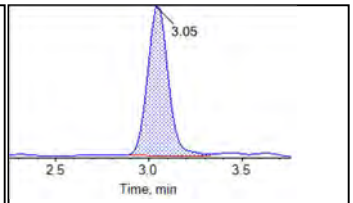
13C5-PFHxA



13C4-PFHpA

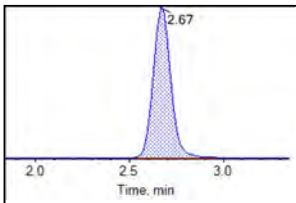


13C8-PFOA

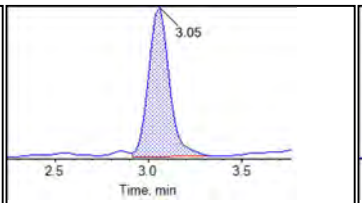


13C8-PFOS

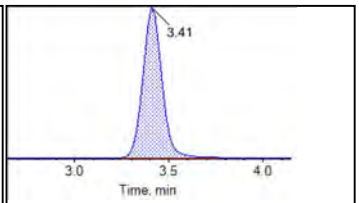
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

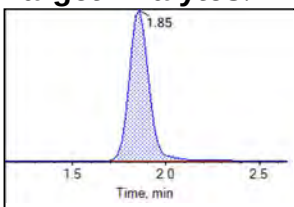
Chromatogram Report

Created with Analyst Reporter
Printed: 27/08/2018 12:37:51 PM

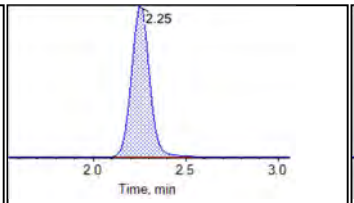
Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_SIS
Sample Comment			

Chromatograms

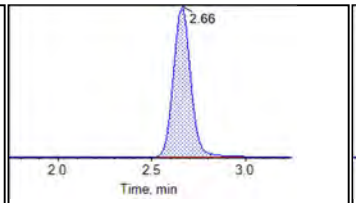
Target Analytes:



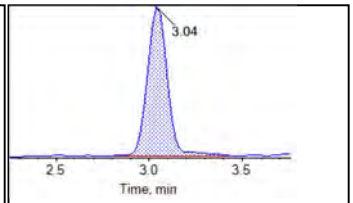
13C5-PFHxA



13C4-PFHpA

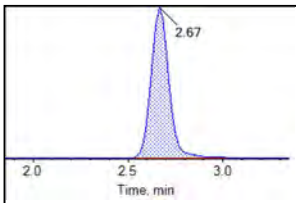


13C8-PFOA

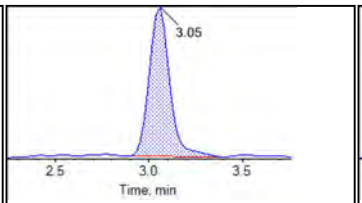


13C8-PFOS

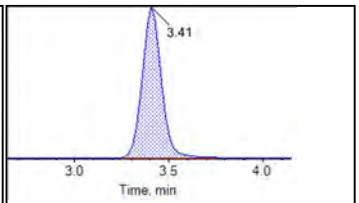
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

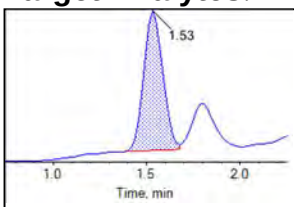
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:30:35 AM

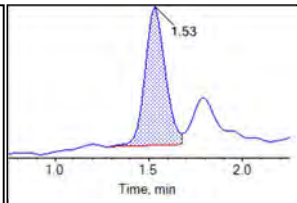
Sample Name	JY38	**Injection Vial**	16
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Chromatograms

Target Analytes:

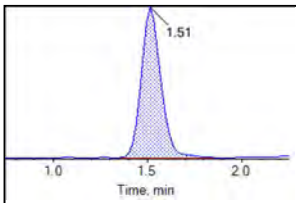


PFBS_1



PFBS_2

Internal Standards:



13C3-PFBS

BATTELLE

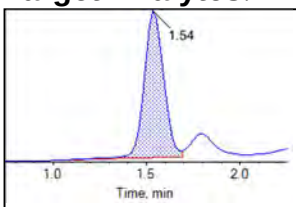
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:30:39 AM

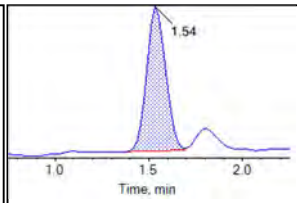
Sample Name	JY39	**Injection Vial**	17
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Chromatograms

Target Analytes:

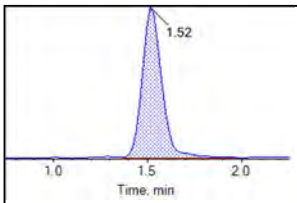


PFBS_1



PFBS_2

Internal Standards:



13C3-PFBS

BATTELLE

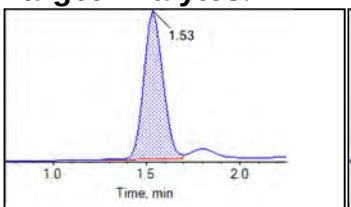
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:30:46 AM

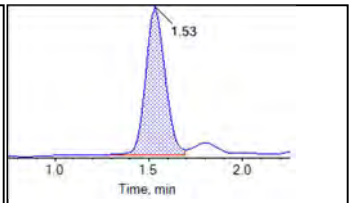
Sample Name	JY40	**Injection Vial**	18
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Chromatograms

Target Analytes:

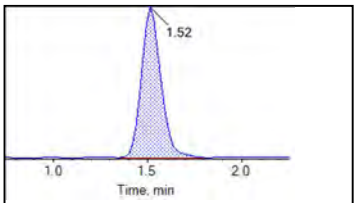


PFBS_1



PFBS_2

Internal Standards:



13C3-PFBS

BATTELLE

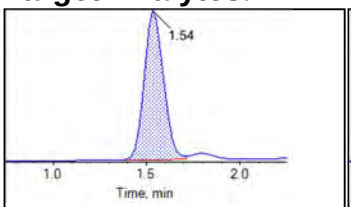
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:30:50 AM

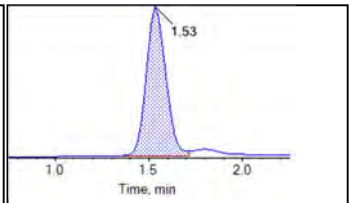
Sample Name	JY41	**Injection Vial**	19
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Chromatograms

Target Analytes:

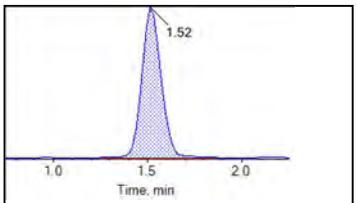


PFBS_1



PFBS_2

Internal Standards:



13C3-PFBS

BATTELLE

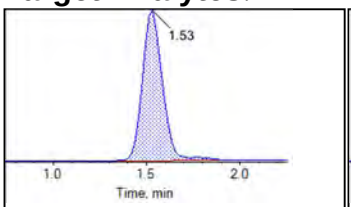
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:30:58 AM

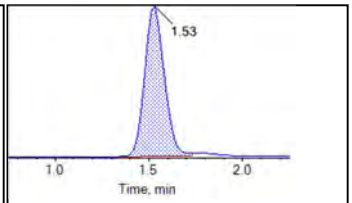
Sample Name	JY42	**Injection Vial**	20
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Chromatograms

Target Analytes:

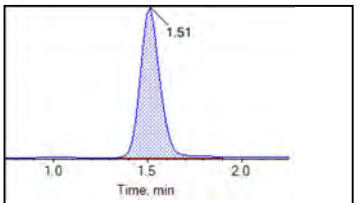


PFBS_1



PFBS_2

Internal Standards:



13C3-PFBS

BATTELLE

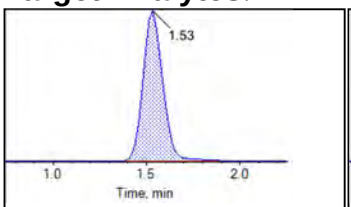
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:31:04 AM

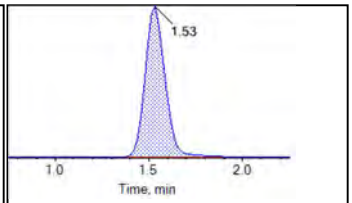
Sample Name	JY43	**Injection Vial**	21
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Chromatograms

Target Analytes:

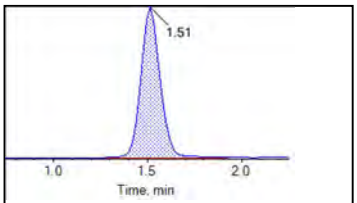


PFBS_1



PFBS_2

Internal Standards:



13C3-PFBS

BATTELLE

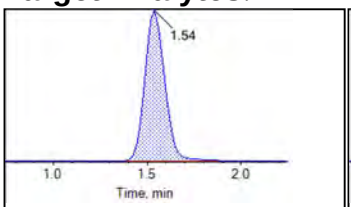
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:31:08 AM

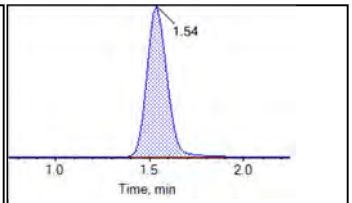
Sample Name	JY44	**Injection Vial**	22
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Chromatograms

Target Analytes:

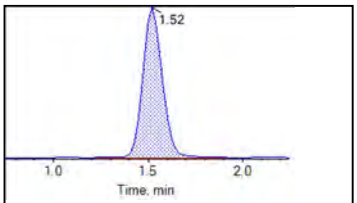


PFBS_1



PFBS_2

Internal Standards:



13C3-PFBS

BATTELLE

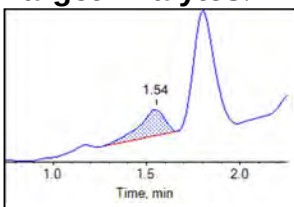
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:31:15 AM

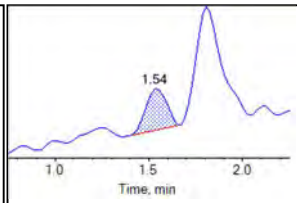
Sample Name	JY46 IB	**Injection Vial**	23
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Chromatograms

Target Analytes:

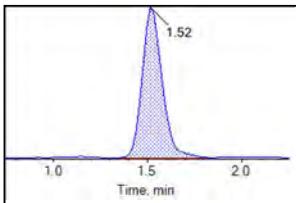


PFBS_1



PFBS_2

Internal Standards:



13C3-PFBS

BATTELLE

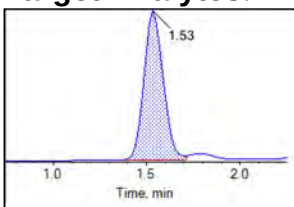
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:31:19 AM

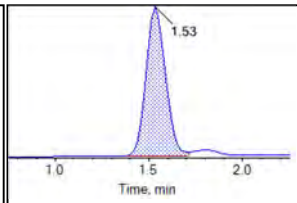
Sample Name	JY45 ICC	**Injection Vial**	24
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Chromatograms

Target Analytes:

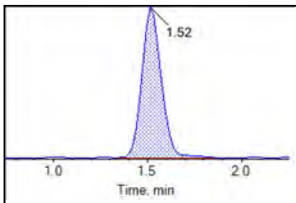


PFBS_1



PFBS_2

Internal Standards:



13C3-PFBS

BATTELLE

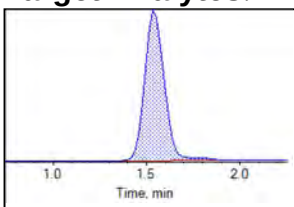
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:31:33 AM

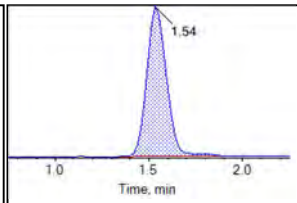
Sample Name	JY42	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T23:31:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Chromatograms

Target Analytes:

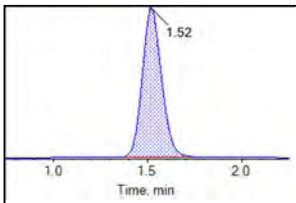


PFBS_1



PFBS_2

Internal Standards:



13C3-PFBS

BATTELLE

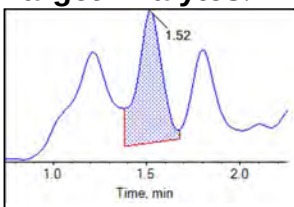
Chromatogram Report

Created with Analyst Reporter
Printed: 30/08/2018 4:41:51 PM

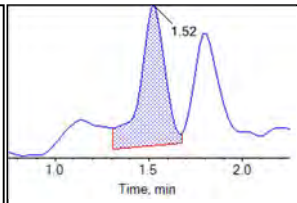
Sample Name	J7259-FS(2)	**Injection Vial**	34
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:14:37	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Chromatograms

Target Analytes:

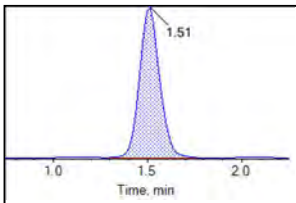


PFBS_1



PFBS_2

Internal Standards:



13C3-PFBS

BATTELLE

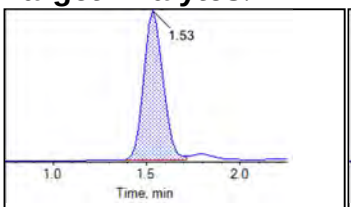
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:31:45 AM

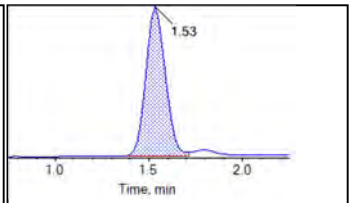
Sample Name	JY41 CCV	**Injection Vial**	19
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_BASE
Sample Comment			

Chromatograms

Target Analytes:

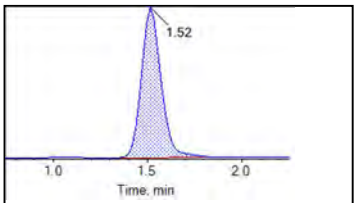


PFBS_1



PFBS_2

Internal Standards:



13C3-PFBS

BATTELLE

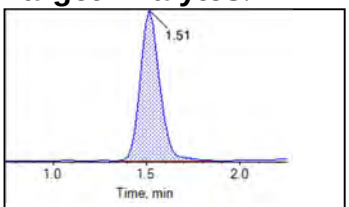
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:28:54 AM

Sample Name	JY38	**Injection Vial**	16
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

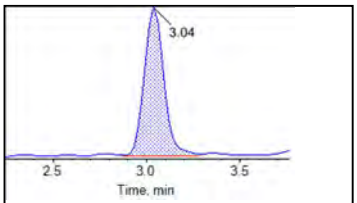
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

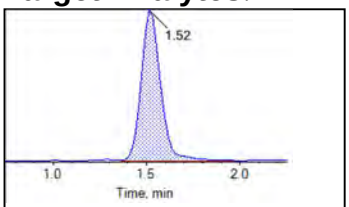
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:29:05 AM

Sample Name	JY39	**Injection Vial**	17
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

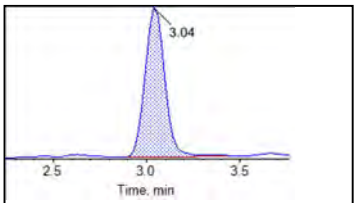
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

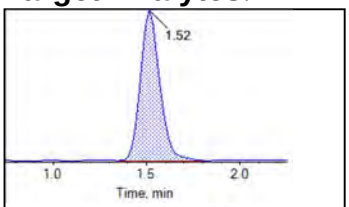
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:29:09 AM

Sample Name	JY40	**Injection Vial**	18
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

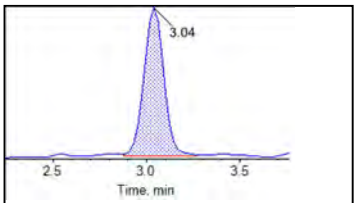
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

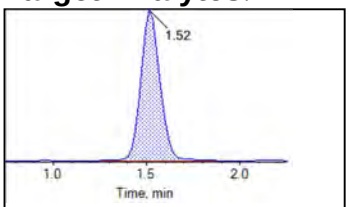
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:29:14 AM

Sample Name	JY41	**Injection Vial**	19
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

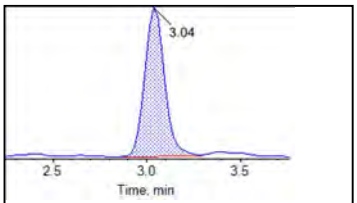
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

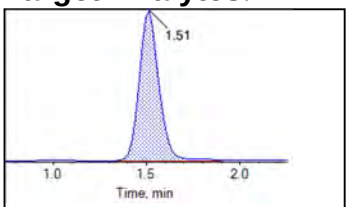
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:29:20 AM

Sample Name	JY42	**Injection Vial**	20
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

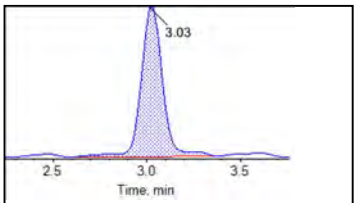
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

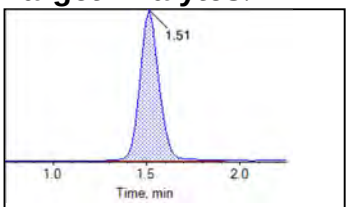
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:29:24 AM

Sample Name	JY43	**Injection Vial**	21
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

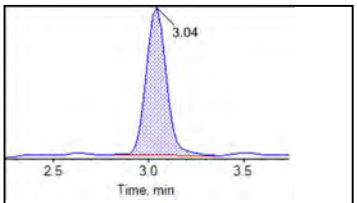
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

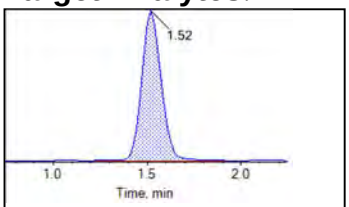
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:29:28 AM

Sample Name	JY44	**Injection Vial**	22
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

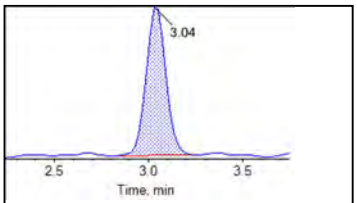
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

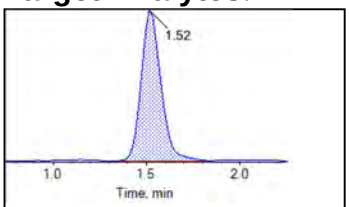
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:29:34 AM

Sample Name	JY46 IB	**Injection Vial**	23
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

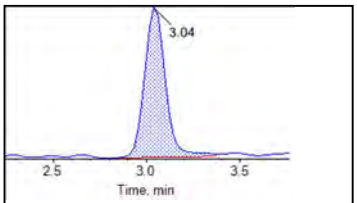
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

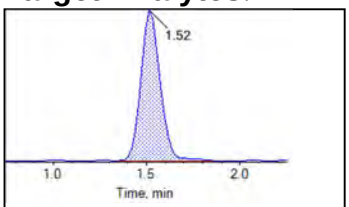
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:29:39 AM

Sample Name	JY45 ICC	**Injection Vial**	24
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

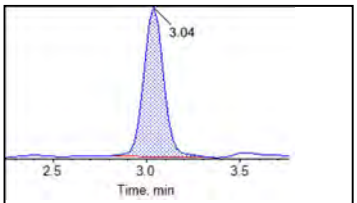
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

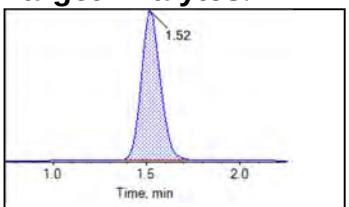
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:29:52 AM

Sample Name	JY42	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-28T23:31:08	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

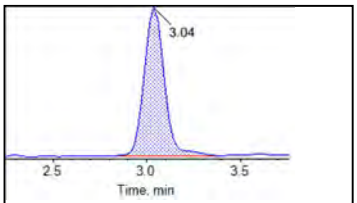
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

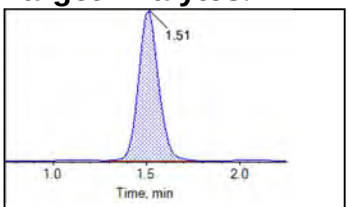
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:30:00 AM

Sample Name	J7259-FS(2)	**Injection Vial**	34
Sample ID	080118-01	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:14:37	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

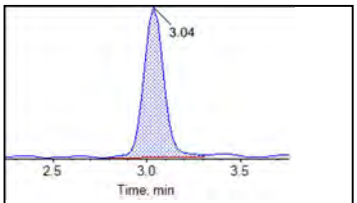
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

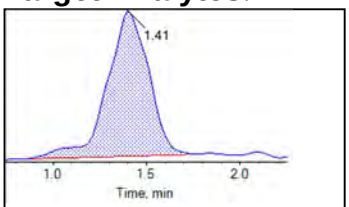
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:30:05 AM

Sample Name	J7251-FS(6)	**Injection Vial**	35
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:25:28	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

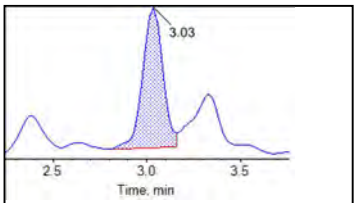
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

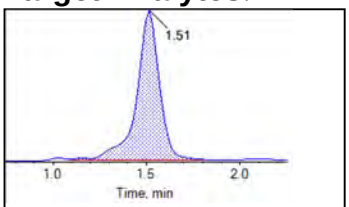
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:30:09 AM

Sample Name	J7251-FS-D(7)	**Injection Vial**	36
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:36:19	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

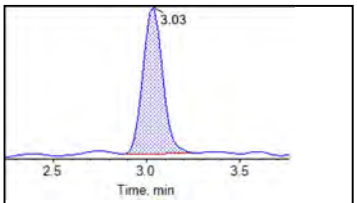
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

BATTELLE

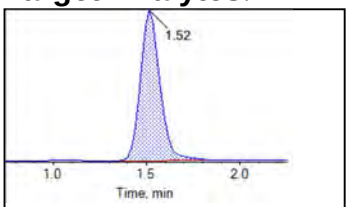
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:30:13 AM

Sample Name	JY41 CCV	**Injection Vial**	19
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

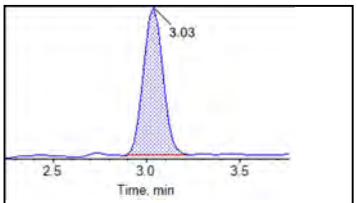
Chromatograms

Target Analytes:



13C3-PFBS

Internal Standards:



13C4-PFOS

Unused Data

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 1:41:36 PM

Sample Name	J7251-FS(6)	**Injection Vial**	35
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:25:28	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.41	73079.03	857.593426	207.6	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 1:41:40 PM

Sample Name	J7251-FS-D(7)	**Injection Vial**	36
Sample ID	073018-04	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-29T00:36:19	**Data File**	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C3-PFBS	302.0 / 99.0	1.51	37313.03	356.775769	311.8	false

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-01				
Battelle ID	J7248-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.275				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	219.71	D	4.32	11.36	113.64
PFHpA	47.65		0.15	0.47	4.73
PFOA	46.73		0.17	0.47	4.73
PFNA	0.95	U	0.25	0.95	4.73
PFDA	0.47	U	0.15	0.47	4.73
PFUnA	0.95	U	0.27	0.95	4.73
PFDoA	0.47	U	0.17	0.47	4.73
PFTrDA	0.47	U	0.14	0.47	4.73
PFTeDA	0.95	U	0.24	0.95	4.73
NMeFOSAA	1.89	U	0.53	1.89	4.73
NEtFOSAA	0.95	U	0.46	0.95	4.73
PFBS	134.06	D	2.95	11.36	113.64
PFHxS	130.56	D	2.50	9.09	113.64
PFOS	0.82	J	0.18	0.47	4.73
Surrogate Recoveries (%)					
13C5-PFHxA	116	D			
13C4-PFHpA	120				
13C8-PFOA	94				
13C9-PFNA	95				
13C6-PFDA	113				
13C7-PFUnA	108				
13C2-PFDoA	95				
13C2-PFTeDA	90				
d3-MeFOSAA	113				
d5-EtFOSAA	100				
13C3-PFBS	140	D			
13C3-PFHxS	108	D			
13C8-PFOS	98				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-02				
Battelle ID	J7249-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.280				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	2225.59	D	21.21	55.80	558.04
PFHpA	671.85	D	3.57	11.16	111.61
PFOA	2054.86	D	20.09	55.80	558.04
PFNA	0.62	J	0.24	0.93	4.65
PFDA	0.46	U	0.15	0.46	4.65
PFUnA	0.93	U	0.27	0.93	4.65
PFDoA	0.46	U	0.17	0.46	4.65
PFTrDA	0.46	U	0.14	0.46	4.65
PFTeDA	0.93	U	0.23	0.93	4.65
NMeFOSAA	1.86	U	0.52	1.86	4.65
NEtFOSAA	0.93	U	0.46	0.93	4.65
PFBS	312.32	D	2.90	11.16	111.61
PFHxS	1069.93	D	2.46	8.93	111.61
PFOS	119.85	D	0.88	2.33	23.25
Surrogate Recoveries (%)					
13C5-PFHxA	108	D			
13C4-PFHpA	111	D			
13C8-PFOA	115	D			
13C9-PFNA	96	D			
13C6-PFDA	110				
13C7-PFUnA	112				
13C2-PFDoA	95				
13C2-PFTeDA	90				
d3-MeFOSAA	134				
d5-EtFOSAA	124				
13C3-PFBS	140	D			
13C3-PFHxS	121	D			
13C8-PFOS	74	D			

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-03				
Battelle ID	J7250-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.285				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	151.08	D	4.17	10.96	109.65
PFHpA	29.83		0.15	0.46	4.57
PFOA	33.32		0.16	0.46	4.57
PFNA	0.38	J	0.24	0.91	4.57
PFDA	0.46	U	0.15	0.46	4.57
PFUnA	0.91	U	0.26	0.91	4.57
PFDoA	0.46	U	0.16	0.46	4.57
PFTrDA	0.46	U	0.14	0.46	4.57
PFTeDA	0.91	U	0.23	0.91	4.57
NMeFOSAA	1.83	U	0.51	1.83	4.57
NEtFOSAA	0.91	U	0.45	0.91	4.57
PFBS	45.51		0.12	0.46	4.57
PFHxS	52.18		0.10	0.37	4.57
PFOS	4.88		0.17	0.46	4.57
Surrogate Recoveries (%)					
13C5-PFHxA	101	D			
13C4-PFHpA	91				
13C8-PFOA	84				
13C9-PFNA	91				
13C6-PFDA	101				
13C7-PFUnA	102				
13C2-PFDoA	95				
13C2-PFTeDA	101				
d3-MeFOSAA	133				
d5-EtFOSAA	119				
13C3-PFBS	70				
13C3-PFHxS	110				
13C8-PFOS	110				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-04				
Battelle ID	J7251-FS				
Sample Type	SA				
Collection Date	07/30/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.285				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	848.37	D	4.17	10.96	109.65
PFHpA	49.66		0.15	0.46	4.57
PFOA	64.18		0.16	0.46	4.57
PFNA	0.53	J	0.24	0.91	4.57
PFDA	0.37	J	0.15	0.46	4.57
PFUnA	0.91	U	0.26	0.91	4.57
PFDoA	0.46	U	0.16	0.46	4.57
PFTrDA	0.46	U	0.14	0.46	4.57
PFTeDA	0.91	U	0.23	0.91	4.57
NMeFOSAA	1.83	U	0.51	1.83	4.57
NEtFOSAA	0.91	U	0.45	0.91	4.57
PFBS	180.63	D	2.85	10.96	109.65
PFHxS	201.18	D	2.41	8.77	109.65
PFOS	26.14		0.17	0.46	4.57
Surrogate Recoveries (%)					
13C5-PFHxA	118	D			
13C4-PFHpA	91				
13C8-PFOA	96				
13C9-PFNA	106				
13C6-PFDA	115				
13C7-PFUnA	107				
13C2-PFDoA	105				
13C2-PFTeDA	95				
d3-MeFOSAA	123				
d5-EtFOSAA	128				
13C3-PFBS	171	ND			
13C3-PFHxS	123	D			
13C8-PFOS	99				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-05			
Battelle ID	J7252-FS			
Sample Type	SA			
Collection Date	07/30/2018			
Extraction Date	08/08/2018			
Analysis Date	08/16/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.290			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFHxA	0.43 U	0.16	0.43	4.31
PFHpA	0.33 J	0.14	0.43	4.31
PFOA	1.26 J	0.16	0.43	4.31
PFNA	0.26 J	0.22	0.86	4.31
PFDA	0.27 J	0.14	0.43	4.31
PFUnA	0.86 U	0.25	0.86	4.31
PFDoA	0.43 U	0.16	0.43	4.31
PFTrDA	0.43 U	0.13	0.43	4.31
PFTeDA	0.86 U	0.22	0.86	4.31
NMeFOSAA	1.72 U	0.48	1.72	4.31
NEtFOSAA	0.86 U	0.42	0.86	4.31
PFBS	0.43 U	0.11	0.43	4.31
PFHxS	0.34 U	0.09	0.34	4.31
PFOS	0.38 J	0.16	0.43	4.31

Surrogate Recoveries (%)

13C5-PFHxA	98
13C4-PFHpA	102
13C8-PFOA	108
13C9-PFNA	104
13C6-PFDA	105
13C7-PFUnA	108
13C2-PFDoA	99
13C2-PFTeDA	92
d3-MeFOSAA	129
d5-EtFOSAA	110
13C3-PFBS	101
13C3-PFHxS	116
13C8-PFOS	111

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-06
Battelle ID	J7253-FS
Sample Type	SA
Collection Date	07/30/2018
Extraction Date	08/08/2018
Analysis Date	08/16/2018
Analytical Instrument	Sciex 5500 LC/MS/MS
% Moisture	NA
Matrix	GW
Sample Size	0.290
Size Unit-Basis	L

Units	ng/L		MDL	LOD	LOQ
PFHxA	0.43	U	0.16	0.43	4.31
PFHpA	0.33	J	0.14	0.43	4.31
PFOA	1.41	J	0.16	0.43	4.31
PFNA	0.28	J	0.22	0.86	4.31
PFDA	0.26	J	0.14	0.43	4.31
PFUnA	0.86	U	0.25	0.86	4.31
PFDoA	0.43	U	0.16	0.43	4.31
PFTrDA	0.43	U	0.13	0.43	4.31
PFTeDA	0.86	U	0.22	0.86	4.31
NMeFOSAA	1.72	U	0.48	1.72	4.31
NEtFOSAA	0.86	U	0.42	0.86	4.31
PFBS	0.43	U	0.11	0.43	4.31
PFHxS	0.12	J	0.09	0.34	4.31
PFOS	0.52	J	0.16	0.43	4.31

Surrogate Recoveries (%)

13C5-PFHxA	80
13C4-PFHpA	89
13C8-PFOA	92
13C9-PFNA	83
13C6-PFDA	110
13C7-PFUnA	102
13C2-PFDoA	93
13C2-PFTeDA	90
d3-MeFOSAA	99
d5-EtFOSAA	106
13C3-PFBS	98
13C3-PFHxS	95
13C8-PFOS	103

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-07			
Battelle ID	J7254-FS			
Sample Type	SA			
Collection Date	07/30/2018			
Extraction Date	08/08/2018			
Analysis Date	08/16/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.285			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFHxA	0.44 U	0.17	0.44	4.39
PFHpA	0.33 J	0.14	0.44	4.39
PFOA	1.48 J	0.16	0.44	4.39
PFNA	0.88 U	0.23	0.88	4.39
PFDA	0.44 U	0.14	0.44	4.39
PFUnA	0.88 U	0.25	0.88	4.39
PFDoA	0.44 U	0.16	0.44	4.39
PFTrDA	0.44 U	0.13	0.44	4.39
PFTeDA	0.88 U	0.22	0.88	4.39
NMeFOSAA	1.75 U	0.49	1.75	4.39
NEtFOSAA	0.88 U	0.43	0.88	4.39
PFBS	0.44 U	0.11	0.44	4.39
PFHxS	0.14 J	0.10	0.35	4.39
PFOS	0.62 J	0.17	0.44	4.39

Surrogate Recoveries (%)

13C5-PFHxA	59
13C4-PFHpA	65
13C8-PFOA	63
13C9-PFNA	63
13C6-PFDA	65
13C7-PFUnA	63
13C2-PFDoA	57
13C2-PFTeDA	59
d3-MeFOSAA	74
d5-EtFOSAA	57
13C3-PFBS	55
13C3-PFHxS	62
13C8-PFOS	70

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073118-01				
Battelle ID	J7255-FS				
Sample Type	SA				
Collection Date	07/31/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.290				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	1456.69	D	4.09	10.78	107.76
PFHpA	129.65		0.14	0.45	4.49
PFOA	80.81		0.16	0.45	4.49
PFNA	0.35	J	0.23	0.90	4.49
PFDA	0.45	U	0.14	0.45	4.49
PFUnA	0.90	U	0.26	0.90	4.49
PFDoA	0.45	U	0.16	0.45	4.49
PFTrDA	0.45	U	0.13	0.45	4.49
PFTeDA	0.90	U	0.22	0.90	4.49
NMeFOSAA	1.80	U	0.50	1.80	4.49
NEtFOSAA	0.90	U	0.44	0.90	4.49
PFBS	315.10	D	2.80	10.78	107.76
PFHxS	194.25	D	2.37	8.62	107.76
PFOS	4.33	J	0.17	0.45	4.49
Surrogate Recoveries (%)					
13C5-PFHxA	108	D			
13C4-PFHpA	77				
13C8-PFOA	78				
13C9-PFNA	88				
13C6-PFDA	86				
13C7-PFUnA	92				
13C2-PFDoA	86				
13C2-PFTeDA	69				
d3-MeFOSAA	90				
d5-EtFOSAA	113				
13C3-PFBS	134	D			
13C3-PFHxS	111	D			
13C8-PFOS	81				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073118-02				
Battelle ID	J7256-FS				
Sample Type	SA				
Collection Date	07/31/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.280				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	168.38	D	4.24	11.16	111.61
PFHpA	49.62		0.15	0.46	4.65
PFOA	8.01		0.17	0.46	4.65
PFNA	0.93	U	0.24	0.93	4.65
PFDA	0.46	U	0.15	0.46	4.65
PFUnA	0.93	U	0.27	0.93	4.65
PFDoA	0.46	U	0.17	0.46	4.65
PFTrDA	0.46	U	0.14	0.46	4.65
PFTeDA	0.93	U	0.23	0.93	4.65
NMeFOSAA	1.86	U	0.52	1.86	4.65
NEtFOSAA	0.93	U	0.46	0.93	4.65
PFBS	20.30		0.12	0.46	4.65
PFHxS	73.39		0.10	0.37	4.65
PFOS	0.94	J	0.18	0.46	4.65
Surrogate Recoveries (%)					
13C5-PFHxA	109	D			
13C4-PFHpA	108				
13C8-PFOA	101				
13C9-PFNA	104				
13C6-PFDA	106				
13C7-PFUnA	112				
13C2-PFDoA	91				
13C2-PFTeDA	80				
d3-MeFOSAA	103				
d5-EtFOSAA	98				
13C3-PFBS	62				
13C3-PFHxS	99				
13C8-PFOS	107				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073118-03				
Battelle ID	J7257-FS				
Sample Type	SA				
Collection Date	07/31/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.290				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	2003.86	D	40.95	107.76	1077.59
PFHpA	1173.74	D	3.45	10.78	107.76
PFOA	119.69	D	3.88	10.78	107.76
PFNA	0.35	J	0.23	0.90	4.49
PFDA	0.45	U	0.14	0.45	4.49
PFUnA	0.90	U	0.26	0.90	4.49
PFDoA	0.45	U	0.16	0.45	4.49
PFTrDA	0.45	U	0.13	0.45	4.49
PFTeDA	0.90	U	0.22	0.90	4.49
NMeFOSAA	1.80	U	0.50	1.80	4.49
NEtFOSAA	0.90	U	0.44	0.90	4.49
PFBS	202.01	D	2.80	10.78	107.76
PFHxS	1031.92	D	2.37	8.62	107.76
PFOS	2.91	J	0.17	0.45	4.49
Surrogate Recoveries (%)					
13C5-PFHxA	96	D			
13C4-PFHpA	132	D			
13C8-PFOA	120	D			
13C9-PFNA	106	D			
13C6-PFDA	123	D			
13C7-PFUnA	119	D			
13C2-PFDoA	111	D			
13C2-PFTeDA	109	D			
d3-MeFOSAA	143	D			
d5-EtFOSAA	141	D			
13C3-PFBS	148	D			
13C3-PFHxS	140	D			
13C8-PFOS	142	D			

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073118-04				
Battelle ID	J7258-FS				
Sample Type	SA				
Collection Date	07/31/2018				
Extraction Date	08/08/2018				
Analysis Date	08/16/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	GW				
Sample Size	0.280				
Size Unit-Basis	L				
Units	ng/L		MDL	LOD	LOQ
PFHxA	533.80	D	4.24	11.16	111.61
PFHpA	41.94		0.15	0.46	4.65
PFOA	77.86		0.17	0.46	4.65
PFNA	1.36	J	0.24	0.93	4.65
PFDA	0.36	J	0.15	0.46	4.65
PFUnA	0.93	U	0.27	0.93	4.65
PFDoA	0.46	U	0.17	0.46	4.65
PFTrDA	0.46	U	0.14	0.46	4.65
PFTeDA	0.93	U	0.23	0.93	4.65
NMeFOSAA	1.86	U	0.52	1.86	4.65
NEtFOSAA	0.93	U	0.46	0.93	4.65
PFBS	453.11	D	2.90	11.16	111.61
PFHxS	354.89	D	2.46	8.93	111.61
PFOS	57.74		0.18	0.46	4.65
Surrogate Recoveries (%)					
13C5-PFHxA	107	D			
13C4-PFHpA	120	D			
13C8-PFOA	105	D			
13C9-PFNA	93	D			
13C6-PFDA	101				
13C7-PFUnA	100				
13C2-PFDoA	96				
13C2-PFTeDA	75				
d3-MeFOSAA	113				
d5-EtFOSAA	118				
13C3-PFBS	127	D			
13C3-PFHxS	122	D			
13C8-PFOS	98				

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	080118-01
Battelle ID	J7259-FS
Sample Type	SA
Collection Date	08/01/2018
Extraction Date	08/08/2018
Analysis Date	08/16/2018
Analytical Instrument	Sciex 5500 LC/MS/MS
% Moisture	NA
Matrix	GW
Sample Size	0.275
Size Unit-Basis	L

Units	ng/L	MDL	LOD	LOQ
PFHxA	0.40 J	0.17	0.45	4.55
PFHpA	0.39 J	0.15	0.45	4.55
PFOA	1.64 J	0.16	0.45	4.55
PFNA	0.26 J	0.24	0.91	4.55
PFDA	0.30 J	0.15	0.45	4.55
PFUnA	0.91 U	0.26	0.91	4.55
PFDoA	0.45 U	0.16	0.45	4.55
PFTrDA	0.45 U	0.14	0.45	4.55
PFTeDA	0.91 U	0.23	0.91	4.55
NMeFOSAA	1.82 U	0.51	1.82	4.55
NEtFOSAA	0.91 U	0.45	0.91	4.55
PFBS	0.35 J	0.12	0.45	4.55
PFHxS	0.52 J	0.10	0.36	4.55
PFOS	0.79 J	0.17	0.45	4.55

Surrogate Recoveries (%)

13C5-PFHxA	128
13C4-PFHpA	132
13C8-PFOA	139
13C9-PFNA	127
13C6-PFDA	136
13C7-PFUnA	128
13C2-PFDoA	113
13C2-PFTeDA	107
d3-MeFOSAA	128
d5-EtFOSAA	140
13C3-PFBS	114
13C3-PFHxS	141
13C8-PFOS	147

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	080118-02			
Battelle ID	J7260-FS			
Sample Type	SA			
Collection Date	08/01/2018			
Extraction Date	08/08/2018			
Analysis Date	08/16/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.280			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFHxA	4.91	0.17	0.45	4.46
PFHpA	0.97 J	0.14	0.45	4.46
PFOA	1.98 J	0.16	0.45	4.46
PFNA	0.27 J	0.23	0.89	4.46
PFDA	0.27 J	0.14	0.45	4.46
PFUnA	0.89 U	0.26	0.89	4.46
PFDoA	0.45 U	0.16	0.45	4.46
PFTrDA	0.45 U	0.13	0.45	4.46
PFTeDA	0.89 U	0.22	0.89	4.46
NMeFOSAA	1.79 U	0.50	1.79	4.46
NEtFOSAA	0.89 U	0.44	0.89	4.46
PFBS	0.44 J	0.12	0.45	4.46
PFHxS	1.26 J	0.10	0.36	4.46
PFOS	2.43 J	0.17	0.45	4.46

Surrogate Recoveries (%)

13C5-PFHxA	107
13C4-PFHpA	120
13C8-PFOA	116
13C9-PFNA	128
13C6-PFDA	125
13C7-PFUnA	120
13C2-PFDoA	108
13C2-PFTeDA	104
d3-MeFOSAA	81
d5-EtFOSAA	86
13C3-PFBS	136
13C3-PFHxS	135
13C8-PFOS	124

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	080118-03
Battelle ID	J7261-FS
Sample Type	SA
Collection Date	08/01/2018
Extraction Date	08/08/2018
Analysis Date	08/16/2018
Analytical Instrument	Sciex 5500 LC/MS/MS
% Moisture	NA
Matrix	GW
Sample Size	0.280
Size Unit-Basis	L

Units	ng/L	MDL	LOD	LOQ
PFHxA	4.77	0.17	0.45	4.46
PFHpA	1.00 J	0.14	0.45	4.46
PFOA	2.37 J	0.16	0.45	4.46
PFNA	0.27 J	0.23	0.89	4.46
PFDA	0.27 J	0.14	0.45	4.46
PFUnA	0.89 U	0.26	0.89	4.46
PFDoA	0.45 U	0.16	0.45	4.46
PFTrDA	0.45 U	0.13	0.45	4.46
PFTeDA	0.89 U	0.22	0.89	4.46
NMeFOSAA	1.79 U	0.50	1.79	4.46
NEtFOSAA	0.89 U	0.44	0.89	4.46
PFBS	0.56 J	0.12	0.45	4.46
PFHxS	1.65 J	0.10	0.36	4.46
PFOS	5.08	0.17	0.45	4.46

Surrogate Recoveries (%)

13C5-PFHxA	103
13C4-PFHpA	108
13C8-PFOA	112
13C9-PFNA	115
13C6-PFDA	121
13C7-PFUnA	117
13C2-PFDoA	100
13C2-PFTeDA	97
d3-MeFOSAA	85
d5-EtFOSAA	92
13C3-PFBS	126
13C3-PFHxS	119
13C8-PFOS	130

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675

Client ID	073018-02	073018-02					
Battelle ID	J7249-FS	J7249MS-FS					
Sample Type	SA	MS					
Collection Date	07/30/2018	07/30/2018					
Extraction Date	08/08/2018	08/08/2018					
Analysis Date	08/16/2018	08/16/2018					
Analytical Instrument	Sciex 5500 LC/MS/MS	Sciex 5500 LC/MS/MS					
% Moisture	NA	NA					
Matrix	GW	GW					
Sample Size	0.280	0.280					
Size Unit-Basis	L	L				Control Limits	
Units	ng/L	ng/L	Target	Recovery	Qual	Lower	Upper
PFHxA	2225.59 D	2610.99 D	27.05	1425	N	51	137
PFHpA	671.85 D	640.63 D	26.79	0	N	48	136
PFOA	2054.86 D	2454.70 D	26.79	1493	N	49	141
PFNA	0.62 J	27.61	26.79	101		58	122
PFDA	0.46 U	24.25	26.79	91		59	135
PFUnA	0.93 U	24.84	26.79	93		64	134
PFDoA	0.46 U	29.90	26.79	112		75	131
PFTrDA	0.46 U	34.54	26.79	129		42	148
PFTeDA	0.93 U	31.01	26.79	116		42	158
NMeFOSAA	1.86 U	26.20	26.79	98		50	146
NEtFOSAA	0.93 U	27.99	26.79	104		51	131
PFBS	312.32 D	319.13 D	27.05	25	N	56	134
PFHxS	1069.93 D	972.63 D	27.05	0	N	52	128
PFOS	119.85 D	147.19 D	26.79	102		40	144
Surrogate Recoveries (%)							
13C5-PFHxA	108 D	98 D					
13C4-PFHpA	111 D	119 D					
13C8-PFOA	115 D	110 D					
13C9-PFNA	96 D	96 D					
13C6-PFDA	110	103 D					
13C7-PFUnA	112	111 D					
13C2-PFDoA	95	104 D					
13C2-PFTeDA	90	100 D					
d3-MeFOSAA	134	129 D					
d5-EtFOSAA	124	130 D					
13C3-PFBS	140 D	148 D					
13C3-PFHxS	121 D	137 D					
13C8-PFOS	74 D	84 D					

Project Client: Battelle
Project Name: Operable Unit 11 NAS North Island
Project No.: 100095675 073018-02

Battelle ID	J7249MSD-FS
Sample Type	MSD
Collection Date	07/30/2018
Extraction Date	08/08/2018
Analysis Date	08/16/2018
Analytical Instrument	Sciex 5500 LC/MS/MS
% Moisture	NA
Matrix	GW
Sample Size	0.275
Size Unit-Basis	L

						Control Limits				RPD
Units	ng/L		Target	Recovery	Qual	Lower	Upper	RPD	Qual	Limit
PFHxA	2431.28	D	27.55	747	N	51	137	62.4	N	≤ 30
PFHpA	723.17	D	27.27	188	N	48	136	200.0	N	≤ 30
PFOA	2260.31	D	27.27	753	N	49	141	65.9	N	≤ 30
PFNA	23.53		27.27	84		58	122	18.4		≤ 30
PFDA	23.29		27.27	85		59	135	6.8		≤ 30
PFUnA	25.04		27.27	92		64	134	1.1		≤ 30
PFDoA	29.22		27.27	107		75	131	4.6		≤ 30
PFTrDA	30.11		27.27	110		42	148	15.9		≤ 30
PFTeDA	28.24		27.27	104		42	158	10.9		≤ 30
NMeFOSAA	23.39		27.27	86		50	146	13.0		≤ 30
NEtFOSAA	25.64		27.27	94		51	131	10.1		≤ 30
PFBS	345.19	D	27.55	119		56	134	130.6	N	≤ 30
PFHxS	1141.96	D	27.55	261	N	52	128	200.0	N	≤ 30
PFOS	123.59	D	27.27	14	N	40	144	151.7	N	≤ 30

Surrogate Recoveries (%)

13C5-PFHxA	104	D
13C4-PFHpA	117	D
13C8-PFOA	114	D
13C9-PFNA	101	D
13C6-PFDA	114	
13C7-PFUnA	104	
13C2-PFDoA	95	
13C2-PFTeDA	87	
d3-MeFOSAA	130	
d5-EtFOSAA	129	
13C3-PFBS	126	D
13C3-PFHxS	107	D
13C8-PFOS	105	D

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Calibration Summary Report

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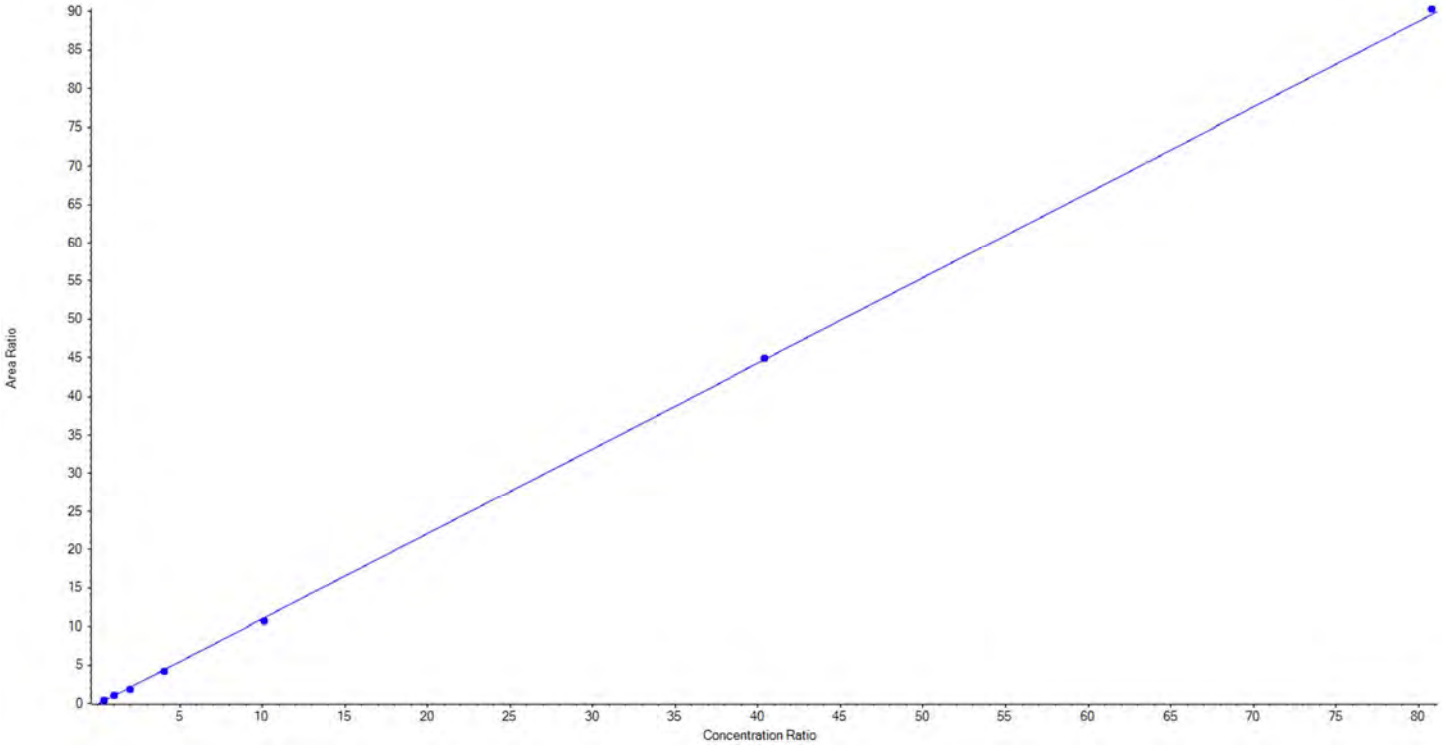
Analyte Name	PFHxA_1	**Data File**	18-0499-18-0497.wiff
MRM Transition	313.0 / 269.0	**Result Table**	18-0497A_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.11076 x + -0.13308 (r = 0.99974) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	117.614761	116.5
3	JY39	L2	True	252.50	258.698417	102.5
4	JY40	L3	True	505.00	448.629574	88.8
5	JY41	L4	True	1010.00	960.813494	95.1
6	JY42	L5	True	2525.00	2426.762636	96.1
7	JY43	L6	True	10100.00	10124.639308	100.2
8	JY44	L7	True	20200.00	20356.341810	100.8



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Calibration Summary Report

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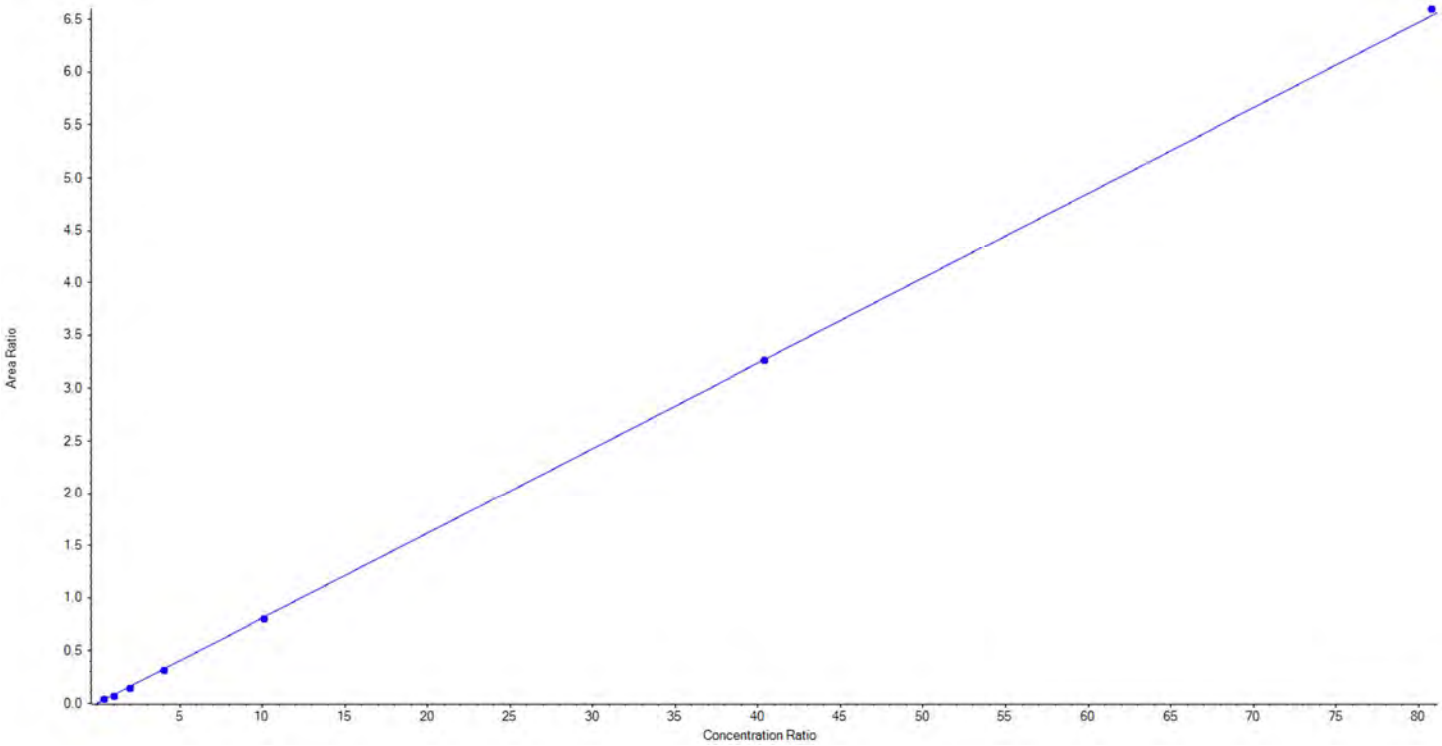
Analyte Name	PFHxA_2	**Data File**	18-0499-18-0497.wiff
MRM Transition	313.0 / 119.0	**Result Table**	18-0497A_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.08090 x + -4.16022e-5 (r = 0.99961) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	131.288798	130.0
3	JY39	L2	True	252.50	220.326158	87.3
4	JY40	L3	True	505.00	446.557348	88.4
5	JY41	L4	True	1010.00	967.754802	95.8
6	JY42	L5	True	2525.00	2471.882588	97.9
7	JY43	L6	True	10100.00	10068.006887	99.7
8	JY44	L7	True	20200.00	20387.683420	100.9



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Calibration Summary Report

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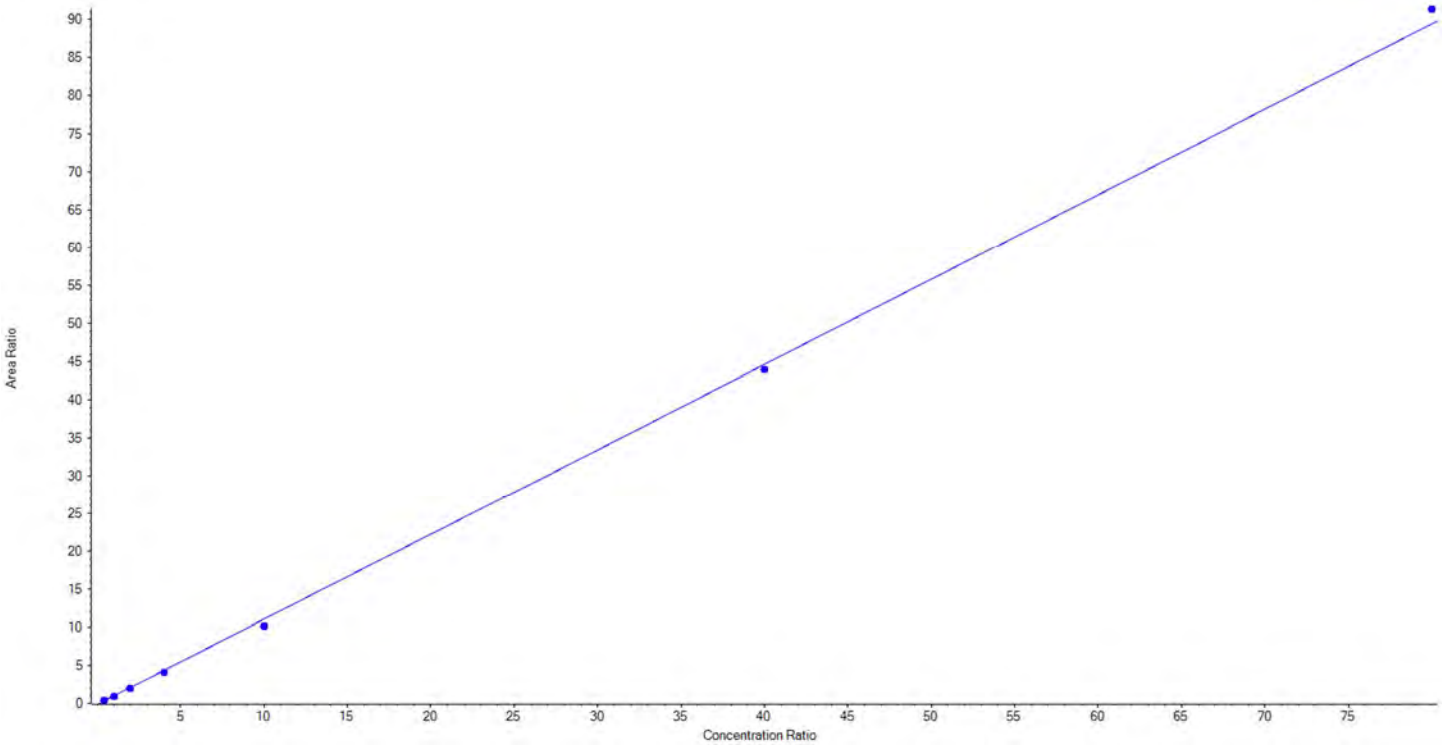
Analyte Name	PFOA_1	**Data File**	18-0499-18-0497.wiff
MRM Transition	413.0 / 369.0	**Result Table**	18-0497A_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.11957 x + -0.14507 (r = 0.99942) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	121.113434	121.1
3	JY39	L2	True	250.00	242.981438	97.2
4	JY40	L3	True	500.00	473.276906	94.7
5	JY41	L4	True	1000.00	944.360671	94.4
6	JY42	L5	True	2500.00	2302.456541	92.1
7	JY43	L6	True	10000.00	9835.045171	98.4
8	JY44	L7	True	20000.00	20430.765839	102.2



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Calibration Summary Report

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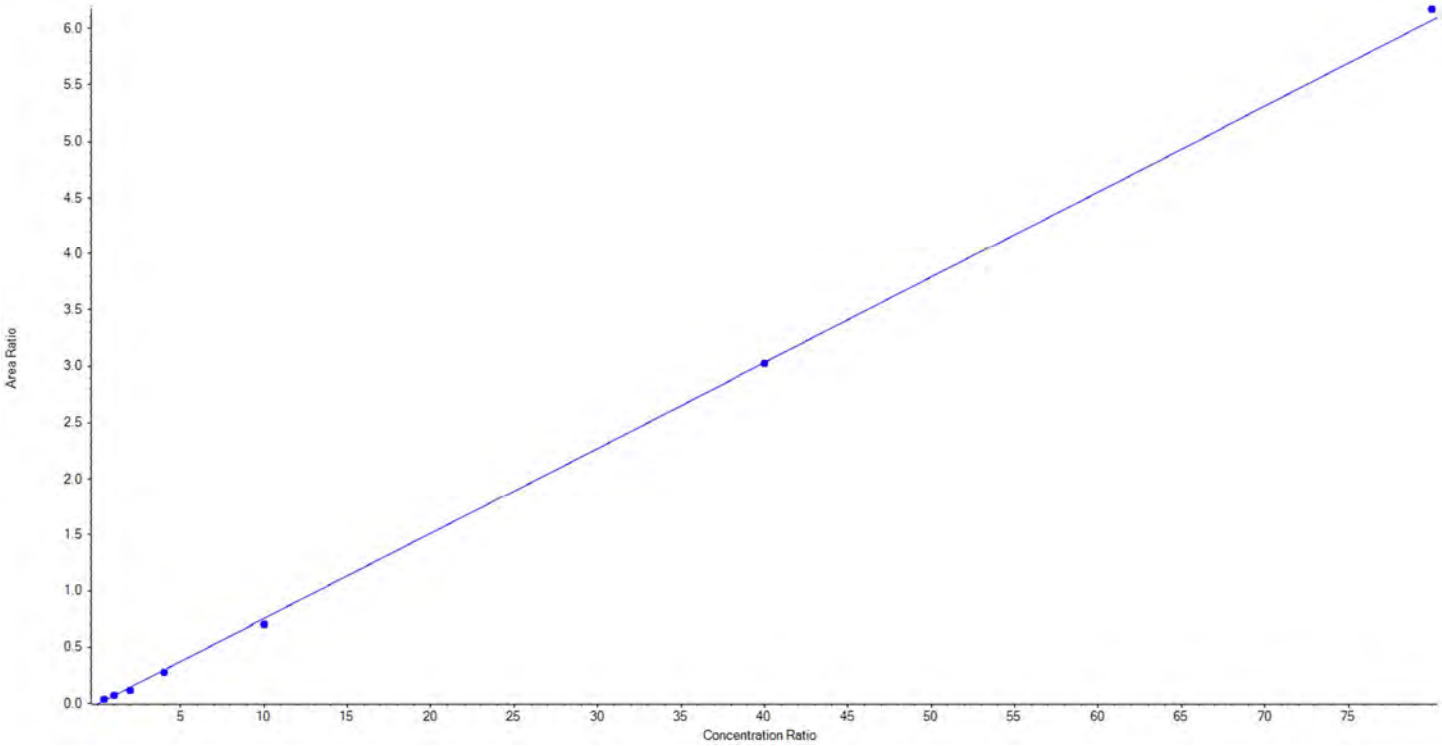
Analyte Name	PFOA_2	**Data File**	18-0499-18-0497.wiff
MRM Transition	413.0 / 169.0	**Result Table**	18-0497A_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.07600 x + -0.00788 (r = 0.99925) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	128.970589	129.0
3	JY39	L2	True	250.00	255.929619	102.4
4	JY40	L3	True	500.00	405.855245	81.2
5	JY41	L4	True	1000.00	925.403115	92.5
6	JY42	L5	True	2500.00	2341.285594	93.7
7	JY43	L6	True	10000.00	9966.400046	99.7
8	JY44	L7	True	20000.00	20326.155793	101.6



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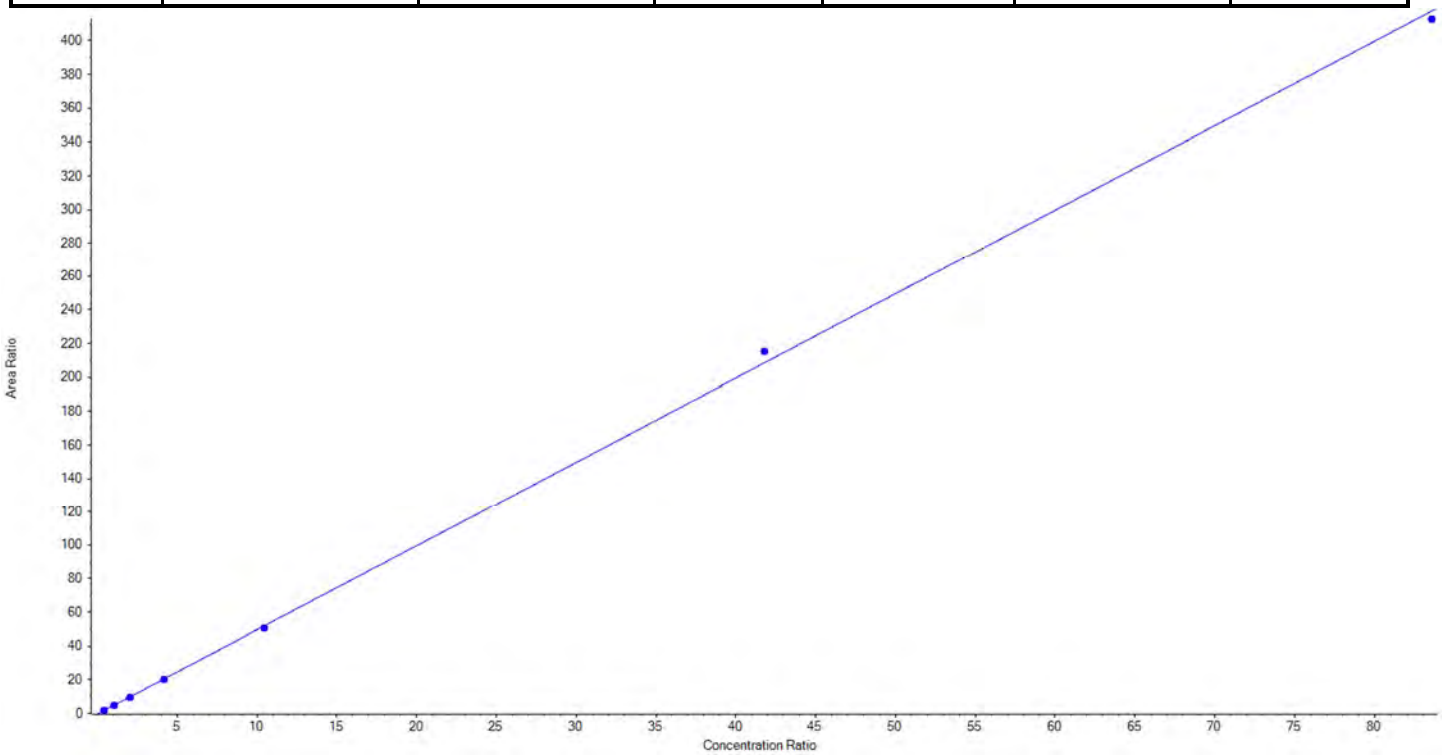
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/08/2018 1:14:54 PM

Analyte Name	PFOS_1	**Data File**	18-0499-18-0497.wiff
MRM Transition	499.0 / 80.0	**Result Table**	18-0497A_BASE
Internal Standard	13C8-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 5.00025 x + -0.44440 (r = 0.99975) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	104.637764	104.6
3	JY39	L2	True	250.00	248.291926	99.3
4	JY40	L3	True	500.00	490.362317	98.1
5	JY41	L4	True	1000.00	987.858062	98.8
6	JY42	L5	True	2500.00	2428.135996	97.1
7	JY43	L6	True	10000.00	10321.637282	103.2
8	JY44	L7	True	20000.00	19769.076652	98.9



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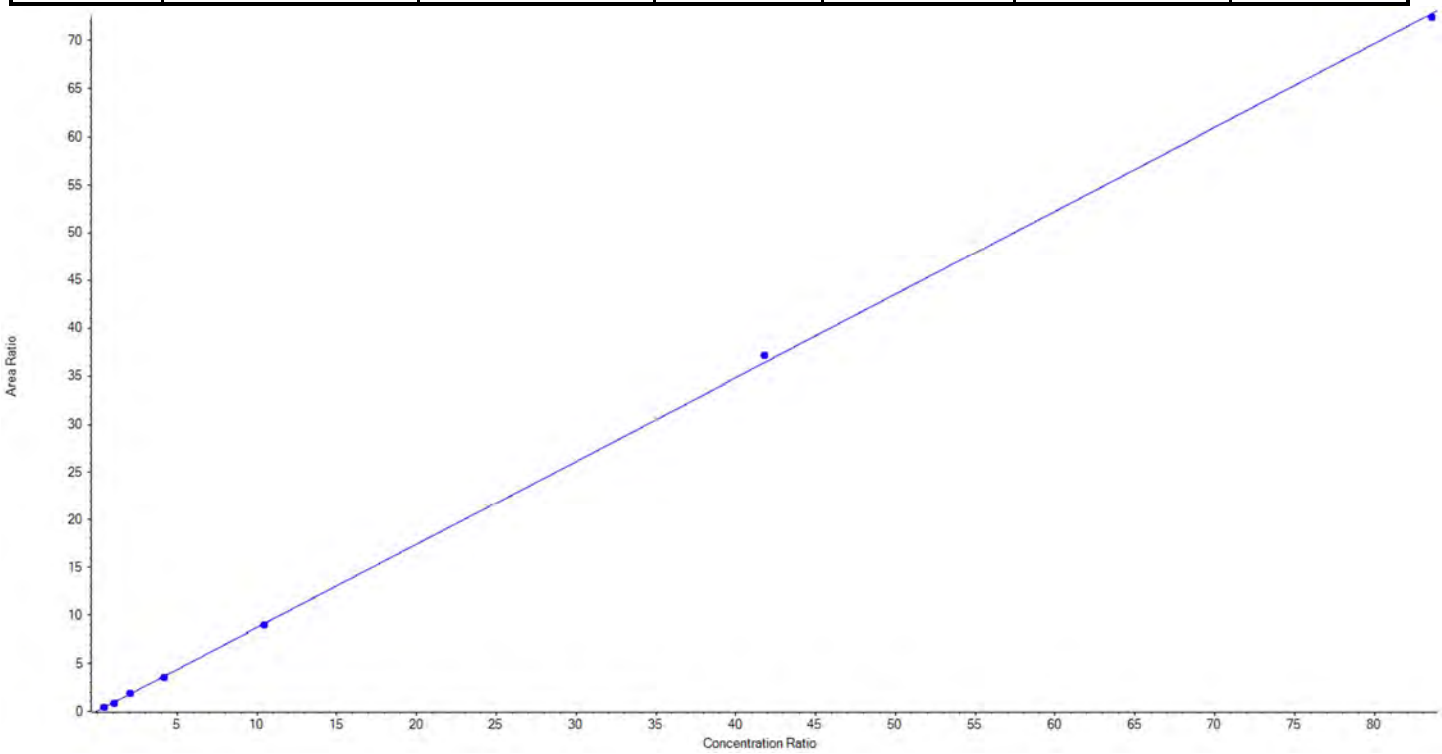
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/08/2018 1:14:54 PM

Analyte Name	PFOS_2	**Data File**	18-0499-18-0497.wiff
MRM Transition	499.0 / 99.0	**Result Table**	18-0497A_BASE
Internal Standard	13C8-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	8/24/2018 3:22:05 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.87064 x + 0.01042 (r = 0.99977) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	116.636822	116.6
3	JY39	L2	True	250.00	213.988200	85.6
4	JY40	L3	True	500.00	510.451344	102.1
5	JY41	L4	True	1000.00	959.221052	95.9
6	JY42	L5	True	2500.00	2458.214761	98.3
7	JY43	L6	True	10000.00	10193.898958	101.9
8	JY44	L7	True	20000.00	19897.588864	99.5



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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:47:58 AM

Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:22:05	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.92	PFHxA			
PFHxA_2	313.0 / 119.0	1.91	PFHxA	0.110	0.080	ü
PFOA_1	413.0 / 369.0	2.73	PFOA			
PFOA_2	413.0 / 169.0	2.74	PFOA	0.080	0.069	ü
PFOS_1	499.0 / 80.0	3.13	PFOS			
PFOS_2	499.0 / 99.0	3.13	PFOS	0.250	0.188	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:48:03 AM

Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:32:58	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.92	PFHxA			
PFHxA_2	313.0 / 119.0	1.92	PFHxA	0.070	0.080	ü
PFOA_1	413.0 / 369.0	2.74	PFOA			
PFOA_2	413.0 / 169.0	2.74	PFOA	0.070	0.069	ü
PFOS_1	499.0 / 80.0	3.12	PFOS			
PFOS_2	499.0 / 99.0	3.12	PFOS	0.170	0.188	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:48:07 AM

Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:43:51	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.91	PFHxA			
PFHxA_2	313.0 / 119.0	1.92	PFHxA	0.080	0.080	ü
PFOA_1	413.0 / 369.0	2.73	PFOA			
PFOA_2	413.0 / 169.0	2.73	PFOA	0.060	0.069	ü
PFOS_1	499.0 / 80.0	3.12	PFOS			
PFOS_2	499.0 / 99.0	3.12	PFOS	0.190	0.188	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:48:11 AM

Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:54:43	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.90	PFHxA			
PFHxA_2	313.0 / 119.0	1.90	PFHxA	0.080	0.080	ü
PFOA_1	413.0 / 369.0	2.72	PFOA			
PFOA_2	413.0 / 169.0	2.72	PFOA	0.070	0.069	ü
PFOS_1	499.0 / 80.0	3.11	PFOS			
PFOS_2	499.0 / 99.0	3.11	PFOS	0.170	0.188	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:48:15 AM

Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:05:35	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.90	PFHxA			
PFHxA_2	313.0 / 119.0	1.90	PFHxA	0.080	0.080	ü
PFOA_1	413.0 / 369.0	2.72	PFOA			
PFOA_2	413.0 / 169.0	2.72	PFOA	0.070	0.069	ü
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.11	PFOS	0.180	0.188	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 9:48:20 AM

Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:16:27	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.90	PFHxA			
PFHxA_2	313.0 / 119.0	1.90	PFHxA	0.070	0.080	ü
PFOA_1	413.0 / 369.0	2.72	PFOA			
PFOA_2	413.0 / 169.0	2.72	PFOA	0.070	0.069	ü
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.10	PFOS	0.170	0.188	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 30/08/2018 4:27:34 PM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:27:19	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.90	PFHxA			
PFHxA_2	313.0 / 119.0	1.90	PFHxA	0.070	0.079	ü
PFOA_1	413.0 / 369.0	2.71	PFOA			
PFOA_2	413.0 / 169.0	2.71	PFOA	0.070	0.069	ü
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.10	PFOS	0.180	0.187	ü

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:51:28 AM

Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:22:05	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.92	13C5-PFHxA	318.0 / 273.0	88221.32	250.00
PFHxA_2	313.0 / 119.0	1.91	13C5-PFHxA	318.0 / 273.0	88221.32	250.00
PFOA_1	413.0 / 369.0	2.73	13C8-PFOA	421.0 / 376.0	95798.07	250.00
PFOA_2	413.0 / 169.0	2.74	13C8-PFOA	421.0 / 376.0	95798.07	250.00
PFOS_1	499.0 / 80.0	3.13	13C8-PFOS	507.0 / 99.0	29249.70	239.25
PFOS_2	499.0 / 99.0	3.13	13C8-PFOS	507.0 / 99.0	29249.70	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:51:33 AM

Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:32:58	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.92	13C5-PFHxA	318.0 / 273.0	92255.73	250.00
PFHxA_2	313.0 / 119.0	1.92	13C5-PFHxA	318.0 / 273.0	92255.73	250.00
PFOA_1	413.0 / 369.0	2.74	13C8-PFOA	421.0 / 376.0	105756.09	250.00
PFOA_2	413.0 / 169.0	2.74	13C8-PFOA	421.0 / 376.0	105756.09	250.00
PFOS_1	499.0 / 80.0	3.12	13C8-PFOS	507.0 / 99.0	34234.34	239.25
PFOS_2	499.0 / 99.0	3.12	13C8-PFOS	507.0 / 99.0	34234.34	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:51:36 AM

Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:43:51	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.91	13C5-PFHxA	318.0 / 273.0	89174.43	250.00
PFHxA_2	313.0 / 119.0	1.92	13C5-PFHxA	318.0 / 273.0	89174.43	250.00
PFOA_1	413.0 / 369.0	2.73	13C8-PFOA	421.0 / 376.0	101044.36	250.00
PFOA_2	413.0 / 169.0	2.73	13C8-PFOA	421.0 / 376.0	101044.36	250.00
PFOS_1	499.0 / 80.0	3.12	13C8-PFOS	507.0 / 99.0	31166.66	239.25
PFOS_2	499.0 / 99.0	3.12	13C8-PFOS	507.0 / 99.0	31166.66	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:51:40 AM

Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:54:43	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.90	13C5-PFHxA	318.0 / 273.0	85560.89	250.00
PFHxA_2	313.0 / 119.0	1.90	13C5-PFHxA	318.0 / 273.0	85560.89	250.00
PFOA_1	413.0 / 369.0	2.72	13C8-PFOA	421.0 / 376.0	98666.25	250.00
PFOA_2	413.0 / 169.0	2.72	13C8-PFOA	421.0 / 376.0	98666.25	250.00
PFOS_1	499.0 / 80.0	3.11	13C8-PFOS	507.0 / 99.0	32391.60	239.25
PFOS_2	499.0 / 99.0	3.11	13C8-PFOS	507.0 / 99.0	32391.60	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:51:44 AM

Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:05:35	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.90	13C5-PFHxA	318.0 / 273.0	83241.90	250.00
PFHxA_2	313.0 / 119.0	1.90	13C5-PFHxA	318.0 / 273.0	83241.90	250.00
PFOA_1	413.0 / 369.0	2.72	13C8-PFOA	421.0 / 376.0	98881.68	250.00
PFOA_2	413.0 / 169.0	2.72	13C8-PFOA	421.0 / 376.0	98881.68	250.00
PFOS_1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	32395.30	239.25
PFOS_2	499.0 / 99.0	3.11	13C8-PFOS	507.0 / 99.0	32395.30	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 9:51:48 AM

Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:16:27	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.90	13C5-PFHxA	318.0 / 273.0	92109.12	250.00
PFHxA_2	313.0 / 119.0	1.90	13C5-PFHxA	318.0 / 273.0	92109.12	250.00
PFOA_1	413.0 / 369.0	2.72	13C8-PFOA	421.0 / 376.0	101004.86	250.00
PFOA_2	413.0 / 169.0	2.72	13C8-PFOA	421.0 / 376.0	101004.86	250.00
PFOS_1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	34002.01	239.25
PFOS_2	499.0 / 99.0	3.10	13C8-PFOS	507.0 / 99.0	34002.01	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 30/08/2018 4:28:45 PM

Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:27:19	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.90	13C5-PFHxA	318.0 / 273.0	87538.58	250.00
PFHxA_2	313.0 / 119.0	1.90	13C5-PFHxA	318.0 / 273.0	87538.58	250.00
PFOA_1	413.0 / 369.0	2.71	13C8-PFOA	421.0 / 376.0	91748.06	250.00
PFOA_2	413.0 / 169.0	2.71	13C8-PFOA	421.0 / 376.0	91748.06	250.00
PFOS_1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	32753.65	239.25
PFOS_2	499.0 / 99.0	3.10	13C8-PFOS	507.0 / 99.0	32753.65	239.25

BATTELLE

QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:54:57 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFHxA_1	313.0 / 269.0	1.89	965.363067	1010.00	95.58
PFHxA_2	313.0 / 119.0	1.89	998.487325	1010.00	98.86
PFOA_1	413.0 / 369.0	2.70	954.602469	1000.00	95.46
PFOA_2	413.0 / 169.0	2.70	939.762822	1000.00	93.98
PFOS_1	499.0 / 80.0	3.09	921.197709	1000.00	92.12
PFOS_2	499.0 / 99.0	3.09	985.245321	1000.00	98.52

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QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:55:00 AM

Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFHxA_1	313.0 / 269.0	1.88	2513.350227	2525.00	99.54
PFHxA_2	313.0 / 119.0	1.87	2464.552207	2525.00	97.61
PFOA_1	413.0 / 369.0	2.68	2425.772049	2500.00	97.03
PFOA_2	413.0 / 169.0	2.68	2214.219950	2500.00	88.57
PFOS_1	499.0 / 80.0	3.07	2319.668695	2500.00	92.79
PFOS_2	499.0 / 99.0	3.07	2479.612269	2500.00	99.18

BATTELLE

QC Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 9:55:04 AM

Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFHxA_1	313.0 / 269.0	1.87	1046.719360	1010.00	103.64
PFHxA_2	313.0 / 119.0	1.86	1076.888738	1010.00	106.62
PFOA_1	413.0 / 369.0	2.67	983.429009	1000.00	98.34
PFOA_2	413.0 / 169.0	2.67	924.025729	1000.00	92.40
PFOS_1	499.0 / 80.0	3.06	957.146085	1000.00	95.71
PFOS_2	499.0 / 99.0	3.06	966.304007	1000.00	96.63

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Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:58:43 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.89	335842.36	965.363067	60.5	false
PFHxA_2	313.0 / 119.0	1.89	26066.17	998.487325	59.6	false
PFOA_1	413.0 / 369.0	2.70	401794.24	954.602469	252.4	false
PFOA_2	413.0 / 169.0	2.70	27196.76	939.762822	187.1	false
PFOS_1	499.0 / 80.0	3.09	627044.42	921.197709	198.2	true
PFOS_2	499.0 / 99.0	3.09	119051.16	985.245321	377.9	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:58:48 AM

Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.88	733066.07	2513.350227	119.2	false
PFHxA_2	313.0 / 119.0	1.87	52878.28	2464.552207	109.7	false
PFOA_1	413.0 / 369.0	2.68	901818.02	2425.772049	521.8	false
PFOA_2	413.0 / 169.0	2.68	56419.90	2214.219950	330.3	false
PFOS_1	499.0 / 80.0	3.07	1381813.83	2319.668695	269.9	false
PFOS_2	499.0 / 99.0	3.07	257566.12	2479.612269	534.5	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 9:58:52 AM

Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	391093.68	1046.719360	85.0	false
PFHxA_2	313.0 / 119.0	1.86	30117.46	1076.888738	77.6	false
PFOA_1	413.0 / 369.0	2.67	471461.77	983.429009	278.0	false
PFOA_2	413.0 / 169.0	2.67	30426.29	924.025729	195.7	false
PFOS_1	499.0 / 80.0	3.06	727695.12	957.146085	215.9	true
PFOS_2	499.0 / 99.0	3.06	130271.67	966.304007	432.9	false

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:01:26 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.89	PFHxA			
PFHxA_2	313.0 / 119.0	1.89	PFHxA	0.080	0.080	ü
PFOA_1	413.0 / 369.0	2.70	PFOA			
PFOA_2	413.0 / 169.0	2.70	PFOA	0.070	0.069	ü
PFOS_1	499.0 / 80.0	3.09	PFOS			
PFOS_2	499.0 / 99.0	3.09	PFOS	0.190	0.188	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:01:31 AM

Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.88	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.080	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.069	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.190	0.188	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:01:36 AM

Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.080	0.080	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.069	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.180	0.188	ü

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:03:55 AM

Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.89	13C5-PFHxA	318.0 / 273.0	81514.52	250.00
PFHxA_2	313.0 / 119.0	1.89	13C5-PFHxA	318.0 / 273.0	81514.52	250.00
PFOA_1	413.0 / 369.0	2.70	13C8-PFOA	421.0 / 376.0	99700.30	250.00
PFOA_2	413.0 / 169.0	2.70	13C8-PFOA	421.0 / 376.0	99700.30	250.00
PFOS_1	499.0 / 80.0	3.09	13C8-PFOS	507.0 / 99.0	32923.87	239.25
PFOS_2	499.0 / 99.0	3.09	13C8-PFOS	507.0 / 99.0	32923.87	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:03:59 AM

Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.88	13C5-PFHxA	318.0 / 273.0	67175.74	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	67175.74	250.00
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	86785.10	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	86785.10	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	28308.60	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	28308.60	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:04:03 AM

Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	87355.69	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	87355.69	250.00
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	113477.64	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	113477.64	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	36732.86	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	36732.86	239.25

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:08:48 AM

Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:38:11	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	true
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	true

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:08:53 AM

Sample Name	J7249-FS-D(8)	**Injection Vial**	27
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:48:13	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.86	43254201.28	157588.523618	201.6	false
PFHxA_2	313.0 / 119.0	1.87	2937171.75	147259.645847	491.0	false
PFOA_1	413.0 / 369.0	2.68	42665250.60	161874.218565	701.2	false
PFOA_2	413.0 / 169.0	2.67	2187745.41	121227.973743	599.6	true
PFOS_1	499.0 / 80.0	2.93	2773091.23	6442.968691	147.0	false
PFOS_2	499.0 / 99.0	3.01	352003.01	4725.079062	255.1	true

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:08:57 AM

Sample Name	J7249-FS-D(9)	**Injection Vial**	28
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:59:04	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	1480547.40	4985.312206	133.1	false
PFHxA_2	313.0 / 119.0	1.87	94933.14	4371.910851	166.8	false
PFOA_1	413.0 / 369.0	2.68	1610171.52	4602.887100	367.4	false
PFOA_2	413.0 / 169.0	2.68	77223.10	3226.632213	187.9	true
PFOS_1	499.0 / 80.0	2.94	119319.27	246.535005	64.3	true
PFOS_2	499.0 / 99.0	3.04	18558.82	198.262320	69.3	true

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:09:01 AM

Sample Name	J7249MS-FS-D(8)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:09:56	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	45550679.89	166187.591619	202.1	false
PFHxA_2	313.0 / 119.0	1.87	3042356.04	152748.213702	497.2	false
PFOA_1	413.0 / 369.0	2.68	45260263.66	152656.723910	571.3	false
PFOA_2	413.0 / 169.0	2.67	2227563.30	109732.390778	601.9	true
PFOS_1	499.0 / 80.0	2.97	3726126.51	7912.704659	129.4	false
PFOS_2	499.0 / 99.0	3.05	539915.69	6629.421356	281.5	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:09:06 AM

Sample Name	J7249MS-FS-D(9)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:20:48	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	1413821.99	5848.608826	131.4	false
PFHxA_2	313.0 / 119.0	1.88	91738.59	5195.250482	134.0	false
PFOA_1	413.0 / 369.0	2.68	1650526.07	5498.523911	409.1	false
PFOA_2	413.0 / 169.0	2.68	78988.83	3845.753644	185.7	true
PFOS_1	499.0 / 80.0	2.99	141570.36	371.533732	56.0	true
PFOS_2	499.0 / 99.0	3.06	21647.72	305.799937	92.8	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:09:13 AM

Sample Name	J7249MSD-FS-D(8)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:31:41	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.86	46835313.43	140298.698237	216.9	false
PFHxA_2	313.0 / 119.0	1.86	3168742.45	130621.474548	436.2	false
PFOA_1	413.0 / 369.0	2.67	46510814.90	135315.804673	520.3	false
PFOA_2	413.0 / 169.0	2.67	2373235.43	100841.549350	570.3	true
PFOS_1	499.0 / 80.0	2.97	3845823.95	6525.243060	124.7	true
PFOS_2	499.0 / 99.0	3.05	543967.58	5332.702245	336.6	true

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:09:22 AM

Sample Name	J7249MSD-FS-D(9)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:42:34	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.86	1494847.51	5348.823304	116.9	false
PFHxA_2	313.0 / 119.0	1.87	95704.34	4685.586301	156.7	false
PFOA_1	413.0 / 369.0	2.67	1695235.12	4972.676663	321.0	false
PFOA_2	413.0 / 169.0	2.67	75943.88	3257.115188	226.4	true
PFOS_1	499.0 / 80.0	2.98	143696.37	283.485847	58.3	true
PFOS_2	499.0 / 99.0	3.06	20729.51	214.784936	103.3	true

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 29/08/2018 10:09:27 AM

Sample Name	J7257-FS-D(9)	**Injection Vial**	33
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:53:25	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	534479.23	2324.472528	91.8	false
PFHxA_2	313.0 / 119.0	1.87	37481.17	2213.560984	86.5	false
PFOA_1	413.0 / 369.0	2.67	30129.38	124.620262	35.9	false
PFOA_2	413.0 / 169.0	2.67	2771.34	155.458771	30.7	false
PFOS_1	499.0 / 80.0	3.06	7785.90	41.774392	19.2	true
PFOS_2	499.0 / 99.0	3.09	3123.27	35.328727	17.8	false

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:13:46 AM

Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:38:11	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.080	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.069	ü
PFOS_1	499.0 / 80.0	N/A	PFOS			
PFOS_2	499.0 / 99.0	N/A	PFOS	N/A	0.188	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:13:50 AM

Sample Name	J7249-FS-D(8)	**Injection Vial**	27
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:48:13	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.080	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.050	0.069	ü
PFOS_1	499.0 / 80.0	2.93	PFOS			
PFOS_2	499.0 / 99.0	3.01	PFOS	0.130	0.188	ü

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:13:54 AM

Sample Name	J7249-FS-D(9)	**Injection Vial**	28
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:59:04	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.060	0.080	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.050	0.069	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.160	0.188	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:14:02 AM

Sample Name	J7249MS-FS-D(8)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:09:56	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.080	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.050	0.069	ü
PFOS_1	499.0 / 80.0	2.97	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.140	0.188	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:14:06 AM

Sample Name	J7249MS-FS-D(9)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:20:48	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.88	PFHxA	0.060	0.080	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.050	0.069	ü
PFOS_1	499.0 / 80.0	2.99	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.150	0.188	ü

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:14:11 AM

Sample Name	J7249MSD-FS-D(8)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:31:41	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.080	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.050	0.069	ü
PFOS_1	499.0 / 80.0	2.97	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.140	0.188	ü

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:14:15 AM

Sample Name	J7249MSD-FS-D(9)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:42:34	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.060	0.080	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.040	0.069	ü
PFOS_1	499.0 / 80.0	2.98	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.140	0.188	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 29/08/2018 10:14:21 AM

Sample Name	J7257-FS-D(9)	**Injection Vial**	33
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:53:25	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.080	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.090	0.069	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.09	PFOS	0.400	0.188	

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:18:47 AM

Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:38:11	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	82645.68	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	82645.68	250.00
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	107810.82	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	107810.82	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	32192.10	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	32192.10	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:18:51 AM

Sample Name	J7249-FS-D(8)	**Injection Vial**	27
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:48:13	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	62561.33	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	62561.33	250.00
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	60963.40	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	60963.40	250.00
PFOS_1	499.0 / 80.0	2.93	13C8-PFOS	507.0 / 99.0	20303.90	239.25
PFOS_2	499.0 / 99.0	3.01	13C8-PFOS	507.0 / 99.0	20303.90	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:18:58 AM

Sample Name	J7249-FS-D(9)	**Injection Vial**	28
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:59:04	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	68040.71	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	68040.71	250.00
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	81300.07	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	81300.07	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	25469.89	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	25469.89	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:19:02 AM

Sample Name	J7249MS-FS-D(8)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:09:56	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	62473.34	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	62473.34	250.00
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	68576.82	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	68576.82	250.00
PFOS_1	499.0 / 80.0	2.97	13C8-PFOS	507.0 / 99.0	22197.38	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	22197.38	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:19:06 AM

Sample Name	J7249MS-FS-D(9)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:20:48	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	55340.02	250.00
PFHxA_2	313.0 / 119.0	1.88	13C5-PFHxA	318.0 / 273.0	55340.02	250.00
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	69707.02	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	69707.02	250.00
PFOS_1	499.0 / 80.0	2.99	13C8-PFOS	507.0 / 99.0	19273.37	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	19273.37	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:19:11 AM

Sample Name	J7249MSD-FS-D(8)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:31:41	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	76090.60	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	76090.60	250.00
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	79504.16	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	79504.16	250.00
PFOS_1	499.0 / 80.0	2.97	13C8-PFOS	507.0 / 99.0	27801.71	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	27801.71	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:19:15 AM

Sample Name	J7249MSD-FS-D(9)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:42:34	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	64005.92	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	64005.92	250.00
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	79200.79	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	79200.79	250.00
PFOS_1	499.0 / 80.0	2.98	13C8-PFOS	507.0 / 99.0	26263.96	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	26263.96	239.25

BATTELLE

Summary Internal Standard Report

Created with Analyst Reporter
Printed: 29/08/2018 10:19:22 AM

Sample Name	J7257-FS-D(9)	**Injection Vial**	33
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:53:25	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	53003.45	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	53003.45	250.00
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	68296.25	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	68296.25	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	23862.90	239.25
PFOS_2	499.0 / 99.0	3.09	13C8-PFOS	507.0 / 99.0	23862.90	239.25

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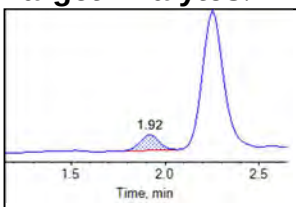
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:26:40 AM

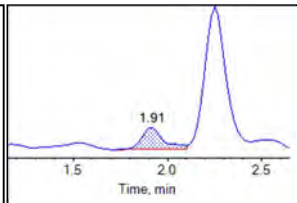
Sample Name	JY38	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:22:05	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

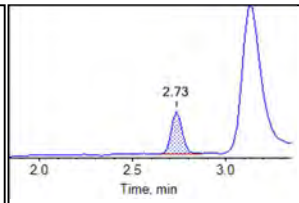
Target Analytes:



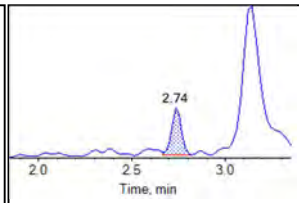
PFHxA_1



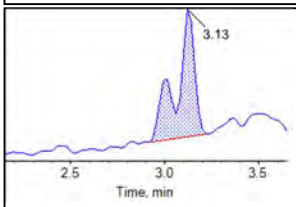
PFHxA_2



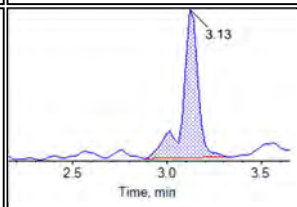
PFOA_1



PFOA_2

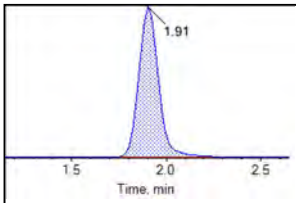


PFOS_1

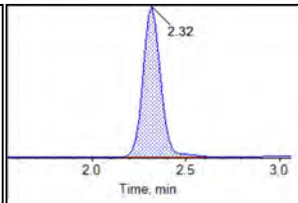


PFOS_2

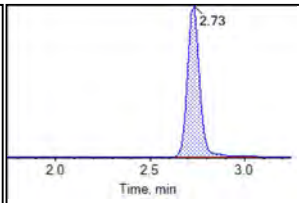
Internal Standards:



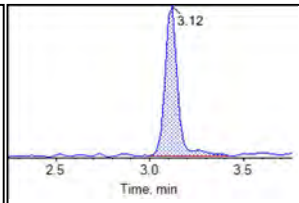
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

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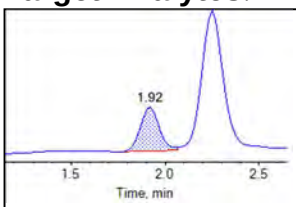
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:26:45 AM

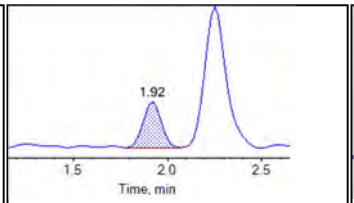
Sample Name	JY39	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:32:58	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

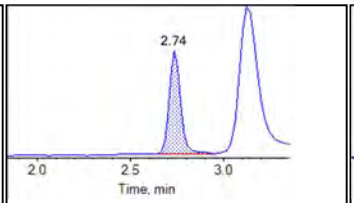
Target Analytes:



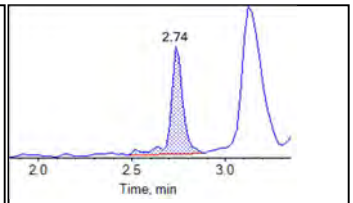
PFHxA_1



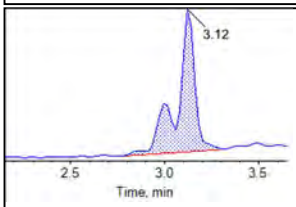
PFHxA_2



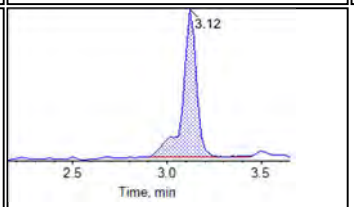
PFOA_1



PFOA_2

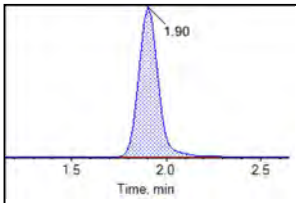


PFOS_1

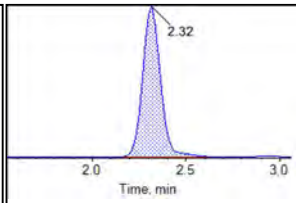


PFOS_2

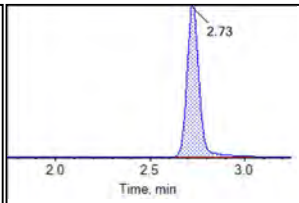
Internal Standards:



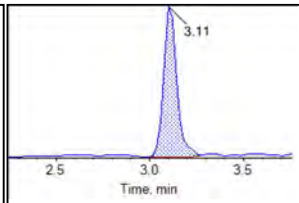
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

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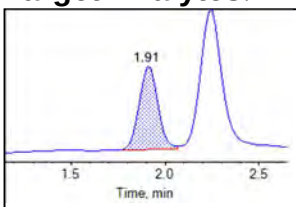
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:26:51 AM

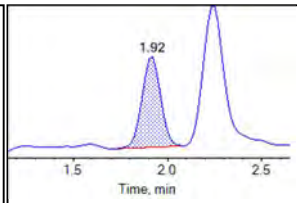
Sample Name	JY40	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:43:51	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

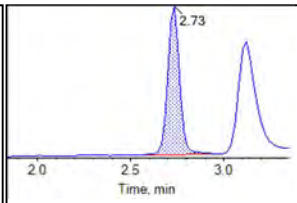
Target Analytes:



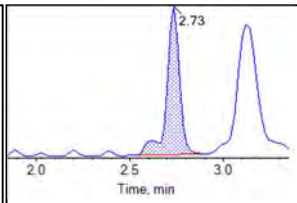
PFHxA_1



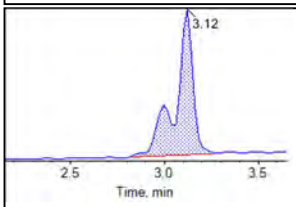
PFHxA_2



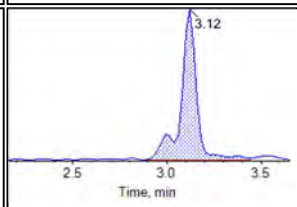
PFOA_1



PFOA_2

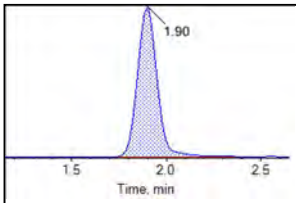


PFOS_1

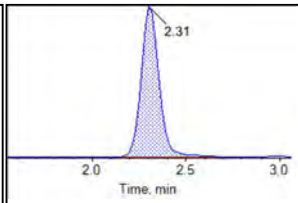


PFOS_2

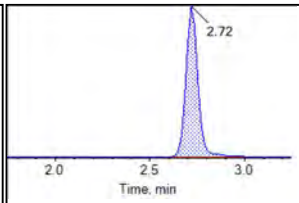
Internal Standards:



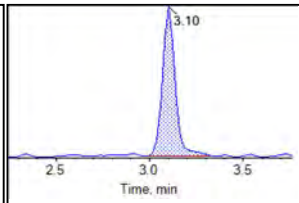
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

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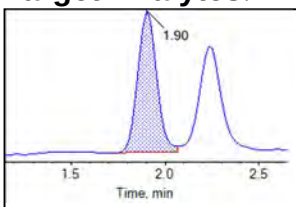
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:26:59 AM

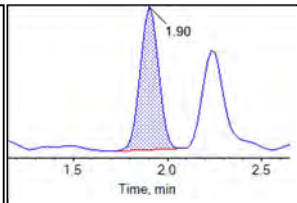
Sample Name	JY41	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T15:54:43	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

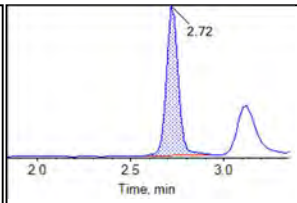
Target Analytes:



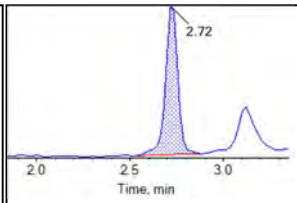
PFHxA_1



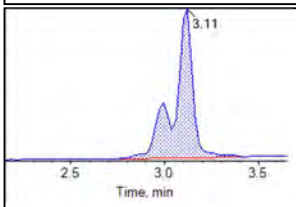
PFHxA_2



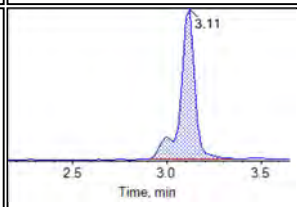
PFOA_1



PFOA_2

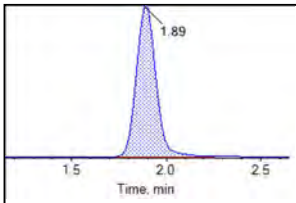


PFOS_1

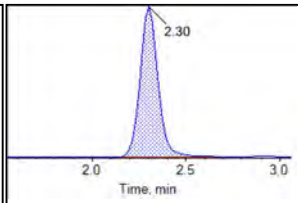


PFOS_2

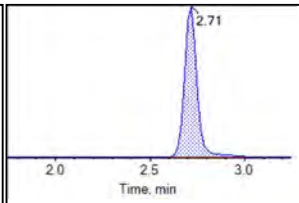
Internal Standards:



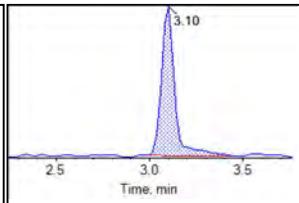
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

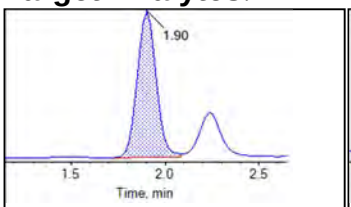
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:27:04 AM

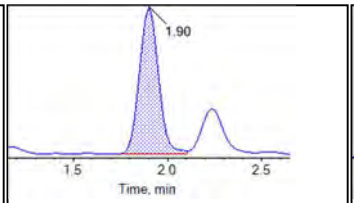
Sample Name	JY42	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:05:35	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

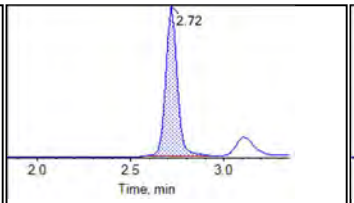
Target Analytes:



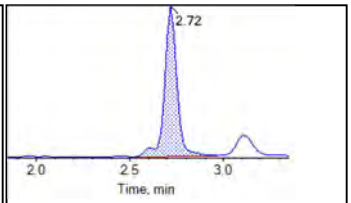
PFHxA_1



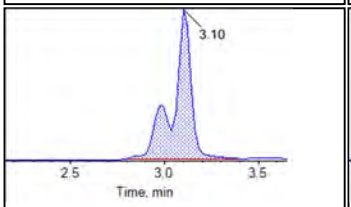
PFHxA_2



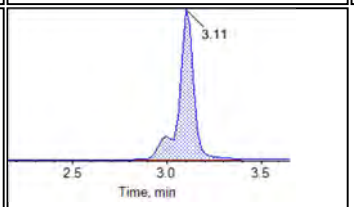
PFOA_1



PFOA_2

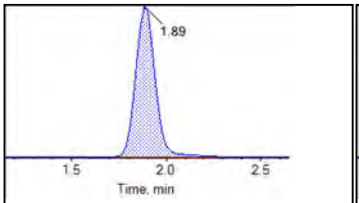


PFOS_1

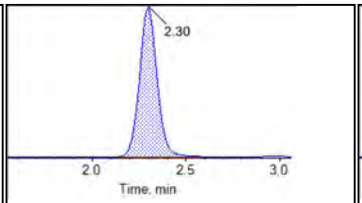


PFOS_2

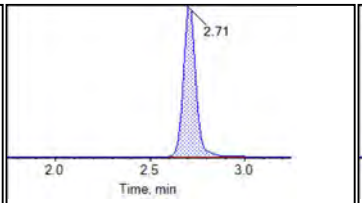
Internal Standards:



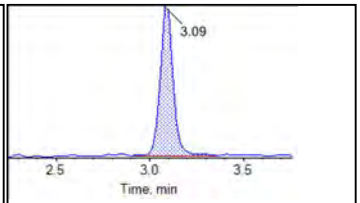
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

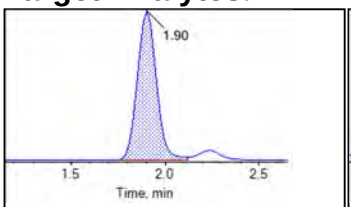
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:27:09 AM

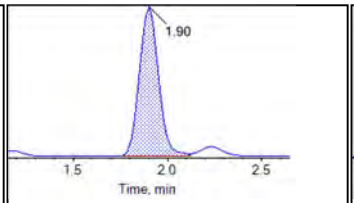
Sample Name	JY43	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:16:27	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

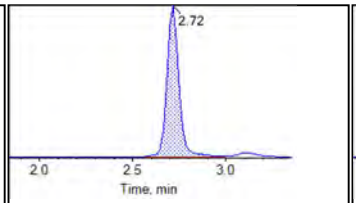
Target Analytes:



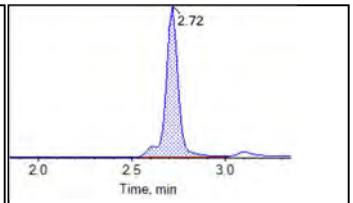
PFHxA_1



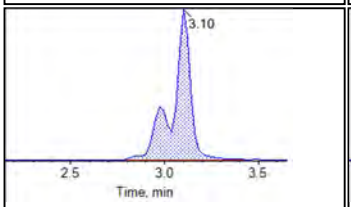
PFHxA_2



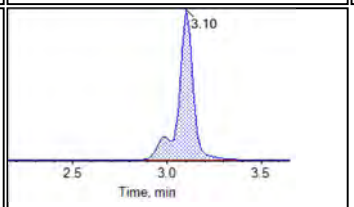
PFOA_1



PFOA_2

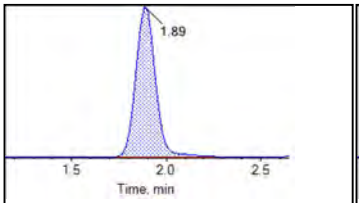


PFOS_1

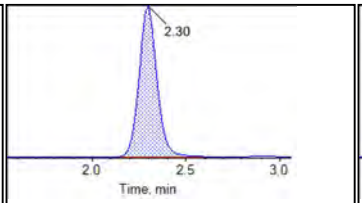


PFOS_2

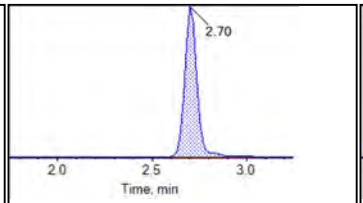
Internal Standards:



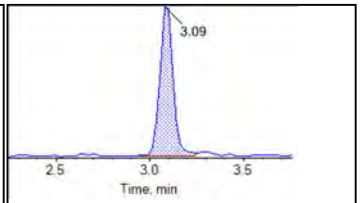
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

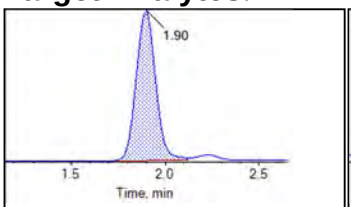
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:27:17 AM

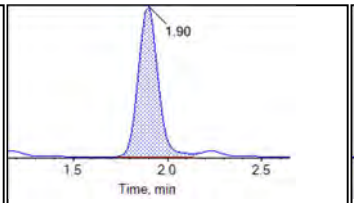
Sample Name	JY44	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:27:19	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

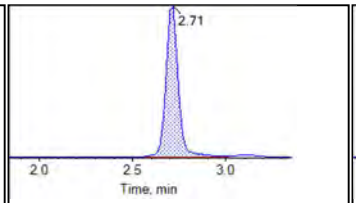
Target Analytes:



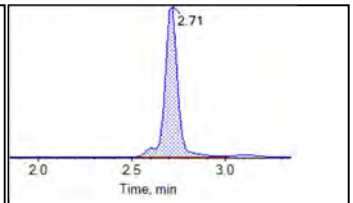
PFHxA_1



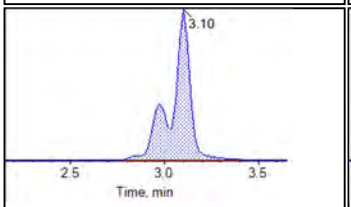
PFHxA_2



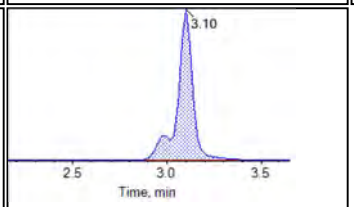
PFOA_1



PFOA_2

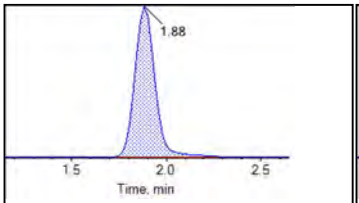


PFOS_1

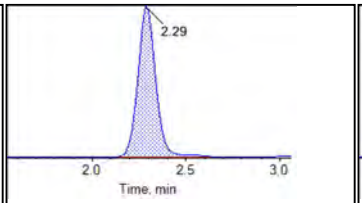


PFOS_2

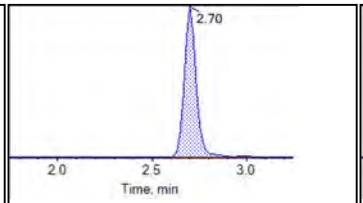
Internal Standards:



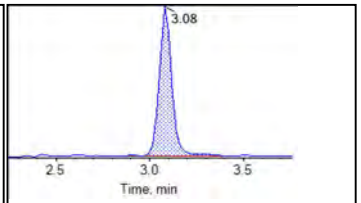
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

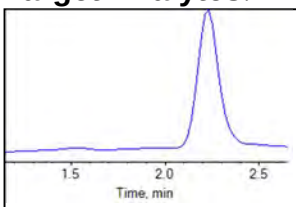
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:27:22 AM

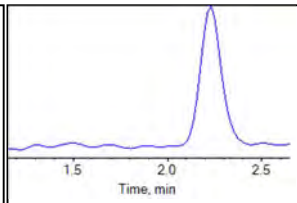
Sample Name	JY46 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:38:11	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

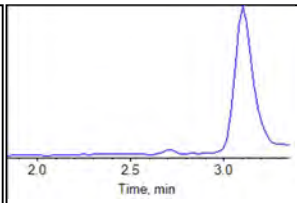
Target Analytes:



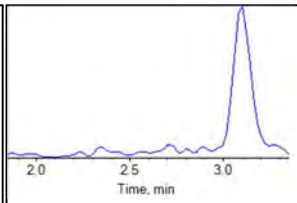
PFHxA_1



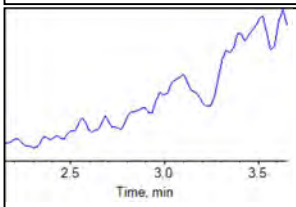
PFHxA_2



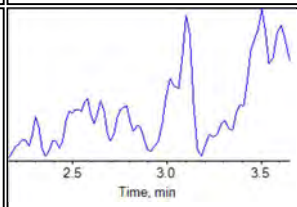
PFOA_1



PFOA_2

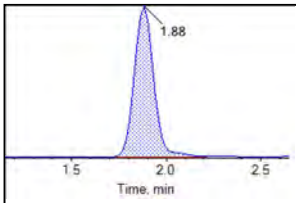


PFOS_1

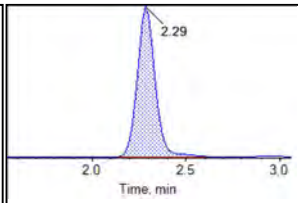


PFOS_2

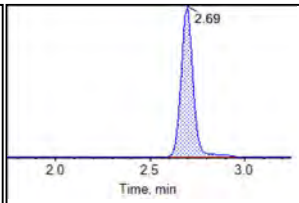
Internal Standards:



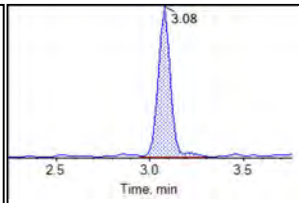
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

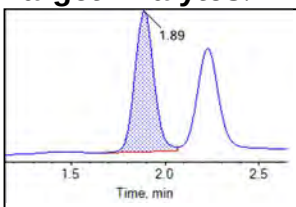
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:27:27 AM

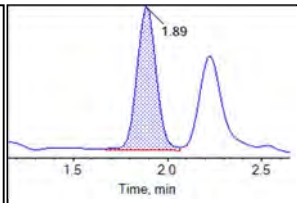
Sample Name	JY45 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T16:49:03	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

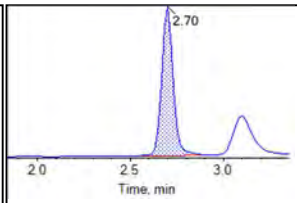
Target Analytes:



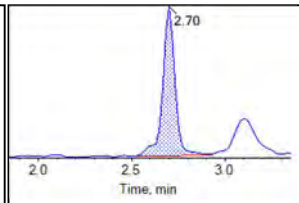
PFHxA_1



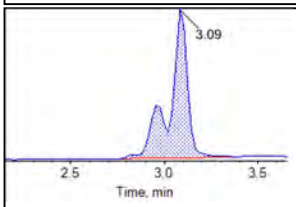
PFHxA_2



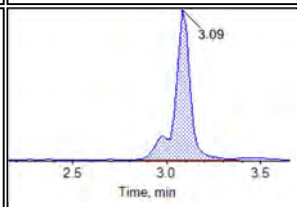
PFOA_1



PFOA_2

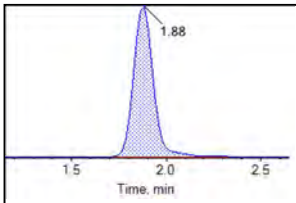


PFOS_1

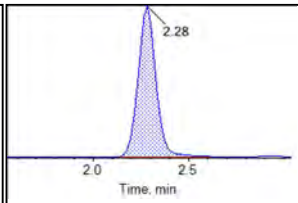


PFOS_2

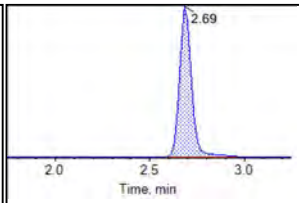
Internal Standards:



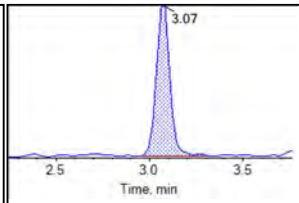
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

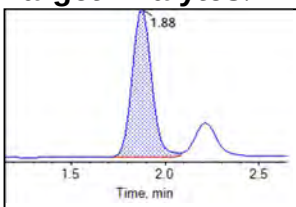
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:27:46 AM

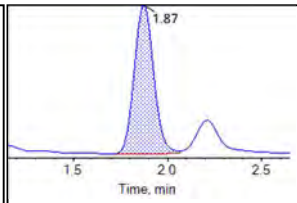
Sample Name	JY42	**Injection Vial**	54
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:26:28	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

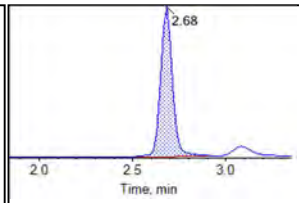
Target Analytes:



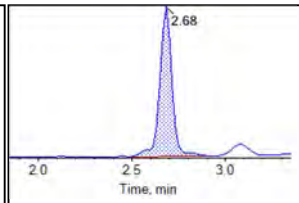
PFHxA_1



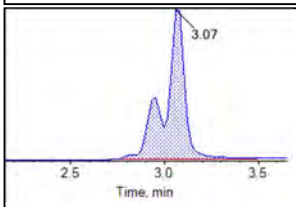
PFHxA_2



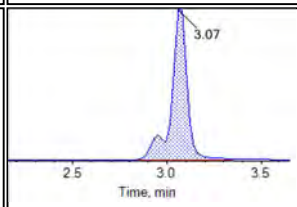
PFOA_1



PFOA_2

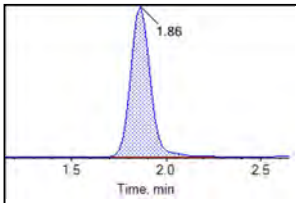


PFOS_1

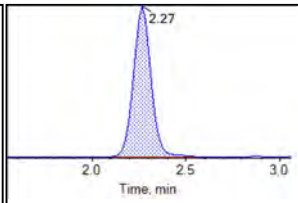


PFOS_2

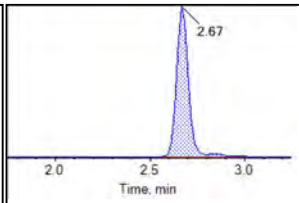
Internal Standards:



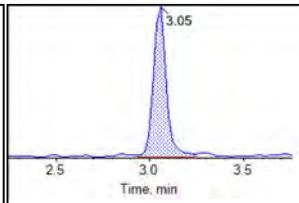
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

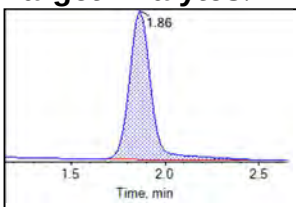
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:27:54 AM

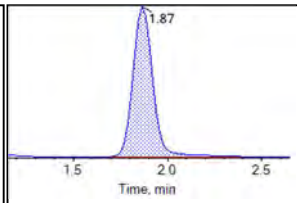
Sample Name	J7249-FS-D(8)	**Injection Vial**	27
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:48:13	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

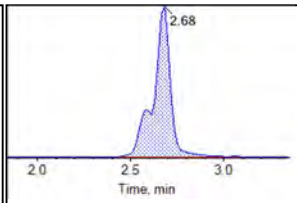
Target Analytes:



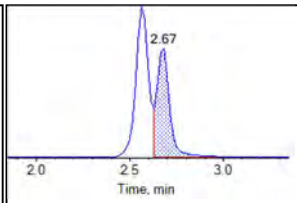
PFHxA_1



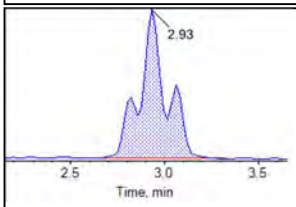
PFHxA_2



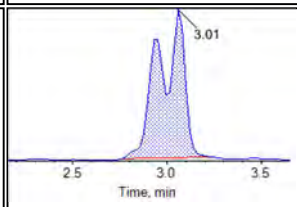
PFOA_1



PFOA_2

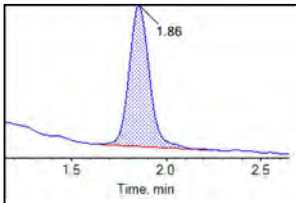


PFOS_1

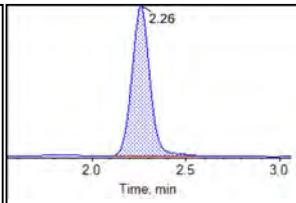


PFOS_2

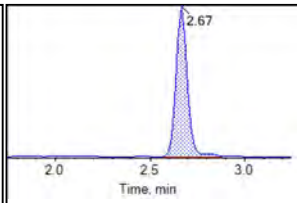
Internal Standards:



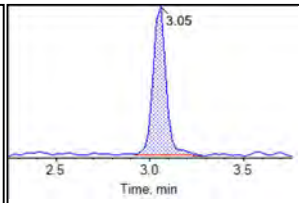
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

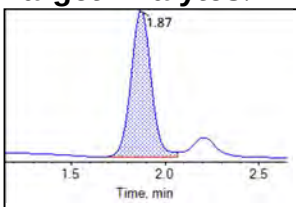
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:27:58 AM

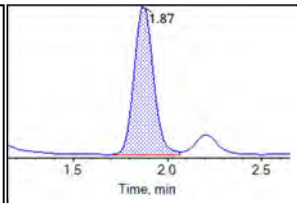
Sample Name	J7249-FS-D(9)	**Injection Vial**	28
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T20:59:04	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

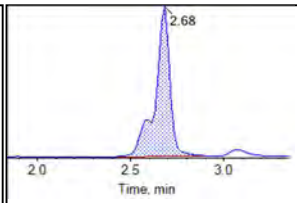
Target Analytes:



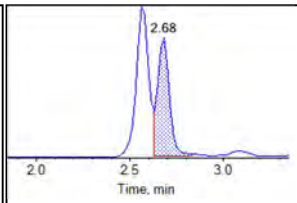
PFHxA_1



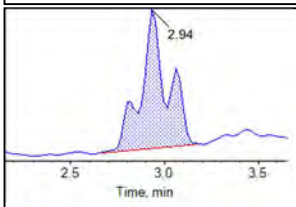
PFHxA_2



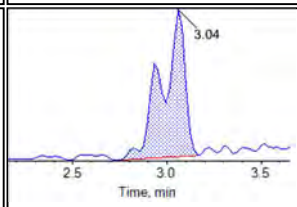
PFOA_1



PFOA_2

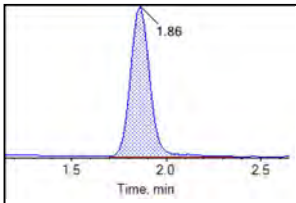


PFOS_1

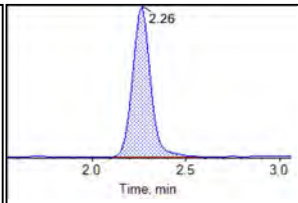


PFOS_2

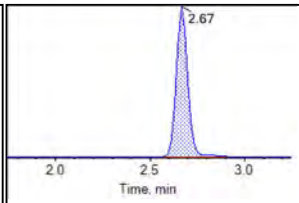
Internal Standards:



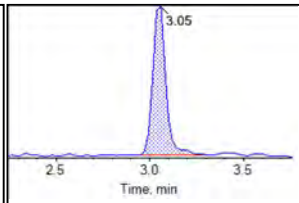
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

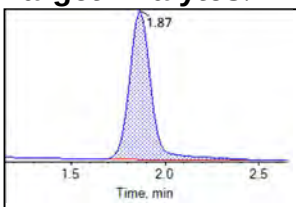
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:28:03 AM

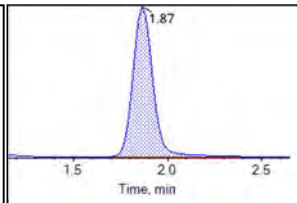
Sample Name	J7249MS-FS-D(8)	**Injection Vial**	29
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:09:56	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

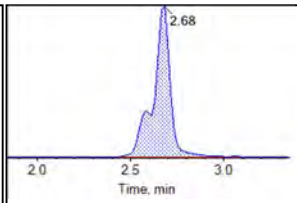
Target Analytes:



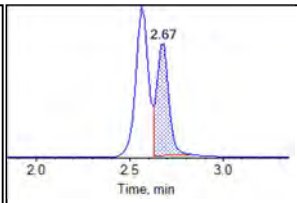
PFHxA_1



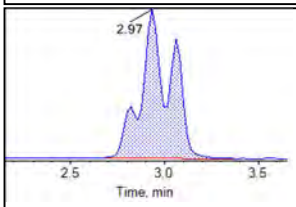
PFHxA_2



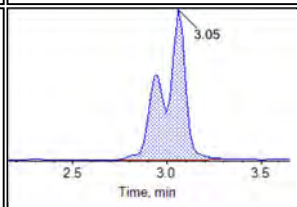
PFOA_1



PFOA_2

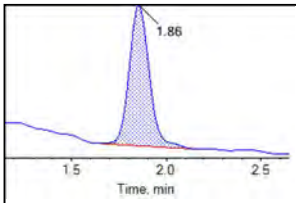


PFOS_1

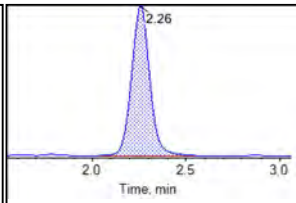


PFOS_2

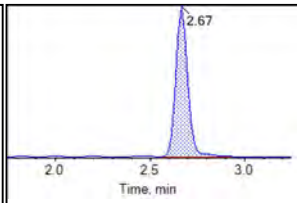
Internal Standards:



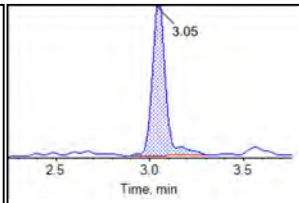
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

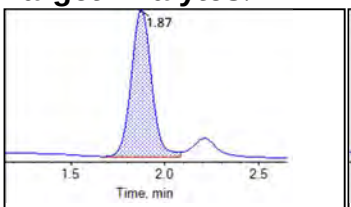
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:28:09 AM

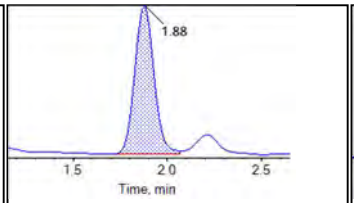
Sample Name	J7249MS-FS-D(9)	**Injection Vial**	30
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:20:48	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

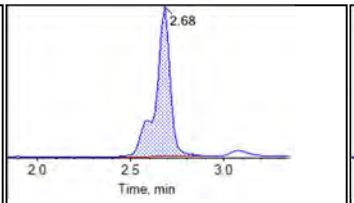
Target Analytes:



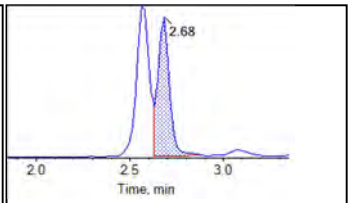
PFHxA_1



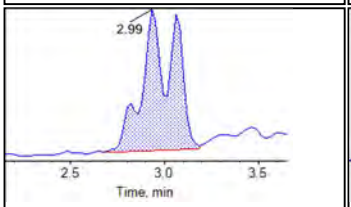
PFHxA_2



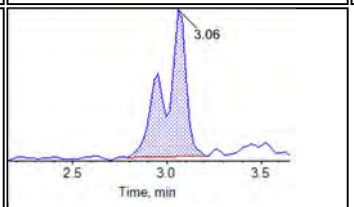
PFOA_1



PFOA_2

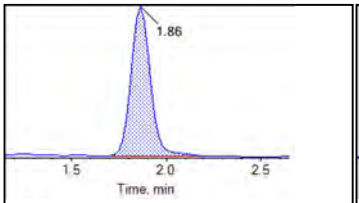


PFOS_1

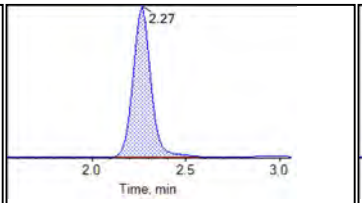


PFOS_2

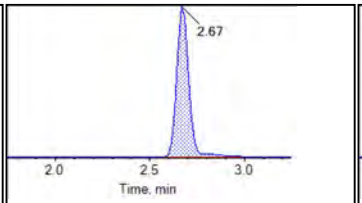
Internal Standards:



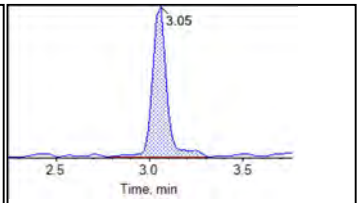
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

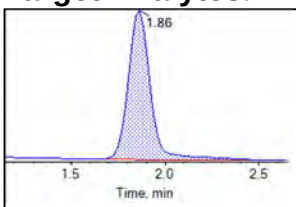
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:28:13 AM

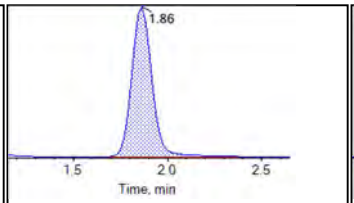
Sample Name	J7249MSD-FS-D(8)	**Injection Vial**	31
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:31:41	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

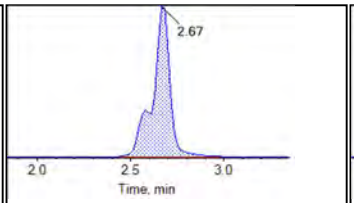
Target Analytes:



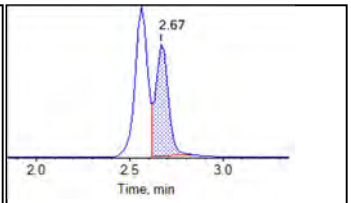
PFHxA_1



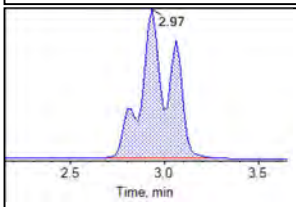
PFHxA_2



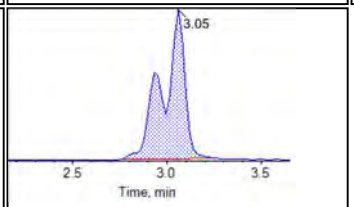
PFOA_1



PFOA_2

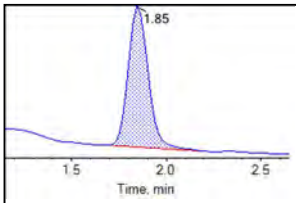


PFOS_1

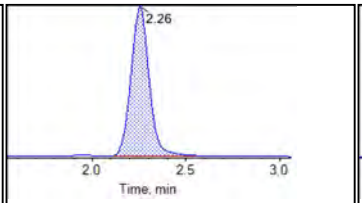


PFOS_2

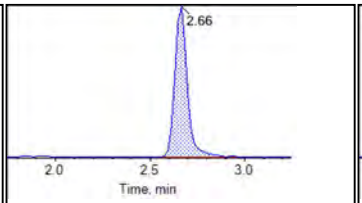
Internal Standards:



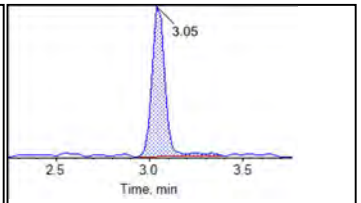
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

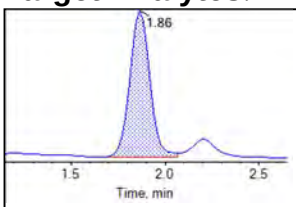
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:28:18 AM

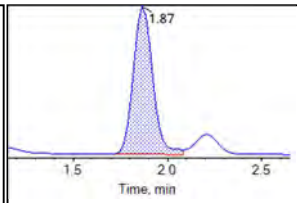
Sample Name	J7249MSD-FS-D(9)	**Injection Vial**	32
Sample ID	073018-02	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:42:34	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

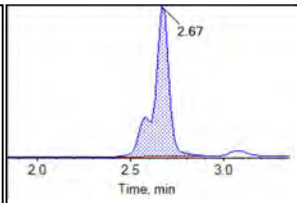
Target Analytes:



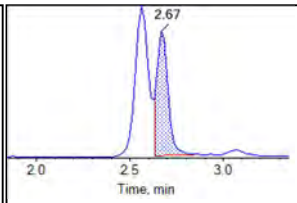
PFHxA_1



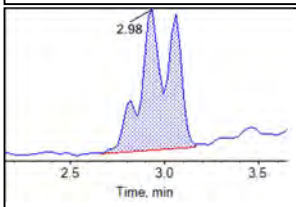
PFHxA_2



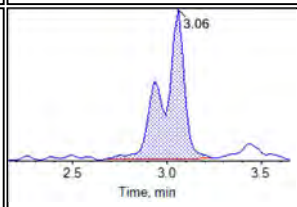
PFOA_1



PFOA_2

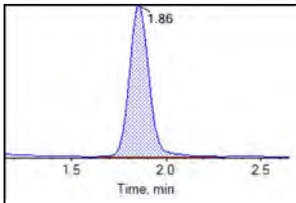


PFOS_1

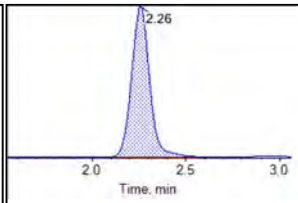


PFOS_2

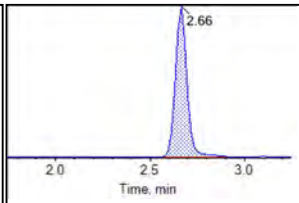
Internal Standards:



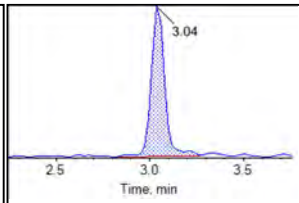
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

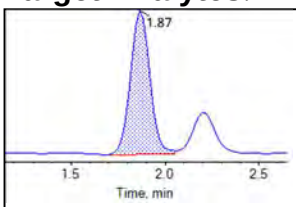
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:28:27 AM

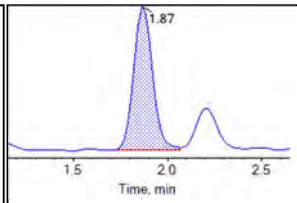
Sample Name	J7257-FS-D(9)	**Injection Vial**	33
Sample ID	073118-03	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T21:53:25	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

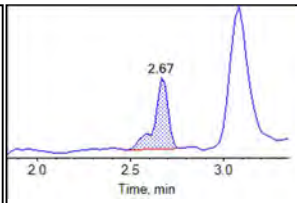
Target Analytes:



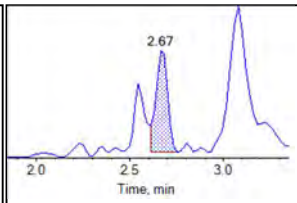
PFHxA_1



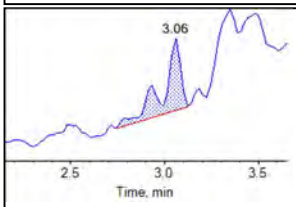
PFHxA_2



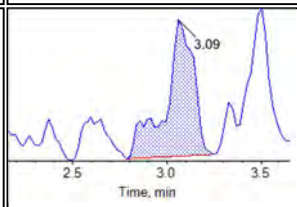
PFOA_1



PFOA_2

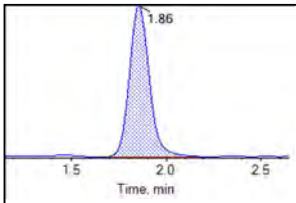


PFOS_1

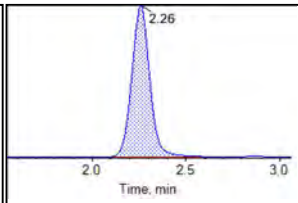


PFOS_2

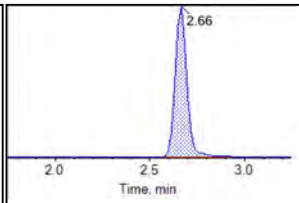
Internal Standards:



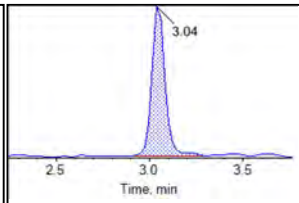
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

BATTELLE

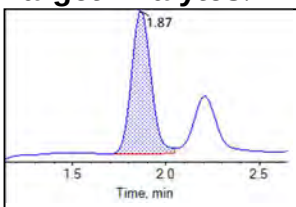
Chromatogram Report

Created with Analyst Reporter
Printed: 29/08/2018 10:28:32 AM

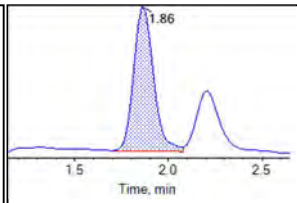
Sample Name	JY41	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-08-24T22:04:18	**Data File**	18-0499-18-0497.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0497A_BASE
Sample Comment			

Chromatograms

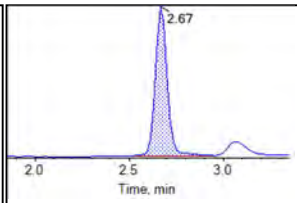
Target Analytes:



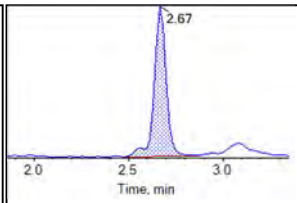
PFHxA_1



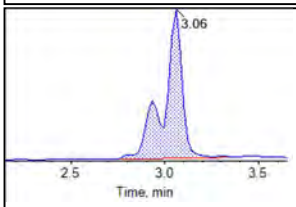
PFHxA_2



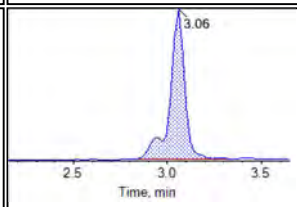
PFOA_1



PFOA_2

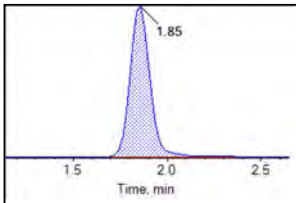


PFOS_1

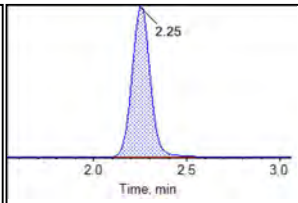


PFOS_2

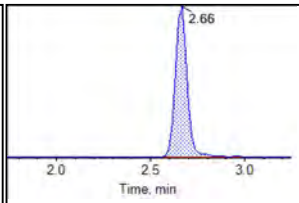
Internal Standards:



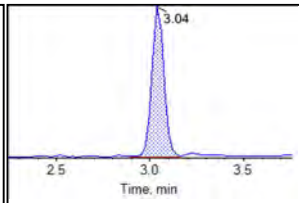
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C8-PFOS

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Battelle
505 King Avenue, Room 10-1-170
Columbus, OH 43201
ATTN: Ms. Pamela Chang

October 2, 2018

SUBJECT: NAS North Island, July 2018, OU11, Data Validation

Dear Ms. Chang,

Enclosed is the final validation report for the fraction listed below. This SDG was received on September 6, 2018. Attachment 1 is a summary of the samples that were reviewed for analysis.

LDC Project #43078:

SDG #	**Fraction**
18-0497	Perfluorinated Alkyl Acids

The data validation was performed under Level III & IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Draft Sampling and Analysis Plan, Field Sampling Plan and Quality Assurance Project Plant, for the Groundwater Evaluation Monitoring Program at Operable Unit 11 Former Surface Impoundments at Industrial Waste and Oily Waste Treatment Plants Naval Air Stations North Island, Coronado, California; February 2016
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review; June 2008

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
Project Manager/Senior Chemist

951 pages-DL

Attachment 1

Client Select IV **NEDD/NIRIS** **LDC #43078 (Battelle-Columbus, OH / NAS North Island, July 2018, OU11)** **PO# 567210**

LDC	SDG#	DATE REC'D	(3) DATE DUE	PFAs (537)																																	
Matrix:	Air/Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	18-0497	09/06/18	09/28/18	13	0																																
A	18-0497	09/06/18	09/28/18	1	0																																
Total	J/PG			14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14

Shaded cells indicate Level IV validation (all other cells are Level III validation).

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NAS North Island, OU11

LDC Report Date: September 24, 2018

Parameters: Perfluorinated Alkyl Acids

Validation Level: Level III & IV

Laboratory: Battelle Memorial Institute

Sample Delivery Group (SDG): 18-0497

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
073018-01	J7248-FS	Water	07/30/18
073018-02**	J7249-FS**	Water	07/30/18
073018-03	J7250-FS	Water	07/30/18
073018-04	J7251-FS	Water	07/30/18
073018-05	J7252-FS	Water	07/30/18
073018-06	J7253-FS	Water	07/30/18
073018-07	J7254-FS	Water	07/30/18
073118-01	J7255-FS	Water	07/31/18
073118-02	J7256-FS	Water	07/31/18
073118-03	J7257-FS	Water	07/31/18
073118-04	J7258-FS	Water	07/31/18
080118-01	J7259-FS	Water	08/01/18
080118-02	J7260-FS	Water	08/01/18
080118-03	J7261-FS	Water	08/01/18
073018-02MS	J7249-FSMS	Water	07/30/18
073018-02MSD	J7249-FSMSD	Water	07/30/18

**Indicates sample underwent Level IV validation

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Draft Sampling and Analysis Plan (Field Sampling Plan and Quality Assurance Project Plan) for the Groundwater Evaluation Monitoring Program at Operable Unit 11 Former Surface Impoundments at Industrial Waste and Oily Waste Treatment Plants Naval Air Station North Island, Coronado, California (February 2016) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (June 2008). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Perfluorinated Alkyl Acids by Environmental Protection Agency (EPA) Method 537

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results. Samples appended with a double asterisk on the cover page were subjected to Level IV data validation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

II. LC/MS Instrument Performance Check

Instrument performance was checked as applicable.

All ion abundance requirements were met.

III. Initial Calibration and Initial Calibration Verification

Initial calibration was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990.

For each calibration point, the percent differences (%D) for their true value were less than or equal to 30.0% for all compounds.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 30.0% for all compounds.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Analysis Date	Compound	Concentration	Associated Samples
CR546PB-FS	08/08/18	PFOA PFOS	0.31 ng/L 0.44 ng/L	All samples in SDG 18-0497

Sample concentrations were compared to concentrations detected in the laboratory blanks. The sample concentrations were either not detected or were significantly greater >5X blank contaminants) than the concentrations found in the associated laboratory blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
073018-01	PFOS	0.82 ng/L	4.73U ng/L
073018-05	PFOA PFOS	1.26 ng/L 0.38 ng/L	4.31U ng/L 4.31U ng/L
073018-06	PFOA PFOS	1.41 ng/L 0.52 ng/L	4.31U ng/L 4.31U ng/L
073018-07	PFOA PFOS	1.48 ng/L 0.62 ng/L	4.39U ng/L 4.39U ng/L
073118-02	PFOS	0.94 ng/L	4.65U ng/L
080118-01	PFOS	0.79 ng/L	4.55U ng/L

VI. Field Blanks

Sample 073018-07 was identified as a trip blank. No contaminants were found with the following exceptions:

Blank ID	Collection Date	Compound	Concentration	Associated Samples
073018-07	07/30/18	PFHpA PFOA PFHxS PFOS	0.33 ng/L 1.48 ng/L 0.14 ng/L 0.62 ng/L	073018-01 073018-02** 073018-03 073018-04 073018-05 073018-06 073118-01 073118-02 073118-03 073118-04 080118-01 080118-02 080118-03

Sample 073018-06 was identified as an equipment rinsate. No contaminants were found with the following exceptions:

Blank ID	Collection Date	Compound	Concentration	Associated Samples
073018-06	07/30/18	PFHpA PFOA PFHxS PFOS PFNA PFDA	0.33 ng/L 1.41 ng/L 0.12 ng/L 0.52 ng/L 0.28 ng/L 0.26 ng/L	073018-01 073018-02** 073018-03 073018-04 073118-01 073118-02 073118-03 073118-04 080118-01 080118-02 080118-03

Sample 073018-05 was identified as a source blank. No contaminants were found with the following exceptions:

Blank ID	Collection Date	Compound	Concentration	Associated Samples
073018-05	07/30/18	PFHpA PFOA PFOS PFNA PFDA	0.33 ng/L 1.26 ng/L 0.38 ng/L 0.26 ng/L 0.27 ng/L	073018-01 073018-02** 073018-03 073018-04 073118-01 073118-02 073118-03 073118-04 080118-01 080118-02 080118-03

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
073018-01	PFOS	0.82 ng/L	4.73U ng/L
073018-02**	PFNA	0.62 ng/L	4.65U ng/L
073018-03	PFNA	0.38 ng/L	4.57U ng/L
073018-04	PFNA PFDA	0.53 ng/L 0.37 ng/L	4.57U ng/L 4.57U ng/L
073018-05	PFHpA PFOA PFOS PFNA PFDA	0.33 ng/L 1.26 ng/L 0.38 ng/L 0.26 ng/L 0.27 ng/L	4.31U ng/L 4.31U ng/L 4.31U ng/L 4.31U ng/L 4.31U ng/L

Sample	Compound	Reported Concentration	Modified Final Concentration
073018-06	PFHpA PFOA PFHxS PFOS PFNA PFDA	0.33 ng/L 1.41 ng/L 0.12 ng/L 0.52 ng/L 0.28 ng/L 0.26 ng/L	4.31U ng/L 4.31U ng/L 4.31U ng/L 4.31U ng/L 4.31U ng/L 4.31U ng/L
073118-01	PFNA	0.35 ng/L	4.49U ng/L
073118-02	PFOS	0.94 ng/L	4.65U ng/L
073118-03	PFNA	0.35 ng/L	4.49U ng/L
073118-04	PFNA PFDA	1.36 ng/L 0.36 ng/L	4.65U ng/L 4.65U ng/L
080118-01	PFHpA PFOA PFHxS PFOS PFNA PFDA	0.39 ng/L 1.64 ng/L 0.52 ng/L 0.79 ng/L 0.26 ng/L 0.30 ng/L	4.55U ng/L 4.55U ng/L 4.55U ng/L 4.55U ng/L 4.55U ng/L 4.55U ng/L
080118-02	PFHpA PFOA PFHxS PFOS PFNA PFDA	0.97 ng/L 1.98 ng/L 1.26 ng/L 2.43 ng/L 0.27 ng/L 0.27 ng/L	4.46U ng/L 4.46U ng/L 4.46U ng/L 4.46U ng/L 4.46U ng/L 4.46U ng/L

VII. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

Samples 080118-02 and 080118-03 were identified as field duplicates. No results were detected in any of the samples with the following exceptions:

Compound	Concentration (ng/L)		RPD (Limits)
	080118-02	080118-03	
PFHxA	4.91	4.77	3 (≤30)
PFHpA	0.97	1.00	3 (≤30)
PFOA	1.98	2.37	18 (≤30)
PFNA	0.27	0.27	0 (≤30)
PFDA	0.27	0.27	0 (≤30)
PFBS	0.44	0.56	24 (≤30)
PFHxS	1.26	1.65	27 (≤30)
PFOS	2.43	5.08	71 (≤30)

XI. Internal Standards

All internal standard percent recoveries (%R) were within QC limits with the following exceptions:

Sample	Internal Standards	%R (Limits)	Affected Compound	Flag	A or P
073018-04	13C3-PFBS	171 (50-150)	PFBS	J (all detects)	P

XII. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Level IV validation. Raw data were not reviewed for Level III validation.

XIII. Target Compound Identifications

All target compound identifications met validation criteria for samples which underwent Level IV validation. Raw data were not reviewed for Level III validation.

XIV. System Performance

The system performance was acceptable for samples which underwent Level IV validation. Raw data were not reviewed for Level III validation.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were

rejected in this SDG.

Due to internal standards %R, data were qualified as estimated in one sample.

Due to laboratory blank contamination, data were qualified as not detected in six samples.
Due to trip blank contamination, data were qualified as not detected in twelve samples.

Due to equipment rinsate contamination, data were qualified as not detected in ten samples.

Due to source blank contamination, data were qualified as not detected in ten samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

NAS North Island, OU11
Perfluorinated Alkyl Acids - Data Qualification Summary - SDG 18-0497

Sample	Compound	Flag	A or P	Reason
073018-04	PFBS	J (all detects)	P	Internal standards (%R)

NAS North Island, OU11
Perfluorinated Alkyl Acids - Laboratory Blank Data Qualification Summary - SDG 18-0497

Sample	Compound	Modified Final Concentration	A or P
073018-01	PFOS	4.73U ng/L	A
073018-05	PFOA PFOS	4.31U ng/L 4.31U ng/L	A
073018-06	PFOA PFOS	4.31U ng/L 4.31U ng/L	A
073018-07	PFOA PFOS	4.39U ng/L 4.39U ng/L	A
073118-02	PFOS	4.65U ng/L	A
080118-01	PFOS	4.55U ng/L	A

NAS North Island, OU11
Perfluorinated Alkyl Acids - Field Blank Data Qualification Summary - SDG 18-0497

Sample	Compound	Modified Final Concentration	A or P
073018-01	PFOS	4.73U ng/L	A
073018-02**	PFNA	4.65U ng/L	A
073018-03	PFNA	4.57U ng/L	A
073018-04	PFNA PFDA	4.57U ng/L 4.57U ng/L	A

Sample	Compound	Modified Final Concentration	A or P
073018-05	PFHpA PFOA PFOS PFNA PFDA	4.31U ng/L 4.31U ng/L 4.31U ng/L 4.31U ng/L 4.31U ng/L	A
073018-06	PFHpA PFOA PFHxS PFOS PFNA PFDA	4.31U ng/L 4.31U ng/L 4.31U ng/L 4.31U ng/L 4.31U ng/L 4.31U ng/L	A
073118-01	PFNA	4.49U ng/L	A
073118-02	PFOS	4.65U ng/L	A
073118-03	PFNA	4.49U ng/L	A
073118-04	PFNA PFDA	4.65U ng/L 4.65U ng/L	A
080118-01	PFHpA PFOA PFHxS PFOS PFNA PFDA	4.55U ng/L 4.55U ng/L 4.55U ng/L 4.55U ng/L 4.55U ng/L 4.55U ng/L	A
080118-02	PFHpA PFOA PFHxS PFOS PFNA PFDA	4.46U ng/L 4.46U ng/L 4.46U ng/L 4.46U ng/L 4.46U ng/L 4.46U ng/L	A

LDC #: 43078A96 **VALIDATION COMPLETENESS WORKSHEET** Date: 09/20/18
SDG #: 18-0497 Level III/IV Page: 1 of 2
Laboratory: Battelle Memorial Institute Reviewer: JW
2nd Reviewer: Q

METHOD: LC/MS Perfluorinated Alkyl Acids (EPA Method 537)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	r ~~r~~ Each std ≤ 30% ICV ≤ 30%
IV.	Continuing calibration	A	CCV ≤ 30%
V.	Laboratory Blanks	SW	
VI.	Field blanks	SW	TB = 7 SB = 5 ER = 6
VII.	Surrogate spikes	~~N~~ A	
VIII.	Matrix spike/Matrix spike duplicates	SW	
IX.	Laboratory control samples	A	LCS
X.	Field duplicates	SW	D = 13/14
XI.	Labeled Compounds	SW	
XII.	Compound quantitation RL/LOQ/LODs	A	Not reviewed for Level III validation
XIII.	Target compound identification	A	Not reviewed for Level III validation
XIV.	System performance	A	Not reviewed for Level III validation
XV.	Overall assessment of data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

** Indicates sample underwent Level IV validation

	Client ID	Lab ID	Matrix	Date
1	073018-01	J7248-FS	Water	07/30/18
2	073018-02**	J7249-FS**	Water	07/30/18
3	073018-03	J7250-FS	Water	07/30/18
4	073018-04	J7251-FS	Water	07/30/18
5	073018-05	J7252-FS	Water	07/30/18
6	073018-06	J7253-FS	Water	07/30/18
7	073018-07	J7254-FS	Water	07/30/18
8	073118-01	J7255-FS	Water	07/31/18
9	073118-02	J7256-FS	Water	07/31/18
10	073118-03	J7257-FS	Water	07/31/18
11	073118-04	J7258-FS	Water	07/31/18
12	080118-01	J7259-FS	Water	08/01/18
13	080118-02 D	J7260-FS	Water	08/01/18

LDC #: 43078A96

VALIDATION COMPLETENESS WORKSHEET

Level III/IV

Date: 09/20/18

SDG #: 18-0497

Page: 2 of 2

Laboratory: Battelle Memorial Institute

Reviewer: DAC

2nd Reviewer: [illegible]

METHOD: LC/MS Perfluorinated Alkyl Acids (EPA Method 537)

	Client ID	Lab ID	Matrix	Date
14	080118-03 D	J7261-FS	Water	08/01/18
15	073018-02MS	J7249-FSMS	Water	07/30/18
16	073018-02MSD	J7249-FSMSD	Water	07/30/18
17				
18				
19				

Notes:

+	CR546PB-FS						

LDC #: 43078A96

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: [illegible]

Method: LCMS (EPA Method 537M)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?			✓	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit criteria of ≥ 0.990?	✓			
Were all analytes within 70-130% or percent differences (%D) ≤30% of their true value for each calibration standard	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) < 30%?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) of the continuing calibration < 30%?	✓			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation findings worksheet.	✓			
VI. Field blanks				
Were field blanks identified in this SDG?	✓			
Were target compounds detected in the field blanks?	✓			
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			

LDC #: 43078A96

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	✓			
Were target compounds detected in the field duplicates?.	✓			
XI. Internal standards				
Were internal standard area counts within ± 50% of the associated calibration standard?		✓		
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	N		✓	
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: PFAS

A. PFHxA			
B. PFHpA			
C. PFOA			
D. PFNA			
E. PFDA			
F. PFUnA			
G. PFDoA			
H. PFTriA			
I. PFTeDA			
J. PFBS			
K. PFHxS			
L. PFHpS			
M. PFOS			
N. PFDS			
O. FOSA			
P. PFBA			
Q. PFPeA			
R. 6:2FTS			
S. 8:2FTS			
T. MeFOSAA			
U. EtFOSAA			
V. Combined PFOAS/PFOS			

LDC #: 43078 A96

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: LC/MS PFAS (EPA Method 537M)

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 08/08/18 **Blank analysis date:** 08/16/18
Conc. units: ng/L **Associated Samples:** All

Compound	Blank ID	Sample Identification								
	CR546 PB-F5	(5x)	1	5	6	7	9	12		
C	0.31	1.55		1.26/4.31U	1.41/4.31U	1.48/4.39U				
M	0.44	2.2	0.82/4.73U	0.38/ ↓	0.52/ ↓	0.62/ ↓	0.94/4.65U	0.79/4.55U		

Blank extraction date: _____ **Blank analysis date:** _____
Conc. units: _____ **Associated Samples:** _____

Compound	Blank ID	Sample Identification								

LDC #: 43078A96

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: JVG
2nd Reviewer:

METHOD: LC/MS PFAS (EPA Method 537M)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?
Blank units: ng/L **Associated sample units:** ng/L
Sampling date: 07/30/18
Field blank type: (circle one) Trip Blank/Field Blank / Rinsate / Other:_____ Associated Samples:_____

TB = All except 7
SB/ER = All except 5,6,7

Compound	TB Blank ID	SB	ER	Sample Identification						
	7	5	6	(5x)	1	2	3	4	8	9
B	0.33	0.33/4.31U	0.33/4.31U	1.65						
C	1.48	1.26	1.41	7.4						
K	0.14		0.12	0.7						
M	0.62	0.38/4.31U	0.52	3.1	0.82/4.73U					0.94/4.65U
D		0.26	0.28	1.4		0.62/4.65U	0.38/4.57U	0.53/4.57U	0.35/4.49U	
E		0.27	0.26	1.35				0.37/		~~0.94/4.65U~~

Blank units:_____ **Associated sample units:**_____
Sampling date:_____
Field blank type: (circle one) Field Blank / Rinsate / Other:_____ Associated Samples: Same as above

Compound	Blank ID	Sample Identification								
					10	11	12	13		
B							0.39/4.55U	0.97/4.46U		
C							1.64/	1.98/		
K							0.52/	1.26/		
M							0.79/	2.43/		
D					0.35/4.49U	1.36/4.65U	0.26/	0.27/		
E						0.36/	0.30/	0.27/		

LDC#: 43078A96

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: JVG
2nd Reviewer:

METHOD: LCMS PFAS (EPA Method 537)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Compound	Concentration (ng/L)		RPD (≤30%)
	13	14	
A	4.91	4.77	3
B	0.97	1.00	3
C	1.98	2.37	18
D	0.27	0.27	0
E	0.27	0.27	0
J	0.44	0.56	24
K	1.26	1.65	27
M	2.43	5.08	71

V:\Josephine\FIELD DUPLICATES\42934B1 battelle nasni.wpd

LDC #: 43678A96

VALIDATION FINDINGS WORKSHEET
Internal Standards

Reviewer: JVG
2nd Reviewer: [signature]

METHOD: LC/MS PFAS (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were all internal standard area counts within -50 to +150% of the associated calibration standard?

(Y) N N/A Were the retention times of the internal standards within +/- 30 seconds of the retention times of the associated calibration standard?

#	Date	Sample ID	Internal Standard	%R	Limits(%)	RT (Limits)	Qualifications (Qual)
		4 (Det)	13C3-PFBS	171	50-150		J / UJ / P (J)

(13C8-FOSA) = 13C8-Perfluorooctanesulfonamide
(13C4-PFBA) = 13C4-Perfluorobutanoic acid
(13C2-PFHxA) =13C2-Perfluorohexanoic acid
(13C4-PFOA) = 13C4-Perfluorooctane acid
(13C5-PFNA) = 13C5-Perfluorononanoic acid
(13C2-PFDA) = 13C2-Perfluorodecanoic acid
(13C2-PFUnA) = 13C2-Perfluoroundecanoic acid
(13C2-PFDoA) = 13C2-Perfluorododecanoic acid
(18O2-PFHxS) = 18O2-Perfluorohexanesulfonic acid
(13C4-PFOS) = 13C4-Perfluorooctanesulfonic acid
(13C4-PFHpA) = 13C4-Perfluoroheptanoic acid
(13C5-PFPeA) = 13C5-Perfluoropentanoic acid

LDC # 43078A96

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: LCMS PFAS (EPA Method 537)

Parameter: PFOA_1

Order of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
08/15/18	QTRAP 5500	PFOA_1	L2	0.9055	1.000
			L3	2.1240	2.000
		(13C8-PFOA)	L4	4.2482	4.000
			L5	10.6769	10.000
			L6	46.4197	40.000
			L7	94.3731	80.000

	Regression Output:	Regression Output:	Reported WLR	
Constant	b =	-0.57358	b =	-0.2951600
Std Err of Y Est				
R Squared	r^2 =	0.99989	r^2 =	0.99979
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	1.18386	m1 =	1.17350
Std Err of Coef.	0.01			

LDC # 43078A96

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: LCMS PFAS (EPA Method 537)

Parameter: PFOS_1

Order of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
08/15/18	QTRAP 5500	PFOS_1	L2	4.7340	1.045
			L3	9.9579	2.090
		(13C8-PFOS)	L4	21.1529	4.180
			L5	52.1966	10.449
			L6	233.5420	41.797
			L7	499.0518	83.595

	Regression Output:	Regression Output:	Reported WLR	
Constant	b =	-5.72547	b =	-2.2420300
Std Err of Y Est				
R Squared	r^2 =	0.99903	r^2 =	0.99895
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	5.97243	m1 =	5.82643
Std Err of Coef.	0.01			

LDC # 43078A96

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: LCMS PFAS (EPA Method 537)

Parameter: PFOA_1

Order of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
08/24/18	QTRAP 5500	PFOA_1	1	0.3975	0.400
			2	0.9403	1.000
		(13C8-PFOA)	3	1.9660	2.000
			4	4.0721	4.000
			5	10.1340	10.000
			6	43.7479	40.000
			7	91.1967	80.000

	Regression Output:	Regression Output:	Reported WLR	
Constant	b =	-0.56936	b =	-0.1450700
Std Err of Y Est				
R Squared	r^2 =	0.99959	r^2 =	0.99942
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	1.13857	m1 =	1.11957
Std Err of Coef.	0.01			

LDC # 43078A96

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: LCMS PFAS (EPA Method 537)

Parameter: PFOS_1

Order of regression: Linear

Date	Instrument	Compound	Points	x area ratio	y conc ratio
08/24/18	QTRAP 5500	PFOS_1	1	1.7556	0.418
			2	4.7605	1.045
		(13C8-PFOS)	3	9.3887	2.090
			4	19.7440	4.180
			5	49.6811	10.449
			6	204.5720	41.797
			7	416.3052	83.595

	Regression Output:	Regression Output:		Reported WLR
Constant	b =	-1.25305	b =	-0.4444400
Std Err of Y Est				
R Squared	r^2 =	0.99993	r^2 =	0.99975
No. of Observations		6.00		
Degrees of Freedom		4.00		
X Coefficient(s)	m1 =	4.97987	m1 =	5.00025
Std Err of Coef.	0.01			

LDC#: 43078A96

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: LCMS PFAS (EPA Method 537)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Conc	Reported (CCV)	Recalculated (CCV)	Reported % R	Recalculated % R
1	JX41 CCV	8/16/2018 12:22	PFOA_1 (13C8-PFOA)	1000.00	994.34	994.34	99.44	99.43
			PFOS_1 (13C8-PFOS)	1000.00	867.27	867.27	86.73	86.73
2	JY42 CCV	8/16/2018 2:11	PFOA_1 (13C8-PFOA)	2500.00	2453.73	2453.73	98.15	98.15
			PFOS_1 (13C8-PFOS)	2500.00	2230.34	2230.34	89.21	89.21
3	JY41 CCV	8/16/2018 4:22	PFOA_1 (13C8-PFOA)	1000.00	937.48	937.48	93.75	93.75
			PFOS_1 (13C8-PFOS)	1000.00	945.05	945.05	94.51	94.51
4	JY42 CCV	8/24/2018 8:26	PFOA_1 (13C8-PFOA)	2500.00	2352.80	2352.79	94.11	94.11
			PFOS_1 (13C8-PFOS)	2500.00	2356.83	2356.83	94.27	94.27

LDC #: 42078A96

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: LC/MS PFAS (EPA Method 537Mod)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 15/16

Compound	Spike Added (ng/L)		Sample Conc (ng/L)	Spiked Sample Concentration (ng/L)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalc
PFOA	26.79	27.27	2054.86	2454.7	2260.31	1493	1493	753	753	65.9	8.25
PFOS	↓	↓	119.85	147.19	123.59	102	102	14	14	151.7	17.43

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

RPD recalc'd based on conc.

LDC #: 43078A96

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG

2nd Reviewer: [illegible]

METHOD: LC/MS PFAS (EPA Method 537M)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC)

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: CR547VCS-F5

Compound	Spike Added (ng/L)		Spike Concentration (ng/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
PFOA	10.0	NA	10.56	NA	106	106				
PFOS	↓	↓	9.96	↓	100	100				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

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LDC #: 43078A96

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: [illegible]

METHOD: LC/MS PFAS (EPA Method 537M)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 2, PFOA:

Conc. = $\frac{\left[\frac{(1610171.5)}{(81300.07)}\right] - (-0.14507)}{(1.11957)} (250)$

= 4454.915

final conc. = $\frac{(4454.92)(0.0005)(250)}{(0.280)}$

= 1988.8 ng/L

#	Sample ID	Compound	Reported Concentration (ng/L)	Calculated Concentration ( )	Qualification
			1988.81		

LDC #: 43078

EDD POPULATION COMPLETENESS WORKSHEET

Date: 10/2
Page: 1 of 1
2nd Reviewer: GG

The LDC job number listed above was entered by JZ.
Entered from Body or Summary

	EDD Process		Comments/Action
I.	EDD Completeness	-	
Ia.	- All methods present?	Y	
Ib.	- All samples present/match report?	Y	
Ic.	- All reported analytes present?	Y	
Id.	- 10% or 100% verification of EDD?	Y	
II.	EDD Preparation/Entry	-	
IIa.	- Carryover U/J?	Y	
IIb.	- Reason Codes used? If so, note which codes.	—	
IIc.	- Additional Information (QC Level, Validator, Validated Y/N, etc.)	Y	
III.	Reasonableness Checks	-	
IIIa.	- Do all qualified ND results have ND qualifier (e.g. UJ)?	Y	
IIIb.	- Do all qualified detect results have detect qualifier (e.g. J)?	Y	
IIIc.	- If reason codes are used, do all qualified results have reason code field populated, and vice versa?	—	
IIId.	-Does the detect flag require changing for blank qualifier? If so, are all U results marked ND?	Y/Y	
IIIe.	- Do blank concentrations in report match EDD where data was qualified due to blank contamination?	Y	
IIIf.	- Were multiple results reported due to dilutions/reanalysis? If so, were results qualified appropriately?	~~Y~~/N	
IIIg.	-Are there any discrepancies between the data packet and the EDD?	N	

Notes: *see discrepancy sheet

LOCATION_NAME	SITE_NAME	INSTALLATION_ID	LOCATION_TYPE	LOCATION_TYPE_DESCRIPTION	SDG	COORD_X	COORD_Y	ANALYTICAL_METHOD	SAMPLE_NAME	SAMPLE_MATRIX	SAMPLE_MATRIX_DESC	COLLECTION_DATE
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-01	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-02	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-03	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-04	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
		NORTH_ISLAND_NAS			18-0497			537_MOD	073018-05	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808

NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-06	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073018-07	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-01	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-02	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-03	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808

NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	073118-04	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-01	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-02	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	PERFLUOROHEXANOIC ACID (PFHXA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	PERFLUOROHEPTANOIC ACID (PFHPA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	PERFLUOROOCTANOIC ACID (PFOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	PERFLUORONONANOIC ACID (PFNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	PERFLUORODECANOIC ACID (PFDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	PERFLUOROUNDECANOIC ACID (PFUNA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	PERFLUORODODECANOIC ACID (PFDOA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	PERLUOROTRIDECANOIC ACID (PFTRA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	PERFLUOROTETRADECANOIC ACID (PFTEDA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	N-METHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (MEFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	N-ETHYL PERFLUOROOCTANESULFONAMIDOACETIC ACID (ETFOSAA)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	PERFLUOROBUTANESULFONIC ACID (PFBS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	PERFLUOROHEXANESULFONIC ACID (PFHXS)	20180808
NORTH_ISLAND_NAS	18-0497	537_MOD	080118-03	Groundwater	HEPTADECAFLUOROACTANESULFONIC ACID (PFOS)	20180808