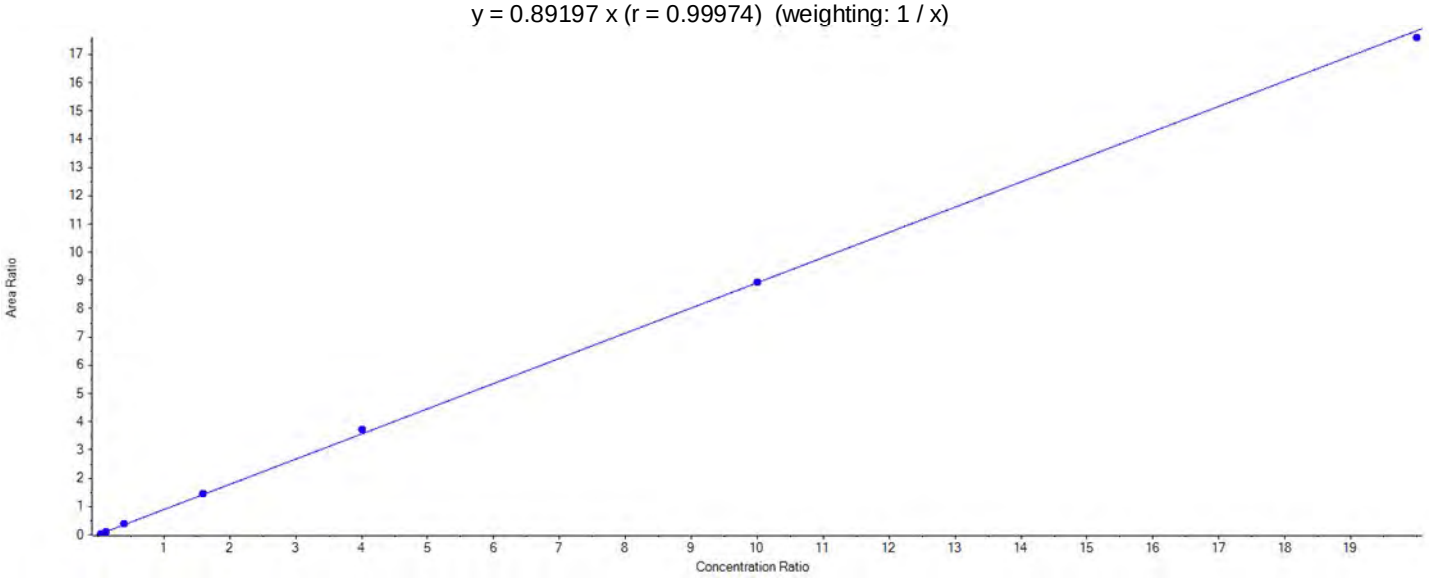
DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV12DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV12DCAL_Updated1/10/2019 3:19:00 PM **Acquisition Method:** 18AUG13_3uL.dam

PFTeDA

y = 0.89197 x (r = 0.99974) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFTeDA Area	S/N	13C2-PFTeDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	16357.5	210.0	410633.036	True	5.00	0.040	6.43	1.000	0.200	0.223	12	30	
CAL2	40236.5	281.3	394146.239	True	5.00	0.102	6.43	1.000	0.600	0.572	-5	30	
CAL3	156439.9	700.6	393544.938	True	5.00	0.398	6.43	1.000	2.000	2.228	11	30	
CAL4	571926.7	1105.3	392356.634	True	5.00	1.458	6.43	1.000	8.000	8.171	2	30	
CAL5	1418276.7	1705.5	379571.560	True	5.00	3.737	6.42	1.000	20.000	20.945	5	30	
CAL6	3149020.2	2109.2	352892.214	True	5.00	8.923	6.43	1.000	50.000	50.021	0	30	
CAL7	6092875.7	2023.1	346256.589	True	5.00	17.596	6.42	1.000	100.000	98.638	-1	30	

APPROVED
By MCD at 3:23 pm, 1/10/19

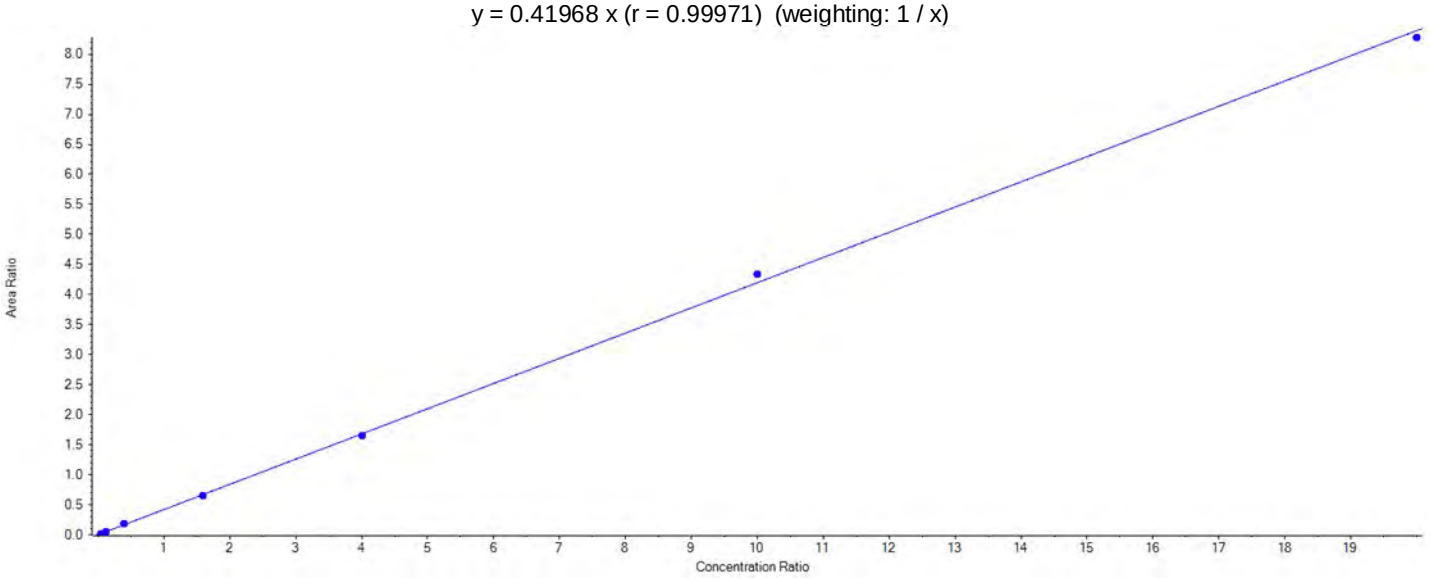
REVIEWED
By ucmr at 3:21 pm, 1/25/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV12DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV12DCAL_Updated1/10/2019 3:19:00 PM **Acquisition Method:** 18AUG13_3uL.dam

PFHxDA

y = 0.41968 x (r = 0.99971) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFHxDA Area	S/N	13C2-PFTeDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	7976.0	221.5	410633.036	True	5.00	0.019	6.73	1.050	0.200	0.231	16	30	
CAL2	19006.4	621.9	394146.239	True	5.00	0.048	6.74	1.050	0.600	0.575	-4	30	
CAL3	69655.1	986.8	393544.938	True	5.00	0.177	6.74	1.050	2.000	2.109	5	30	
CAL4	256654.3	1362.8	392356.634	True	5.00	0.654	6.73	1.050	8.000	7.793	-3	30	
CAL5	627350.7	1919.3	379571.560	True	5.00	1.653	6.72	1.050	20.000	19.691	-2	30	
CAL6	1533920.2	4020.8	352892.214	True	5.00	4.347	6.74	1.050	50.000	51.786	4	30	
CAL7	2866097.3	3342.9	346256.589	True	5.00	8.277	6.72	1.050	100.000	98.615	-1	30	

APPROVED
By MCD at 3:23 pm, 1/10/19

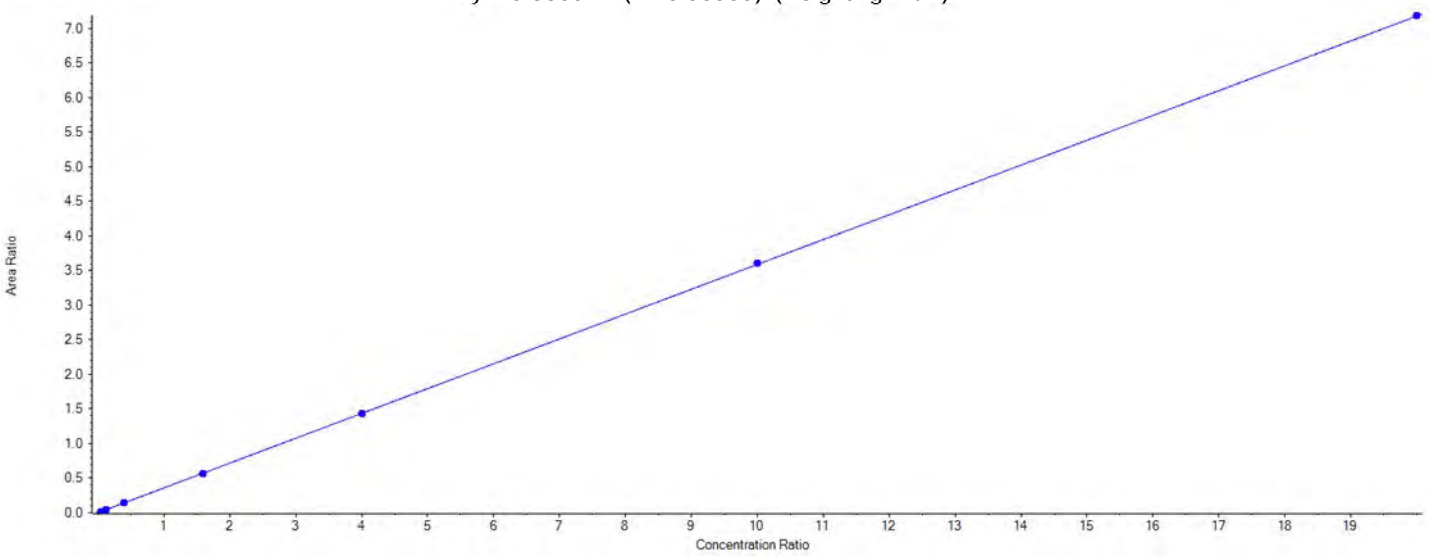
REVIEWED
By ucmr at 3:21 pm, 1/25/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV12DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV12DCAL_Updated1/10/2019 3:19:00 PM **Acquisition Method:** 18AUG13_3uL.dam

PFODA

y = 0.35901 x (r = 0.99996) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFODA Area	S/N	13C2-PFTeDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	6020.3	470.6	410633.036	True	5.00	0.015	7.00	1.090	0.200	0.204	2	30	
CAL2	14955.6	635.0	394146.239	True	5.00	0.038	7.00	1.090	0.600	0.528	-12	30	
CAL3	57796.0	1304.8	393544.938	True	5.00	0.147	7.00	1.090	2.000	2.045	2	30	
CAL4	219359.6	2291.9	392356.634	True	5.00	0.559	6.99	1.090	8.000	7.786	-3	30	
CAL5	544296.5	2946.8	379571.560	True	5.00	1.434	6.98	1.090	20.000	19.971	0	30	
CAL6	1270897.6	3196.4	352892.214	True	5.00	3.601	7.00	1.090	50.000	50.157	0	30	
CAL7	2488863.6	3668.3	346256.589	True	5.00	7.188	6.98	1.090	100.000	100.107	0	30	

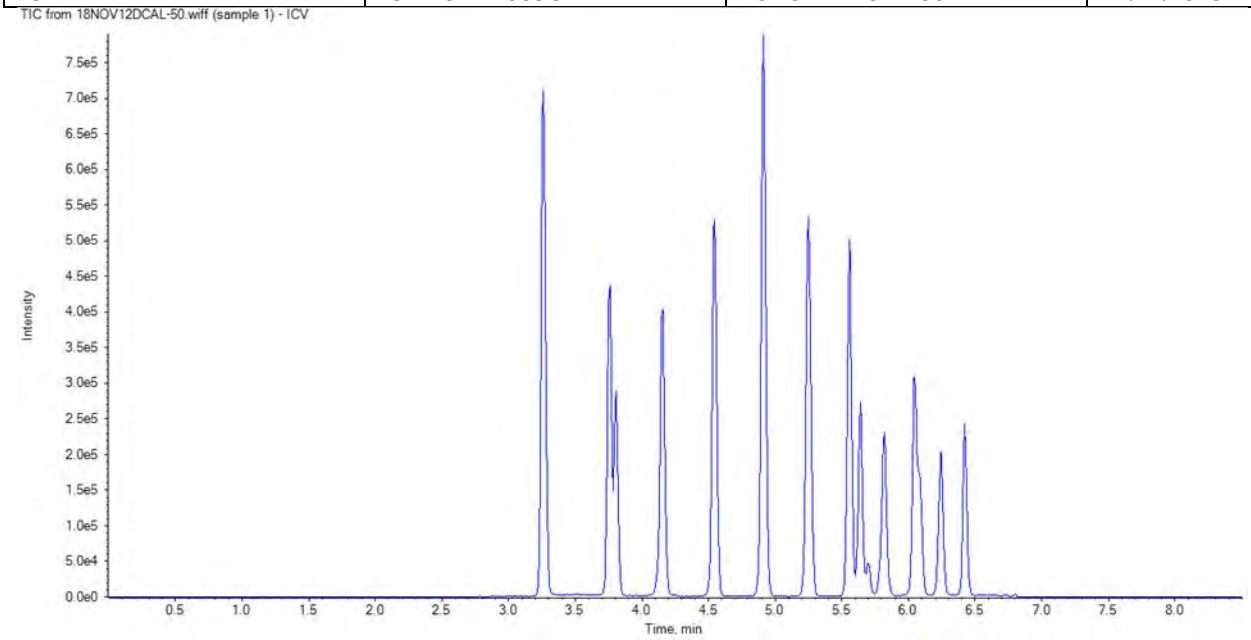
APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV12DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV12DCAL_Updated1/10/2019 3:19:00 PM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name	Sample ID:	Sample File:	Acquisition Date:
ICV	ICVMODX1833G	18NOV12DCAL-50.wiff	11/12/2018 4:18:11 PM



Injection Standard Name	Inj Std Conc	Injection Std Peak Area	CAL3 Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.000	655209.3	659926.2	-0.7	50	
13C2-PFOA	5.000	452726.2	450219.7	0.6	50	
13C4-PFOS	4.780	253010.3	249205.8	1.5	50	
13C2-PFDA	5.000	277002.7	278743.9	-0.6	50	

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV12DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV12DCAL_Updated1/10/2019 3:19:00 PM **Acquisition Method:** 18AUG13_3uL.dam

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV12DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV12DCAL_Updated1/10/2019 3:19:00 PM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name	Sample ID:	Sample File:	Acquisition Date:
ICV	ICVMODX1833G	18NOV12DCAL-50.wiff	11/12/2018 4:18:11 PM

Analyte Name	Analyte Area	Ext Std Name	Ext Std Area	Ext Std Con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	270820.6	13C4-PFBA	715834.413	5.00	0.378	3.26	1.00	2.000	2.096	5	30	
PFPeA	265646.8	13C5-PFPeA	699482.188	5.00	0.380	3.76	1.00	2.000	2.198	10	30	
PFBS	150059.6	13C3-PFBS	394903.376	4.65	0.380	3.80	1.00	1.769	1.808	2	30	
4:2-FTS	N/A	13C2-4:2-FTS	47297.290	4.67	N/A	N/A	N/A	0.000	N/A		30	
PFHxA	328694.3	13C5-PFHxA	613579.433	5.00	0.536	4.15	1.00	2.000	2.237	12	30	
PFPeS	N/A	13C3-PFBS	394903.376	4.65	N/A	N/A	N/A	0.000	N/A		30	
PFHpA	316975.3	13C4-PFHpA	485394.910	5.00	0.653	4.54	1.00	2.000	2.165	8	30	
PFHxS	115564.2	13C3-PFHxS	304897.777	4.73	0.379	4.55	1.00	1.890	1.838	-3	30	
6:2-FTS	N/A	13C2-6:2-FTS	31532.780	4.75	N/A	N/A	N/A	0.000	N/A		30	
PFHpS	118318.7	13C3-PFHxS	304897.777	4.73	0.388	4.91	1.08	1.900	2.043	8	30	
PFOA	332094.4	13C8-PFOA	843573.278	5.00	0.394	4.91	1.00	2.000	2.103	5	30	
PFOS	100952.5	13C8-PFOS	266211.354	4.78	0.379	5.24	1.00	1.910	1.658	-13	30	
PFNA	271240.4	13C9-PFNA	458821.538	5.00	0.591	5.26	1.00	2.000	2.132	7	30	
PFNS	N/A	13C8-PFOS	266211.354	4.78	N/A	N/A	N/A	0.000	N/A		30	
PFDA	224279.7	13C6-PFDA	590290.290	5.00	0.380	5.56	1.00	2.000	2.014	1	30	
8:2-FTS	N/A	13C2-8:2-FTS	22188.868	4.79	N/A	N/A	N/A	0.000	N/A		30	
PFOSA	N/A	13C8-PFOSA	587080.139	5.00	N/A	N/A	N/A	0.000	N/A		30	
NMeFOSAA	30591.9	d3-NMeFOSAA	70133.206	5.00	0.436	5.70	1.00	2.000	2.465	23	30	
PFDS	52860.9	13C8-PFOS	266211.354	4.78	0.199	5.79	1.11	1.930	1.799	-7	30	
PFUnDA	183511.3	13C7-PFUnDA	228363.909	5.00	0.804	5.82	1.00	2.000	2.101	5	30	
NEtFOSAA	26149.3	d5-NEtFOSAA	59551.262	5.00	0.439	5.83	1.00	2.000	2.302	15	30	
PFDoDA	185295.0	13C2-PFDoDA	495858.058	5.00	0.374	6.05	1.00	2.000	1.903	-5	30	
10:2-FTS	N/A	13C2-8:2-FTS	22188.868	4.79	N/A	N/A	N/A	0.000	N/A		30	
NMePFOSAE	N/A	d7-NMePFOSAE	299185.381	5.00	N/A	N/A	N/A	0.000	N/A		30	
NMePFOSA	N/A	d3-NMePFOSA	75186.885	5.00	N/A	N/A	N/A	0.000	N/A		30	
PFDoS	N/A	13C8-PFOS	266211.354	4.78	N/A	N/A	N/A	0.000	N/A		30	
NEtPFOSAE	N/A	d9-NEtPFOSAE	255149.770	5.00	N/A	N/A	N/A	0.000	N/A		30	
NEtPFOSA	N/A	d5-NEtPFOSA	53596.168	5.00	N/A	N/A	N/A	0.000	N/A		30	
PFTrDA	165153.1	13C2-PFDoDA	495858.058	5.00	0.333	6.25	1.03	2.000	2.102	5	30	

APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV12DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV12DCAL_Updated1/10/2019 3:19:00 PM **Acquisition Method:** 18AUG13_3uL.dam

PFTeDA	135651.0	13C2-PFTeDA	365300.216	5.00	0.371	6.42	1.00	2.000	2.082	4	30	
PFHxDA	N/A	13C2-PFTeDA	365300.216	5.00	N/A	N/A	N/A	0.000	N/A		30	
PFODA	N/A	13C2-PFTeDA	365300.216	5.00	N/A	N/A	N/A	0.000	N/A		30	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL1			**Data File:**		18NOV12DCAL-42.wiff
Sample ID:	CALBRN11833C			**Acquis Date:**		2018-11-12T15:05:54
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	3			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV12DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N\A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	676527.5	659926.2	3	50	
13C2-PFOA	5.0	474834.9	450219.7	5	50	
13C4-PFOS	4.8	265369.0	249205.8	6	50	
13C2-PFDA	5.0	281654.8	278743.9	1	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	763334.3	13C3-PFBA	676527.5	1.128	5.000	5.059	101	70-130	
E13C5-PFPeA	771179.4	13C3-PFBA	676527.5	1.140	5.000	5.113	102	70-130	
E13C3-PFBS	445963.4	13C3-PFBA	676527.5	0.659	4.650	4.653	100	70-130	
E13C2-4:2-FTS	51494.6	13C2-PFOA	474834.9	0.108	4.670	4.830	103	70-130	
E13C5-PFHxA	664975.9	13C2-PFOA	474834.9	1.400	5.000	5.059	101	70-130	
E13C3-PFHxS	327944.5	13C2-PFOA	474834.9	0.691	4.730	4.739	100	70-130	
E13C4-PFHpA	528473.5	13C2-PFOA	474834.9	1.113	5.000	5.014	100	70-130	
E13C2-6:2-FTS	35455.2	13C2-PFOA	474834.9	0.075	4.750	4.996	105	70-130	
E13C8-PFOA	912537.7	13C2-PFOA	474834.9	1.922	5.000	5.295	106	70-130	
E13C8-PFOS	283127.4	13C4-PFOS	265369.0	1.067	4.780	4.727	99	70-130	
E13C9-PFNA	479931.4	13C4-PFOS	265369.0	1.809	5.000	5.042	101	70-130	
E13C6-PFDA	612577.4	13C2-PFDA	281654.8	2.175	5.000	5.075	102	70-130	
E13C2-8:2-FTS	26445.5	13C2-PFDA	281654.8	0.094	4.790	4.683	98	70-130	
E13C8-PFOSA	664489.9	13C2-PFDA	281654.8	2.359	5.000	5.230	105	70-130	
Ed3-NMeFOSAA	86914.5	13C2-PFDA	281654.8	0.309	5.000	5.570	111	70-130	
E13C7-PFUnDA	256402.0	13C2-PFDA	281654.8	0.910	5.000	5.285	106	70-130	
Ed5-NEtFOSAA	80597.2	13C2-PFDA	281654.8	0.286	5.000	6.054	121	70-130	
E13C2-PFDoDA	545413.2	13C2-PFDA	281654.8	1.936	5.000	5.028	101	70-130	
Ed7-NMePFOSAE	349854.5	13C2-PFDA	281654.8	1.242	5.000	5.375	108	70-130	
Ed3-NMePFOSA	78396.5	13C2-PFDA	281654.8	0.278	5.000	5.057	101	70-130	
Ed9-NEtPFOSAE	280311.6	13C2-PFDA	281654.8	0.995	5.000	5.176	104	70-130	
Ed5-NEtPFOSA	63047.1	13C2-PFDA	281654.8	0.224	5.000	5.251	105	70-130	
E13C2-PFTeDA	410633.0	13C2-PFDA	281654.8	1.458	5.000	5.118	102	70-130	

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

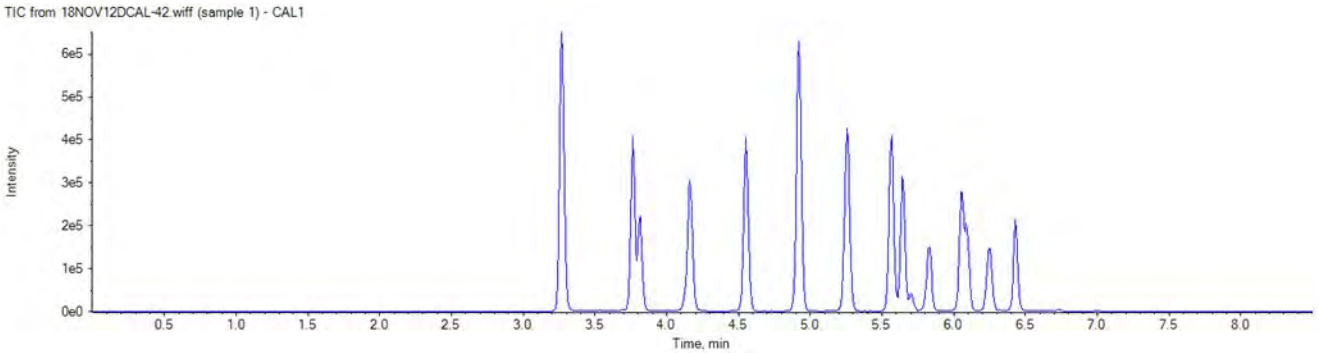
Analyte Quantitation Peak Table

Sample Name: CAL1 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-42.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	32322.9		A	13C4-PFBA	3.27	763334.3	0.042	0.235
PFPeA	3.77	1.000	32633.1		M	13C5-PFPeA	3.76	771179.4	0.042	0.245
PFBS	3.81	1.000	18010.0		A	13C3-PFBS	3.81	445963.4	0.040	0.192
4:2-FTS	4.13	1.000	3636.4		A	13C2-4:2-FTS	4.13	51494.6	0.071	0.192
PFHxA	4.16	1.000	39108.2		A	13C5-PFHxA	4.16	664975.9	0.059	0.246
PFPeS	4.18	1.100	9620.1		A	13C3-PFBS	3.81	445963.4	0.022	0.209
PFHpA	4.55	1.000	37545.4		A	13C4-PFHpA	4.55	528473.5	0.071	0.235
PFHxS	4.55	1.000	12858.1		M	13C3-PFHxS	4.55	327944.5	0.039	0.190
6:2-FTS	4.90	1.000	2683.1		M	13C2-6:2-FTS	4.91	35455.2	0.076	0.183
PFHpS	4.91	1.080	13262.8		A	13C3-PFHxS	4.55	327944.5	0.040	0.213
PFOA	4.92	1.000	41468.0		A	13C8-PFOA	4.92	912537.7	0.045	0.243
PFOS	5.25	1.000	13088.5		M	13C8-PFOS	5.25	283127.4	0.046	0.202
PFNA	5.26	1.000	29660.1		A	13C9-PFNA	5.26	479931.4	0.062	0.223
PFNS	5.54	1.060	6846.6		A	13C8-PFOS	5.25	283127.4	0.024	0.169
PFDA	5.56	1.000	27488.6		A	13C6-PFDA	5.57	612577.4	0.045	0.238
8:2-FTS	5.57	1.000	2333.1		A	13C2-8:2-FTS	5.57	26445.5	0.088	0.206
PFOSA	5.64	1.000	29582.8		A	13C8-PFOSA	5.65	664489.9	0.045	0.217
NMeFOSAA	5.71	1.000	2306.4		A	d3-NMeFOSAA	5.70	86914.5	0.027	0.150
PFDS	5.80	1.100	5952.2		A	13C8-PFOS	5.25	283127.4	0.021	0.190
PFUnDA	5.82	1.000	23379.5		A	13C7-PFUnDA	5.83	256402.0	0.091	0.238
NEtFOSAA	5.85	1.000	2284.9		A	d5-NEtFOSAA	5.84	80597.2	0.028	0.149
PFDoDA	6.05	1.000	22143.6		A	13C2-PFDoDA	6.05	545413.2	0.041	0.207
10:2-FTS	6.07	1.090	1814.2		A	13C2-8:2-FTS	5.57	26445.5	0.069	0.229
NMePFOSAE	6.10	1.000	18013.9		A	d7-NMePFOSAE	6.09	349854.5	0.051	0.214
NMePFOSA	6.11	1.000	2376.3		A	d3-NMePFOSA	6.10	78396.5	0.030	0.150
PFDoS	6.22	1.190	3520.9		A	13C8-PFOS	5.25	283127.4	0.012	0.218
NEtPFOSAE	6.26	1.000	21005.9		A	d9-NEtPFOSAE	6.24	280311.6	0.075	0.240
NEtPFOSA	6.27	1.000	2846.2		M	d5-NEtPFOSA	6.26	63047.1	0.045	0.207
PFTrDA	6.25	1.030	20185.1		M	13C2-PFDoDA	6.05	545413.2	0.037	0.234
PFTeDA	6.43	1.000	16357.5		A	13C2-PFTeDA	6.43	410633.0	0.040	0.223
PFHxDA	6.73	1.050	7976.0		M	13C2-PFTeDA	6.43	410633.0	0.019	0.231
PFODA	7.00	1.090	6020.3		A	13C2-PFTeDA	6.43	410633.0	0.015	0.204

Total Ion Chromatogram

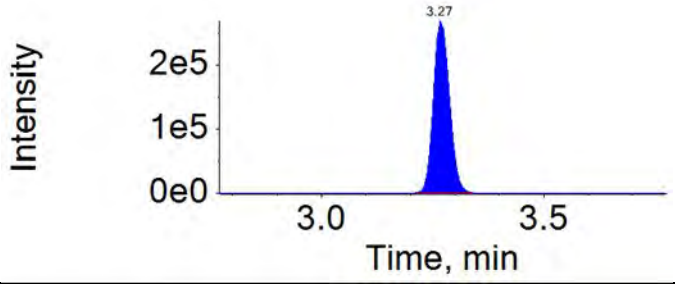


APPROVED
By MCD at 6:33 pm, 11/12/18

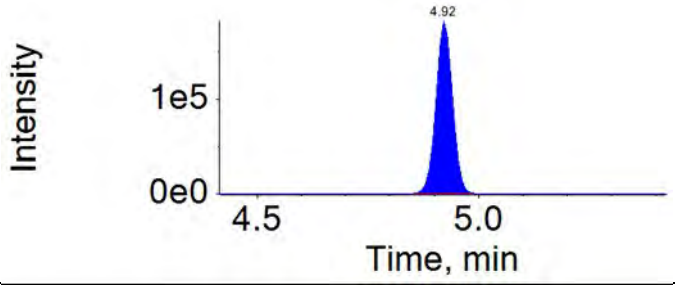
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

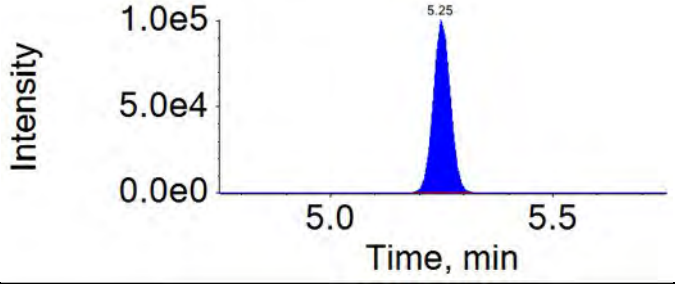
Injection Standard: 13C3-PFBA
216.0 / 172.0



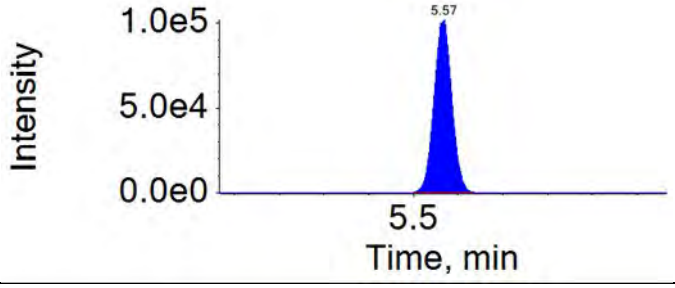
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

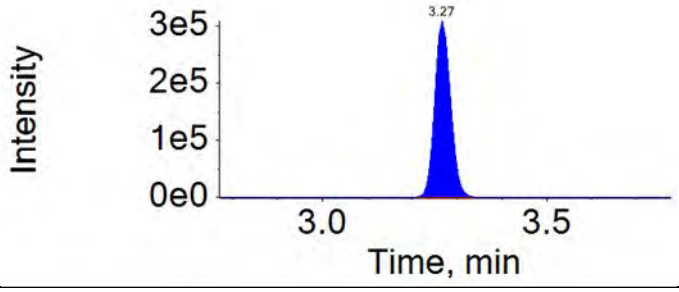


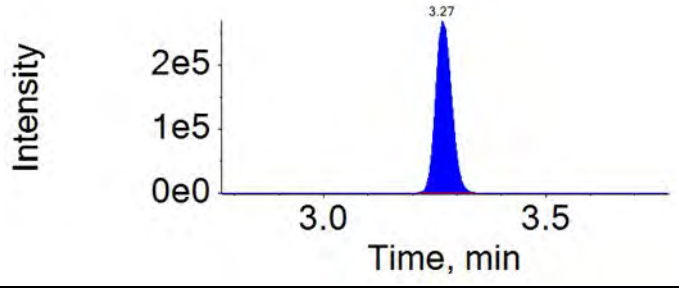
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

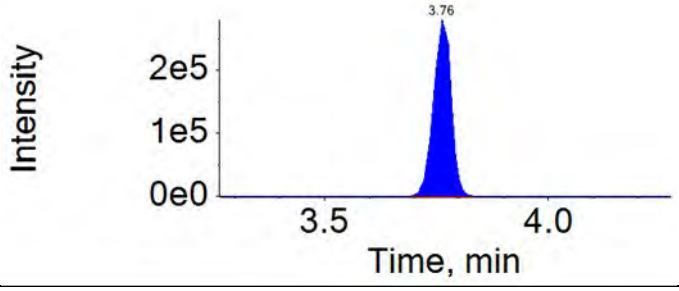
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

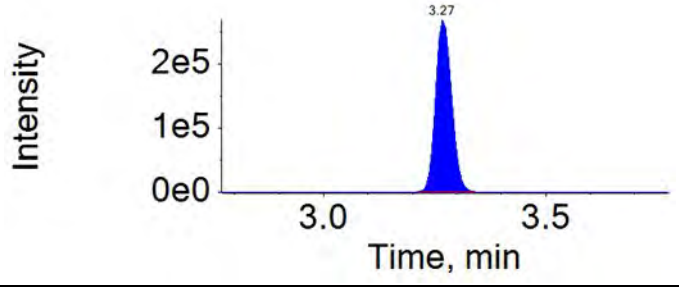
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



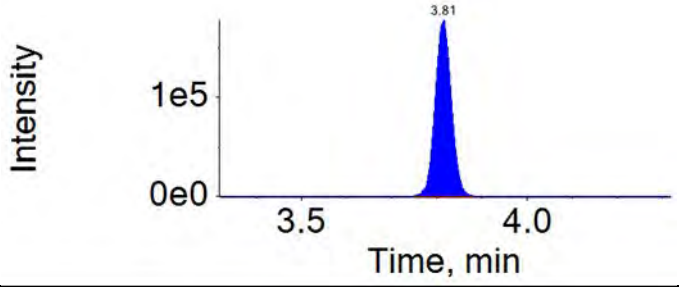


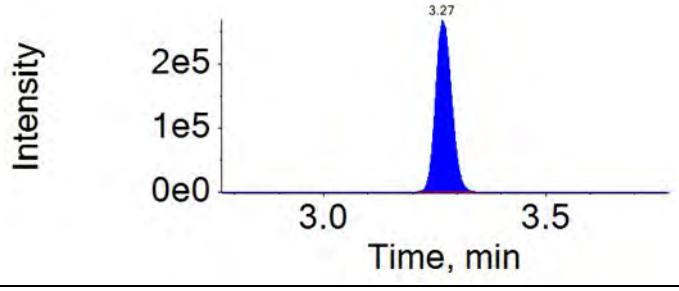
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



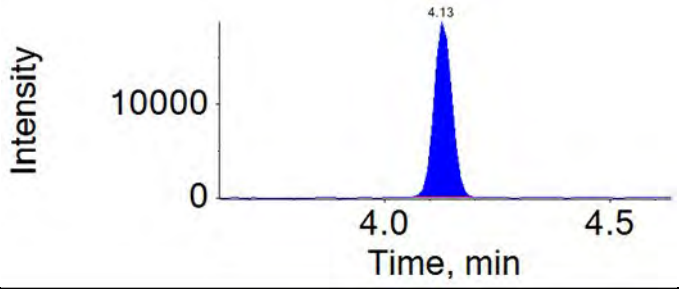


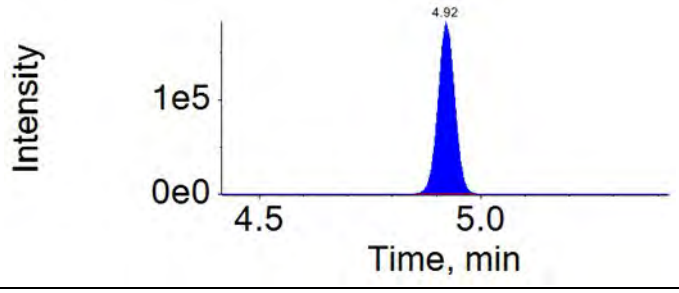
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

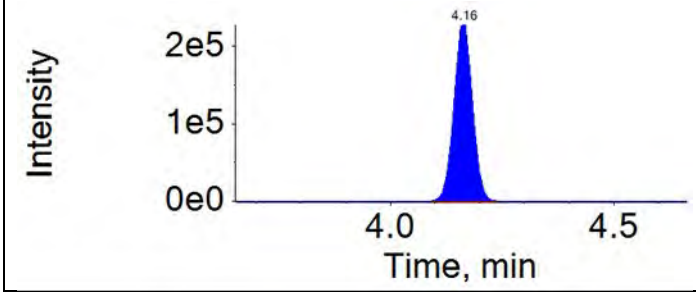
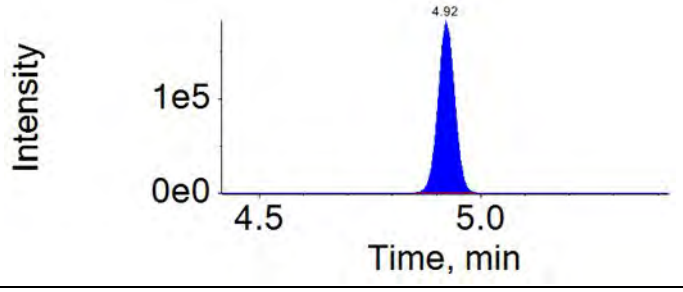


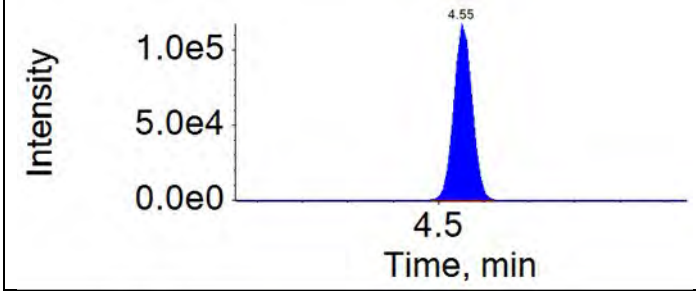
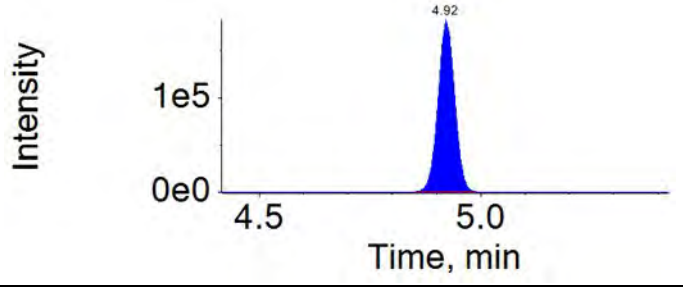


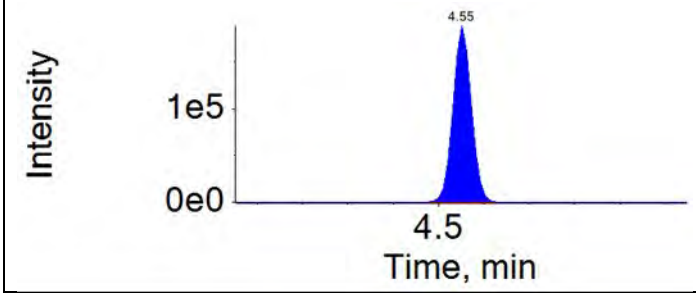
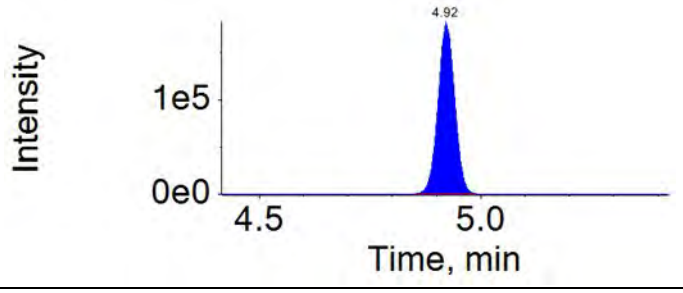
APPROVED
By MCD at 6:33 pm, 11/12/18

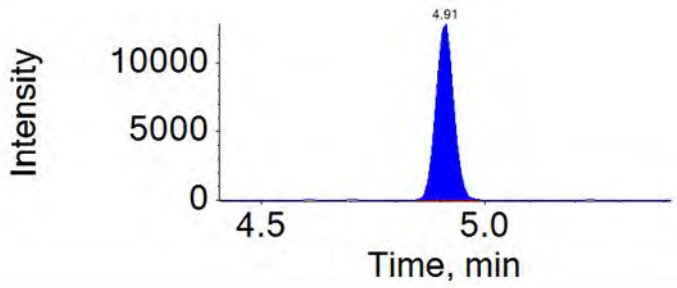
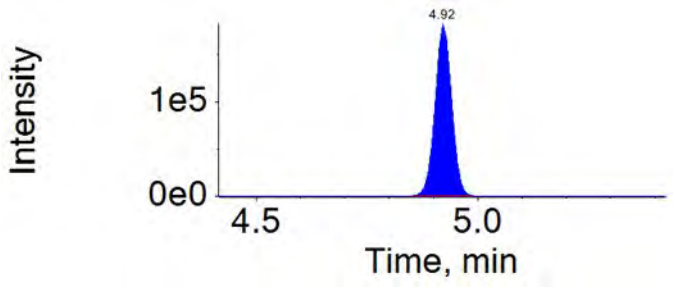
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

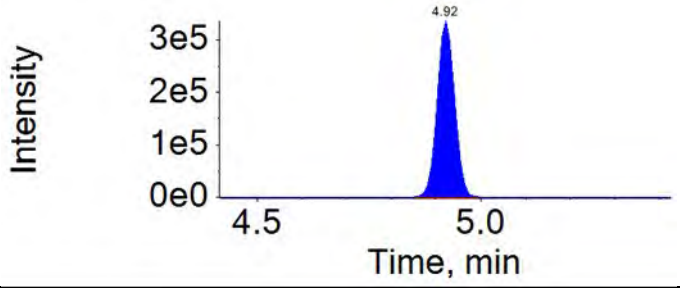
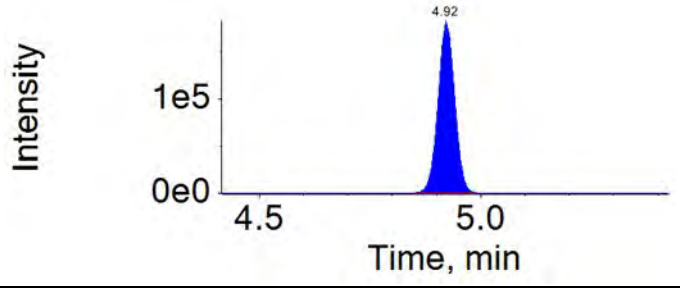
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

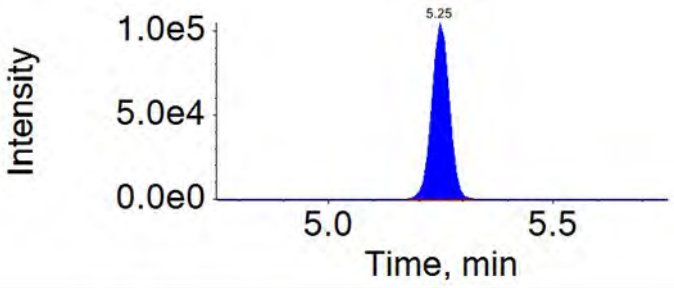
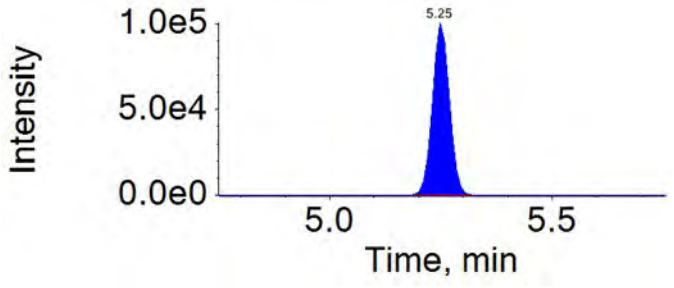
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

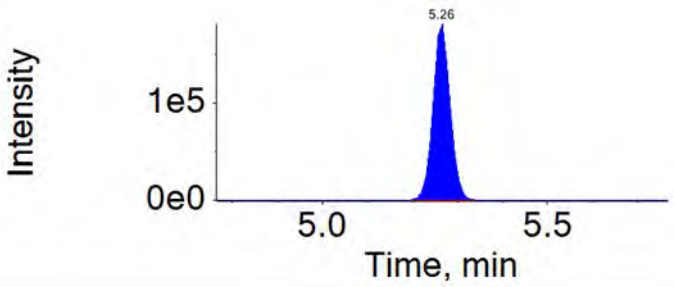
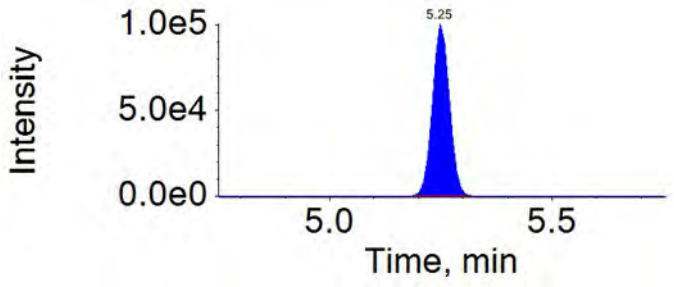
APPROVED
By MCD at 6:33 pm, 11/12/18

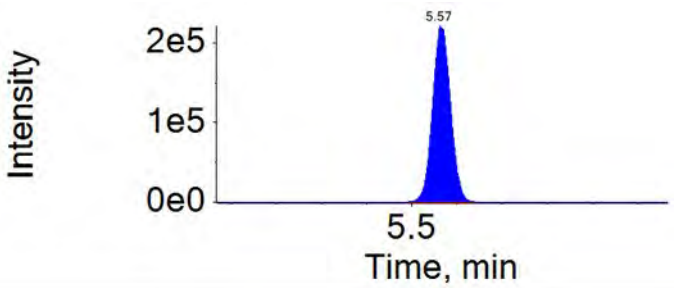
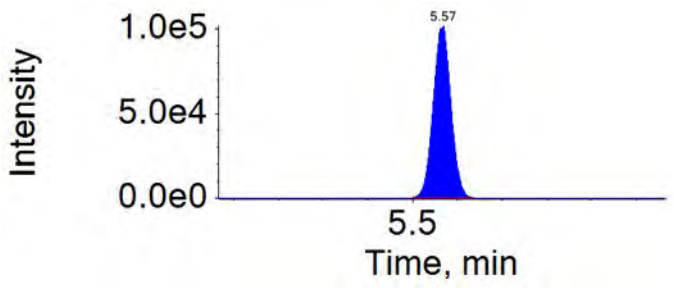
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

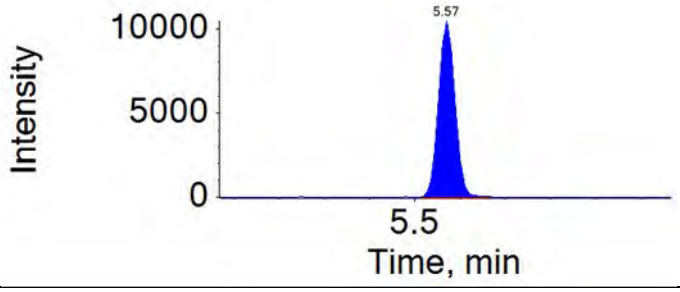
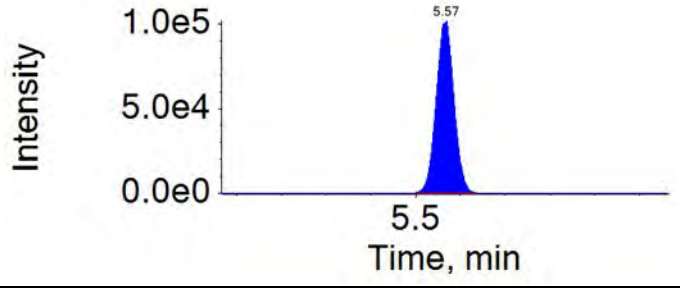
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

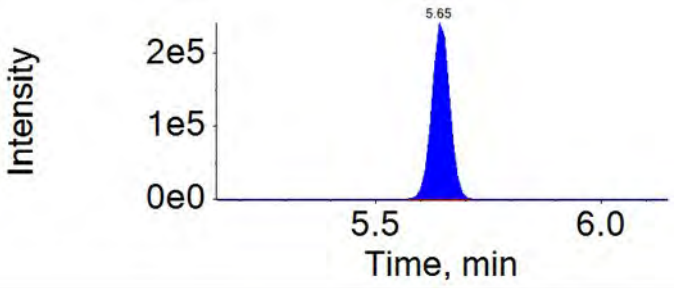
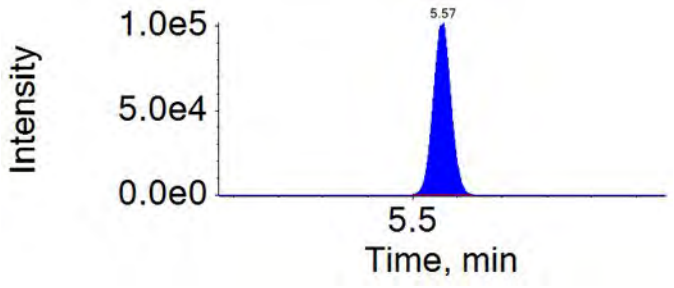
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

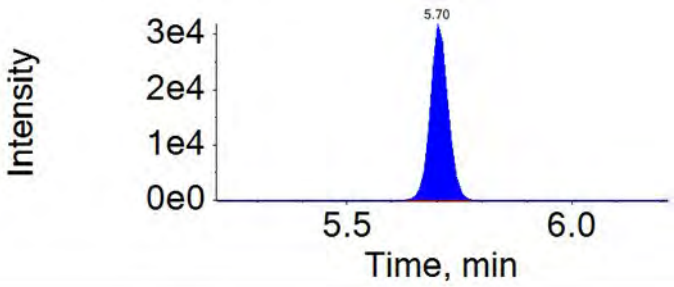
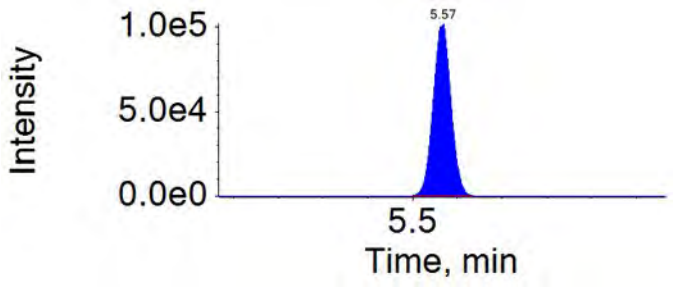
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

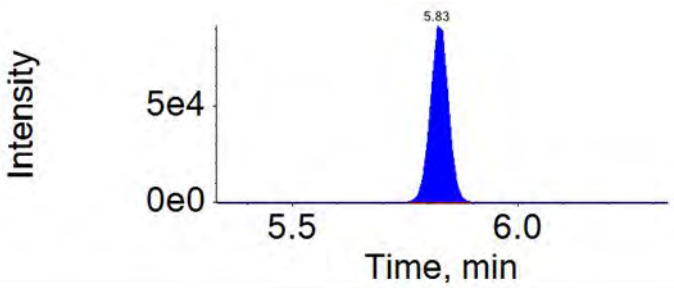
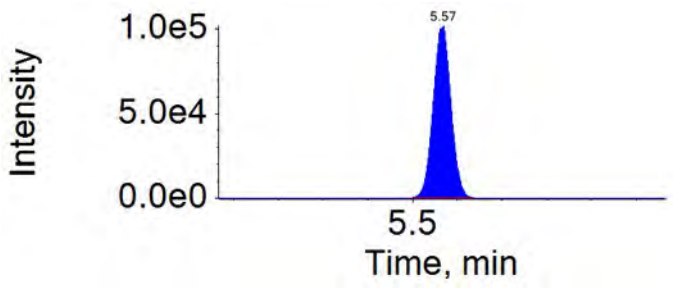
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

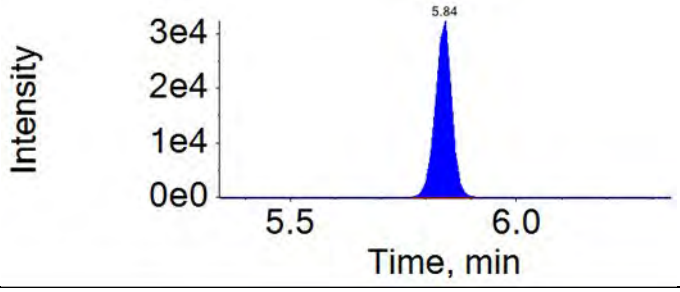
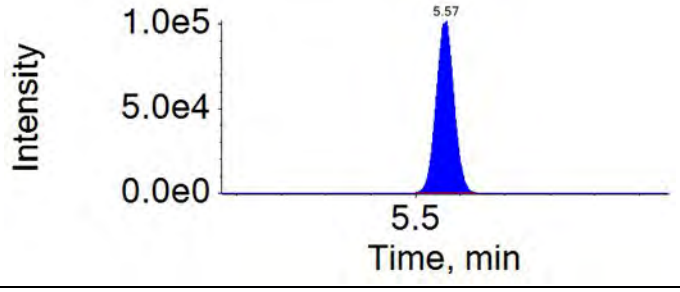
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

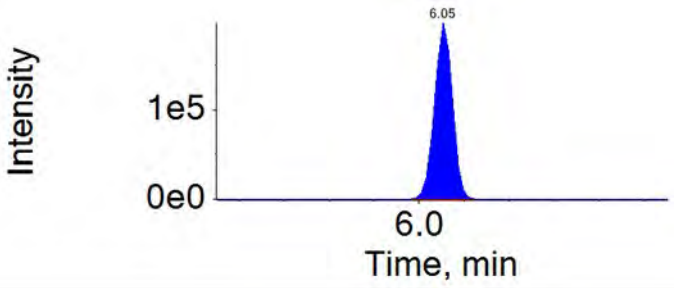
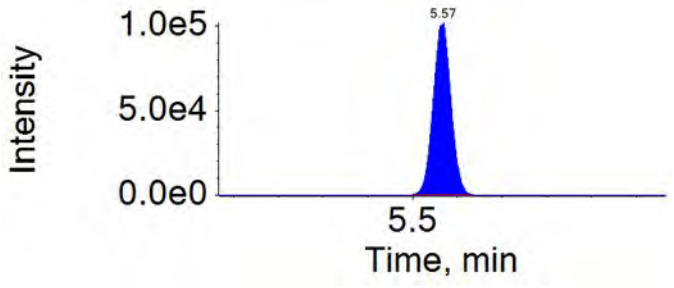
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

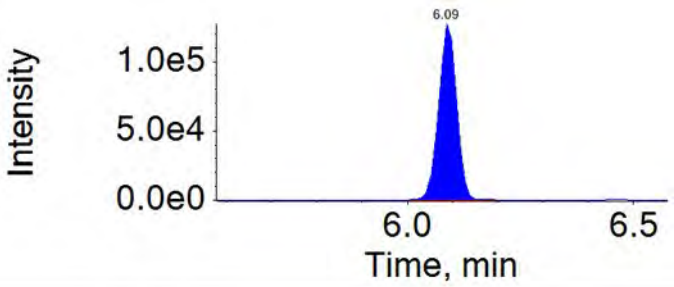
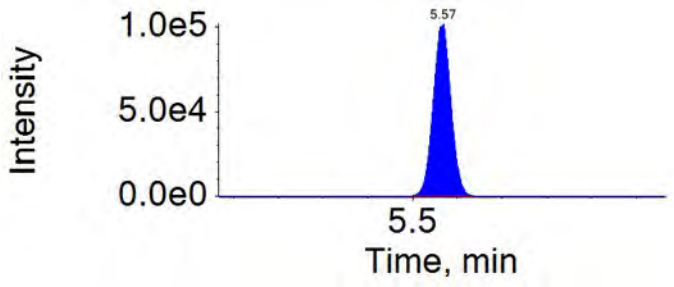
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

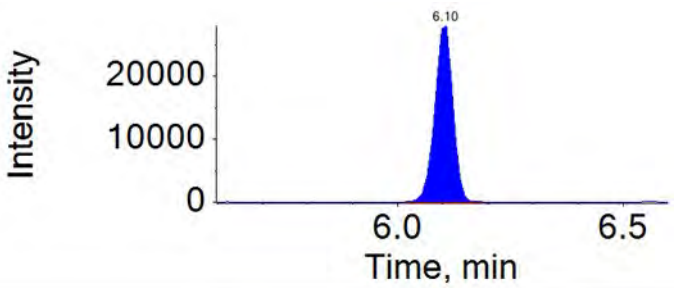
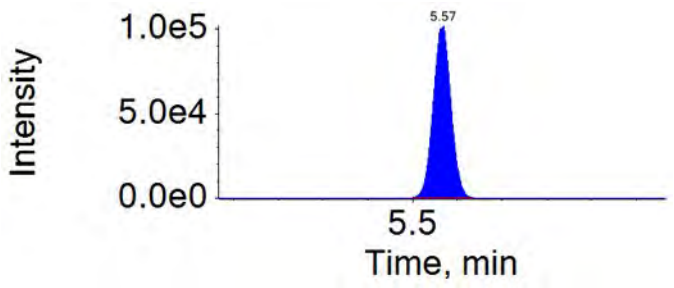
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

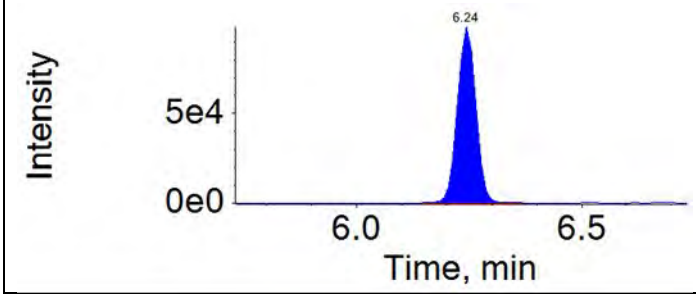
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

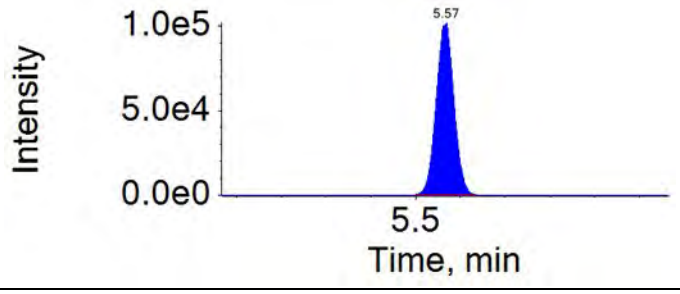
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

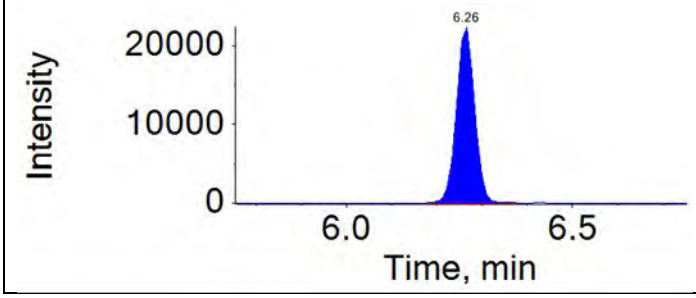
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

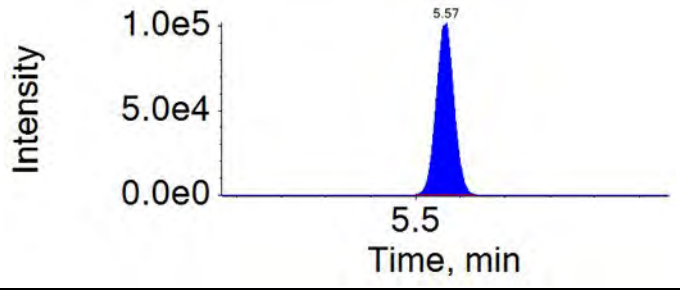
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



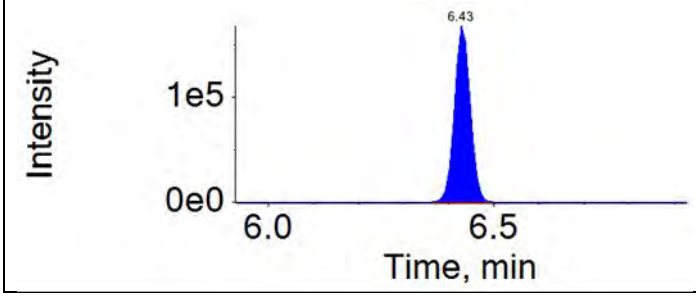


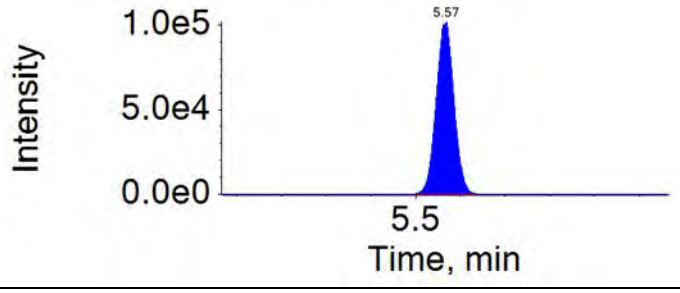
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



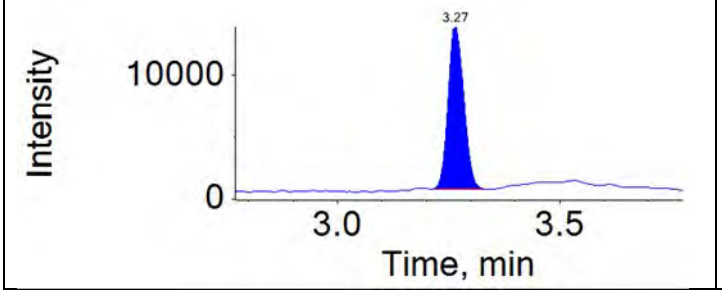


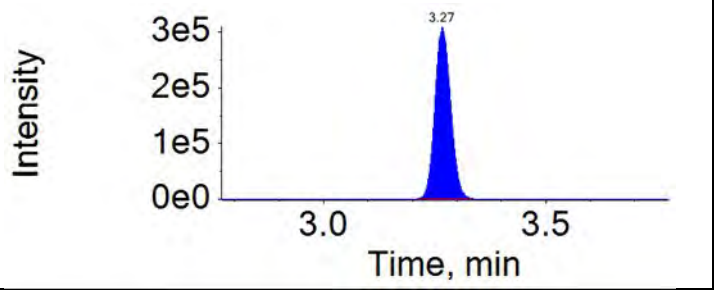
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

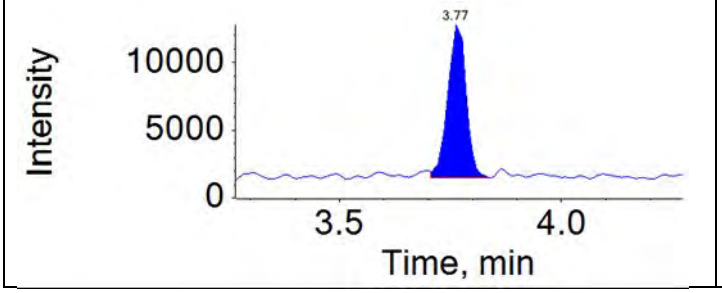
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

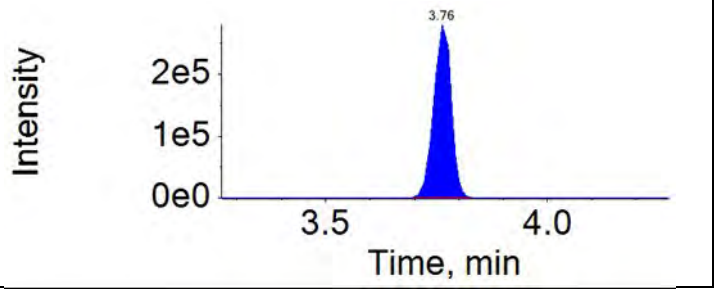
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



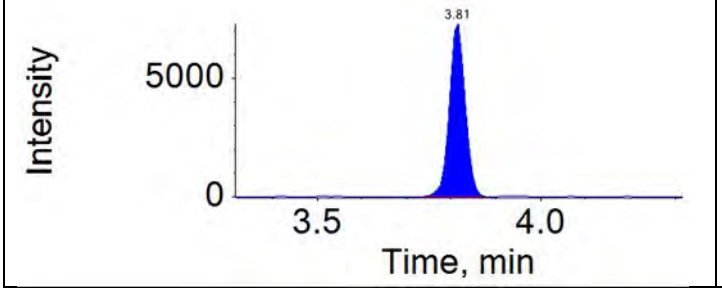


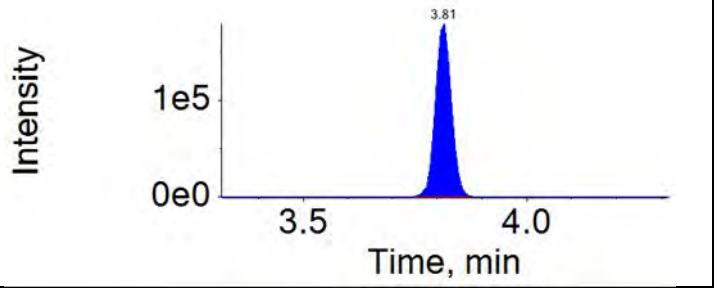
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



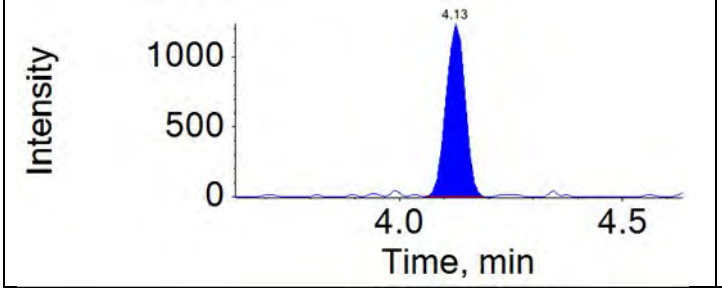


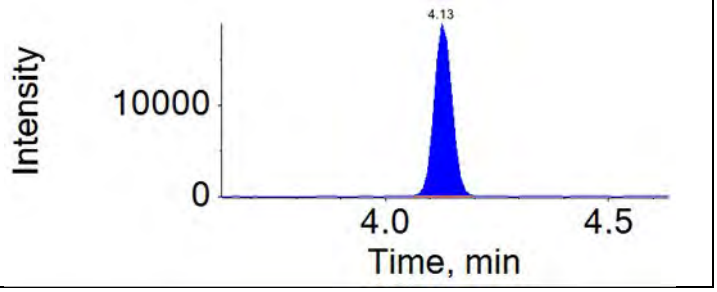
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



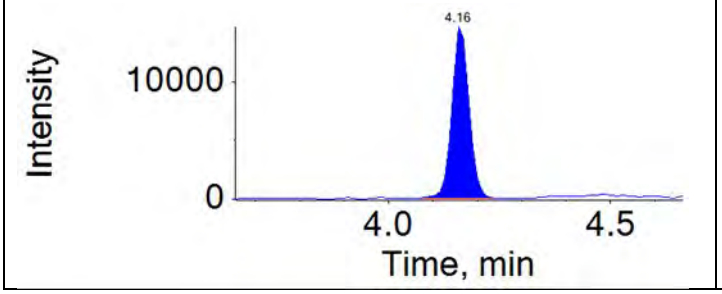


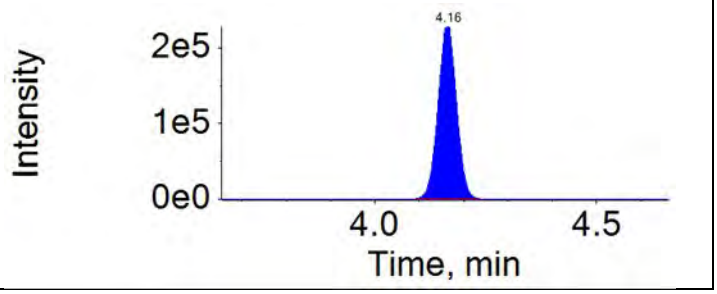
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

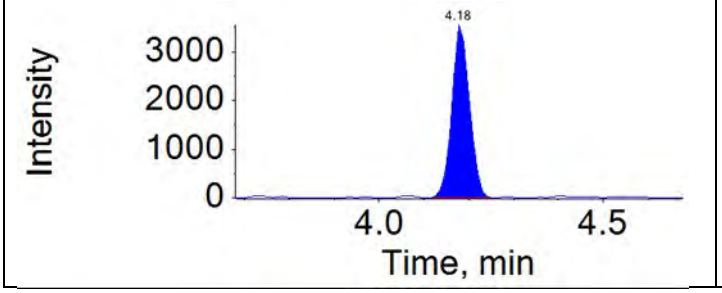
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

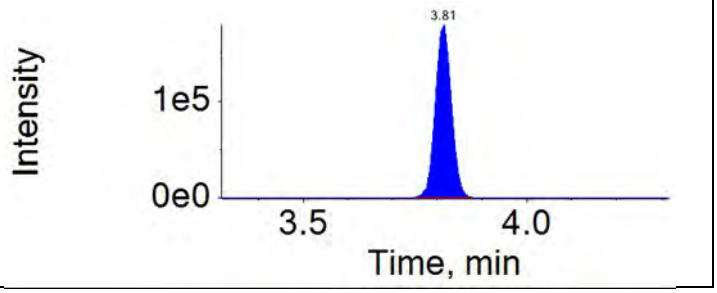
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



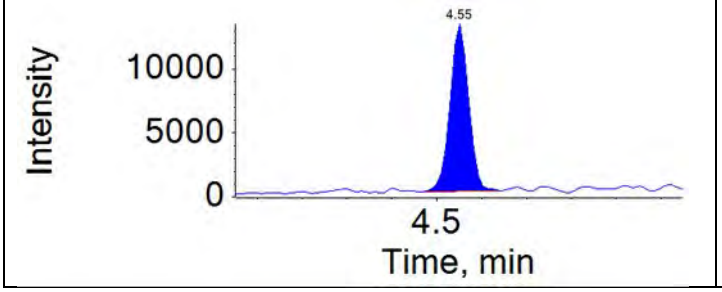


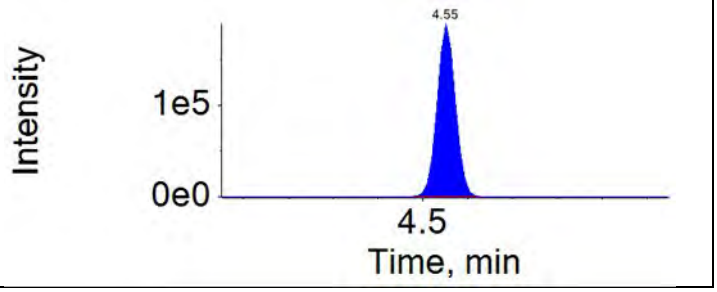
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



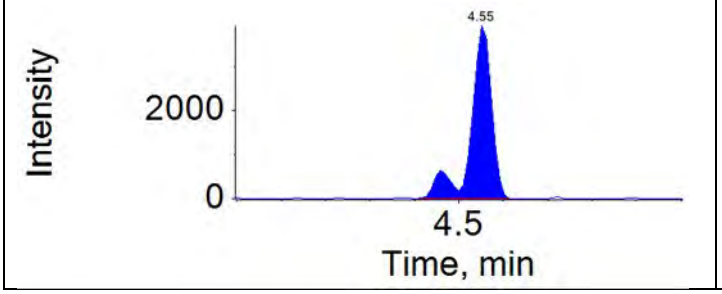


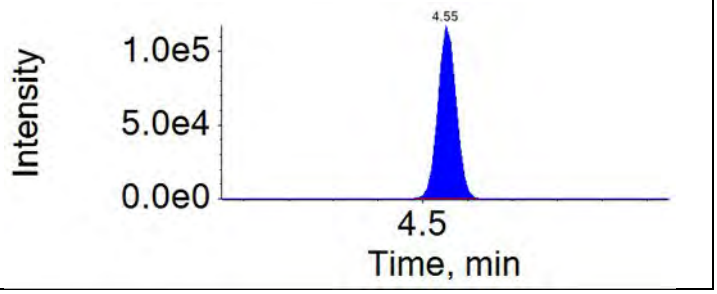
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



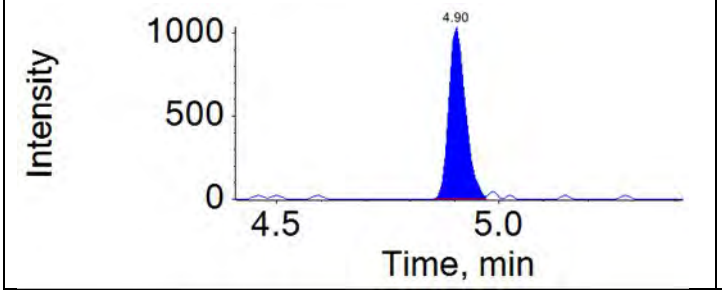


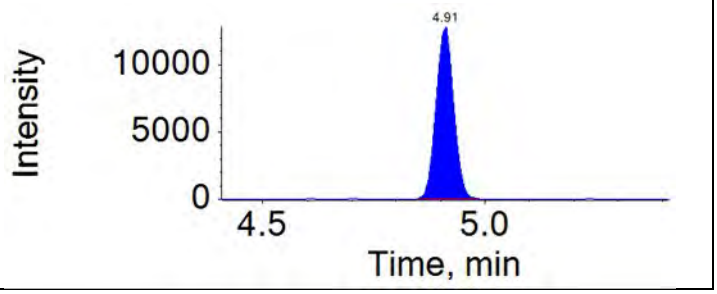
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

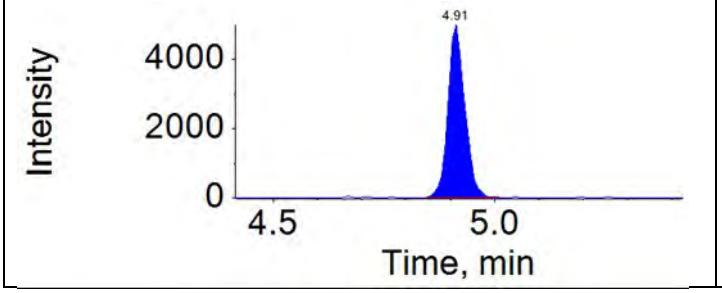
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

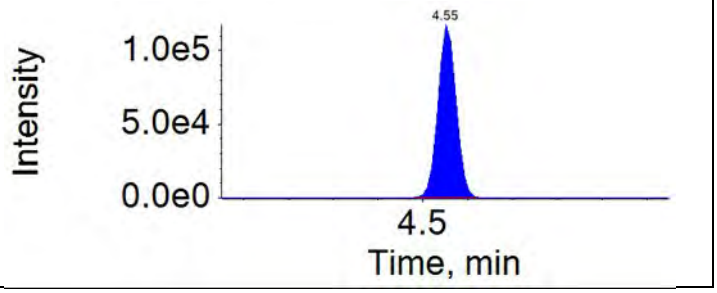
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



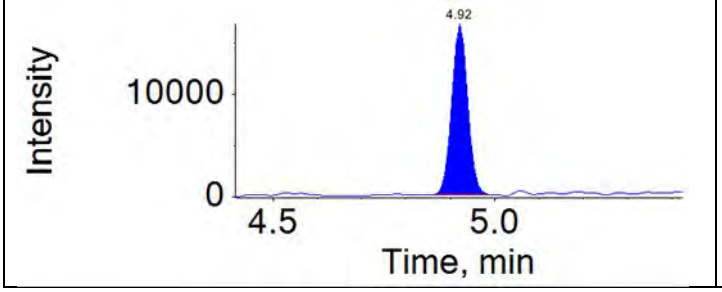


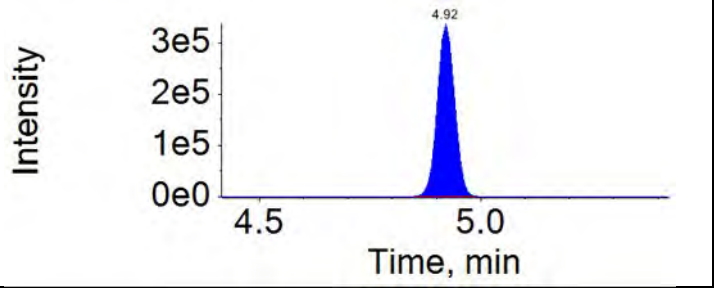
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



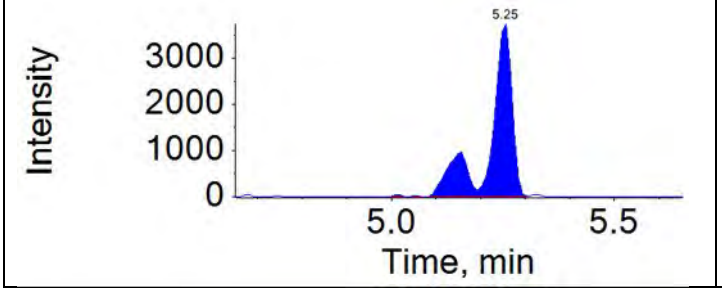


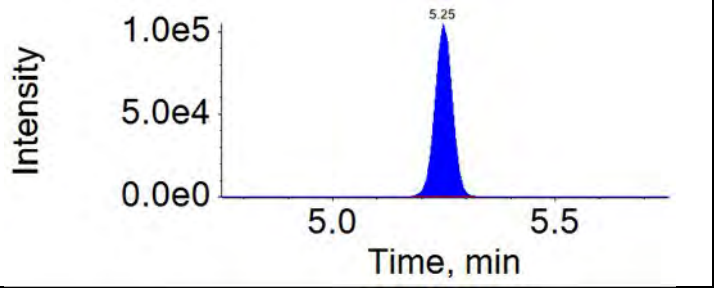
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



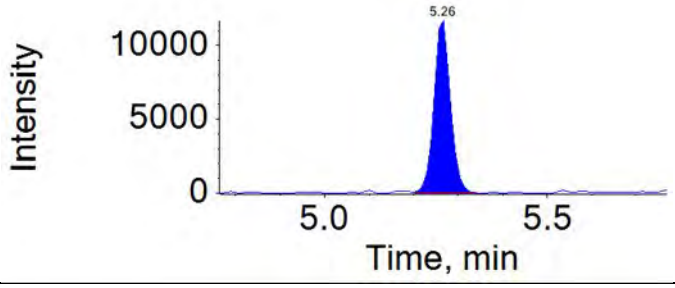


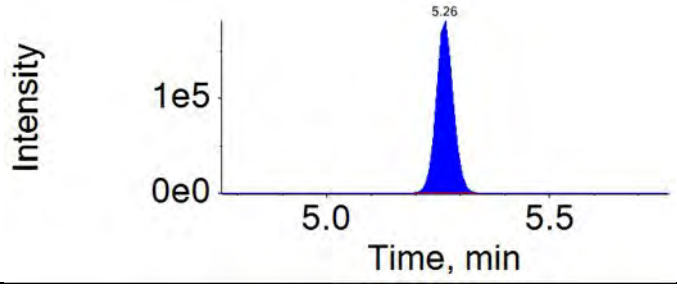
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

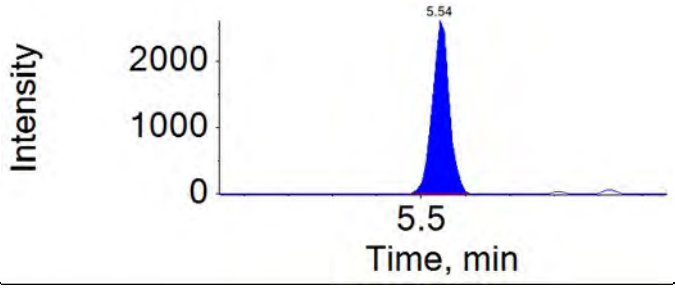
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

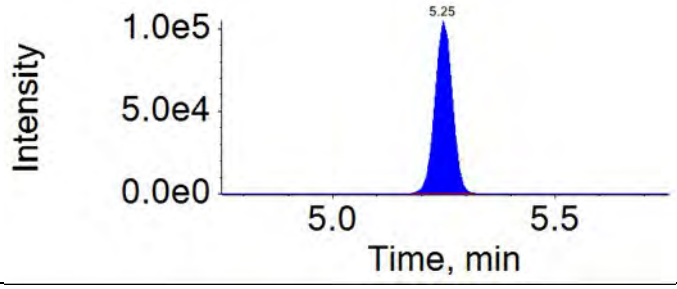
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



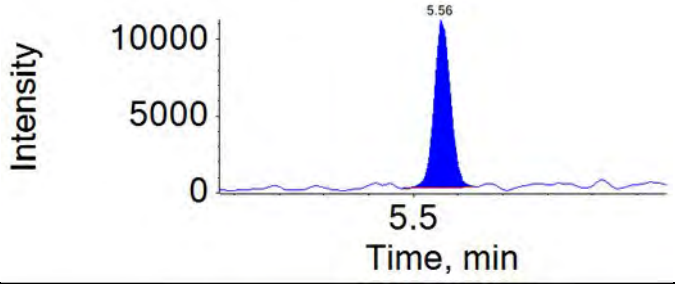


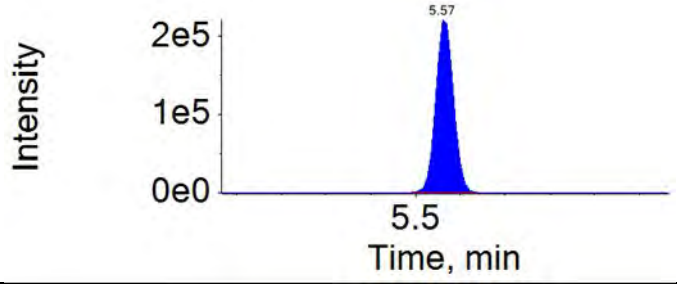
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



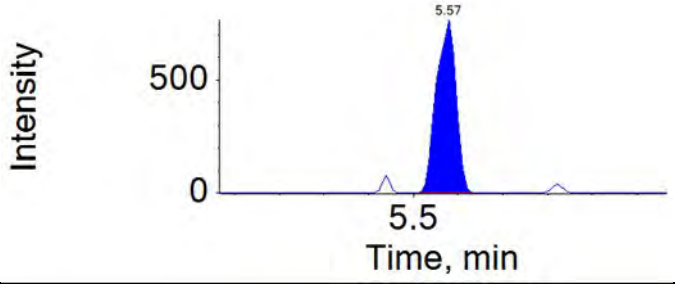


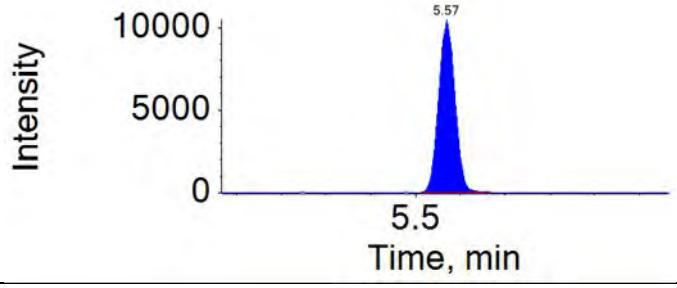
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



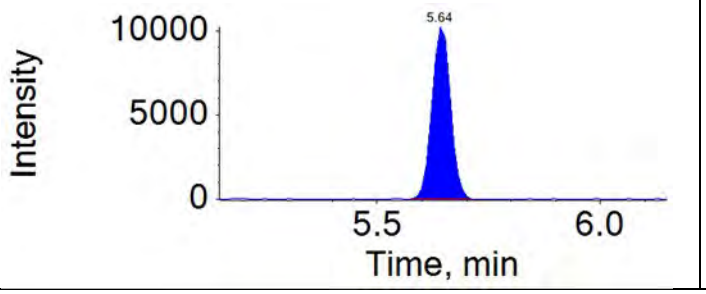


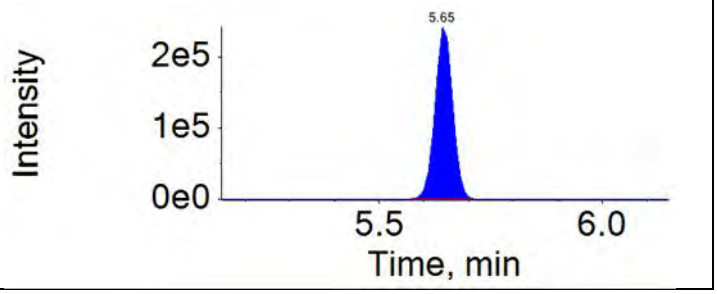
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

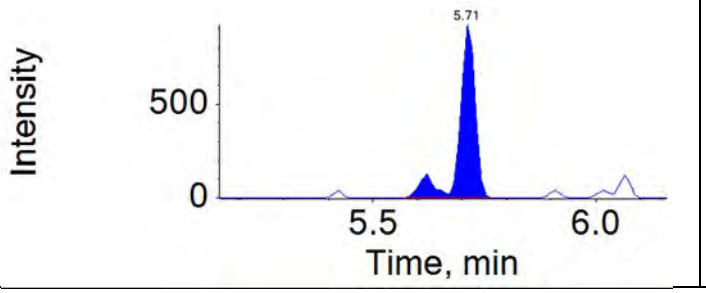
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

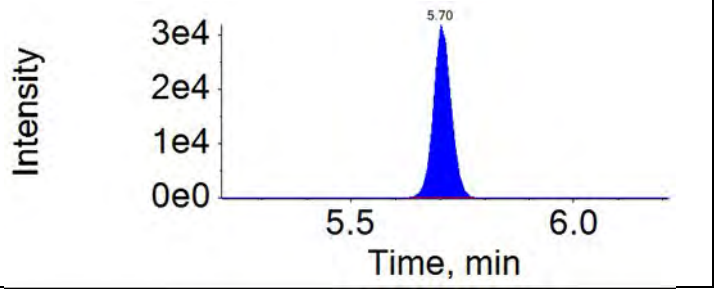
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



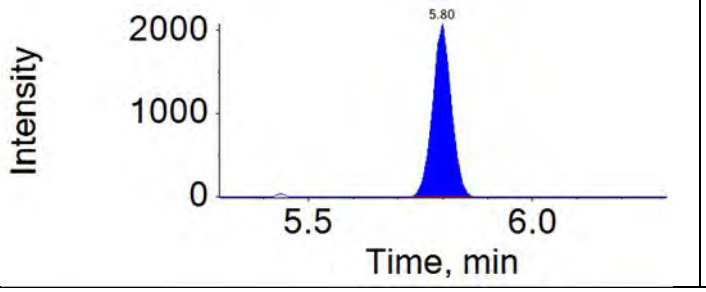


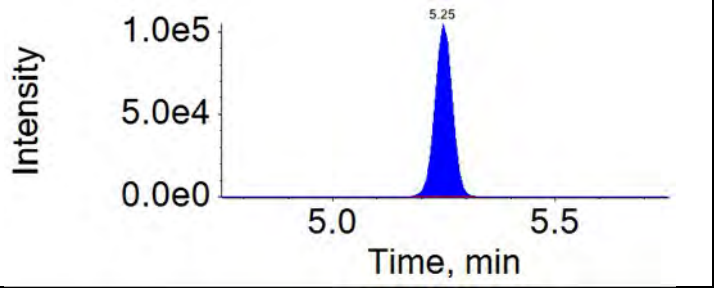
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



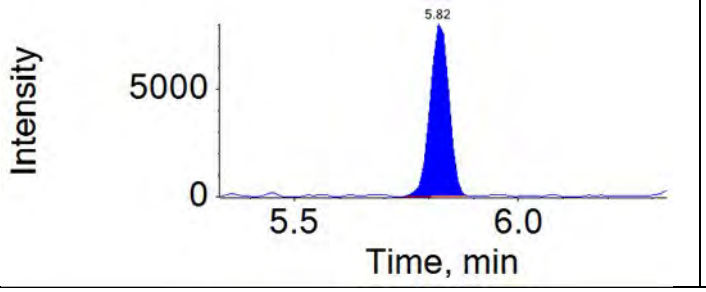


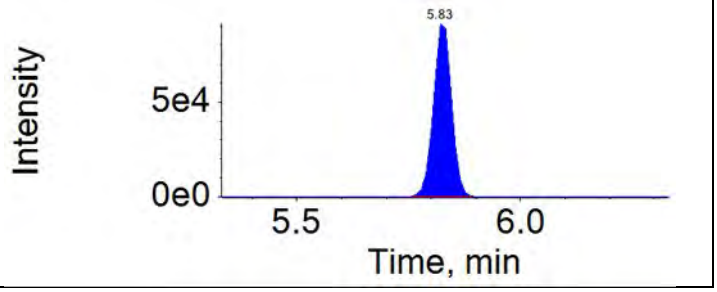
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0

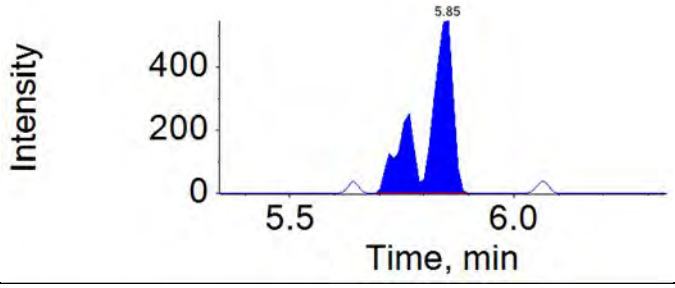
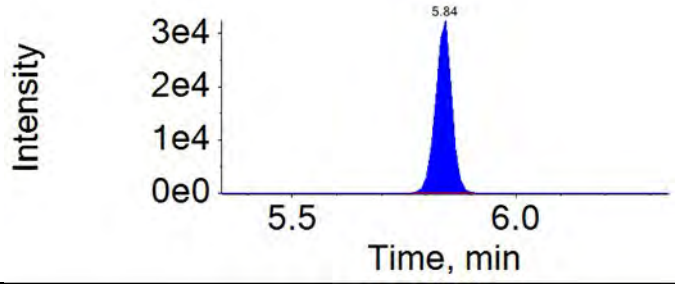


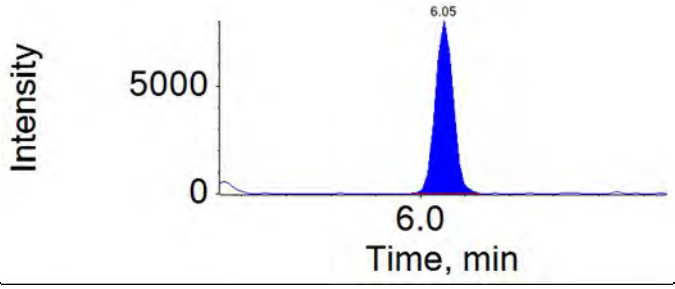
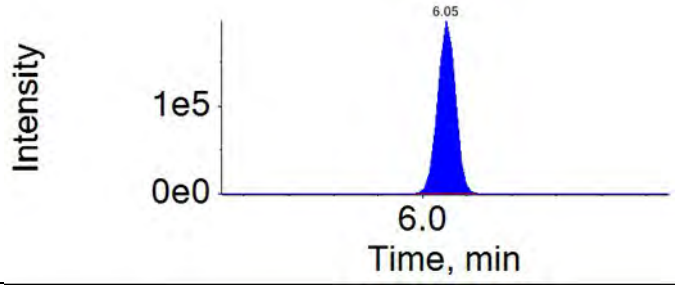


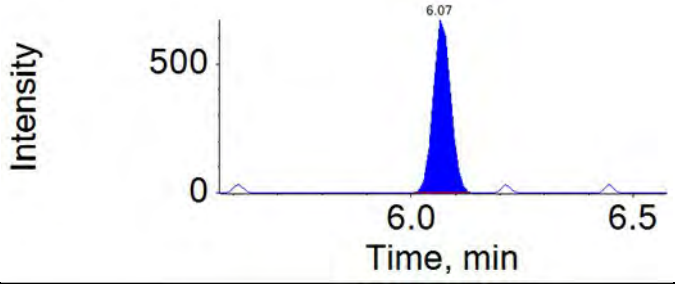
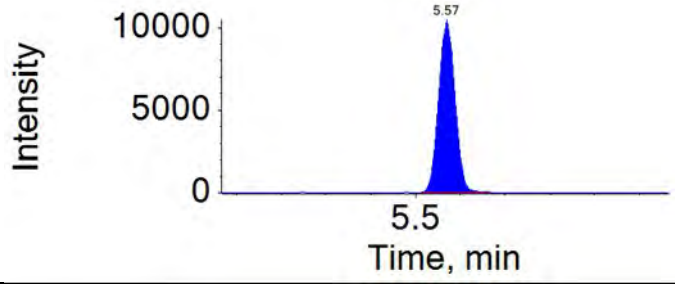
APPROVED
By MCD at 6:33 pm, 11/12/18

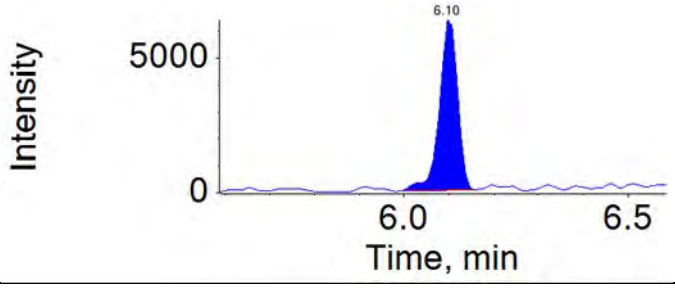
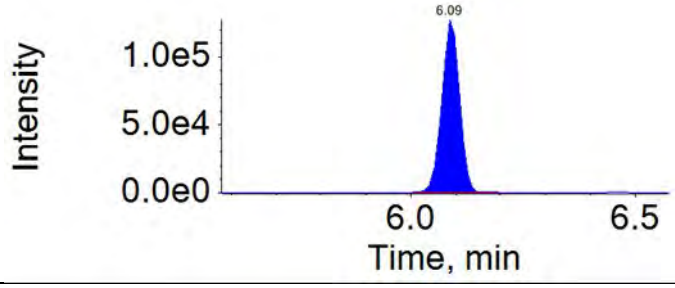
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0
	

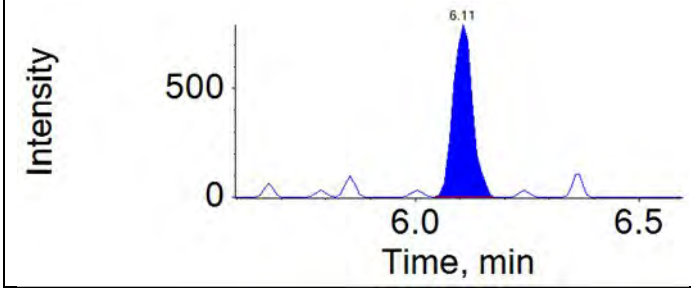
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0
	

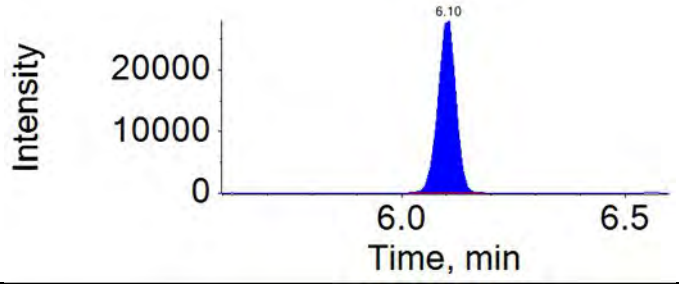
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0
	

Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0
	

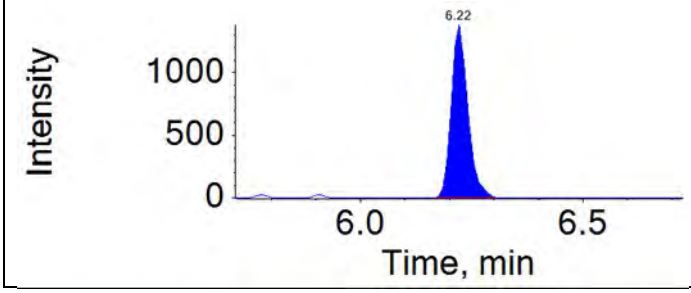
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

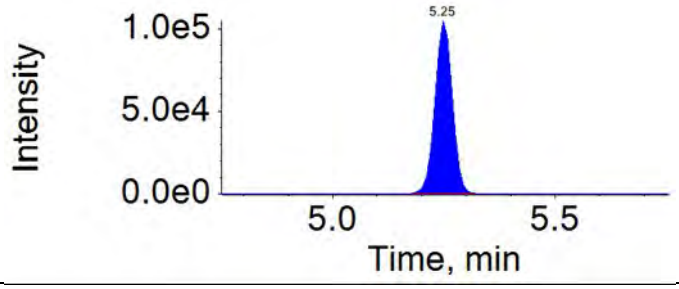
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



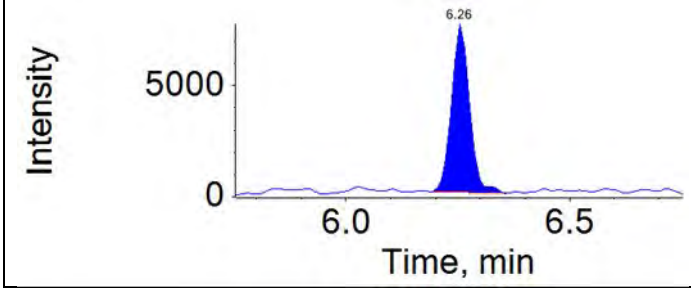


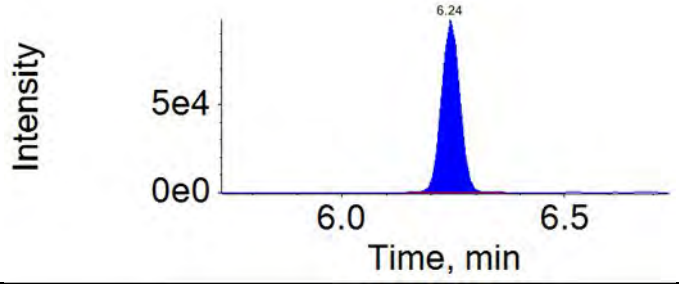
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



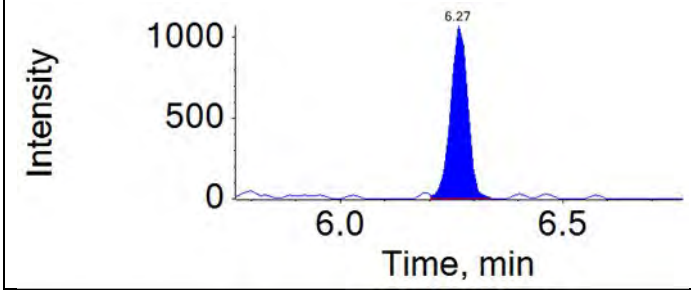


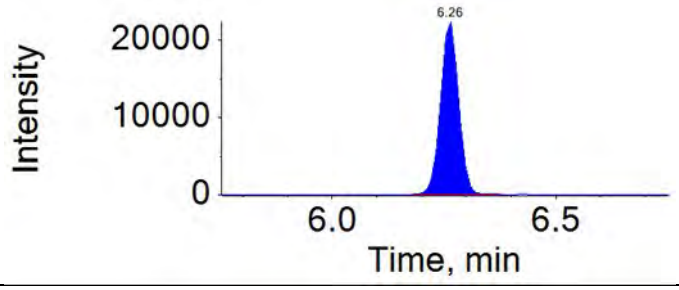
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

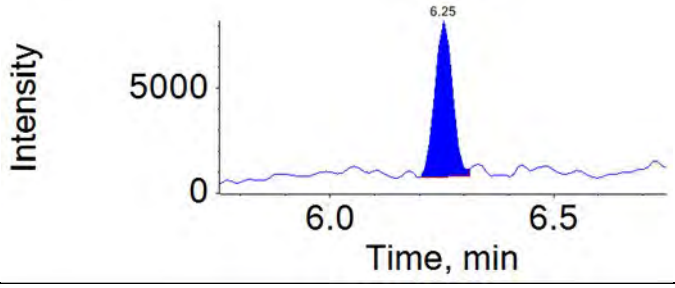
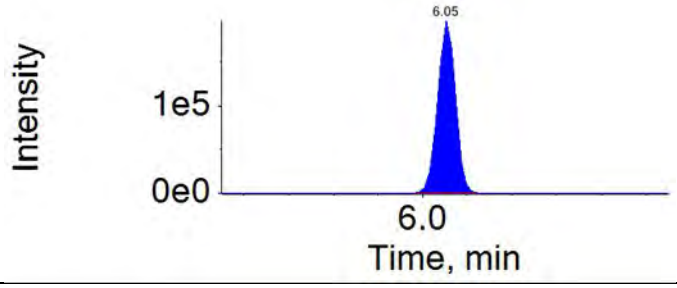


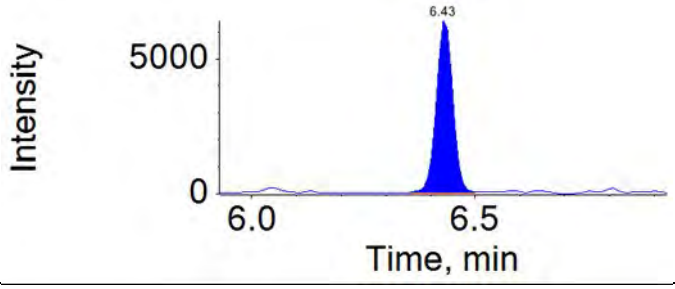
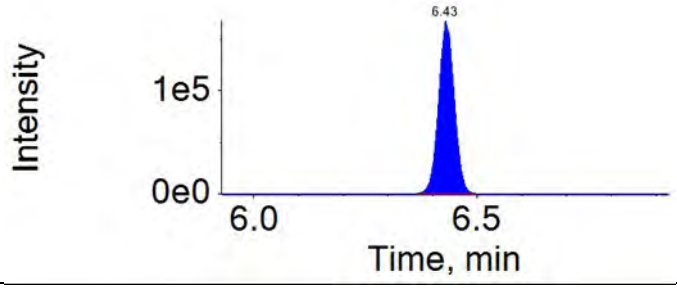


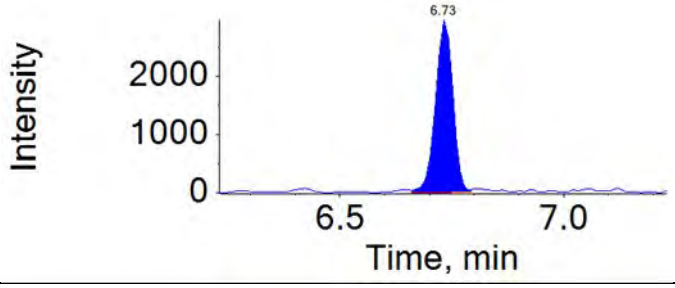
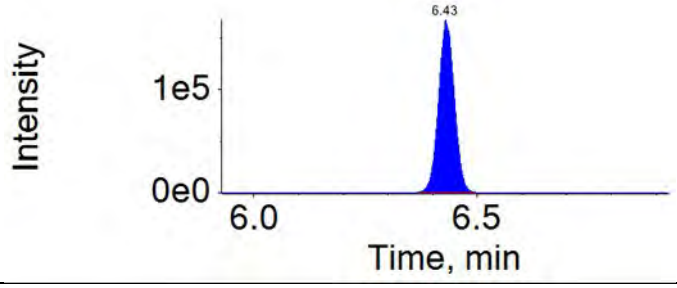
APPROVED
By MCD at 6:33 pm, 11/12/18

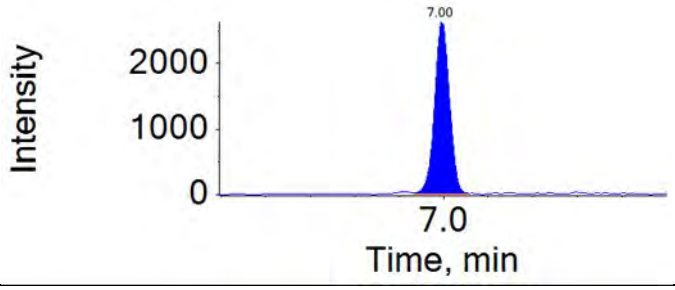
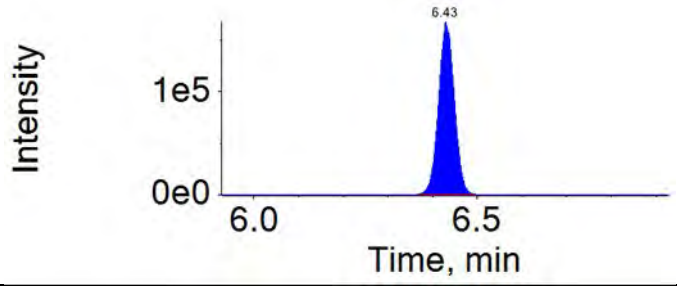
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

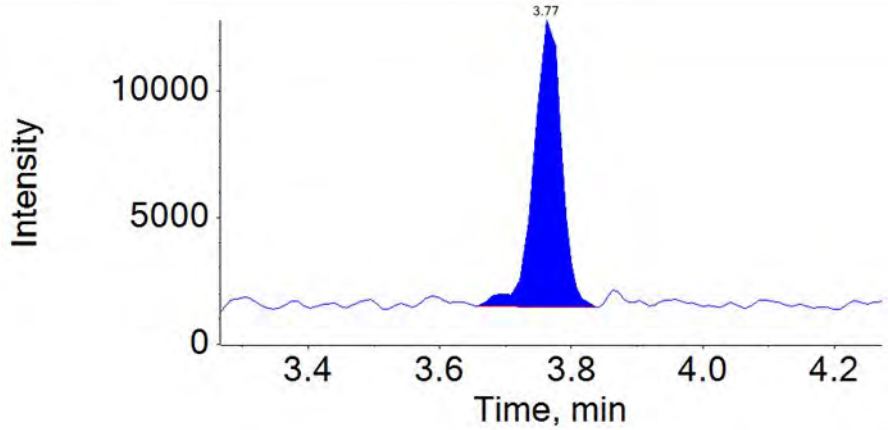
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

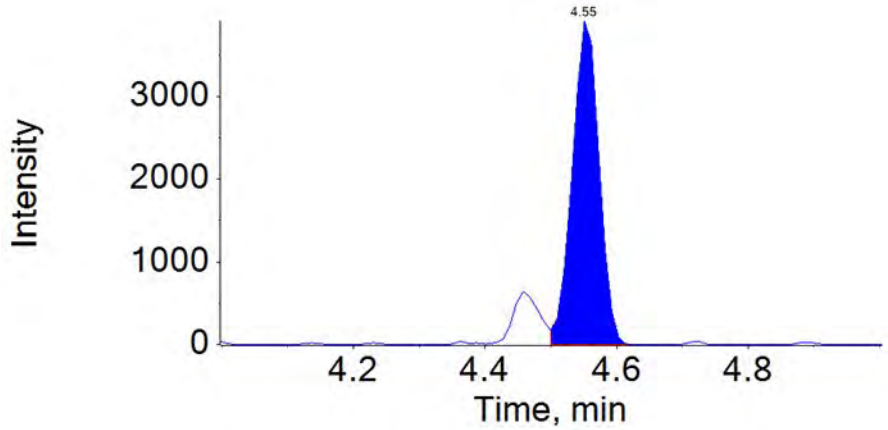
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

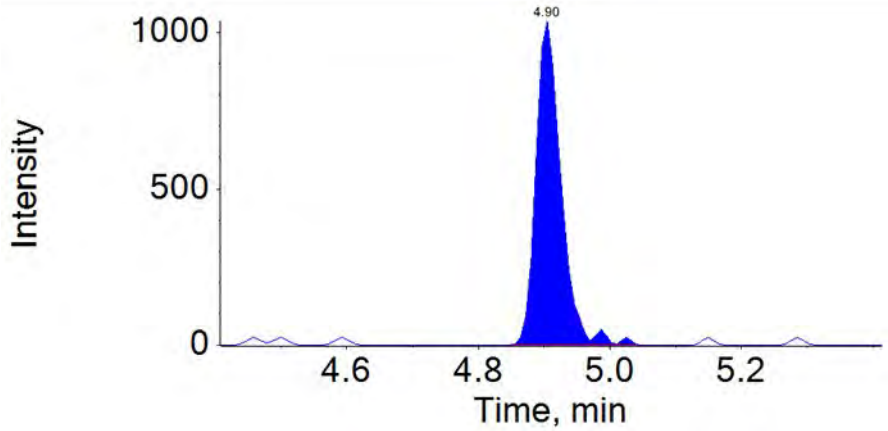
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFPeA **RT (min.):** 3.77 **Peak Area:** 33474.86 **Mass Range:** 263.0 / 219.0 **File Name:** 18NOV12DCAL-42.wiff **Sample Name:** CAL1	 **Integration Comment:** incorrect integration

Component Name: PFHxS **RT (min.):** 4.55 **Peak Area:** 11101.81 **Mass Range:** 399.0 / 80.0 **File Name:** 18NOV12DCAL-42.wiff **Sample Name:** CAL1	 **Integration Comment:** incorrect integration

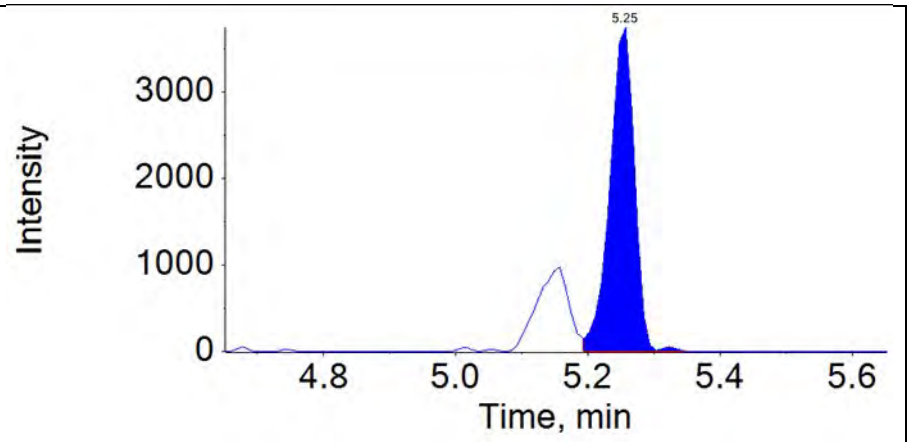
Component Name: 6:2-FTS **RT (min.):** 4.90 **Peak Area:** 2772.78 **Mass Range:** 427.0 / 407.0 **File Name:** 18NOV12DCAL-42.wiff **Sample Name:** CAL1	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

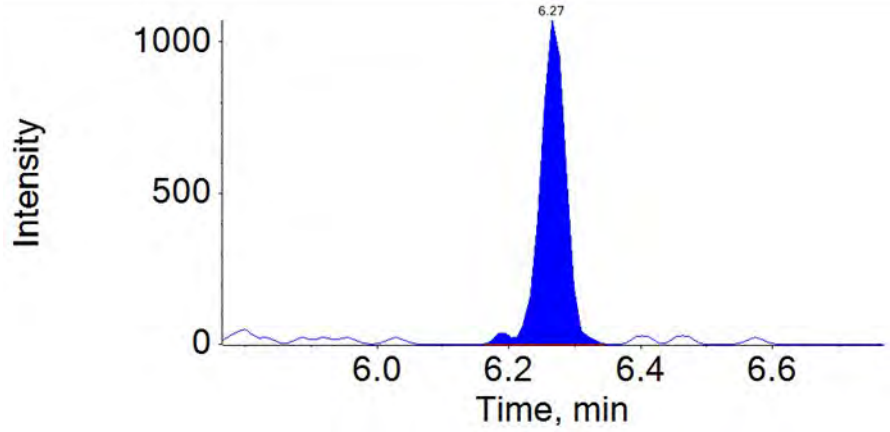
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
9779.70
Mass Range:
499.0 / 80.0
File Name:
18NOV12DCAL-42.wiff
Sample Name:
CAL1



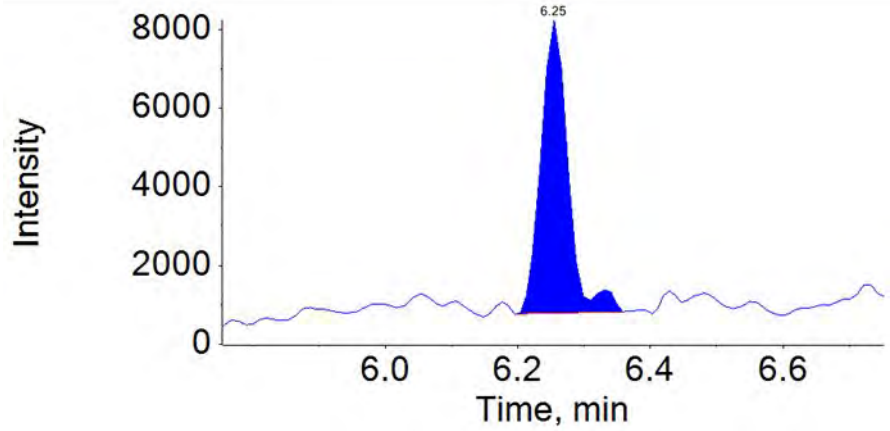
Integration Comment: incorrect integration

Component Name:
NEtPFOSA
RT (min.):
6.27
Peak Area:
2904.33
Mass Range:
526.0 / 169.0
File Name:
18NOV12DCAL-42.wiff
Sample Name:
CAL1



Integration Comment: incorrect integration

Component Name:
PFTrDA
RT (min.):
6.25
Peak Area:
21221.75
Mass Range:
663.0 / 619.0
File Name:
18NOV12DCAL-42.wiff
Sample Name:
CAL1



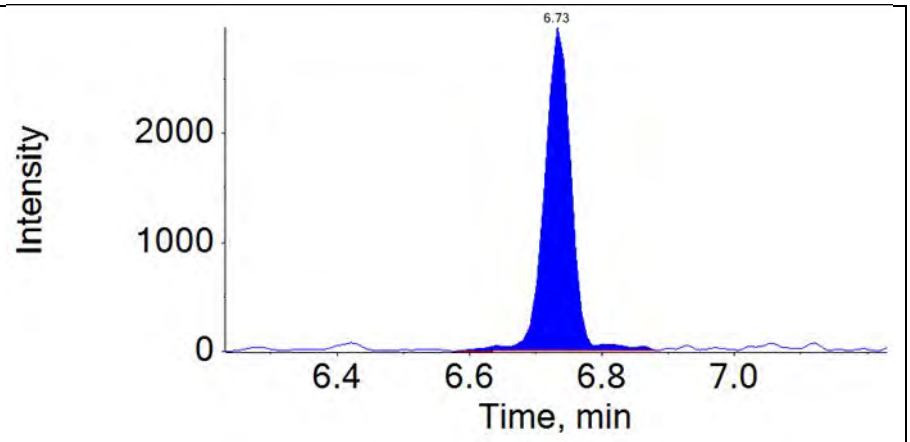
Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

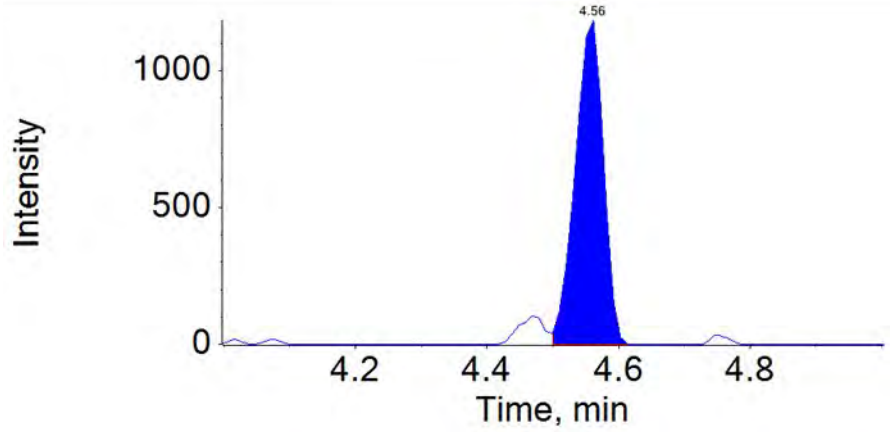
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFHxDA
RT (min.): 6.73
Peak Area: 8304.86
Mass Range: 813.0 / 769.0
File Name: 18NOV12DCAL-42.wiff
Sample Name: CAL1



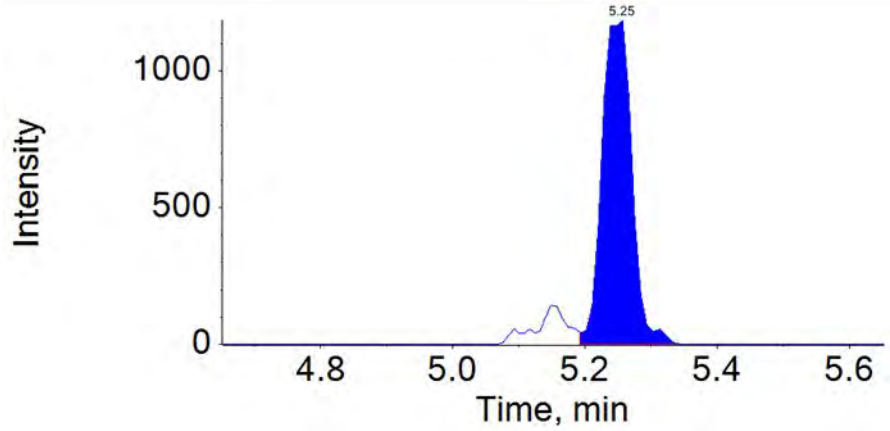
Integration Comment: incorrect integration

Component Name: PFHxS_2
RT (min.): 4.56
Peak Area: 3529.38
Mass Range: 399.0 / 99.0
File Name: 18NOV12DCAL-42.wiff
Sample Name: CAL1



Integration Comment: incorrect integration

Component Name: PFOS_2
RT (min.): 5.25
Peak Area: 3773.94
Mass Range: 499.0 / 99.0
File Name: 18NOV12DCAL-42.wiff
Sample Name: CAL1

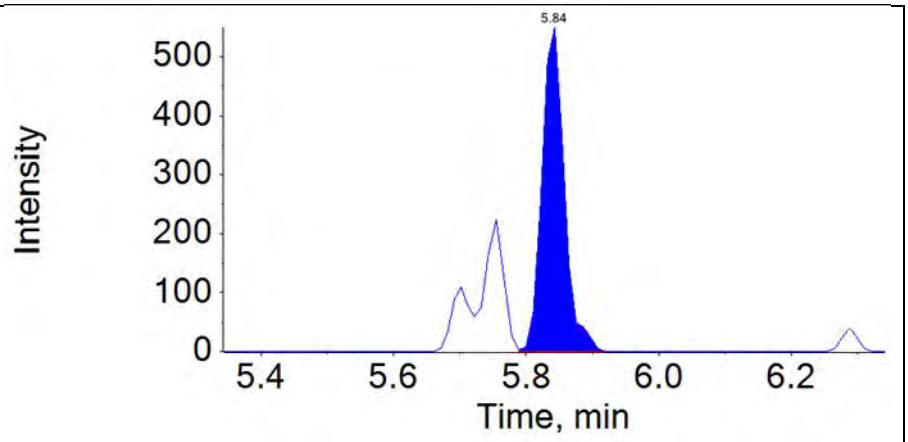


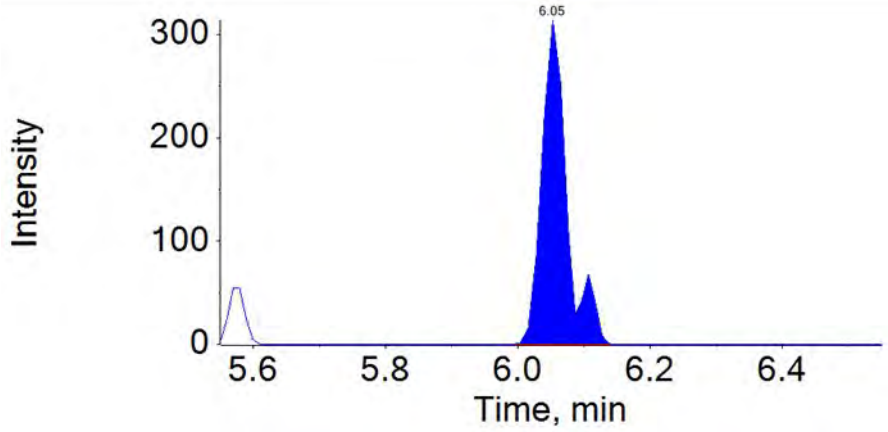
Integration Comment: incorrect integration

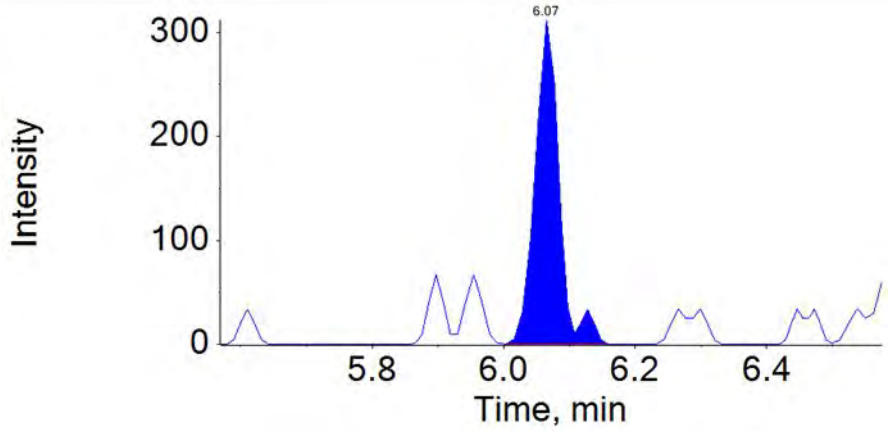
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: NEtFOSAA_2 **RT (min.):** 5.84 **Peak Area:** 1295.22 **Mass Range:** 584.0 / 526.0 **File Name:** 18NOV12DCAL-42.wiff **Sample Name:** CAL1	 **Integration Comment:** incorrect integration

Component Name: PFDoDA_2 **RT (min.):** 6.05 **Peak Area:** 835.89 **Mass Range:** 613.0 / 169.0 **File Name:** 18NOV12DCAL-42.wiff **Sample Name:** CAL1	 **Integration Comment:** incorrect integration

Component Name: 10:2 FTS_2 **RT (min.):** 6.07 **Peak Area:** 801.59 **Mass Range:** 627.0 / 81.0 **File Name:** 18NOV12DCAL-42.wiff **Sample Name:** CAL1	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

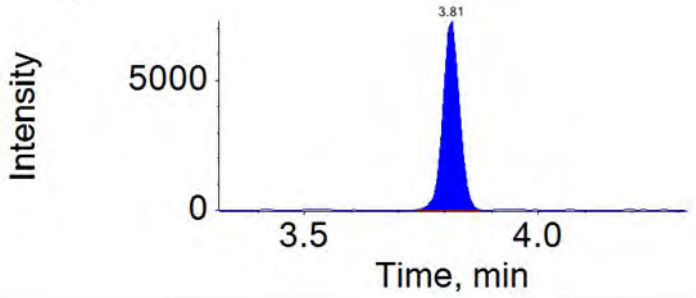
Sample Name: CAL1 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-42.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	18010.03	A	0.3619	0.3587			
PFBS_2	3.81	1.00	6459.67	A	0.3619	0.3587	-1	50	
4:2-FTS	4.13	1.00	3636.36	A	0.6730	0.7769			
4:2 FTS_2	4.13	1.00	2825.20	A	0.6730	0.7769		#NA!	
PFHxA	4.16	1.00	39108.19	A	0.0117	0.0110			
PFHxA_2	4.16	1.00	431.19	A	0.0117	0.0110	-5	50	
PFPeS	4.18	1.10	9620.09	A	0.5191	0.4377			
PFPeS_2	4.18	1.10	4210.95	A	0.5191	0.4377	-16	50	
PFHpA	4.55	1.00	37545.37	A	0.0563	0.0594			
PFHpA_2	4.55	1.00	2229.00	A	0.0563	0.0594	5	50	
PFHxS	4.55	1.00	12858.11	M	0.3428	0.2967			
PFHxS_2	4.56	1.00	3815.05	M	0.3428	0.2967	-13	50	
6:2-FTS	4.90	1.00	2683.12	M	0.6604	0.6208			
6:2 FTS_2	4.91	1.00	1665.70	A	0.6604	0.6208		#NA!	
PFHpS	4.91	1.08	13262.78	A	0.4066	0.3857			
PFHpS_2	4.91	1.08	5115.91	A	0.4066	0.3857	-5	50	
PFOA	4.92	1.00	41467.99	A	0.0562	0.0587			
PFOA_2	4.92	1.00	2433.19	A	0.0562	0.0587	4	50	
PFOS	5.25	1.00	13088.49	M	0.2968	0.3248			
PFOS_2	5.25	1.00	4250.80	M	0.2968	0.3248	9	50	
PFNA	5.26	1.00	29660.05	A	0.0229	0.0300			
PFNA_2	5.26	1.00	890.58	A	0.0229	0.0300	31	50	
PFNS	5.54	1.06	6846.55	A	0.4828	0.5747			
PFNS_2	5.55	1.06	3934.96	A	0.4828	0.5747	19	50	
PFDA	5.56	1.00	27488.55	A	0.0081	0.0185			
PFDA_2	5.57	1.00	509.91	A	0.0081	0.0185	130	50	OOS
8:2-FTS	5.57	1.00	2333.06	A	0.6814	0.8052			
8:2 FTS_2	5.57	1.00	1878.62	A	0.6814	0.8052		#NA!	
NMeFOSAA	5.71	1.00	2306.38	A	0.2569	0.2416			
NMeFOSAA_2	5.69	1.00	557.21	A	0.2569	0.2416	-6	50	
PFDS	5.80	1.10	5952.23	A	0.5144	0.5857			
PFDS_2	5.80	1.11	3486.36	A	0.5144	0.5857	14	50	
PFUnDA	5.82	1.00	23379.53	A	0.0058	0.0168			
PFUnDA_2	5.83	1.00	393.36	A	0.0058	0.0168	189	50	OOS
NEtFOSAA	5.85	1.00	2284.89	A	0.7253	0.8510			
NEtFOSAA_2	5.84	1.00	1944.53	M	0.7253	0.8510	17	50	
PFDoDA	6.05	1.00	22143.56	A	0.0157	0.0329			
PFDoDA_2	6.05	1.00	728.93	M	0.0157	0.0329	110	50	OOS
10:2-FTS	6.07	1.09	1814.19	A	0.6356	0.4140			
10:2 FTS_2	6.07	1.09	751.03	M	0.6356	0.4140		#NA!	
PFTrDA	6.25	1.03	20185.08	M	0.0086	0.0098			
PFTrDA_2	6.24	1.03	198.77	A	0.0086	0.0098	15	50	
PFTeDA	6.43	1.00	16357.53	A	0.0062	0.0036			
PFTeDA_2	6.46	1.01	58.89	A	0.0062	0.0036	-42	50	
PFHxDA	6.73	1.05	7976.02	M	0.0683	0.0708			
PFHxDA_2	6.73	1.05	564.53	A	0.0683	0.0708	4	50	
PFODA	7.00	1.09	6020.31	A	0.0277	0.0307			
PFODA_2	6.99	1.09	185.07	A	0.0277	0.0307	11	50	

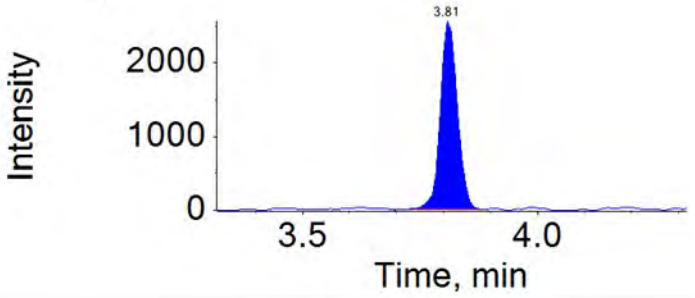
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

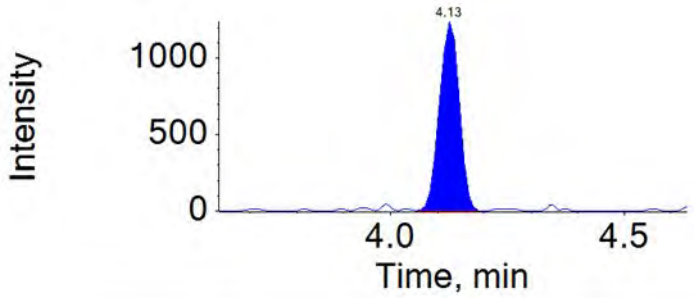
Component: PFBS
Primary Mass: 299.0 / 80.0



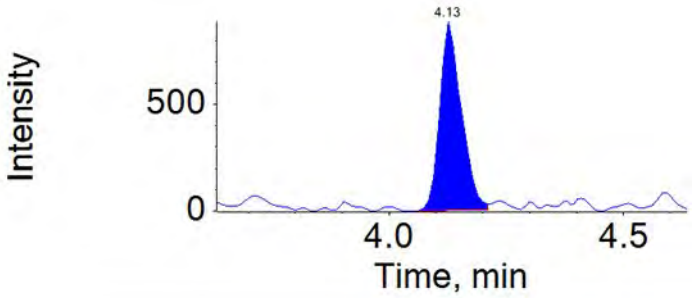
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



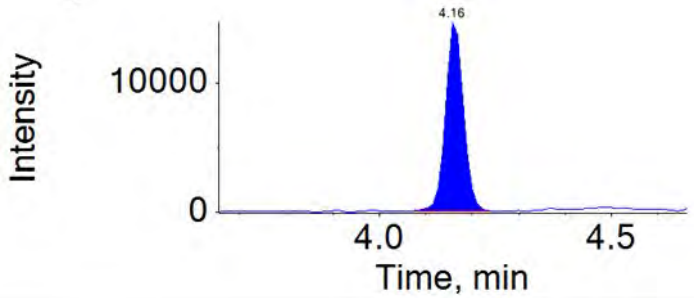
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



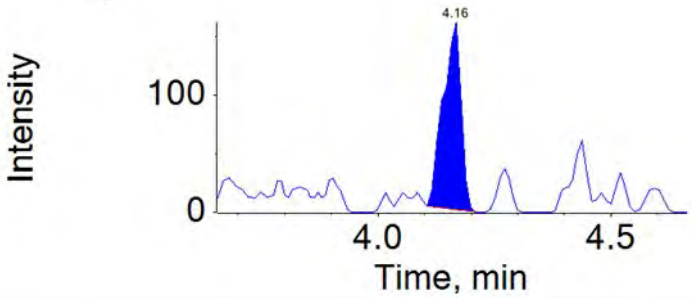
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



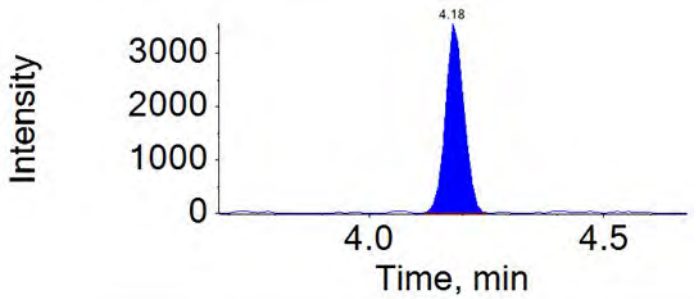
Component: PFHxA
Primary Mass: 313.0 / 269.0



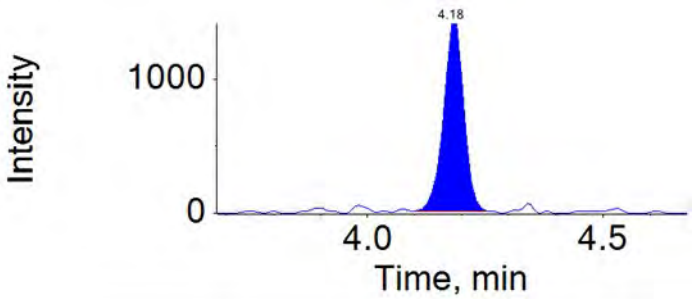
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



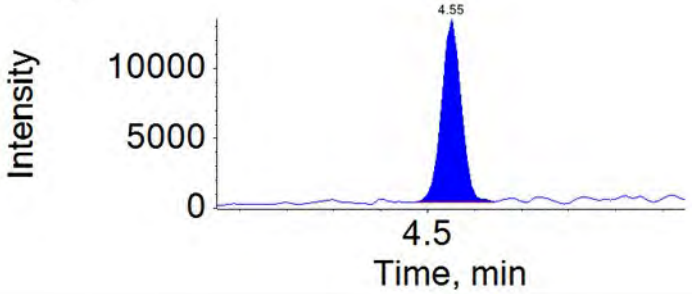
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



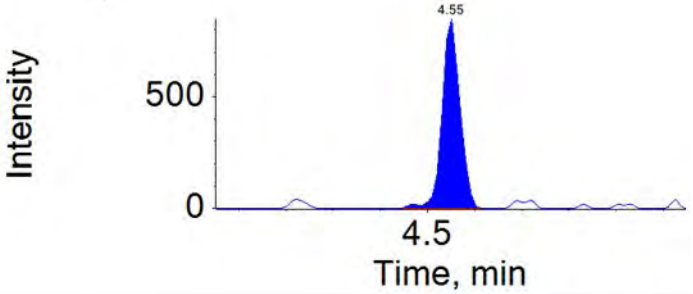
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

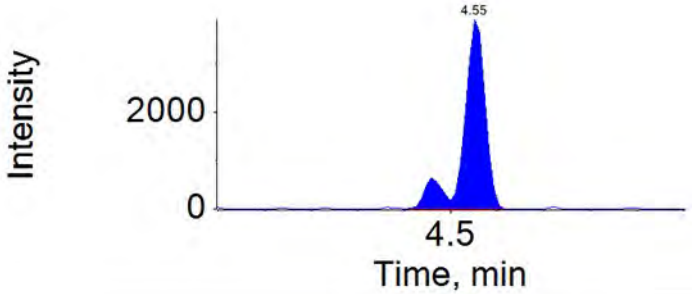
Component: PFHpA
Primary Mass: 363.0 / 319.0



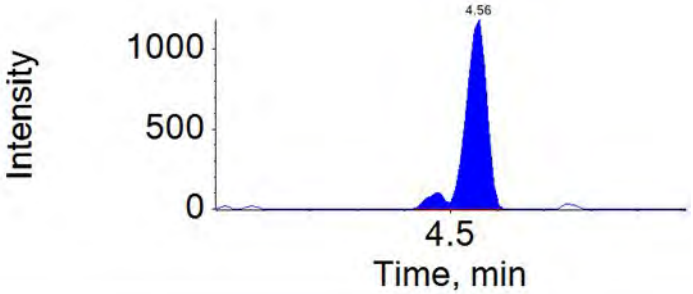
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



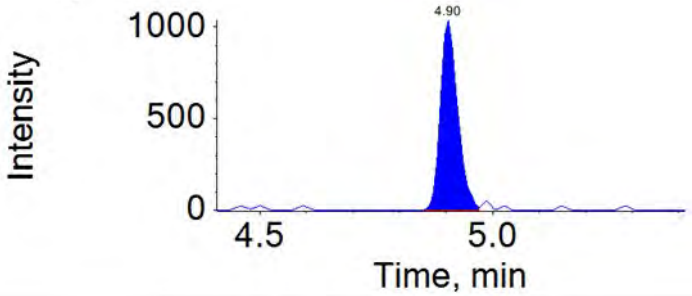
Component: PFHxS
Primary Mass: 399.0 / 80.0



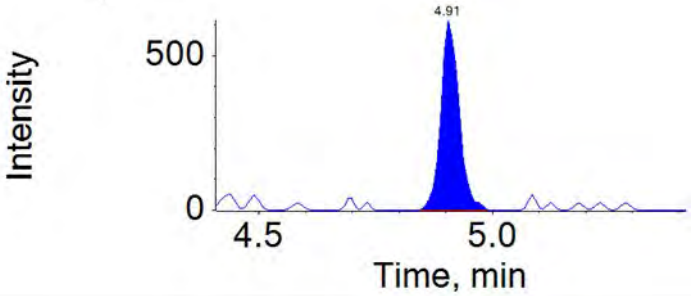
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



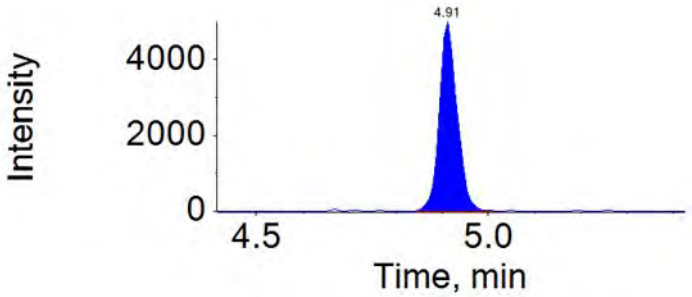
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



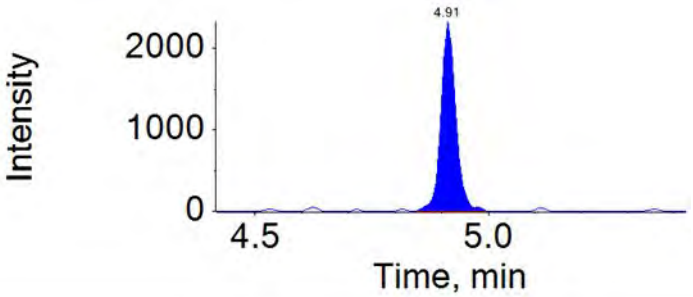
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



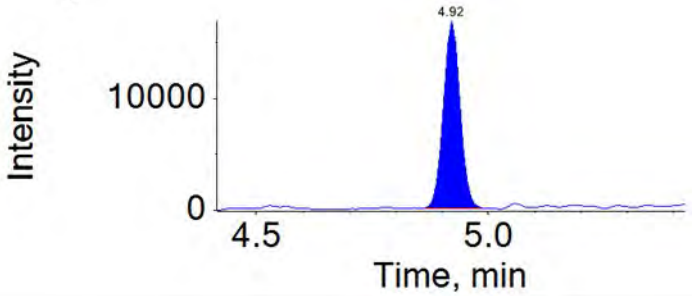
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



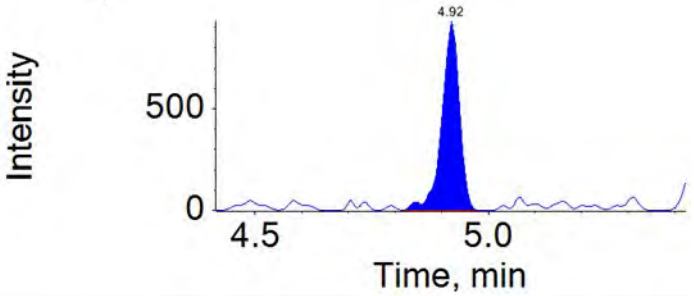
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

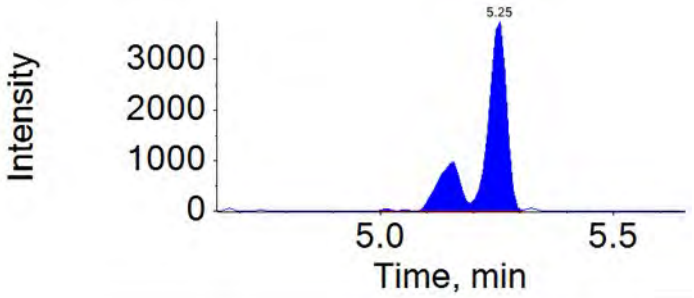
Component: PFOA
Primary Mass: 413.0 / 369.0



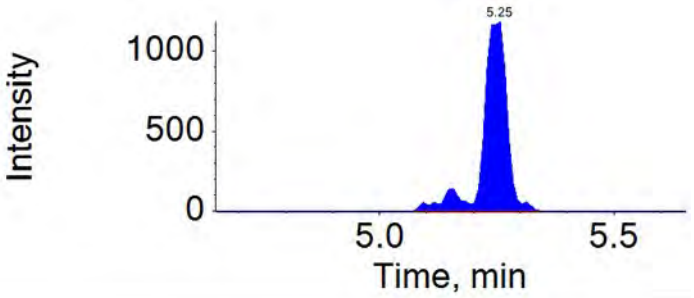
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



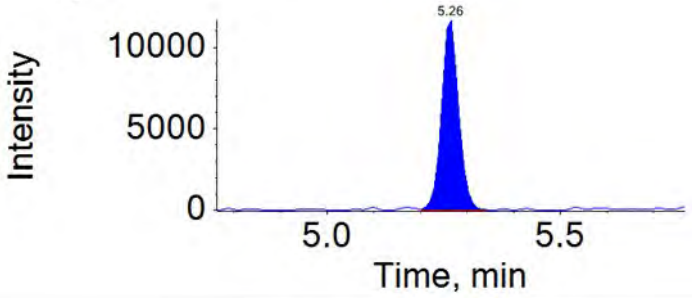
Component: PFOS
Primary Mass: 499.0 / 80.0



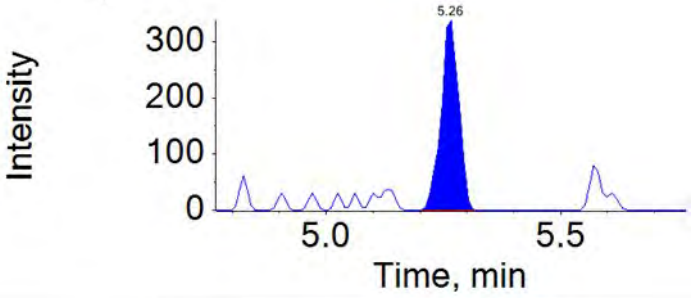
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



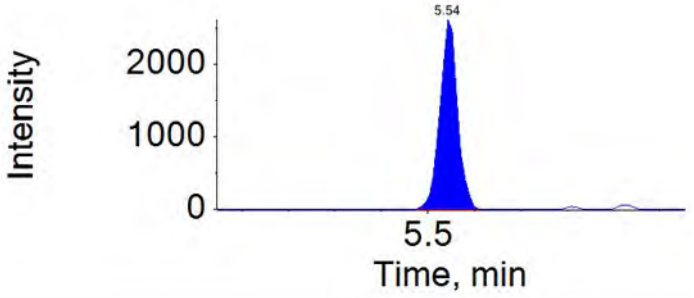
Component: PFNA
Primary Mass: 463.0 / 419.0



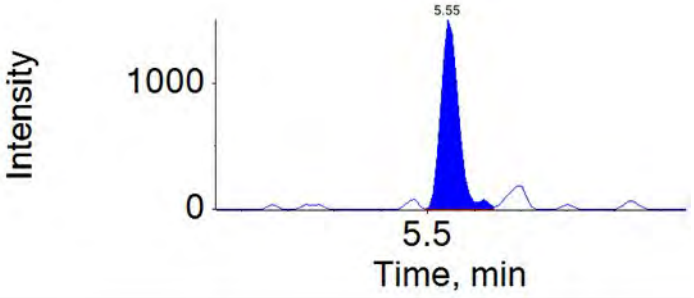
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



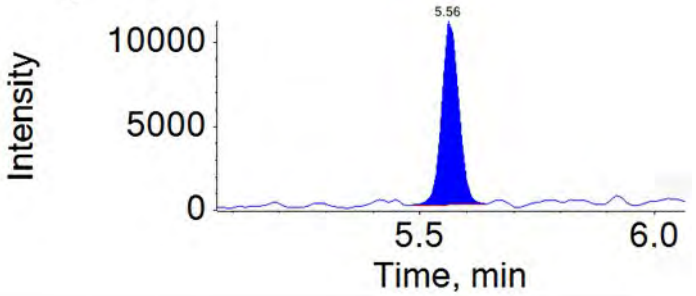
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



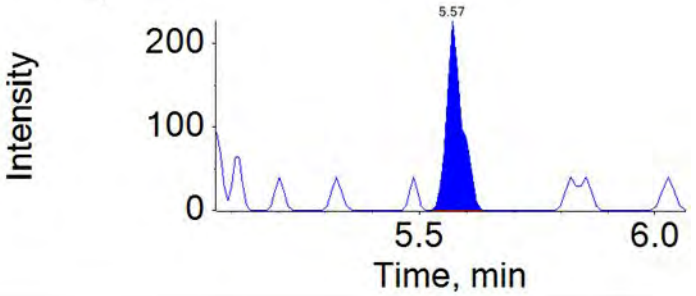
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

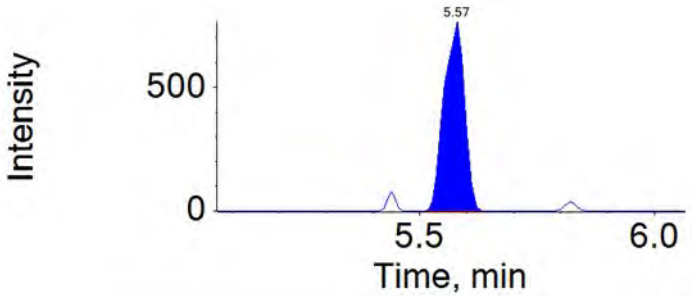
Component: PFDA
Primary Mass: 513.0 / 469.0



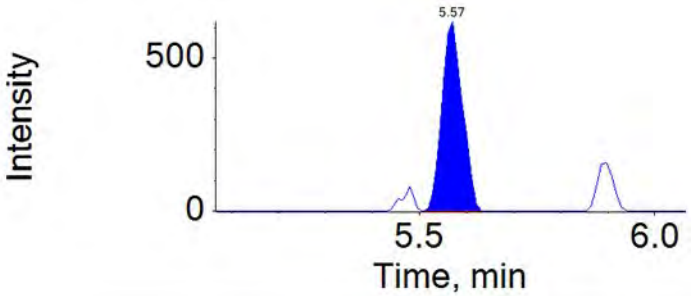
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



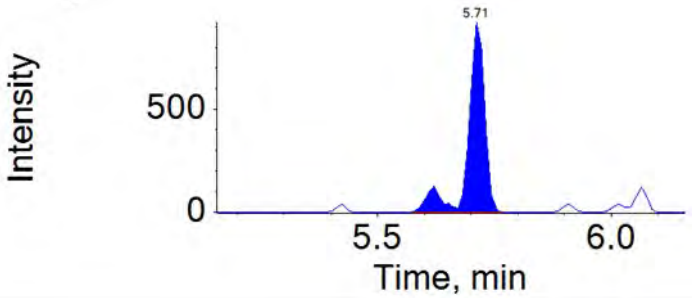
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



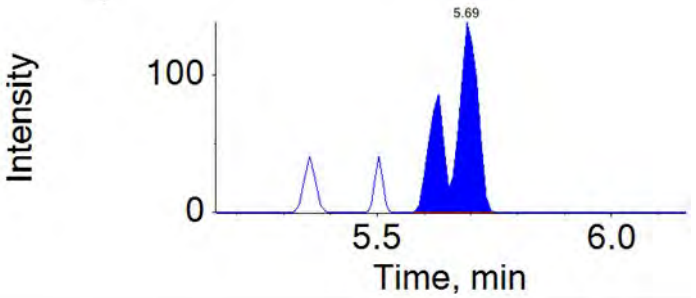
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



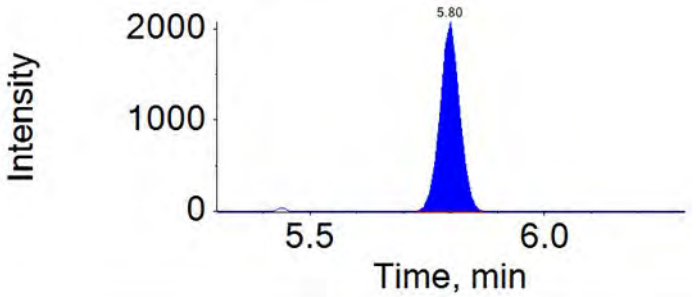
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



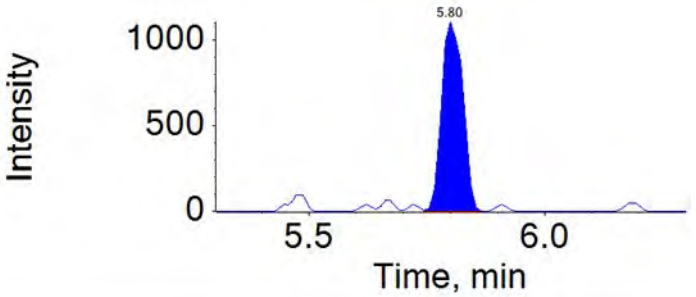
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



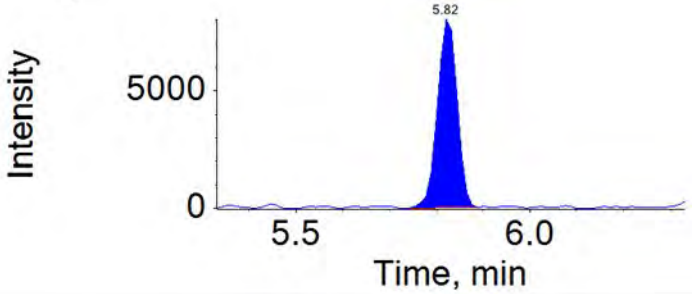
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Secondary Mass: 599.0 / 99.0



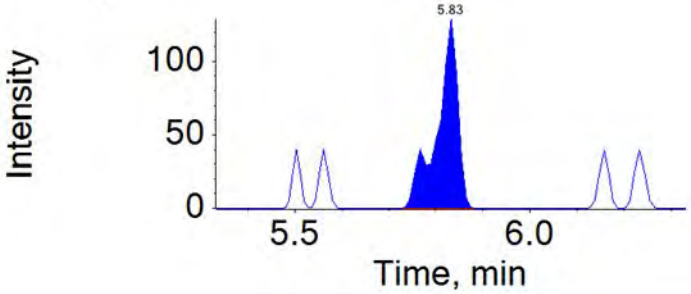
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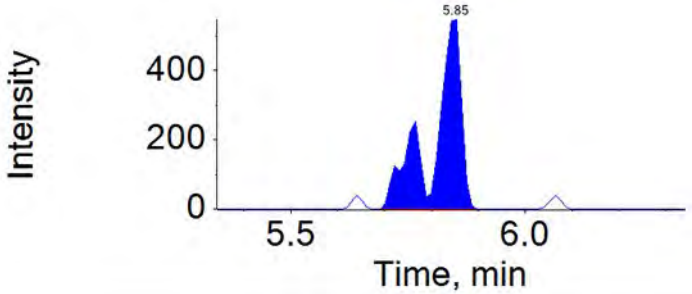
Component: PFUnDA
Primary Mass: 563.0 / 519.0



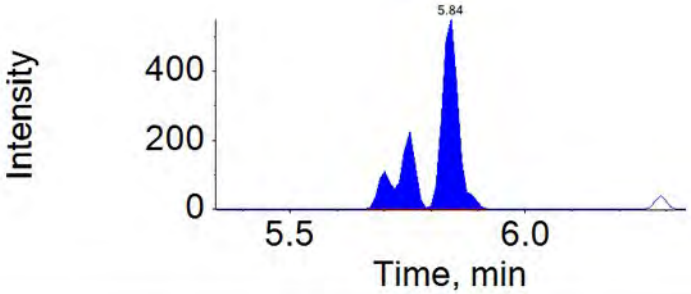
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



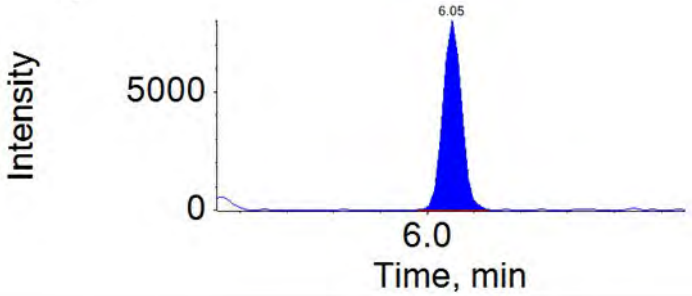
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



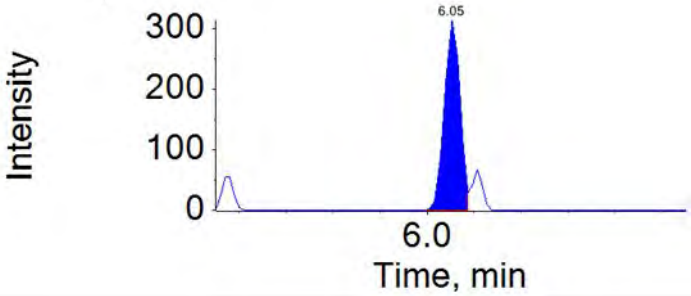
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



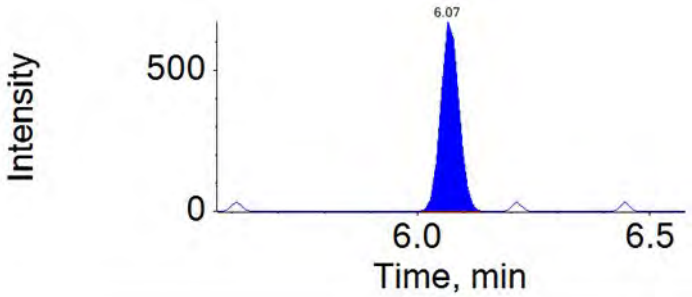
Component: PFDoDA
Primary Mass: 613.0 / 569.0



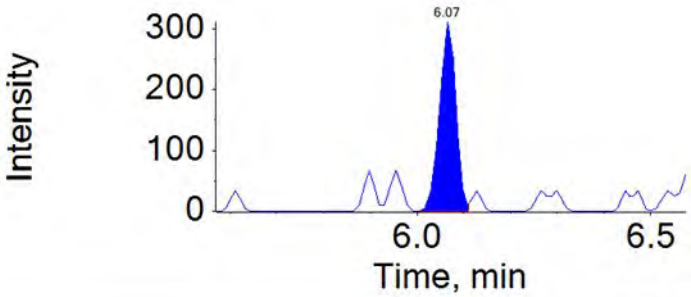
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



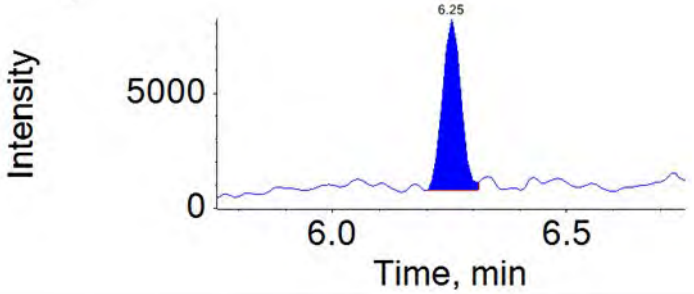
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



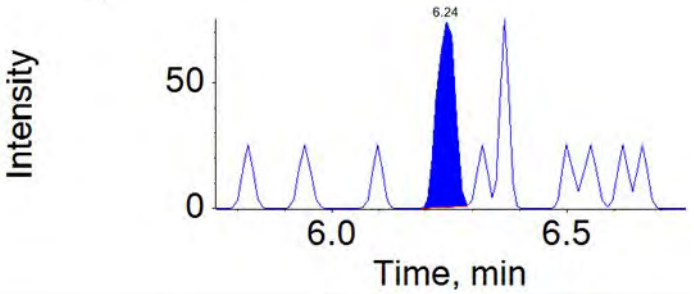
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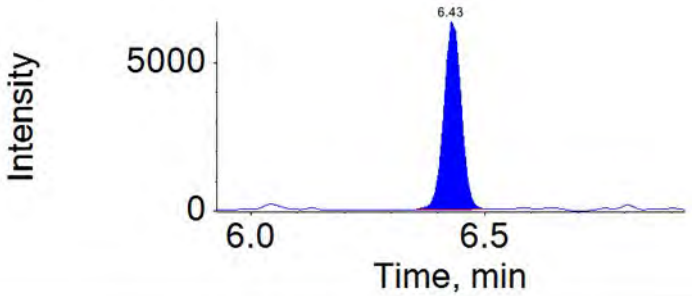
Component: PFTrDA
Primary Mass: 663.0 / 619.0



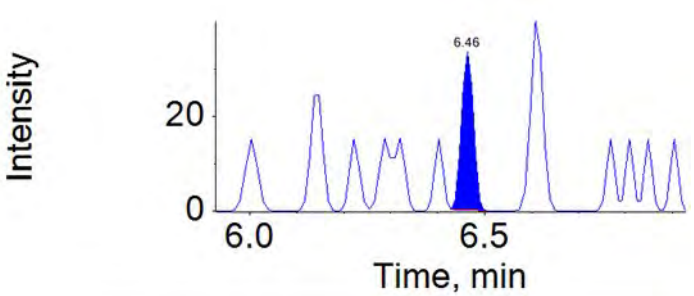
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



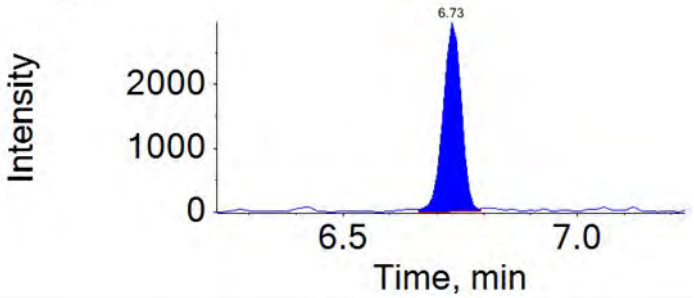
Component: PFTeDA
Primary Mass: 713.0 / 669.0



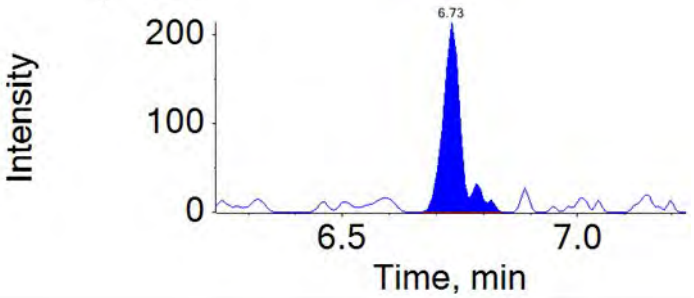
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



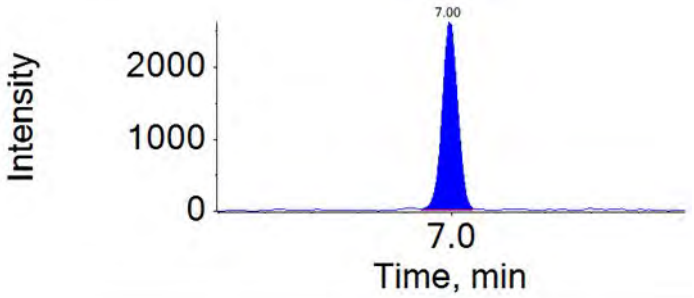
Component: PFHxDA
Primary Mass: 813.0 / 769.0



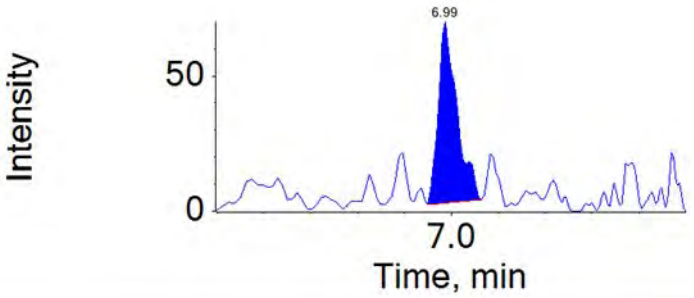
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL2			**Data File:**		18NOV12DCAL-43.wiff
Sample ID:	CALBRN21833C			**Acquis Date:**		2018-11-12T15:15:03
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	4			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV12DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N\A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	662396.7	659926.2	0	50	
13C2-PFOA	5.0	454466.7	450219.7	1	50	
13C4-PFOS	4.8	250483.8	249205.8	1	50	
13C2-PFDA	5.0	277324.2	278743.9	-1	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	771445.8	13C3-PFBA	662396.7	1.165	5.000	5.221	104	70-130	
E13C5-PFPeA	738194.7	13C3-PFBA	662396.7	1.114	5.000	4.998	100	70-130	
E13C3-PFBS	418860.7	13C3-PFBA	662396.7	0.632	4.650	4.464	96	70-130	
E13C2-4:2-FTS	46141.8	13C2-PFOA	454466.7	0.102	4.670	4.522	97	70-130	
E13C5-PFHxA	648170.1	13C2-PFOA	454466.7	1.426	5.000	5.152	103	70-130	
E13C3-PFHxS	320400.4	13C2-PFOA	454466.7	0.705	4.730	4.838	102	70-130	
E13C4-PFHpA	532987.5	13C2-PFOA	454466.7	1.173	5.000	5.284	106	70-130	
E13C2-6:2-FTS	35585.7	13C2-PFOA	454466.7	0.078	4.750	5.239	110	70-130	
E13C8-PFOA	892584.2	13C2-PFOA	454466.7	1.964	5.000	5.411	108	70-130	
E13C8-PFOS	271778.8	13C4-PFOS	250483.8	1.085	4.780	4.808	101	70-130	
E13C9-PFNA	451850.1	13C4-PFOS	250483.8	1.804	5.000	5.030	101	70-130	
E13C6-PFDA	601859.8	13C2-PFDA	277324.2	2.170	5.000	5.064	101	70-130	
E13C2-8:2-FTS	27639.2	13C2-PFDA	277324.2	0.100	4.790	4.970	104	70-130	
E13C8-PFOSA	636543.2	13C2-PFDA	277324.2	2.295	5.000	5.089	102	70-130	
Ed3-NMeFOSAA	77388.6	13C2-PFDA	277324.2	0.279	5.000	5.037	101	70-130	
E13C7-PFUnDA	242881.8	13C2-PFDA	277324.2	0.876	5.000	5.085	102	70-130	
Ed5-NEtFOSAA	63686.9	13C2-PFDA	277324.2	0.230	5.000	4.859	97	70-130	
E13C2-PFDoDA	532175.4	13C2-PFDA	277324.2	1.919	5.000	4.982	100	70-130	
Ed7-NMePFOSAE	323456.5	13C2-PFDA	277324.2	1.166	5.000	5.047	101	70-130	
Ed3-NMePFOSA	77893.2	13C2-PFDA	277324.2	0.281	5.000	5.103	102	70-130	
Ed9-NEtPFOSAE	261195.6	13C2-PFDA	277324.2	0.942	5.000	4.899	98	70-130	
Ed5-NEtPFOSA	58073.5	13C2-PFDA	277324.2	0.209	5.000	4.912	98	70-130	
E13C2-PFTeDA	394146.2	13C2-PFDA	277324.2	1.421	5.000	4.990	100	70-130	

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

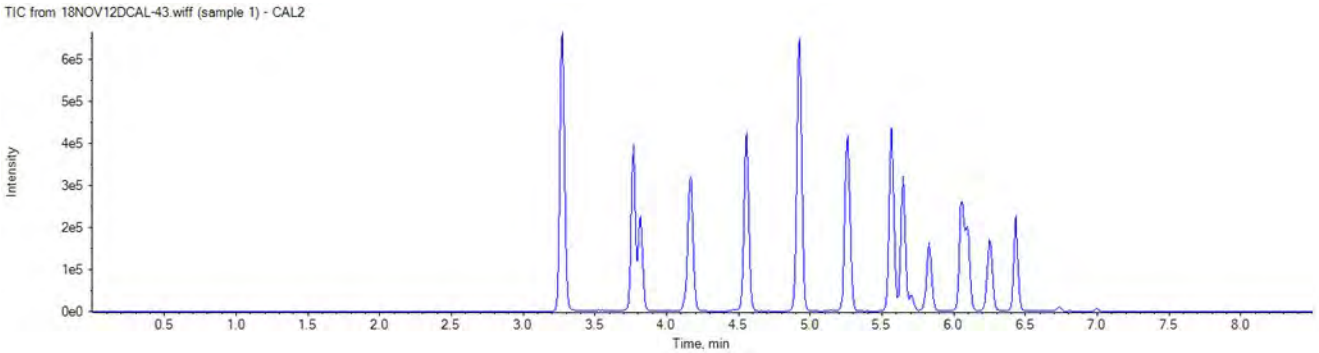
Analyte Quantitation Peak Table

Sample Name: CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-43.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	80396.2		A	13C4-PFBA	3.27	771445.8	0.104	0.577
PFPeA	3.77	1.000	84319.4		A	13C5-PFPeA	3.77	738194.7	0.114	0.661
PFBS	3.82	1.000	44885.2		A	13C3-PFBS	3.82	418860.7	0.107	0.510
4:2-FTS	4.13	1.000	8804.0		A	13C2-4:2-FTS	4.13	46141.8	0.191	0.518
PFHxA	4.16	1.000	96559.3		A	13C5-PFHxA	4.17	648170.1	0.149	0.622
PFPeS	4.19	1.100	20295.0		A	13C3-PFBS	3.82	418860.7	0.048	0.470
PFHpA	4.55	1.000	95048.3		M	13C4-PFHpA	4.55	532987.5	0.178	0.591
PFHxS	4.56	1.000	31064.7		M	13C3-PFHxS	4.56	320400.4	0.097	0.470
6:2-FTS	4.91	1.000	8048.4		A	13C2-6:2-FTS	4.91	35585.7	0.226	0.547
PFHpS	4.92	1.080	29902.3		A	13C3-PFHxS	4.56	320400.4	0.093	0.491
PFOA	4.93	1.000	100710.5		A	13C8-PFOA	4.92	892584.2	0.113	0.603
PFOS	5.25	1.000	32301.0		M	13C8-PFOS	5.25	271778.8	0.119	0.520
PFNA	5.27	1.000	80724.2		A	13C9-PFNA	5.27	451850.1	0.179	0.644
PFNS	5.55	1.060	20326.1		A	13C8-PFOS	5.25	271778.8	0.075	0.523
PFDA	5.57	1.000	63802.1		M	13C6-PFDA	5.57	601859.8	0.106	0.562
8:2-FTS	5.57	1.000	6214.2		A	13C2-8:2-FTS	5.57	27639.2	0.225	0.524
PFOSA	5.65	1.000	71087.0		A	13C8-PFOSA	5.65	636543.2	0.112	0.545
NMeFOSAA	5.71	1.000	5759.6		A	d3-NMeFOSAA	5.71	77388.6	0.074	0.421
PFDS	5.80	1.100	16291.9		A	13C8-PFOS	5.25	271778.8	0.060	0.543
PFUnDA	5.83	1.000	51206.8		A	13C7-PFUnDA	5.83	242881.8	0.211	0.551
NEtFOSAA	5.85	1.000	7727.1		M	d5-NEtFOSAA	5.84	63686.9	0.121	0.636
PFDoDA	6.06	1.000	59695.3		A	13C2-PFDoDA	6.06	532175.4	0.112	0.571
10:2-FTS	6.08	1.090	5206.5		A	13C2-8:2-FTS	5.57	27639.2	0.188	0.627
NMePFOSAE	6.10	1.000	43085.1		A	d7-NMePFOSAE	6.09	323456.5	0.133	0.554
NMePFOSA	6.11	1.000	8877.7		A	d3-NMePFOSA	6.11	77893.2	0.114	0.562
PFDoS	6.22	1.190	8992.5		M	13C8-PFOS	5.25	271778.8	0.033	0.580
NEtPFOSAE	6.26	1.000	46623.3		M	d9-NEtPFOSAE	6.25	261195.6	0.178	0.573
NEtPFOSA	6.27	1.000	8053.7		M	d5-NEtPFOSA	6.27	58073.5	0.139	0.637
PFTrDA	6.26	1.030	47991.3		A	13C2-PFDoDA	6.06	532175.4	0.090	0.569
PFTeDA	6.43	1.000	40236.5		A	13C2-PFTeDA	6.43	394146.2	0.102	0.572
PFHxDA	6.74	1.050	19006.4		A	13C2-PFTeDA	6.43	394146.2	0.048	0.575
PFODA	7.00	1.090	14955.6		A	13C2-PFTeDA	6.43	394146.2	0.038	0.528

Total Ion Chromatogram

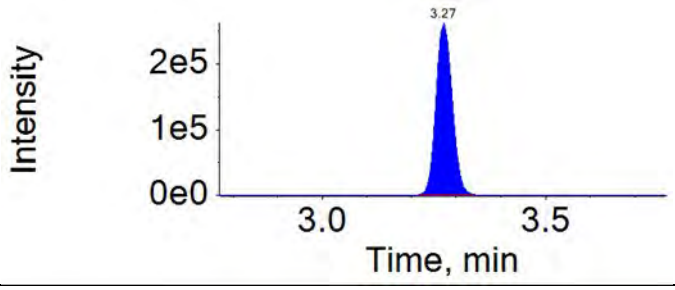


APPROVED
By MCD at 6:33 pm, 11/12/18

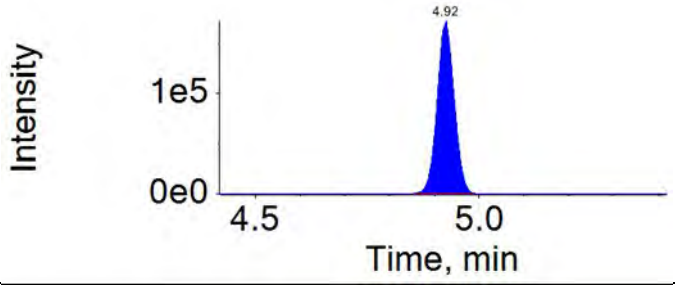
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

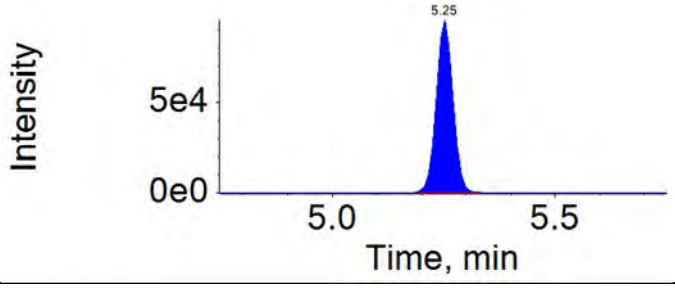
Injection Standard: 13C3-PFBA
216.0 / 172.0



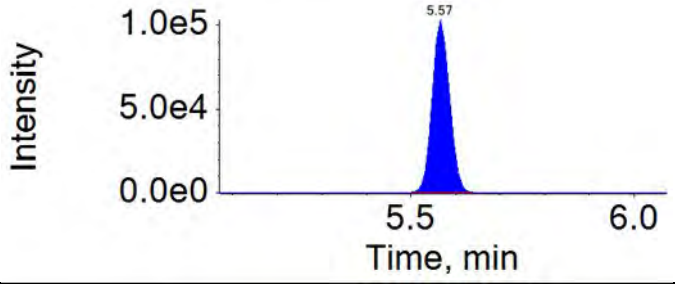
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

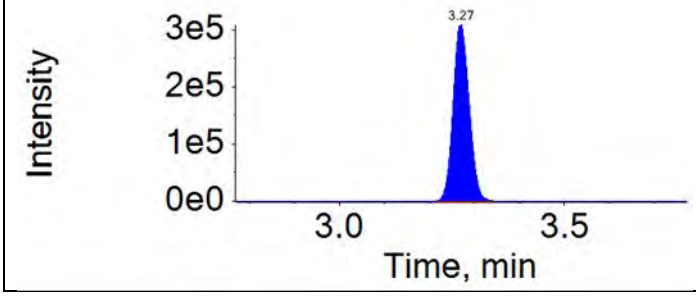


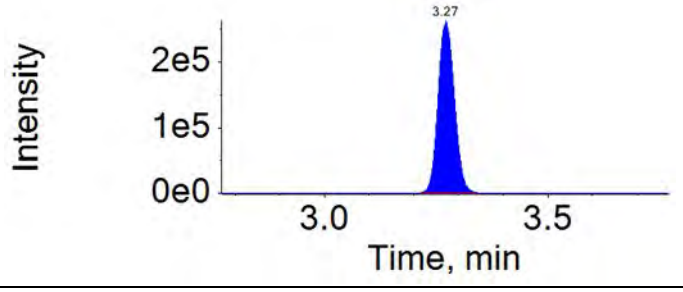
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

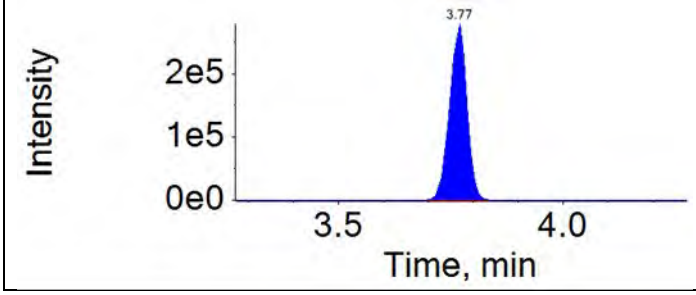
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

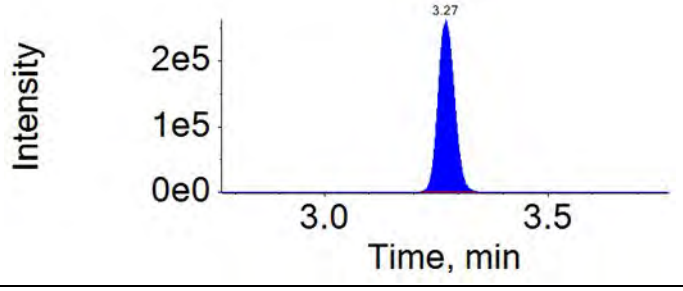
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



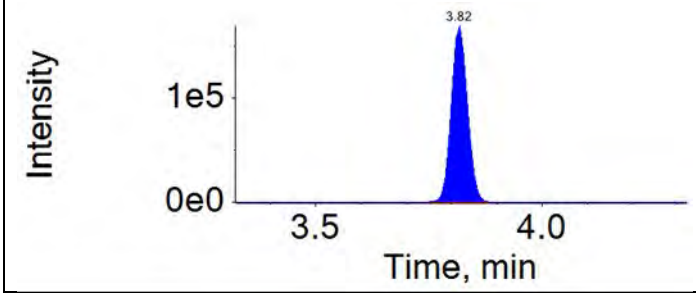


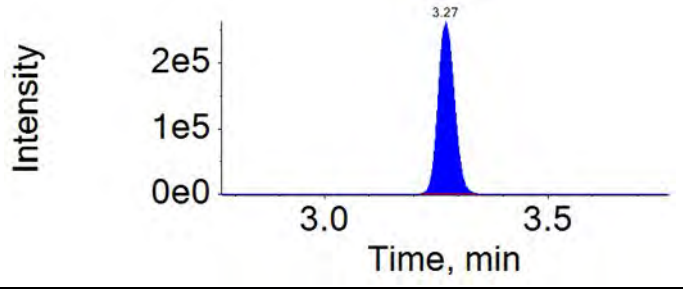
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



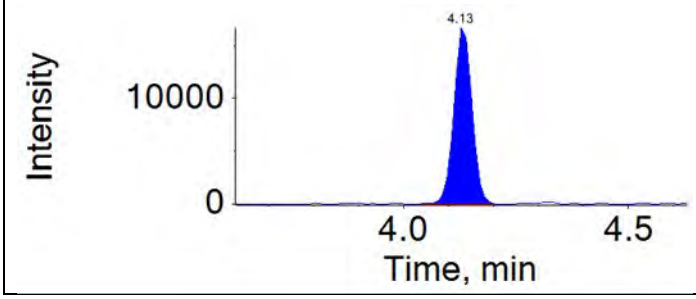


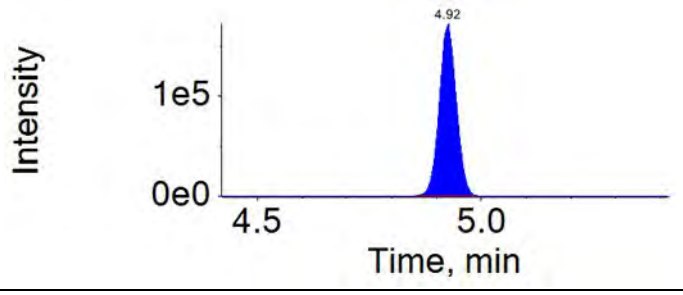
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



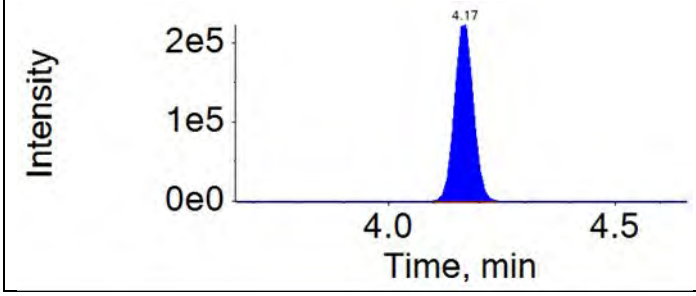


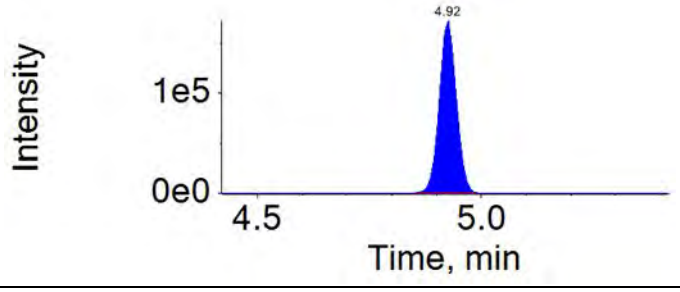
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

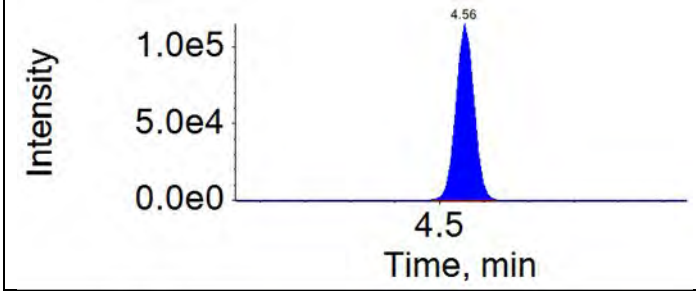
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

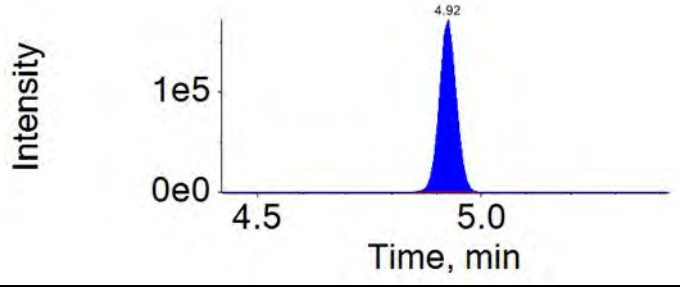
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



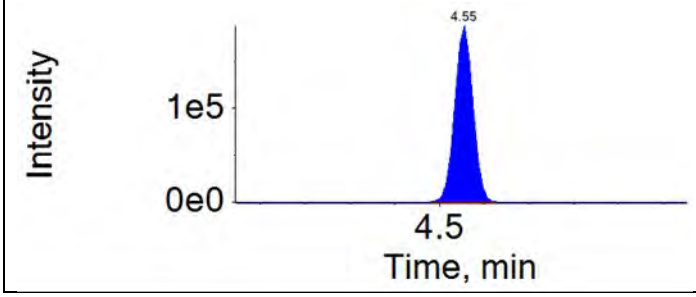


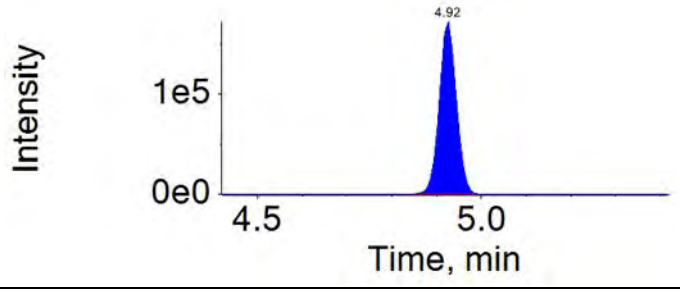
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



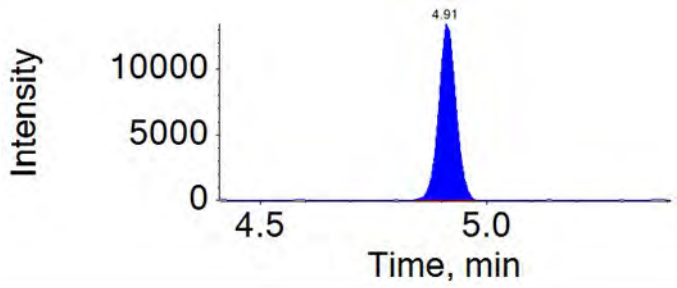


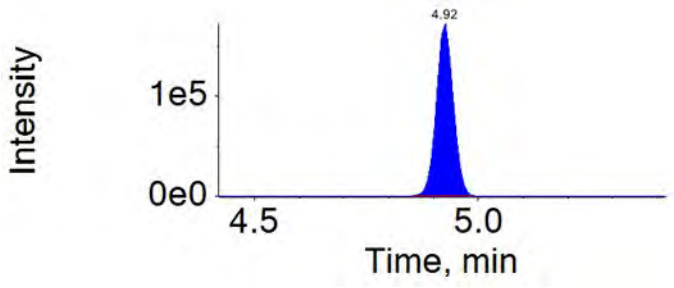
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

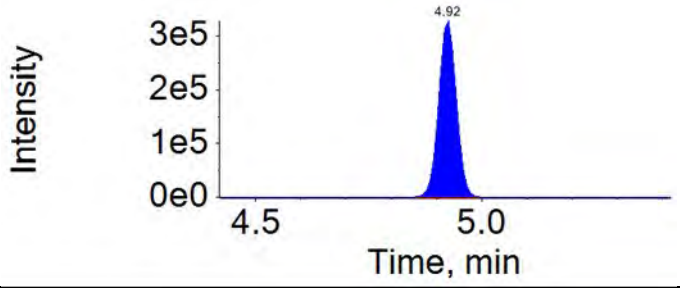
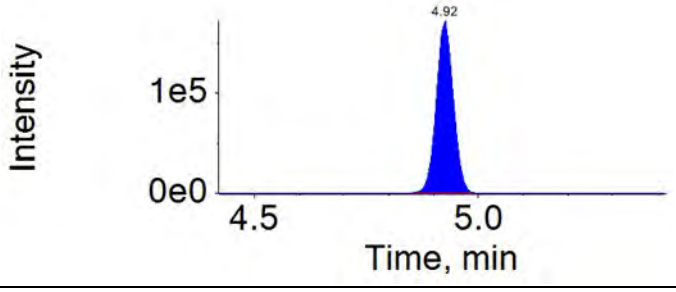


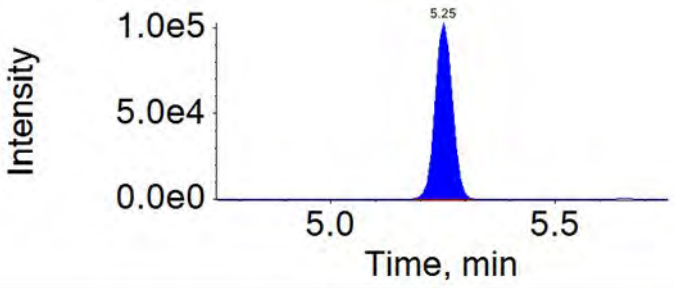
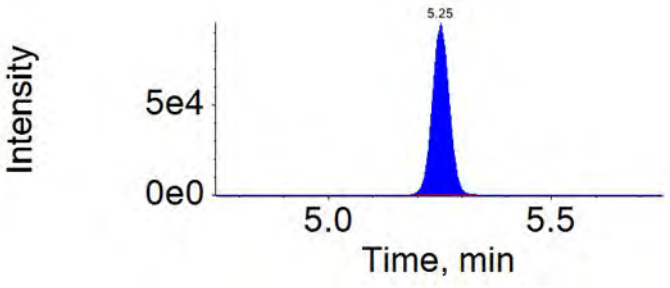


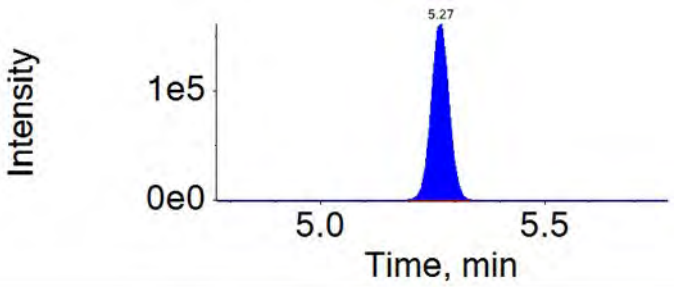
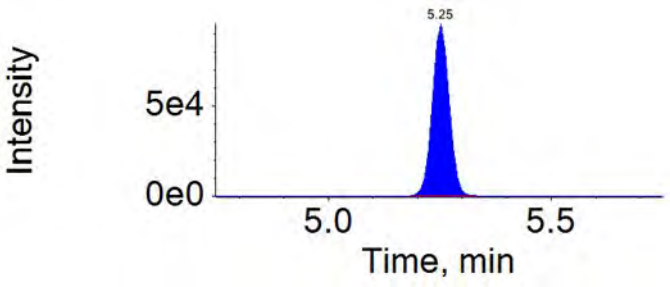
APPROVED
By MCD at 6:33 pm, 11/12/18

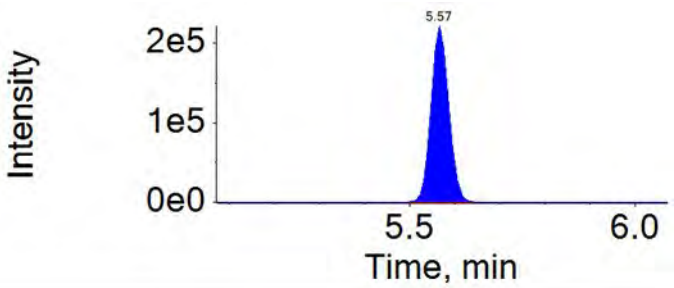
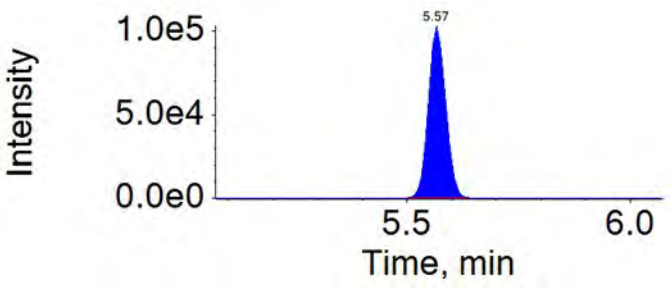
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

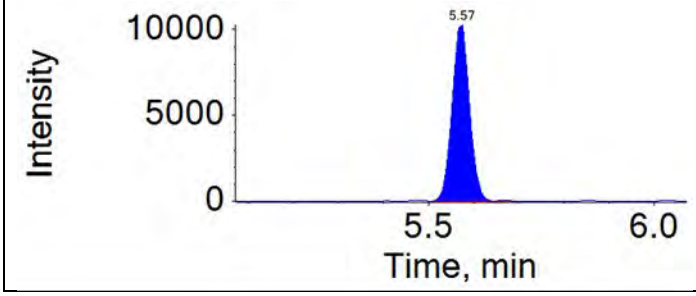
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

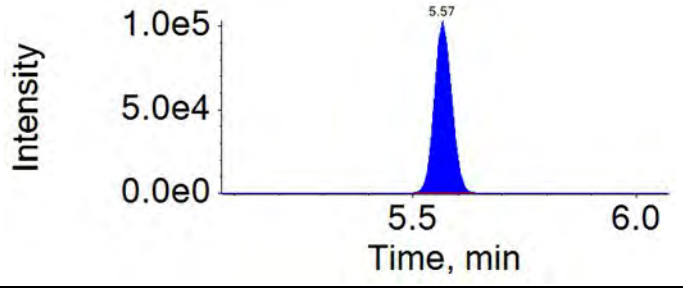
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

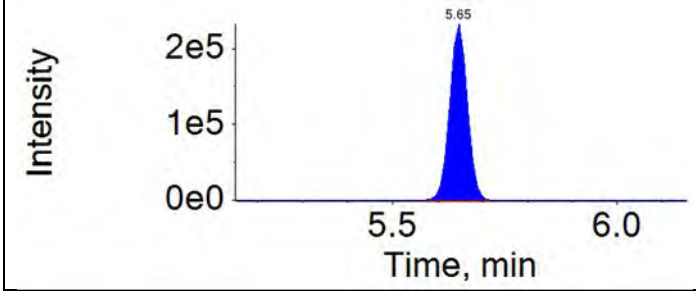
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

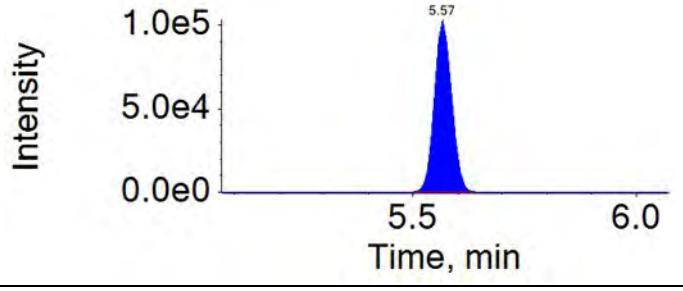
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



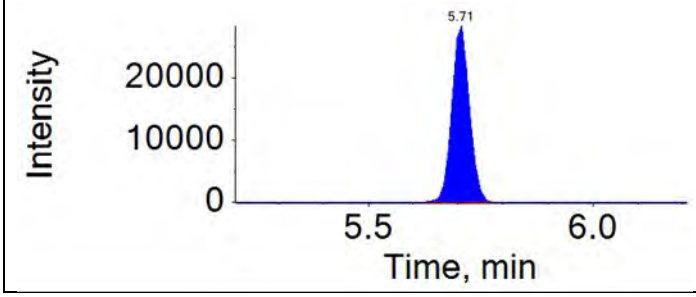


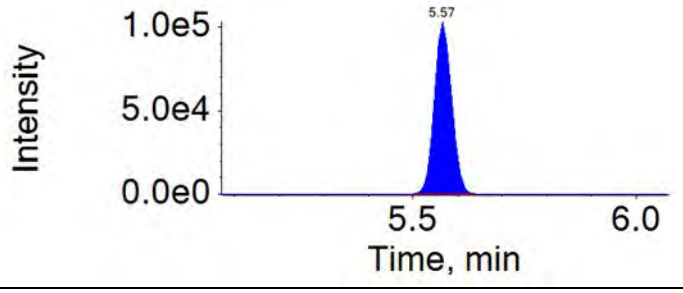
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



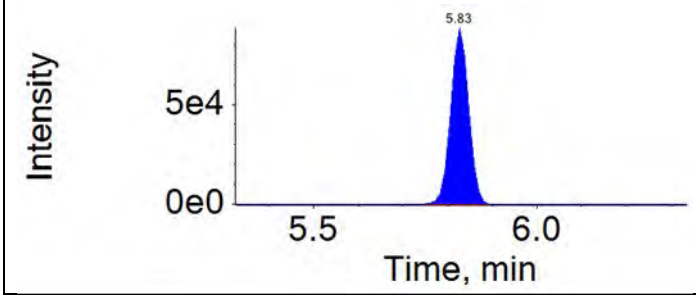


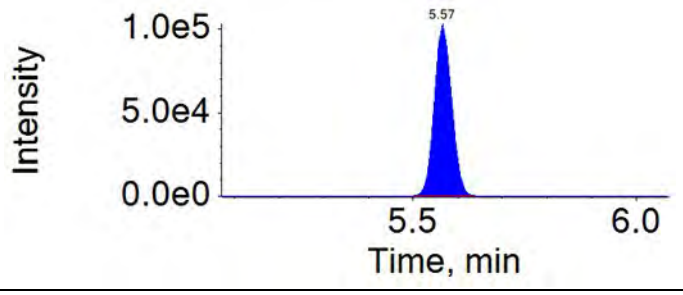
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0

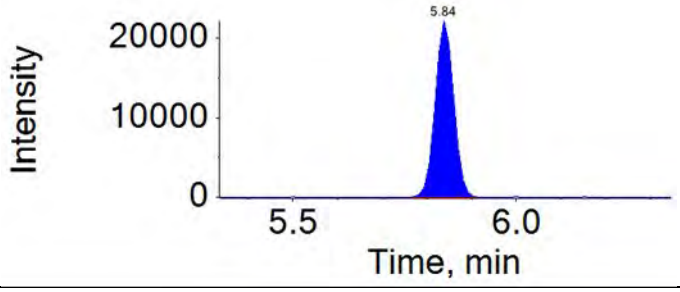
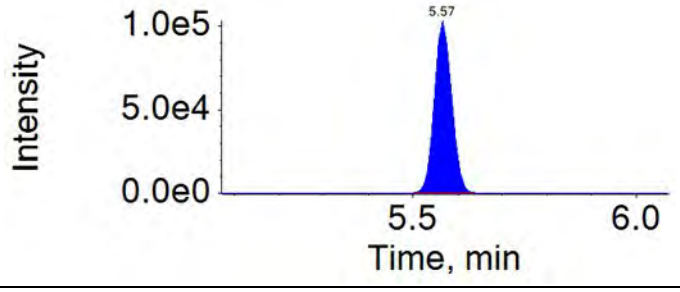


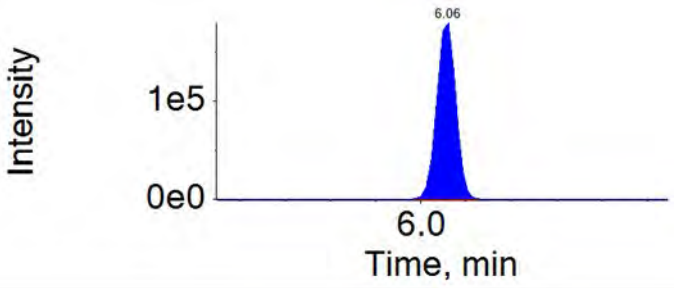
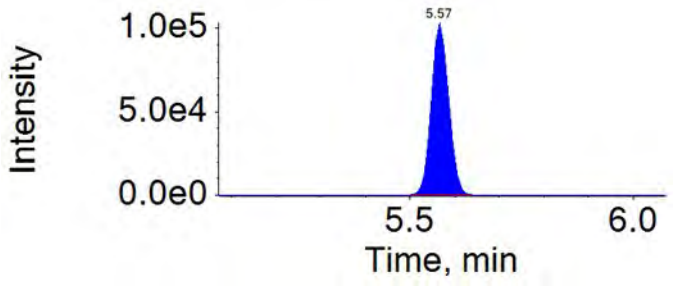


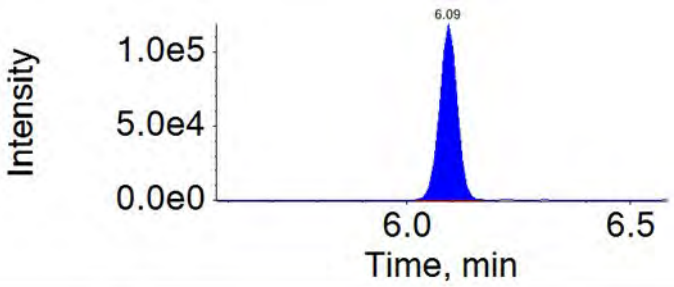
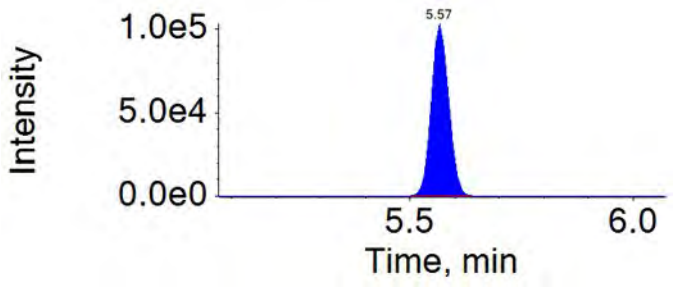
APPROVED
By MCD at 6:33 pm, 11/12/18

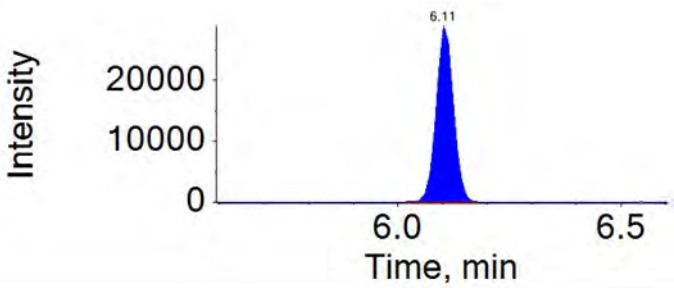
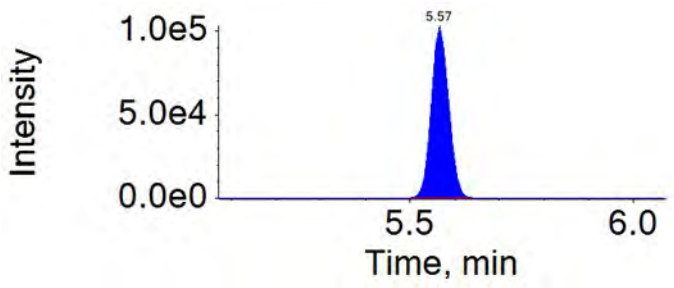
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

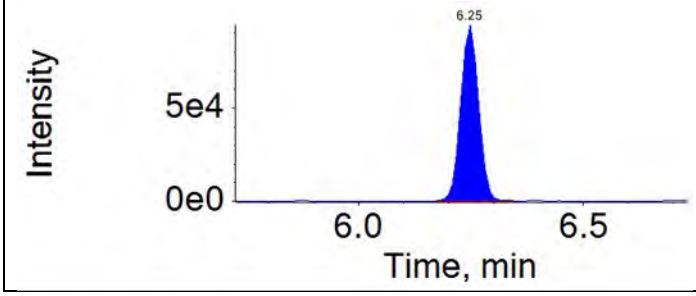
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

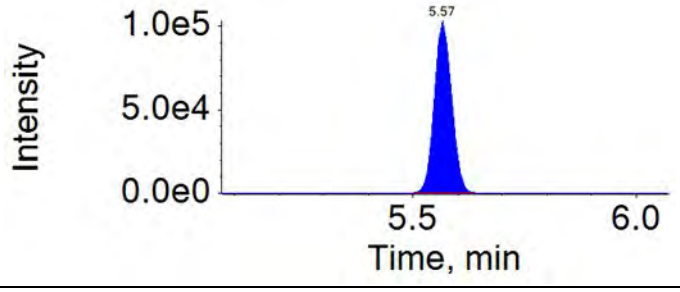
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

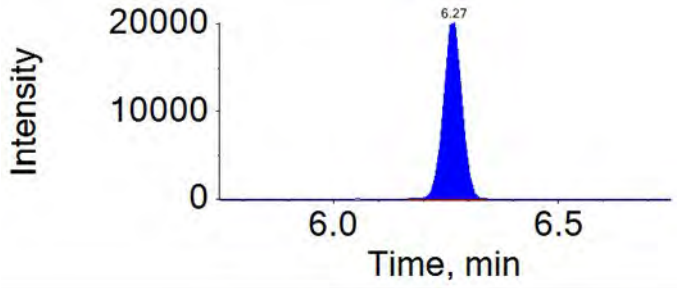
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

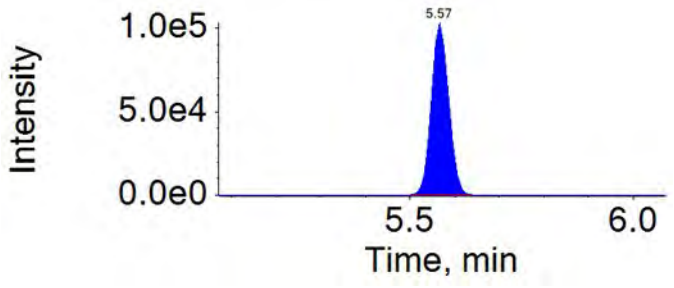
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



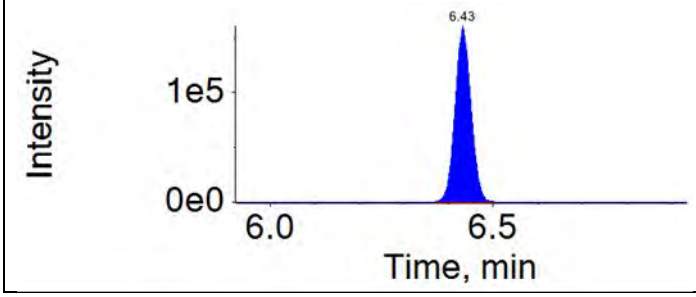


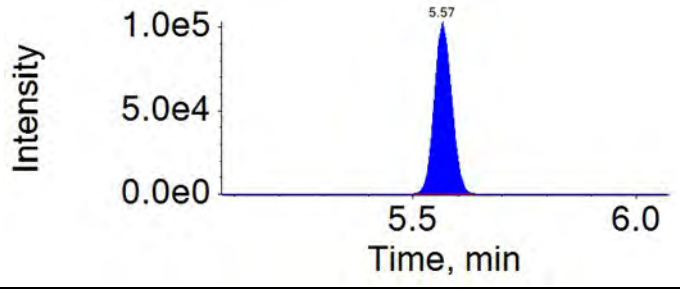
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



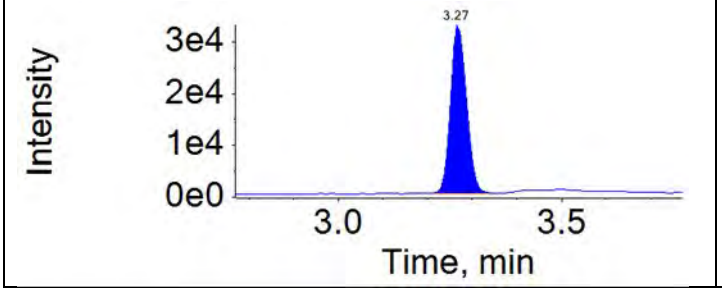


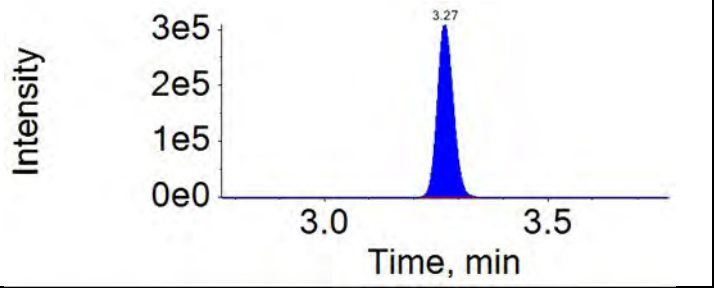
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

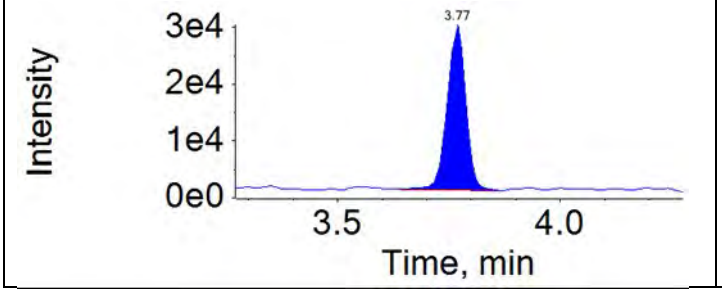
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

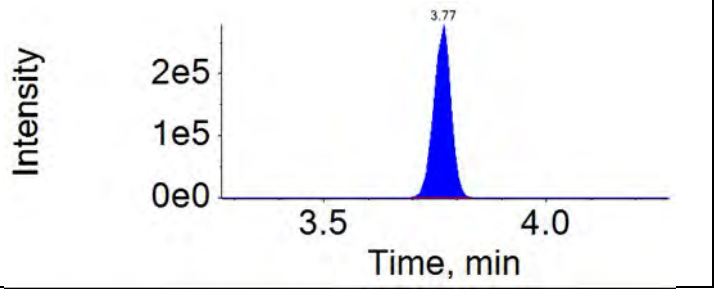
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



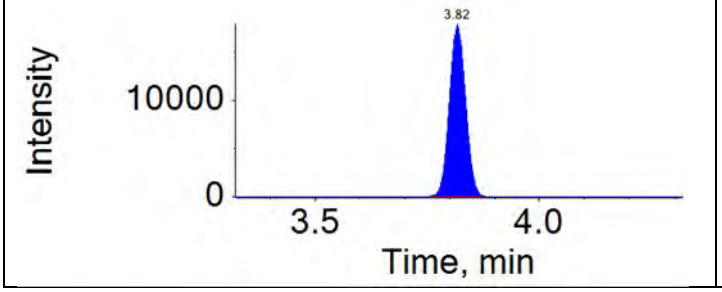


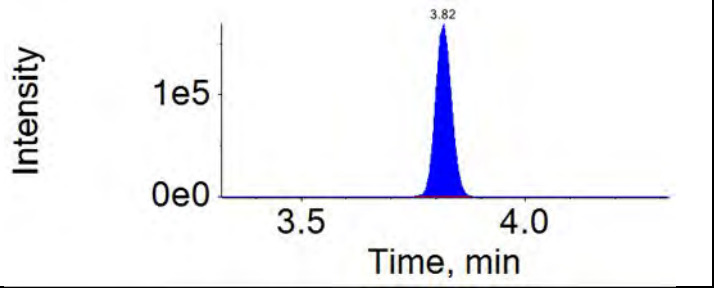
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



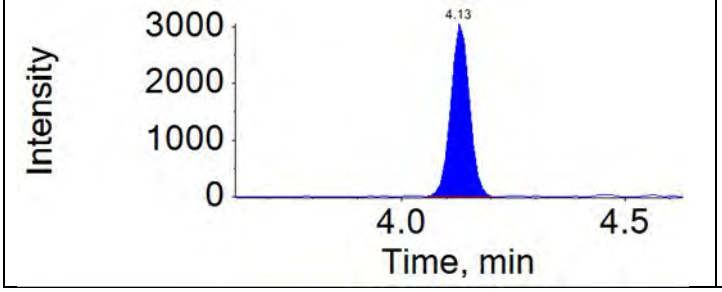


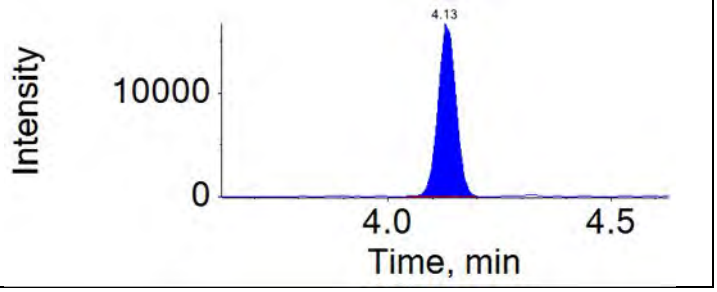
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



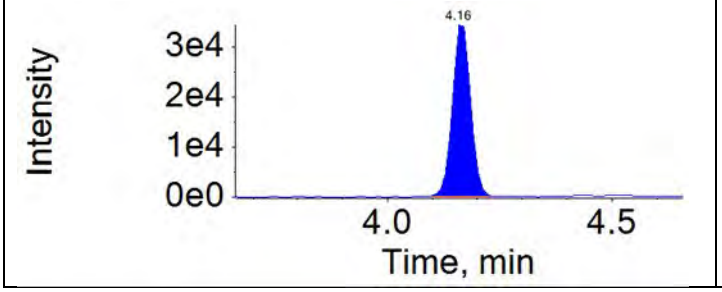


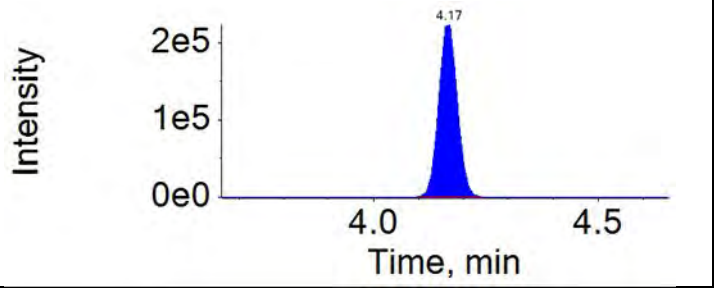
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

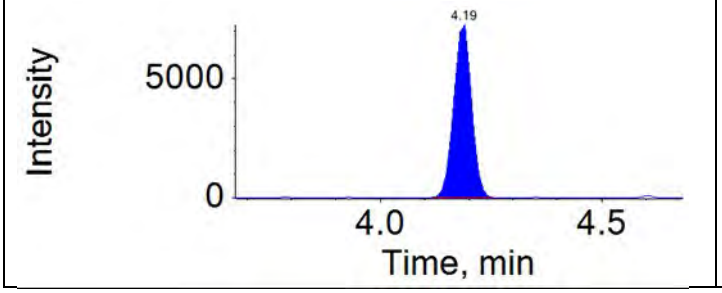
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

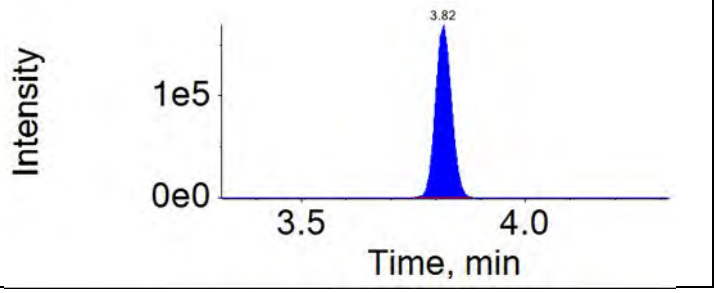
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



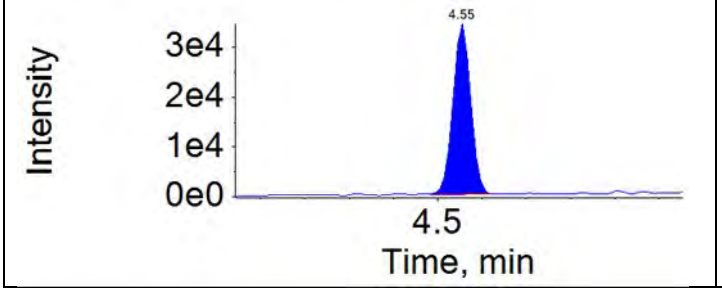


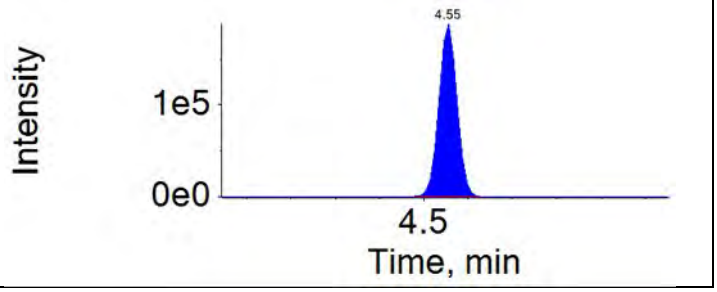
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



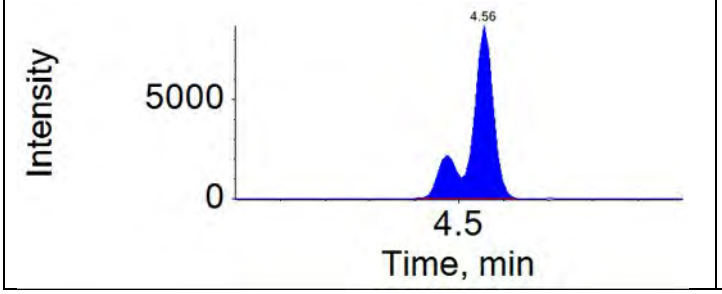


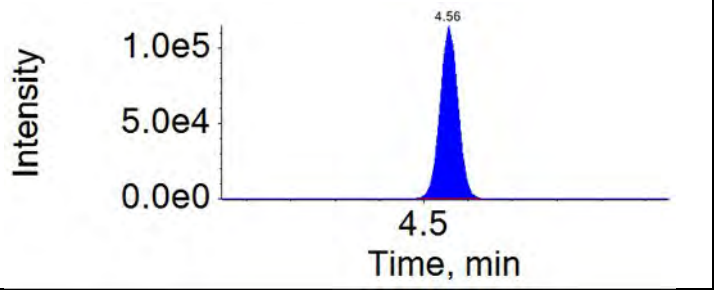
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



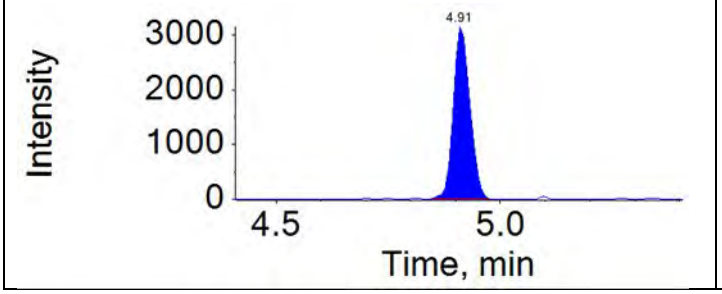


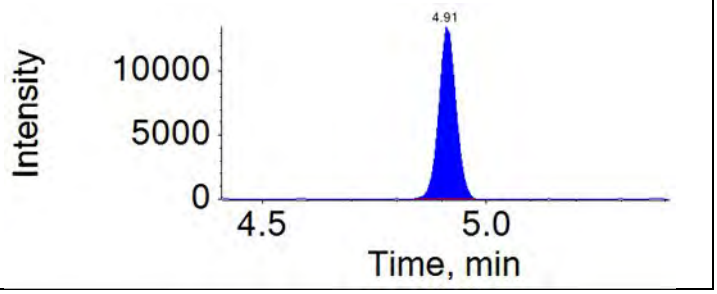
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

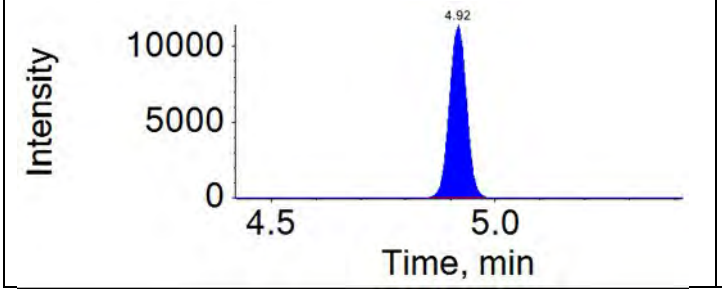
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

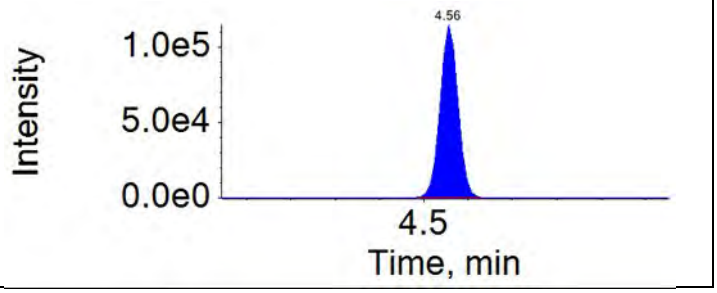
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



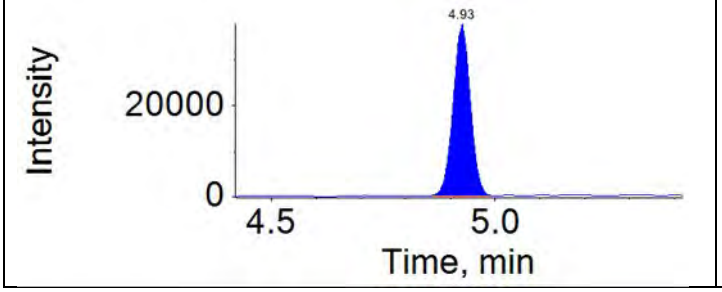


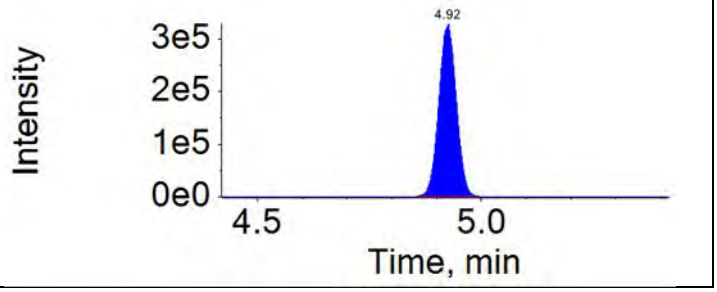
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



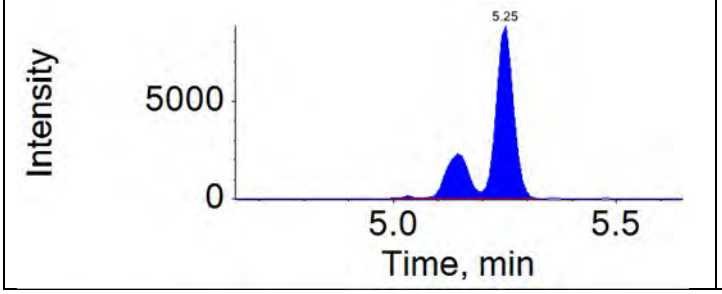


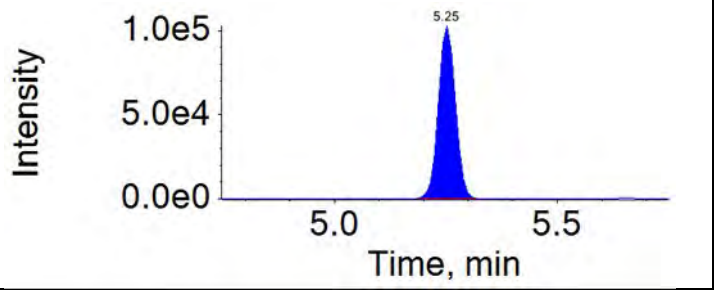
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





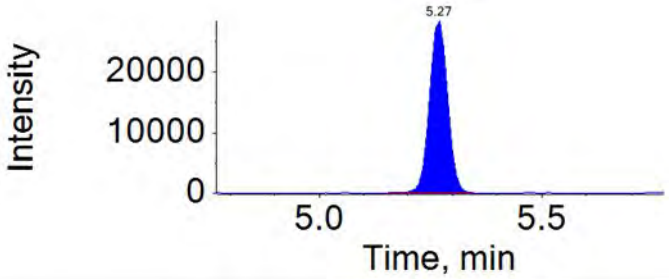
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0

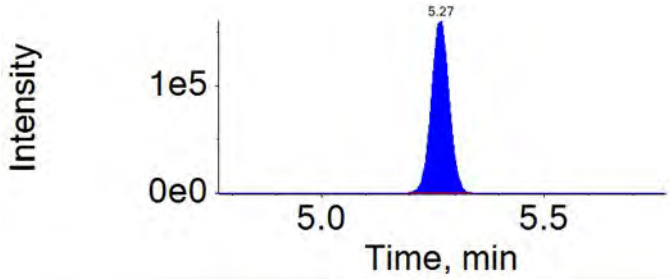




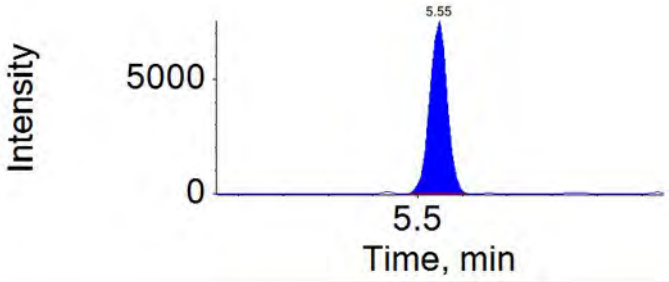
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

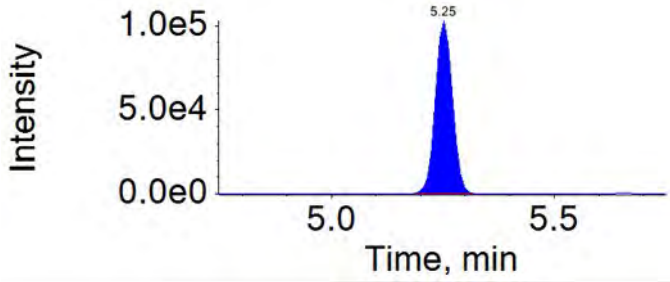
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



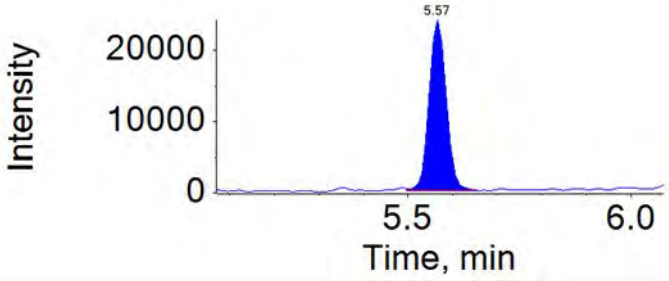


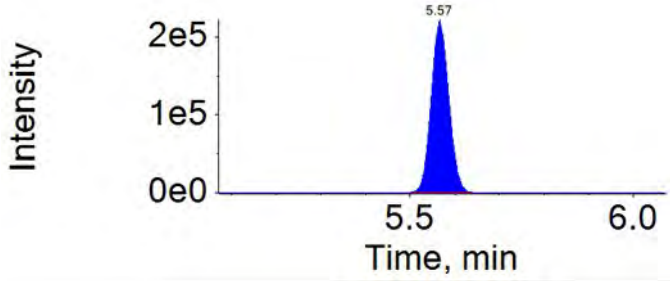
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



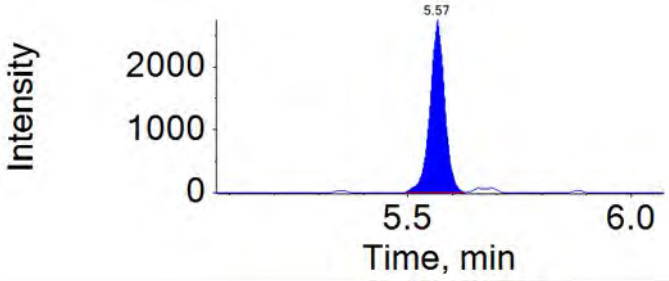


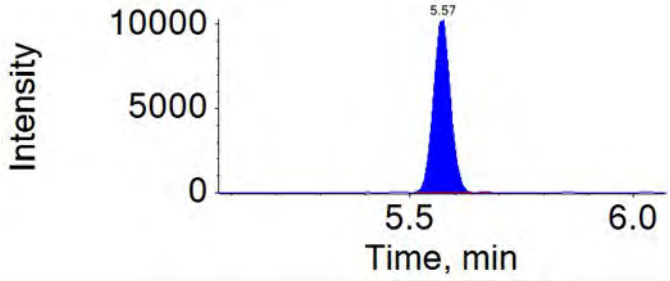
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



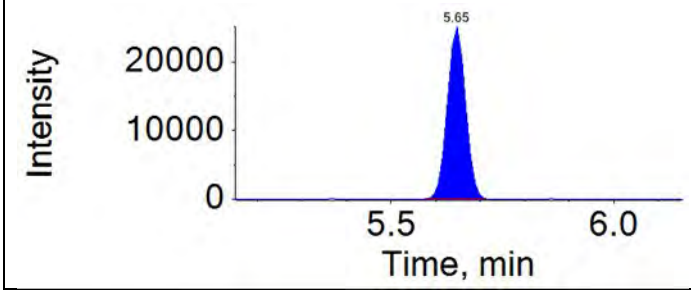


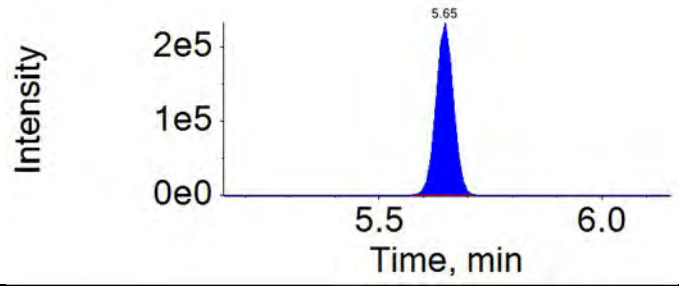
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

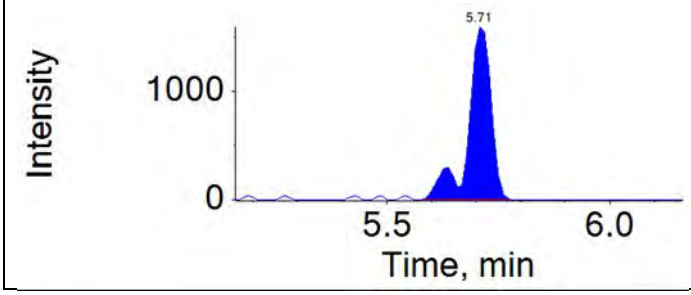
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

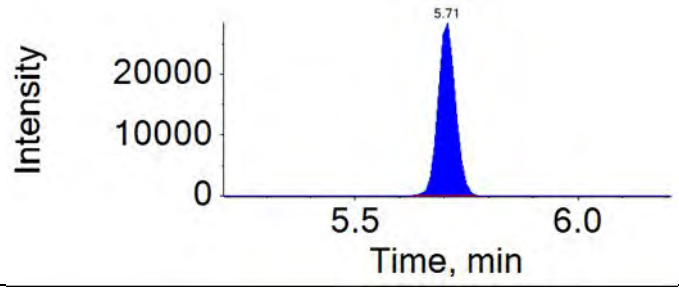
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



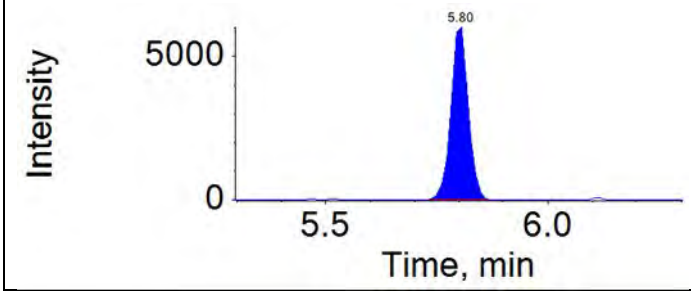


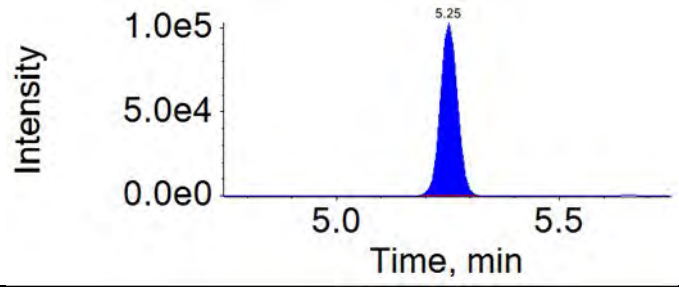
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



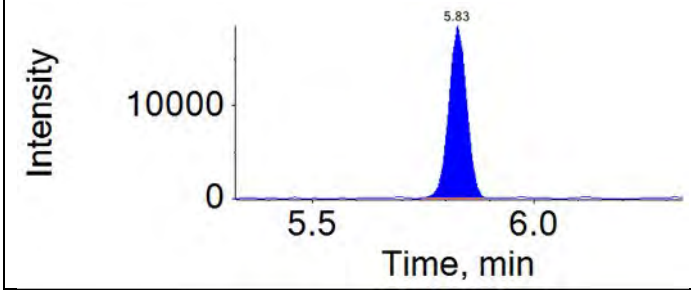


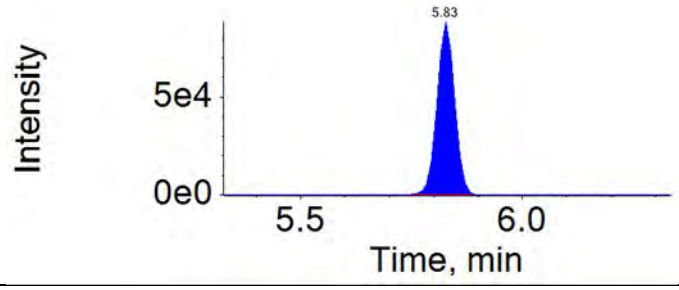
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0

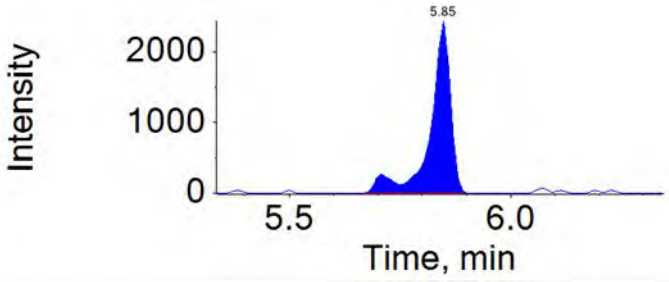
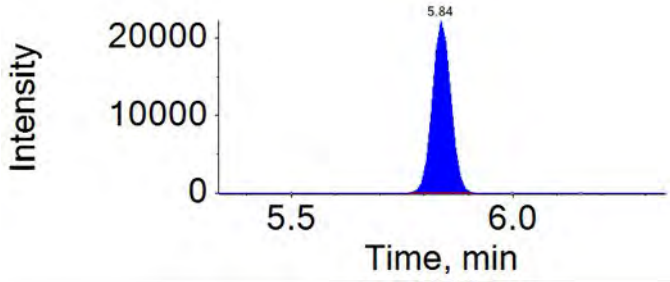


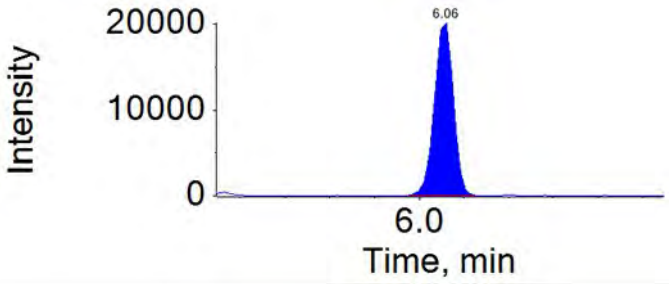
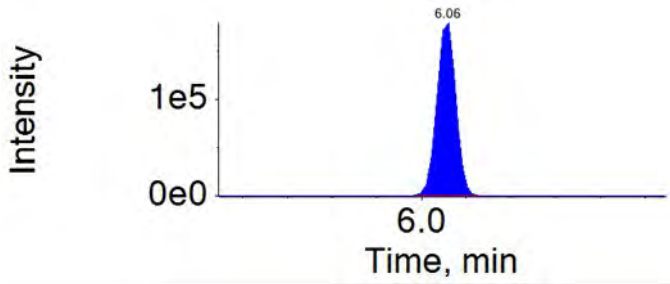


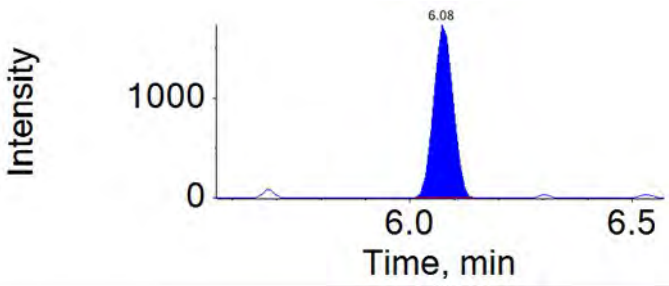
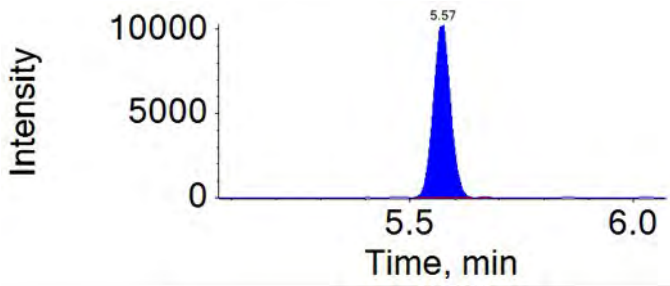
APPROVED
By MCD at 6:33 pm, 11/12/18

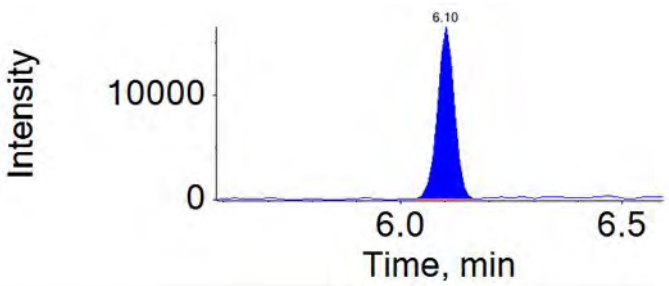
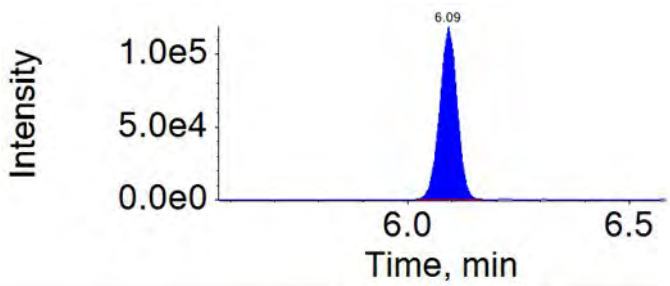
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0
	

Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0
	

Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0
	

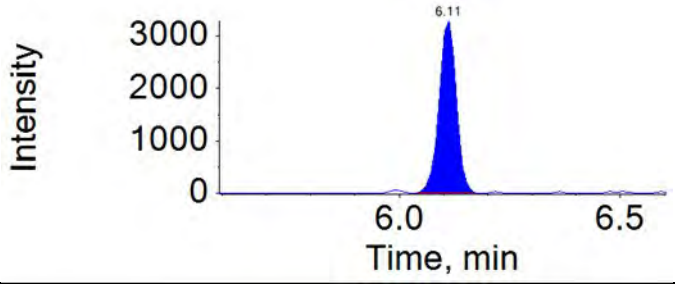
Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0
	

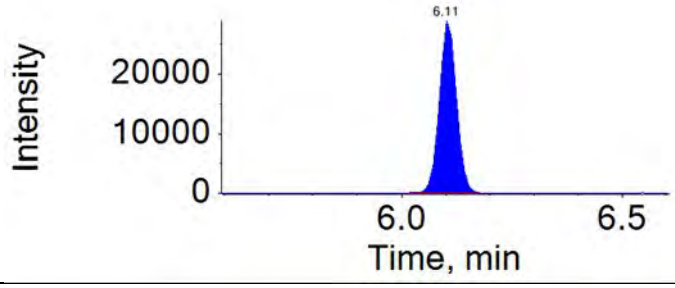
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

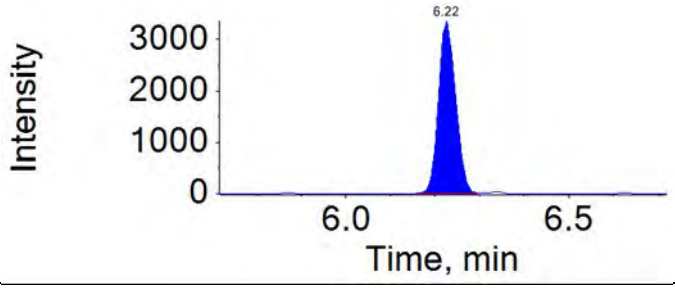
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

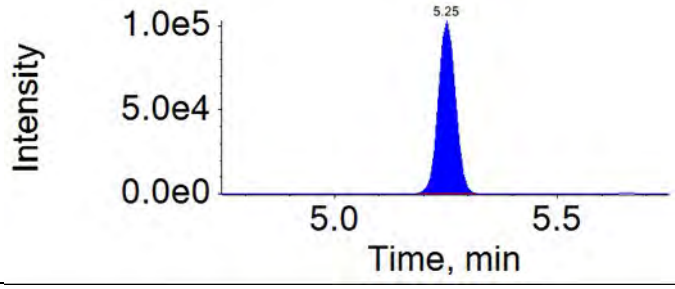
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



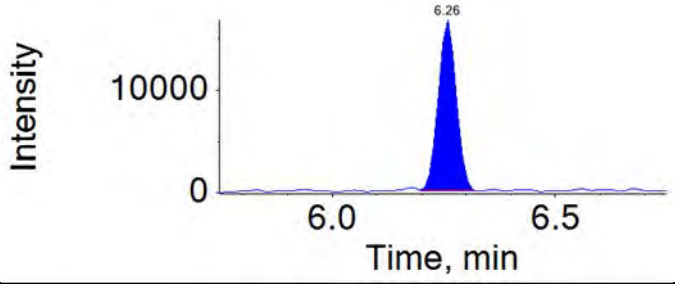


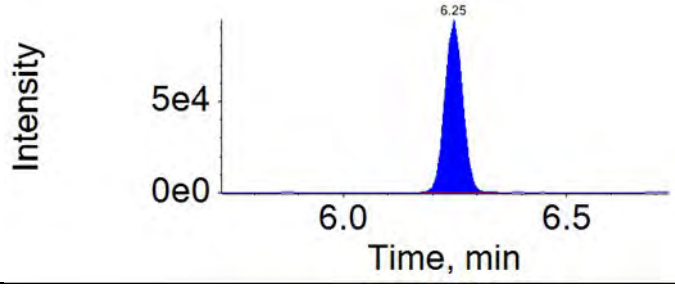
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



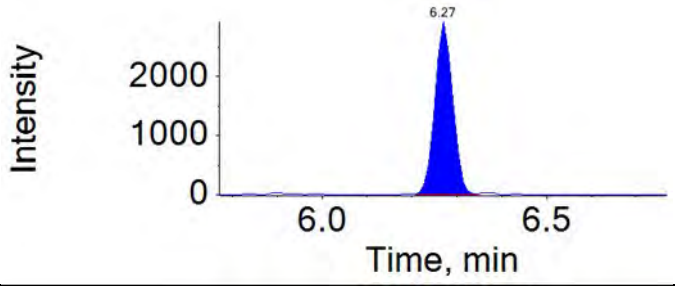


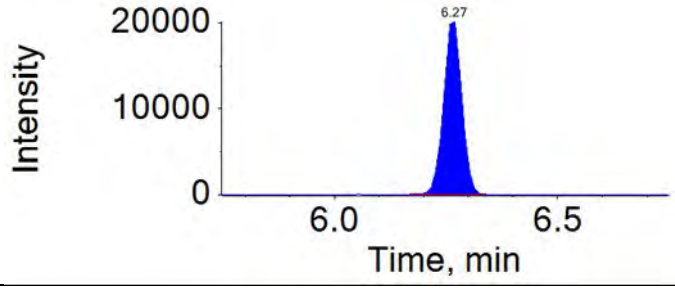
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

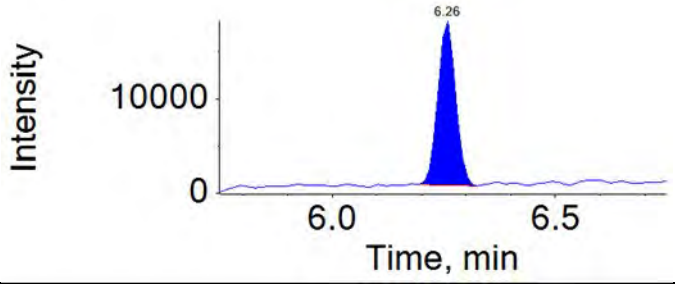
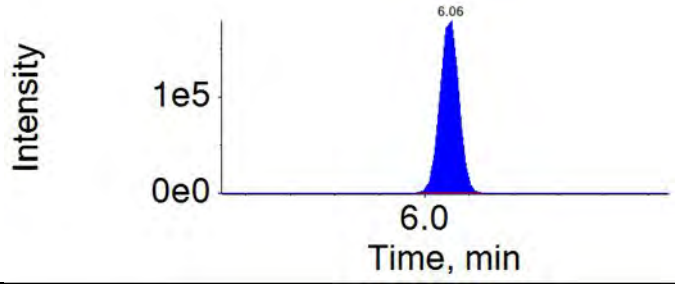


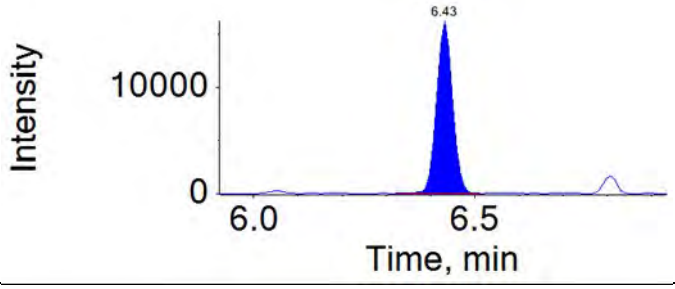
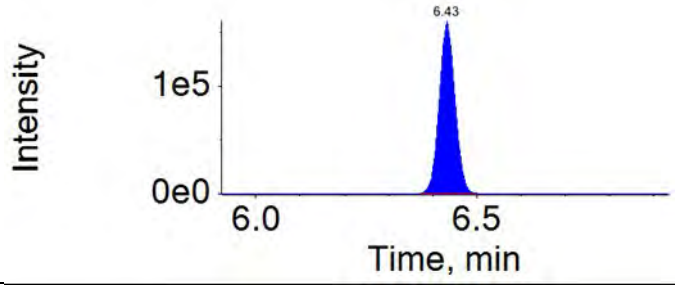


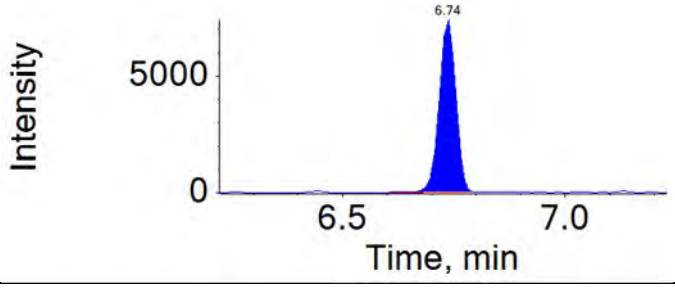
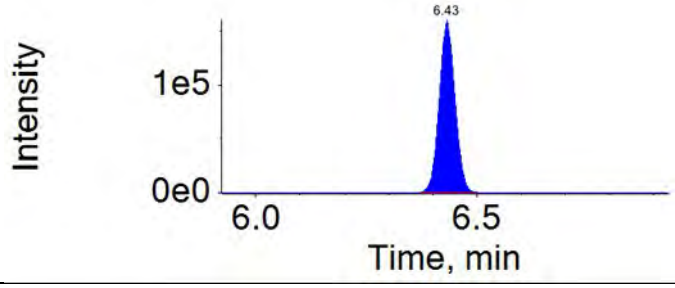
APPROVED
By MCD at 6:33 pm, 11/12/18

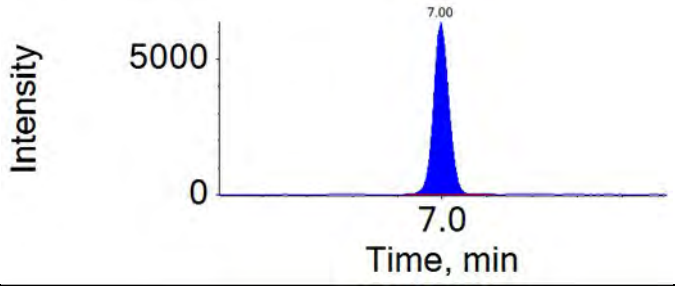
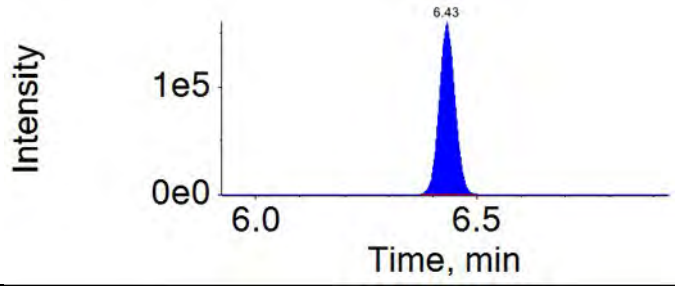
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

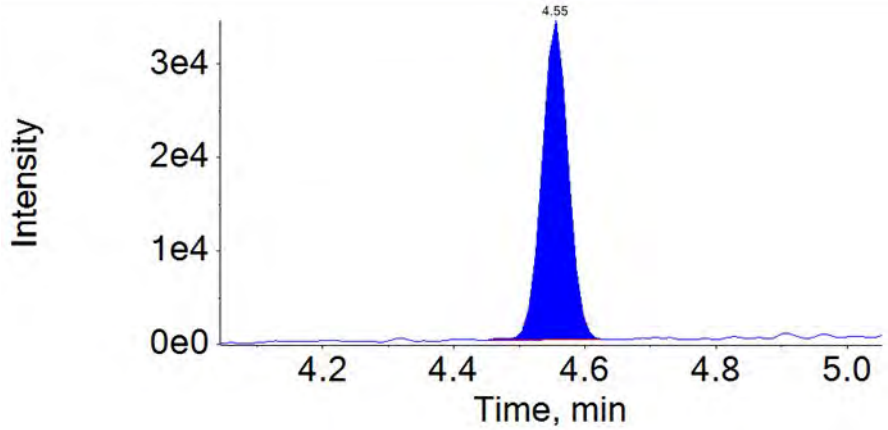
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

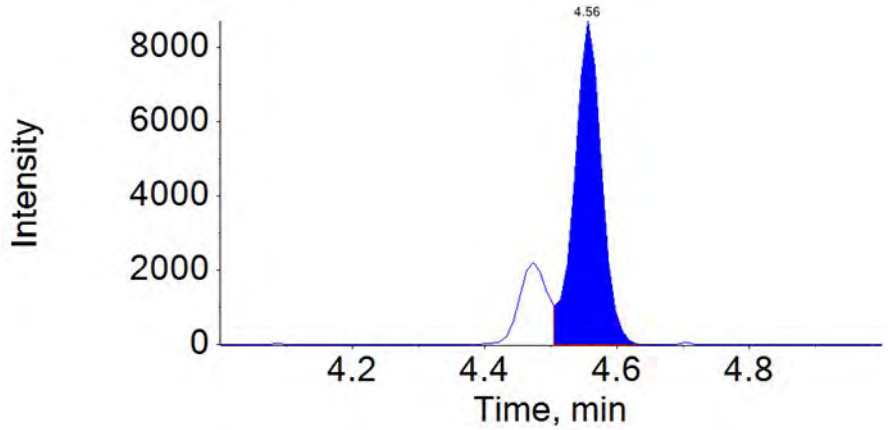
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHpA
RT (min.):
4.55
Peak Area:
95434.80
Mass Range:
363.0 / 319.0
File Name:
18NOV12DCAL-43.wiff
Sample Name:
CAL2



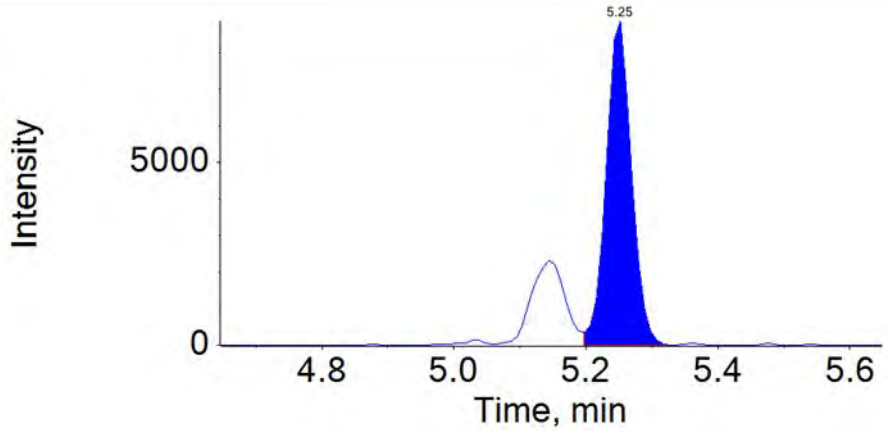
Integration Comment: incorrect integration

Component Name:
PFHxS
RT (min.):
4.56
Peak Area:
24710.47
Mass Range:
399.0 / 80.0
File Name:
18NOV12DCAL-43.wiff
Sample Name:
CAL2



Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
23625.90
Mass Range:
499.0 / 80.0
File Name:
18NOV12DCAL-43.wiff
Sample Name:
CAL2

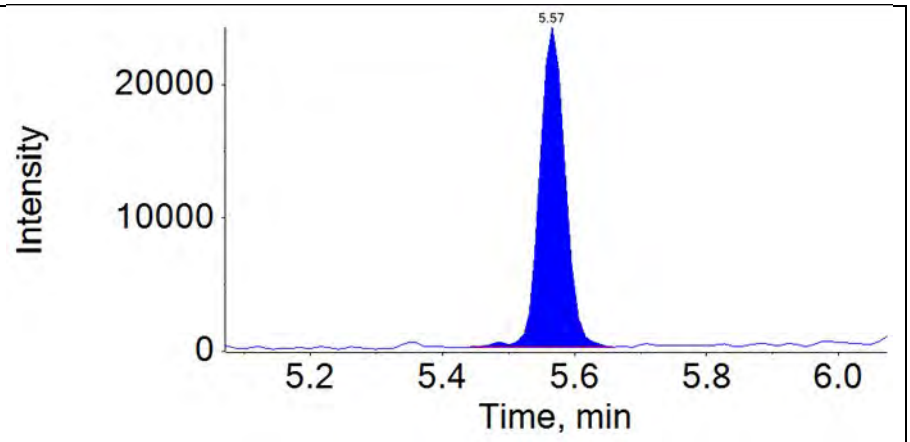


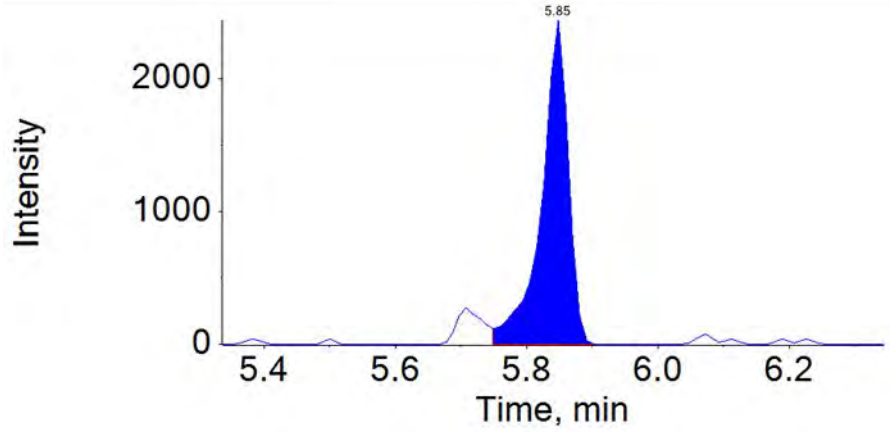
Integration Comment: incorrect integration

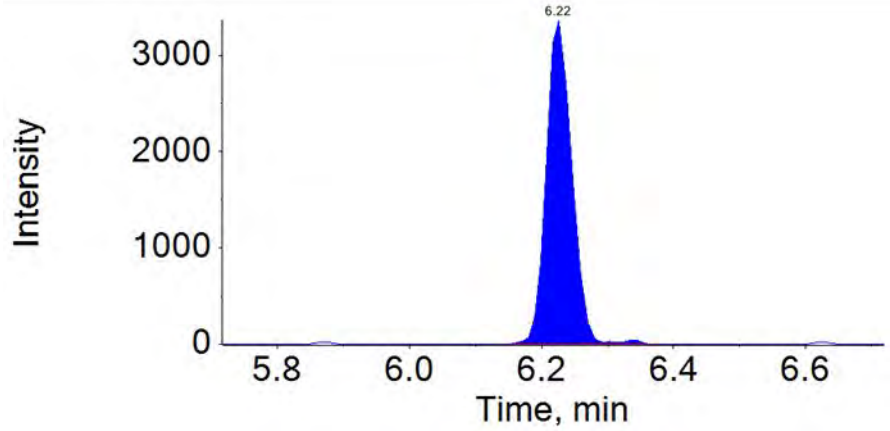
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFDA **RT (min.):** 5.57 **Peak Area:** 64555.75 **Mass Range:** 513.0 / 469.0 **File Name:** 18NOV12DCAL-43.wiff **Sample Name:** CAL2	 **Integration Comment:** incorrect integration

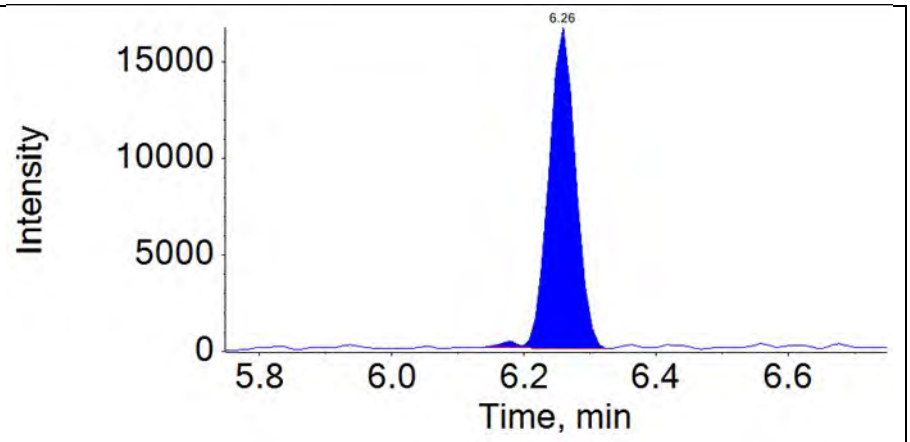
Component Name: NEtFOSAA **RT (min.):** 5.85 **Peak Area:** 6972.11 **Mass Range:** 584.0 / 419.0 **File Name:** 18NOV12DCAL-43.wiff **Sample Name:** CAL2	 **Integration Comment:** incorrect integration

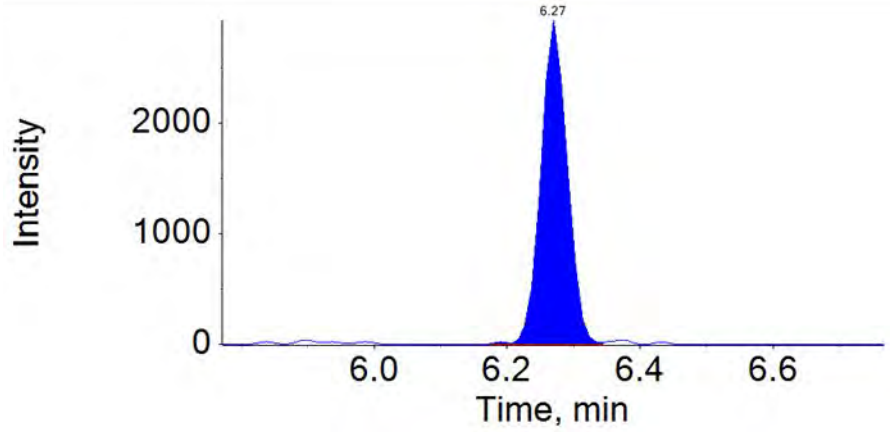
Component Name: PFDoS **RT (min.):** 6.22 **Peak Area:** 9104.97 **Mass Range:** 699.0 / 80.0 **File Name:** 18NOV12DCAL-43.wiff **Sample Name:** CAL2	 **Integration Comment:** incorrect integration

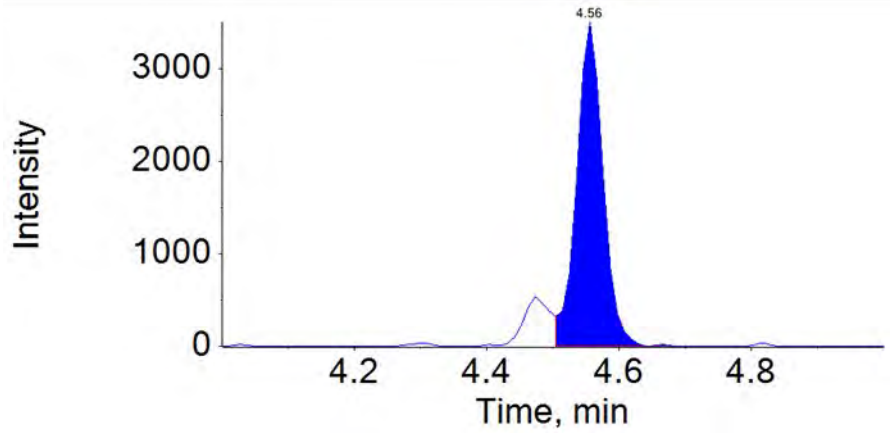
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: NEtPFOSAE **RT (min.):** 6.26 **Peak Area:** 47267.14 **Mass Range:** 630.0 / 59.0 **File Name:** 18NOV12DCAL-43.wiff **Sample Name:** CAL2	 **Integration Comment:** incorrect integration

Component Name: NEtPFOSA **RT (min.):** 6.27 **Peak Area:** 8081.41 **Mass Range:** 526.0 / 169.0 **File Name:** 18NOV12DCAL-43.wiff **Sample Name:** CAL2	 **Integration Comment:** incorrect integration

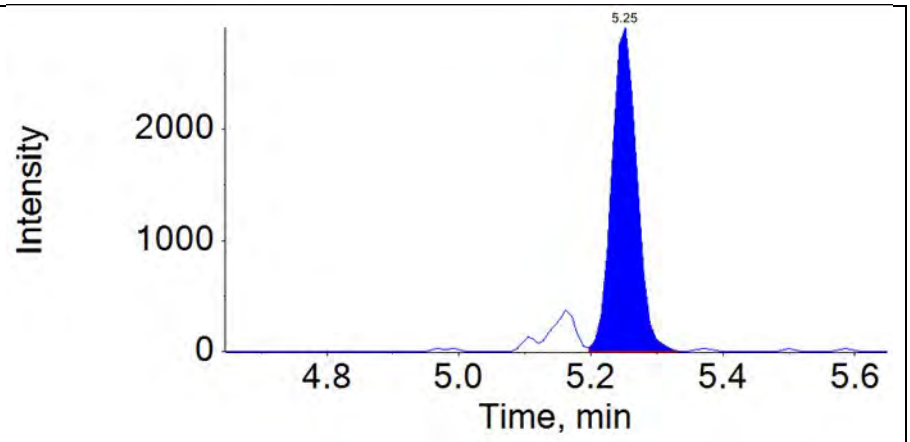
Component Name: PFHxS_2 **RT (min.):** 4.56 **Peak Area:** 9734.65 **Mass Range:** 399.0 / 99.0 **File Name:** 18NOV12DCAL-43.wiff **Sample Name:** CAL2	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

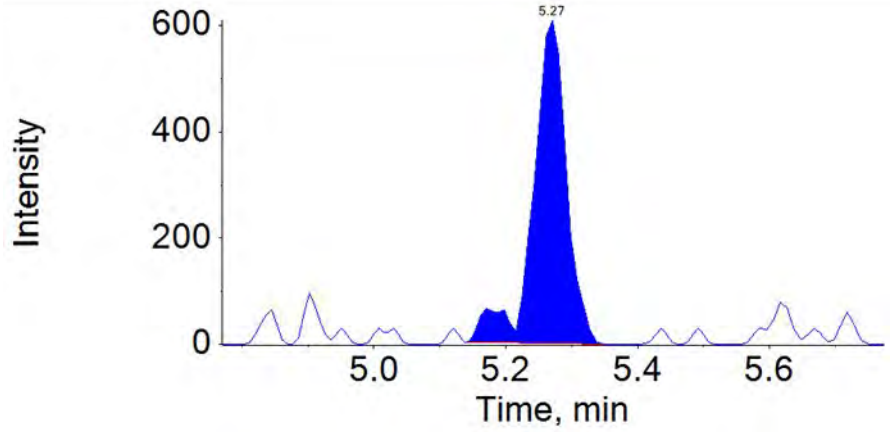
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFOS_2
RT (min.):
5.25
Peak Area:
7692.11
Mass Range:
499.0 / 99.0
File Name:
18NOV12DCAL-43.wiff
Sample Name:
CAL2



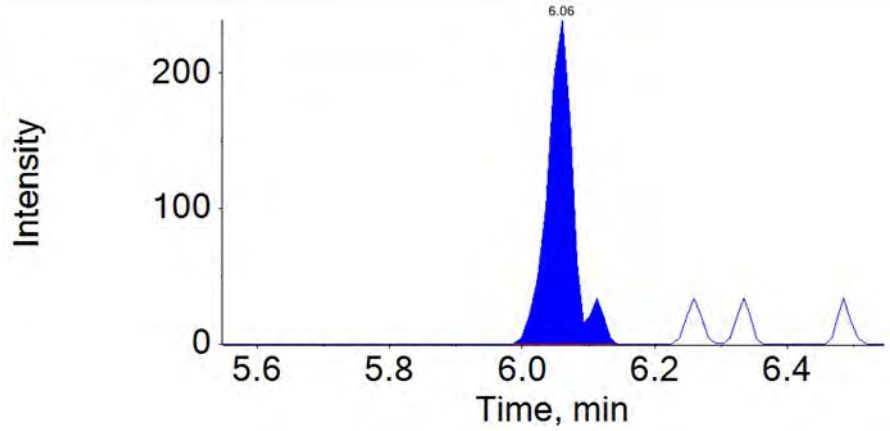
Integration Comment: incorrect integration

Component Name:
PFNA_2
RT (min.):
5.27
Peak Area:
2176.77
Mass Range:
463.0 / 169.0
File Name:
18NOV12DCAL-43.wiff
Sample Name:
CAL2



Integration Comment: incorrect integration

Component Name:
PFDoDA_2
RT (min.):
6.06
Peak Area:
655.49
Mass Range:
613.0 / 169.0
File Name:
18NOV12DCAL-43.wiff
Sample Name:
CAL2



Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

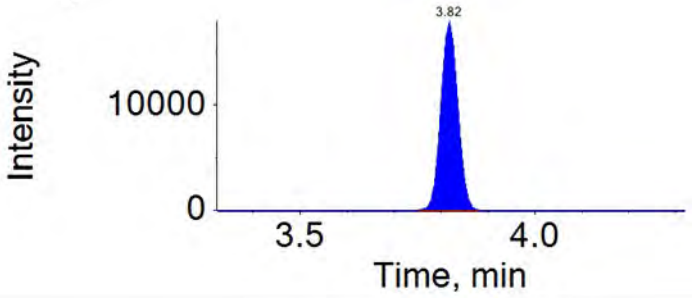
Sample Name: CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-43.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	44885.16	A	0.3619	0.3622			
PFBS_2	3.82	1.00	16259.22	A	0.3619	0.3622	0	50	
4:2-FTS	4.13	1.00	8803.96	A	0.6730	0.7006			
4:2 FTS_2	4.13	1.00	6168.18	A	0.6730	0.7006		#NA!	
PFHxA	4.16	1.00	96559.34	A	0.0117	0.0147			
PFHxA_2	4.16	1.00	1416.25	A	0.0117	0.0147	26	50	
PFPeS	4.19	1.10	20295.04	A	0.5191	0.5794			
PFPeS_2	4.18	1.10	11758.90	A	0.5191	0.5794	12	50	
PFHpA	4.55	1.00	95048.34	M	0.0563	0.0529			
PFHpA_2	4.55	1.00	5032.31	A	0.0563	0.0529	-6	50	
PFHxS	4.56	1.00	31064.73	M	0.3428	0.3595			
PFHxS_2	4.56	1.00	11169.02	M	0.3428	0.3595	5	50	
6:2-FTS	4.91	1.00	8048.37	A	0.6604	0.6742			
6:2 FTS_2	4.91	1.00	5425.84	A	0.6604	0.6742		#NA!	
PFHpS	4.92	1.08	29902.32	A	0.4066	0.4437			
PFHpS_2	4.92	1.08	13266.19	A	0.4066	0.4437	9	50	
PFOA	4.93	1.00	100710.53	A	0.0562	0.0523			
PFOA_2	4.92	1.00	5264.55	A	0.0562	0.0523	-7	50	
PFOS	5.25	1.00	32300.98	M	0.2968	0.2722			
PFOS_2	5.25	1.00	8793.88	M	0.2968	0.2722	-8	50	
PFNA	5.27	1.00	80724.19	A	0.0229	0.0248			
PFNA_2	5.27	1.00	1999.67	M	0.0229	0.0248	8	50	
PFNS	5.55	1.06	20326.14	A	0.4828	0.4548			
PFNS_2	5.54	1.06	9243.39	A	0.4828	0.4548	-6	50	
PFDA	5.57	1.00	63802.06	M	0.0081	0.0067			
PFDA_2	5.56	1.00	427.00	A	0.0081	0.0067	-17	50	
8:2-FTS	5.57	1.00	6214.24	A	0.6814	0.7964			
8:2 FTS_2	5.57	1.00	4949.26	A	0.6814	0.7964		#NA!	
NMeFOSAA	5.71	1.00	5759.59	A	0.2569	0.2344			
NMeFOSAA_2	5.70	1.00	1350.22	A	0.2569	0.2344	-9	50	
PFDS	5.80	1.10	16291.91	A	0.5144	0.5360			
PFDS_2	5.80	1.11	8732.52	A	0.5144	0.5360	4	50	
PFUnDA	5.83	1.00	51206.76	A	0.0058	0.0013			
PFUnDA_2	5.87	1.01	64.88	A	0.0058	0.0013	-78	50	OOS
NEtFOSAA	5.85	1.00	7727.12	M	0.7253	0.7329			
NEtFOSAA_2	5.84	1.00	5663.34	A	0.7253	0.7329	1	50	
PFDoDA	6.06	1.00	59695.25	A	0.0157	0.0101			
PFDoDA_2	6.06	1.00	604.13	M	0.0157	0.0101	-35	50	
10:2-FTS	6.08	1.09	5206.47	A	0.6356	0.6377			
10:2 FTS_2	6.07	1.09	3320.12	A	0.6356	0.6377		#NA!	
PFTrDA	6.26	1.03	47991.31	A	0.0086	0.0047			
PFTrDA_2	6.26	1.03	226.86	A	0.0086	0.0047	-45	50	
PFTeDA	6.43	1.00	40236.53	A	0.0062	0.0078			
PFTeDA_2	6.43	1.00	314.50	A	0.0062	0.0078	25	50	
PFHxDA	6.74	1.05	19006.44	A	0.0683	0.0747			
PFHxDA_2	6.73	1.05	1419.64	A	0.0683	0.0747	9	50	
PFODA	7.00	1.09	14955.56	A	0.0277	0.0314			
PFODA_2	7.00	1.09	469.81	A	0.0277	0.0314	13	50	

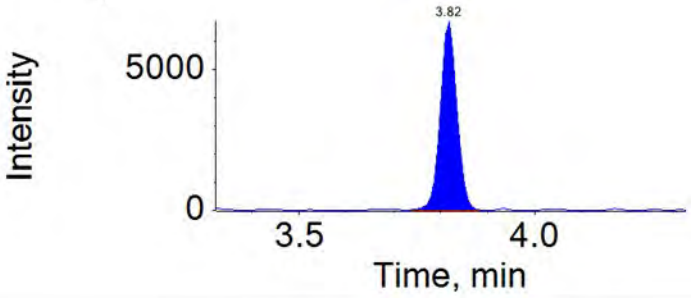
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

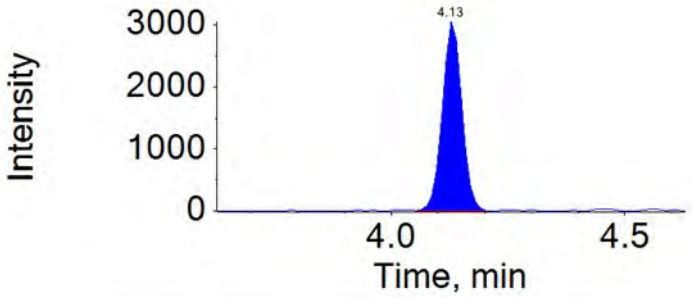
Component: PFBS
Primary Mass: 299.0 / 80.0



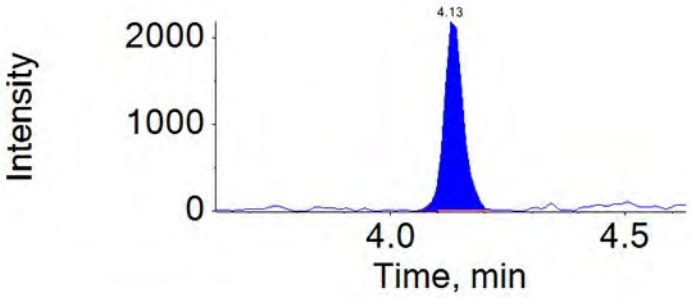
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



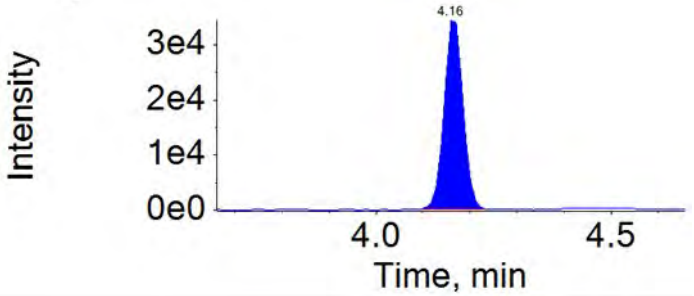
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



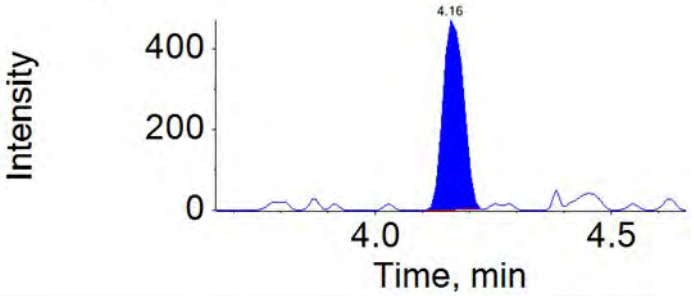
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



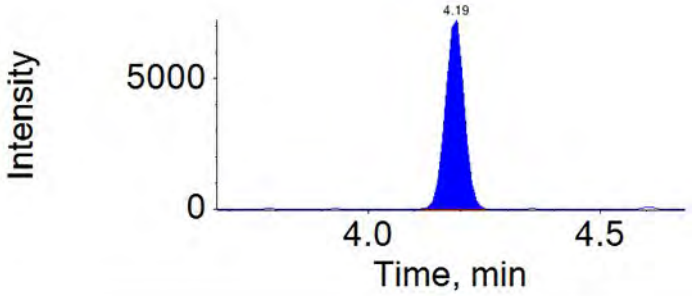
Component: PFHxA
Primary Mass: 313.0 / 269.0



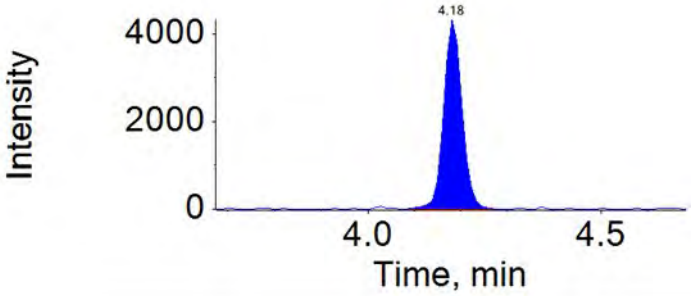
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



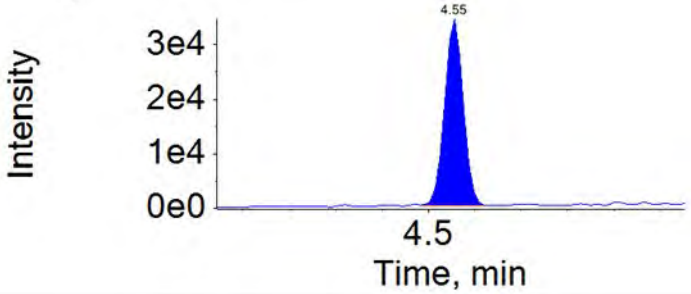
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



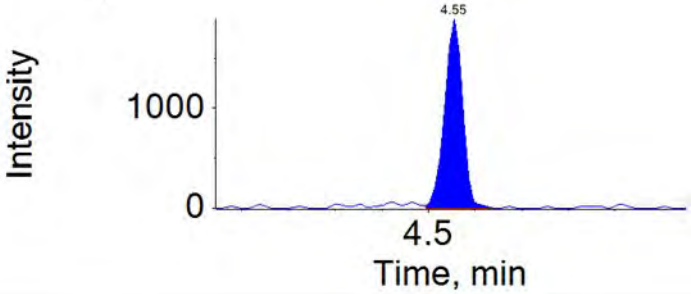
APPROVED
By MCD at 6:33 pm, 11/12/18

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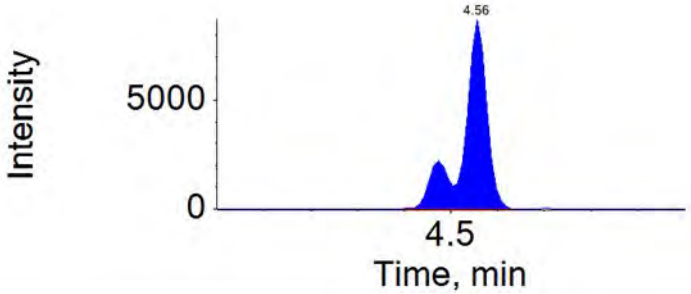
Component: PFHpA
Primary Mass: 363.0 / 319.0



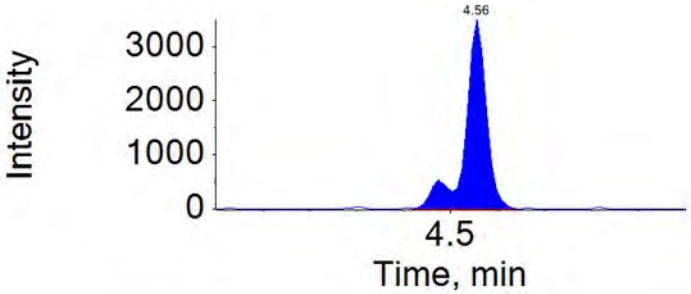
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



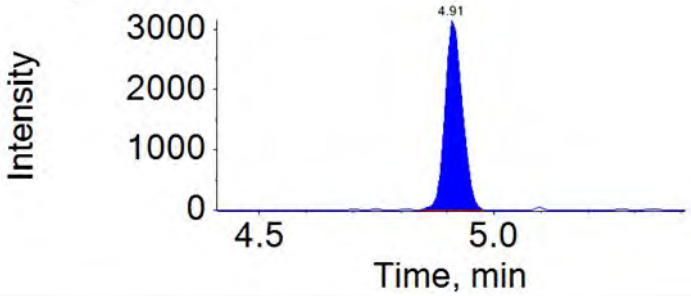
Component: PFHxS
Primary Mass: 399.0 / 80.0



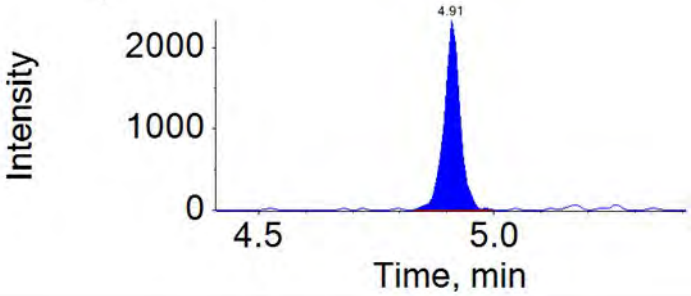
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



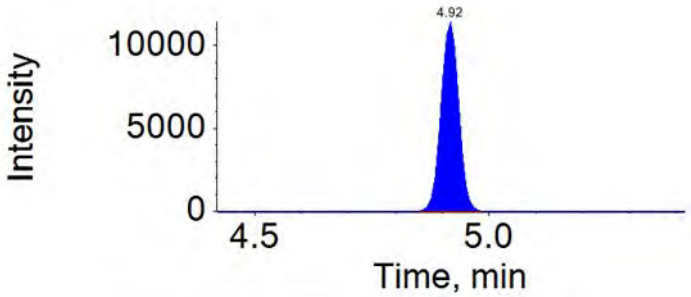
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



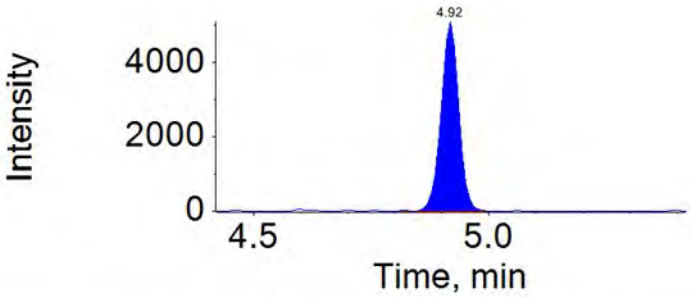
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



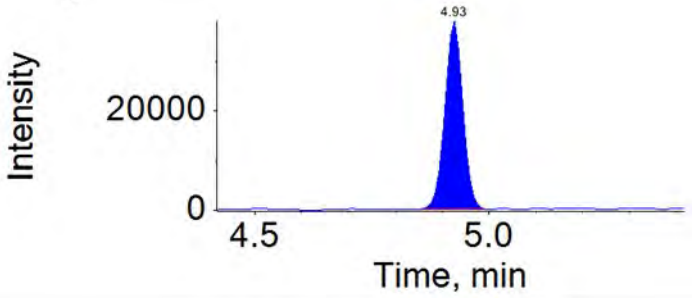
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



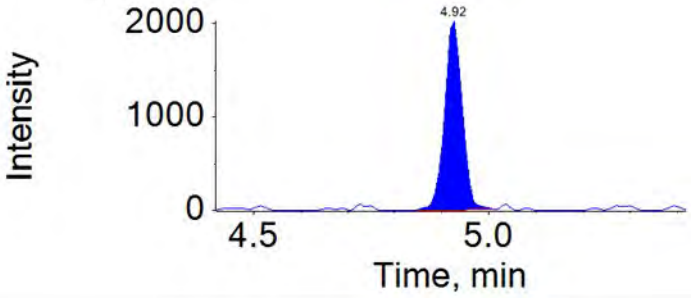
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By HMK at 10:53 am, 11/13/18

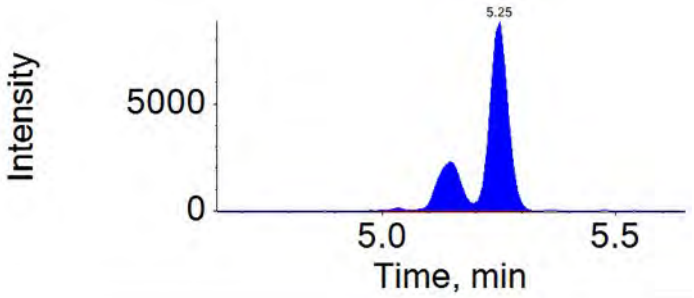
Component: PFOA
Primary Mass: 413.0 / 369.0



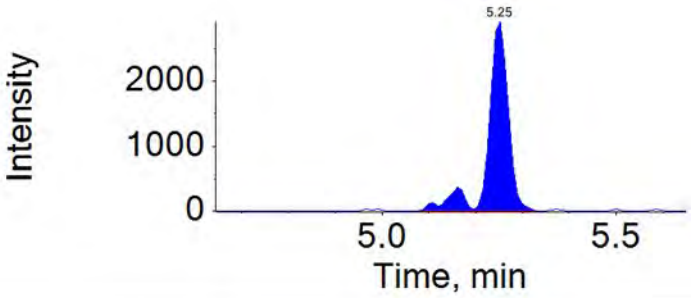
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



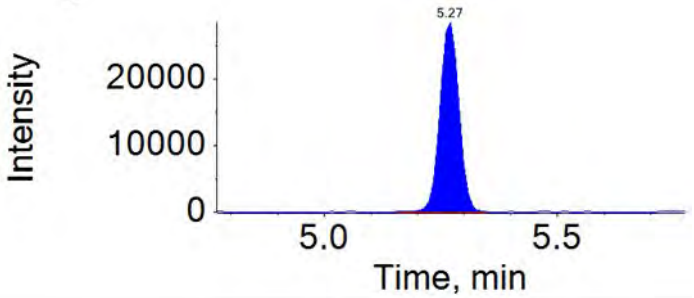
Component: PFOS
Primary Mass: 499.0 / 80.0



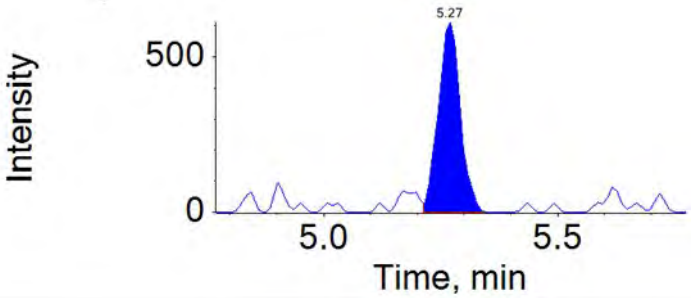
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



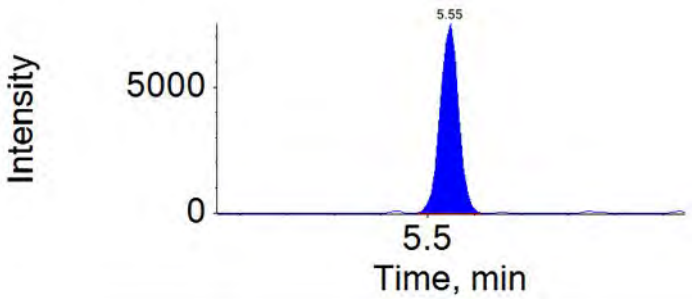
Component: PFNA
Primary Mass: 463.0 / 419.0



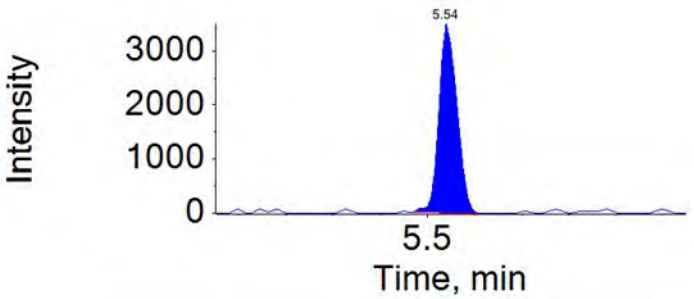
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



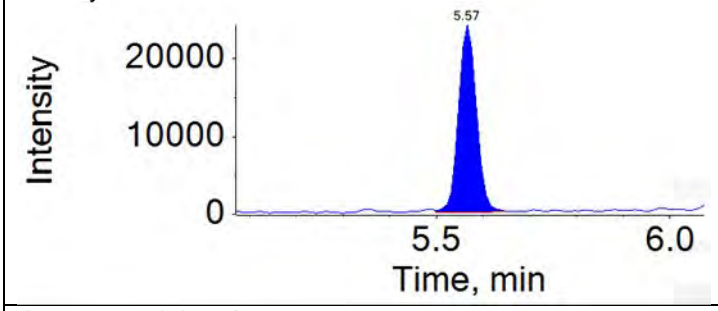
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



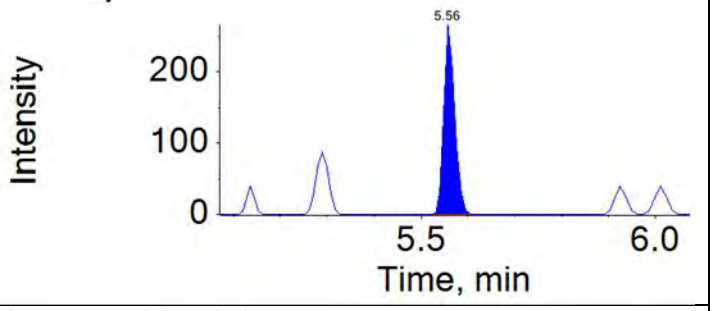
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

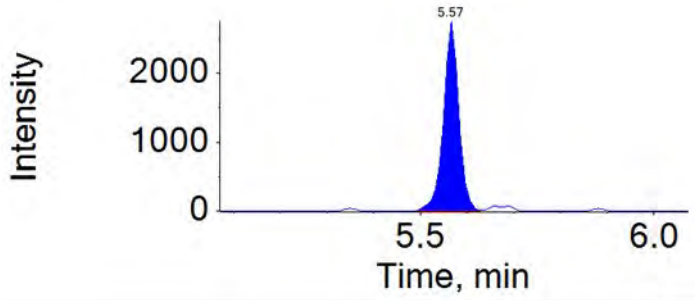
Component: PFDA
Primary Mass: 513.0 / 469.0



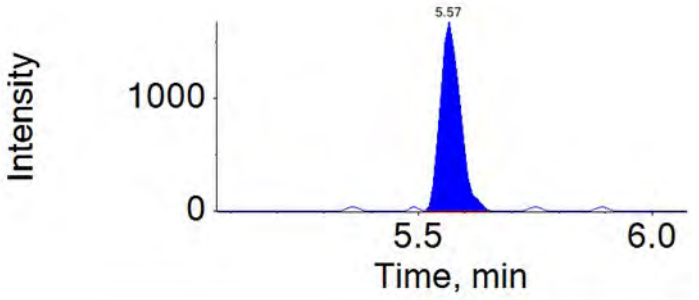
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



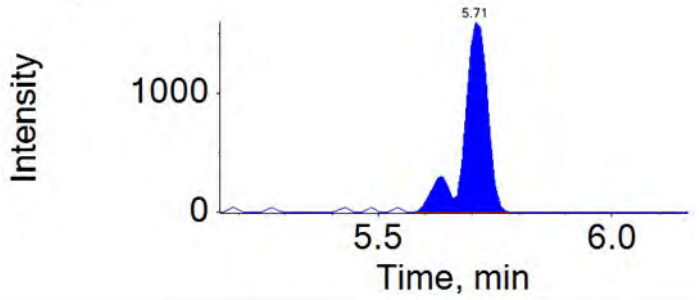
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



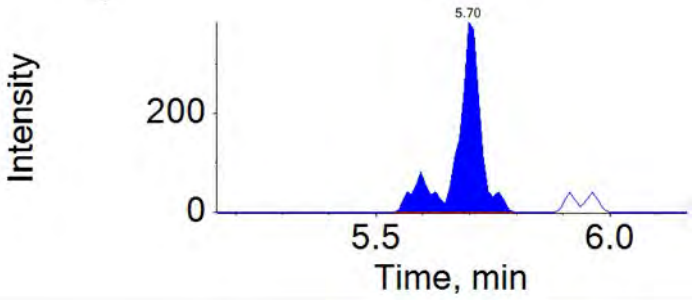
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



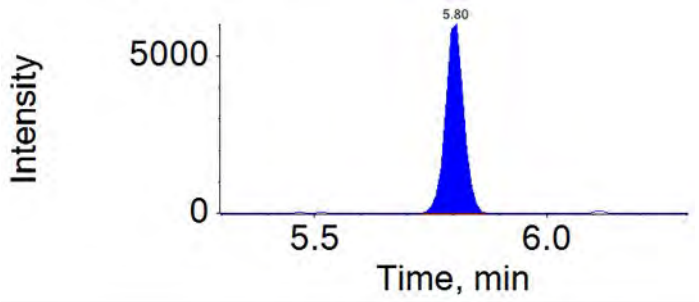
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



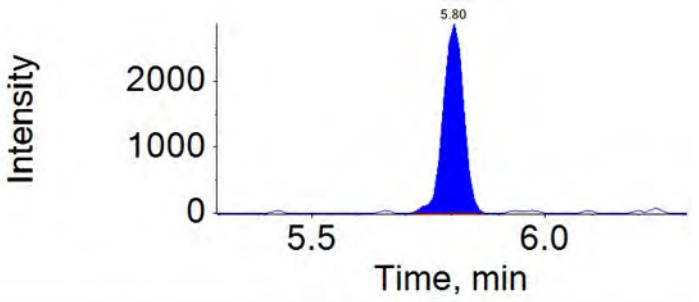
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



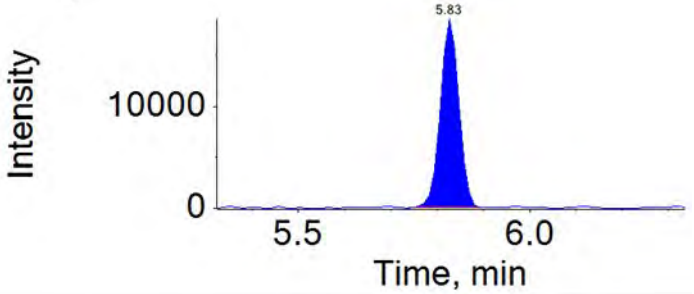
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



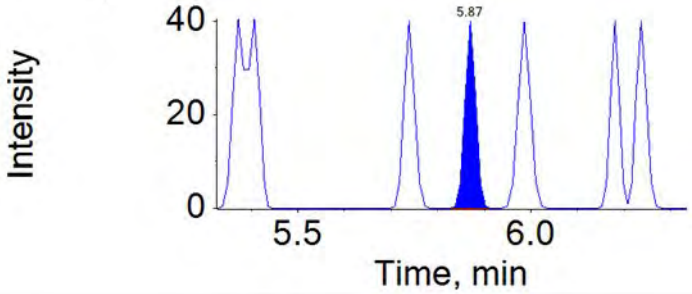
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

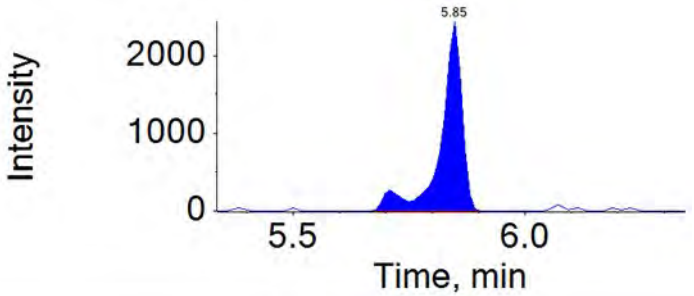
Component: PFUnDA
Primary Mass: 563.0 / 519.0



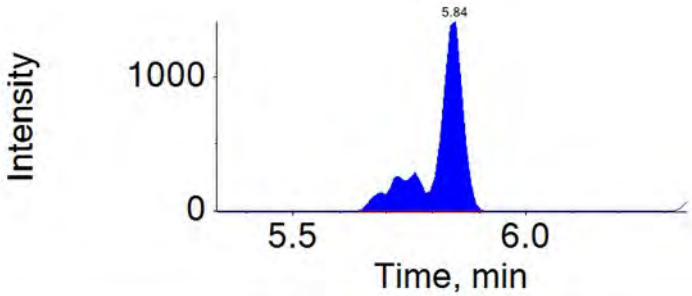
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



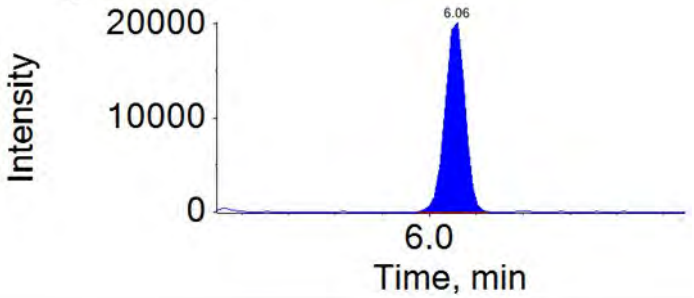
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



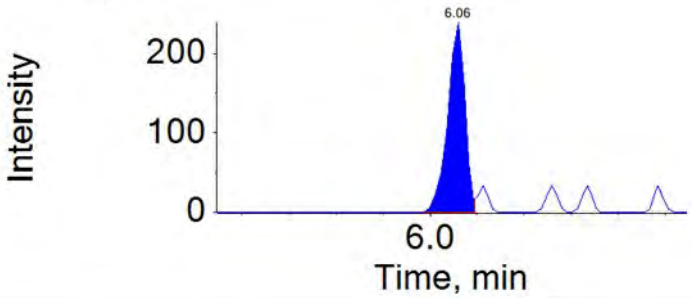
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



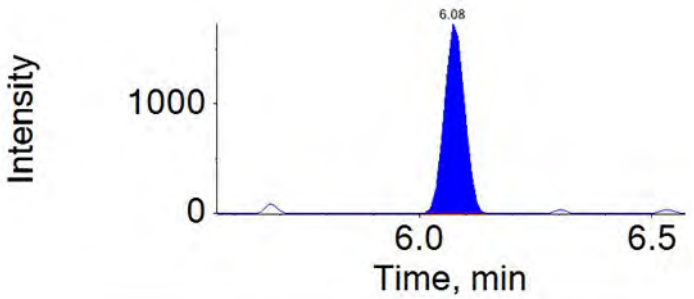
Component: PFDoDA
Primary Mass: 613.0 / 569.0



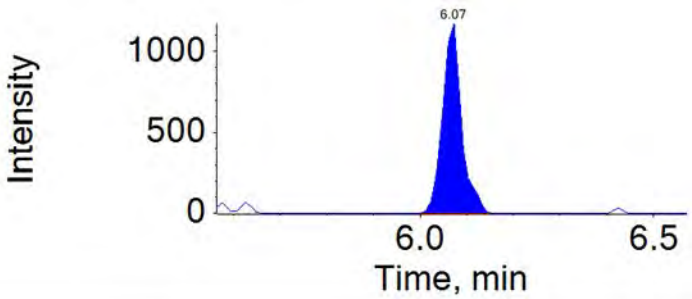
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



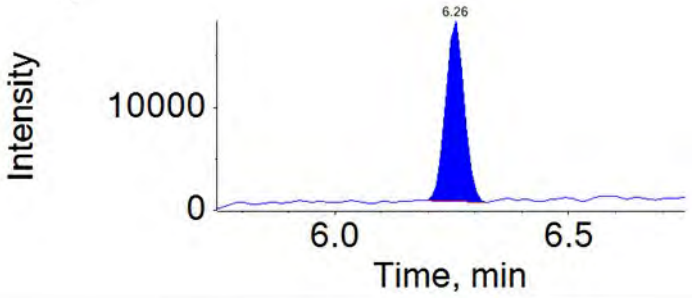
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



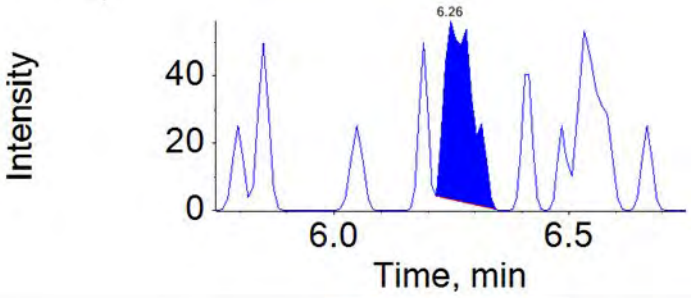
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

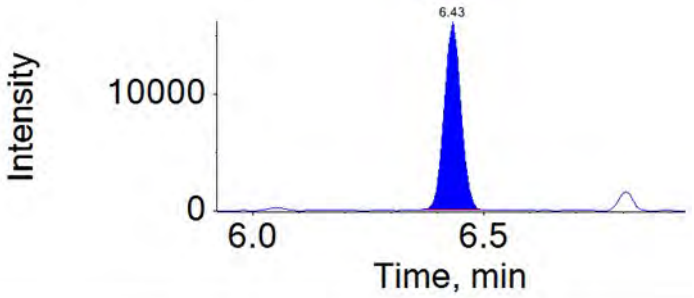
Component: PFTrDA
Primary Mass: 663.0 / 619.0



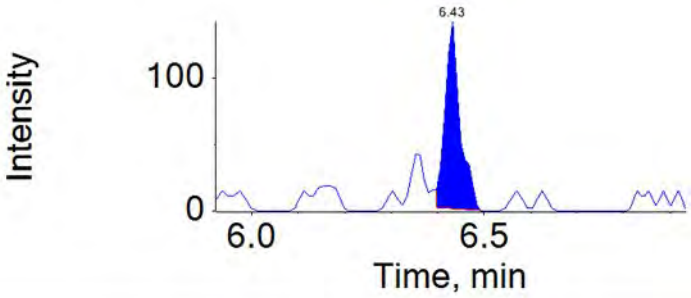
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



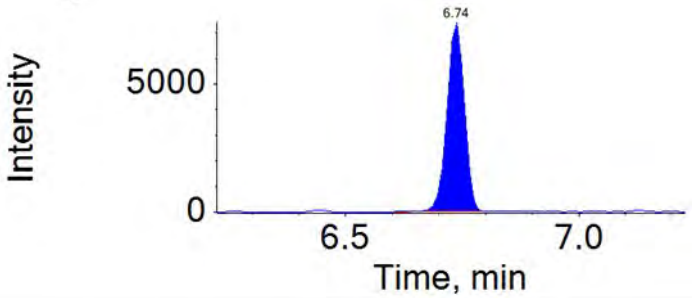
Component: PFTeDA
Primary Mass: 713.0 / 669.0



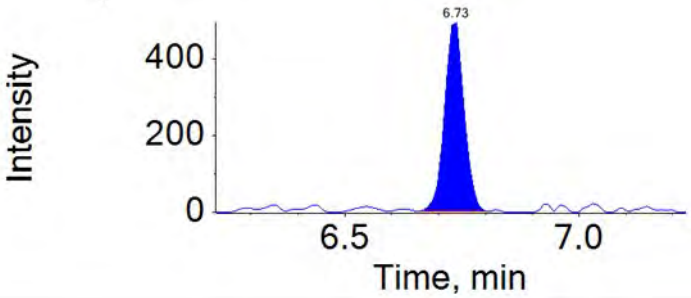
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



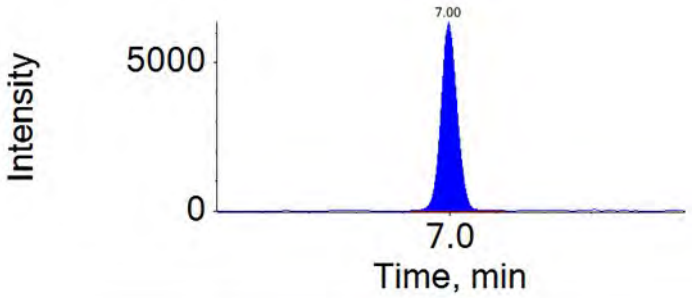
Component: PFHxDA
Primary Mass: 813.0 / 769.0



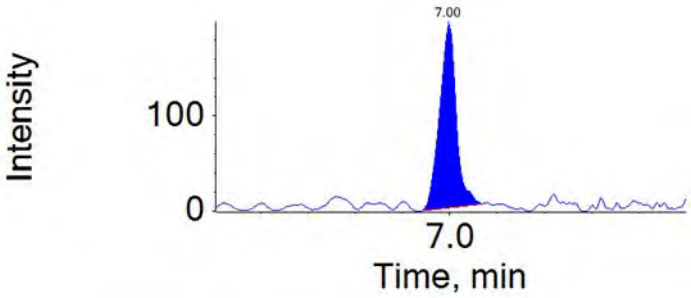
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL3			**Data File:**		18NOV12DCAL-44.wiff
Sample ID:	CALBRN31833B			**Acquis Date:**		2018-11-12T15:24:03
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	5			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV12DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N\A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	659926.2	659926.2	0	50	
13C2-PFOA	5.0	450219.7	450219.7	0	50	
13C4-PFOS	4.8	249205.8	249205.8	0	50	
13C2-PFDA	5.0	278743.9	278743.9	0	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	733360.2	13C3-PFBA	659926.2	1.111	5.000	4.982	100	70-130	
E13C5-PFPeA	695805.7	13C3-PFBA	659926.2	1.054	5.000	4.729	95	70-130	
E13C3-PFBS	416352.8	13C3-PFBA	659926.2	0.631	4.650	4.454	96	70-130	
E13C2-4:2-FTS	47514.8	13C2-PFOA	450219.7	0.106	4.670	4.700	101	70-130	
E13C5-PFHxA	646783.5	13C2-PFOA	450219.7	1.437	5.000	5.189	104	70-130	
E13C3-PFHxS	317243.2	13C2-PFOA	450219.7	0.705	4.730	4.835	102	70-130	
E13C4-PFHpA	503681.0	13C2-PFOA	450219.7	1.119	5.000	5.040	101	70-130	
E13C2-6:2-FTS	31706.4	13C2-PFOA	450219.7	0.070	4.750	4.712	99	70-130	
E13C8-PFOA	878868.5	13C2-PFOA	450219.7	1.952	5.000	5.378	108	70-130	
E13C8-PFOS	281035.5	13C4-PFOS	249205.8	1.128	4.780	4.997	105	70-130	
E13C9-PFNA	455948.9	13C4-PFOS	249205.8	1.830	5.000	5.101	102	70-130	
E13C6-PFDA	612680.8	13C2-PFDA	278743.9	2.198	5.000	5.129	103	70-130	
E13C2-8:2-FTS	29249.8	13C2-PFDA	278743.9	0.105	4.790	5.233	109	70-130	
E13C8-PFOSA	629109.9	13C2-PFDA	278743.9	2.257	5.000	5.004	100	70-130	
Ed3-NMeFOSAA	71670.3	13C2-PFDA	278743.9	0.257	5.000	4.641	93	70-130	
E13C7-PFUnDA	245605.3	13C2-PFDA	278743.9	0.881	5.000	5.116	102	70-130	
Ed5-NEtFOSAA	54383.9	13C2-PFDA	278743.9	0.195	5.000	4.128	83	70-130	
E13C2-PFDoDA	549542.3	13C2-PFDA	278743.9	1.971	5.000	5.119	102	70-130	
Ed7-NMePFOSAE	307355.4	13C2-PFDA	278743.9	1.103	5.000	4.772	95	70-130	
Ed3-NMePFOSA	76782.9	13C2-PFDA	278743.9	0.275	5.000	5.005	100	70-130	
Ed9-NEtPFOSAE	259792.3	13C2-PFDA	278743.9	0.932	5.000	4.847	97	70-130	
Ed5-NEtPFOSA	57485.9	13C2-PFDA	278743.9	0.206	5.000	4.838	97	70-130	
E13C2-PFTeDA	393544.9	13C2-PFDA	278743.9	1.412	5.000	4.957	99	70-130	

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

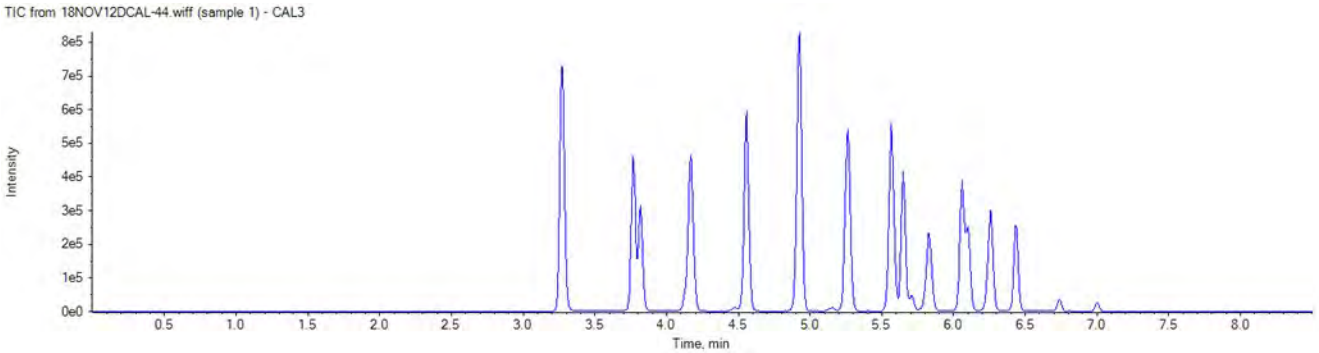
Analyte Quantitation Peak Table

Sample Name: CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-44.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	303228.7		A	13C4-PFBA	3.27	733360.2	0.413	2.291
PFPeA	3.77	1.000	292715.8		A	13C5-PFPeA	3.77	695805.7	0.421	2.435
PFBS	3.82	1.000	168144.6		A	13C3-PFBS	3.82	416352.8	0.404	1.921
4:2-FTS	4.13	1.000	34188.5		A	13C2-4:2-FTS	4.13	47514.8	0.720	1.954
PFHxA	4.17	1.000	352013.5		A	13C5-PFHxA	4.17	646783.5	0.544	2.272
PFPeS	4.19	1.100	84071.2		A	13C3-PFBS	3.82	416352.8	0.202	1.960
PFHpA	4.56	1.000	355834.2		A	13C4-PFHpA	4.55	503681.0	0.706	2.342
PFHxS	4.56	1.000	125622.0		M	13C3-PFHxS	4.56	317243.2	0.396	1.920
6:2-FTS	4.91	1.000	28084.9		A	13C2-6:2-FTS	4.91	31706.4	0.886	2.143
PFHpS	4.92	1.080	125907.9		A	13C3-PFHxS	4.56	317243.2	0.397	2.089
PFOA	4.93	1.000	372258.9		A	13C8-PFOA	4.93	878868.5	0.424	2.262
PFOS	5.25	1.000	120897.5		M	13C8-PFOS	5.25	281035.5	0.430	1.881
PFNA	5.27	1.000	302323.8		A	13C9-PFNA	5.27	455948.9	0.663	2.391
PFNS	5.55	1.060	76049.0		A	13C8-PFOS	5.25	281035.5	0.271	1.893
PFDA	5.57	1.000	254047.8		M	13C6-PFDA	5.57	612680.8	0.415	2.198
8:2-FTS	5.57	1.000	26295.1		A	13C2-8:2-FTS	5.57	29249.8	0.899	2.096
PFOSA	5.65	1.000	270175.5		A	13C8-PFOSA	5.65	629109.9	0.429	2.098
NMeFOSAA	5.71	1.000	25147.7		A	d3-NMeFOSAA	5.71	71670.3	0.351	1.983
PFDS	5.80	1.110	57966.9		A	13C8-PFOS	5.25	281035.5	0.206	1.869
PFUnDA	5.83	1.000	199061.8		A	13C7-PFUnDA	5.83	245605.3	0.810	2.119
NEtFOSAA	5.84	1.000	25089.0		A	d5-NEtFOSAA	5.84	54383.9	0.461	2.418
PFDoDA	6.06	1.000	237252.6		A	13C2-PFDoDA	6.06	549542.3	0.432	2.198
10:2-FTS	6.07	1.090	18541.7		A	13C2-8:2-FTS	5.57	29249.8	0.634	2.111
NMePFOSAE	6.10	1.000	163668.7		A	d7-NMePFOSAE	6.09	307355.4	0.533	2.216
NMePFOSA	6.11	1.000	29934.3		A	d3-NMePFOSA	6.11	76782.9	0.390	1.923
PFDoS	6.23	1.190	30098.3		A	13C8-PFOS	5.25	281035.5	0.107	1.876
NEtPFOSAE	6.26	1.000	178457.9		A	d9-NEtPFOSAE	6.25	259792.3	0.687	2.204
NEtPFOSA	6.27	1.000	26590.2		M	d5-NEtPFOSA	6.27	57485.9	0.463	2.124
PFTrDA	6.26	1.030	184322.9		A	13C2-PFDoDA	6.06	549542.3	0.335	2.117
PFTeDA	6.43	1.000	156439.9		A	13C2-PFTeDA	6.43	393544.9	0.398	2.228
PFHxDA	6.74	1.050	69655.1		A	13C2-PFTeDA	6.43	393544.9	0.177	2.109
PFODA	7.00	1.090	57796.0		A	13C2-PFTeDA	6.43	393544.9	0.147	2.045

Total Ion Chromatogram

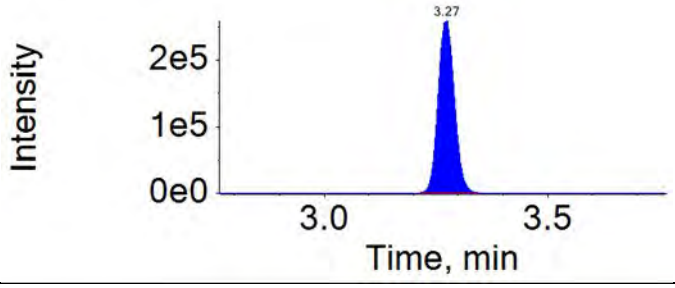


APPROVED
By MCD at 6:33 pm, 11/12/18

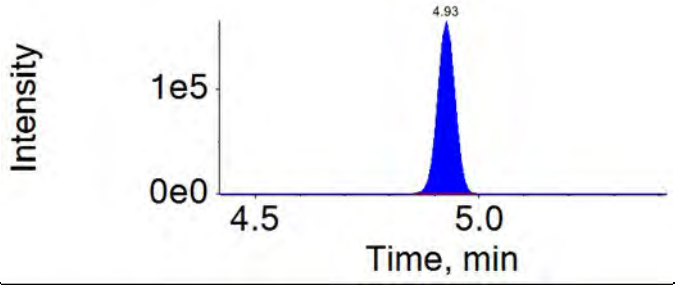
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

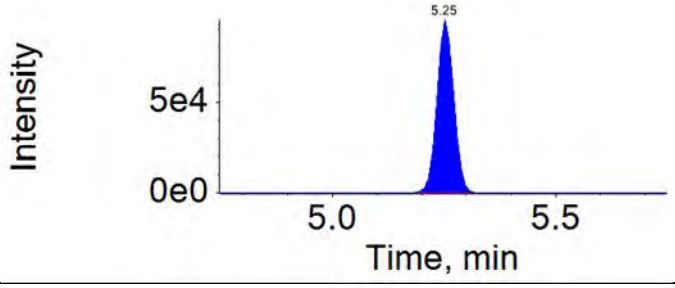
Injection Standard: 13C3-PFBA
216.0 / 172.0



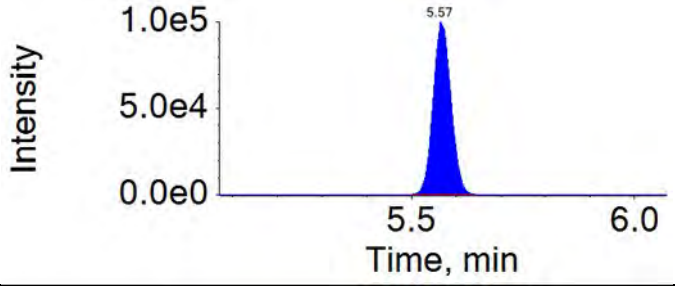
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



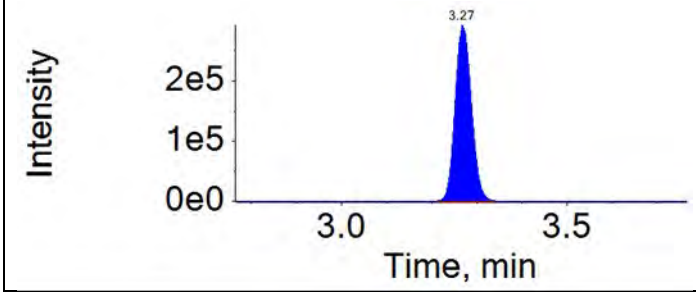
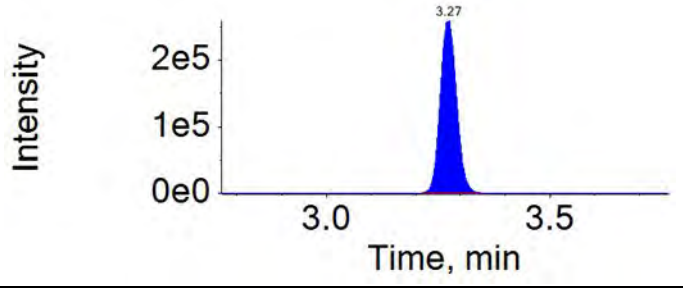
Injection Standard: 13C2-PFDA
515.0 / 470.0

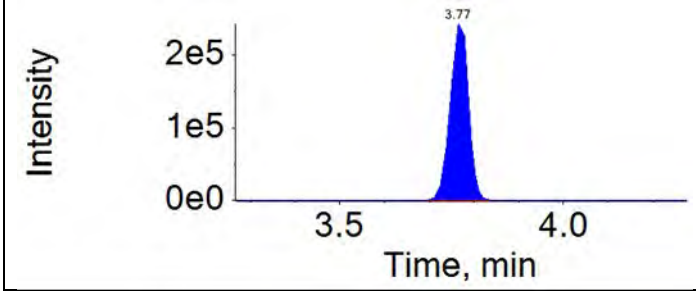
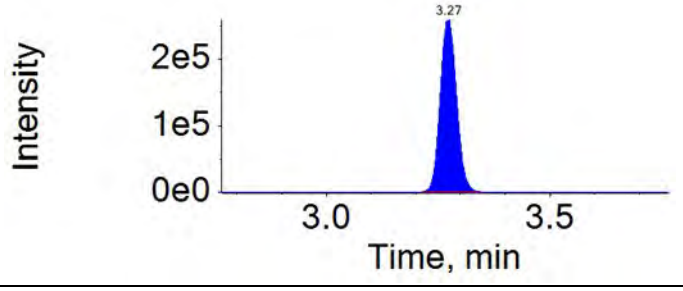


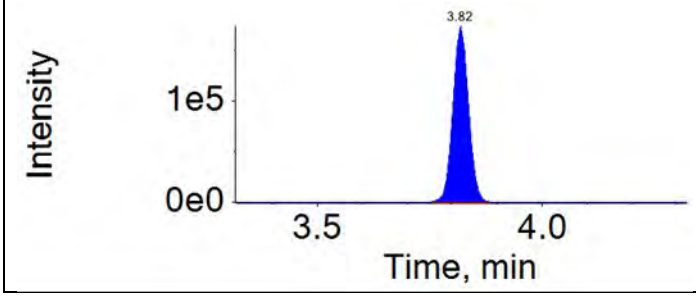
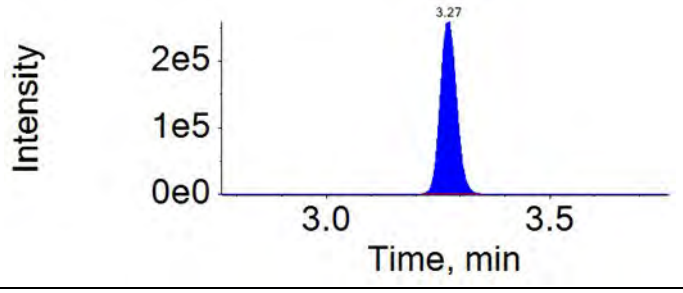
APPROVED
By MCD at 6:33 pm, 11/12/18

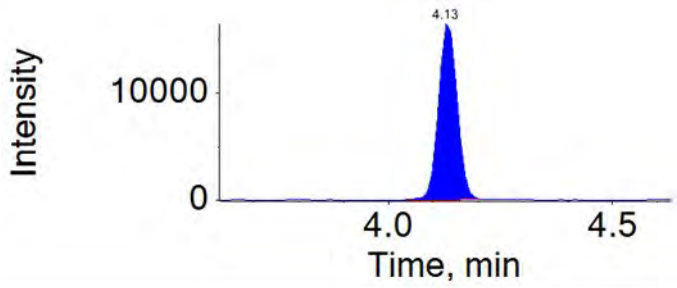
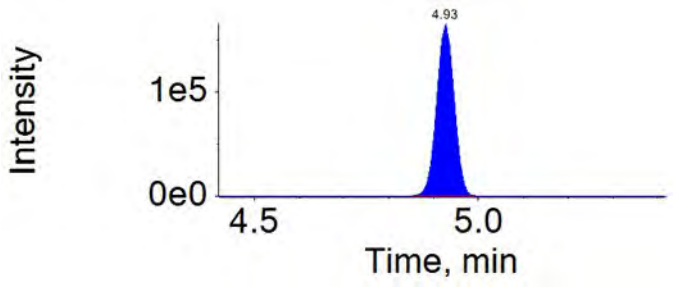
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

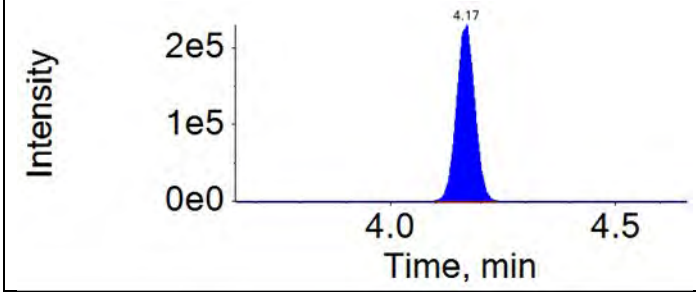
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

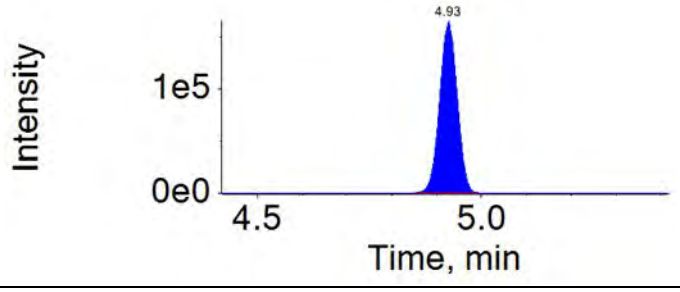
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

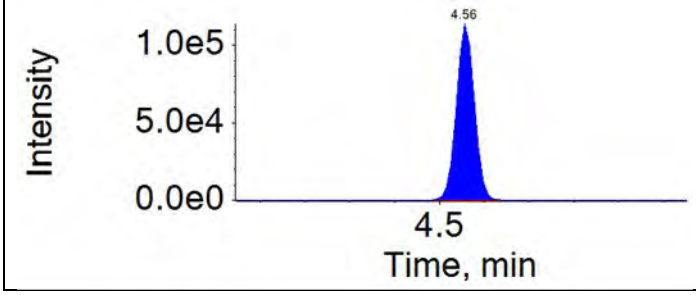
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

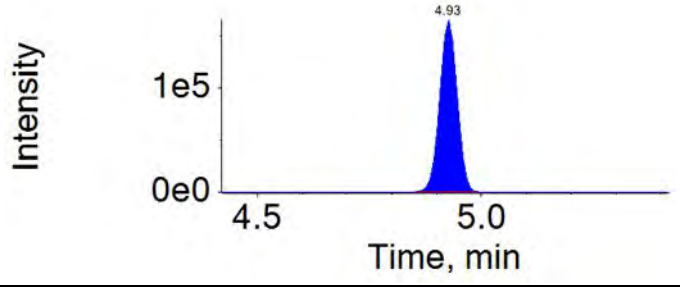
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



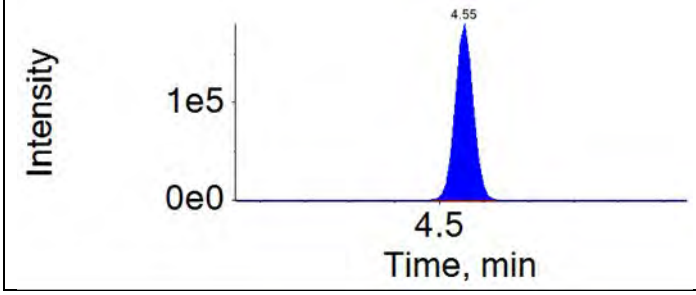


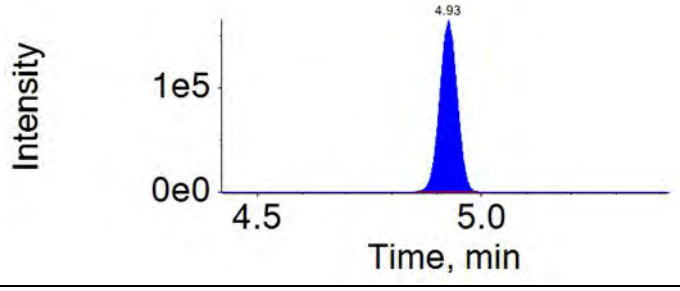
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



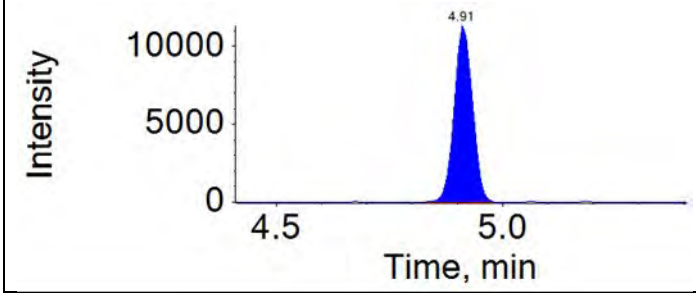


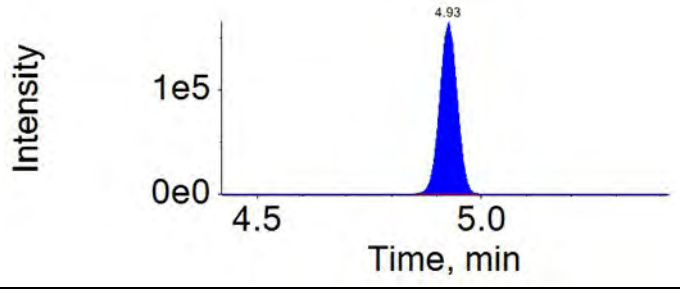
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

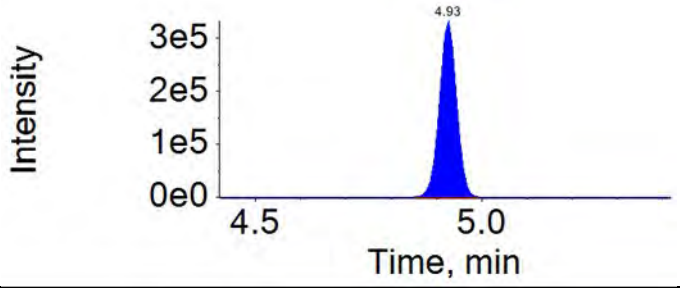
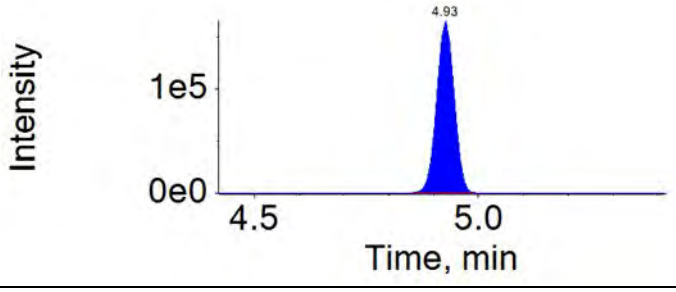


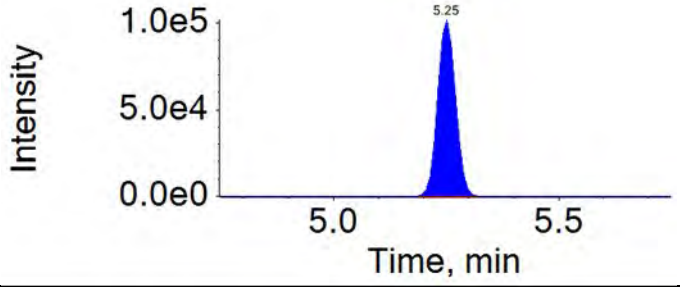
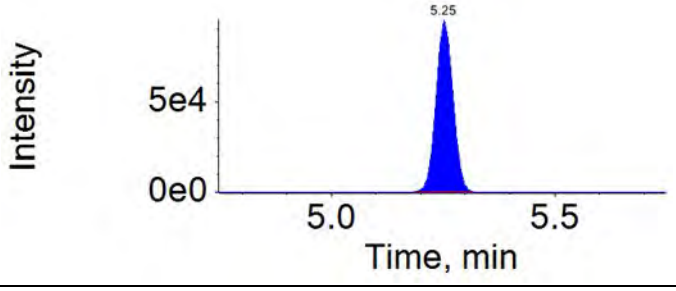


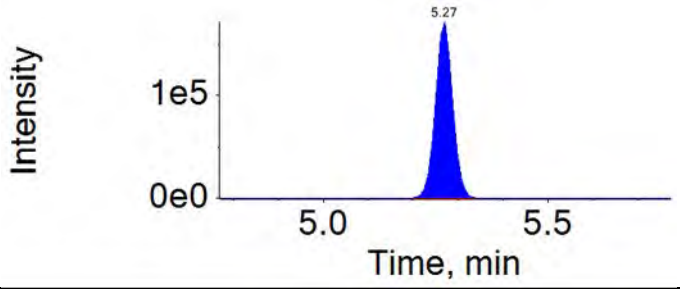
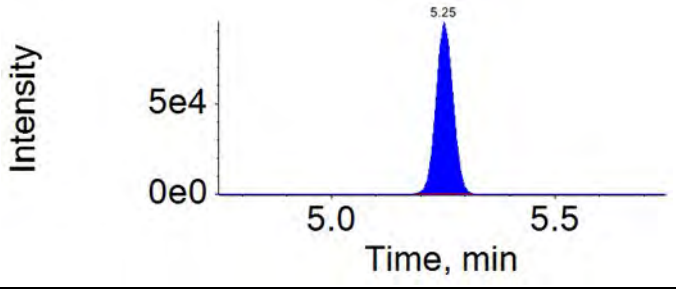
APPROVED
By MCD at 6:33 pm, 11/12/18

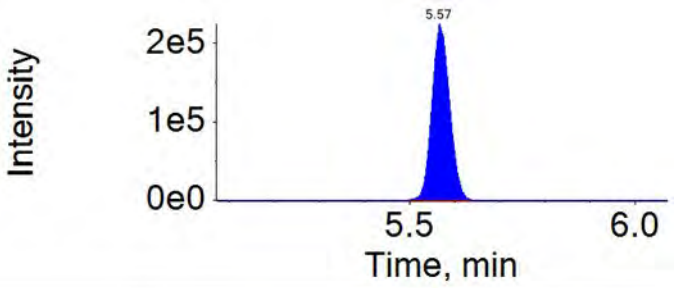
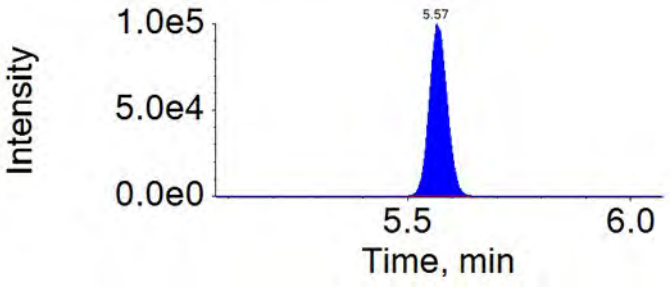
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

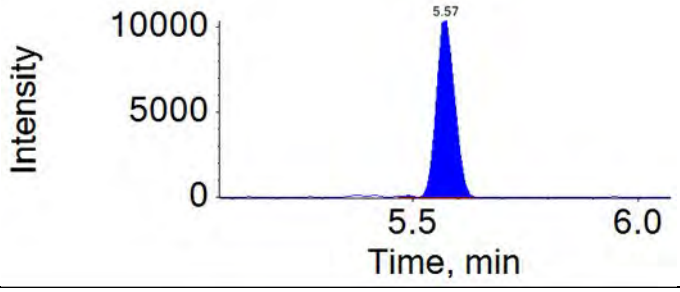
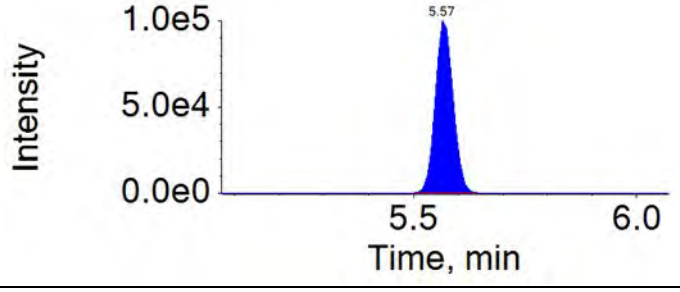
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

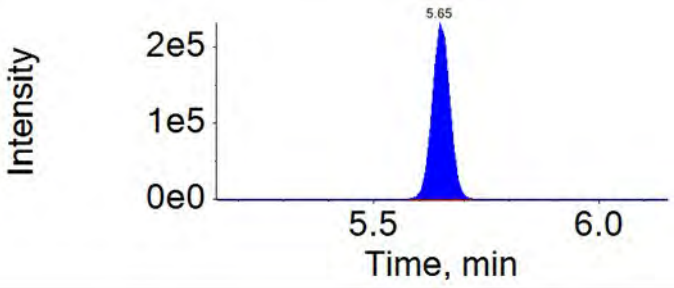
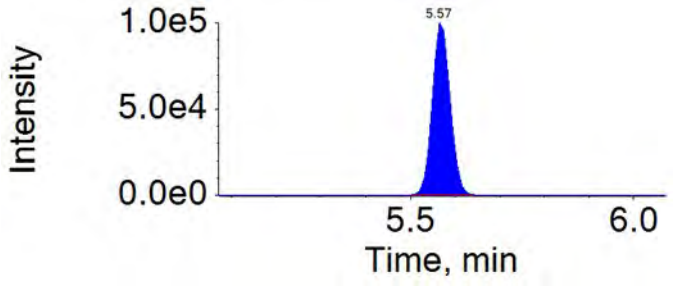
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

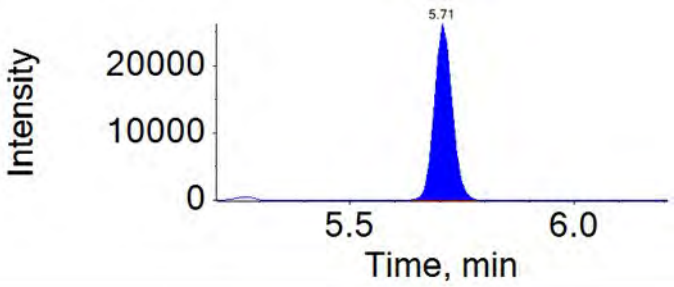
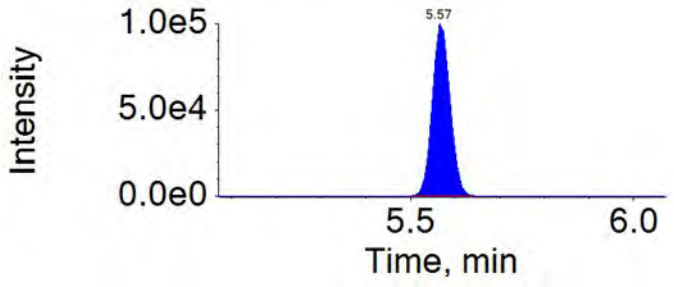
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

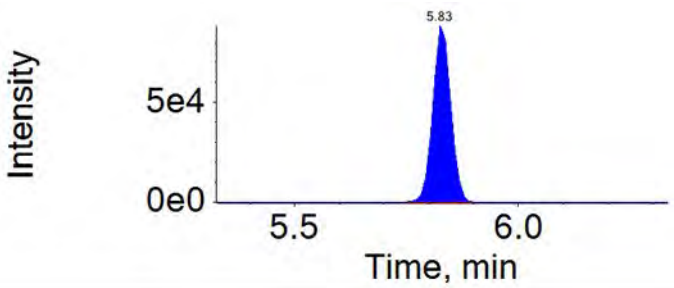
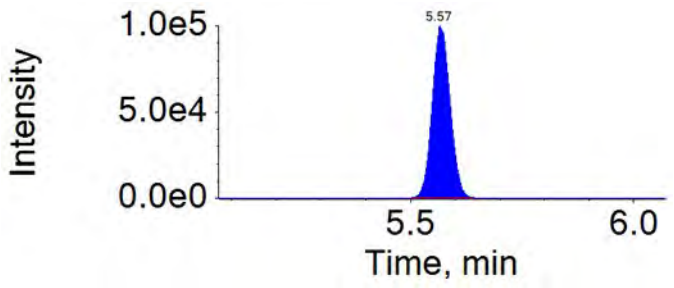
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

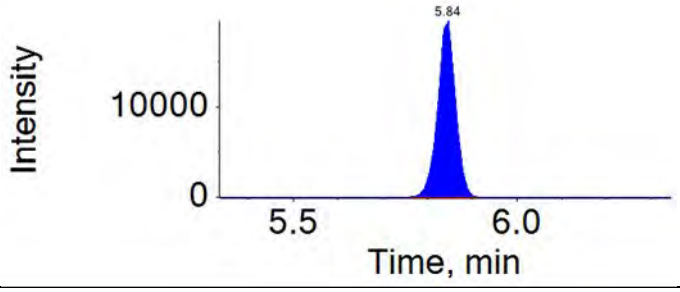
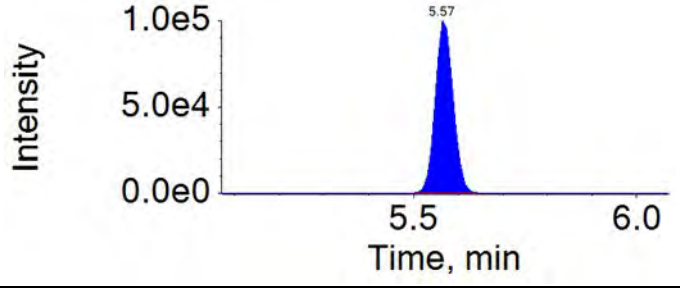
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

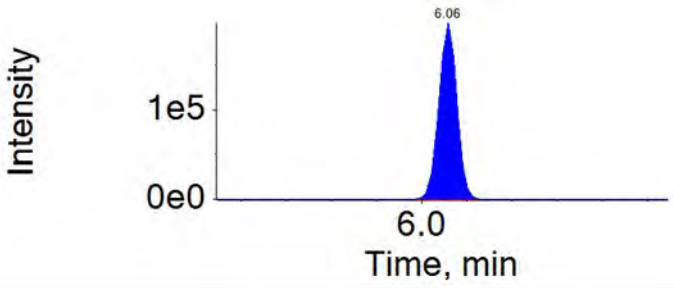
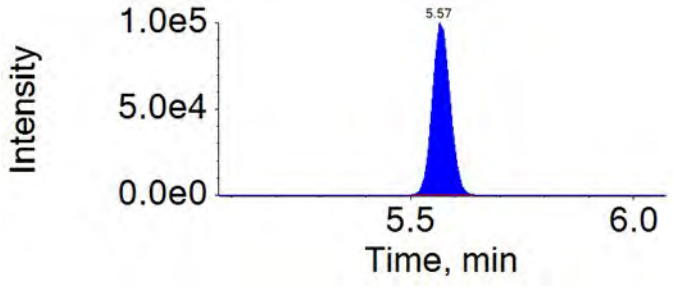
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

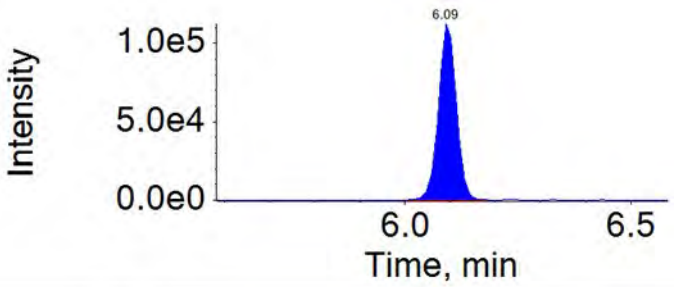
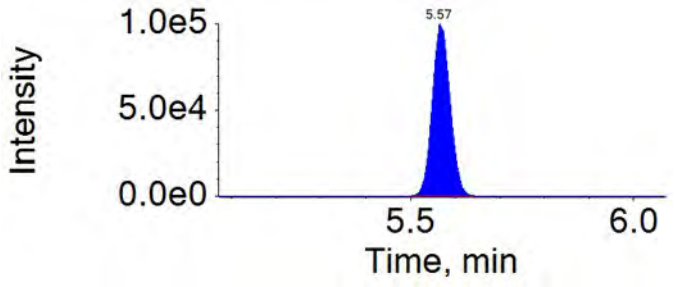
APPROVED
By MCD at 6:33 pm, 11/12/18

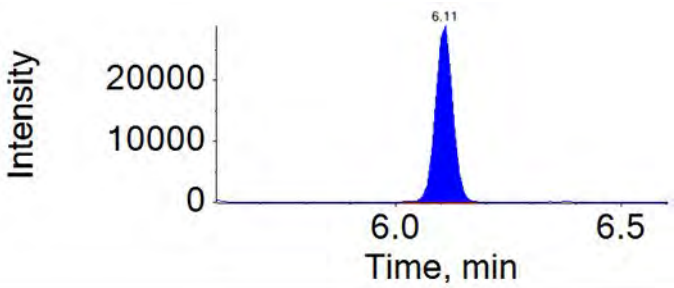
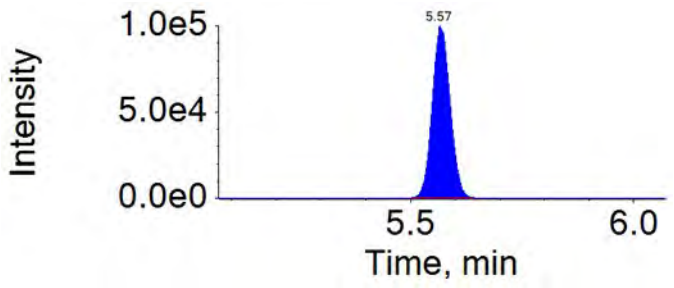
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

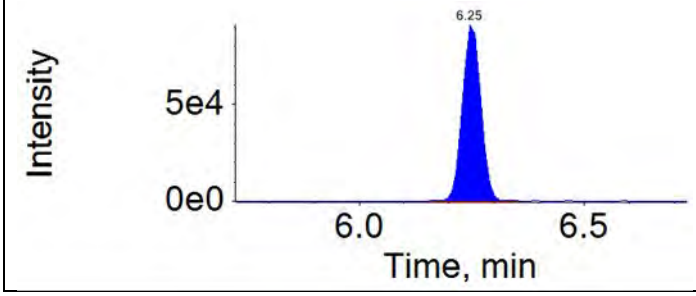
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

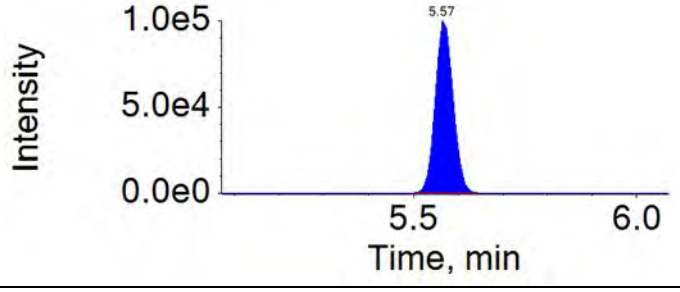
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

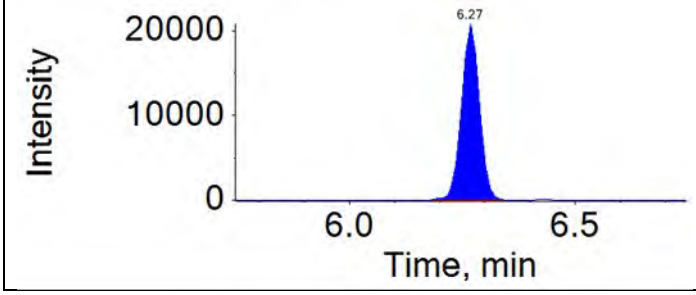
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

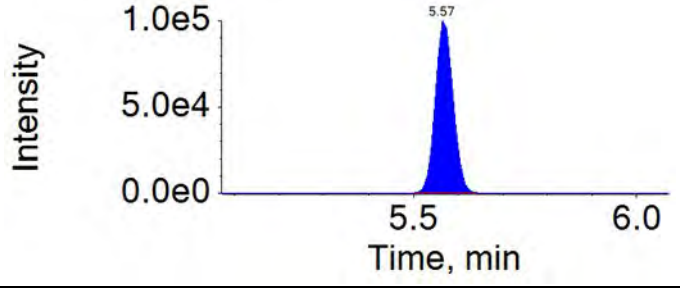
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



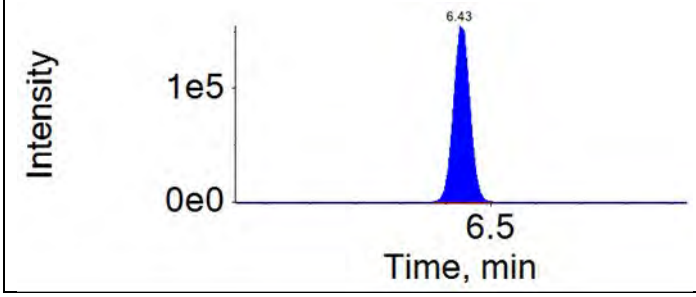


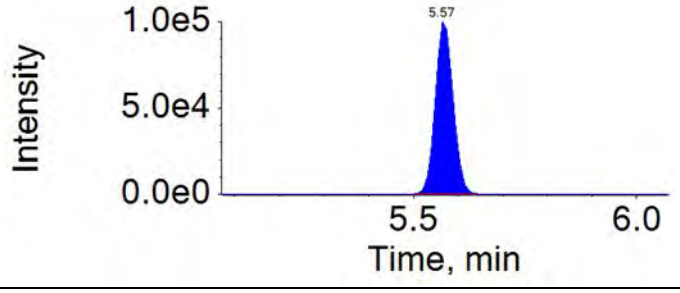
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



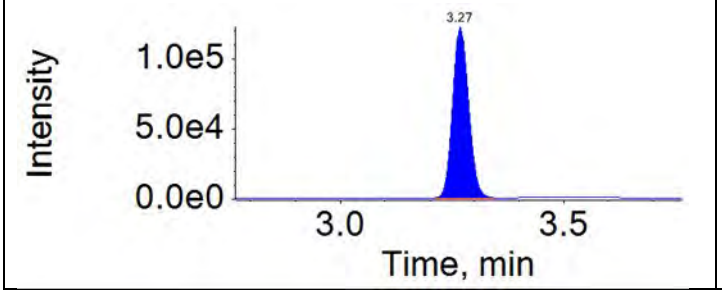


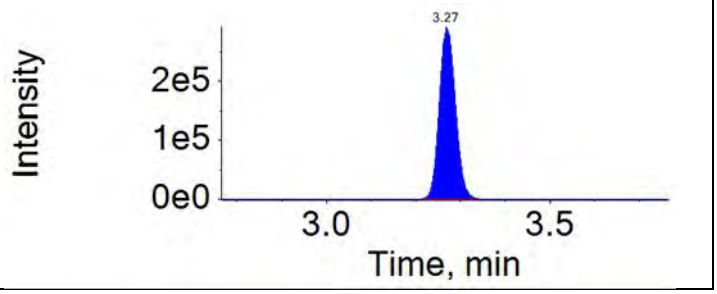
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

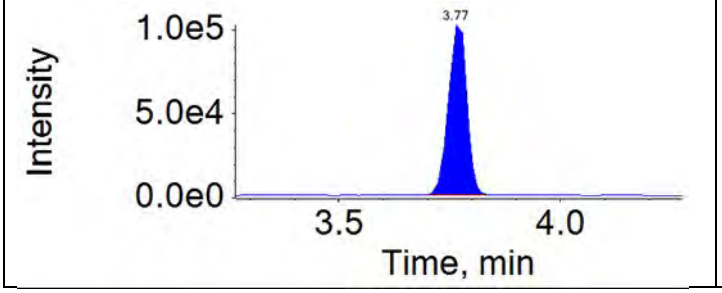
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

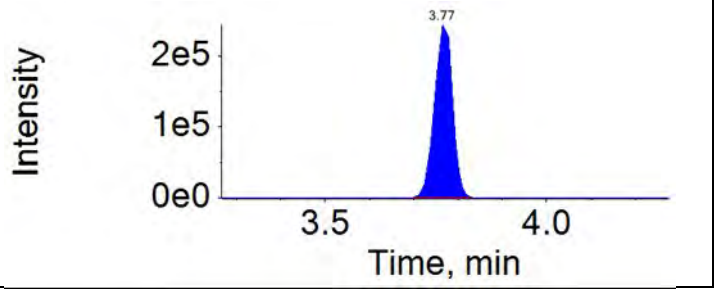
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



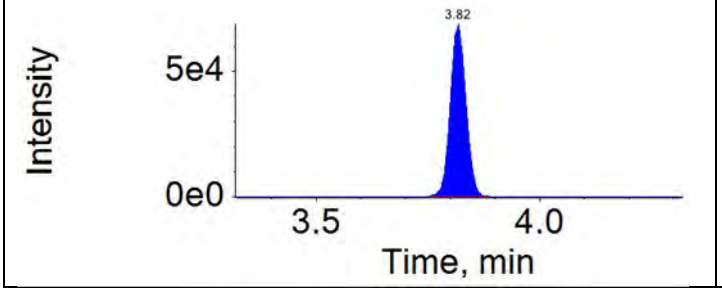


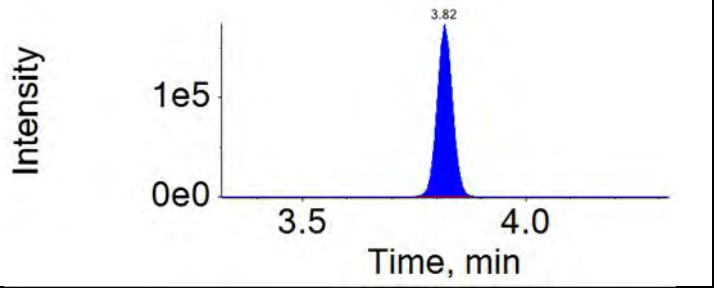
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



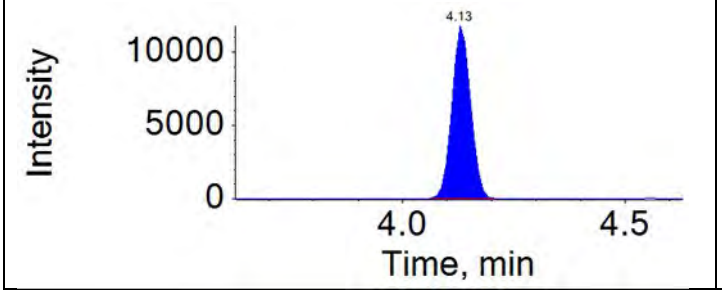


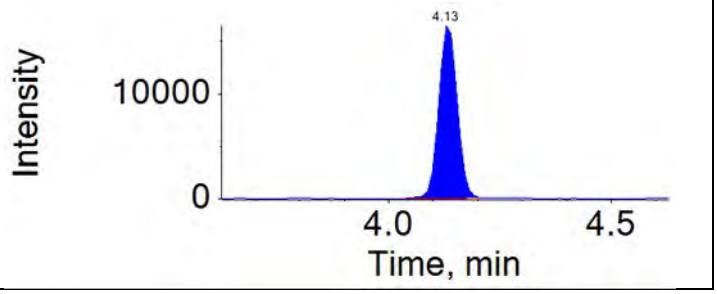
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



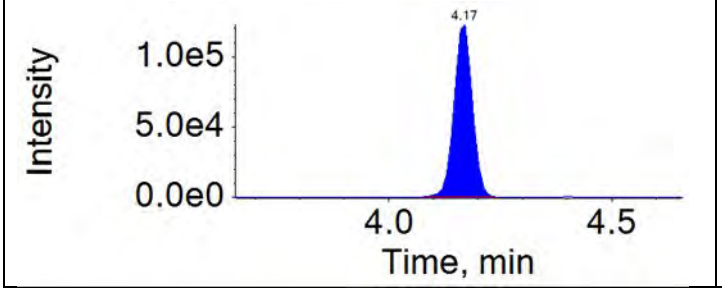


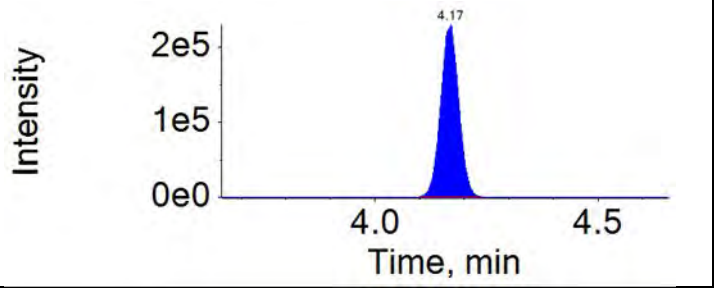
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

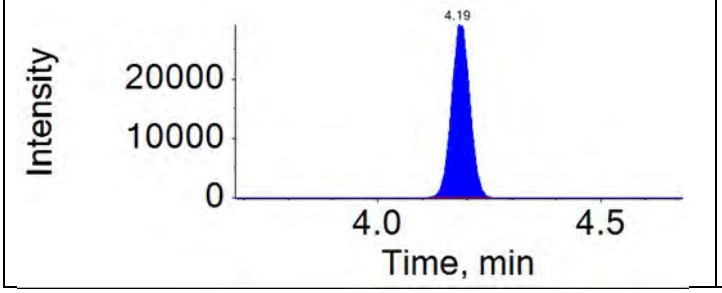
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

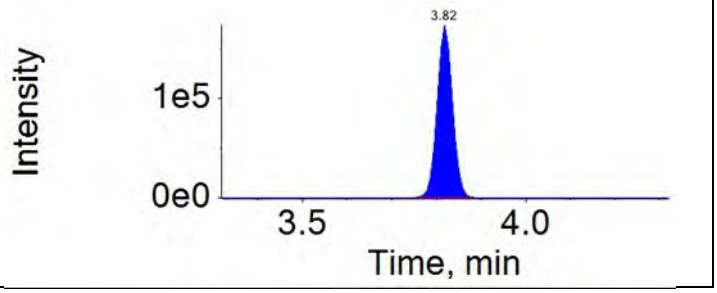
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



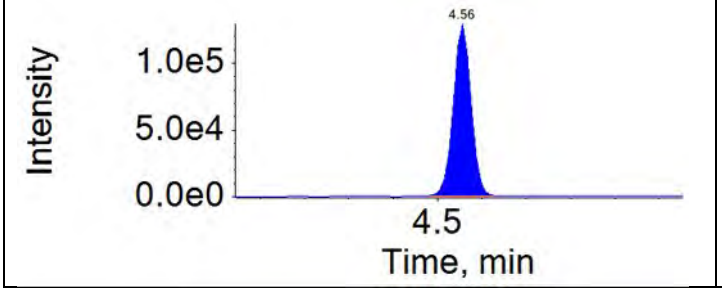


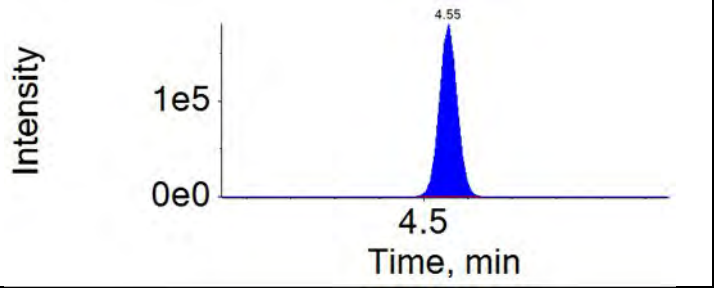
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



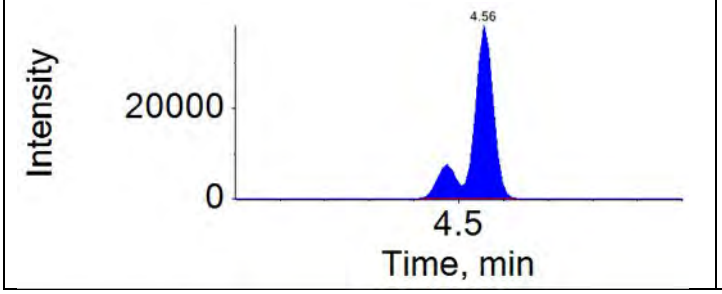


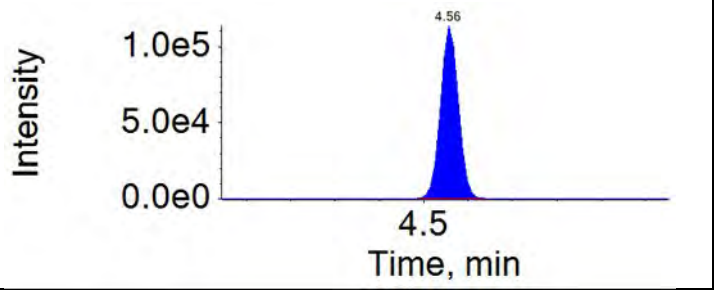
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



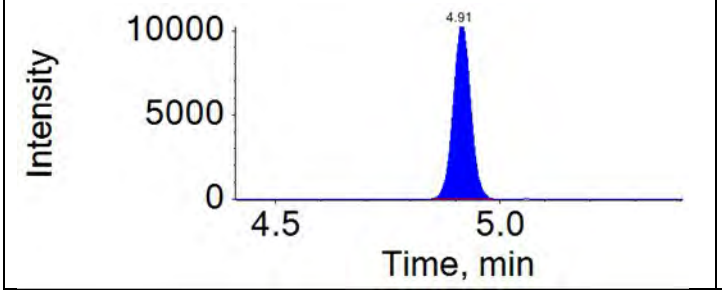


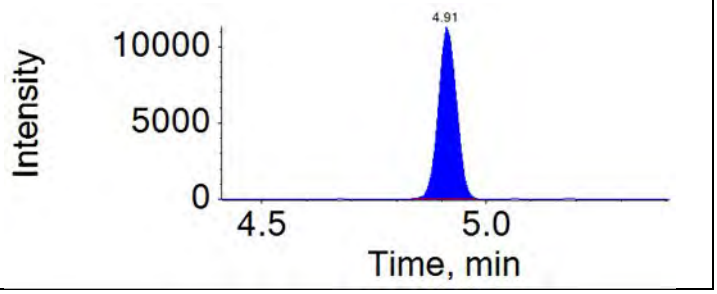
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

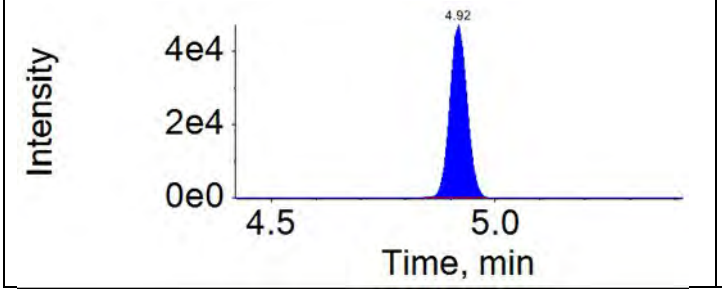
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

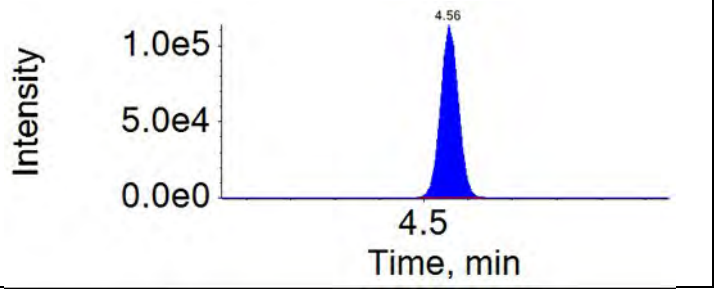
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



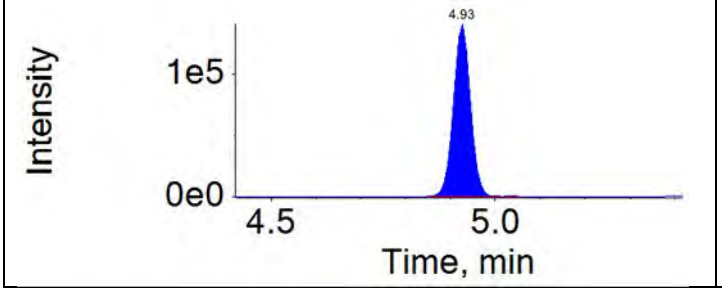


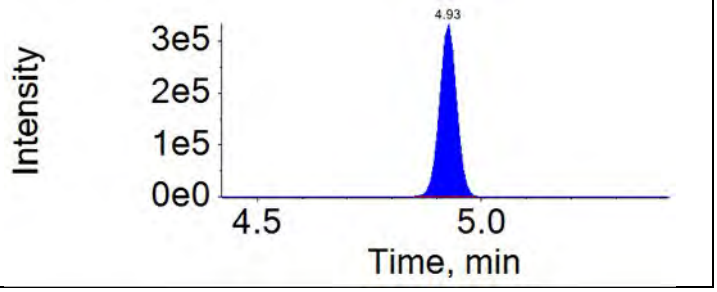
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



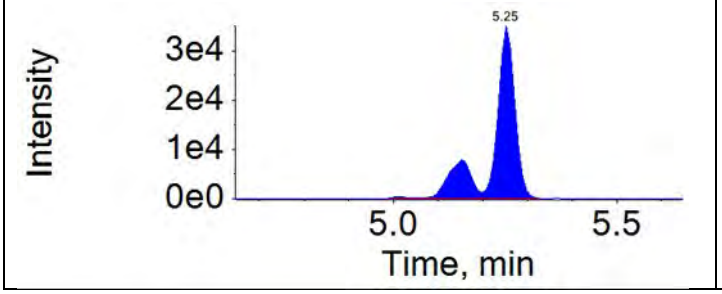


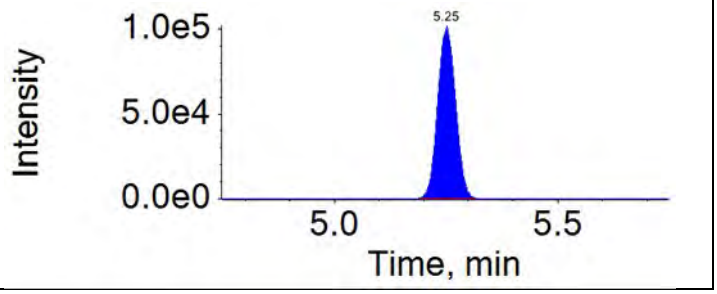
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



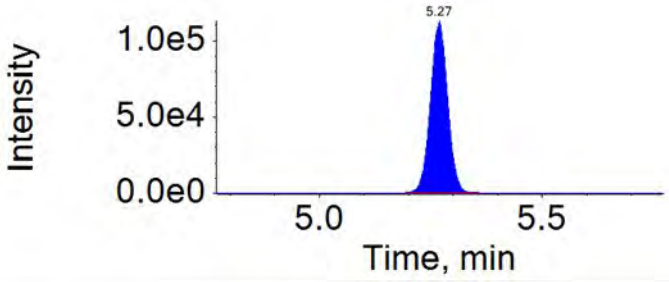


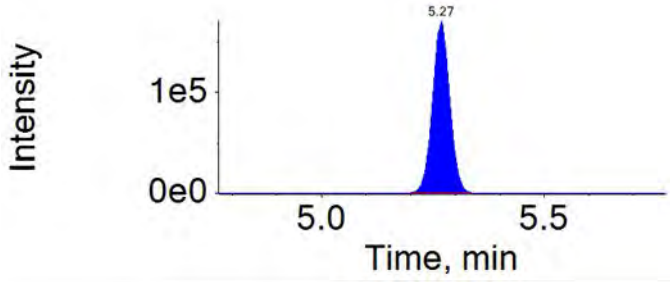
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

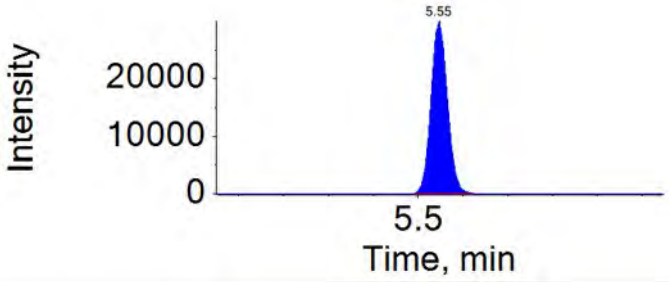
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

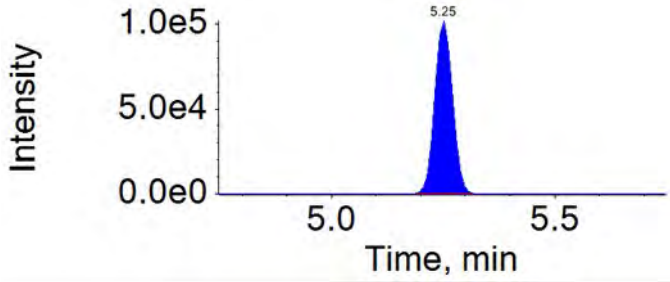
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



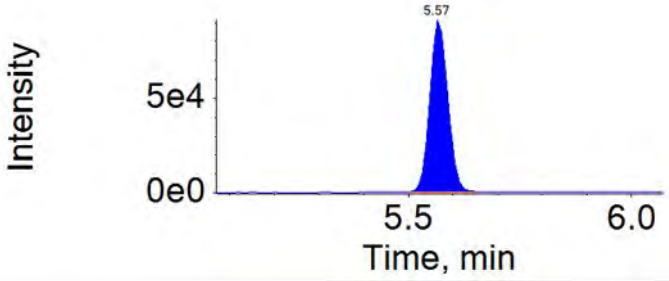


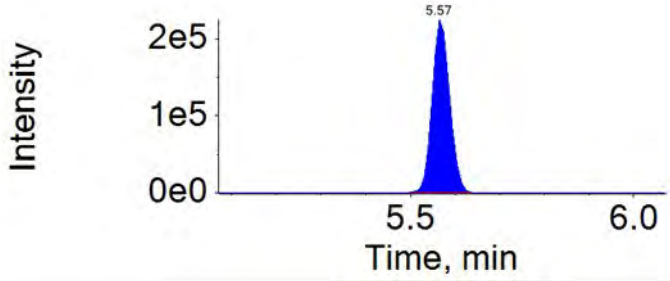
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



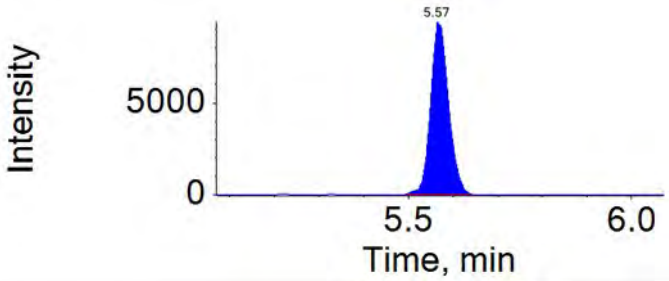


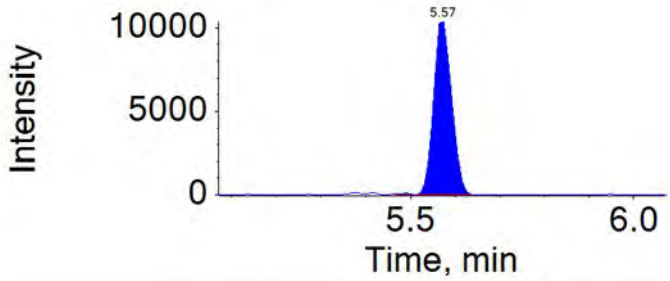
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



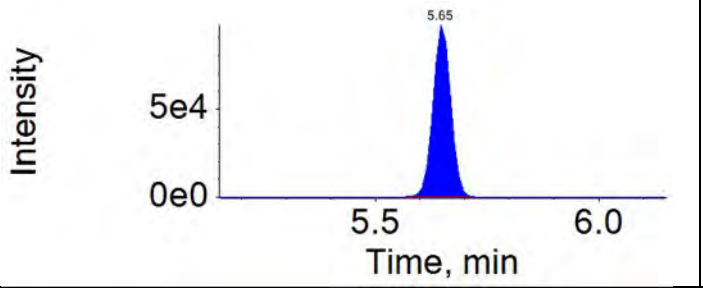


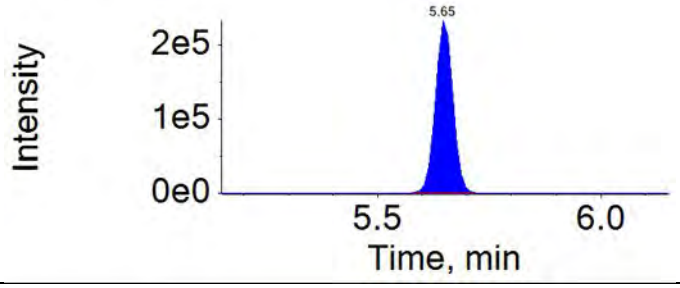
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

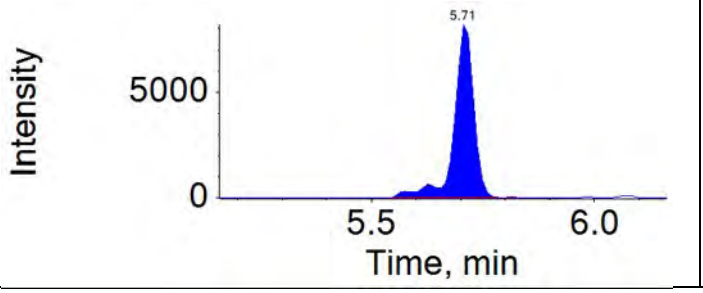
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

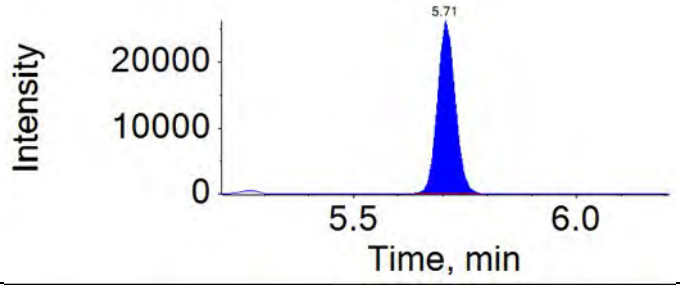
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



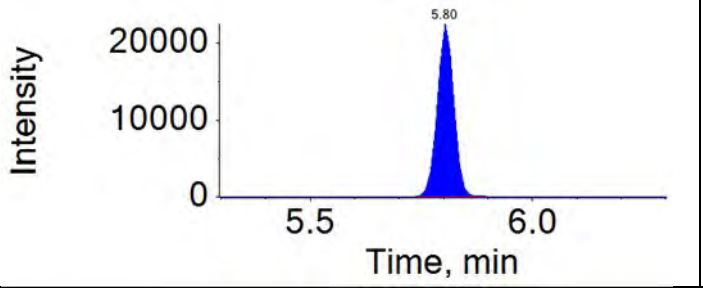


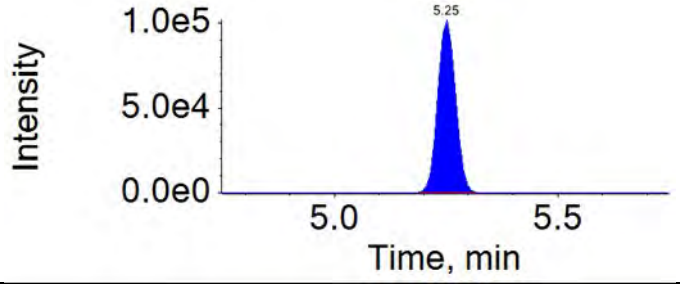
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



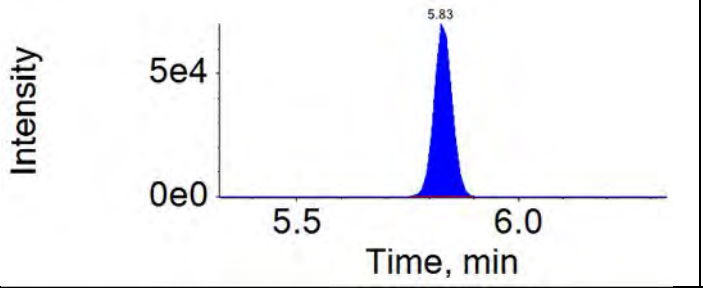


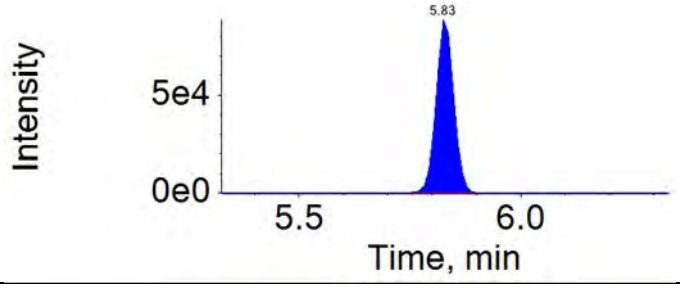
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



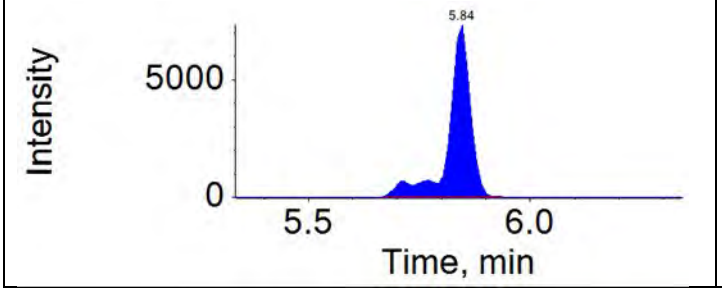


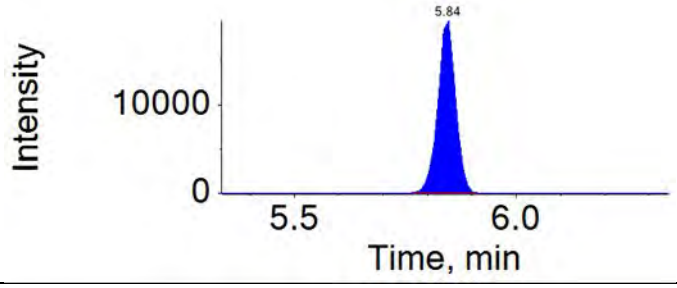
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

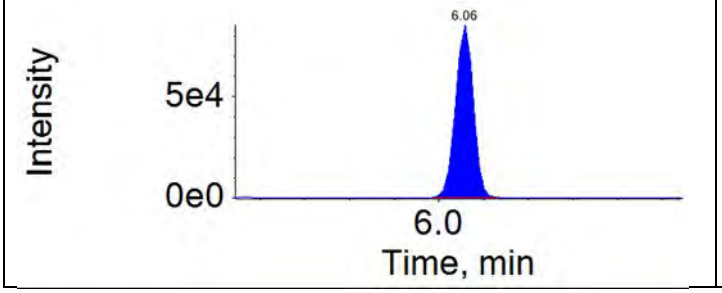
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

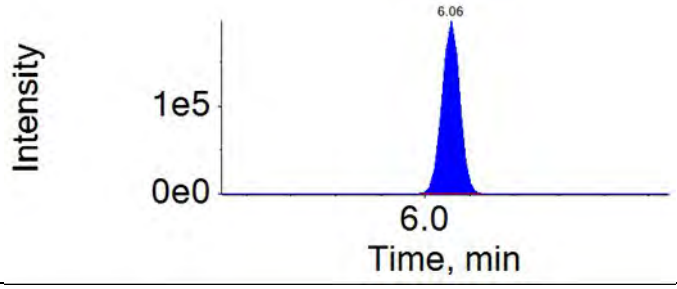
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



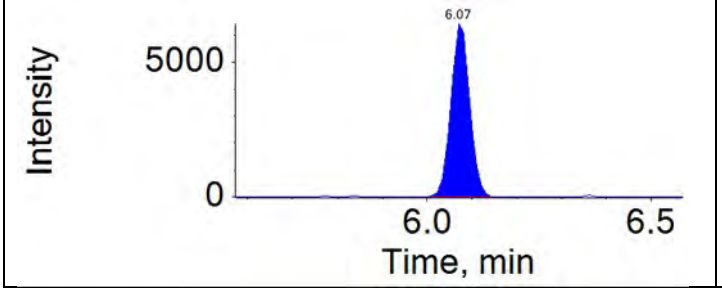


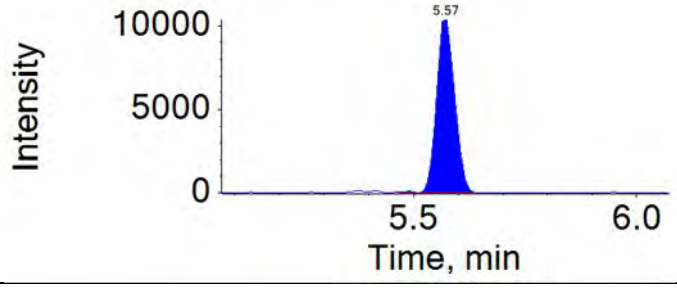
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



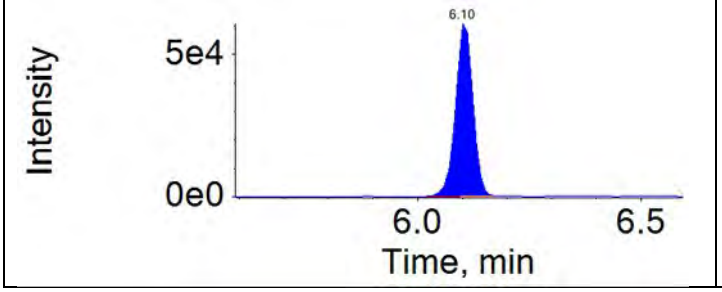


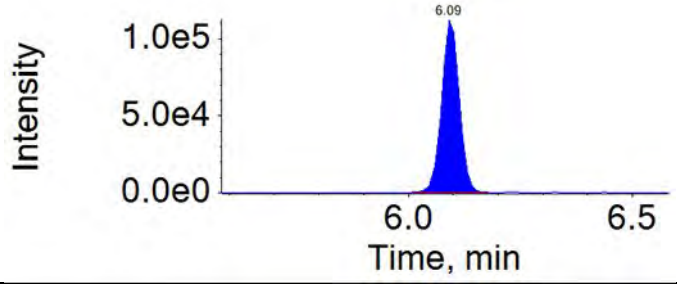
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



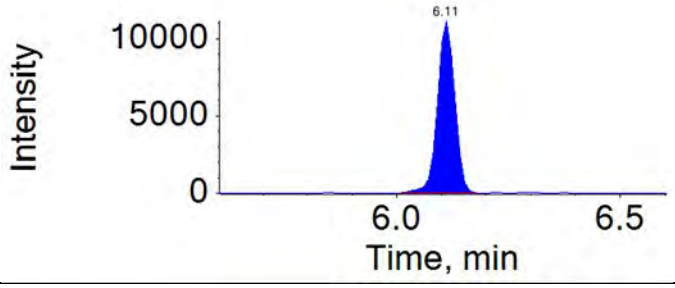


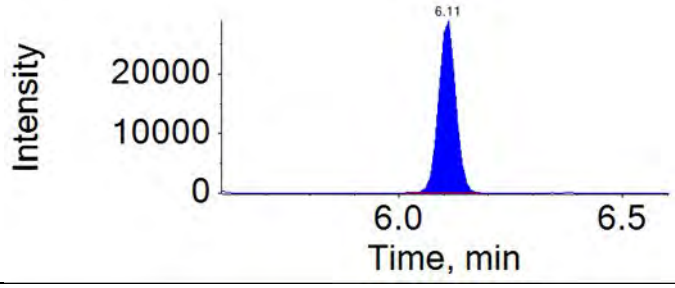
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

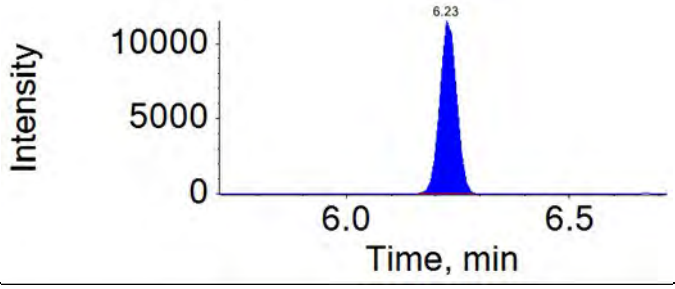
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

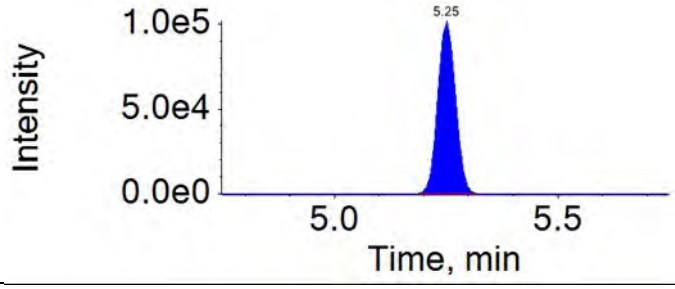
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



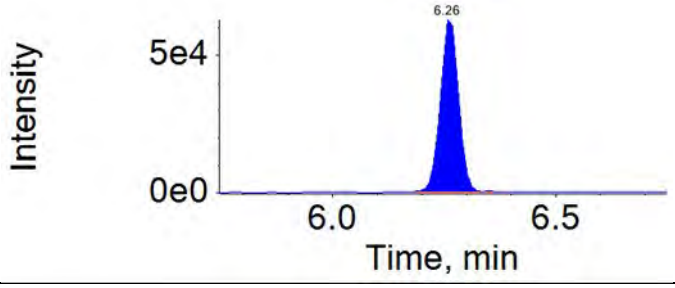


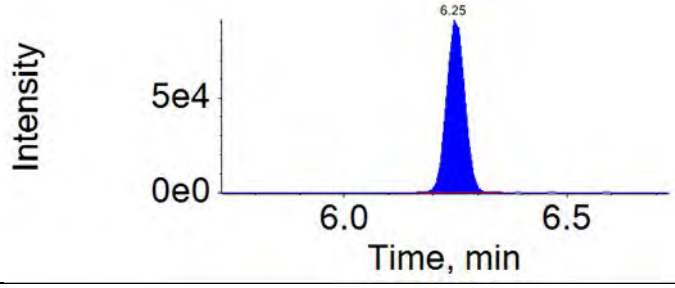
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



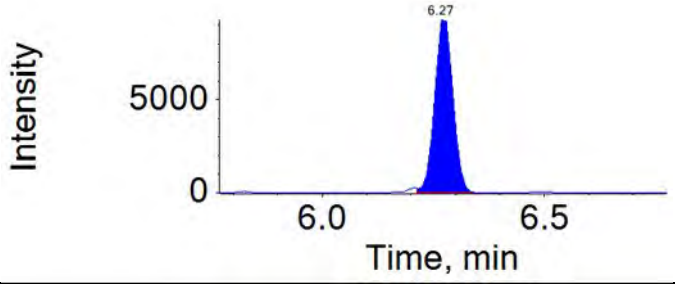


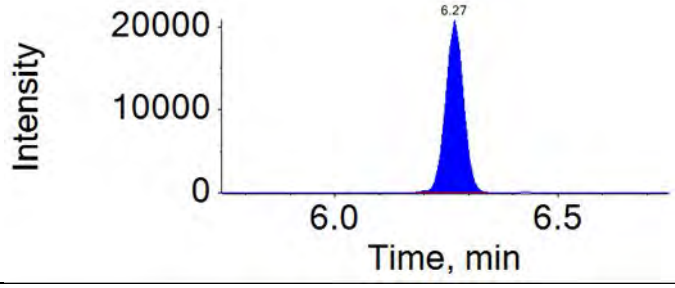
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

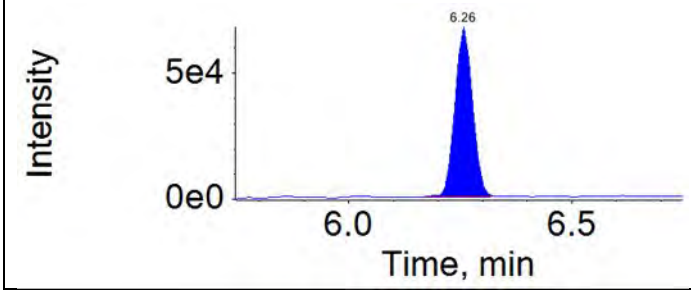
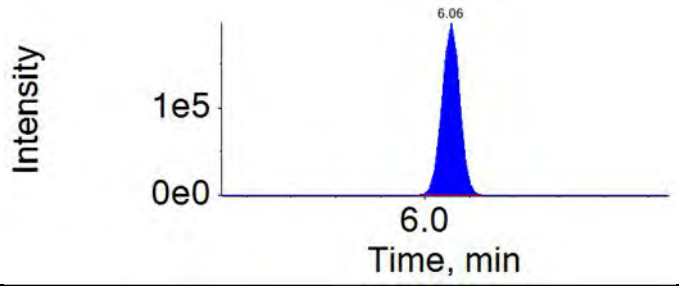


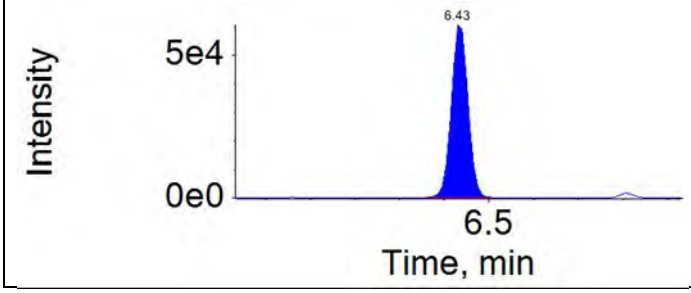
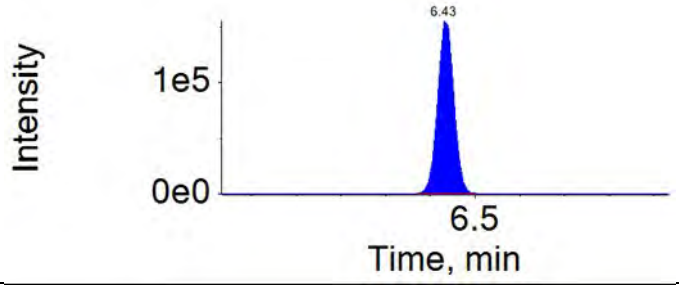


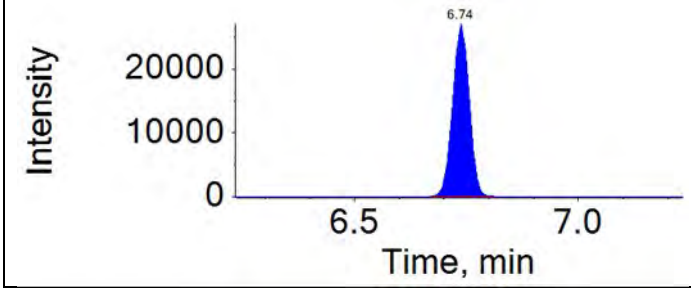
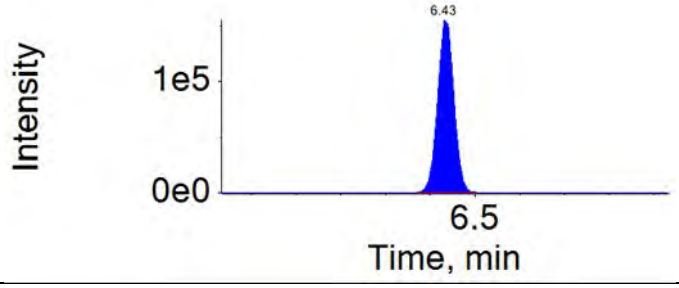
APPROVED
By MCD at 6:33 pm, 11/12/18

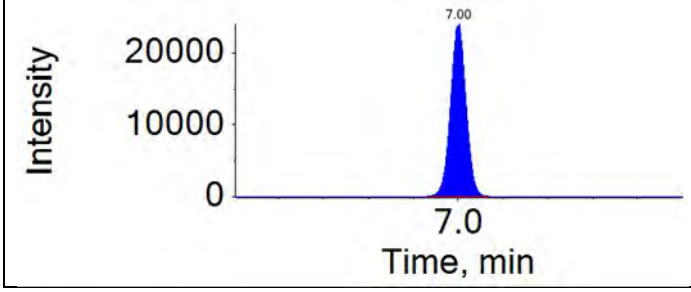
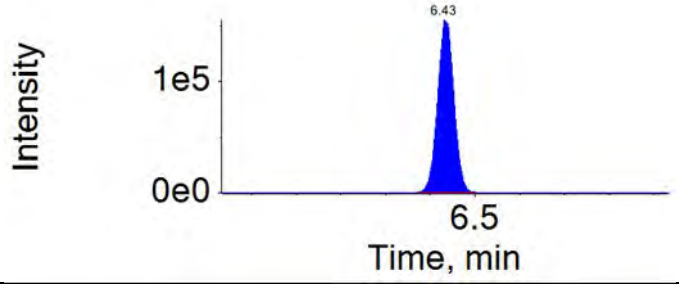
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

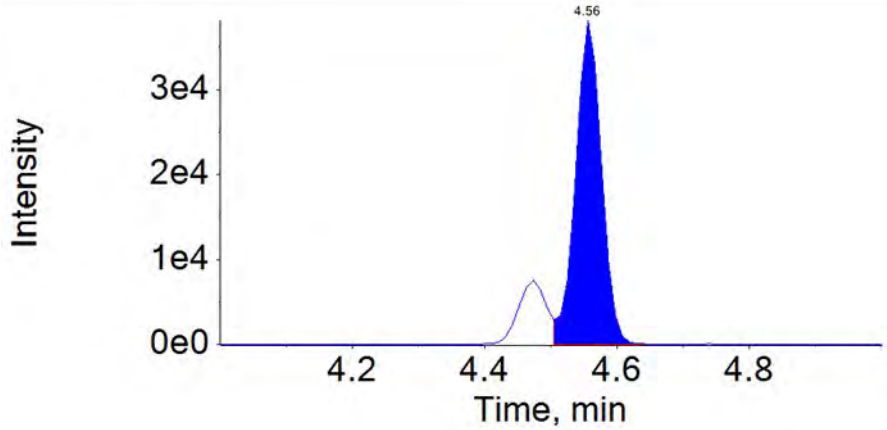
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

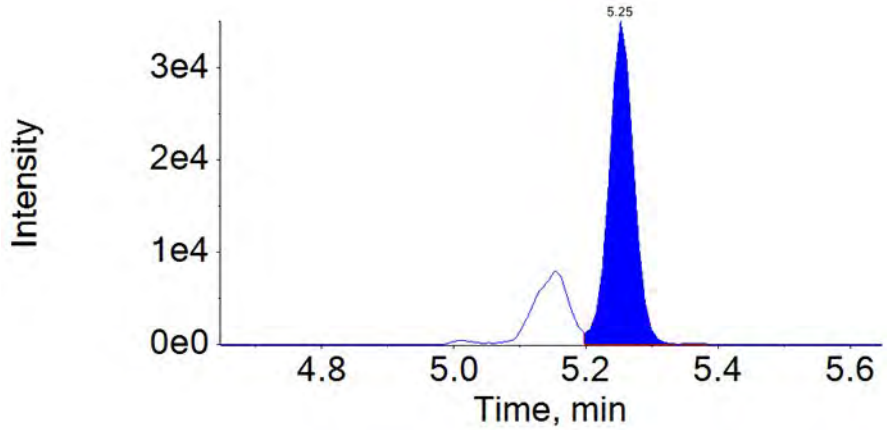
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.56
Peak Area:
103825.76
Mass Range:
399.0 / 80.0
File Name:
18NOV12DCAL-44.wiff
Sample Name:
CAL3



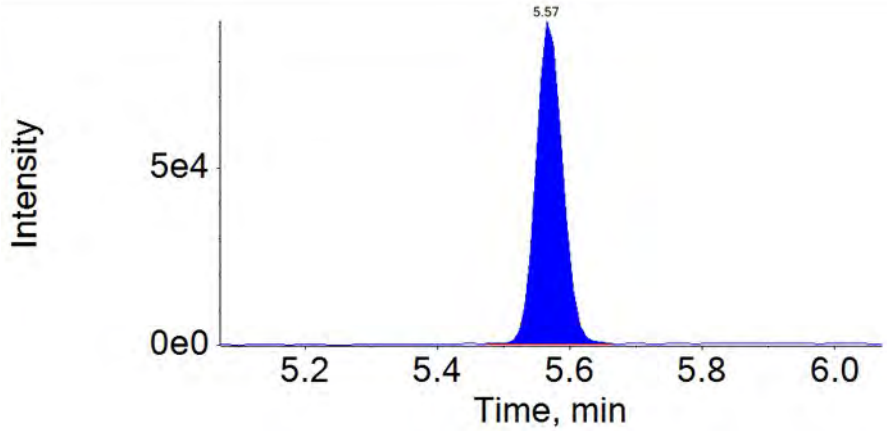
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
90727.07
Mass Range:
499.0 / 80.0
File Name:
18NOV12DCAL-44.wiff
Sample Name:
CAL3



Integration Comment: incorrect integration

Component Name:
PFDA
RT (min.):
5.57
Peak Area:
254529.84
Mass Range:
513.0 / 469.0
File Name:
18NOV12DCAL-44.wiff
Sample Name:
CAL3



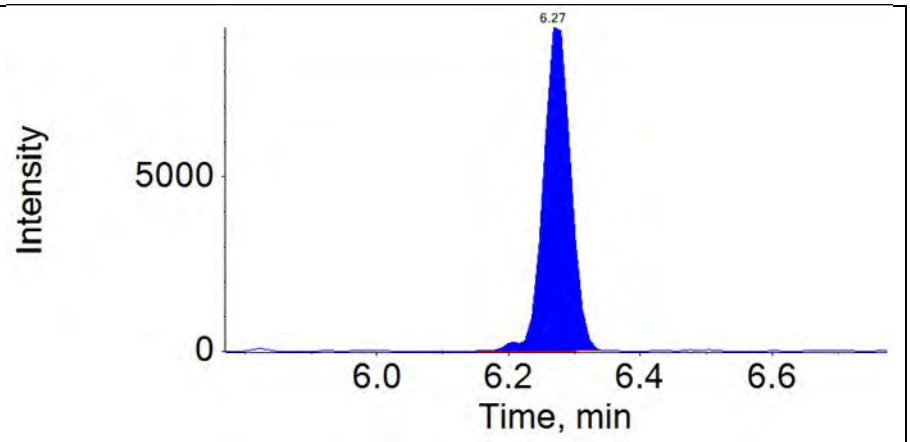
Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

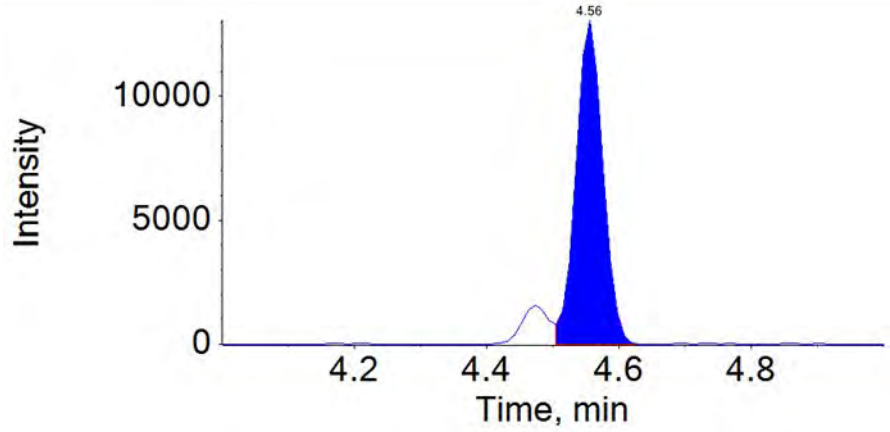
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NEtPFOSA
RT (min.):
6.27
Peak Area:
26985.34
Mass Range:
526.0 / 169.0
File Name:
18NOV12DCAL-44.wiff
Sample Name:
CAL3



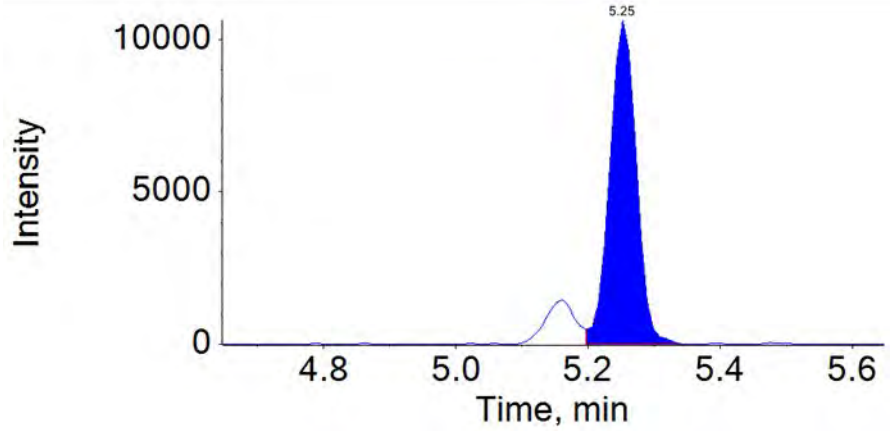
Integration Comment: incorrect integration

Component Name:
PFHxS_2
RT (min.):
4.56
Peak Area:
37027.02
Mass Range:
399.0 / 99.0
File Name:
18NOV12DCAL-44.wiff
Sample Name:
CAL3



Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.25
Peak Area:
29768.90
Mass Range:
499.0 / 99.0
File Name:
18NOV12DCAL-44.wiff
Sample Name:
CAL3



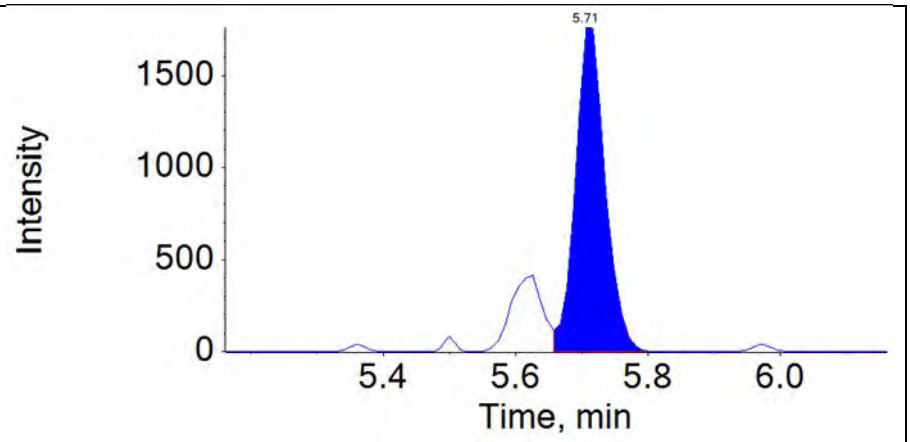
Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

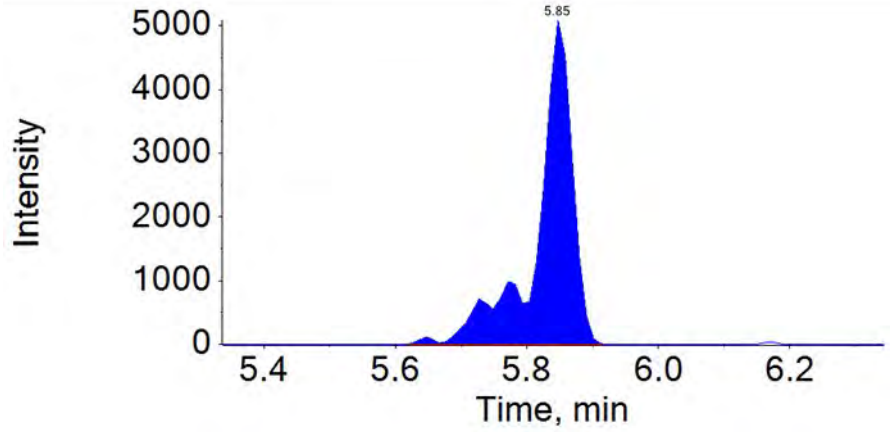
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NMeFOSAA_2
RT (min.):
5.71
Peak Area:
5548.71
Mass Range:
570.0 / 483.0
File Name:
18NOV12DCAL-44.wiff
Sample Name:
CAL3



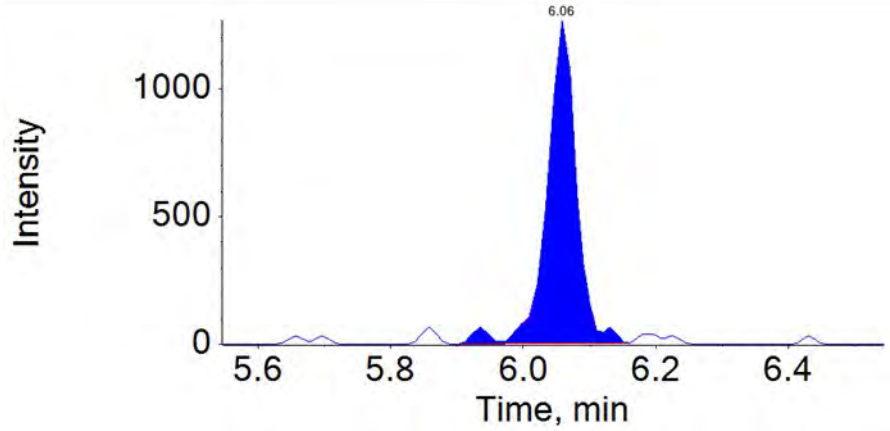
Integration Comment: incorrect integration

Component Name:
NEtFOSAA_2
RT (min.):
5.85
Peak Area:
19243.29
Mass Range:
584.0 / 526.0
File Name:
18NOV12DCAL-44.wiff
Sample Name:
CAL3



Integration Comment: incorrect integration

Component Name:
PFDoDA_2
RT (min.):
6.06
Peak Area:
3956.45
Mass Range:
613.0 / 169.0
File Name:
18NOV12DCAL-44.wiff
Sample Name:
CAL3



Integration Comment: incorrect integration

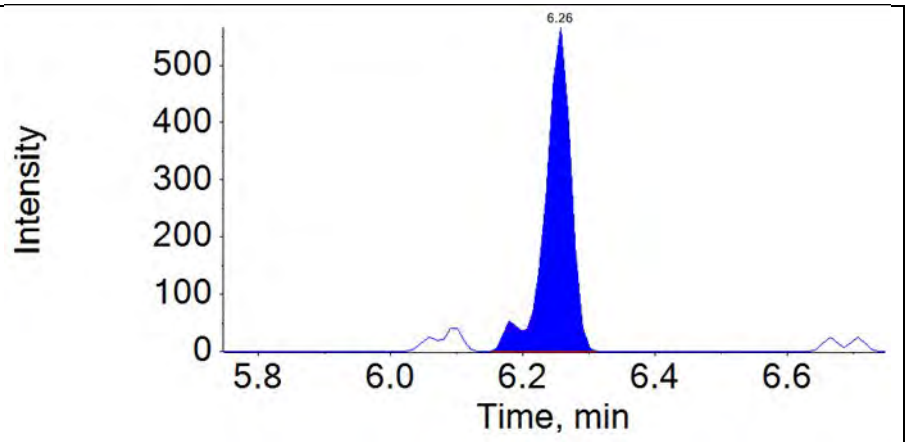
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFTrDA_2
RT (min.):
6.26
Peak Area:
1527.41
Mass Range:
663.0 / 169.0
File Name:
18NOV12DCAL-44.wiff
Sample Name:
CAL3



Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

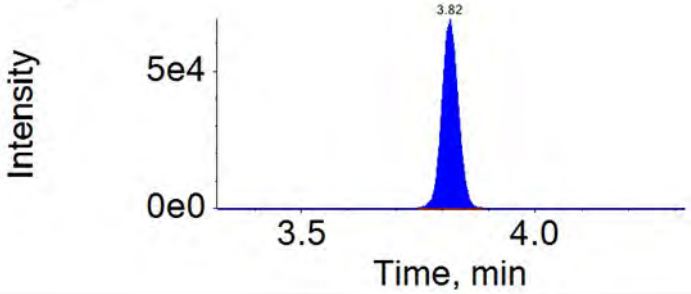
Sample Name: CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-44.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	168144.64	A	0.3619	0.3569			
PFBS_2	3.82	1.00	60008.36	A	0.3619	0.3569	-1	50	
4:2-FTS	4.13	1.00	34188.48	A	0.6730	0.6730			
4:2 FTS_2	4.13	1.00	23007.23	A	0.6730	0.6730		#NA!	
PFHxA	4.17	1.00	352013.45	A	0.0117	0.0120			
PFHxA_2	4.17	1.00	4207.12	A	0.0117	0.0120	3	50	
PFPeS	4.19	1.10	84071.24	A	0.5191	0.5304			
PFPeS_2	4.19	1.10	44592.70	A	0.5191	0.5304	2	50	
PFHpA	4.56	1.00	355834.18	A	0.0563	0.0619			
PFHpA_2	4.55	1.00	22030.36	A	0.0563	0.0619	10	50	
PFHxS	4.56	1.00	125622.02	M	0.3428	0.3304			
PFHxS_2	4.56	1.00	41506.57	M	0.3428	0.3304	-4	50	
6:2-FTS	4.91	1.00	28084.91	A	0.6604	0.7337			
6:2 FTS_2	4.91	1.00	20606.67	A	0.6604	0.7337		#NA!	
PFHpS	4.92	1.08	125907.86	A	0.4066	0.3838			
PFHpS_2	4.92	1.08	48327.03	A	0.4066	0.3838	-6	50	
PFOA	4.93	1.00	372258.90	A	0.0562	0.0567			
PFOA_2	4.92	1.00	21118.14	A	0.0562	0.0567	1	50	
PFOS	5.25	1.00	120897.45	M	0.2968	0.2842			
PFOS_2	5.25	1.00	34361.90	M	0.2968	0.2842	-4	50	
PFNA	5.27	1.00	302323.82	A	0.0229	0.0192			
PFNA_2	5.28	1.00	5790.58	A	0.0229	0.0192	-16	50	
PFNS	5.55	1.06	76049.00	A	0.4828	0.4502			
PFNS_2	5.54	1.06	34233.54	A	0.4828	0.4502	-7	50	
PFDA	5.57	1.00	254047.79	M	0.0081	0.0044			
PFDA_2	5.56	1.00	1125.96	A	0.0081	0.0044	-45	50	
8:2-FTS	5.57	1.00	26295.08	A	0.6814	0.5850			
8:2 FTS_2	5.57	1.00	15383.41	A	0.6814	0.5850		#NA!	
NMeFOSAA	5.71	1.00	25147.65	A	0.2569	0.2754			
NMeFOSAA_2	5.71	1.00	6926.51	M	0.2569	0.2754	7	50	
PFDS	5.80	1.11	57966.88	A	0.5144	0.5358			
PFDS_2	5.80	1.11	31061.10	A	0.5144	0.5358	4	50	
PFUnDA	5.83	1.00	199061.83	A	0.0058	0.0049			
PFUnDA_2	5.83	1.00	975.19	A	0.0058	0.0049	-16	50	
NEtFOSAA	5.84	1.00	25089.02	A	0.7253	0.7602			
NEtFOSAA_2	5.85	1.00	19071.96	M	0.7253	0.7602	5	50	
PFDoDA	6.06	1.00	237252.63	A	0.0157	0.0159			
PFDoDA_2	6.06	1.00	3761.16	M	0.0157	0.0159	1	50	
10:2-FTS	6.07	1.09	18541.69	A	0.6356	0.6613			
10:2 FTS_2	6.08	1.09	12260.75	A	0.6356	0.6613		#NA!	
PFTrDA	6.26	1.03	184322.87	A	0.0086	0.0079			
PFTrDA_2	6.26	1.03	1447.70	M	0.0086	0.0079	-8	50	
PFTeDA	6.43	1.00	156439.94	A	0.0062	0.0065			
PFTeDA_2	6.44	1.00	1023.07	A	0.0062	0.0065	5	50	
PFHxDA	6.74	1.05	69655.07	A	0.0683	0.0690			
PFHxDA_2	6.74	1.05	4808.92	A	0.0683	0.0690	1	50	
PFODA	7.00	1.09	57795.96	A	0.0277	0.0253			
PFODA_2	7.00	1.09	1464.82	A	0.0277	0.0253	-9	50	

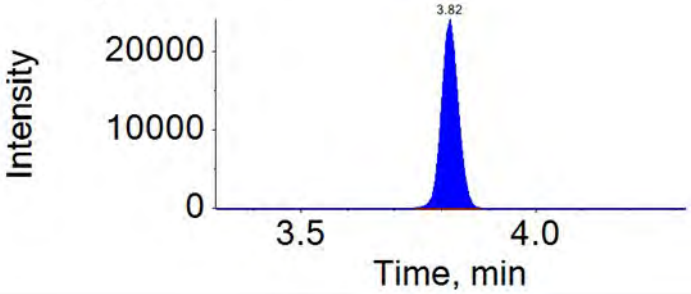
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

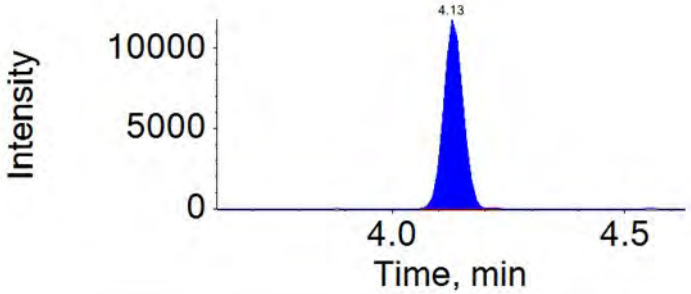
Component: PFBS
Primary Mass: 299.0 / 80.0



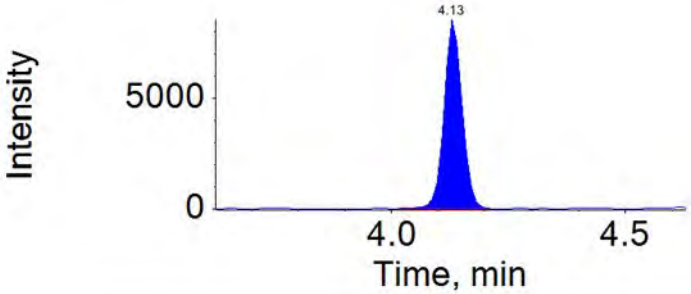
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



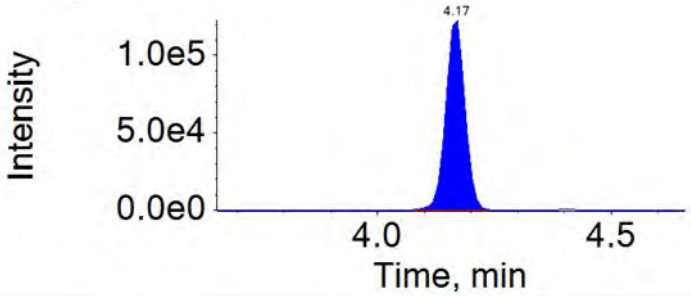
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



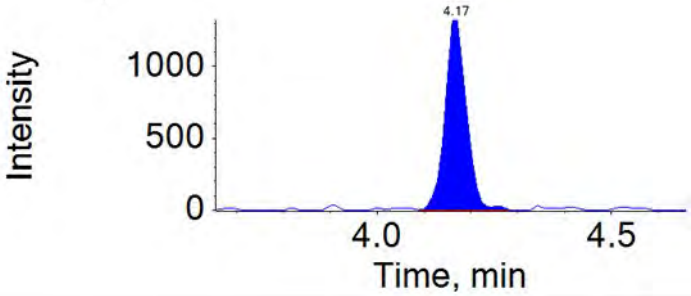
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



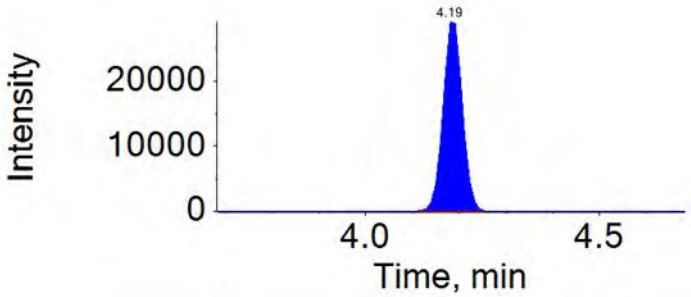
Component: PFHxA
Primary Mass: 313.0 / 269.0



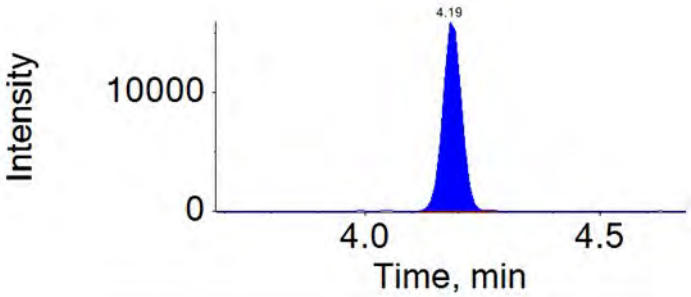
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



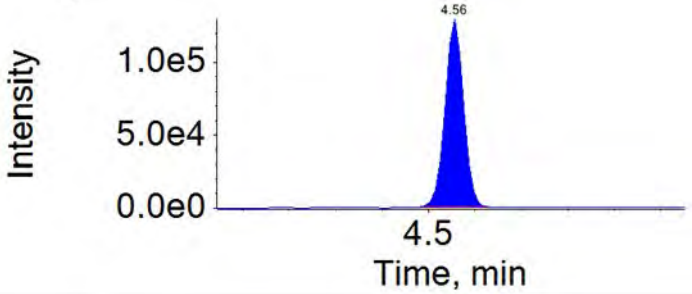
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



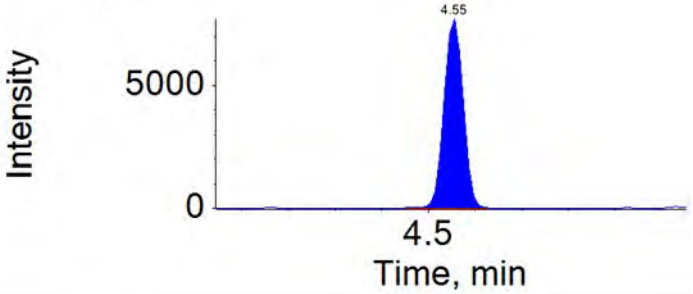
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

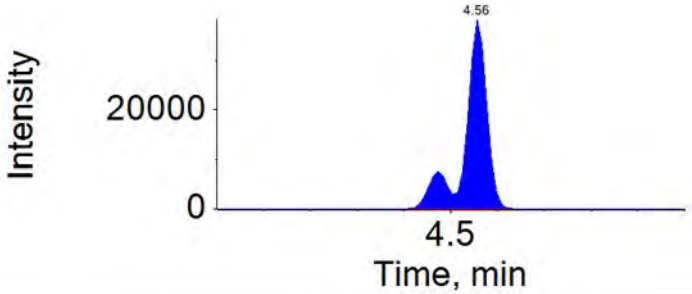
Component: PFHpA
Primary Mass: 363.0 / 319.0



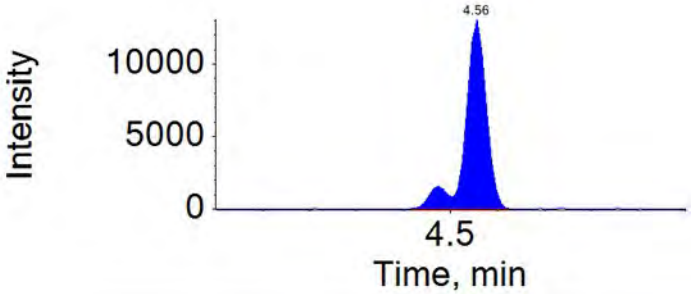
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



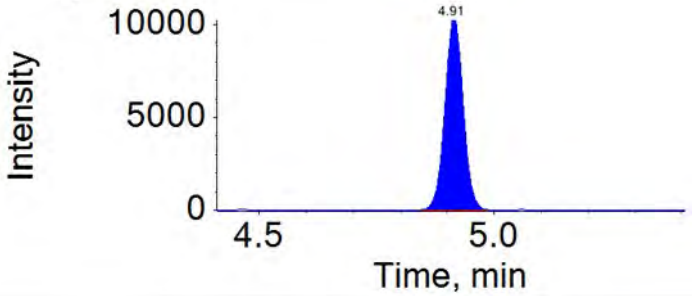
Component: PFHxS
Primary Mass: 399.0 / 80.0



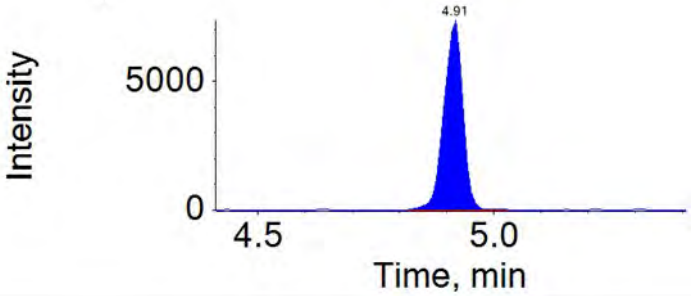
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



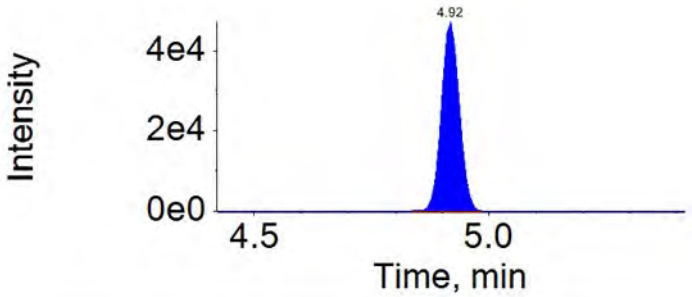
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



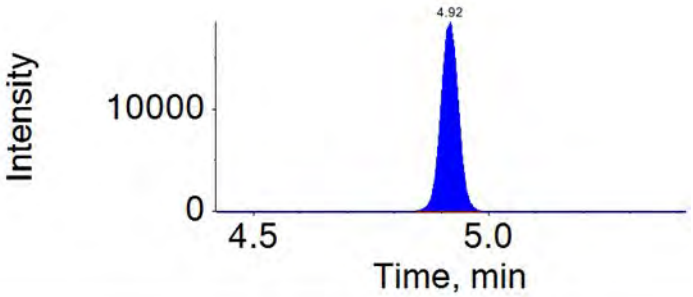
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



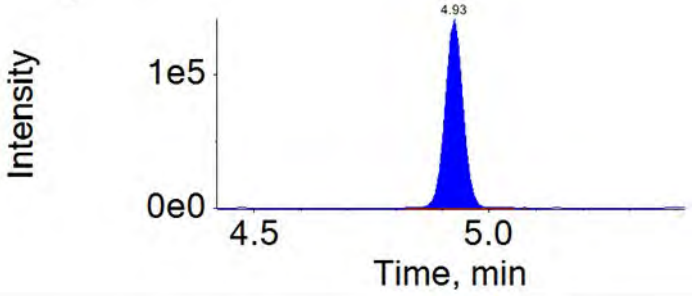
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



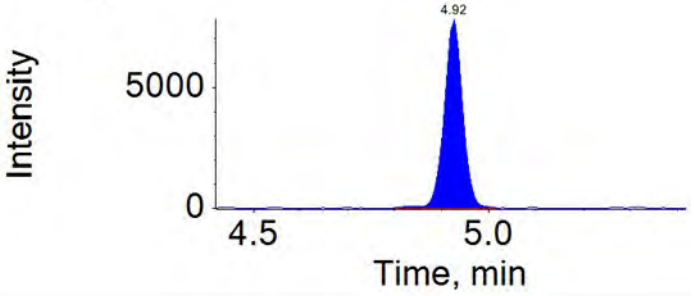
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

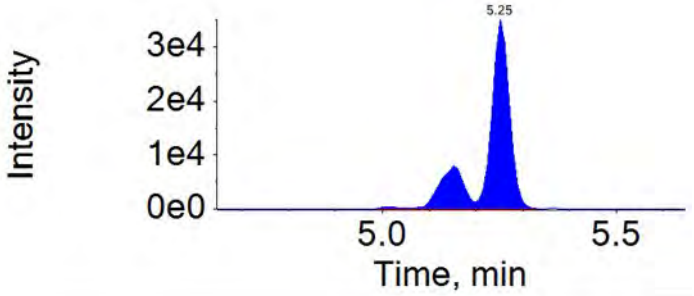
Component: PFOA
Primary Mass: 413.0 / 369.0



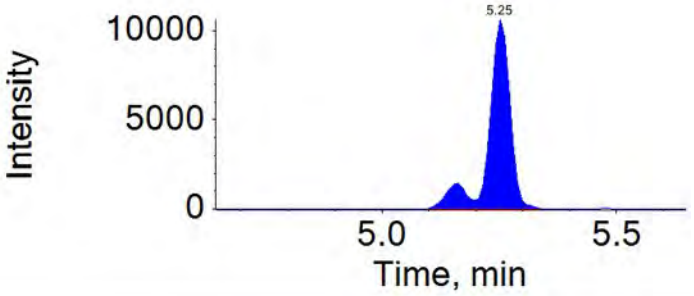
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



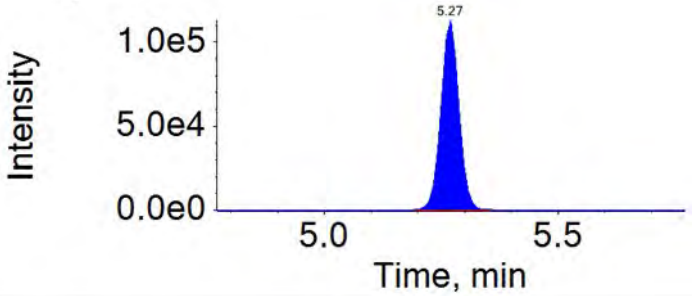
Component: PFOS
Primary Mass: 499.0 / 80.0



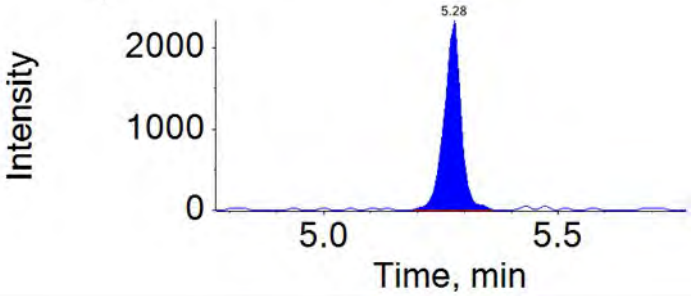
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Secondary Mass: 499.0 / 99.0



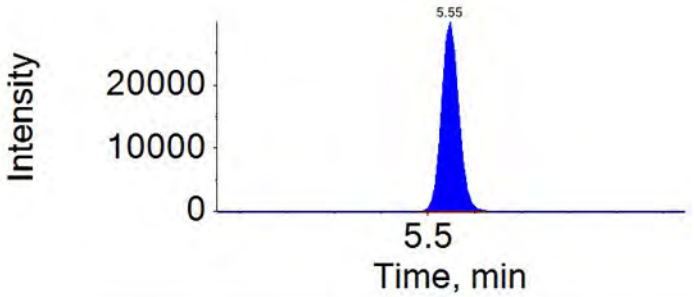
Component: PFNA
Primary Mass: 463.0 / 419.0



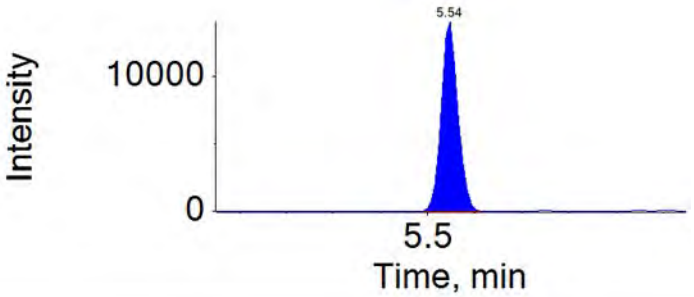
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



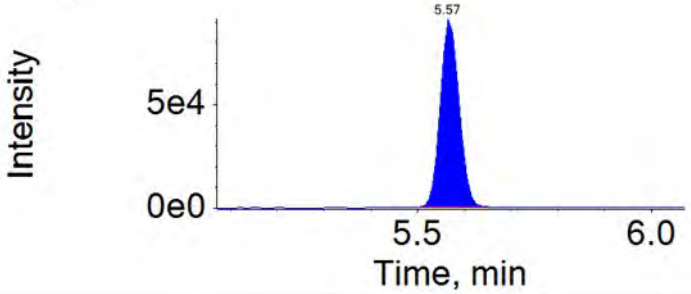
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



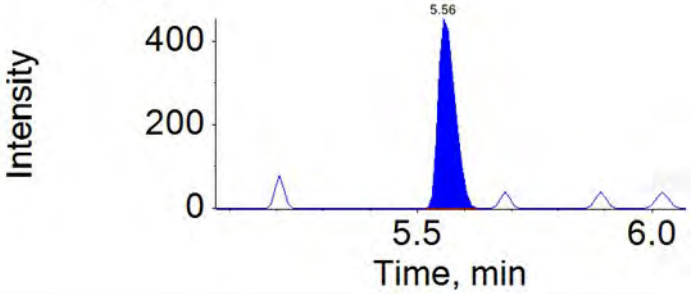
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

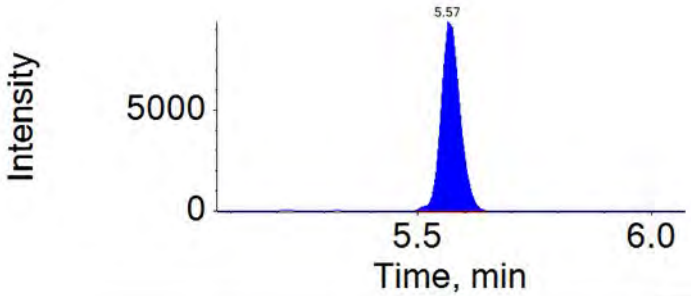
Component: PFDA
Primary Mass: 513.0 / 469.0



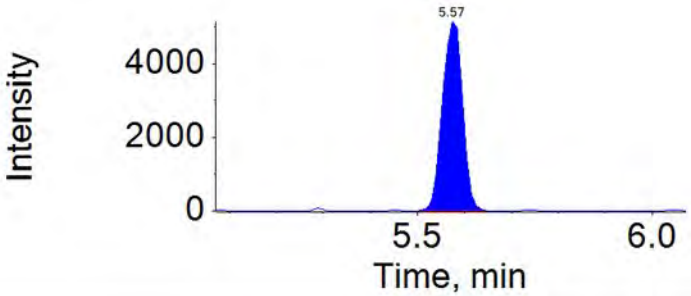
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Secondary Mass: 513.0 / 169.0



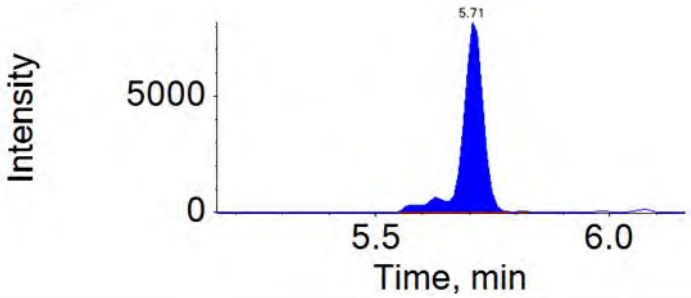
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



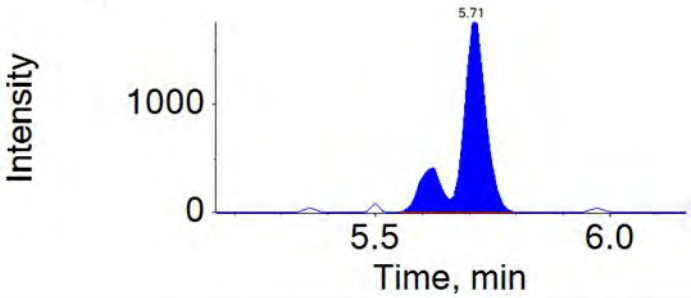
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



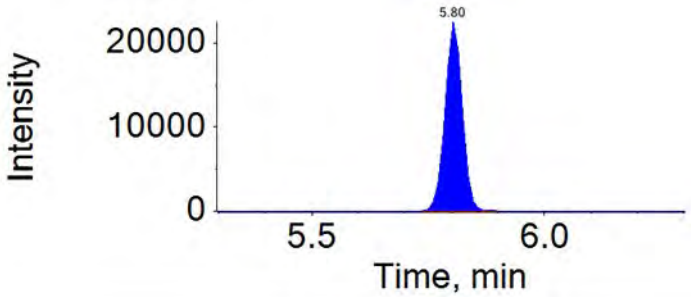
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



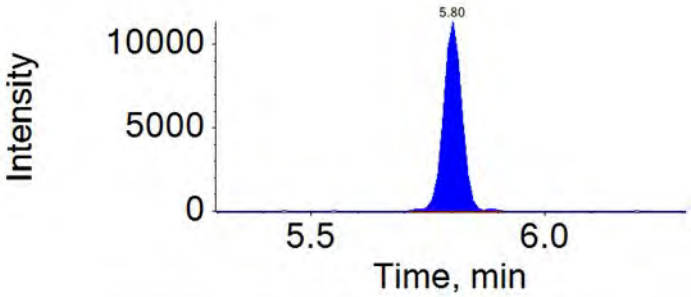
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



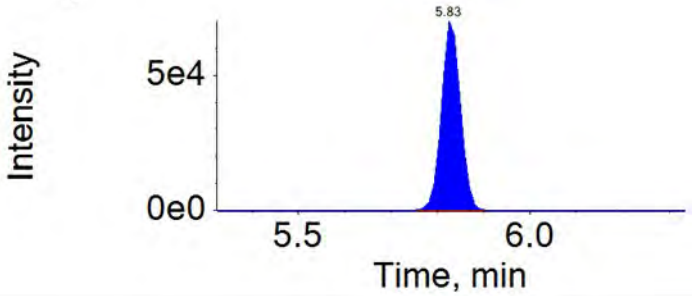
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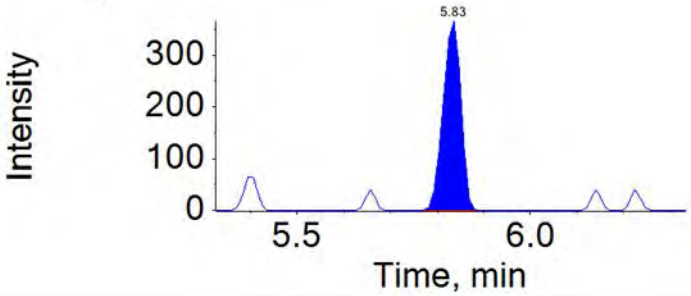
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

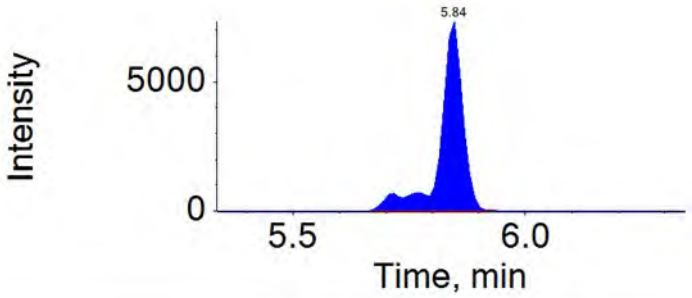
Component: PFUnDA
Primary Mass: 563.0 / 519.0



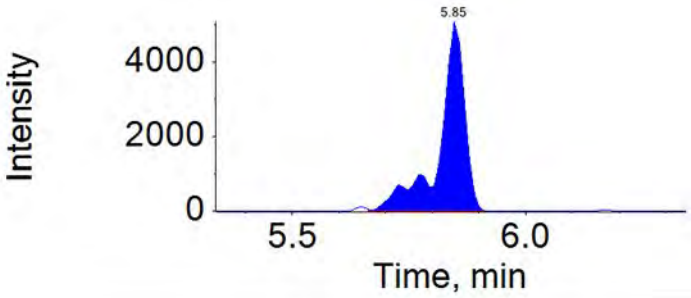
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Secondary Mass: 563.0 / 169.0



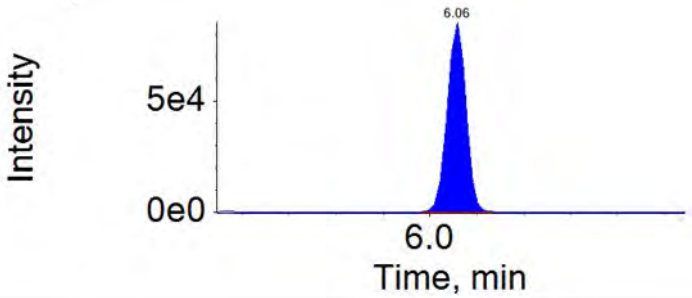
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



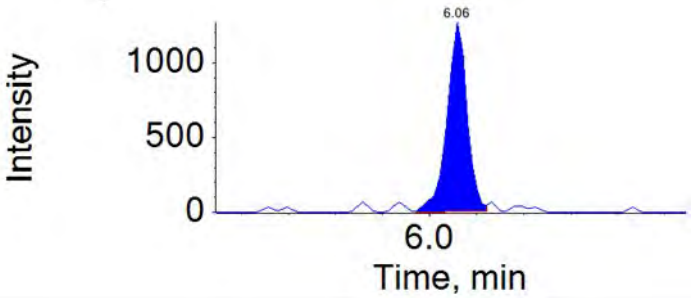
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



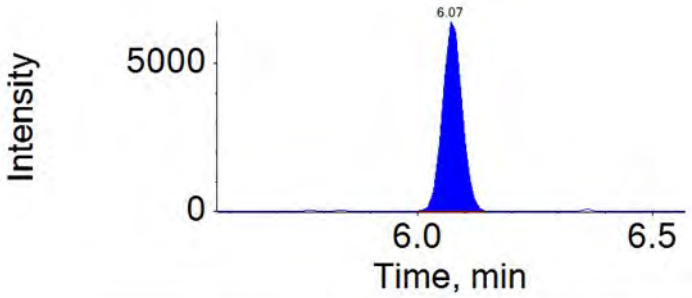
Component: PFDoDA
Primary Mass: 613.0 / 569.0



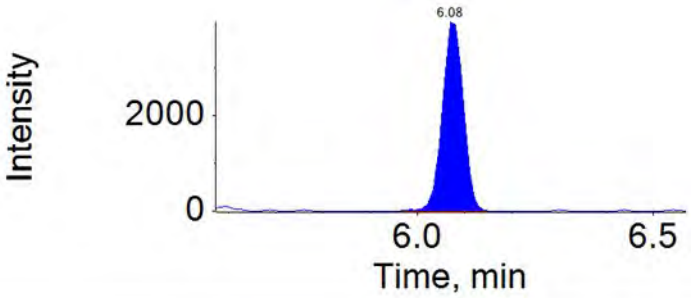
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



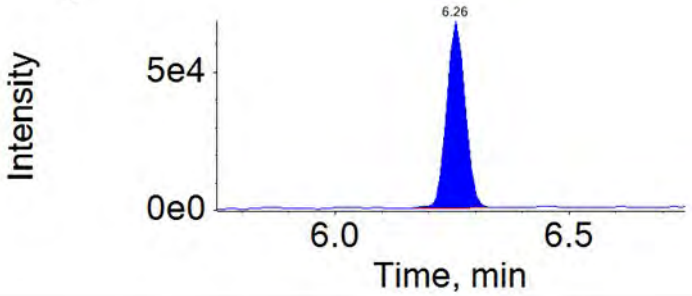
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



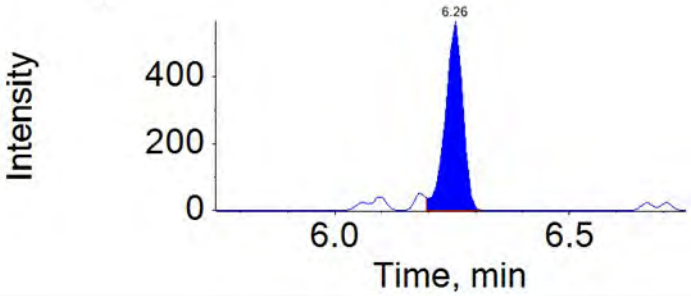
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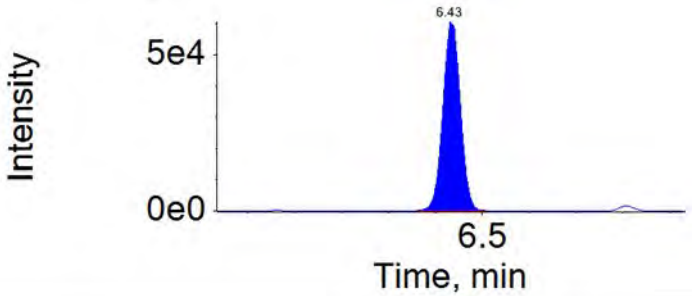
Component: PFTrDA
Primary Mass: 663.0 / 619.0



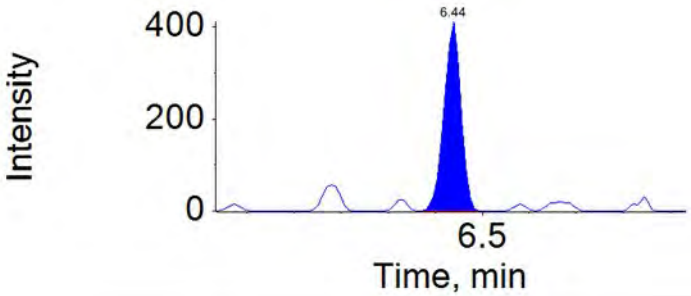
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



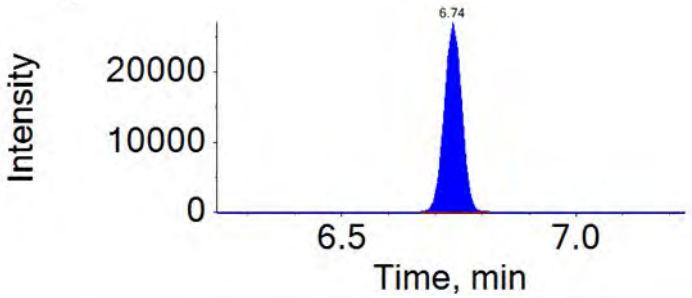
Component: PFTeDA
Primary Mass: 713.0 / 669.0



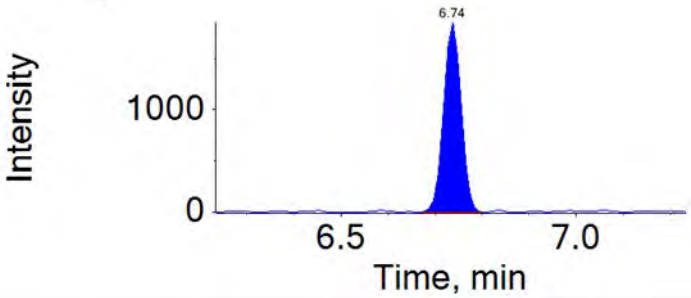
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



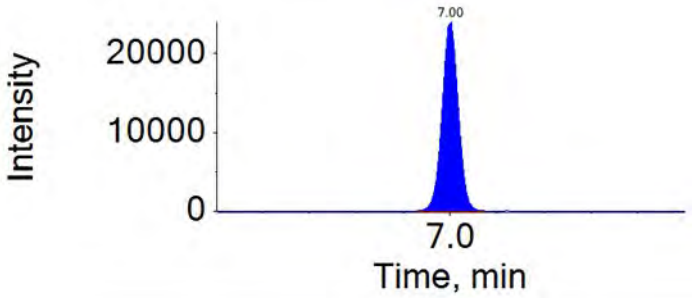
Component: PFHxDA
Primary Mass: 813.0 / 769.0



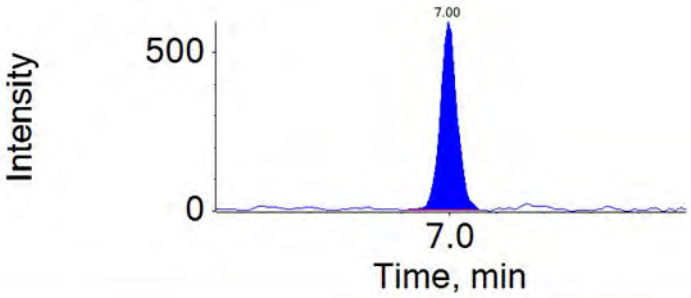
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL4			**Data File:**		18NOV12DCAL-45.wiff
Sample ID:	CALBRN41833B			**Acquis Date:**		2018-11-12T15:33:03
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	6			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV12DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N\A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	671568.1	659926.2	2	50	
13C2-PFOA	5.0	477519.7	450219.7	6	50	
13C4-PFOS	4.8	256143.3	249205.8	3	50	
13C2-PFDA	5.0	301327.2	278743.9	8	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	726396.0	13C3-PFBA	671568.1	1.082	5.000	4.849	97	70-130	
E13C5-PFPeA	716206.9	13C3-PFBA	671568.1	1.066	5.000	4.783	96	70-130	
E13C3-PFBS	425015.7	13C3-PFBA	671568.1	0.633	4.650	4.468	96	70-130	
E13C2-4:2-FTS	47246.4	13C2-PFOA	477519.7	0.099	4.670	4.407	94	70-130	
E13C5-PFHxA	641195.9	13C2-PFOA	477519.7	1.343	5.000	4.851	97	70-130	
E13C3-PFHxS	315722.6	13C2-PFOA	477519.7	0.661	4.730	4.537	96	70-130	
E13C4-PFHpA	509151.8	13C2-PFOA	477519.7	1.066	5.000	4.804	96	70-130	
E13C2-6:2-FTS	31883.3	13C2-PFOA	477519.7	0.067	4.750	4.467	94	70-130	
E13C8-PFOA	863597.3	13C2-PFOA	477519.7	1.809	5.000	4.983	100	70-130	
E13C8-PFOS	267380.8	13C4-PFOS	256143.3	1.044	4.780	4.625	97	70-130	
E13C9-PFNA	485570.4	13C4-PFOS	256143.3	1.896	5.000	5.285	106	70-130	
E13C6-PFDA	612056.5	13C2-PFDA	301327.2	2.031	5.000	4.740	95	70-130	
E13C2-8:2-FTS	27253.5	13C2-PFDA	301327.2	0.090	4.790	4.511	94	70-130	
E13C8-PFOSA	607762.0	13C2-PFDA	301327.2	2.017	5.000	4.472	89	70-130	
Ed3-NMeFOSAA	72788.0	13C2-PFDA	301327.2	0.242	5.000	4.360	87	70-130	
E13C7-PFUnDA	232014.1	13C2-PFDA	301327.2	0.770	5.000	4.470	89	70-130	
Ed5-NEtFOSAA	65478.0	13C2-PFDA	301327.2	0.217	5.000	4.597	92	70-130	
E13C2-PFDoDA	521514.1	13C2-PFDA	301327.2	1.731	5.000	4.494	90	70-130	
Ed7-NMePFOSAE	327796.4	13C2-PFDA	301327.2	1.088	5.000	4.708	94	70-130	
Ed3-NMePFOSA	70122.5	13C2-PFDA	301327.2	0.233	5.000	4.228	85	70-130	
Ed9-NEtPFOSAE	259467.4	13C2-PFDA	301327.2	0.861	5.000	4.479	90	70-130	
Ed5-NEtPFOSA	55177.3	13C2-PFDA	301327.2	0.183	5.000	4.296	86	70-130	
E13C2-PFTeDA	392356.6	13C2-PFDA	301327.2	1.302	5.000	4.571	91	70-130	

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

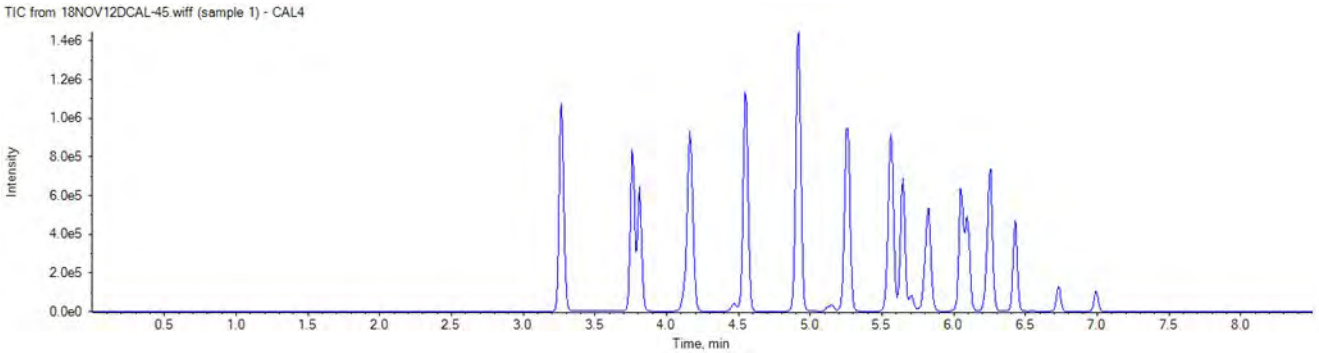
Analyte Quantitation Peak Table

Sample Name: CAL4 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-45.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	1068414.9		A	13C4-PFBA	3.26	726396.0	1.471	8.148
PFPeA	3.76	1.000	1075643.5		A	13C5-PFPeA	3.76	716206.9	1.502	8.694
PFBS	3.81	1.000	617045.6		A	13C3-PFBS	3.81	425015.7	1.452	6.906
4:2-FTS	4.13	1.000	126396.5		A	13C2-4:2-FTS	4.13	47246.4	2.675	7.263
PFHxA	4.16	1.000	1265231.1		A	13C5-PFHxA	4.16	641195.9	1.973	8.239
PFPeS	4.18	1.100	328681.7		A	13C3-PFBS	3.81	425015.7	0.773	7.508
PFHpA	4.55	1.000	1318774.5		A	13C4-PFHpA	4.55	509151.8	2.590	8.586
PFHxS	4.55	1.000	479291.0		M	13C3-PFHxS	4.55	315722.6	1.518	7.361
6:2-FTS	4.91	1.000	107470.6		A	13C2-6:2-FTS	4.91	31883.3	3.371	8.157
PFHpS	4.91	1.080	434949.2		A	13C3-PFHxS	4.55	315722.6	1.378	7.252
PFOA	4.92	1.000	1327086.1		A	13C8-PFOA	4.92	863597.3	1.537	8.207
PFOS	5.25	1.000	448833.8		M	13C8-PFOS	5.25	267380.8	1.679	7.341
PFNA	5.26	1.000	1106664.2		A	13C9-PFNA	5.26	485570.4	2.279	8.218
PFNS	5.54	1.060	269712.3		A	13C8-PFOS	5.25	267380.8	1.009	7.057
PFDA	5.56	1.000	941985.3		M	13C6-PFDA	5.56	612056.5	1.539	8.159
8:2-FTS	5.57	1.000	80922.6		A	13C2-8:2-FTS	5.57	27253.5	2.969	6.923
PFOSA	5.64	1.000	927660.5		A	13C8-PFOSA	5.64	607762.0	1.526	7.455
NMeFOSAA	5.70	1.000	103649.1		A	d3-NMeFOSAA	5.70	72788.0	1.424	8.048
PFDS	5.80	1.110	224031.2		A	13C8-PFOS	5.25	267380.8	0.838	7.592
PFUnDA	5.82	1.000	768010.8		A	13C7-PFUnDA	5.82	232014.1	3.310	8.654
NEtFOSAA	5.84	1.000	94877.8		A	d5-NEtFOSAA	5.83	65478.0	1.449	7.596
PFDoDA	6.05	1.000	803646.8		A	13C2-PFDoDA	6.05	521514.1	1.541	7.847
10:2-FTS	6.07	1.090	56040.8		A	13C2-8:2-FTS	5.57	27253.5	2.056	6.849
NMePFOSAE	6.10	1.000	618314.4		M	d7-NMePFOSAE	6.09	327796.4	1.886	7.850
NMePFOSA	6.10	1.000	114415.9		M	d3-NMePFOSA	6.10	70122.5	1.632	8.049
PFDoS	6.22	1.190	117663.3		A	13C8-PFOS	5.25	267380.8	0.440	7.707
NEtPFOSAE	6.25	1.000	673196.1		A	d9-NEtPFOSAE	6.24	259467.4	2.595	8.324
NEtPFOSA	6.27	1.000	99354.1		M	d5-NEtPFOSA	6.26	55177.3	1.801	8.269
PFTrDA	6.25	1.030	674140.3		A	13C2-PFDoDA	6.05	521514.1	1.293	8.159
PFTeDA	6.43	1.000	571926.7		A	13C2-PFTeDA	6.43	392356.6	1.458	8.171
PFHxDA	6.73	1.050	256654.3		A	13C2-PFTeDA	6.43	392356.6	0.654	7.793
PFODA	6.99	1.090	219359.6		A	13C2-PFTeDA	6.43	392356.6	0.559	7.786

Total Ion Chromatogram

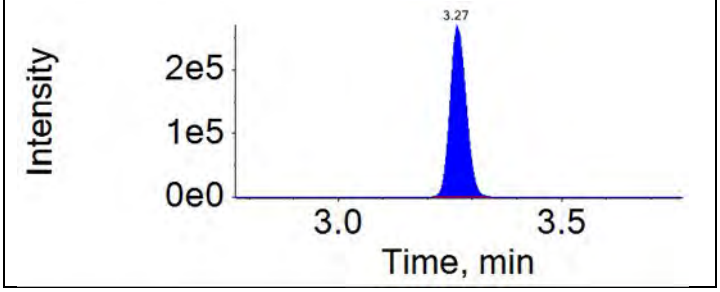


APPROVED
By MCD at 6:33 pm, 11/12/18

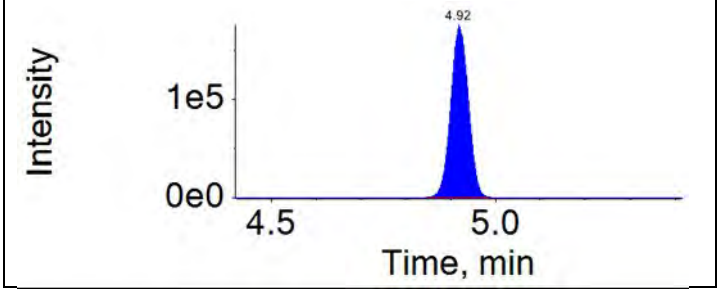
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

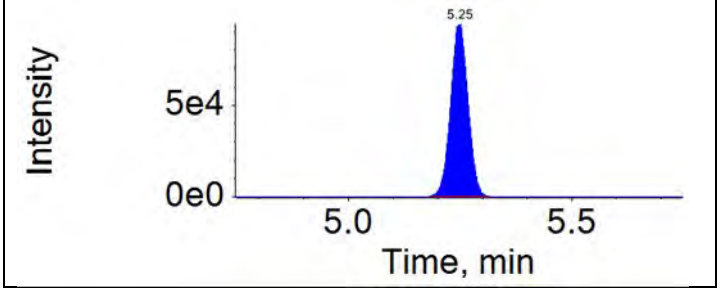
Injection Standard: 13C3-PFBA
216.0 / 172.0



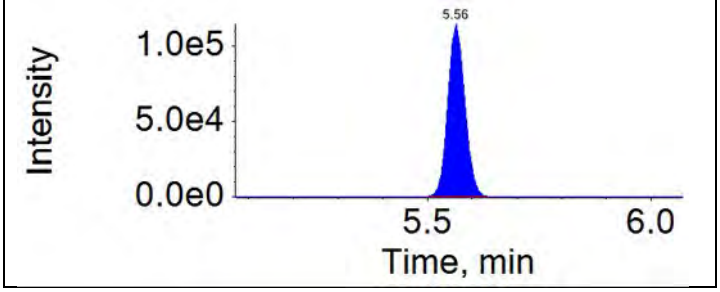
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



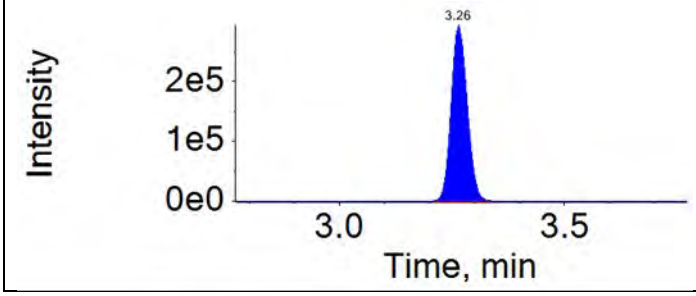
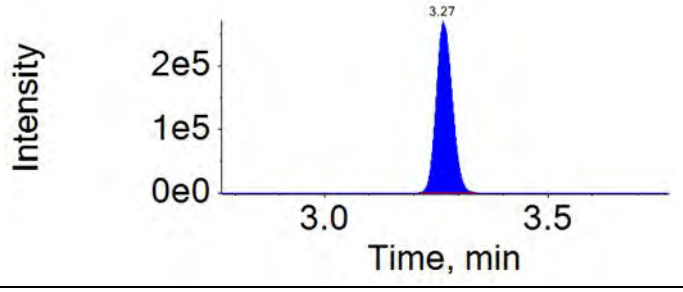
Injection Standard: 13C2-PFDA
515.0 / 470.0

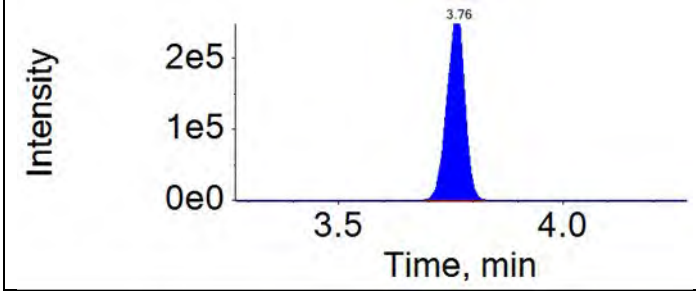
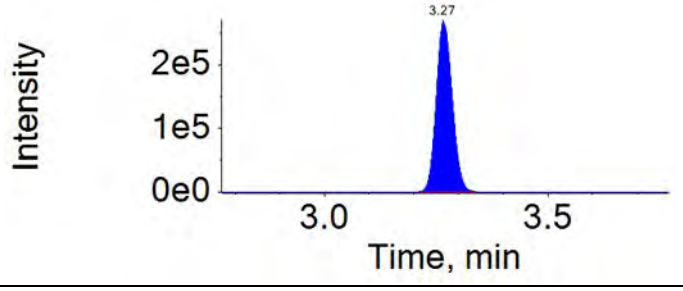


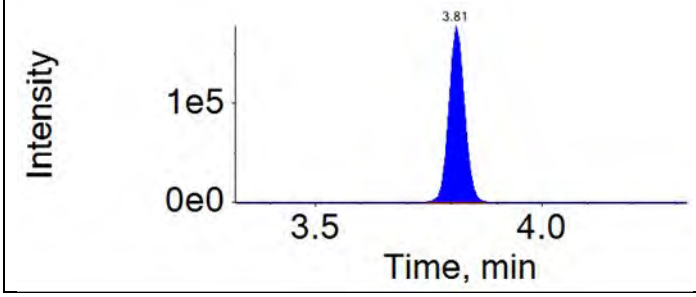
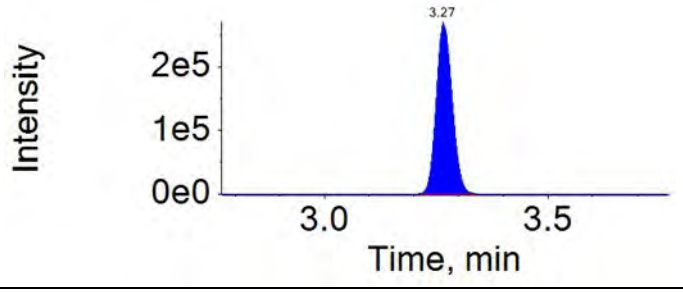
APPROVED
By MCD at 6:33 pm, 11/12/18

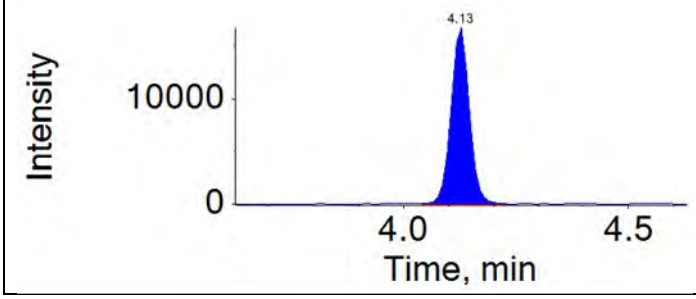
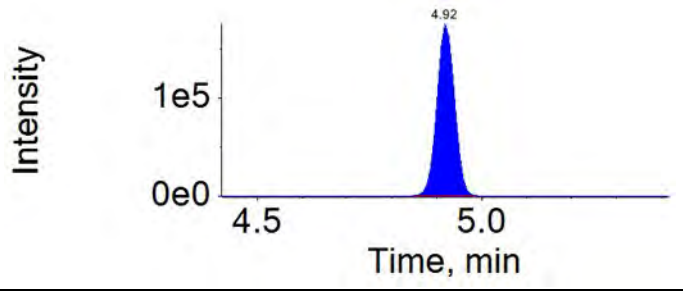
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

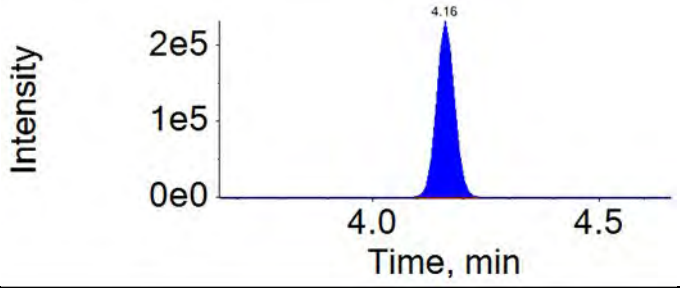
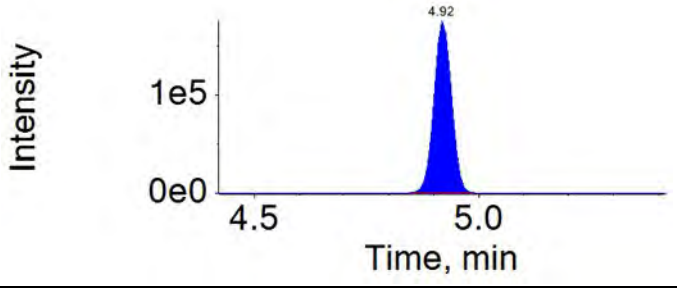
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

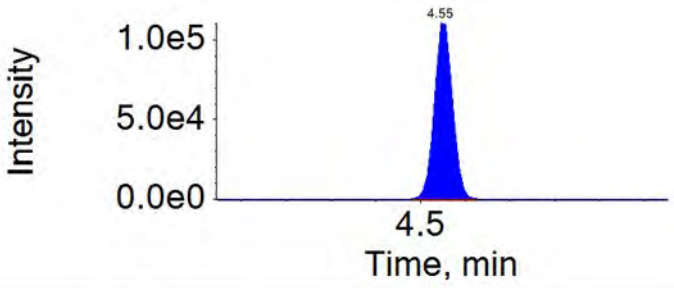
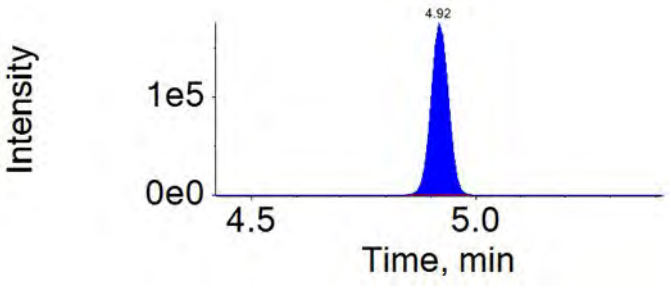
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

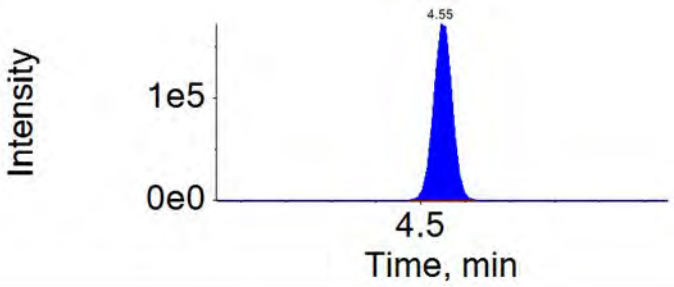
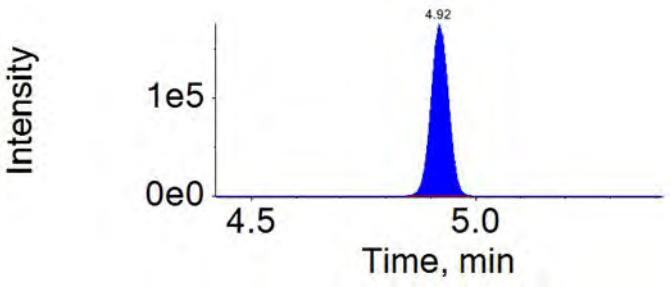
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

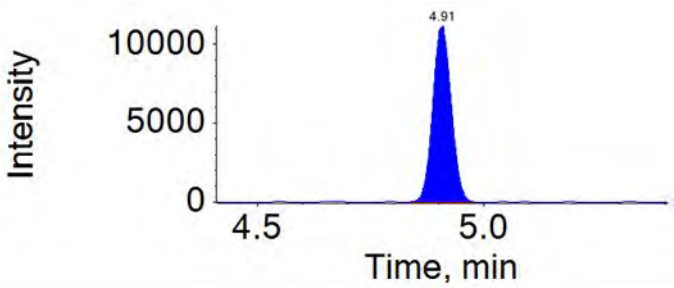
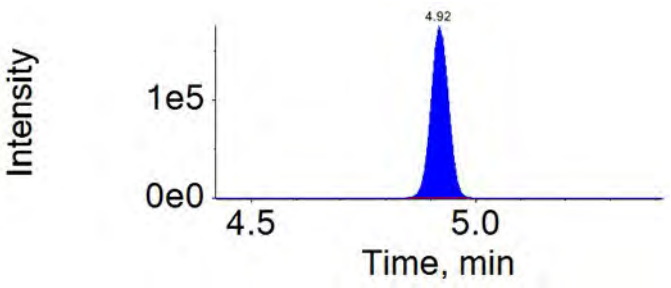
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

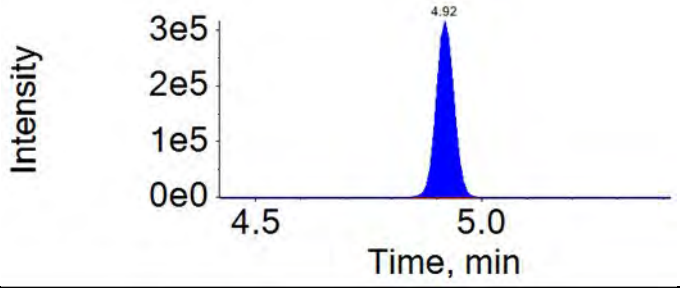
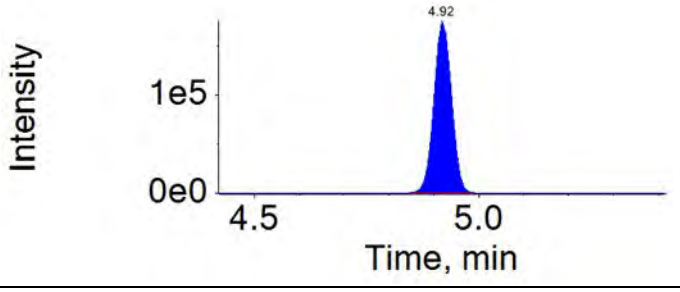
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

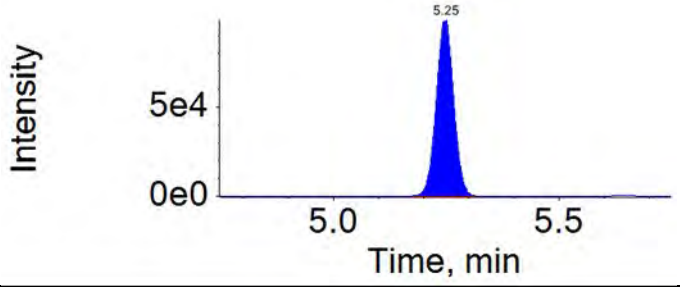
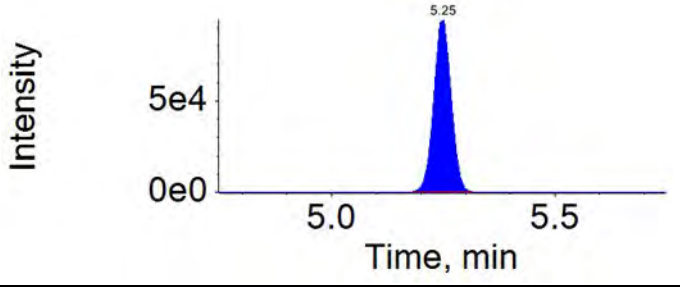
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

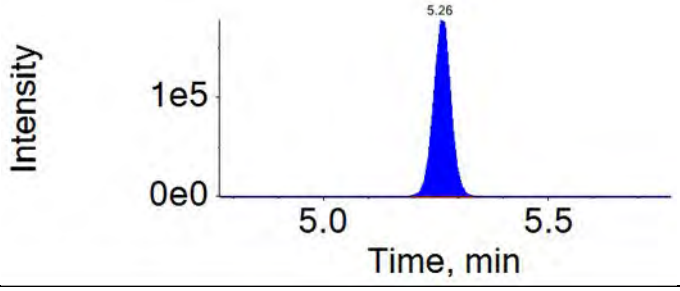
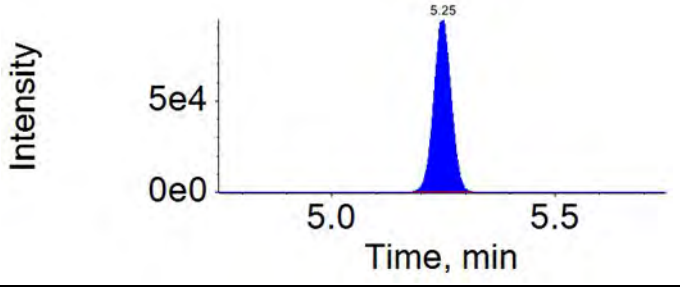
APPROVED
By MCD at 6:33 pm, 11/12/18

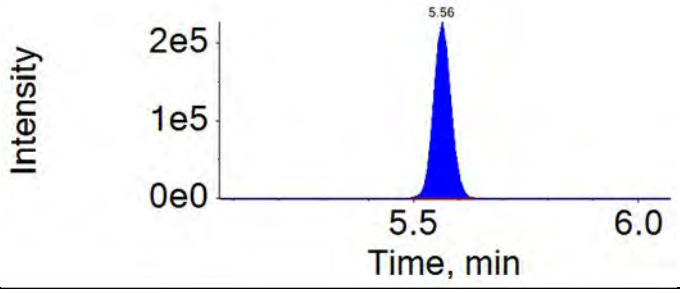
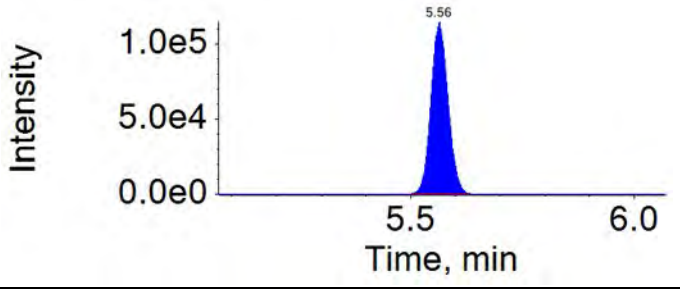
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

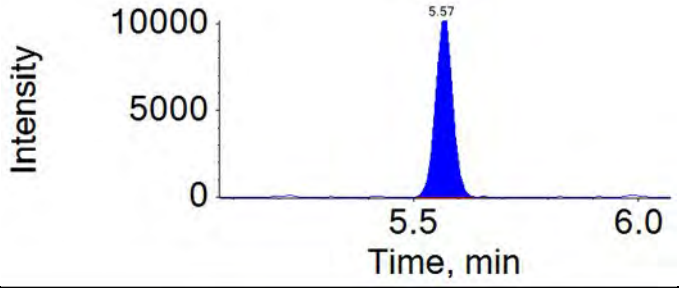
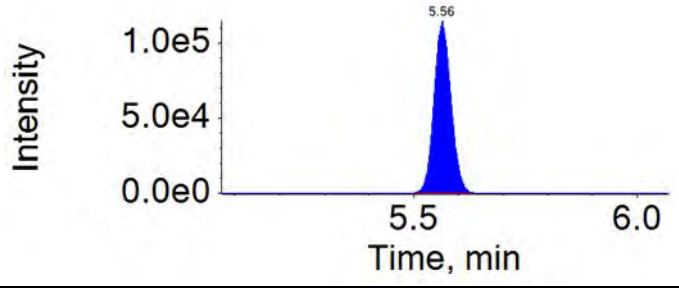
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

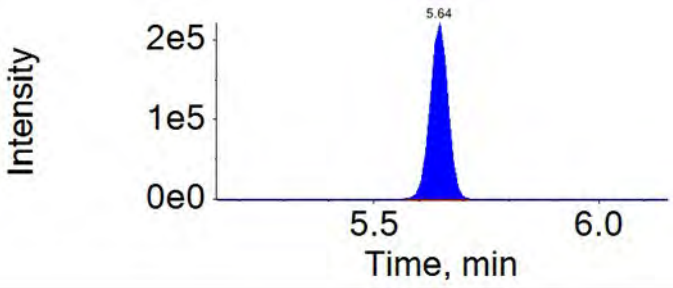
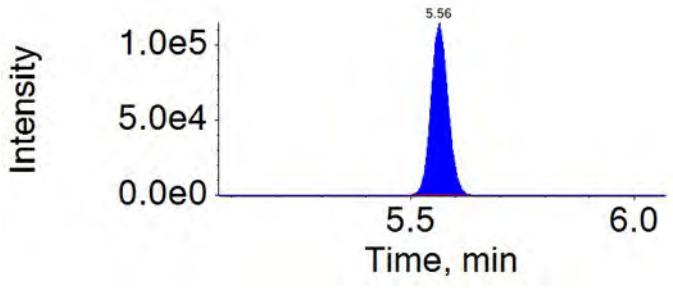
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

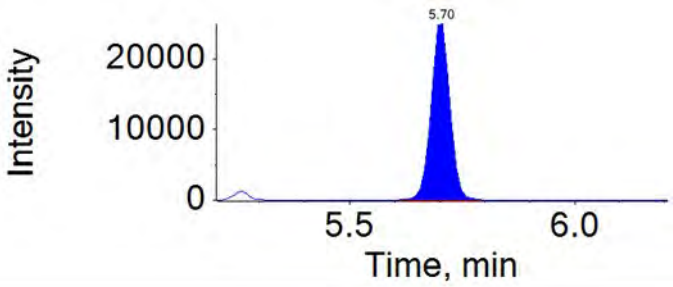
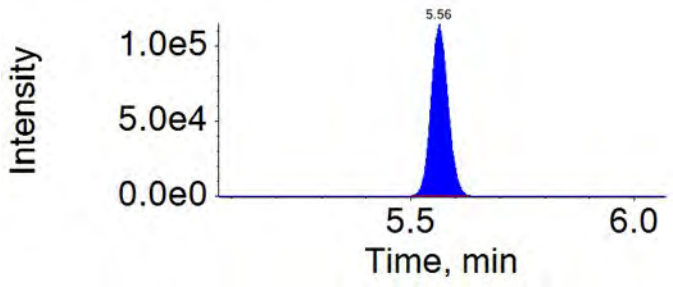
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

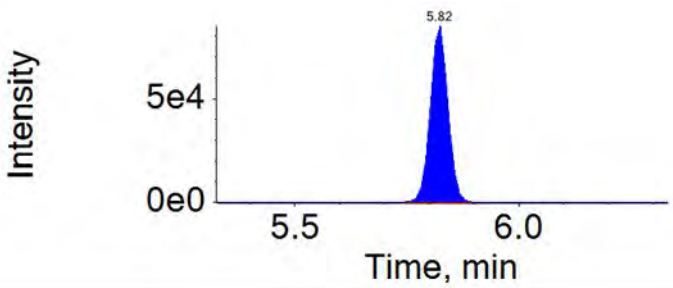
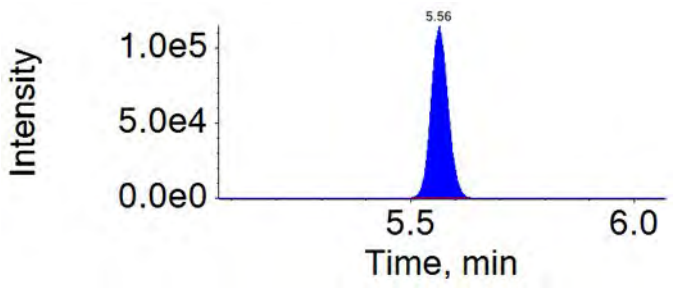
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

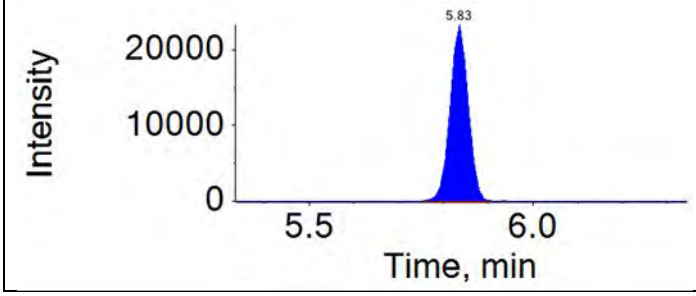
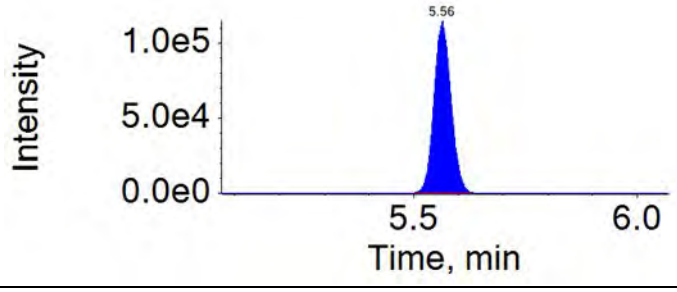
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

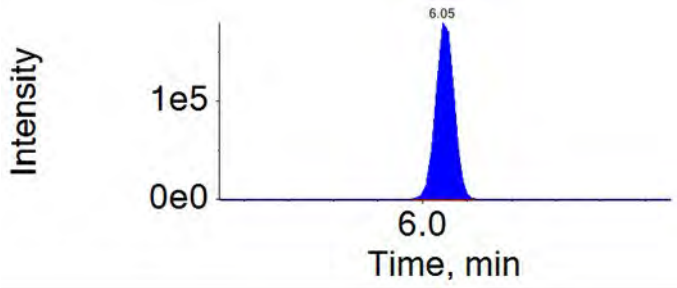
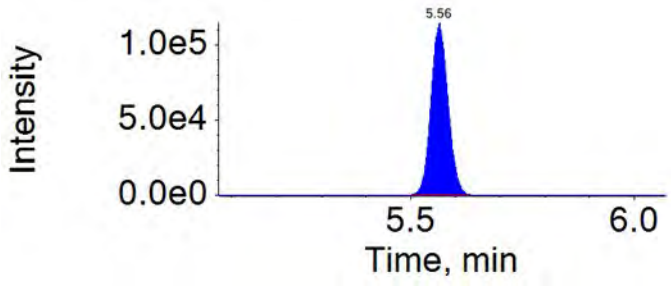
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

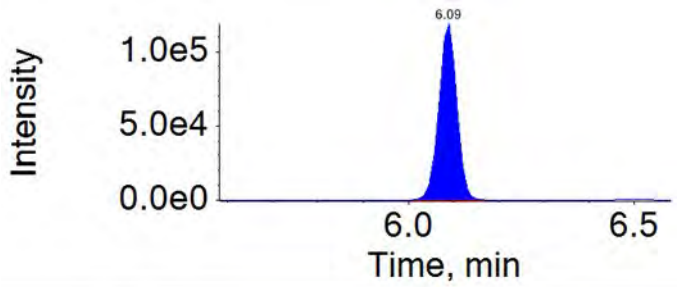
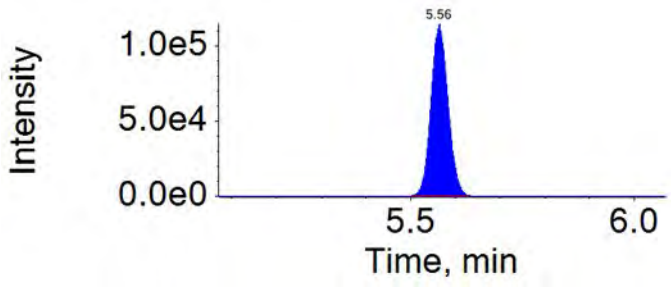
APPROVED
By MCD at 6:33 pm, 11/12/18

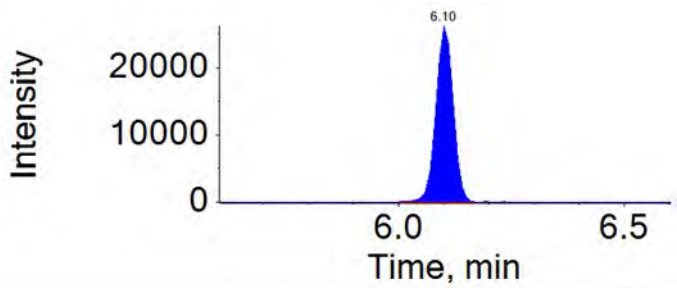
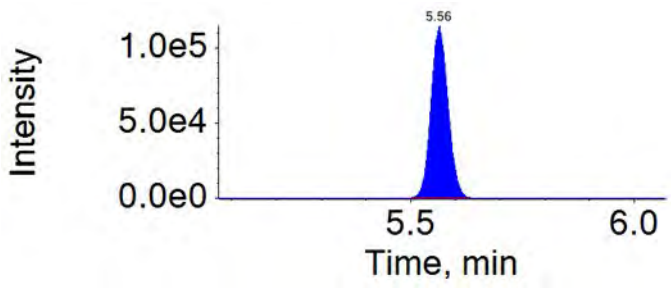
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

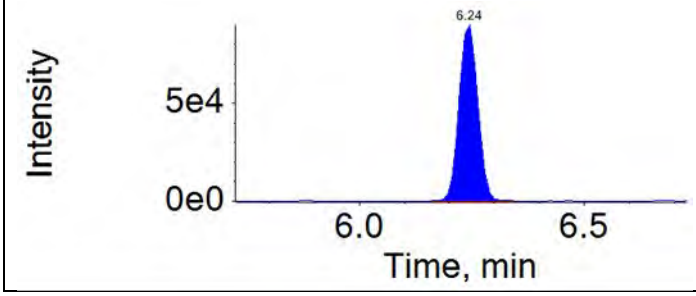
Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

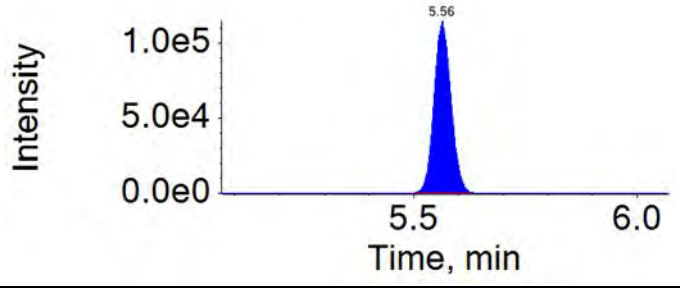
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

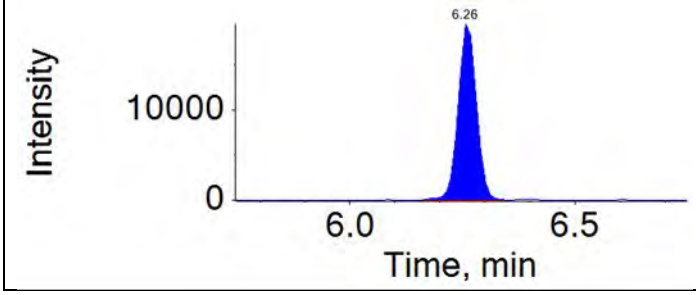
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

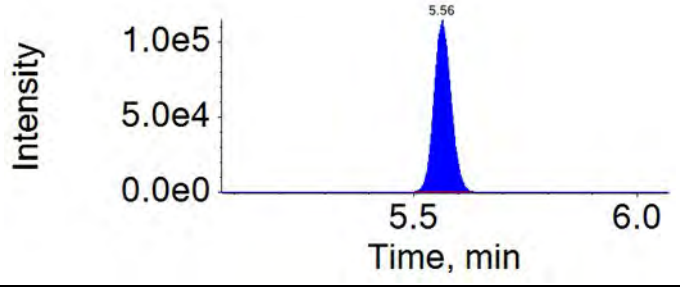
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



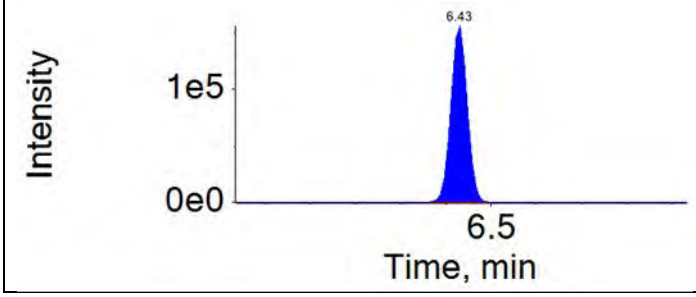


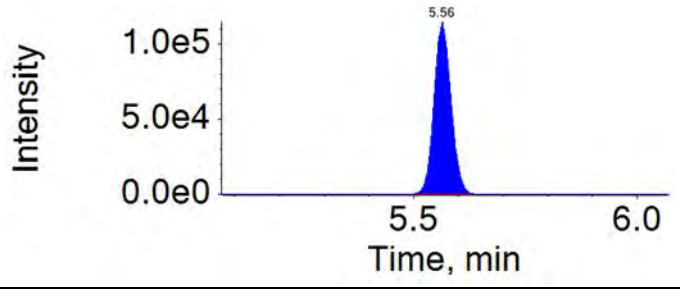
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



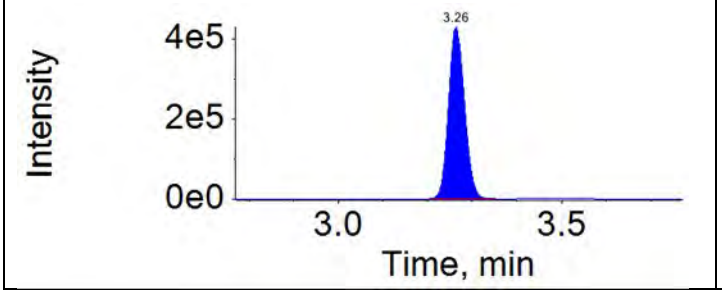


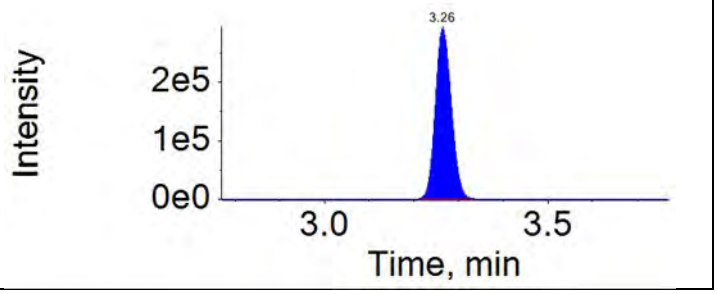
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

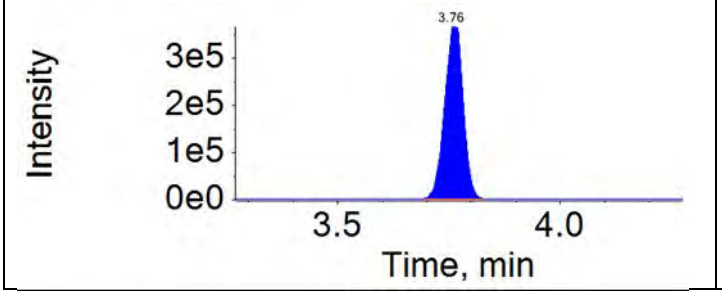
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

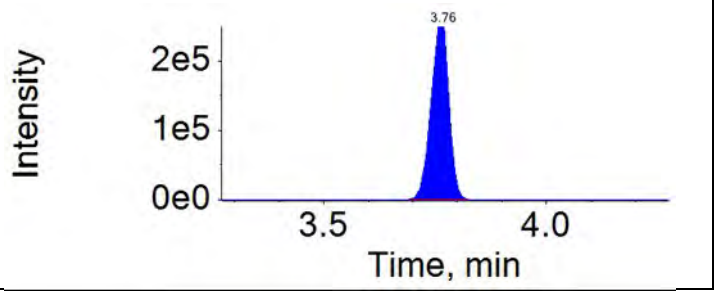
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



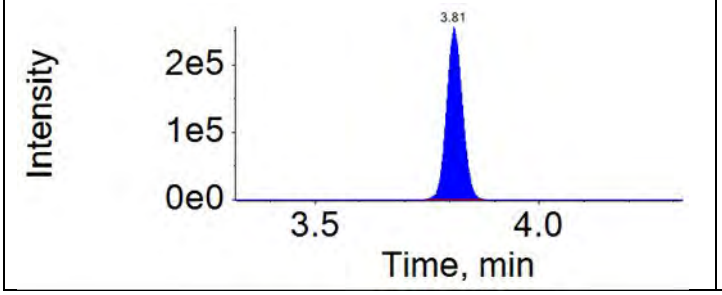


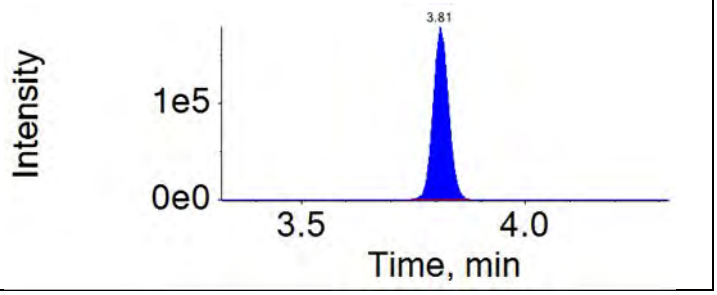
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



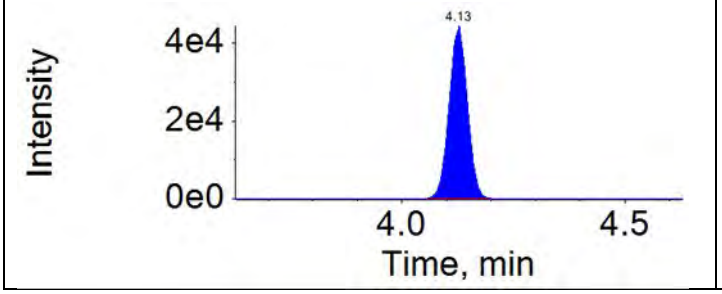


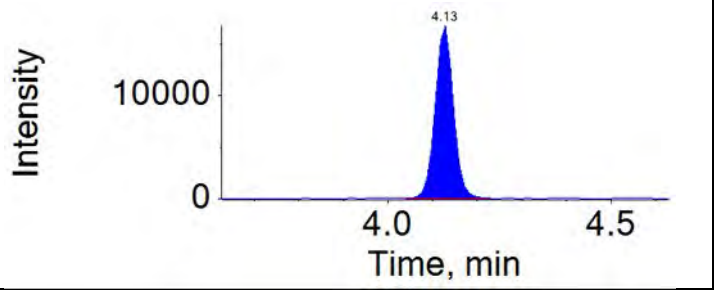
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



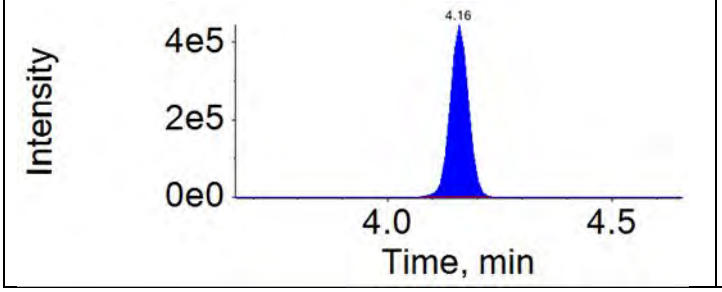


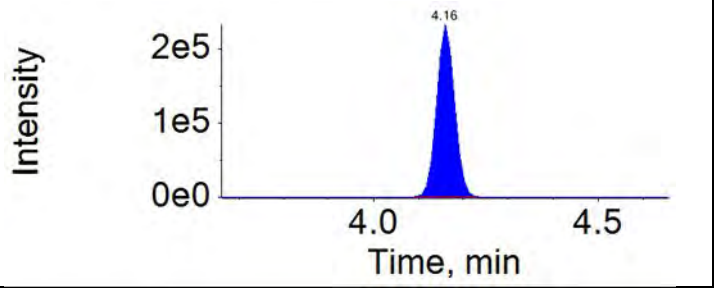
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

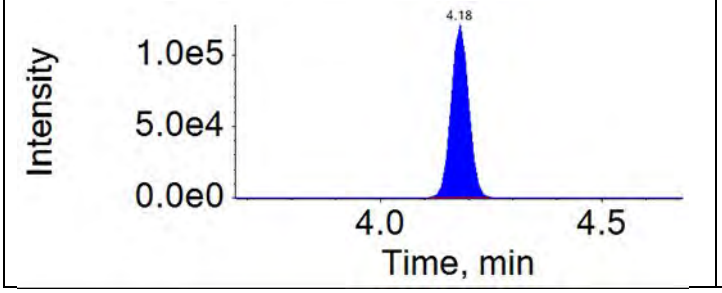
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

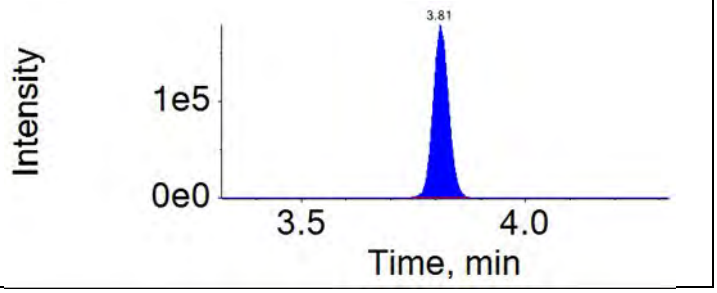
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



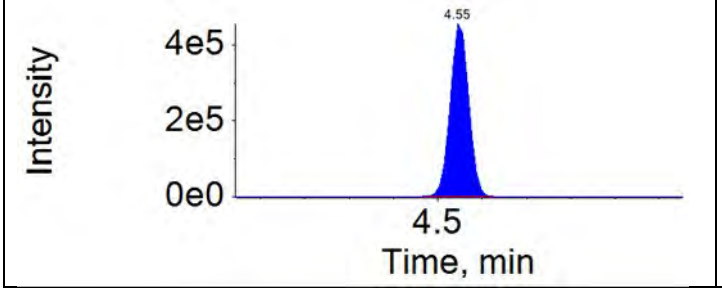


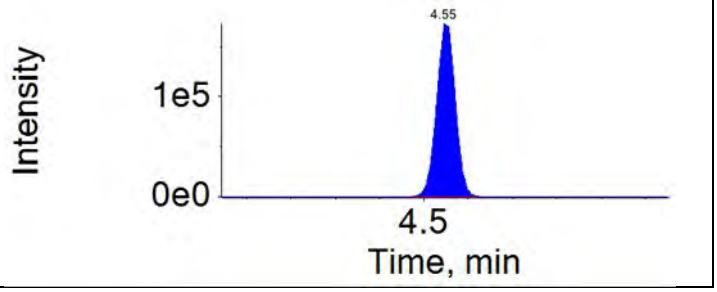
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



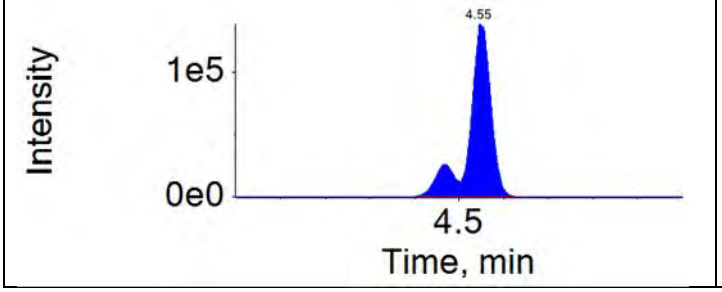


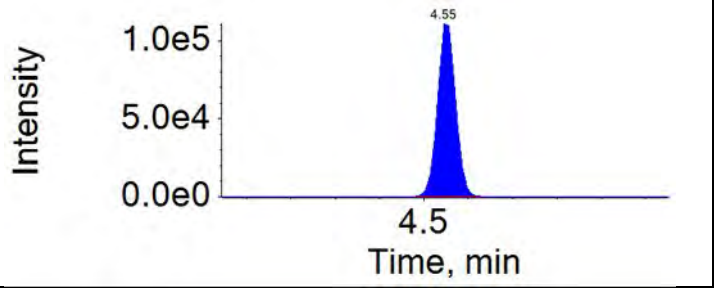
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

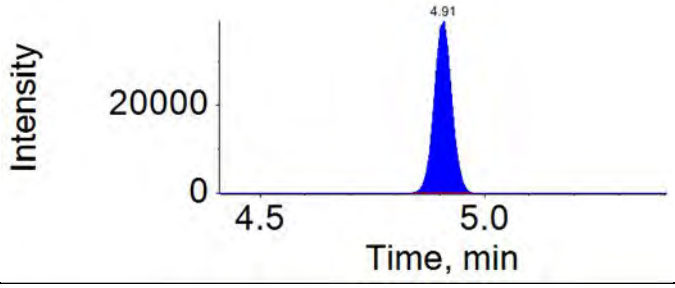
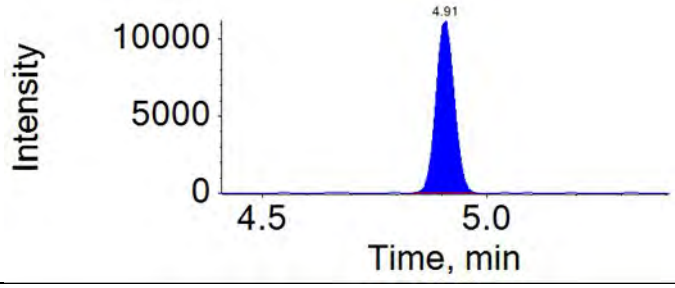


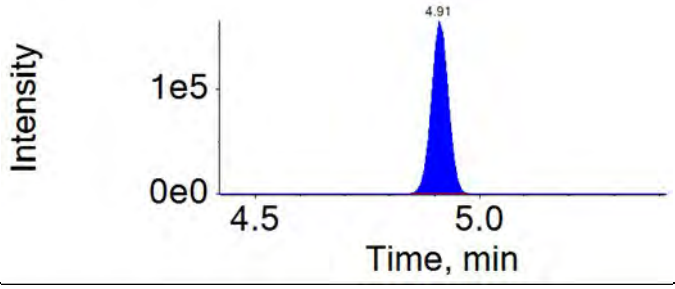
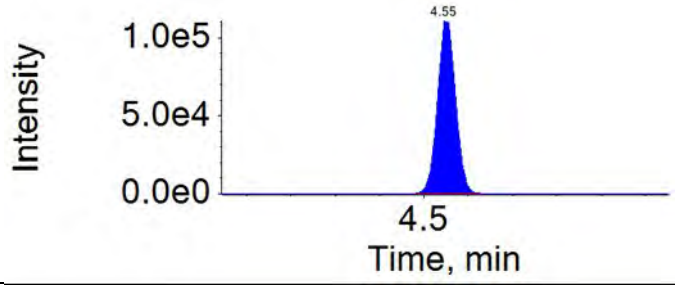


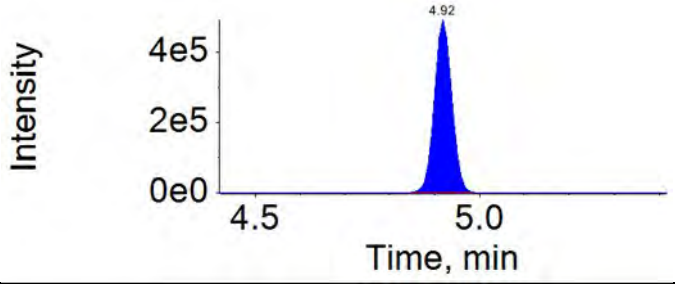
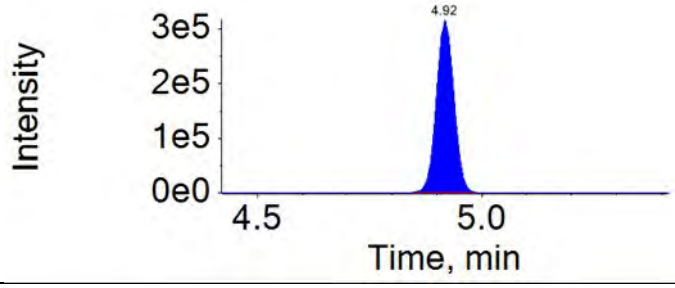
APPROVED
By MCD at 6:33 pm, 11/12/18

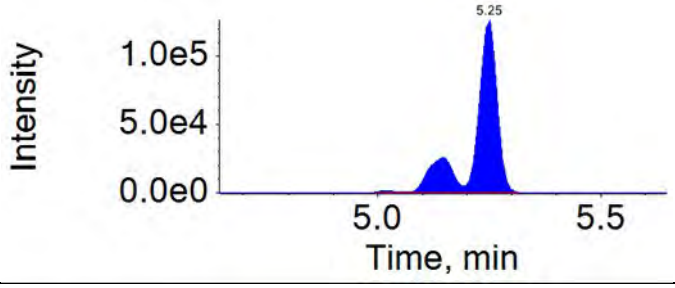
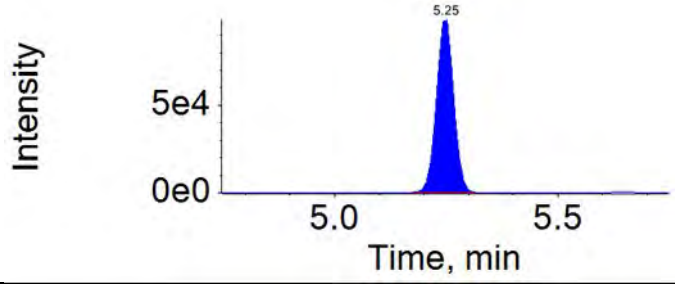
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

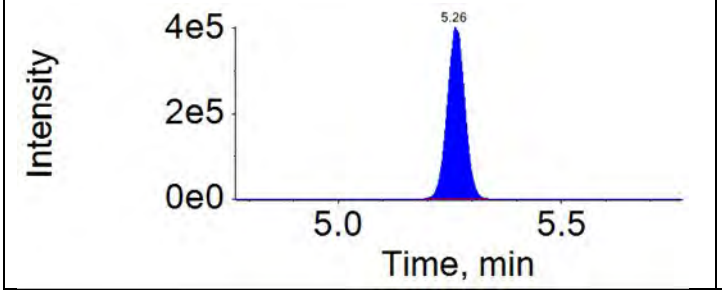
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

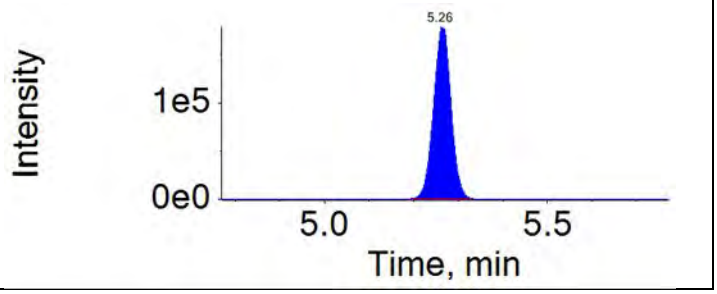
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

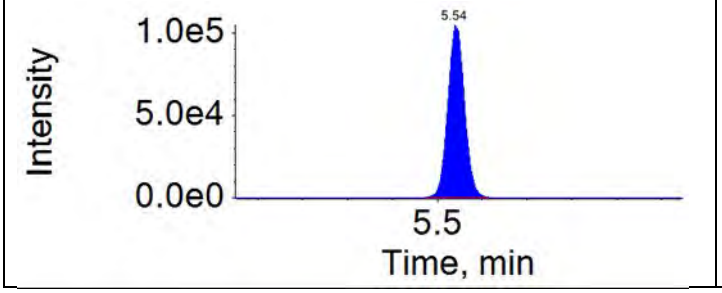
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

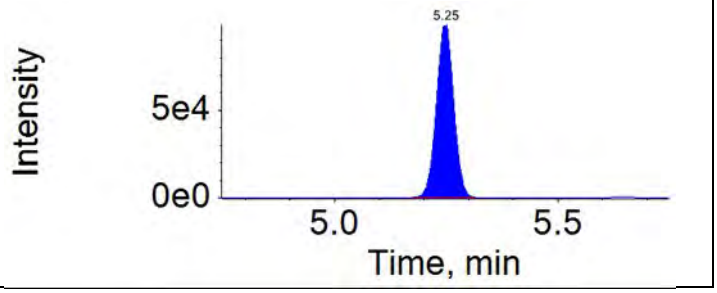
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



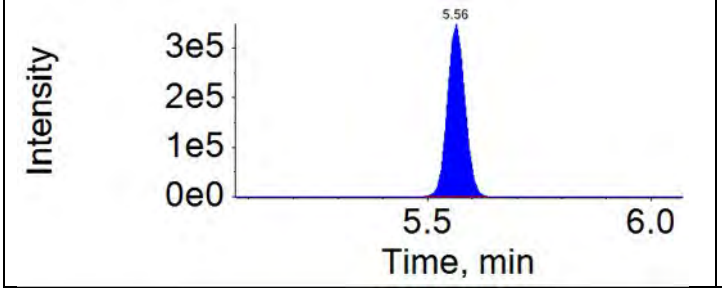


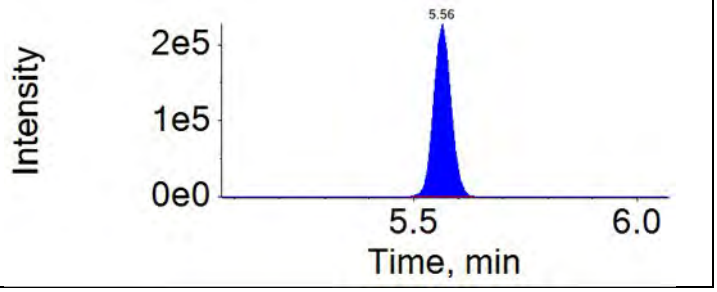
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



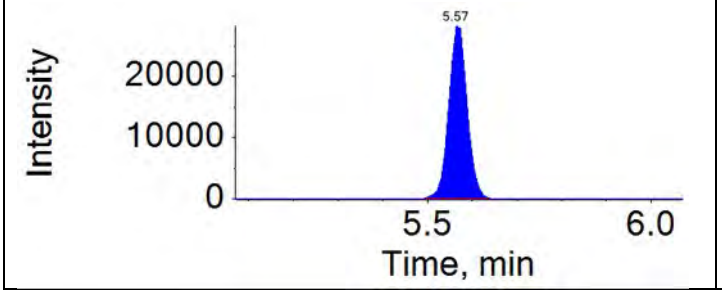


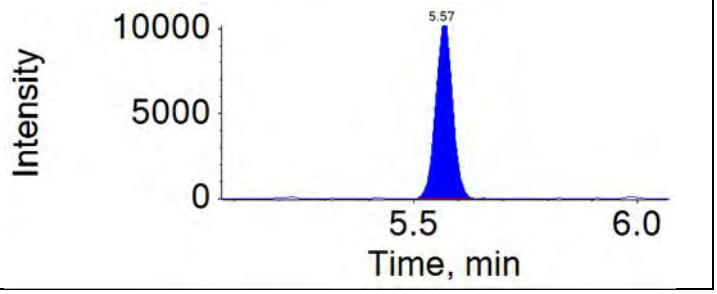
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



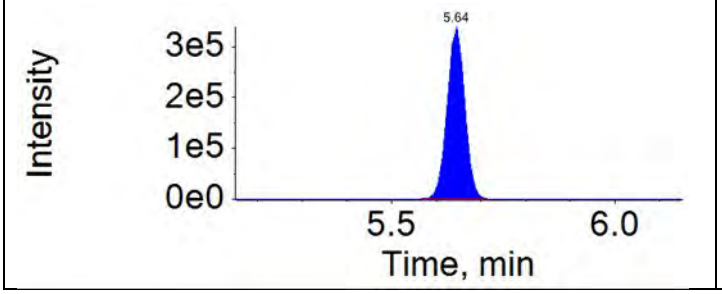


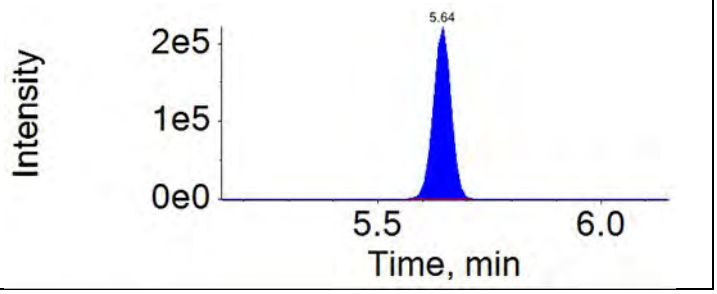
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

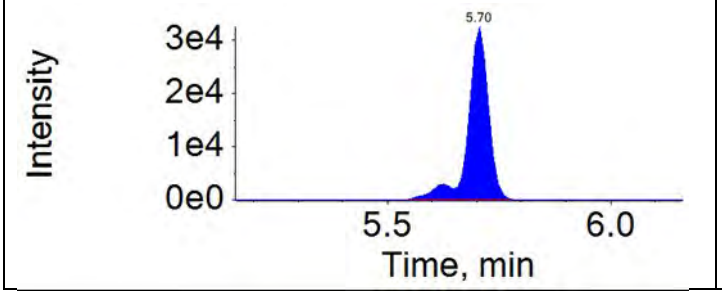
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

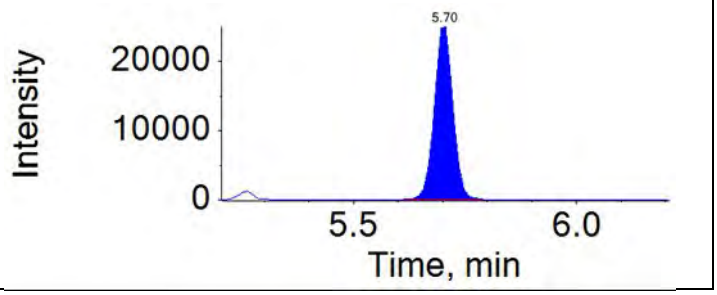
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



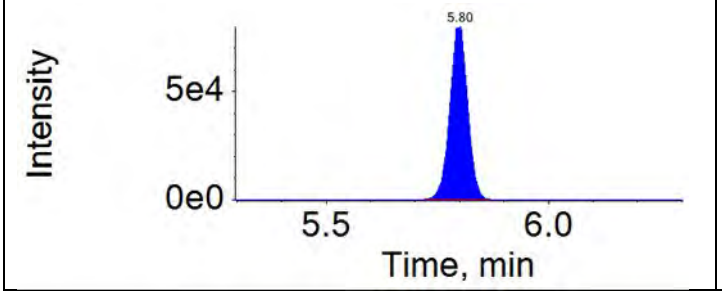


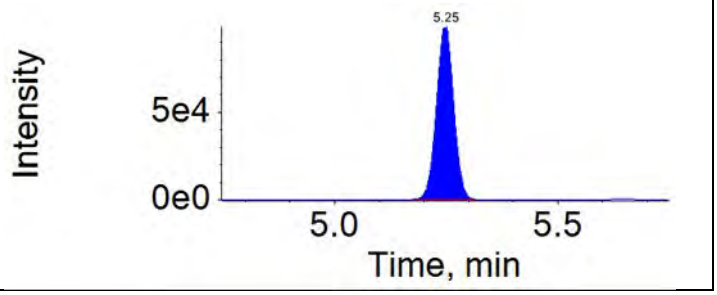
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



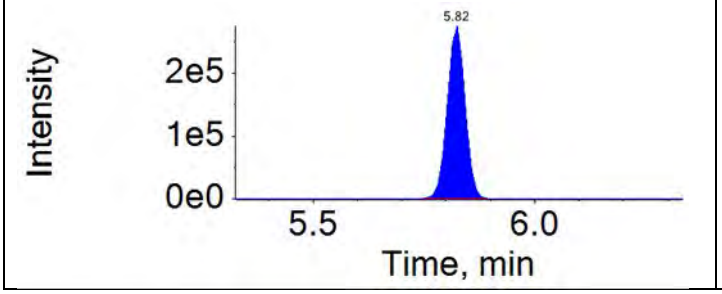


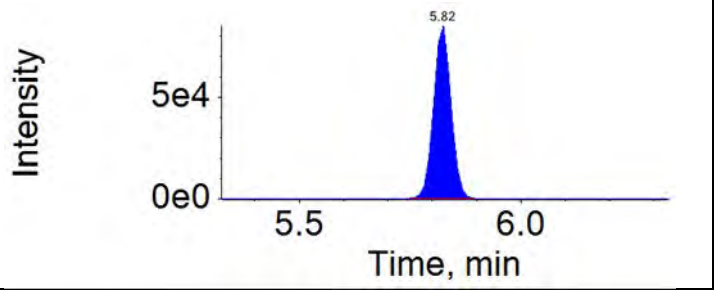
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



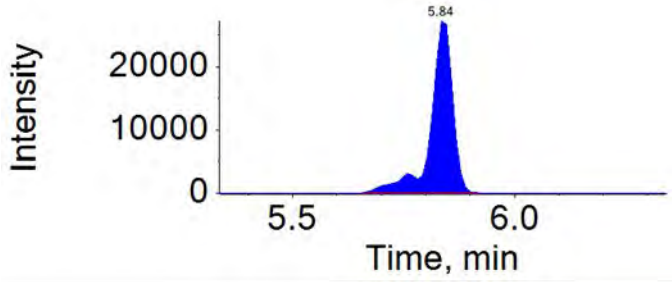


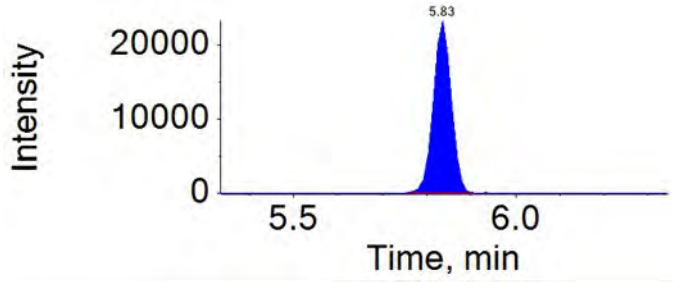
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

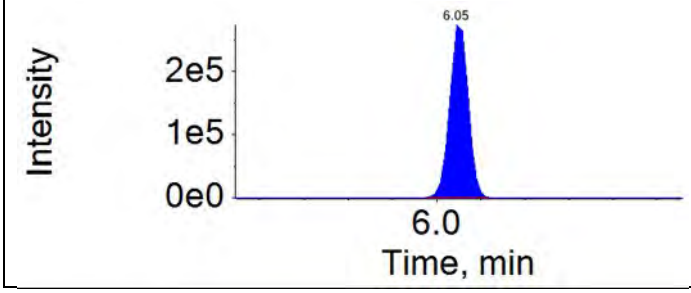
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

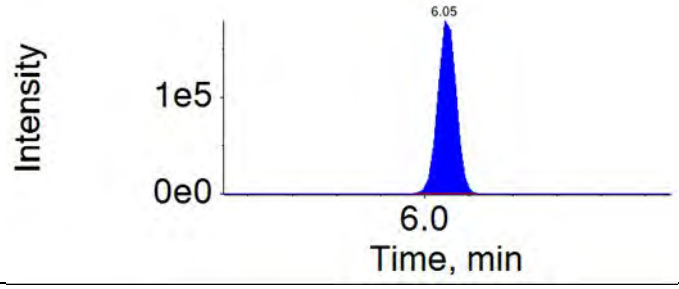
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



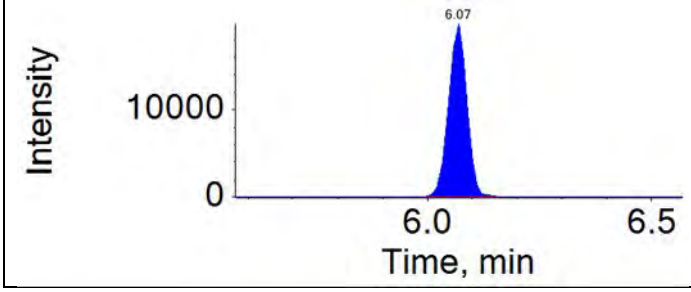


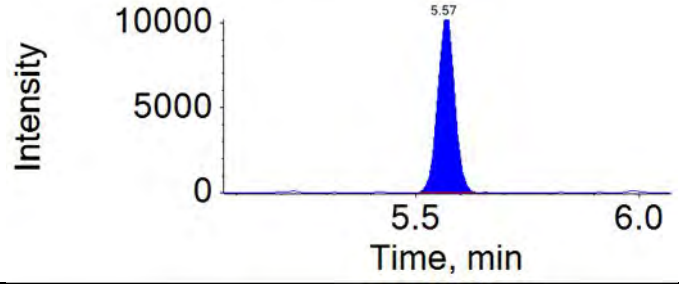
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



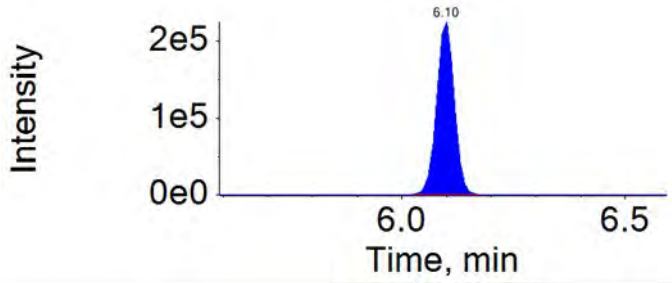


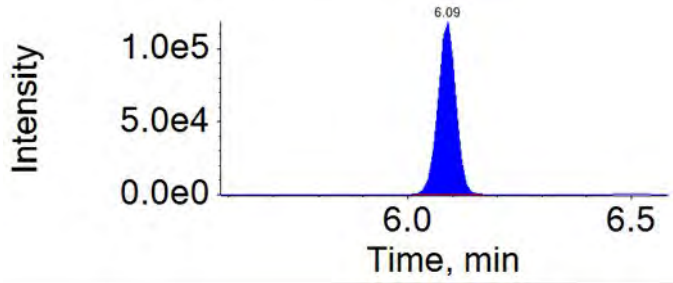
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



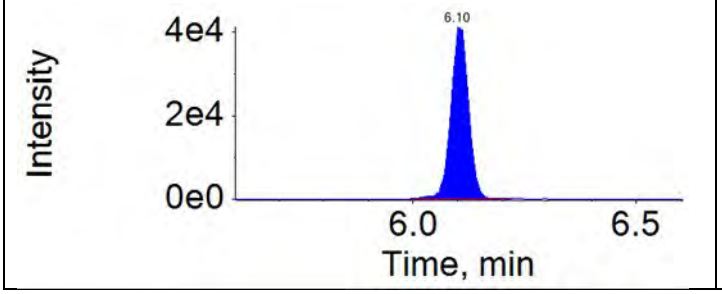


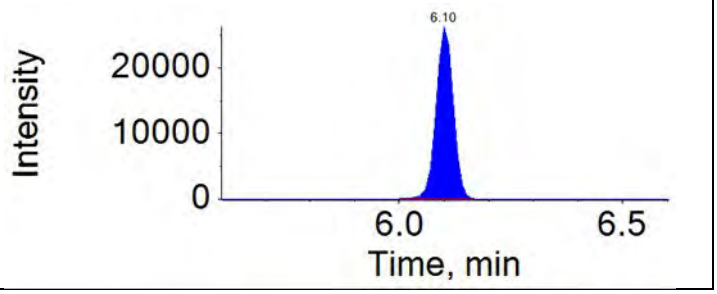
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

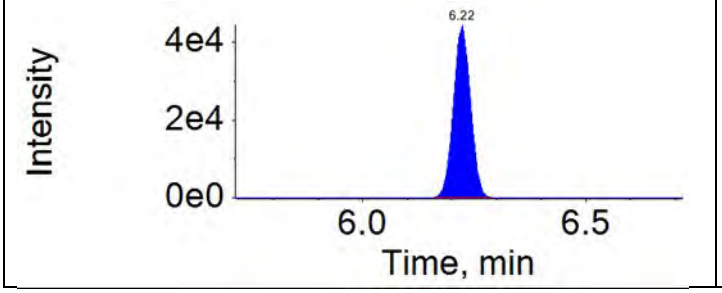
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

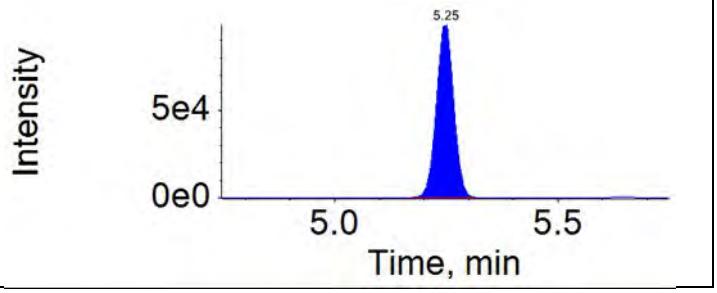
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



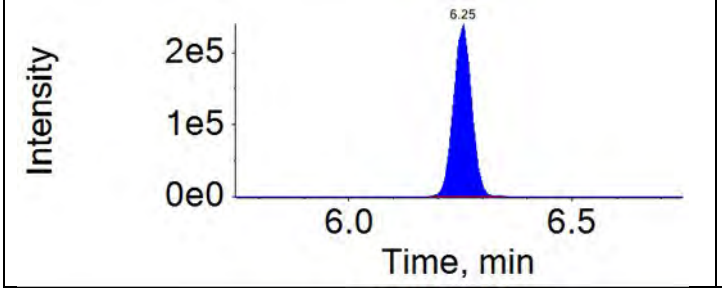


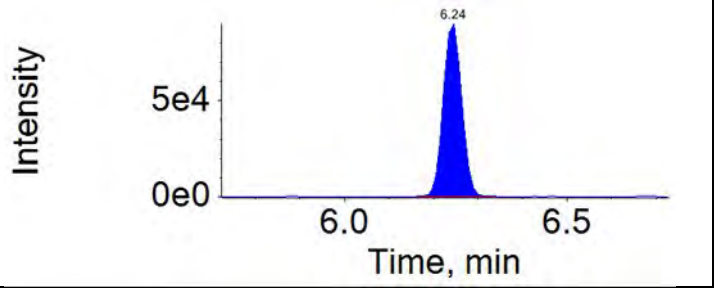
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



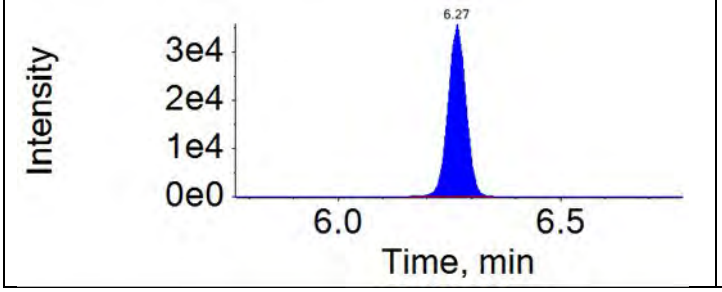


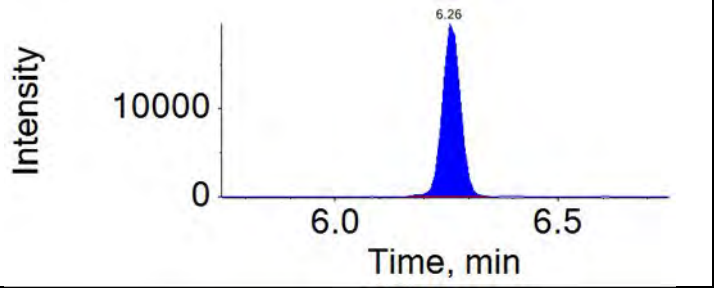
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

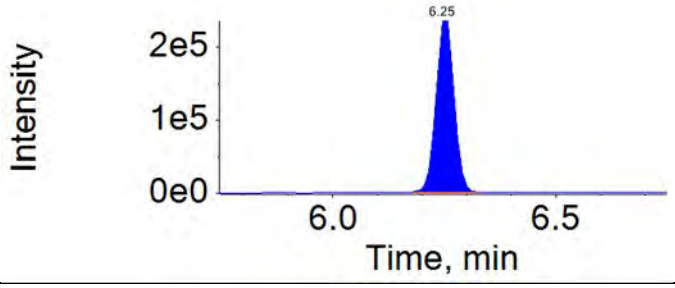
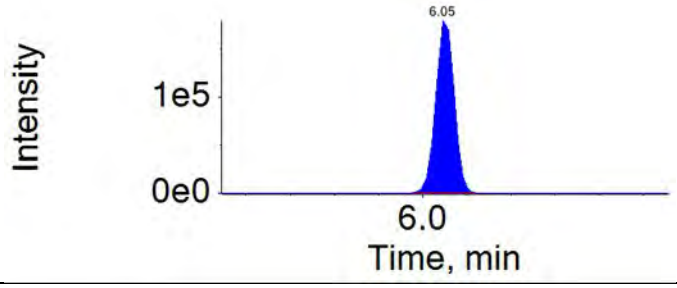


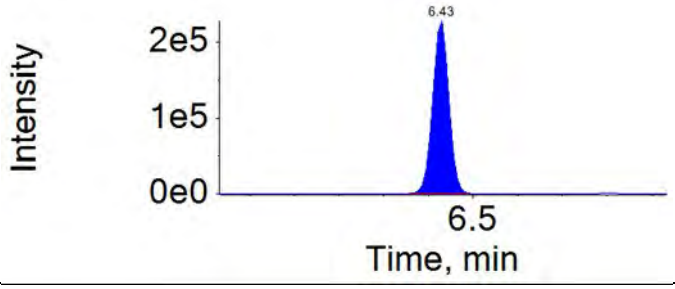
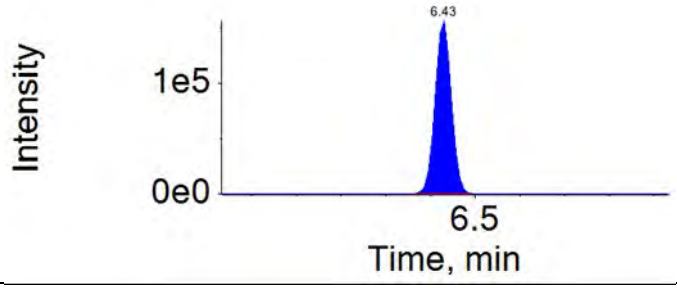


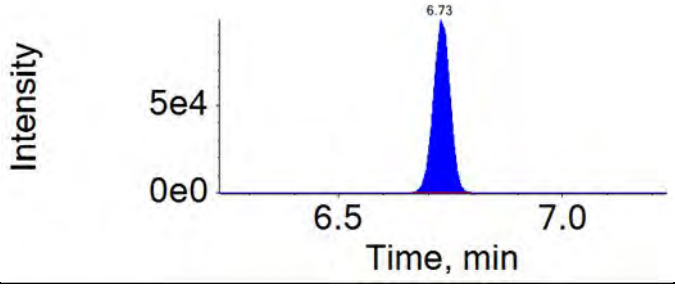
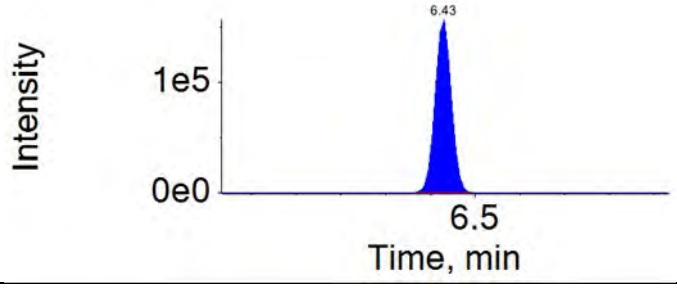
APPROVED
By MCD at 6:33 pm, 11/12/18

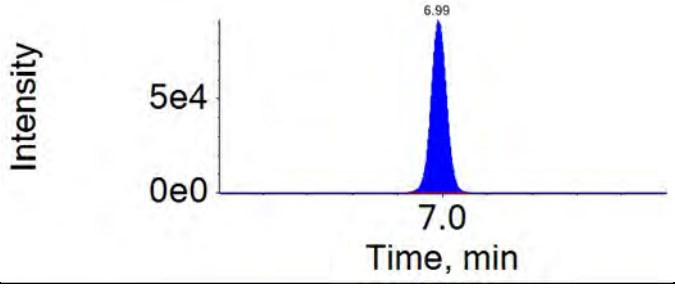
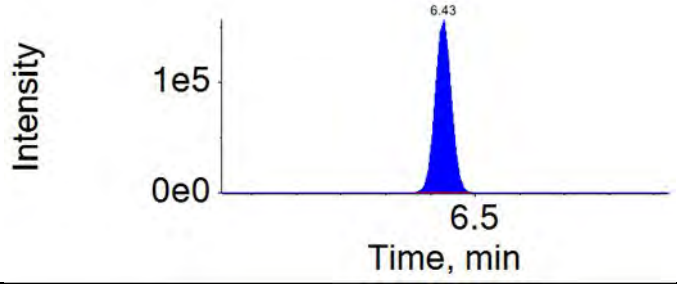
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

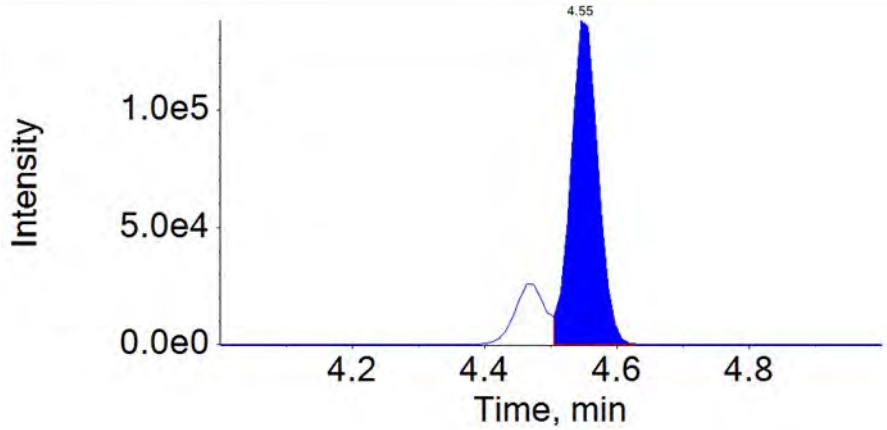
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

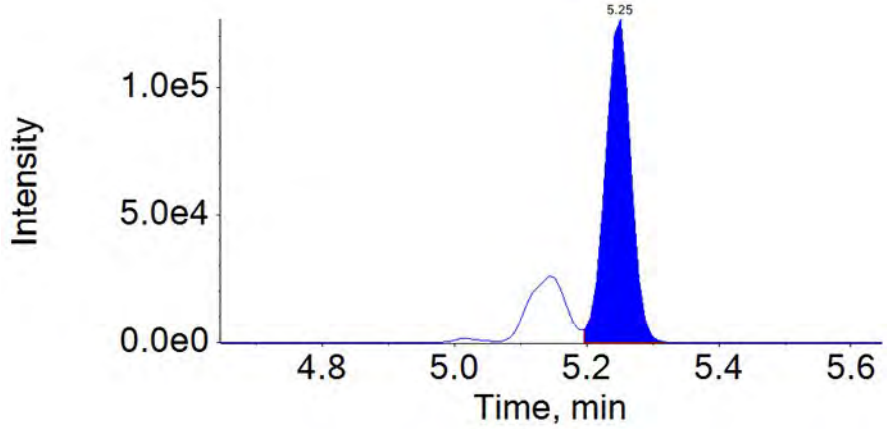
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.55
Peak Area:
397028.39
Mass Range:
399.0 / 80.0
File Name:
18NOV12DCAL-45.wiff
Sample Name:
CAL4



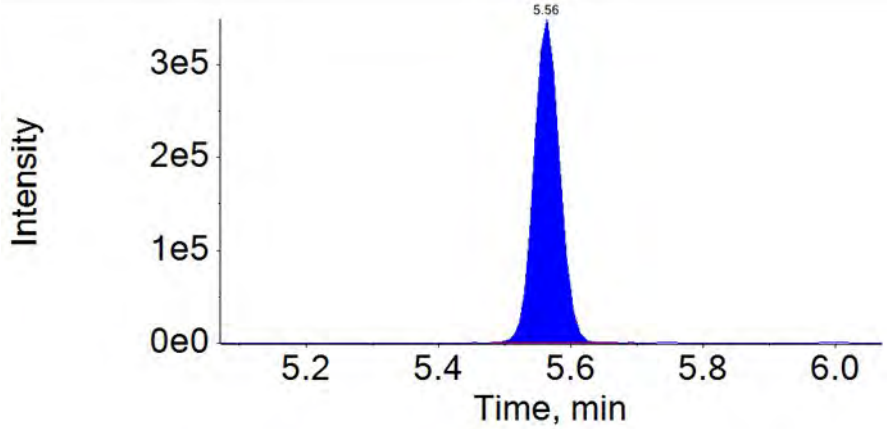
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
340529.09
Mass Range:
499.0 / 80.0
File Name:
18NOV12DCAL-45.wiff
Sample Name:
CAL4



Integration Comment: incorrect integration

Component Name:
PFDA
RT (min.):
5.56
Peak Area:
942897.11
Mass Range:
513.0 / 469.0
File Name:
18NOV12DCAL-45.wiff
Sample Name:
CAL4



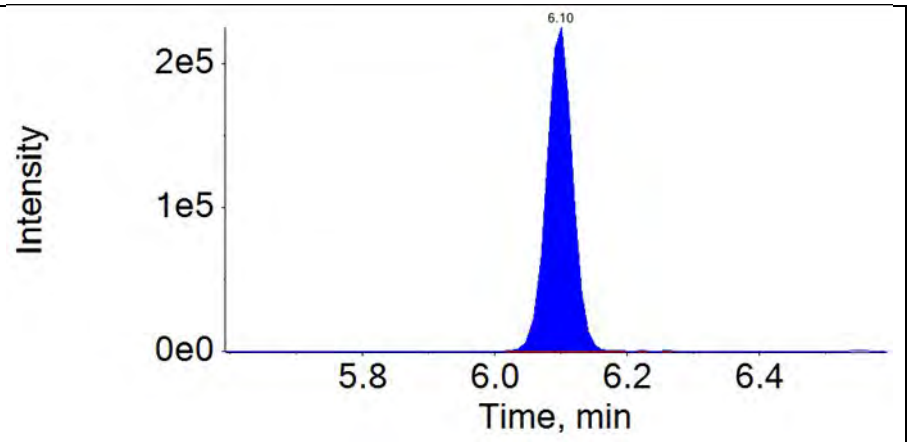
Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

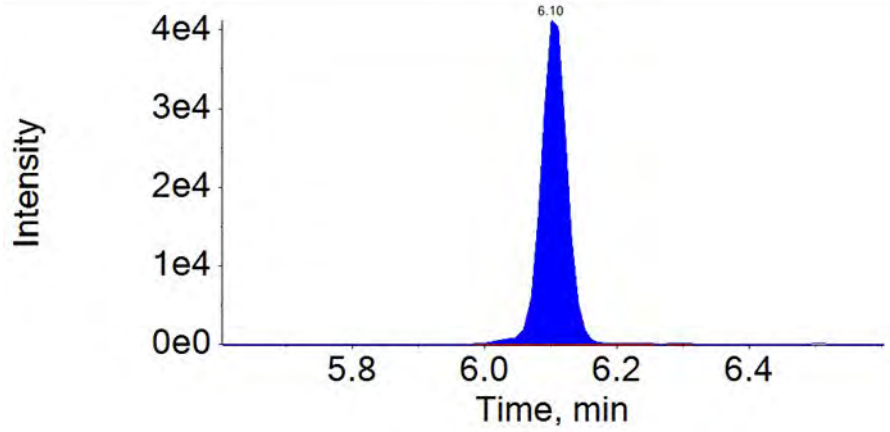
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NMePFOSAE
RT (min.):
6.10
Peak Area:
620009.05
Mass Range:
616.0 / 59.0
File Name:
18NOV12DCAL-45.wiff
Sample Name:
CAL4



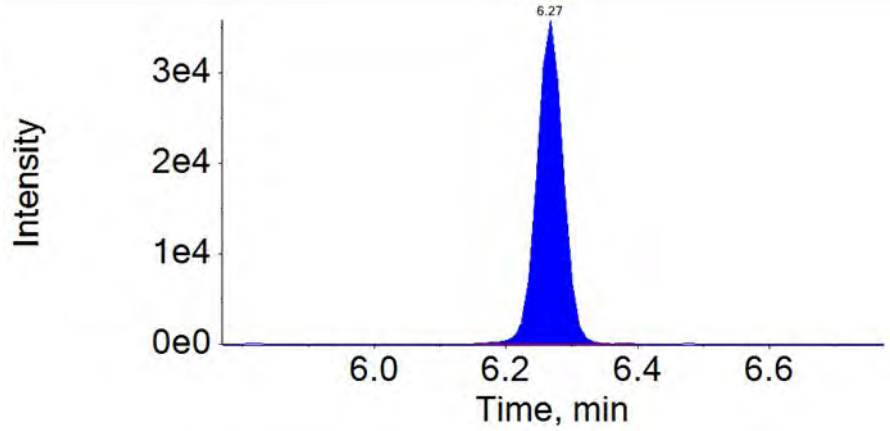
Integration Comment: incorrect integration

Component Name:
NMePFOSA
RT (min.):
6.10
Peak Area:
115018.95
Mass Range:
512.0 / 169.0
File Name:
18NOV12DCAL-45.wiff
Sample Name:
CAL4



Integration Comment: incorrect integration

Component Name:
NEtPFOSA
RT (min.):
6.27
Peak Area:
99550.21
Mass Range:
526.0 / 169.0
File Name:
18NOV12DCAL-45.wiff
Sample Name:
CAL4



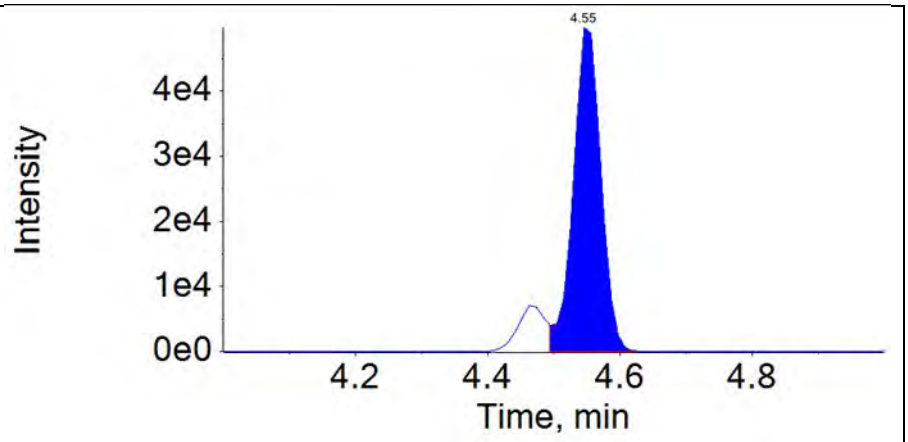
Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

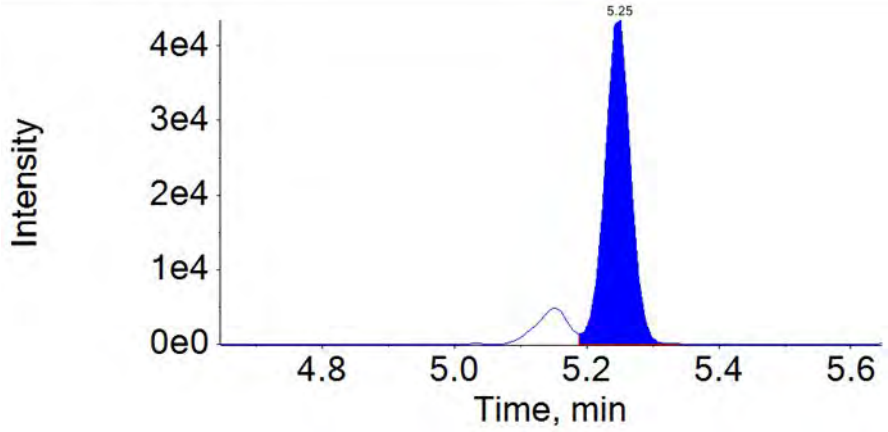
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS_2
RT (min.):
4.55
Peak Area:
144906.99
Mass Range:
399.0 / 99.0
File Name:
18NOV12DCAL-45.wiff
Sample Name:
CAL4



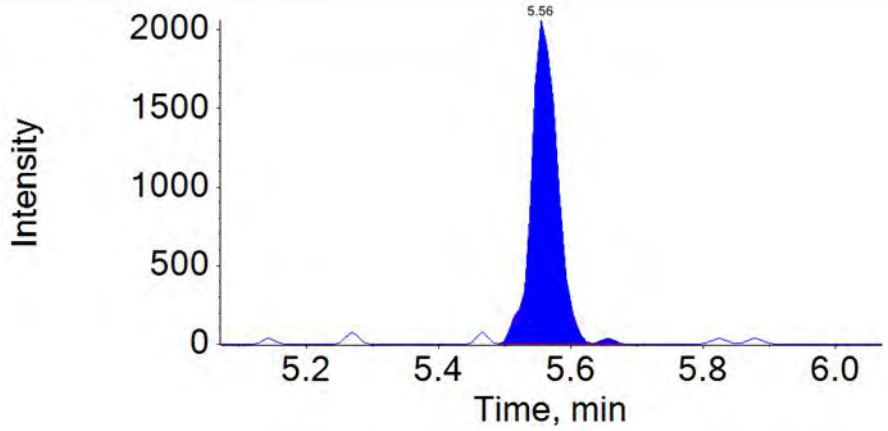
Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.25
Peak Area:
119086.74
Mass Range:
499.0 / 99.0
File Name:
18NOV12DCAL-45.wiff
Sample Name:
CAL4



Integration Comment: incorrect integration

Component Name:
PFDA_2
RT (min.):
5.56
Peak Area:
5673.40
Mass Range:
513.0 / 169.0
File Name:
18NOV12DCAL-45.wiff
Sample Name:
CAL4



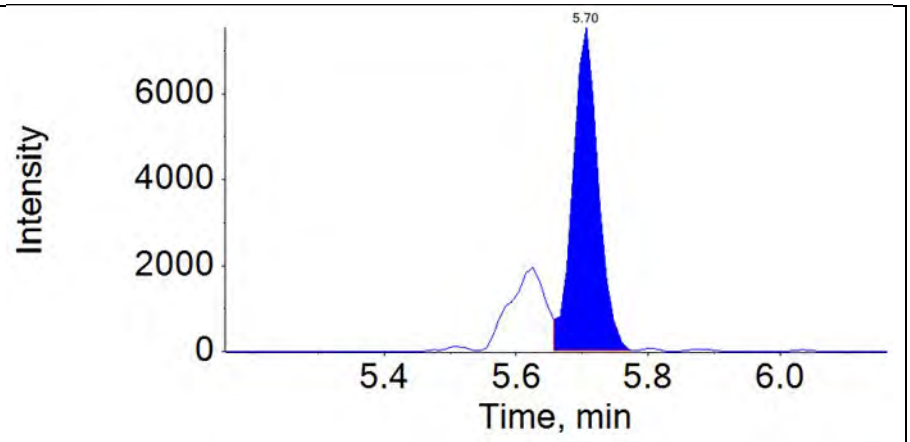
Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

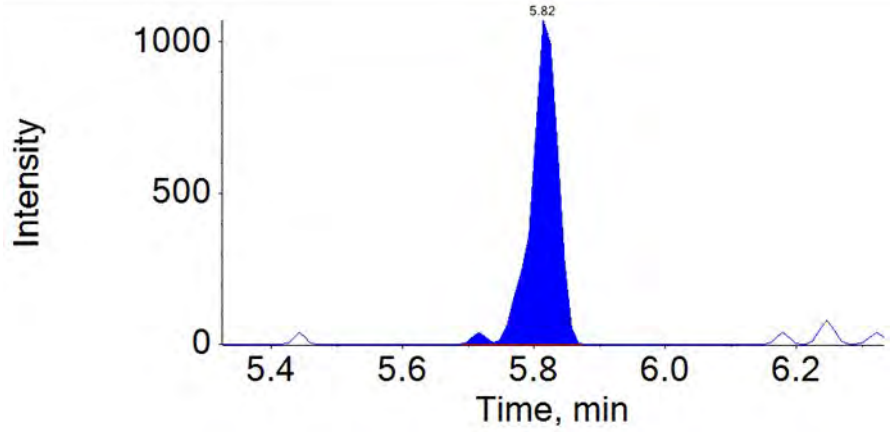
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NMeFOSAA_2
RT (min.):
5.70
Peak Area:
20115.54
Mass Range:
570.0 / 483.0
File Name:
18NOV12DCAL-45.wiff
Sample Name:
CAL4



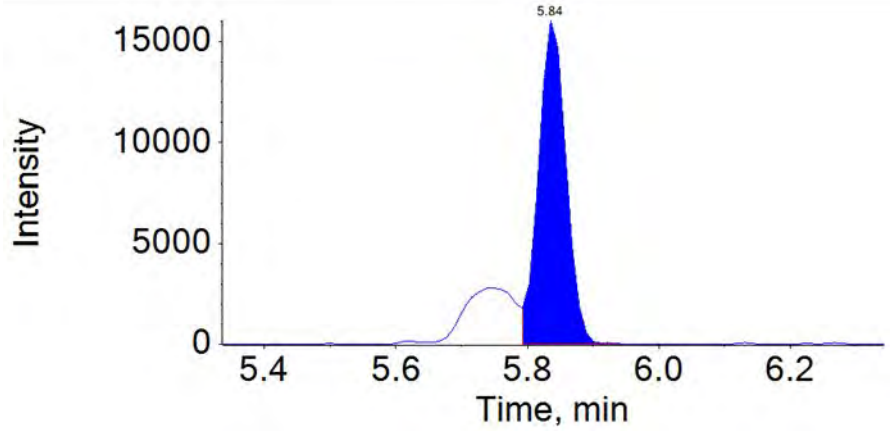
Integration Comment: incorrect integration

Component Name:
PFUnDA_2
RT (min.):
5.82
Peak Area:
3055.95
Mass Range:
563.0 / 169.0
File Name:
18NOV12DCAL-45.wiff
Sample Name:
CAL4



Integration Comment: incorrect integration

Component Name:
NEtFOSAA_2
RT (min.):
5.84
Peak Area:
46742.13
Mass Range:
584.0 / 526.0
File Name:
18NOV12DCAL-45.wiff
Sample Name:
CAL4



Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

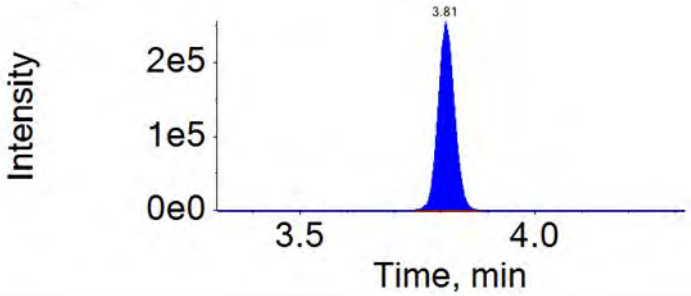
Sample Name: CAL4 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-45.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	617045.58	A	0.3619	0.3710			
PFBS_2	3.81	1.00	228894.51	A	0.3619	0.3710	3	50	
4:2-FTS	4.13	1.00	126396.51	A	0.6730	0.6813			
4:2 FTS_2	4.12	1.00	86110.06	A	0.6730	0.6813		#NA!	
PFHxA	4.16	1.00	1265231.12	A	0.0117	0.0101			
PFHxA_2	4.16	1.00	12793.78	A	0.0117	0.0101	-13	50	
PFPeS	4.18	1.10	328681.66	A	0.5191	0.5078			
PFPeS_2	4.18	1.10	166890.99	A	0.5191	0.5078	-2	50	
PFHpA	4.55	1.00	1318774.50	A	0.0563	0.0555			
PFHpA_2	4.55	1.00	73135.24	A	0.0563	0.0555	-2	50	
PFHxS	4.55	1.00	479290.97	M	0.3428	0.3441			
PFHxS_2	4.55	1.00	164902.13	M	0.3428	0.3441	0	50	
6:2-FTS	4.91	1.00	107470.62	A	0.6604	0.6264			
6:2 FTS_2	4.91	1.00	67319.96	A	0.6604	0.6264		#NA!	
PFHpS	4.91	1.08	434949.18	A	0.4066	0.4089			
PFHpS_2	4.91	1.08	177851.23	A	0.4066	0.4089	1	50	
PFOA	4.92	1.00	1327086.09	A	0.0562	0.0557			
PFOA_2	4.92	1.00	73867.47	A	0.0562	0.0557	-1	50	
PFOS	5.25	1.00	448833.83	M	0.2968	0.3022			
PFOS_2	5.25	1.00	135652.81	M	0.2968	0.3022	2	50	
PFNA	5.26	1.00	1106664.23	A	0.0229	0.0210			
PFNA_2	5.26	1.00	23205.90	A	0.0229	0.0210	-8	50	
PFNS	5.54	1.06	269712.27	A	0.4828	0.4818			
PFNS_2	5.54	1.06	129941.05	A	0.4828	0.4818	0	50	
PFDA	5.56	1.00	941985.31	M	0.0081	0.0060			
PFDA_2	5.56	1.00	5626.45	M	0.0081	0.0060	-26	50	
8:2-FTS	5.57	1.00	80922.57	A	0.6814	0.6947			
8:2 FTS_2	5.57	1.00	56219.65	A	0.6814	0.6947		#NA!	
NMeFOSAA	5.70	1.00	103649.07	A	0.2569	0.2651			
NMeFOSAA_2	5.70	1.00	27472.86	M	0.2569	0.2651	3	50	
PFDS	5.80	1.11	224031.22	A	0.5144	0.4482			
PFDS_2	5.80	1.10	100404.30	A	0.5144	0.4482	-13	50	
PFUnDA	5.82	1.00	768010.80	A	0.0058	0.0039			
PFUnDA_2	5.82	1.00	2997.45	M	0.0058	0.0039	-33	50	
NEtFOSAA	5.84	1.00	94877.84	A	0.7253	0.6488			
NEtFOSAA_2	5.84	1.00	61554.78	M	0.7253	0.6488	-11	50	
PFDoDA	6.05	1.00	803646.84	A	0.0157	0.0099			
PFDoDA_2	6.05	1.00	7981.38	A	0.0157	0.0099	-37	50	
10:2-FTS	6.07	1.09	56040.80	A	0.6356	0.7371			
10:2 FTS_2	6.07	1.09	41308.18	A	0.6356	0.7371		#NA!	
PFTrDA	6.25	1.03	674140.32	A	0.0086	0.0101			
PFTrDA_2	6.25	1.03	6830.51	A	0.0086	0.0101	18	50	
PFTeDA	6.43	1.00	571926.74	A	0.0062	0.0068			
PFTeDA_2	6.43	1.00	3881.08	A	0.0062	0.0068	9	50	
PFHxDA	6.73	1.05	256654.28	A	0.0683	0.0616			
PFHxDA_2	6.73	1.05	15804.20	A	0.0683	0.0616	-10	50	
PFODA	6.99	1.09	219359.64	A	0.0277	0.0258			
PFODA_2	6.99	1.09	5669.48	A	0.0277	0.0258	-7	50	

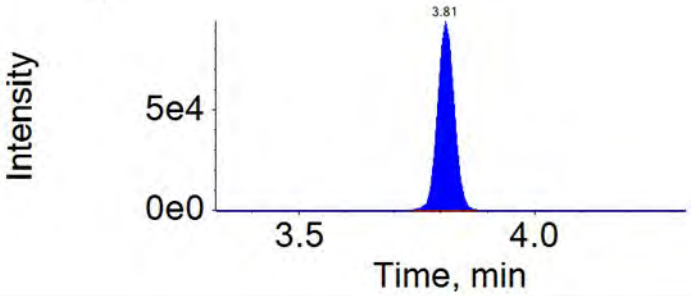
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

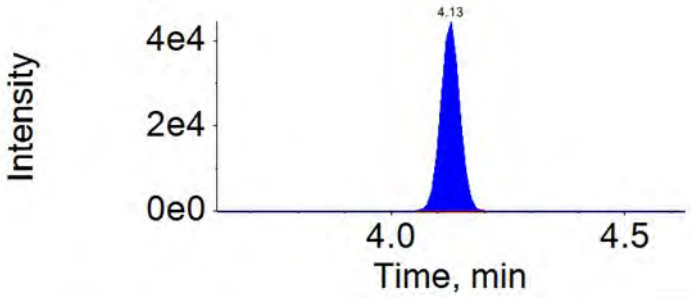
Component: PFBS
Primary Mass: 299.0 / 80.0



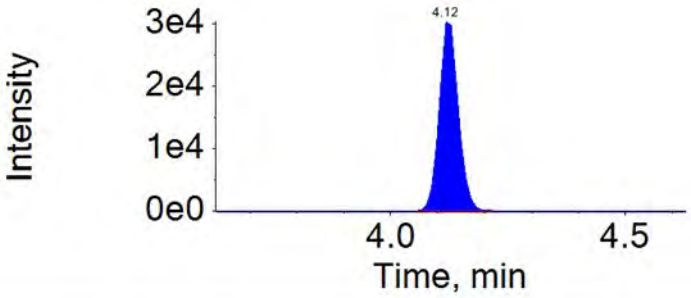
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



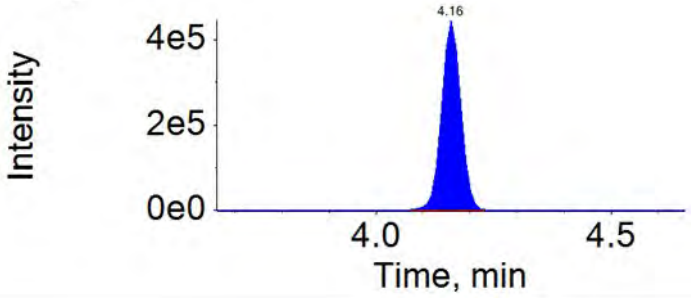
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



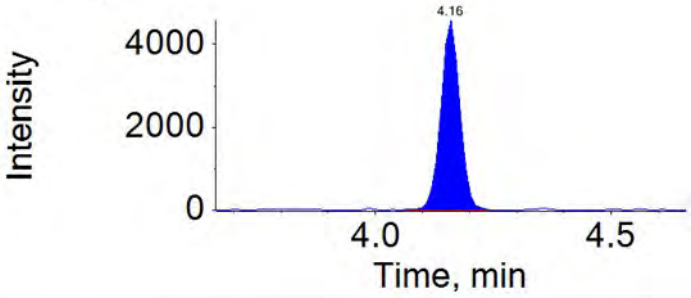
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



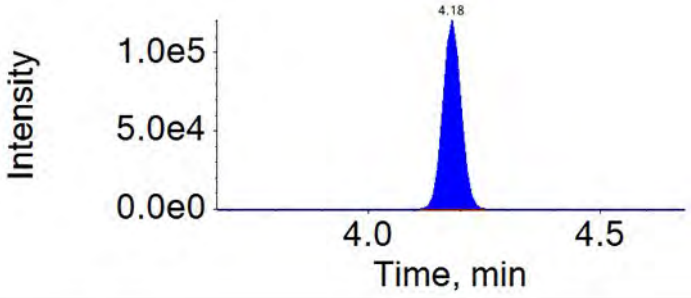
Component: PFHxA
Primary Mass: 313.0 / 269.0



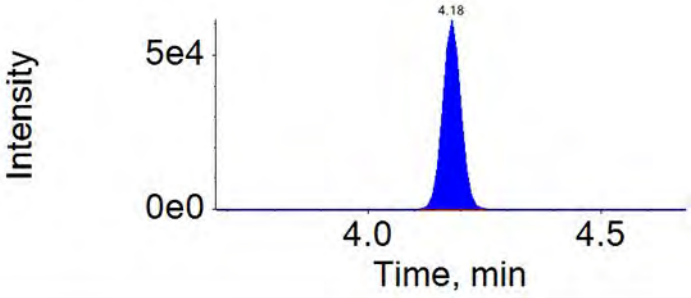
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



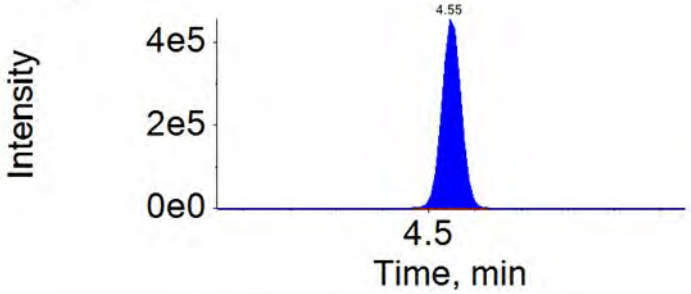
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



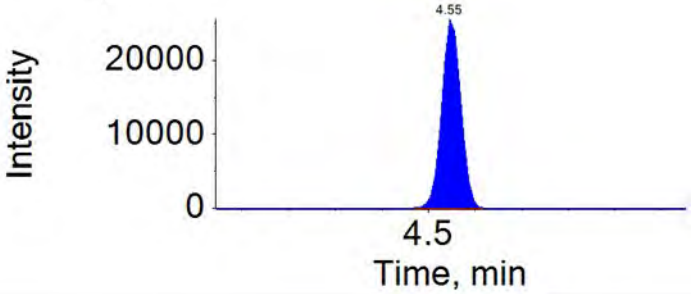
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

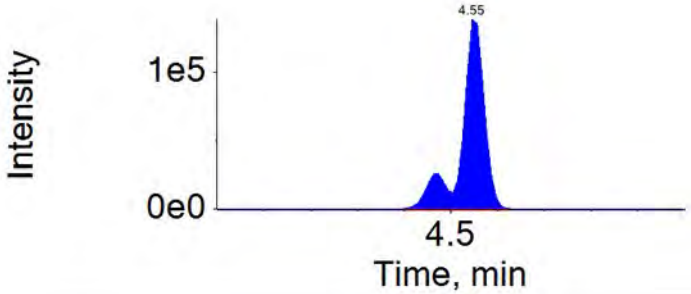
Component: PFHpA
Primary Mass: 363.0 / 319.0



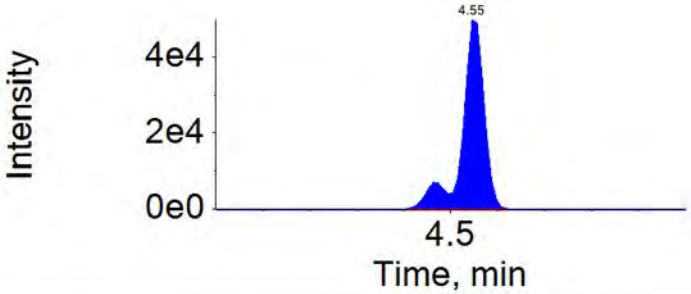
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



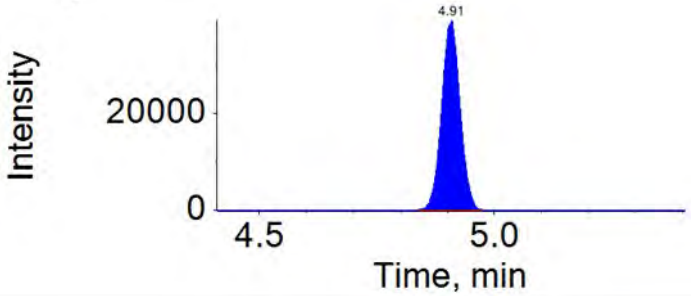
Component: PFHxS
Primary Mass: 399.0 / 80.0



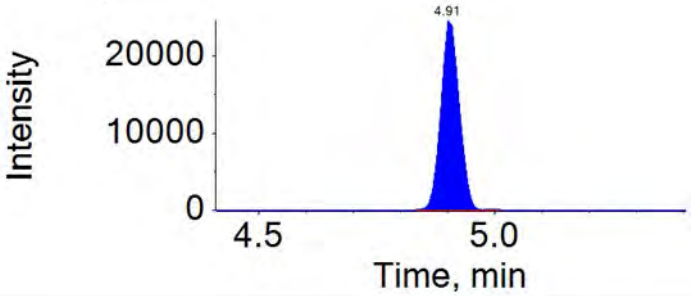
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



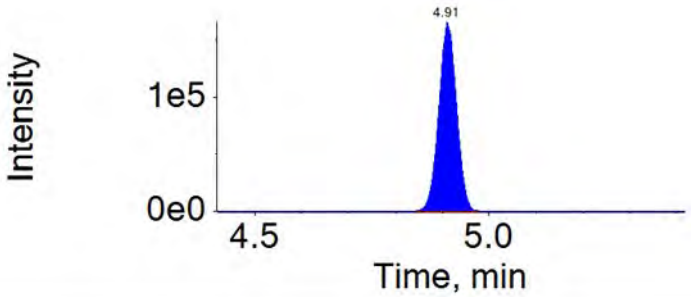
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



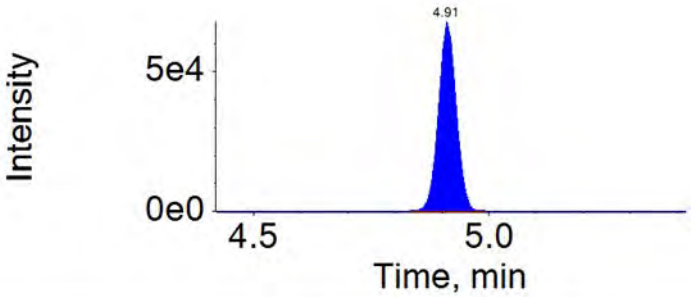
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



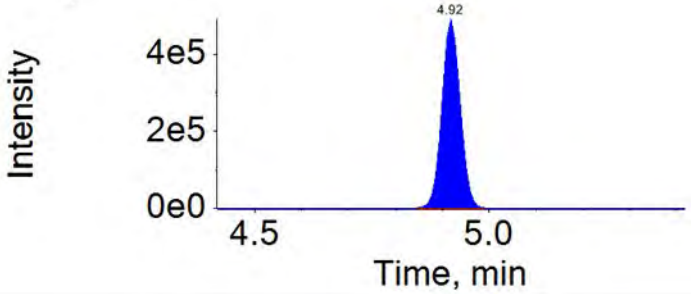
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



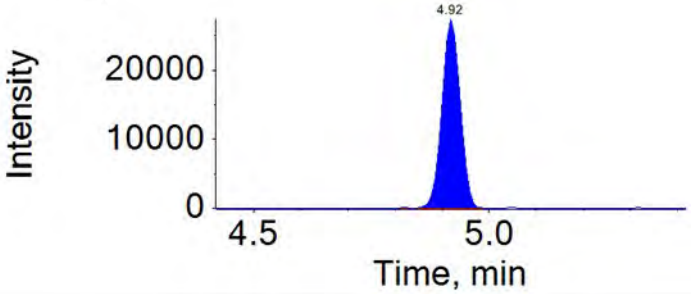
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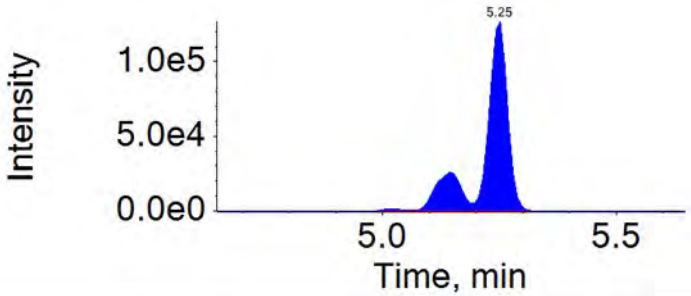
Component: PFOA
Primary Mass: 413.0 / 369.0



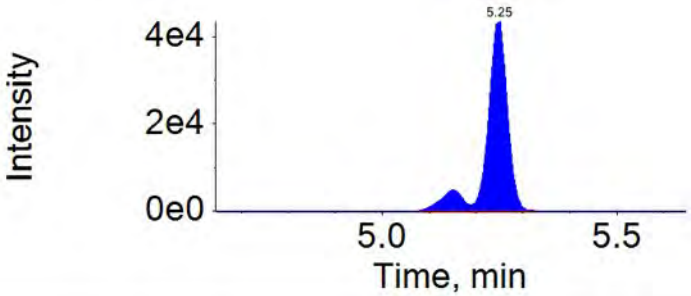
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



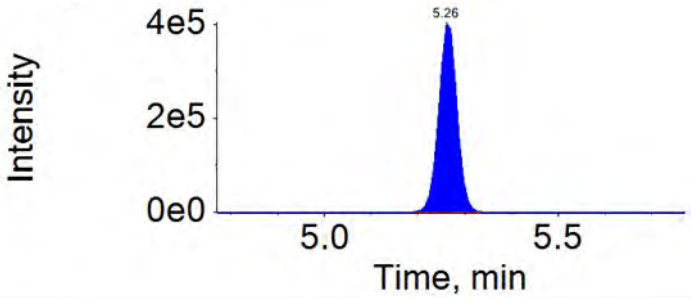
Component: PFOS
Primary Mass: 499.0 / 80.0



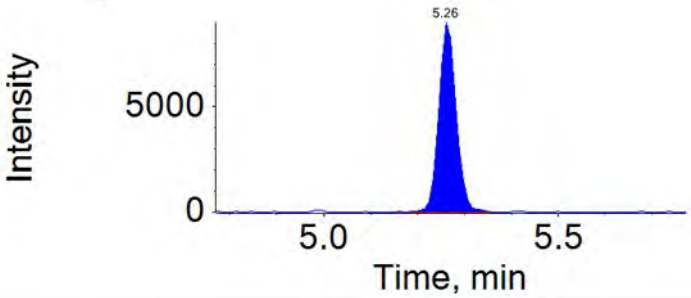
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



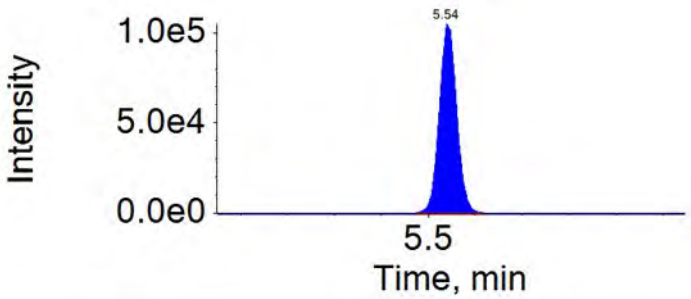
Component: PFNA
Primary Mass: 463.0 / 419.0



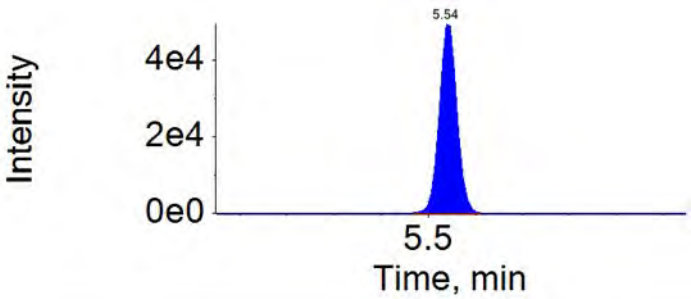
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



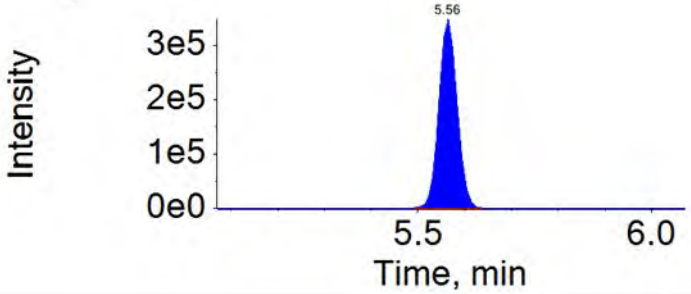
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



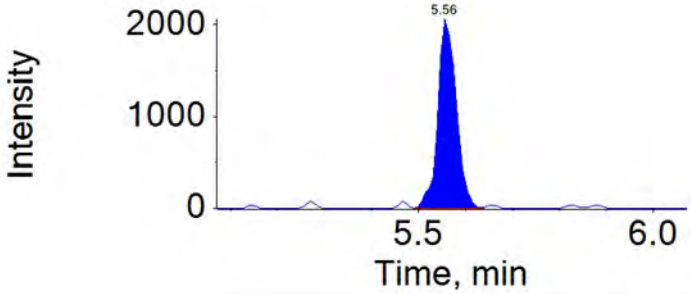
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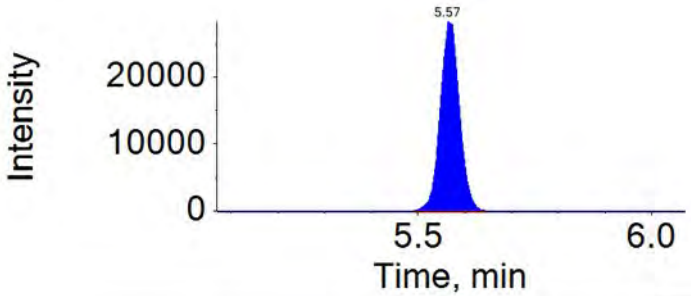
Component: PFDA
Primary Mass: 513.0 / 469.0



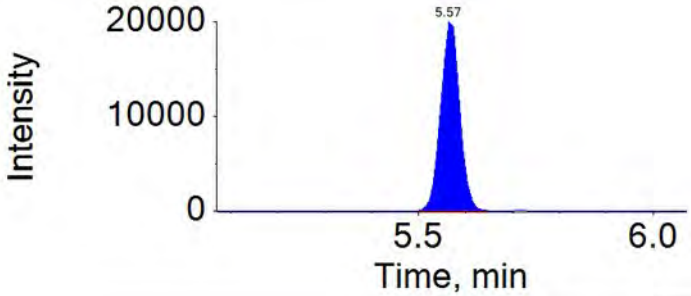
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



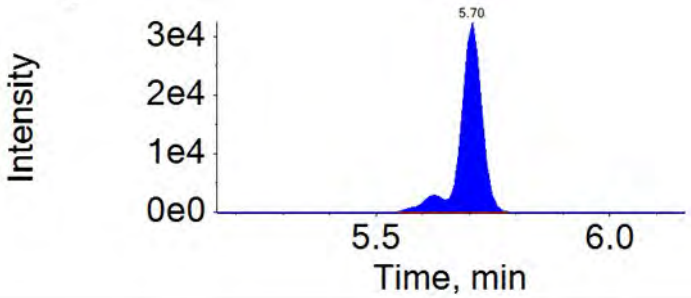
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



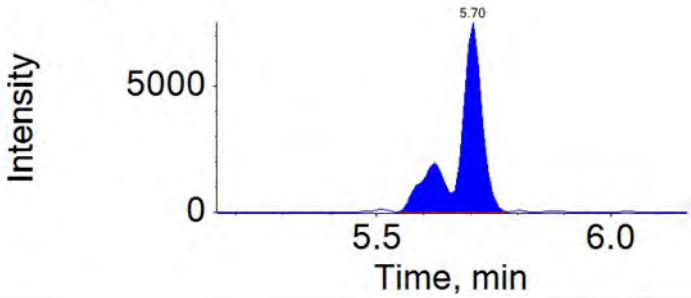
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



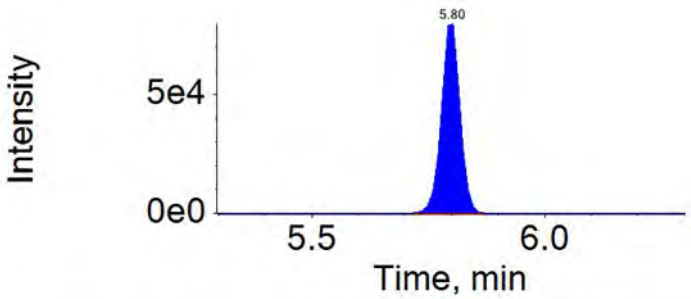
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



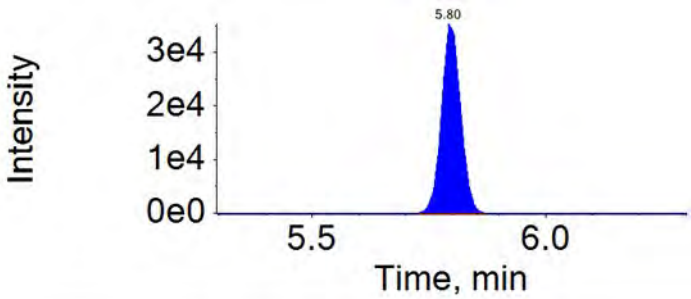
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



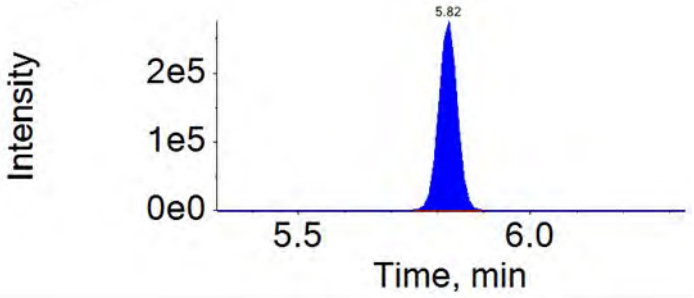
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



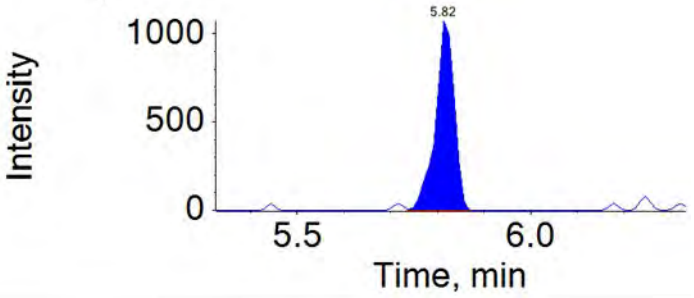
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

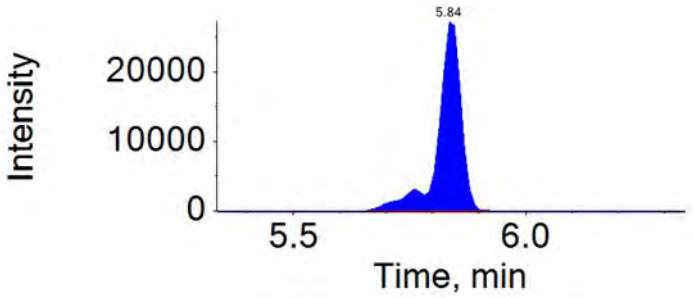
Component: PFUnDA
Primary Mass: 563.0 / 519.0



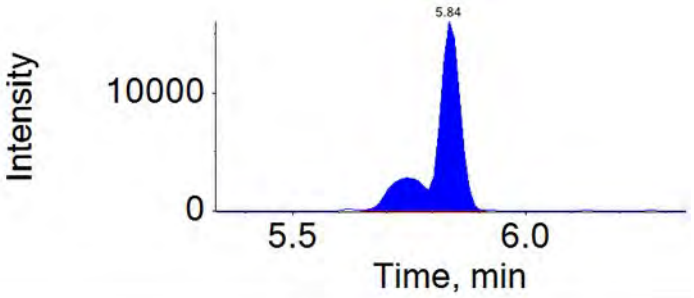
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



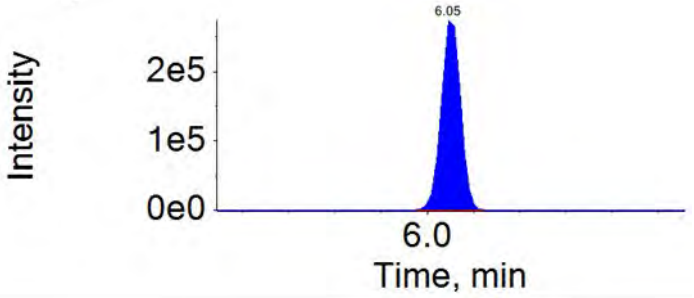
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



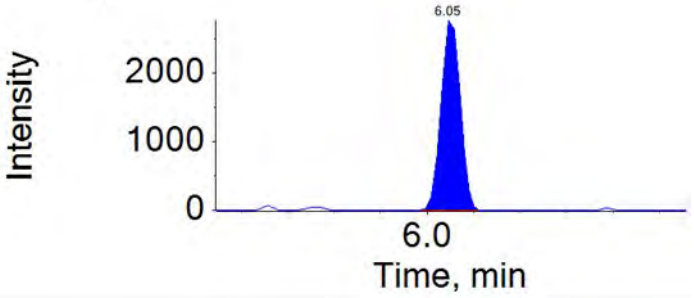
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



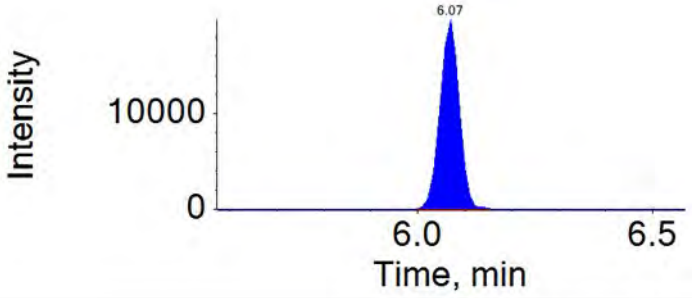
Component: PFDoDA
Primary Mass: 613.0 / 569.0



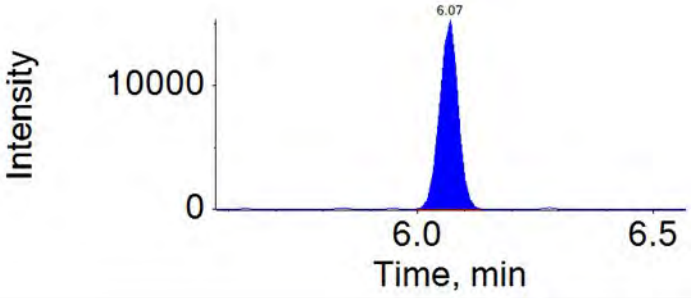
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



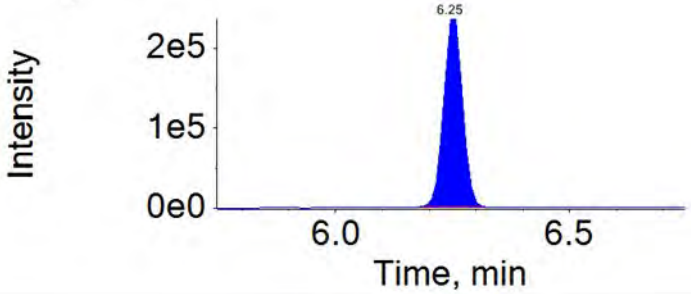
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



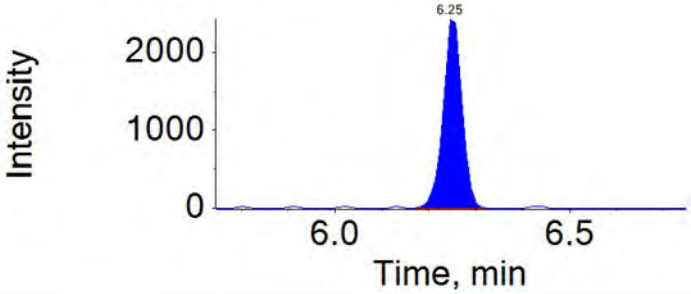
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

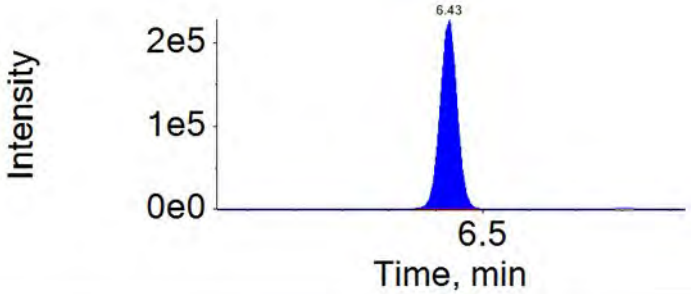
Component: PFTrDA
Primary Mass: 663.0 / 619.0



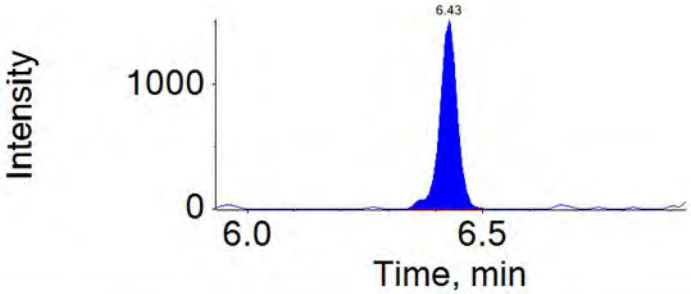
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



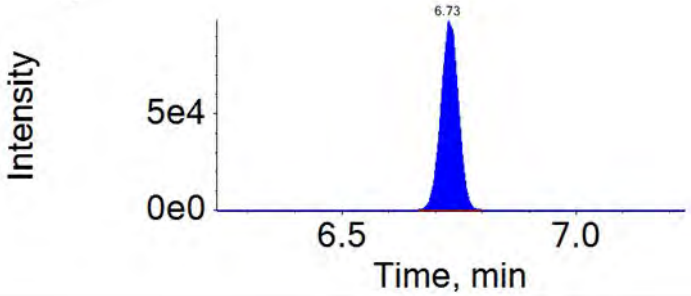
Component: PFTeDA
Primary Mass: 713.0 / 669.0



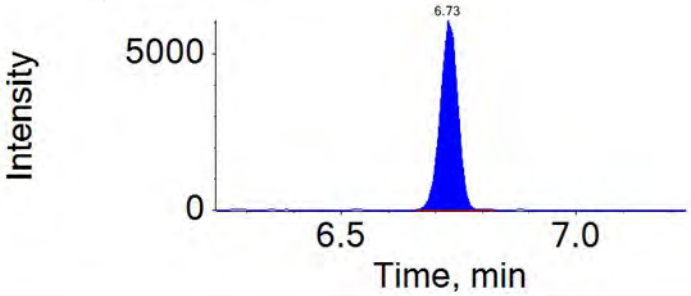
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



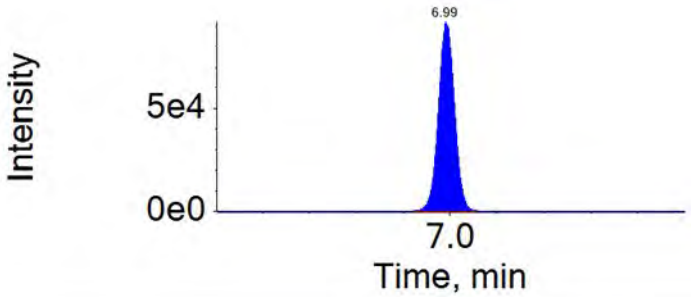
Component: PFHxDA
Primary Mass: 813.0 / 769.0



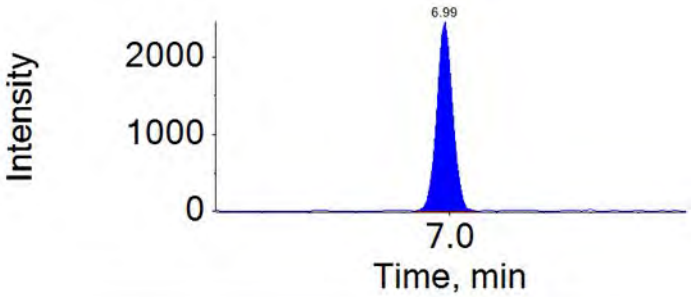
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL5			**Data File:**		18NOV12DCAL-46.wiff
Sample ID:	CALBRN51833B			**Acquis Date:**		2018-11-12T15:42:06
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	7			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV12DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N\A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	641789.5	659926.2	-3	50	
13C2-PFOA	5.0	464284.6	450219.7	3	50	
13C4-PFOS	4.8	243589.9	249205.8	-2	50	
13C2-PFDA	5.0	269315.7	278743.9	-3	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	698871.9	13C3-PFBA	641789.5	1.089	5.000	4.882	98	70-130	
E13C5-PFPeA	734598.3	13C3-PFBA	641789.5	1.145	5.000	5.134	103	70-130	
E13C3-PFBS	428050.6	13C3-PFBA	641789.5	0.667	4.650	4.708	101	70-130	
E13C2-4:2-FTS	51791.9	13C2-PFOA	464284.6	0.112	4.670	4.968	106	70-130	
E13C5-PFHxA	628952.8	13C2-PFOA	464284.6	1.355	5.000	4.894	98	70-130	
E13C3-PFHxS	309304.5	13C2-PFOA	464284.6	0.666	4.730	4.571	97	70-130	
E13C4-PFHpA	525802.1	13C2-PFOA	464284.6	1.132	5.000	5.102	102	70-130	
E13C2-6:2-FTS	31012.0	13C2-PFOA	464284.6	0.067	4.750	4.469	94	70-130	
E13C8-PFOA	805288.7	13C2-PFOA	464284.6	1.734	5.000	4.779	96	70-130	
E13C8-PFOS	267157.6	13C4-PFOS	243589.9	1.097	4.780	4.860	102	70-130	
E13C9-PFNA	441776.8	13C4-PFOS	243589.9	1.814	5.000	5.057	101	70-130	
E13C6-PFDA	585231.2	13C2-PFDA	269315.7	2.173	5.000	5.071	101	70-130	
E13C2-8:2-FTS	24192.1	13C2-PFDA	269315.7	0.090	4.790	4.480	94	70-130	
E13C8-PFOSA	596544.1	13C2-PFDA	269315.7	2.215	5.000	4.911	98	70-130	
Ed3-NMeFOSAA	72424.5	13C2-PFDA	269315.7	0.269	5.000	4.854	97	70-130	
E13C7-PFUnDA	231187.9	13C2-PFDA	269315.7	0.858	5.000	4.984	100	70-130	
Ed5-NEtFOSAA	63701.7	13C2-PFDA	269315.7	0.237	5.000	5.004	100	70-130	
E13C2-PFDoDA	507556.8	13C2-PFDA	269315.7	1.885	5.000	4.893	98	70-130	
Ed7-NMePFOSAE	316777.8	13C2-PFDA	269315.7	1.176	5.000	5.090	102	70-130	
Ed3-NMePFOSA	68615.7	13C2-PFDA	269315.7	0.255	5.000	4.629	93	70-130	
Ed9-NEtPFOSAE	255767.8	13C2-PFDA	269315.7	0.950	5.000	4.939	99	70-130	
Ed5-NEtPFOSA	55378.5	13C2-PFDA	269315.7	0.206	5.000	4.824	96	70-130	
E13C2-PFTeDA	379571.6	13C2-PFDA	269315.7	1.409	5.000	4.948	99	70-130	

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

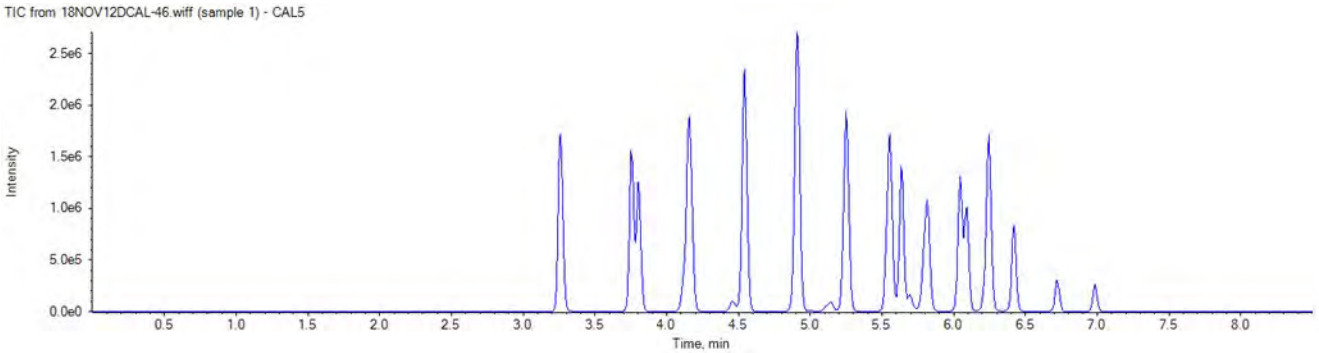
Analyte Quantitation Peak Table

Sample Name: CAL5 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-46.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	2700090.8		A	13C4-PFBA	3.26	698871.9	3.863	21.403
PFPeA	3.76	1.000	2660895.4		A	13C5-PFPeA	3.76	734598.3	3.622	20.969
PFBS	3.80	1.000	1630613.5		A	13C3-PFBS	3.81	428050.6	3.809	18.121
4:2-FTS	4.12	1.000	344695.9		A	13C2-4:2-FTS	4.12	51791.9	6.655	18.070
PFHxA	4.15	1.000	3158486.4		A	13C5-PFHxA	4.15	628952.8	5.022	20.968
PFPeS	4.17	1.100	815928.2		A	13C3-PFBS	3.81	428050.6	1.906	18.506
PFHpA	4.54	1.000	3269561.0		A	13C4-PFHpA	4.54	525802.1	6.218	20.612
PFHxS	4.54	1.000	1138604.3		M	13C3-PFHxS	4.54	309304.5	3.681	17.849
6:2-FTS	4.90	1.000	260254.3		A	13C2-6:2-FTS	4.90	31012.0	8.392	20.308
PFHpS	4.90	1.080	1145559.8		A	13C3-PFHxS	4.54	309304.5	3.704	19.496
PFOA	4.91	1.000	3291549.4		A	13C8-PFOA	4.91	805288.7	4.087	21.830
PFOS	5.24	1.000	1147826.8		M	13C8-PFOS	5.24	267157.6	4.296	18.789
PFNA	5.26	1.000	2725089.7		A	13C9-PFNA	5.26	441776.8	6.168	22.243
PFNS	5.53	1.060	725402.0		A	13C8-PFOS	5.24	267157.6	2.715	18.997
PFDA	5.56	1.000	2309359.5		A	13C6-PFDA	5.56	585231.2	3.946	20.920
8:2-FTS	5.56	1.000	206213.1		A	13C2-8:2-FTS	5.56	24192.1	8.524	19.873
PFOSA	5.64	1.000	2498877.9		A	13C8-PFOSA	5.64	596544.1	4.189	20.460
NMeFOSAA	5.70	1.000	250711.5		A	d3-NMeFOSAA	5.70	72424.5	3.462	19.564
PFDS	5.79	1.100	578877.5		A	13C8-PFOS	5.24	267157.6	2.167	19.633
PFUnDA	5.82	1.000	1773582.6		A	13C7-PFUnDA	5.82	231187.9	7.672	20.055
NEtFOSAA	5.83	1.000	237197.2		A	d5-NEtFOSAA	5.83	63701.7	3.724	19.520
PFDoDA	6.04	1.000	2099385.0		A	13C2-PFDoDA	6.04	507556.8	4.136	21.062
10:2-FTS	6.06	1.090	153343.6		A	13C2-8:2-FTS	5.56	24192.1	6.339	21.113
NMePFOSAE	6.09	1.000	1590507.1		M	d7-NMePFOSAE	6.08	316777.8	5.021	20.896
NMePFOSA	6.10	1.000	300855.7		A	d3-NMePFOSA	6.09	68615.7	4.385	21.631
PFDoS	6.21	1.190	288905.1		A	13C8-PFOS	5.24	267157.6	1.081	18.940
NEtPFOSAE	6.25	1.000	1660562.6		M	d9-NEtPFOSAE	6.23	255767.8	6.492	20.830
NEtPFOSA	6.26	1.000	258300.3		A	d5-NEtPFOSA	6.25	55378.5	4.664	21.421
PFTrDA	6.24	1.030	1679407.2		A	13C2-PFDoDA	6.04	507556.8	3.309	20.884
PFTeDA	6.42	1.000	1418276.7		A	13C2-PFTeDA	6.42	379571.6	3.737	20.945
PFHxDA	6.72	1.050	627350.7		A	13C2-PFTeDA	6.42	379571.6	1.653	19.691
PFODA	6.98	1.090	544296.5		A	13C2-PFTeDA	6.42	379571.6	1.434	19.971

Total Ion Chromatogram

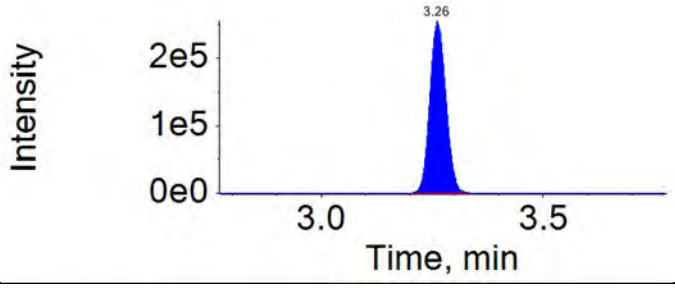


APPROVED
By MCD at 6:33 pm, 11/12/18

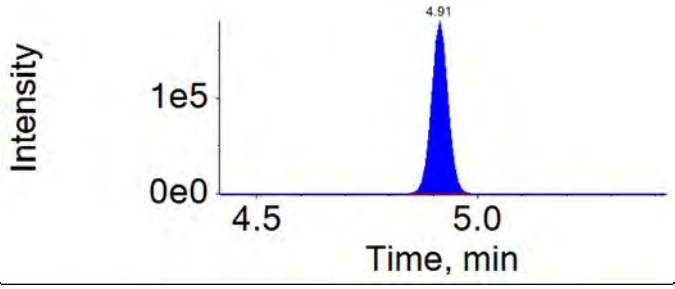
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

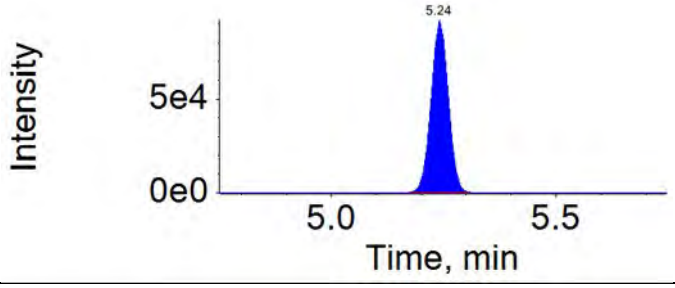
Injection Standard: 13C3-PFBA
216.0 / 172.0



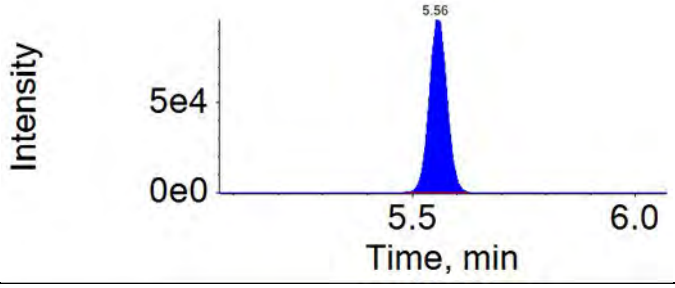
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

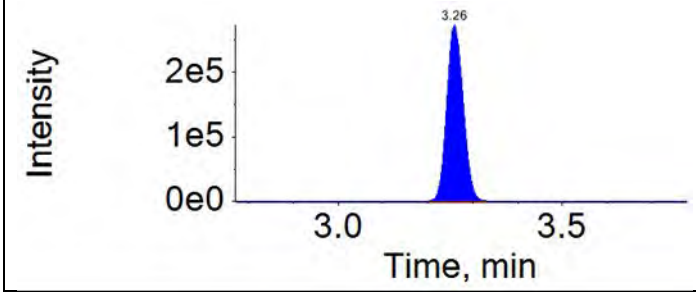


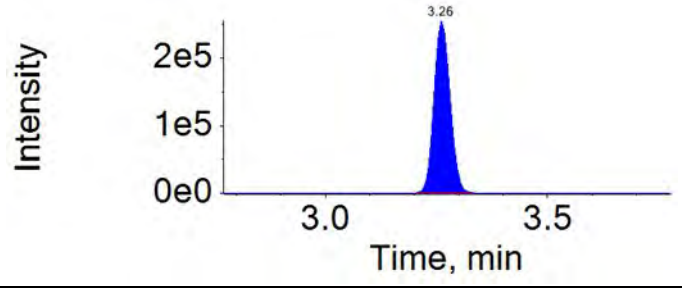
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

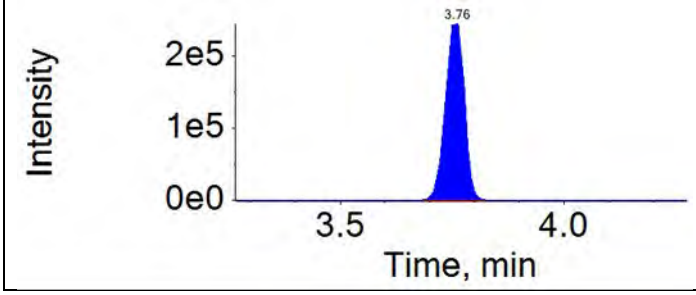
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

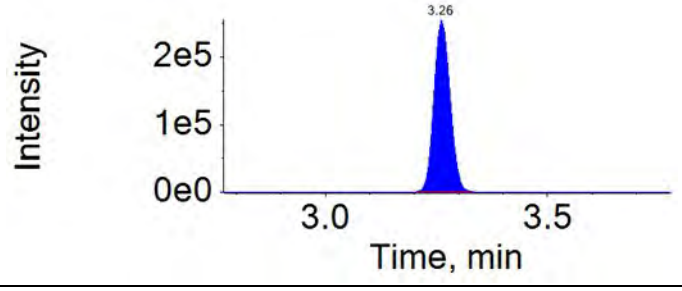
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



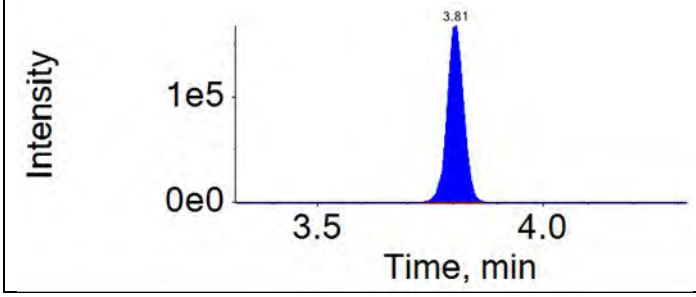


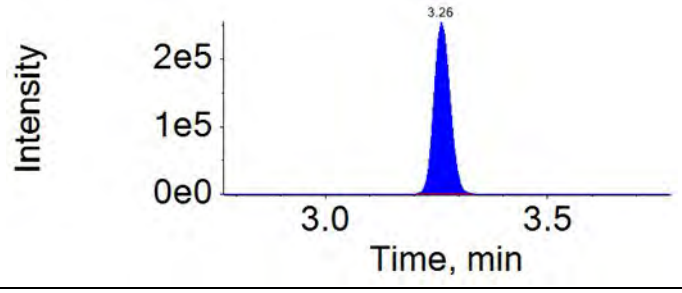
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



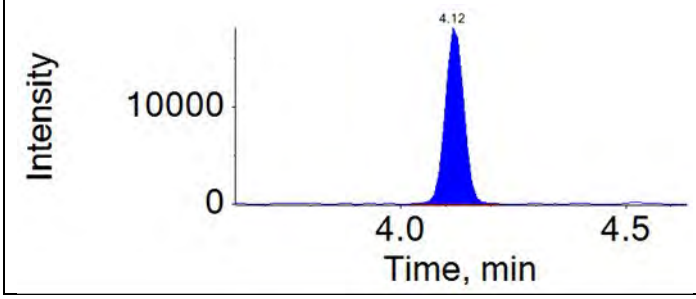


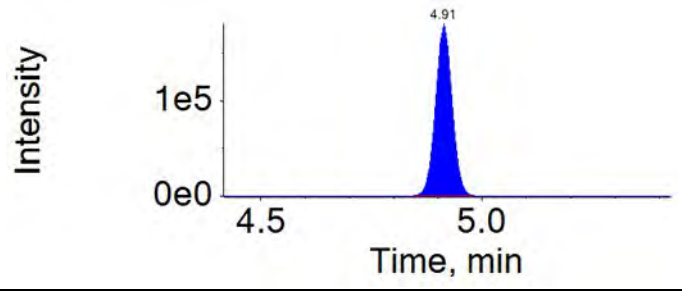
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





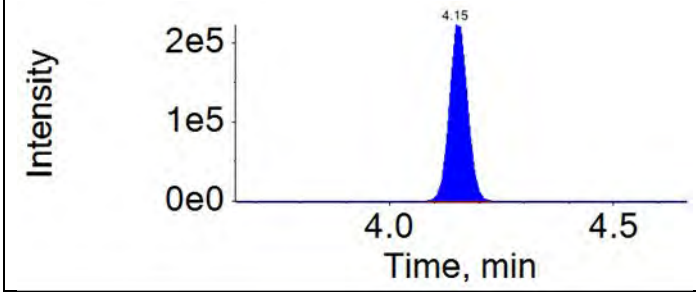
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

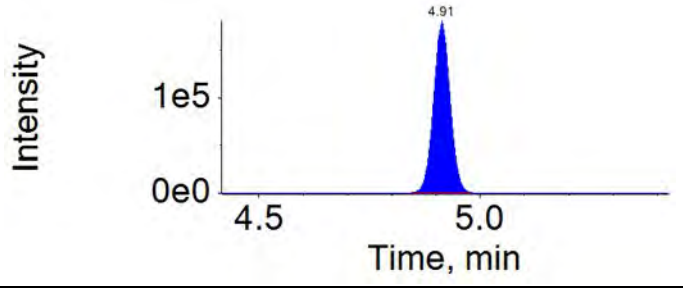




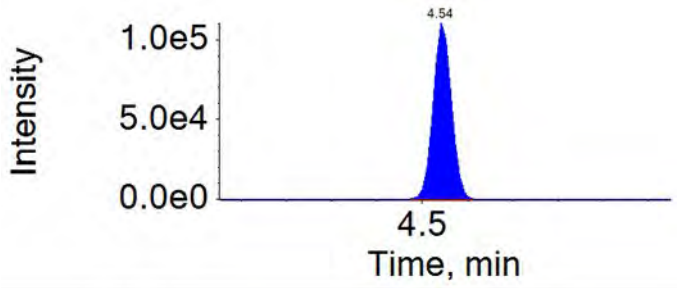
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

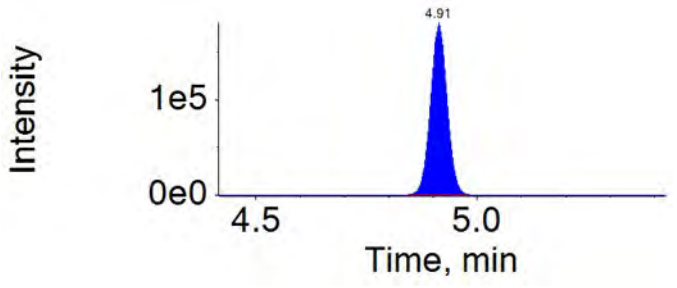
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



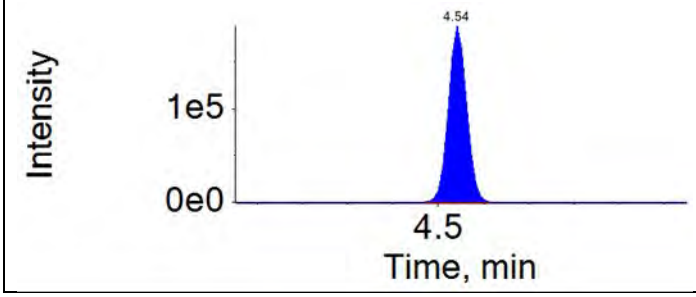


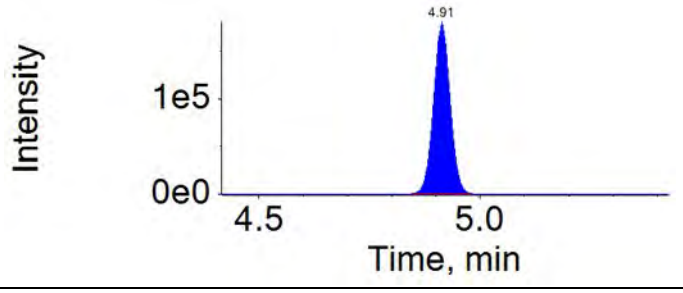
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



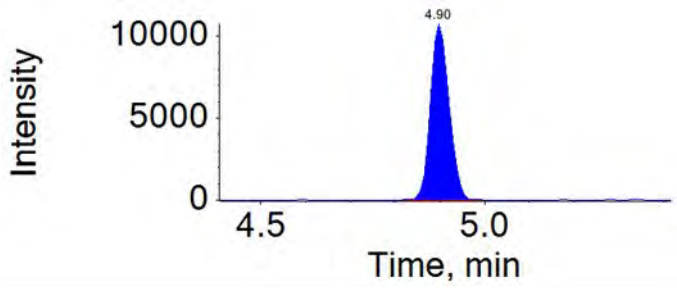


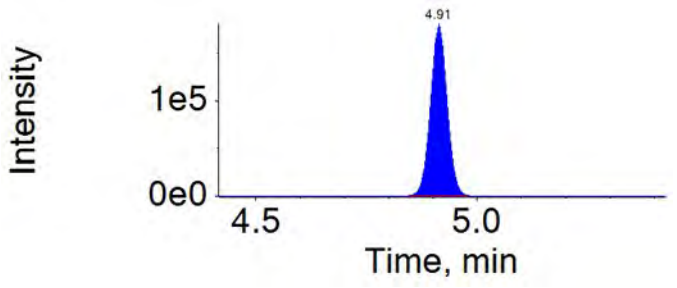
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

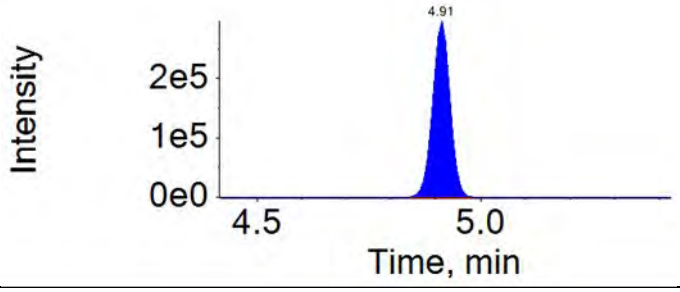
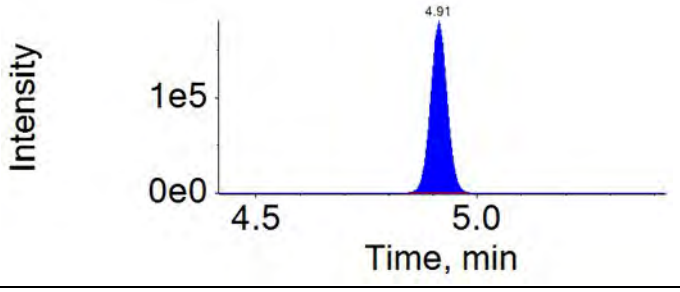


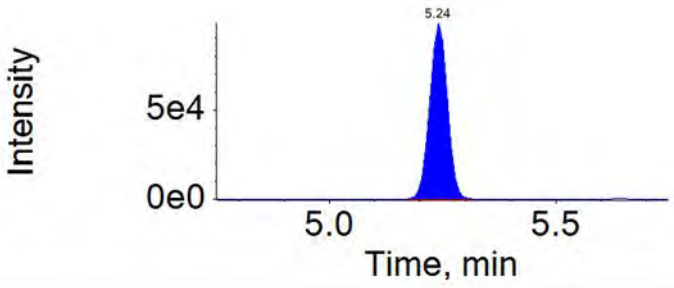
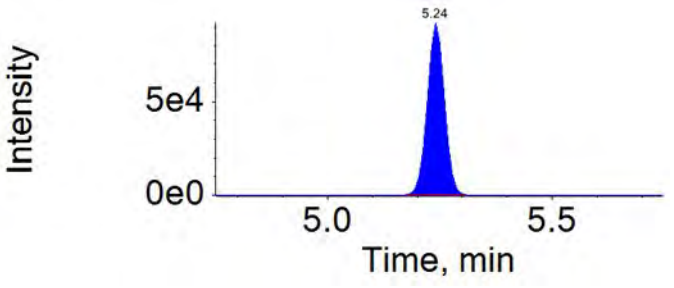


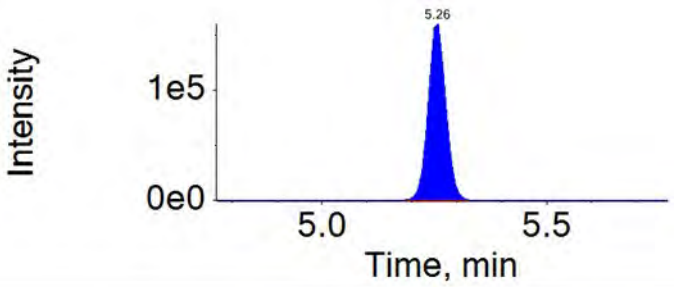
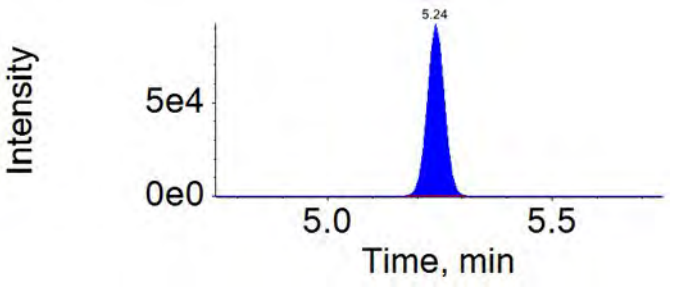
APPROVED
By MCD at 6:33 pm, 11/12/18

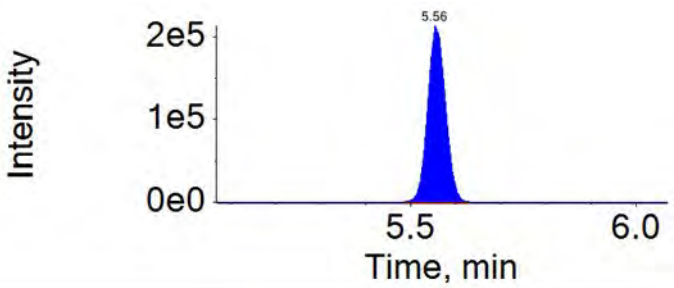
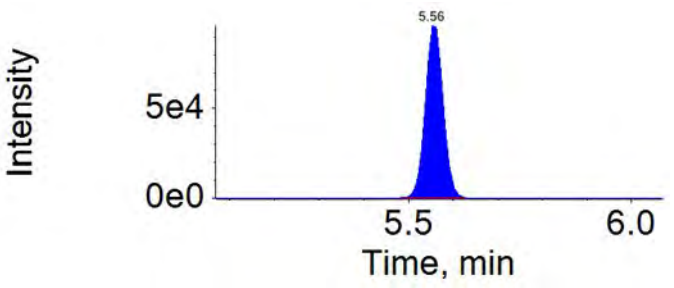
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

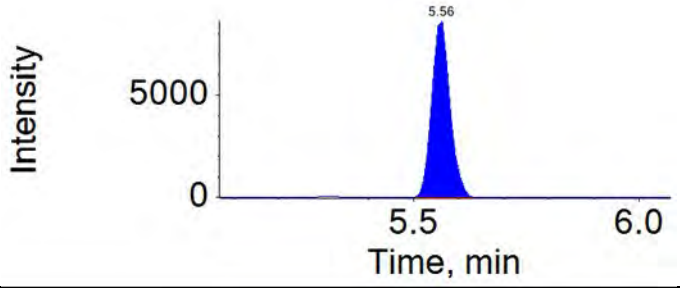
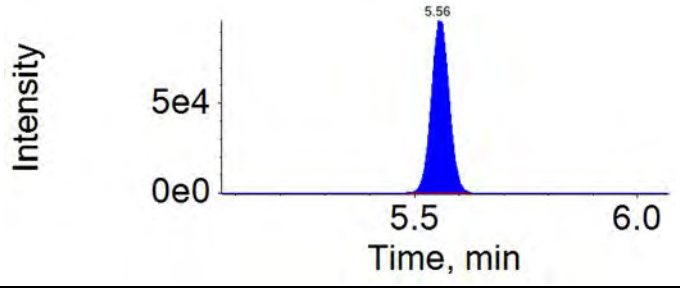
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

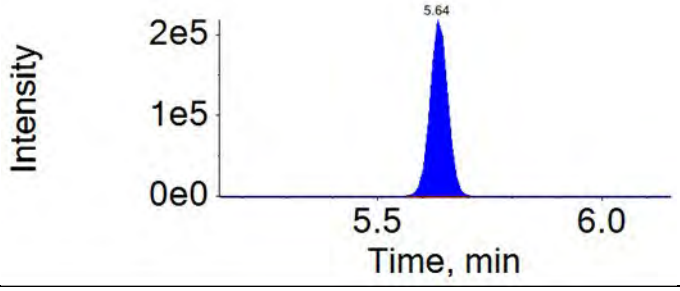
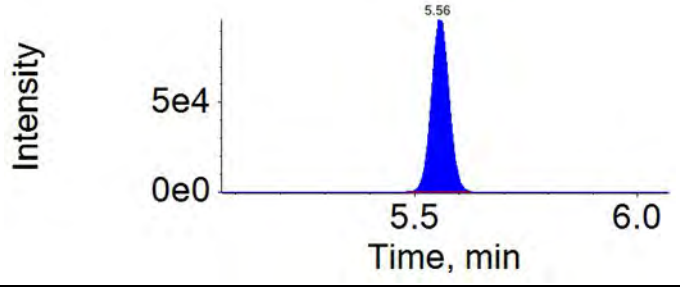
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

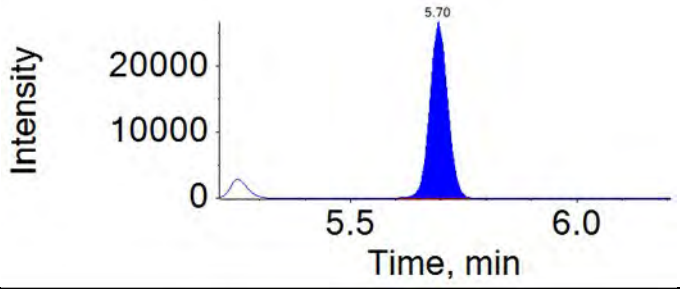
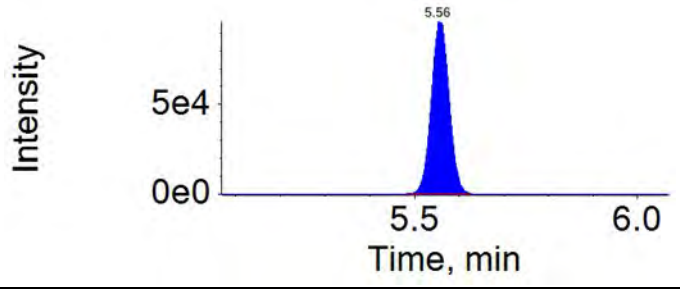
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

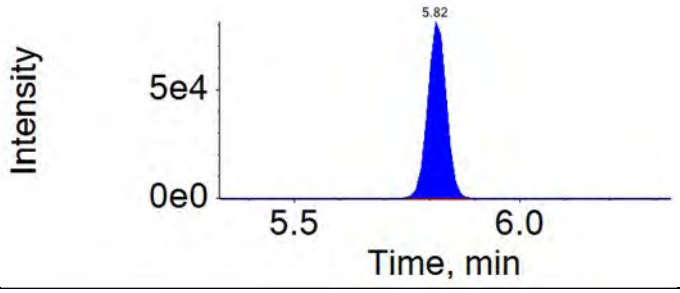
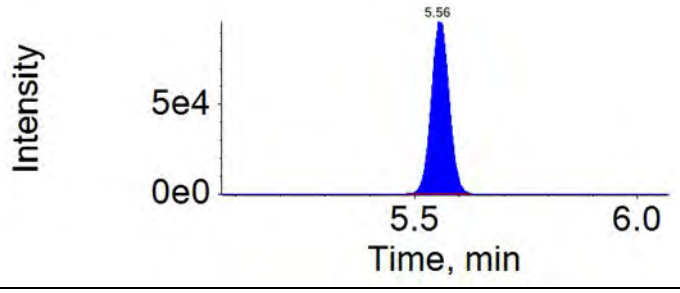
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

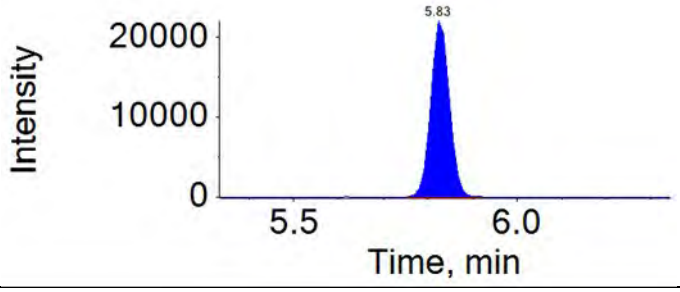
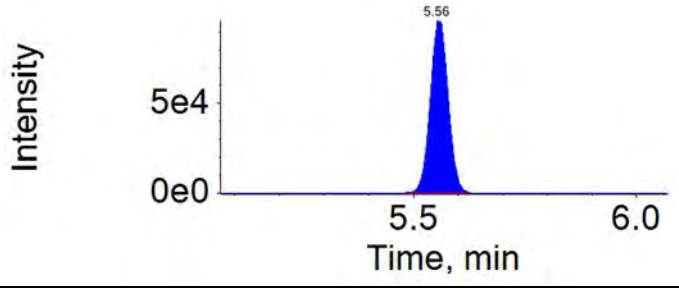
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

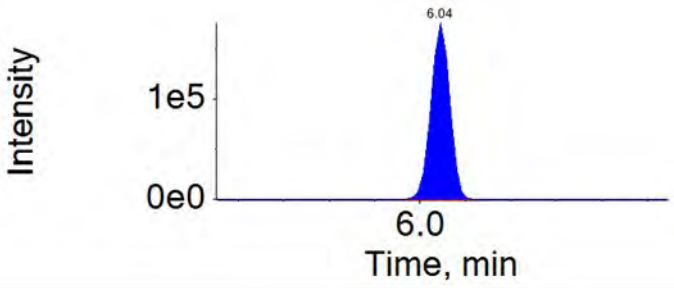
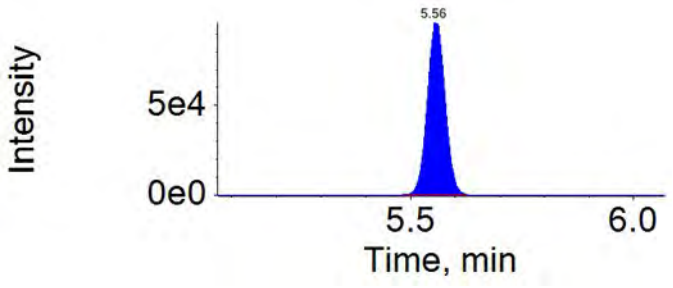
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

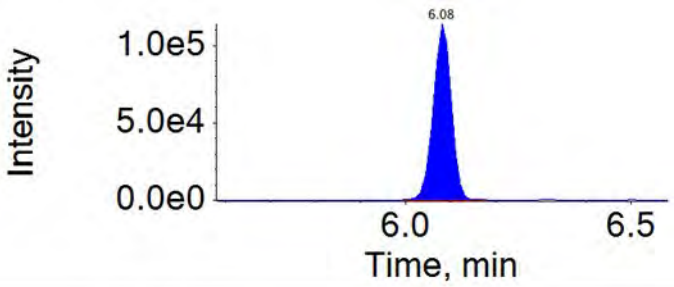
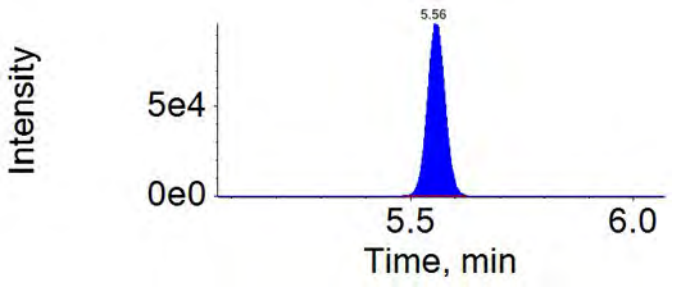
APPROVED
By MCD at 6:33 pm, 11/12/18

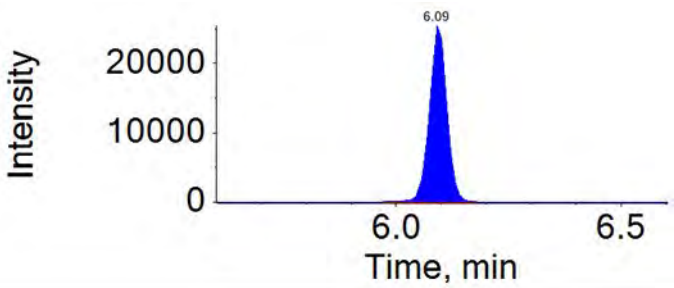
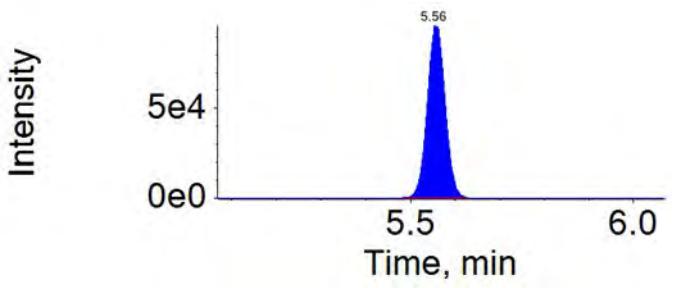
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

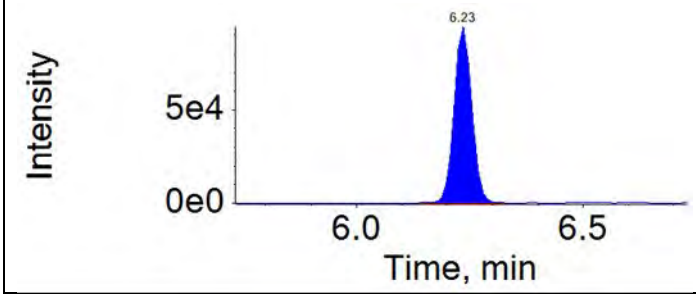
Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

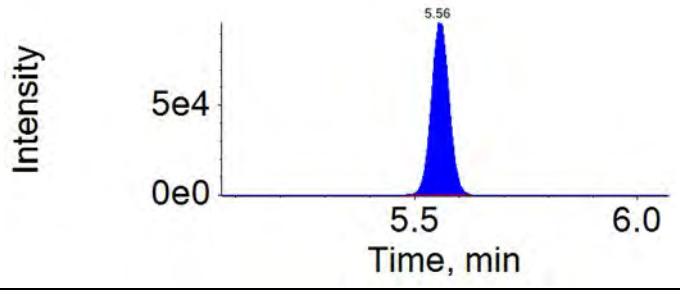
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

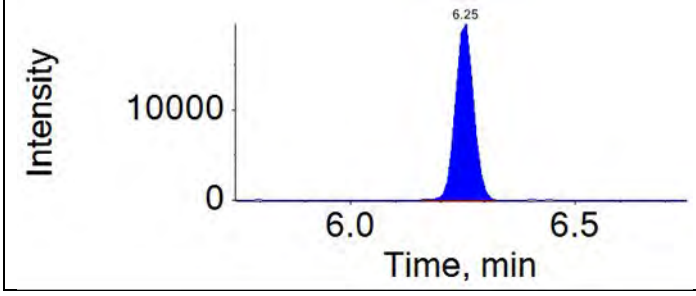
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

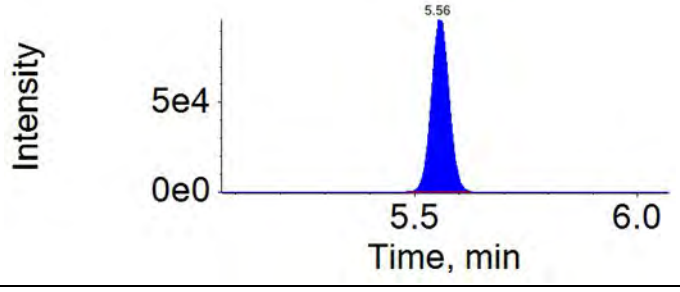
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



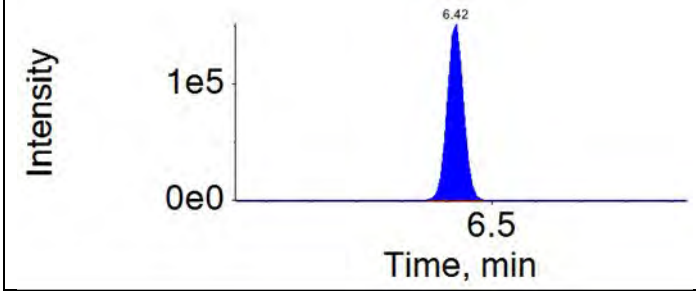


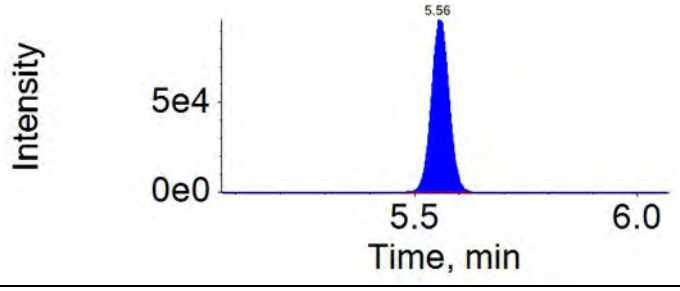
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



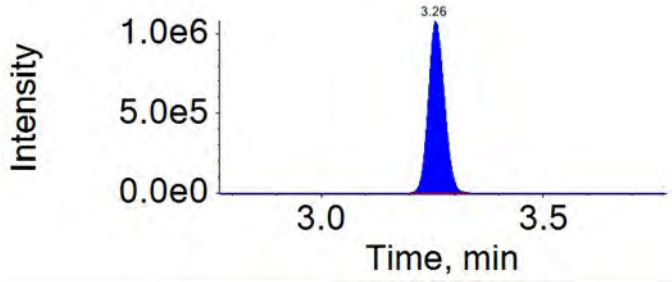


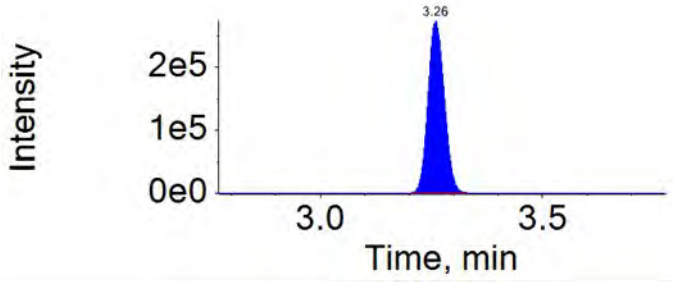
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

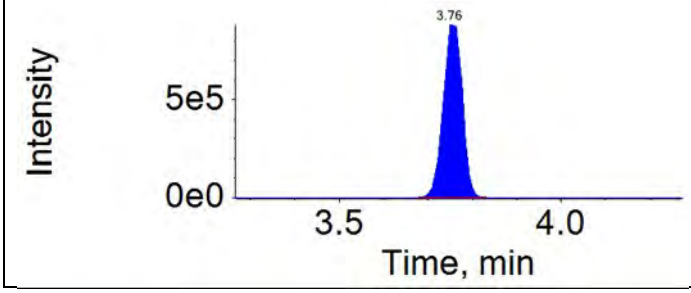
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

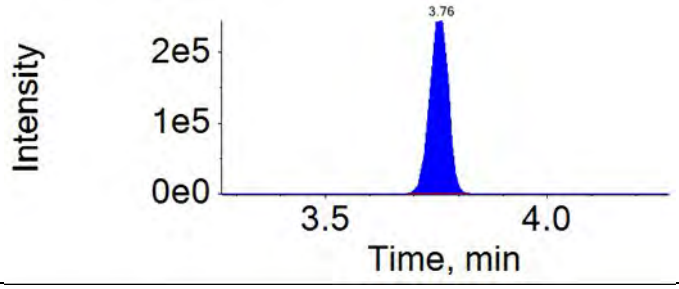
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



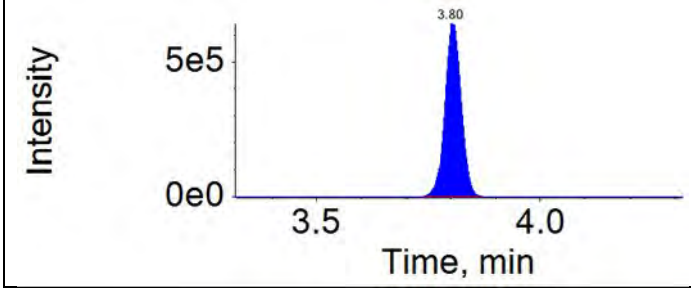


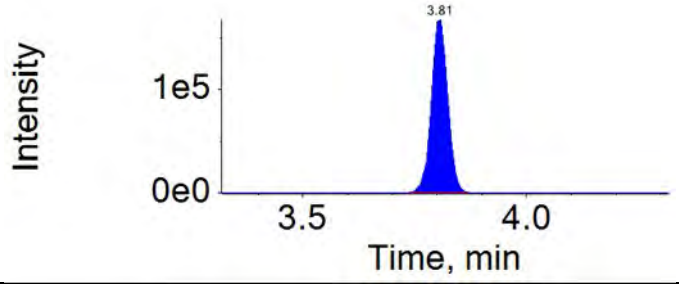
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



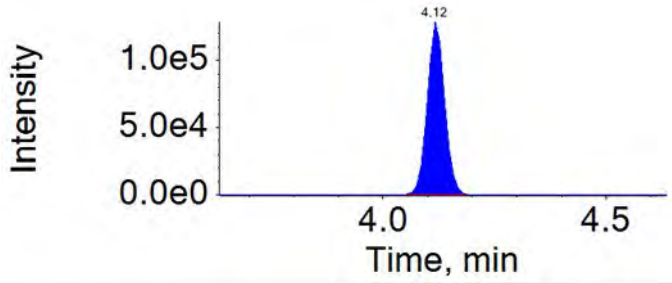


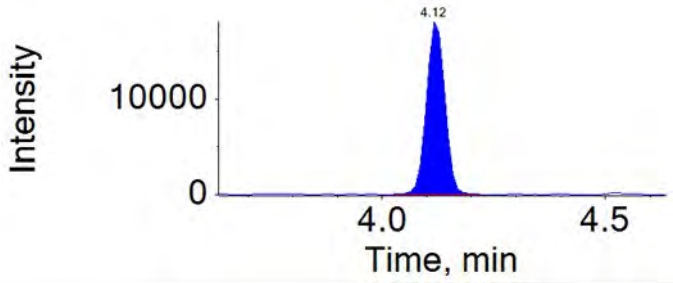
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



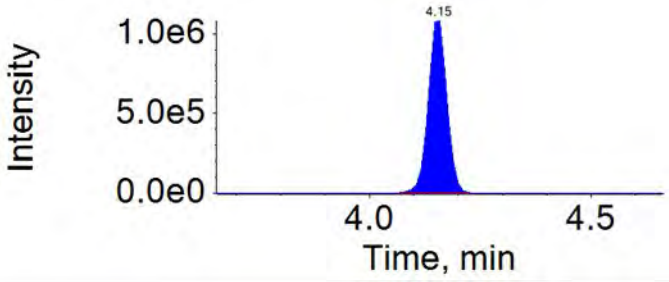


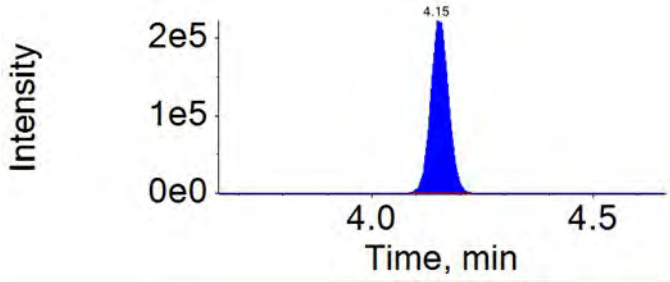
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

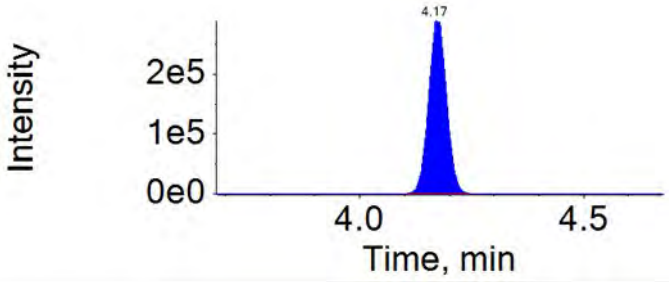
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

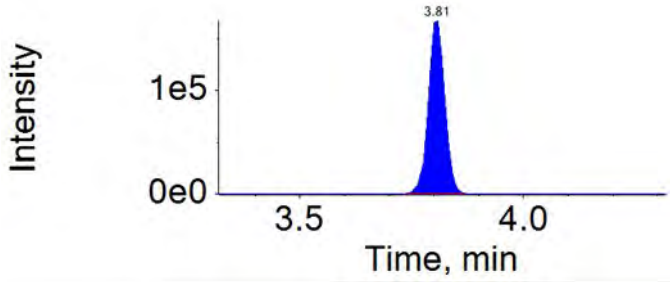
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



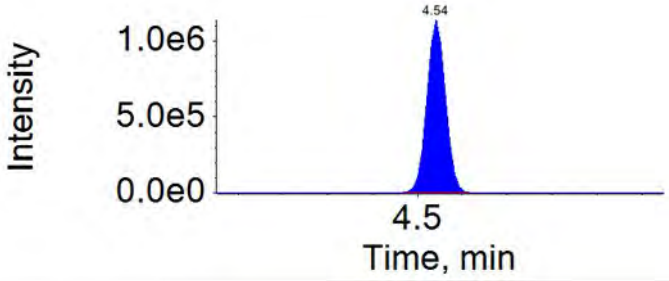


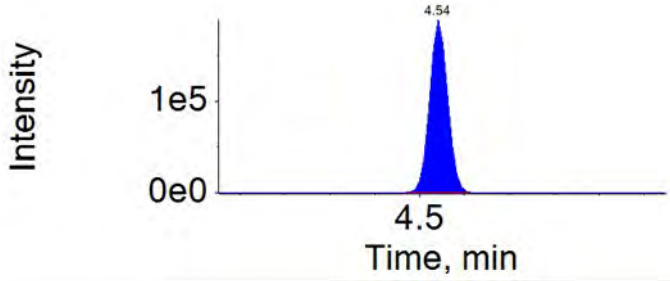
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



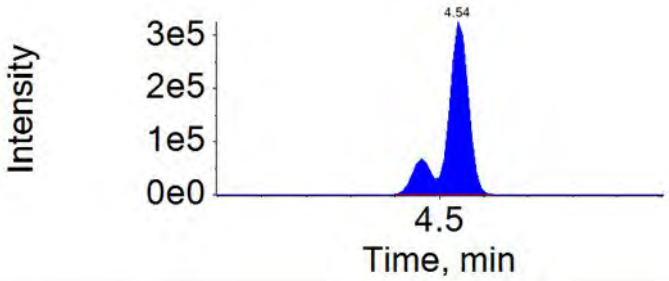


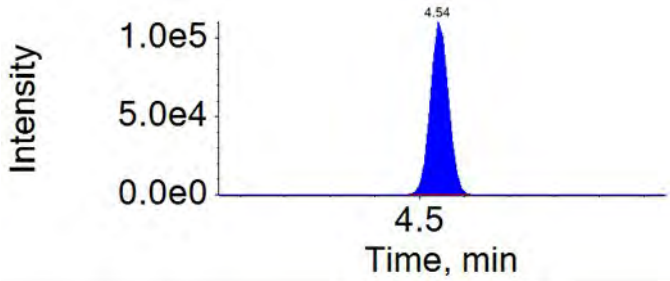
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

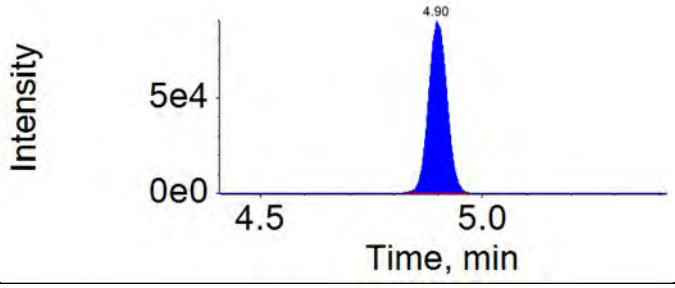
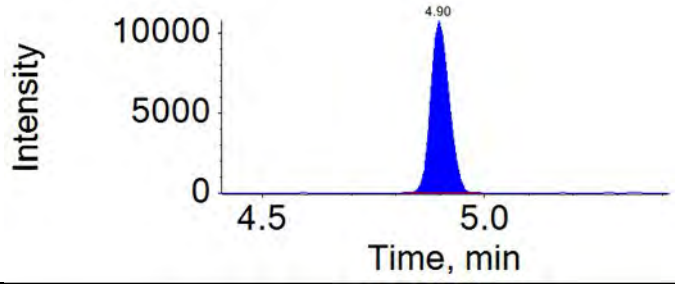


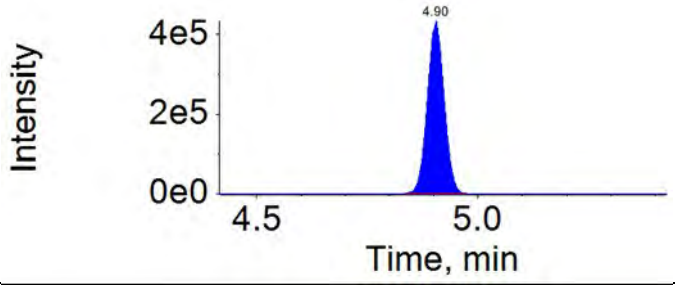
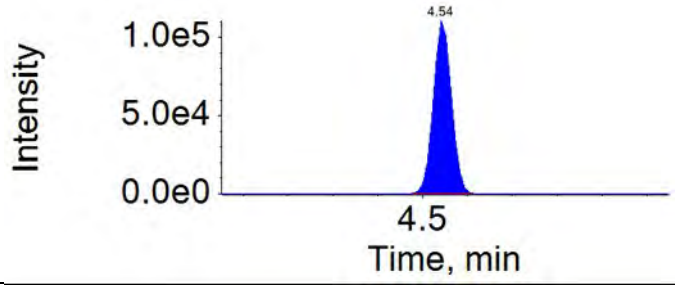


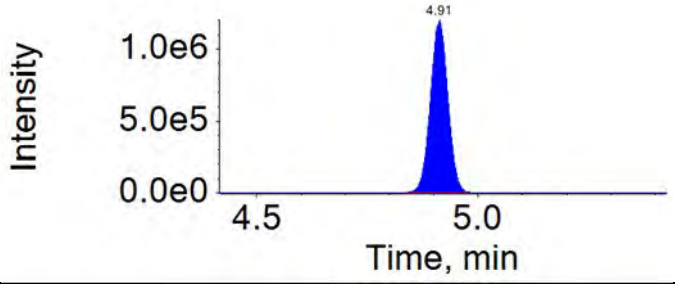
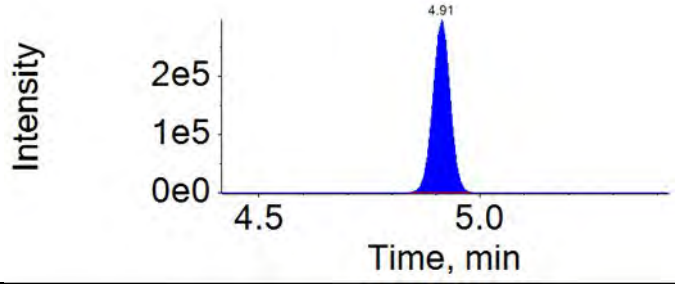
APPROVED
By MCD at 6:33 pm, 11/12/18

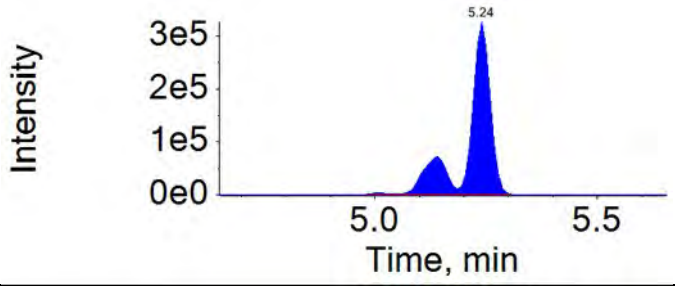
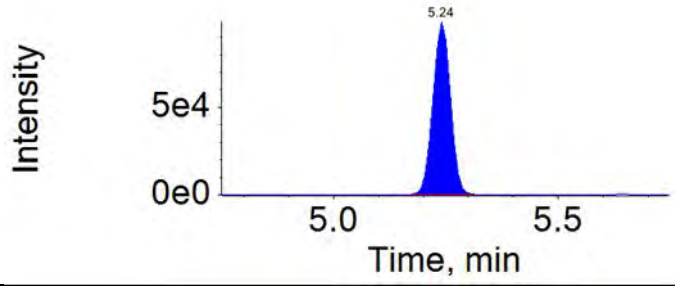
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

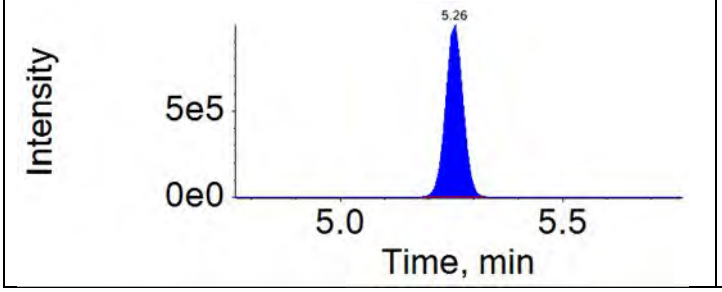
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

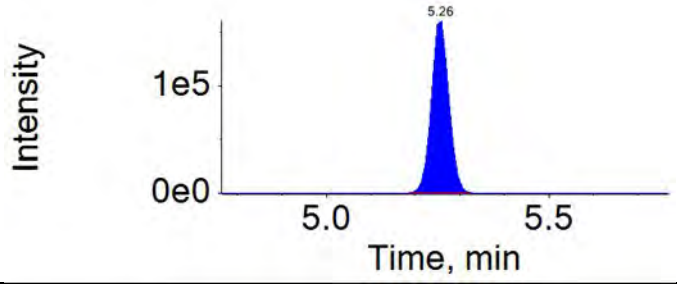
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

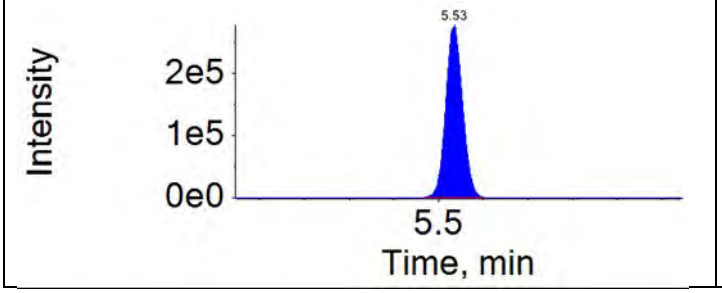
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

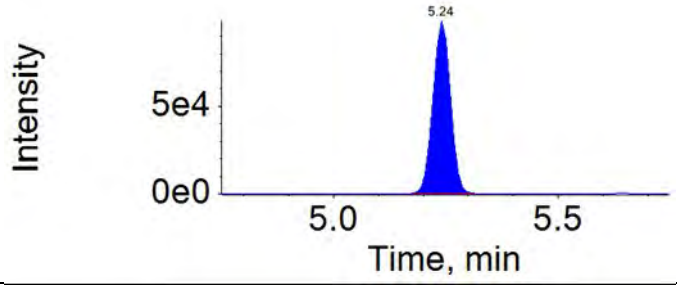
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



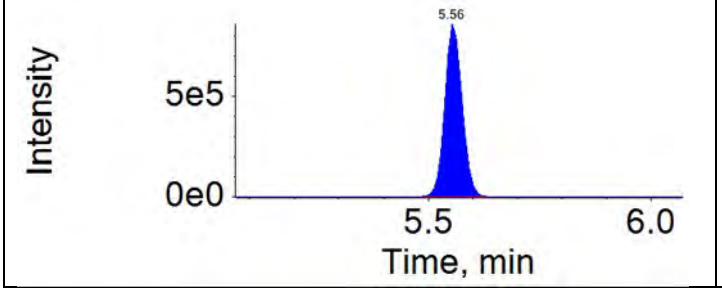


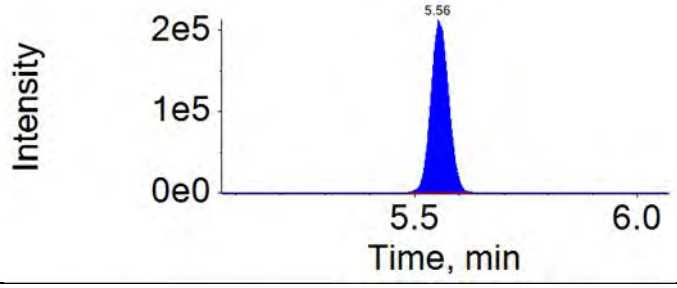
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



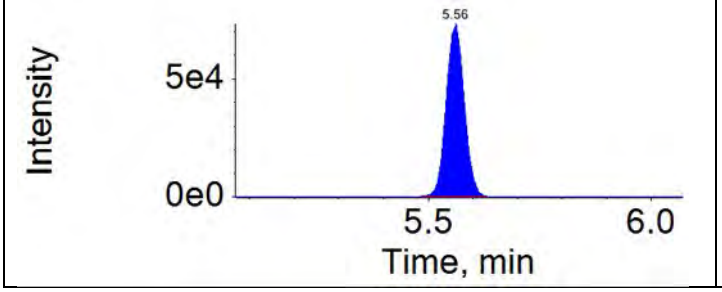


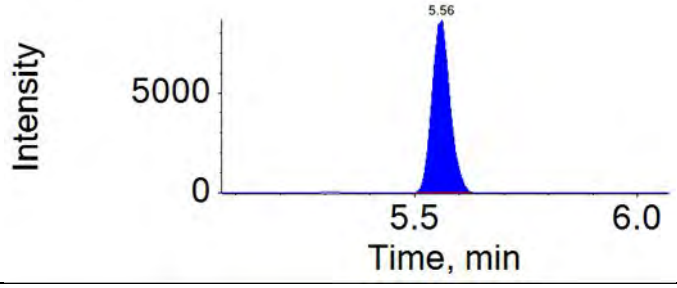
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



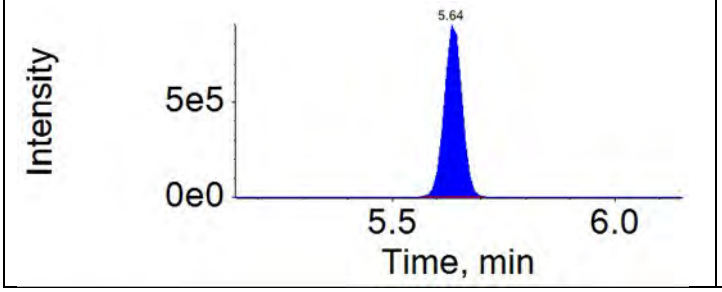


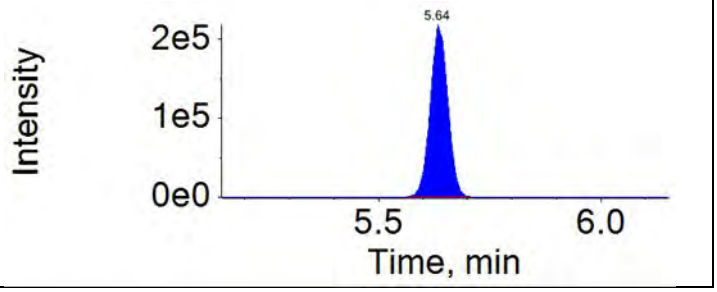
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

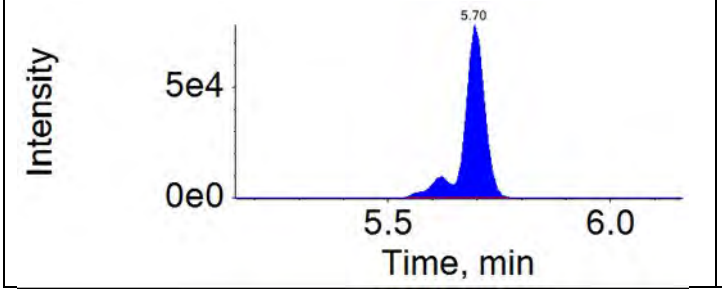
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

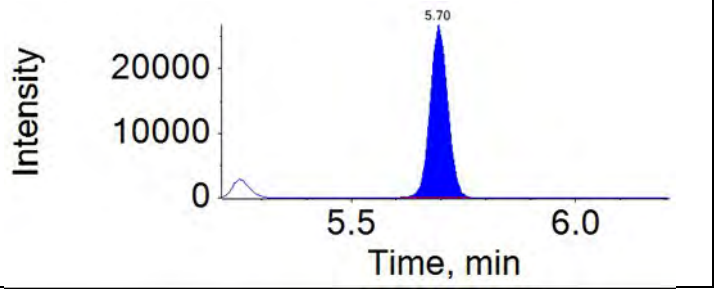
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



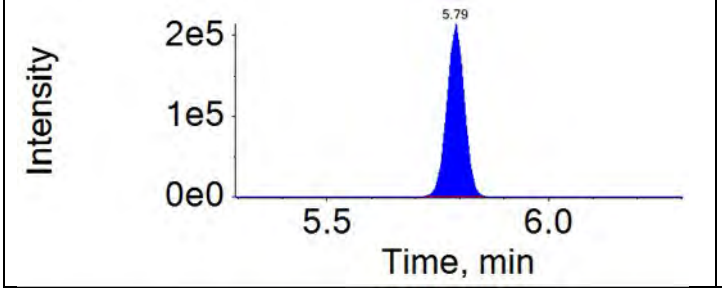


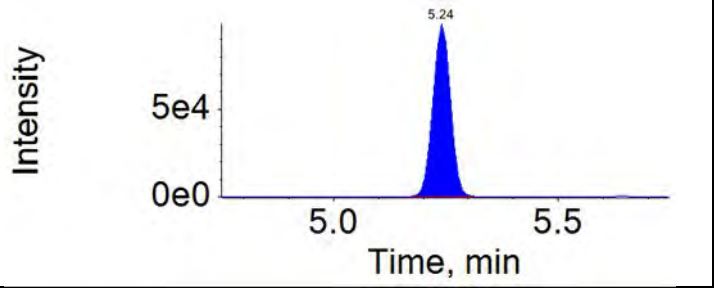
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



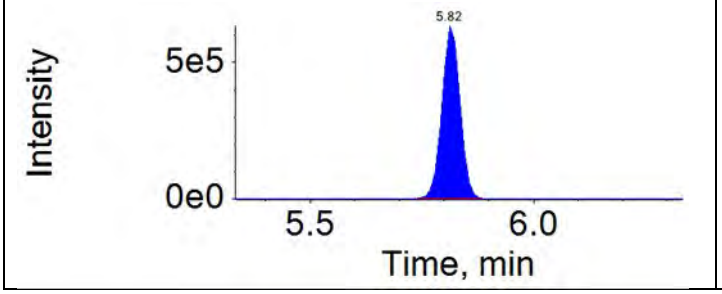


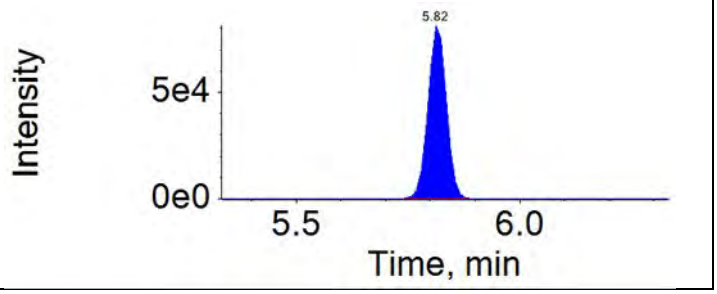
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



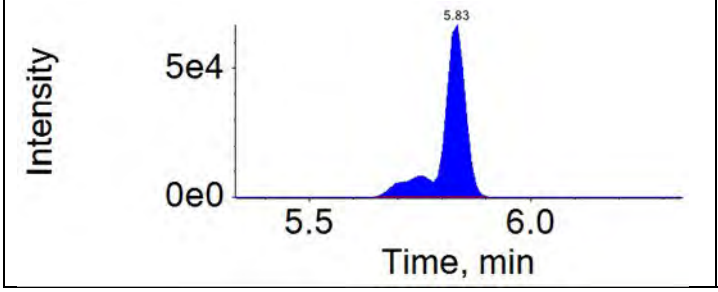


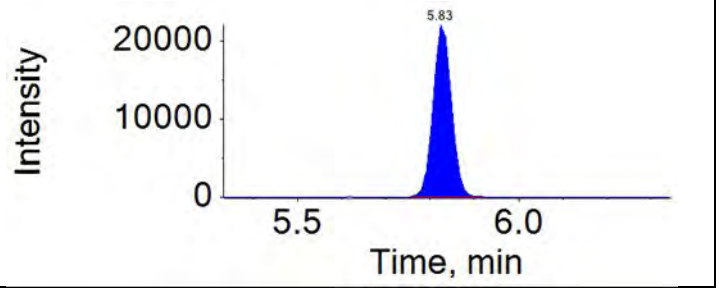
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

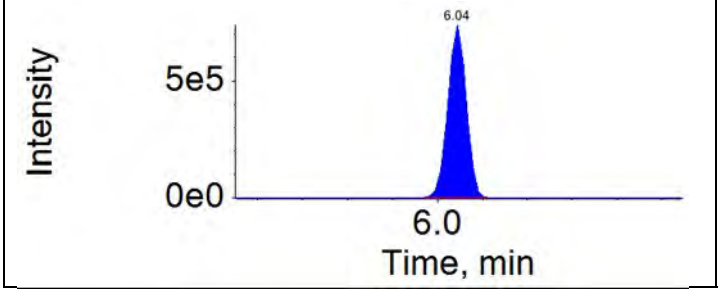
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

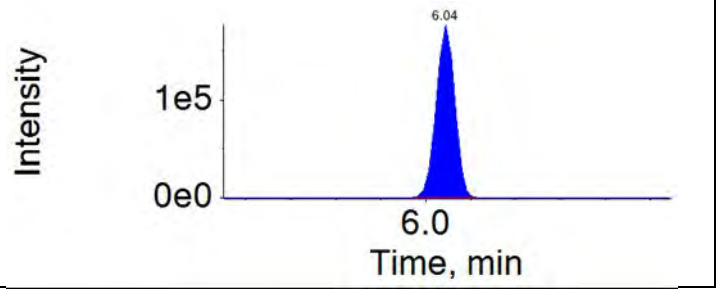
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



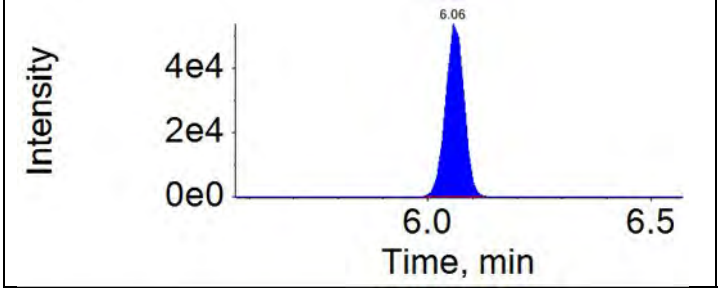


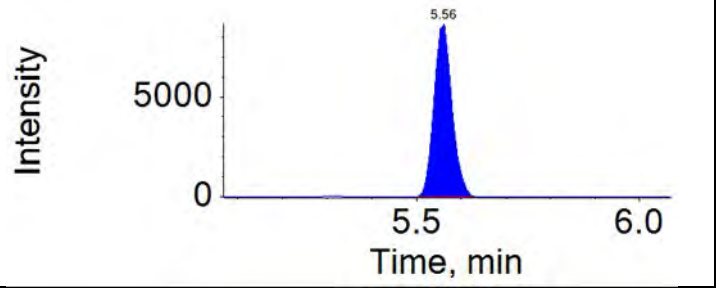
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



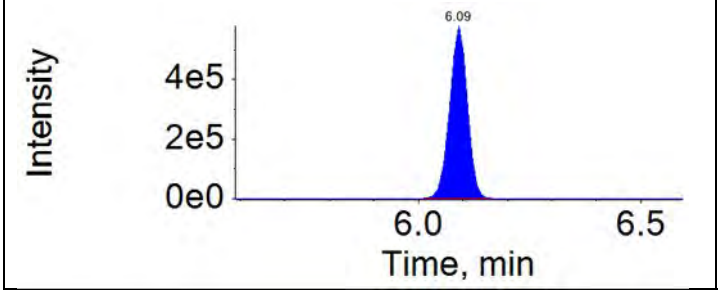


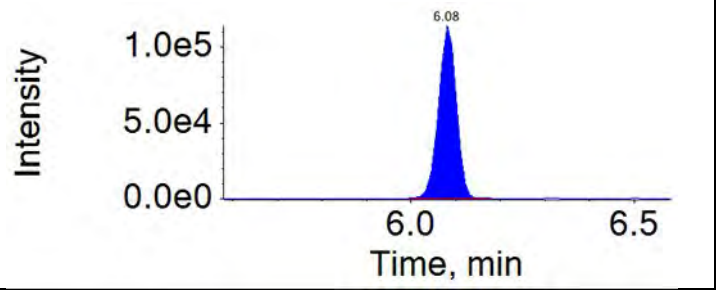
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



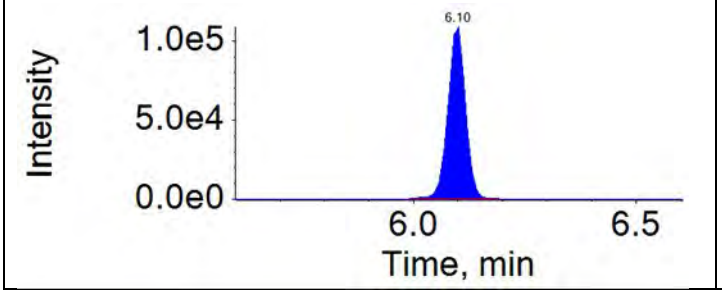


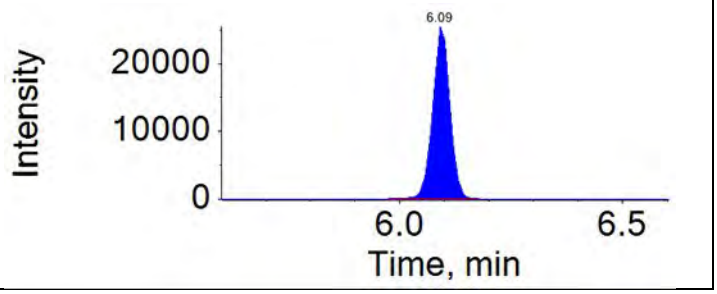
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

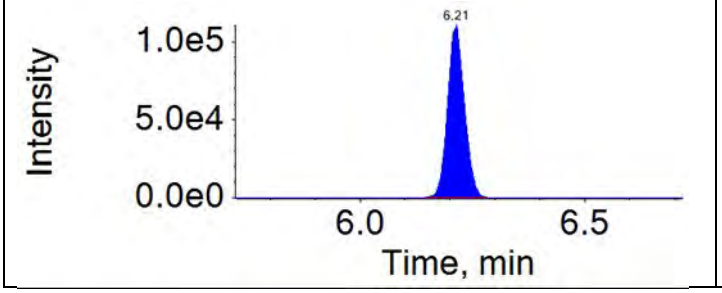
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

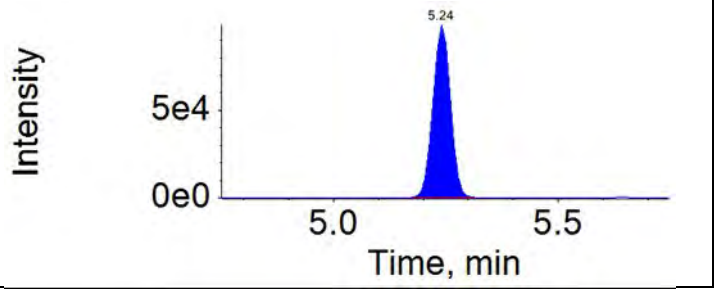
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



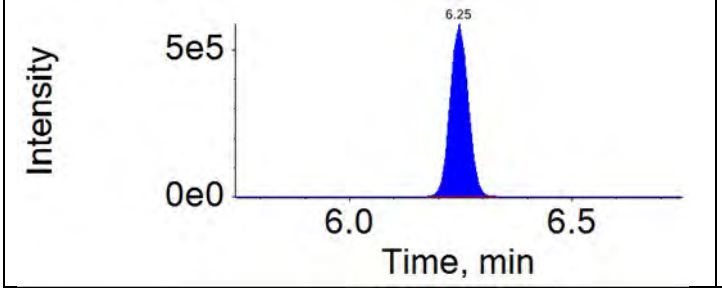


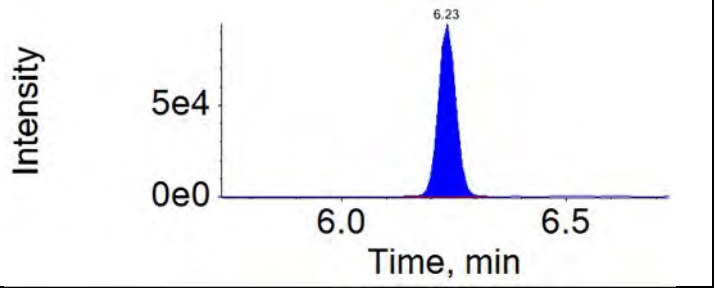
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



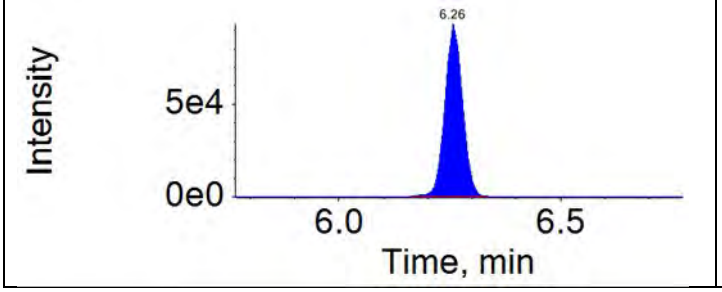


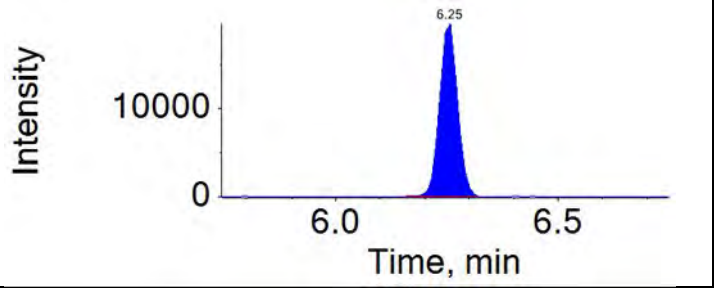
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

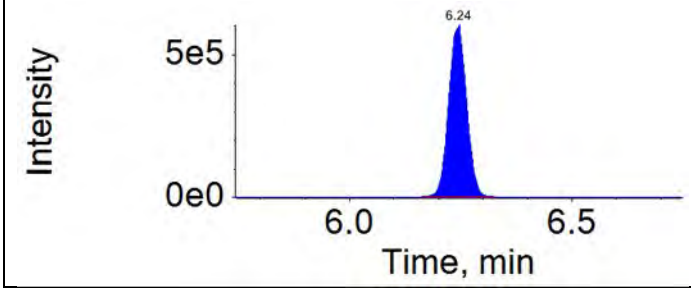
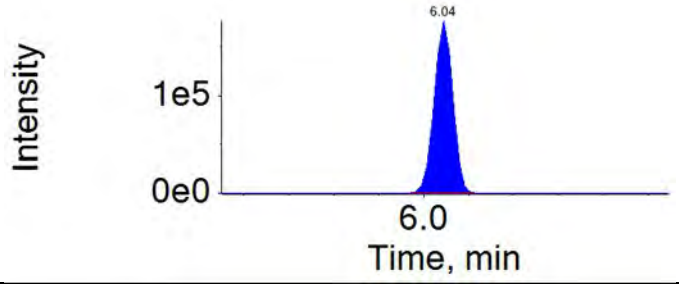


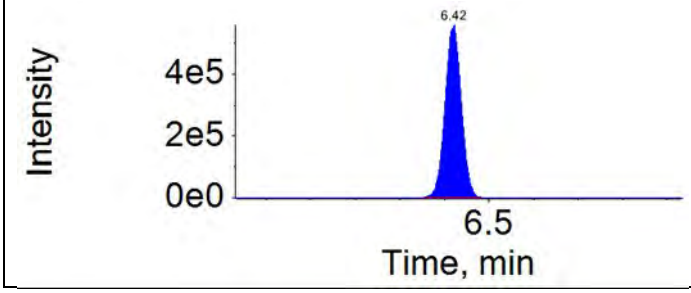
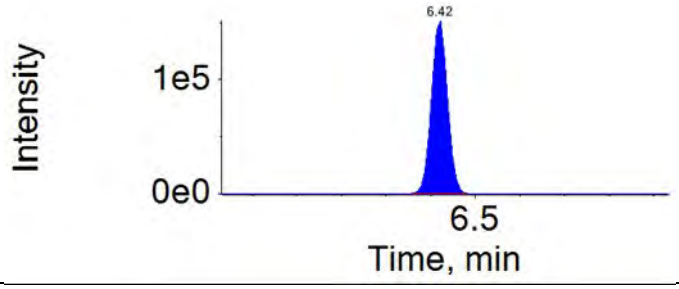


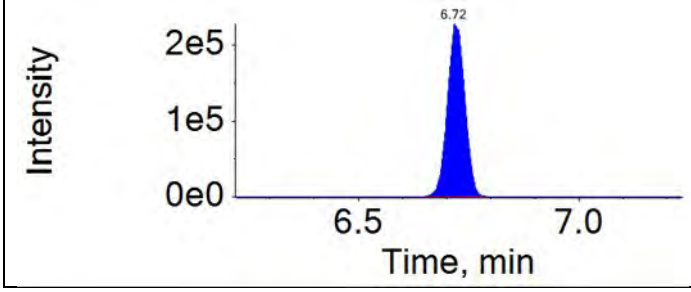
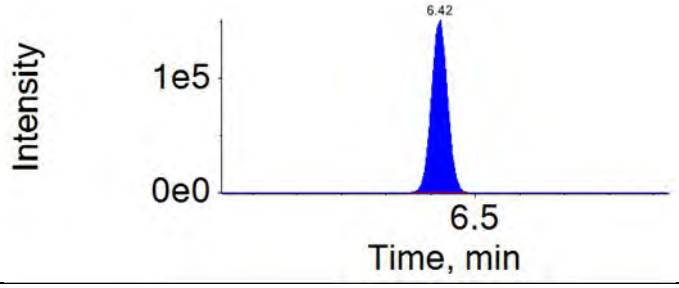
APPROVED
By MCD at 6:33 pm, 11/12/18

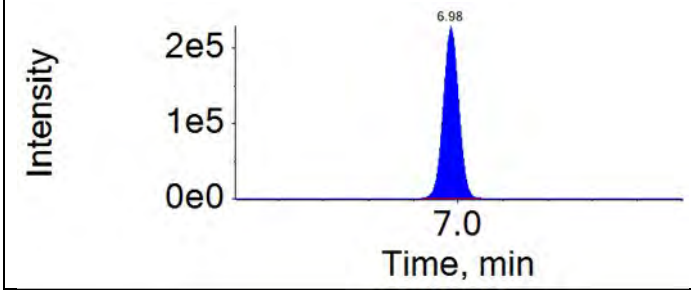
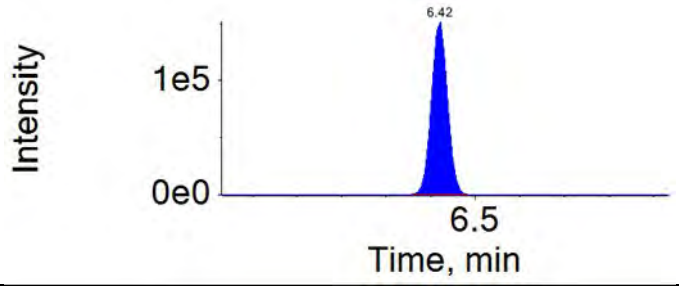
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

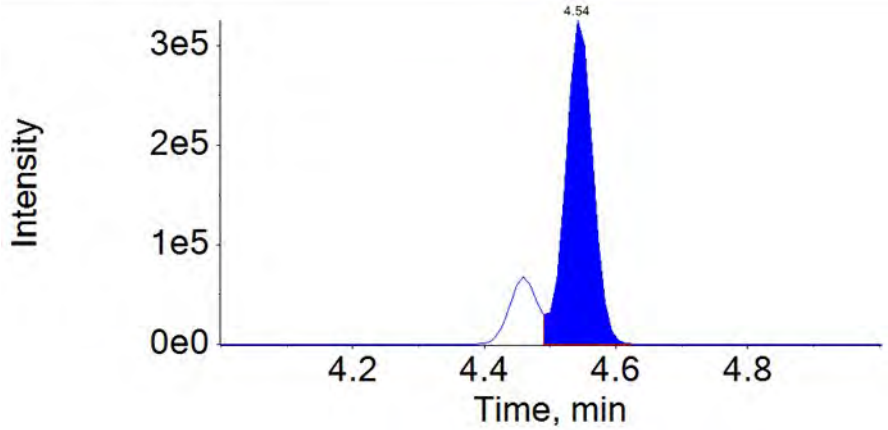
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

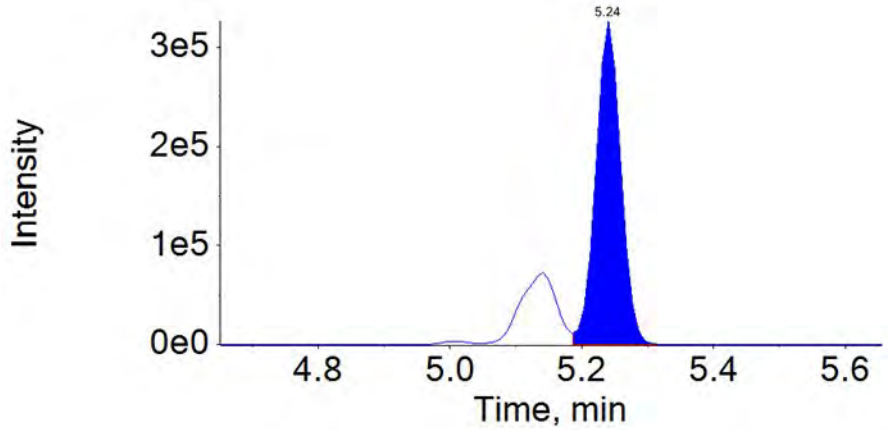
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.54
Peak Area:
943687.14
Mass Range:
399.0 / 80.0
File Name:
18NOV12DCAL-46.wiff
Sample Name:
CAL5



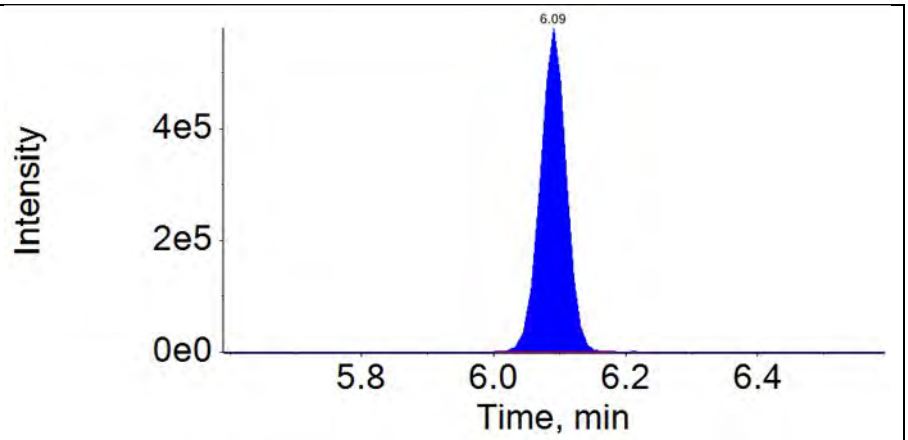
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
860586.56
Mass Range:
499.0 / 80.0
File Name:
18NOV12DCAL-46.wiff
Sample Name:
CAL5



Integration Comment: incorrect integration

Component Name:
NMePFOSAE
RT (min.):
6.09
Peak Area:
1591493.63
Mass Range:
616.0 / 59.0
File Name:
18NOV12DCAL-46.wiff
Sample Name:
CAL5



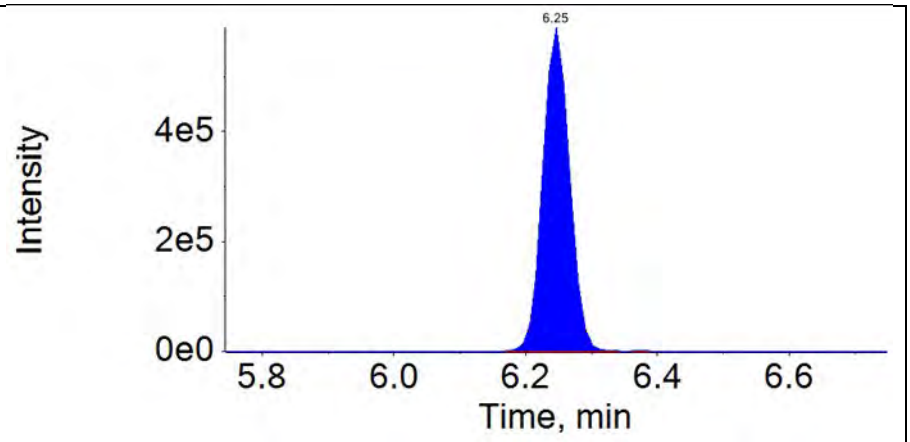
Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

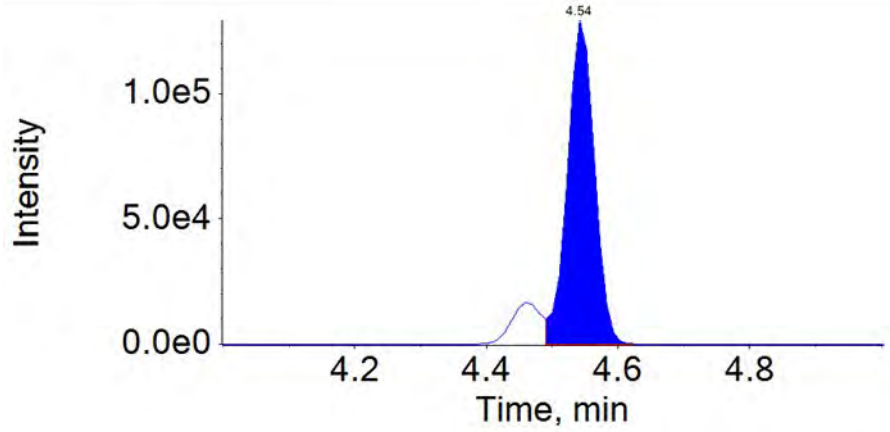
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NEtPFOSAE
RT (min.):
6.25
Peak Area:
1662069.44
Mass Range:
630.0 / 59.0
File Name:
18NOV12DCAL-46.wiff
Sample Name:
CAL5



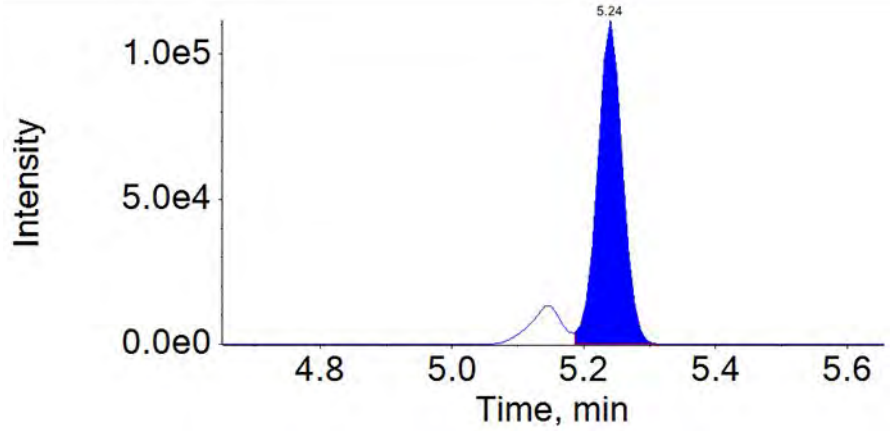
Integration Comment: incorrect integration

Component Name:
PFHxS_2
RT (min.):
4.54
Peak Area:
369522.57
Mass Range:
399.0 / 99.0
File Name:
18NOV12DCAL-46.wiff
Sample Name:
CAL5



Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.24
Peak Area:
295251.82
Mass Range:
499.0 / 99.0
File Name:
18NOV12DCAL-46.wiff
Sample Name:
CAL5



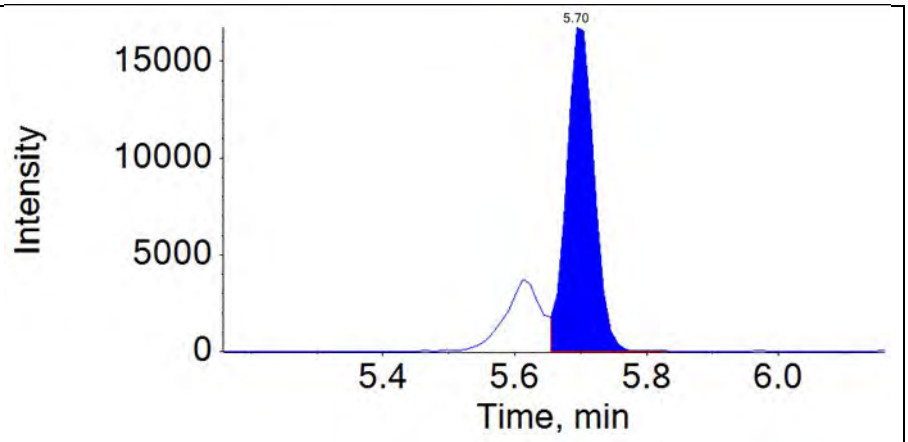
Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

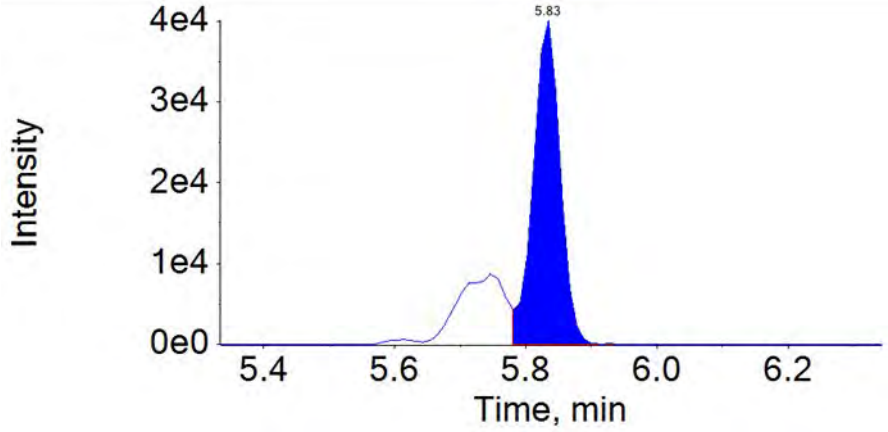
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NMeFOSAA_2
RT (min.):
5.70
Peak Area:
48911.60
Mass Range:
570.0 / 483.0
File Name:
18NOV12DCAL-46.wiff
Sample Name:
CAL5



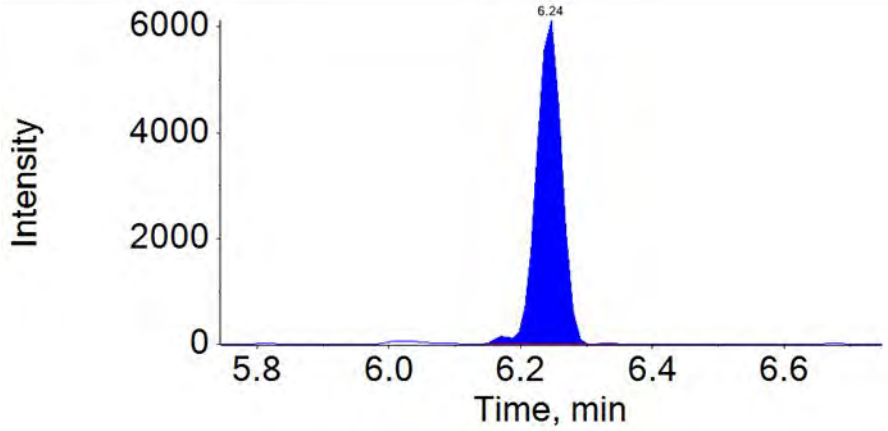
Integration Comment: incorrect integration

Component Name:
NEtFOSAA_2
RT (min.):
5.83
Peak Area:
114677.93
Mass Range:
584.0 / 526.0
File Name:
18NOV12DCAL-46.wiff
Sample Name:
CAL5



Integration Comment: incorrect integration

Component Name:
PFTrDA_2
RT (min.):
6.24
Peak Area:
16434.79
Mass Range:
663.0 / 169.0
File Name:
18NOV12DCAL-46.wiff
Sample Name:
CAL5



Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

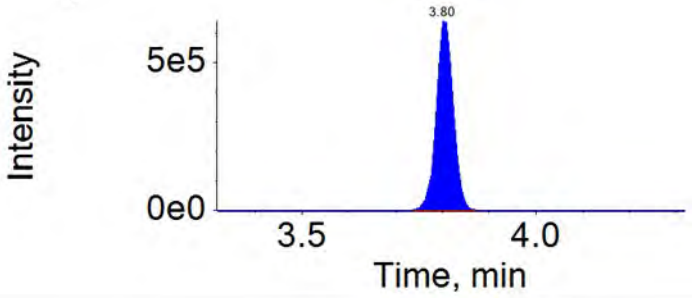
Sample Name: CAL5 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-46.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.80	1.00	1630613.49	A	0.3619	0.3539			
PFBS_2	3.80	1.00	577021.23	A	0.3619	0.3539	-2	50	
4:2-FTS	4.12	1.00	344695.89	A	0.6730	0.5792			
4:2 FTS_2	4.12	1.00	199643.08	A	0.6730	0.5792		#NA!	
PFHxA	4.15	1.00	3158486.41	A	0.0117	0.0109			
PFHxA_2	4.15	1.00	34335.08	A	0.0117	0.0109	-7	50	
PFPeS	4.17	1.10	815928.18	A	0.5191	0.5405			
PFPeS_2	4.17	1.10	440987.79	A	0.5191	0.5405	4	50	
PFHpA	4.54	1.00	3269561.01	A	0.0563	0.0518			
PFHpA_2	4.54	1.00	169510.99	A	0.0563	0.0518	-8	50	
PFHxS	4.54	1.00	1138604.25	M	0.3428	0.3697			
PFHxS_2	4.54	1.00	420898.36	M	0.3428	0.3697	8	50	
6:2-FTS	4.90	1.00	260254.34	A	0.6604	0.6706			
6:2 FTS_2	4.90	1.00	174514.29	A	0.6604	0.6706		#NA!	
PFHpS	4.90	1.08	1145559.80	A	0.4066	0.4043			
PFHpS_2	4.90	1.08	463097.70	A	0.4066	0.4043	-1	50	
PFOA	4.91	1.00	3291549.40	A	0.0562	0.0563			
PFOA_2	4.91	1.00	185238.19	A	0.0562	0.0563	0	50	
PFOS	5.24	1.00	1147826.77	M	0.2968	0.2969			
PFOS_2	5.24	1.00	340771.88	M	0.2968	0.2969	0	50	
PFNA	5.26	1.00	2725089.71	A	0.0229	0.0218			
PFNA_2	5.26	1.00	59324.51	A	0.0229	0.0218	-5	50	
PFNS	5.53	1.06	725402.00	A	0.4828	0.4661			
PFNS_2	5.53	1.06	338109.67	A	0.4828	0.4661	-3	50	
PFDA	5.56	1.00	2309359.54	A	0.0081	0.0056			
PFDA_2	5.56	1.00	12923.91	A	0.0081	0.0056	-31	50	
8:2-FTS	5.56	1.00	206213.12	A	0.6814	0.6384			
8:2 FTS_2	5.56	1.00	131655.86	A	0.6814	0.6384		#NA!	
NMeFOSAA	5.70	1.00	250711.49	A	0.2569	0.2507			
NMeFOSAA_2	5.70	1.00	62849.33	M	0.2569	0.2507	-2	50	
PFDS	5.79	1.10	578877.50	A	0.5144	0.4977			
PFDS_2	5.79	1.10	288112.49	A	0.5144	0.4977	-3	50	
PFUnDA	5.82	1.00	1773582.60	A	0.0058	0.0044			
PFUnDA_2	5.82	1.00	7755.59	A	0.0058	0.0044	-25	50	
NEtFOSAA	5.83	1.00	237197.18	A	0.7253	0.6651			
NEtFOSAA_2	5.83	1.00	157758.05	M	0.7253	0.6651	-8	50	
PFDoDA	6.04	1.00	2099385.04	A	0.0157	0.0116			
PFDoDA_2	6.04	1.00	24326.91	A	0.0157	0.0116	-26	50	
10:2-FTS	6.06	1.09	153343.55	A	0.6356	0.6979			
10:2 FTS_2	6.06	1.09	107018.53	A	0.6356	0.6979		#NA!	
PFTrDA	6.24	1.03	1679407.24	A	0.0086	0.0096			
PFTrDA_2	6.24	1.03	16152.60	M	0.0086	0.0096	12	50	
PFTeDA	6.42	1.00	1418276.72	A	0.0062	0.0062			
PFTeDA_2	6.42	1.00	8850.65	A	0.0062	0.0062	0	50	
PFHxDA	6.72	1.05	627350.68	A	0.0683	0.0680			
PFHxDA_2	6.72	1.05	42651.35	A	0.0683	0.0680	0	50	
PFODA	6.98	1.09	544296.46	A	0.0277	0.0265			
PFODA_2	6.98	1.09	14445.27	A	0.0277	0.0265	-4	50	

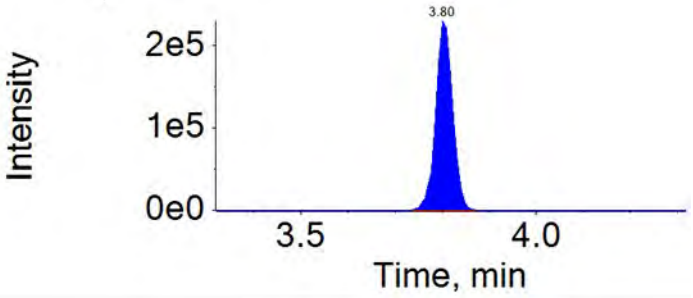
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

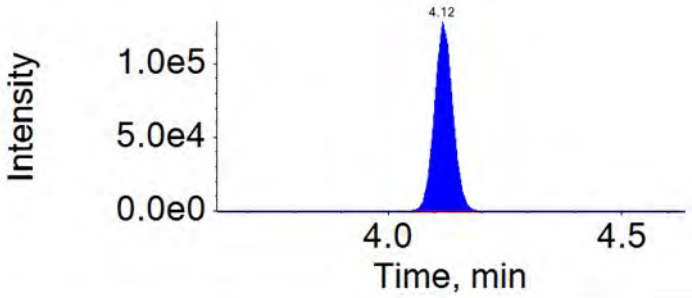
Component: PFBS
Primary Mass: 299.0 / 80.0



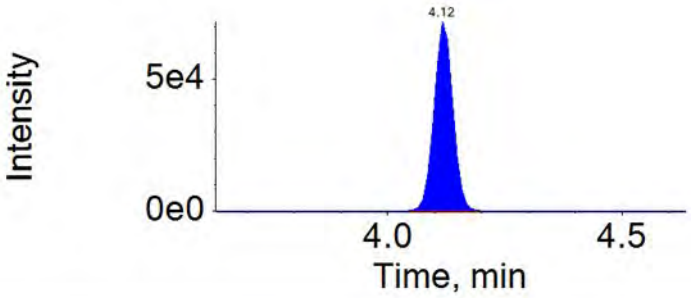
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



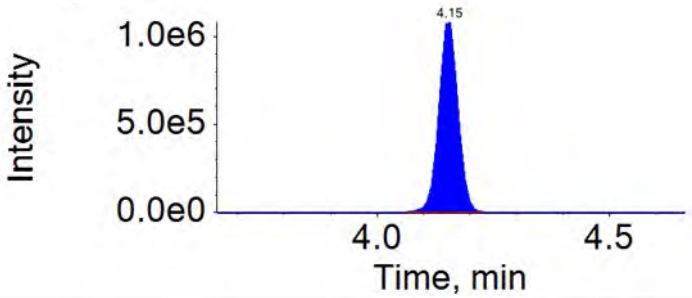
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



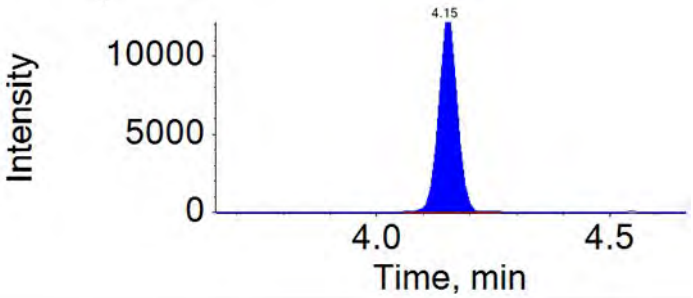
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



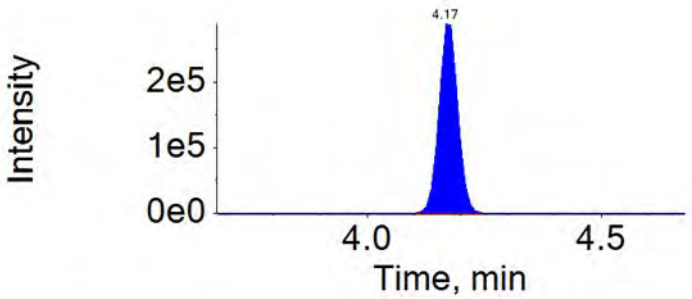
Component: PFHxA
Primary Mass: 313.0 / 269.0



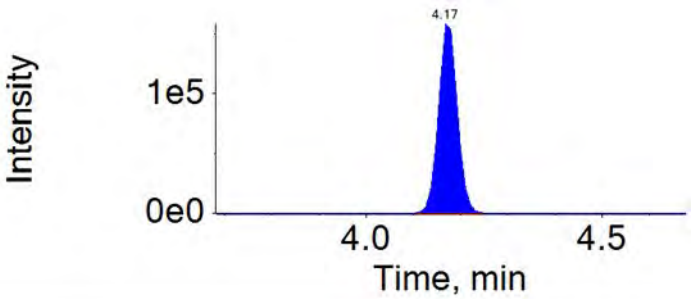
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



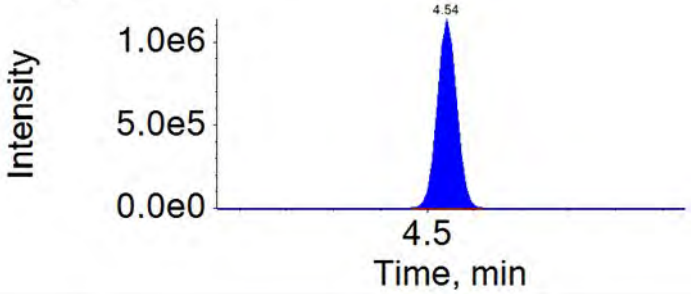
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



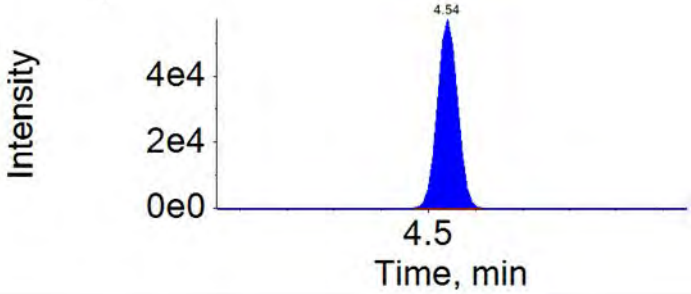
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

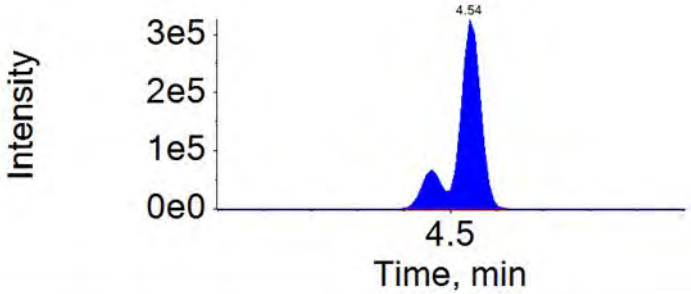
Component: PFHpA
Primary Mass: 363.0 / 319.0



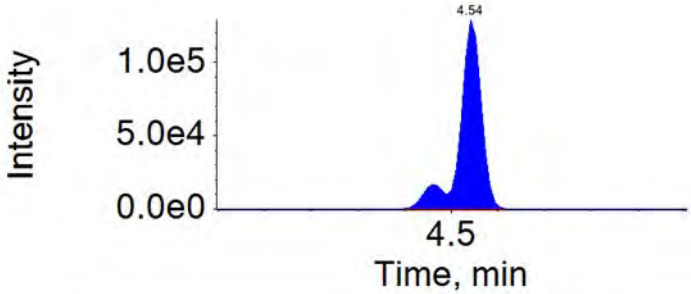
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



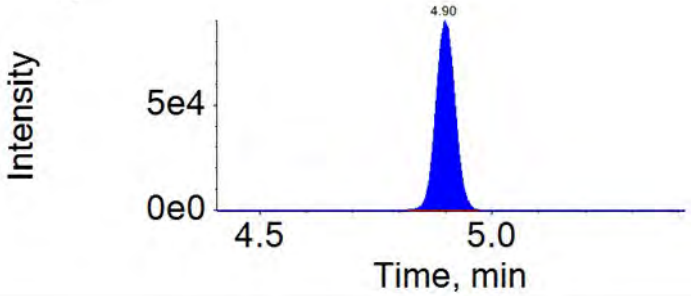
Component: PFHxS
Primary Mass: 399.0 / 80.0



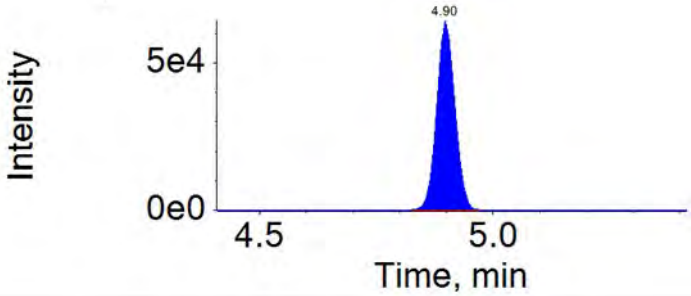
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



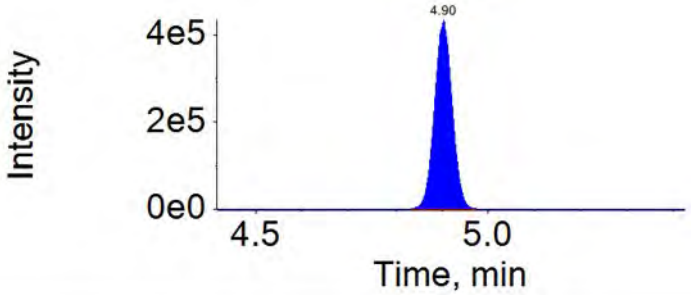
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



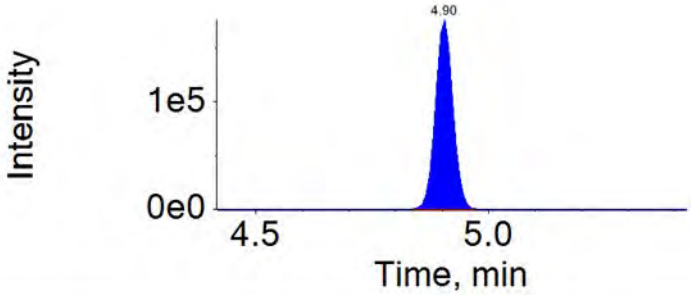
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



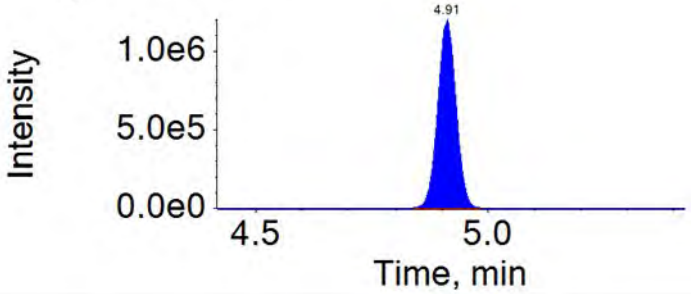
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



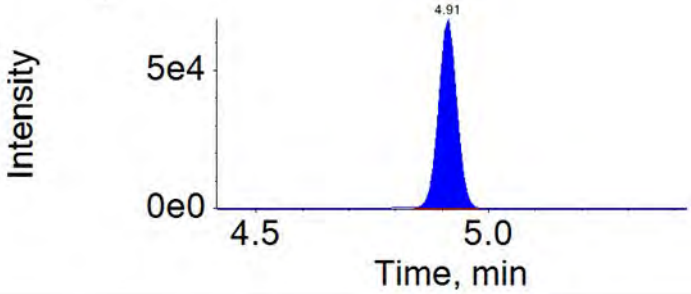
APPROVED
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By HMK at 10:53 am, 11/13/18

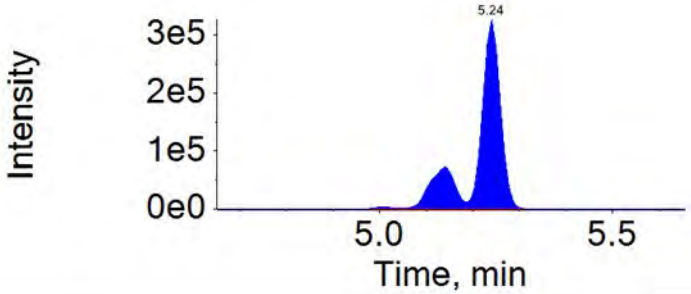
Component: PFOA
Primary Mass: 413.0 / 369.0



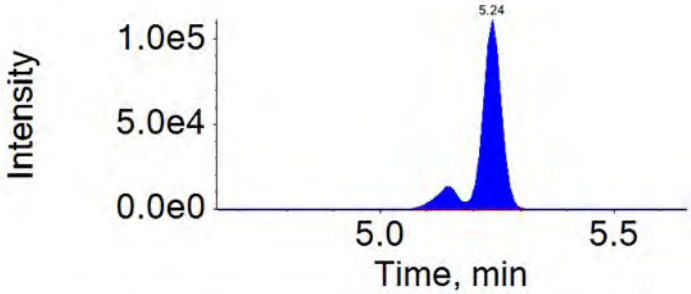
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



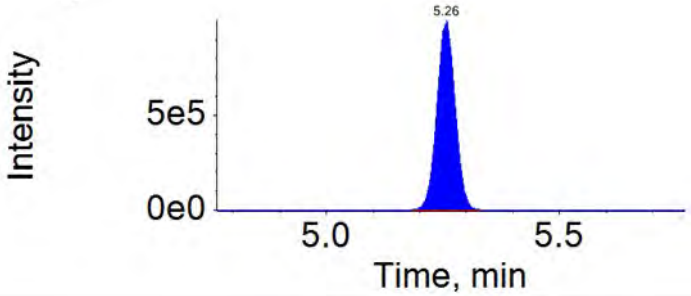
Component: PFOS
Primary Mass: 499.0 / 80.0



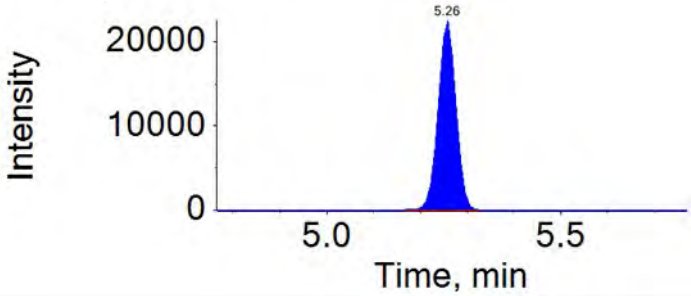
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



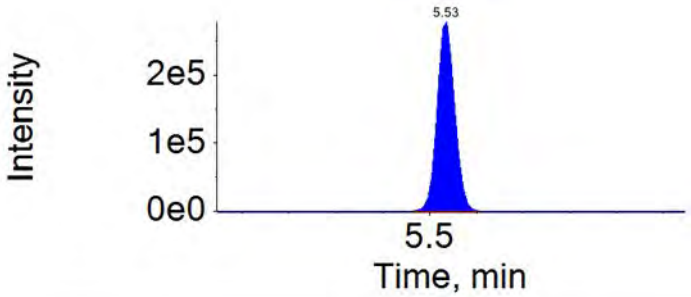
Component: PFNA
Primary Mass: 463.0 / 419.0



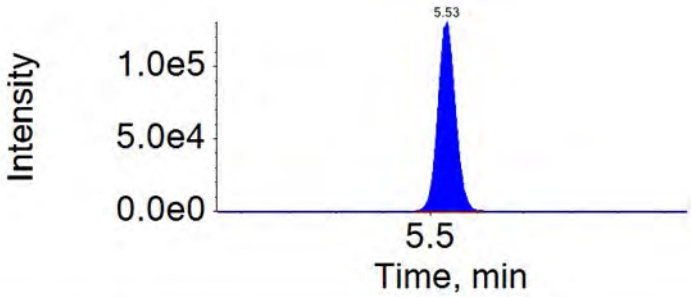
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



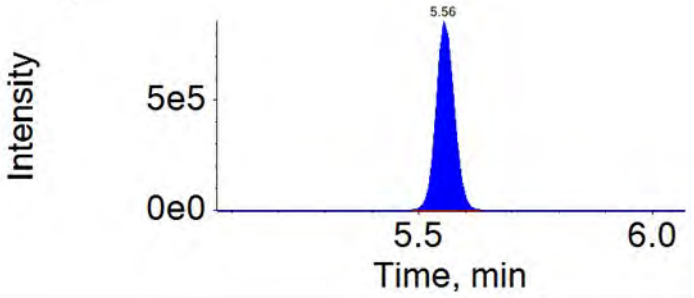
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



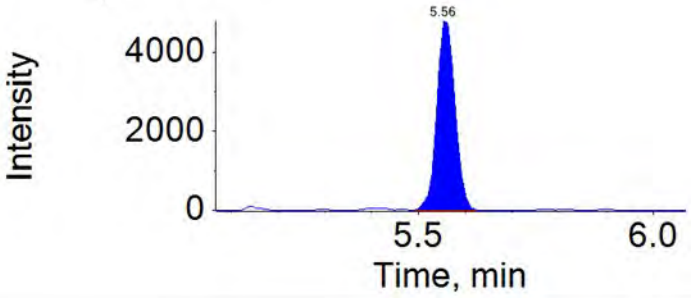
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

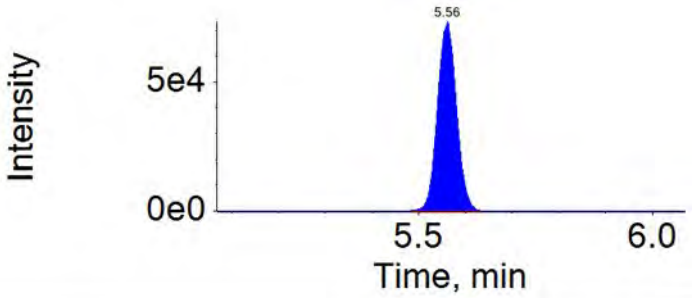
Component: PFDA
Primary Mass: 513.0 / 469.0



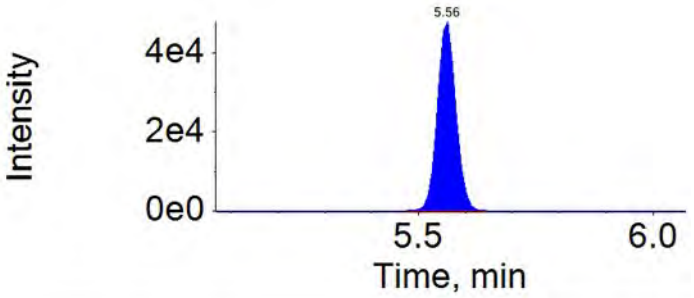
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



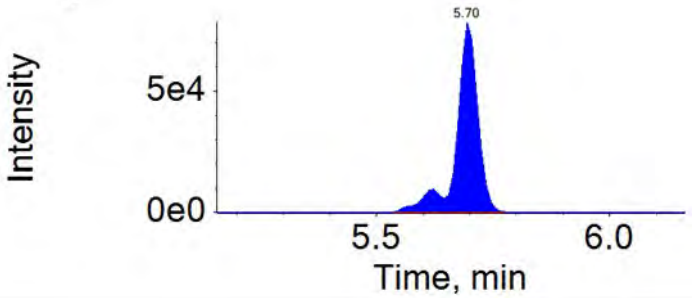
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



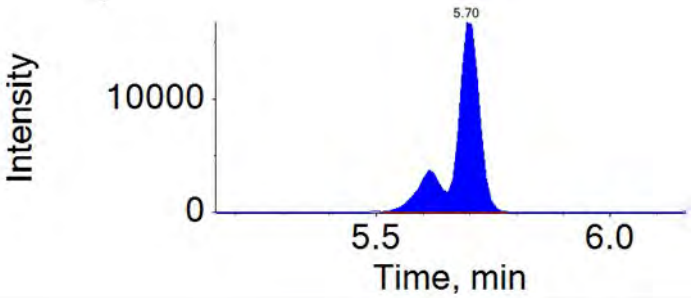
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



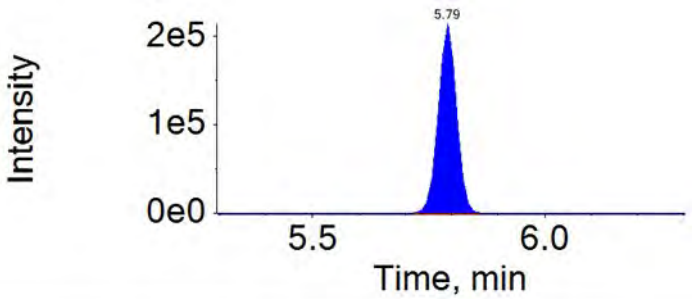
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



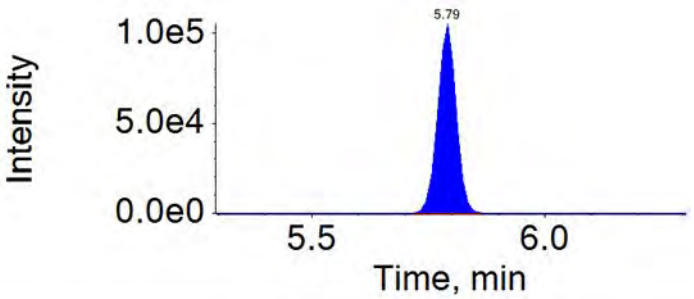
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



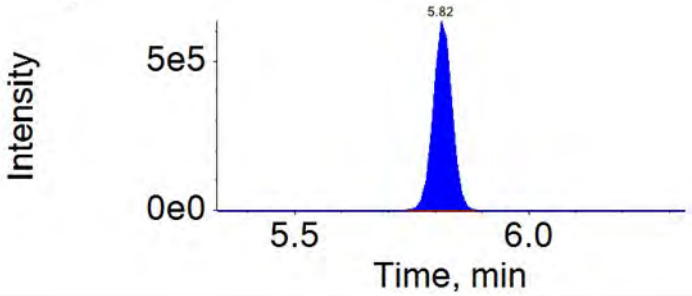
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



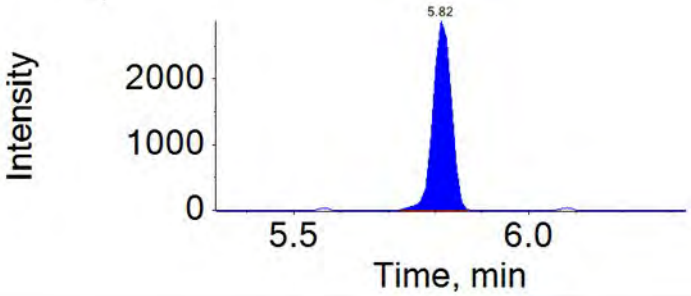
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

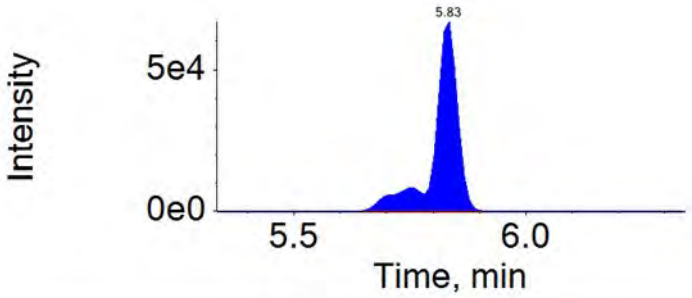
Component: PFUnDA
Primary Mass: 563.0 / 519.0



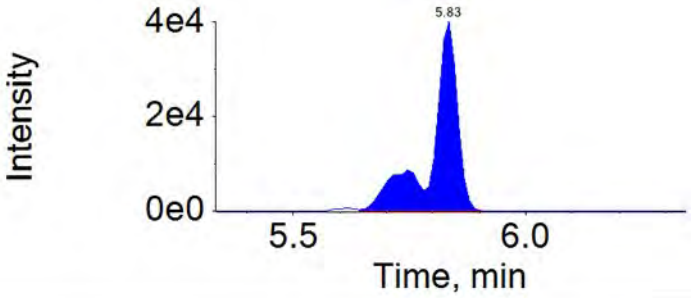
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



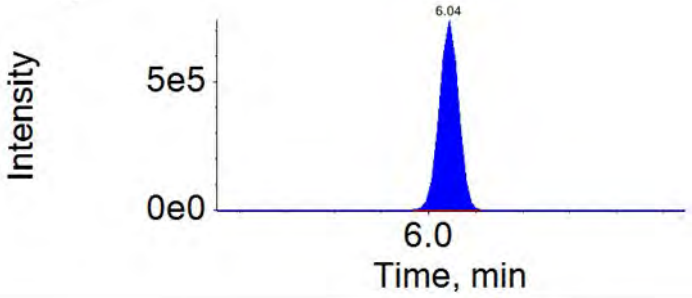
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



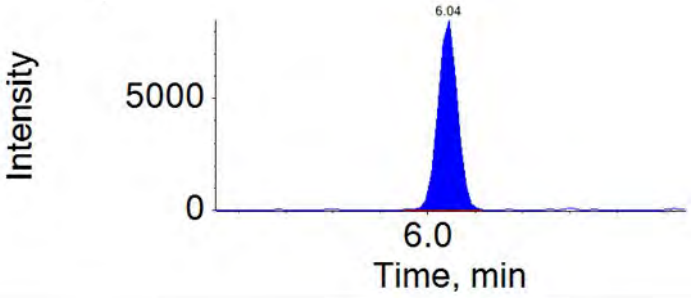
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



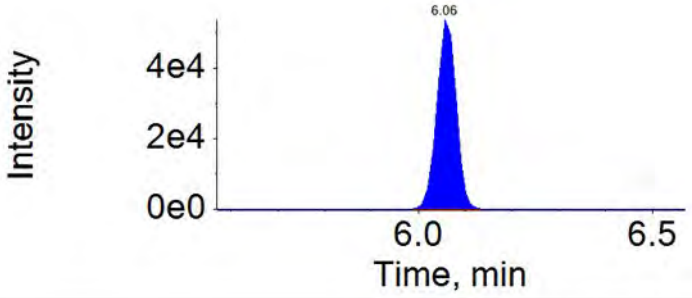
Component: PFDoDA
Primary Mass: 613.0 / 569.0



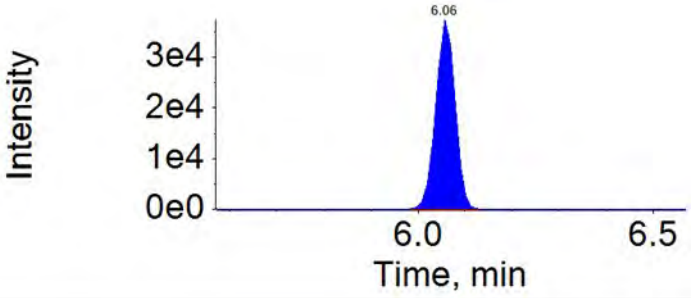
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



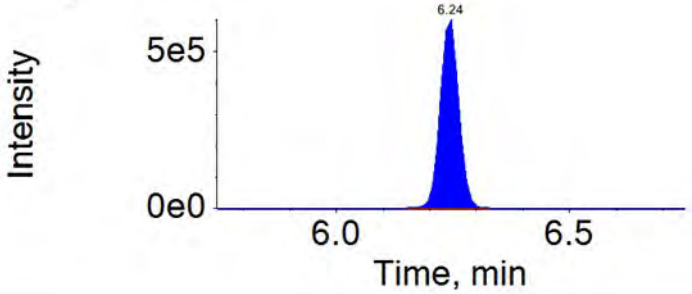
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



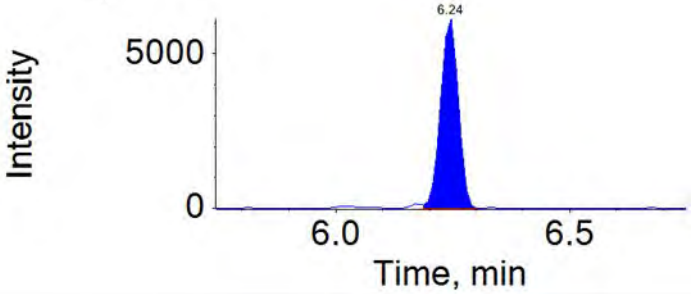
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

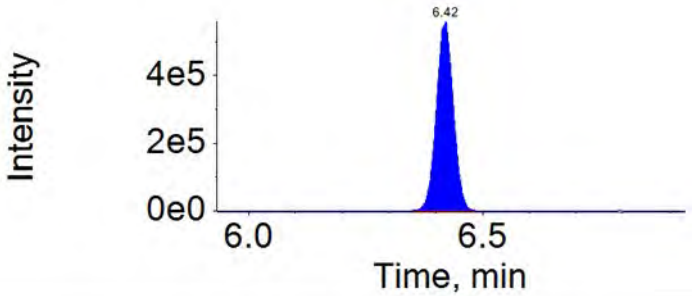
Component: PFTrDA
Primary Mass: 663.0 / 619.0



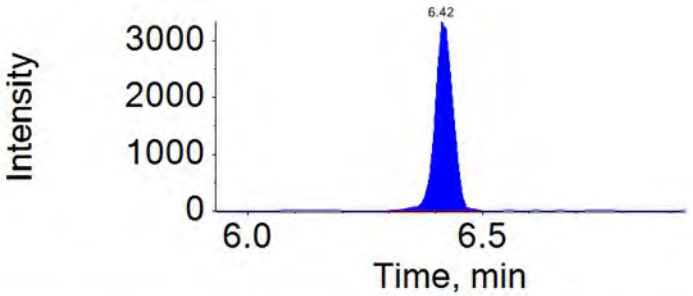
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



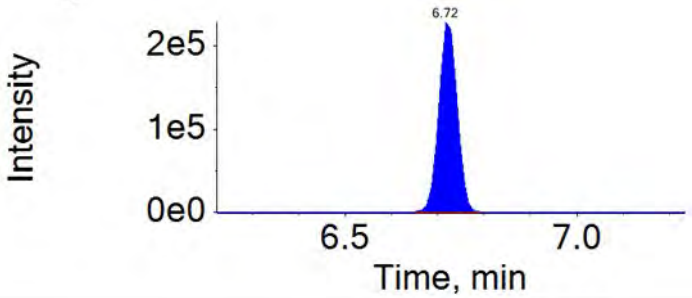
Component: PFTeDA
Primary Mass: 713.0 / 669.0



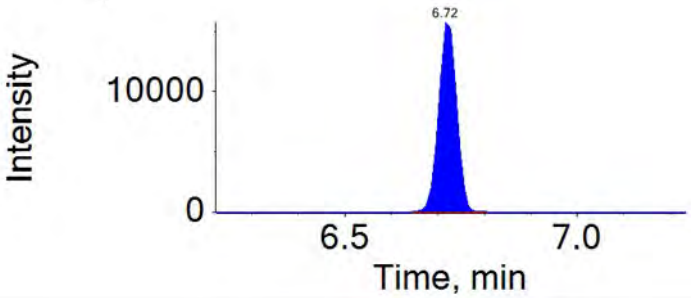
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



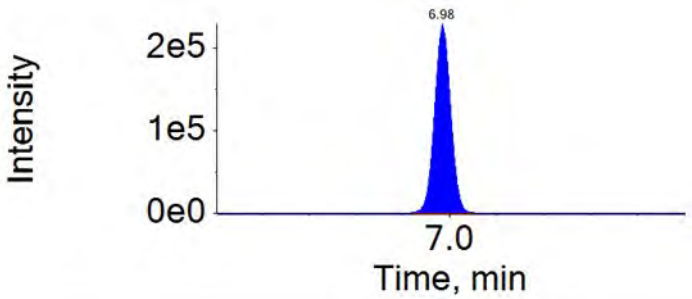
Component: PFHxDA
Primary Mass: 813.0 / 769.0



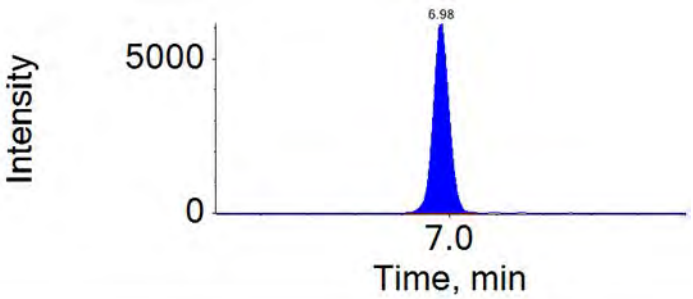
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL6			**Data File:**		18NOV12DCAL-47.wiff
Sample ID:	CALBRN61833B			**Acquis Date:**		2018-11-12T15:51:06
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	8			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV12DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N\A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	555817.9	659926.2	-16	50	
13C2-PFOA	5.0	422900.5	450219.7	-6	50	
13C4-PFOS	4.8	231712.1	249205.8	-7	50	
13C2-PFDA	5.0	237446.9	278743.9	-15	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	633648.4	13C3-PFBA	555817.9	1.140	5.000	5.111	102	70-130	
E13C5-PFPeA	635977.8	13C3-PFBA	555817.9	1.144	5.000	5.132	103	70-130	
E13C3-PFBS	378676.8	13C3-PFBA	555817.9	0.681	4.650	4.809	103	70-130	
E13C2-4:2-FTS	41422.2	13C2-PFOA	422900.5	0.098	4.670	4.362	93	70-130	
E13C5-PFHxA	568205.8	13C2-PFOA	422900.5	1.344	5.000	4.854	97	70-130	
E13C3-PFHxS	284116.5	13C2-PFOA	422900.5	0.672	4.730	4.610	97	70-130	
E13C4-PFHpA	455005.8	13C2-PFOA	422900.5	1.076	5.000	4.847	97	70-130	
E13C2-6:2-FTS	27988.5	13C2-PFOA	422900.5	0.066	4.750	4.428	93	70-130	
E13C8-PFOA	707130.3	13C2-PFOA	422900.5	1.672	5.000	4.607	92	70-130	
E13C8-PFOS	253129.2	13C4-PFOS	231712.1	1.092	4.780	4.840	101	70-130	
E13C9-PFNA	413811.4	13C4-PFOS	231712.1	1.786	5.000	4.979	100	70-130	
E13C6-PFDA	522613.8	13C2-PFDA	237446.9	2.201	5.000	5.136	103	70-130	
E13C2-8:2-FTS	22899.0	13C2-PFDA	237446.9	0.096	4.790	4.810	100	70-130	
E13C8-PFOSA	539992.5	13C2-PFDA	237446.9	2.274	5.000	5.042	101	70-130	
Ed3-NMeFOSAA	70320.3	13C2-PFDA	237446.9	0.296	5.000	5.346	107	70-130	
E13C7-PFUnDA	208574.1	13C2-PFDA	237446.9	0.878	5.000	5.100	102	70-130	
Ed5-NEtFOSAA	57308.1	13C2-PFDA	237446.9	0.241	5.000	5.106	102	70-130	
E13C2-PFDoDA	477105.5	13C2-PFDA	237446.9	2.009	5.000	5.217	104	70-130	
Ed7-NMePFOSAE	272639.0	13C2-PFDA	237446.9	1.148	5.000	4.969	99	70-130	
Ed3-NMePFOSA	68215.9	13C2-PFDA	237446.9	0.287	5.000	5.220	104	70-130	
Ed9-NEtPFOSAE	242587.5	13C2-PFDA	237446.9	1.022	5.000	5.314	106	70-130	
Ed5-NEtPFOSA	56004.0	13C2-PFDA	237446.9	0.236	5.000	5.533	111	70-130	
E13C2-PFTeDA	352892.2	13C2-PFDA	237446.9	1.486	5.000	5.218	104	70-130	

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

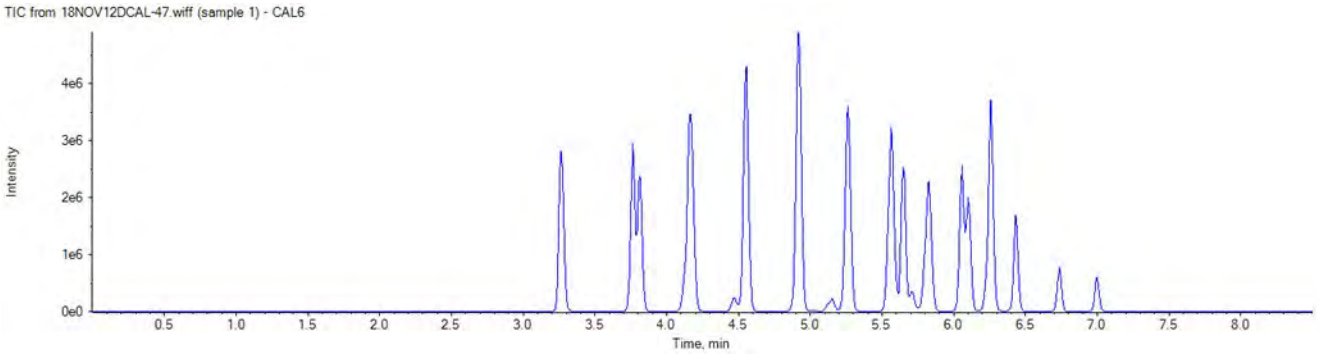
Analyte Quantitation Peak Table

Sample Name: CAL6 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-47.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	5765353.4		A	13C4-PFBA	3.27	633648.4	9.099	50.404
PFPeA	3.77	1.000	5570221.7		A	13C5-PFPeA	3.76	635977.8	8.759	50.702
PFBS	3.81	1.000	3588084.2		A	13C3-PFBS	3.81	378676.8	9.475	45.072
4:2-FTS	4.13	1.000	738294.0		A	13C2-4:2-FTS	4.13	41422.2	17.824	48.392
PFHxA	4.16	1.000	6593779.0		A	13C5-PFHxA	4.16	568205.8	11.605	48.453
PFPeS	4.18	1.100	1847826.8		A	13C3-PFBS	3.81	378676.8	4.880	47.375
PFHpA	4.55	1.000	6648455.3		A	13C4-PFHpA	4.55	455005.8	14.612	48.434
PFHxS	4.55	1.000	2662852.0		M	13C3-PFHxS	4.55	284116.5	9.372	45.444
6:2-FTS	4.91	1.000	523949.5		A	13C2-6:2-FTS	4.91	27988.5	18.720	45.301
PFHpS	4.91	1.080	2604868.6		A	13C3-PFHxS	4.55	284116.5	9.168	48.262
PFOA	4.92	1.000	6758642.8		A	13C8-PFOA	4.92	707130.3	9.558	51.047
PFOS	5.25	1.000	2664957.2		M	13C8-PFOS	5.25	253129.2	10.528	46.040
PFNA	5.27	1.000	5820576.6		A	13C9-PFNA	5.27	413811.4	14.066	50.720
PFNS	5.55	1.060	1709959.5		A	13C8-PFOS	5.25	253129.2	6.755	47.262
PFDA	5.57	1.000	4802967.8		A	13C6-PFDA	5.57	522613.8	9.190	48.722
8:2-FTS	5.57	1.000	469719.6		A	13C2-8:2-FTS	5.57	22899.0	20.513	47.825
PFOSA	5.65	1.000	5530440.6		A	13C8-PFOSA	5.65	539992.5	10.242	50.024
NMeFOSAA	5.71	1.000	627854.4		M	d3-NMeFOSAA	5.71	70320.3	8.928	50.461
PFDS	5.80	1.100	1313570.3		A	13C8-PFOS	5.25	253129.2	5.189	47.020
PFUnDA	5.83	1.000	3923979.2		A	13C7-PFUnDA	5.83	208574.1	18.813	49.183
NEtFOSAA	5.84	1.000	551865.7		A	d5-NEtFOSAA	5.84	57308.1	9.630	50.481
PFDoDA	6.06	1.000	4582985.5		A	13C2-PFDoDA	6.06	477105.5	9.606	48.914
10:2-FTS	6.07	1.090	348263.2		A	13C2-8:2-FTS	5.57	22899.0	15.209	50.658
NMePFOSAE	6.10	1.000	3484588.8		A	d7-NMePFOSAE	6.09	272639.0	12.781	53.193
NMePFOSA	6.11	1.000	670429.6		A	d3-NMePFOSA	6.11	68215.9	9.828	48.485
PFDoS	6.23	1.190	711567.5		A	13C8-PFOS	5.25	253129.2	2.811	49.234
NEtPFOSAE	6.26	1.000	3677006.6		A	d9-NEtPFOSAE	6.25	242587.5	15.157	48.629
NEtPFOSA	6.27	1.000	599280.4		A	d5-NEtPFOSA	6.27	56004.0	10.701	49.142
PFTrDA	6.26	1.030	3691733.8		A	13C2-PFDoDA	6.06	477105.5	7.738	48.838
PFTeDA	6.43	1.000	3149020.2		A	13C2-PFTeDA	6.43	352892.2	8.923	50.021
PFHxDA	6.74	1.050	1533920.2		A	13C2-PFTeDA	6.43	352892.2	4.347	51.786
PFODA	7.00	1.090	1270897.6		A	13C2-PFTeDA	6.43	352892.2	3.601	50.157

Total Ion Chromatogram

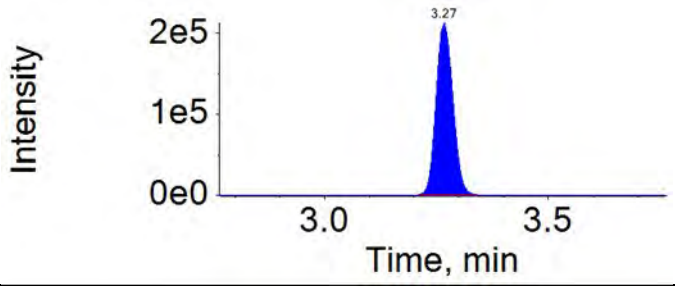


APPROVED
By MCD at 6:33 pm, 11/12/18

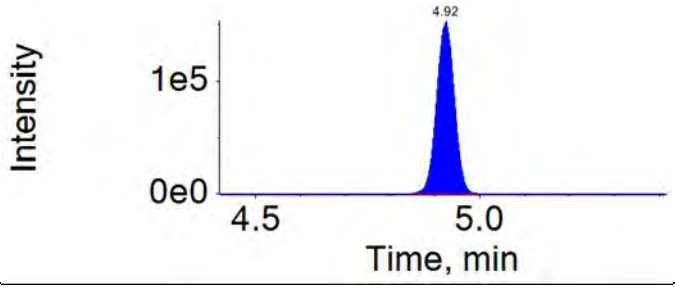
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

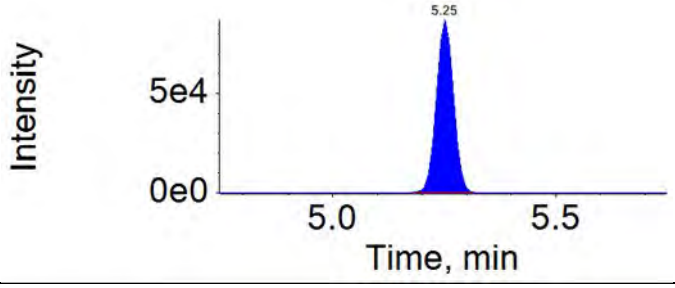
Injection Standard: 13C3-PFBA
216.0 / 172.0



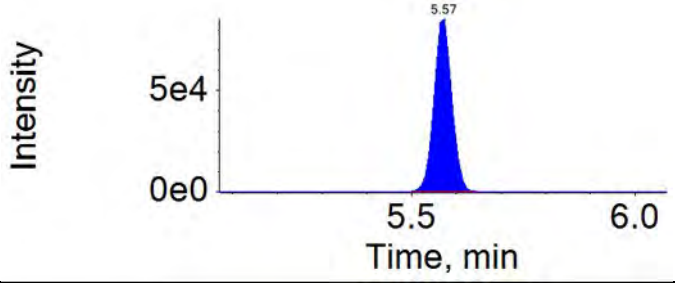
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

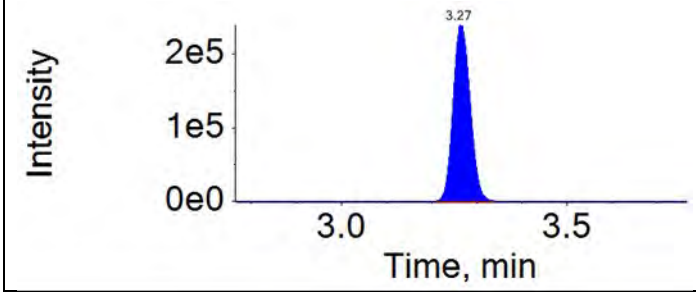


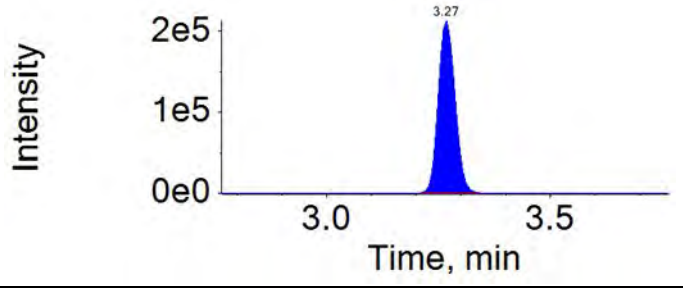
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

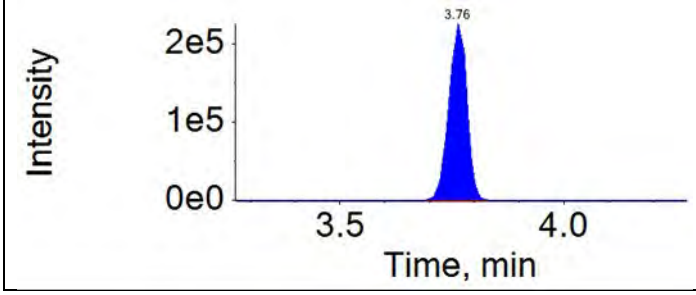
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

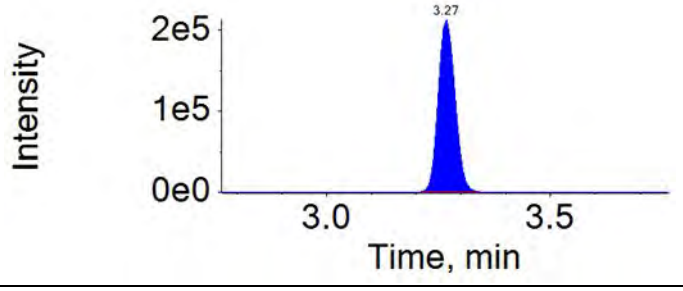
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



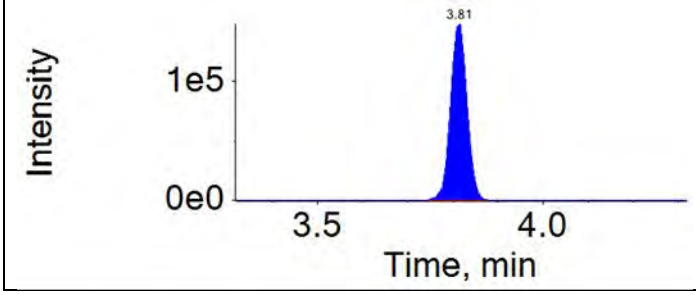


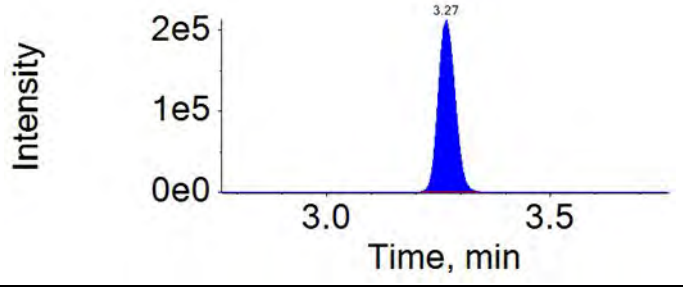
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



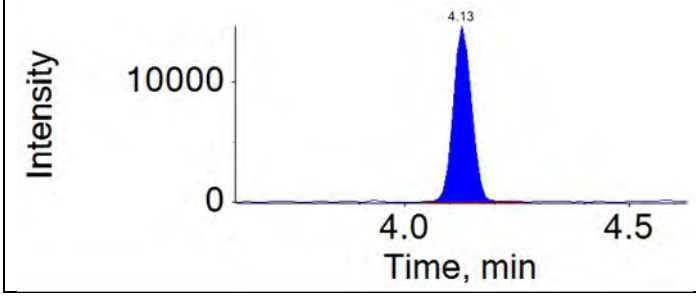


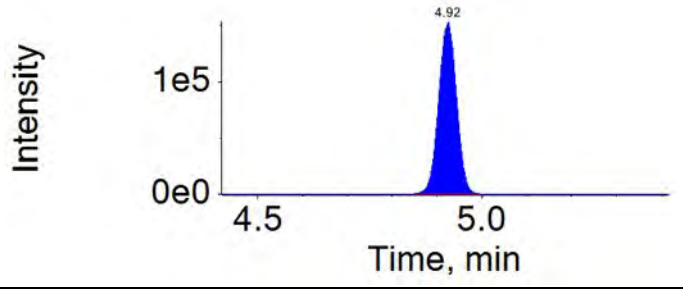
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



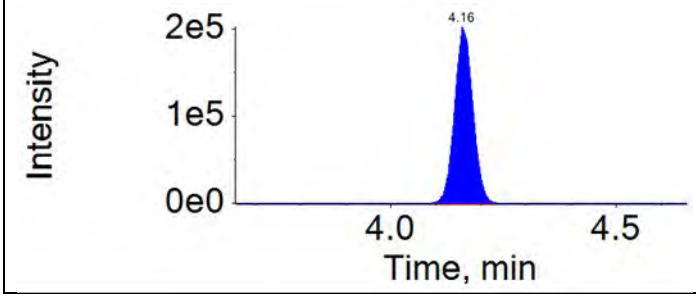


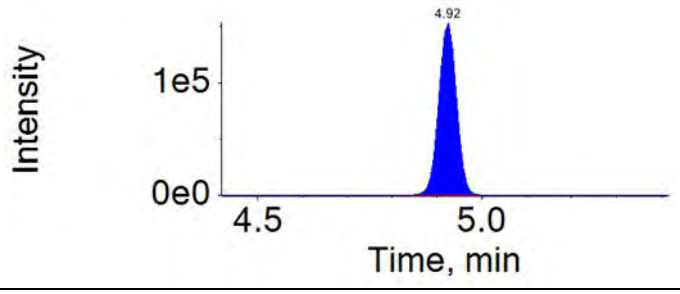
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

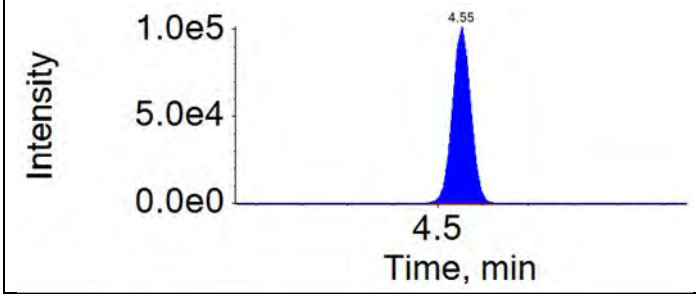
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

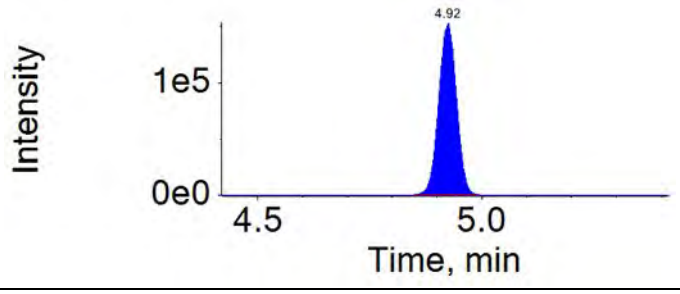
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



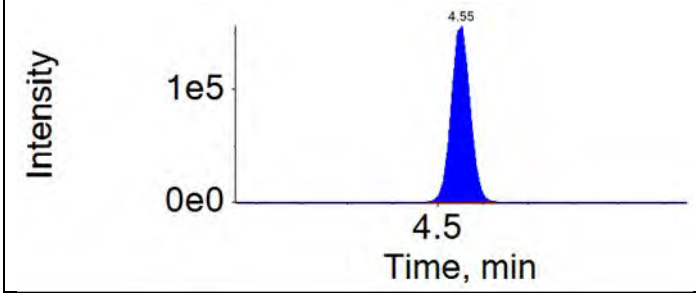


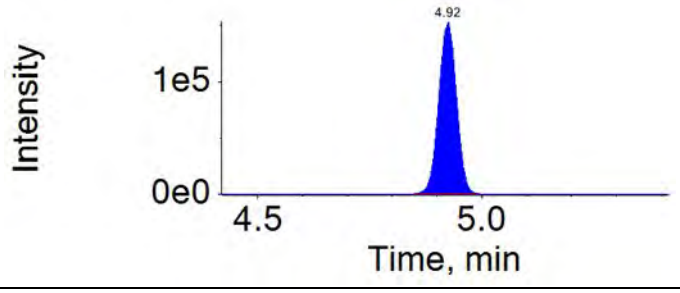
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



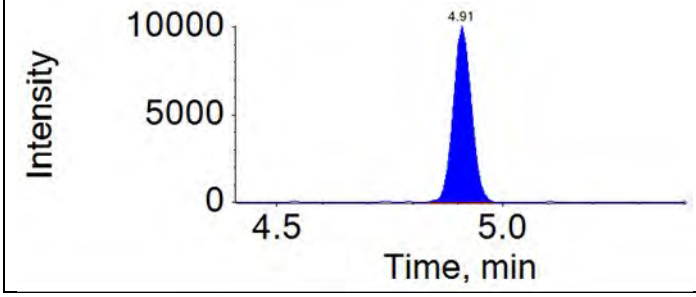


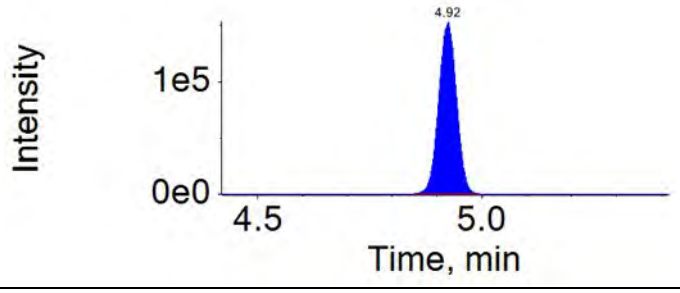
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

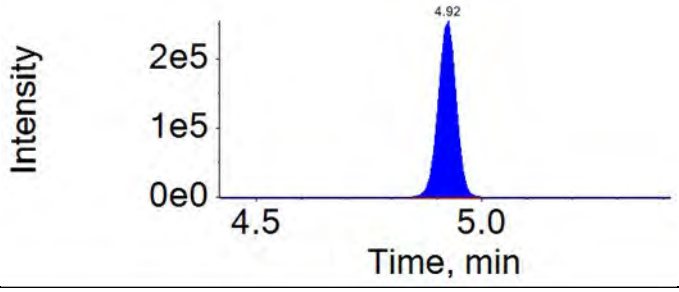
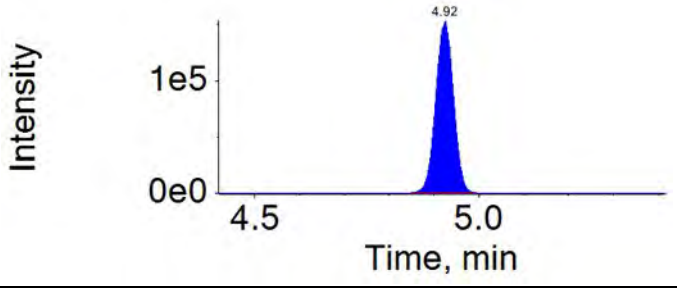


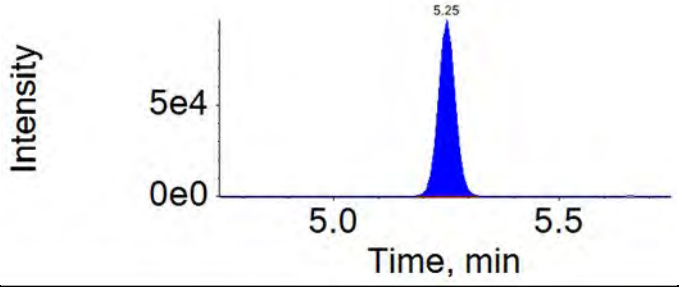
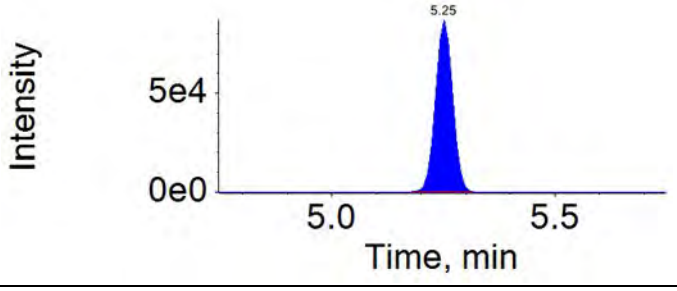


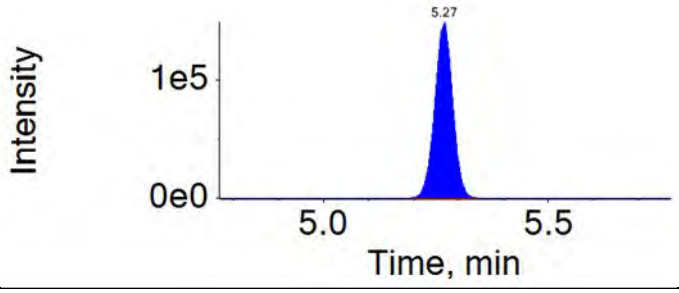
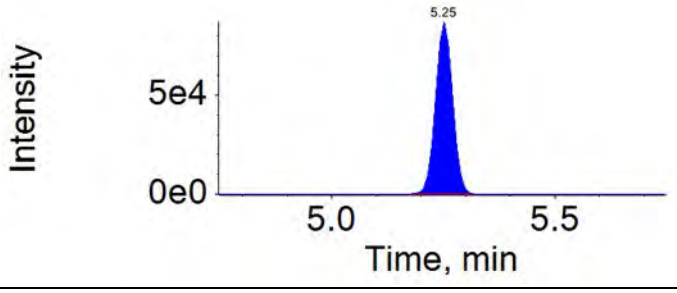
APPROVED
By MCD at 6:33 pm, 11/12/18

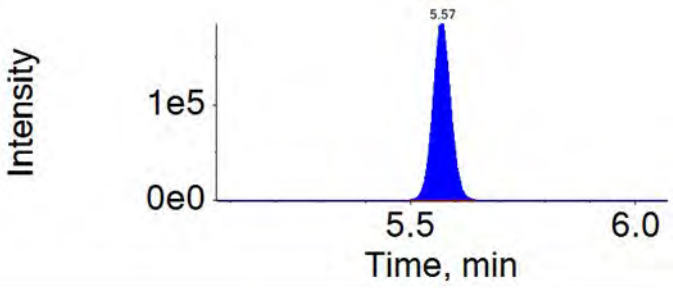
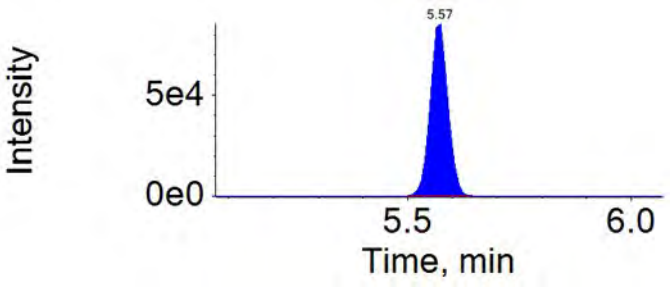
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

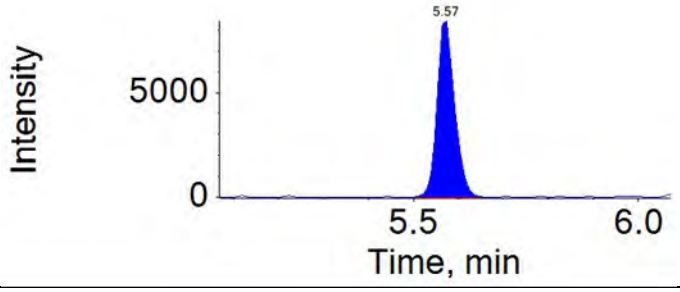
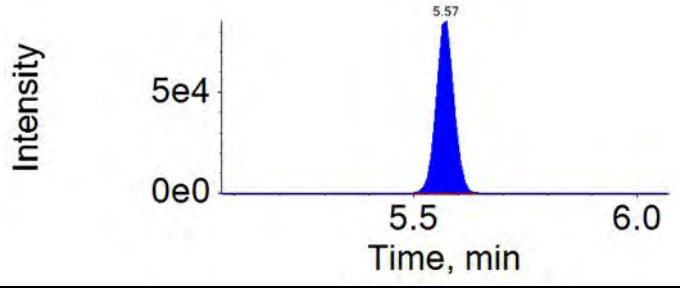
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

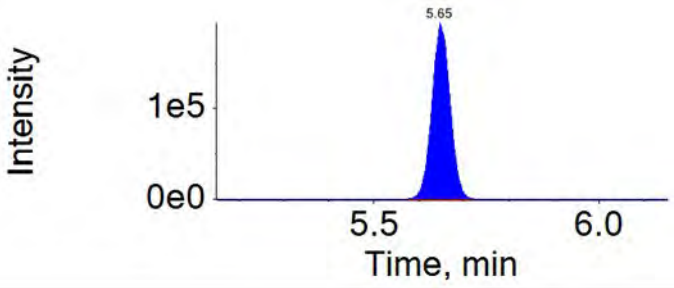
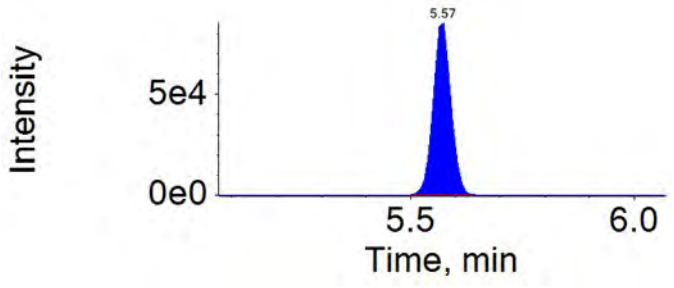
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

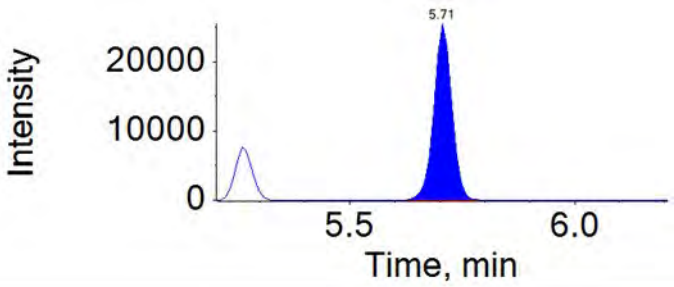
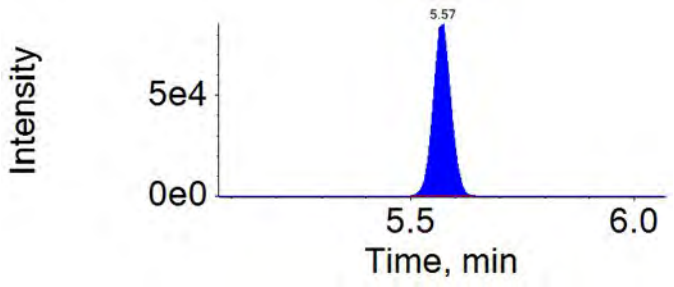
APPROVED
By MCD at 6:33 pm, 11/12/18

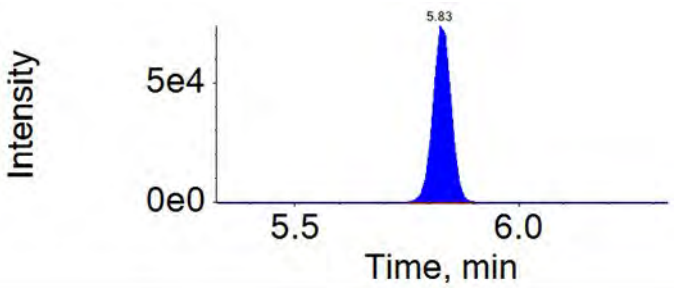
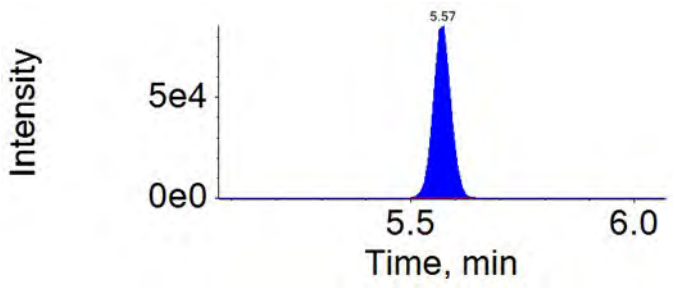
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

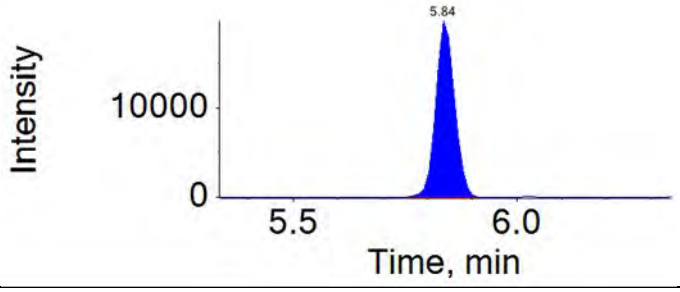
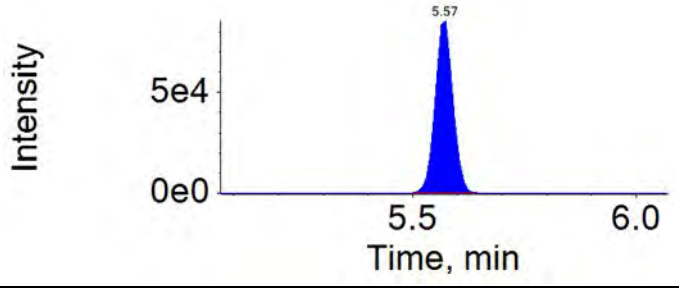
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

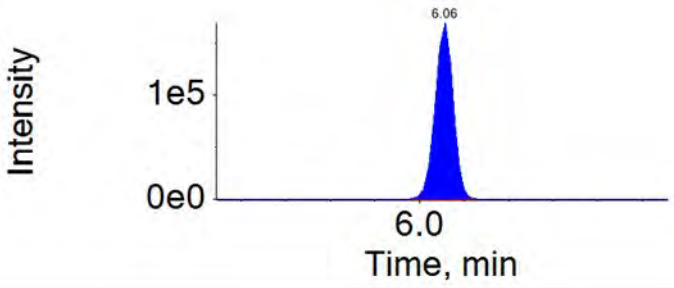
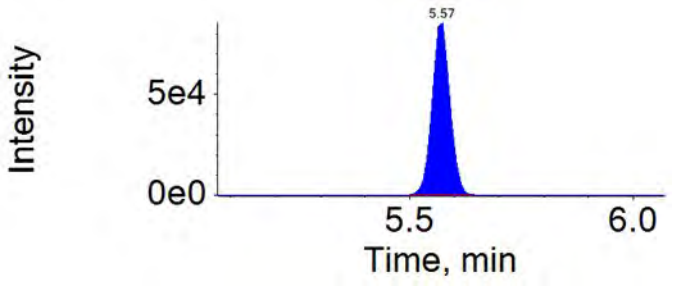
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

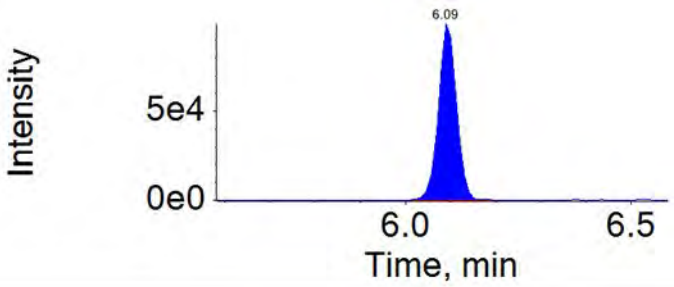
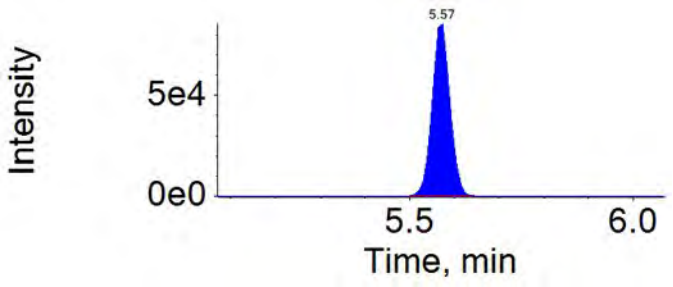
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

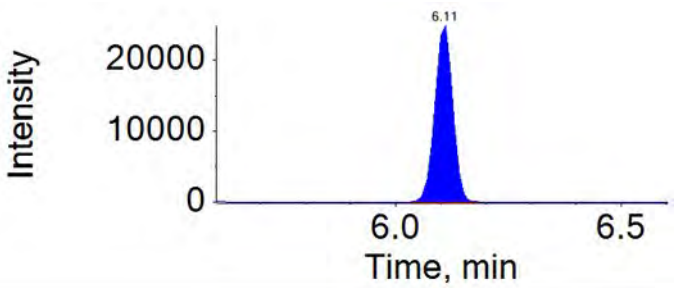
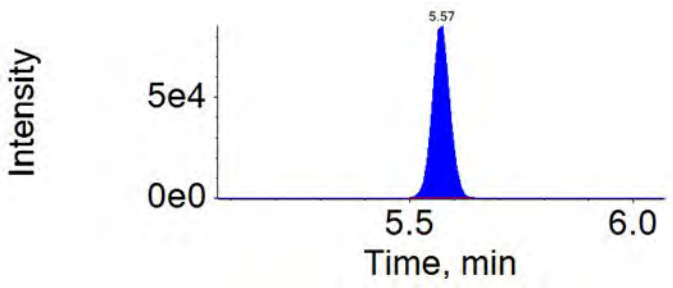
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

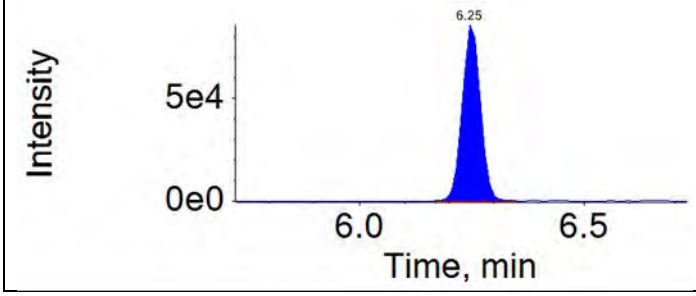
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

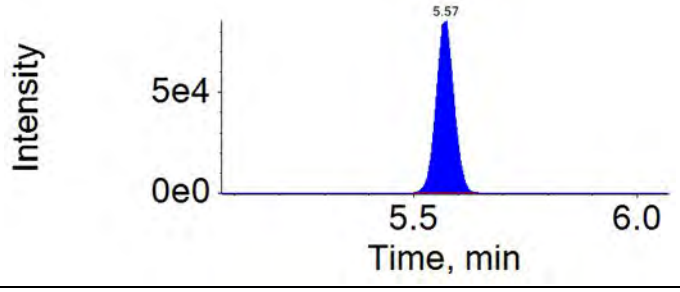
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

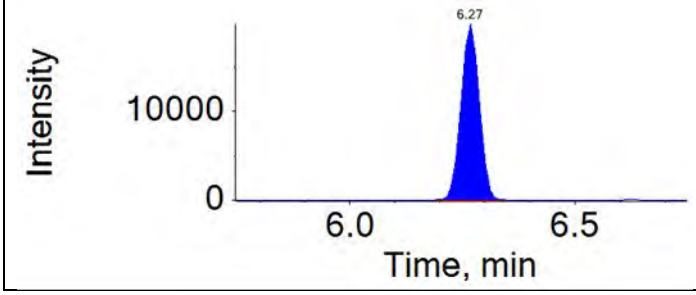
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

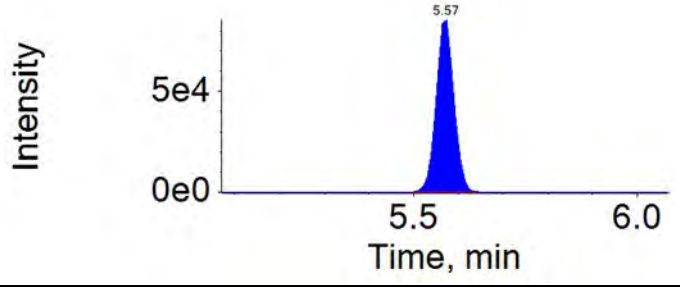
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



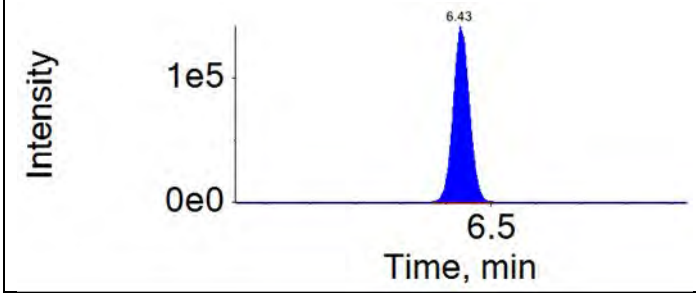


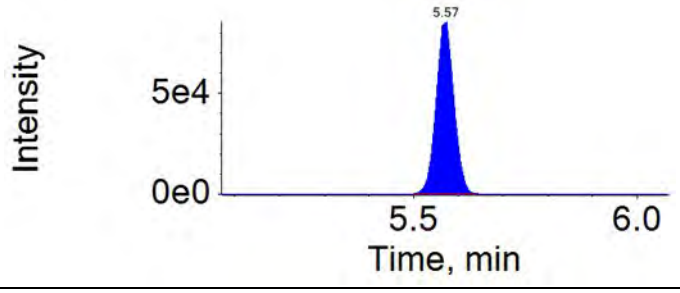
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



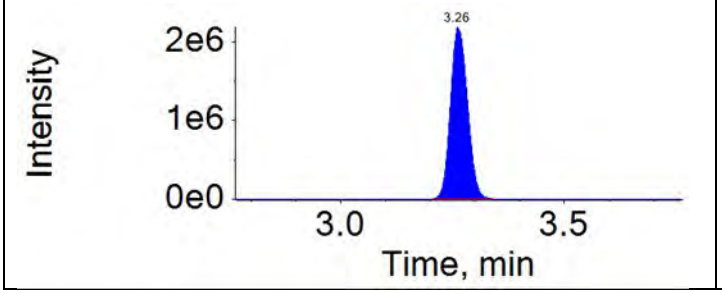


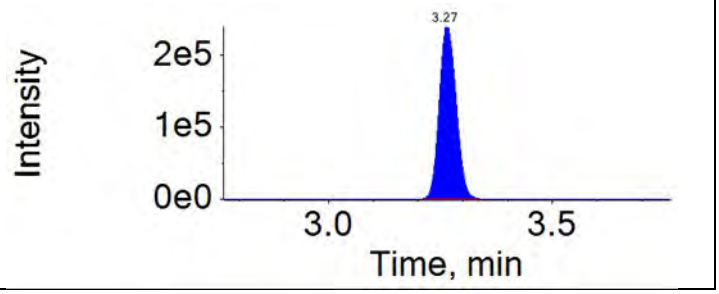
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

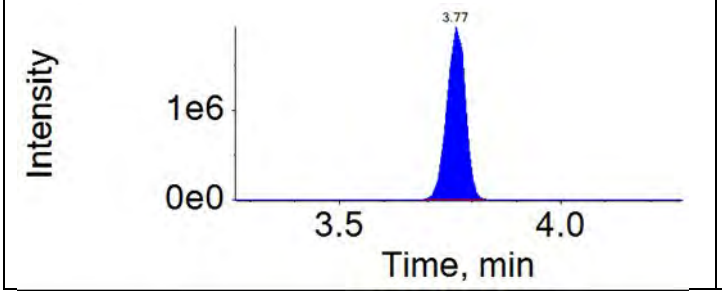
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

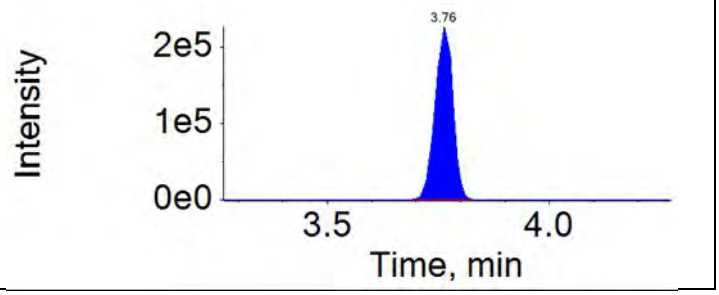
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



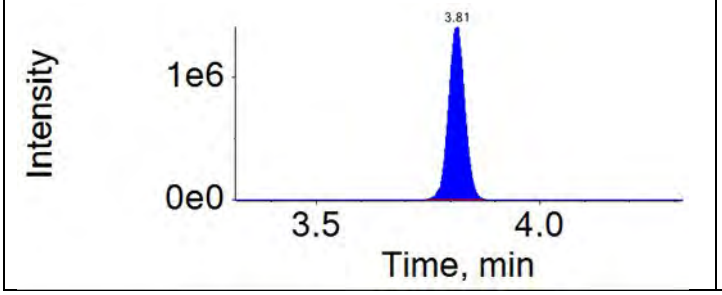


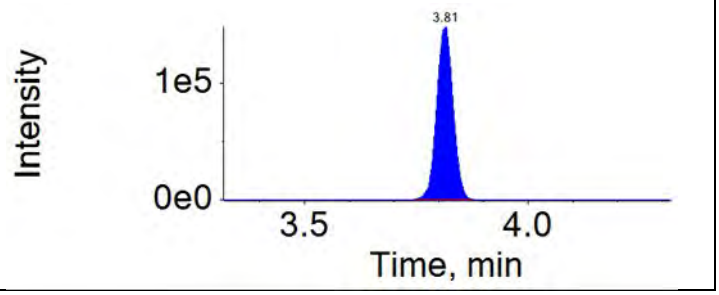
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



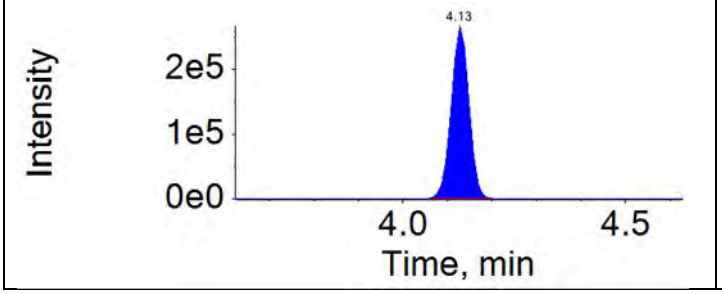


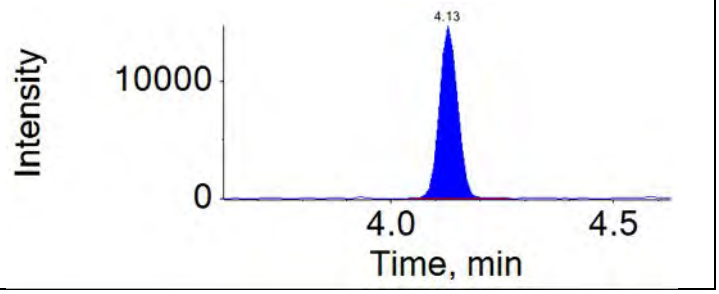
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



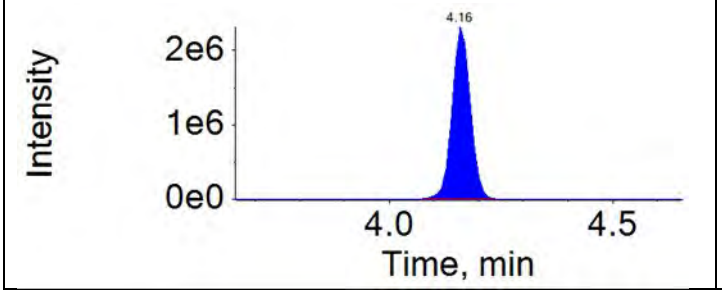


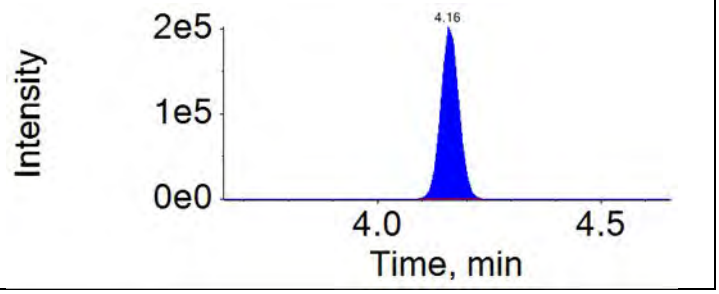
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

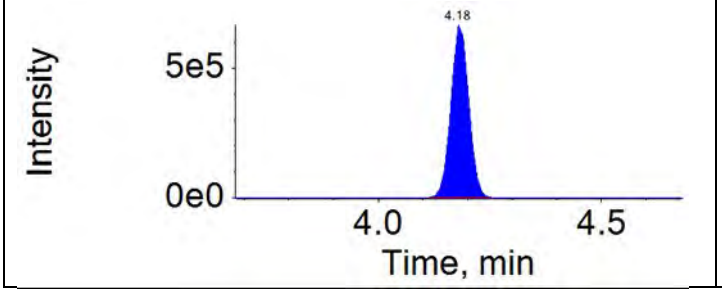
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

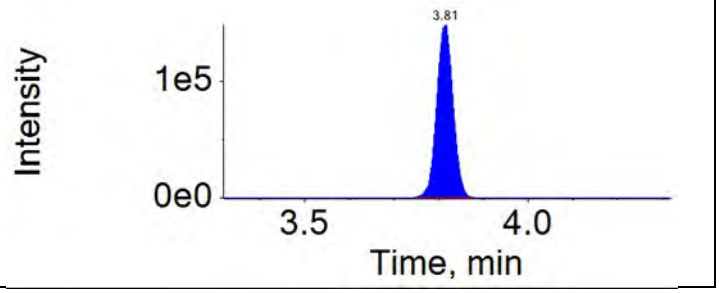
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



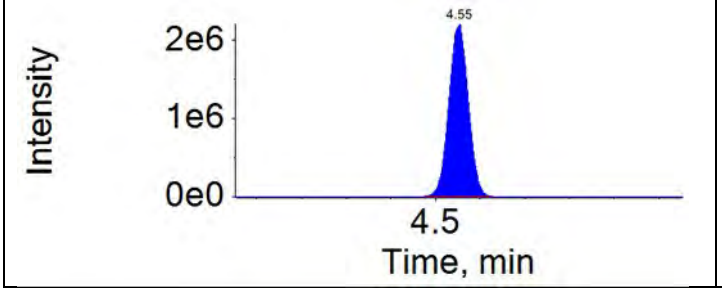


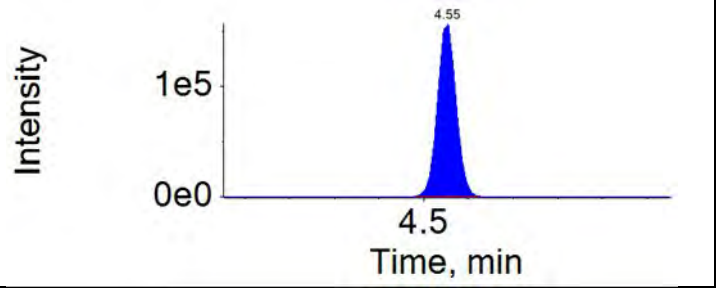
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



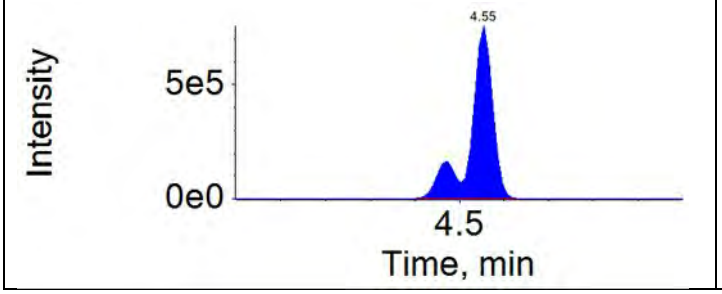


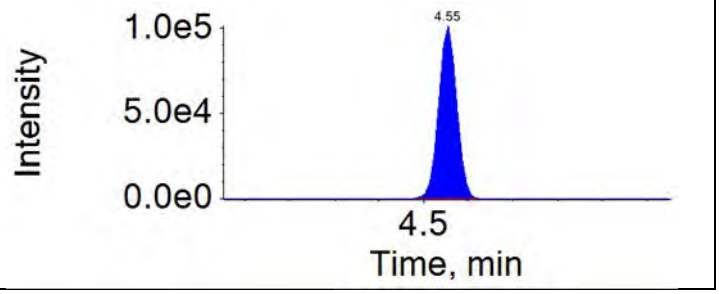
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



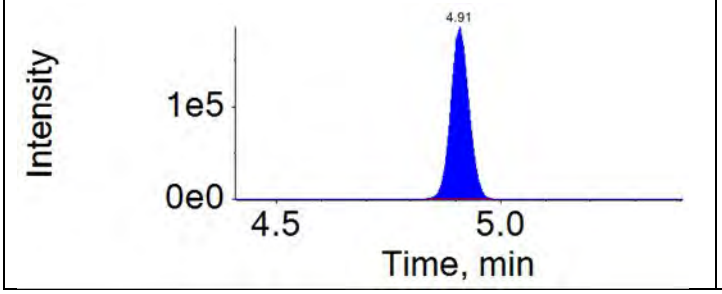


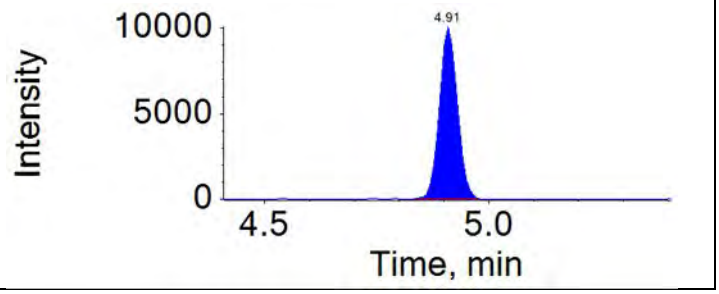
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

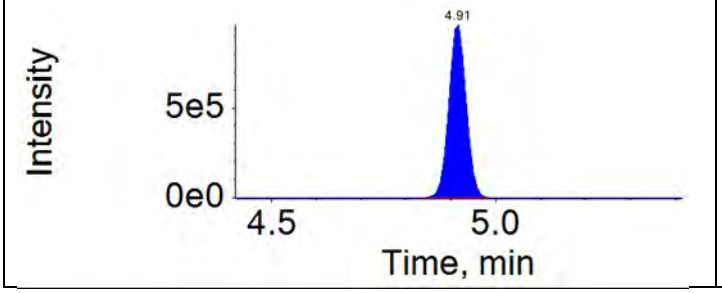
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

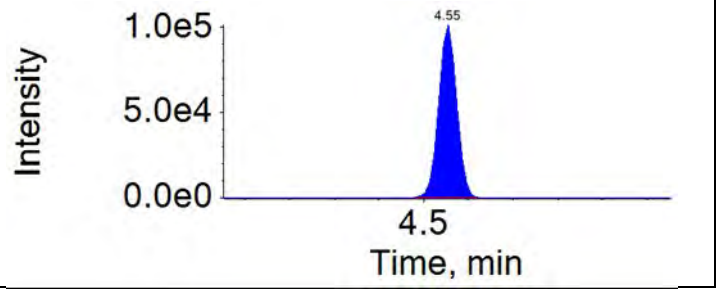
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



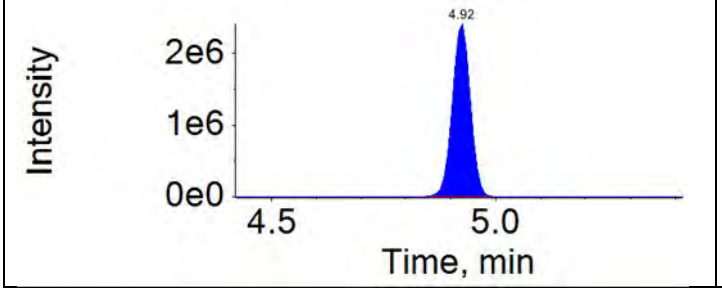


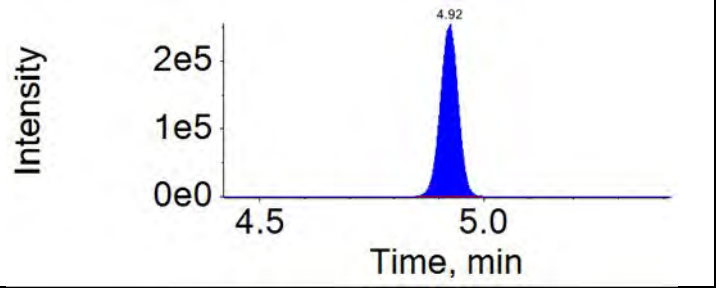
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



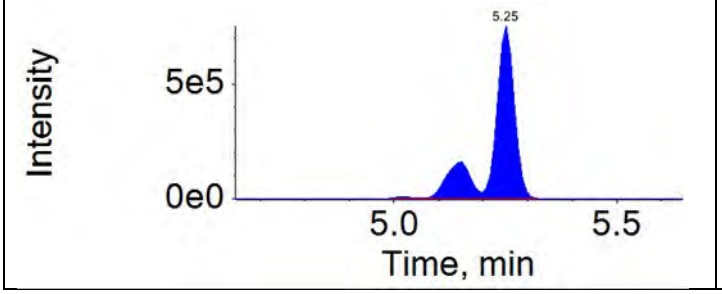


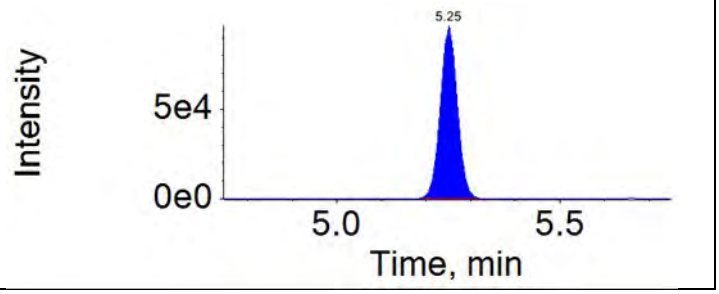
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



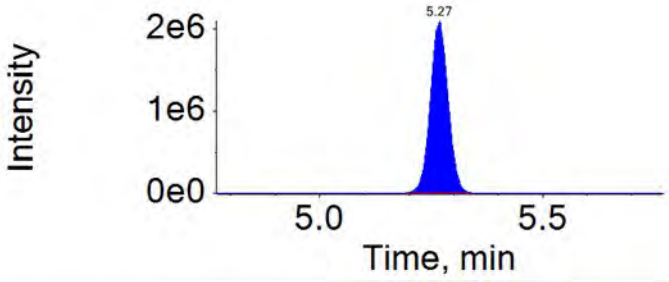


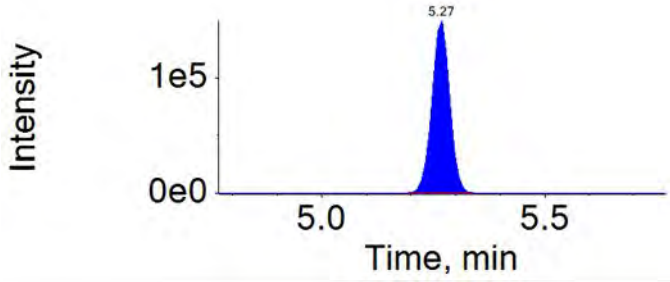
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

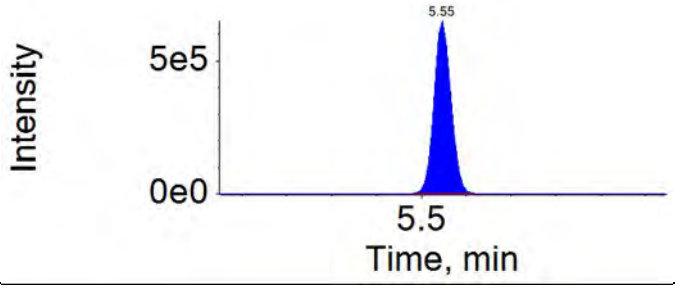
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

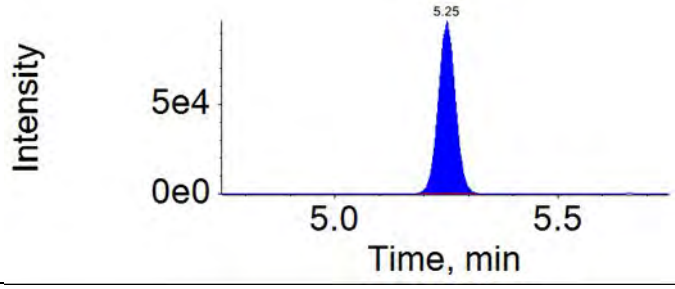
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



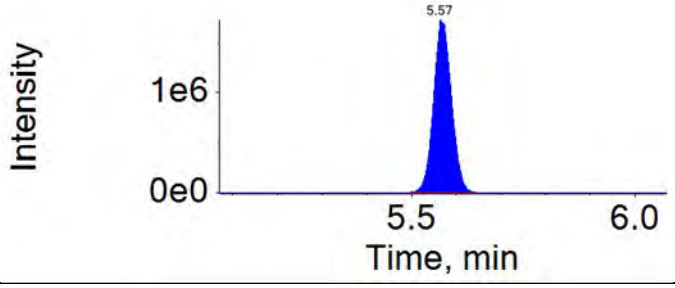


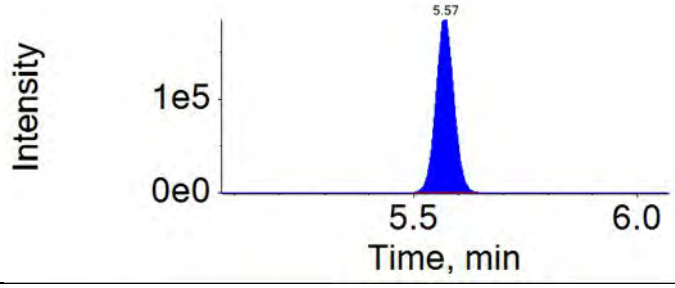
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



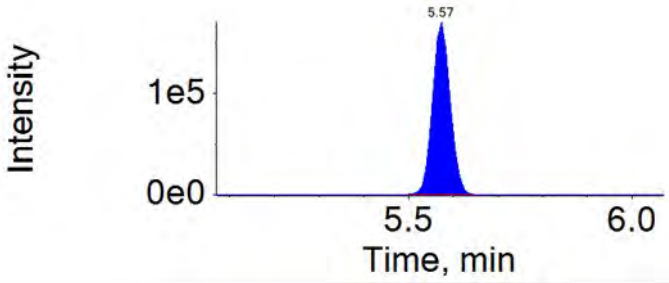


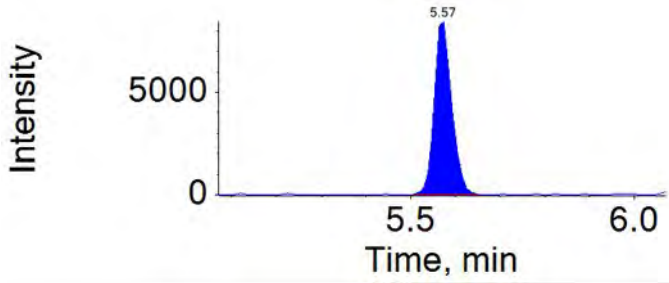
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



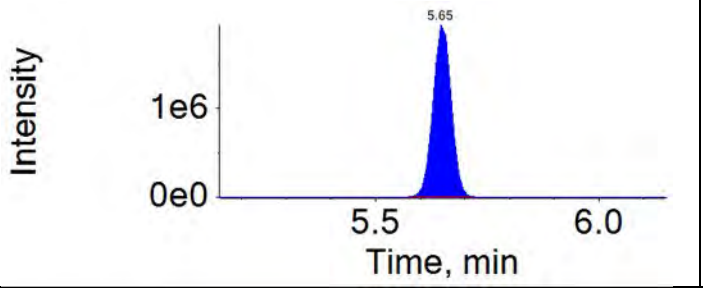


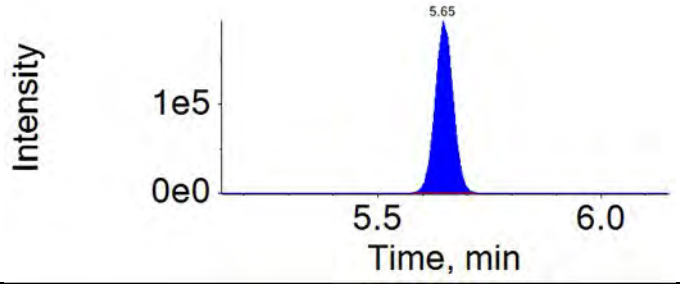
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

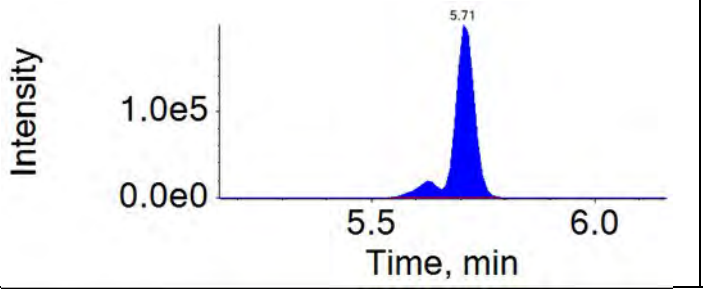
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

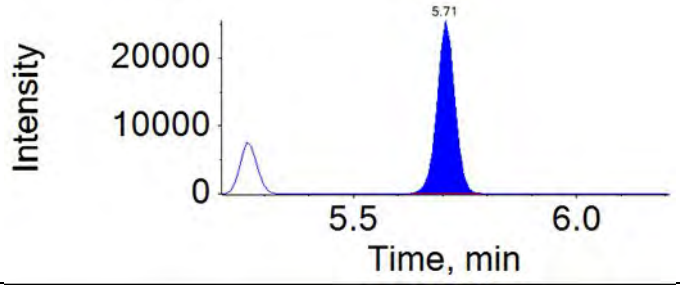
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



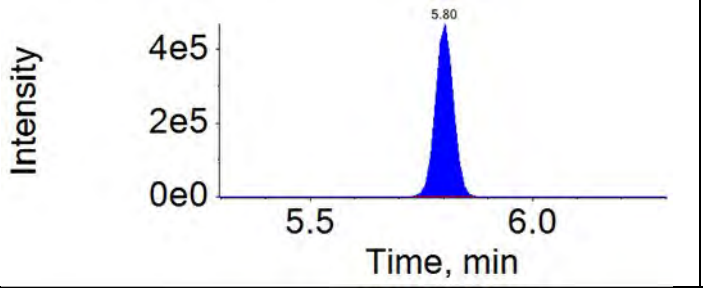


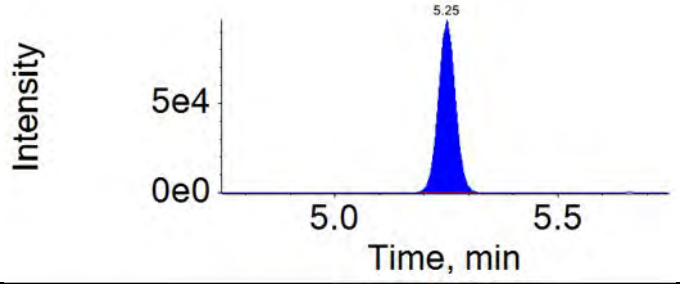
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



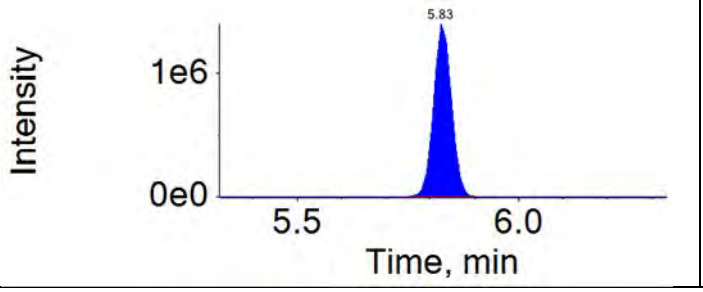


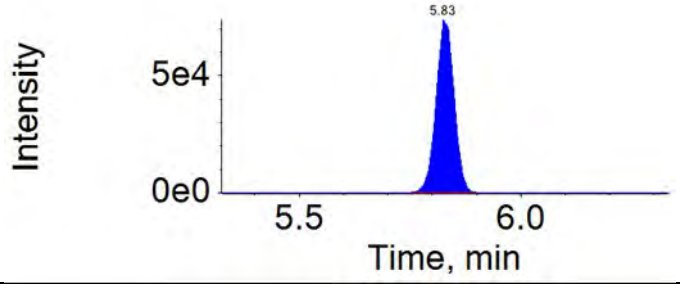
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



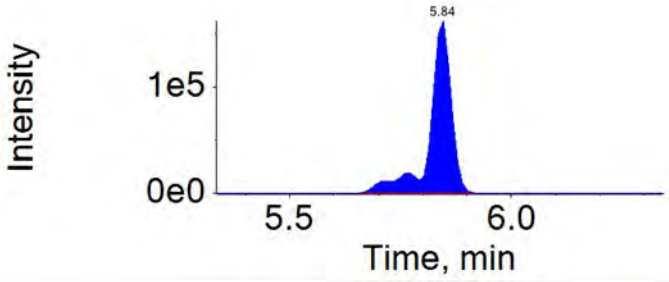


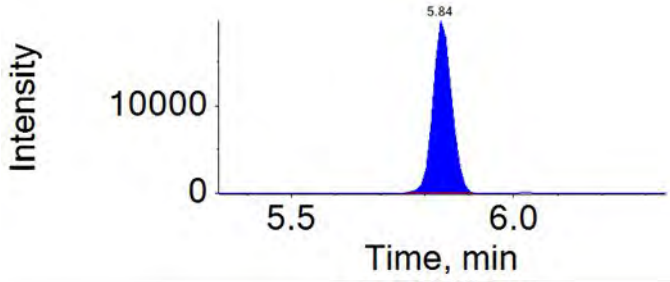
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

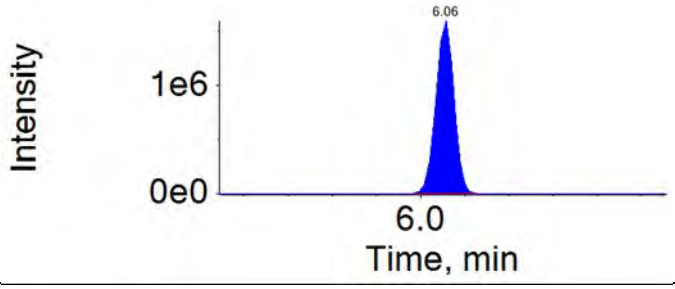
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

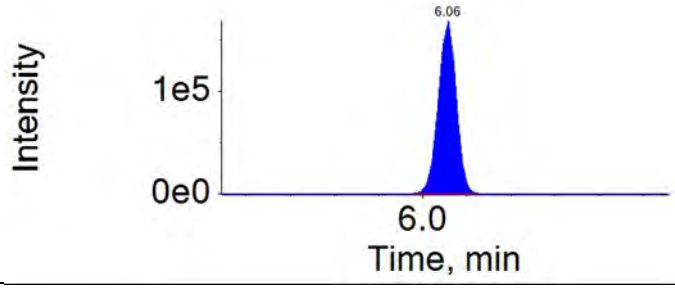
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



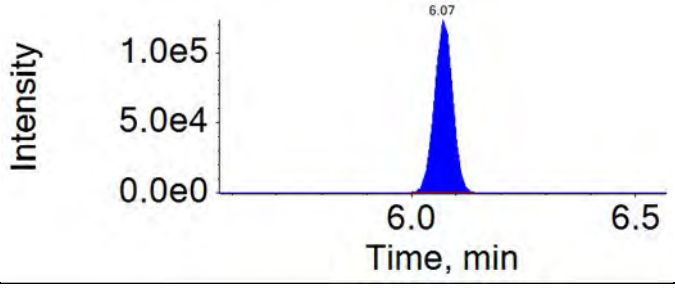


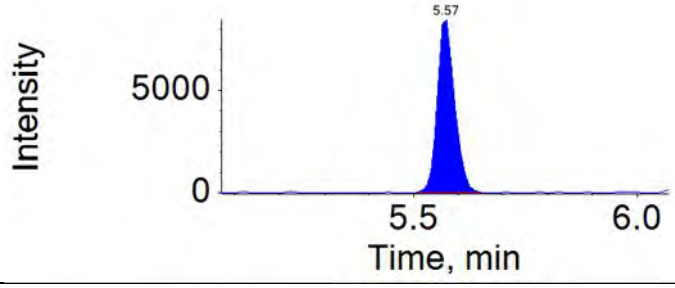
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



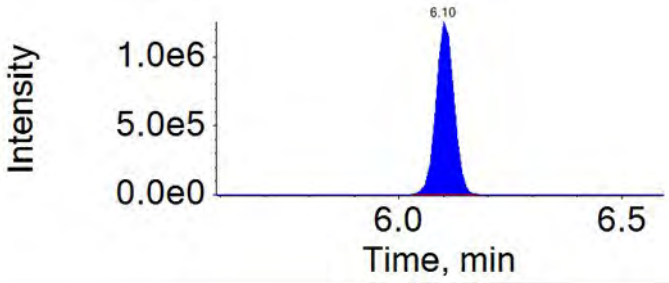


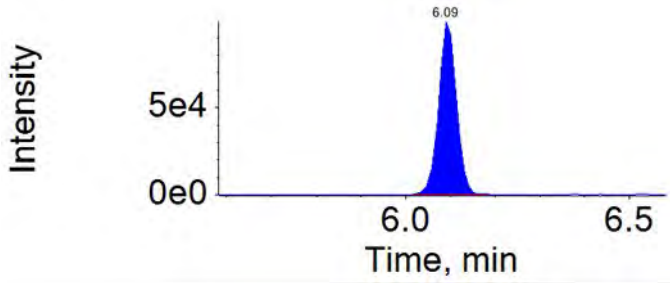
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



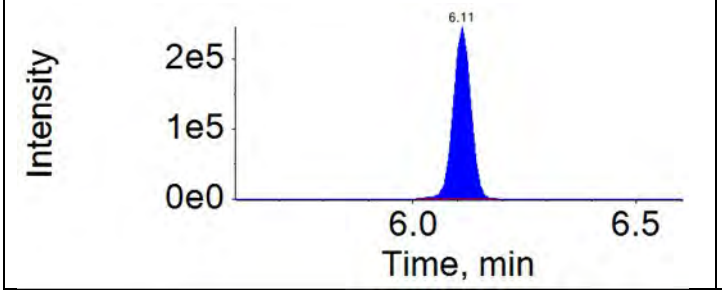


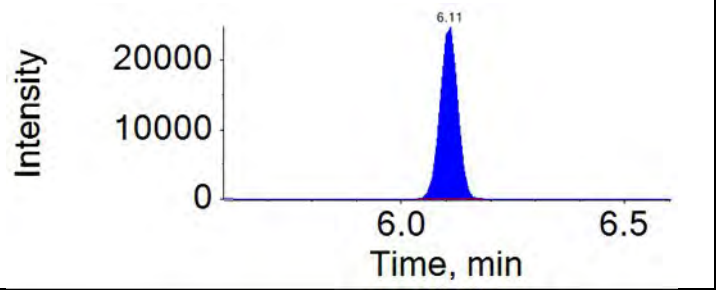
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

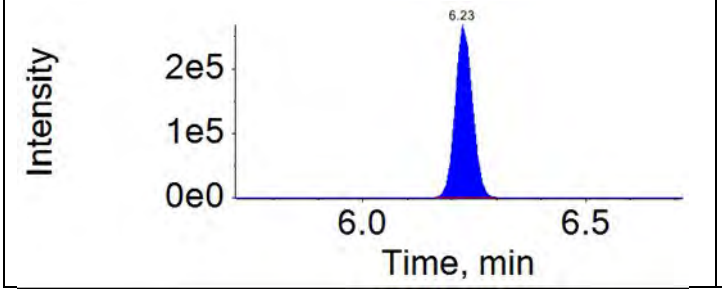
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

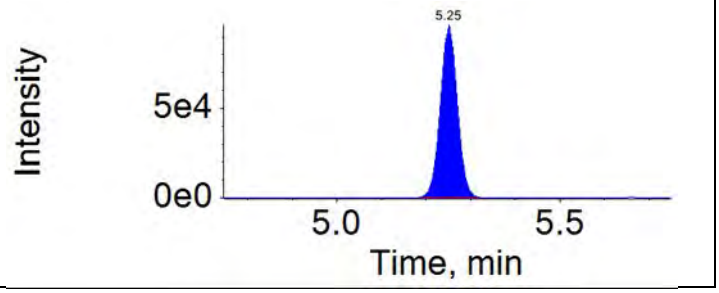
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



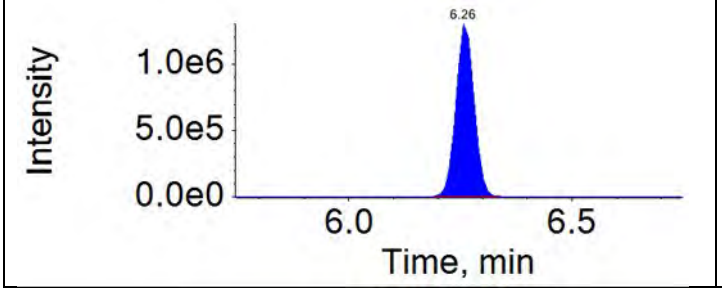


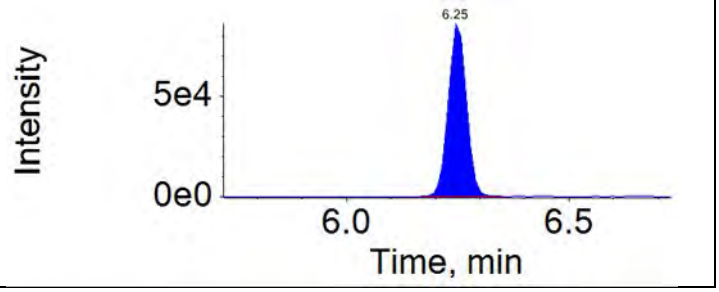
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



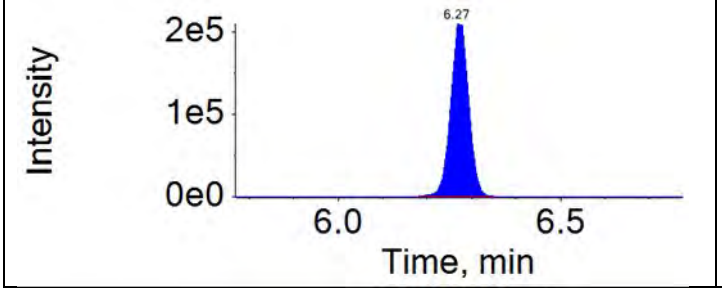


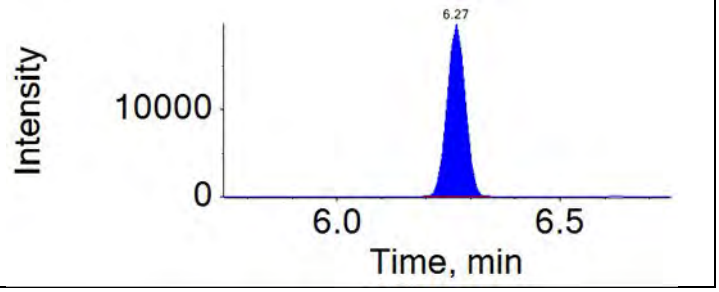
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



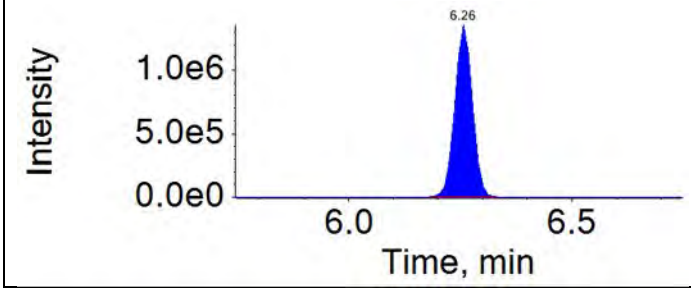


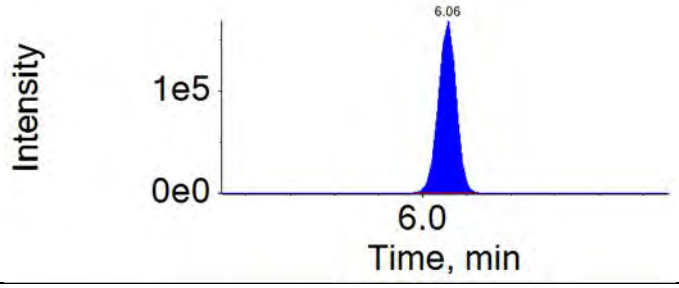
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

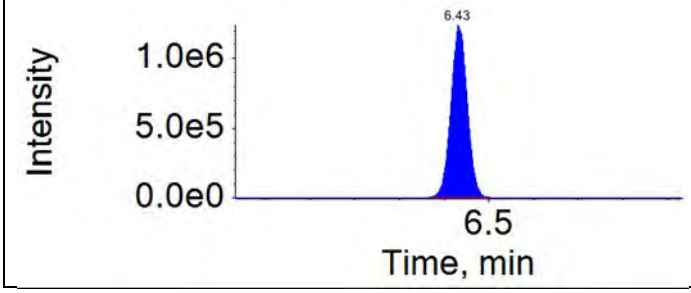
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

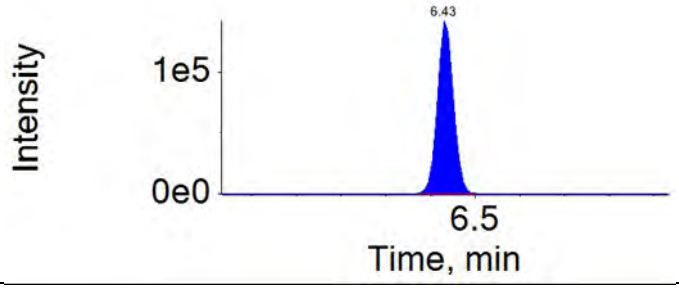
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



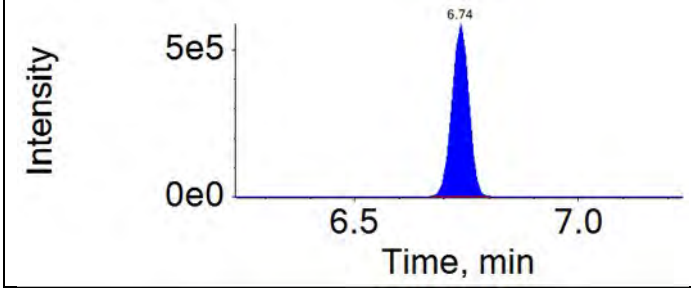


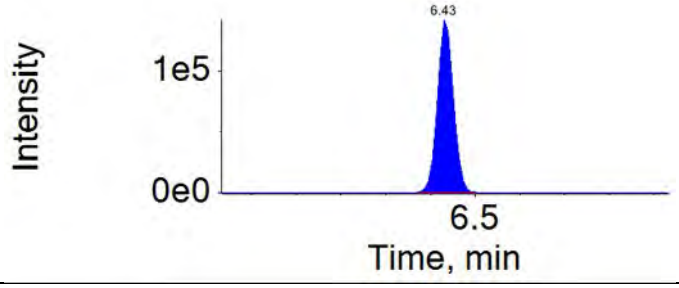
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



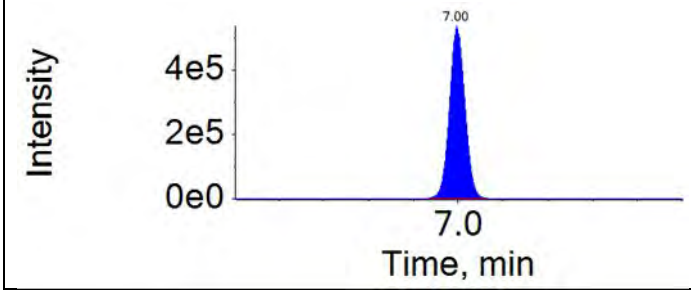


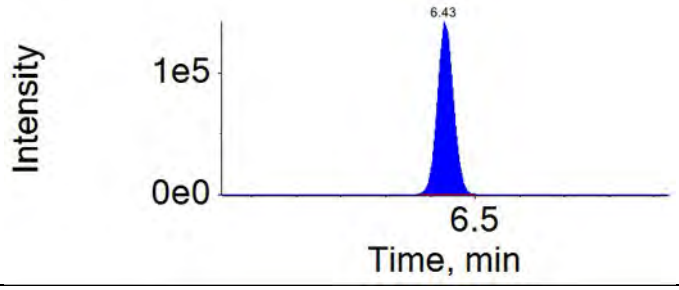
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



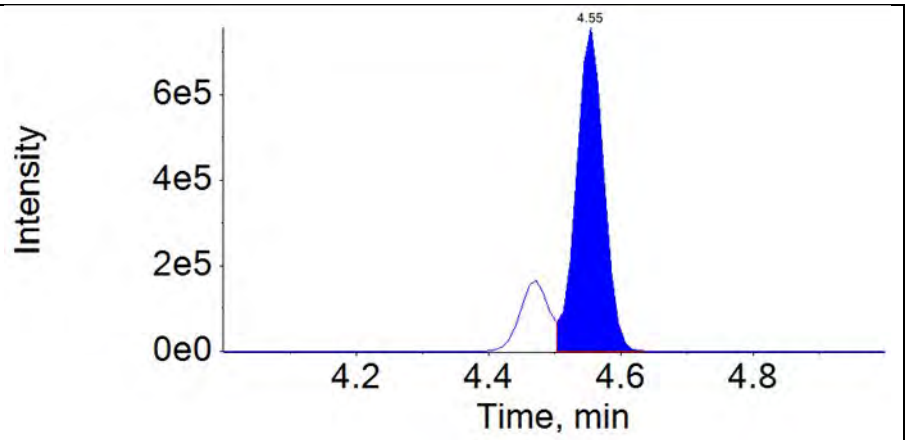


APPROVED
By MCD at 6:33 pm, 11/12/18

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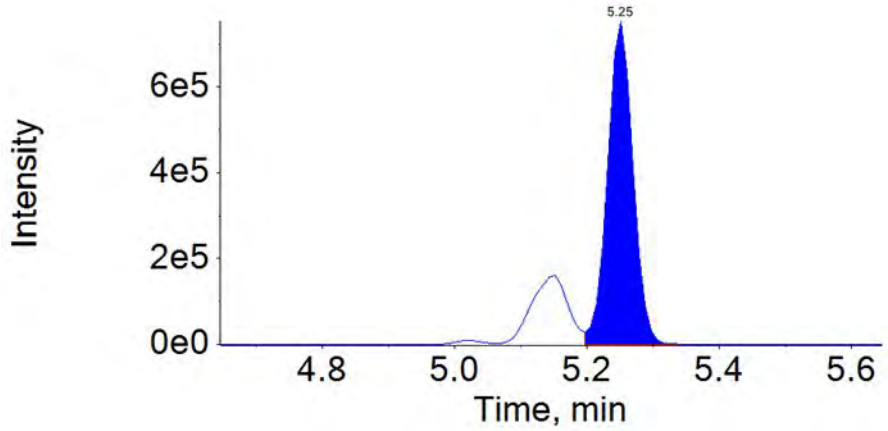
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.55
Peak Area:
2168276.79
Mass Range:
399.0 / 80.0
File Name:
18NOV12DCAL-47.wiff
Sample Name:
CAL6



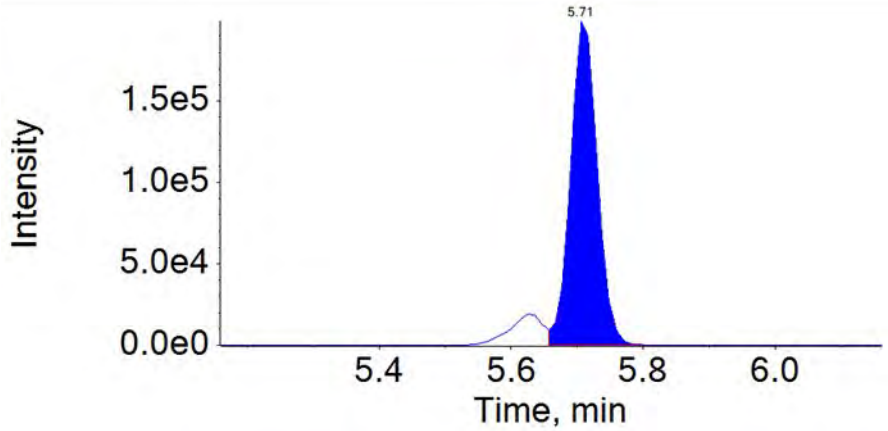
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
2015391.27
Mass Range:
499.0 / 80.0
File Name:
18NOV12DCAL-47.wiff
Sample Name:
CAL6



Integration Comment: incorrect integration

Component Name:
NMeFOSAA
RT (min.):
5.71
Peak Area:
561930.92
Mass Range:
570.0 / 419.0
File Name:
18NOV12DCAL-47.wiff
Sample Name:
CAL6

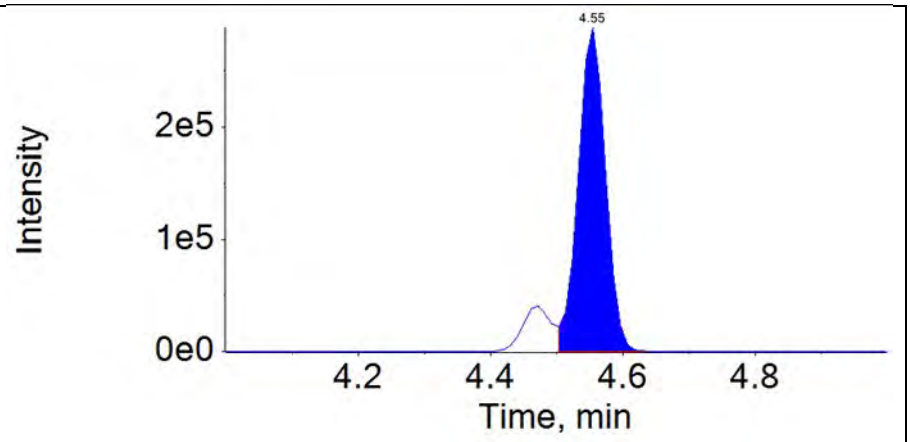


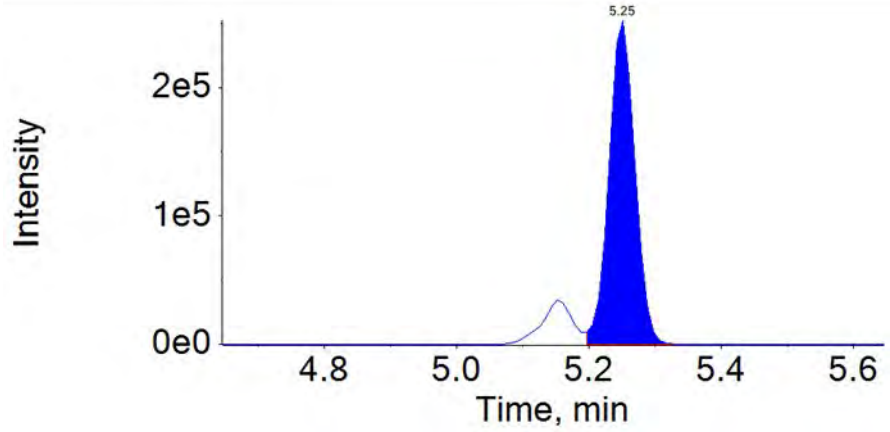
Integration Comment: incorrect integration

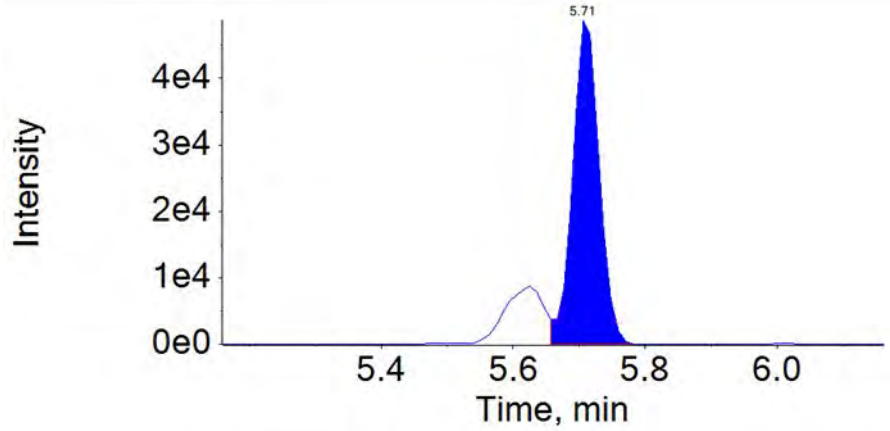
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFHxS_2 **RT (min.):** 4.55 **Peak Area:** 827831.34 **Mass Range:** 399.0 / 99.0 **File Name:** 18NOV12DCAL-47.wiff **Sample Name:** CAL6	 **Integration Comment:** incorrect integration

Component Name: PFOS_2 **RT (min.):** 5.25 **Peak Area:** 689553.42 **Mass Range:** 499.0 / 99.0 **File Name:** 18NOV12DCAL-47.wiff **Sample Name:** CAL6	 **Integration Comment:** incorrect integration

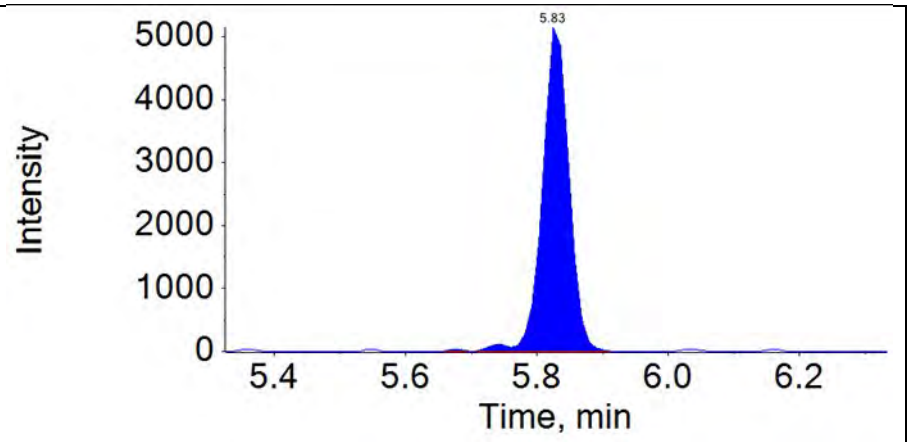
Component Name: NMeFOSAA_2 **RT (min.):** 5.71 **Peak Area:** 136171.13 **Mass Range:** 570.0 / 483.0 **File Name:** 18NOV12DCAL-47.wiff **Sample Name:** CAL6	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

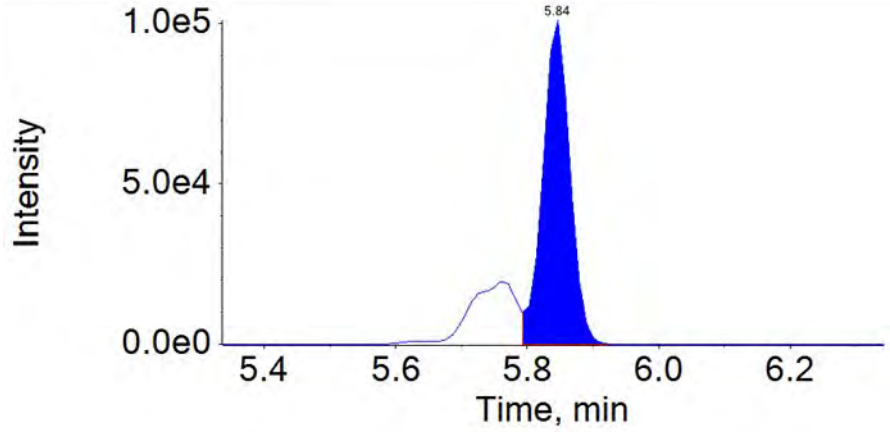
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFUnDA_2
RT (min.):
5.83
Peak Area:
14552.55
Mass Range:
563.0 / 169.0
File Name:
18NOV12DCAL-47.wiff
Sample Name:
CAL6



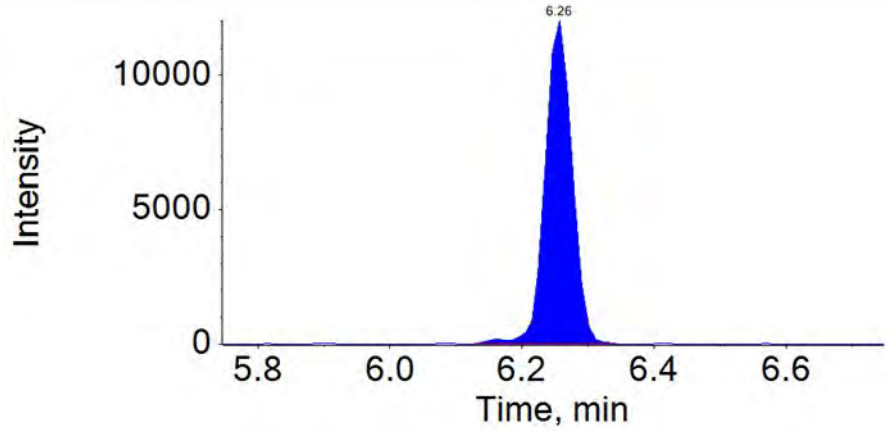
Integration Comment: incorrect integration

Component Name:
NEtFOSAA_2
RT (min.):
5.84
Peak Area:
290918.50
Mass Range:
584.0 / 526.0
File Name:
18NOV12DCAL-47.wiff
Sample Name:
CAL6



Integration Comment: incorrect integration

Component Name:
PFTrDA_2
RT (min.):
6.26
Peak Area:
34575.92
Mass Range:
663.0 / 169.0
File Name:
18NOV12DCAL-47.wiff
Sample Name:
CAL6



Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

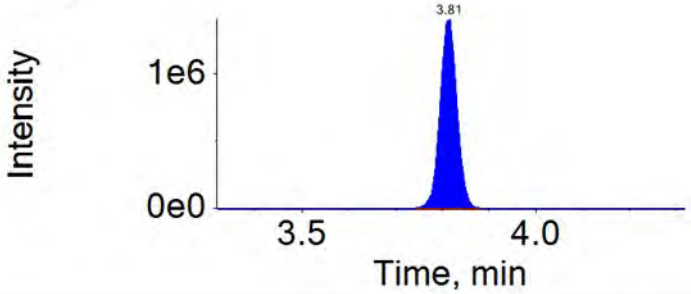
Sample Name: CAL6 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-47.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	3588084.15	A	0.3619	0.3688			
PFBS_2	3.81	1.00	1323155.38	A	0.3619	0.3688	2	50	
4:2-FTS	4.13	1.00	738293.95	A	0.6730	0.6272			
4:2 FTS_2	4.13	1.00	463074.71	A	0.6730	0.6272		#NA!	
PFHxA	4.16	1.00	6593778.96	A	0.0117	0.0113			
PFHxA_2	4.16	1.00	74578.79	A	0.0117	0.0113	-3	50	
PFPeS	4.18	1.10	1847826.78	A	0.5191	0.5187			
PFPeS_2	4.18	1.10	958558.40	A	0.5191	0.5187	0	50	
PFHpA	4.55	1.00	6648455.32	A	0.0563	0.0564			
PFHpA_2	4.55	1.00	375071.53	A	0.0563	0.0564	0	50	
PFHxS	4.55	1.00	2662852.00	M	0.3428	0.3565			
PFHxS_2	4.55	1.00	949378.20	M	0.3428	0.3565	4	50	
6:2-FTS	4.91	1.00	523949.46	A	0.6604	0.6368			
6:2 FTS_2	4.91	1.00	333633.12	A	0.6604	0.6368		#NA!	
PFHpS	4.91	1.08	2604868.63	A	0.4066	0.4130			
PFHpS_2	4.91	1.08	1075742.12	A	0.4066	0.4130	2	50	
PFOA	4.92	1.00	6758642.79	A	0.0562	0.0574			
PFOA_2	4.92	1.00	387863.69	A	0.0562	0.0574	2	50	
PFOS	5.25	1.00	2664957.22	M	0.2968	0.3006			
PFOS_2	5.25	1.00	801195.47	M	0.2968	0.3006	1	50	
PFNA	5.27	1.00	5820576.59	A	0.0229	0.0205			
PFNA_2	5.27	1.00	119436.95	A	0.0229	0.0205	-10	50	
PFNS	5.55	1.06	1709959.45	A	0.4828	0.4693			
PFNS_2	5.55	1.06	802535.42	A	0.4828	0.4693	-3	50	
PFDA	5.57	1.00	4802967.81	A	0.0081	0.0072			
PFDA_2	5.57	1.00	34768.56	A	0.0081	0.0072	-10	50	
8:2-FTS	5.57	1.00	469719.63	A	0.6814	0.5683			
8:2 FTS_2	5.57	1.00	266934.57	A	0.6814	0.5683		#NA!	
NMeFOSAA	5.71	1.00	627854.43	M	0.2569	0.2739			
NMeFOSAA_2	5.71	1.00	171981.91	M	0.2569	0.2739	7	50	
PFDS	5.80	1.10	1313570.32	A	0.5144	0.4832			
PFDS_2	5.80	1.11	634717.73	A	0.5144	0.4832	-6	50	
PFUnDA	5.83	1.00	3923979.21	A	0.0058	0.0036			
PFUnDA_2	5.83	1.00	14257.68	M	0.0058	0.0036	-38	50	
NEtFOSAA	5.84	1.00	551865.73	A	0.7253	0.6936			
NEtFOSAA_2	5.84	1.00	382778.11	M	0.7253	0.6936	-4	50	
PFDoDA	6.06	1.00	4582985.49	A	0.0157	0.0136			
PFDoDA_2	6.06	1.00	62235.50	A	0.0157	0.0136	-13	50	
10:2-FTS	6.07	1.09	348263.21	A	0.6356	0.6654			
10:2 FTS_2	6.07	1.09	231731.38	A	0.6356	0.6654		#NA!	
PFTrDA	6.26	1.03	3691733.76	A	0.0086	0.0093			
PFTrDA_2	6.26	1.03	34255.33	M	0.0086	0.0093	8	50	
PFTeDA	6.43	1.00	3149020.22	A	0.0062	0.0065			
PFTeDA_2	6.43	1.00	20486.74	A	0.0062	0.0065	4	50	
PFHxDA	6.74	1.05	1533920.21	A	0.0683	0.0655			
PFHxDA_2	6.73	1.05	100532.17	A	0.0683	0.0655	-4	50	
PFODA	7.00	1.09	1270897.62	A	0.0277	0.0264			
PFODA_2	7.00	1.09	33518.79	A	0.0277	0.0264	-5	50	

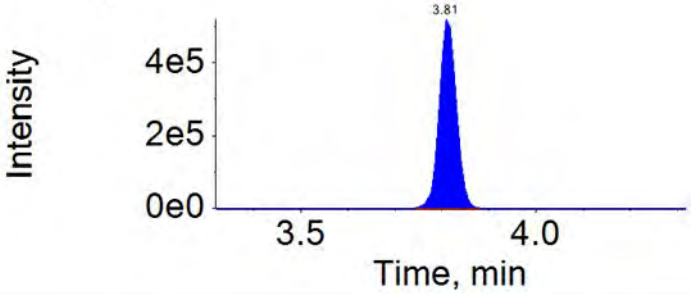
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

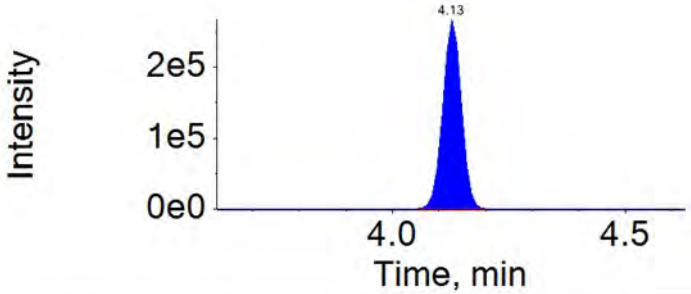
Component: PFBS
Primary Mass: 299.0 / 80.0



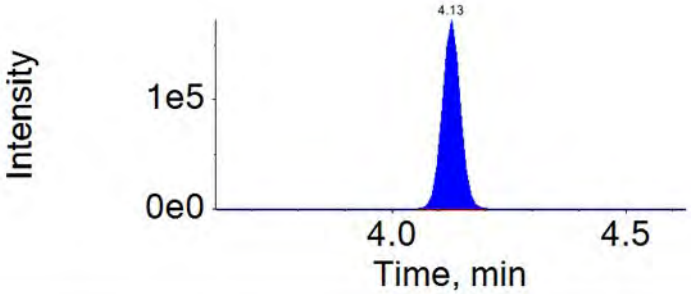
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



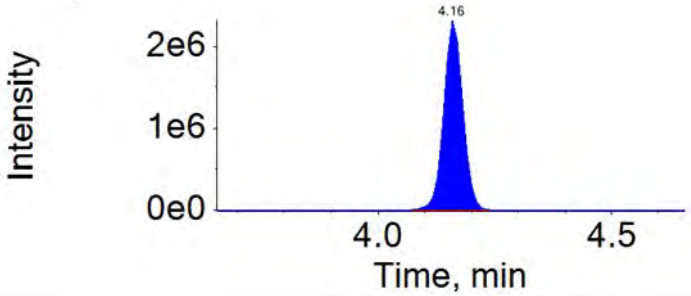
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



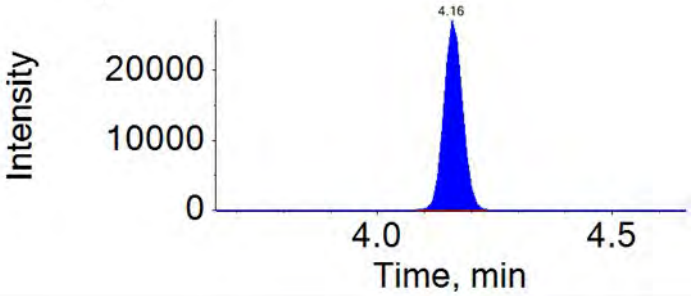
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



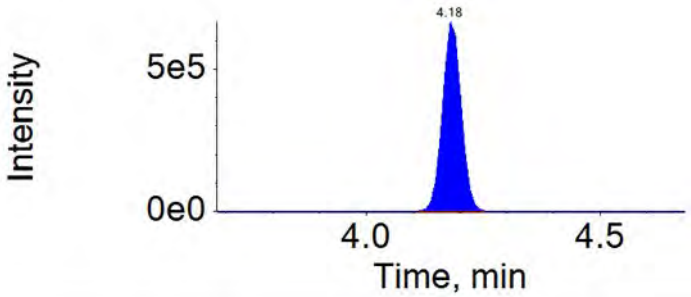
Component: PFHxA
Primary Mass: 313.0 / 269.0



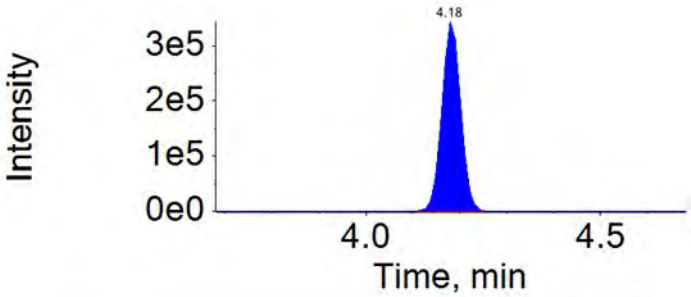
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



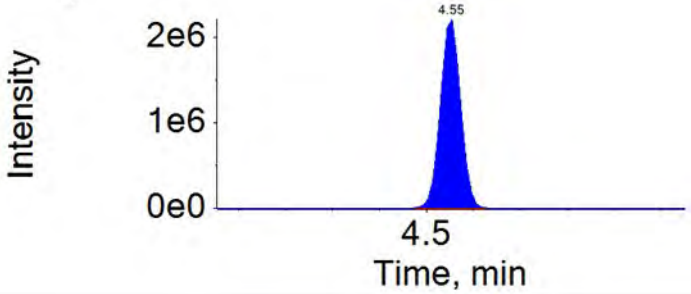
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



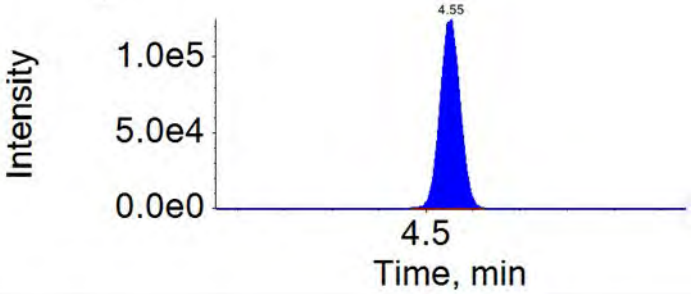
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

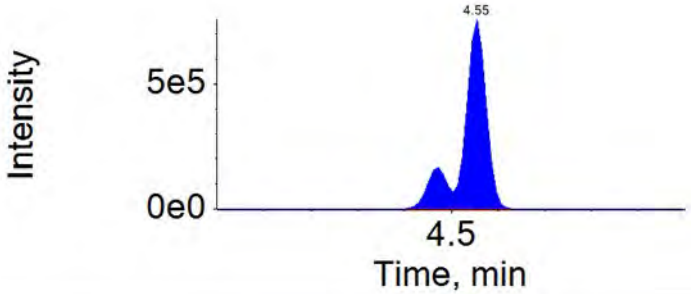
Component: PFHpA
Primary Mass: 363.0 / 319.0



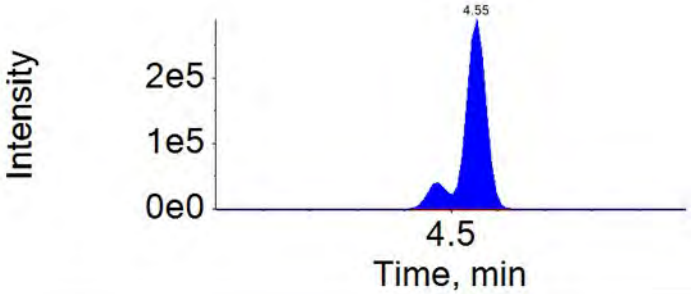
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



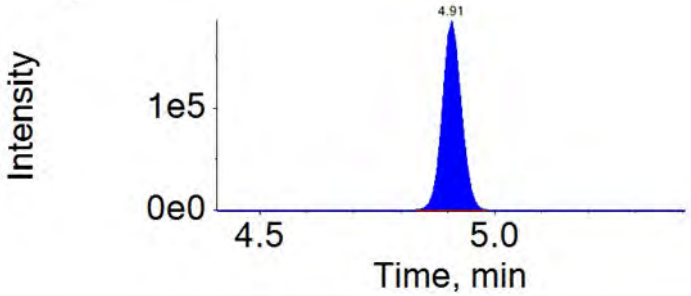
Component: PFHxS
Primary Mass: 399.0 / 80.0



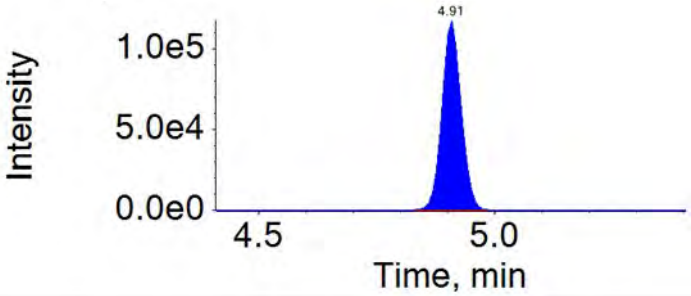
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



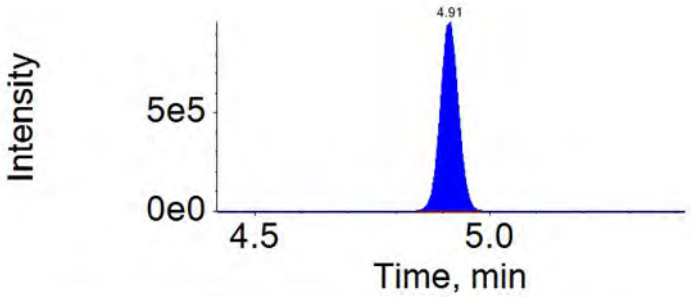
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



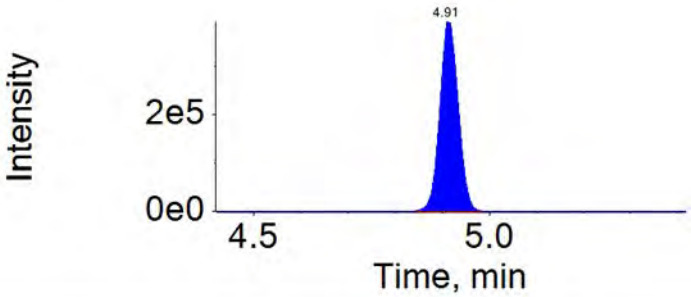
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



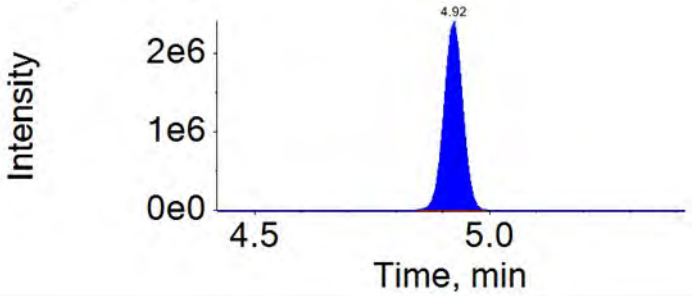
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



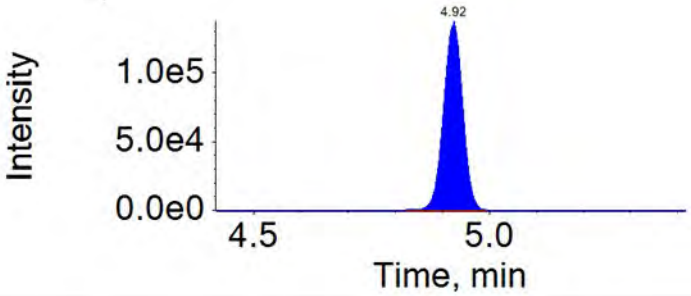
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

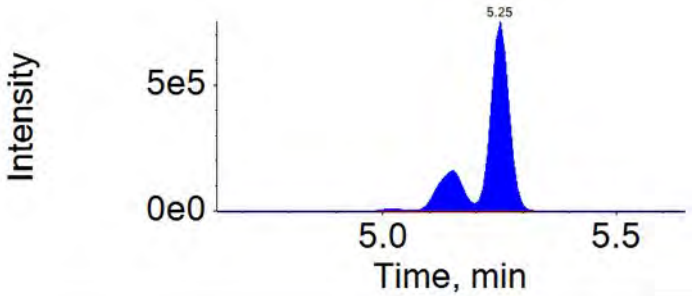
Component: PFOA
Primary Mass: 413.0 / 369.0



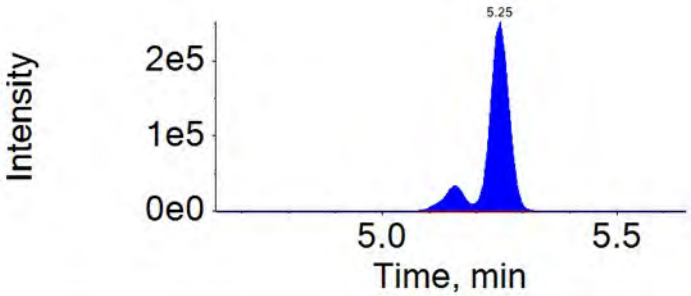
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



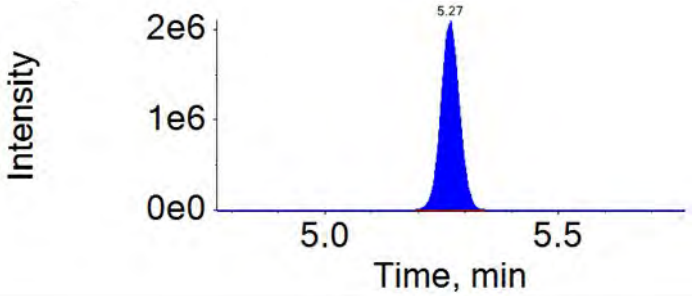
Component: PFOS
Primary Mass: 499.0 / 80.0



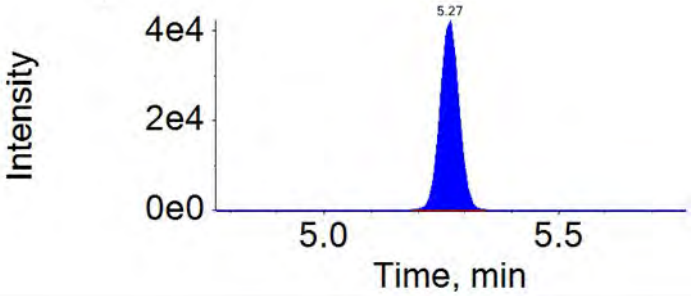
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



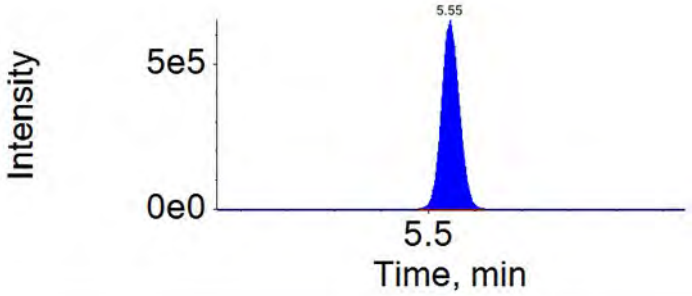
Component: PFNA
Primary Mass: 463.0 / 419.0



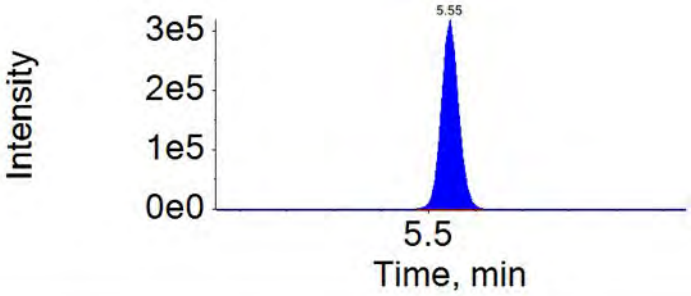
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



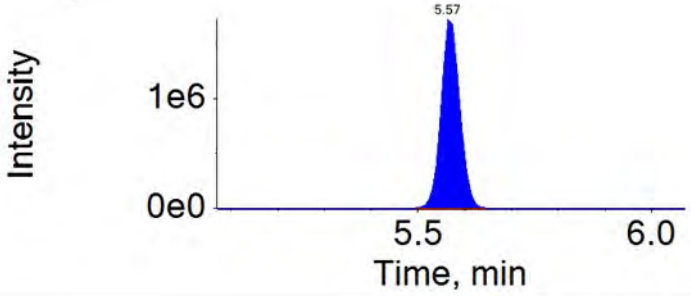
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



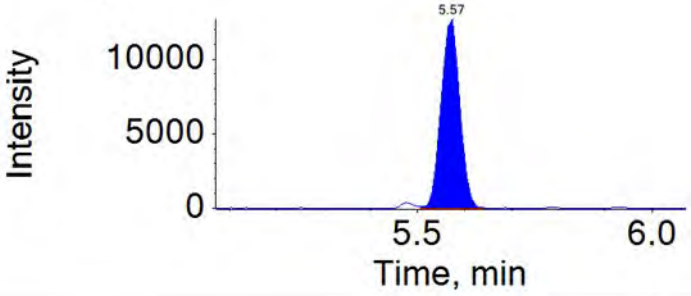
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By HMK at 10:53 am, 11/13/18

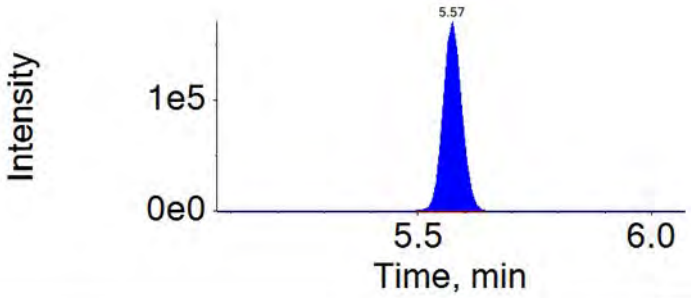
Component: PFDA
Primary Mass: 513.0 / 469.0



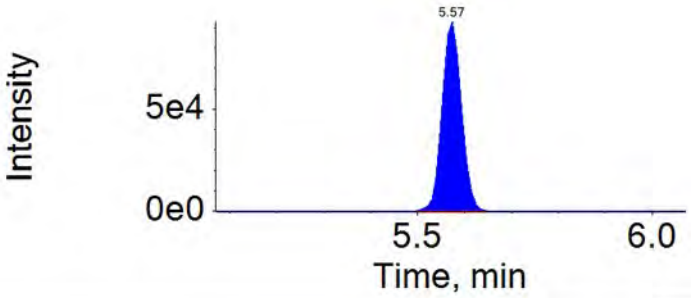
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



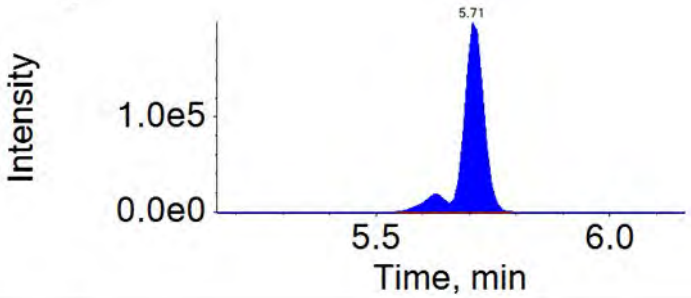
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



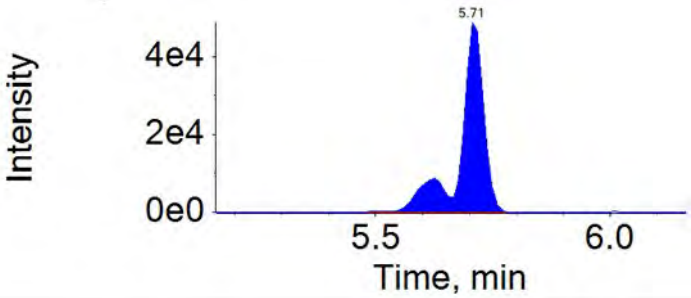
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



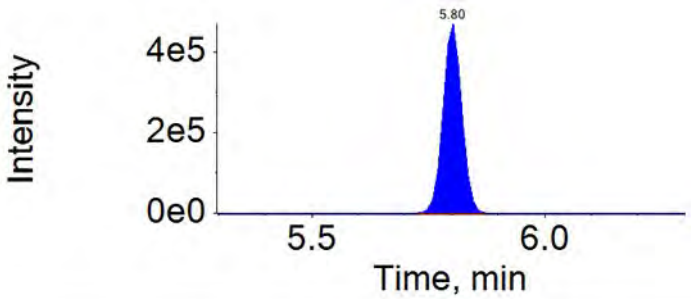
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



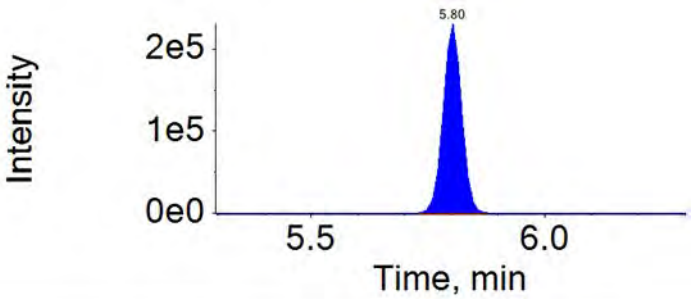
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



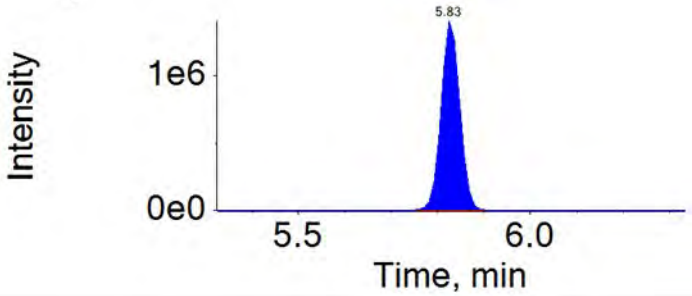
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Secondary Mass: 599.0 / 99.0



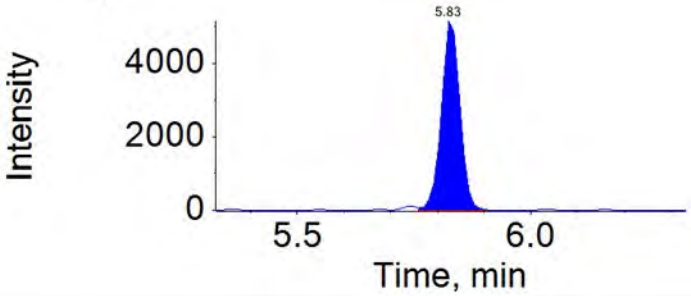
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

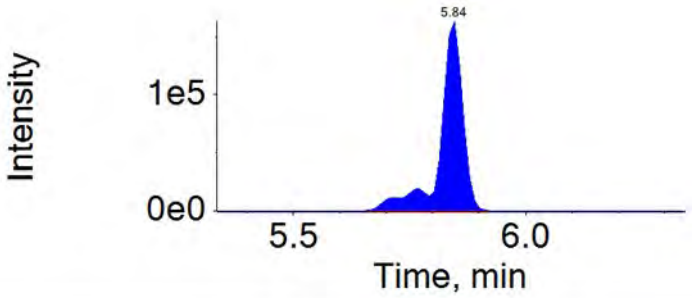
Component: PFUnDA
Primary Mass: 563.0 / 519.0



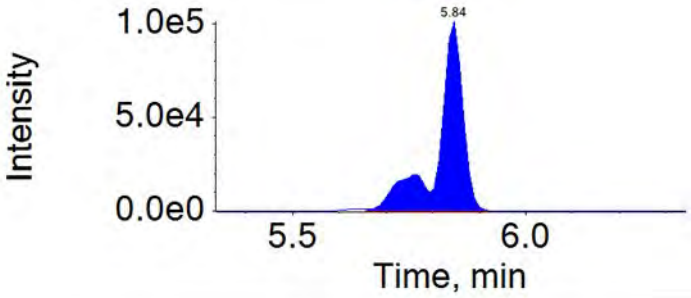
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Secondary Mass: 563.0 / 169.0



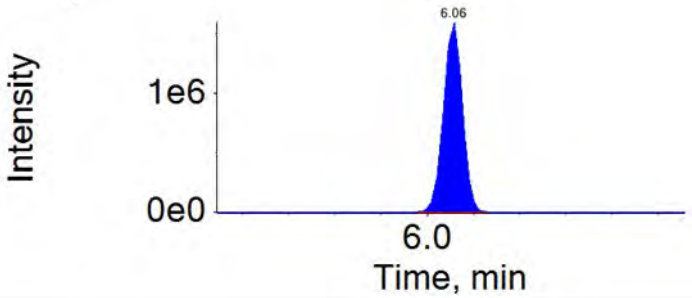
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



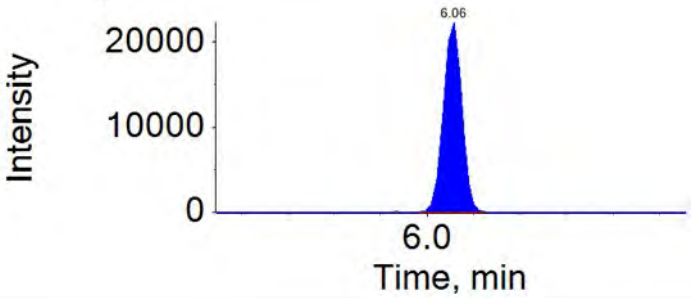
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



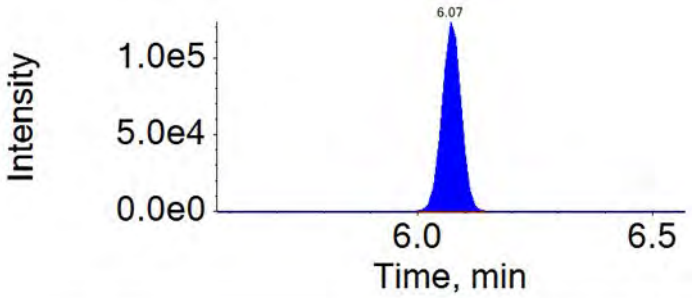
Component: PFDoDA
Primary Mass: 613.0 / 569.0



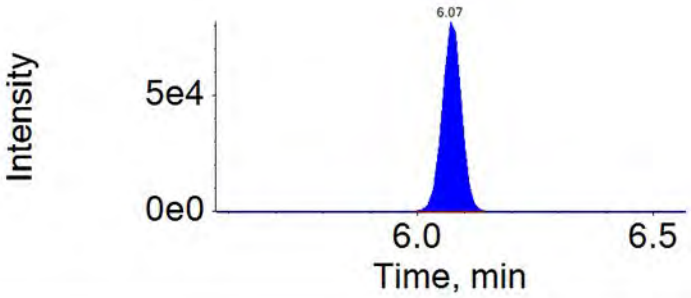
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



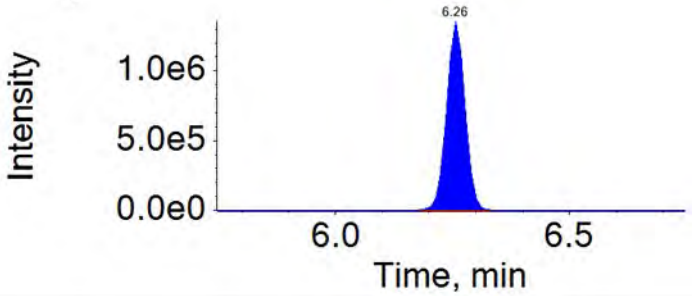
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



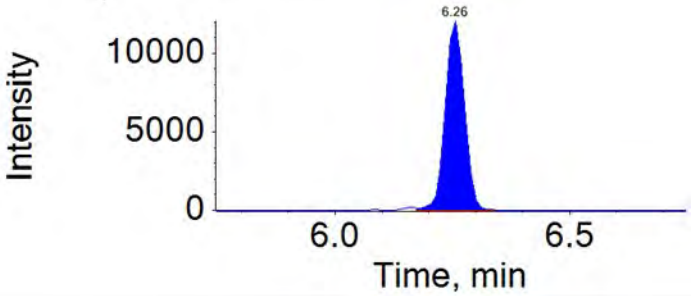
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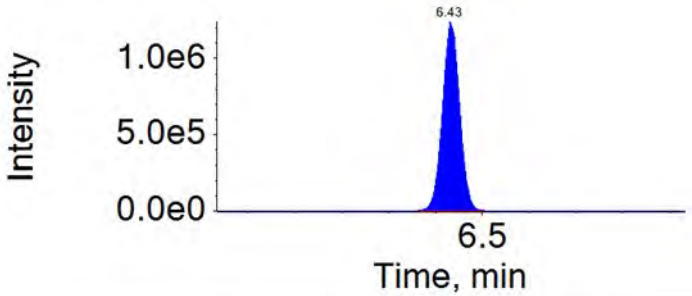
Component: PFTrDA
Primary Mass: 663.0 / 619.0



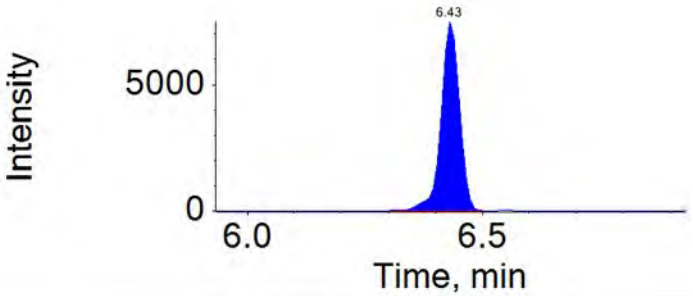
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



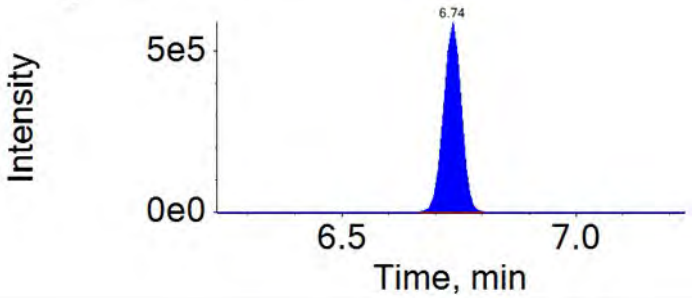
Component: PFTeDA
Primary Mass: 713.0 / 669.0



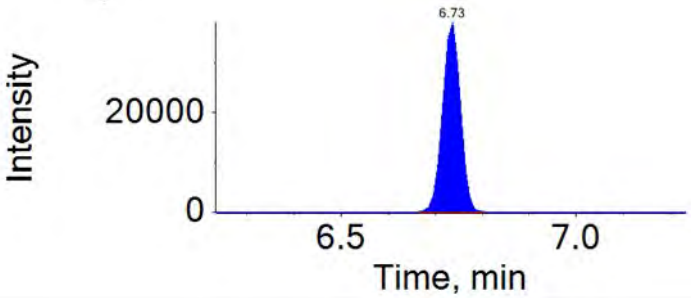
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



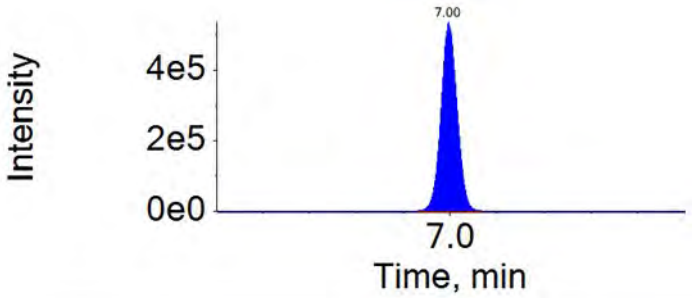
Component: PFHxDA
Primary Mass: 813.0 / 769.0



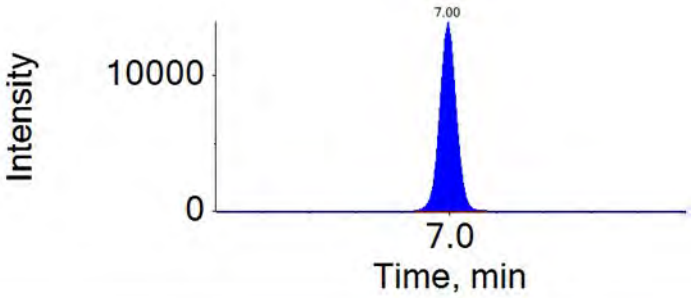
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL7			**Data File:**		18NOV12DCAL-48.wiff
Sample ID:	CALBRN71833B			**Acquis Date:**		2018-11-12T16:00:06
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	9			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV12DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N\A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	510525.8	659926.2	-23	50	
13C2-PFOA	5.0	368158.3	450219.7	-18	50	
13C4-PFOS	4.8	233532.7	249205.8	-6	50	
13C2-PFDA	5.0	233825.1	278743.9	-16	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	557392.8	13C3-PFBA	510525.8	1.092	5.000	4.895	98	70-130	
E13C5-PFPeA	581688.7	13C3-PFBA	510525.8	1.139	5.000	5.110	102	70-130	
E13C3-PFBS	361166.0	13C3-PFBA	510525.8	0.707	4.650	4.994	107	70-130	
E13C2-4:2-FTS	40505.1	13C2-PFOA	368158.3	0.110	4.670	4.900	105	70-130	
E13C5-PFHxA	509808.0	13C2-PFOA	368158.3	1.385	5.000	5.002	100	70-130	
E13C3-PFHxS	267182.8	13C2-PFOA	368158.3	0.726	4.730	4.980	105	70-130	
E13C4-PFHpA	401203.9	13C2-PFOA	368158.3	1.090	5.000	4.910	98	70-130	
E13C2-6:2-FTS	27180.2	13C2-PFOA	368158.3	0.074	4.750	4.939	104	70-130	
E13C8-PFOA	607669.5	13C2-PFOA	368158.3	1.651	5.000	4.548	91	70-130	
E13C8-PFOS	242617.5	13C4-PFOS	233532.7	1.039	4.780	4.603	96	70-130	
E13C9-PFNA	377369.8	13C4-PFOS	233532.7	1.616	5.000	4.505	90	70-130	
E13C6-PFDA	479333.1	13C2-PFDA	233825.1	2.050	5.000	4.784	96	70-130	
E13C2-8:2-FTS	22711.0	13C2-PFDA	233825.1	0.097	4.790	4.844	101	70-130	
E13C8-PFOSA	554092.6	13C2-PFDA	233825.1	2.370	5.000	5.254	105	70-130	
Ed3-NMeFOSAA	67250.5	13C2-PFDA	233825.1	0.288	5.000	5.192	104	70-130	
E13C7-PFUnDA	199746.8	13C2-PFDA	233825.1	0.854	5.000	4.960	99	70-130	
Ed5-NEtFOSAA	58049.5	13C2-PFDA	233825.1	0.248	5.000	5.252	105	70-130	
E13C2-PFDoDA	474393.8	13C2-PFDA	233825.1	2.029	5.000	5.268	105	70-130	
Ed7-NMePFOSAE	272283.1	13C2-PFDA	233825.1	1.164	5.000	5.039	101	70-130	
Ed3-NMePFOSA	74110.3	13C2-PFDA	233825.1	0.317	5.000	5.758	115	70-130	
Ed9-NEtPFOSAE	240346.5	13C2-PFDA	233825.1	1.028	5.000	5.346	107	70-130	
Ed5-NEtPFOSA	53297.9	13C2-PFDA	233825.1	0.228	5.000	5.347	107	70-130	
E13C2-PFTeDA	346256.6	13C2-PFDA	233825.1	1.481	5.000	5.199	104	70-130	

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

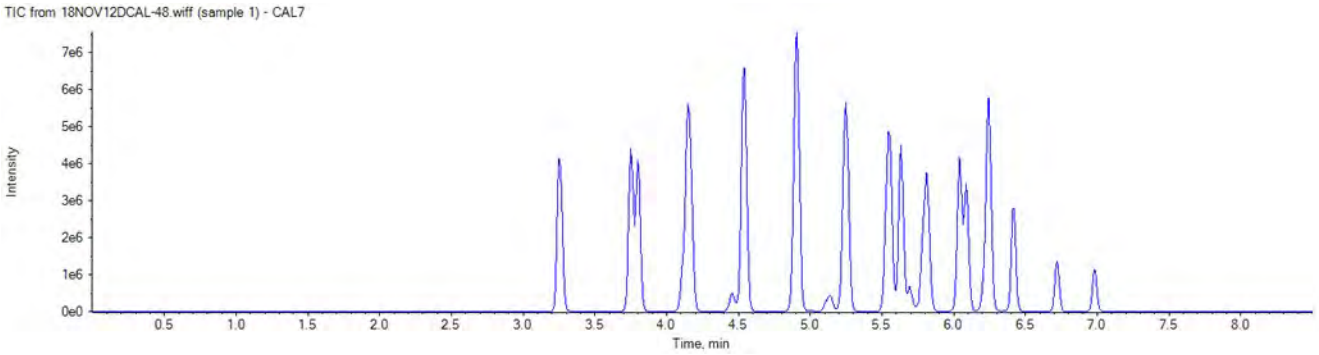
Analyte Quantitation Peak Table

Sample Name: CAL7 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-48.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.25	1.000	9834601.7		A	13C4-PFBA	3.25	557392.8	17.644	97.743
PFPeA	3.75	1.000	9756431.5		A	13C5-PFPeA	3.75	581688.7	16.773	97.094
PFBS	3.80	1.000	6615935.3		A	13C3-PFBS	3.80	361166.0	18.318	87.136
4:2-FTS	4.11	1.000	1379983.9		A	13C2-4:2-FTS	4.11	40505.1	34.069	92.499
PFHxA	4.15	1.000	11059420.3		A	13C5-PFHxA	4.15	509808.0	21.693	90.577
PFPeS	4.17	1.100	3482095.9		A	13C3-PFBS	3.80	361166.0	9.641	93.602
PFHpA	4.54	1.000	10981922.8		A	13C4-PFHpA	4.54	401203.9	27.372	90.732
PFHxS	4.54	1.000	5048349.8		M	13C3-PFHxS	4.54	267182.8	18.895	91.615
6:2-FTS	4.89	1.000	869227.2		A	13C2-6:2-FTS	4.89	27180.2	31.980	77.388
PFHpS	4.90	1.080	4784682.8		A	13C3-PFHxS	4.54	267182.8	17.908	94.267
PFOA	4.91	1.000	10991740.1		A	13C8-PFOA	4.91	607669.5	18.088	96.608
PFOS	5.24	1.000	5138367.0		M	13C8-PFOS	5.24	242617.5	21.179	92.617
PFNA	5.25	1.000	10084288.3		A	13C9-PFNA	5.25	377369.8	26.723	96.360
PFNS	5.53	1.060	3386860.5		A	13C8-PFOS	5.24	242617.5	13.960	97.666
PFDA	5.55	1.000	8104726.6		A	13C6-PFDA	5.55	479333.1	16.908	89.640
8:2-FTS	5.56	1.000	804019.5		A	13C2-8:2-FTS	5.56	22711.0	35.402	82.540
PFOSA	5.63	1.000	10169176.9		A	13C8-PFOSA	5.63	554092.6	18.353	89.642
NMeFOSAA	5.69	1.000	1191981.7		M	d3-NMeFOSAA	5.69	67250.5	17.725	100.173
PFDS	5.79	1.110	2606720.7		A	13C8-PFOS	5.24	242617.5	10.744	97.353
PFUnDA	5.81	1.000	6802701.2		A	13C7-PFUnDA	5.81	199746.8	34.057	89.032
NEtFOSAA	5.83	1.000	1046636.1		M	d5-NEtFOSAA	5.82	58049.5	18.030	94.517
PFDoDA	6.04	1.000	8171355.4		A	13C2-PFDoDA	6.04	474393.8	17.225	87.711
10:2-FTS	6.06	1.090	632223.7		A	13C2-8:2-FTS	5.56	22711.0	27.838	92.724
NMePFOSAE	6.09	1.000	6272486.3		A	d7-NMePFOSAE	6.08	272283.1	23.037	95.876
NMePFOSA	6.09	1.000	1310162.9		A	d3-NMePFOSA	6.09	74110.3	17.679	87.214
PFDoS	6.21	1.190	1336765.3		A	13C8-PFOS	5.24	242617.5	5.510	96.500
NEtPFOSAE	6.25	1.000	6557402.5		A	d9-NEtPFOSAE	6.23	240346.5	27.283	87.532
NEtPFOSA	6.26	1.000	1148933.0		A	d5-NEtPFOSA	6.25	53297.9	21.557	98.999
PFTrDA	6.24	1.030	6281239.0		A	13C2-PFDoDA	6.04	474393.8	13.241	83.569
PFTeDA	6.42	1.000	6092875.7		A	13C2-PFTeDA	6.42	346256.6	17.596	98.638
PFHxDA	6.72	1.050	2866097.3		A	13C2-PFTeDA	6.42	346256.6	8.277	98.615
PFODA	6.98	1.090	2488863.6		A	13C2-PFTeDA	6.42	346256.6	7.188	100.107

Total Ion Chromatogram

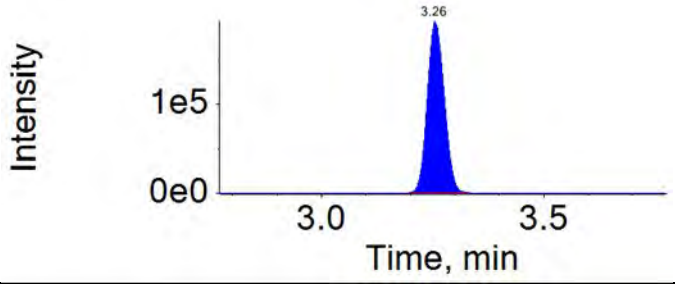


APPROVED
By MCD at 6:33 pm, 11/12/18

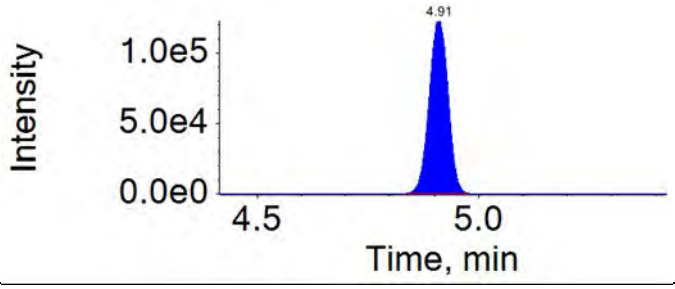
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

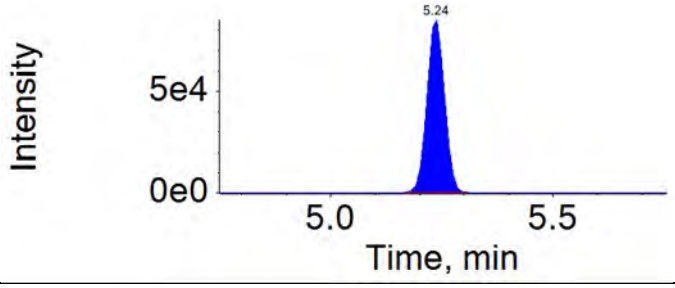
Injection Standard: 13C3-PFBA
216.0 / 172.0



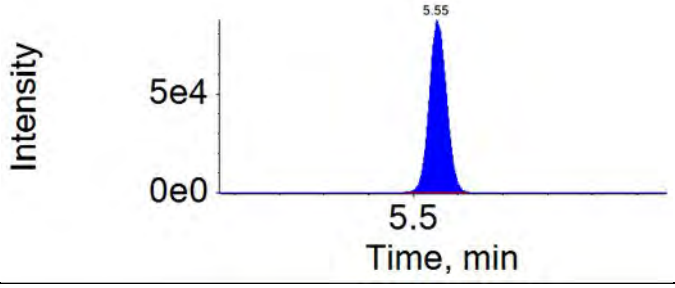
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

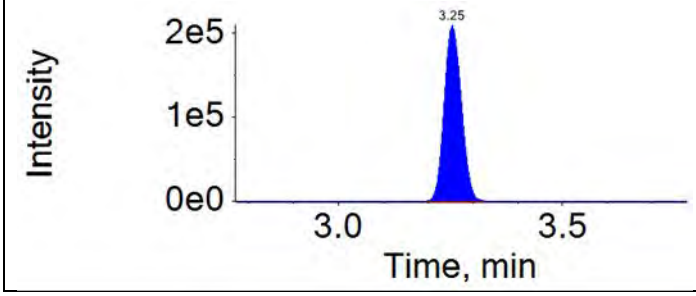


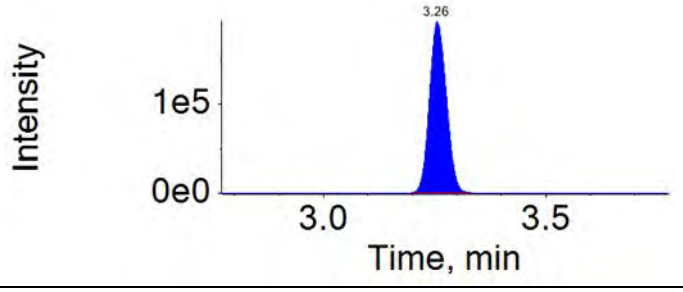
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

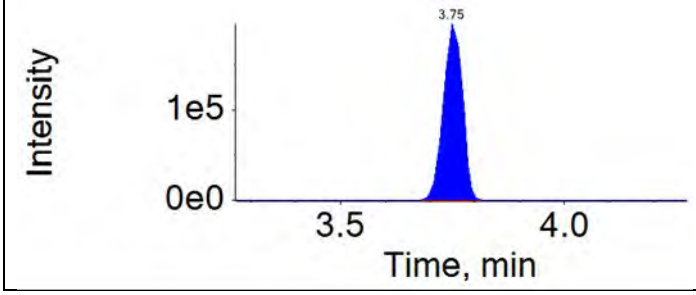
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

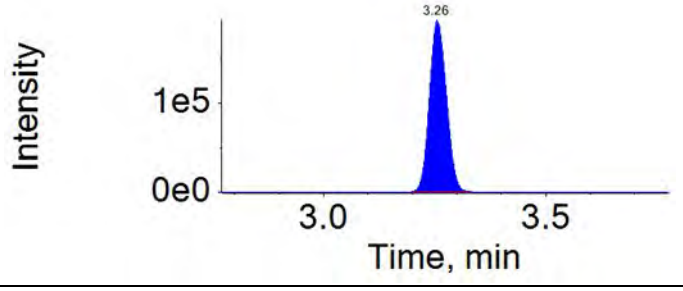
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



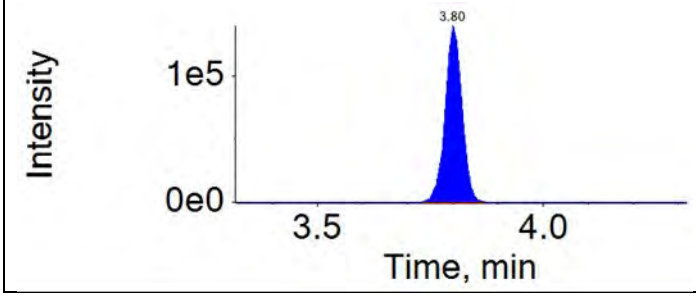


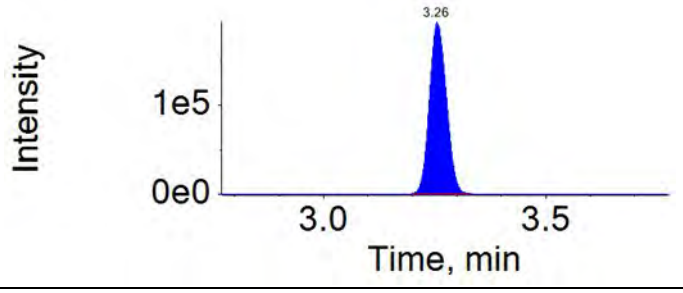
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



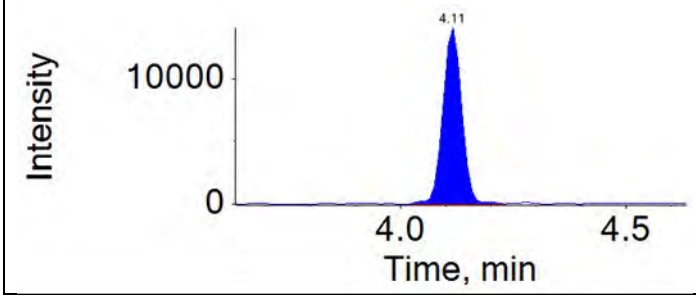


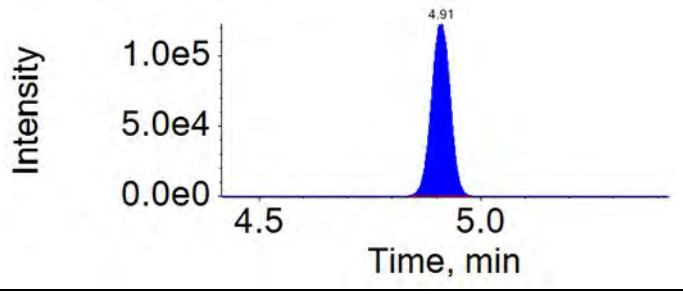
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0



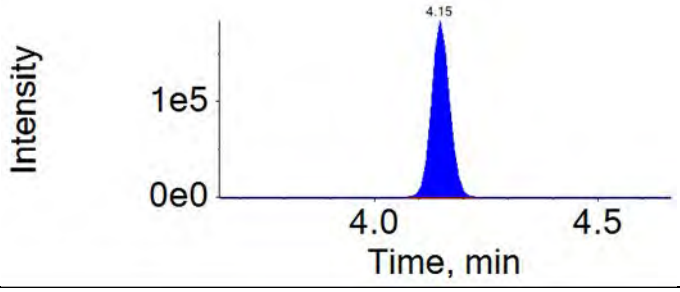
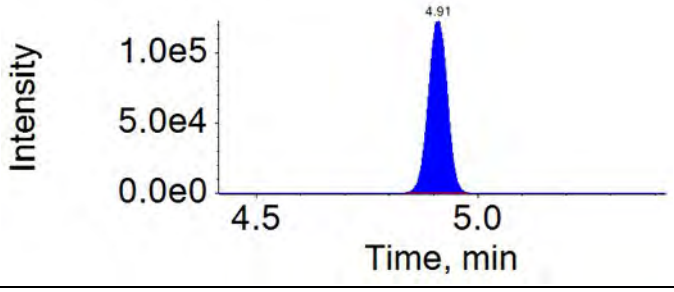


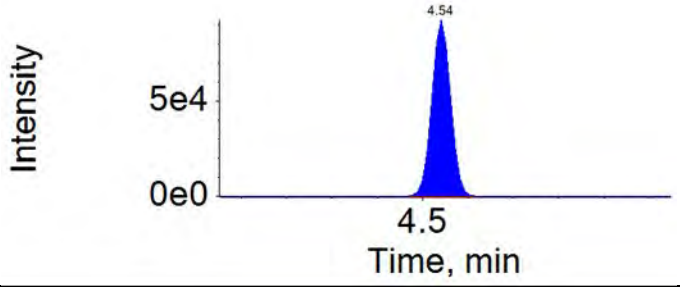
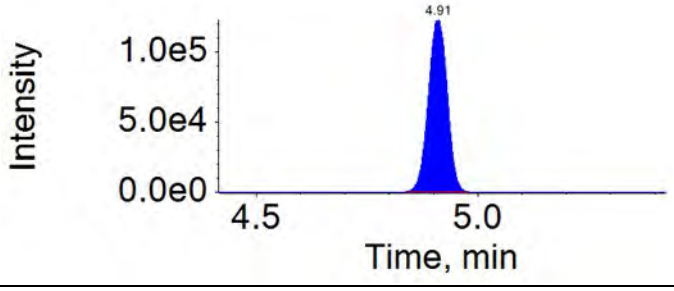
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

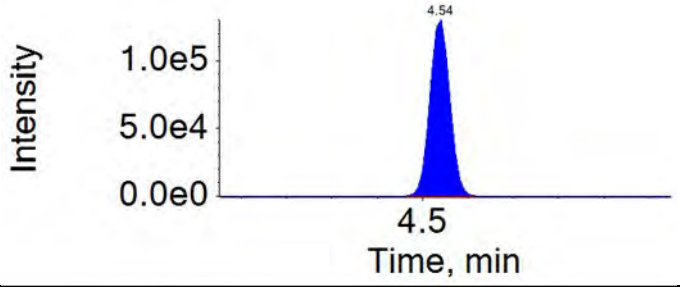
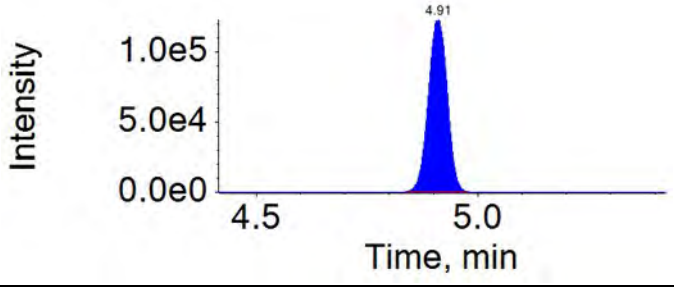


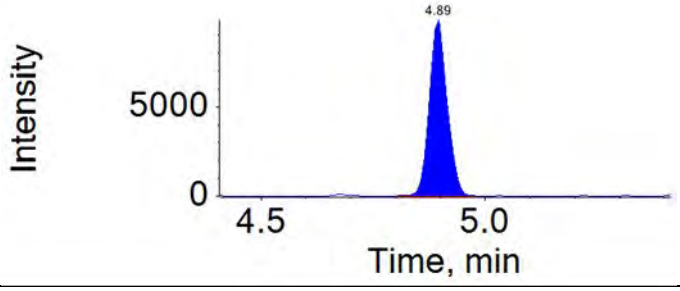
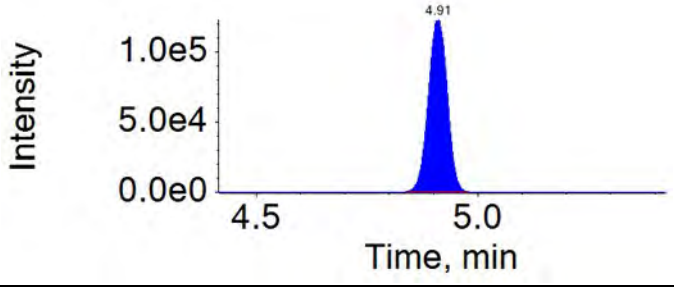


ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

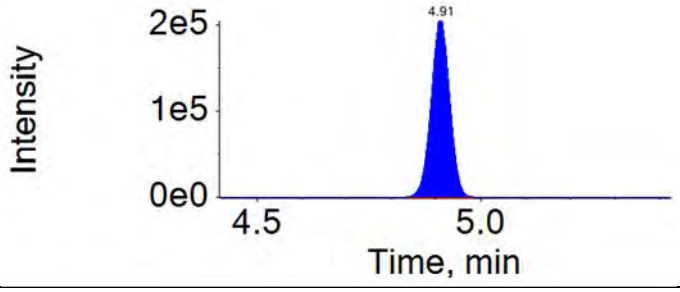
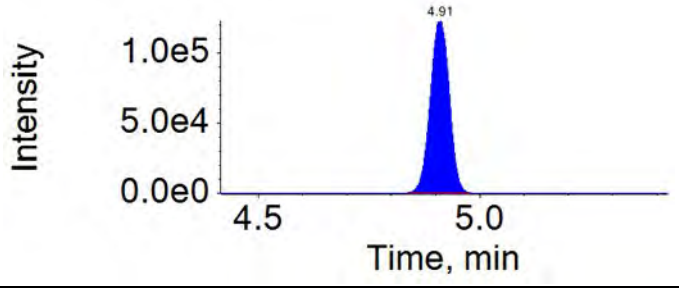
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

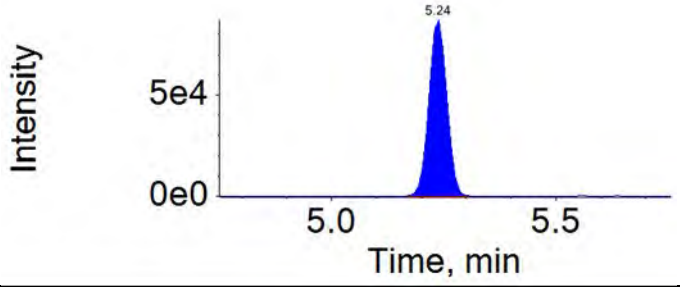
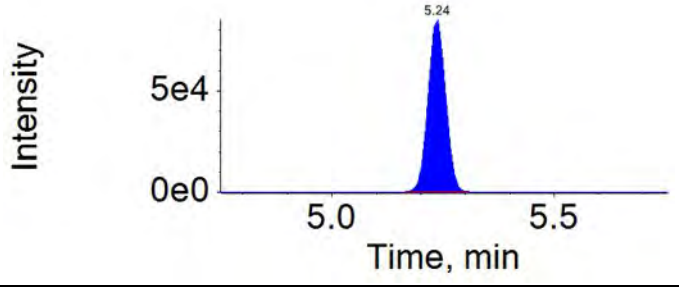
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

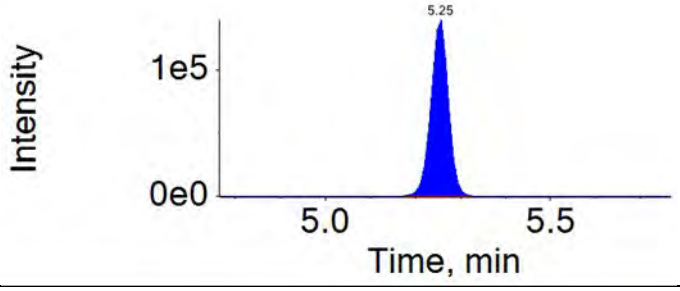
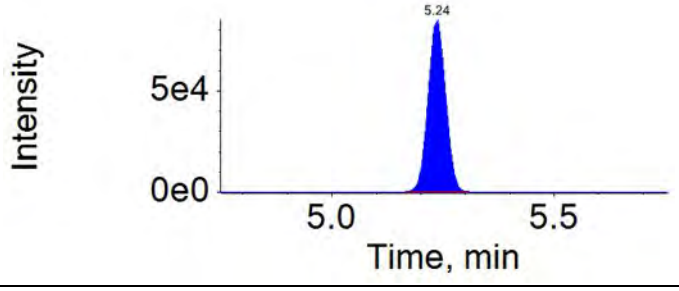
APPROVED
By MCD at 6:33 pm, 11/12/18

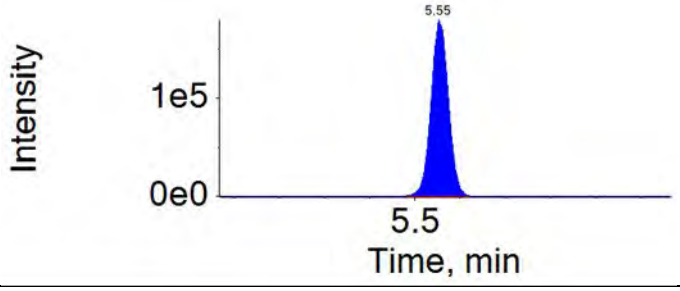
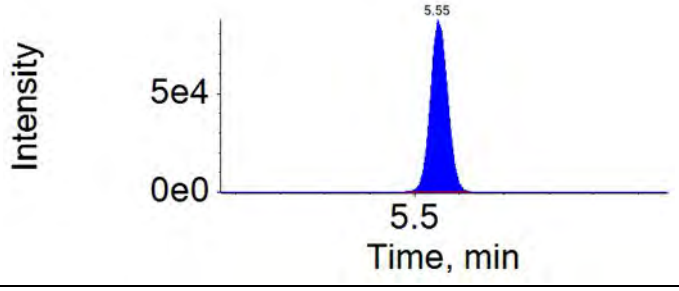
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

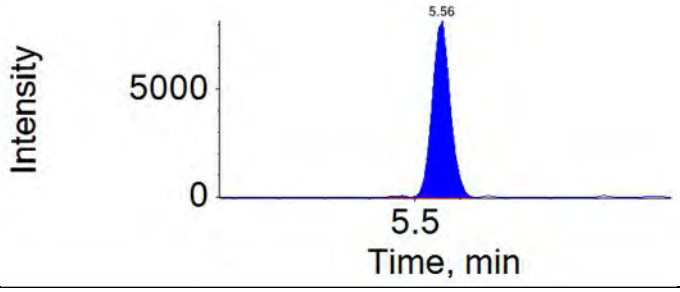
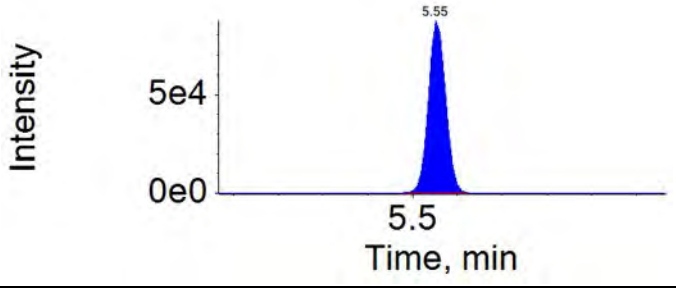
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

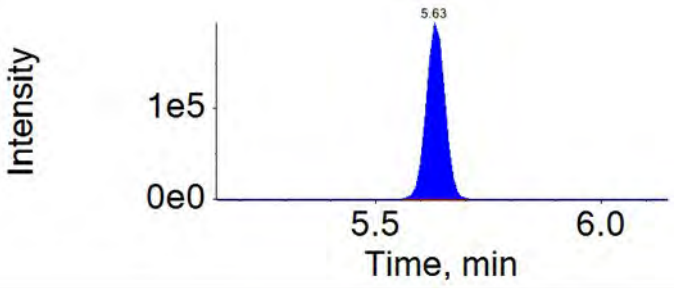
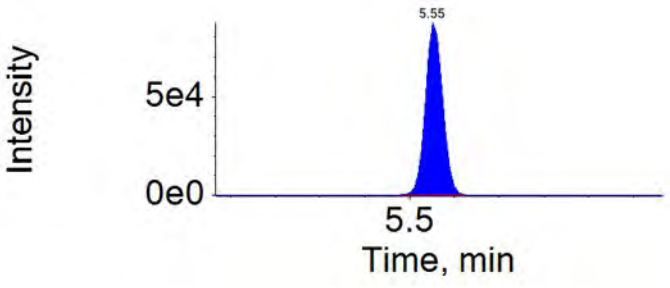
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

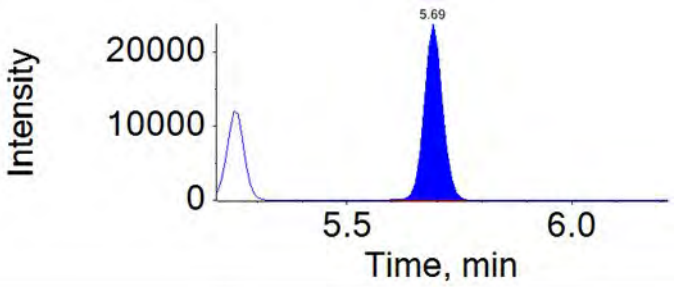
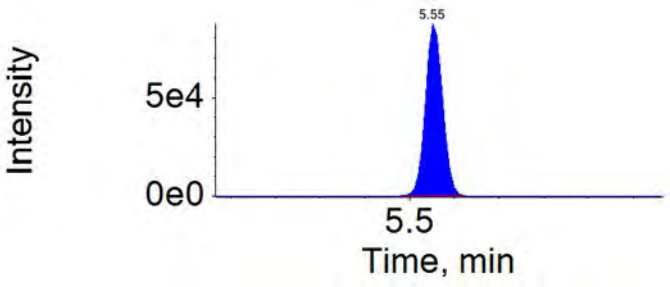
APPROVED
By MCD at 6:33 pm, 11/12/18

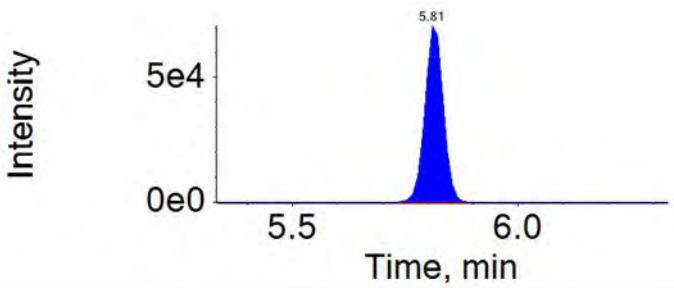
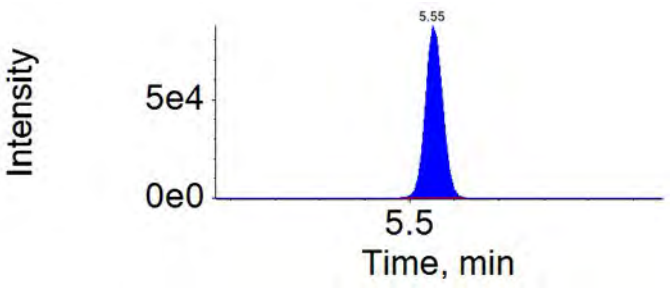
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

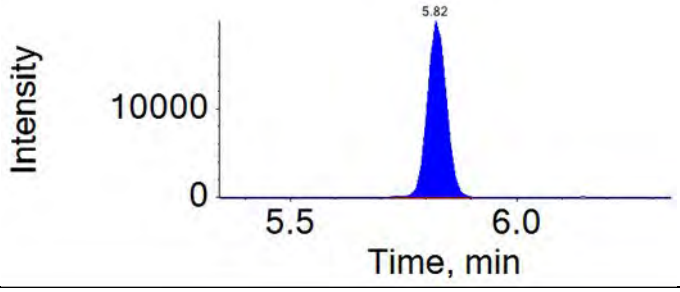
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

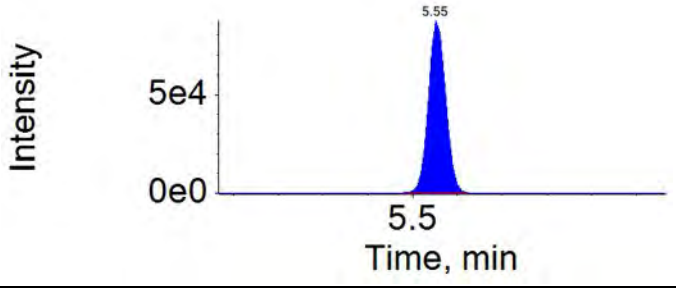
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

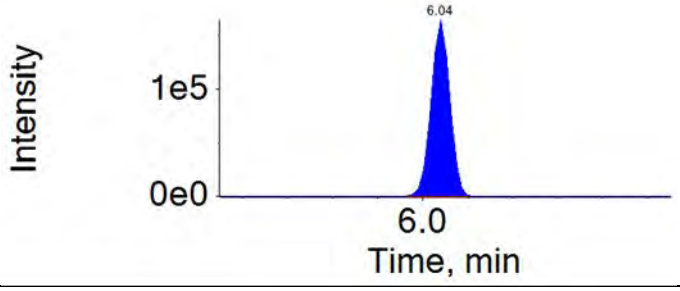
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

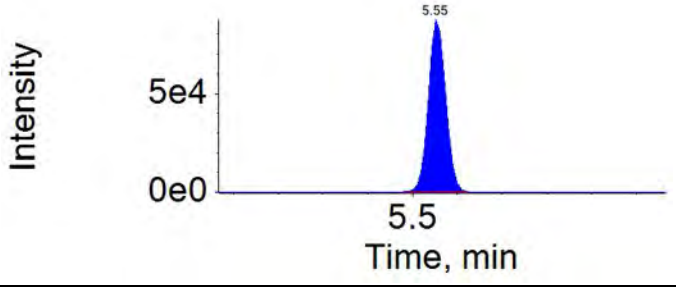
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



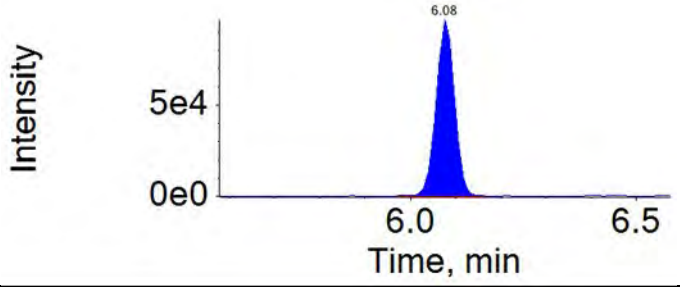


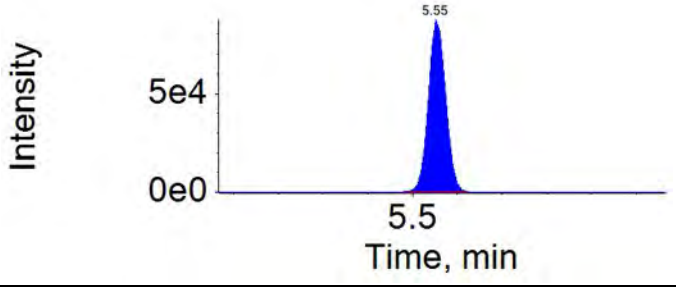
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



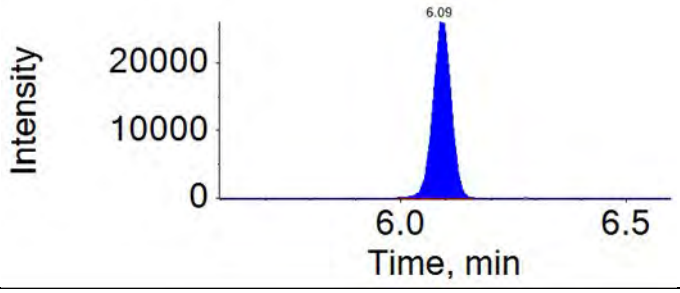


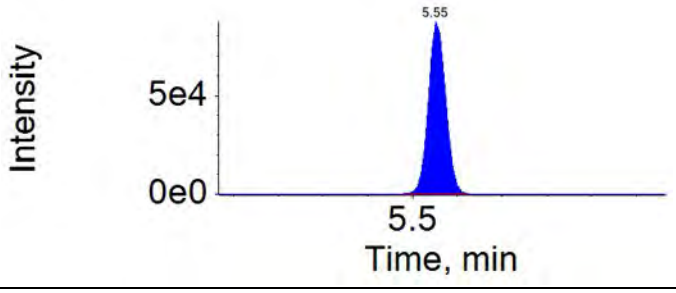
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



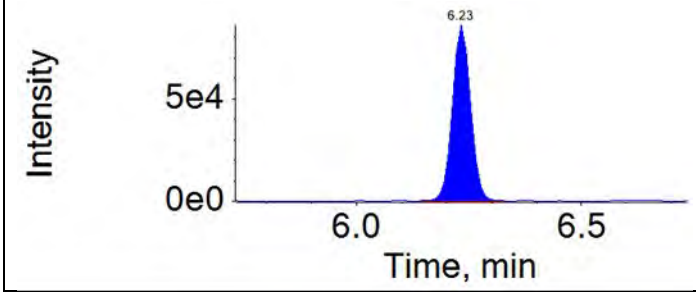


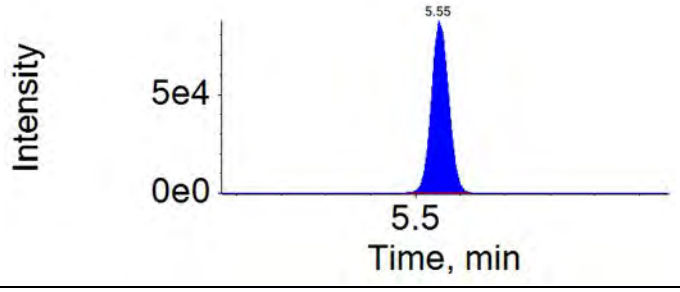
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

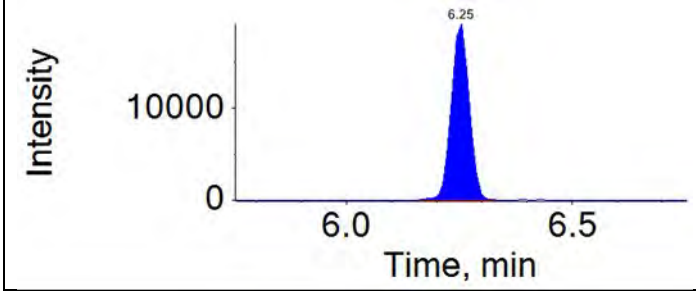
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

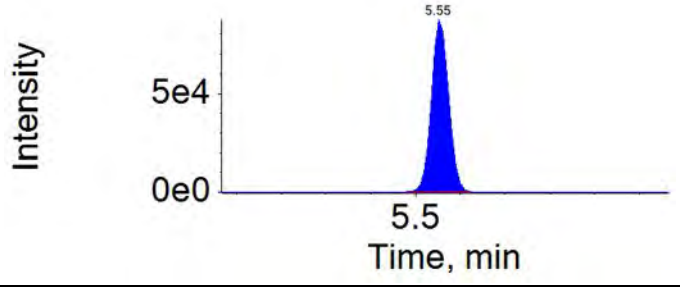
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



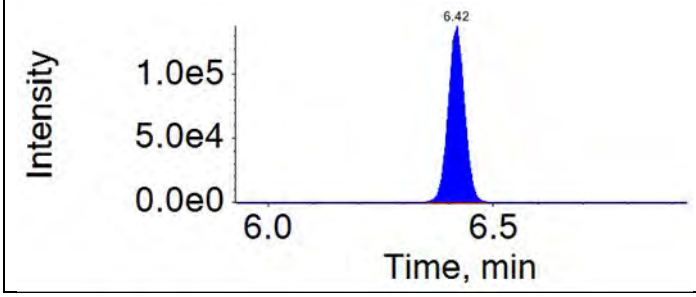


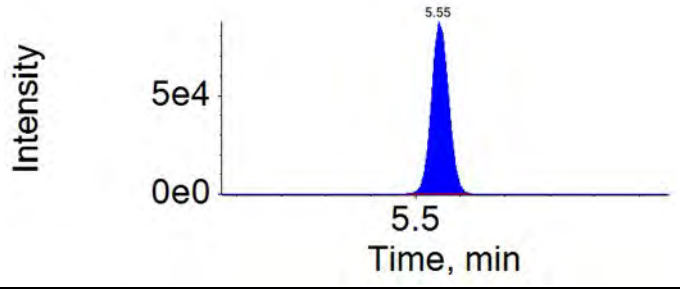
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



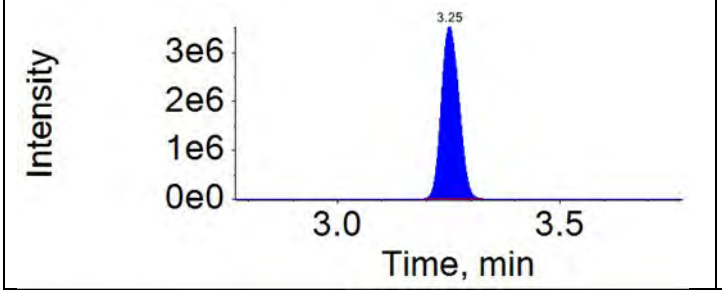


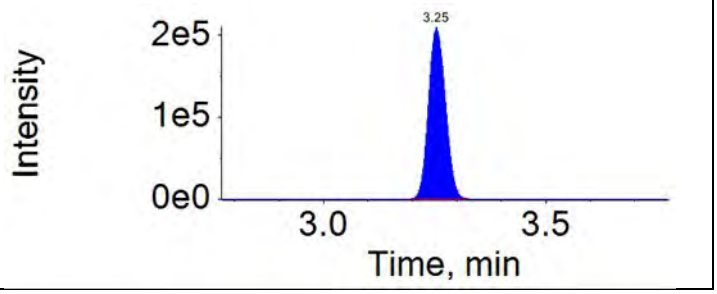
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

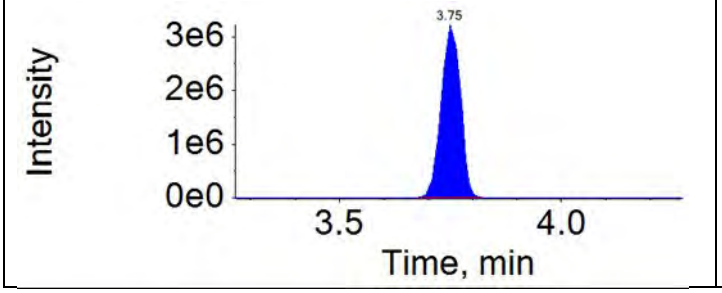
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

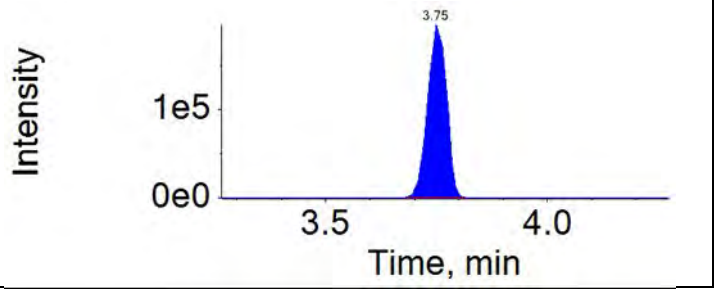
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



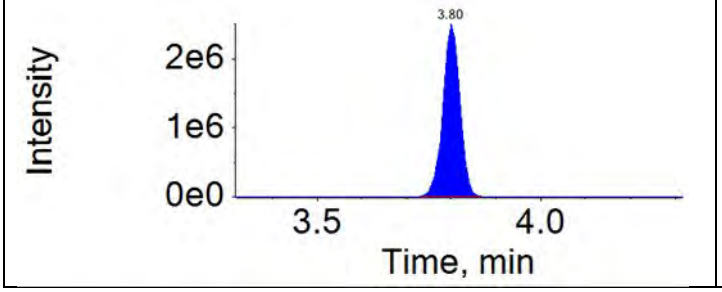


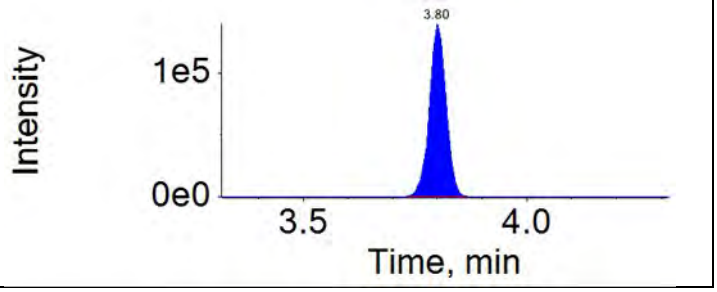
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



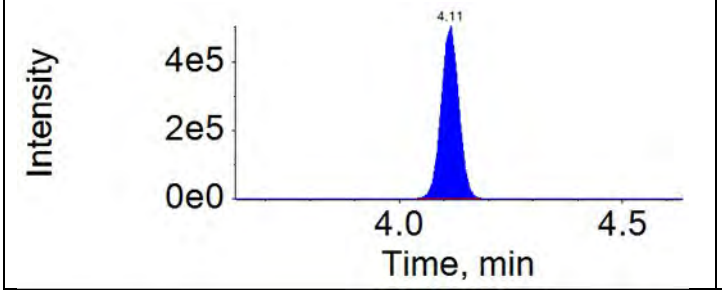


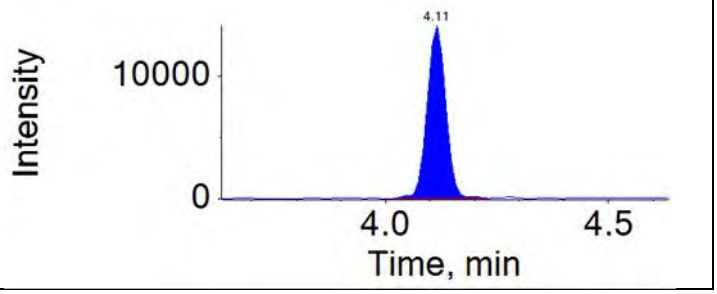
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



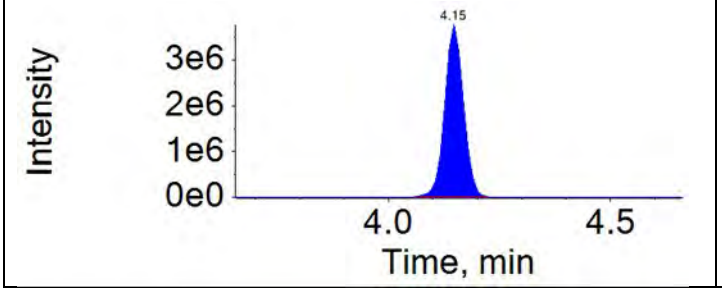


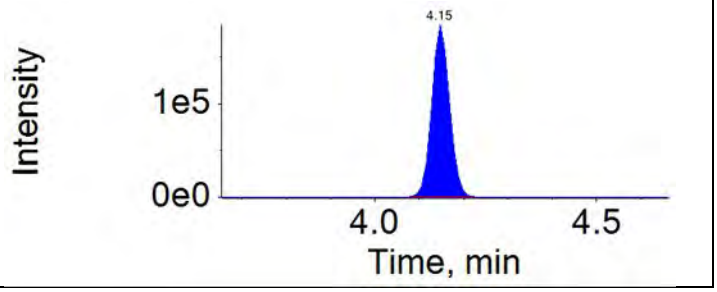
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

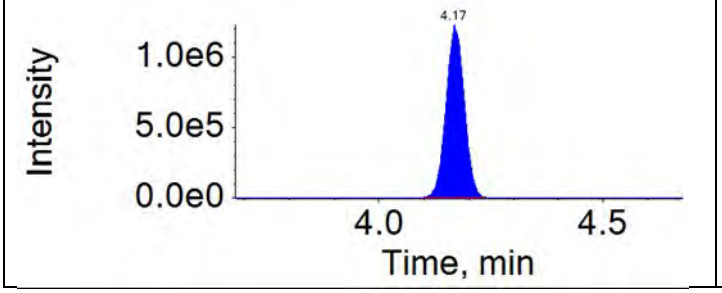
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

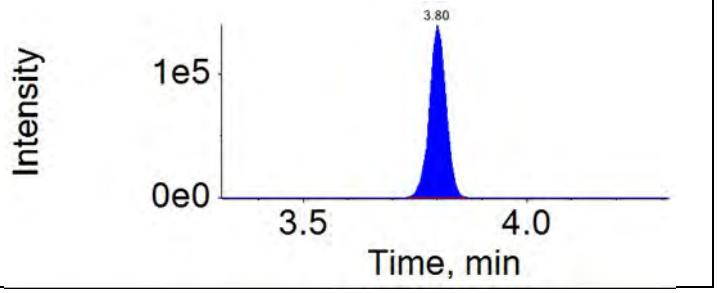
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



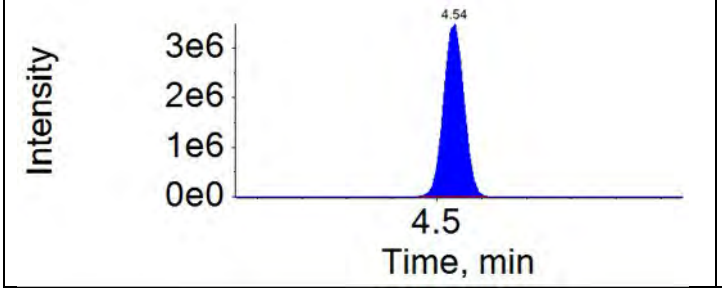


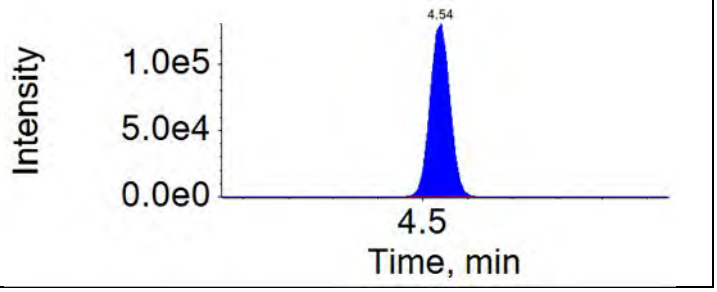
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



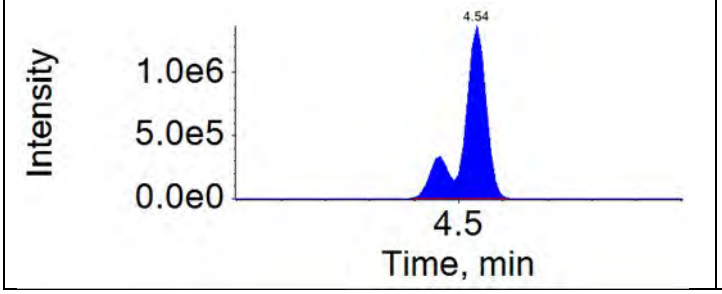


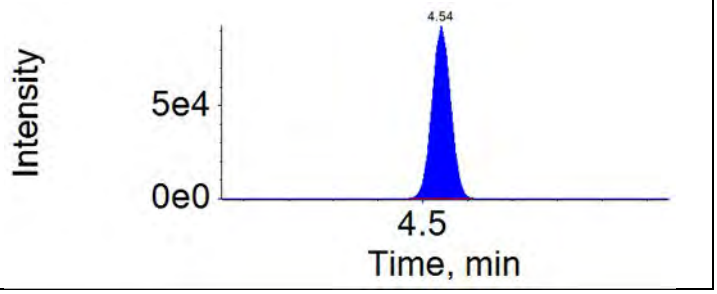
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



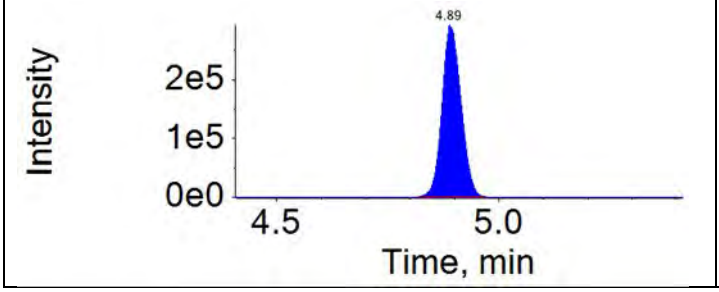


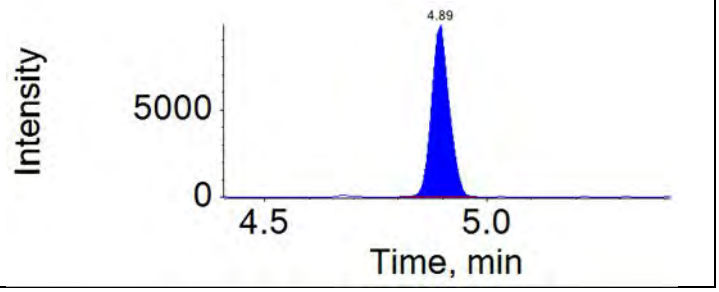
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

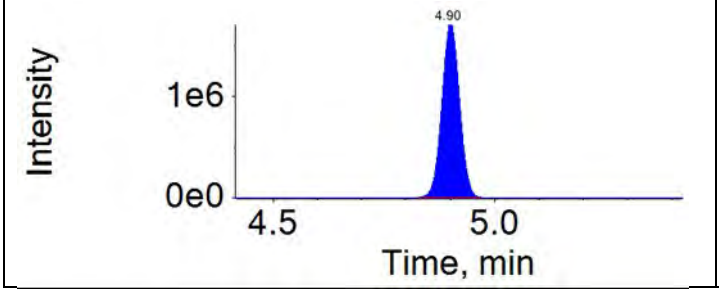
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

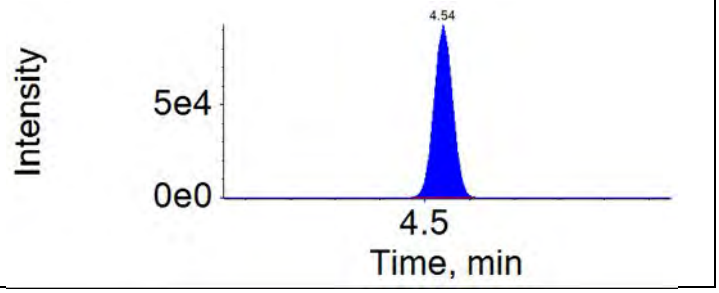
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



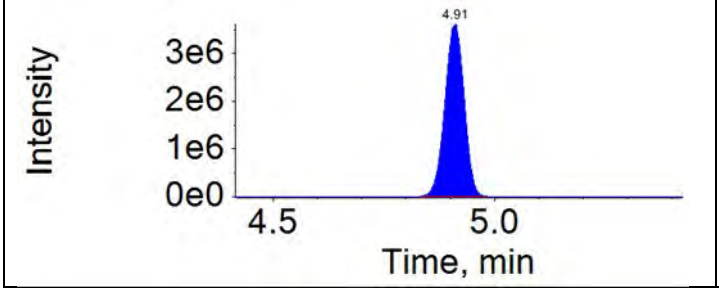


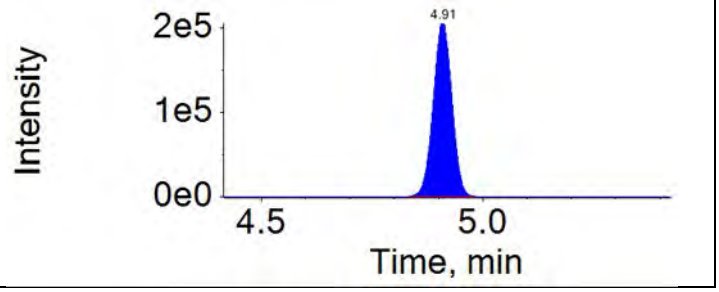
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



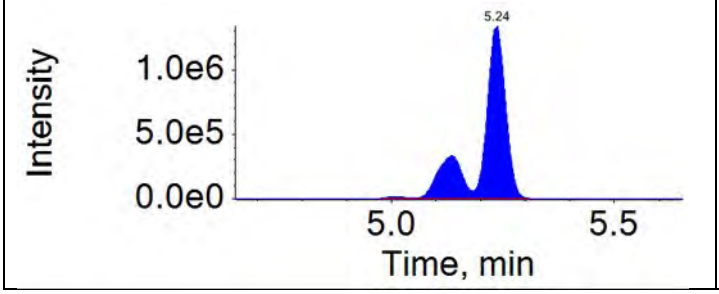


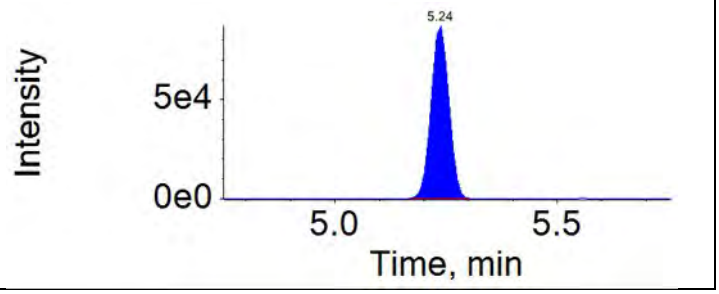
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



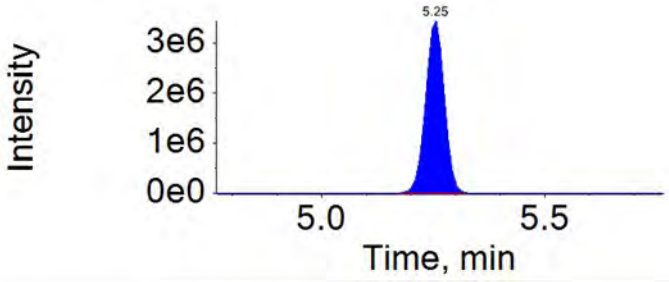


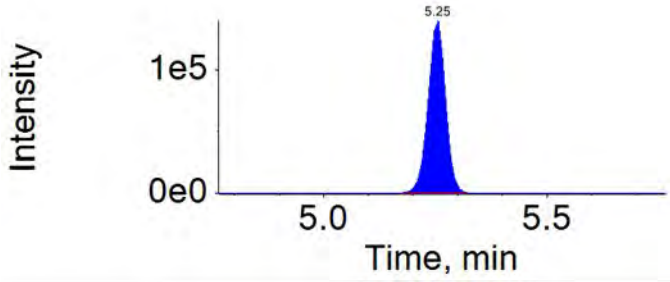
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

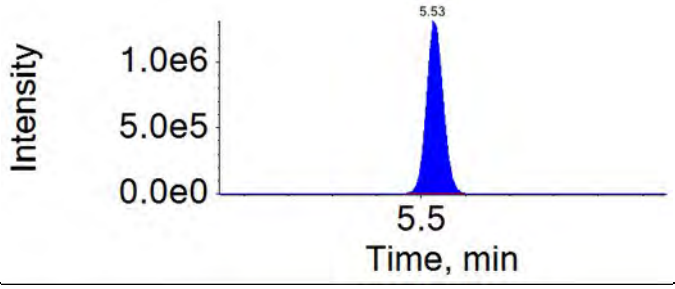
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

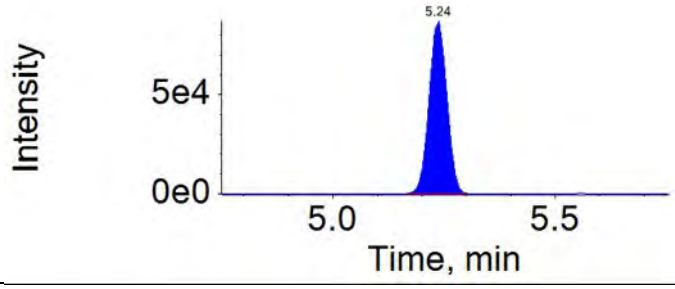
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



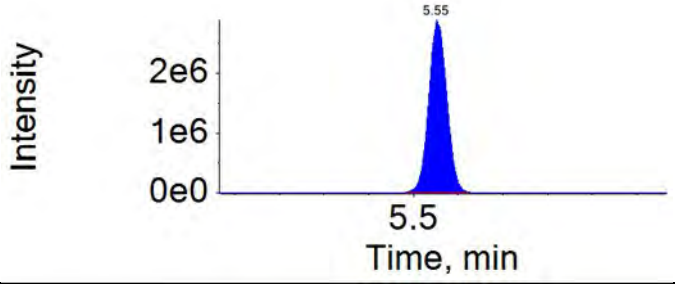


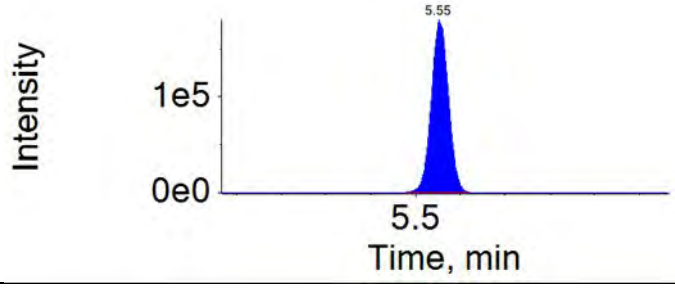
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



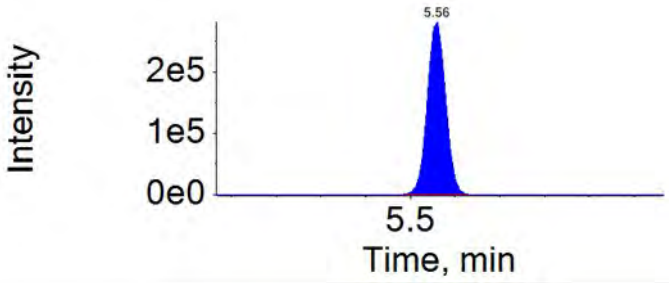


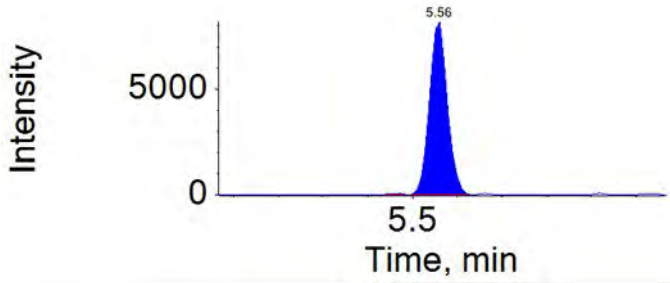
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



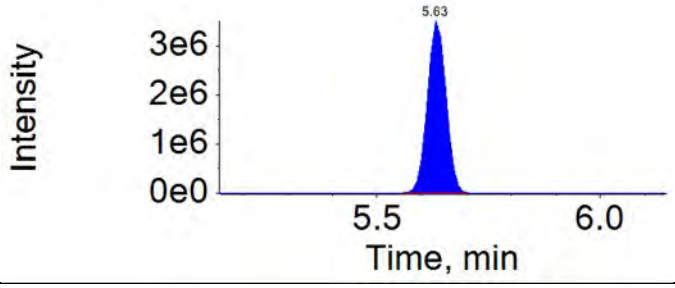


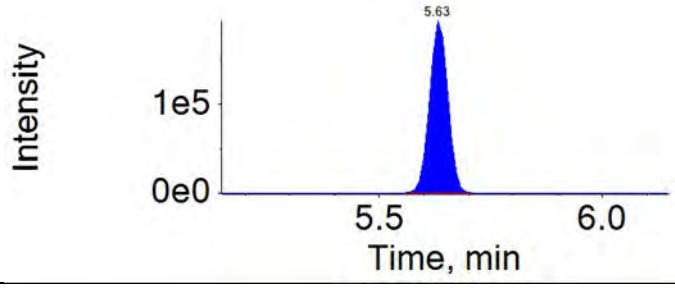
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

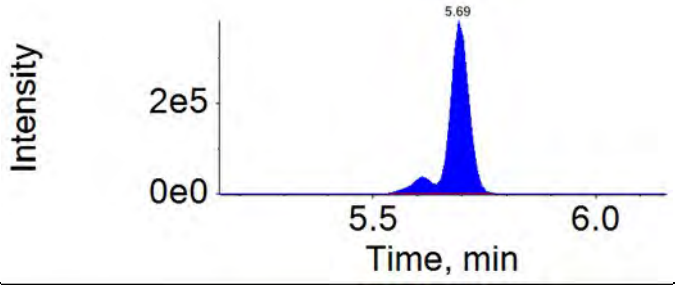
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

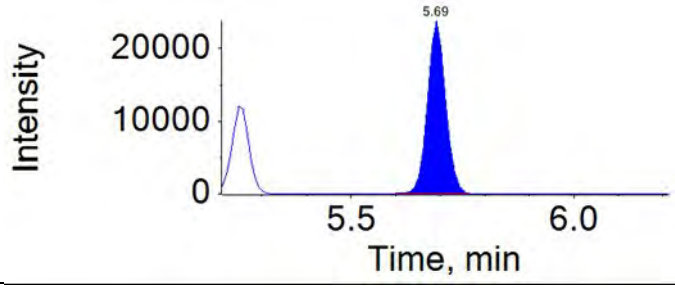
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



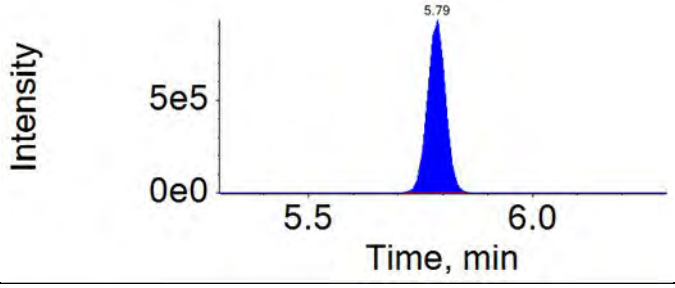


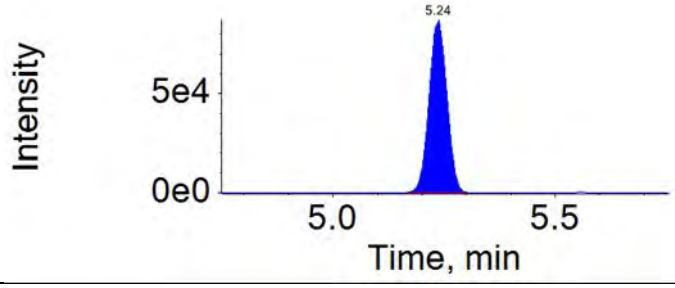
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



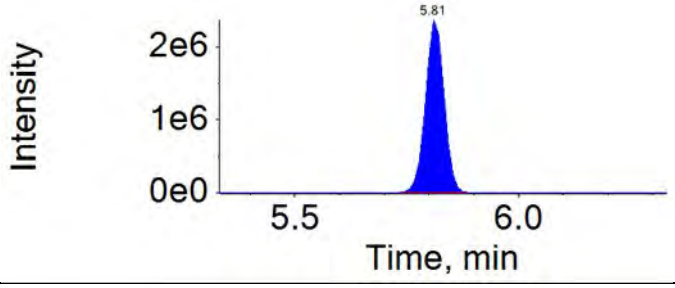


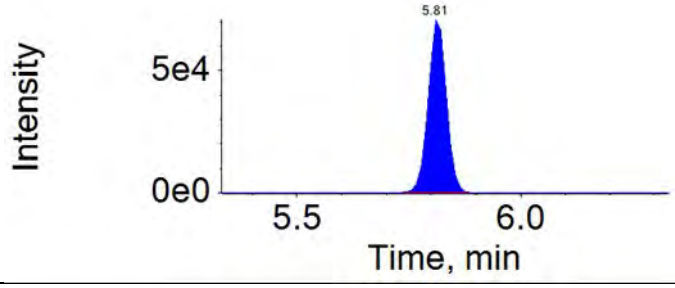
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



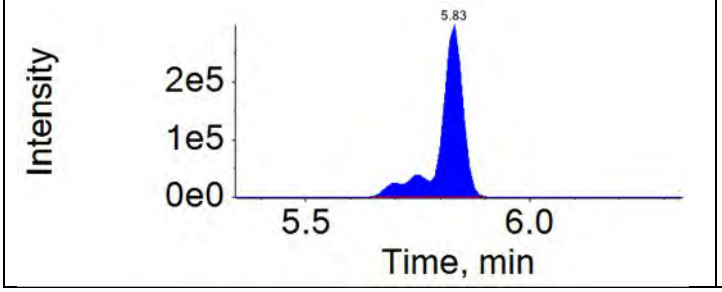


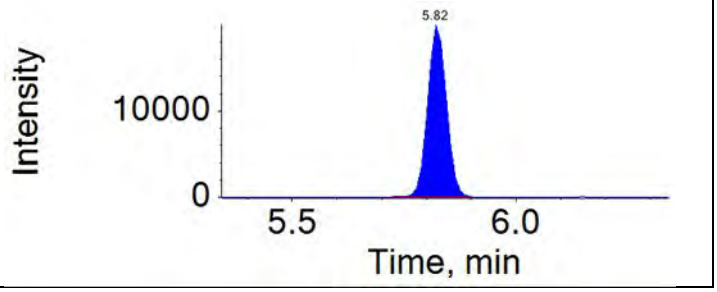
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

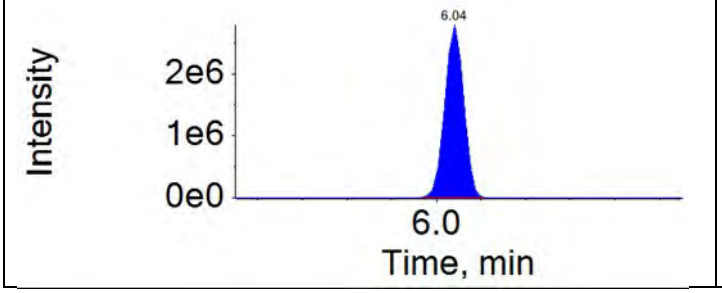
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QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

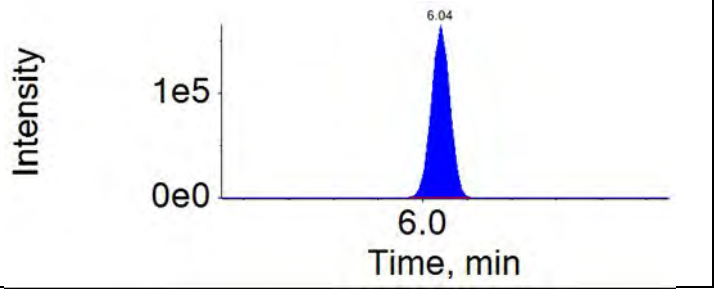
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



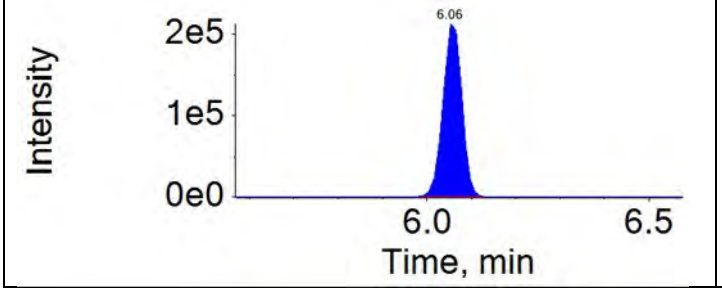


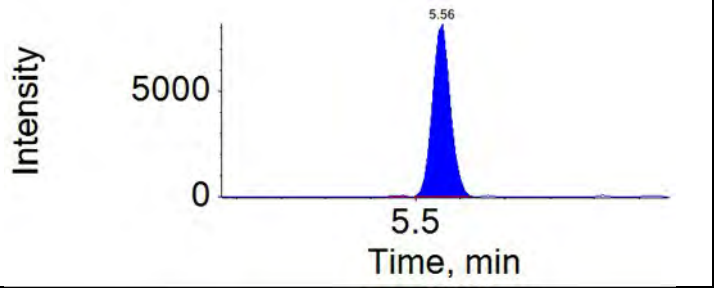
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



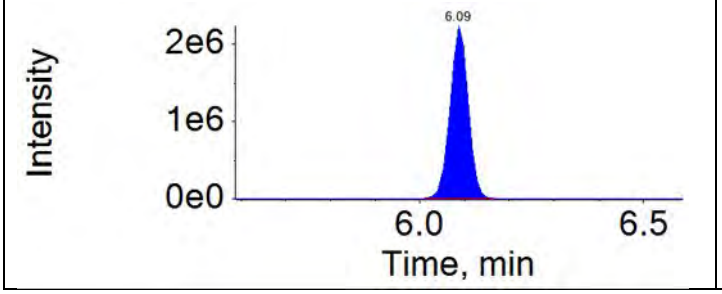


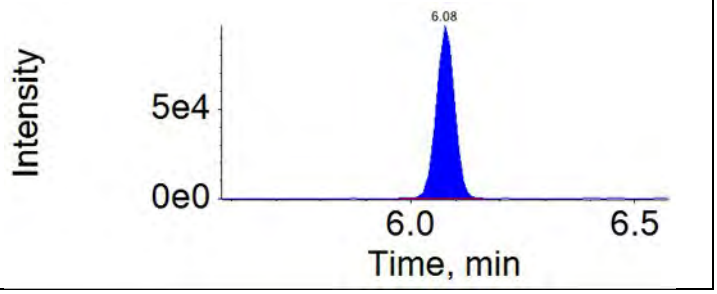
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



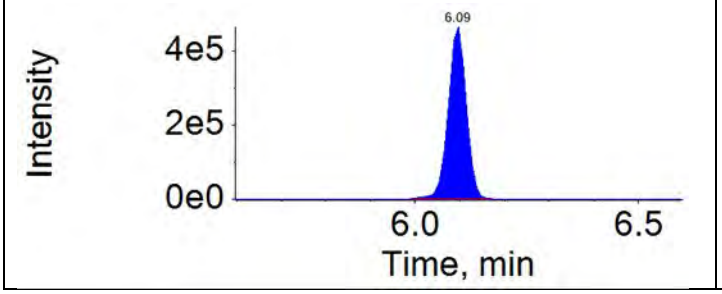


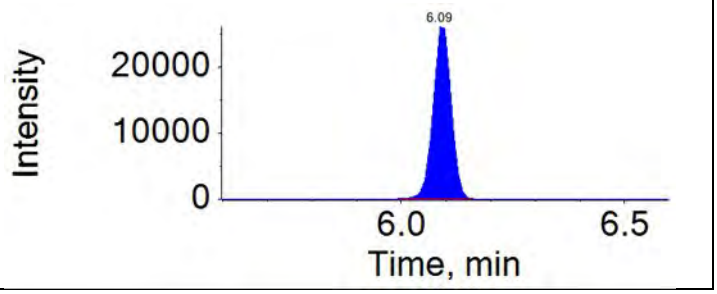
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

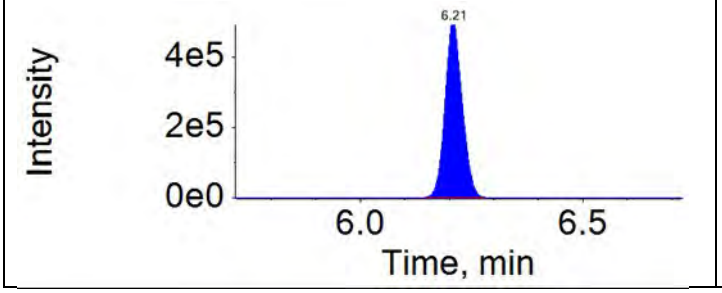
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

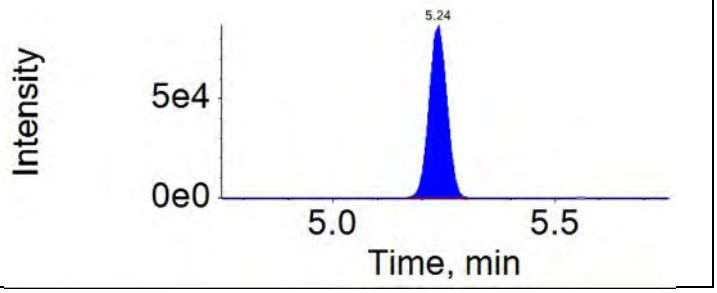
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



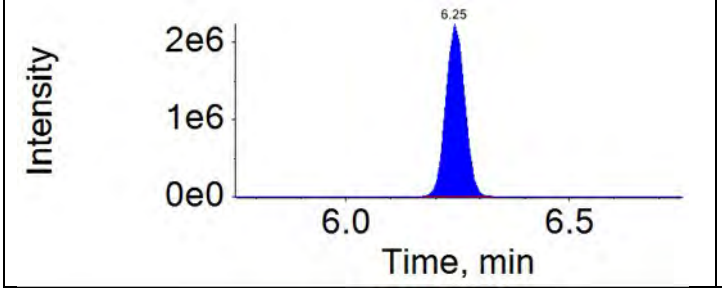


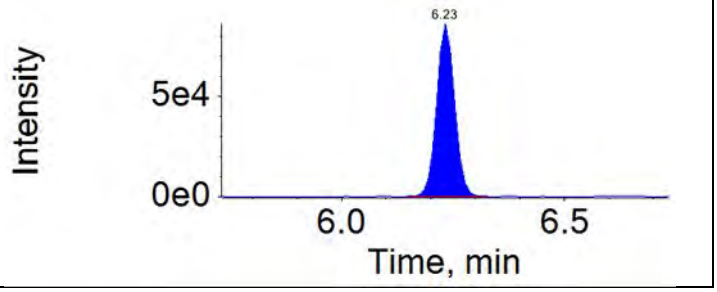
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



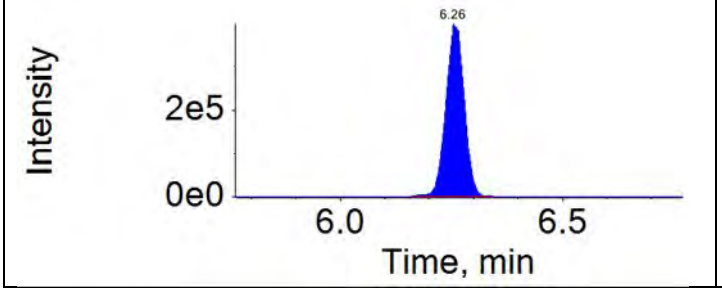


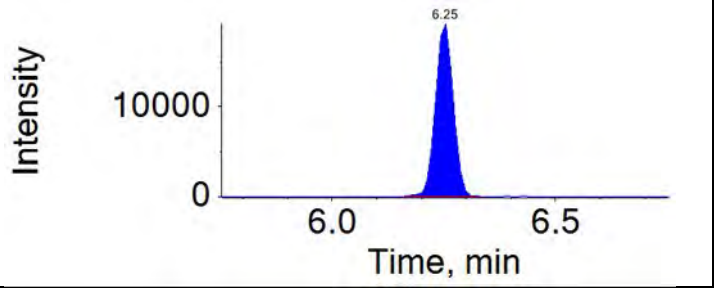
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



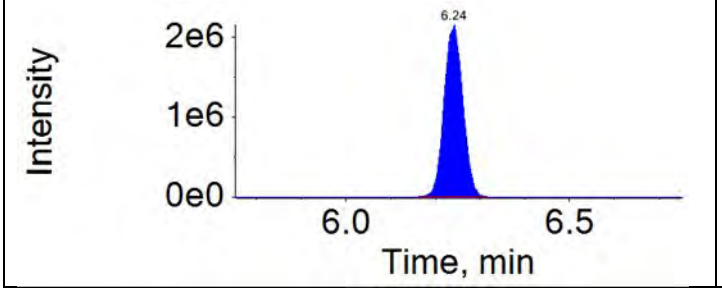


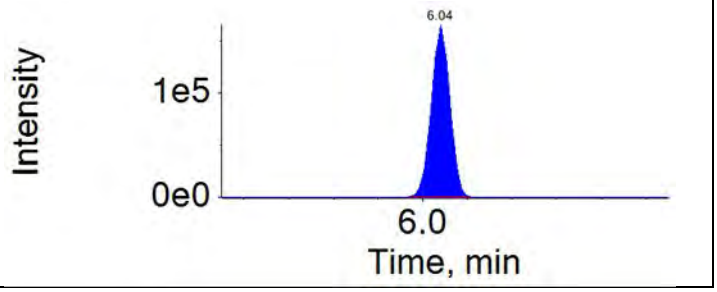
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

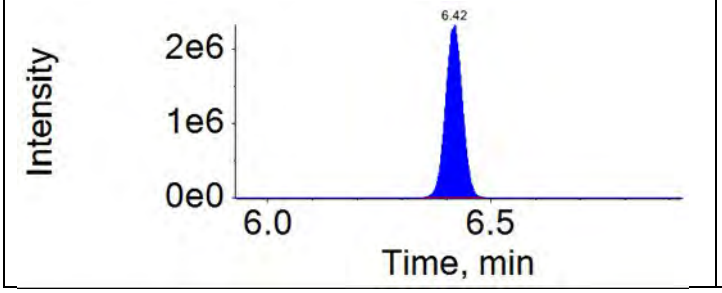
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

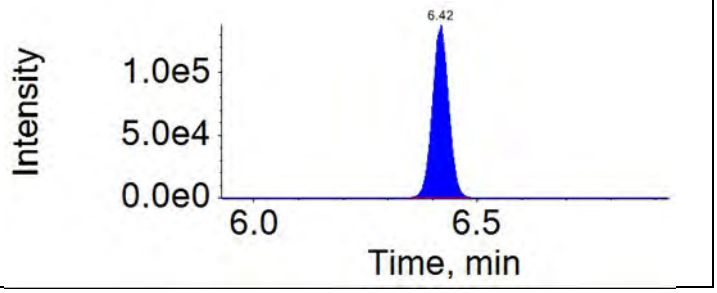
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



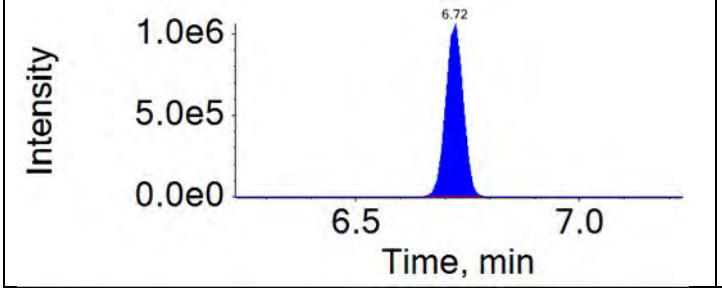


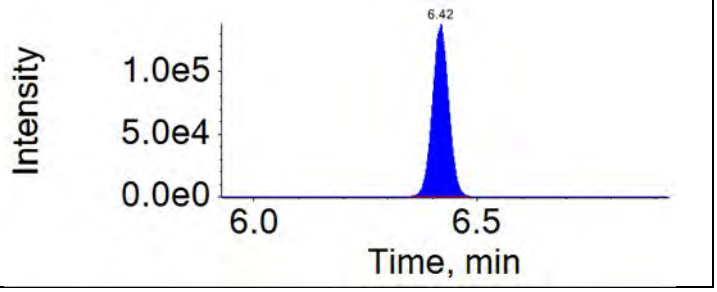
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



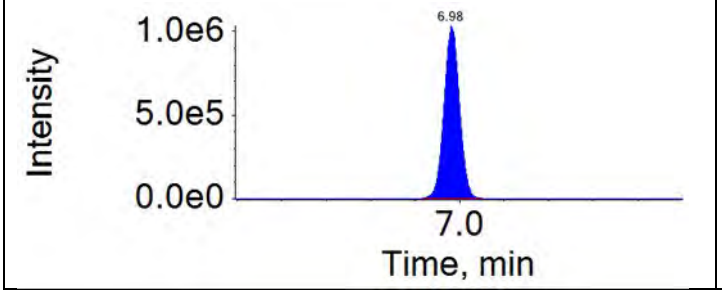


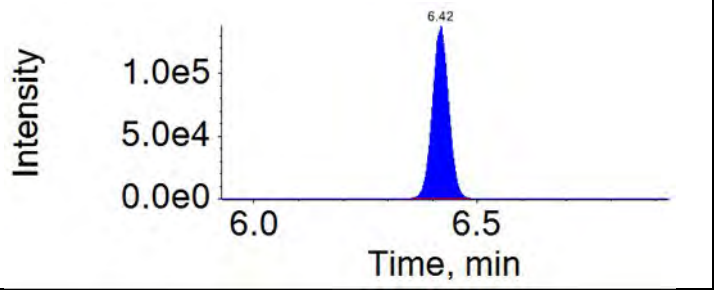
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



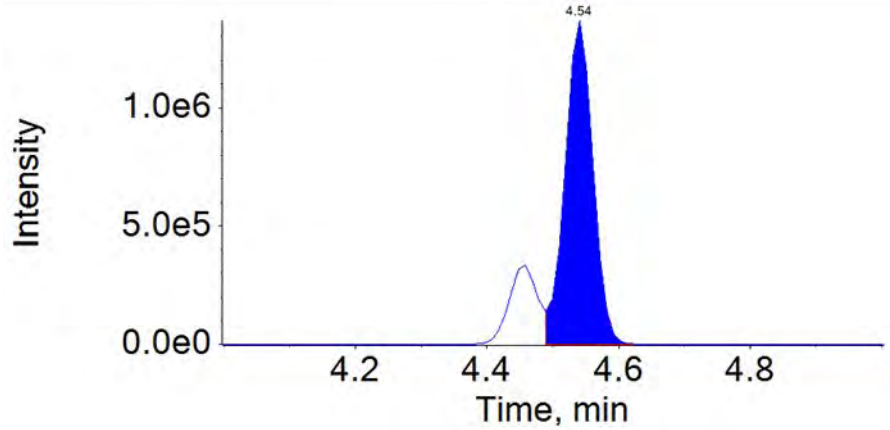


APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

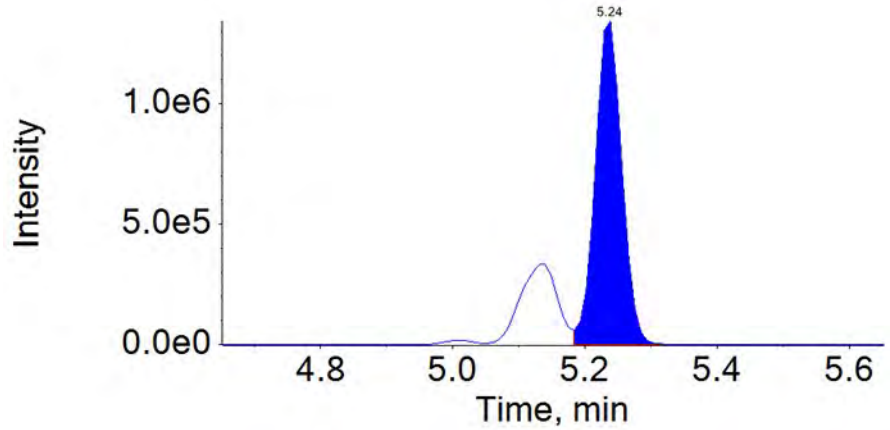
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.54
Peak Area:
4044983.17
Mass Range:
399.0 / 80.0
File Name:
18NOV12DCAL-48.wiff
Sample Name:
CAL7



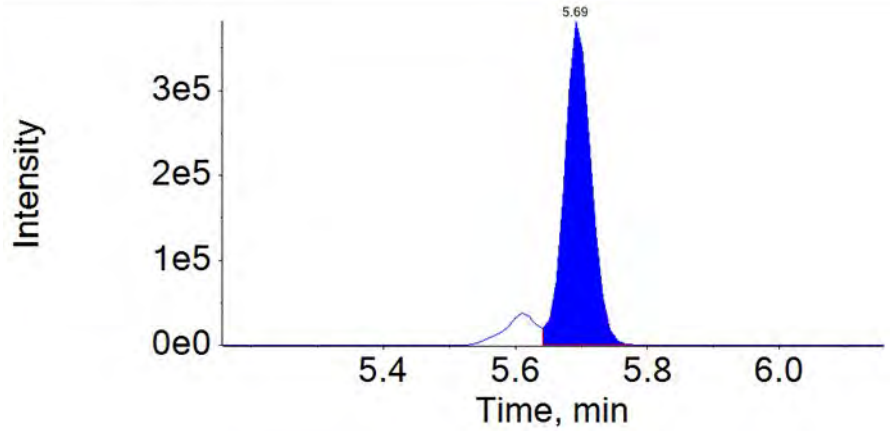
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
3770924.60
Mass Range:
499.0 / 80.0
File Name:
18NOV12DCAL-48.wiff
Sample Name:
CAL7



Integration Comment: incorrect integration

Component Name:
NMeFOSAA
RT (min.):
5.69
Peak Area:
1065914.33
Mass Range:
570.0 / 419.0
File Name:
18NOV12DCAL-48.wiff
Sample Name:
CAL7

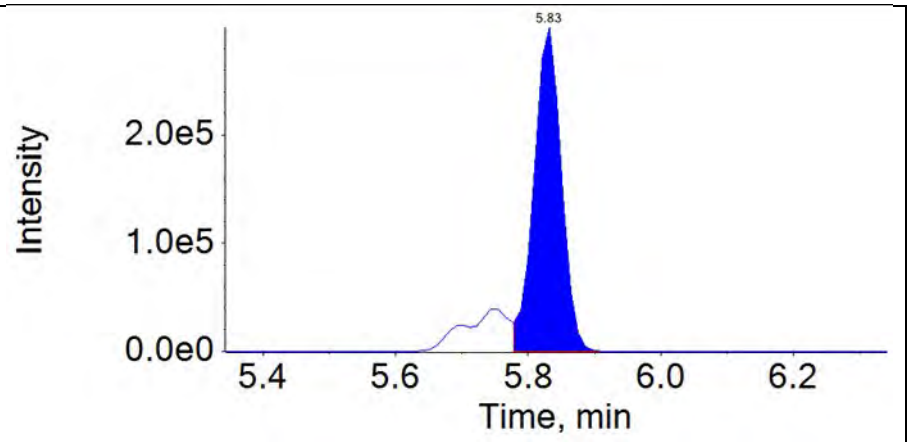


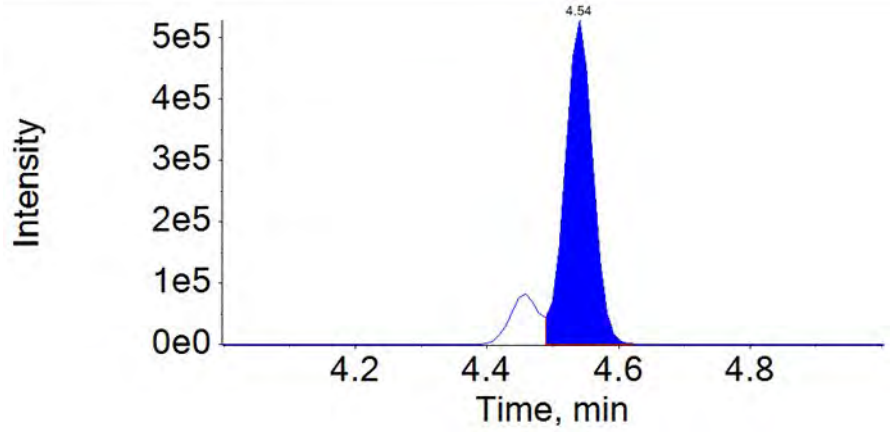
Integration Comment: incorrect integration

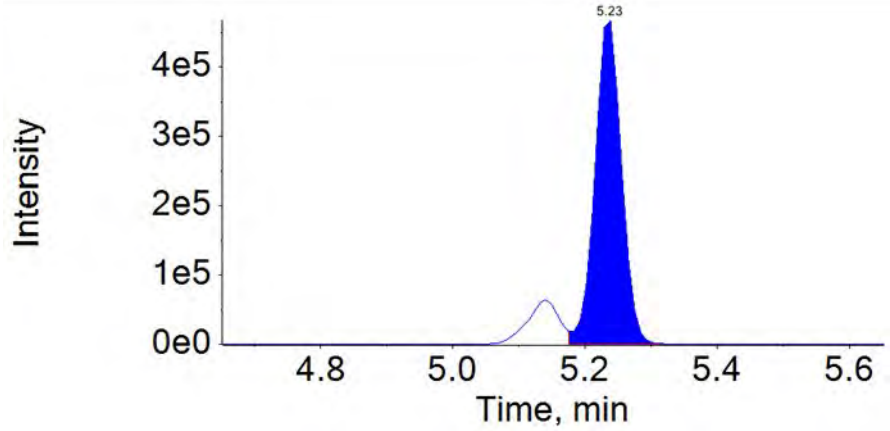
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: NEtFOSAA **RT (min.):** 5.83 **Peak Area:** 862135.47 **Mass Range:** 584.0 / 419.0 **File Name:** 18NOV12DCAL-48.wiff **Sample Name:** CAL7	 **Integration Comment:** incorrect integration

Component Name: PFHxS_2 **RT (min.):** 4.54 **Peak Area:** 1552233.65 **Mass Range:** 399.0 / 99.0 **File Name:** 18NOV12DCAL-48.wiff **Sample Name:** CAL7	 **Integration Comment:** incorrect integration

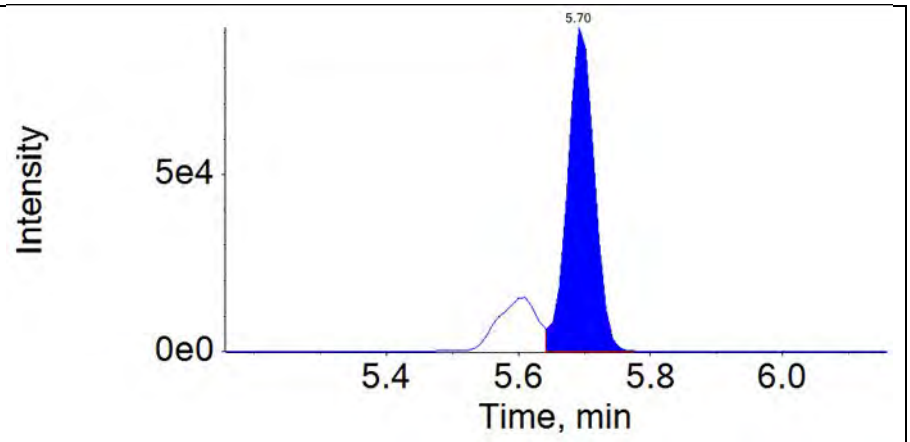
Component Name: PFOS_2 **RT (min.):** 5.23 **Peak Area:** 1316284.93 **Mass Range:** 499.0 / 99.0 **File Name:** 18NOV12DCAL-48.wiff **Sample Name:** CAL7	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

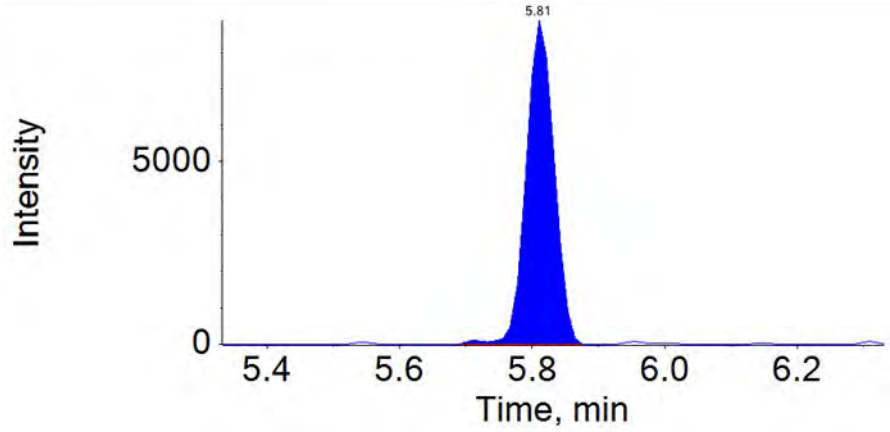
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NMeFOSAA_2
RT (min.):
5.70
Peak Area:
256419.22
Mass Range:
570.0 / 483.0
File Name:
18NOV12DCAL-48.wiff
Sample Name:
CAL7



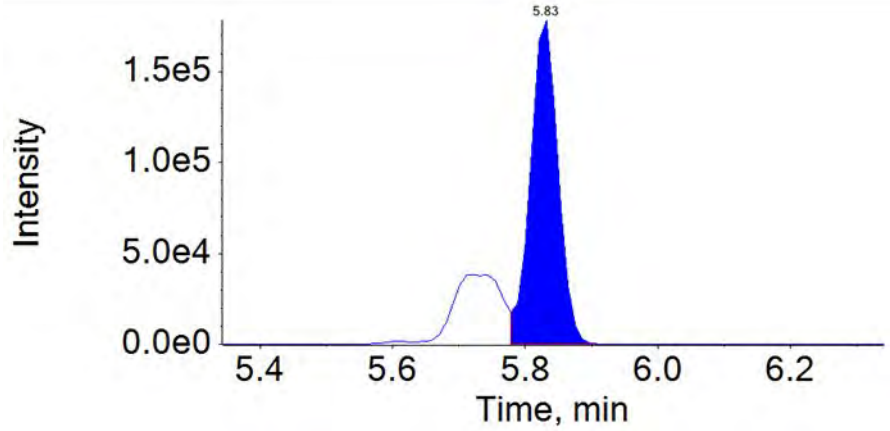
Integration Comment: incorrect integration

Component Name:
PFUnDA_2
RT (min.):
5.81
Peak Area:
26121.92
Mass Range:
563.0 / 169.0
File Name:
18NOV12DCAL-48.wiff
Sample Name:
CAL7



Integration Comment: incorrect integration

Component Name:
NEtFOSAA_2
RT (min.):
5.83
Peak Area:
517079.85
Mass Range:
584.0 / 526.0
File Name:
18NOV12DCAL-48.wiff
Sample Name:
CAL7



Integration Comment: incorrect integration

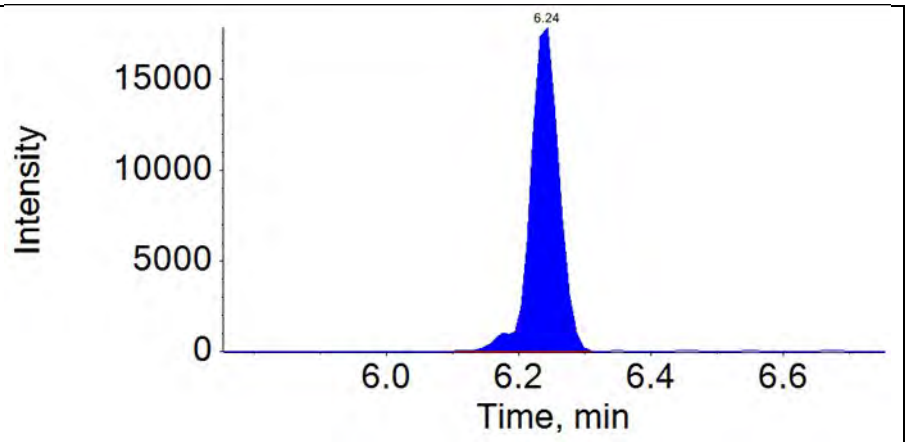
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFTrDA_2
RT (min.):
6.24
Peak Area:
53950.01
Mass Range:
663.0 / 169.0
File Name:
18NOV12DCAL-48.wiff
Sample Name:
CAL7



Integration Comment: incorrect integration

APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

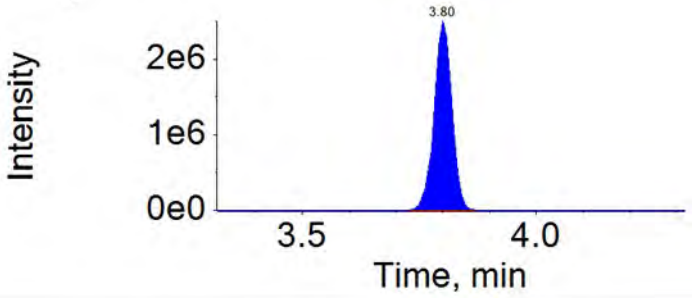
Sample Name: CAL7 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-48.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.80	1.00	6615935.34	A	0.3619	0.3803			
PFBS_2	3.80	1.00	2515947.77	A	0.3619	0.3803	5	50	
4:2-FTS	4.11	1.00	1379983.90	A	0.6730	0.6491			
4:2 FTS_2	4.11	1.00	895801.93	A	0.6730	0.6491		#NA!	
PFHxA	4.15	1.00	11059420.28	A	0.0117	0.0124			
PFHxA_2	4.15	1.00	136818.87	A	0.0117	0.0124	6	50	
PFPeS	4.17	1.10	3482095.87	A	0.5191	0.5217			
PFPeS_2	4.17	1.10	1816709.54	A	0.5191	0.5217	1	50	
PFHpA	4.54	1.00	10981922.82	A	0.0563	0.0563			
PFHpA_2	4.54	1.00	618128.71	A	0.0563	0.0563	0	50	
PFHxS	4.54	1.00	5048349.82	M	0.3428	0.3562			
PFHxS_2	4.54	1.00	1798400.55	M	0.3428	0.3562	4	50	
6:2-FTS	4.89	1.00	869227.19	A	0.6604	0.6365			
6:2 FTS_2	4.89	1.00	553300.52	A	0.6604	0.6365		#NA!	
PFHpS	4.90	1.08	4784682.82	A	0.4066	0.4068			
PFHpS_2	4.90	1.08	1946425.33	A	0.4066	0.4068	0	50	
PFOA	4.91	1.00	10991740.12	A	0.0562	0.0611			
PFOA_2	4.91	1.00	671295.39	A	0.0562	0.0611	9	50	
PFOS	5.24	1.00	5138366.95	M	0.2968	0.2975			
PFOS_2	5.23	1.00	1528751.71	M	0.2968	0.2975	0	50	
PFNA	5.25	1.00	10084288.28	A	0.0229	0.0213			
PFNA_2	5.25	1.00	214560.66	A	0.0229	0.0213	-7	50	
PFNS	5.53	1.06	3386860.46	A	0.4828	0.4408			
PFNS_2	5.53	1.06	1492987.09	A	0.4828	0.4408	-9	50	
PFDA	5.55	1.00	8104726.61	A	0.0081	0.0071			
PFDA_2	5.55	1.00	57305.88	A	0.0081	0.0071	-12	50	
8:2-FTS	5.56	1.00	804019.53	A	0.6814	0.5854			
8:2 FTS_2	5.56	1.00	470706.51	A	0.6814	0.5854		#NA!	
NMeFOSAA	5.69	1.00	1191981.70	M	0.2569	0.2688			
NMeFOSAA_2	5.70	1.00	320371.24	M	0.2569	0.2688	5	50	
PFDS	5.79	1.11	2606720.69	A	0.5144	0.4749			
PFDS_2	5.79	1.10	1238034.03	A	0.5144	0.4749	-8	50	
PFUnDA	5.81	1.00	6802701.21	A	0.0058	0.0038			
PFUnDA_2	5.81	1.00	25933.20	M	0.0058	0.0038	-34	50	
NEtFOSAA	5.83	1.00	1046636.11	M	0.7253	0.6803			
NEtFOSAA_2	5.83	1.00	711980.18	M	0.7253	0.6803	-6	50	
PFDoDA	6.04	1.00	8171355.35	A	0.0157	0.0138			
PFDoDA_2	6.04	1.00	113144.85	A	0.0157	0.0138	-12	50	
10:2-FTS	6.06	1.09	632223.71	A	0.6356	0.6817			
10:2 FTS_2	6.06	1.09	431003.27	A	0.6356	0.6817		#NA!	
PFTrDA	6.24	1.03	6281239.03	A	0.0086	0.0083			
PFTrDA_2	6.24	1.03	52325.72	M	0.0086	0.0083	-3	50	
PFTeDA	6.42	1.00	6092875.66	A	0.0062	0.0060			
PFTeDA_2	6.42	1.00	36395.60	A	0.0062	0.0060	-4	50	
PFHxDA	6.72	1.05	2866097.32	A	0.0683	0.0642			
PFHxDA_2	6.72	1.05	183981.95	A	0.0683	0.0642	-6	50	
PFODA	6.98	1.09	2488863.64	A	0.0277	0.0267			
PFODA_2	6.98	1.09	66332.27	A	0.0277	0.0267	-4	50	

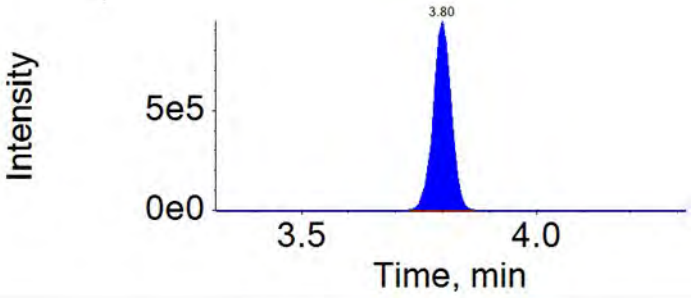
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

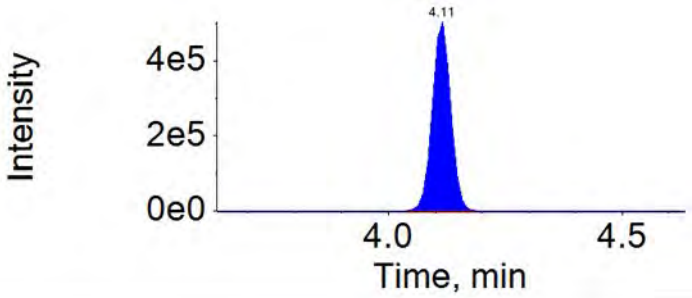
Component: PFBS
Primary Mass: 299.0 / 80.0



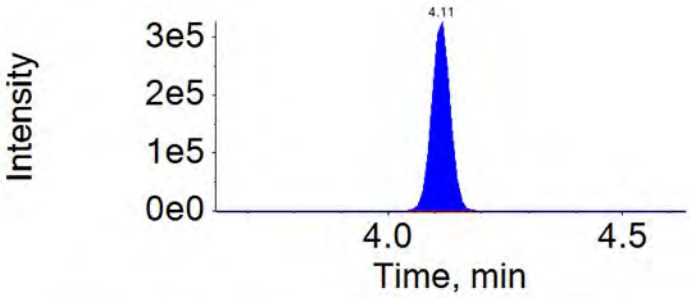
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



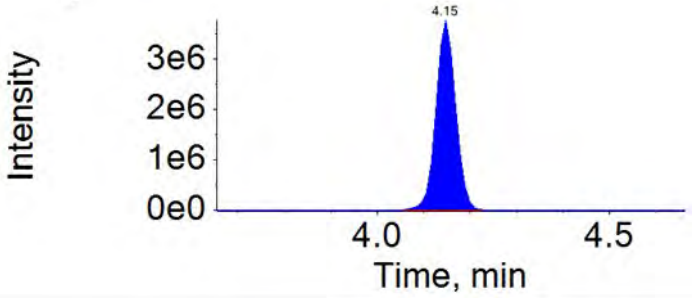
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



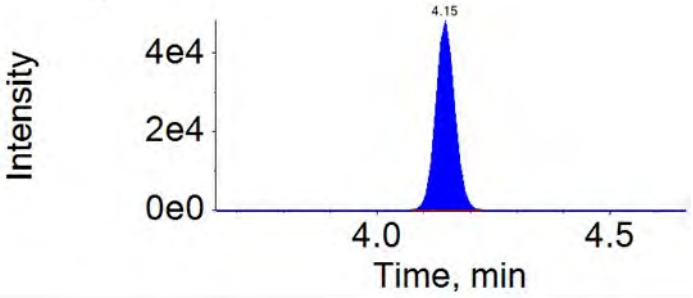
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



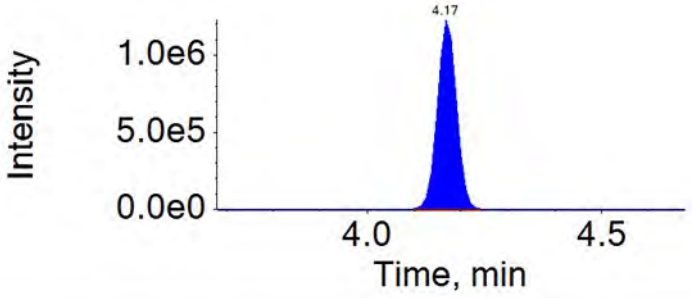
Component: PFHxA
Primary Mass: 313.0 / 269.0



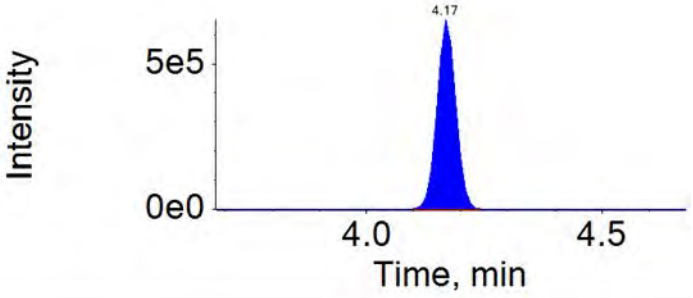
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



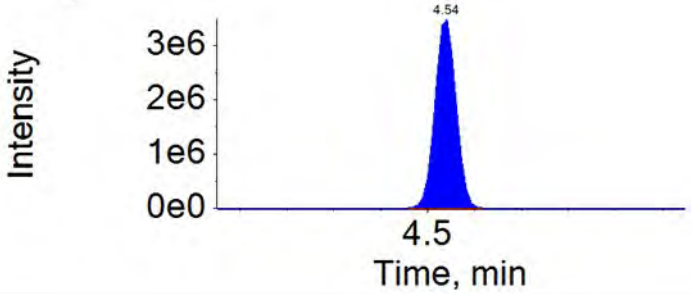
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



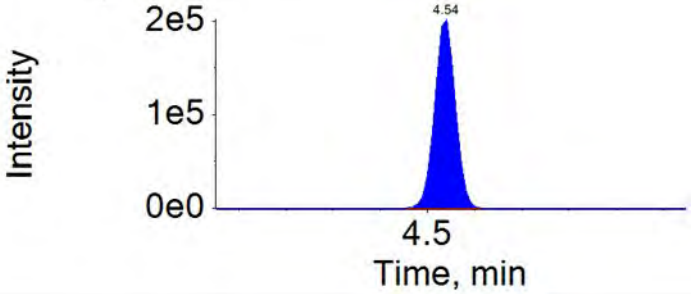
APPROVED
By MCD at 6:33 pm, 11/12/18

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By HMK at 10:53 am, 11/13/18

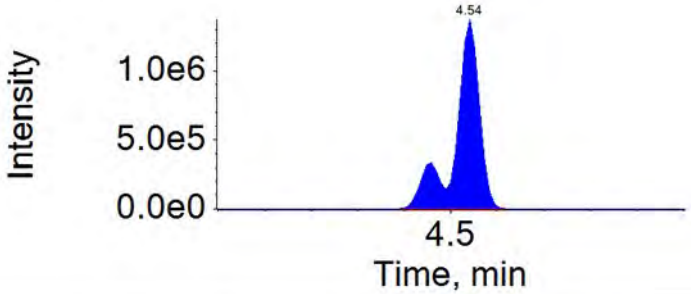
Component: PFHpA
Primary Mass: 363.0 / 319.0



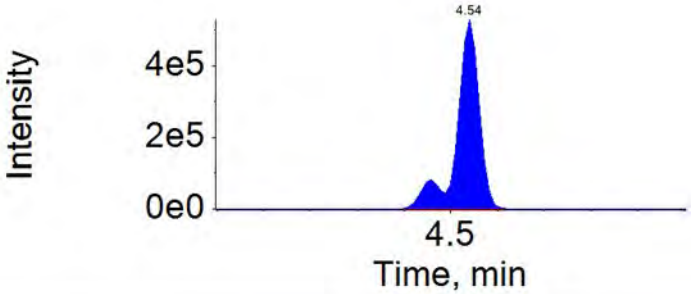
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



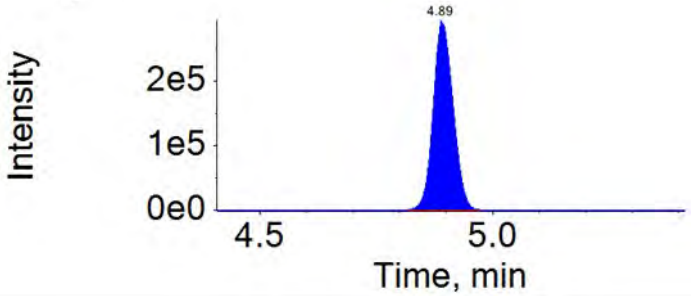
Component: PFHxS
Primary Mass: 399.0 / 80.0



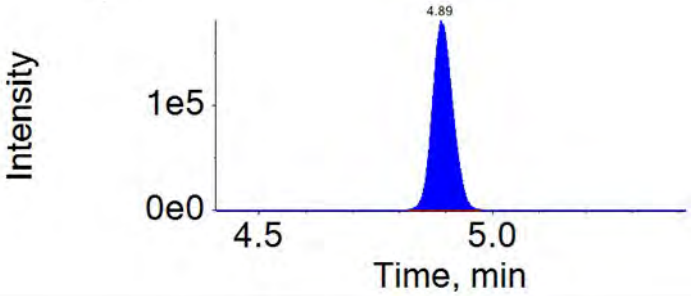
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



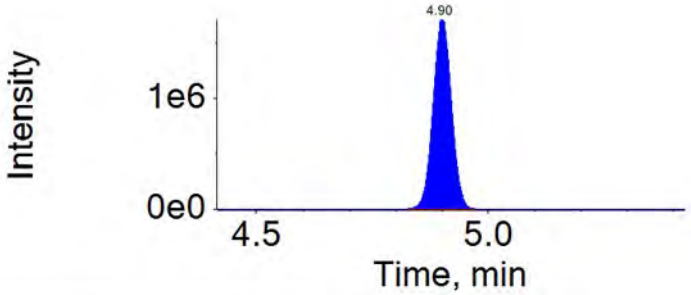
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



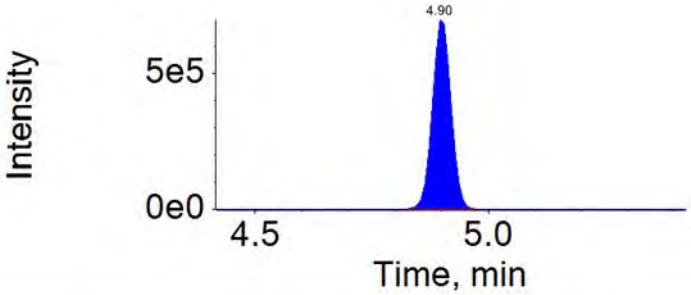
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



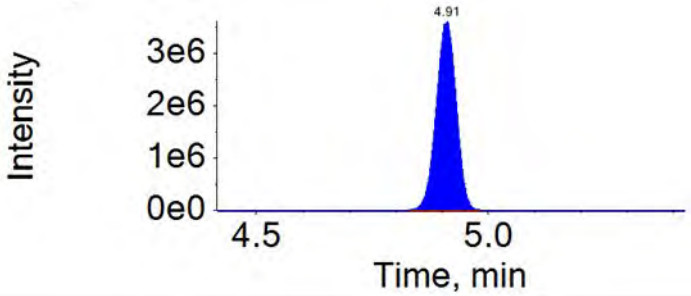
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



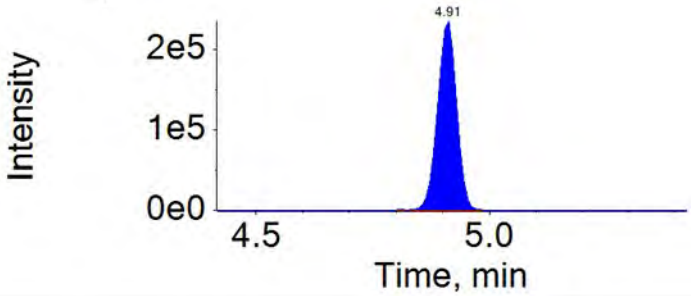
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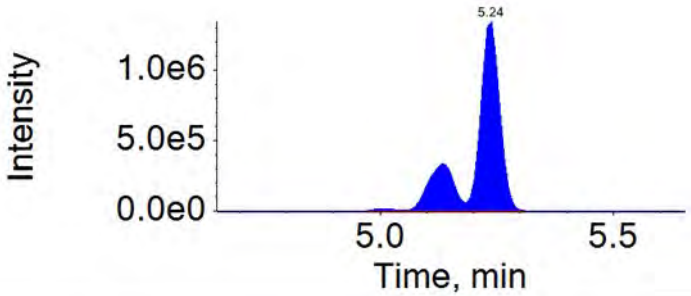
Component: PFOA
Primary Mass: 413.0 / 369.0



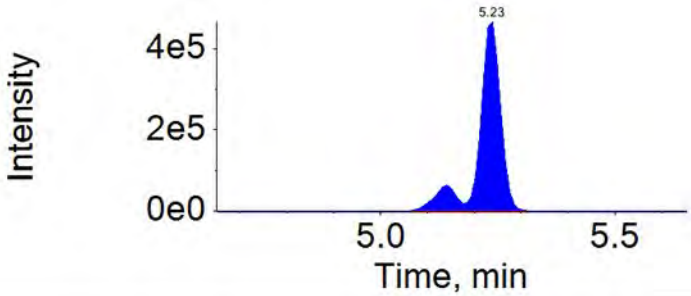
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



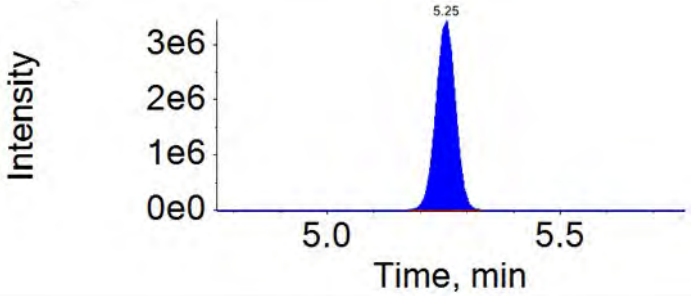
Component: PFOS
Primary Mass: 499.0 / 80.0



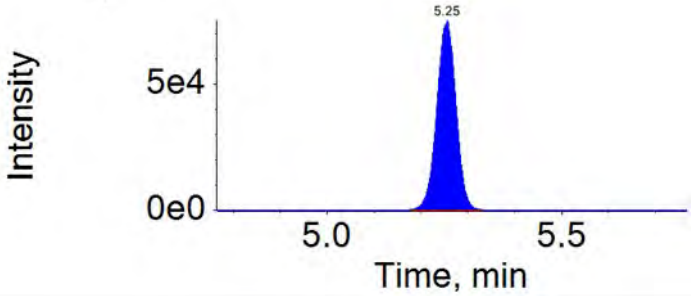
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



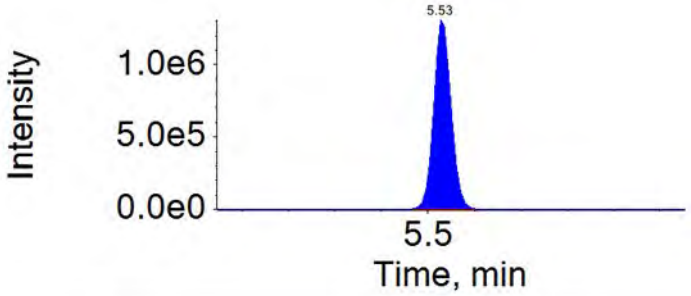
Component: PFNA
Primary Mass: 463.0 / 419.0



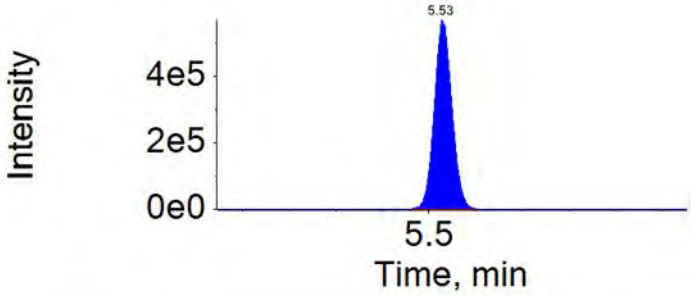
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



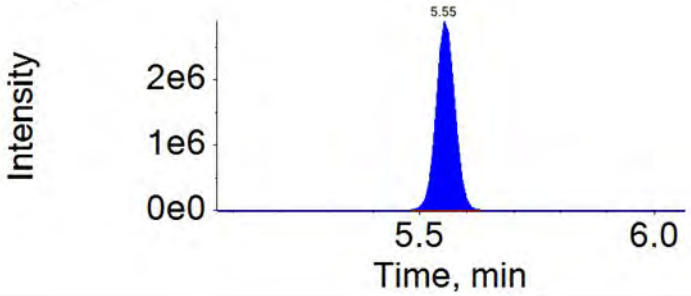
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



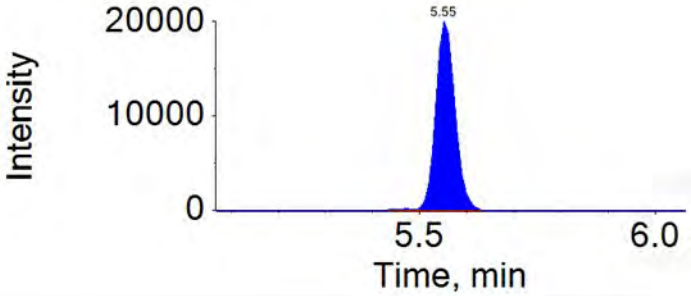
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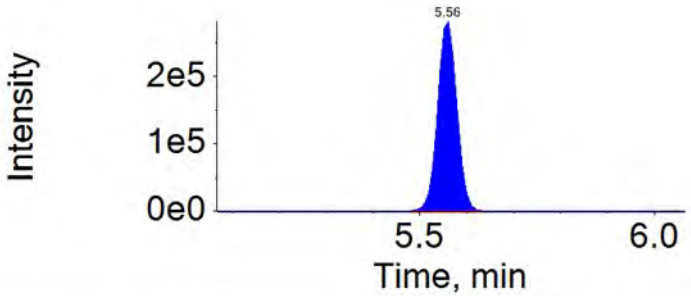
Component: PFDA
Primary Mass: 513.0 / 469.0



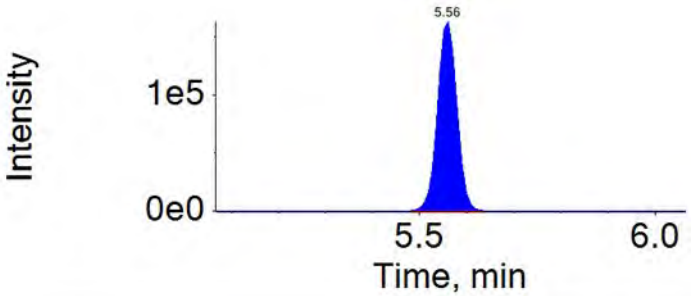
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



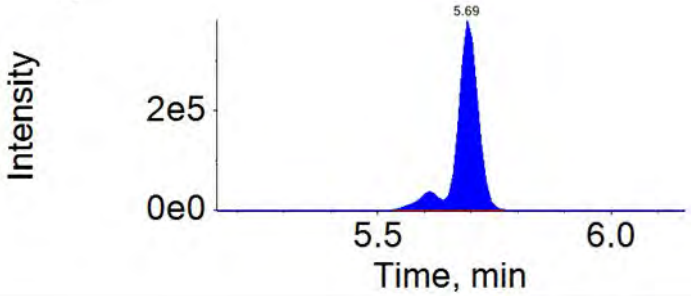
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



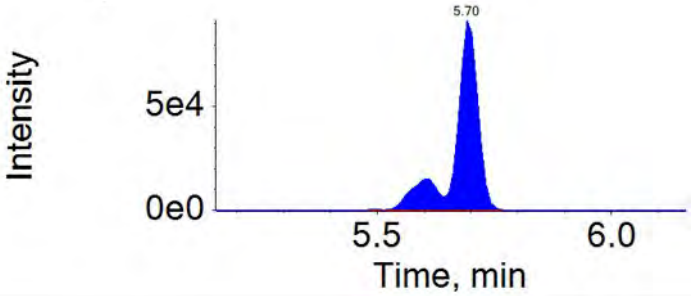
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



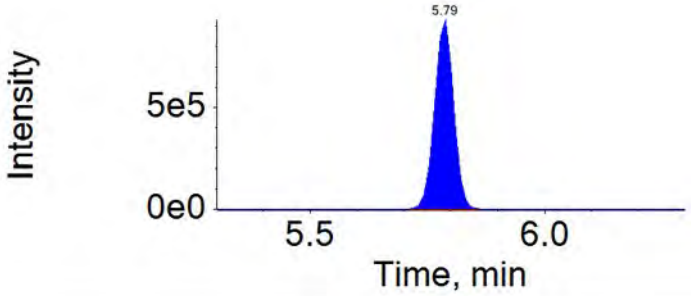
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



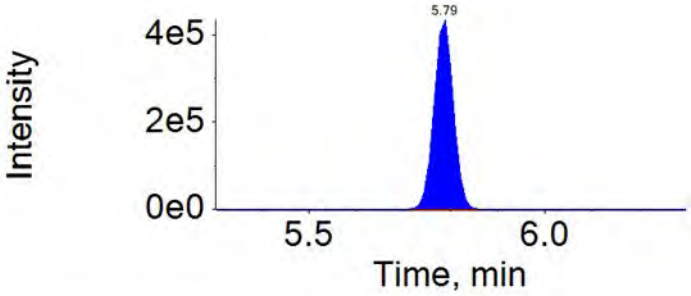
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



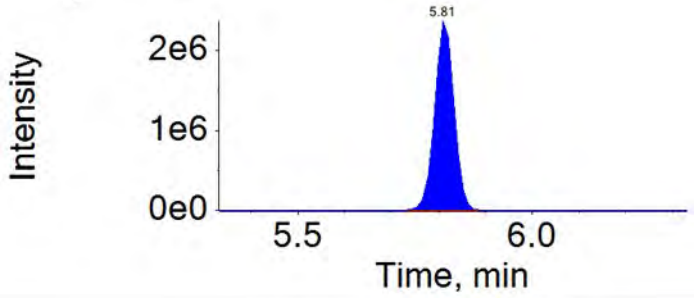
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



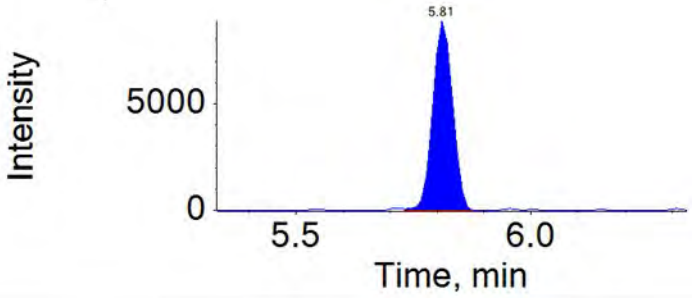
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By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

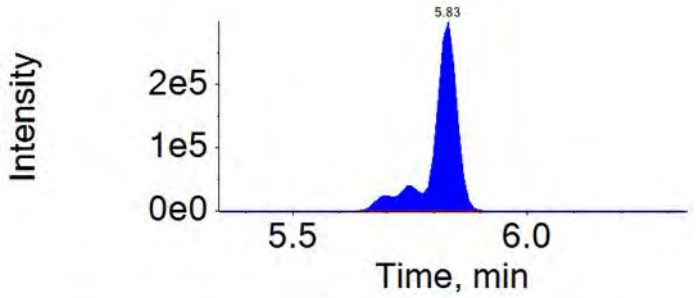
Component: PFUnDA
Primary Mass: 563.0 / 519.0



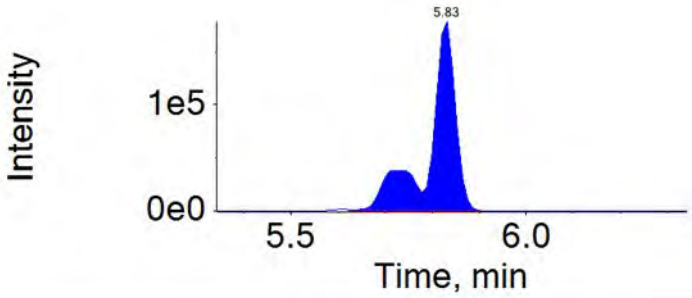
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



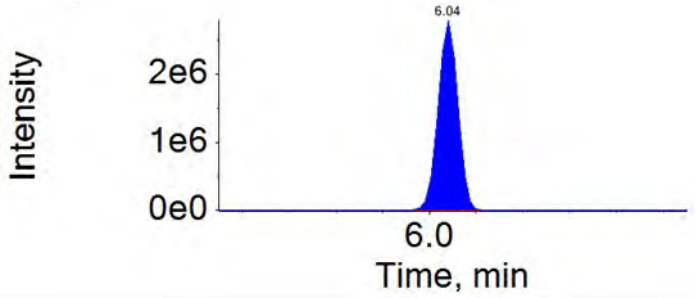
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



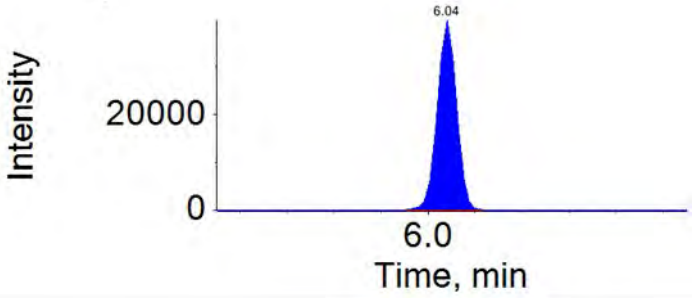
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Secondary Mass: 584.0 / 526.0



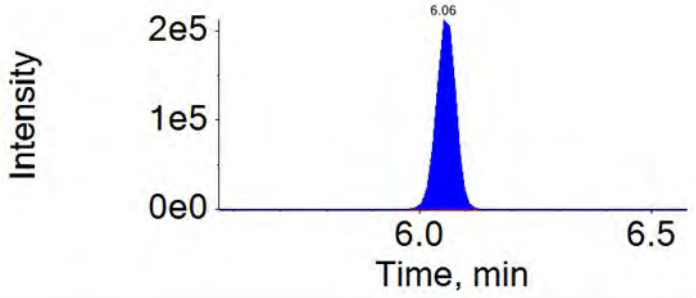
Component: PFDoDA
Primary Mass: 613.0 / 569.0



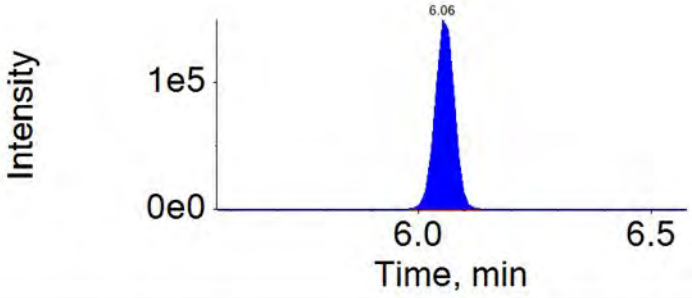
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



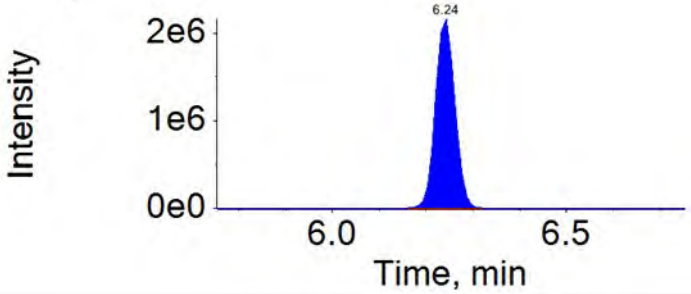
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



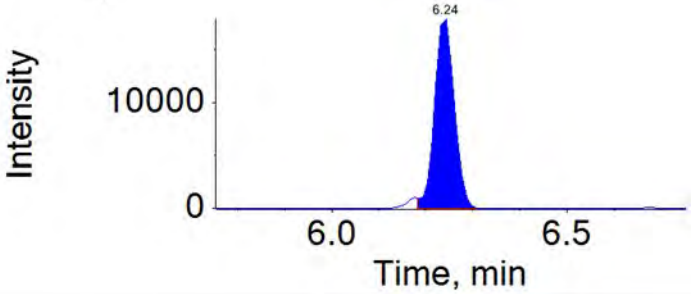
APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

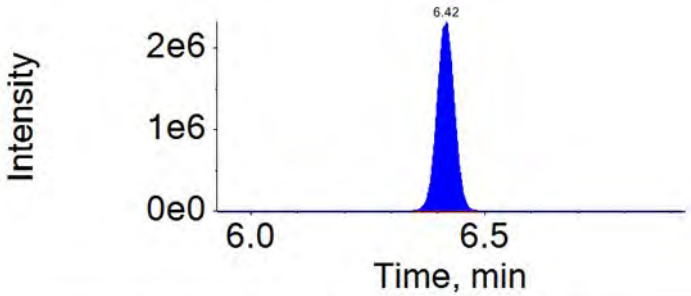
Component: PFTrDA
Primary Mass: 663.0 / 619.0



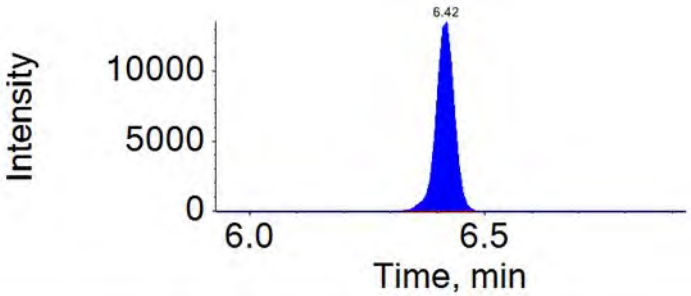
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



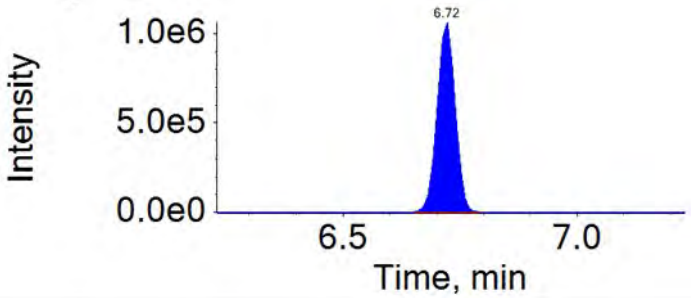
Component: PFTeDA
Primary Mass: 713.0 / 669.0



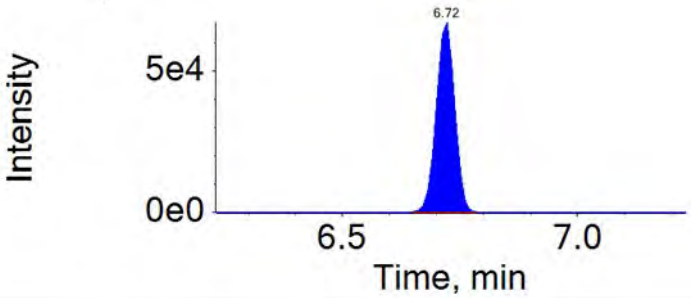
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



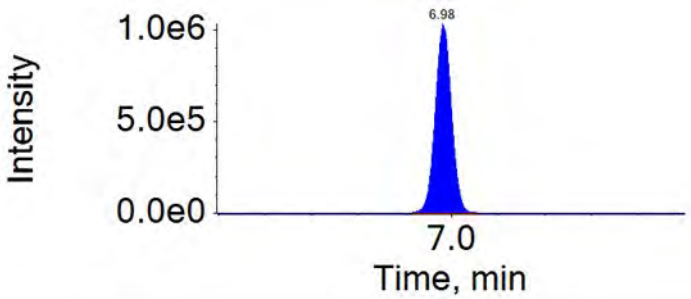
Component: PFHxDA
Primary Mass: 813.0 / 769.0



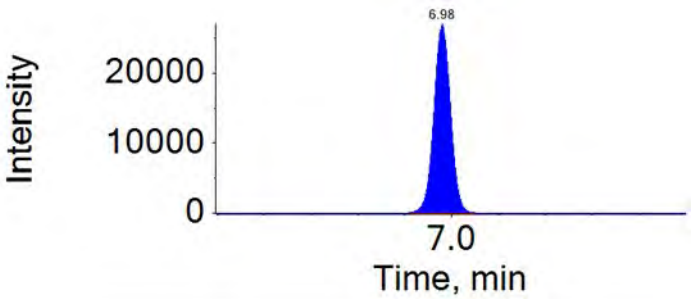
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 6:33 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	MDL			**Data File:**		18NOV12DCAL-41.wiff
Sample ID:	MDLMODX1833F			**Acquis Date:**		2018-11-12T14:56:51
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	2			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV12DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N\A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	633265.0	659926.2	-4	50	
13C2-PFOA	5.0	422926.0	450219.7	-6	50	
13C4-PFOS	4.8	238608.2	249205.8	-4	50	
13C2-PFDA	5.0	268362.6	278743.9	-4	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	710466.9	13C3-PFBA	633265.0	1.122	5.000	5.030	101	70-130	
E13C5-PFPeA	681259.0	13C3-PFBA	633265.0	1.076	5.000	4.825	97	70-130	
E13C3-PFBS	393264.2	13C3-PFBA	633265.0	0.621	4.650	4.384	94	70-130	
E13C2-4:2-FTS	44526.6	13C2-PFOA	422926.0	0.105	4.670	4.689	100	70-130	
E13C5-PFHxA	637812.0	13C2-PFOA	422926.0	1.508	5.000	5.448	109	70-130	
E13C3-PFHxS	301527.6	13C2-PFOA	422926.0	0.713	4.730	4.892	103	70-130	
E13C4-PFHpA	476944.8	13C2-PFOA	422926.0	1.128	5.000	5.081	102	70-130	
E13C2-6:2-FTS	30514.4	13C2-PFOA	422926.0	0.072	4.750	4.827	102	70-130	
E13C8-PFOA	779343.3	13C2-PFOA	422926.0	1.843	5.000	5.077	102	70-130	
E13C8-PFOS	248479.3	13C4-PFOS	238608.2	1.041	4.780	4.614	97	70-130	
E13C9-PFNA	435787.7	13C4-PFOS	238608.2	1.826	5.000	5.092	102	70-130	
E13C6-PFDA	583105.1	13C2-PFDA	268362.6	2.173	5.000	5.070	101	70-130	
E13C2-8:2-FTS	24193.5	13C2-PFDA	268362.6	0.090	4.790	4.496	94	70-130	
E13C8-PFOSA	559143.9	13C2-PFDA	268362.6	2.084	5.000	4.619	92	70-130	
Ed3-NMeFOSAA	63421.6	13C2-PFDA	268362.6	0.236	5.000	4.266	85	70-130	
E13C7-PFUnDA	227858.5	13C2-PFDA	268362.6	0.849	5.000	4.930	99	70-130	
Ed5-NEtFOSAA	57840.8	13C2-PFDA	268362.6	0.216	5.000	4.560	91	70-130	
E13C2-PFDoDA	487146.2	13C2-PFDA	268362.6	1.815	5.000	4.713	94	70-130	
Ed7-NMePFOSAE	286690.6	13C2-PFDA	268362.6	1.068	5.000	4.623	92	70-130	
Ed3-NMePFOSA	71517.2	13C2-PFDA	268362.6	0.266	5.000	4.842	97	70-130	
Ed9-NEtPFOSAE	252037.2	13C2-PFDA	268362.6	0.939	5.000	4.885	98	70-130	
Ed5-NEtPFOSA	54637.9	13C2-PFDA	268362.6	0.204	5.000	4.776	96	70-130	
E13C2-PFTeDA	362820.8	13C2-PFDA	268362.6	1.352	5.000	4.746	95	70-130	

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

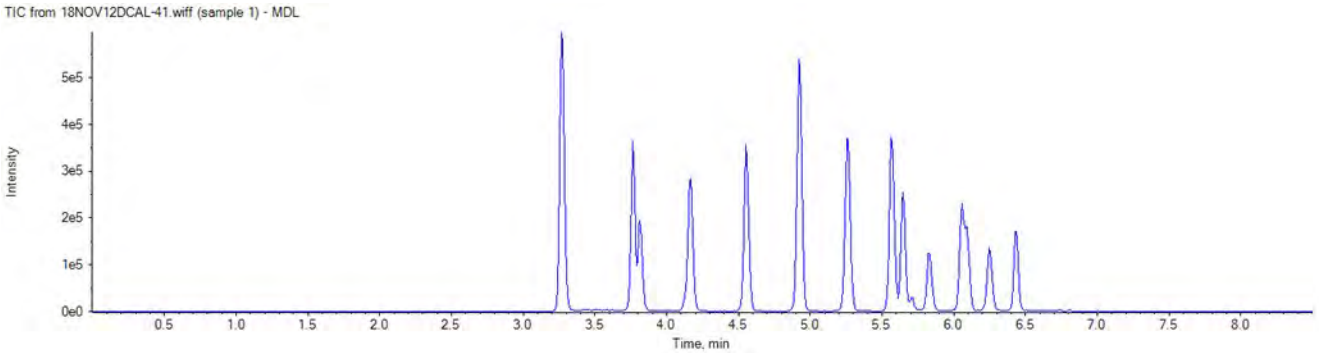
Analyte Quantitation Peak Table

Sample Name: MDL **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-41.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	22532.9		A	13C4-PFBA	3.27	710466.9	0.032	0.176
PFPeA	3.77	1.000	20193.5		M	13C5-PFPeA	3.77	681259.0	0.030	0.172
PFBS	3.81	1.000	9248.3		A	13C3-PFBS	3.81	393264.2	0.024	0.112
4:2-FTS	4.13	1.000	1329.9		A	13C2-4:2-FTS	4.13	44526.6	0.030	0.081
PFHxA	4.17	1.000	21601.6		A	13C5-PFHxA	4.17	637812.0	0.034	0.141
PFPeS	4.19	1.100	4484.8		A	13C3-PFBS	3.81	393264.2	0.011	0.111
PFHpA	4.56	1.000	22043.5		A	13C4-PFHpA	4.55	476944.8	0.046	0.153
PFHxS	4.56	1.000	8143.5		M	13C3-PFHxS	4.56	301527.6	0.027	0.131
6:2-FTS	4.91	1.000	1176.2		M	13C2-6:2-FTS	4.91	30514.4	0.039	0.093
PFHpS	4.92	1.080	7117.5		A	13C3-PFHxS	4.56	301527.6	0.024	0.124
PFOA	4.93	1.000	18045.0		A	13C8-PFOA	4.93	779343.3	0.023	0.124
PFOS	5.25	1.000	6416.9		A	13C8-PFOS	5.25	248479.3	0.026	0.113
PFNA	5.27	1.000	18065.1		M	13C9-PFNA	5.27	435787.7	0.041	0.149
PFNS	5.54	1.060	3661.2		A	13C8-PFOS	5.25	248479.3	0.015	0.103
PFDA	5.57	1.000	17350.5		A	13C6-PFDA	5.57	583105.1	0.030	0.158
8:2-FTS	5.57	1.000	1475.2		A	13C2-8:2-FTS	5.57	24193.5	0.061	0.142
PFOSA	5.64	1.000	10288.3		A	13C8-PFOSA	5.65	559143.9	0.018	0.090
NMeFOSAA	5.72	1.000	1372.4		A	d3-NMeFOSAA	5.71	63421.6	0.022	0.122
PFDS	5.80	1.100	2648.8		A	13C8-PFOS	5.25	248479.3	0.011	0.097
PFUnDA	5.83	1.000	12215.3		M	13C7-PFUnDA	5.83	227858.5	0.054	0.140
NEtFOSAA	5.84	1.000	1937.8		A	d5-NEtFOSAA	5.84	57840.8	0.034	0.176
PFDoDA	6.06	1.000	14033.1		A	13C2-PFDoDA	6.06	487146.2	0.029	0.147
10:2-FTS	6.06	1.090	352.6		M	13C2-8:2-FTS	5.57	24193.5	0.015	0.049
NMePFOSAE	6.10	1.000	9218.1		A	d7-NMePFOSAE	6.09	286690.6	0.032	0.134
NMePFOSA	6.11	1.000	1339.8		A	d3-NMePFOSA	6.11	71517.2	0.019	0.092
PFDoS	6.22	1.180	1425.7		A	13C8-PFOS	5.25	248479.3	0.006	0.100
NEtPFOSAE	6.26	1.000	10510.3		A	d9-NEtPFOSAE	6.25	252037.2	0.042	0.134
NEtPFOSA	6.28	1.000	1191.3		M	d5-NEtPFOSA	6.27	54637.9	0.022	0.100
PFTrDA	6.26	1.030	7825.5		M	13C2-PFDoDA	6.06	487146.2	0.016	0.101
PFTeDA	6.43	1.000	8938.5		A	13C2-PFTeDA	6.43	362820.8	0.025	0.138
PFHxDA	6.74	1.050	3934.2		A	13C2-PFTeDA	6.43	362820.8	0.011	0.129
PFODA	7.00	1.090	2726.4		A	13C2-PFTeDA	6.43	362820.8	0.008	0.105

Total Ion Chromatogram

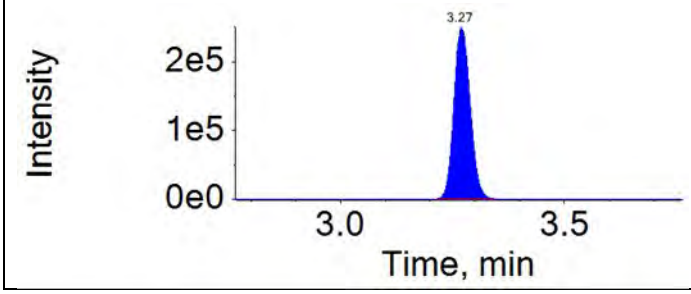


APPROVED
By MCD at 6:34 pm, 11/12/18

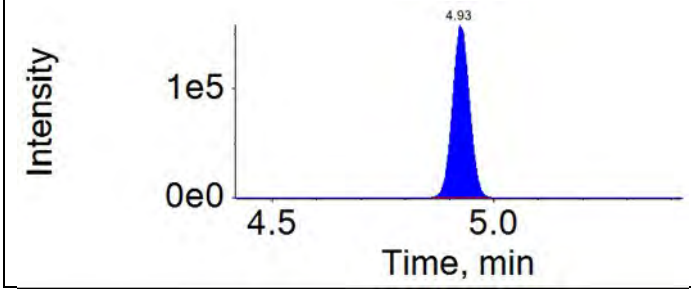
REVIEWED
By HMK at 10:54 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

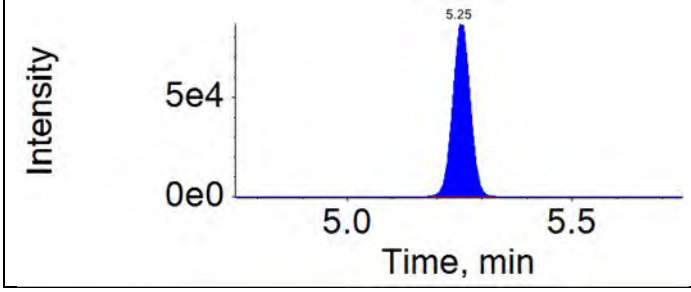
Injection Standard: 13C3-PFBA
216.0 / 172.0



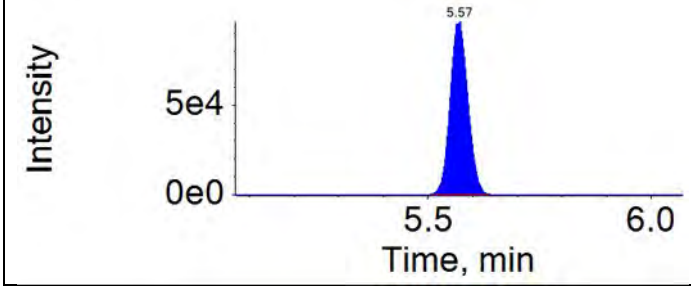
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

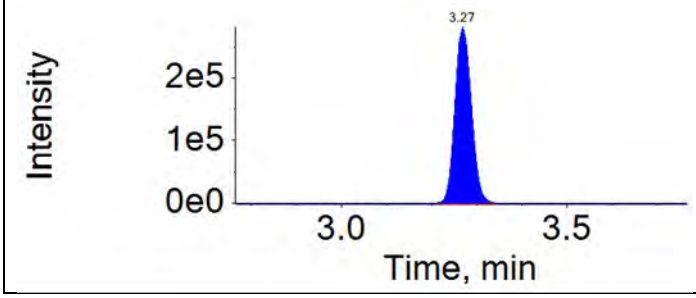


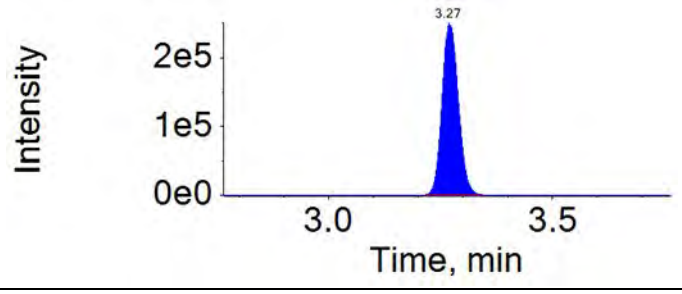
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

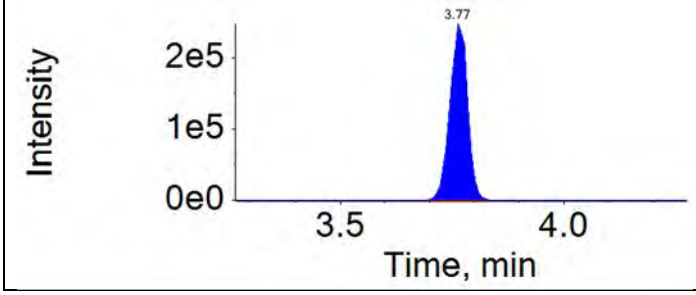
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

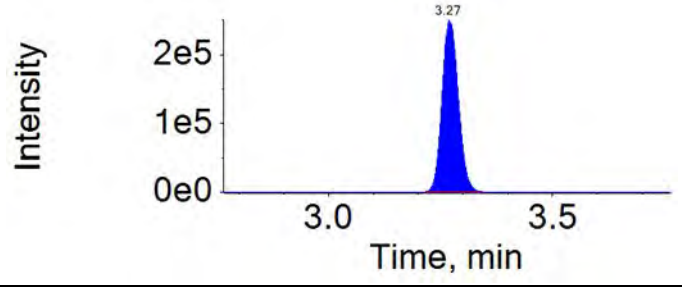
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



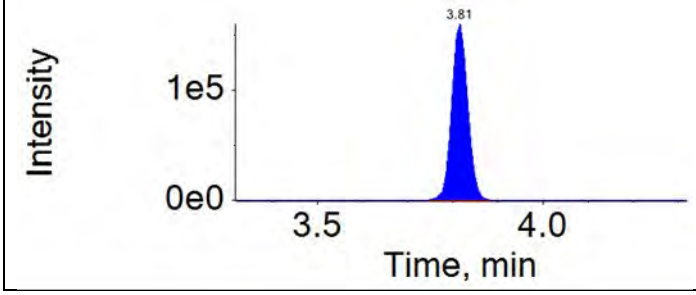


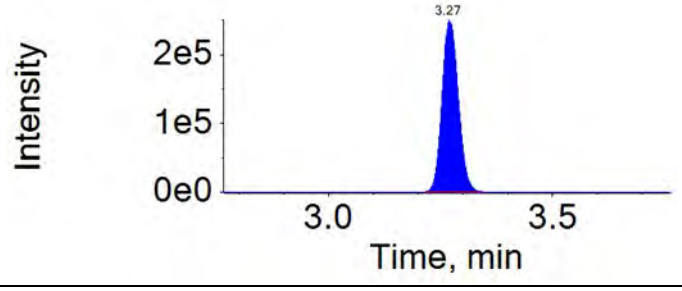
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



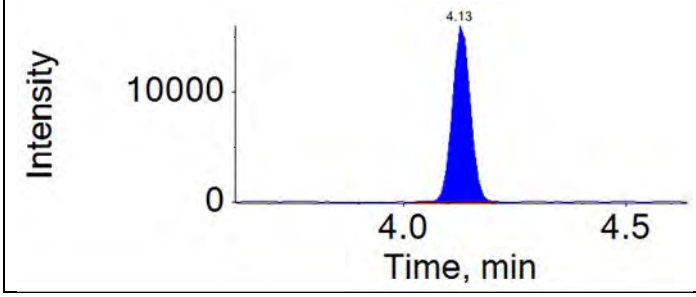


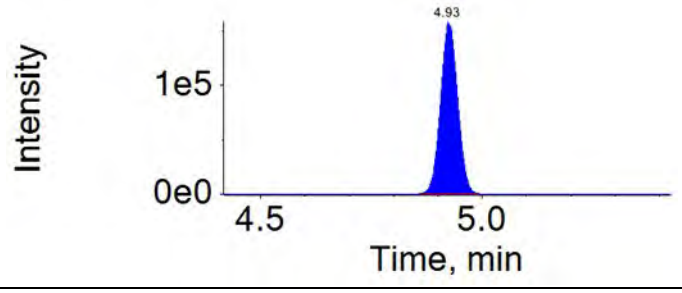
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



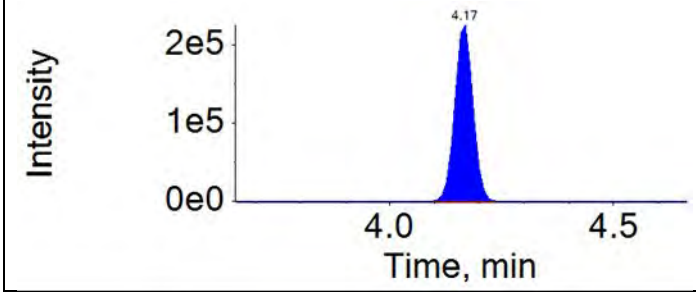


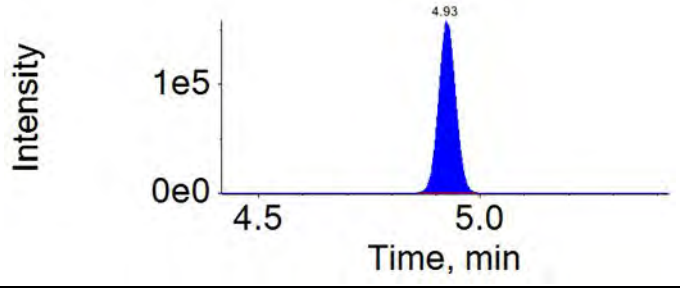
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

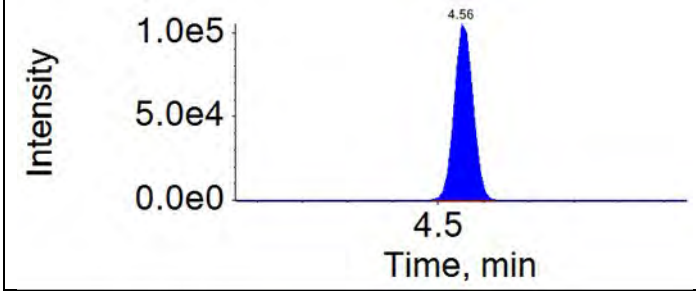
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

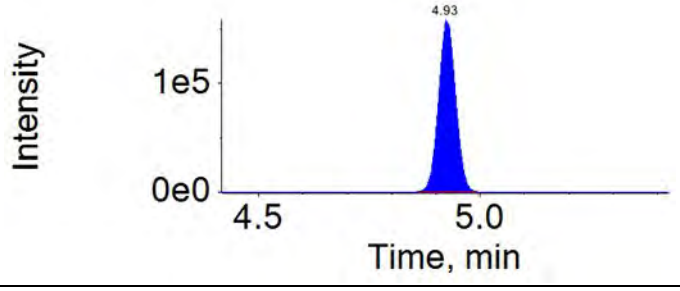
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



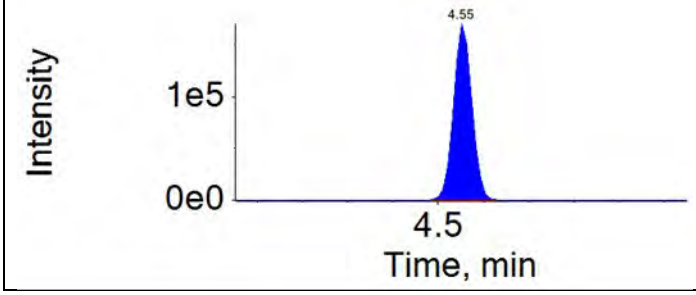


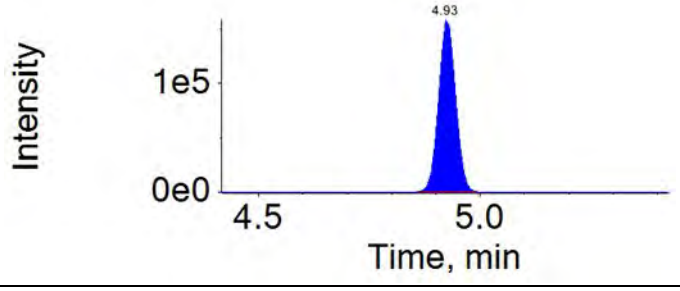
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



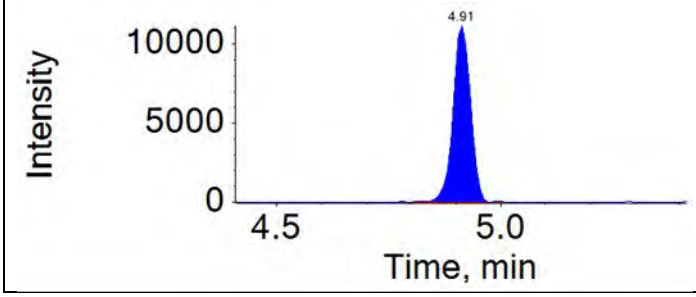


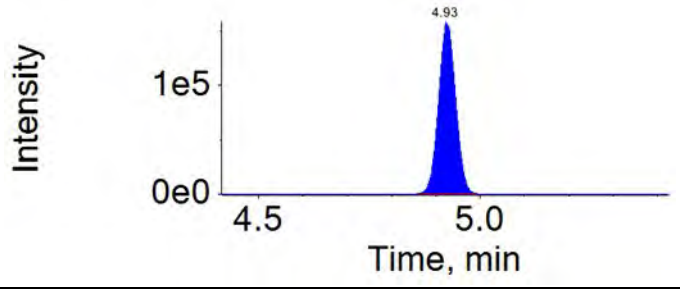
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

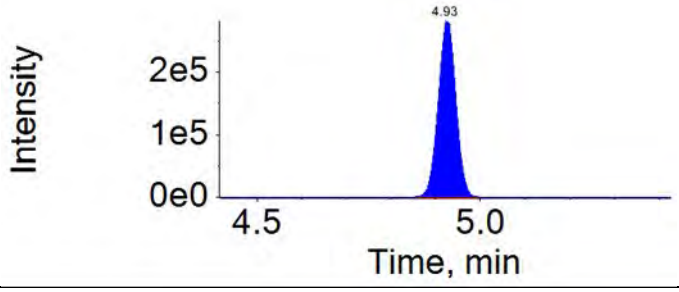
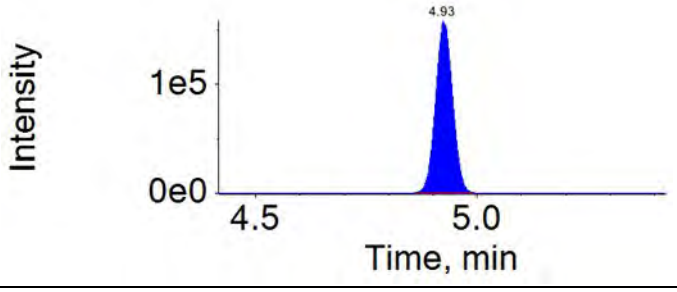


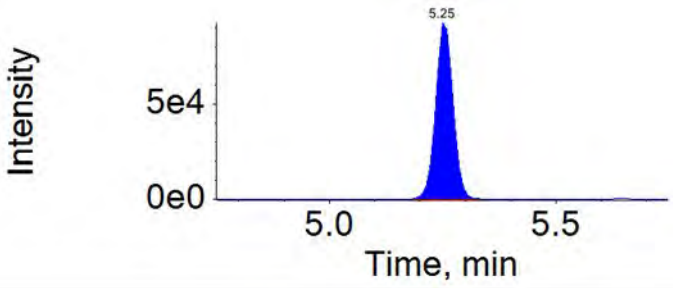
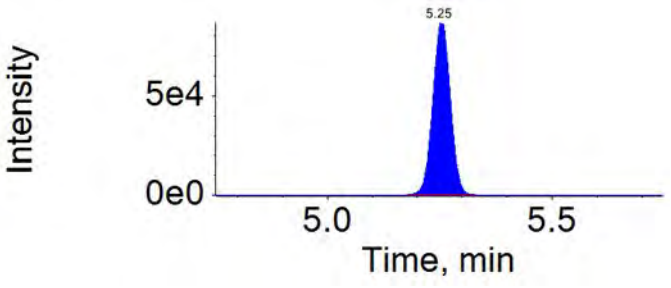


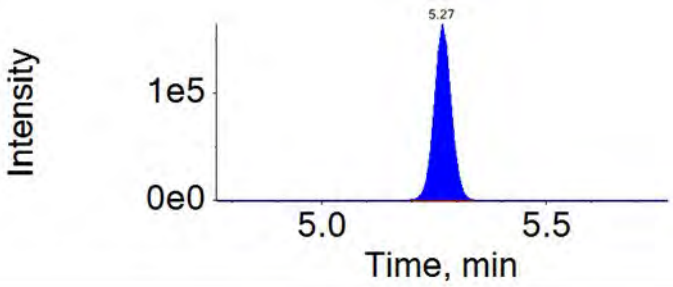
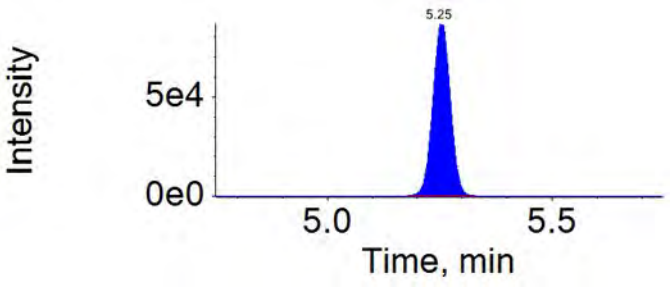
APPROVED
By MCD at 6:34 pm, 11/12/18

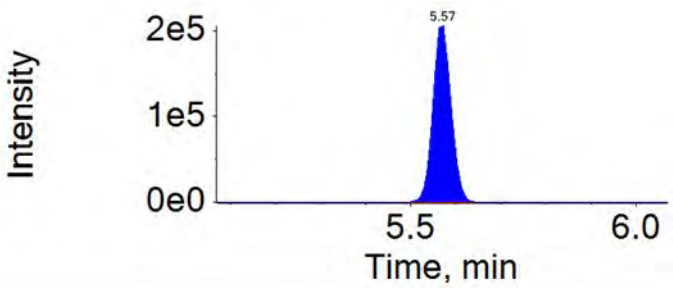
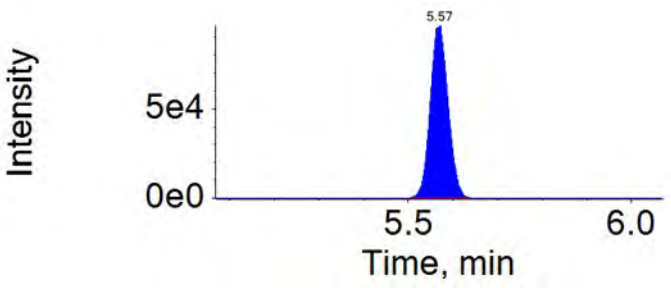
REVIEWED
By HMK at 10:54 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

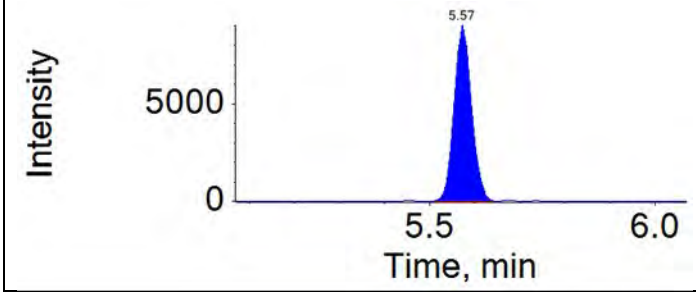
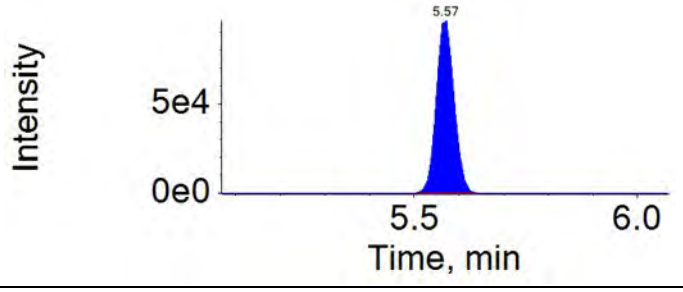
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

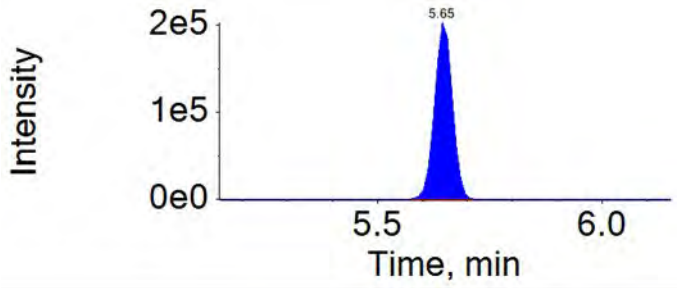
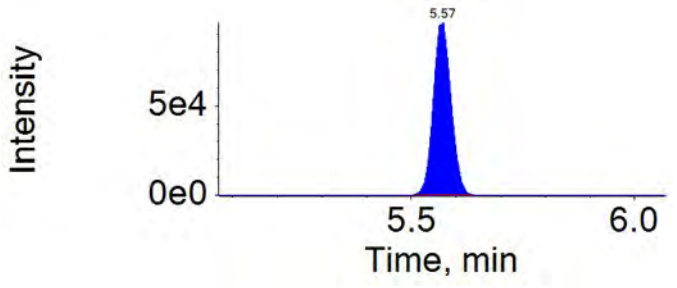
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

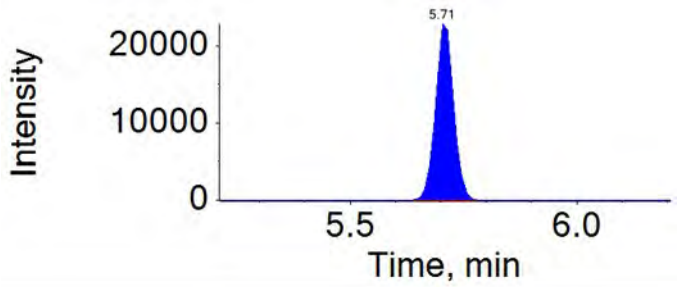
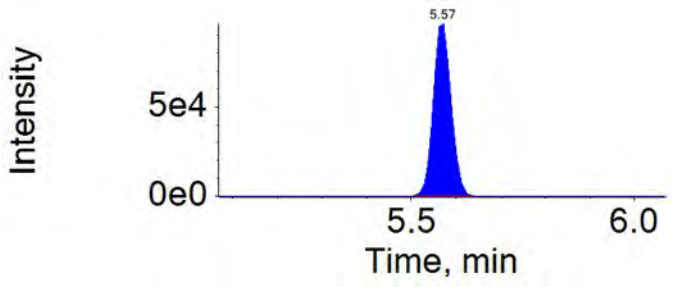
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

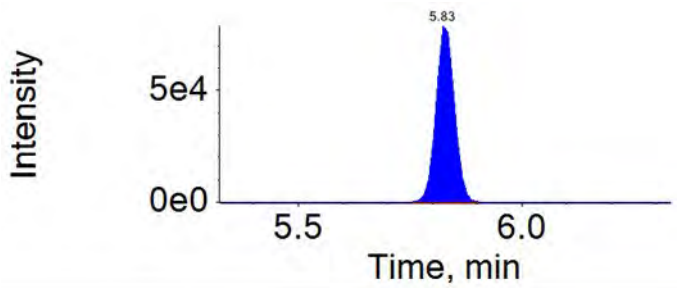
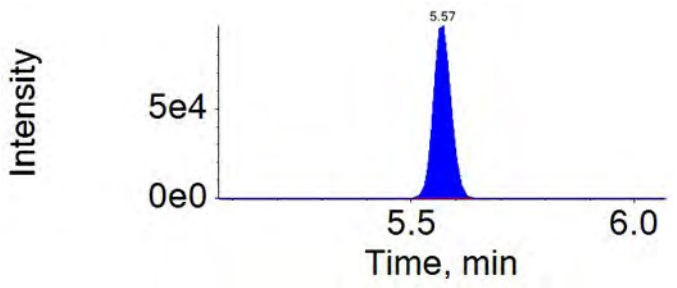
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

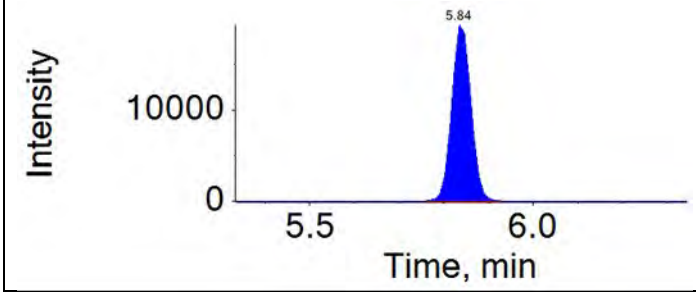
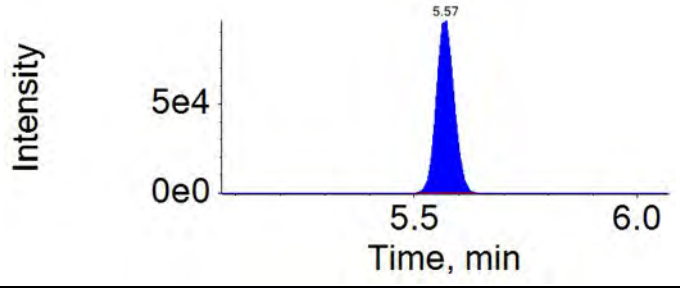
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

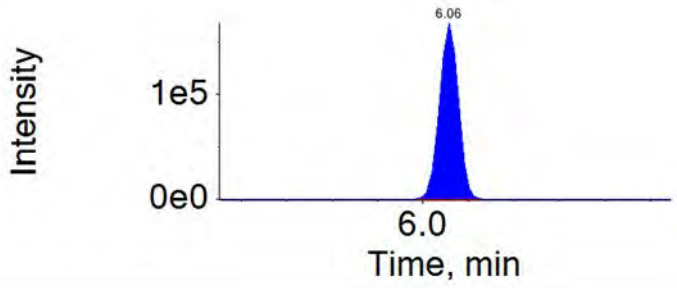
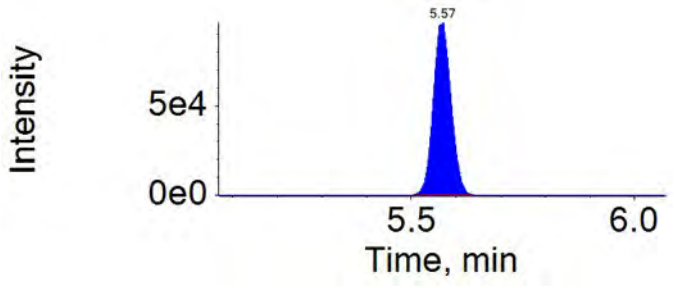
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

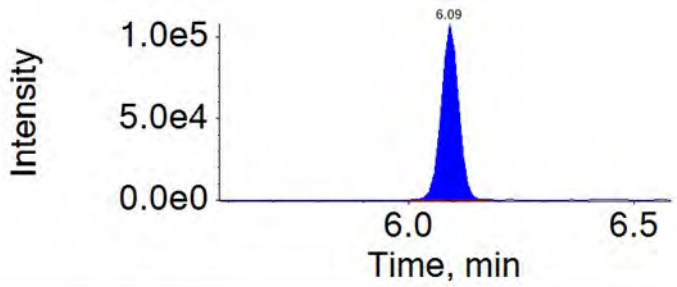
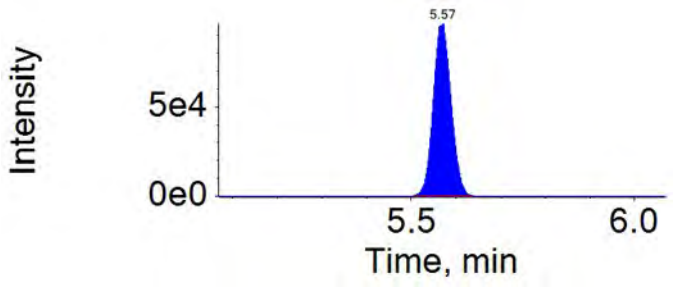
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

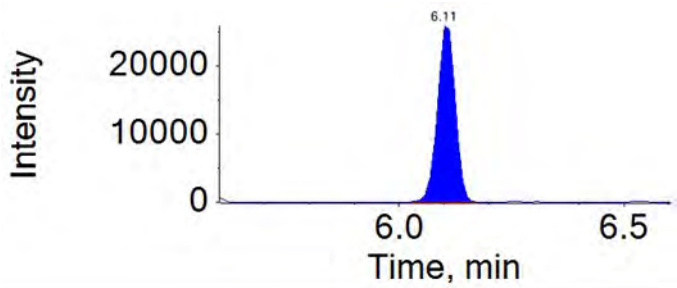
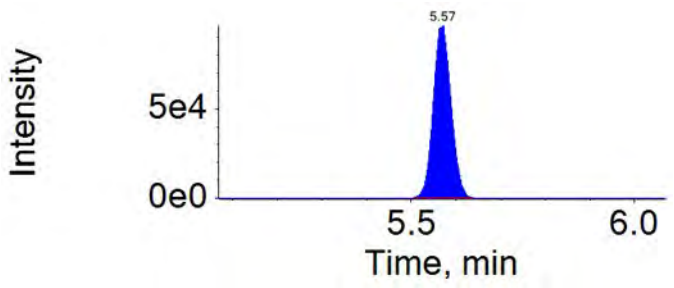
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

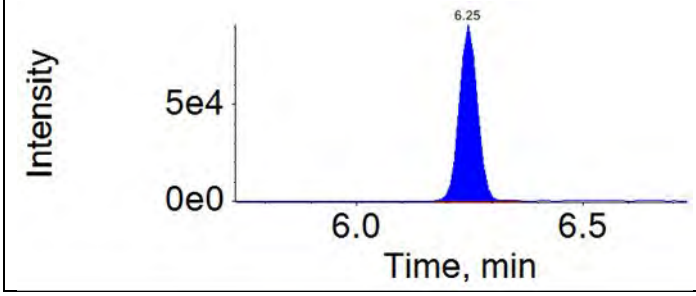
Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

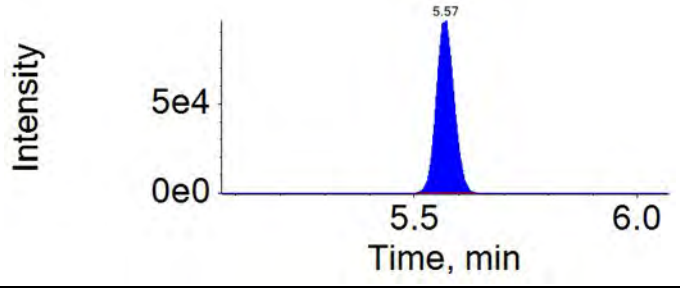
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

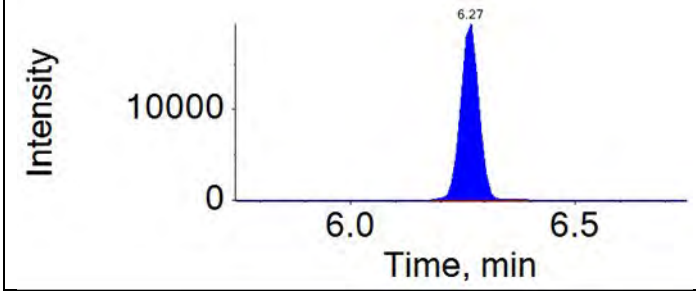
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

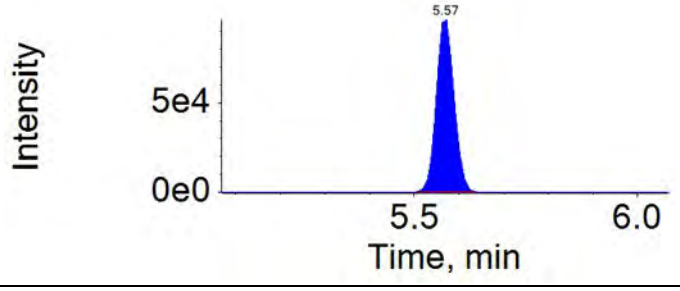
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



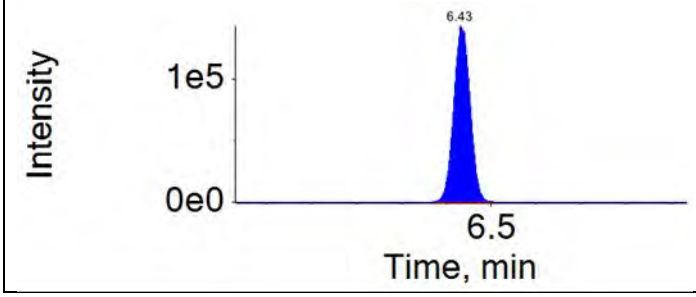


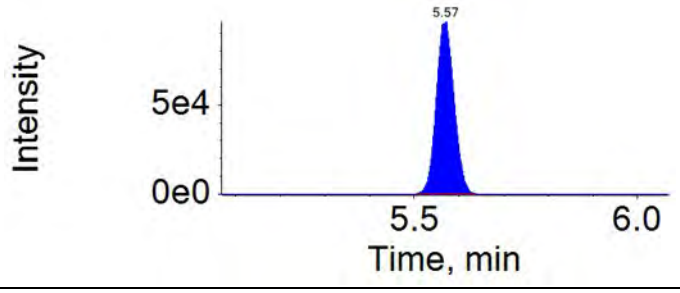
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



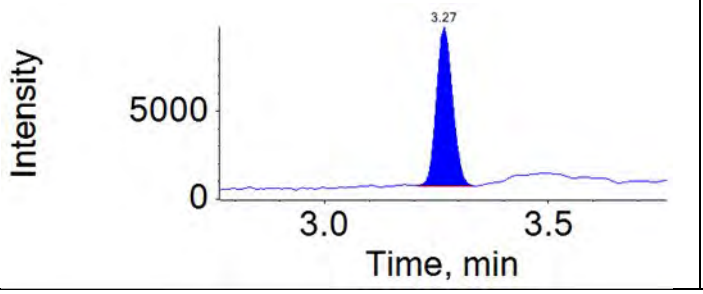


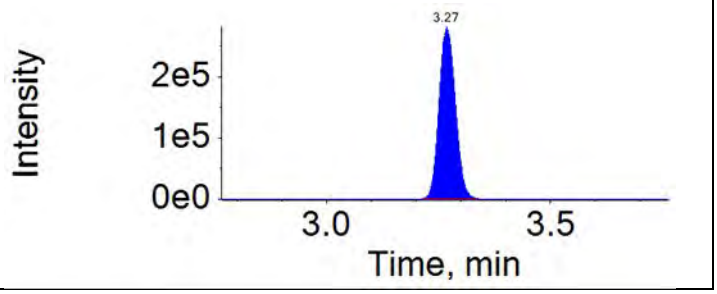
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

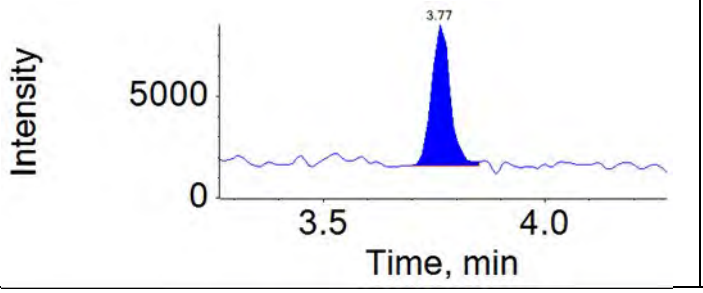
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

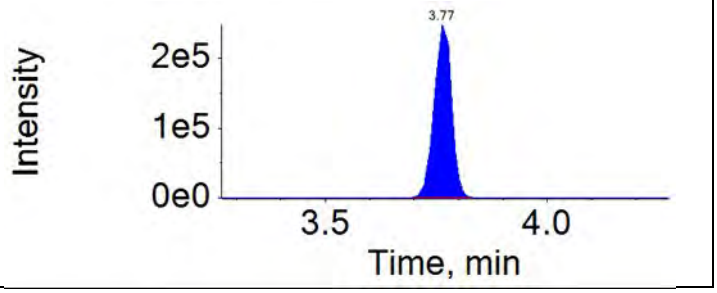
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



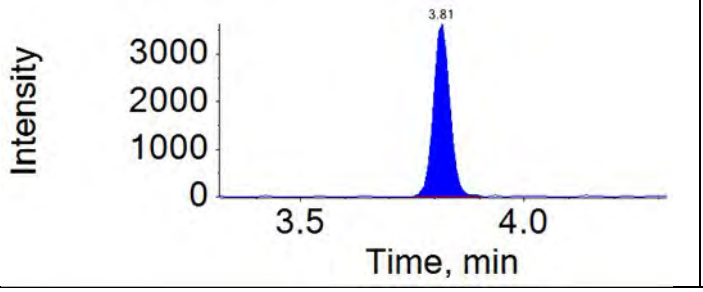


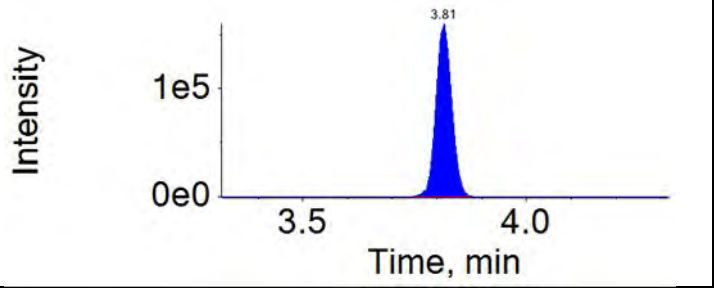
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



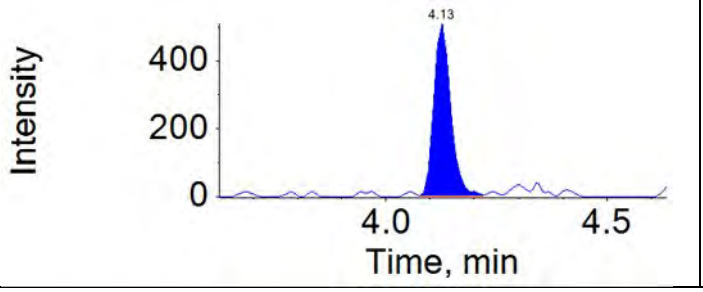


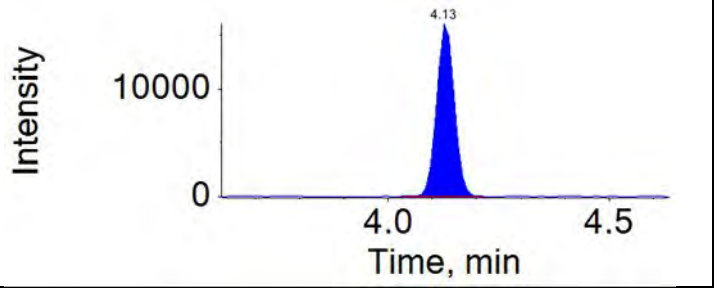
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



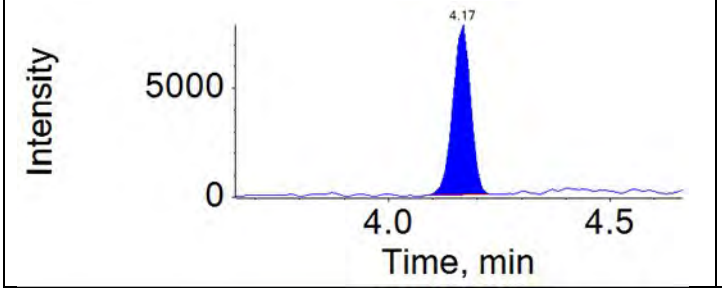


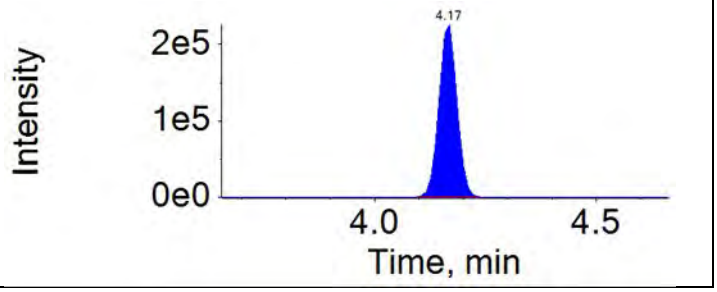
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

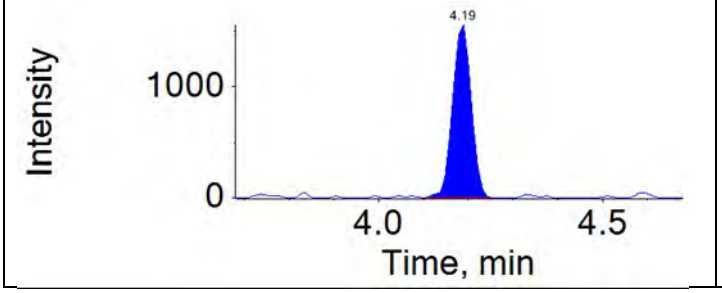
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

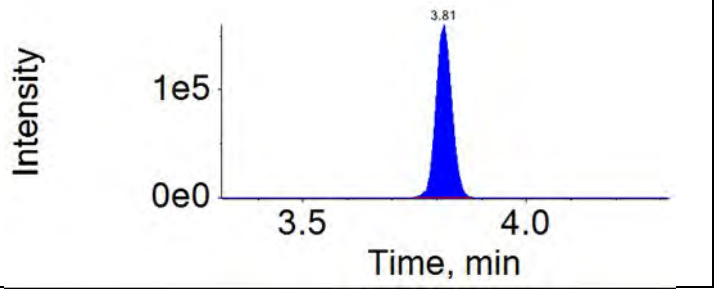
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



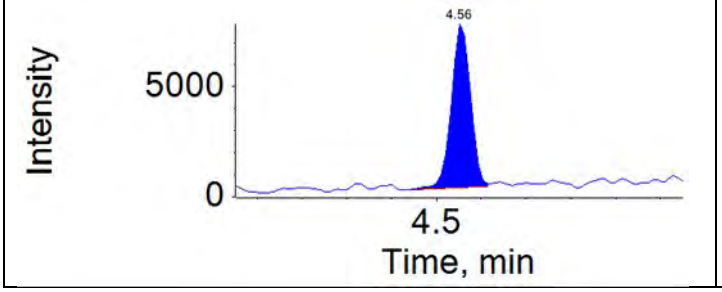


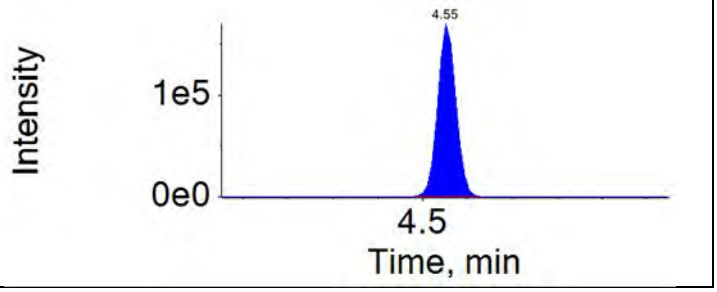
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



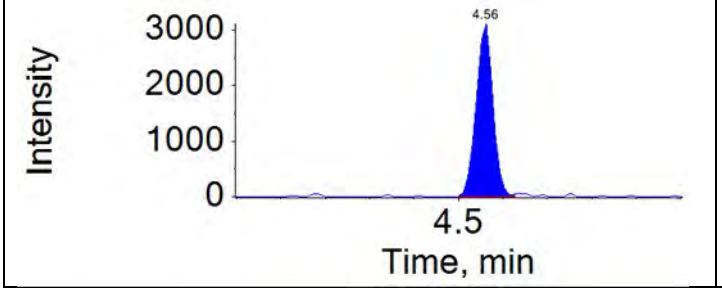


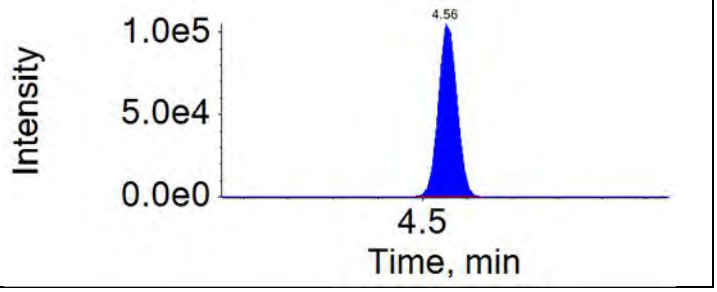
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



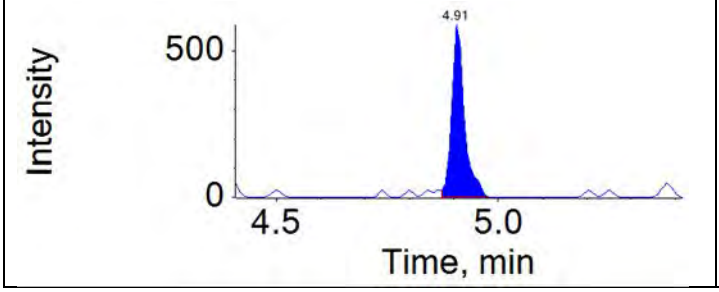


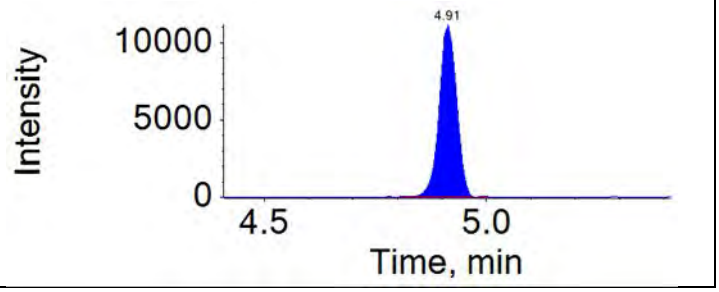
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

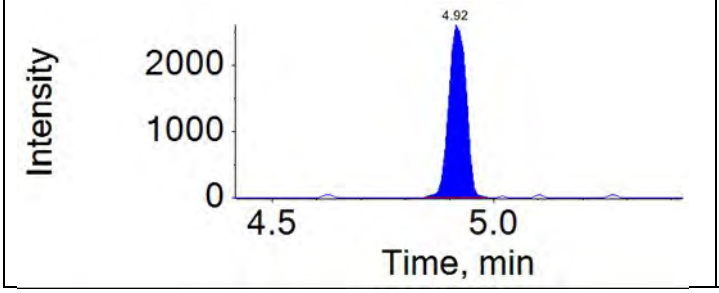
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

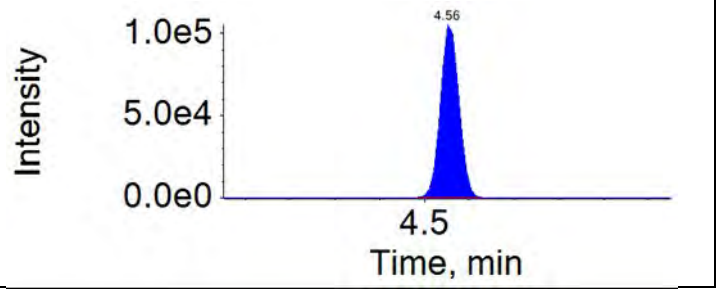
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



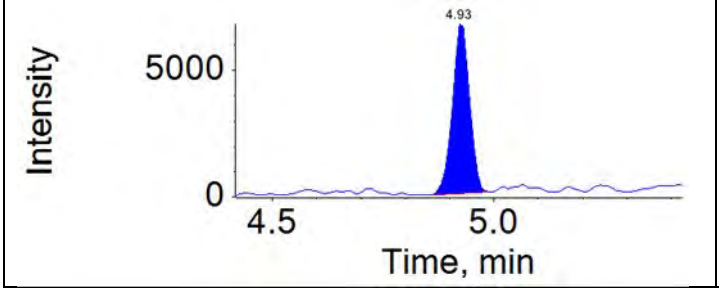


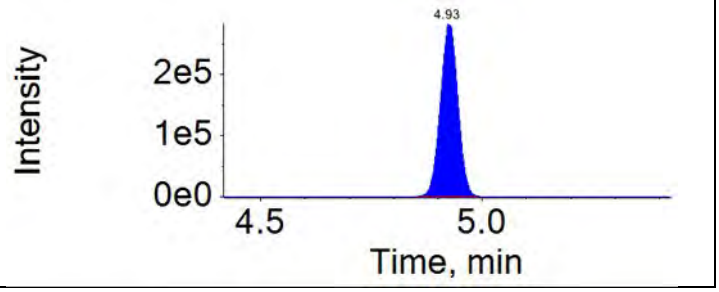
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



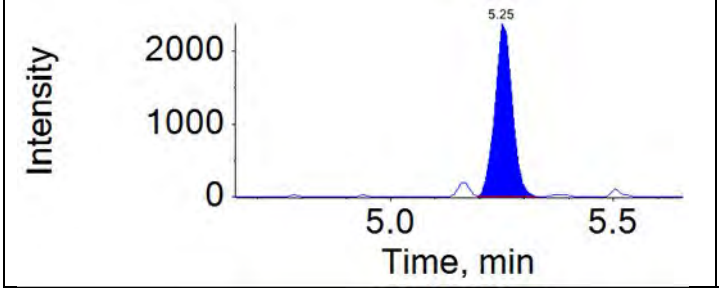


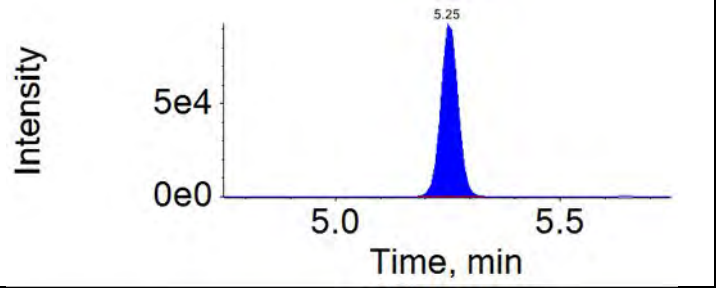
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0

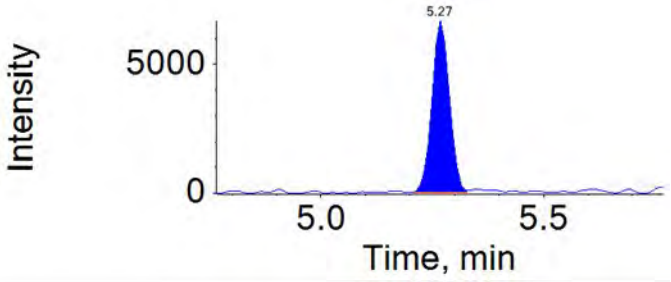
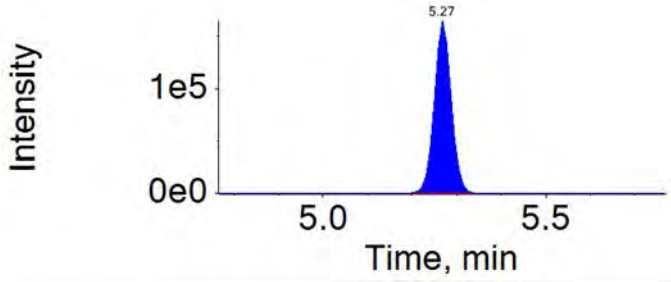


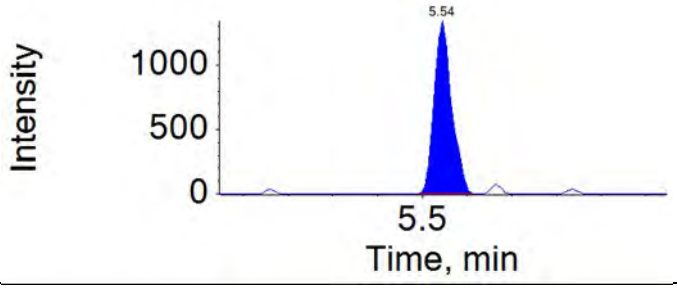
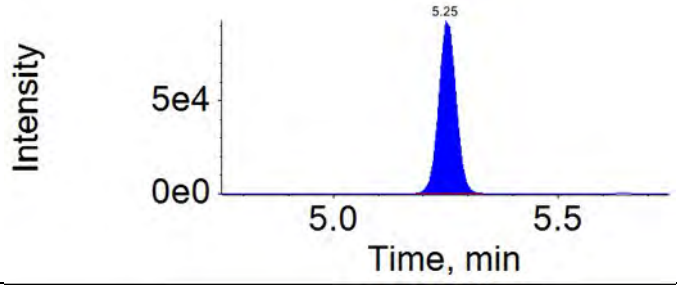


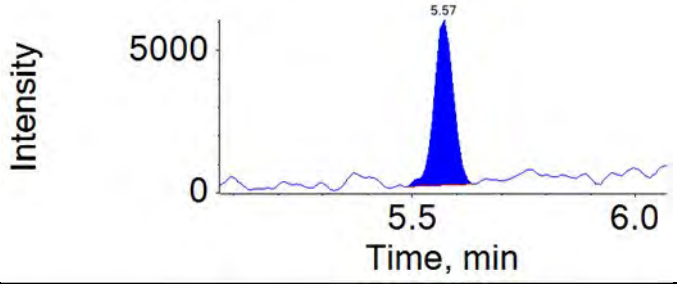
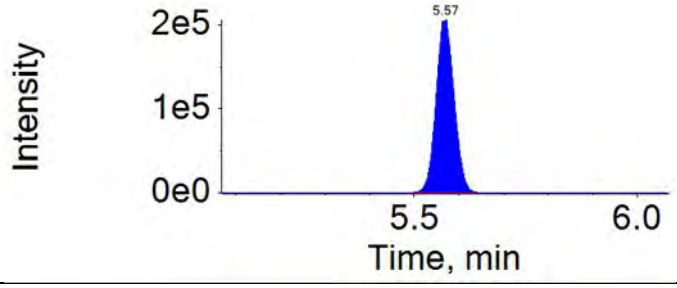
APPROVED
By MCD at 6:34 pm, 11/12/18

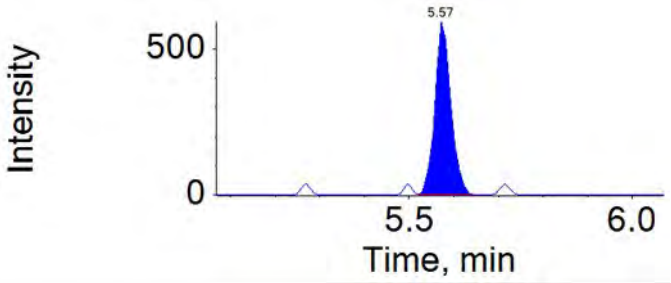
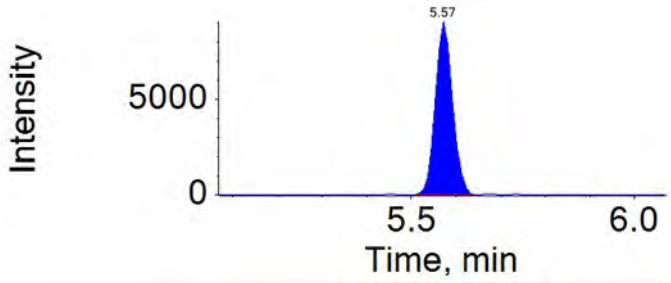
REVIEWED
By HMK at 10:54 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0
	

Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0
	

Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0
	

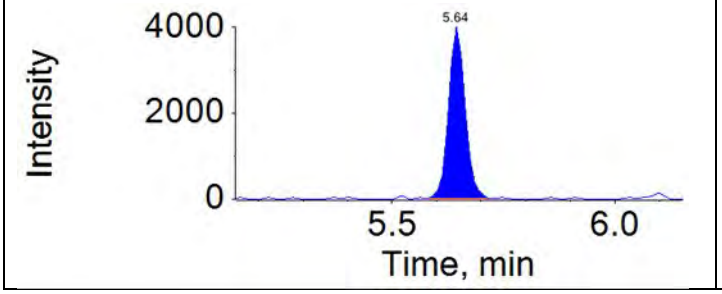
Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0
	

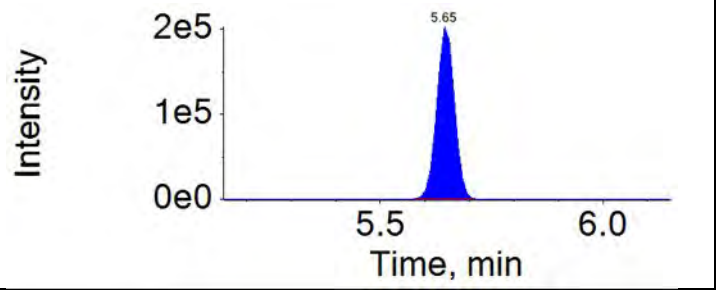
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

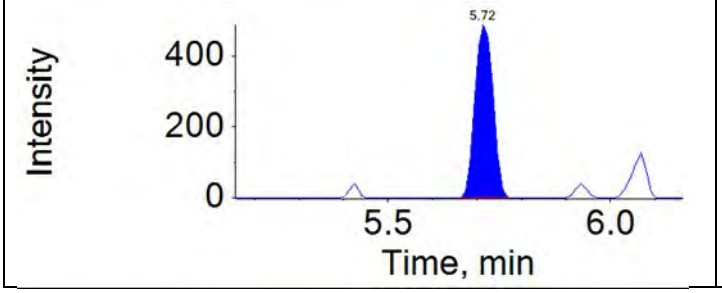
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

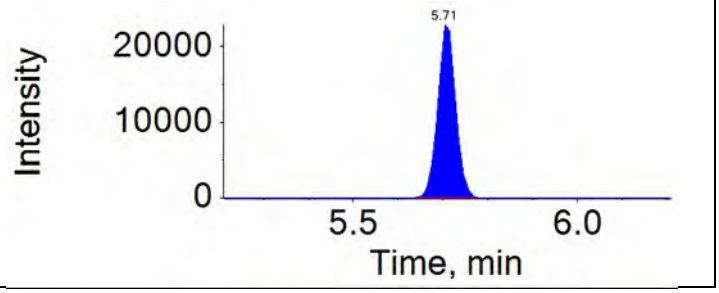
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



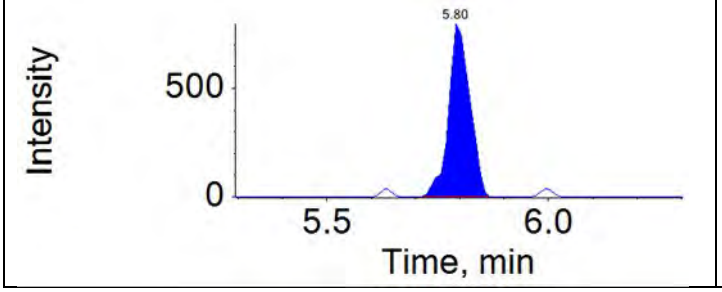


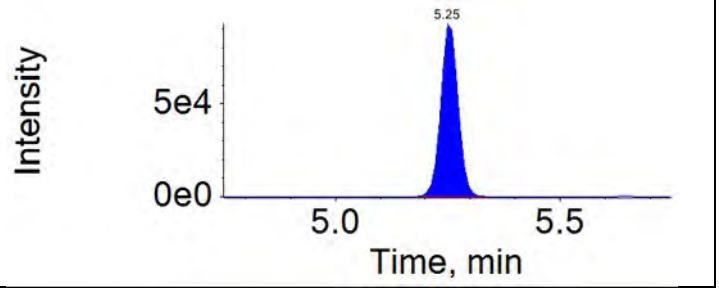
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



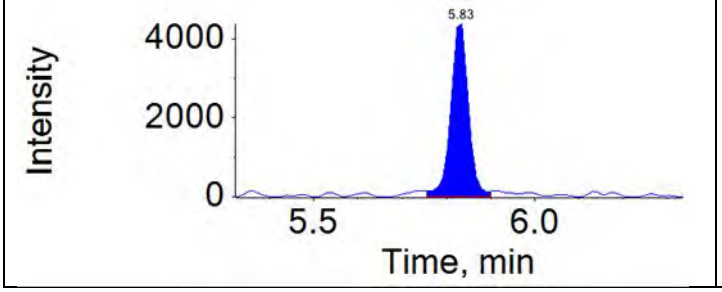


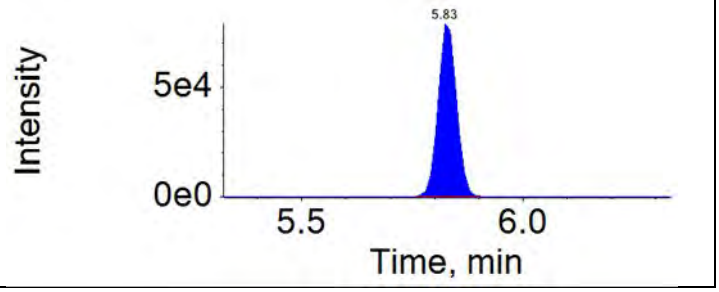
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



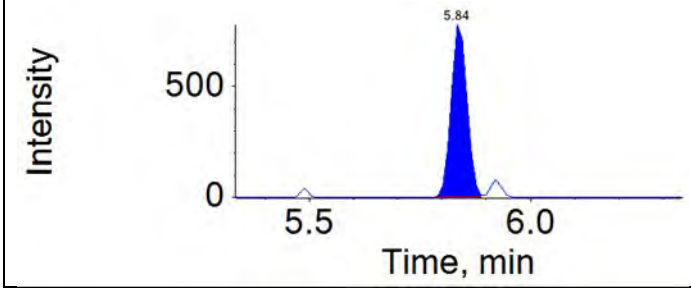


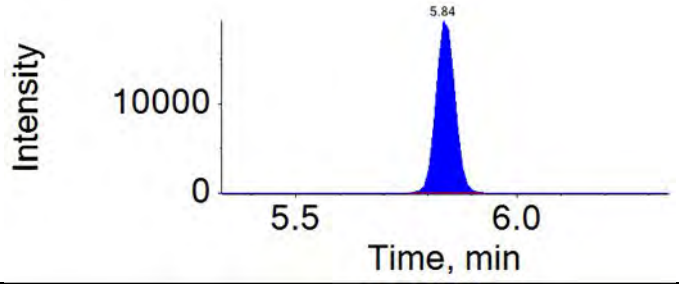
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

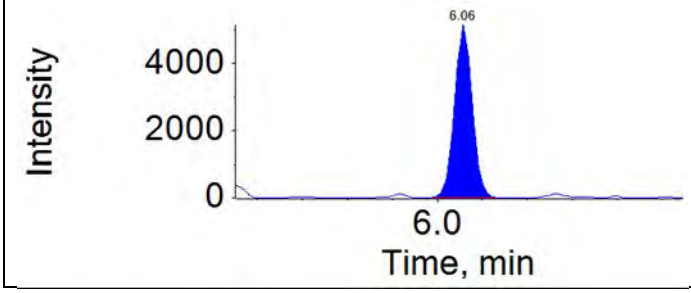
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

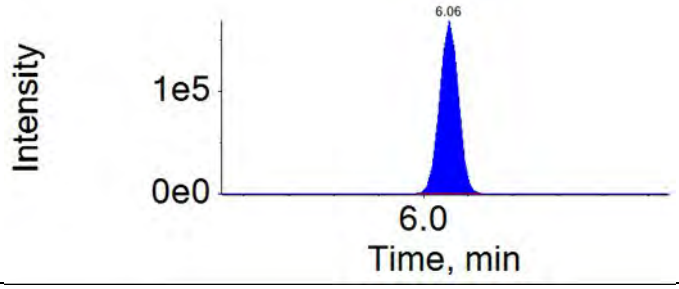
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



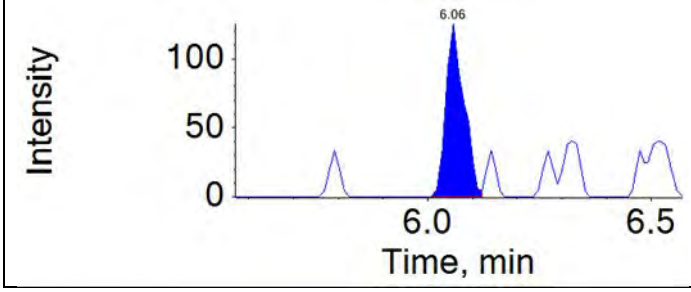


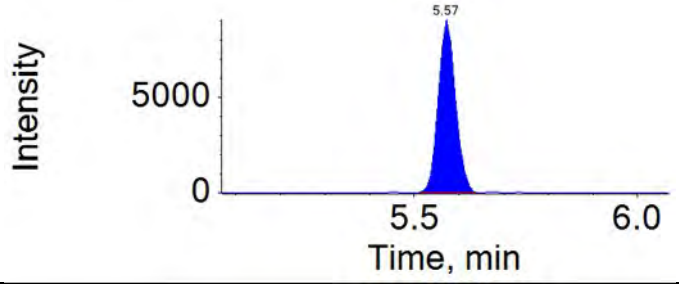
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



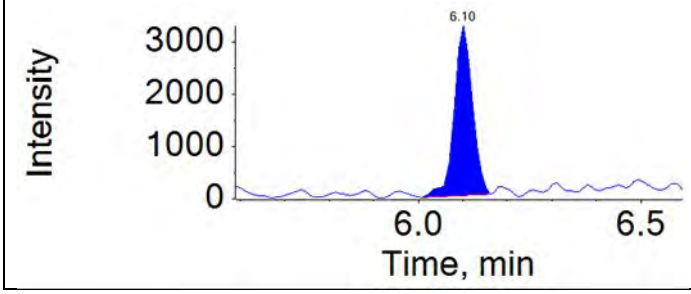


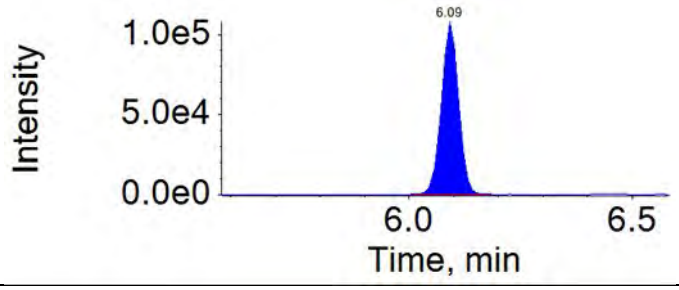
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



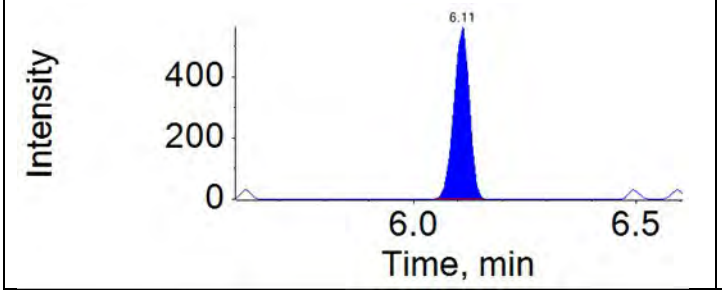


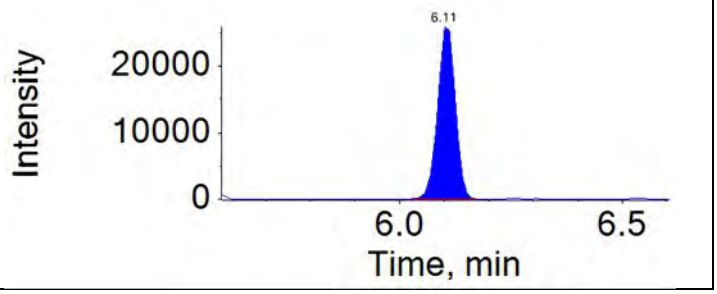
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

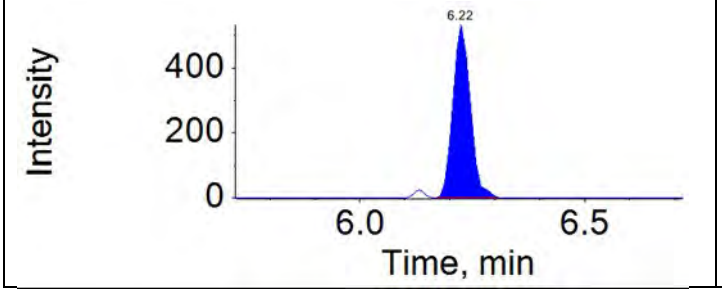
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

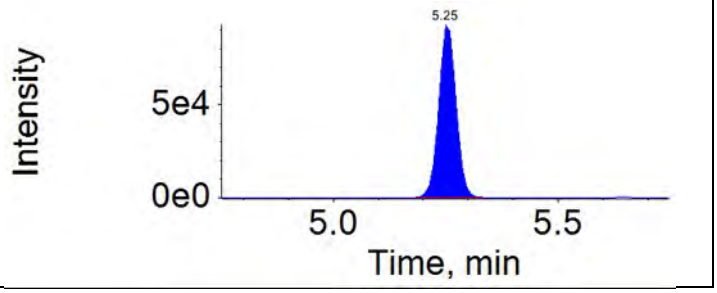
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



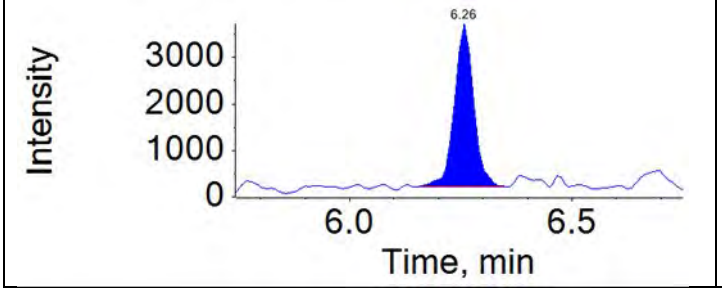


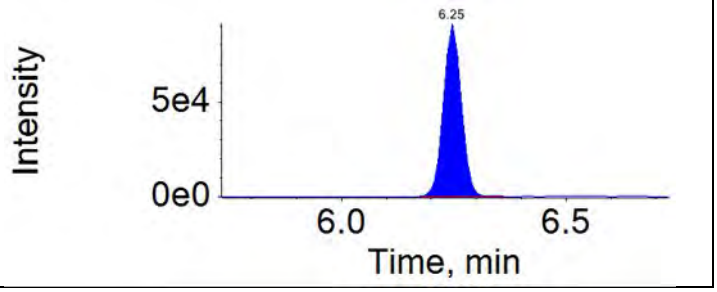
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



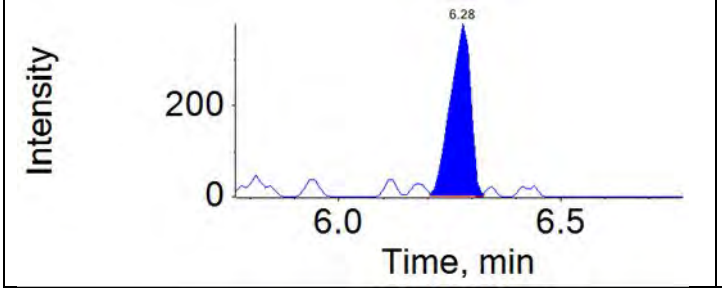


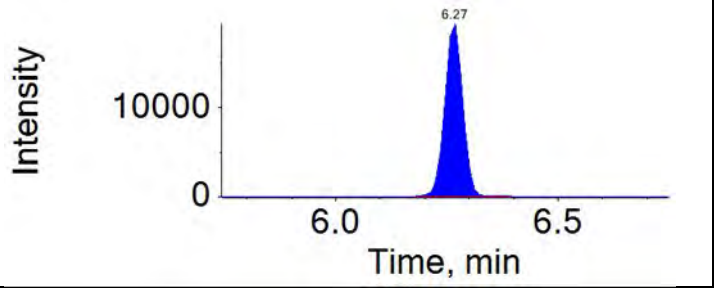
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

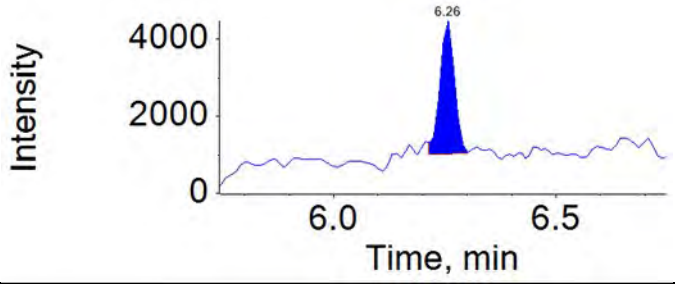
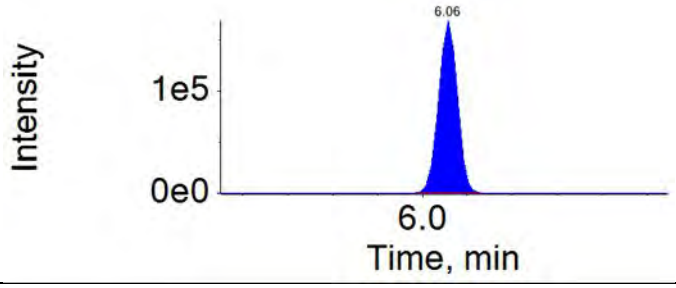


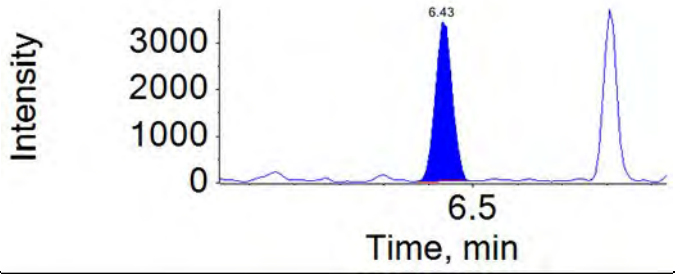
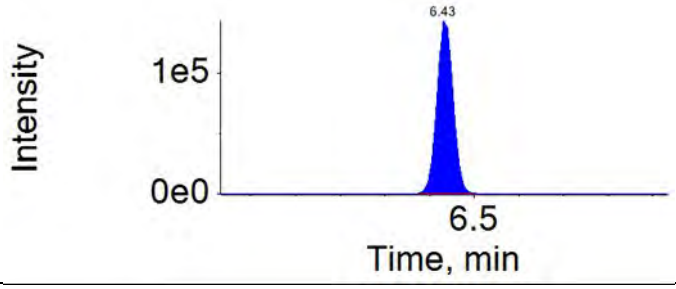


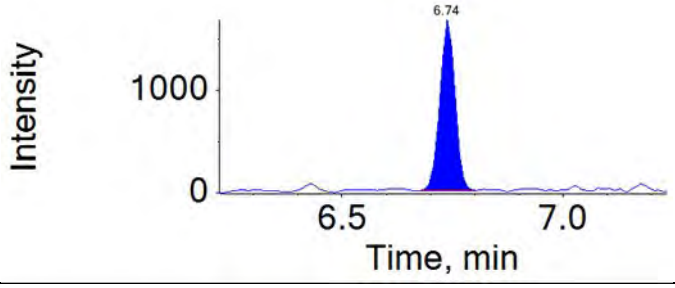
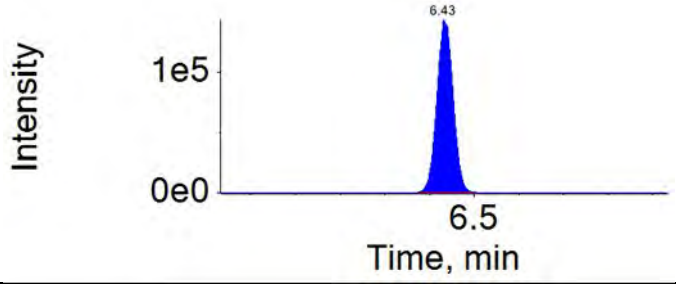
APPROVED
By MCD at 6:34 pm, 11/12/18

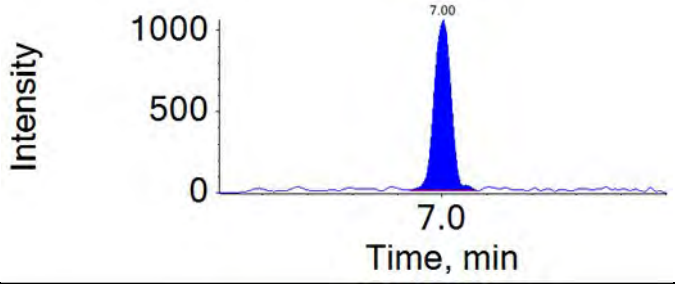
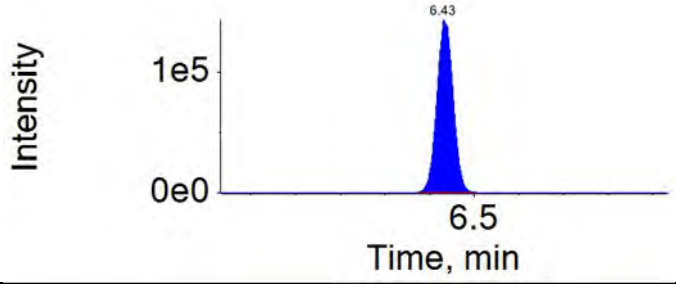
REVIEWED
By HMK at 10:54 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

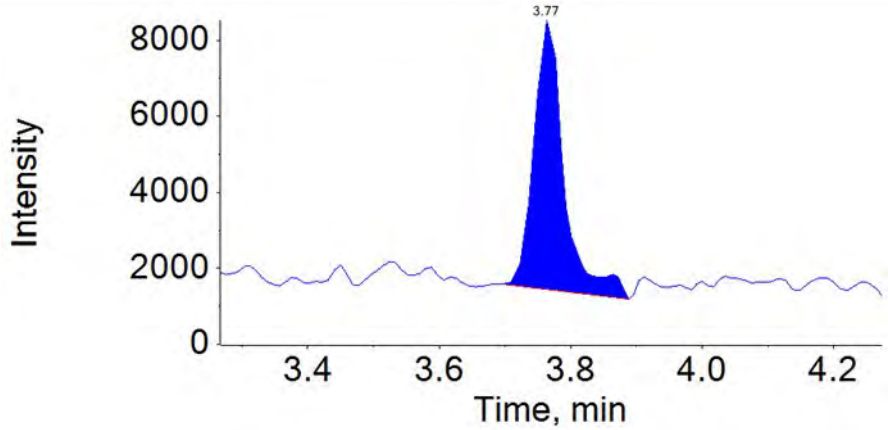
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

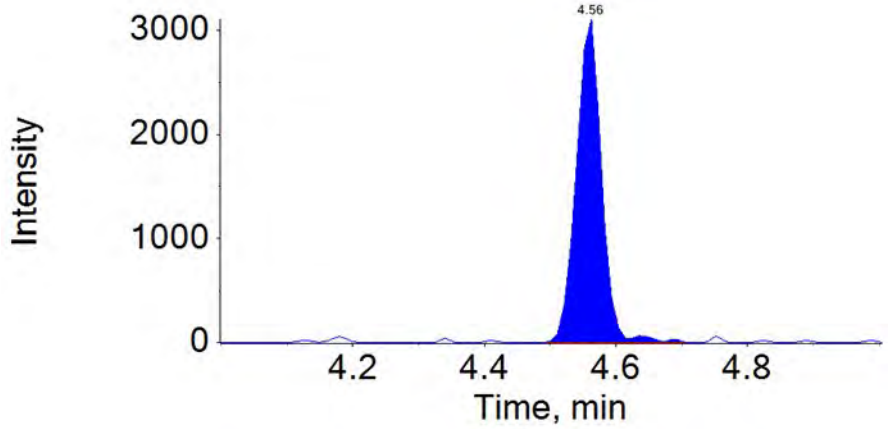
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFPeA
RT (min.):
3.77
Peak Area:
22570.74
Mass Range:
263.0 / 219.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



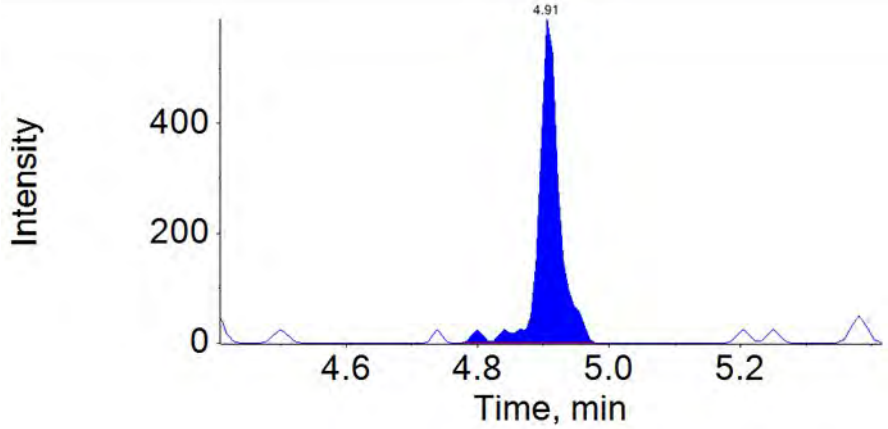
Integration Comment: incorrect integration

Component Name:
PFHxS
RT (min.):
4.56
Peak Area:
8305.21
Mass Range:
399.0 / 80.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



Integration Comment: incorrect integration

Component Name:
6:2-FTS
RT (min.):
4.91
Peak Area:
1264.35
Mass Range:
427.0 / 407.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



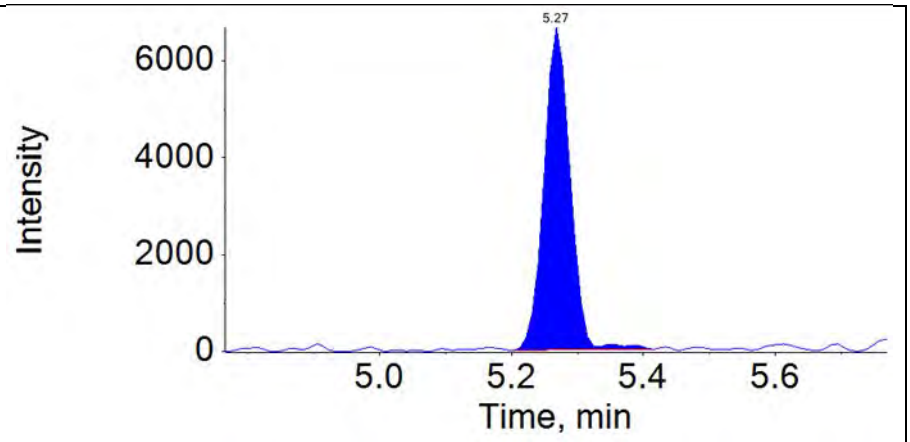
Integration Comment: incorrect integration

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

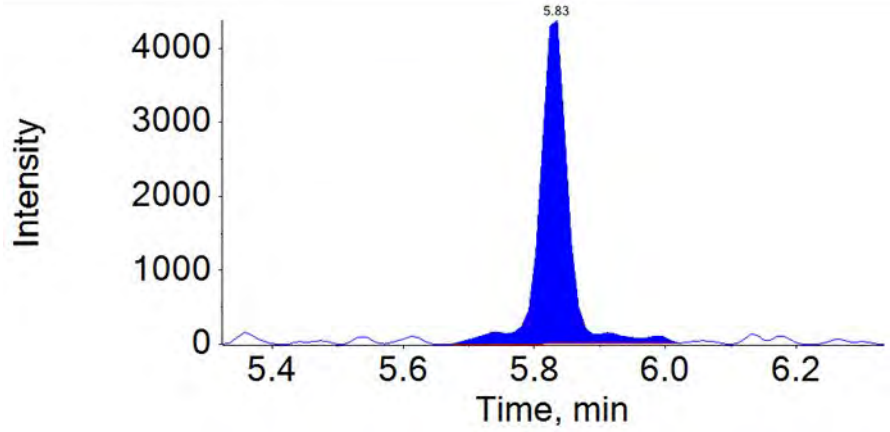
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFNA
RT (min.):
5.27
Peak Area:
18397.36
Mass Range:
463.0 / 419.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



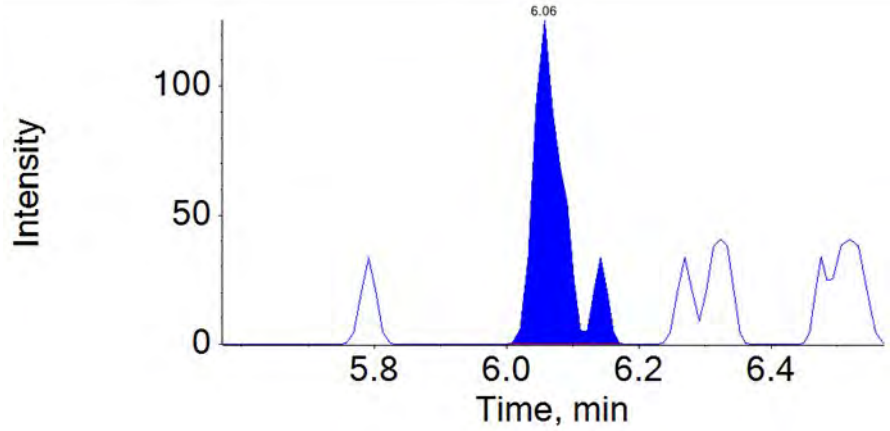
Integration Comment: incorrect integration

Component Name:
PFUnDA
RT (min.):
5.83
Peak Area:
13277.76
Mass Range:
563.0 / 519.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



Integration Comment: incorrect integration

Component Name:
10:2-FTS
RT (min.):
6.06
Peak Area:
401.71
Mass Range:
627.0 / 607.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



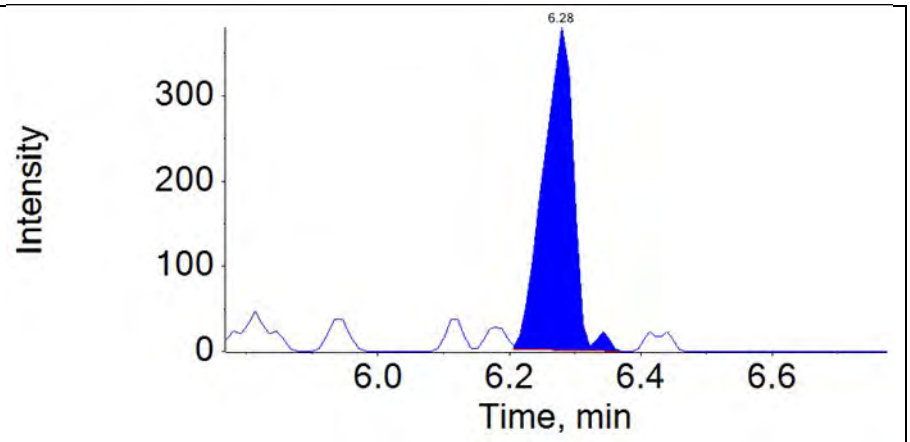
Integration Comment: incorrect integration

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

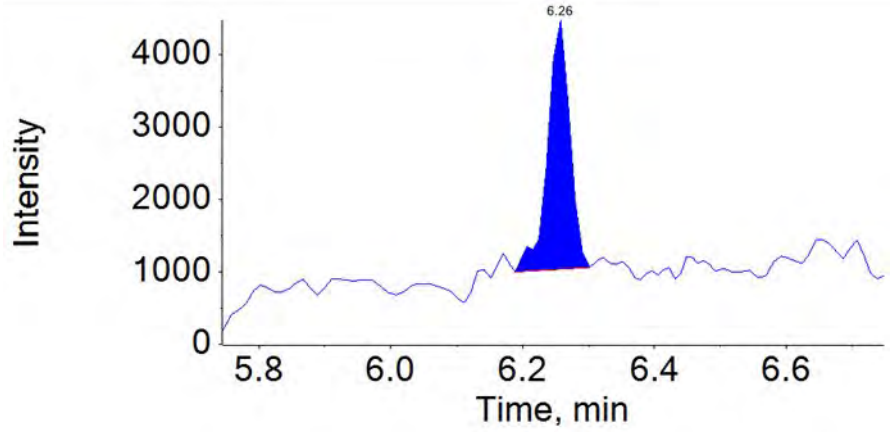
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NEtPFOSA
RT (min.):
6.28
Peak Area:
1221.08
Mass Range:
526.0 / 169.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



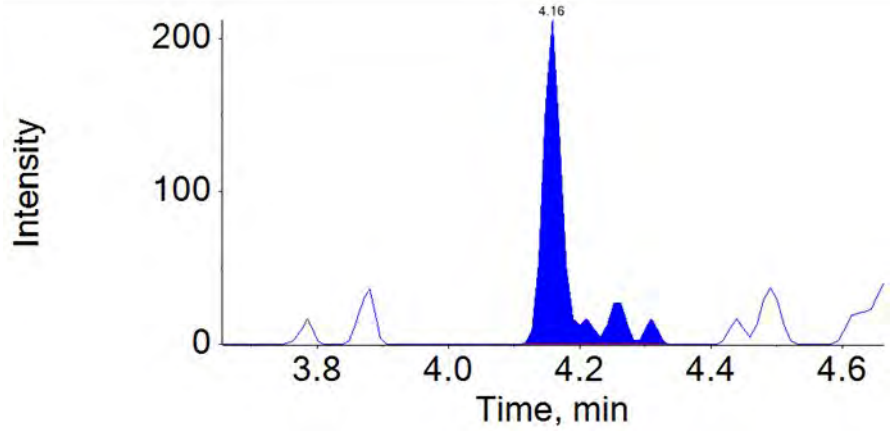
Integration Comment: incorrect integration

Component Name:
PFTrDA
RT (min.):
6.26
Peak Area:
8070.84
Mass Range:
663.0 / 619.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



Integration Comment: incorrect integration

Component Name:
PFHxA_2
RT (min.):
4.16
Peak Area:
496.72
Mass Range:
313.0 / 119.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



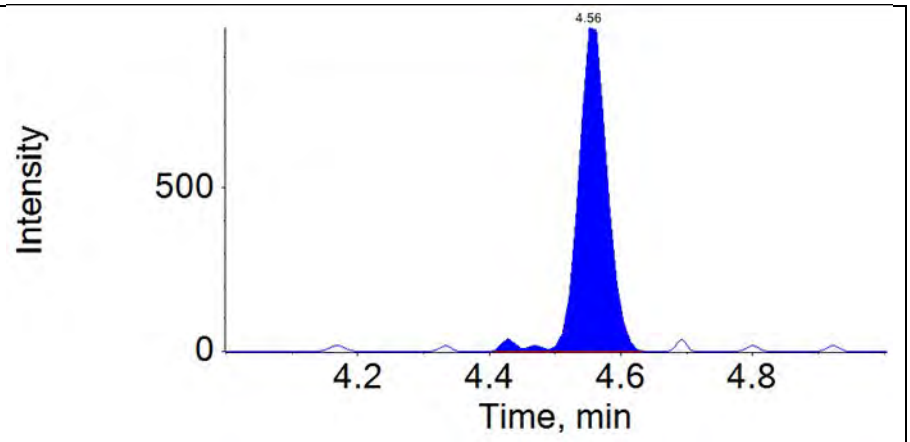
Integration Comment: incorrect integration

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

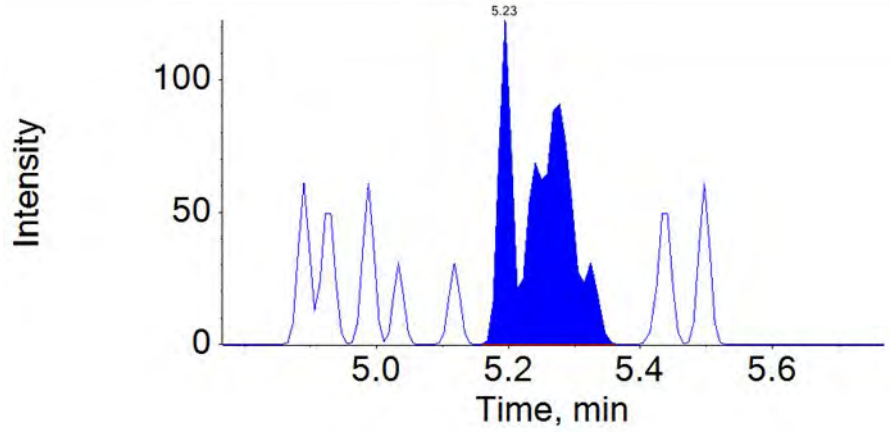
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS_2
RT (min.):
4.56
Peak Area:
3074.31
Mass Range:
399.0 / 99.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



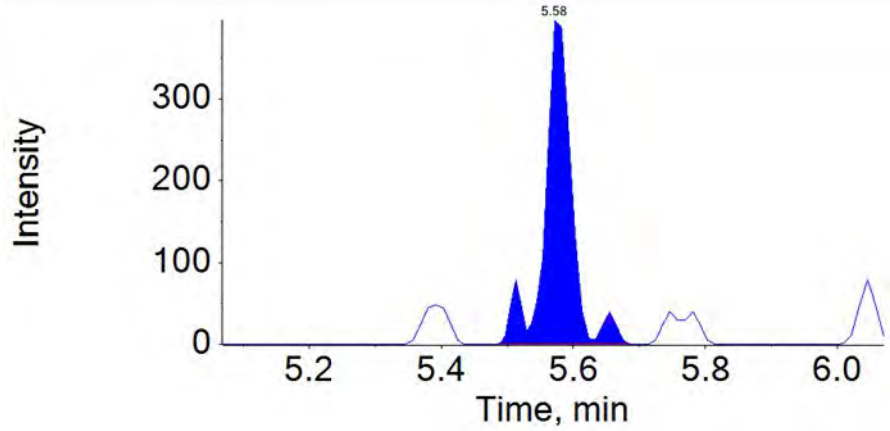
Integration Comment: incorrect integration

Component Name:
PFNA_2
RT (min.):
5.23
Peak Area:
553.54
Mass Range:
463.0 / 169.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



Integration Comment: incorrect integration

Component Name:
8:2 FTS_2
RT (min.):
5.58
Peak Area:
1126.66
Mass Range:
527.0 / 81.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



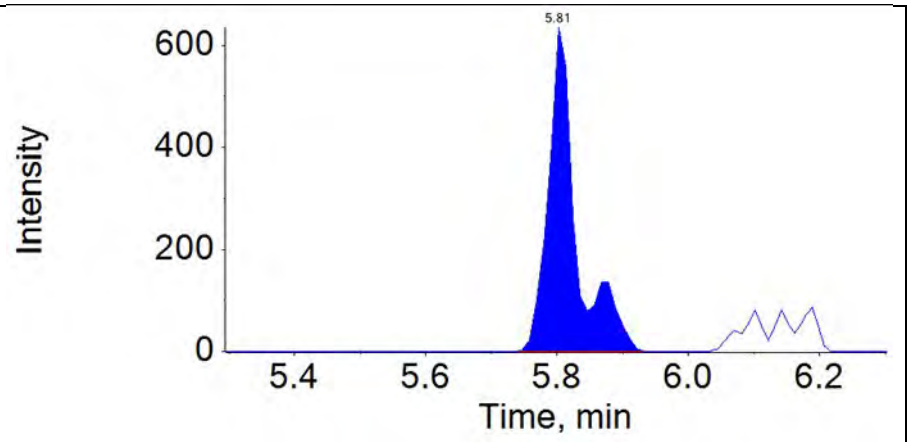
Integration Comment: incorrect integration

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

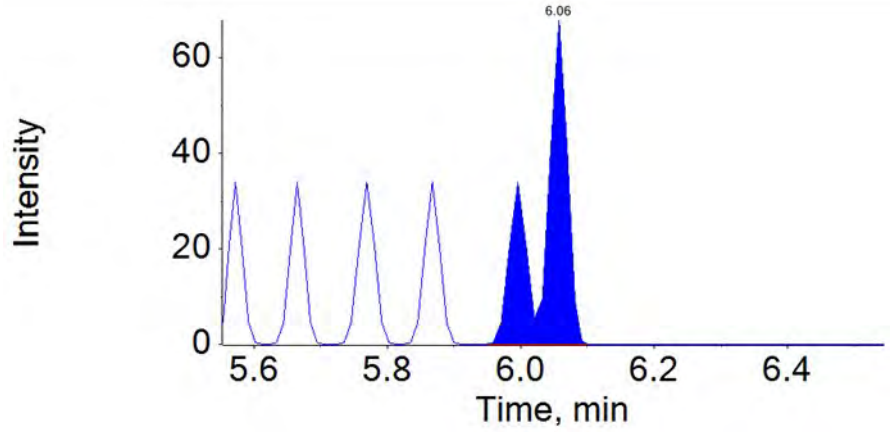
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFDS_2
RT (min.):
5.81
Peak Area:
1909.26
Mass Range:
599.0 / 99.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



Integration Comment: incorrect integration

Component Name:
PFDoDA_2
RT (min.):
6.06
Peak Area:
186.10
Mass Range:
613.0 / 169.0
File Name:
18NOV12DCAL-41.wiff
Sample Name:
MDL



Integration Comment: incorrect integration

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

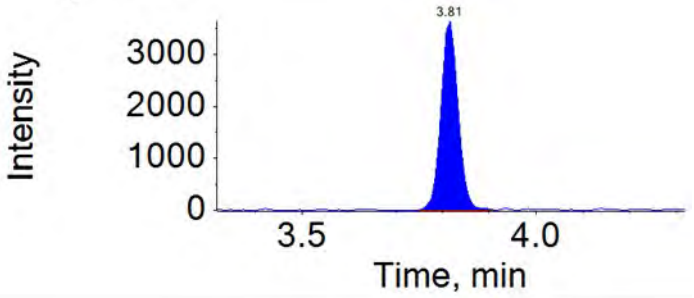
Sample Name: MDL **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-41.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	9248.27	A	0.3619	0.4009			
PFBS_2	3.81	1.00	3707.95	A	0.3619	0.4009	11	50	
4:2-FTS	4.13	1.00	1329.90	A	0.6730	1.1531			
4:2 FTS_2	4.14	1.00	1533.53	A	0.6730	1.1531		#NA!	
PFHxA	4.17	1.00	21601.58	A	0.0117	0.0185			
PFHxA_2	4.16	1.00	400.56	M	0.0117	0.0185	59	50	OOS
PFPeS	4.19	1.10	4484.75	A	0.5191	0.5939			
PFPeS_2	4.18	1.10	2663.62	A	0.5191	0.5939	14	50	
PFHpA	4.56	1.00	22043.51	A	0.0563	0.0598			
PFHpA_2	4.54	1.00	1317.81	A	0.0563	0.0598	6	50	
PFHxS	4.56	1.00	8143.51	M	0.3428	0.3665			
PFHxS_2	4.56	1.00	2984.60	M	0.3428	0.3665	7	50	
6:2-FTS	4.91	1.00	1176.17	M	0.6604	0.6555			
6:2 FTS_2	4.91	1.00	771.04	A	0.6604	0.6555		#NA!	
PFHpS	4.92	1.08	7117.47	A	0.4066	0.3729			
PFHpS_2	4.92	1.08	2653.97	A	0.4066	0.3729	-8	50	
PFOA	4.93	1.00	18045.03	A	0.0562	0.0847			
PFOA_2	4.92	1.00	1528.65	A	0.0562	0.0847	51	50	OOS
PFOS	5.25	1.00	6416.89	A	0.2968	0.3439			
PFOS_2	5.25	1.00	2206.80	A	0.2968	0.3439	16	50	
PFNA	5.27	1.00	18065.11	M	0.0229	0.0217			
PFNA_2	5.27	1.00	391.14	M	0.0229	0.0217	-5	50	
PFNS	5.54	1.06	3661.22	A	0.4828	0.5154			
PFNS_2	5.55	1.06	1886.87	A	0.4828	0.5154	7	50	
PFDA	5.57	1.00	17350.54	A	0.0081	0.0034			
PFDA_2	5.58	1.00	58.57	A	0.0081	0.0034	-58	50	OOS
8:2-FTS	5.57	1.00	1475.16	A	0.6814	0.6626			
8:2 FTS_2	5.58	1.00	977.44	M	0.6814	0.6626		#NA!	
NMeFOSAA	5.72	1.00	1372.38	A	0.2569	0.3580			
NMeFOSAA_2	5.70	1.00	491.32	A	0.2569	0.3580	39	50	
PFDS	5.80	1.10	2648.79	A	0.5144	0.5845			
PFDS_2	5.81	1.10	1548.24	M	0.5144	0.5845	14	50	
PFUnDA	5.83	1.00	12215.29	M	0.0058	0.0269			
PFUnDA_2	5.82	1.00	328.37	A	0.0058	0.0269	362	50	OOS
NEtFOSAA	5.84	1.00	1937.77	A	0.7253	0.5676			
NEtFOSAA_2	5.85	1.00	1099.93	A	0.7253	0.5676	-22	50	
PFDoDA	6.06	1.00	14033.14	A	0.0157	0.0089			
PFDoDA_2	6.06	1.00	124.75	M	0.0157	0.0089	-43	50	
10:2-FTS	6.06	1.09	352.60	M	0.6356	0.9381			
10:2 FTS_2	6.08	1.09	330.78	A	0.6356	0.9381		#NA!	
PFTrDA	6.26	1.03	7825.51	M	0.0086	0.0105			
PFTrDA_2	6.26	1.03	82.38	A	0.0086	0.0105	23	50	
PFTeDA	6.43	1.00	8938.53	A	0.0062	0.0089			
PFTeDA_2	6.43	1.00	79.25	A	0.0062	0.0089	42	50	
PFHxDA	6.74	1.05	3934.22	A	0.0683	0.0745			
PFHxDA_2	6.74	1.05	292.96	A	0.0683	0.0745	9	50	
PFODA	7.00	1.09	2726.36	A	0.0277	0.0224			
PFODA_2	6.99	1.09	61.09	A	0.0277	0.0224	-19	50	

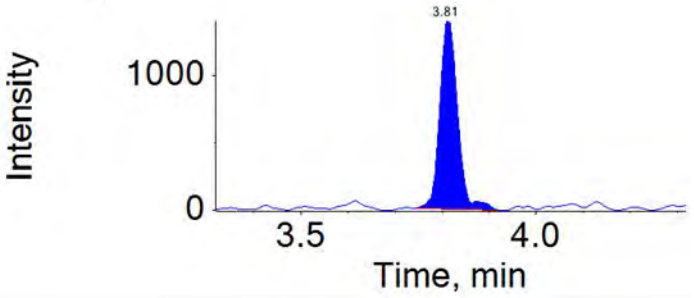
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

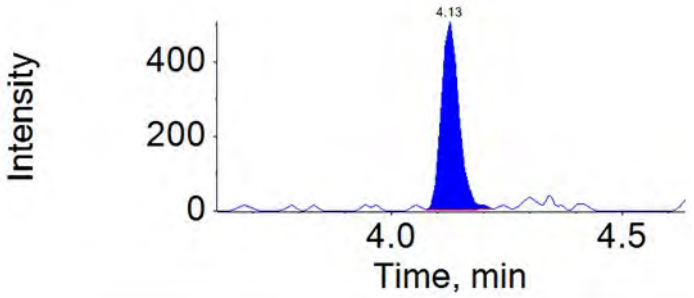
Component: PFBS
Primary Mass: 299.0 / 80.0



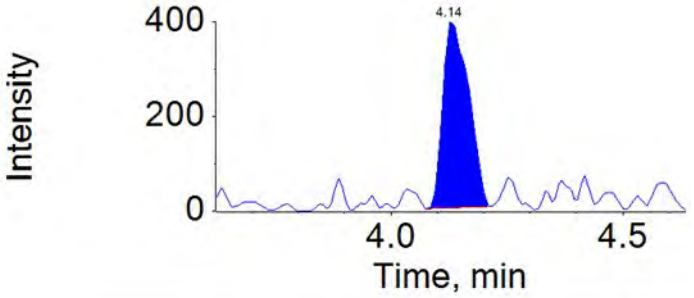
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



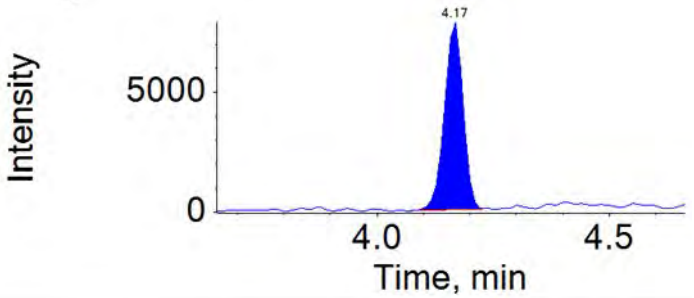
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



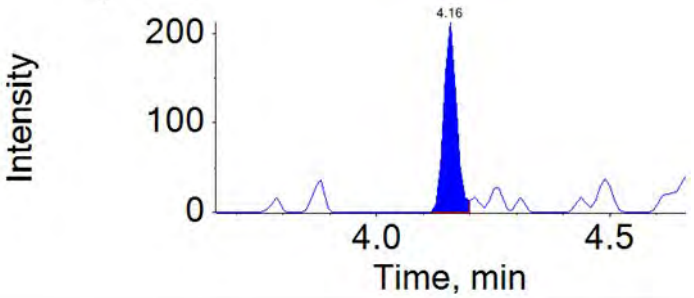
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



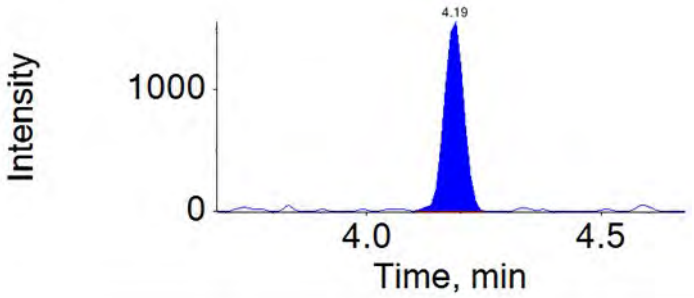
Component: PFHxA
Primary Mass: 313.0 / 269.0



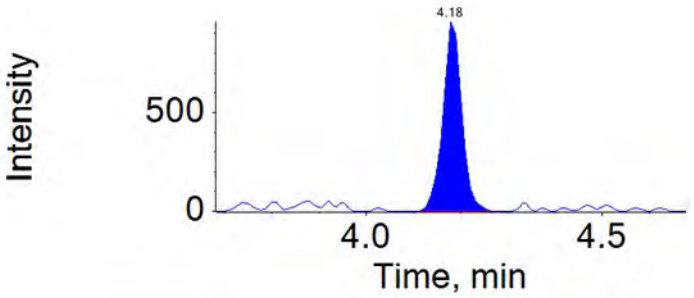
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



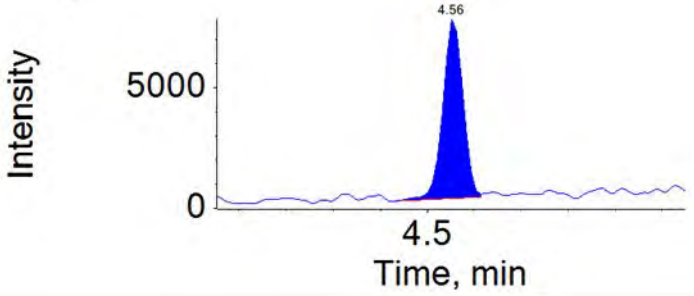
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



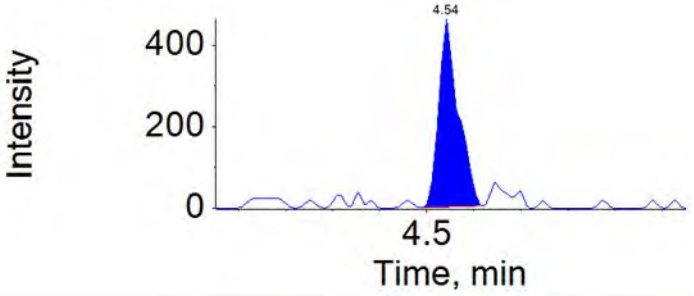
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

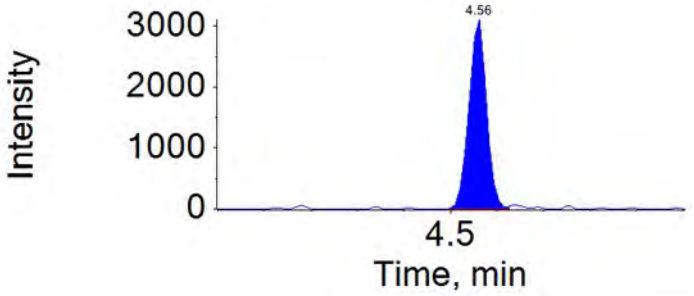
Component: PFHpA
Primary Mass: 363.0 / 319.0



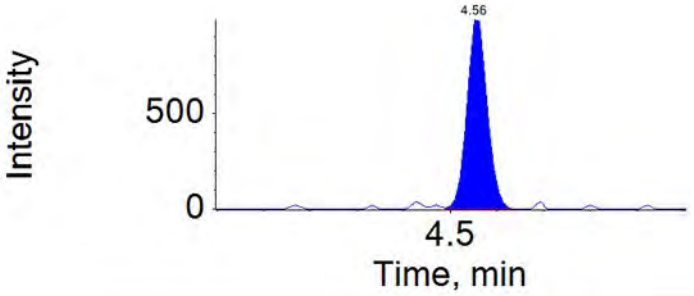
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



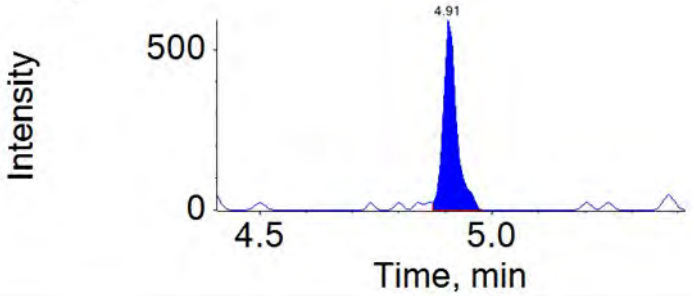
Component: PFHxS
Primary Mass: 399.0 / 80.0



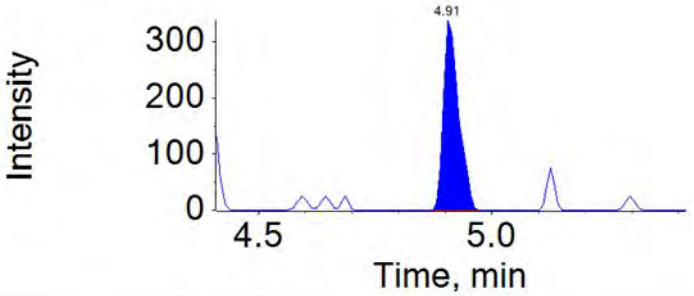
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



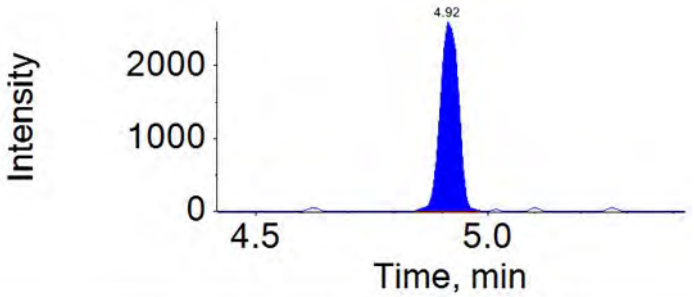
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



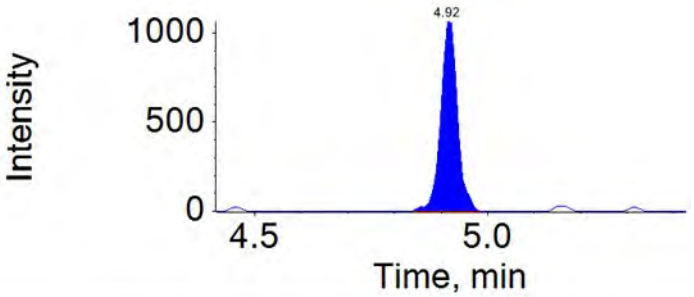
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



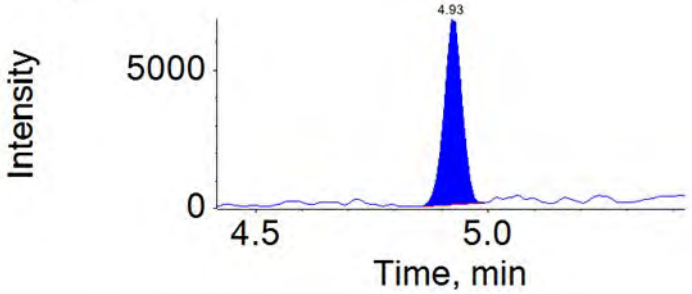
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



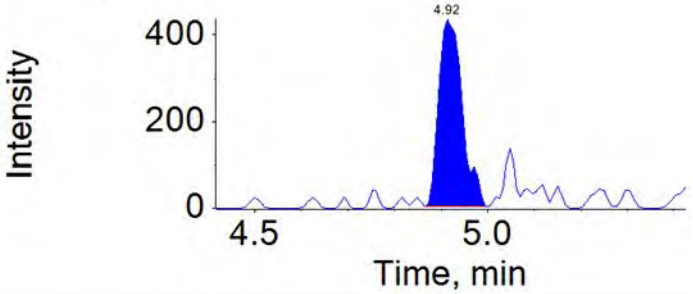
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

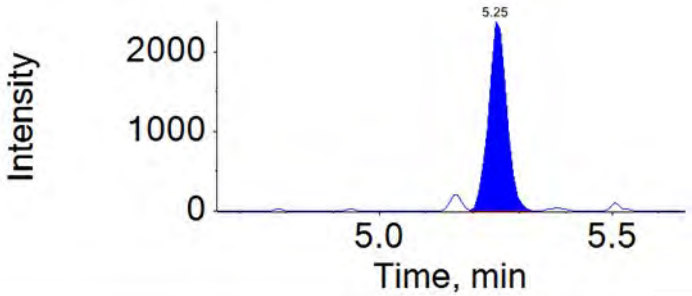
Component: PFOA
Primary Mass: 413.0 / 369.0



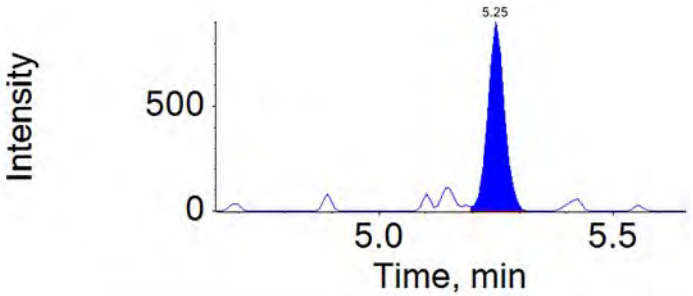
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



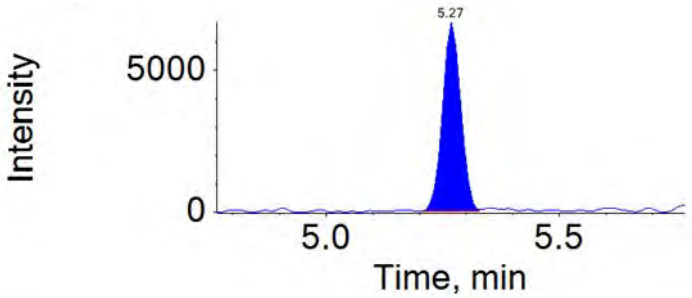
Component: PFOS
Primary Mass: 499.0 / 80.0



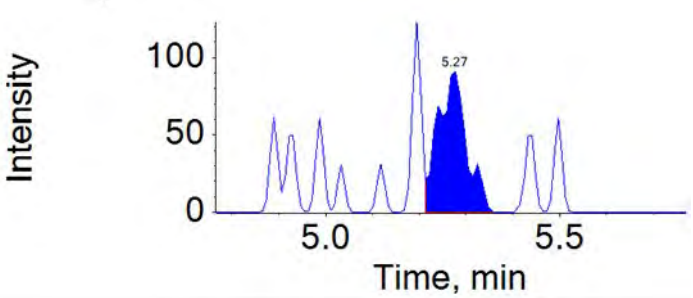
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



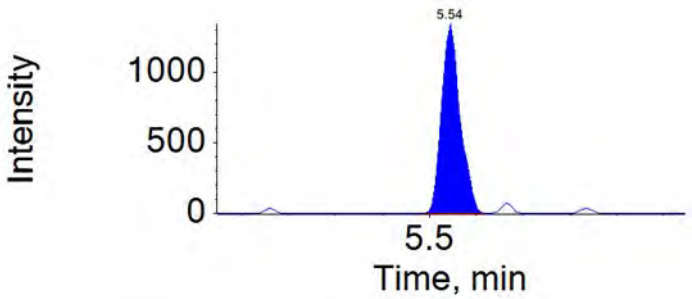
Component: PFNA
Primary Mass: 463.0 / 419.0



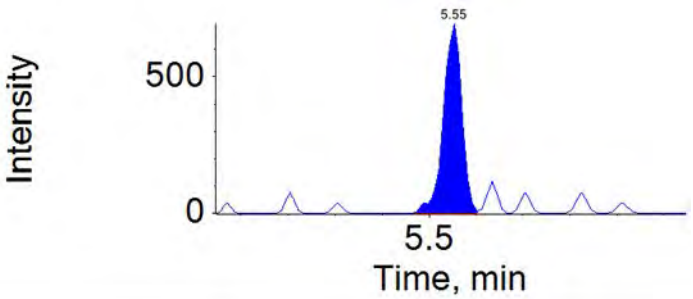
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



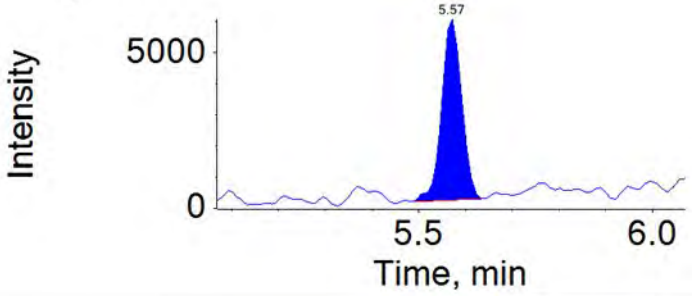
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



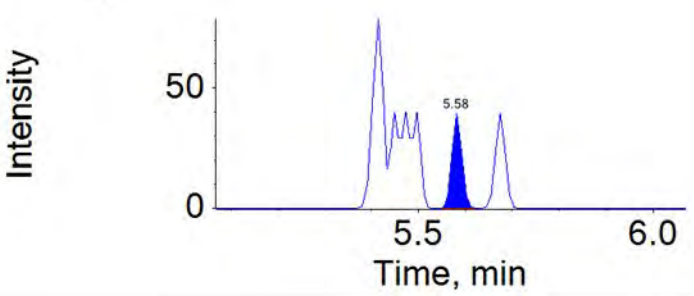
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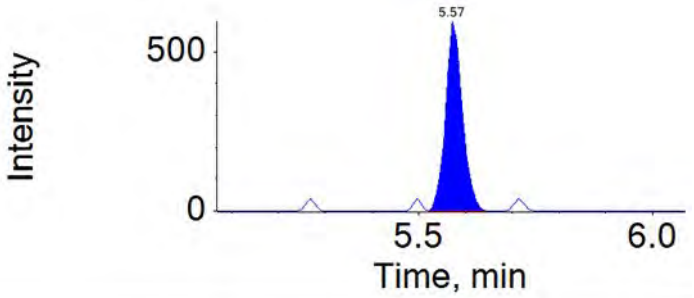
Component: PFDA
Primary Mass: 513.0 / 469.0



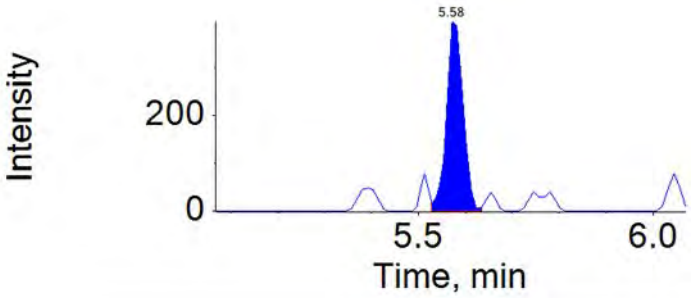
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



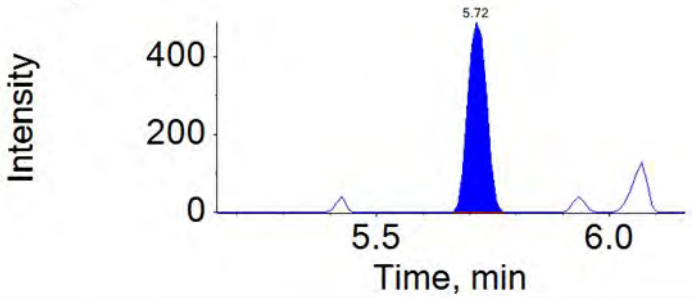
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



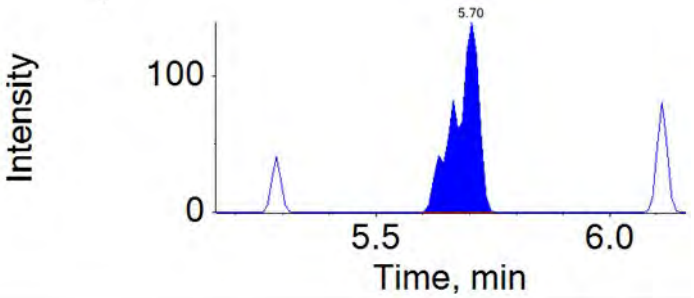
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



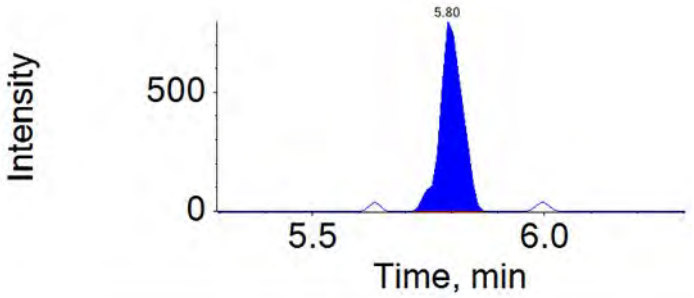
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



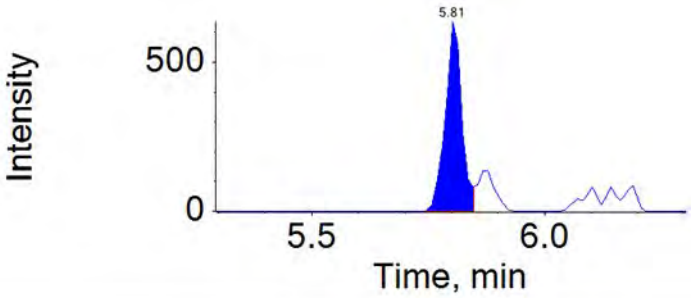
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



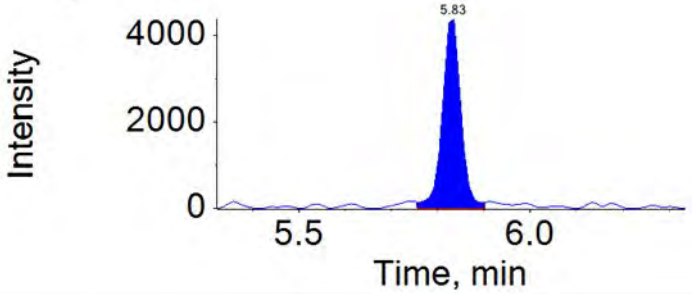
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



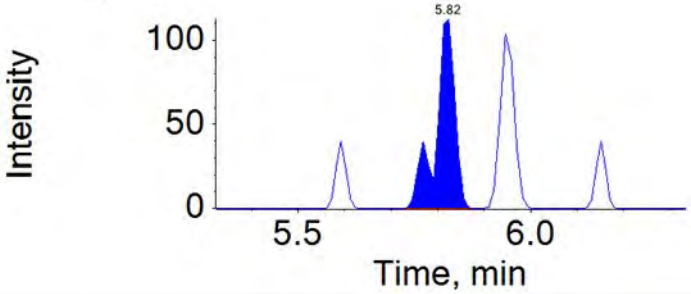
APPROVED
By MCD at 6:34 pm, 11/12/18

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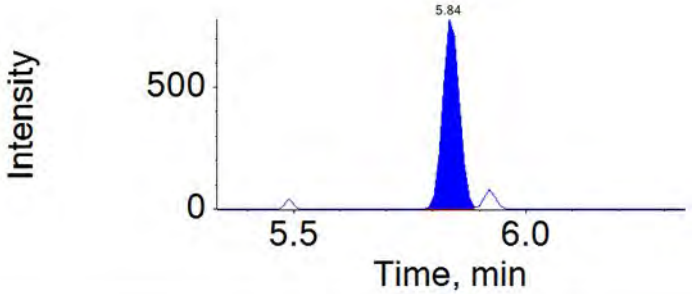
Component: PFUnDA
Primary Mass: 563.0 / 519.0



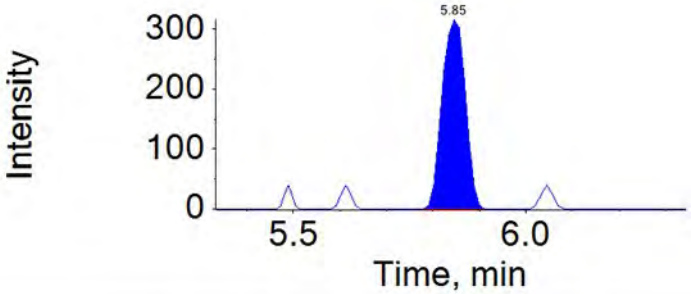
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Secondary Mass: 563.0 / 169.0



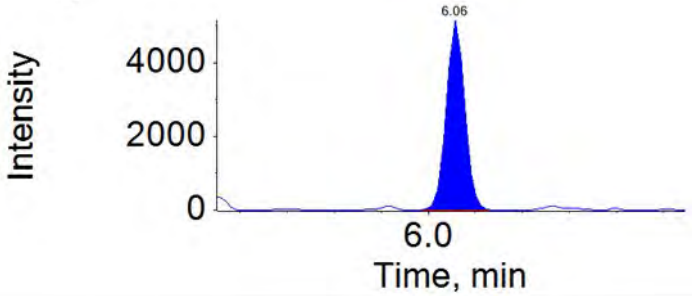
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



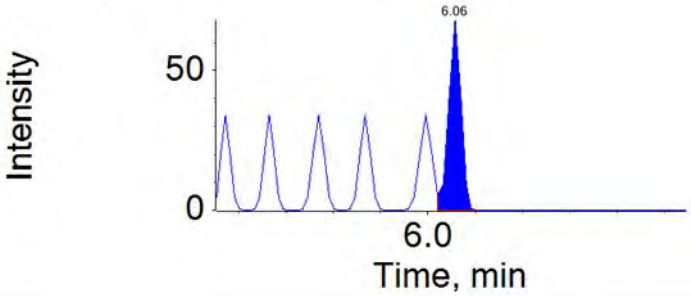
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



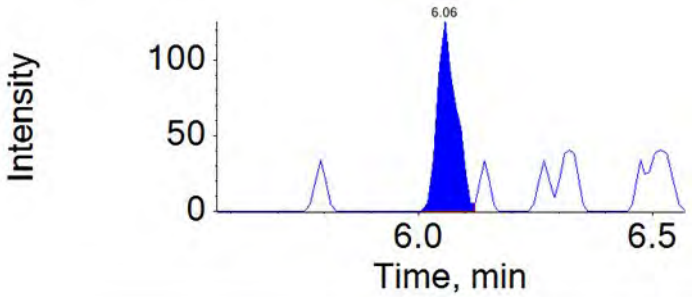
Component: PFDoDA
Primary Mass: 613.0 / 569.0



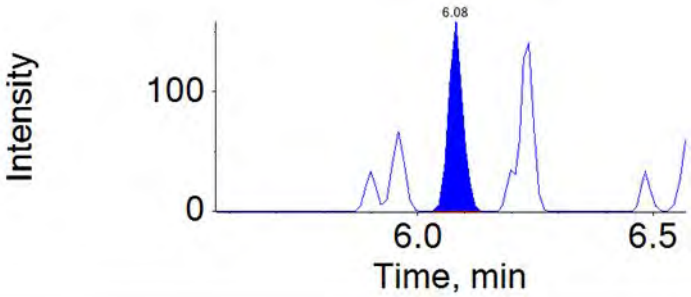
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



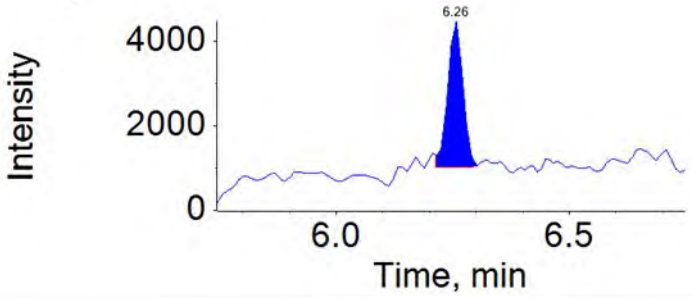
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



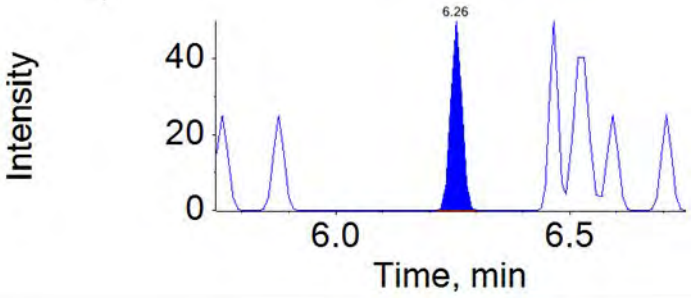
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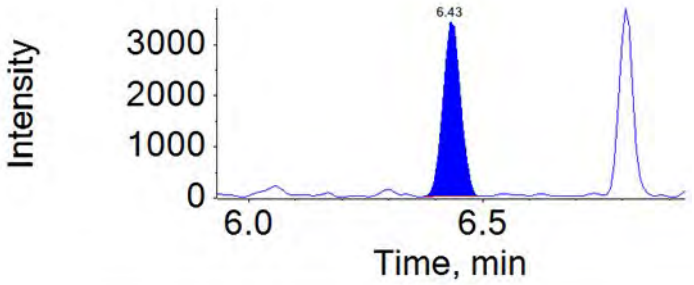
Component: PFTrDA
Primary Mass: 663.0 / 619.0



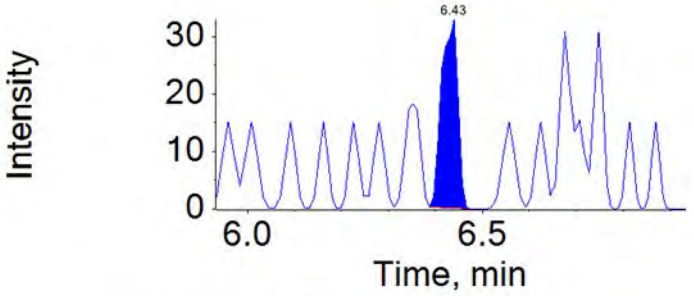
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



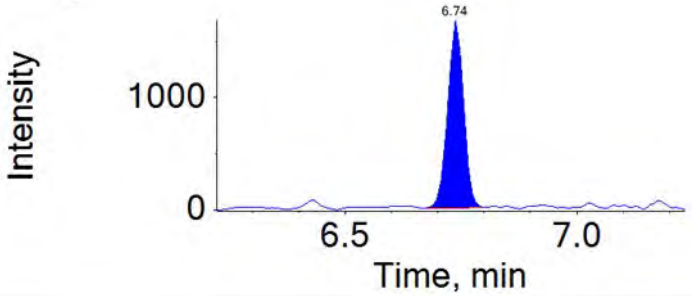
Component: PFTeDA
Primary Mass: 713.0 / 669.0



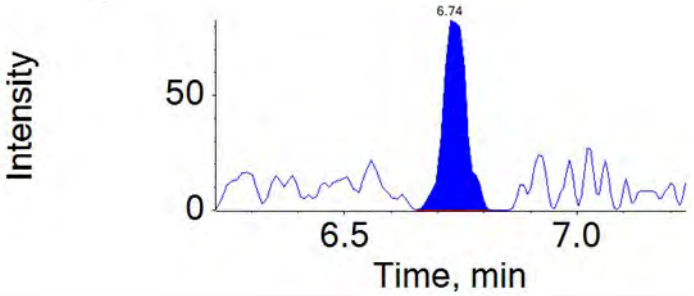
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



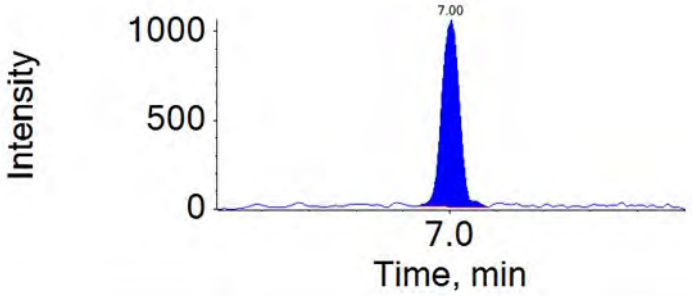
Component: PFHxDA
Primary Mass: 813.0 / 769.0



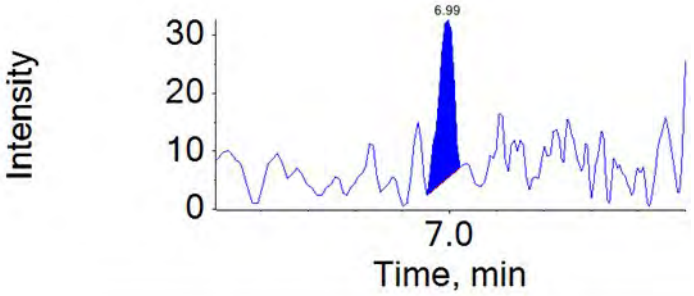
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:54 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	INBLK			**Data File:**		18NOV12DCAL-49.wiff
Sample ID:	methanol			**Acquis Date:**		11/12/2018 4:09:09 PM
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	1			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV12DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N\A			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	705408.6	659926.2	7	50	
13C2-PFOA	5.0	484266.1	450219.7	8	50	
13C4-PFOS	4.8	261290.0	249205.8	5	50	
13C2-PFDA	5.0	303665.7	278743.9	9	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	778730.1	13C3-PFBA	705408.6	1.104	5.000	4.949	99	70-130	
E13C5-PFPeA	758823.9	13C3-PFBA	705408.6	1.076	5.000	4.825	96	70-130	
E13C3-PFBS	456635.4	13C3-PFBA	705408.6	0.647	4.650	4.570	98	70-130	
E13C2-4:2-FTS	57620.0	13C2-PFOA	484266.1	0.119	4.670	5.299	113	70-130	
E13C5-PFHxA	665797.6	13C2-PFOA	484266.1	1.375	5.000	4.966	99	70-130	
E13C3-PFHxS	372925.2	13C2-PFOA	484266.1	0.770	4.730	5.284	112	70-130	
E13C4-PFHpA	547261.8	13C2-PFOA	484266.1	1.130	5.000	5.091	102	70-130	
E13C2-6:2-FTS	39087.0	13C2-PFOA	484266.1	0.081	4.750	5.400	114	70-130	
E13C8-PFOA	901909.5	13C2-PFOA	484266.1	1.862	5.000	5.131	103	70-130	
E13C8-PFOS	289703.0	13C4-PFOS	261290.0	1.109	4.780	4.913	103	70-130	
E13C9-PFNA	509013.2	13C4-PFOS	261290.0	1.948	5.000	5.432	109	70-130	
E13C6-PFDA	643925.8	13C2-PFDA	303665.7	2.121	5.000	4.948	99	70-130	
E13C2-8:2-FTS	27339.0	13C2-PFDA	303665.7	0.090	4.790	4.490	94	70-130	
E13C8-PFOSA	681332.9	13C2-PFDA	303665.7	2.244	5.000	4.974	99	70-130	
Ed3-NMeFOSAA	73694.3	13C2-PFDA	303665.7	0.243	5.000	4.381	88	70-130	
E13C7-PFUnDA	265353.1	13C2-PFDA	303665.7	0.874	5.000	5.073	101	70-130	
Ed5-NEtFOSAA	59646.1	13C2-PFDA	303665.7	0.196	5.000	4.156	83	70-130	
E13C2-PFDoDA	576780.7	13C2-PFDA	303665.7	1.899	5.000	4.932	99	70-130	
Ed7-NMePFOSAE	354624.2	13C2-PFDA	303665.7	1.168	5.000	5.054	101	70-130	
Ed3-NMePFOSA	79601.3	13C2-PFDA	303665.7	0.262	5.000	4.763	95	70-130	
Ed9-NEtPFOSAE	287722.3	13C2-PFDA	303665.7	0.947	5.000	4.928	99	70-130	
Ed5-NEtPFOSA	59772.3	13C2-PFDA	303665.7	0.197	5.000	4.617	92	70-130	
E13C2-PFTeDA	418729.7	13C2-PFDA	303665.7	1.379	5.000	4.841	97	70-130	

APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

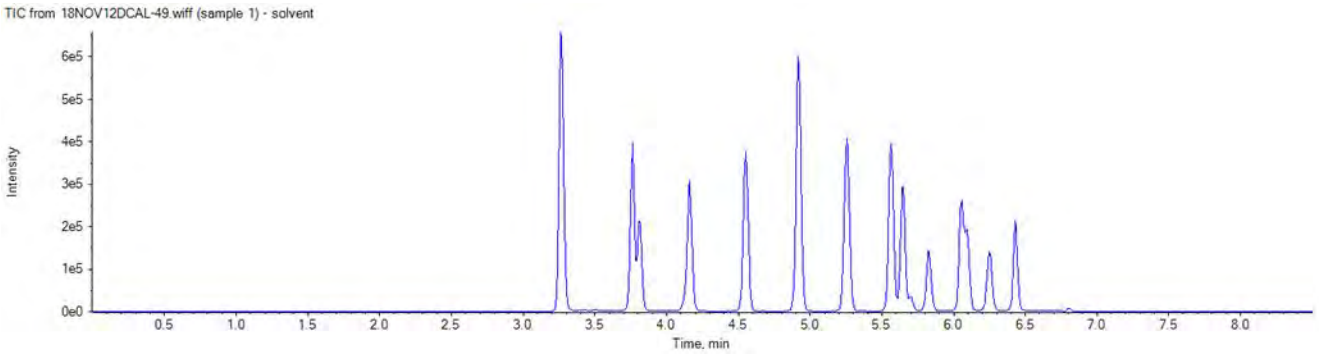
Analyte Quantitation Peak Table

Sample Name: INBLK **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-49.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	N/A	N/A	N/A		A	13C4-PFBA	3.26	778730.1	N/A	
PFPeA	N/A	N/A	N/A		A	13C5-PFPeA	3.76	758823.9	N/A	
PFBS	N/A	N/A	N/A		A	13C3-PFBS	3.81	456635.4	N/A	
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.13	57620.0	N/A	
PFHxA	N/A	N/A	N/A		A	13C5-PFHxA	4.16	665797.6	N/A	
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.81	456635.4	N/A	
PFHpA	N/A	N/A	N/A		A	13C4-PFHpA	4.55	547261.8	N/A	
PFHxS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	372925.2	N/A	
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.91	39087.0	N/A	
PFHpS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	372925.2	N/A	
PFOA	N/A	N/A	N/A		A	13C8-PFOA	4.92	901909.5	N/A	
PFOS	N/A	N/A	N/A		A	13C8-PFOS	5.25	289703.0	N/A	
PFNA	N/A	N/A	N/A		A	13C9-PFNA	5.26	509013.2	N/A	
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.25	289703.0	N/A	
PFDA	N/A	N/A	N/A		A	13C6-PFDA	5.56	643925.8	N/A	
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.57	27339.0	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.65	681332.9	N/A	
NMeFOSAA	N/A	N/A	N/A		A	d3-NMeFOSAA	5.70	73694.3	N/A	
PFDS	N/A	N/A	N/A		A	13C8-PFOS	5.25	289703.0	N/A	
PFUnDA	N/A	N/A	N/A		A	13C7-PFUnDA	5.83	265353.1	N/A	
NEtFOSAA	N/A	N/A	N/A		A	d5-NEtFOSAA	5.84	59646.1	N/A	
PFDoDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	576780.7	N/A	
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.57	27339.0	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.09	354624.2	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.10	79601.3	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.25	289703.0	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.25	287722.3	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.26	59772.3	N/A	
PFTrDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	576780.7	N/A	
PFTeDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	418729.7	N/A	
PFHxDA	6.73	1.050	2221.7		A	13C2-PFTeDA	6.43	418729.7	0.005	0.063
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	418729.7	N/A	

Total Ion Chromatogram

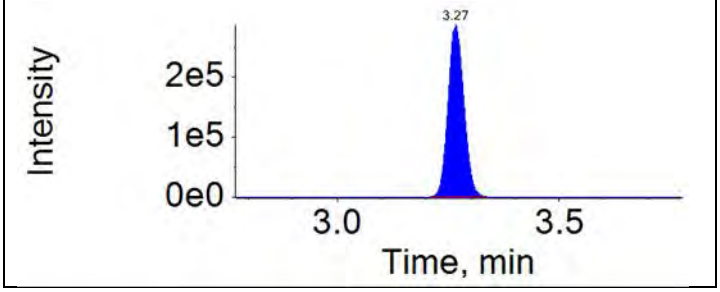


APPROVED
By JPT at 8:42 am, 11/20/18

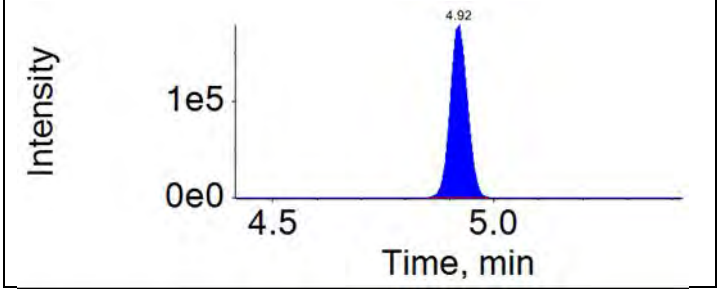
REVIEWED
By HMK at 8:47 am, 11/20/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

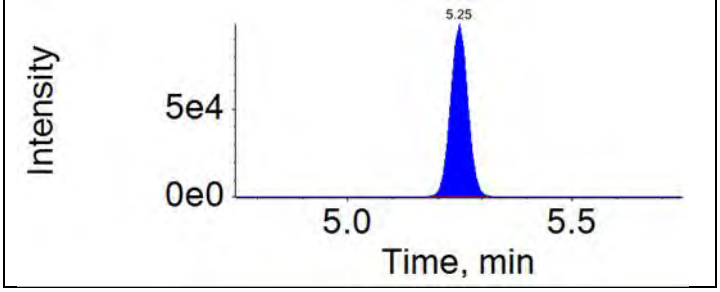
Injection Standard: 13C3-PFBA
216.0 / 172.0



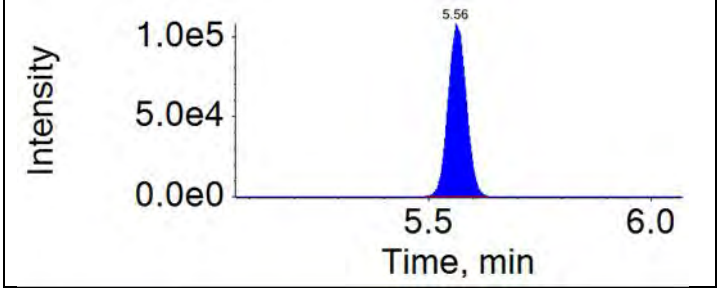
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

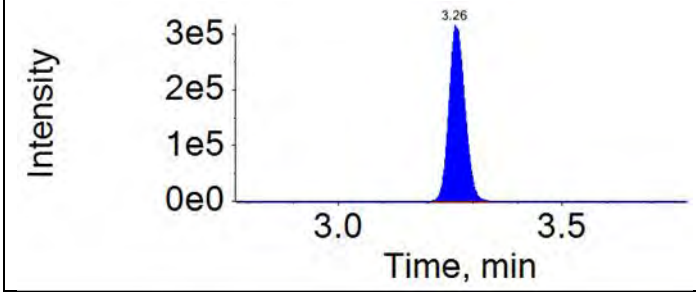


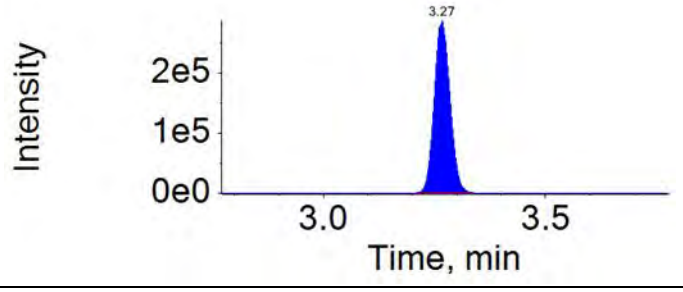
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

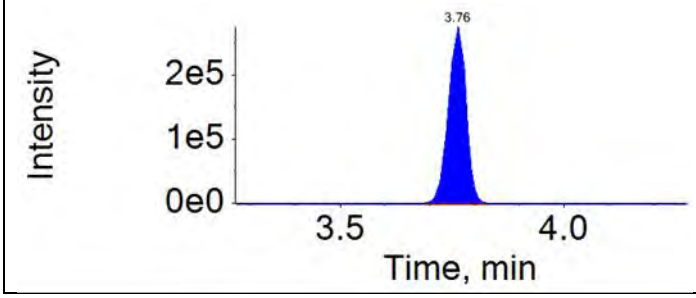
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

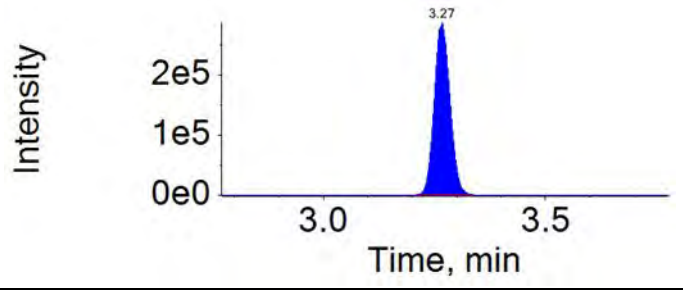
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



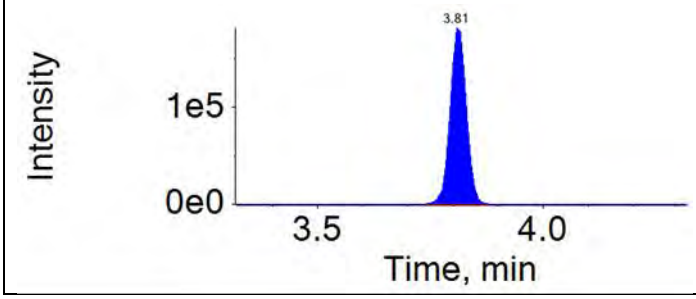


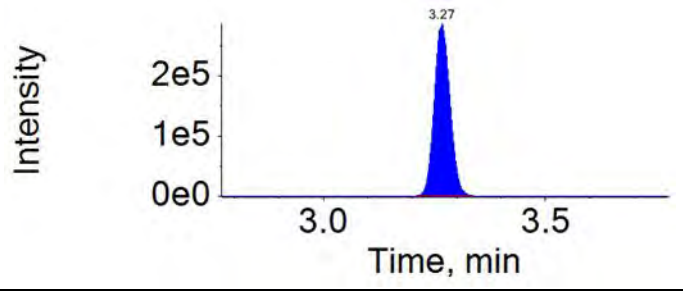
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



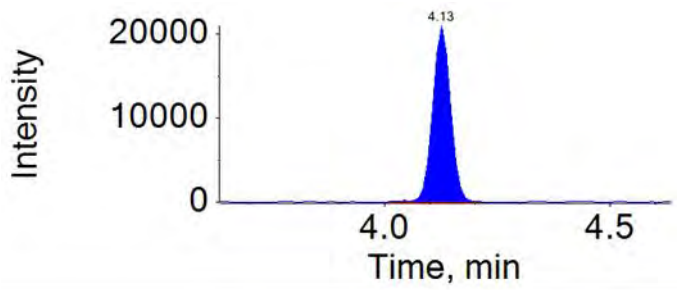


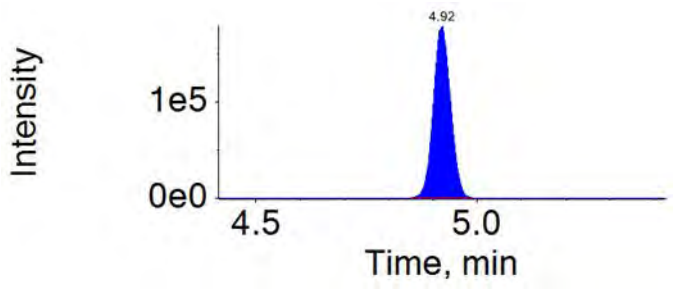
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



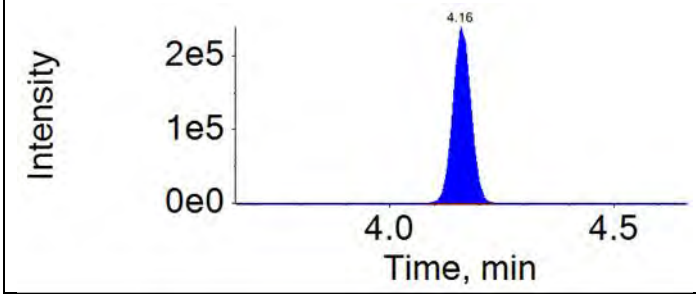


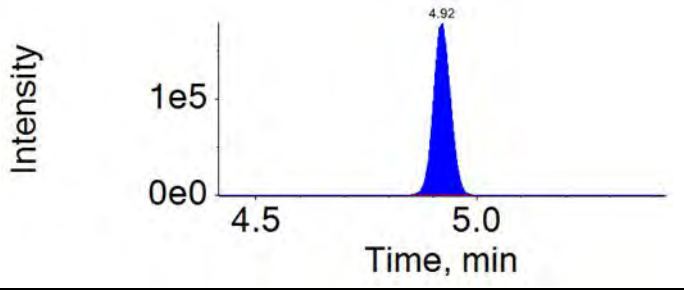
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

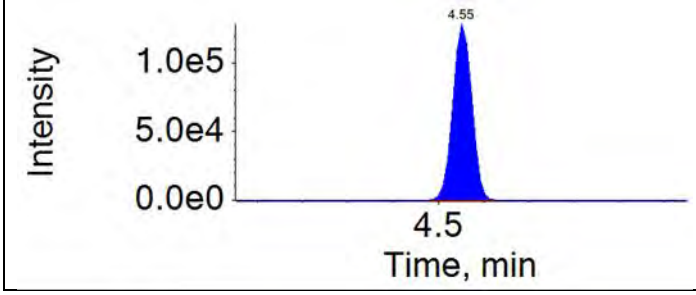
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

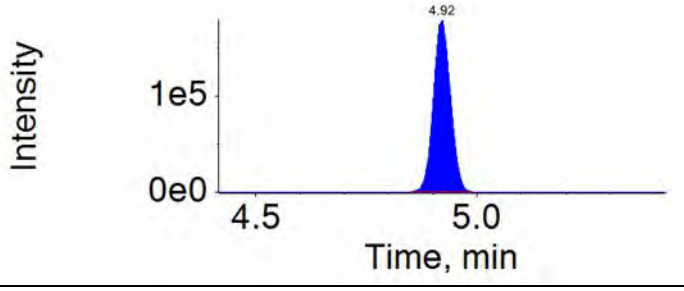
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



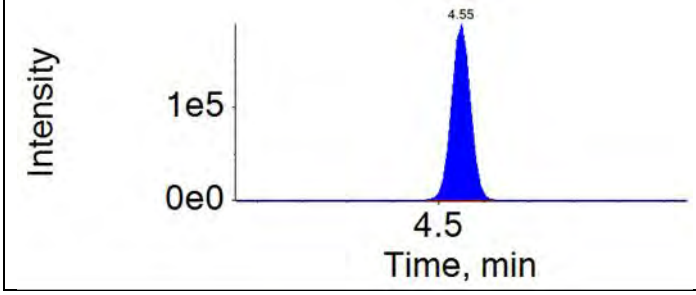


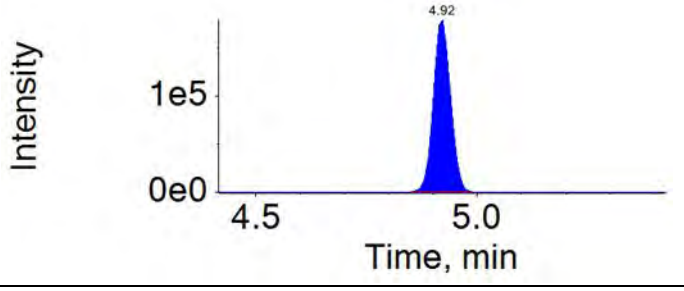
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



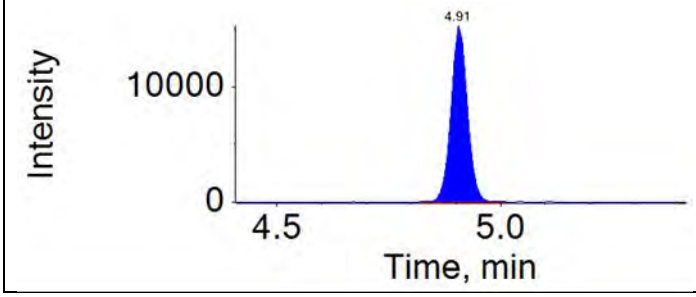


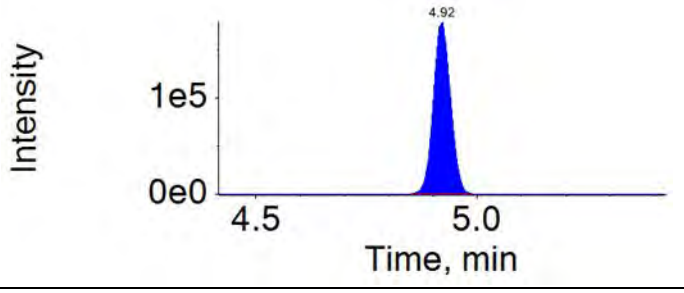
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

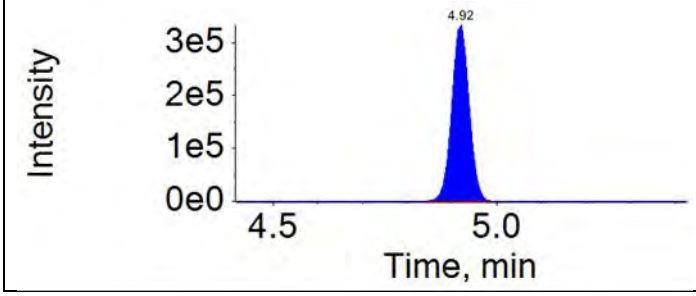
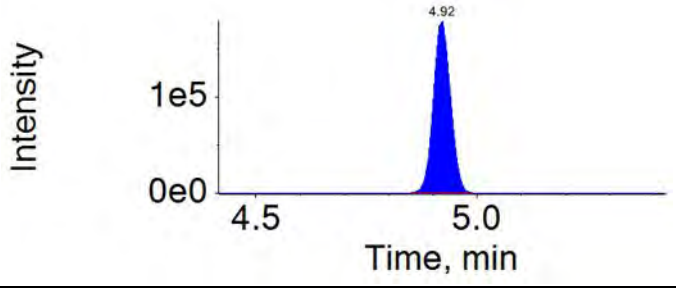


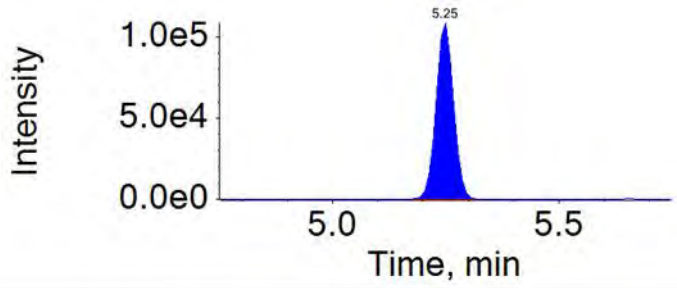
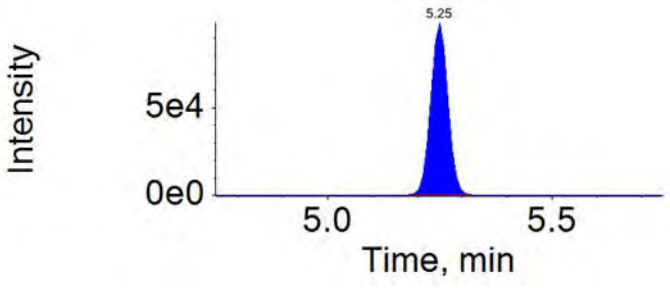


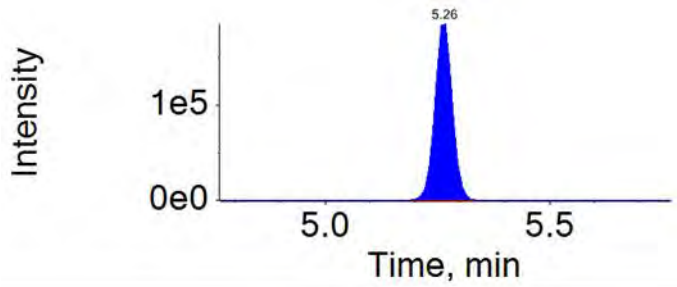
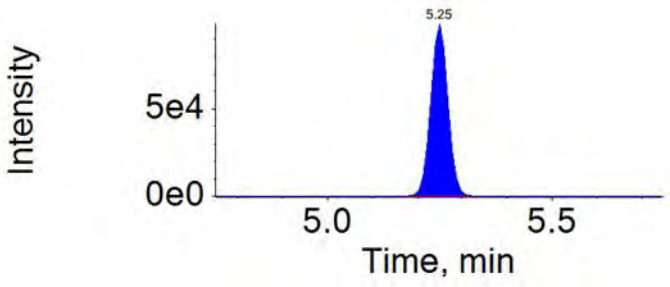
APPROVED
By JPT at 8:42 am, 11/20/18

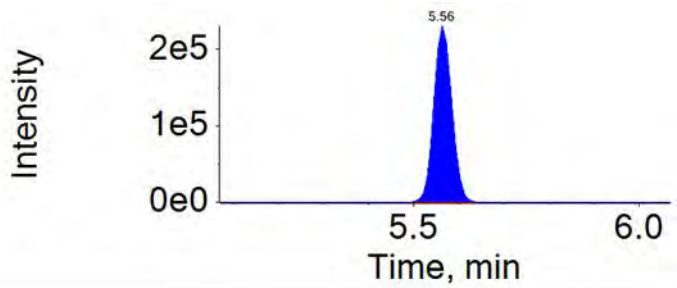
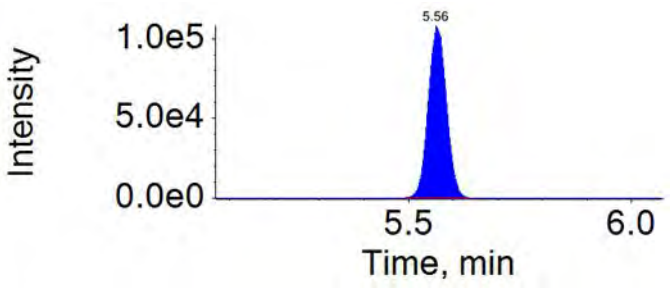
REVIEWED
By HMK at 8:47 am, 11/20/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

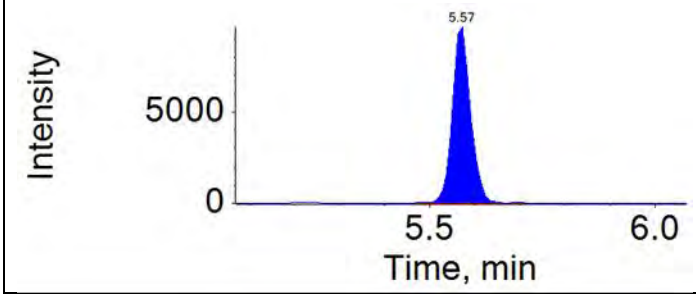
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

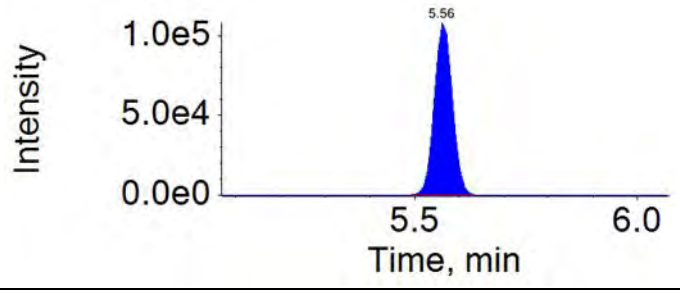
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

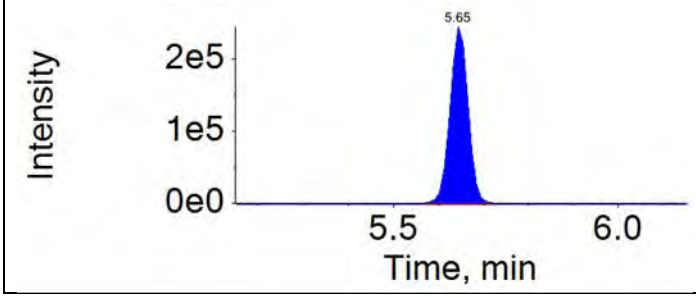
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

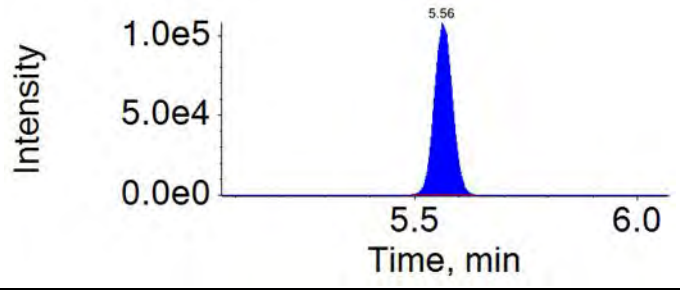
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



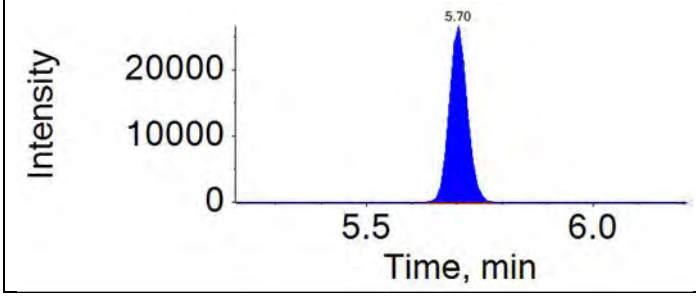


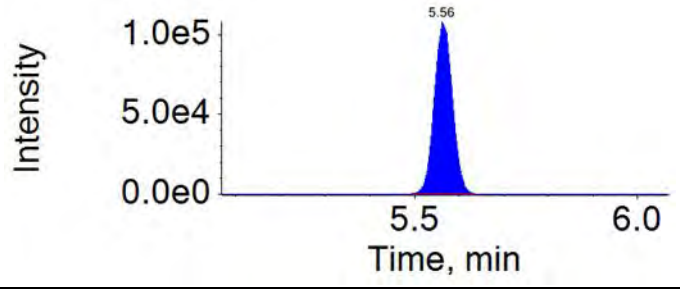
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



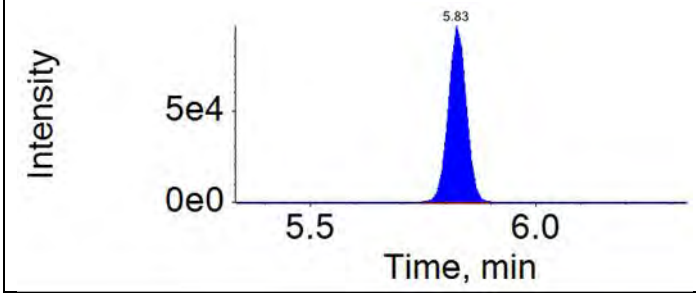


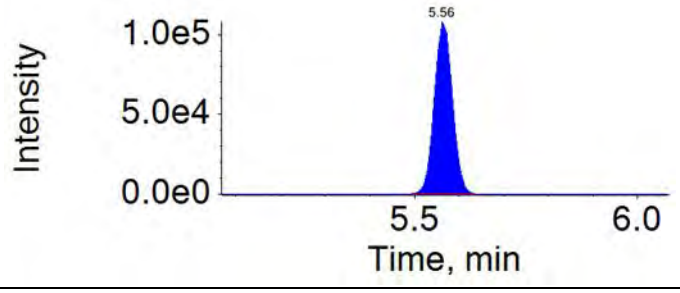
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0

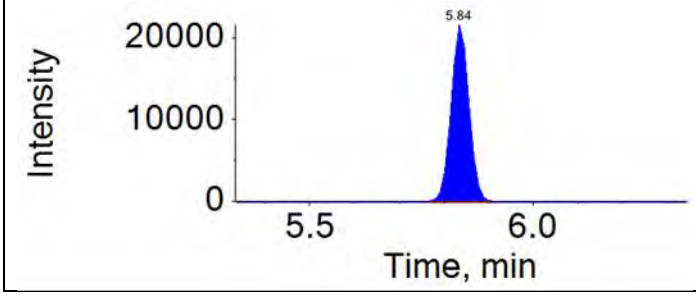
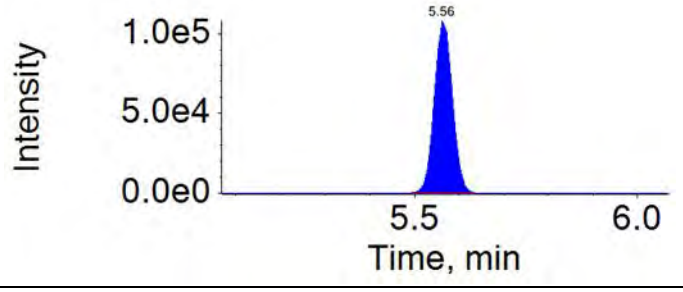


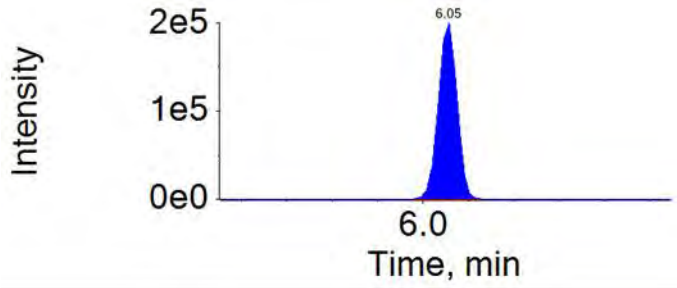
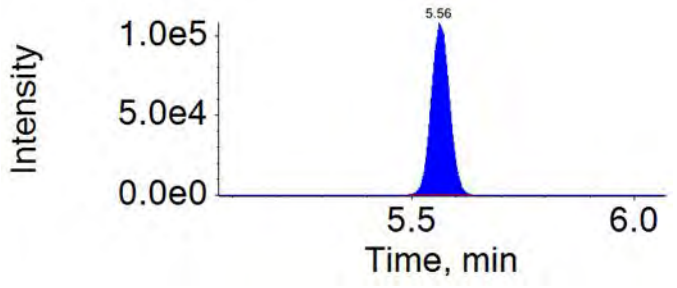


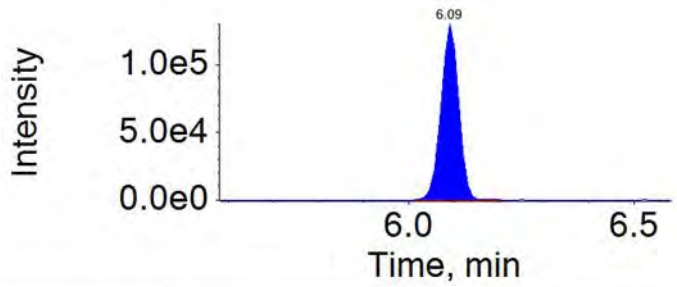
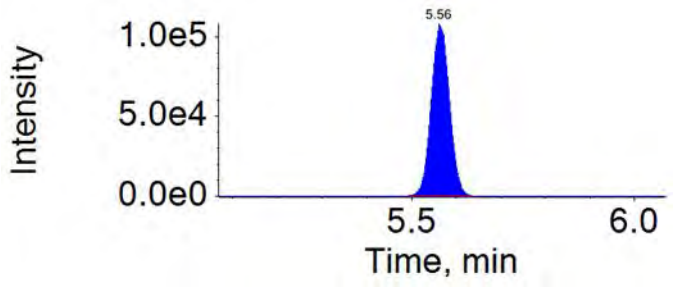
APPROVED
By JPT at 8:42 am, 11/20/18

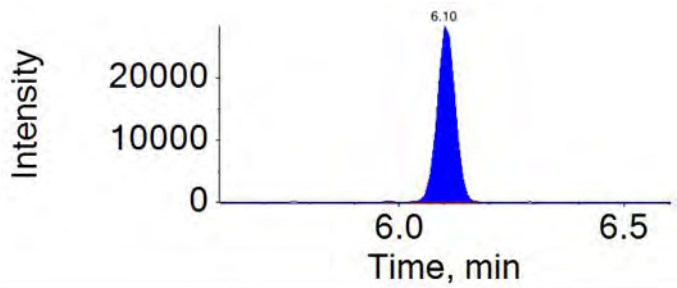
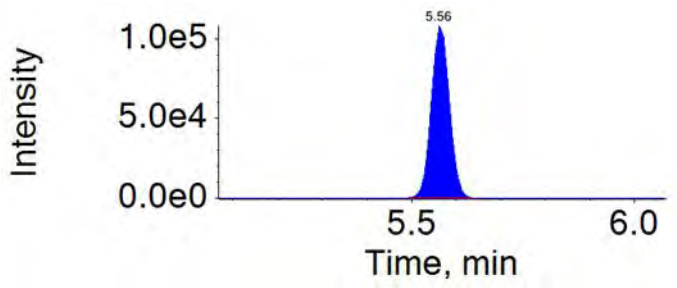
REVIEWED
By HMK at 8:47 am, 11/20/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

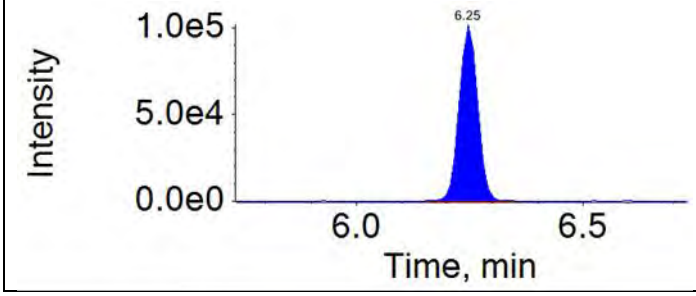
Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

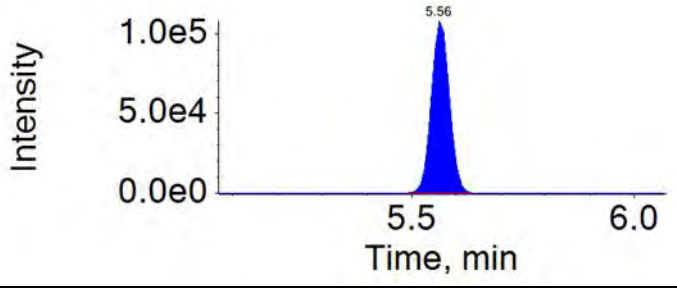
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

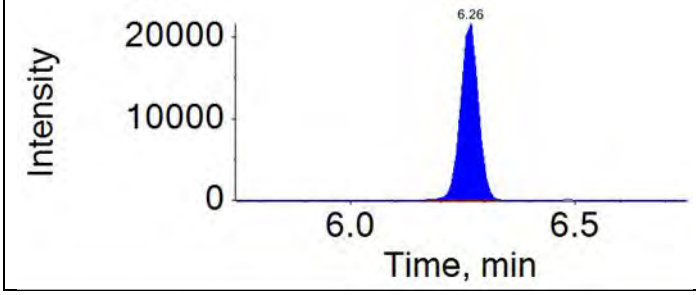
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

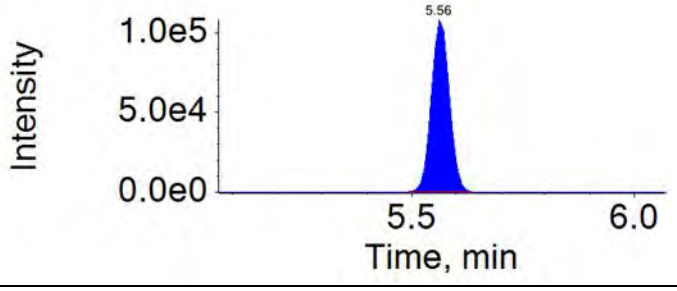
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



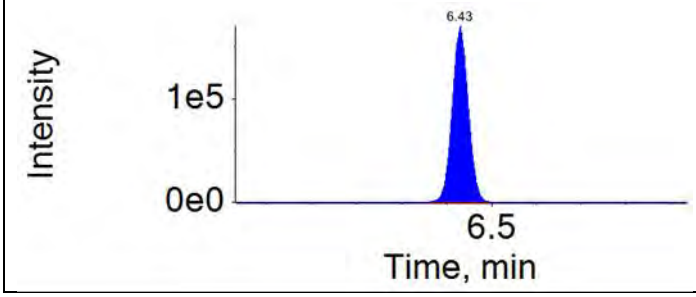


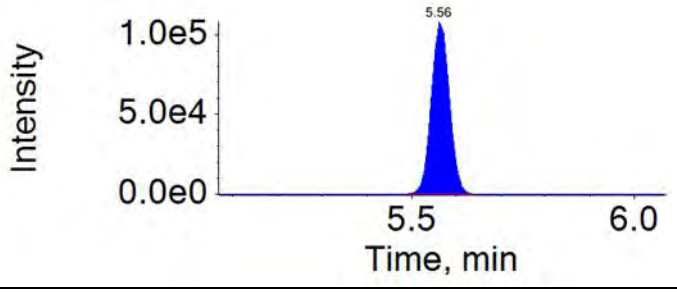
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



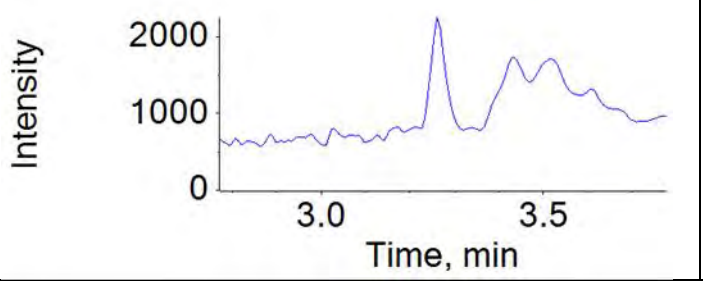


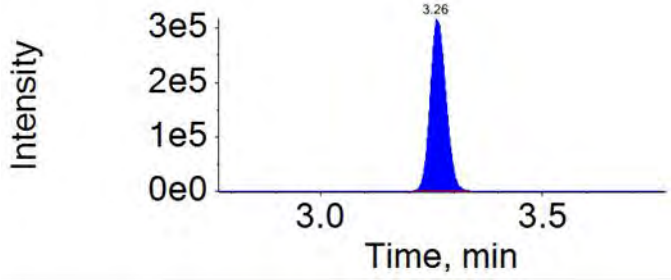
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

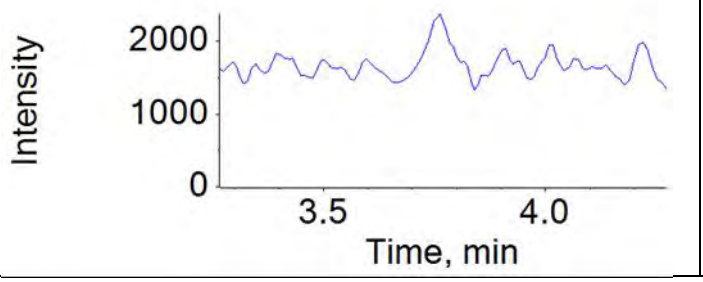
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

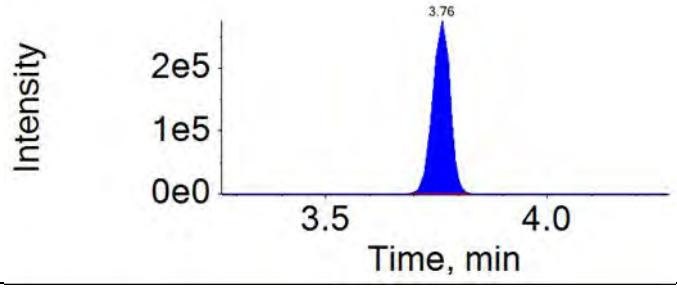
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



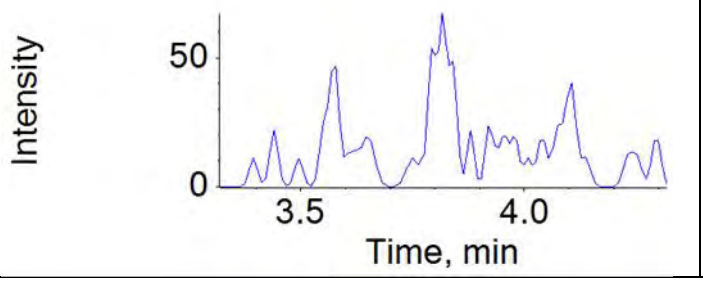


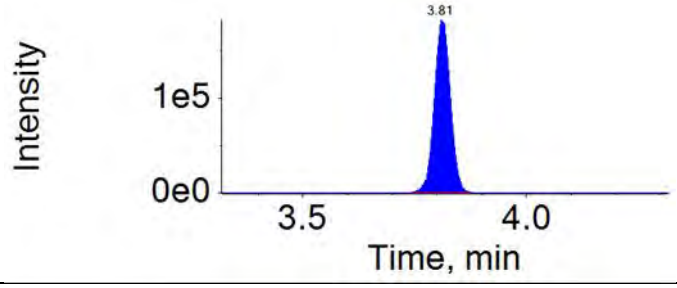
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



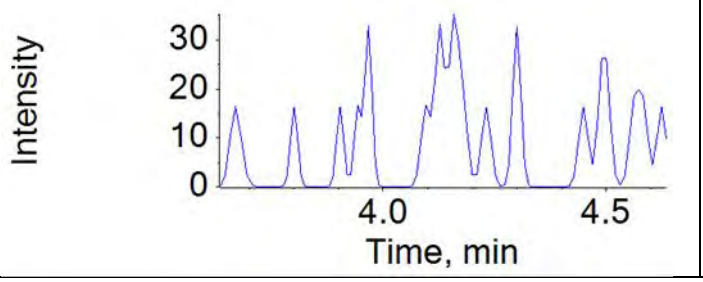


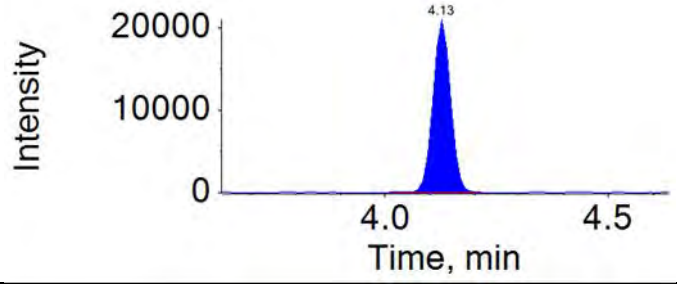
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



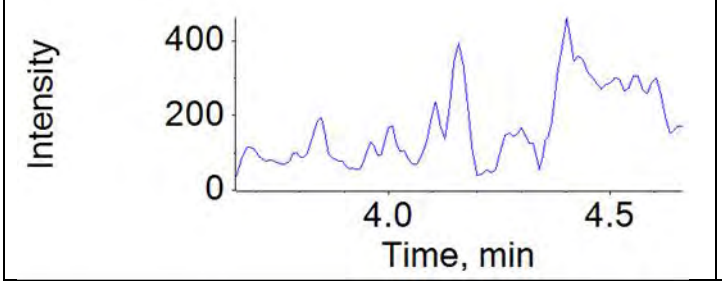


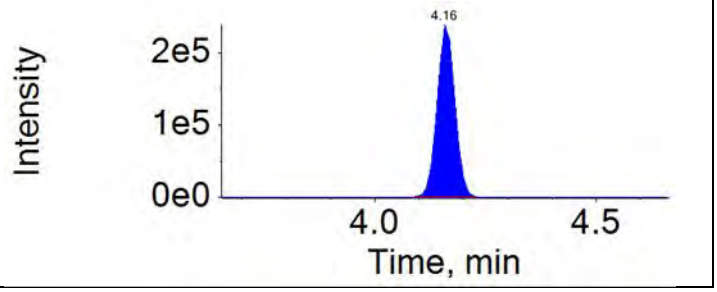
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

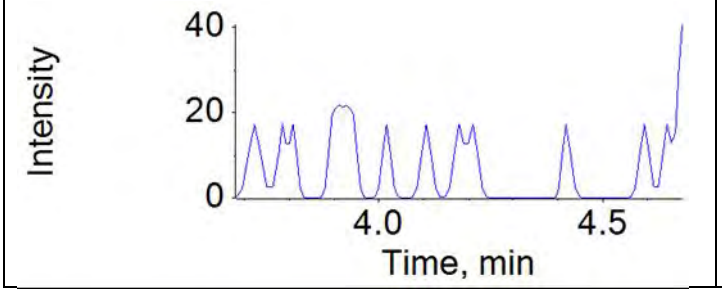
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

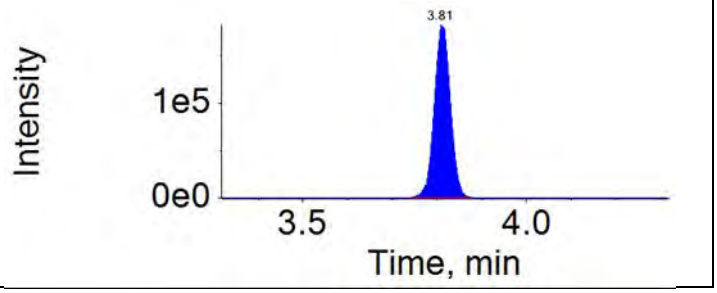
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



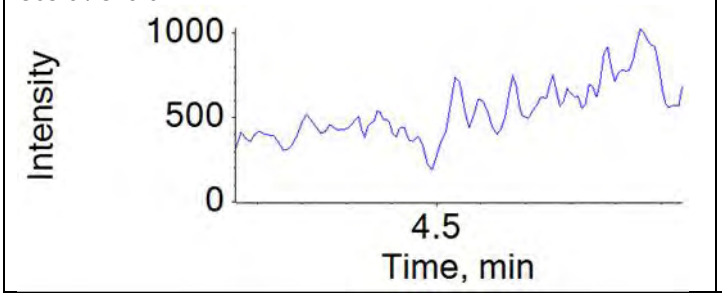


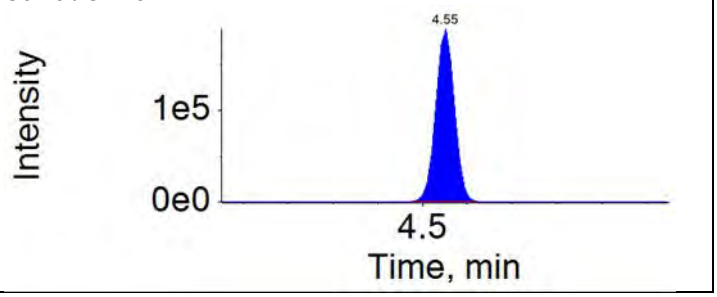
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



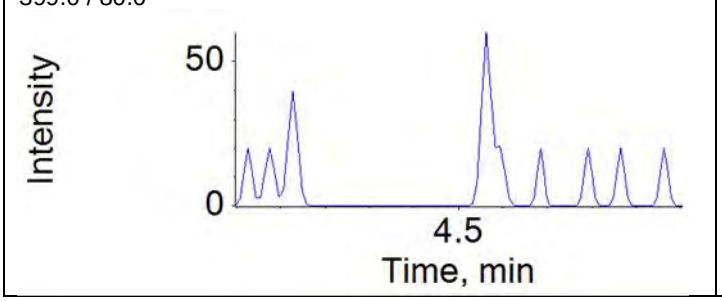


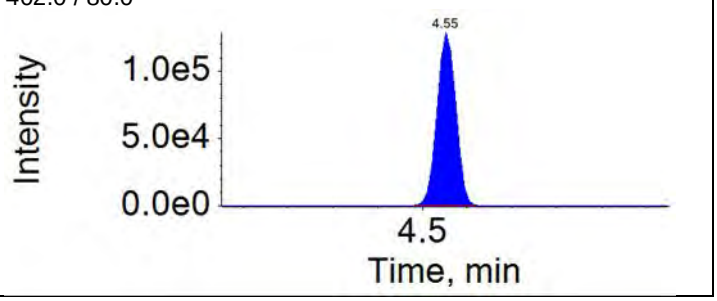
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



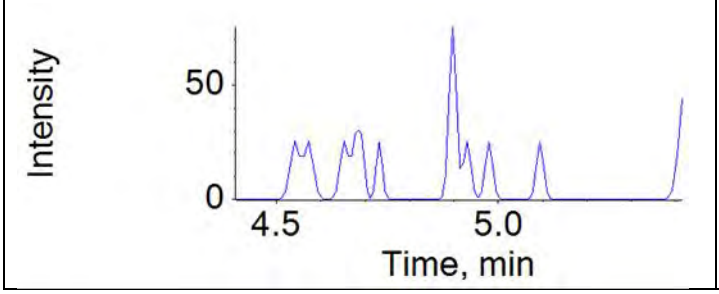


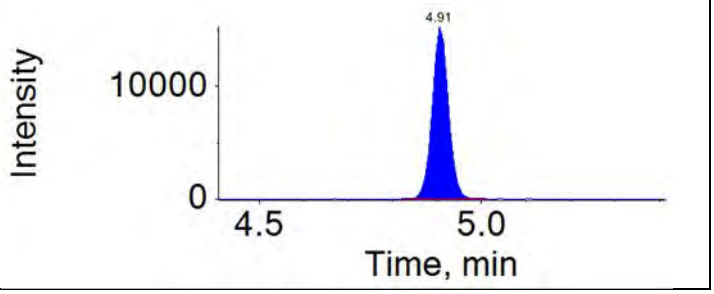
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

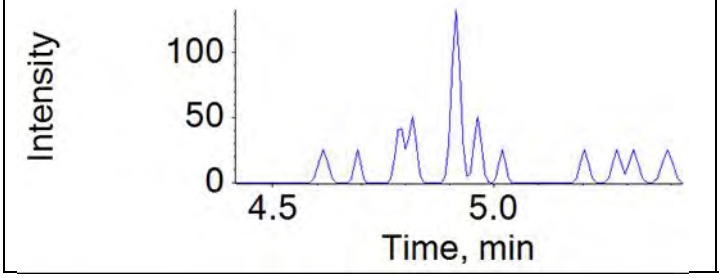
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

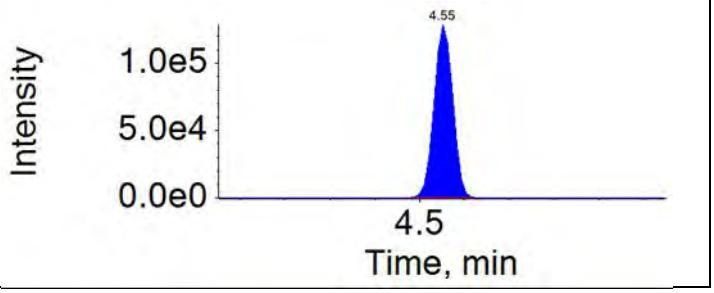
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



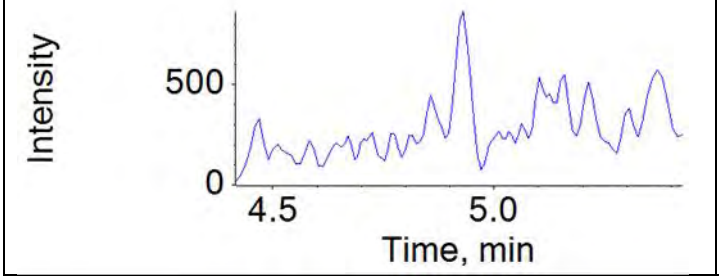


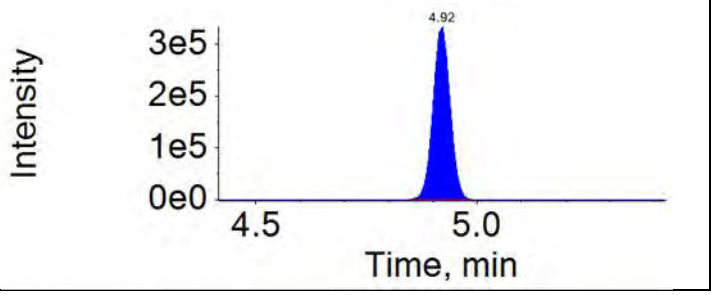
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



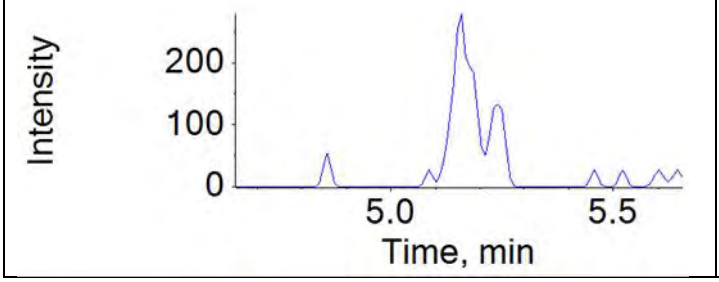


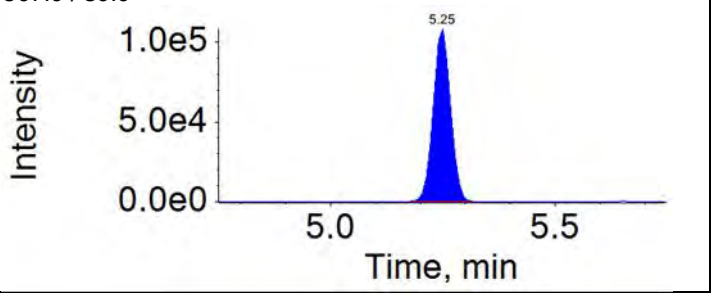
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



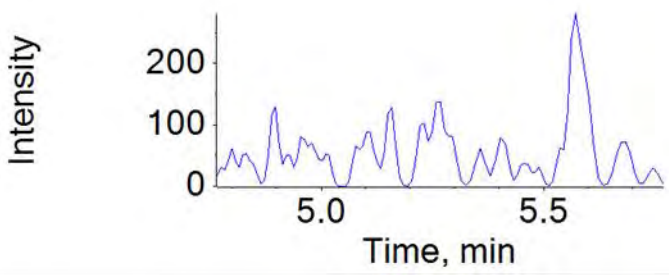


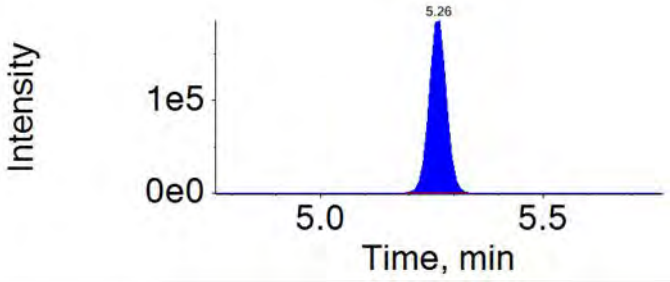
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

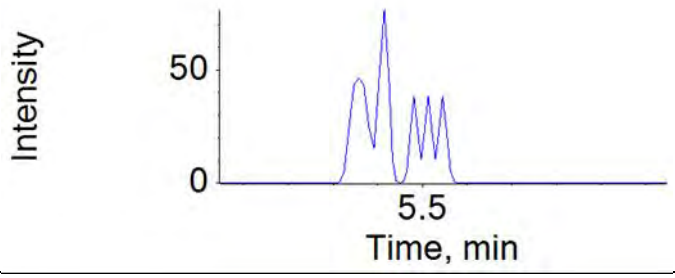
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

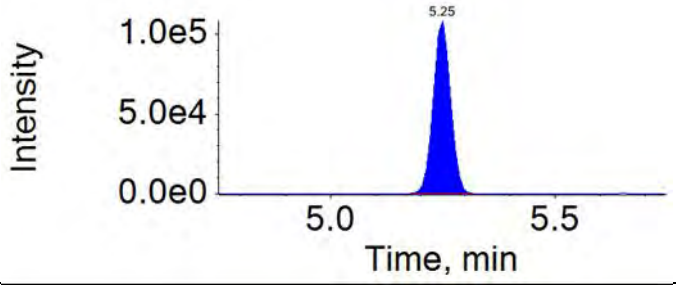
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



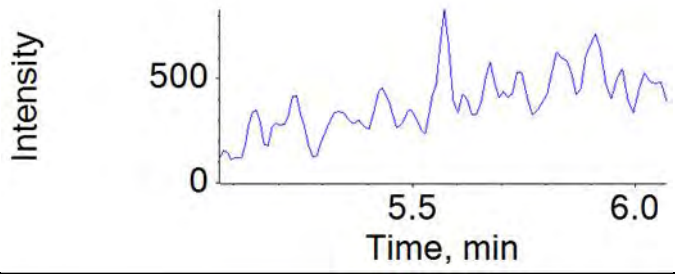


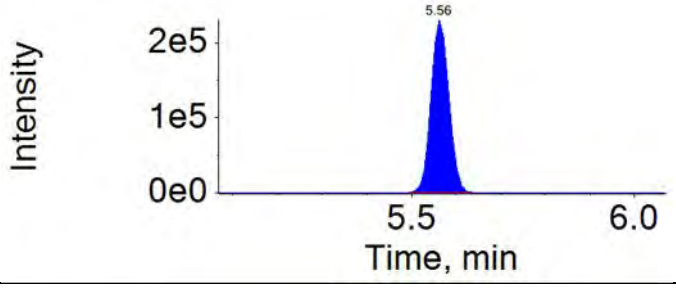
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



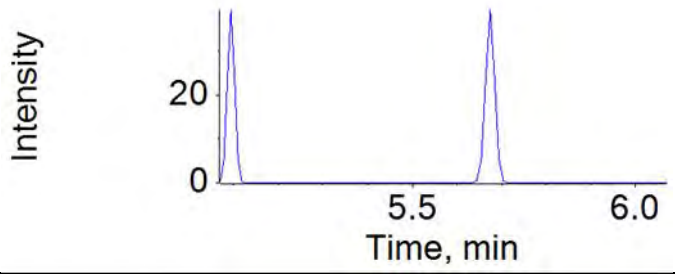


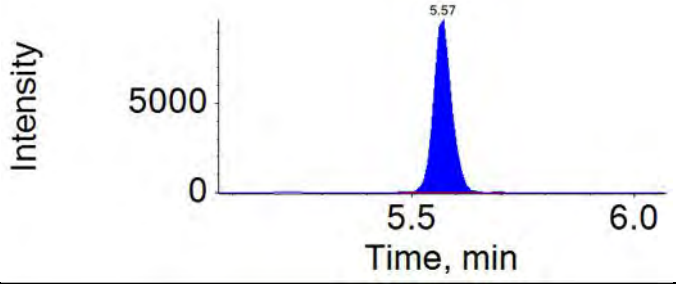
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



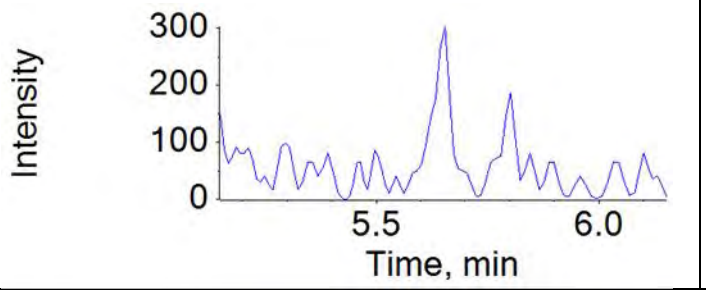


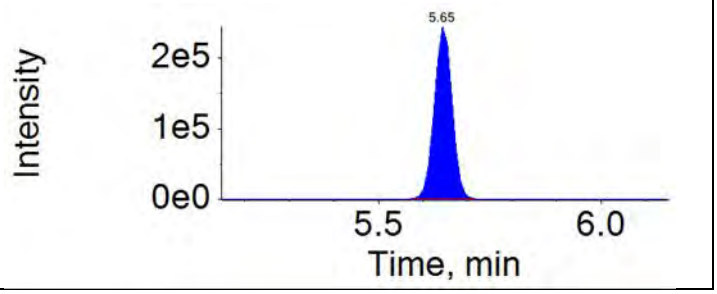
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

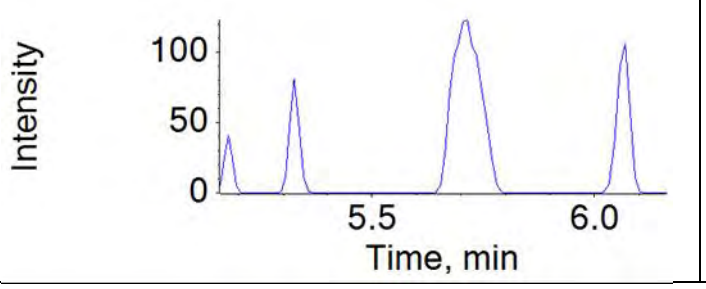
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

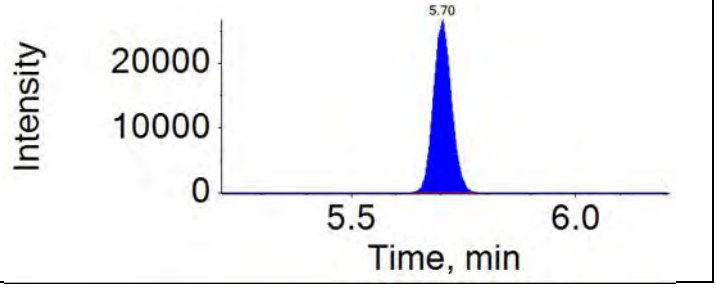
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



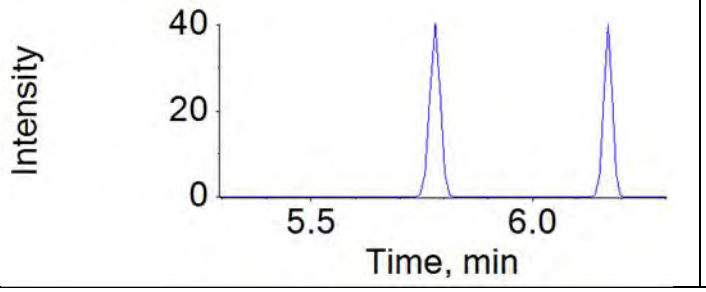


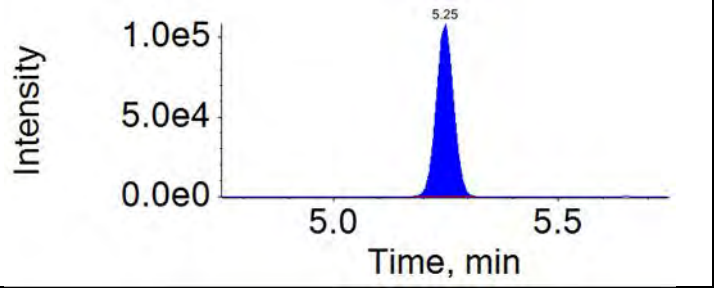
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



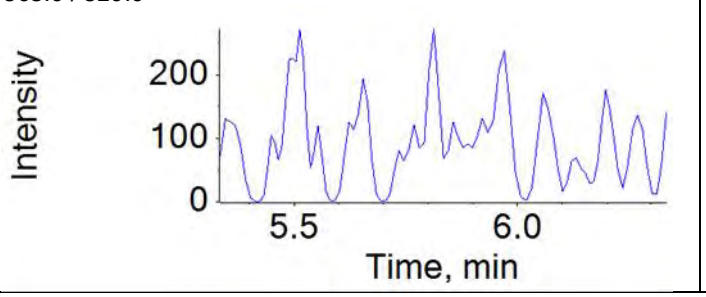


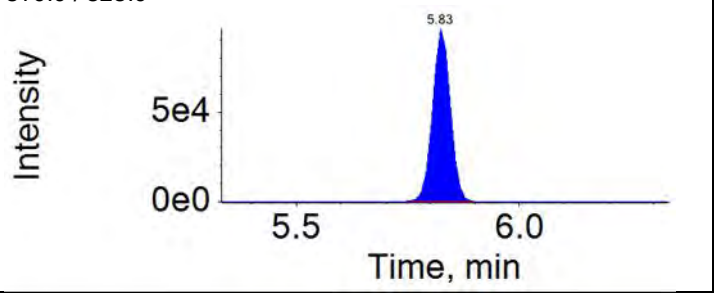
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



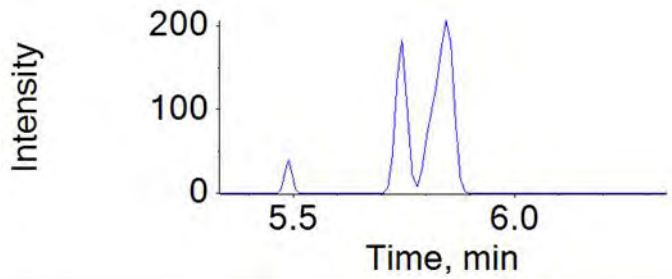


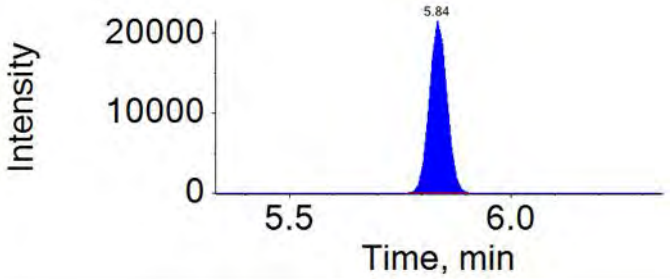
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

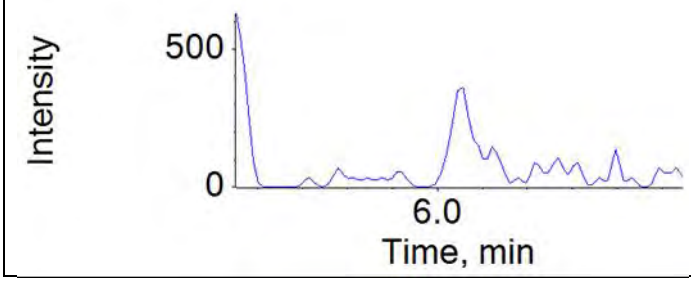
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

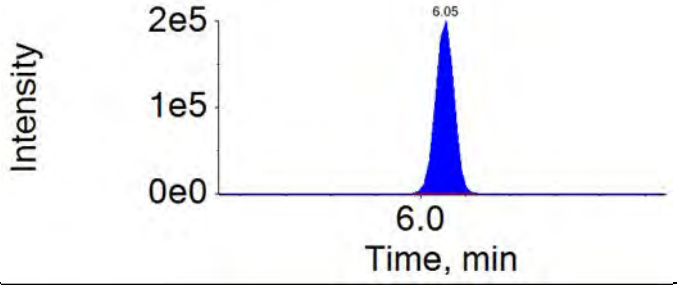
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



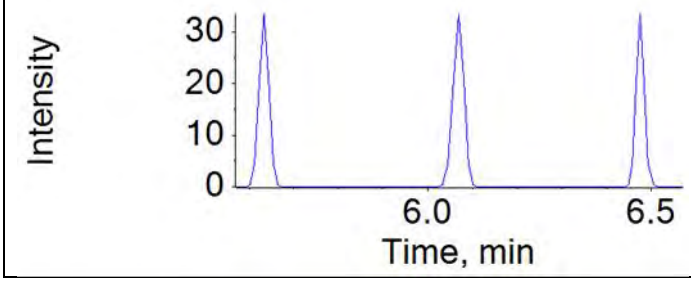


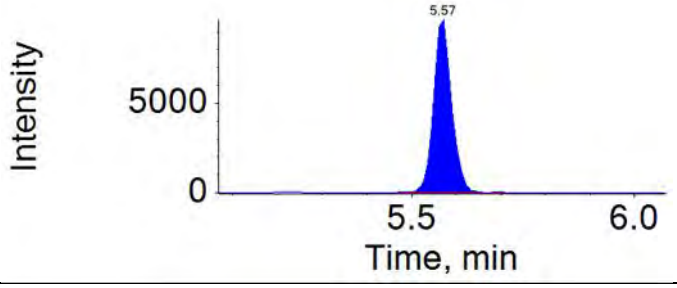
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



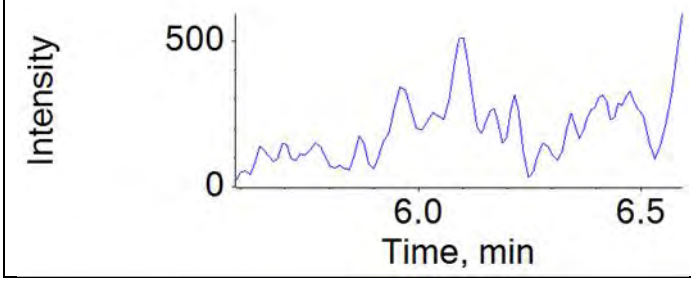


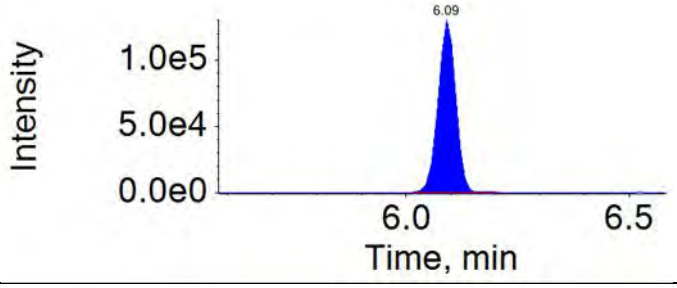
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



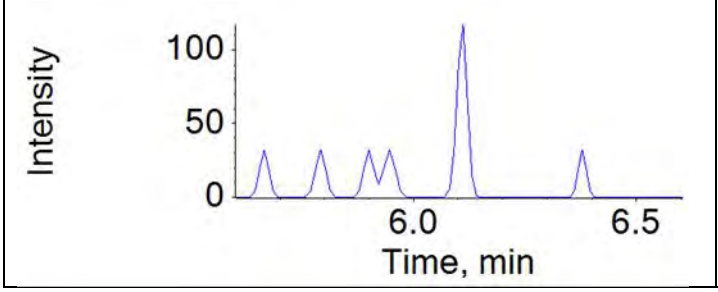


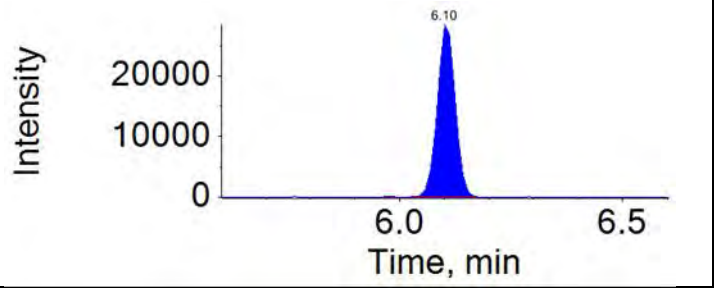
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

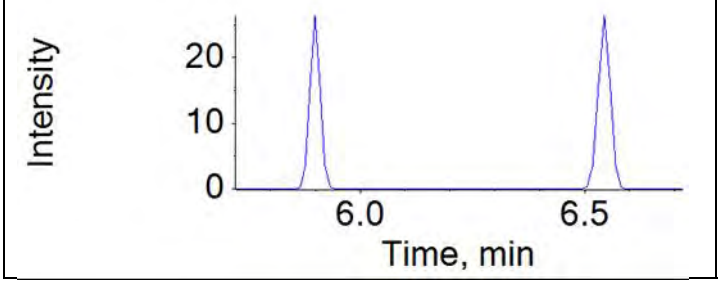
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

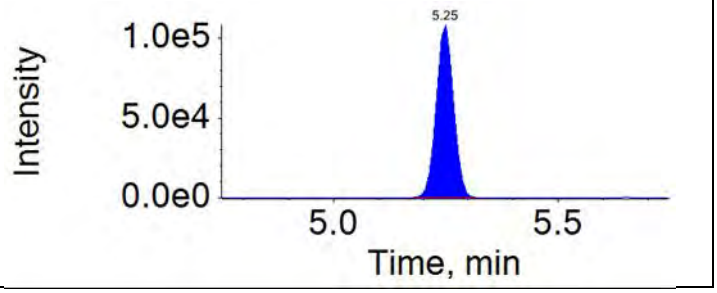
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



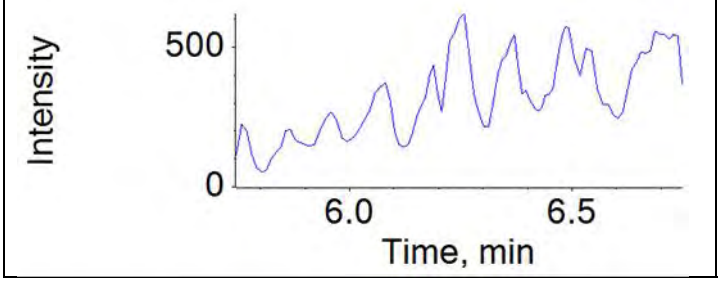


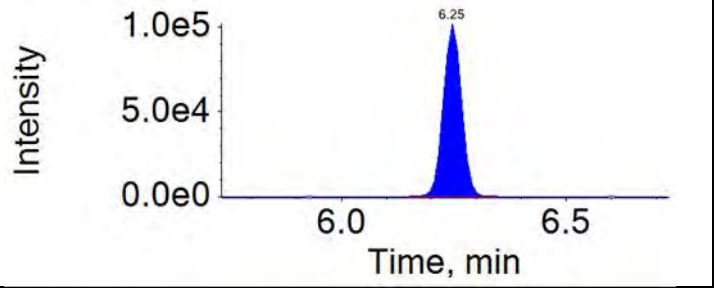
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



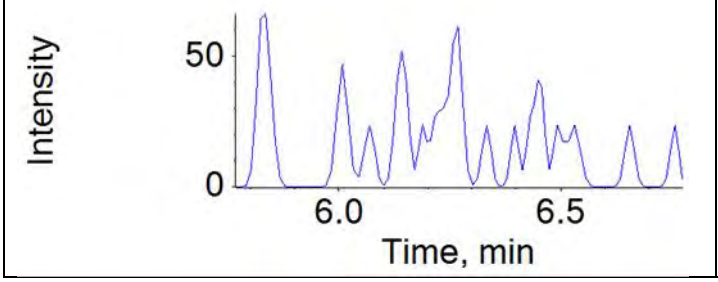


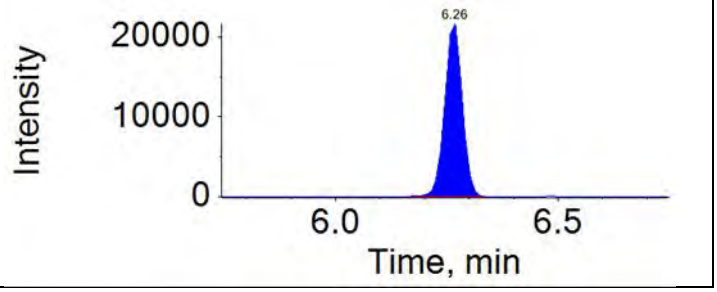
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





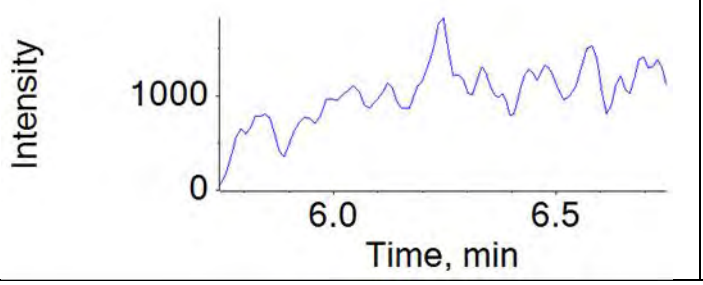
Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

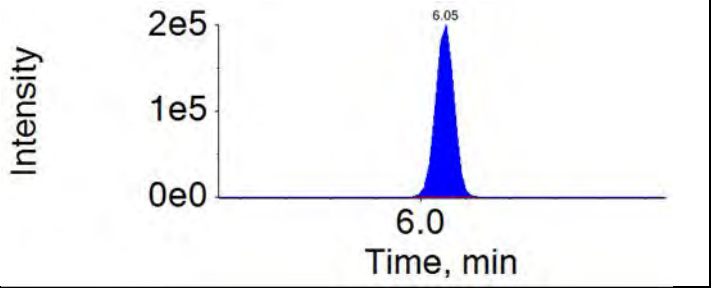




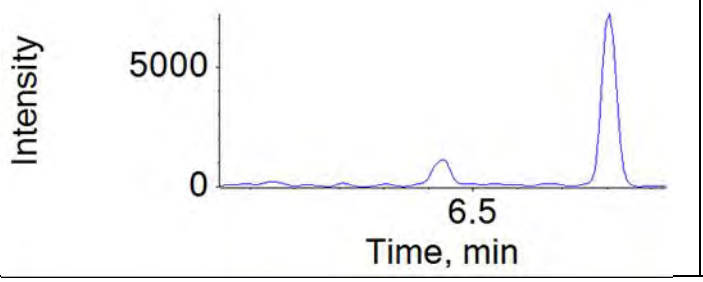
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/20/2018 8:36:28 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

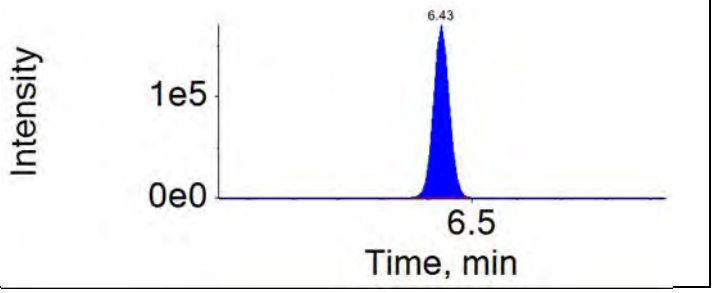
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



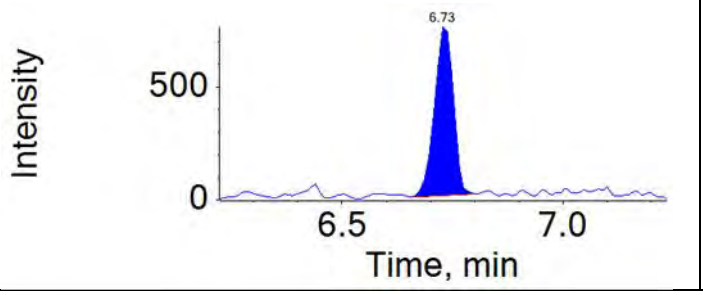


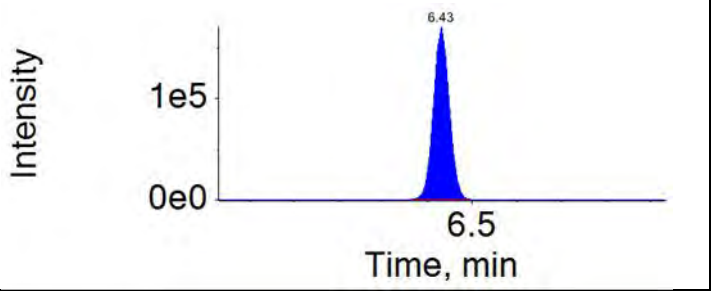
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



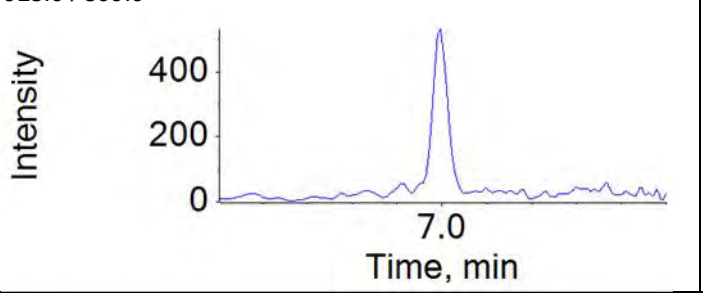


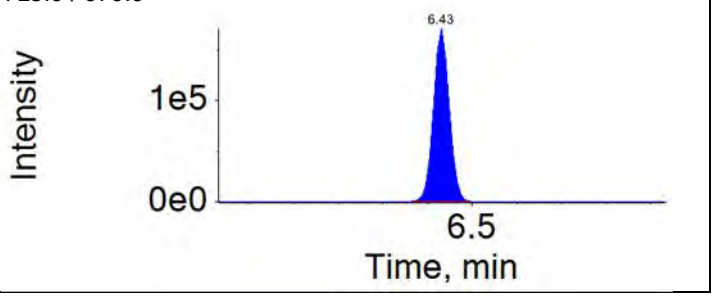
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0





APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

Ion Ratio Report

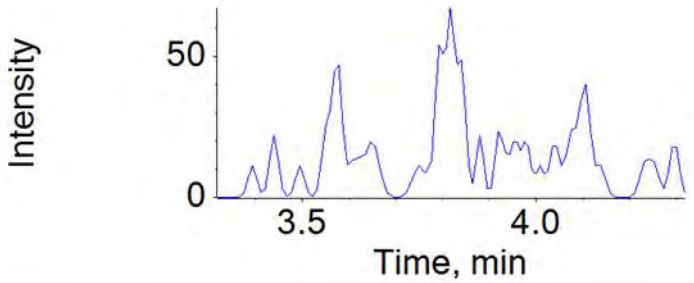
Sample Name: INBLK **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-49.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	N/A	N/A	N/A	A	N/A	N/A			
PFBS_2	N/A	N/A	N/A	A	N/A	N/A		50	
4:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
4:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFHxA	N/A	N/A	N/A	A	N/A	N/A			
PFHxA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFPeS	N/A	N/A	N/A	A	N/A	N/A			
PFPeS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpA	N/A	N/A	N/A	A	N/A	N/A			
PFHpA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxS	N/A	N/A	N/A	A	N/A	N/A			
PFHxS_2	N/A	N/A	N/A	A	N/A	N/A		50	
6:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
6:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFHpS	N/A	N/A	N/A	A	N/A	N/A			
PFHpS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOA	N/A	N/A	N/A	A	N/A	N/A			
PFOA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOS	N/A	N/A	N/A	A	N/A	N/A			
PFOS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNA	N/A	N/A	N/A	A	N/A	N/A			
PFNA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNS	N/A	N/A	N/A	A	N/A	N/A			
PFNS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDA	N/A	N/A	N/A	A	N/A	N/A			
PFDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
8:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
8:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
NMeFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NMeFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDS	N/A	N/A	N/A	A	N/A	N/A			
PFDS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFUnDA	N/A	N/A	N/A	A	N/A	N/A			
PFUnDA_2	5.81	1.00	64.89	A	N/A	N/A		50	
NEtFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NEtFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDoDA	N/A	N/A	N/A	A	N/A	N/A			
PFDoDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
10:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
10:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFTrDA	N/A	N/A	N/A	A	N/A	N/A			
PFTrDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTeDA	N/A	N/A	N/A	A	N/A	N/A			
PFTeDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxDA	6.73	1.05	2221.67	A	N/A	1.0000			
PFHxDA_2	6.74	1.05	133.29	A	N/A	0.0600	-11	50	
PFODA	N/A	N/A	N/A	A	N/A	N/A			
PFODA_2	N/A	N/A	N/A	A	N/A	N/A		50	

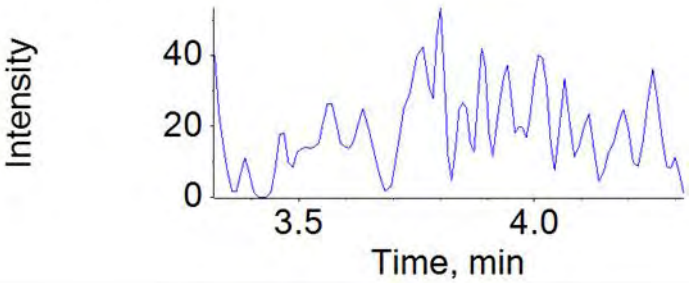
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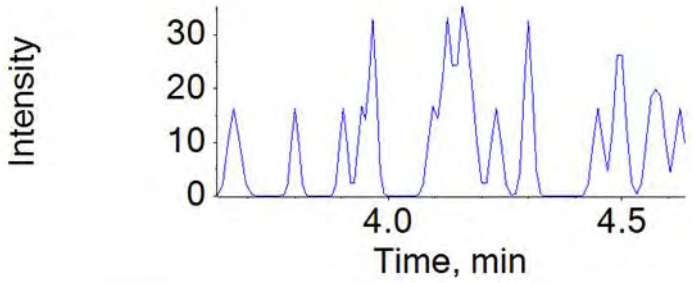
Component: PFBS
Primary Mass: 299.0 / 80.0



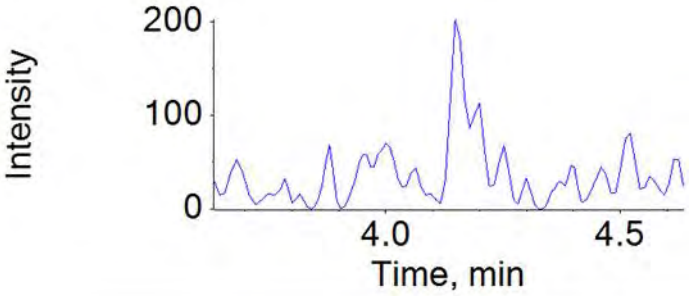
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



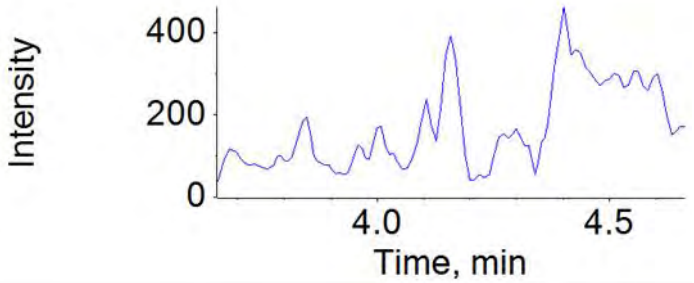
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



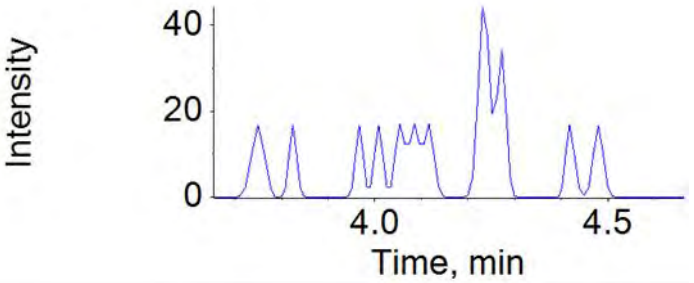
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



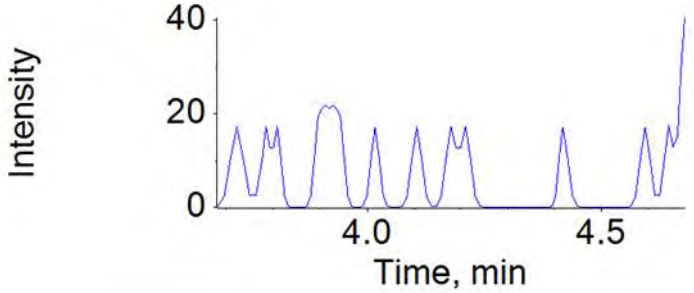
Component: PFHxA
Primary Mass: 313.0 / 269.0



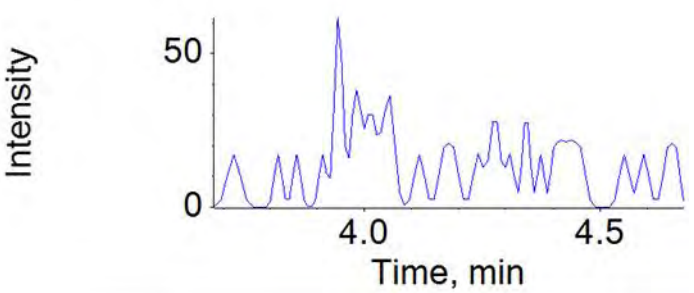
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



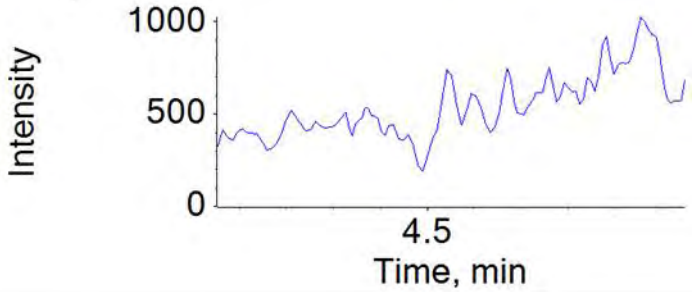
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



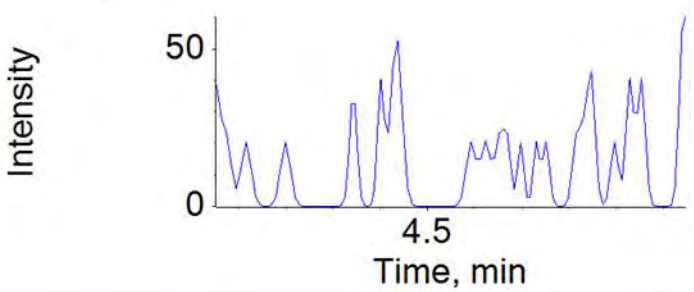
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

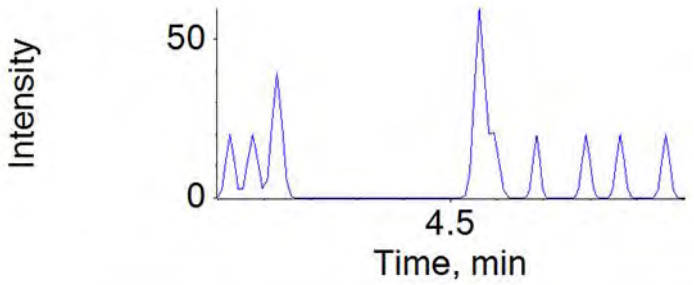
Component: PFHpA
Primary Mass: 363.0 / 319.0



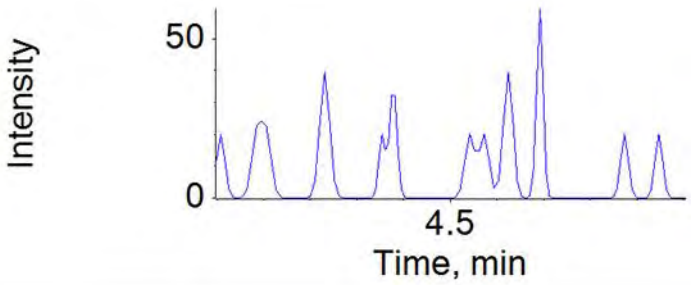
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



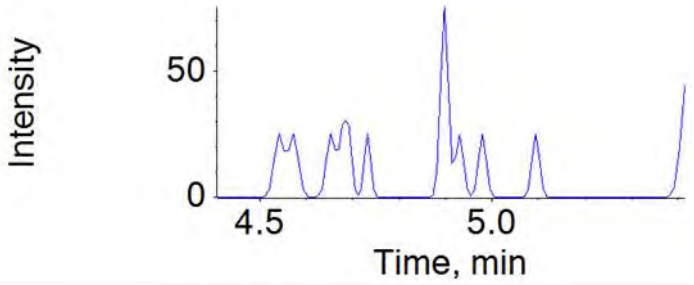
Component: PFHxS
Primary Mass: 399.0 / 80.0



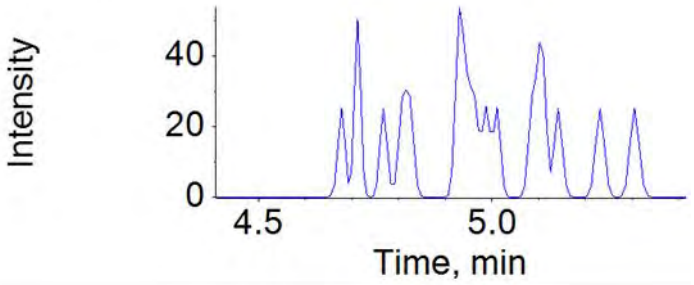
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



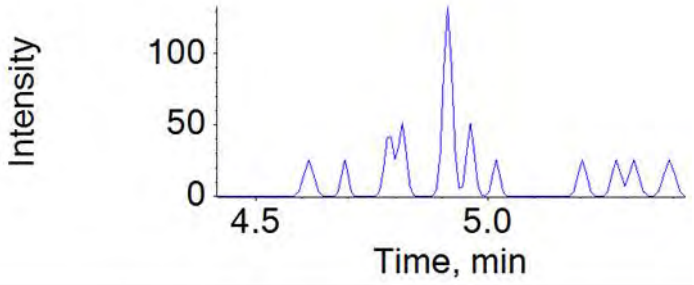
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



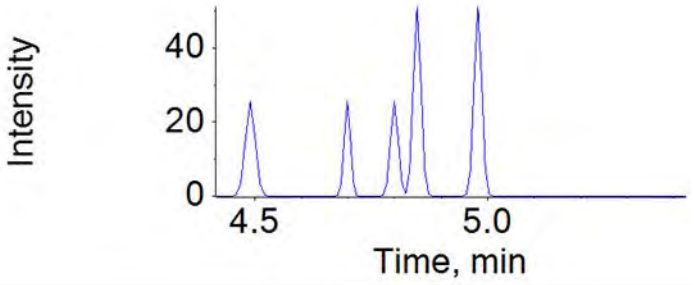
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



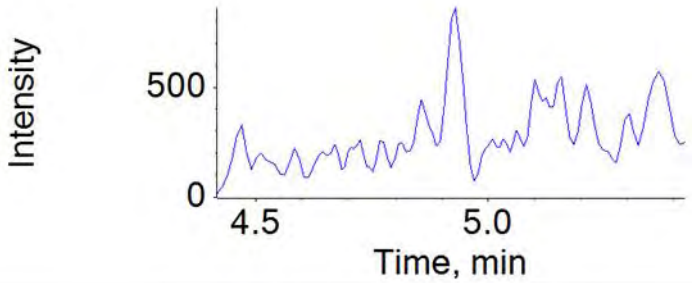
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



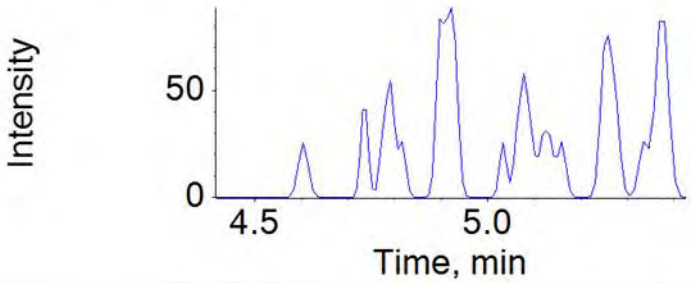
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

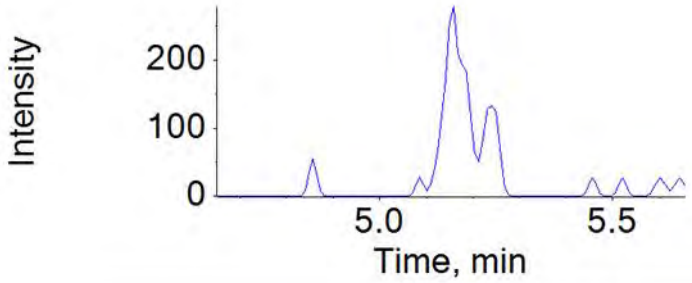
Component: PFOA
Primary Mass: 413.0 / 369.0



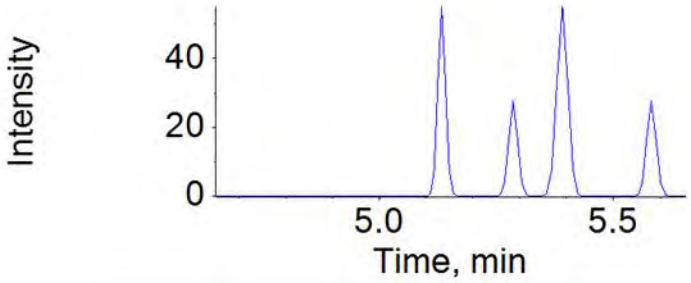
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



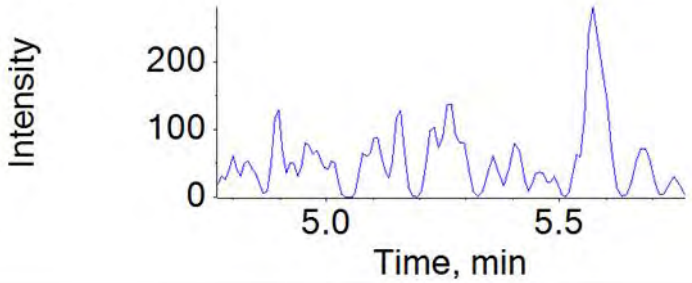
Component: PFOS
Primary Mass: 499.0 / 80.0



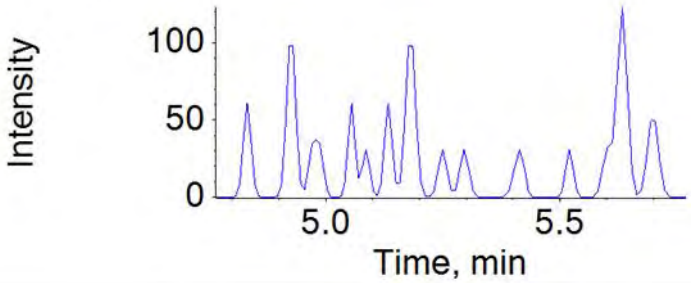
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



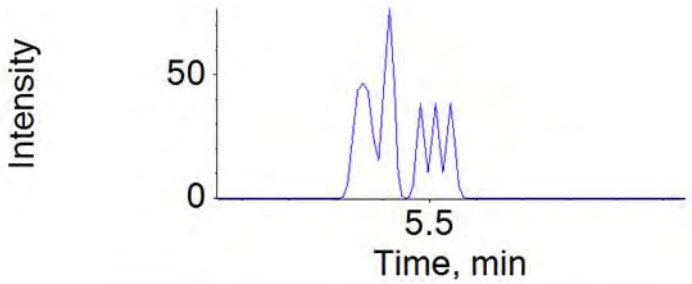
Component: PFNA
Primary Mass: 463.0 / 419.0



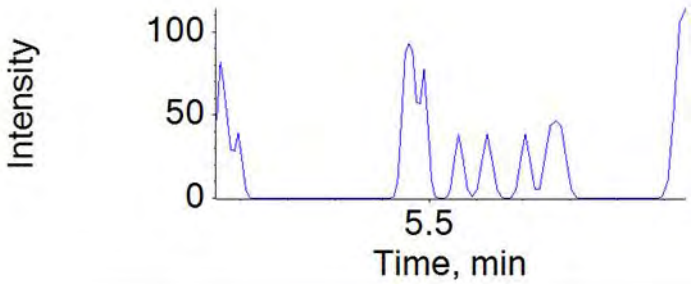
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



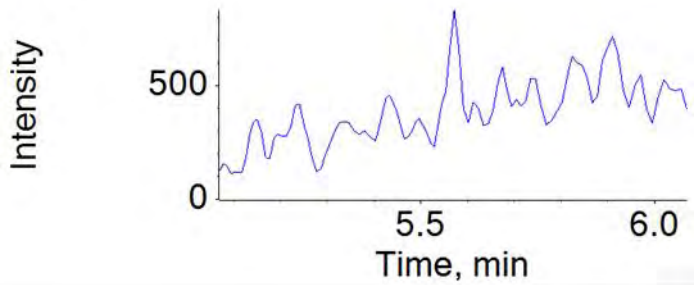
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



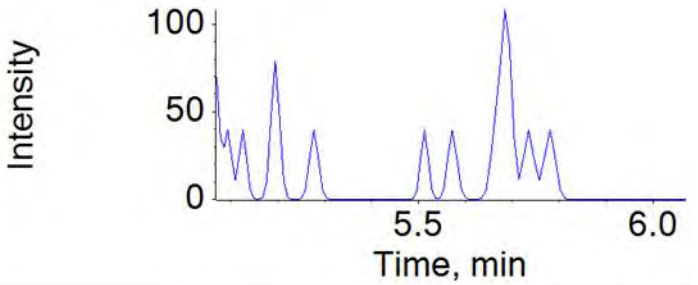
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

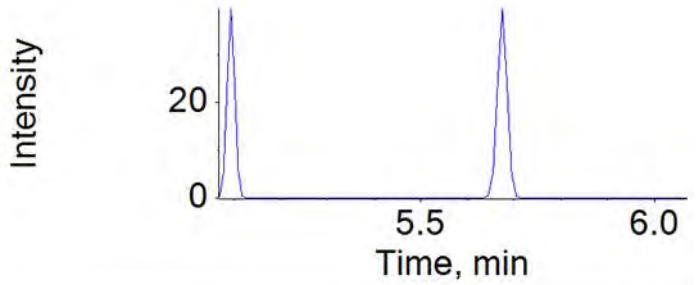
Component: PFDA
Primary Mass: 513.0 / 469.0



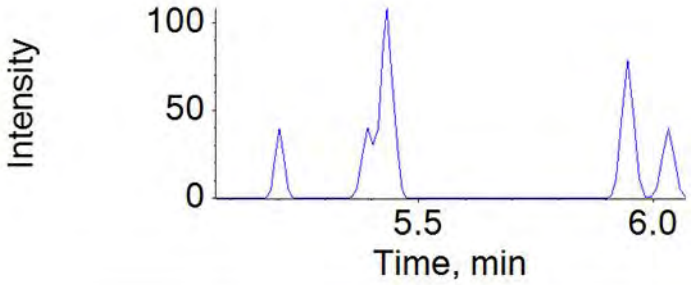
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



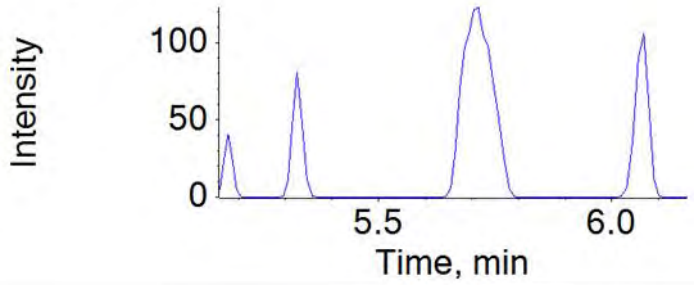
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



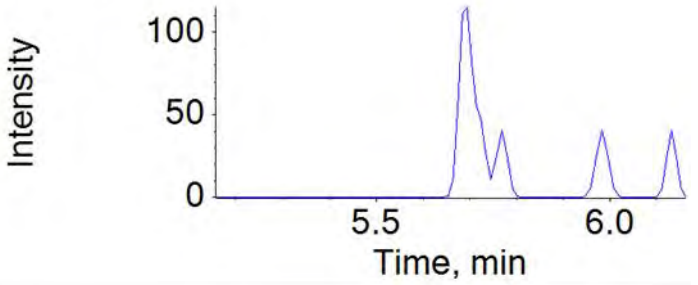
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



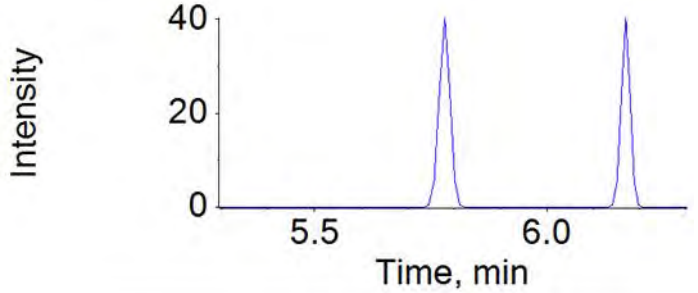
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



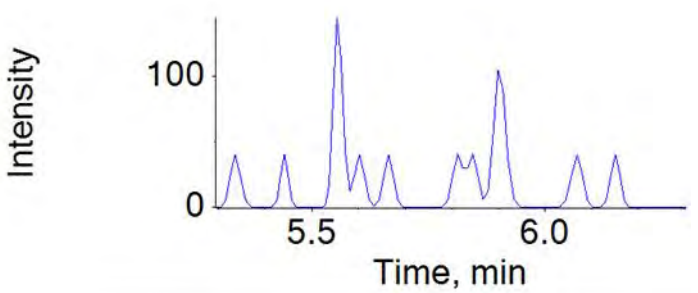
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



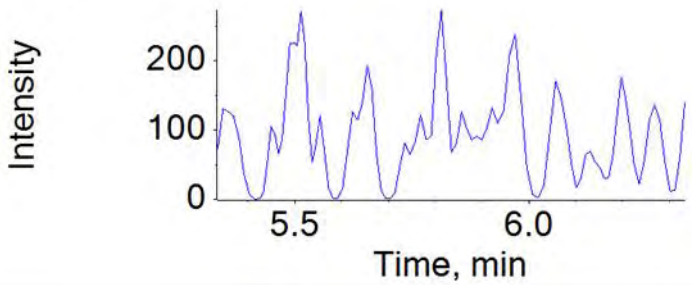
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



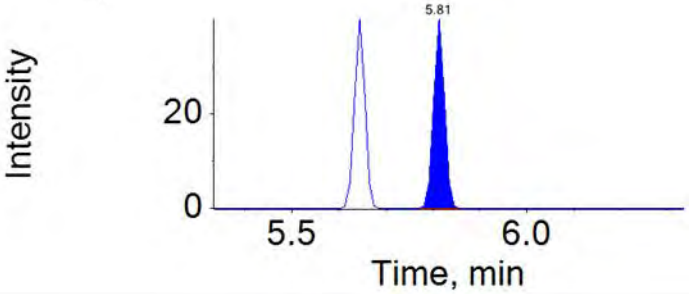
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

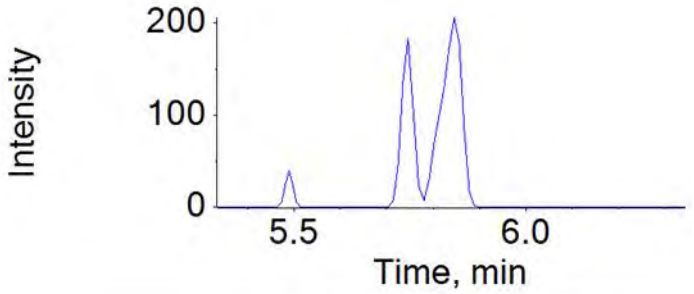
Component: PFUnDA
Primary Mass: 563.0 / 519.0



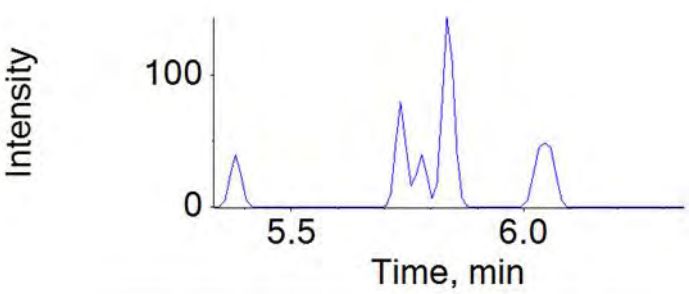
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



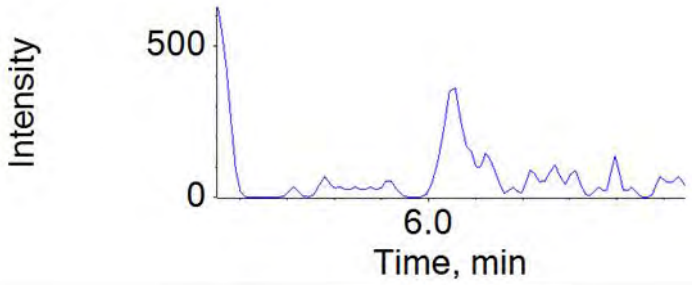
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



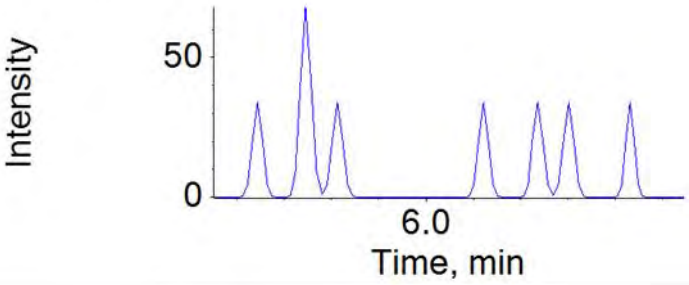
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



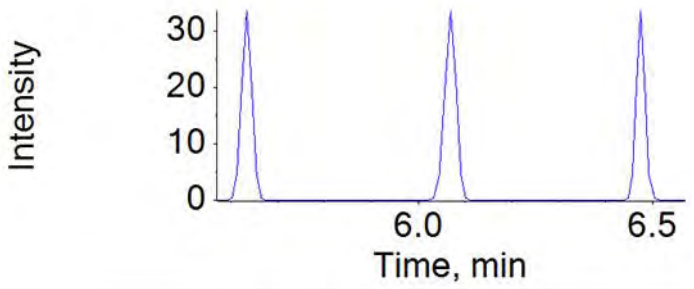
Component: PFDoDA
Primary Mass: 613.0 / 569.0



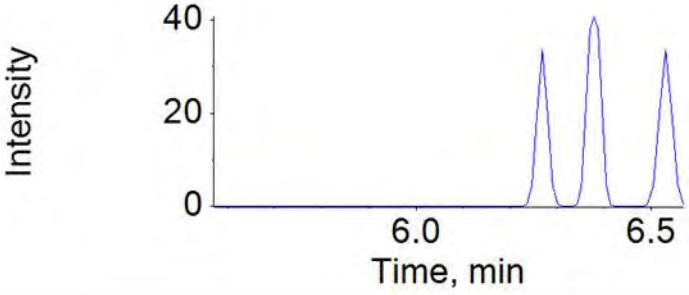
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



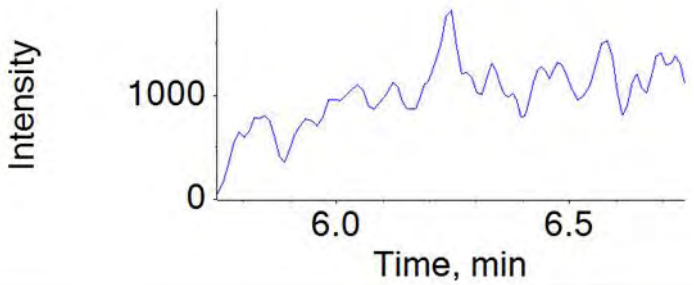
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



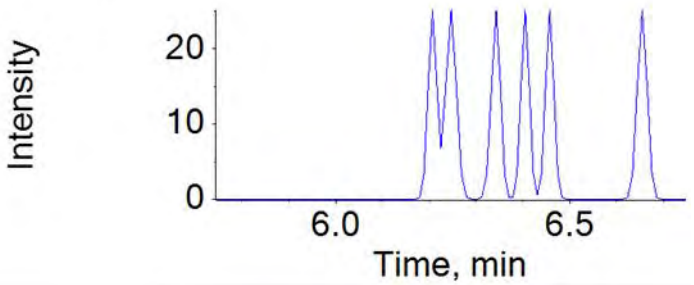
APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

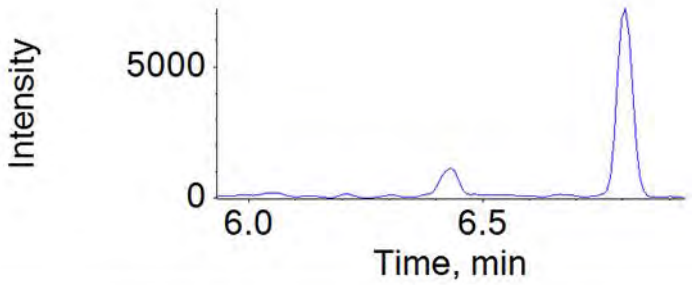
Component: PFTrDA
Primary Mass: 663.0 / 619.0



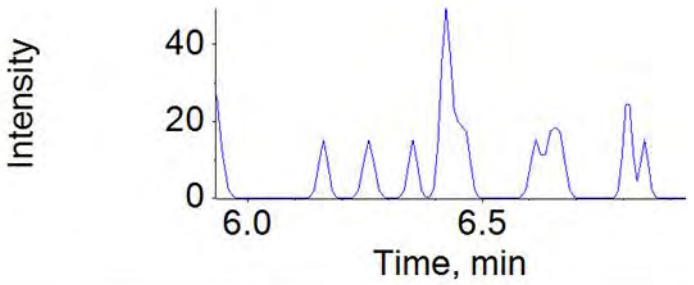
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



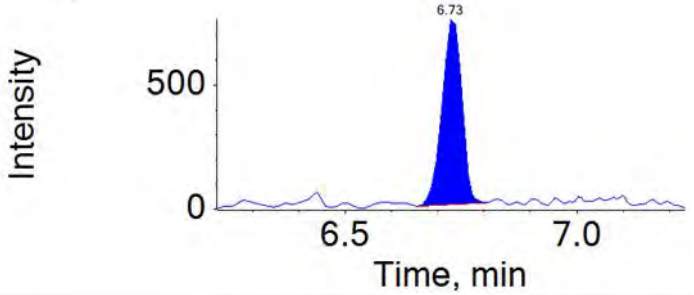
Component: PFTeDA
Primary Mass: 713.0 / 669.0



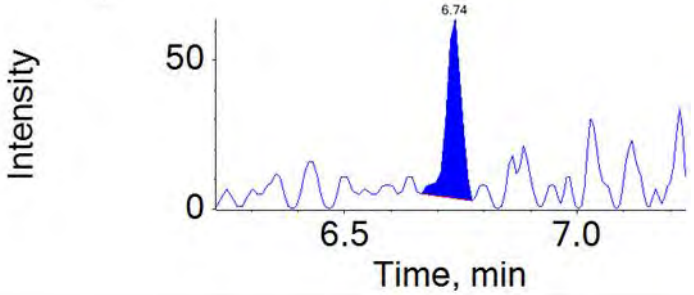
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



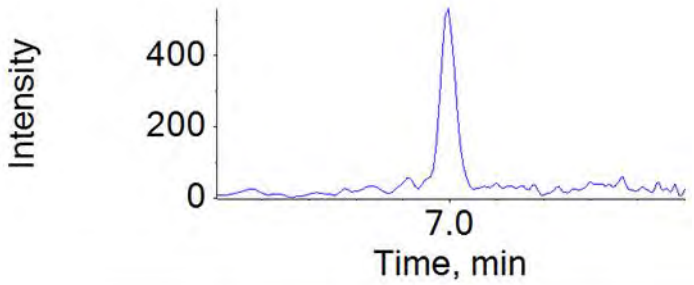
Component: PFHxDA
Primary Mass: 813.0 / 769.0



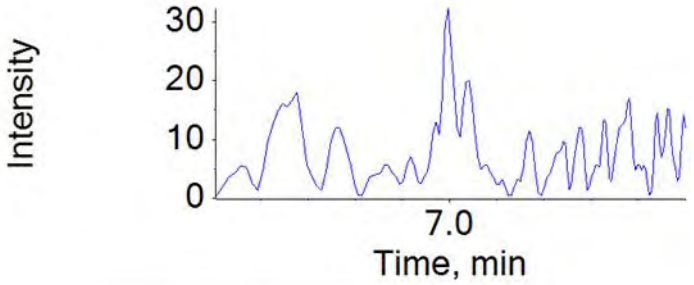
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By JPT at 8:42 am, 11/20/18

REVIEWED
By HMK at 8:47 am, 11/20/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	ICV			**Data File:**		18NOV12DCAL-50.wiff
Sample ID:	ICVMODX1833G			**Acquis Date:**		2018-11-12T16:18:11
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	10			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV12DCAL_Updated
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N\A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	655209.3	659926.2	-1	50	
13C2-PFOA	5.0	452726.2	450219.7	1	50	
13C4-PFOS	4.8	253010.3	249205.8	2	50	
13C2-PFDA	5.0	277002.7	278743.9	-1	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	715834.4	13C3-PFBA	655209.3	1.093	5.000	4.898	98	70-130	
E13C5-PFPeA	699482.2	13C3-PFBA	655209.3	1.068	5.000	4.788	96	70-130	
E13C3-PFBS	394903.4	13C3-PFBA	655209.3	0.603	4.650	4.255	91	70-130	
E13C2-4:2-FTS	47297.3	13C2-PFOA	452726.2	0.104	4.670	4.653	100	70-130	
E13C5-PFHxA	613579.4	13C2-PFOA	452726.2	1.355	5.000	4.896	98	70-130	
E13C3-PFHxS	304897.8	13C2-PFOA	452726.2	0.673	4.730	4.621	98	70-130	
E13C4-PFHpA	485394.9	13C2-PFOA	452726.2	1.072	5.000	4.830	97	70-130	
E13C2-6:2-FTS	31532.8	13C2-PFOA	452726.2	0.070	4.750	4.660	98	70-130	
E13C8-PFOA	843573.3	13C2-PFOA	452726.2	1.863	5.000	5.134	103	70-130	
E13C8-PFOS	266211.4	13C4-PFOS	253010.3	1.052	4.780	4.662	98	70-130	
E13C9-PFNA	458821.5	13C4-PFOS	253010.3	1.813	5.000	5.056	101	70-130	
E13C6-PFDA	590290.3	13C2-PFDA	277002.7	2.131	5.000	4.973	99	70-130	
E13C2-8:2-FTS	22188.9	13C2-PFDA	277002.7	0.080	4.790	3.995	83	70-130	
E13C8-PFOSA	587080.1	13C2-PFDA	277002.7	2.119	5.000	4.699	94	70-130	
Ed3-NMeFOSAA	70133.2	13C2-PFDA	277002.7	0.253	5.000	4.570	91	70-130	
E13C7-PFUnDA	228363.9	13C2-PFDA	277002.7	0.824	5.000	4.786	96	70-130	
Ed5-NEtFOSAA	59551.3	13C2-PFDA	277002.7	0.215	5.000	4.548	91	70-130	
E13C2-PFDoDA	495858.1	13C2-PFDA	277002.7	1.790	5.000	4.648	93	70-130	
Ed7-NMePFOSAE	299185.4	13C2-PFDA	277002.7	1.080	5.000	4.674	93	70-130	
Ed3-NMePFOSA	75186.9	13C2-PFDA	277002.7	0.271	5.000	4.931	99	70-130	
Ed9-NEtPFOSAE	255149.8	13C2-PFDA	277002.7	0.921	5.000	4.791	96	70-130	
Ed5-NEtPFOSA	53596.2	13C2-PFDA	277002.7	0.193	5.000	4.539	91	70-130	
E13C2-PFTeDA	365300.2	13C2-PFDA	277002.7	1.319	5.000	4.630	93	70-130	

APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

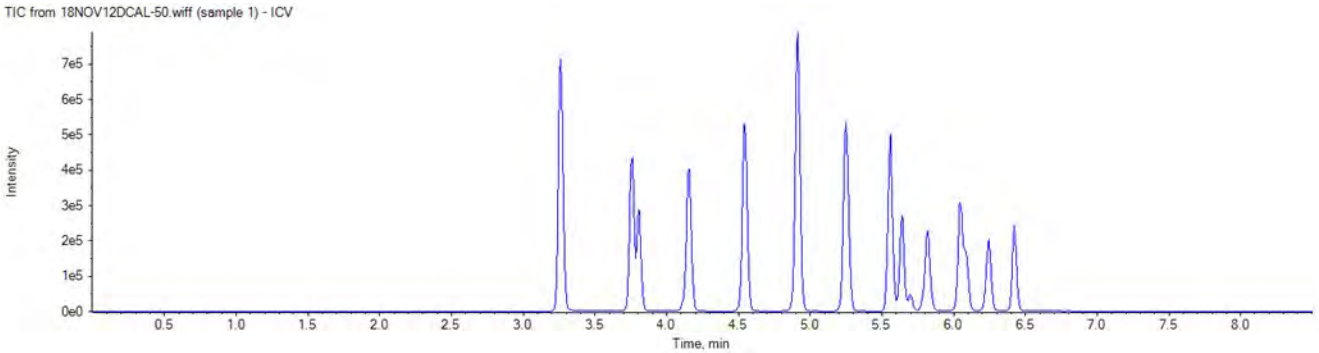
Analyte Quantitation Peak Table

Sample Name: ICV **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-50.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	270820.6		A	13C4-PFBA	3.26	715834.4	0.378	2.096
PFPeA	3.76	1.000	265646.8		A	13C5-PFPeA	3.76	699482.2	0.380	2.198
PFBS	3.80	1.000	150059.6		A	13C3-PFBS	3.81	394903.4	0.380	1.808
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.12	47297.3	N/A	
PFHxA	4.15	1.000	328694.3		A	13C5-PFHxA	4.15	613579.4	0.536	2.237
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.81	394903.4	N/A	
PFHpA	4.54	1.000	316975.3		A	13C4-PFHpA	4.54	485394.9	0.653	2.165
PFHxS	4.55	1.000	115564.2		A	13C3-PFHxS	4.55	304897.8	0.379	1.838
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.90	31532.8	N/A	
PFHpS	4.91	1.080	118318.7		A	13C3-PFHxS	4.55	304897.8	0.388	2.043
PFOA	4.91	1.000	332094.4		A	13C8-PFOA	4.91	843573.3	0.394	2.103
PFOS	5.24	1.000	100952.5		M	13C8-PFOS	5.24	266211.4	0.379	1.658
PFNA	5.26	1.000	271240.4		A	13C9-PFNA	5.26	458821.5	0.591	2.132
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.24	266211.4	N/A	
PFDA	5.56	1.000	224279.7		A	13C6-PFDA	5.56	590290.3	0.380	2.014
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.56	22188.9	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.64	587080.1	N/A	
NMeFOSAA	5.70	1.000	30591.9		A	d3-NMeFOSAA	5.70	70133.2	0.436	2.465
PFDS	5.79	1.110	52860.9		M	13C8-PFOS	5.24	266211.4	0.199	1.799
PFUnDA	5.82	1.000	183511.3		A	13C7-PFUnDA	5.82	228363.9	0.804	2.101
NEtFOSAA	5.83	1.000	26149.3		A	d5-NEtFOSAA	5.83	59551.3	0.439	2.302
PFDoDA	6.05	1.000	185295.0		A	13C2-PFDoDA	6.05	495858.1	0.374	1.903
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.56	22188.9	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.08	299185.4	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.10	75186.9	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.24	266211.4	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.24	255149.8	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.26	53596.2	N/A	
PFTrDA	6.25	1.030	165153.1		A	13C2-PFDoDA	6.05	495858.1	0.333	2.102
PFTeDA	6.42	1.000	135651.0		A	13C2-PFTeDA	6.42	365300.2	0.371	2.082
PFHxDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	365300.2	N/A	
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	365300.2	N/A	

Total Ion Chromatogram

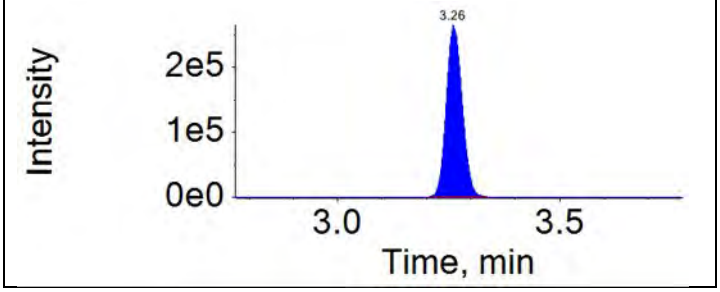


APPROVED
By MCD at 3:23 pm, 1/10/19

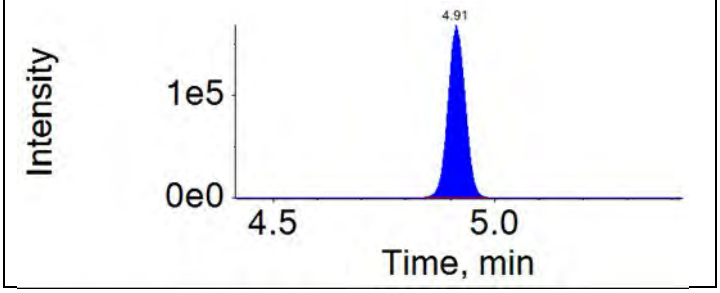
REVIEWED
By ucmr at 3:21 pm, 1/25/19

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

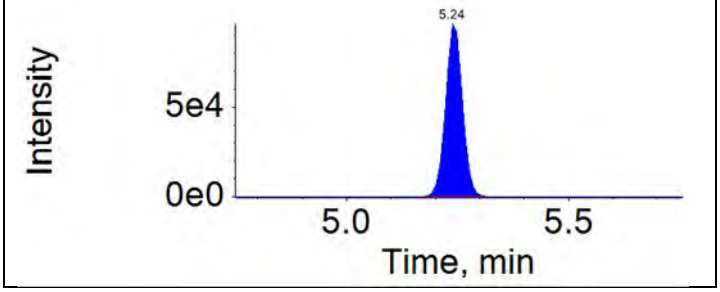
Injection Standard: 13C3-PFBA
216.0 / 172.0



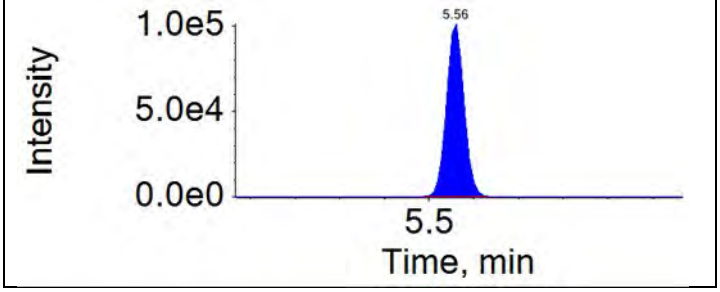
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0

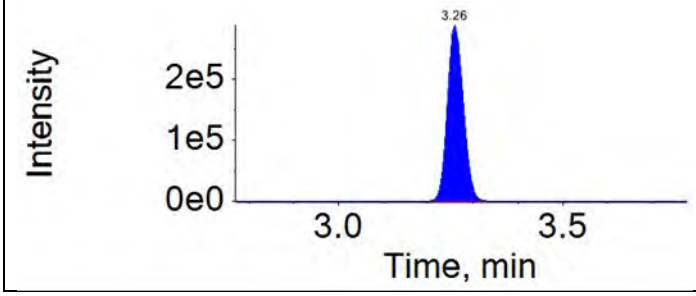


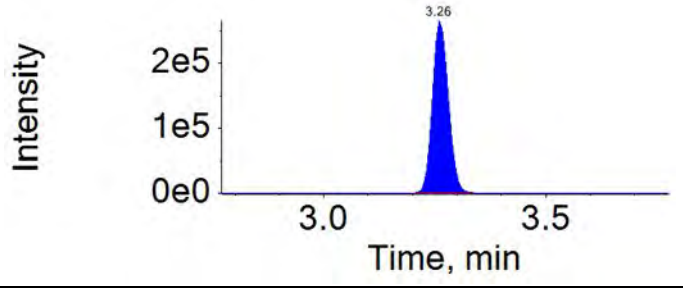
Injection Standard: 13C2-PFDA
515.0 / 470.0



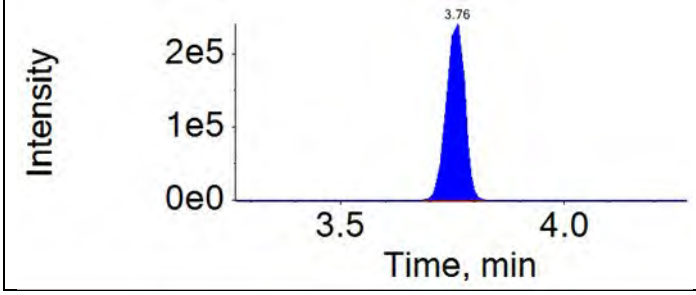
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

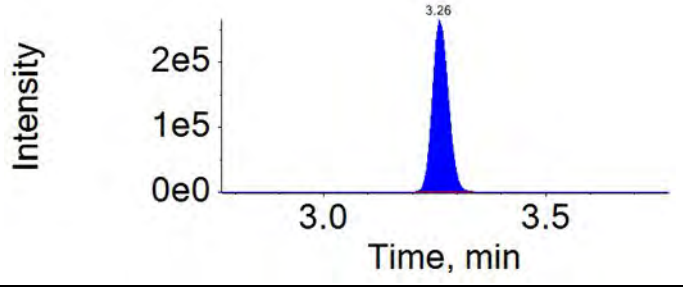
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



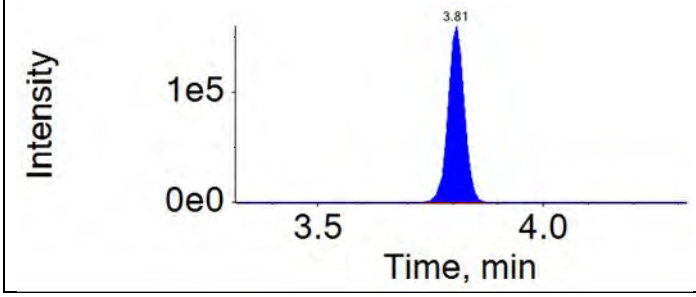


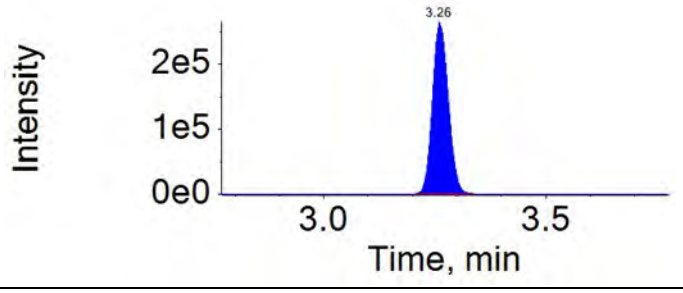
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268.0 / 223.0	216.0 / 172.0



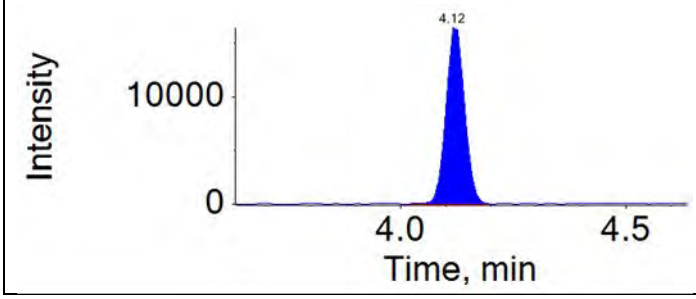


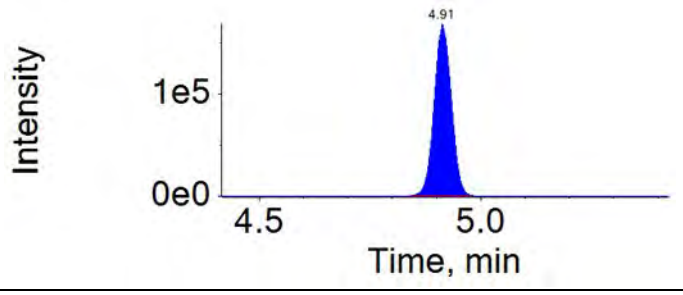
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



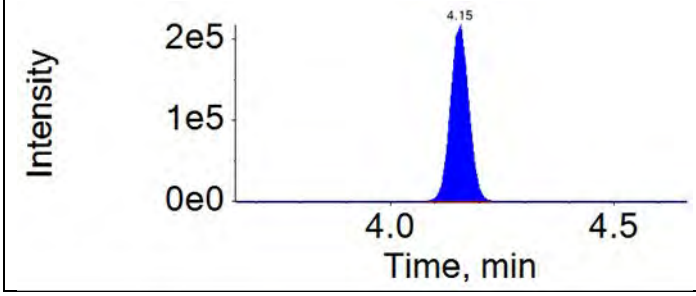


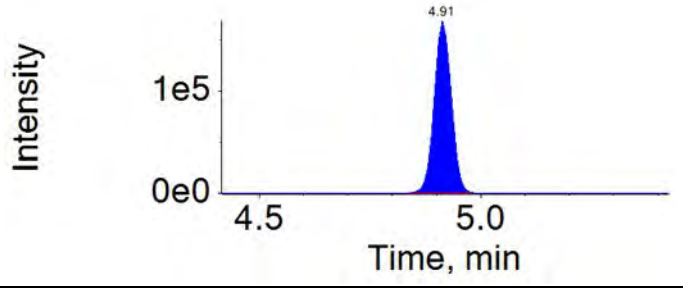
APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

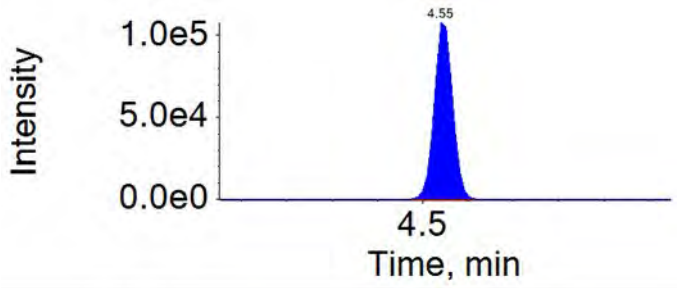
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

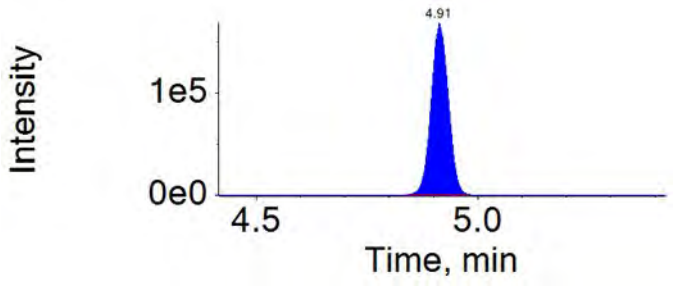
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



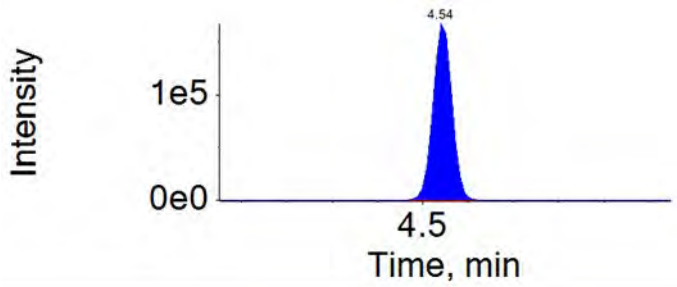


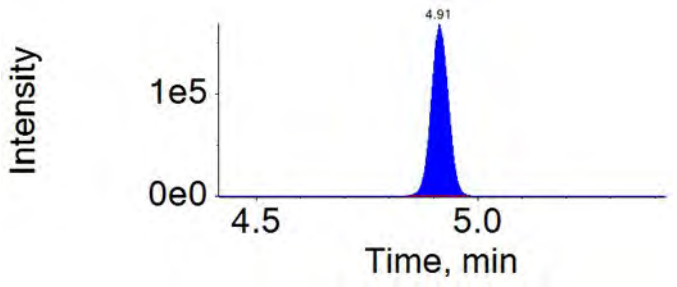
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



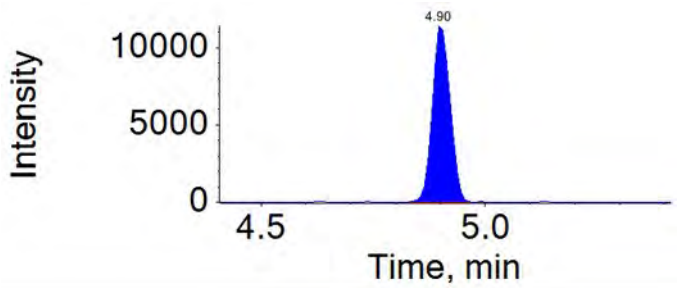


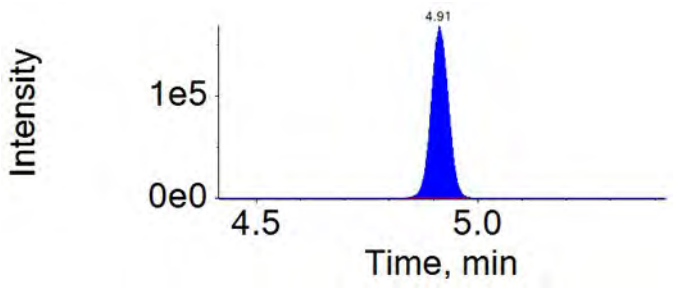
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0



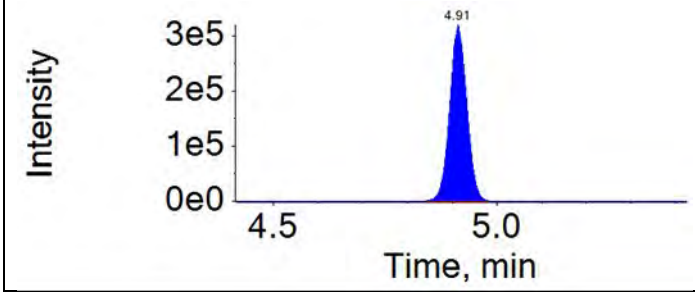


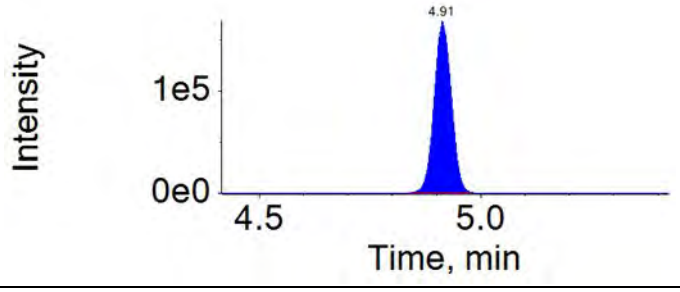
APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

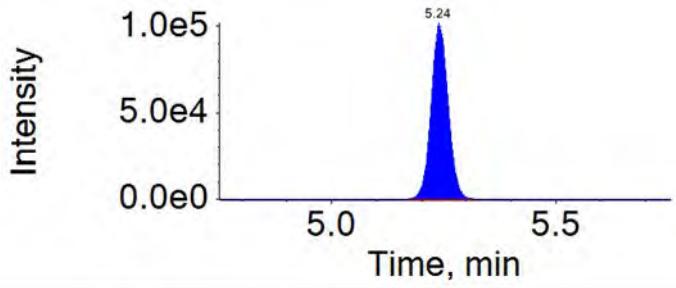
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

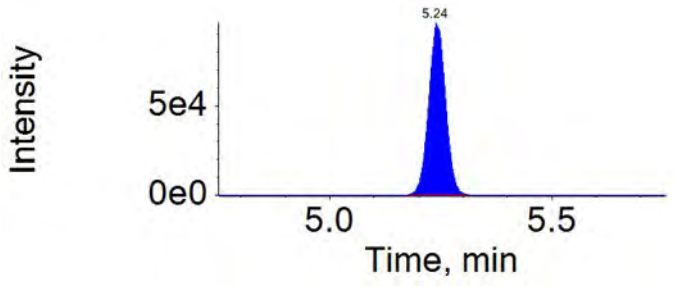
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0



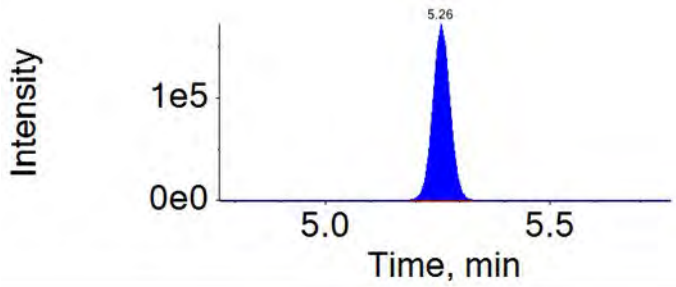


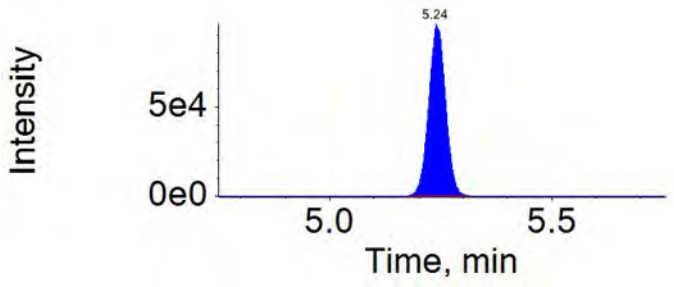
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0



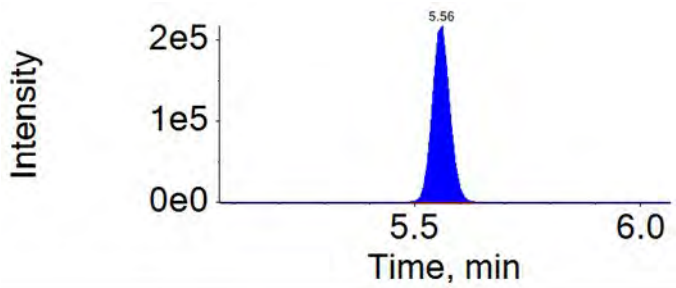


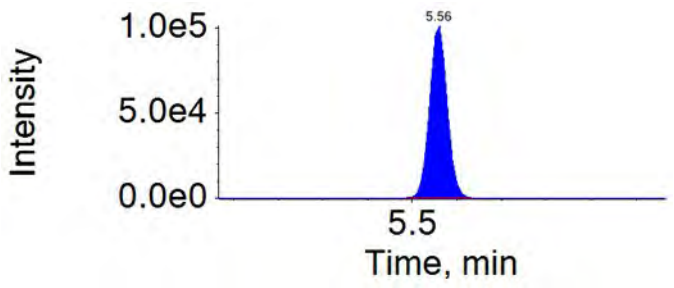
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0



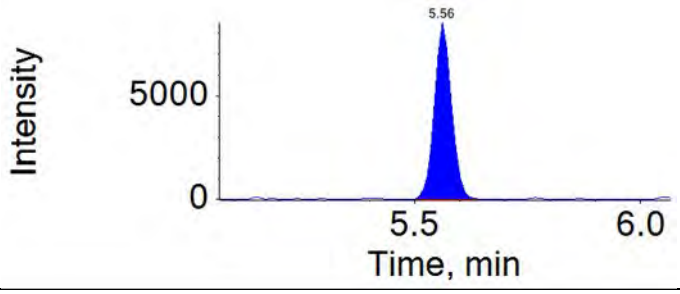
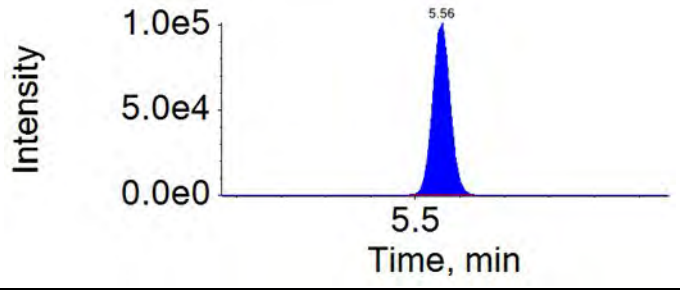


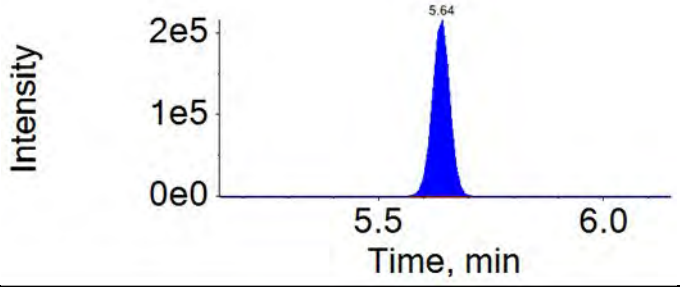
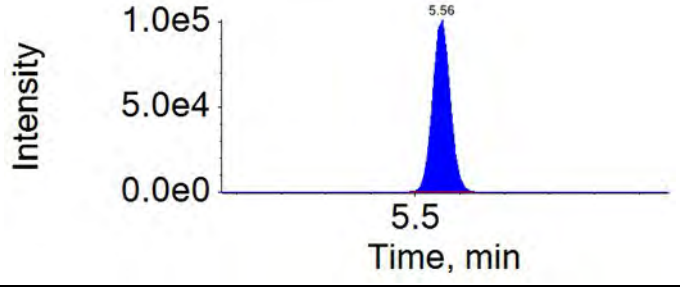
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0

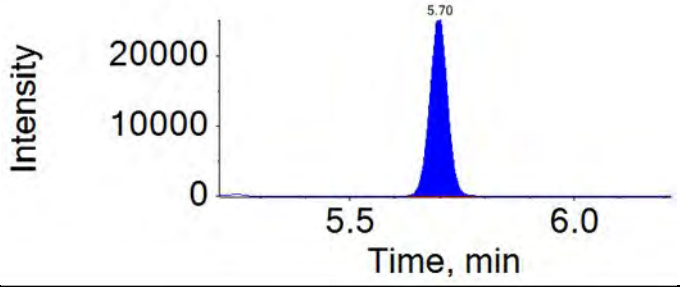
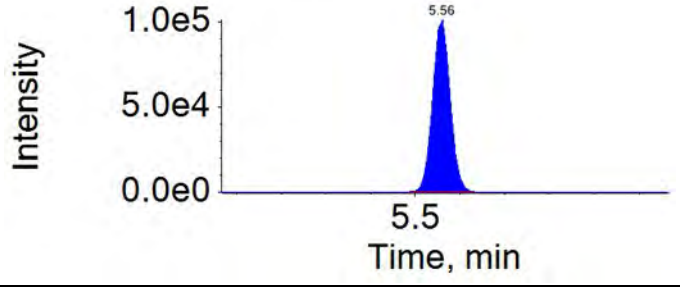


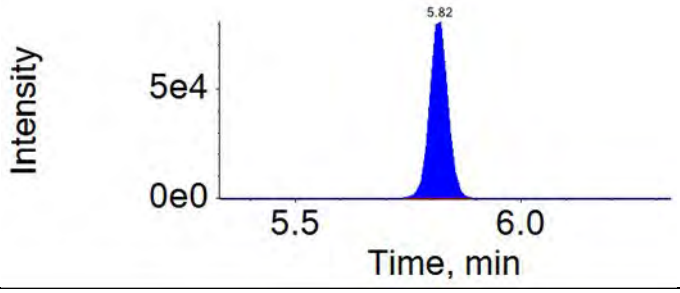
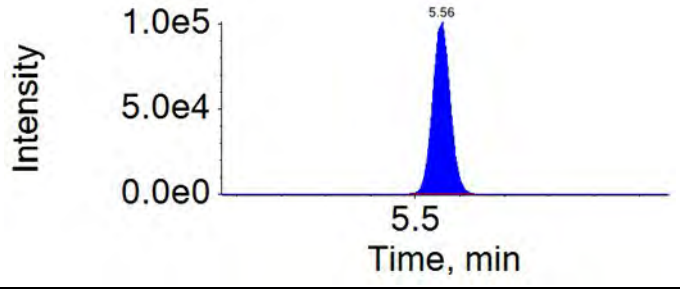


ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

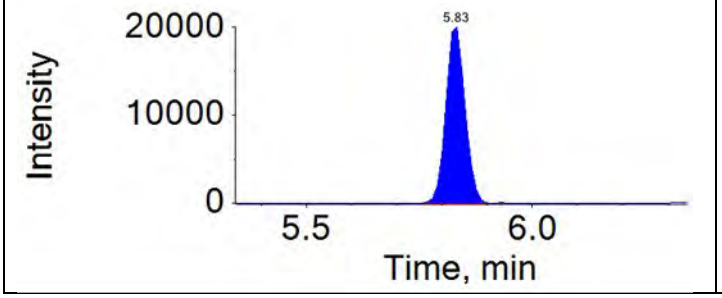
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

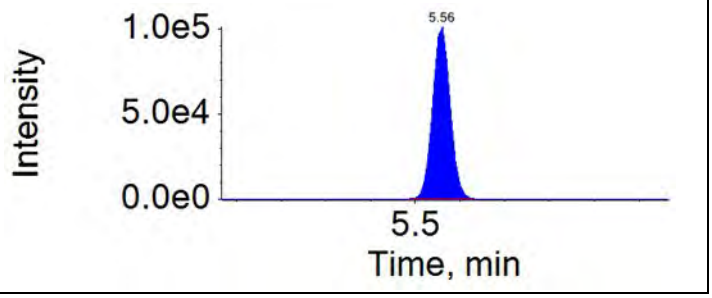
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

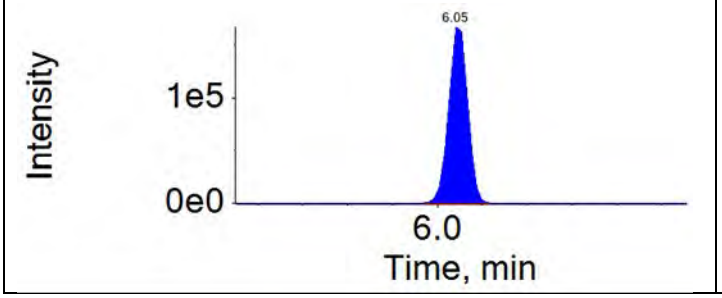
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

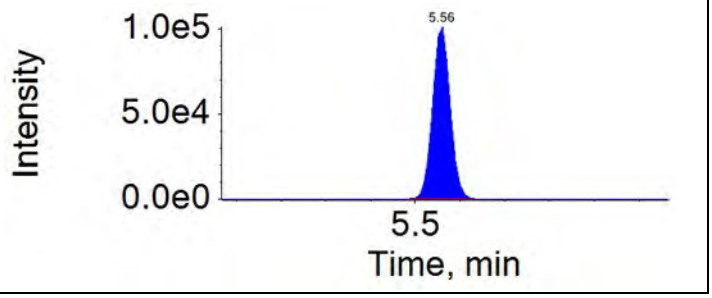
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



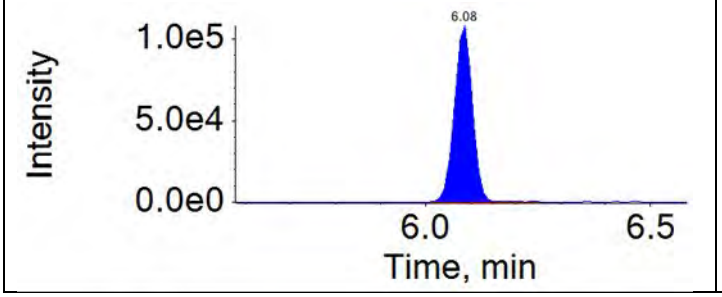


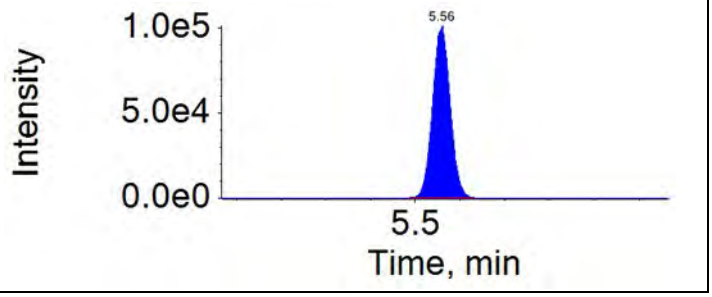
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



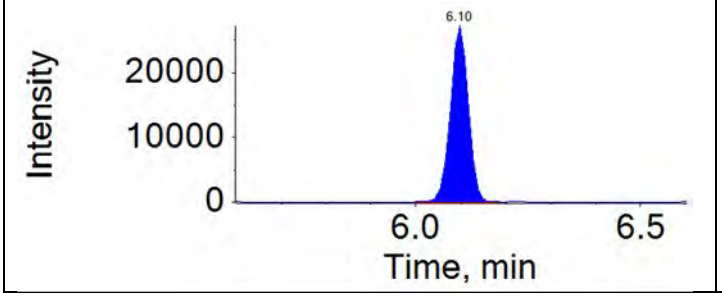


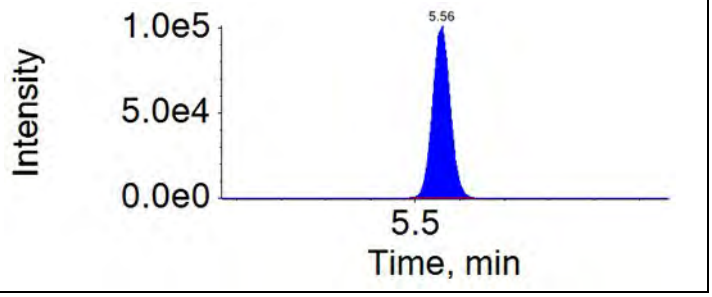
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





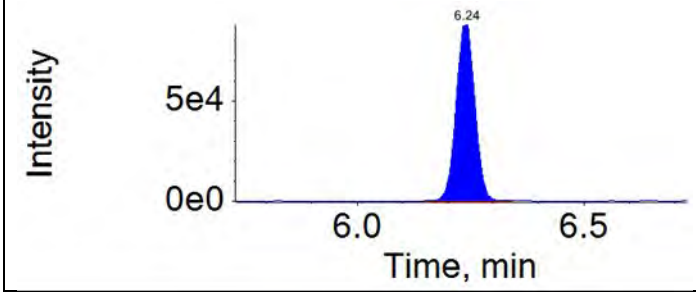
Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0

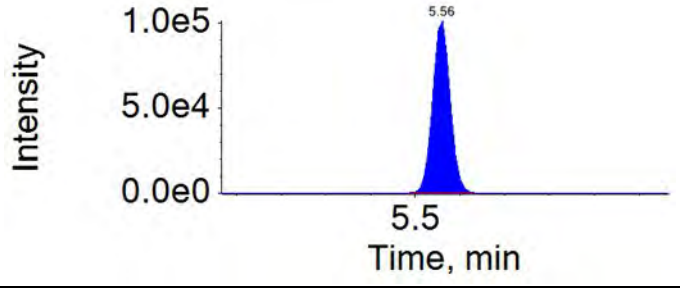




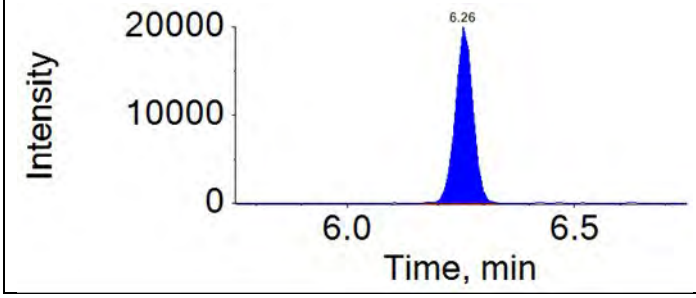
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

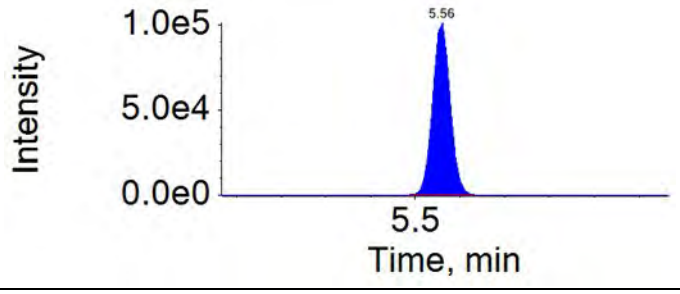
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



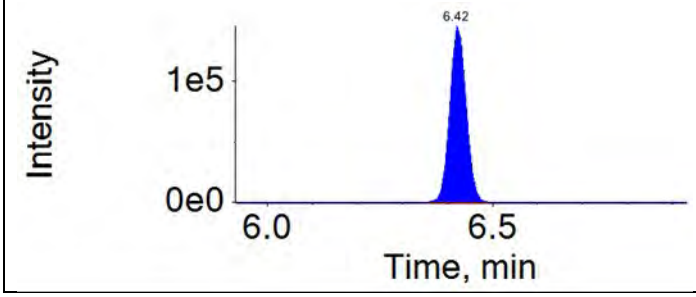


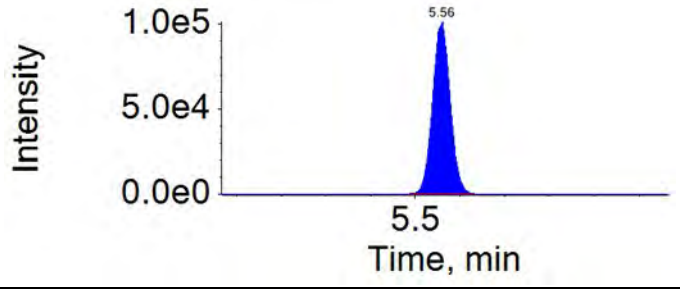
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





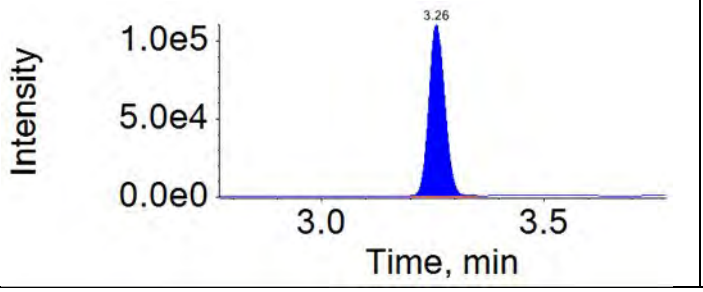
Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0

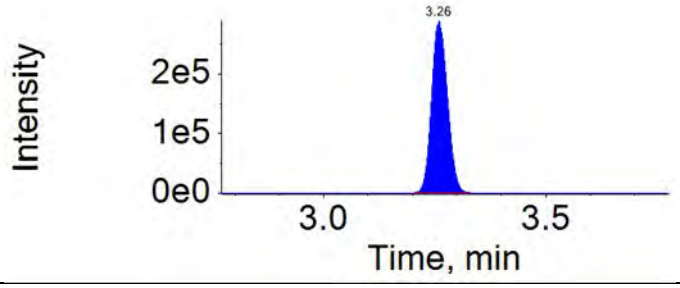




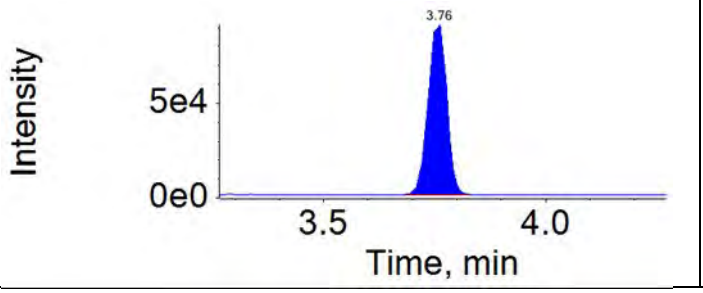
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

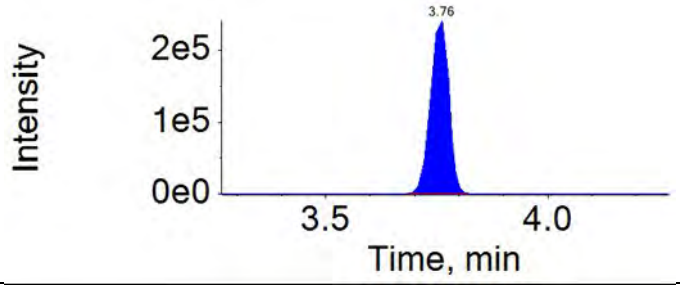
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



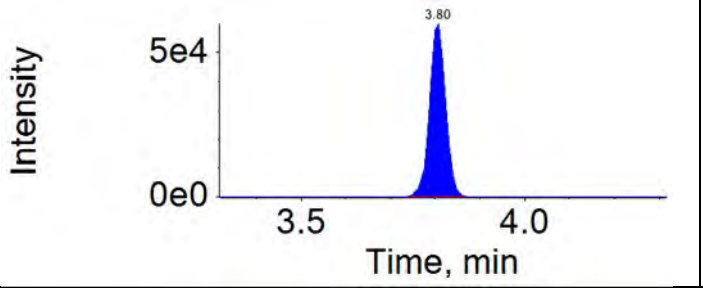


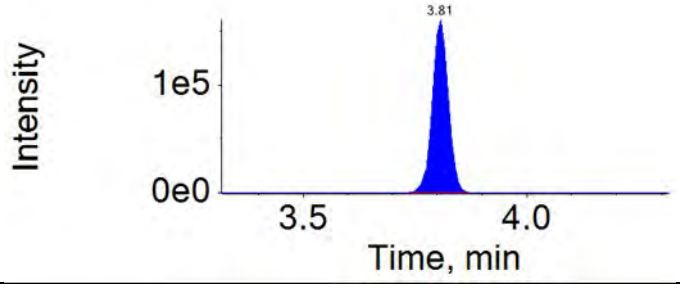
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



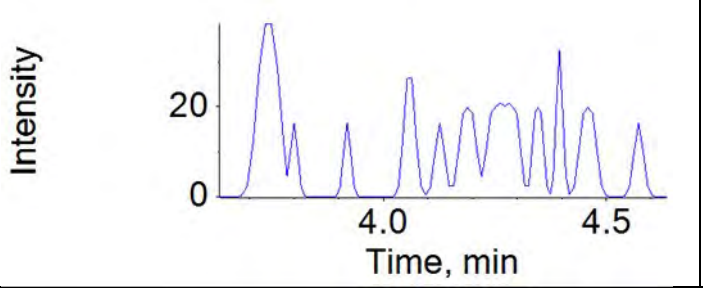


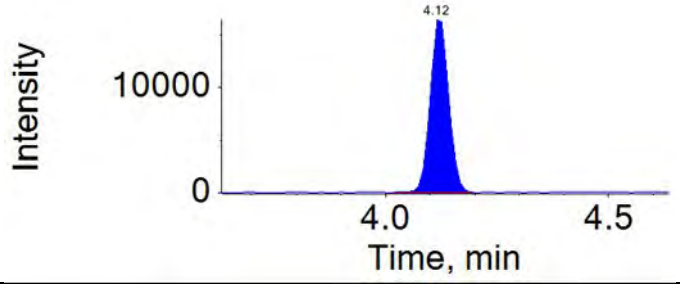
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



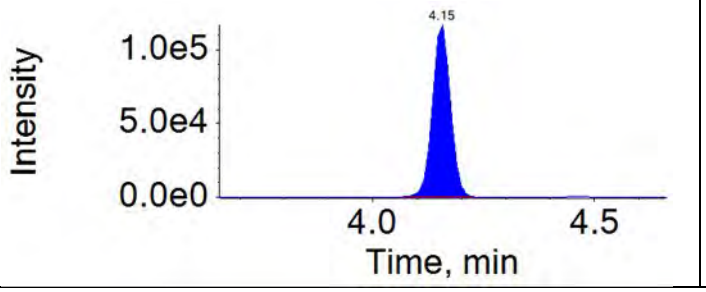


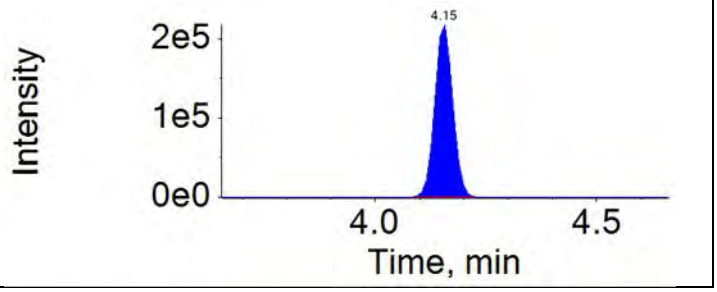
APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

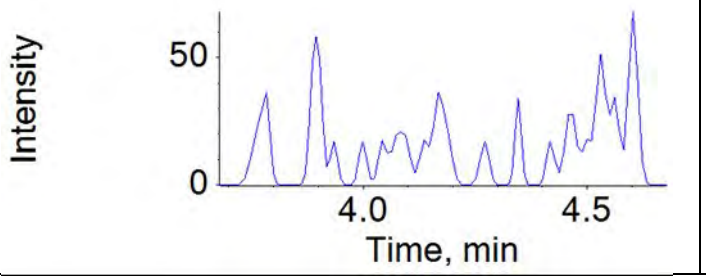
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

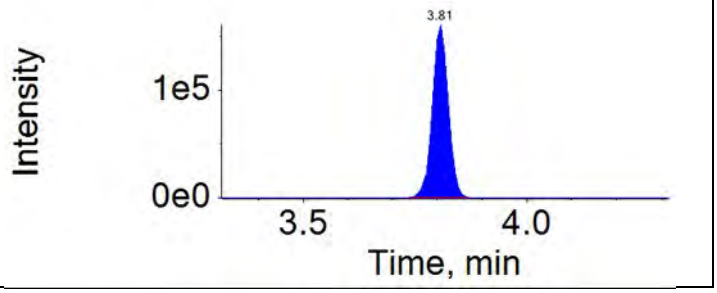
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



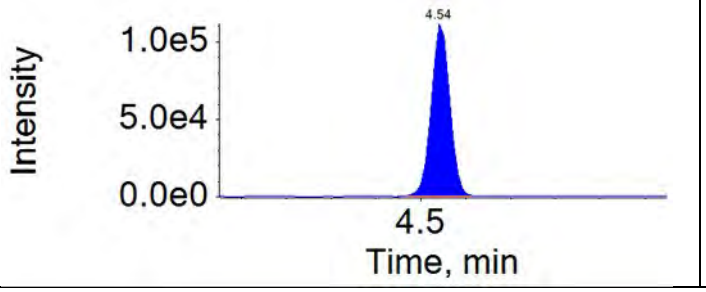


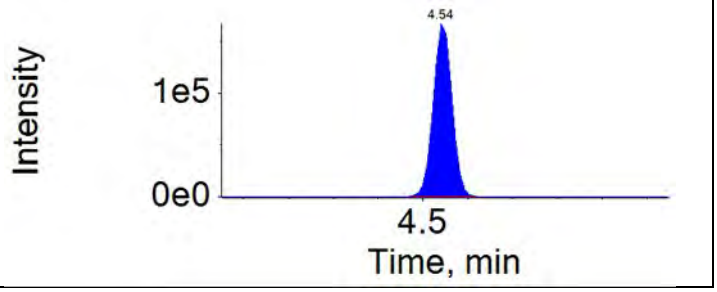
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



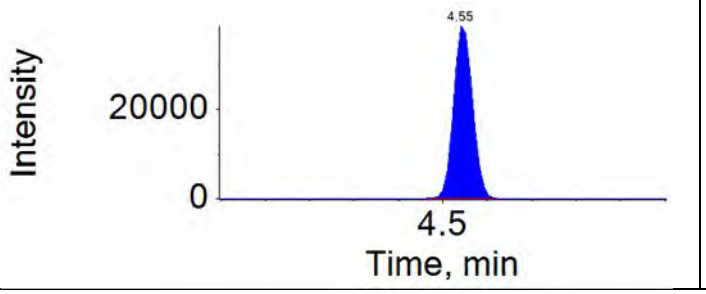


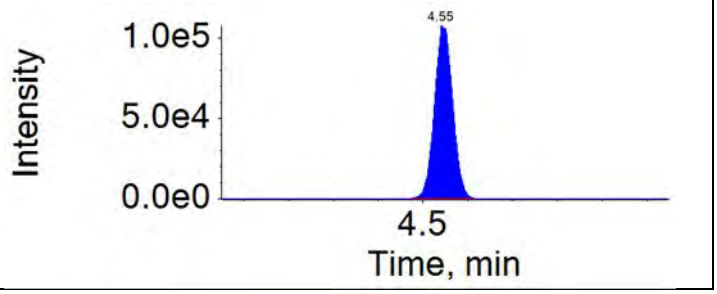
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0



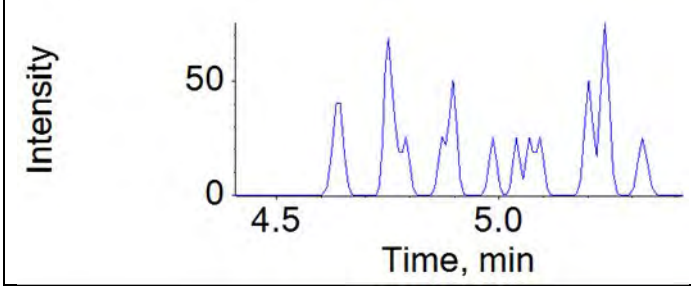
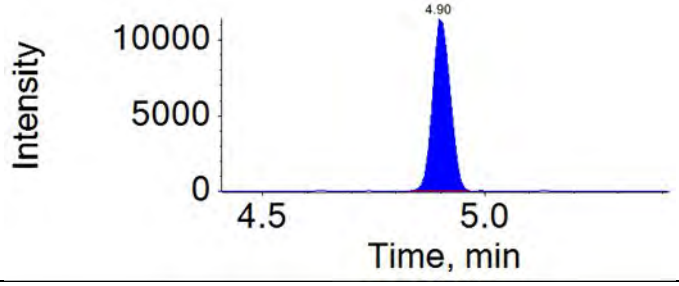


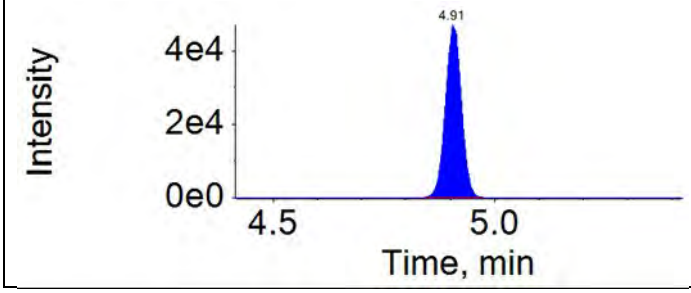
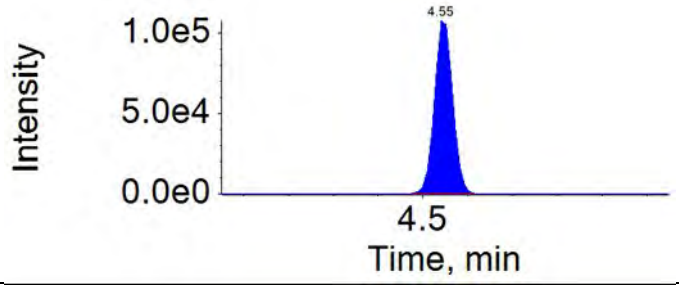
Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

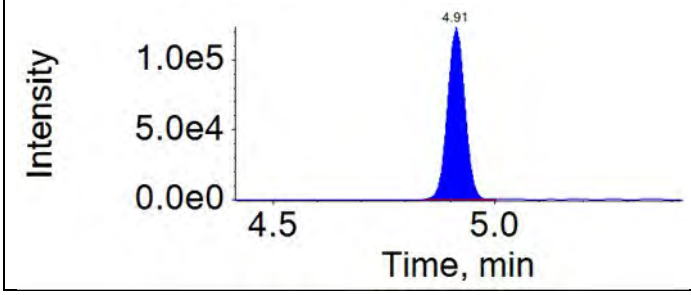
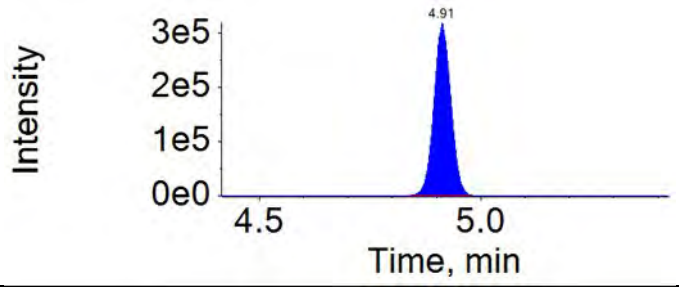


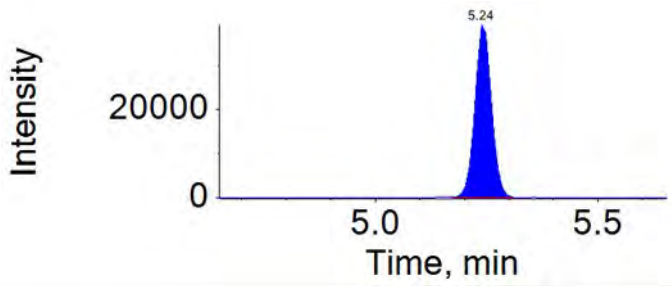
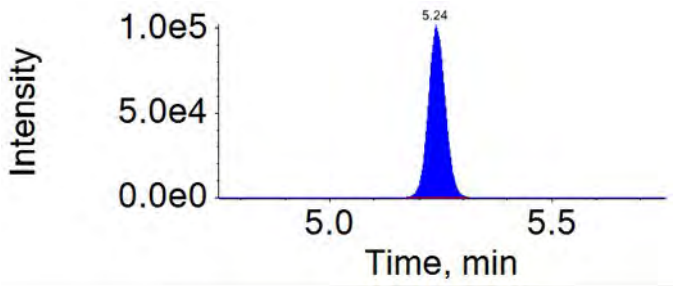


ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

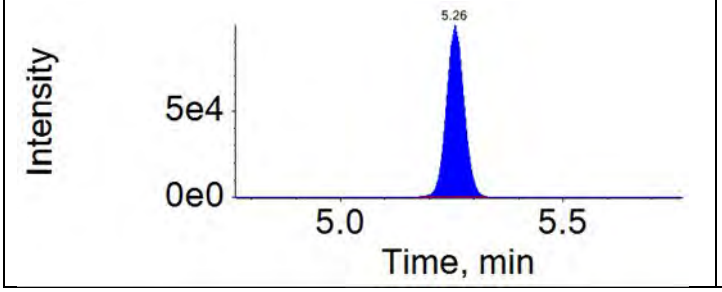
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

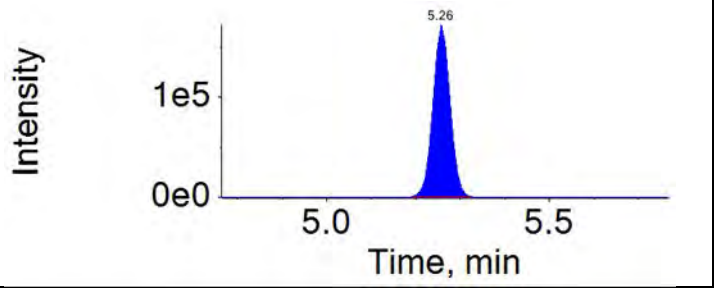
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

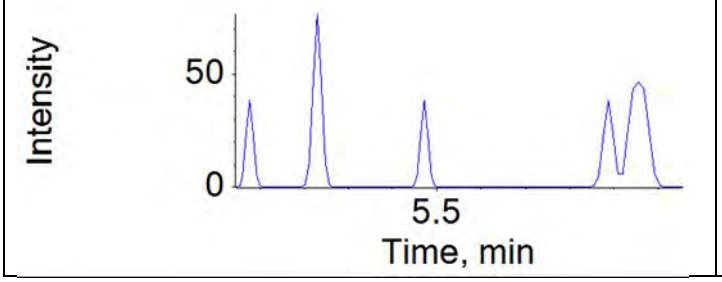
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

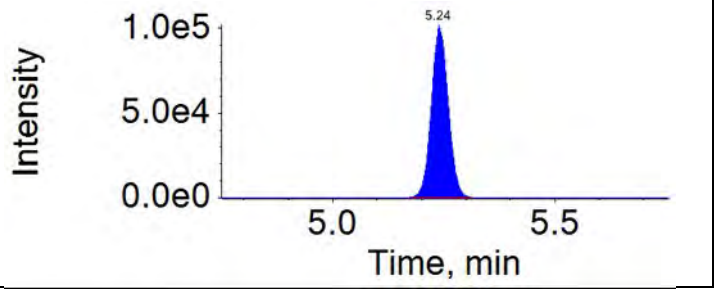
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



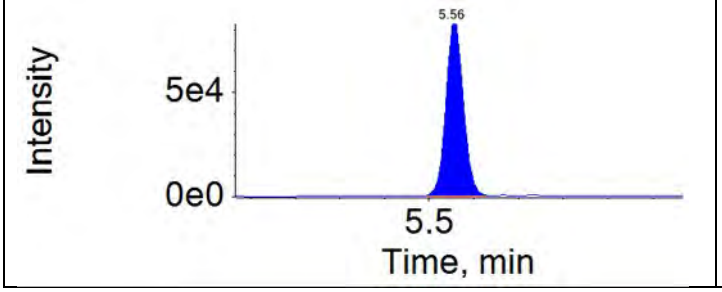


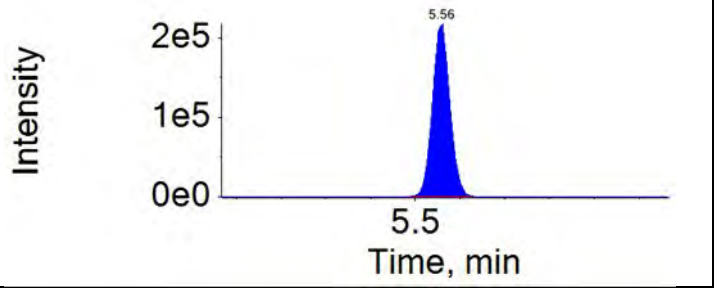
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



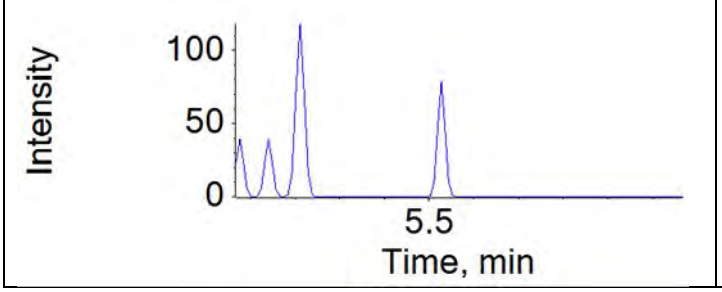


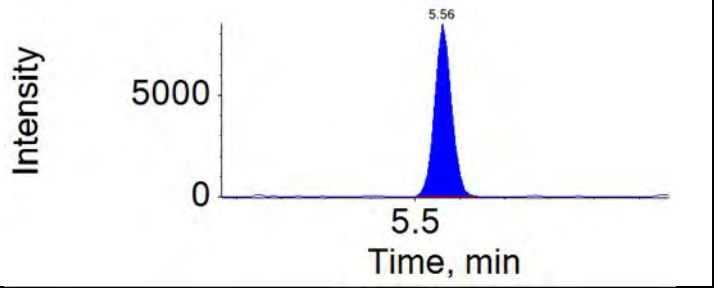
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0

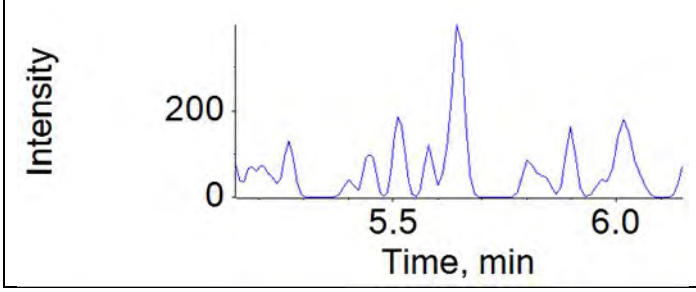
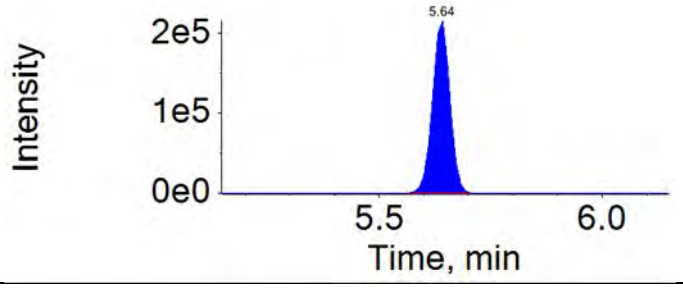


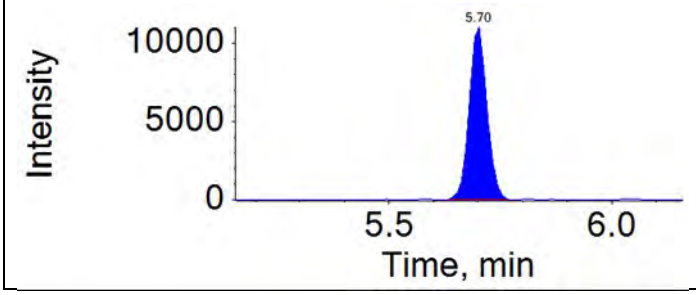
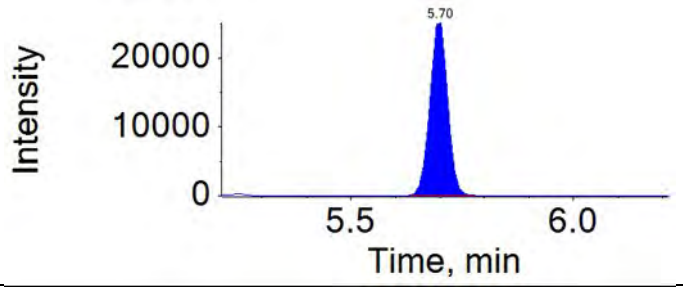


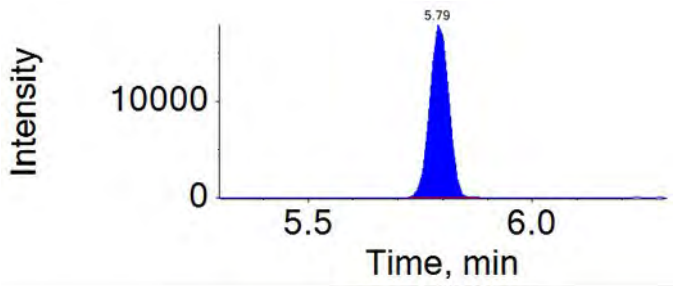
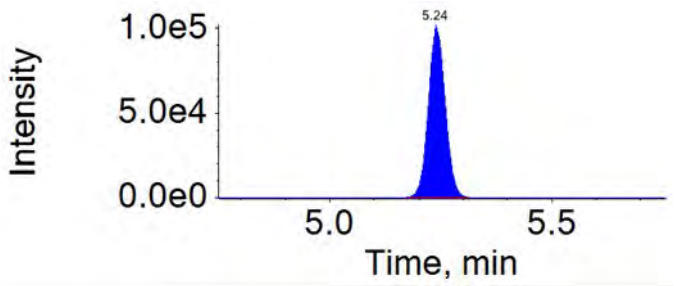
APPROVED
By MCD at 3:23 pm, 1/10/19

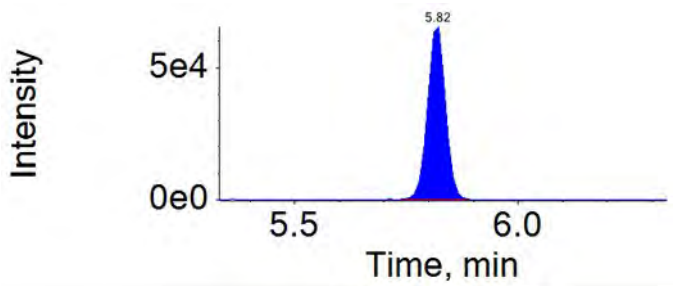
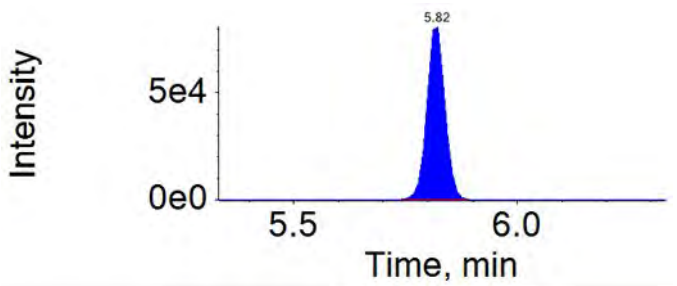
REVIEWED
By ucmr at 3:21 pm, 1/25/19

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0
	

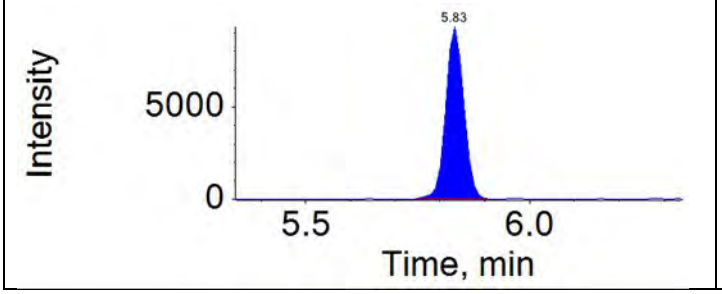
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0
	

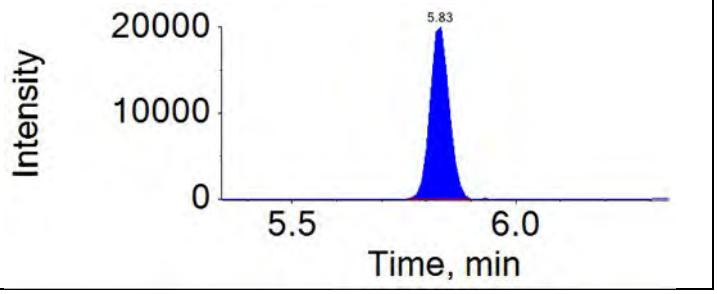
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0
	

Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0
	

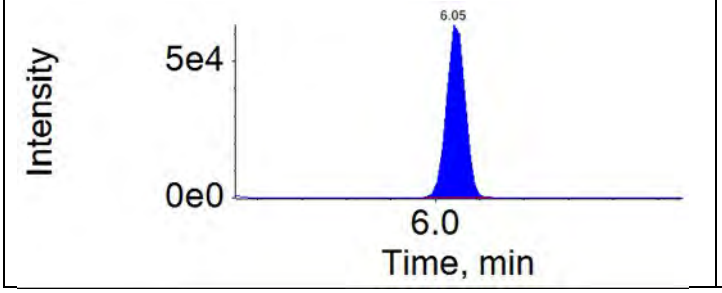
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

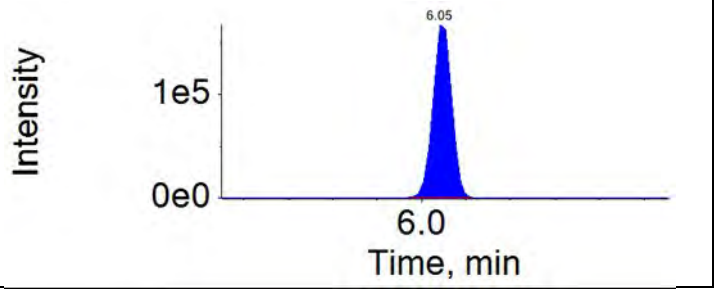
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



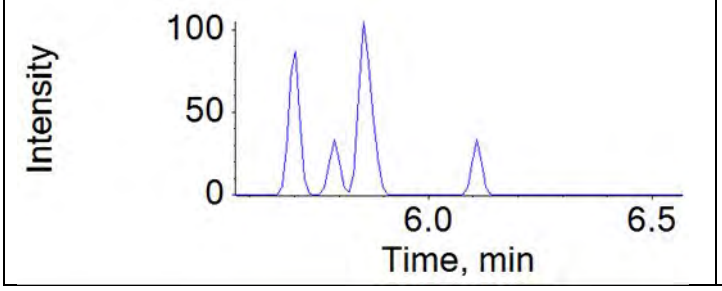


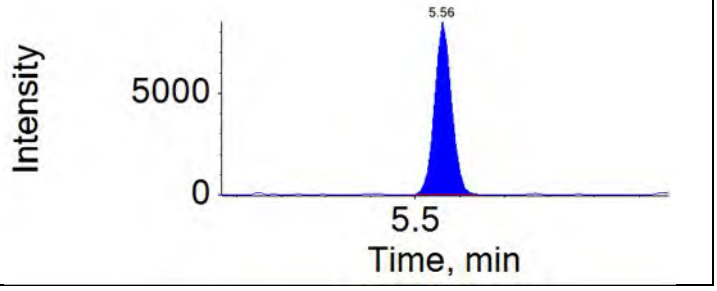
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



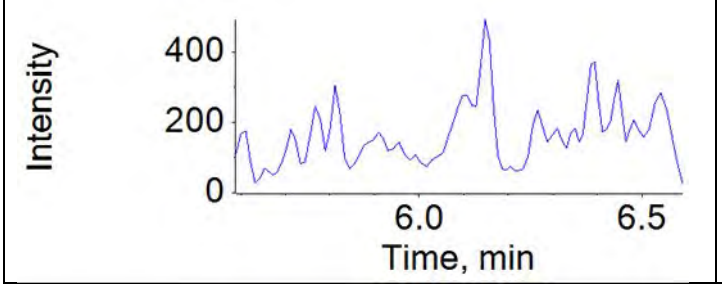


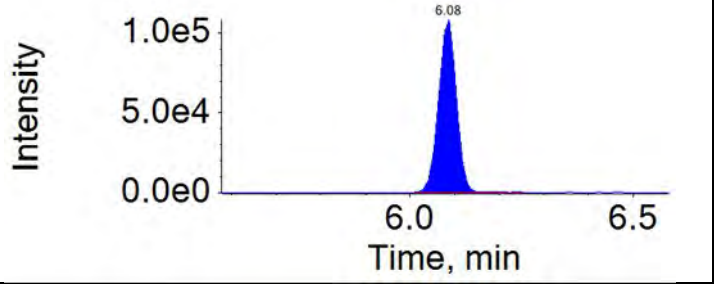
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



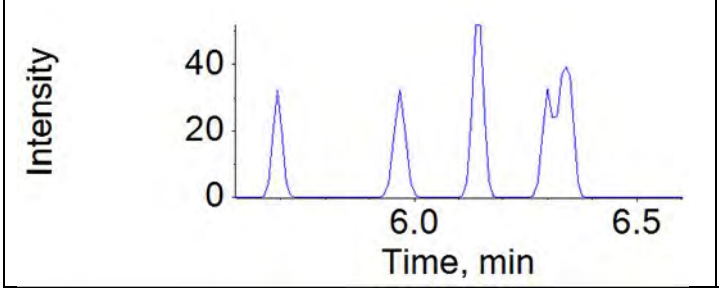


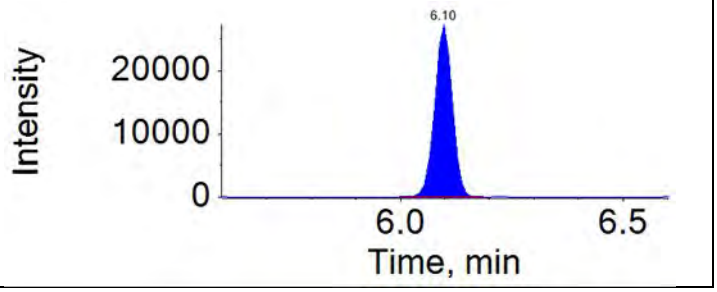
APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

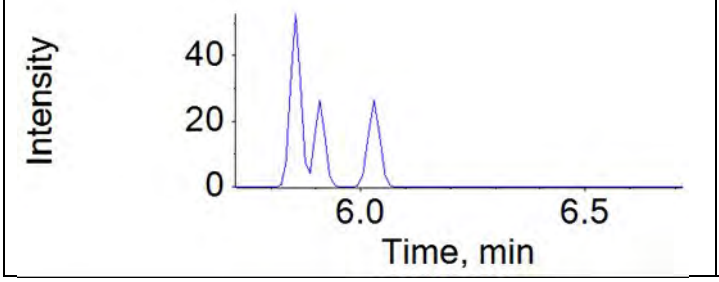
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

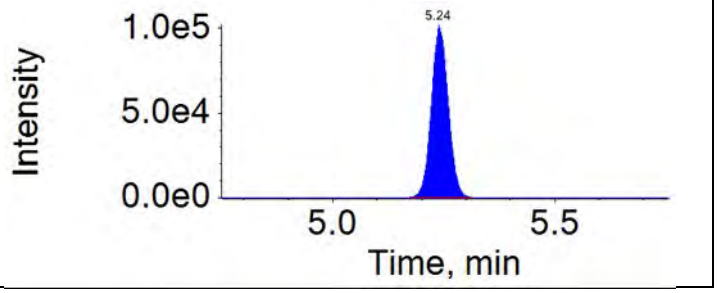
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



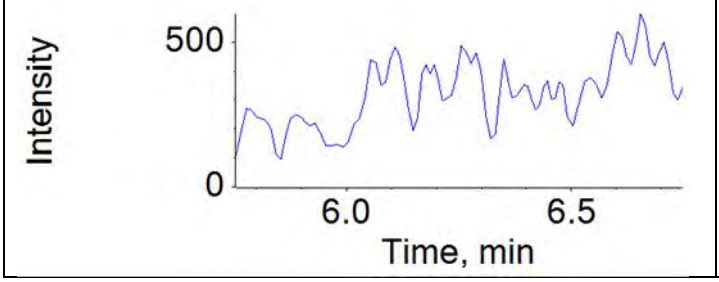


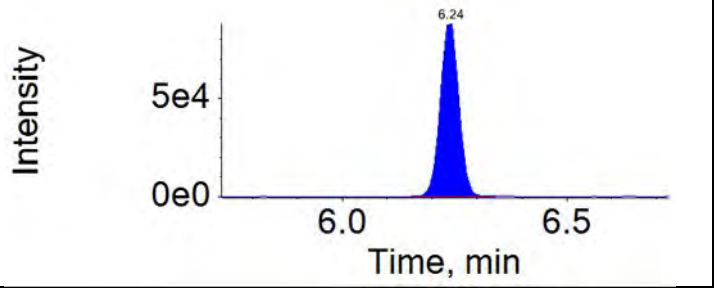
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



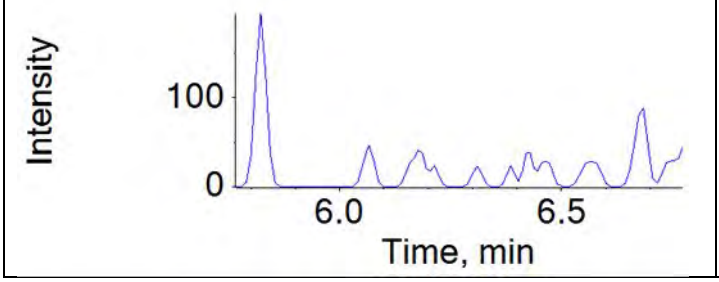


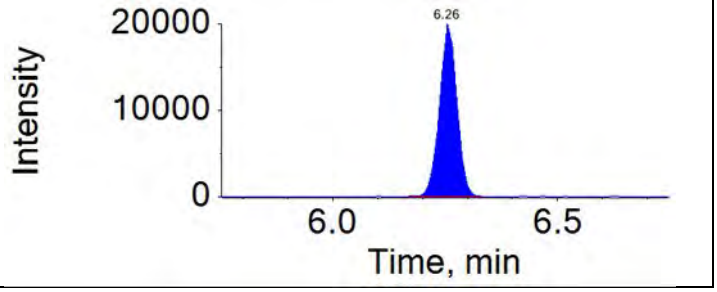
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



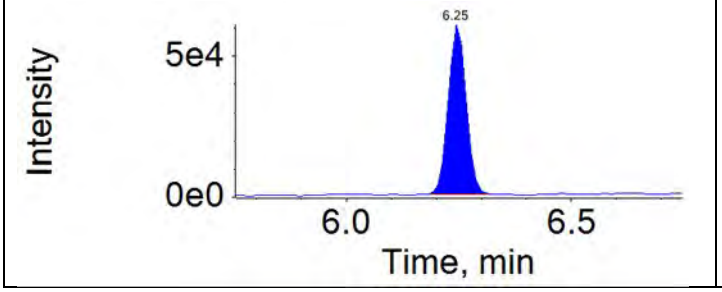


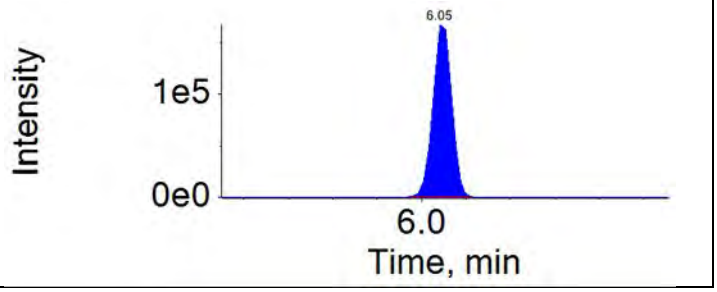
APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

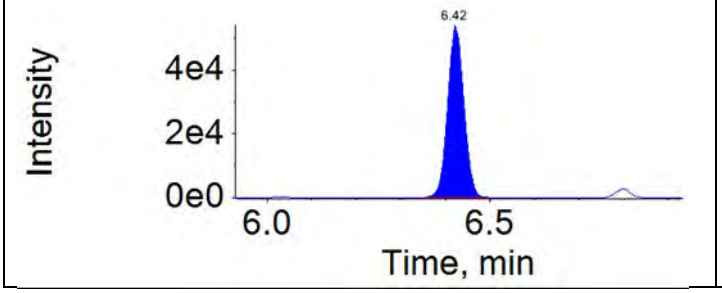
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL_Updated 1/10/2019 3:19:00 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

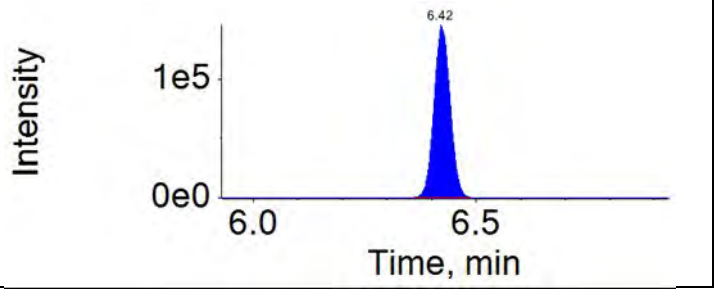
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



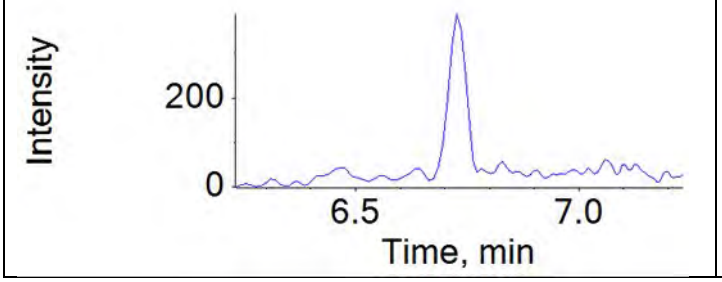


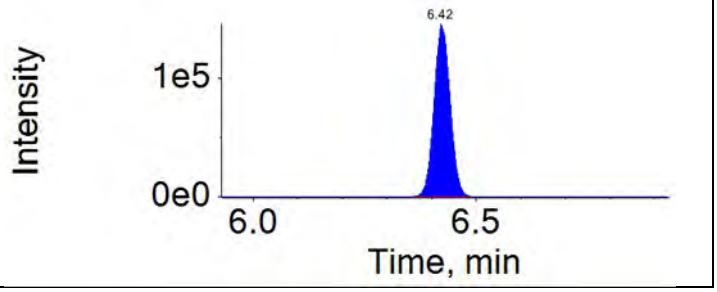
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



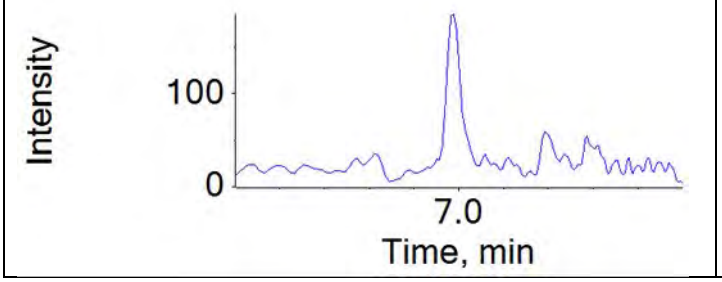


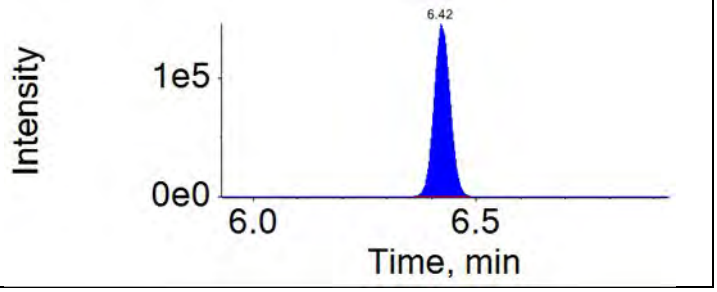
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



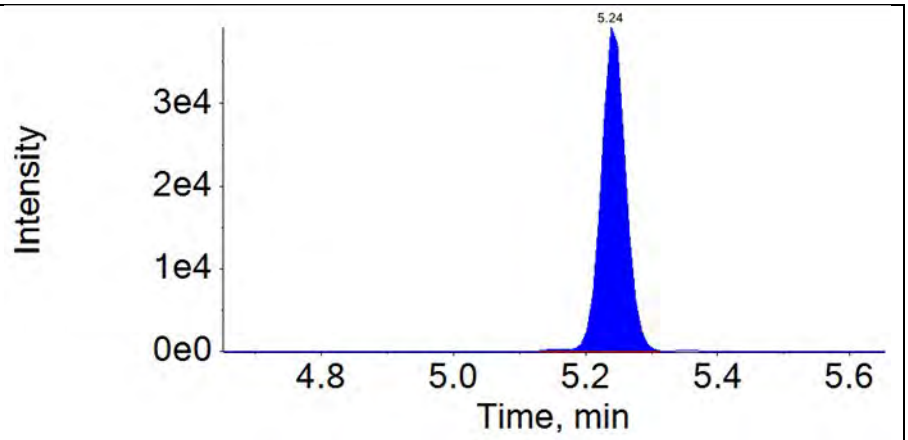


APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

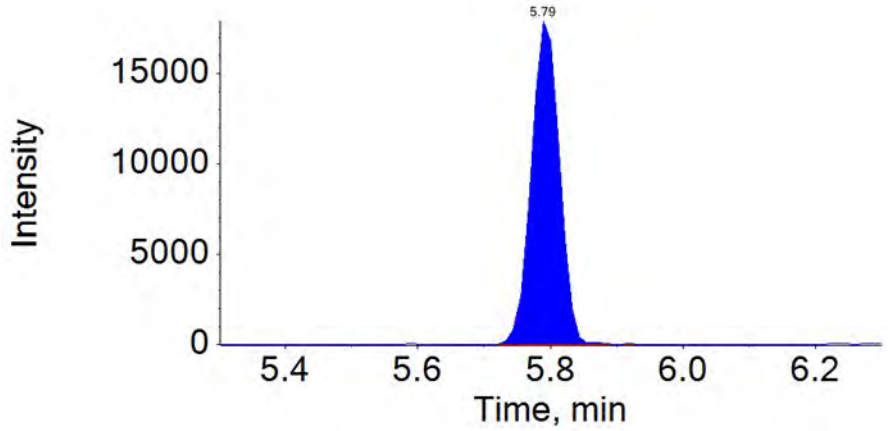
Results Table Name: 18NOV12DCAL_Updated
Results Table Date: 1/10/2019 3:19:00 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
101508.8
Mass Range:
499.0 / 80.0
File Name:
18NOV12DCAL-50.wiff
Sample Name:
ICV



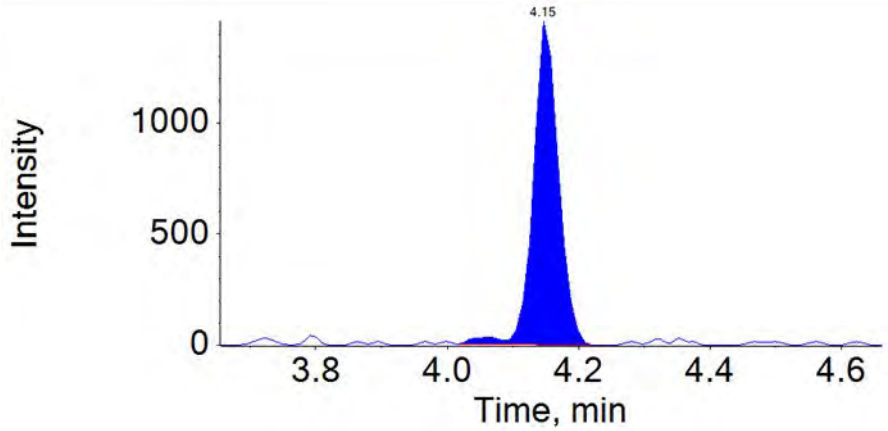
Integration Comment: incorrect integration

Component Name:
PFDS
RT (min.):
5.79
Peak Area:
52928.5
Mass Range:
599.0 / 80.0
File Name:
18NOV12DCAL-50.wiff
Sample Name:
ICV



Integration Comment: incorrect integration

Component Name:
PFHxA_2
RT (min.):
4.15
Peak Area:
3909.7
Mass Range:
313.0 / 119.0
File Name:
18NOV12DCAL-50.wiff
Sample Name:
ICV



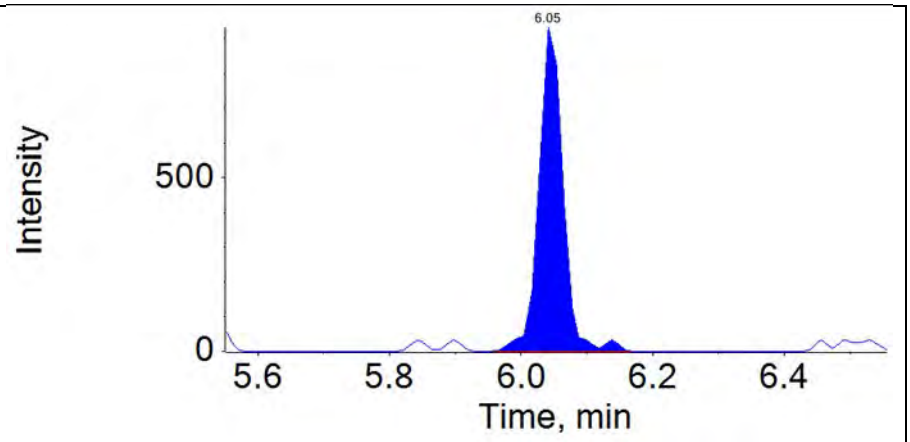
Integration Comment: incorrect integration

APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

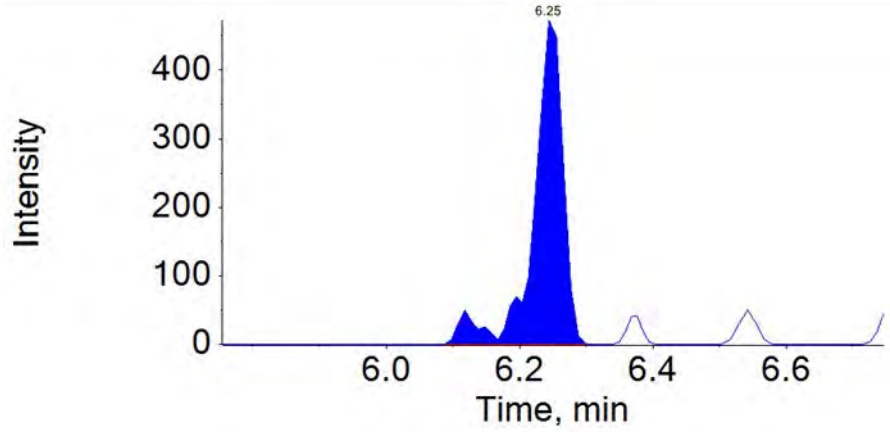
Results Table Name: 18NOV12DCAL_Updated
Results Table Date: 1/10/2019 3:19:00 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFDoDA_2
RT (min.):
6.05
Peak Area:
2399.9
Mass Range:
613.0 / 169.0
File Name:
18NOV12DCAL-50.wiff
Sample Name:
ICV



Integration Comment: incorrect integration

Component Name:
PFTrDA_2
RT (min.):
6.25
Peak Area:
1468.6
Mass Range:
663.0 / 169.0
File Name:
18NOV12DCAL-50.wiff
Sample Name:
ICV



Integration Comment: incorrect integration

APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

Results Table Name: 18NOV12DCAL_Updated
Results Table Date: 1/10/2019 3:19:00 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

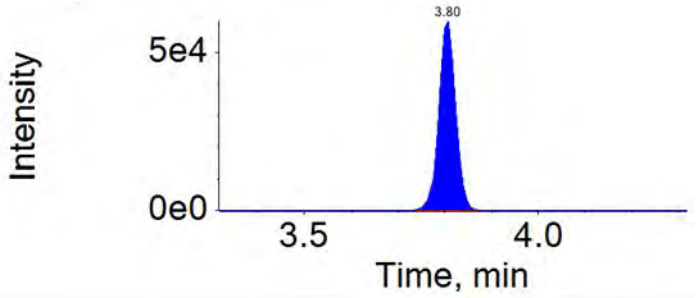
Sample Name: ICV **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-50.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.80	1.00	150059.6	A	N/A	0.3773			
PFBS_2	3.81	1.00	56617.7	A	N/A	0.3773	4	50	
4:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
4:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFHxA	4.15	1.00	328694.3	A	N/A	0.0117			
PFHxA_2	4.15	1.00	3829.7	M	N/A	0.0117	0	50	
PFPeS	N/A	N/A	N/A	A	N/A	N/A			
PFPeS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpA	4.54	1.00	316975.3	A	N/A	0.0530			
PFHpA_2	4.54	1.00	16790.6	A	N/A	0.0530	-6	50	
PFHxS	4.55	1.00	115564.2	A	N/A	0.3340			
PFHxS_2	4.55	1.00	38596.8	A	N/A	0.3340	-3	50	
6:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
6:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFHpS	4.91	1.08	118318.7	A	N/A	0.3735			
PFHpS_2	4.91	1.08	44193.2	A	N/A	0.3735	-8	50	
PFOA	4.91	1.00	332094.4	A	N/A	0.0559			
PFOA_2	4.91	1.00	18574.5	A	N/A	0.0559	0	50	
PFOS	5.24	1.00	100952.5	M	N/A	0.3741			
PFOS_2	5.24	1.00	37762.8	A	N/A	0.3741	26	50	
PFNA	5.26	1.00	271240.4	A	N/A	0.0190			
PFNA_2	5.26	1.00	5150.4	A	N/A	0.0190	-17	50	
PFNS	N/A	N/A	N/A	A	N/A	N/A			
PFNS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDA	5.56	1.00	224279.7	A	N/A	0.0061			
PFDA_2	5.56	1.00	1372.7	A	N/A	0.0061	-24	50	
8:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
8:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
NMeFOSAA	5.70	1.00	30591.9	A	N/A	0.2719			
NMeFOSAA_2	5.70	1.00	8316.9	A	N/A	0.2719	6	50	
PFDS	5.79	1.11	52860.9	M	N/A	0.5291			
PFDS_2	5.79	1.11	27969.6	A	N/A	0.5291	3	50	
PFUnDA	5.82	1.00	183511.3	A	N/A	0.0078			
PFUnDA_2	5.82	1.00	1432.4	A	N/A	0.0078	34	50	
NEtFOSAA	5.83	1.00	26149.3	A	N/A	0.6365			
NEtFOSAA_2	5.83	1.00	16644.9	A	N/A	0.6365	-12	50	
PFDoDA	6.05	1.00	185295.0	A	N/A	0.0127			
PFDoDA_2	6.05	1.00	2349.0	M	N/A	0.0127	-19	50	
10:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
10:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFTrDA	6.25	1.03	165153.1	A	N/A	0.0082			
PFTrDA_2	6.25	1.03	1357.0	M	N/A	0.0082	-4	50	
PFTeDA	6.42	1.00	135651.0	A	N/A	0.0054			
PFTeDA_2	6.42	1.00	727.0	A	N/A	0.0054	-14	50	
PFHxDA	N/A	N/A	N/A	A	N/A	N/A			
PFHxDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFODA	N/A	N/A	N/A	A	N/A	N/A			
PFODA_2	N/A	N/A	N/A	A	N/A	N/A		50	

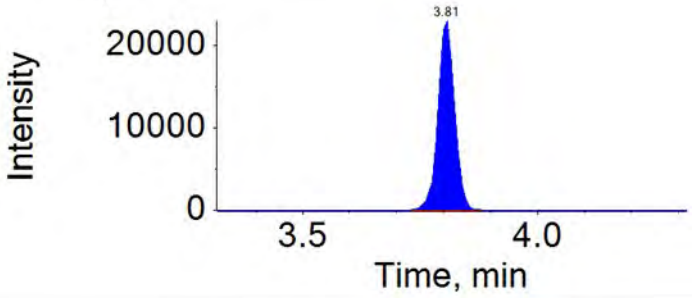
APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

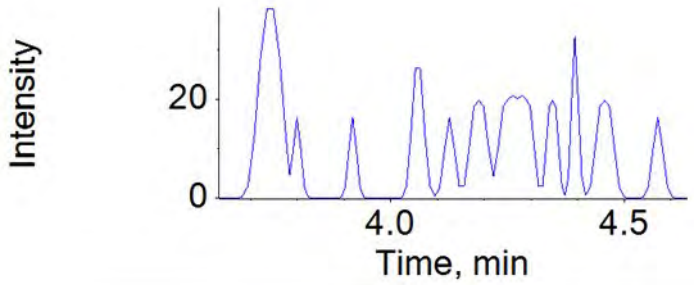
Component: PFBS
Primary Mass: 299.0 / 80.0



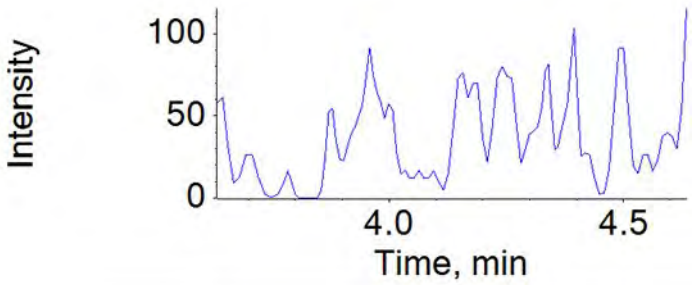
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



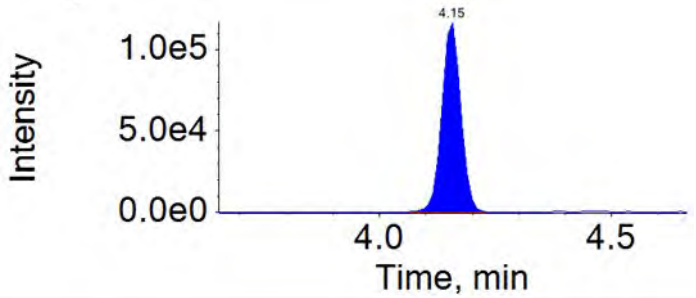
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



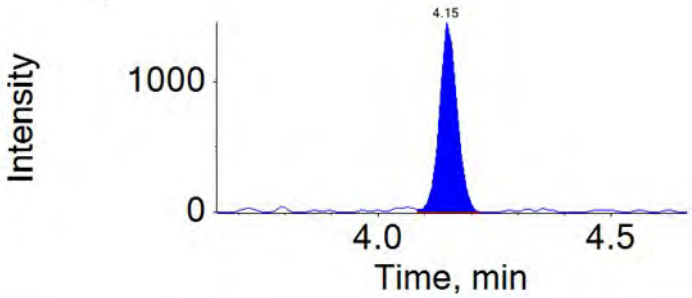
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



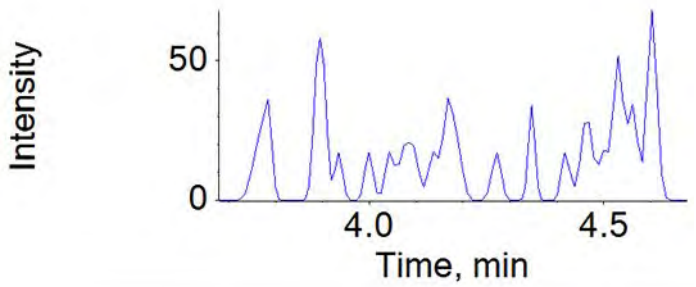
Component: PFHxA
Primary Mass: 313.0 / 269.0



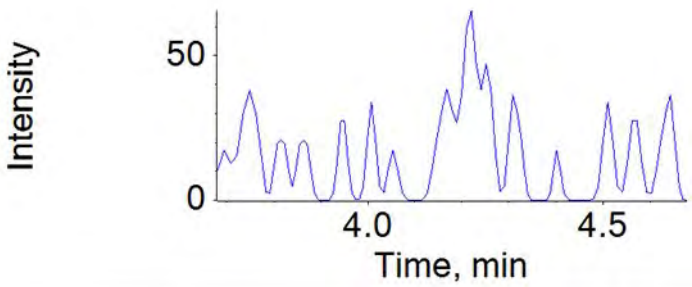
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



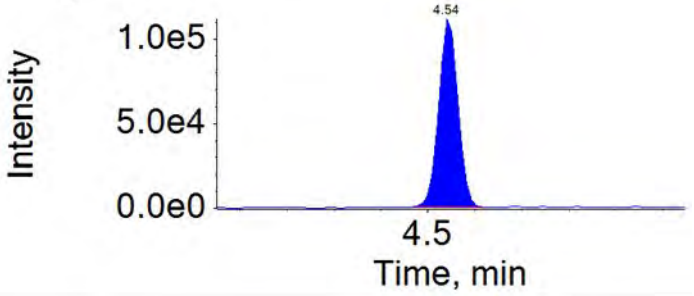
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



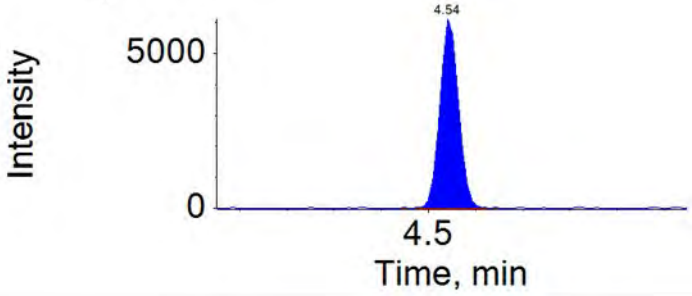
APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

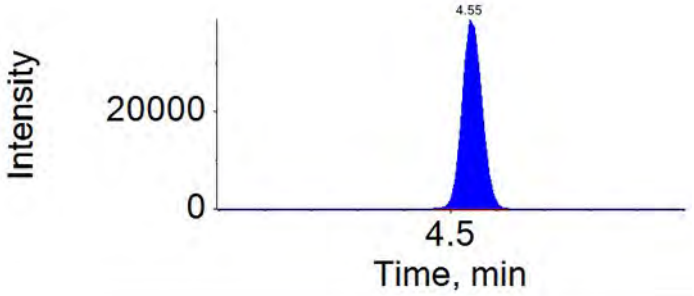
Component: PFHpA
Primary Mass: 363.0 / 319.0



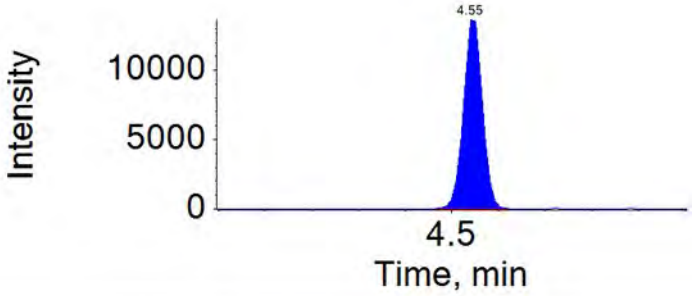
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



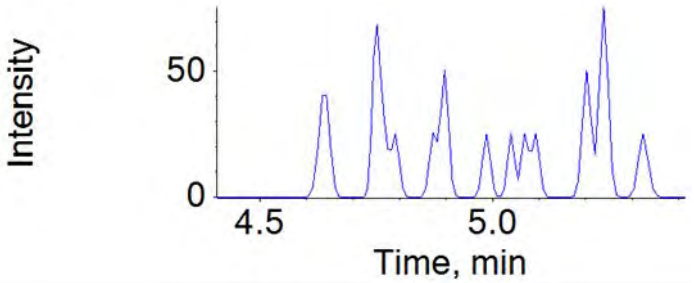
Component: PFHxS
Primary Mass: 399.0 / 80.0



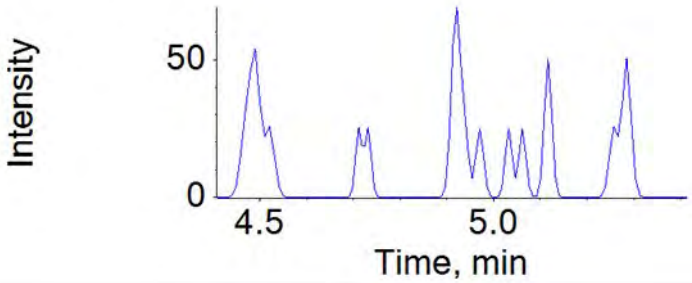
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



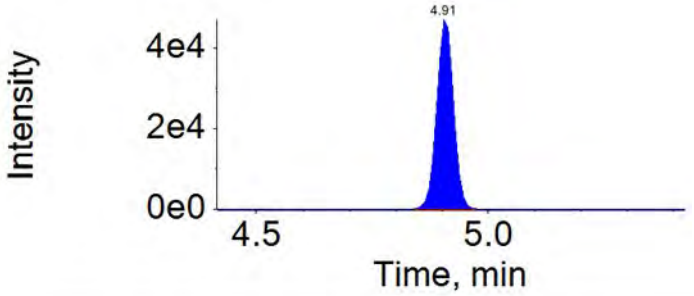
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



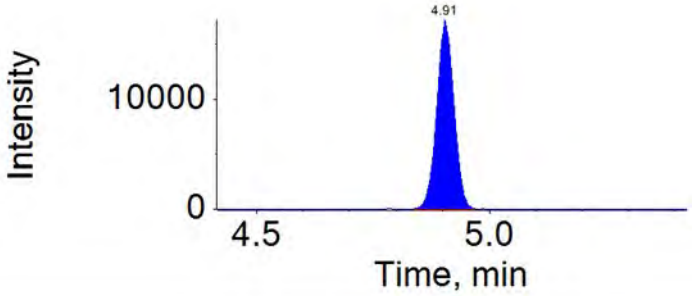
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



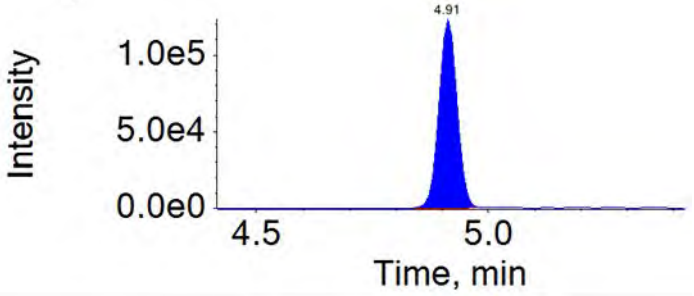
Component: PFHpS
Primary Mass: 449.0 / 80.0



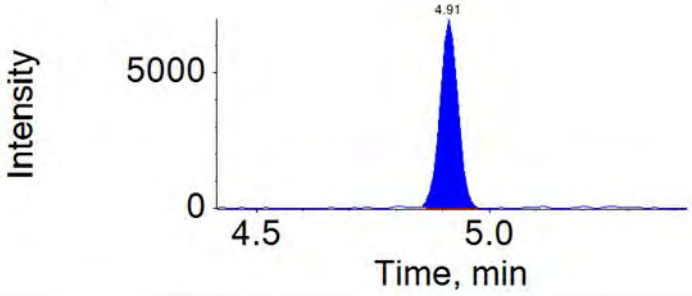
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



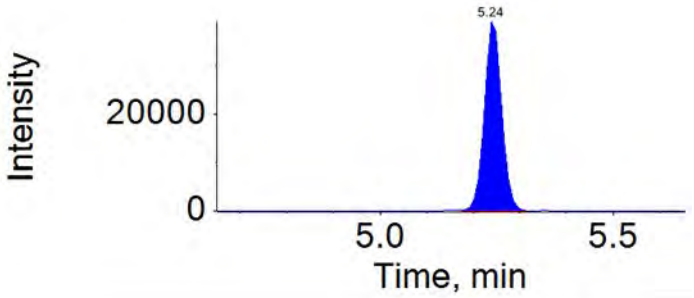
Component: PFOA
Primary Mass: 413.0 / 369.0



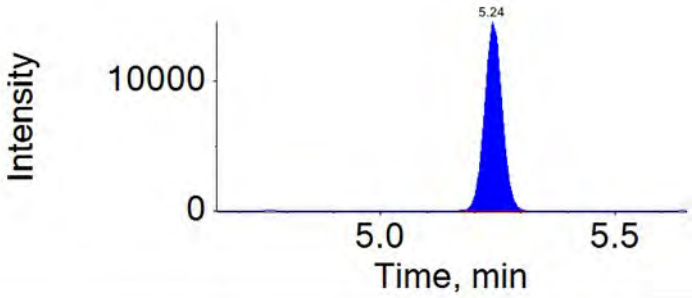
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



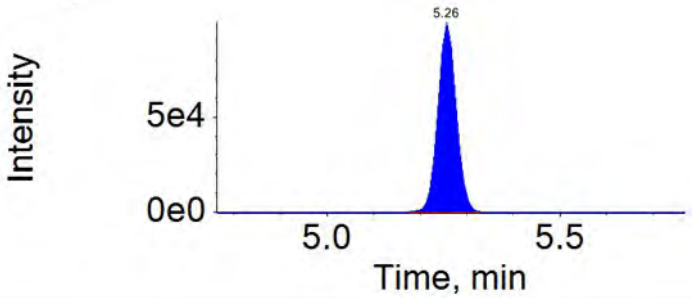
Component: PFOS
Primary Mass: 499.0 / 80.0



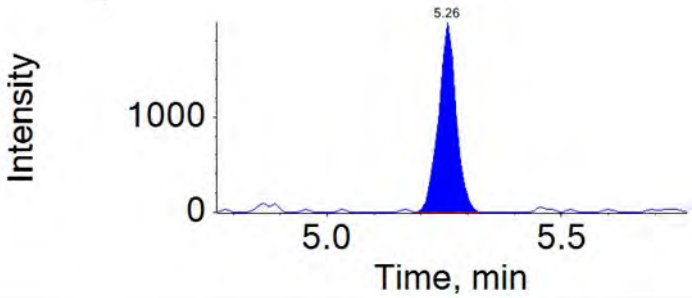
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



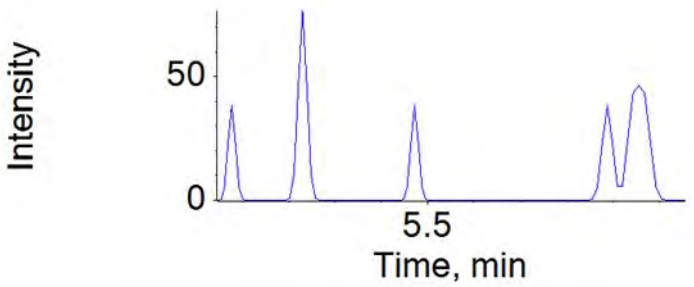
Component: PFNA
Primary Mass: 463.0 / 419.0



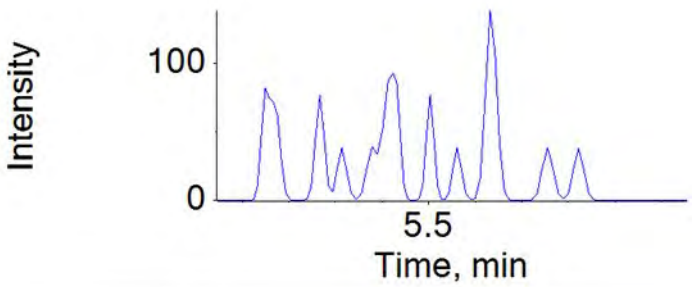
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Secondary Mass: 463.0 / 169.0



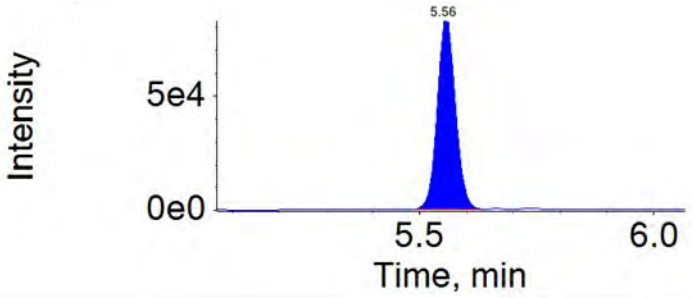
Component: PFNS
Primary Mass: 549.0 / 80.0



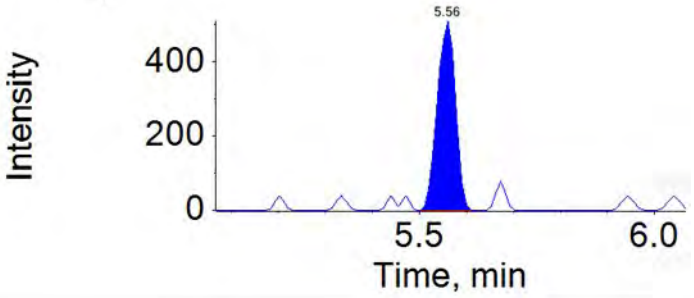
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



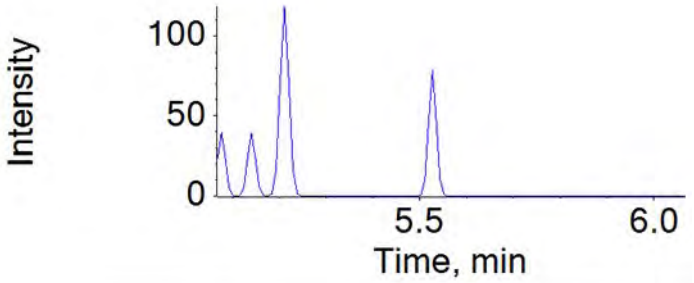
Component: PFDA
Primary Mass: 513.0 / 469.0



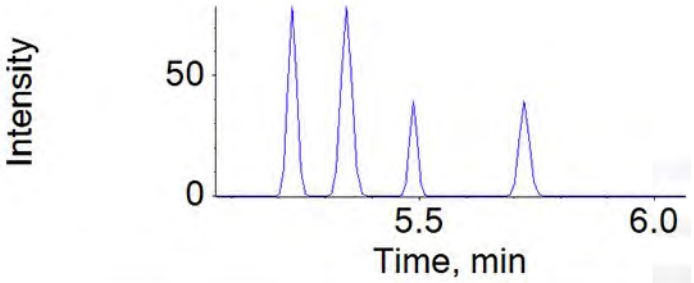
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Secondary Mass: 513.0 / 169.0



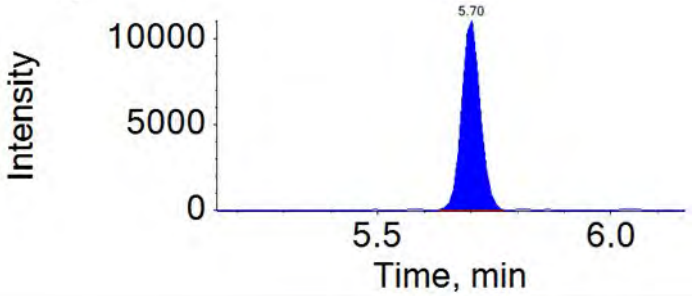
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



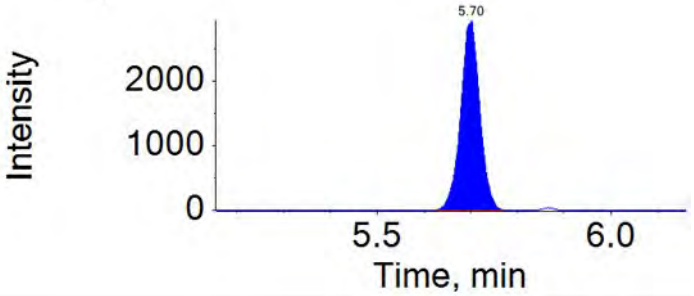
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



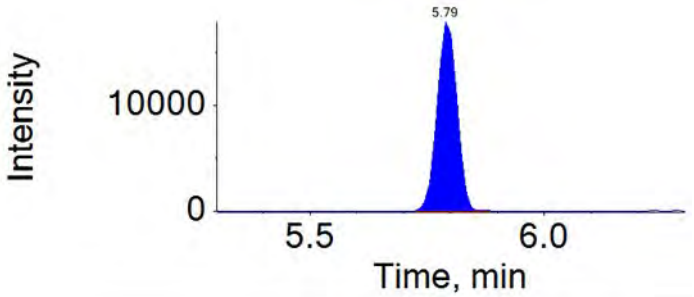
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



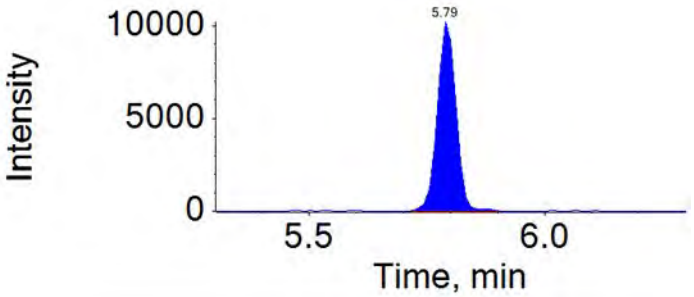
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



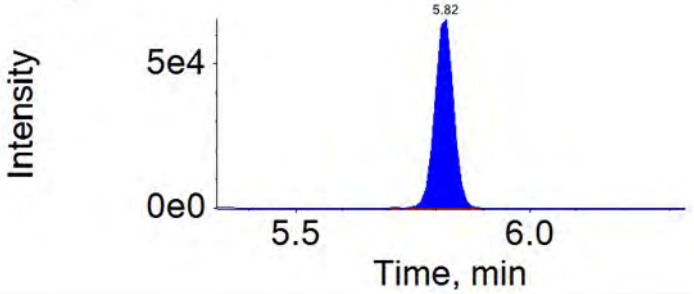
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Secondary Mass: 599.0 / 99.0



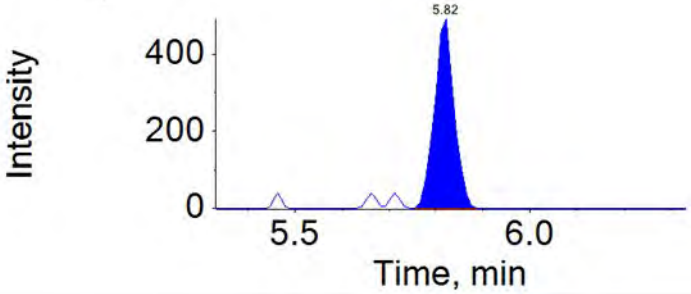
APPROVED
By MCD at 3:23 pm, 1/10/19

REVIEWED
By ucmr at 3:21 pm, 1/25/19

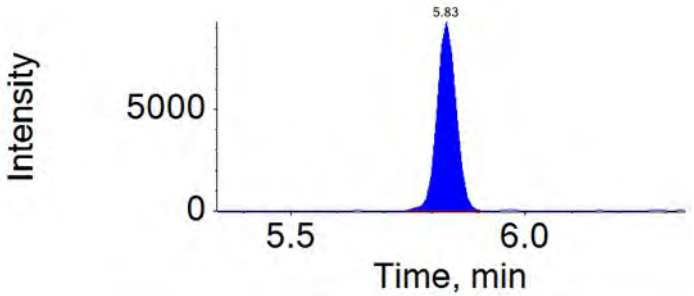
Component: PFUnDA
Primary Mass: 563.0 / 519.0



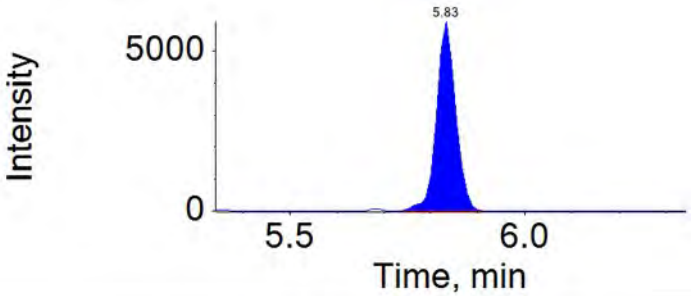
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Secondary Mass: 563.0 / 169.0



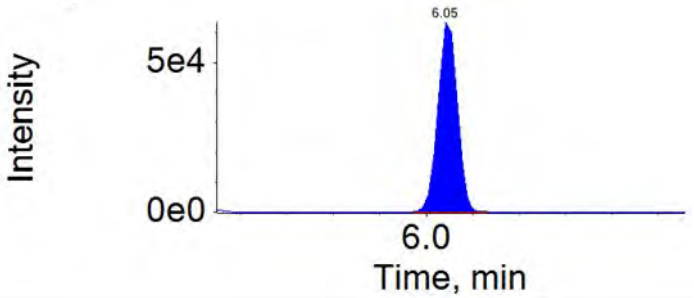
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



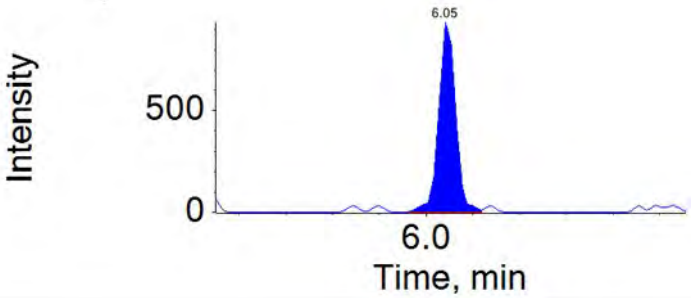
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



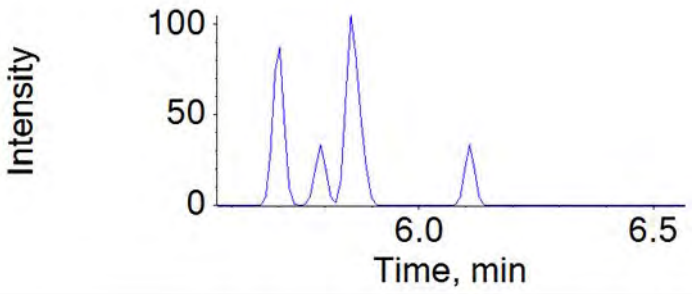
Component: PFDoDA
Primary Mass: 613.0 / 569.0



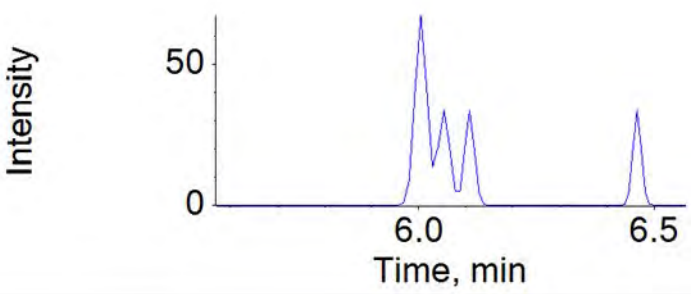
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



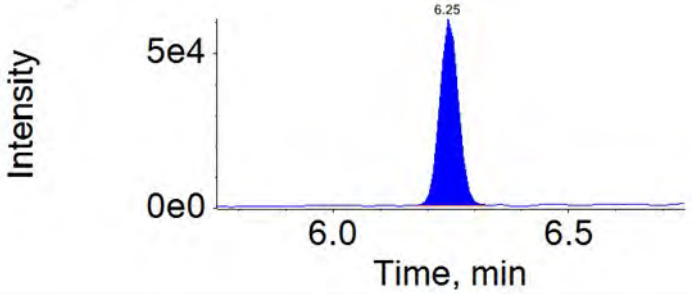
Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



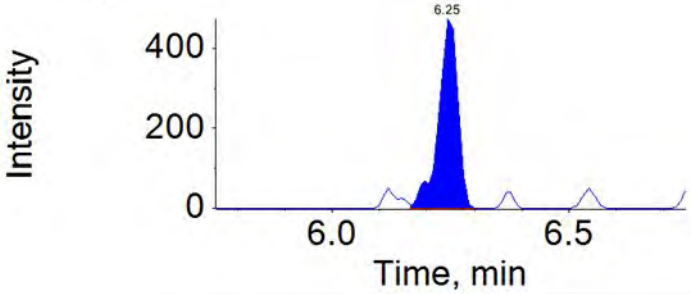
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



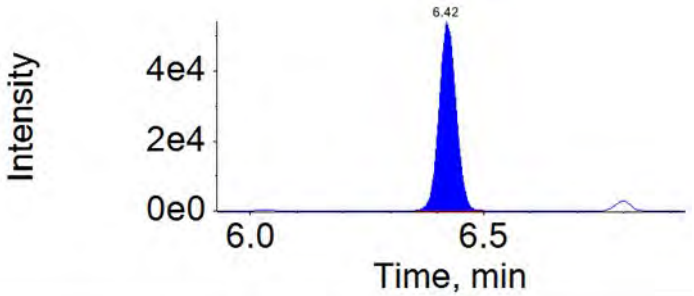
Component: PFTrDA
Primary Mass: 663.0 / 619.0



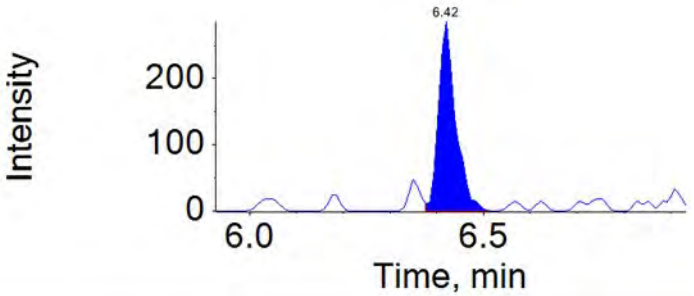
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Secondary Mass: 663.0 / 169.0



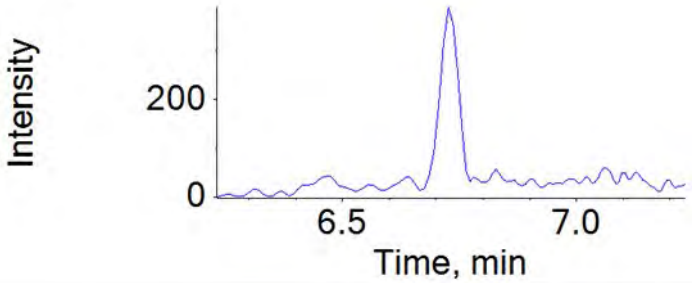
Component: PFTeDA
Primary Mass: 713.0 / 669.0



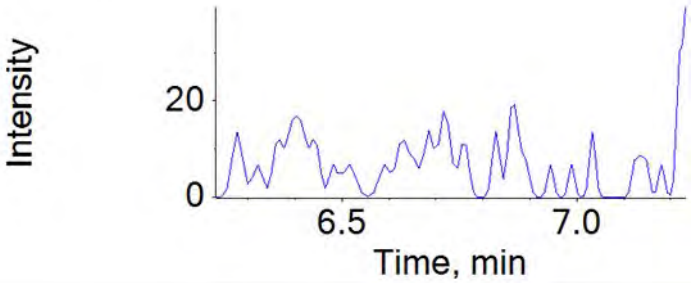
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



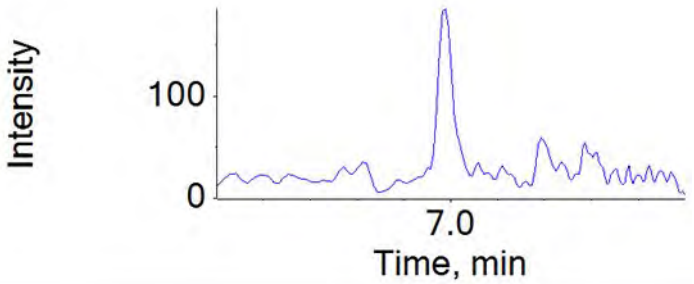
Component: PFHxDA
Primary Mass: 813.0 / 769.0



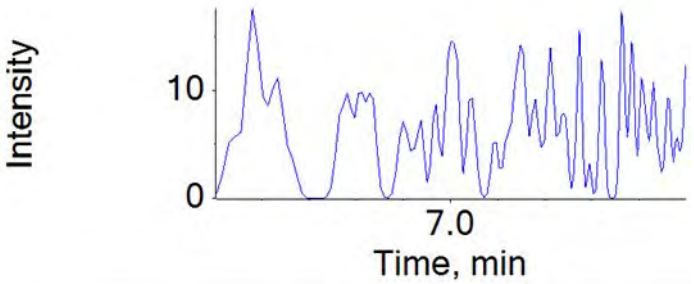
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	L+B CAL3			**Data File:**		18NOV12DCAL-51.wiff
Sample ID:	LBMODX1833D			**Acquis Date:**		2018-11-12T16:27:15
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	11			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV12DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N\A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	682528.6	659926.2	3	50	
13C2-PFOA	5.0	446810.2	450219.7	-1	50	
13C4-PFOS	4.8	256014.8	249205.8	3	50	
13C2-PFDA	5.0	295115.2	278743.9	6	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	735331.8	13C3-PFBA	682528.6	1.077	5.000	4.830	97	70-130	
E13C5-PFPeA	714738.5	13C3-PFBA	682528.6	1.047	5.000	4.697	94	70-130	
E13C3-PFBS	418749.4	13C3-PFBA	682528.6	0.614	4.650	4.331	93	70-130	
E13C2-4:2-FTS	45470.2	13C2-PFOA	446810.2	0.102	4.670	4.532	97	70-130	
E13C5-PFHxA	624943.7	13C2-PFOA	446810.2	1.399	5.000	5.052	101	70-130	
E13C3-PFHxS	318599.1	13C2-PFOA	446810.2	0.713	4.730	4.893	103	70-130	
E13C4-PFHpA	492218.6	13C2-PFOA	446810.2	1.102	5.000	4.963	99	70-130	
E13C2-6:2-FTS	35757.3	13C2-PFOA	446810.2	0.080	4.750	5.354	113	70-130	
E13C8-PFOA	860795.2	13C2-PFOA	446810.2	1.927	5.000	5.308	106	70-130	
E13C8-PFOS	257626.7	13C4-PFOS	256014.8	1.006	4.780	4.459	93	70-130	
E13C9-PFNA	443649.2	13C4-PFOS	256014.8	1.733	5.000	4.832	97	70-130	
E13C6-PFDA	588492.8	13C2-PFDA	295115.2	1.994	5.000	4.653	93	70-130	
E13C2-8:2-FTS	26035.6	13C2-PFDA	295115.2	0.088	4.790	4.400	92	70-130	
E13C8-PFOSA	615348.9	13C2-PFDA	295115.2	2.085	5.000	4.623	92	70-130	
Ed3-NMeFOSAA	69196.9	13C2-PFDA	295115.2	0.234	5.000	4.232	85	70-130	
E13C7-PFUnDA	249433.8	13C2-PFDA	295115.2	0.845	5.000	4.907	98	70-130	
Ed5-NEtFOSAA	70399.3	13C2-PFDA	295115.2	0.239	5.000	5.047	101	70-130	
E13C2-PFDoDA	502206.8	13C2-PFDA	295115.2	1.702	5.000	4.418	88	70-130	
Ed7-NMePFOSAE	314874.3	13C2-PFDA	295115.2	1.067	5.000	4.617	92	70-130	
Ed3-NMePFOSA	80287.6	13C2-PFDA	295115.2	0.272	5.000	4.943	99	70-130	
Ed9-NEtPFOSAE	265747.6	13C2-PFDA	295115.2	0.900	5.000	4.683	94	70-130	
Ed5-NEtPFOSA	56128.1	13C2-PFDA	295115.2	0.190	5.000	4.462	89	70-130	
E13C2-PFTeDA	379002.1	13C2-PFDA	295115.2	1.284	5.000	4.509	90	70-130	

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

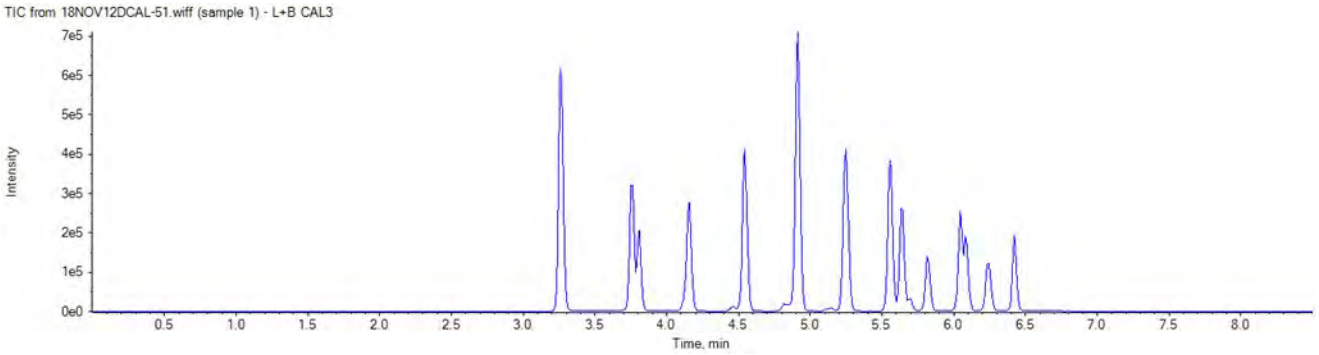
Analyte Quantitation Peak Table

Sample Name: L+B CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-51.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	N/A	N/A	N/A		A	13C4-PFBA	3.26	735331.8	N/A	
PFPeA	N/A	N/A	N/A		A	13C5-PFPeA	3.76	714738.5	N/A	
PFBS	N/A	N/A	N/A		A	13C3-PFBS	3.81	418749.4	N/A	
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.12	45470.2	N/A	
PFHxA	N/A	N/A	N/A		A	13C5-PFHxA	4.15	624943.7	N/A	
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.81	418749.4	N/A	
PFHpA	N/A	N/A	N/A		A	13C4-PFHpA	4.54	492218.6	N/A	
PFHxS	4.55	1.000	122359.8		M	13C3-PFHxS	4.55	318599.1	0.384	1.862
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.90	35757.3	N/A	
PFHpS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	318599.1	N/A	
PFOA	4.91	1.000	312625.4		M	13C8-PFOA	4.91	860795.2	0.363	1.940
PFOS	5.24	1.000	105809.8		M	13C8-PFOS	5.24	257626.7	0.411	1.796
PFNA	N/A	N/A	N/A		A	13C9-PFNA	5.26	443649.2	N/A	
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.24	257626.7	N/A	
PFDA	N/A	N/A	N/A		A	13C6-PFDA	5.56	588492.8	N/A	
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.56	26035.6	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.64	615348.9	N/A	
NMeFOSAA	N/A	N/A	N/A		A	d3-NMeFOSAA	5.70	69196.9	N/A	
PFDS	N/A	N/A	N/A		A	13C8-PFOS	5.24	257626.7	N/A	
PFUnDA	N/A	N/A	N/A		A	13C7-PFUnDA	5.82	249433.8	N/A	
NEtFOSAA	N/A	N/A	N/A		A	d5-NEtFOSAA	5.83	70399.3	N/A	
PFDoDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	502206.8	N/A	
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.56	26035.6	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.08	314874.3	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.10	80287.6	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.24	257626.7	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.24	265747.6	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.26	56128.1	N/A	
PFTrDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	502206.8	N/A	
PFTeDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	379002.1	N/A	
PFHxDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	379002.1	N/A	
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	379002.1	N/A	

Total Ion Chromatogram

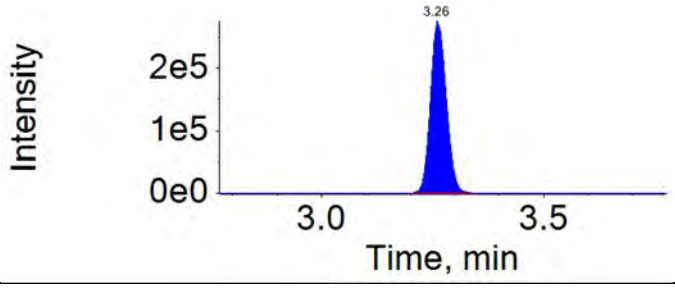


APPROVED
By MCD at 6:34 pm, 11/12/18

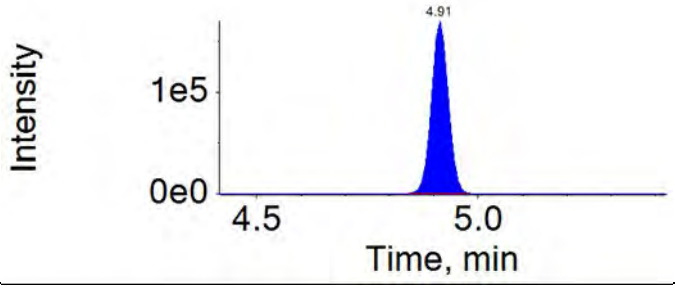
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

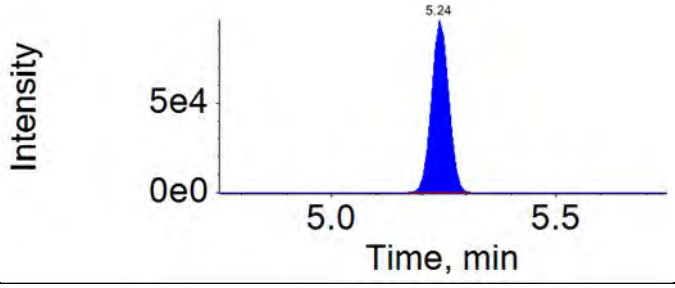
Injection Standard: 13C3-PFBA
216.0 / 172.0



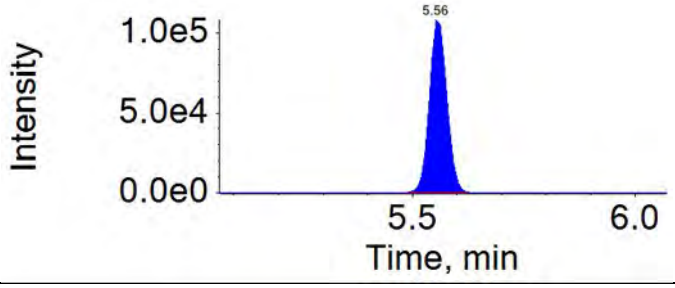
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

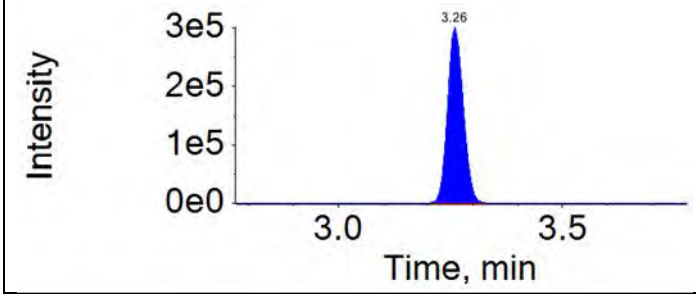


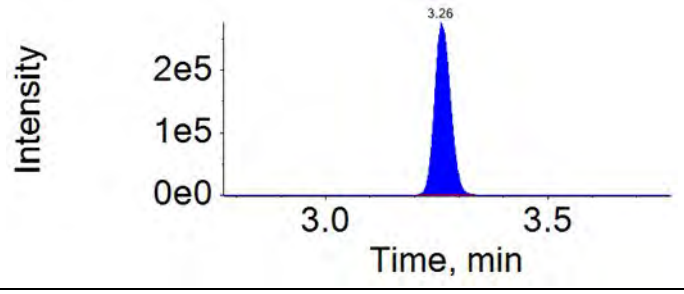
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

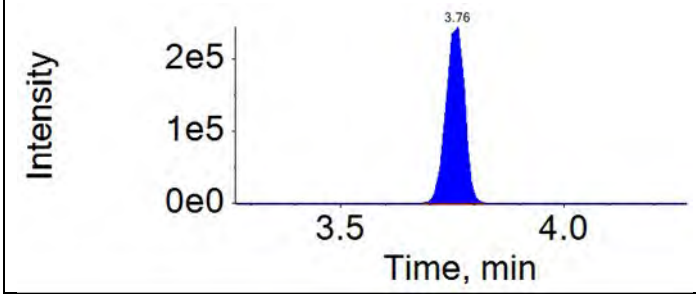
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

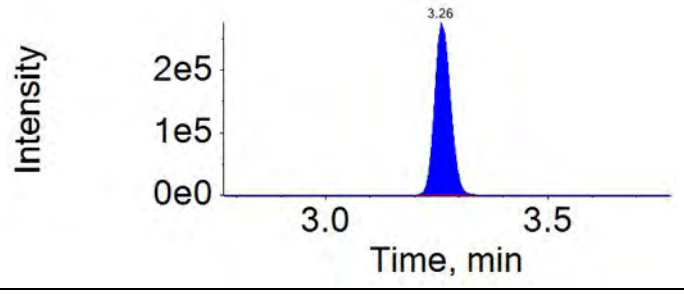
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



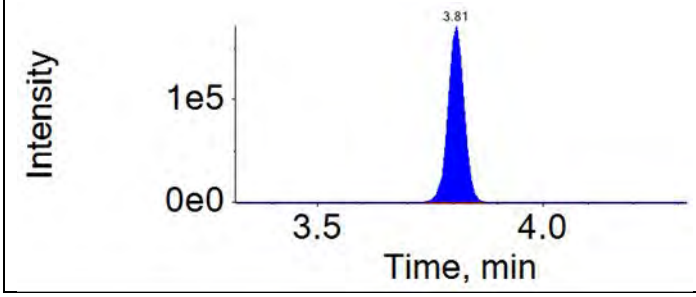


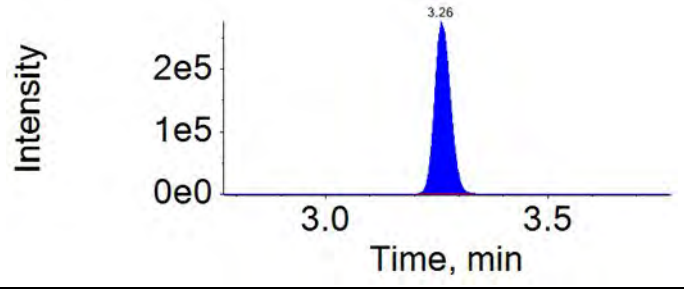
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



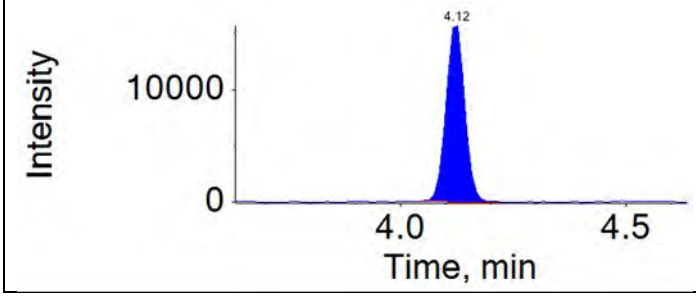


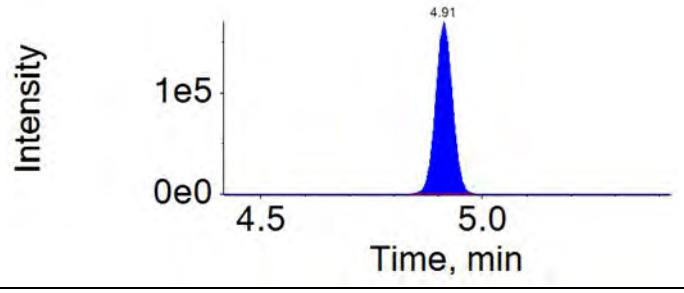
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



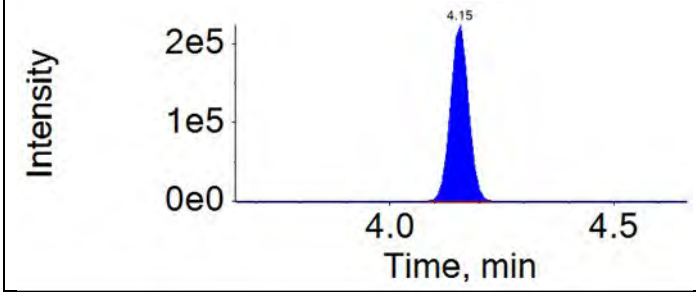


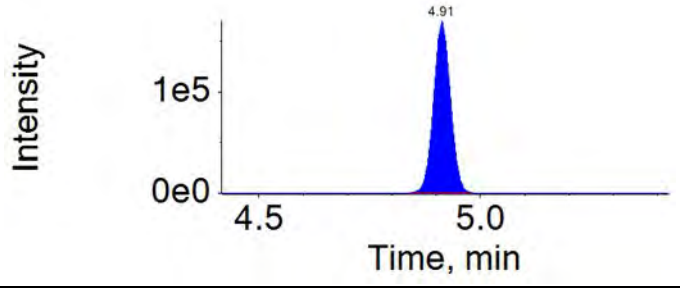
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

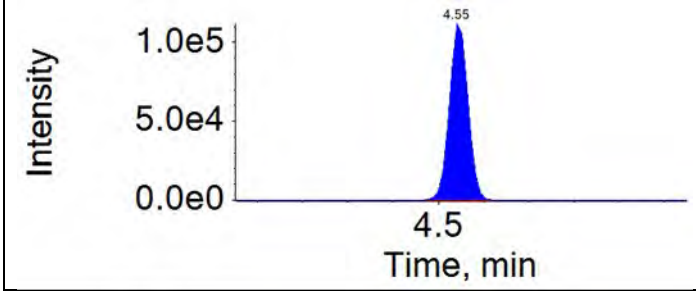
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

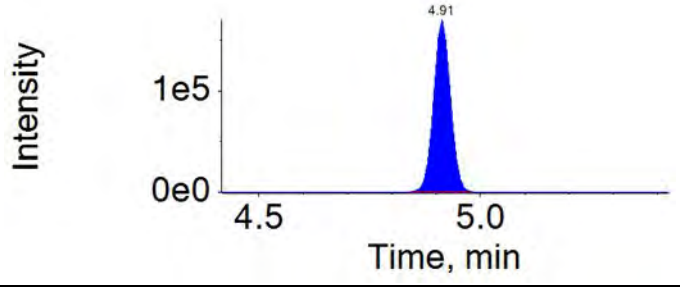
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



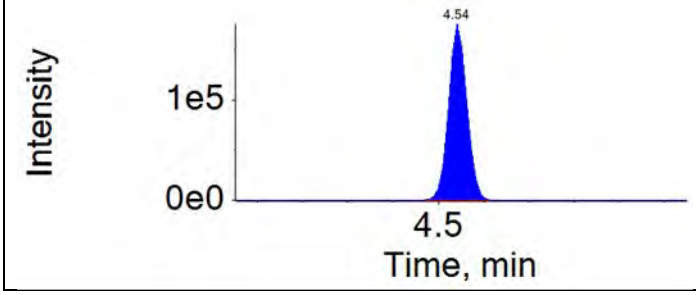


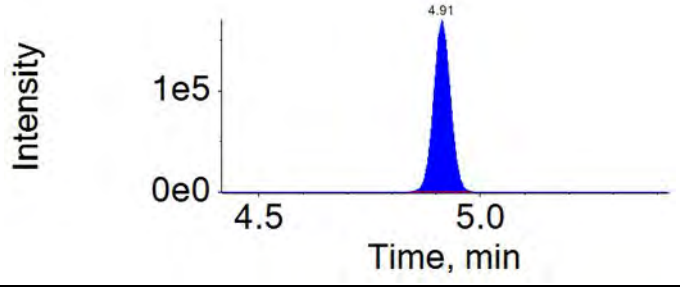
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



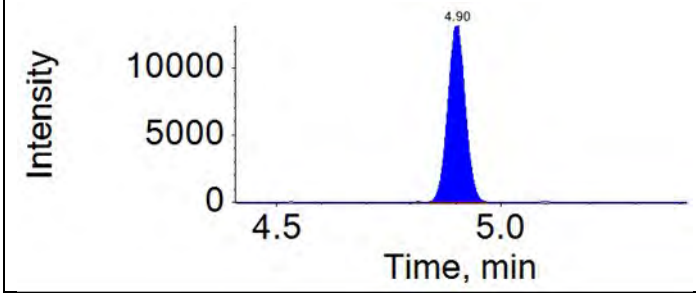


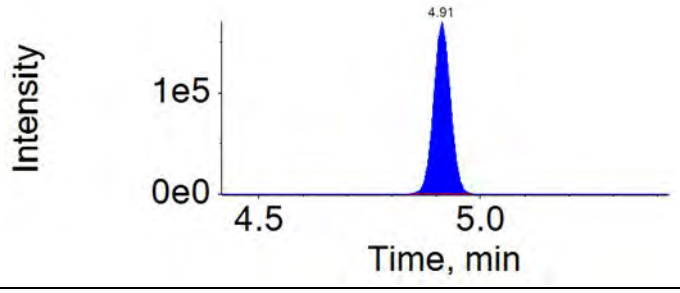
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

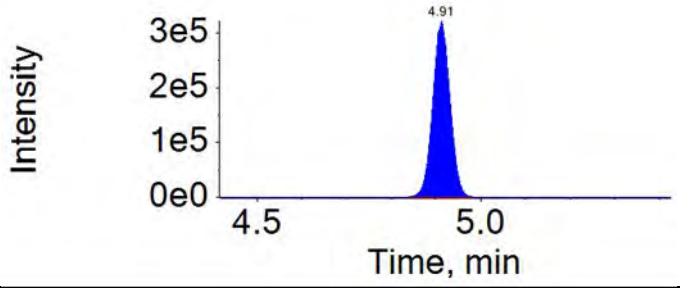
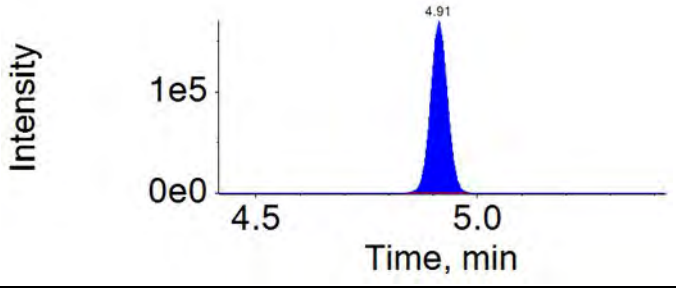


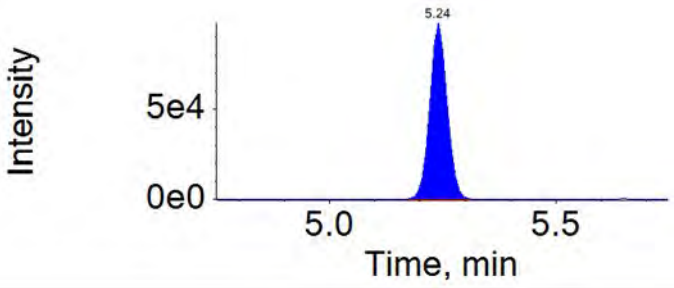
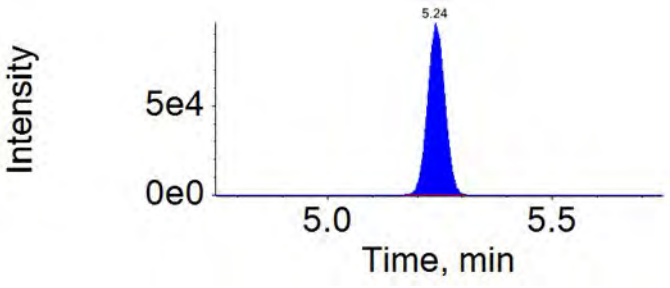


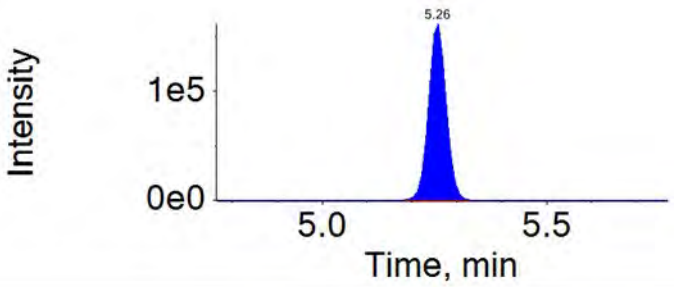
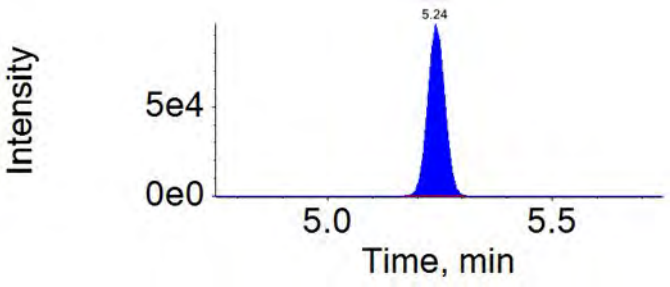
APPROVED
By MCD at 6:34 pm, 11/12/18

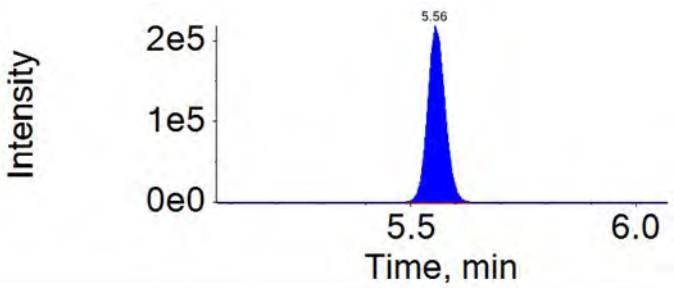
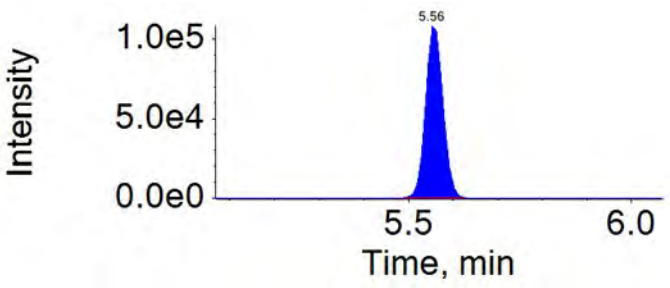
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

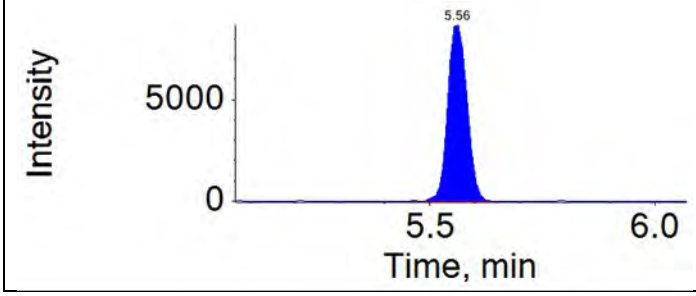
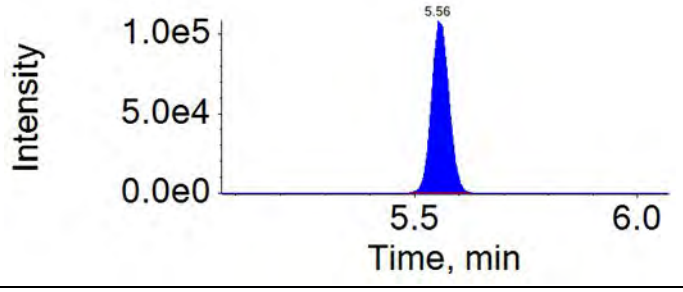
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

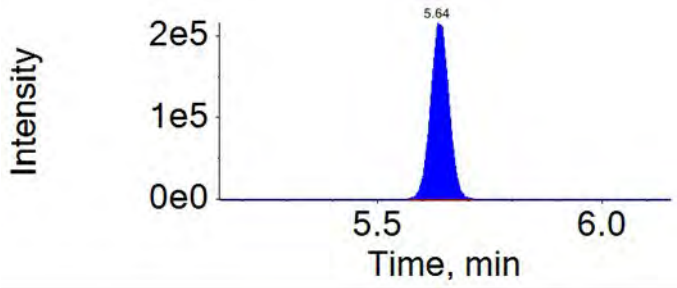
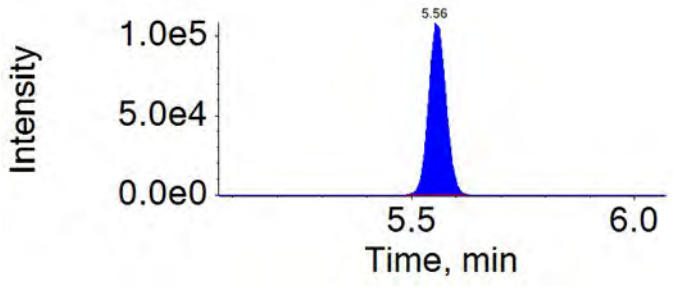
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

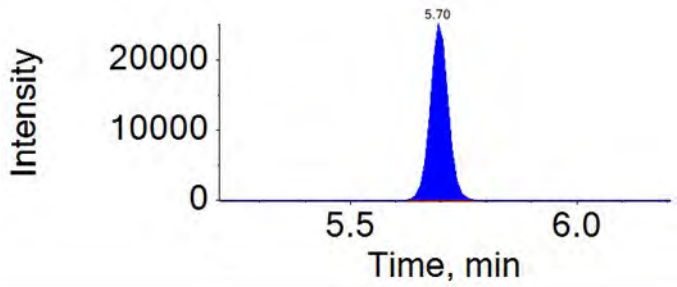
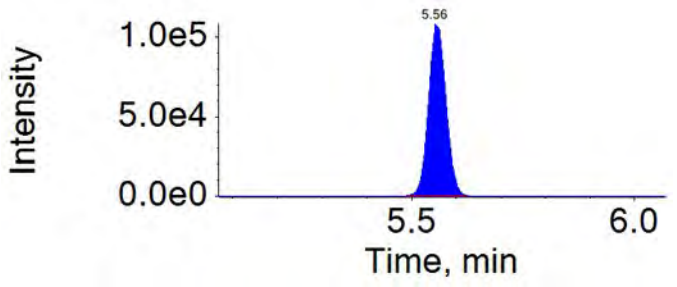
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

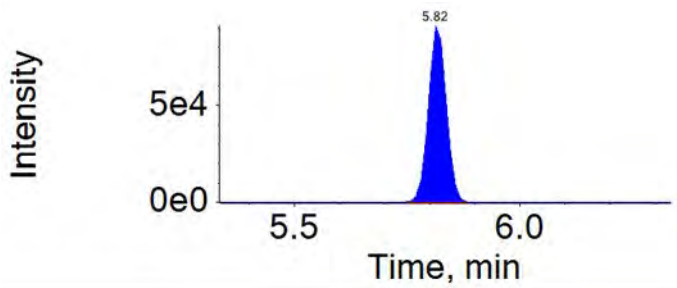
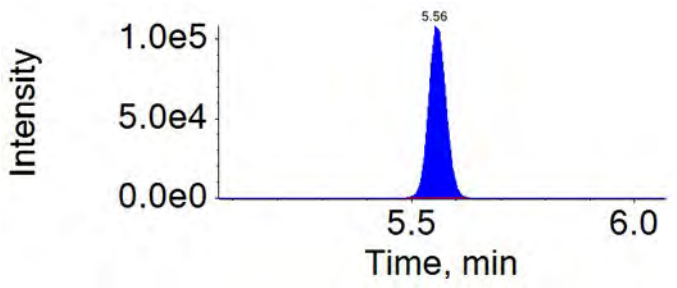
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

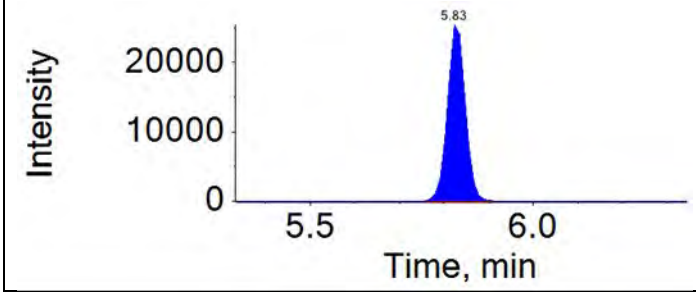
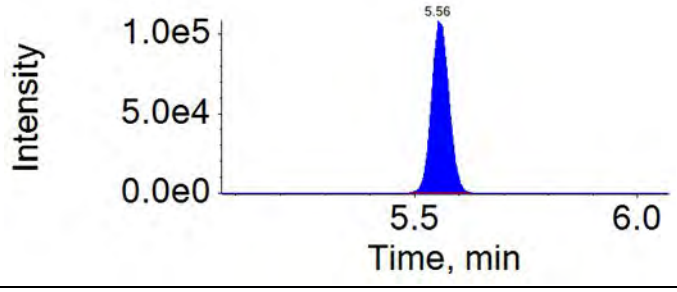
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

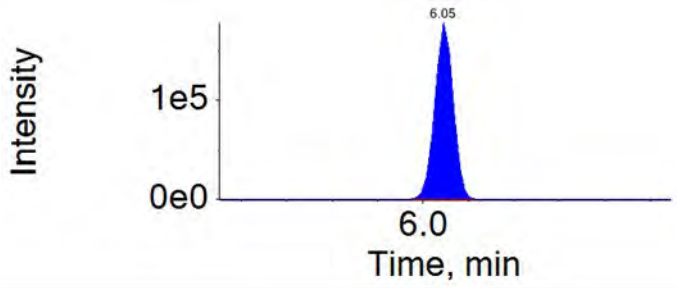
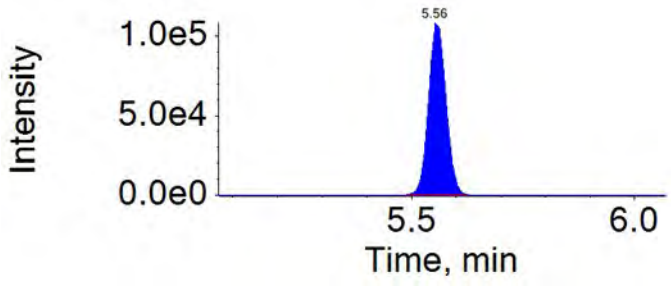
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

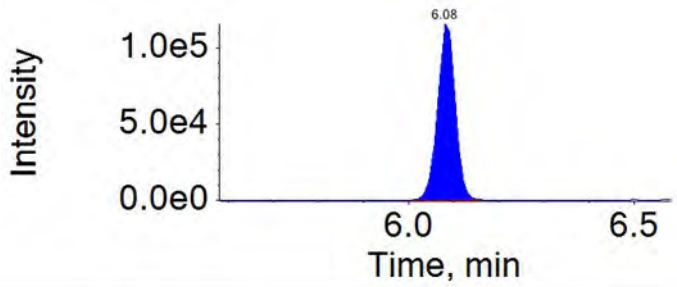
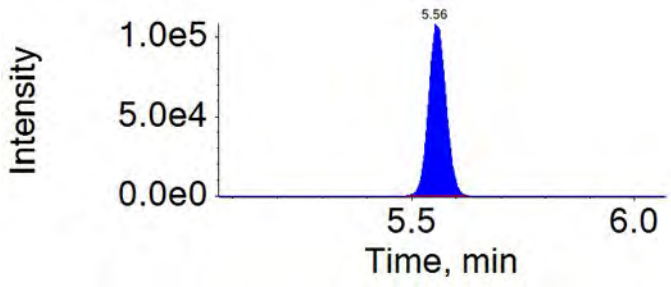
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

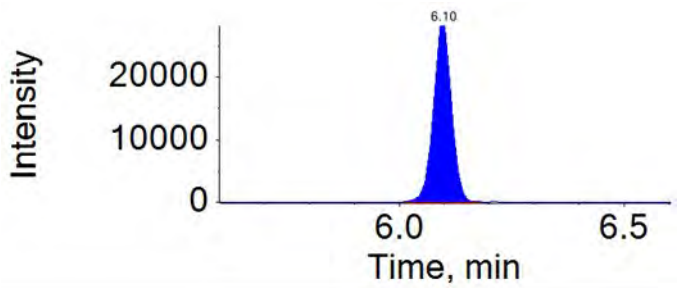
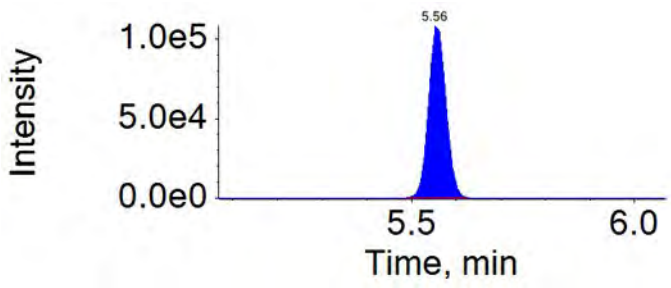
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

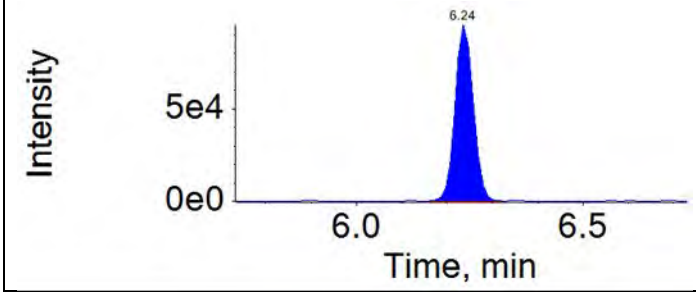
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

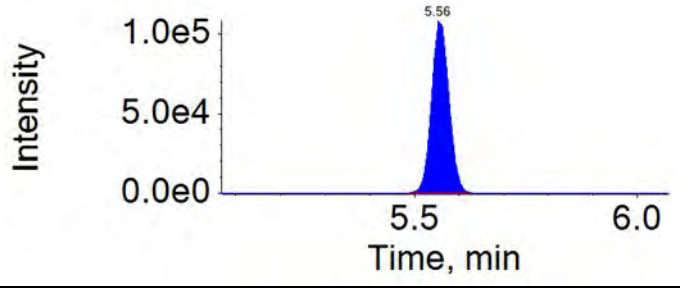
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

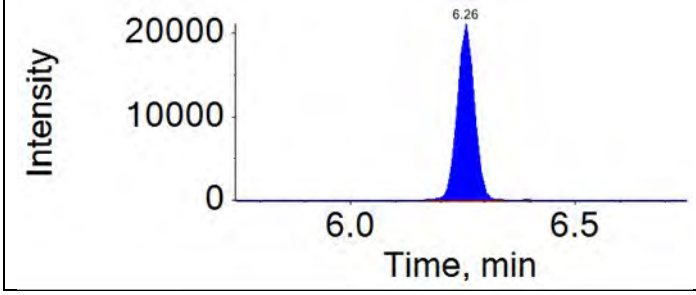
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

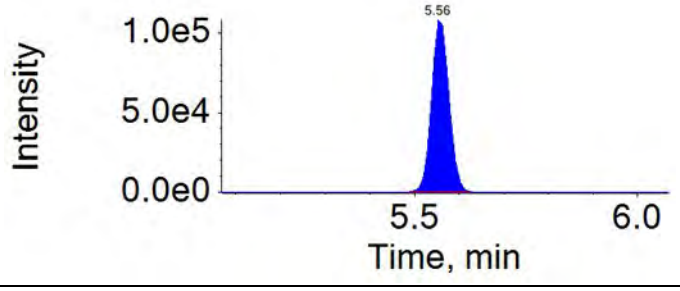
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



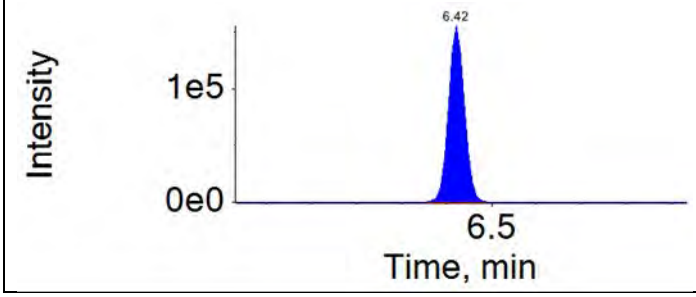


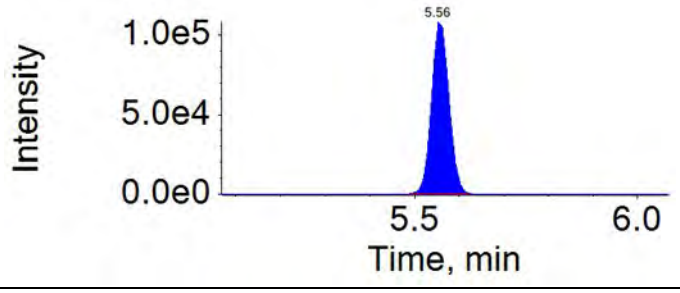
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



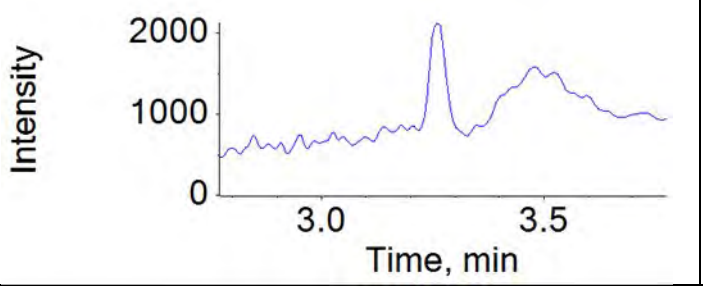


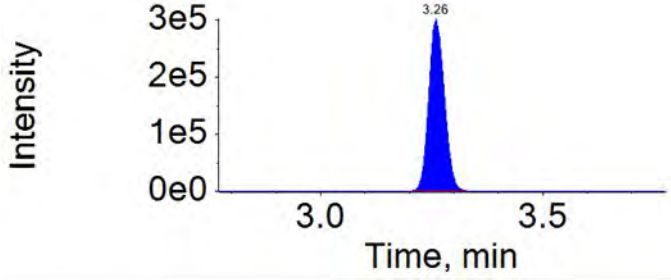
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

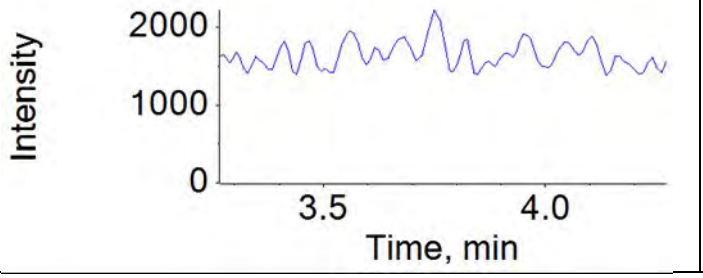
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

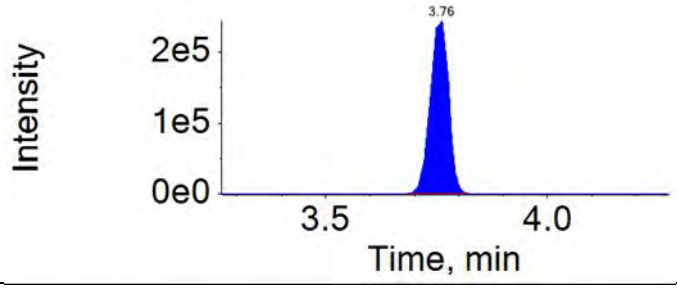
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



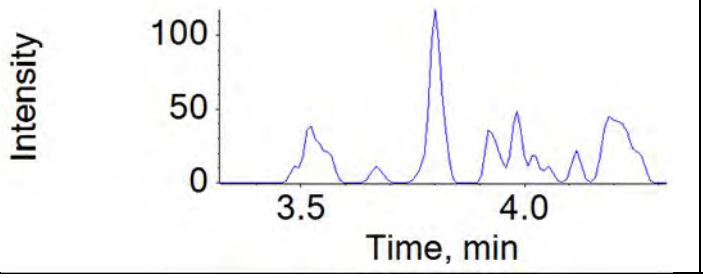


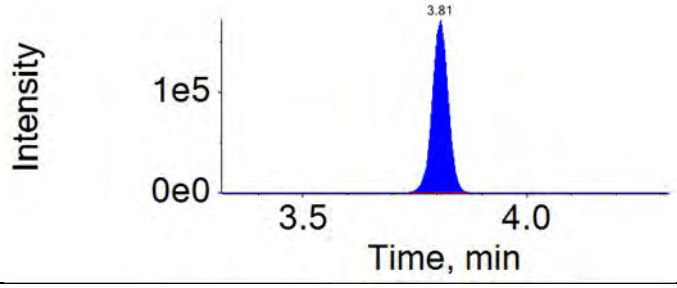
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



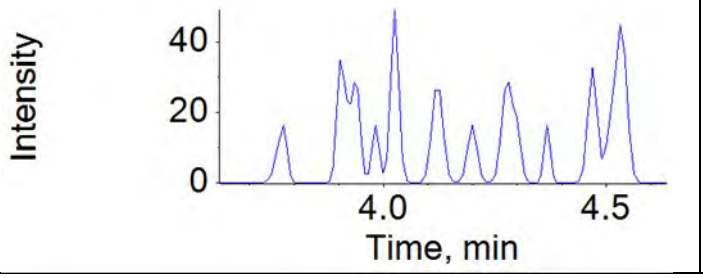


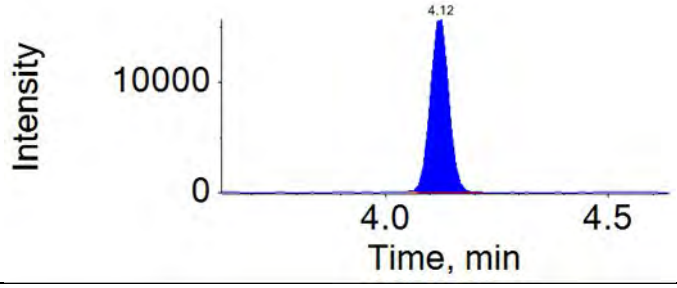
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



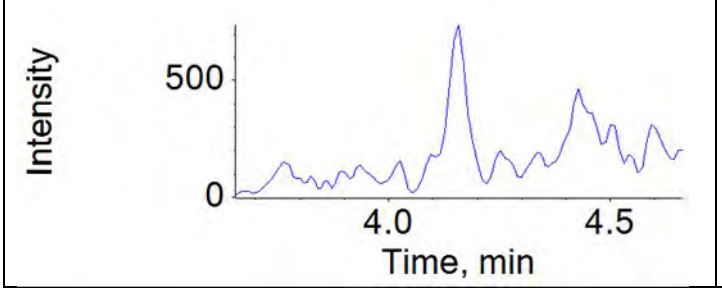


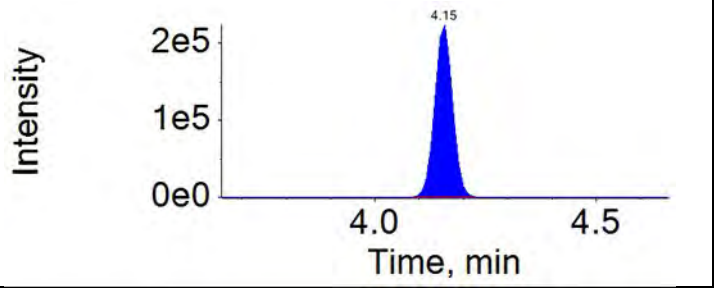
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

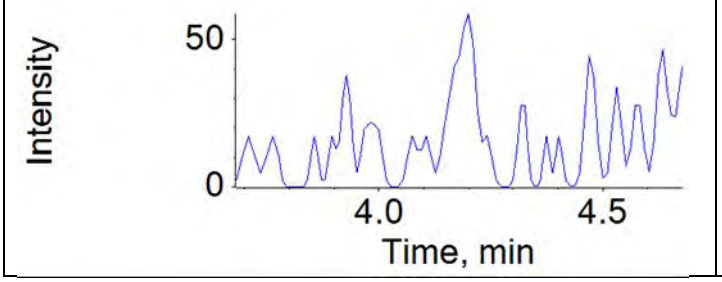
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

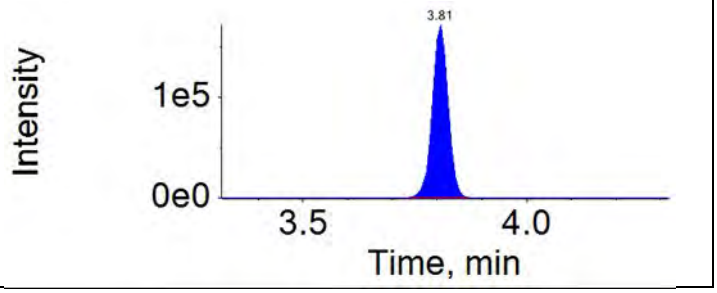
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



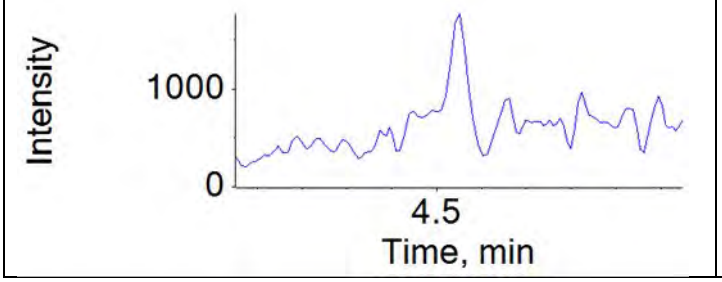


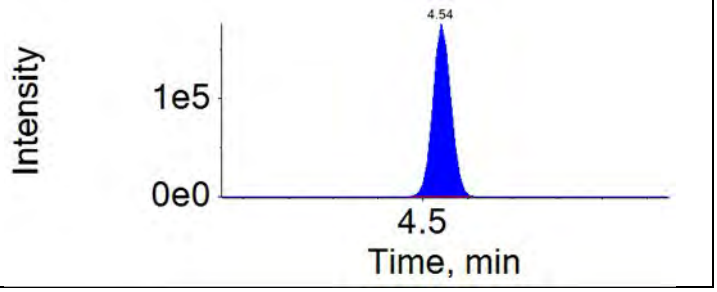
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



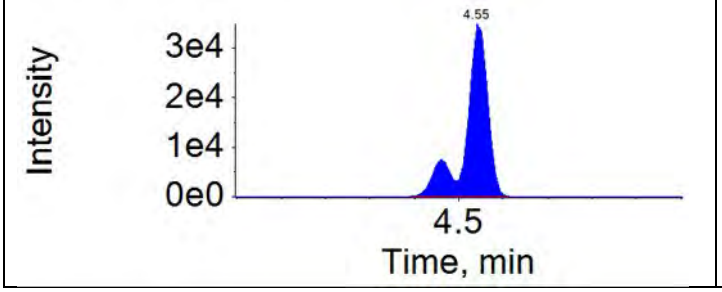


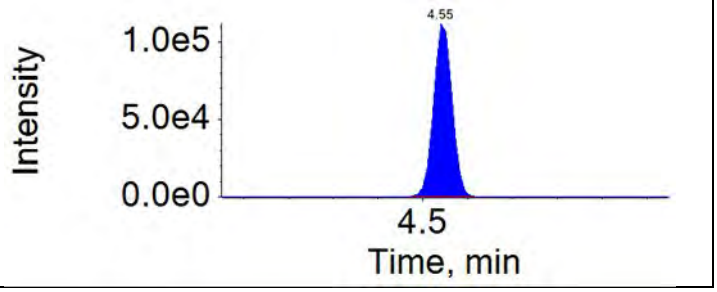
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





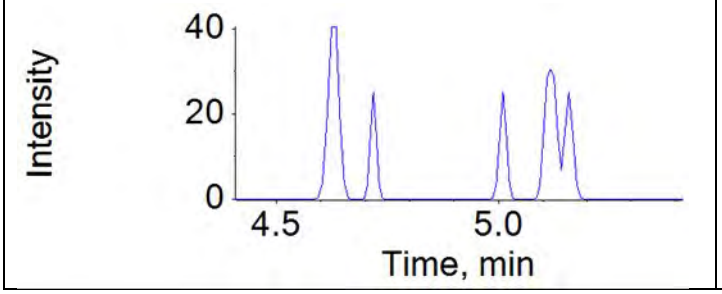
Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

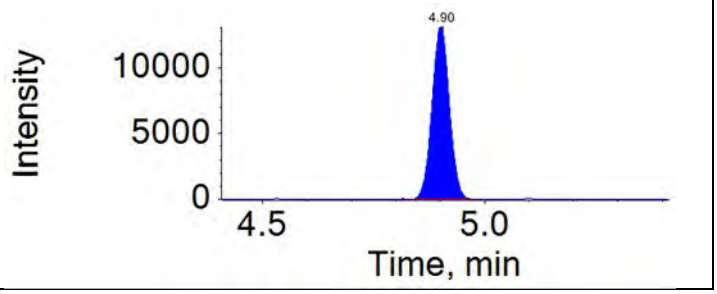




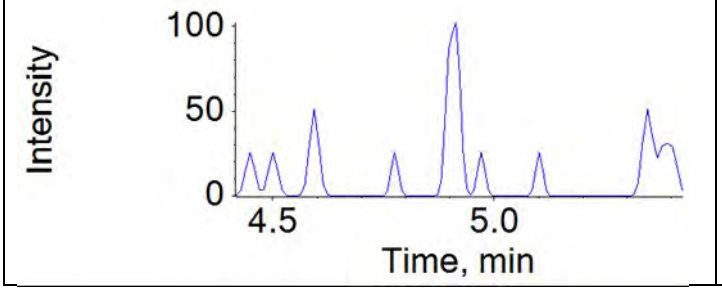
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

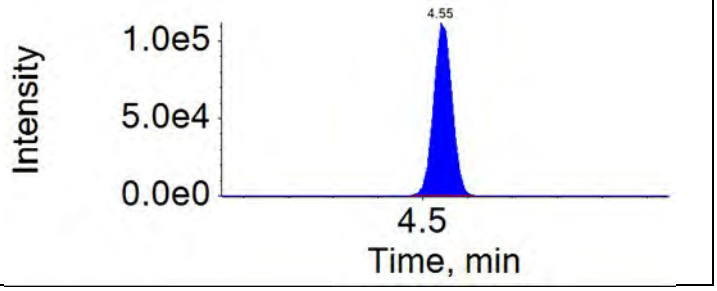
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



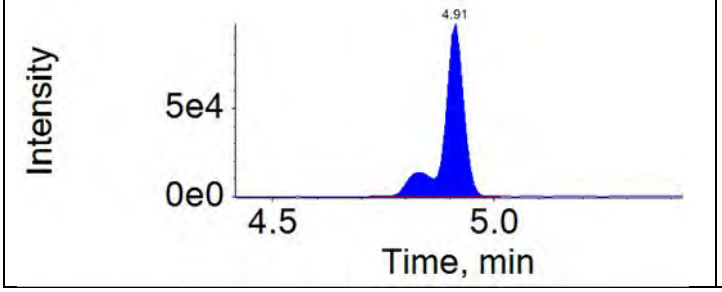


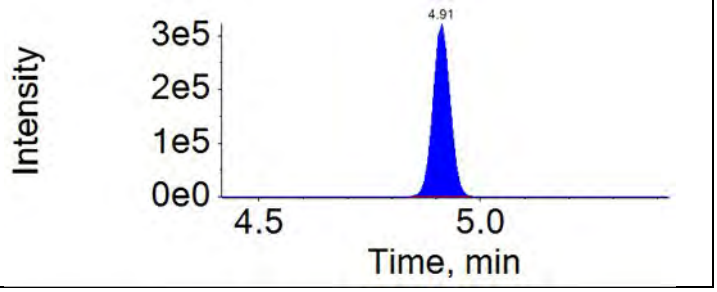
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



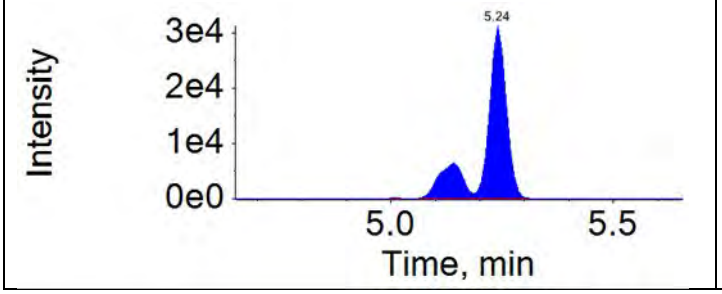


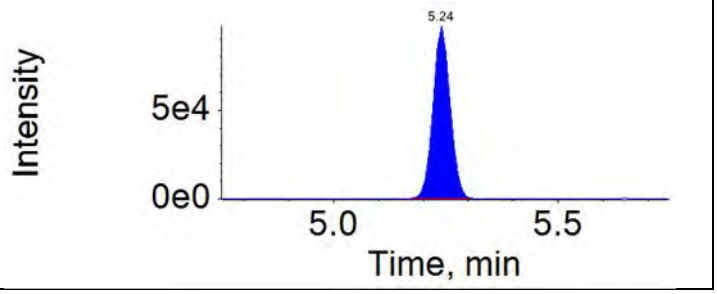
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



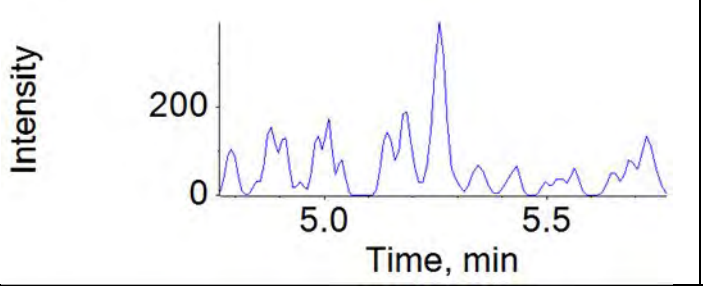


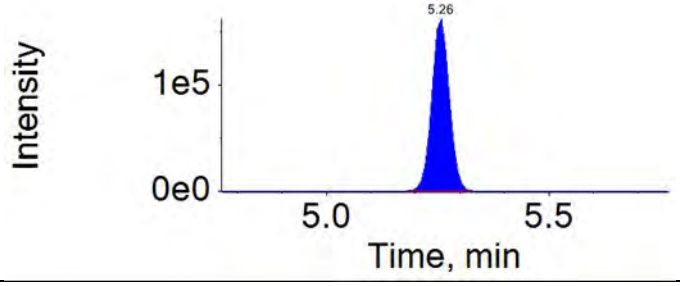
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

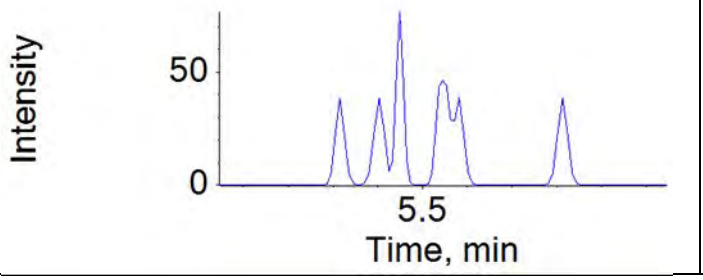
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

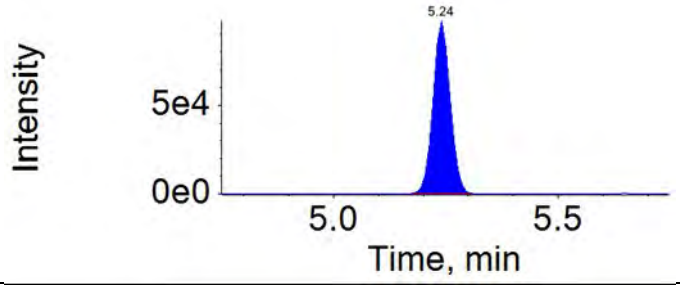
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



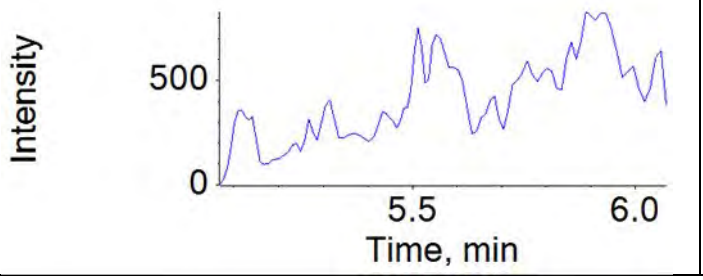


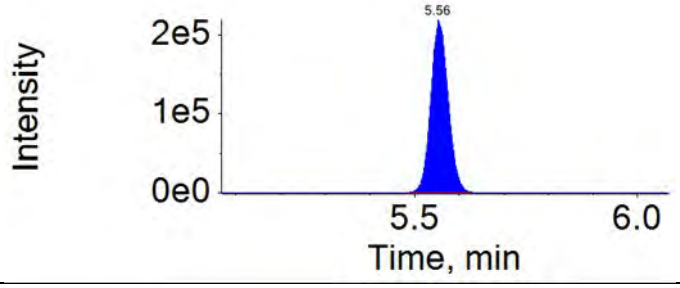
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



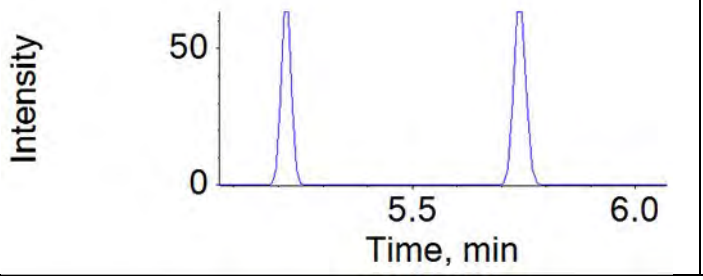


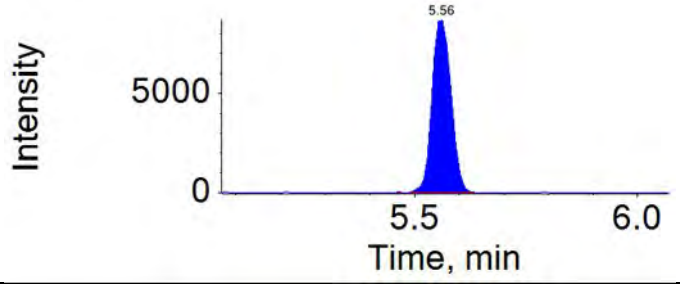
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



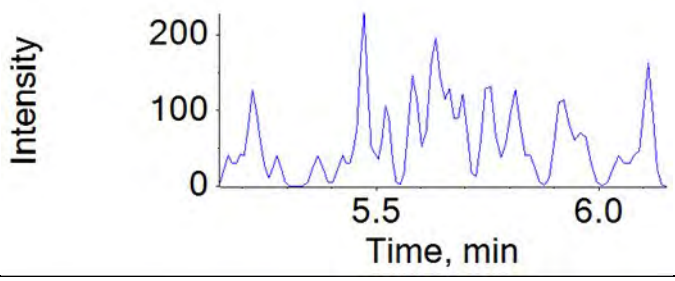


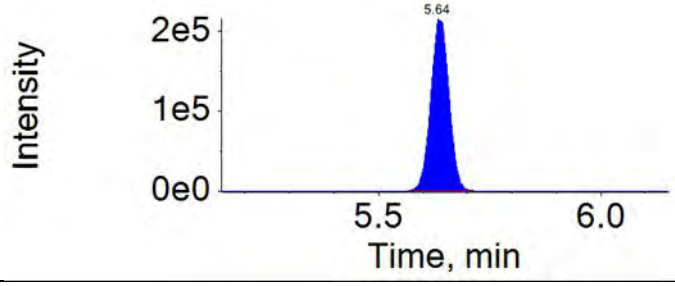
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

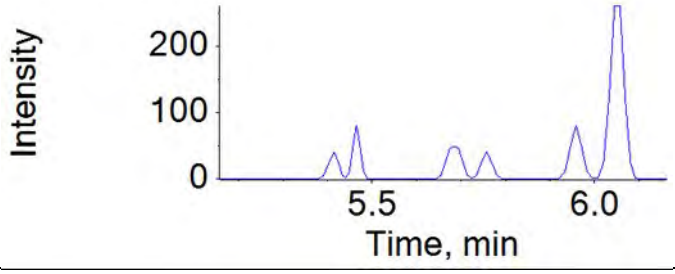
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

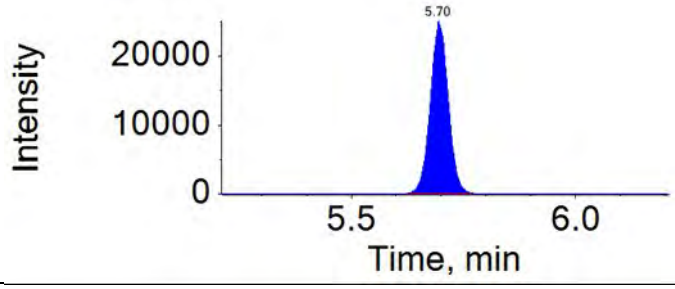
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



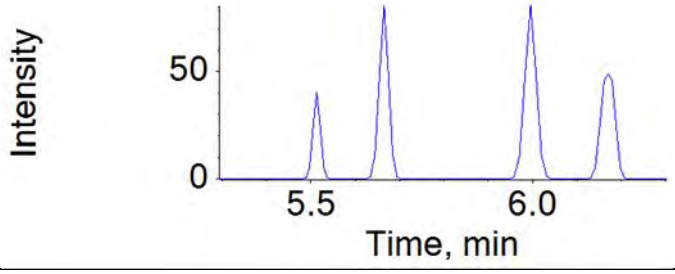


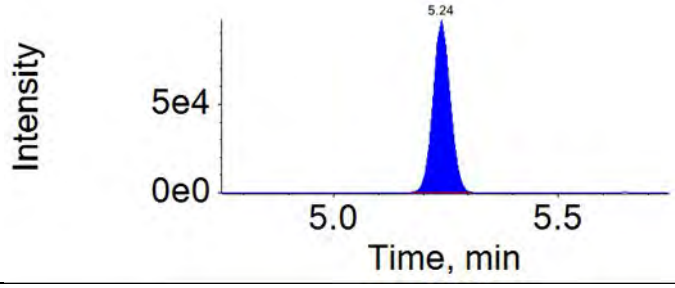
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



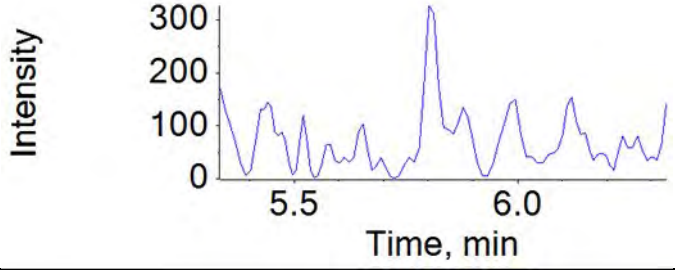


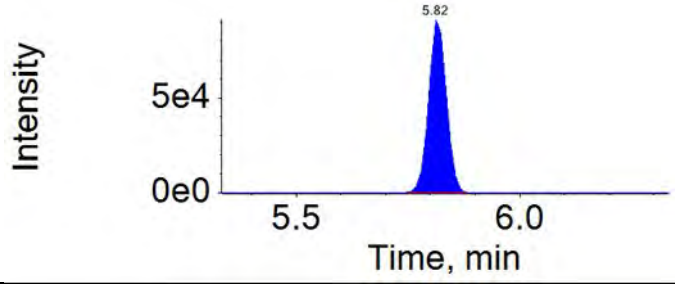
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



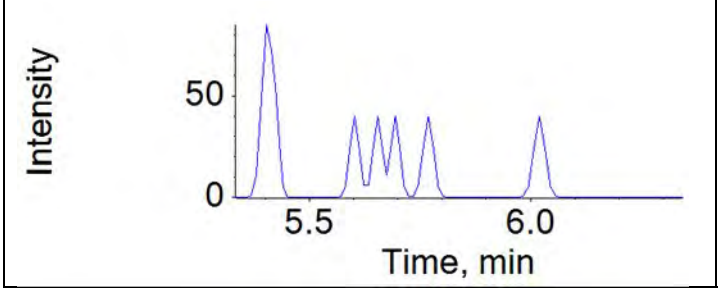


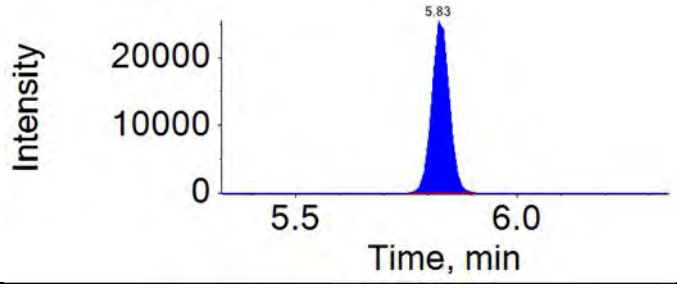
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

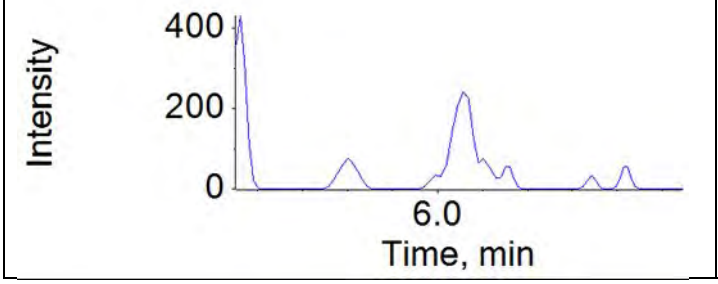
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

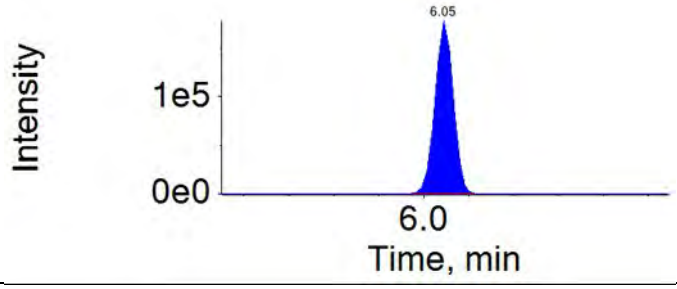
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



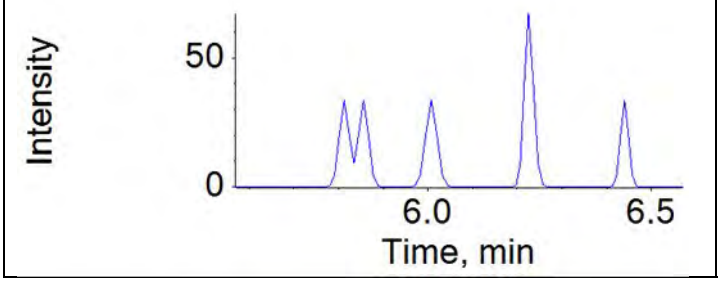


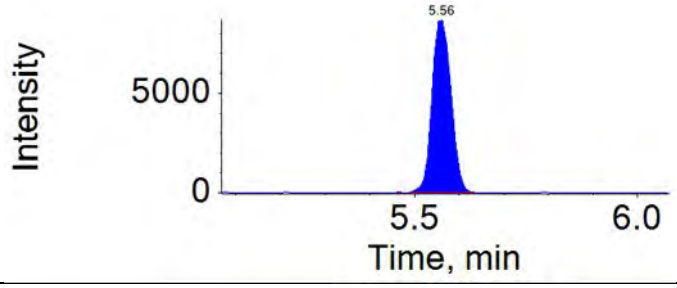
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



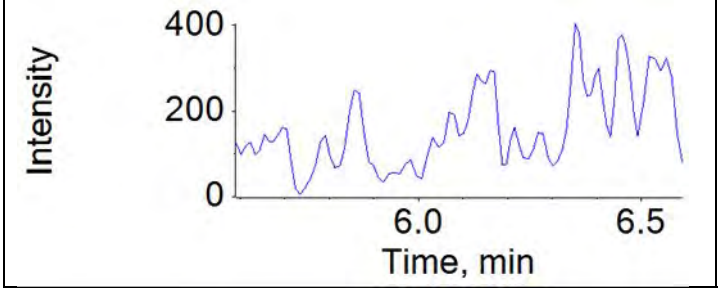


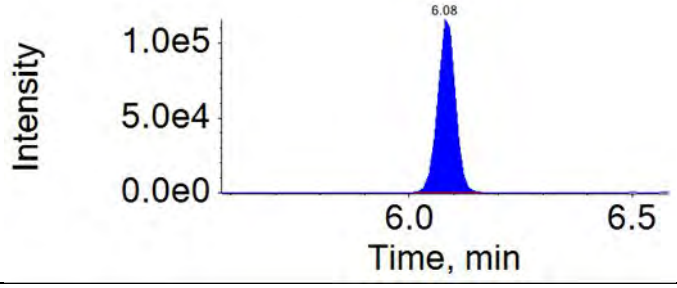
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



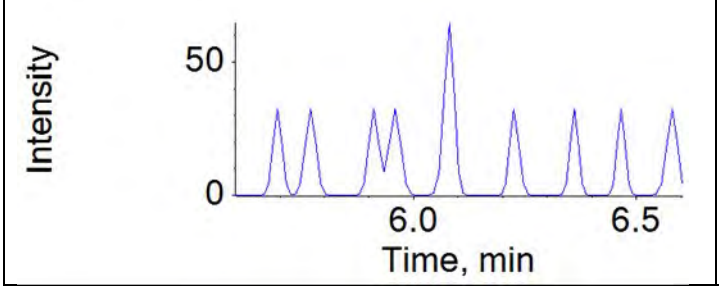


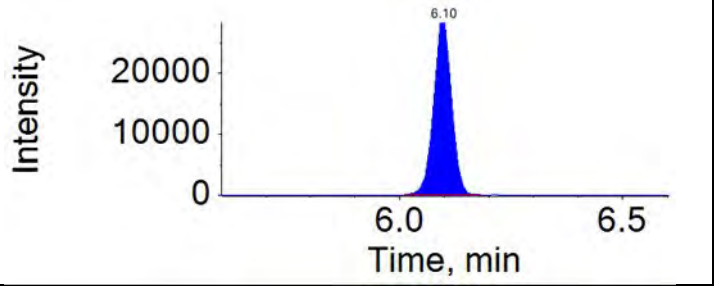
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

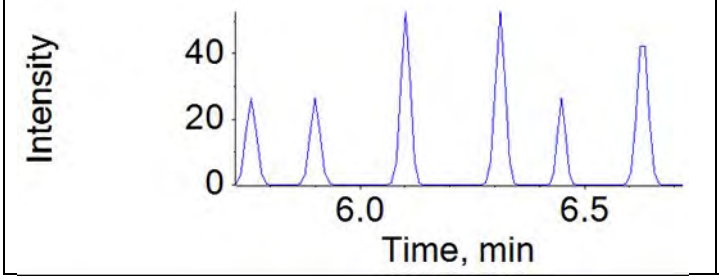
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

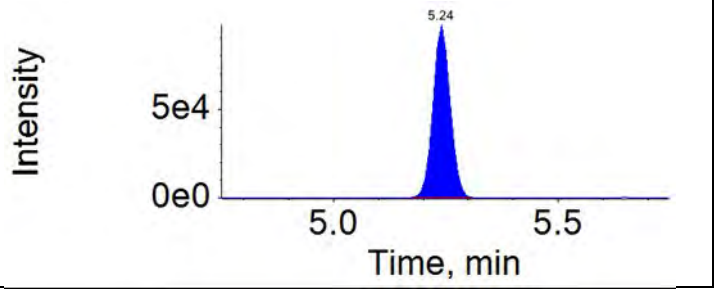
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



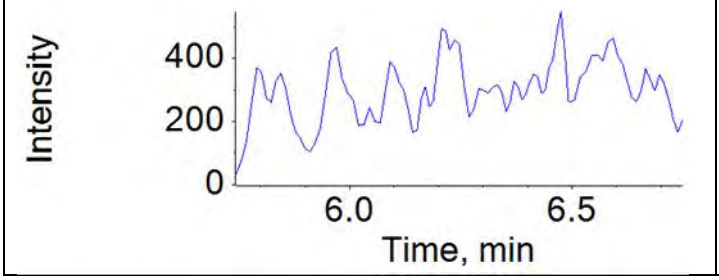


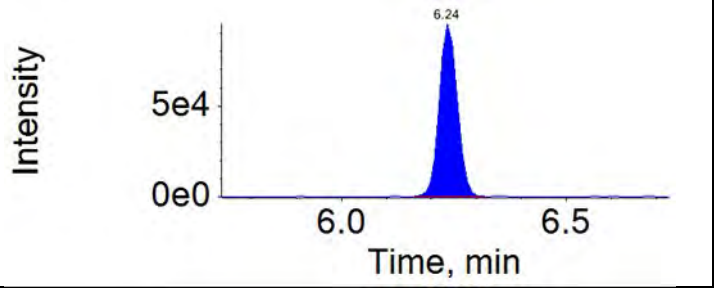
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



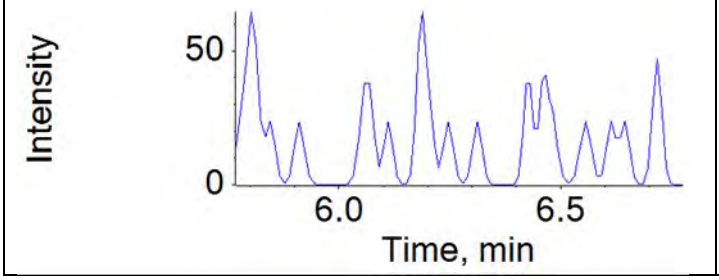


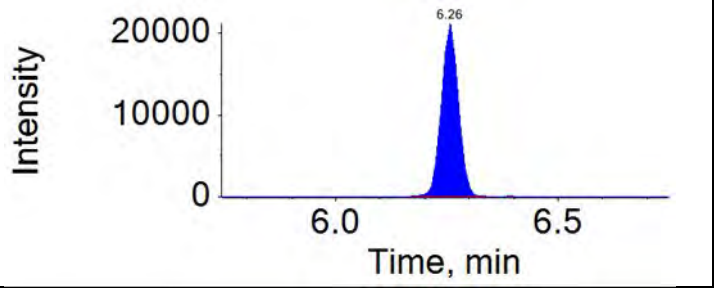
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

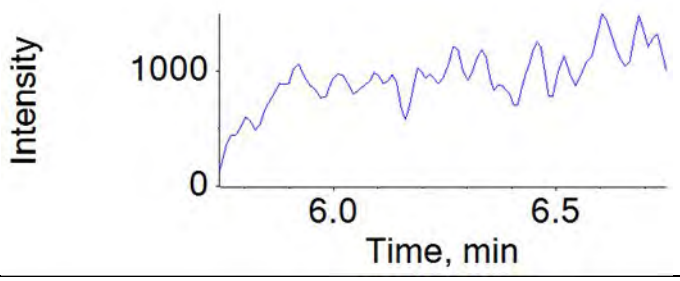
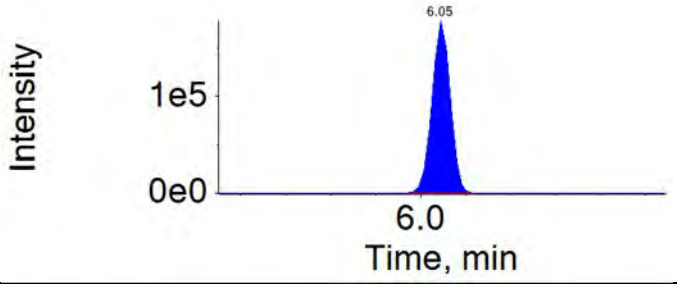


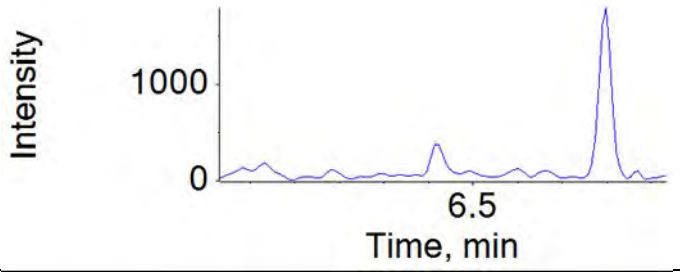
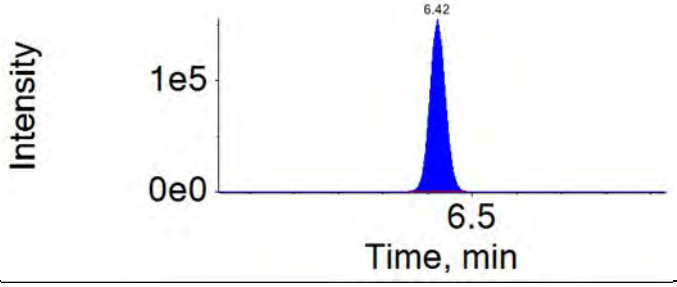


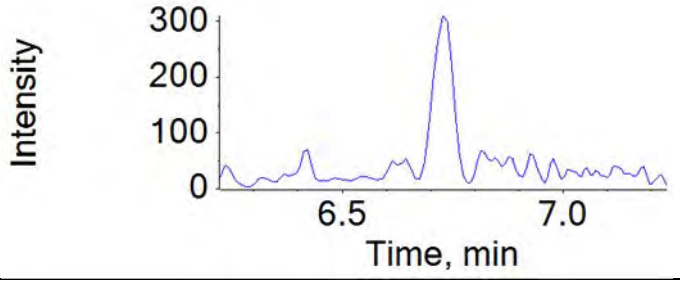
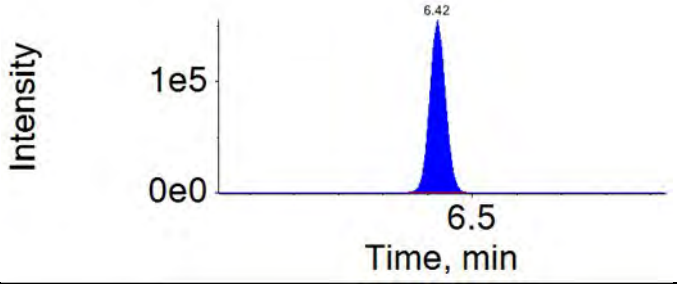
APPROVED
By MCD at 6:34 pm, 11/12/18

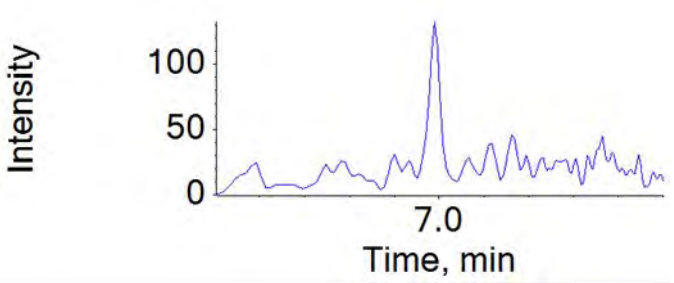
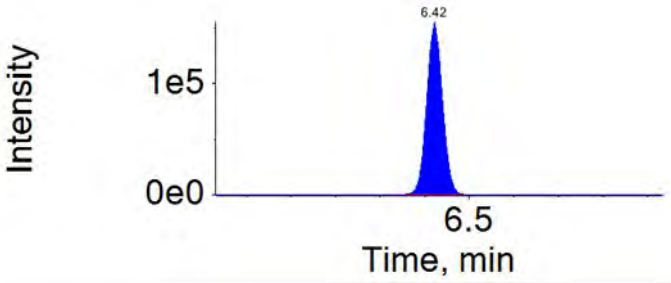
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

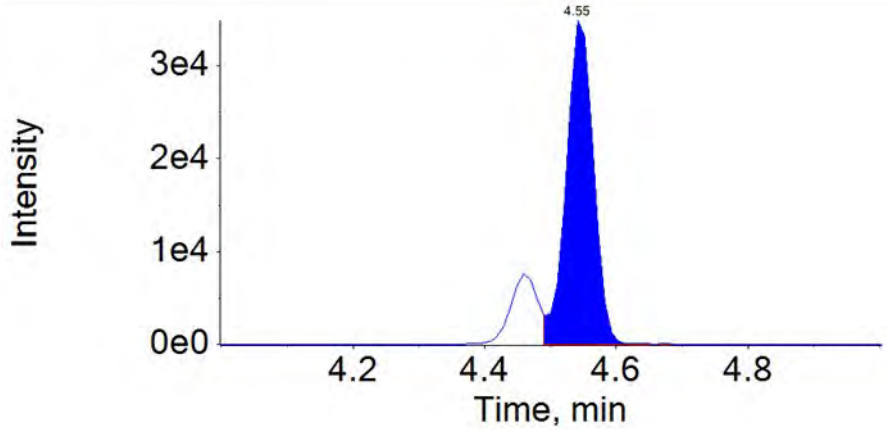
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

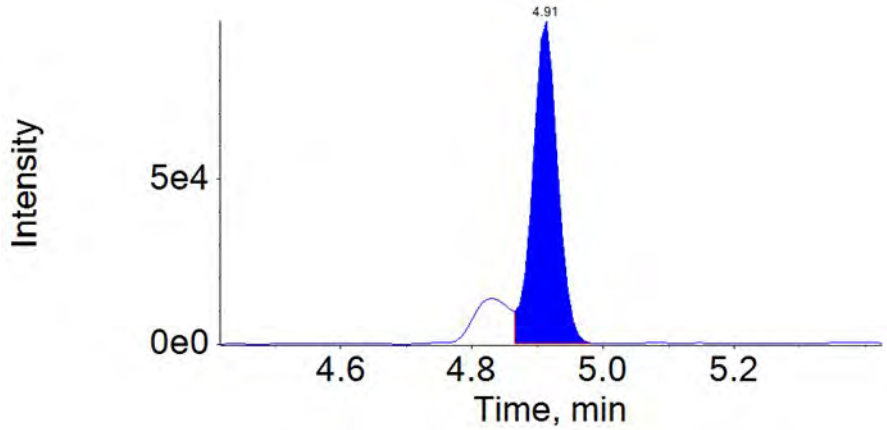
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.55
Peak Area:
101341.11
Mass Range:
399.0 / 80.0
File Name:
18NOV12DCAL-51.wiff
Sample Name:
L+B CAL3



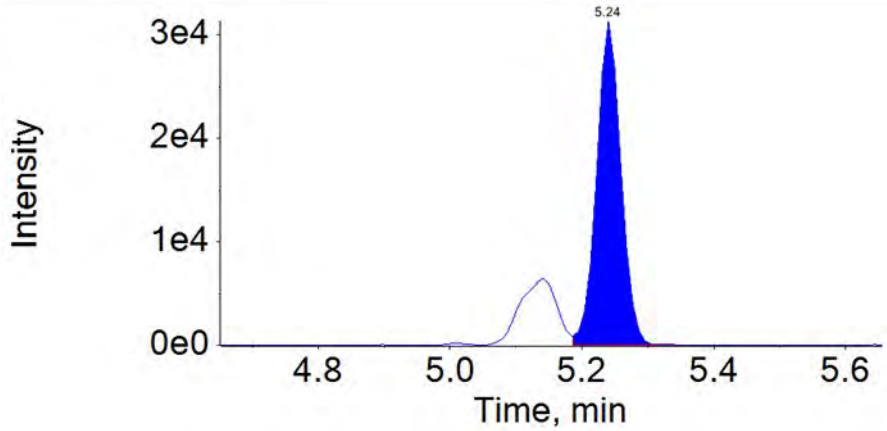
Integration Comment: incorrect integration

Component Name:
PFOA
RT (min.):
4.91
Peak Area:
258567.11
Mass Range:
413.0 / 369.0
File Name:
18NOV12DCAL-51.wiff
Sample Name:
L+B CAL3



Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
80546.10
Mass Range:
499.0 / 80.0
File Name:
18NOV12DCAL-51.wiff
Sample Name:
L+B CAL3



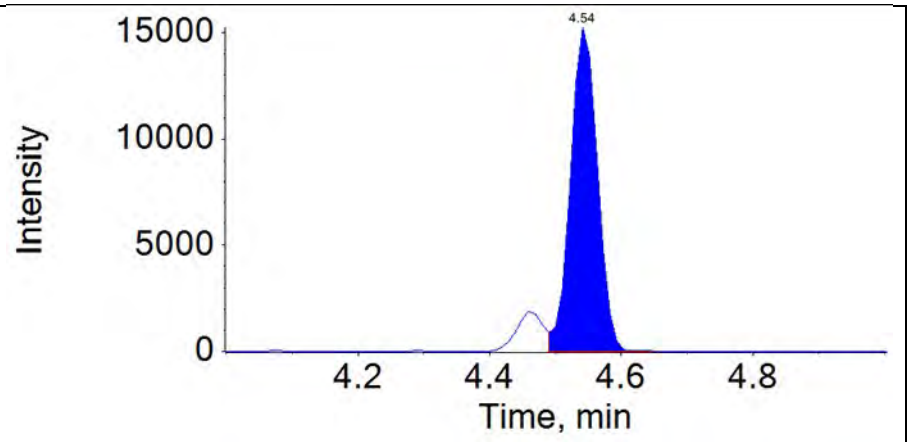
Integration Comment: incorrect integration

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

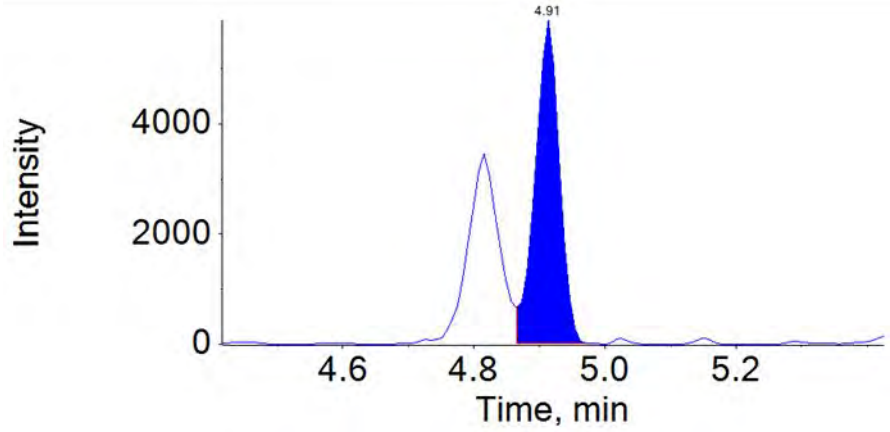
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS_2
RT (min.):
4.54
Peak Area:
43554.75
Mass Range:
399.0 / 99.0
File Name:
18NOV12DCAL-51.wiff
Sample Name:
L+B CAL3



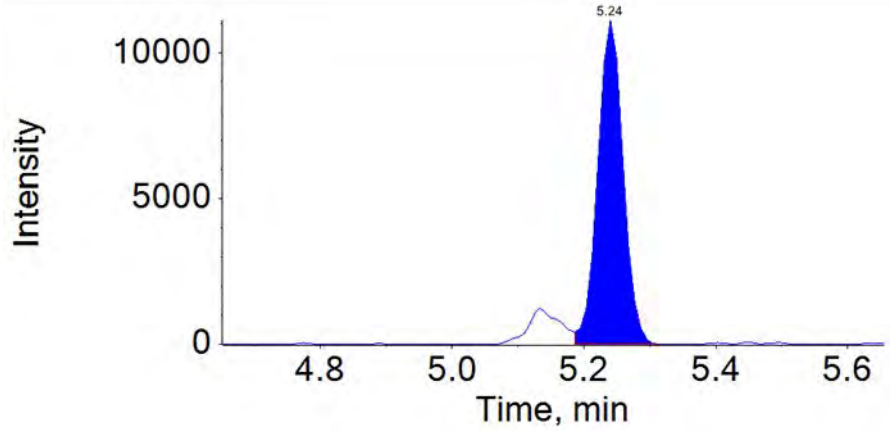
Integration Comment: incorrect integration

Component Name:
PFOA_2
RT (min.):
4.91
Peak Area:
15059.21
Mass Range:
413.0 / 169.0
File Name:
18NOV12DCAL-51.wiff
Sample Name:
L+B CAL3



Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.24
Peak Area:
29829.42
Mass Range:
499.0 / 99.0
File Name:
18NOV12DCAL-51.wiff
Sample Name:
L+B CAL3



Integration Comment: incorrect integration

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

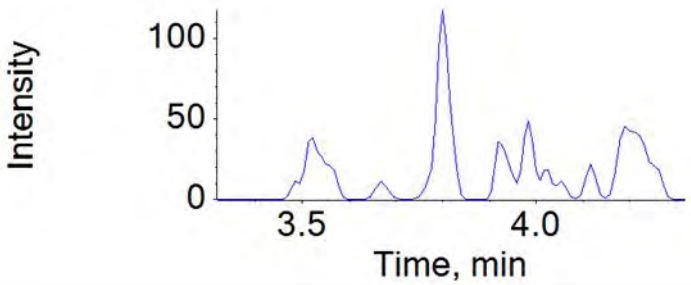
Sample Name: L+B CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-51.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	N/A	N/A	N/A	A	0.3619	N/A			
PFBS_2	N/A	N/A	N/A	A	0.3619	N/A		50	
4:2-FTS	N/A	N/A	N/A	A	0.6730	N/A			
4:2 FTS_2	N/A	N/A	N/A	A	0.6730	N/A		#NA!	
PFHxA	N/A	N/A	N/A	A	0.0117	N/A			
PFHxA_2	N/A	N/A	N/A	A	0.0117	N/A		50	
PFPeS	N/A	N/A	N/A	A	0.5191	N/A			
PFPeS_2	N/A	N/A	N/A	A	0.5191	N/A		50	
PFHpA	N/A	N/A	N/A	A	0.0563	N/A			
PFHpA_2	N/A	N/A	N/A	A	0.0563	N/A		50	
PFHxS	4.55	1.00	122359.84	M	0.3428	0.3979			
PFHxS_2	4.54	1.00	48686.07	M	0.3428	0.3979	16	50	
6:2-FTS	N/A	N/A	N/A	A	0.6604	N/A			
6:2 FTS_2	N/A	N/A	N/A	A	0.6604	N/A		#NA!	
PFHpS	N/A	N/A	N/A	A	0.4066	N/A			
PFHpS_2	N/A	N/A	N/A	A	0.4066	N/A		50	
PFOA	4.91	1.00	312625.40	M	0.0562	0.0855			
PFOA_2	4.90	1.00	26736.79	M	0.0562	0.0855	52	50	OOS
PFOS	5.24	1.00	105809.81	M	0.2968	0.3212			
PFOS_2	5.24	1.00	33989.74	M	0.2968	0.3212	8	50	
PFNA	N/A	N/A	N/A	A	0.0229	N/A			
PFNA_2	N/A	N/A	N/A	A	0.0229	N/A		50	
PFNS	N/A	N/A	N/A	A	0.4828	N/A			
PFNS_2	N/A	N/A	N/A	A	0.4828	N/A		50	
PFDA	N/A	N/A	N/A	A	0.0081	N/A			
PFDA_2	N/A	N/A	N/A	A	0.0081	N/A		50	
8:2-FTS	N/A	N/A	N/A	A	0.6814	N/A			
8:2 FTS_2	N/A	N/A	N/A	A	0.6814	N/A		#NA!	
NMeFOSAA	N/A	N/A	N/A	A	0.2569	N/A			
NMeFOSAA_2	N/A	N/A	N/A	A	0.2569	N/A		50	
PFDS	N/A	N/A	N/A	A	0.5144	N/A			
PFDS_2	N/A	N/A	N/A	A	0.5144	N/A		50	
PFUnDA	N/A	N/A	N/A	A	0.0058	N/A			
PFUnDA_2	N/A	N/A	N/A	A	0.0058	N/A		50	
NEtFOSAA	N/A	N/A	N/A	A	0.7253	N/A			
NEtFOSAA_2	N/A	N/A	N/A	A	0.7253	N/A		50	
PFDoDA	N/A	N/A	N/A	A	0.0157	N/A			
PFDoDA_2	N/A	N/A	N/A	A	0.0157	N/A		50	
10:2-FTS	N/A	N/A	N/A	A	0.6356	N/A			
10:2 FTS_2	N/A	N/A	N/A	A	0.6356	N/A		#NA!	
PFTrDA	N/A	N/A	N/A	A	0.0086	N/A			
PFTrDA_2	N/A	N/A	N/A	A	0.0086	N/A		50	
PFTeDA	N/A	N/A	N/A	A	0.0062	N/A			
PFTeDA_2	N/A	N/A	N/A	A	0.0062	N/A		50	
PFHxDA	N/A	N/A	N/A	A	0.0683	N/A			
PFHxDA_2	N/A	N/A	N/A	A	0.0683	N/A		50	
PFODA	N/A	N/A	N/A	A	0.0277	N/A			
PFODA_2	N/A	N/A	N/A	A	0.0277	N/A		50	

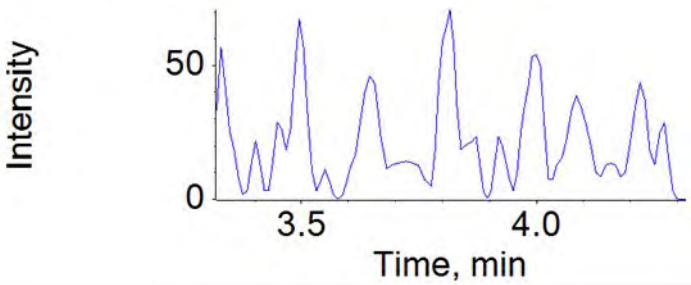
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

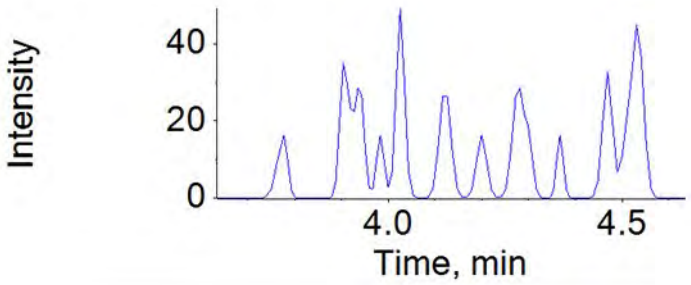
Component: PFBS
Primary Mass: 299.0 / 80.0



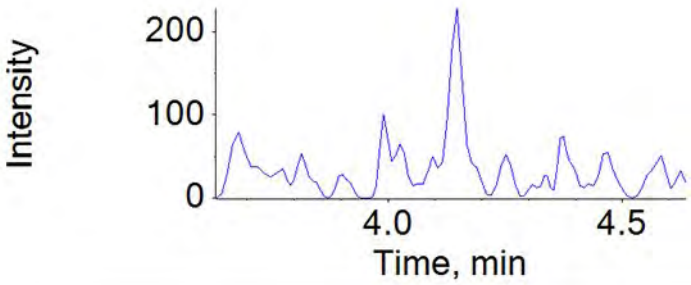
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



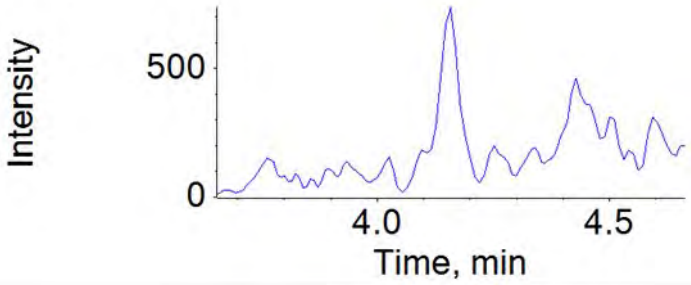
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



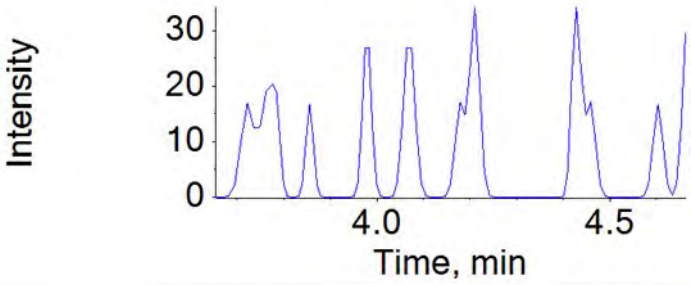
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



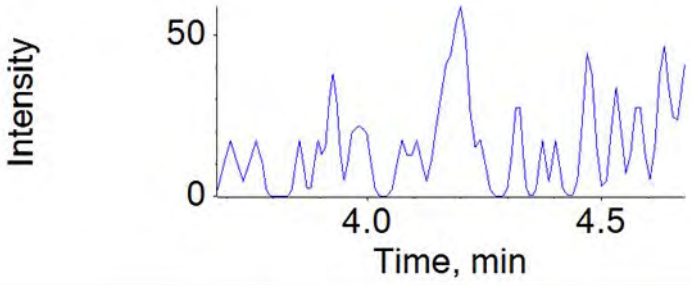
Component: PFHxA
Primary Mass: 313.0 / 269.0



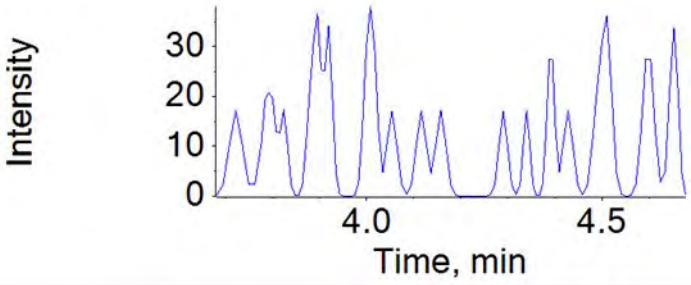
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



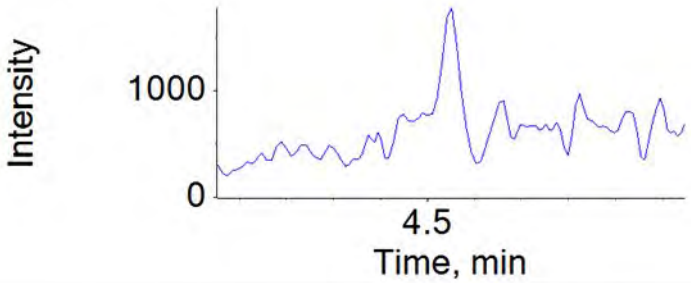
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



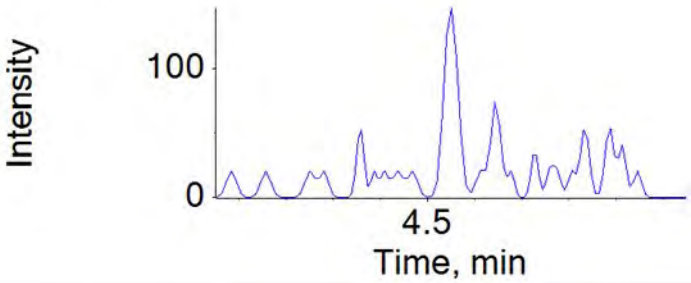
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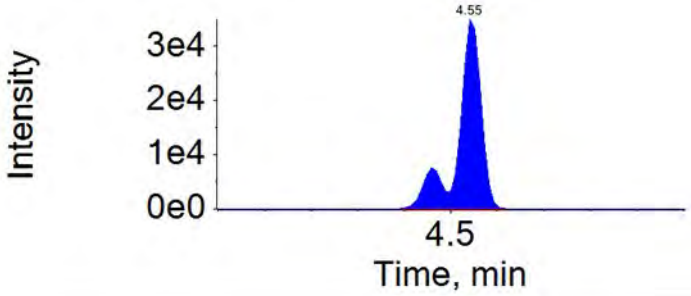
Component: PFHpA
Primary Mass: 363.0 / 319.0



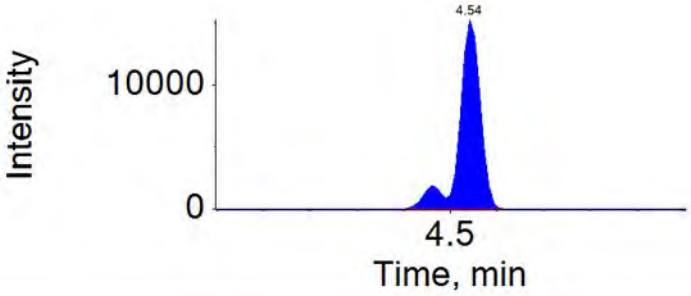
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



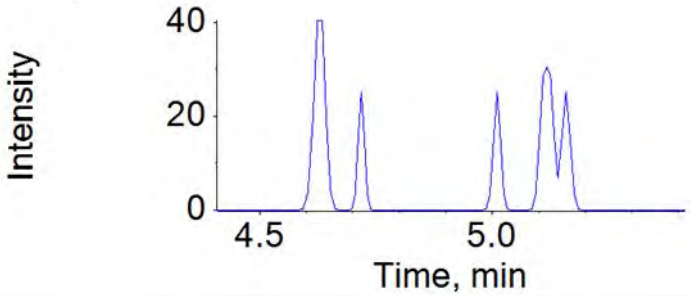
Component: PFHxS
Primary Mass: 399.0 / 80.0



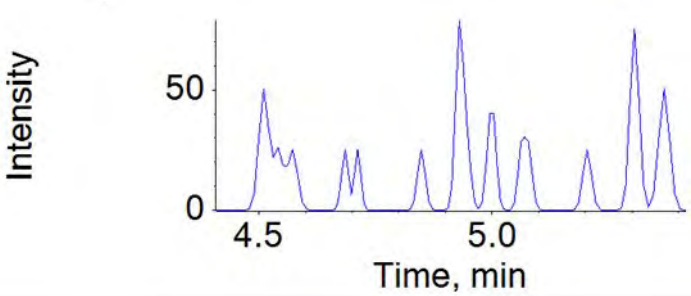
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



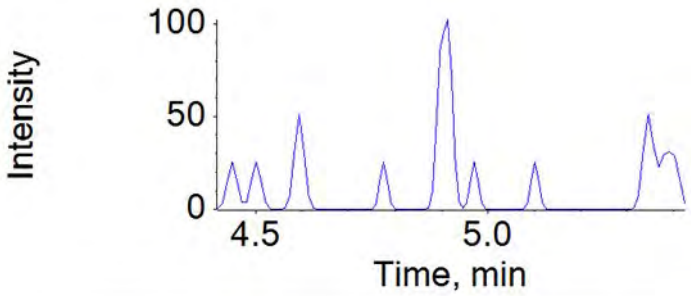
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



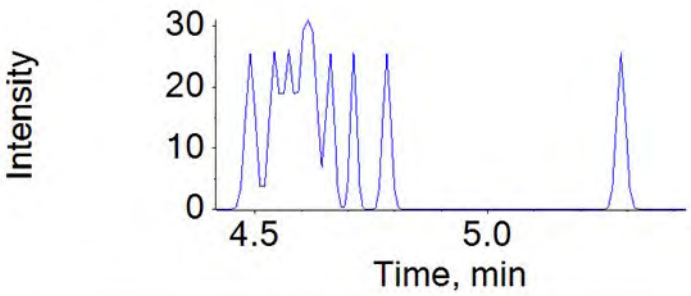
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



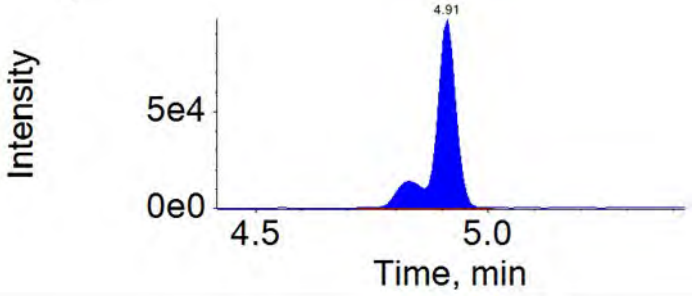
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



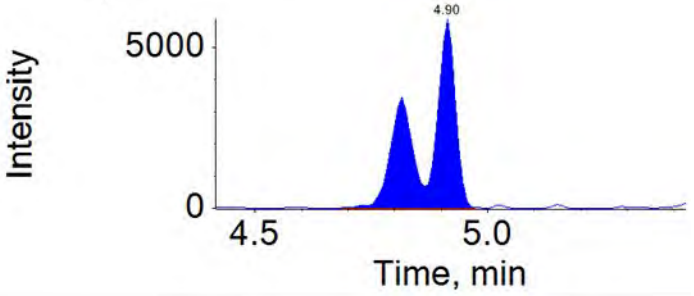
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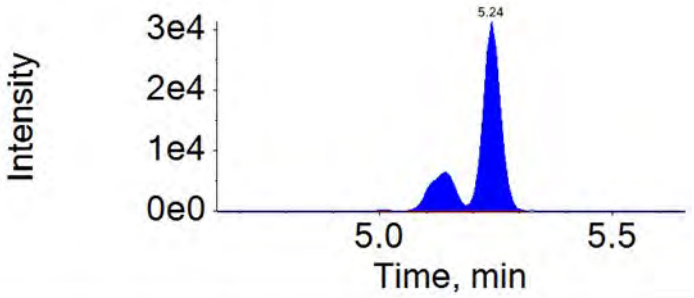
Component: PFOA
Primary Mass: 413.0 / 369.0



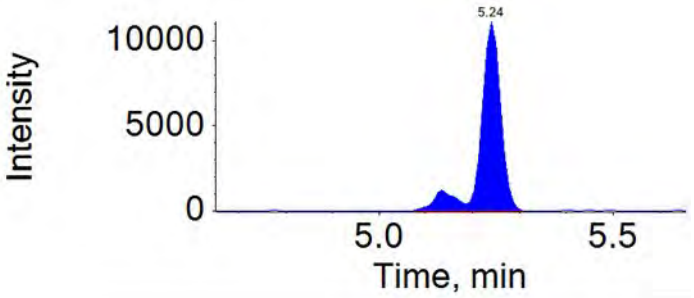
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



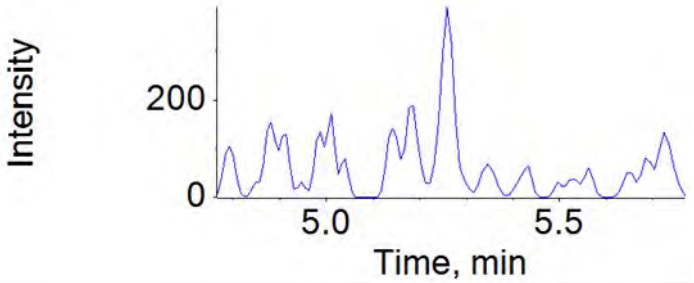
Component: PFOS
Primary Mass: 499.0 / 80.0



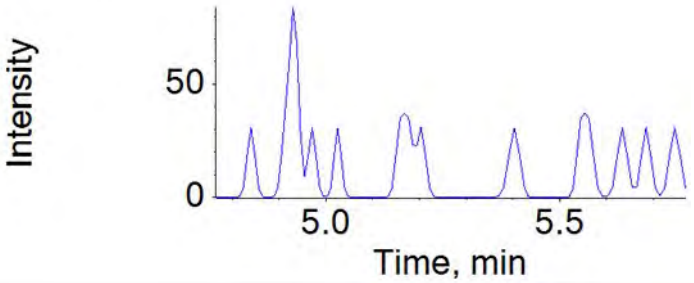
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



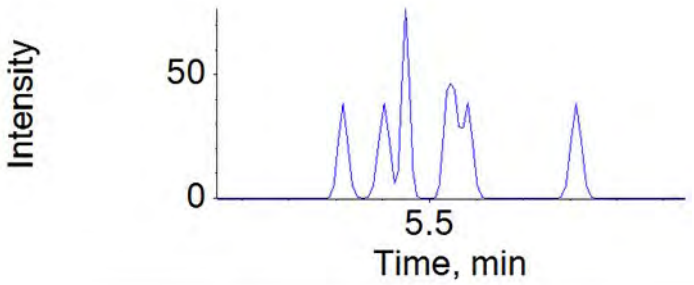
Component: PFNA
Primary Mass: 463.0 / 419.0



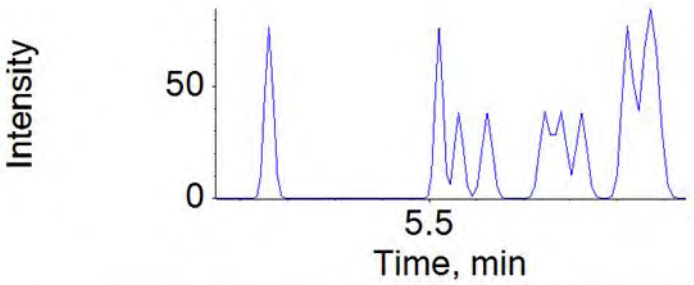
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



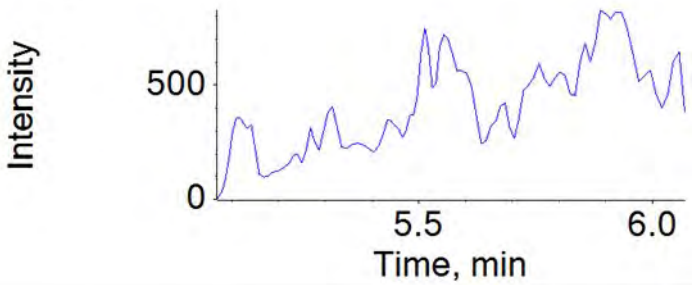
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



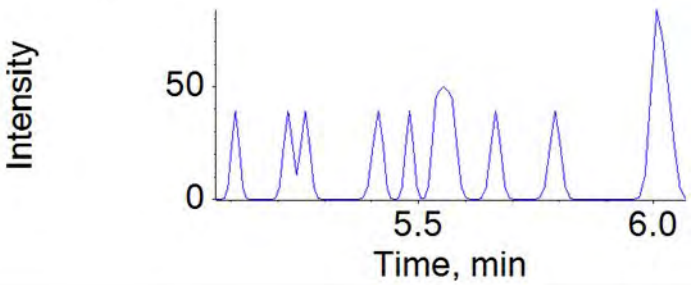
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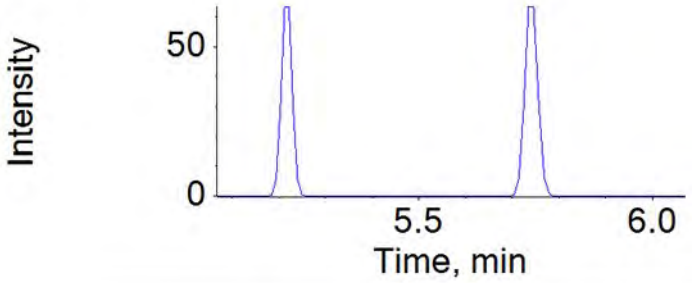
Component: PFDA
Primary Mass: 513.0 / 469.0



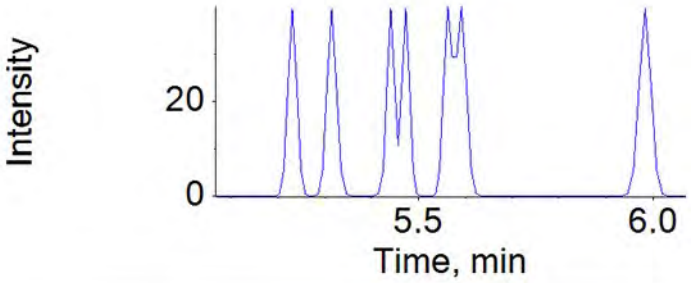
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



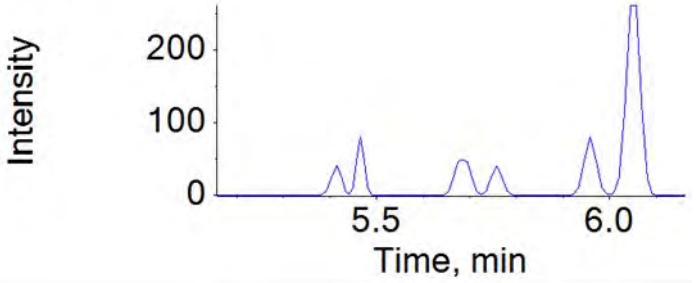
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



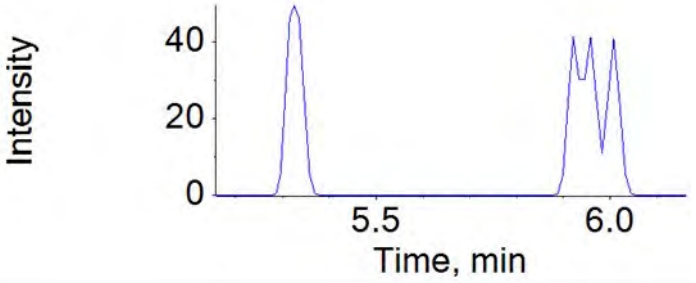
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



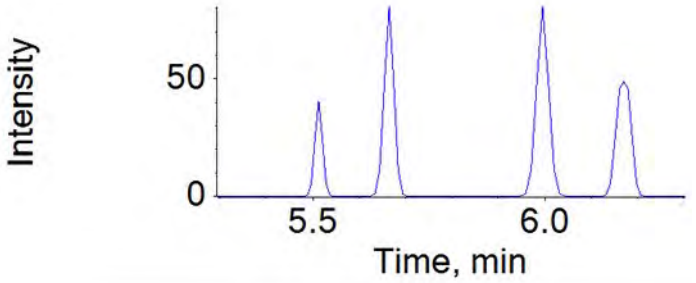
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



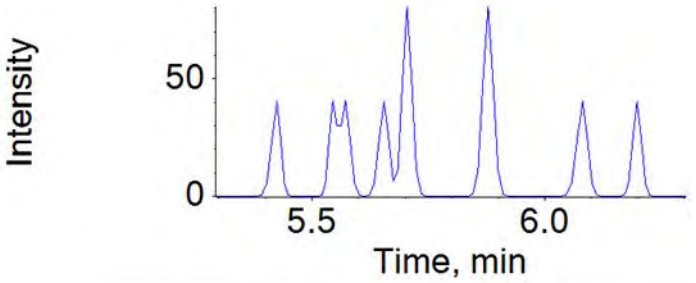
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



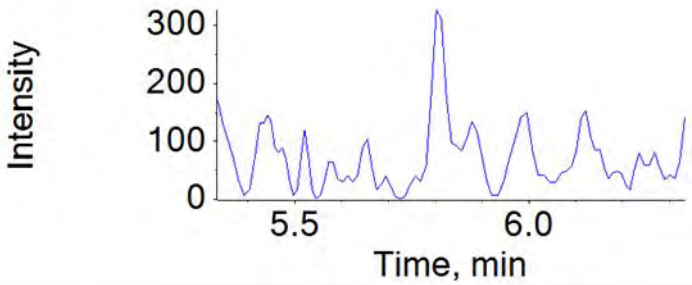
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



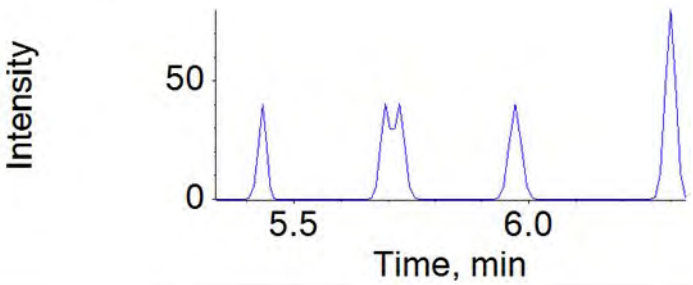
APPROVED
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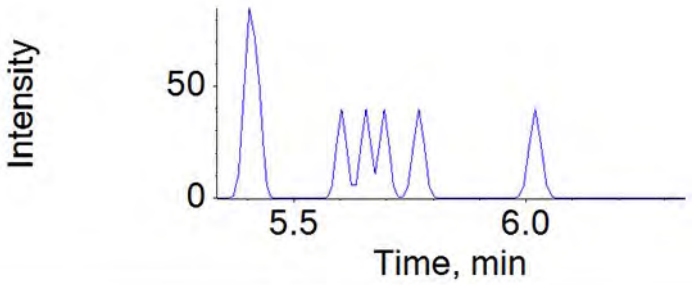
Component: PFUnDA
Primary Mass: 563.0 / 519.0



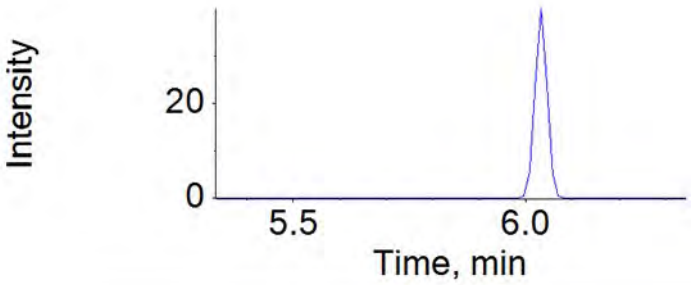
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



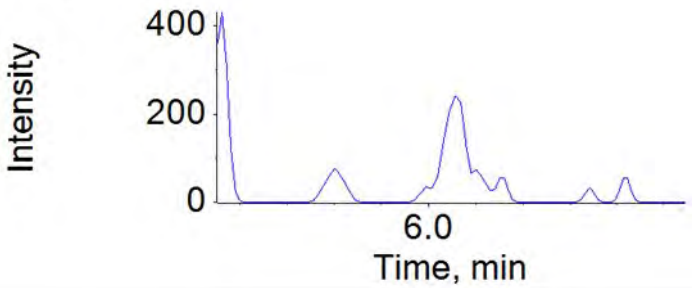
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



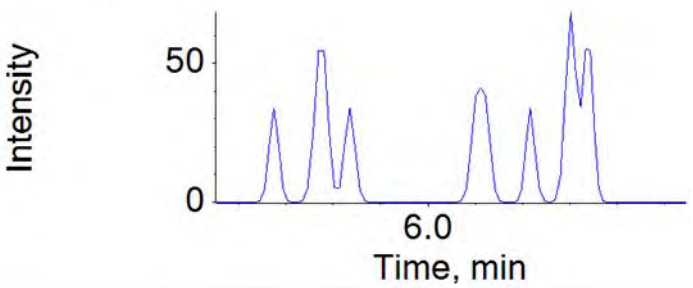
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



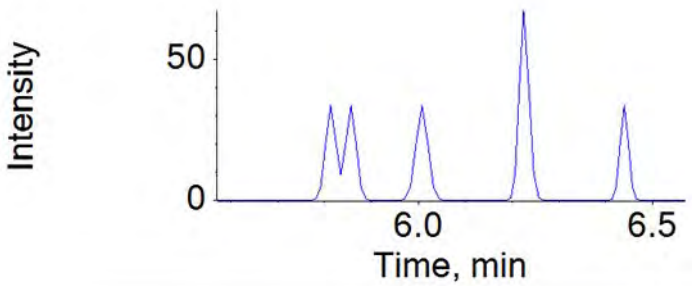
Component: PFDoDA
Primary Mass: 613.0 / 569.0



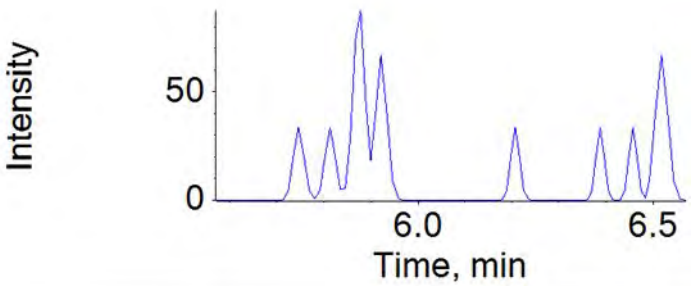
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



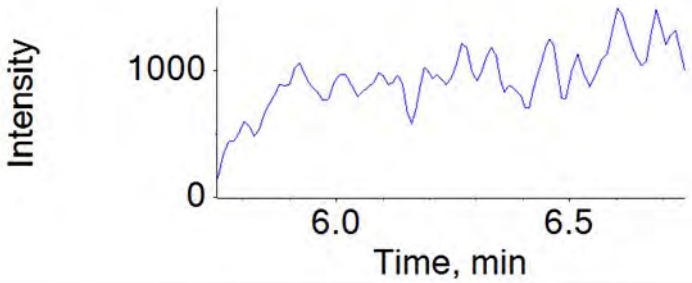
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



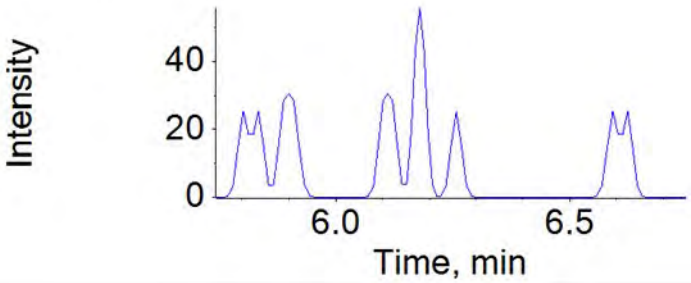
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

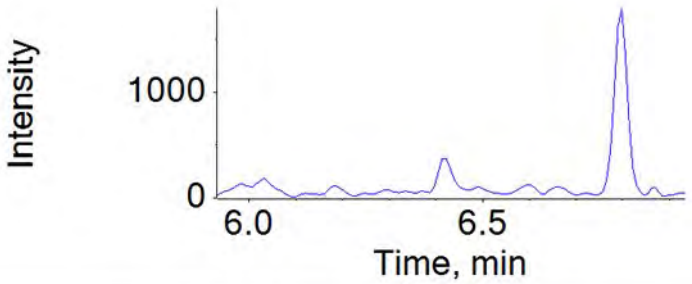
Component: PFTrDA
Primary Mass: 663.0 / 619.0



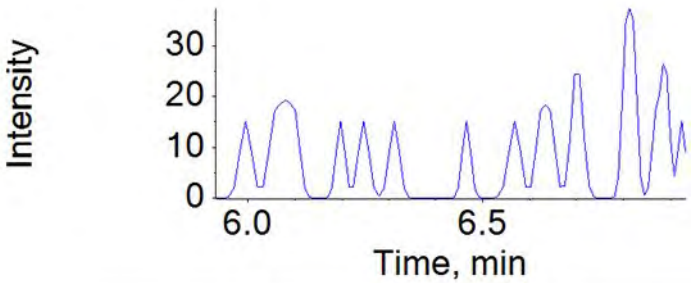
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



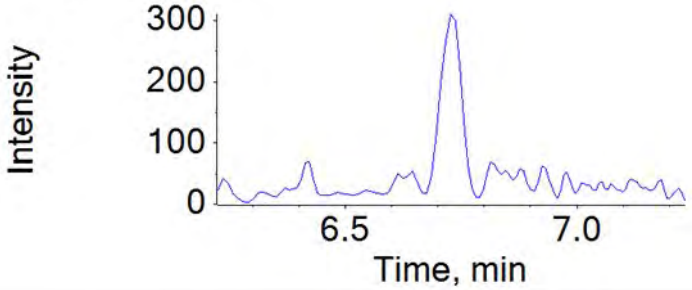
Component: PFTeDA
Primary Mass: 713.0 / 669.0



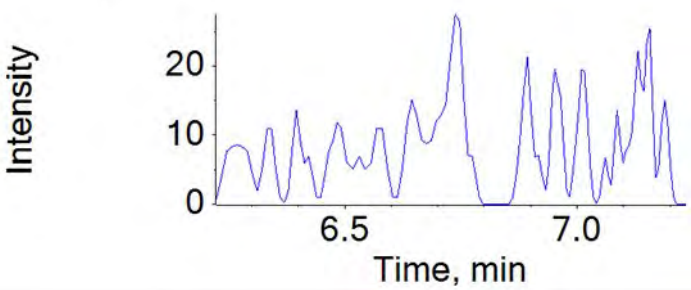
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



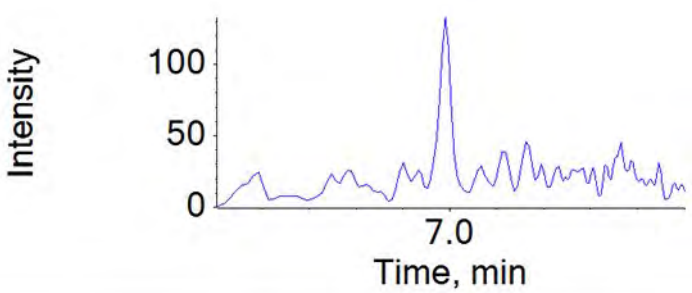
Component: PFHxDA
Primary Mass: 813.0 / 769.0



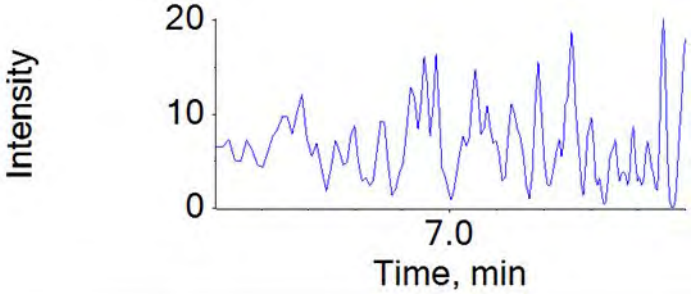
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



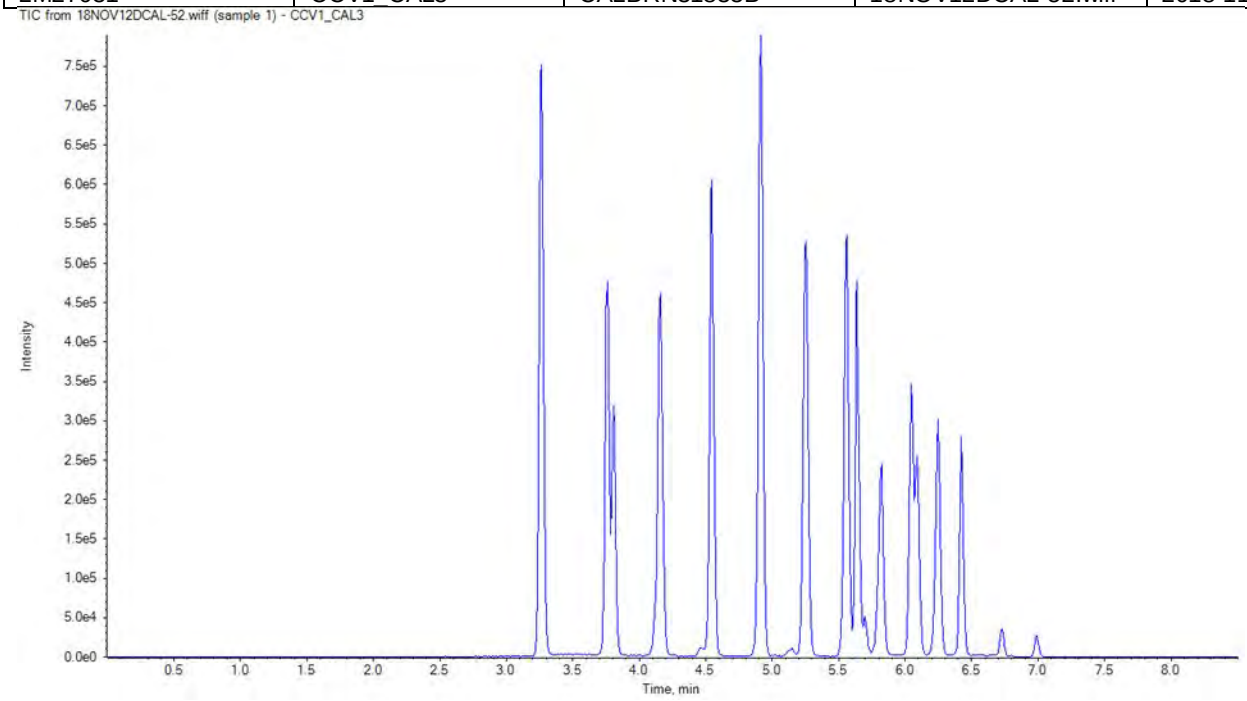
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV1_CAL3	CALBRN31833B	18NOV12DCAL-52.wiff	2018-11-12T16:36:17



Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	664284.7	659926.2	1	50	
13C2-PFOA	5.0	438739.4	450219.7	-3	50	
13C4-PFOS	4.8	248122.9	249205.8	0	50	
13C2-PFDA	5.0	280671.6	278743.9	1	50	

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV1_CAL3	CALBRN31833B	18NOV12DCAL-52.wiff	2018-11-12T16:36:17

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	303662.2	10	13C4-PFBA	735275.5	5.0	0.413	3.26	1.000	2.000	2.288	14	30	
PFPeA	301109.0	11	13C5-PFPeA	741612.6	5.0	0.406	3.76	1.000	2.000	2.350	18	30	
PFBS	166889.6	10	13C3-PFBS	428368.4	4.7	0.390	3.81	1.000	1.770	1.853	5	30	
4:2-FTS	33008.9	12	13C2-4:2-FTS	45542.8	4.7	0.725	4.12	1.000	1.870	1.968	5	30	
PFHxA	362326.0	12	13C5-PFHxA	638944.4	5.0	0.567	4.16	1.000	2.000	2.368	18	30	
PFPeS	87834.9	11	13C3-PFBS	428368.4	4.7	0.205	4.18	1.100	1.880	1.991	6	30	
PFHpA	361271.6	11	13C4-PFHpA	513535.0	5.0	0.703	4.54	1.000	2.000	2.332	17	30	
PFHxS	128396.1	18	13C3-PFHxS	315408.2	4.7	0.407	4.55	1.000	1.820	1.974	8	30	
6:2-FTS	30500.7	11	13C2-6:2-FTS	31026.1	4.8	0.983	4.90	1.000	1.900	2.379	25	30	
PFHpS	122801.7	11	13C3-PFHxS	315408.2	4.7	0.389	4.91	1.080	1.900	2.050	8	30	
PFOA	370358.7	11	13C8-PFOA	845332.9	5.0	0.438	4.91	1.000	2.000	2.340	17	30	
PFOS	122332.0	21	13C8-PFOS	260810.5	4.8	0.469	5.24	1.000	1.850	2.051	11	30	
PFNA	292557.2	11	13C9-PFNA	468762.7	5.0	0.624	5.26	1.000	2.000	2.250	13	30	
PFNS	76021.2	11	13C8-PFOS	260810.5	4.8	0.291	5.54	1.060	1.920	2.039	6	30	
PFDA	253956.7	11	13C6-PFDA	610394.1	5.0	0.416	5.56	1.000	2.000	2.206	10	30	
8:2-FTS	22335.5	11	13C2-8:2-FTS	28002.9	4.8	0.798	5.56	1.000	1.920	1.860	-3	30	
PFOSA	236734.8	12	13C8-PFOSA	697263.3	5.0	0.340	5.64	1.000	2.000	1.658	-17	30	
NMeFOSAA	28733.4	18	d3-NMeFOSAA	73784.5	5.0	0.389	5.70	1.000	2.000	2.201	10	30	
PFDS	62507.8	11	13C8-PFOS	260810.5	4.8	0.240	5.79	1.110	1.930	2.172	13	30	
PFUnDA	199322.4	12	13C7-PFUnDA	244775.8	5.0	0.814	5.82	1.000	2.000	2.129	6	30	
NEtFOSAA	24531.9	20	d5-NEtFOSAA	70158.9	5.0	0.350	5.83	1.000	2.000	1.833	-8	30	
PFDoDA	228792.9	12	13C2-PFDoDA	497113.0	5.0	0.460	6.05	1.000	2.000	2.344	17	30	
10:2-FTS	14411.1	11	13C2-8:2-FTS	28002.9	4.8	0.515	6.06	1.090	1.930	1.714	-11	30	
NMePFOSAE	172466.5	11	d7-NMePFOSAE	300873.2	5.0	0.573	6.09	1.000	2.000	2.386	19	30	
NMePFOSA	31464.1	12	d3-NMePFOSA	75068.4	5.0	0.419	6.10	1.000	2.000	2.068	3	30	
PFDoS	33762.2	11	13C8-PFOS	260810.5	4.8	0.129	6.22	1.190	1.940	2.267	17	30	
NEtPFOSAE	180928.5	11	d9-NEtPFOSAE	250299.2	5.0	0.723	6.25	1.000	2.000	2.319	16	30	
NEtPFOSA	26529.3	11	d5-NEtPFOSA	59631.6	5.0	0.445	6.26	1.000	2.000	2.043	2	30	
PFTrDA	185154.6	11	13C2-PFDoDA	497113.0	5.0	0.372	6.25	1.030	2.000	2.351	18	30	
PFTeDA	159904.6	10	13C2-PFTeDA	379642.6	5.0	0.421	6.42	1.000	2.000	2.361	18	30	
PFHxDA	68393.8	11	13C2-PFTeDA	379642.6	5.0	0.180	6.73	1.050	2.000	2.146	7	30	
PFODA	58092.4	10	13C2-PFTeDA	379642.6	5.0	0.153	6.99	1.090	2.000	2.131	7	30	

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18NOV12DCAL 11/12/2018 6:14:07 PM
Acquisition Method: 18AUG13_3uL.dam

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV1_CAL3			**Data File:**		18NOV12DCAL-52.wiff
Sample ID:	CALBRN31833B			**Acquis Date:**		2018-11-12T16:36:17
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	5			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV12DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N\A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	664284.7	659926.2	1	50	
13C2-PFOA	5.0	438739.4	450219.7	-3	50	
13C4-PFOS	4.8	248122.9	249205.8	0	50	
13C2-PFDA	5.0	280671.6	278743.9	1	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	735275.5	13C3-PFBA	664284.7	1.107	5.000	4.962	99	70-130	
E13C5-PFPeA	741612.6	13C3-PFBA	664284.7	1.116	5.000	5.007	100	70-130	
E13C3-PFBS	428368.4	13C3-PFBA	664284.7	0.645	4.650	4.552	98	70-130	
E13C2-4:2-FTS	45542.8	13C2-PFOA	438739.4	0.104	4.670	4.623	99	70-130	
E13C5-PFHxA	638944.4	13C2-PFOA	438739.4	1.456	5.000	5.261	105	70-130	
E13C3-PFHxS	315408.2	13C2-PFOA	438739.4	0.719	4.730	4.933	104	70-130	
E13C4-PFHpA	513535.0	13C2-PFOA	438739.4	1.170	5.000	5.273	105	70-130	
E13C2-6:2-FTS	31026.1	13C2-PFOA	438739.4	0.071	4.750	4.731	100	70-130	
E13C8-PFOA	845332.9	13C2-PFOA	438739.4	1.927	5.000	5.308	106	70-130	
E13C8-PFOS	260810.5	13C4-PFOS	248122.9	1.051	4.780	4.657	97	70-130	
E13C9-PFNA	468762.7	13C4-PFOS	248122.9	1.889	5.000	5.267	105	70-130	
E13C6-PFDA	610394.1	13C2-PFDA	280671.6	2.175	5.000	5.075	102	70-130	
E13C2-8:2-FTS	28002.9	13C2-PFDA	280671.6	0.100	4.790	4.976	104	70-130	
E13C8-PFOSA	697263.3	13C2-PFDA	280671.6	2.484	5.000	5.508	110	70-130	
Ed3-NMeFOSAA	73784.5	13C2-PFDA	280671.6	0.263	5.000	4.745	95	70-130	
E13C7-PFUnDA	244775.8	13C2-PFDA	280671.6	0.872	5.000	5.063	101	70-130	
Ed5-NEtFOSAA	70158.9	13C2-PFDA	280671.6	0.250	5.000	5.288	106	70-130	
E13C2-PFDoDA	497113.0	13C2-PFDA	280671.6	1.771	5.000	4.599	92	70-130	
Ed7-NMePFOSAE	300873.2	13C2-PFDA	280671.6	1.072	5.000	4.639	93	70-130	
Ed3-NMePFOSA	75068.4	13C2-PFDA	280671.6	0.267	5.000	4.859	97	70-130	
Ed9-NEtPFOSAE	250299.2	13C2-PFDA	280671.6	0.892	5.000	4.638	93	70-130	
Ed5-NEtPFOSA	59631.6	13C2-PFDA	280671.6	0.212	5.000	4.984	100	70-130	
E13C2-PFTeDA	379642.6	13C2-PFDA	280671.6	1.353	5.000	4.749	95	70-130	

APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

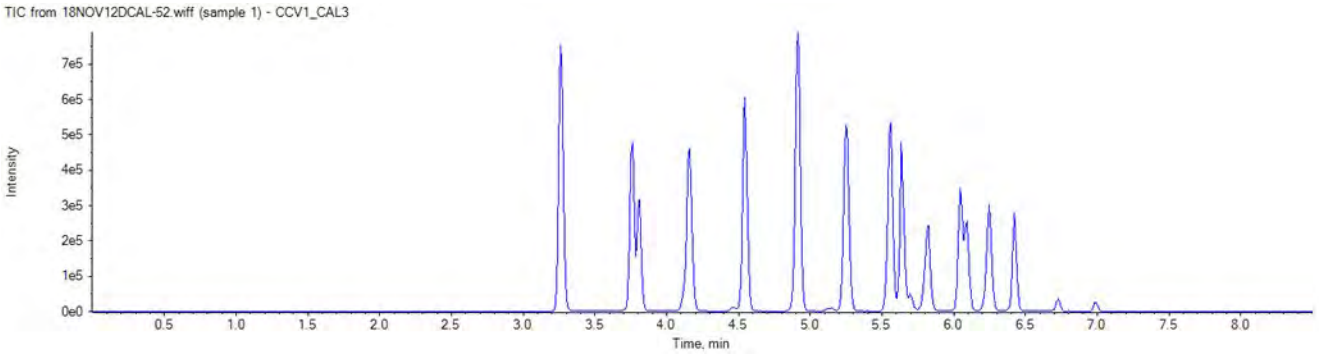
Analyte Quantitation Peak Table

Sample Name: CCV1_CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-52.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	303662.2		A	13C4-PFBA	3.26	735275.5	0.413	2.288
PFPeA	3.76	1.000	301109.0		A	13C5-PFPeA	3.76	741612.6	0.406	2.350
PFBS	3.81	1.000	166889.6		A	13C3-PFBS	3.81	428368.4	0.390	1.853
4:2-FTS	4.12	1.000	33008.9		A	13C2-4:2-FTS	4.12	45542.8	0.725	1.968
PFHxA	4.16	1.000	362326.0		A	13C5-PFHxA	4.16	638944.4	0.567	2.368
PFPeS	4.18	1.100	87834.9		A	13C3-PFBS	3.81	428368.4	0.205	1.991
PFHpA	4.54	1.000	361271.6		A	13C4-PFHpA	4.54	513535.0	0.703	2.332
PFHxS	4.55	1.000	128396.1		M	13C3-PFHxS	4.55	315408.2	0.407	1.974
6:2-FTS	4.90	1.000	30500.7		A	13C2-6:2-FTS	4.90	31026.1	0.983	2.379
PFHpS	4.91	1.080	122801.7		A	13C3-PFHxS	4.55	315408.2	0.389	2.050
PFOA	4.91	1.000	370358.7		A	13C8-PFOA	4.91	845332.9	0.438	2.340
PFOS	5.24	1.000	122332.0		M	13C8-PFOS	5.24	260810.5	0.469	2.051
PFNA	5.26	1.000	292557.2		A	13C9-PFNA	5.26	468762.7	0.624	2.250
PFNS	5.54	1.060	76021.2		A	13C8-PFOS	5.24	260810.5	0.291	2.039
PFDA	5.56	1.000	253956.7		A	13C6-PFDA	5.56	610394.1	0.416	2.206
8:2-FTS	5.56	1.000	22335.5		A	13C2-8:2-FTS	5.56	28002.9	0.798	1.860
PFOSA	5.64	1.000	236734.8		A	13C8-PFOSA	5.64	697263.3	0.340	1.658
NMeFOSAA	5.70	1.000	28733.4		A	d3-NMeFOSAA	5.70	73784.5	0.389	2.201
PFDS	5.79	1.110	62507.8		A	13C8-PFOS	5.24	260810.5	0.240	2.172
PFUnDA	5.82	1.000	199322.4		A	13C7-PFUnDA	5.82	244775.8	0.814	2.129
NEtFOSAA	5.83	1.000	24531.9		A	d5-NEtFOSAA	5.83	70158.9	0.350	1.833
PFDoDA	6.05	1.000	228792.9		A	13C2-PFDoDA	6.05	497113.0	0.460	2.344
10:2-FTS	6.06	1.090	14411.1		A	13C2-8:2-FTS	5.56	28002.9	0.515	1.714
NMePFOSAE	6.09	1.000	172466.5		A	d7-NMePFOSAE	6.09	300873.2	0.573	2.386
NMePFOSA	6.10	1.000	31464.1		A	d3-NMePFOSA	6.10	75068.4	0.419	2.068
PFDoS	6.22	1.190	33762.2		A	13C8-PFOS	5.24	260810.5	0.129	2.267
NEtPFOSAE	6.25	1.000	180928.5		A	d9-NEtPFOSAE	6.24	250299.2	0.723	2.319
NEtPFOSA	6.26	1.000	26529.3		A	d5-NEtPFOSA	6.26	59631.6	0.445	2.043
PFTrDA	6.25	1.030	185154.6		A	13C2-PFDoDA	6.05	497113.0	0.372	2.351
PFTeDA	6.42	1.000	159904.6		A	13C2-PFTeDA	6.42	379642.6	0.421	2.361
PFHxDA	6.73	1.050	68393.8		A	13C2-PFTeDA	6.42	379642.6	0.180	2.146
PFODA	6.99	1.090	58092.4		A	13C2-PFTeDA	6.42	379642.6	0.153	2.131

Total Ion Chromatogram

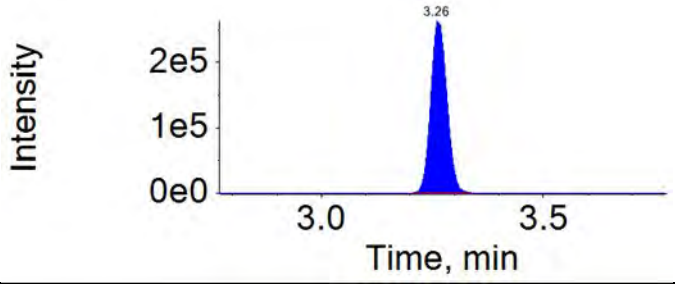


APPROVED
By MCD at 6:34 pm, 11/12/18

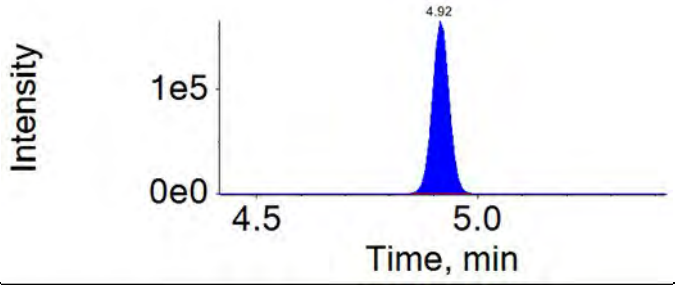
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

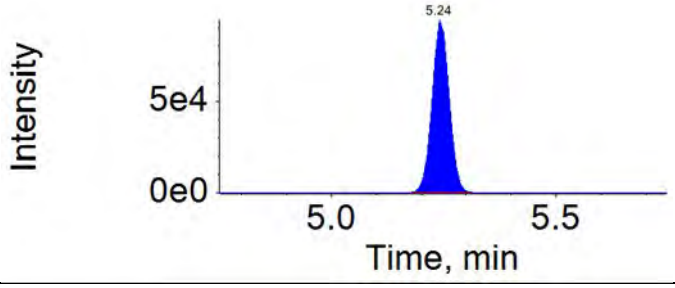
Injection Standard: 13C3-PFBA
216.0 / 172.0



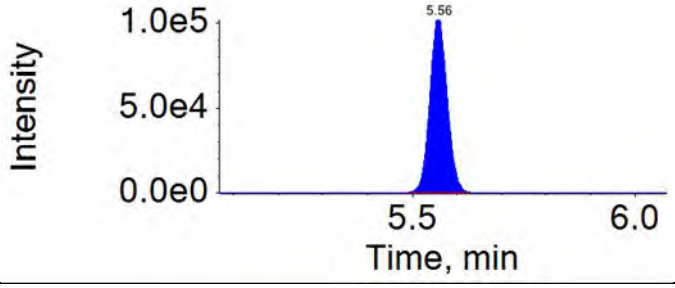
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

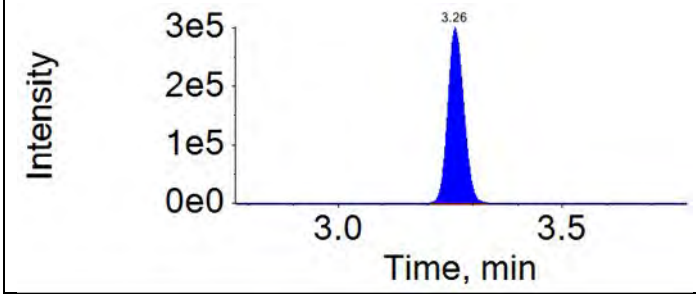


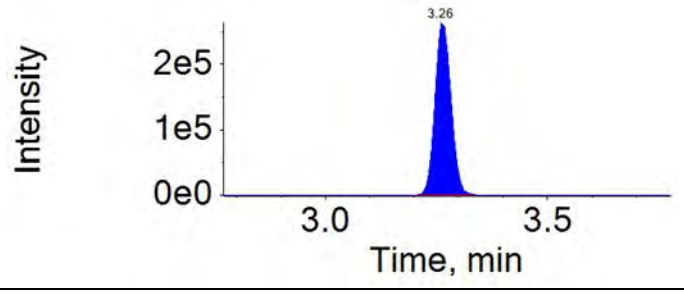
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

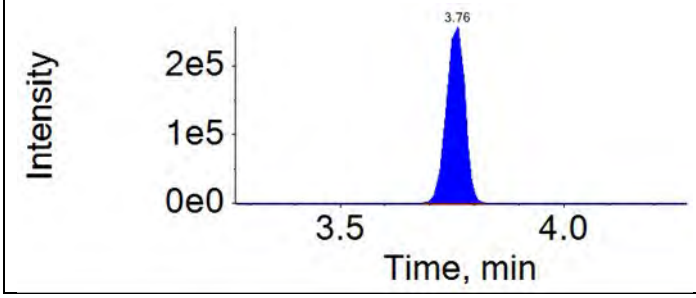
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

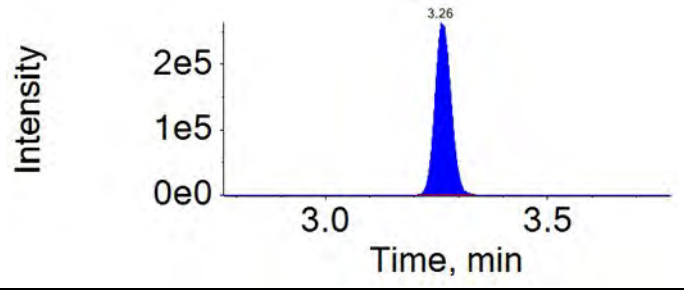
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



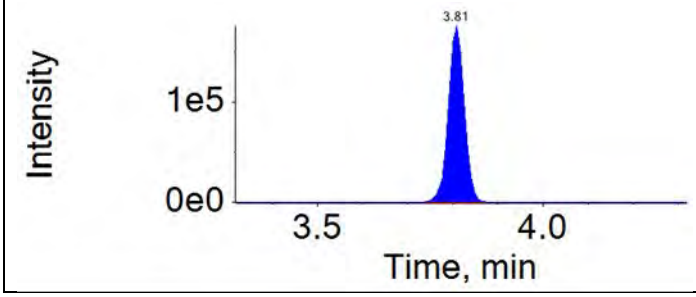


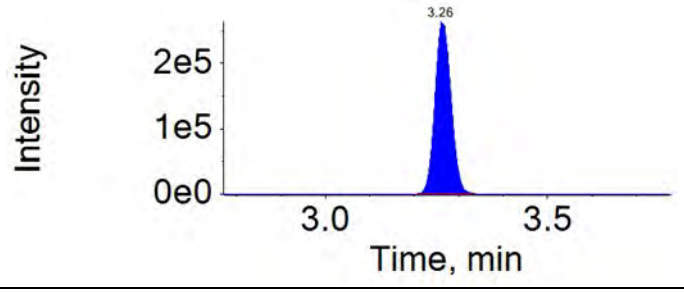
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



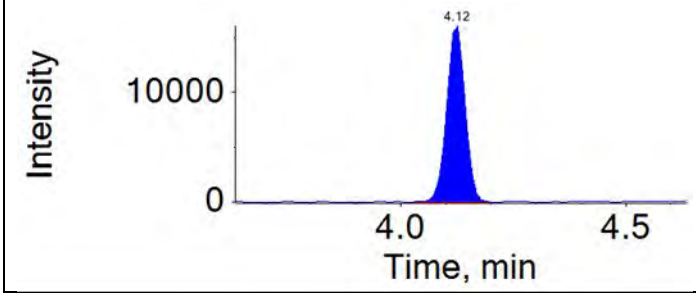


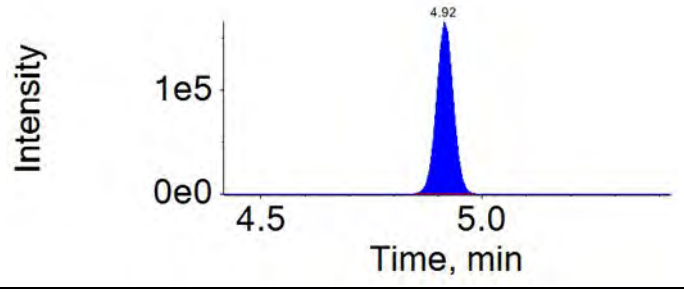
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

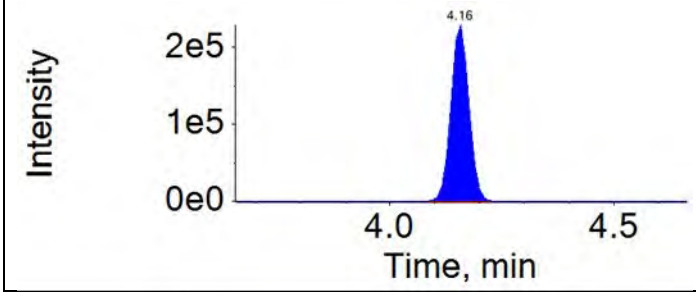
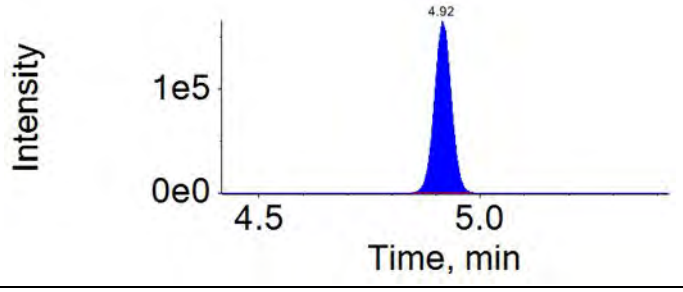


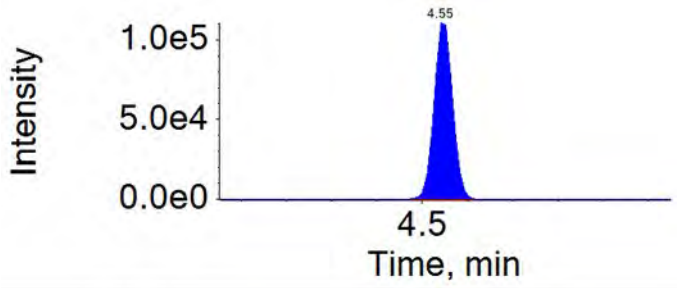
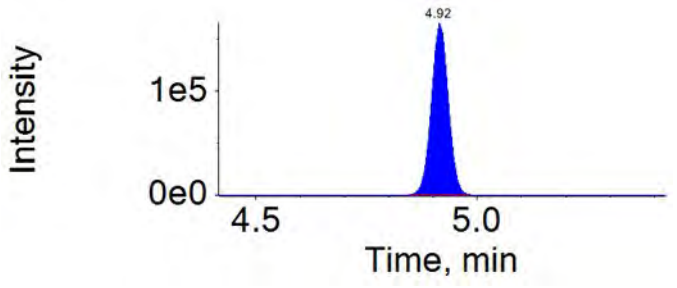


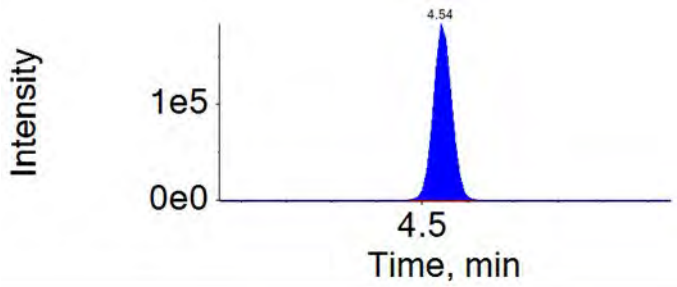
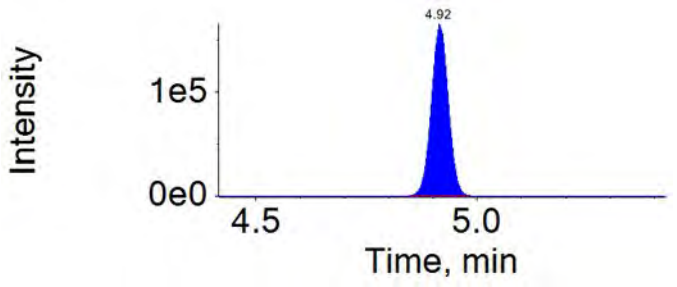
APPROVED
By MCD at 6:34 pm, 11/12/18

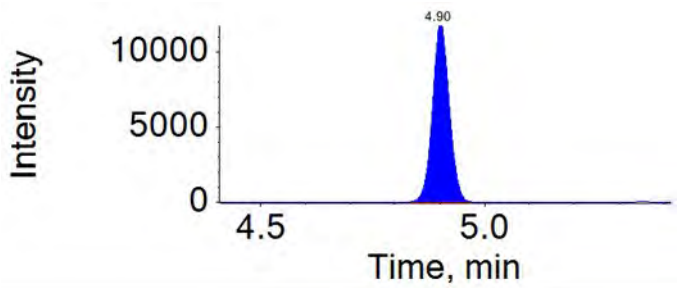
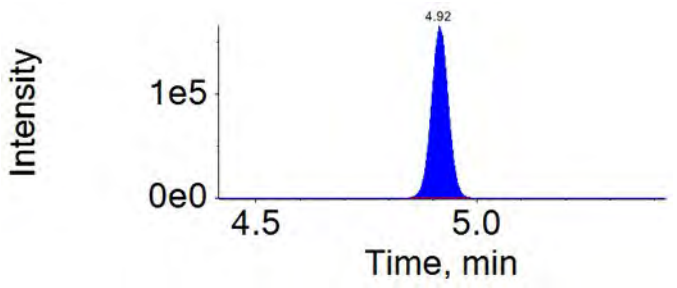
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

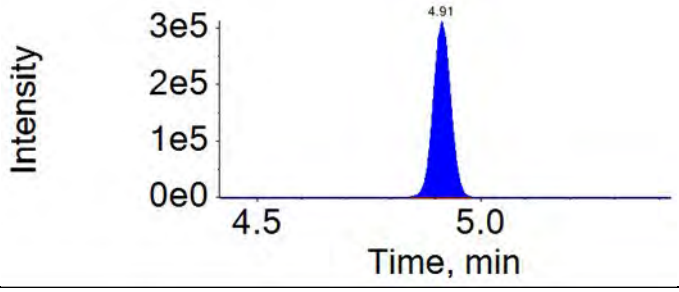
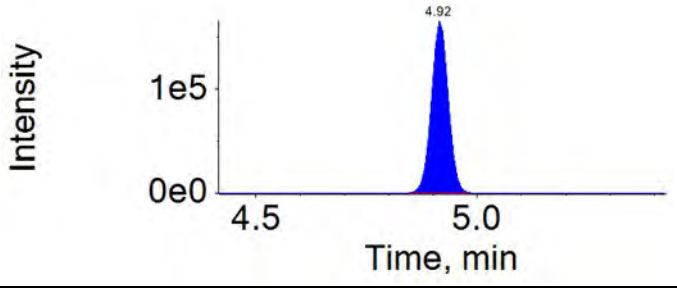
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

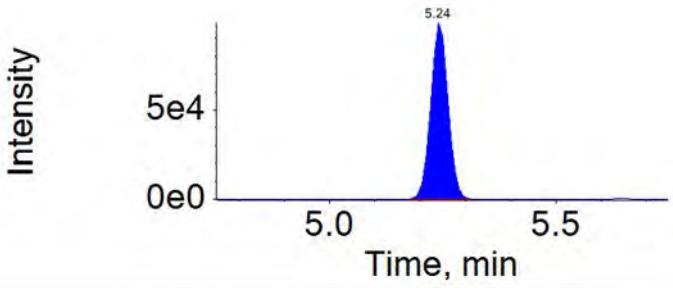
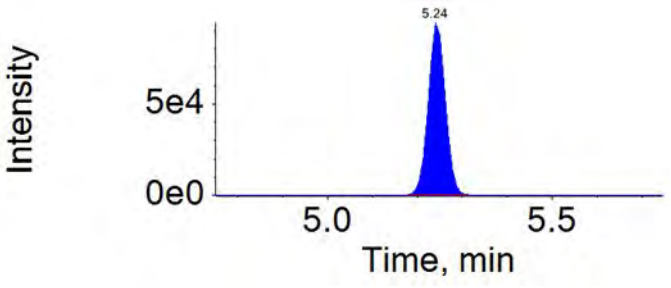
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

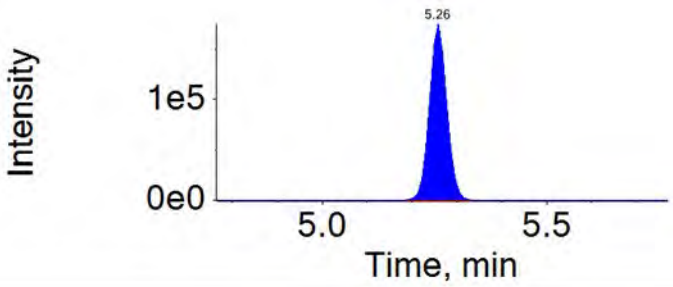
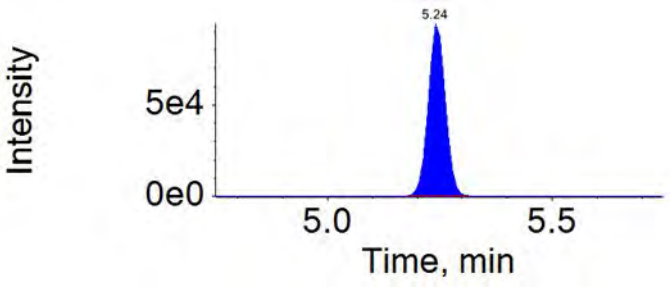
APPROVED
By MCD at 6:34 pm, 11/12/18

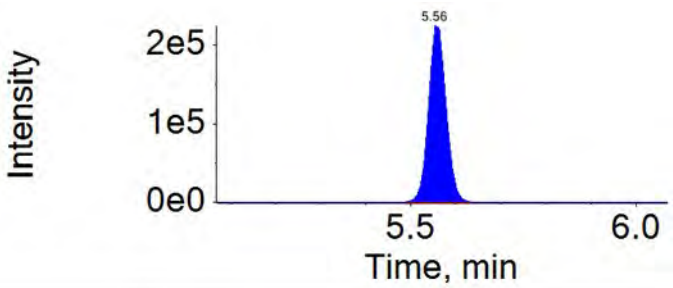
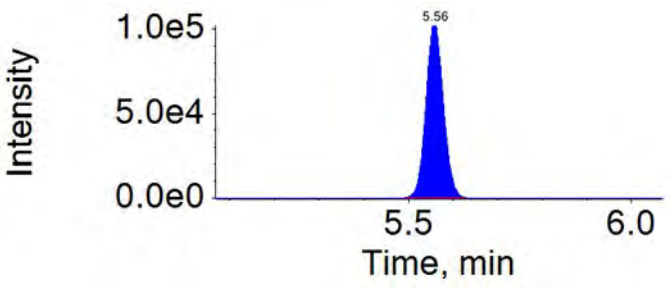
REVIEWED
By HMK at 10:53 am, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

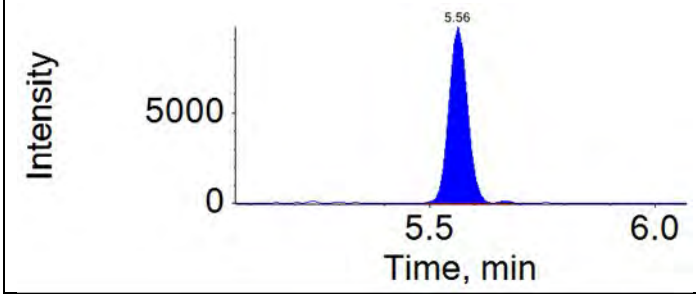
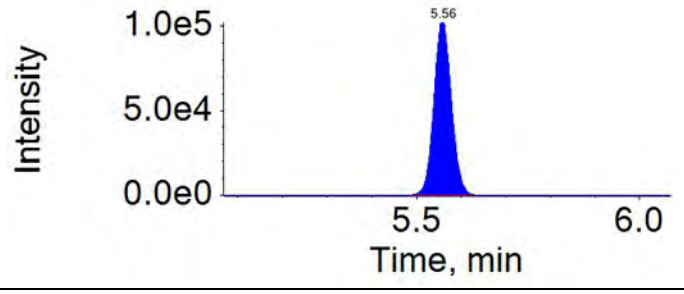
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

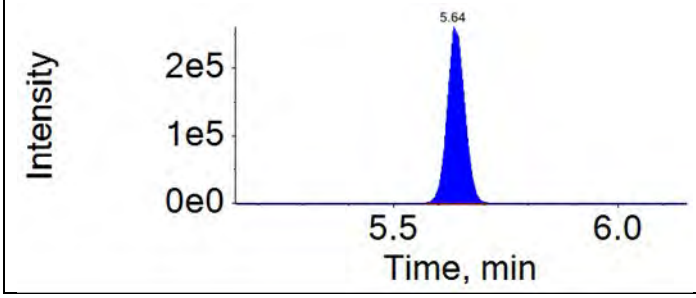
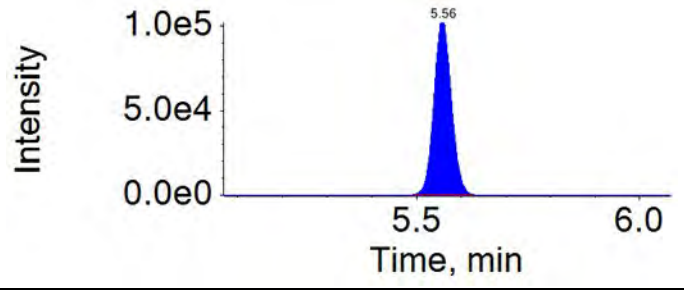
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

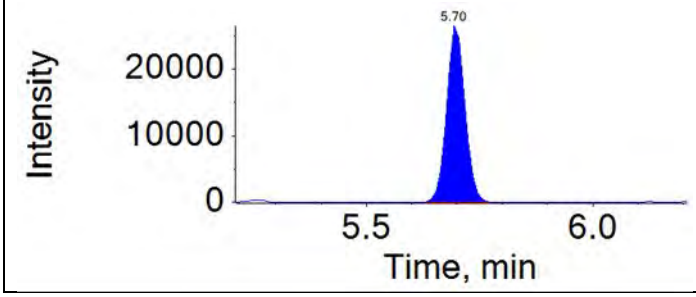
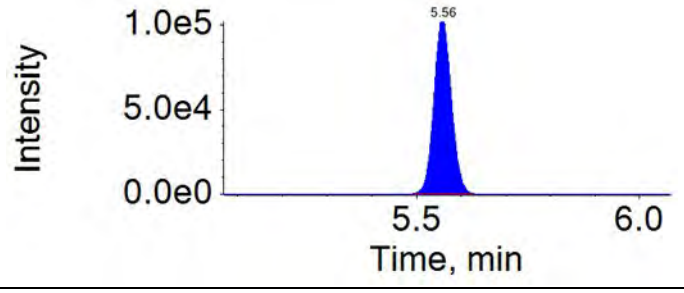
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

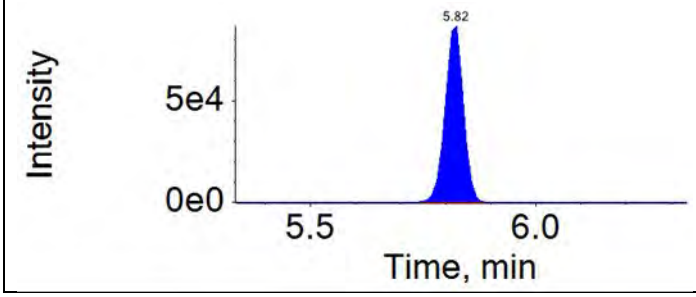
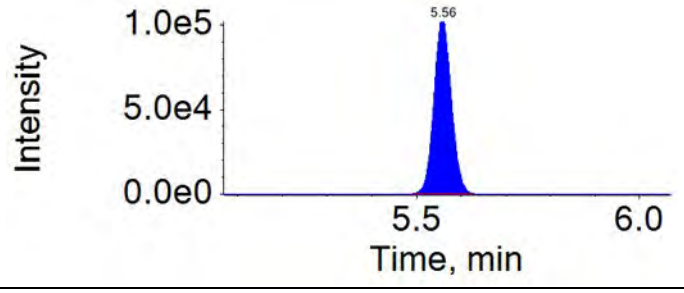
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

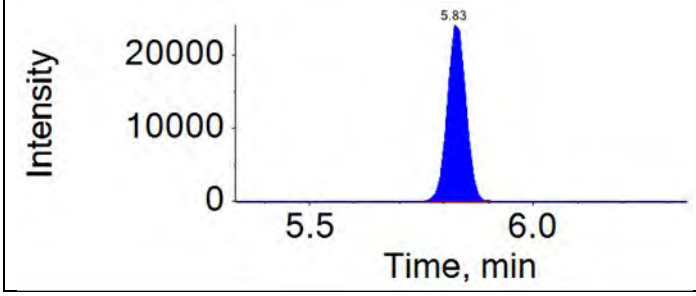
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

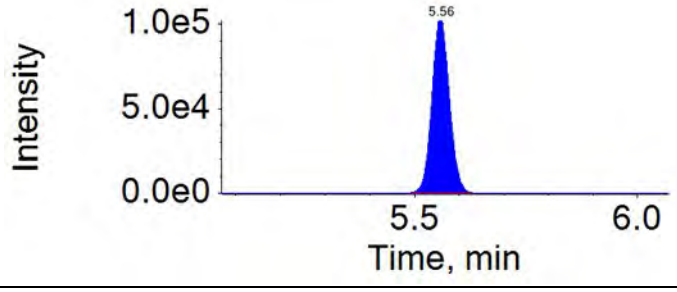
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

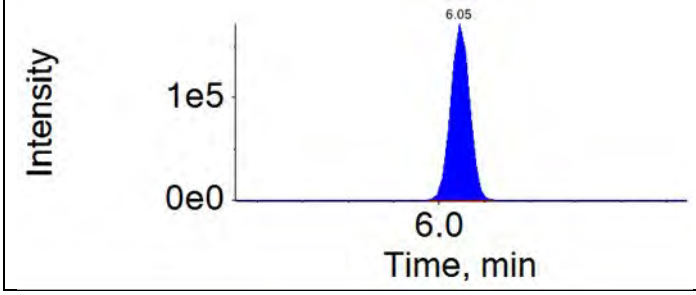
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

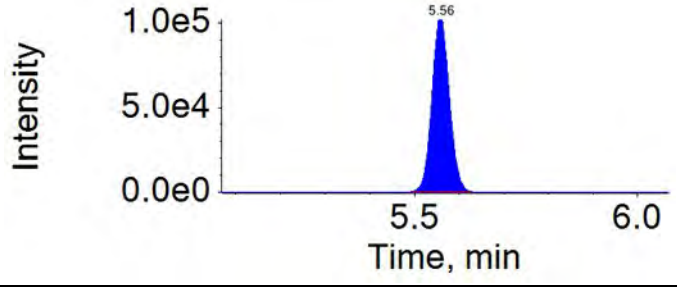
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



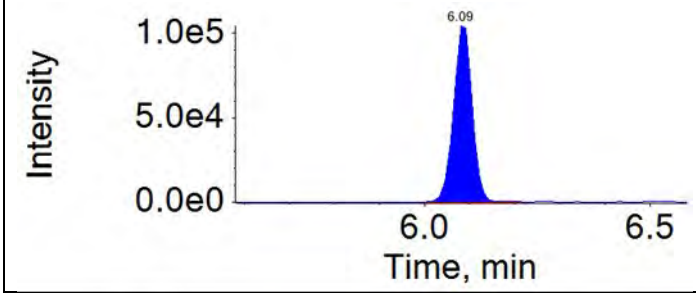


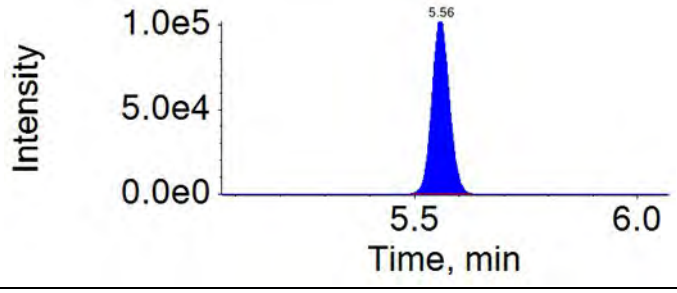
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



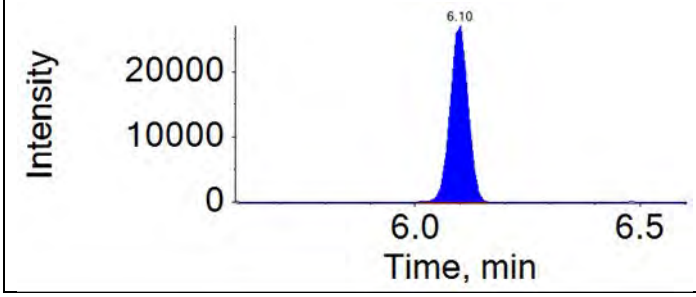


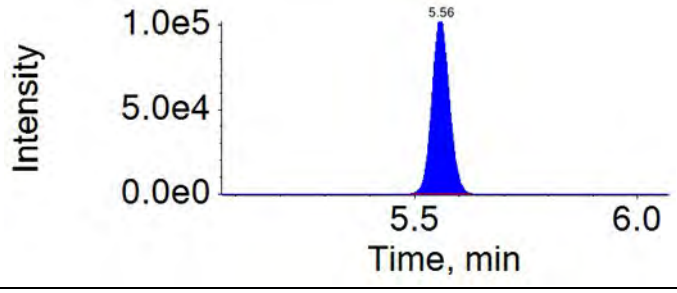
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



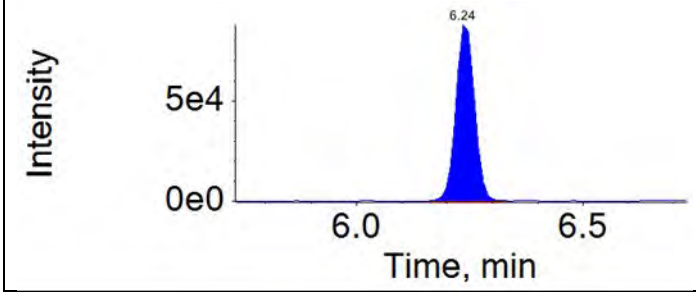


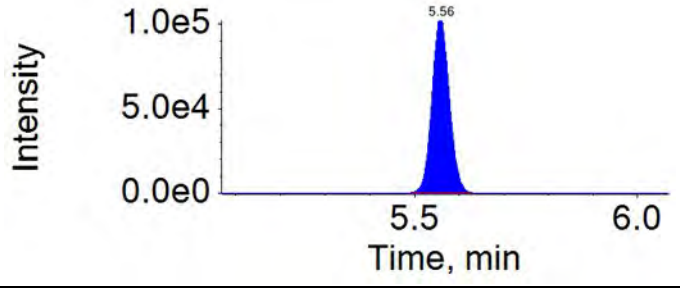
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

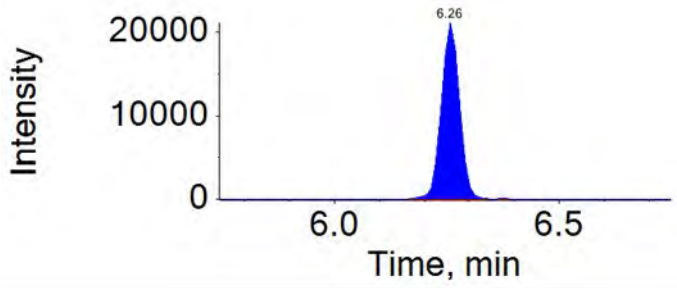
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

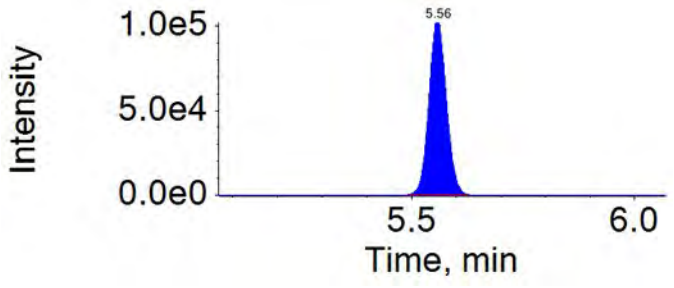
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



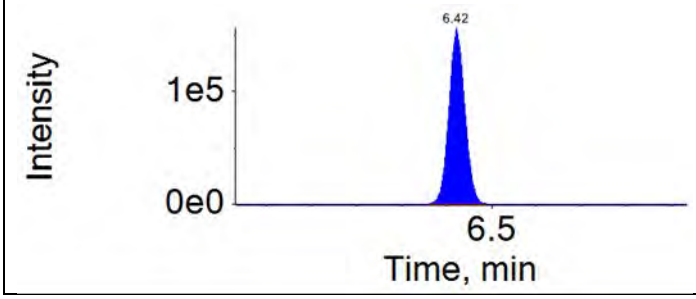


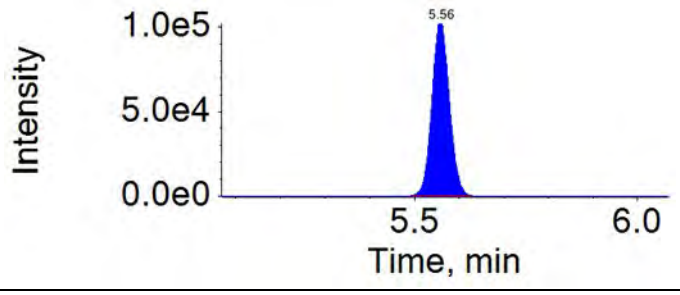
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



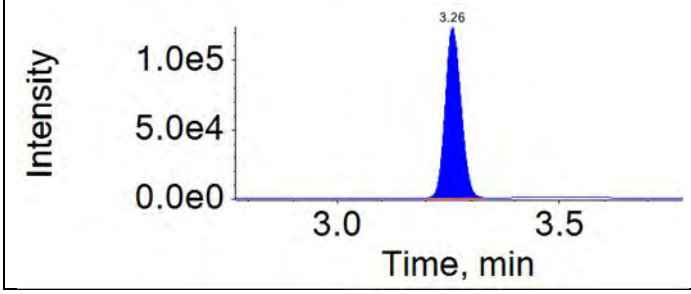


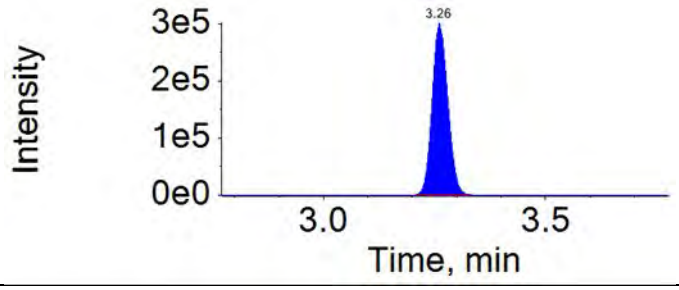
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

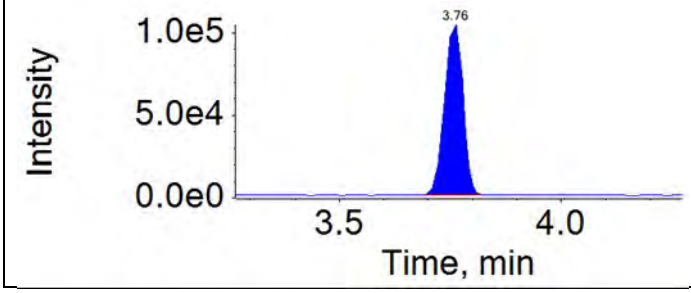
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

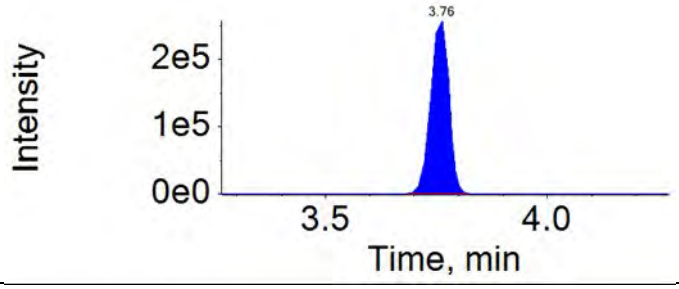
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



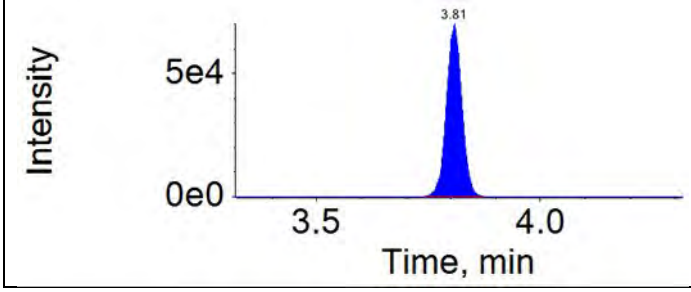


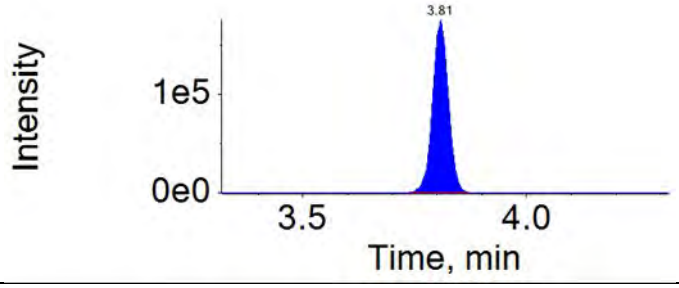
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



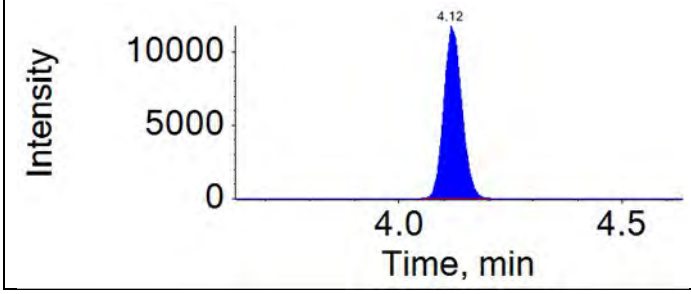


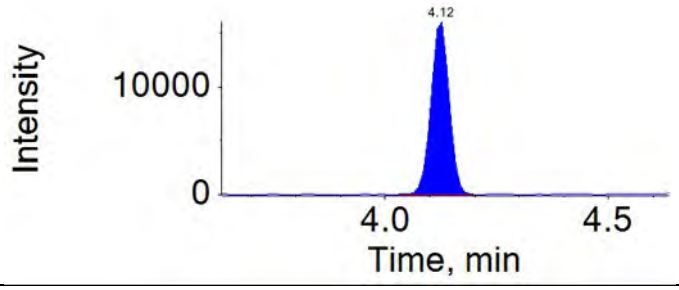
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



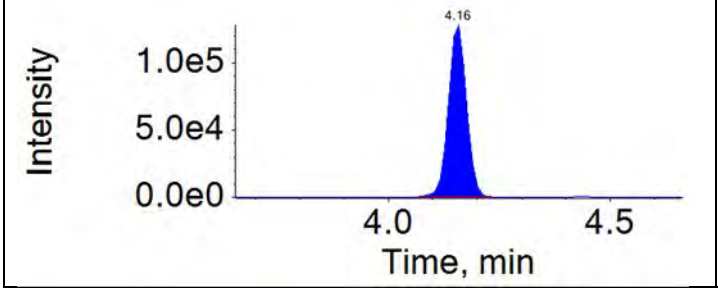


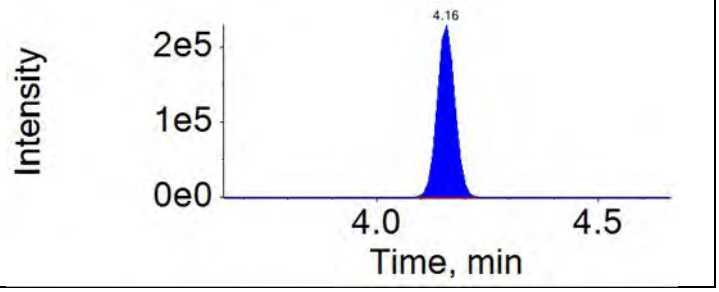
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

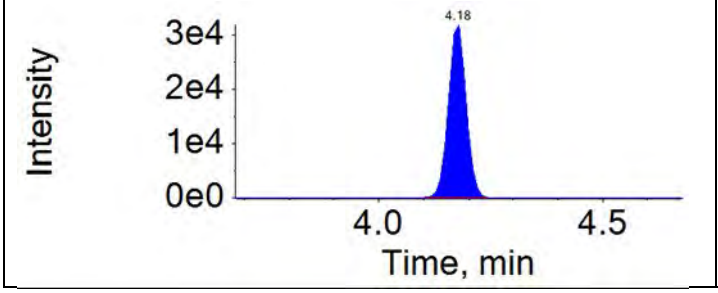
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

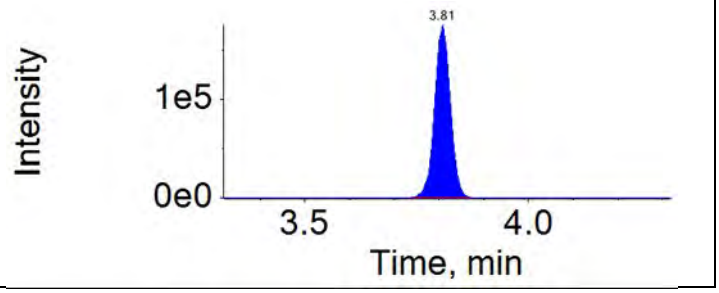
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



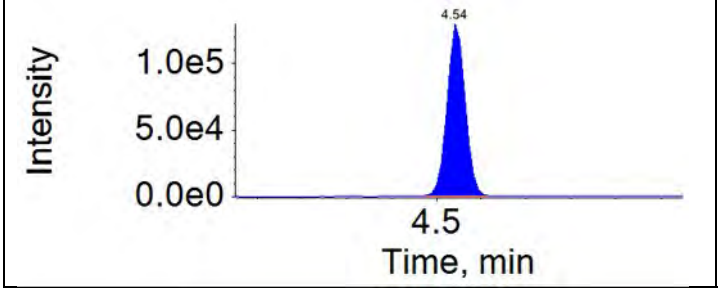


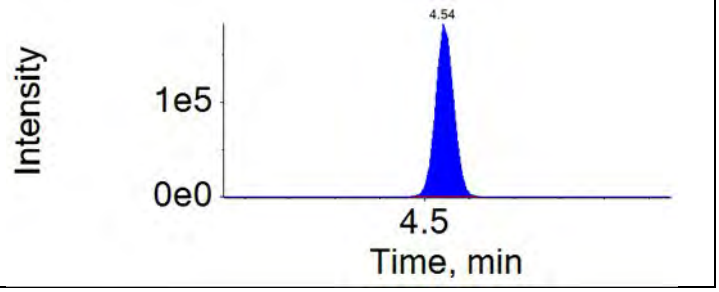
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



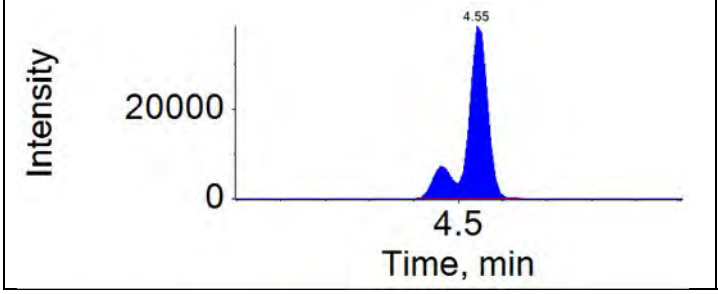


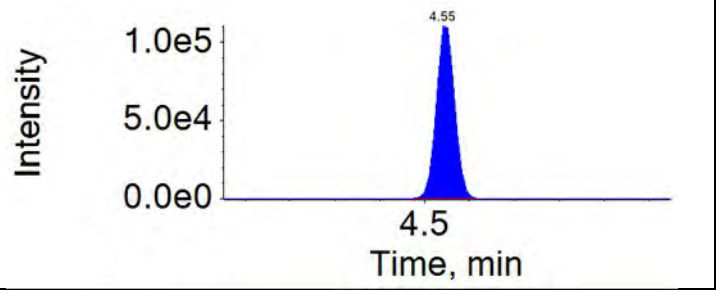
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



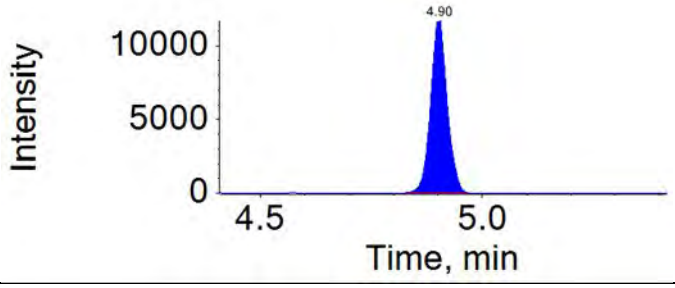


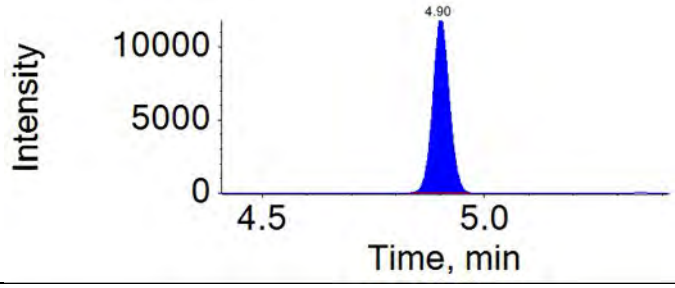
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

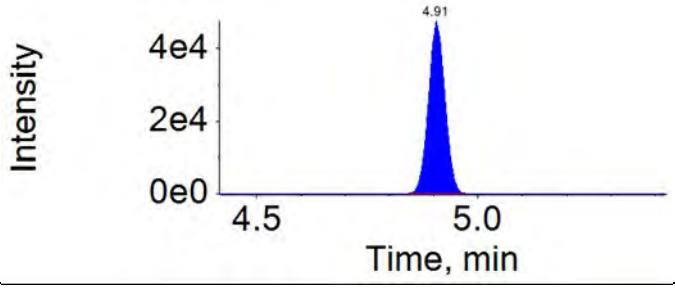
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

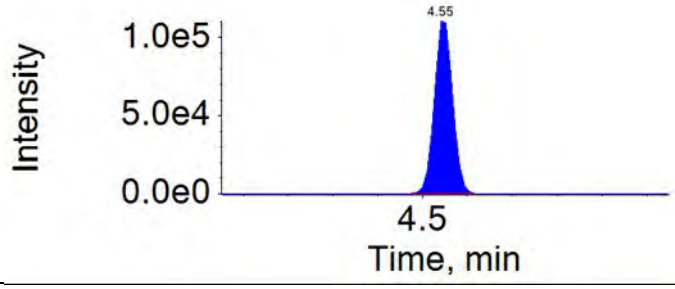
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



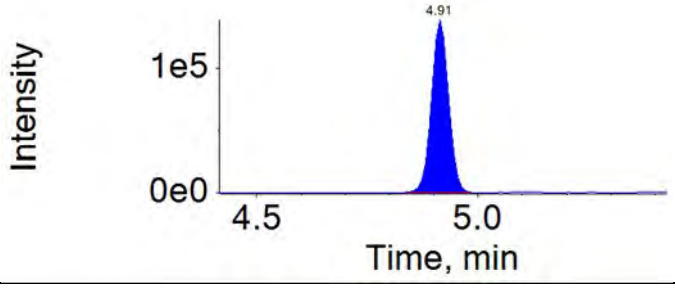


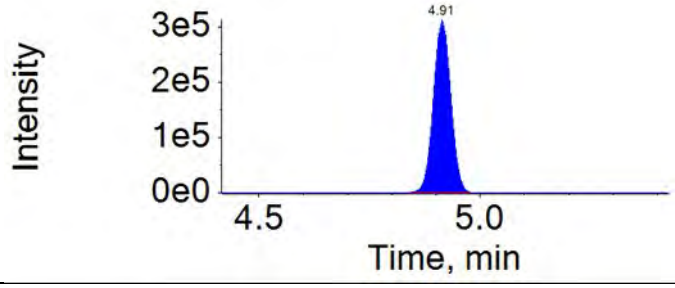
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



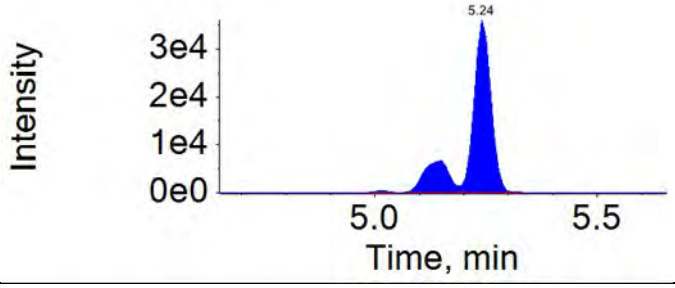


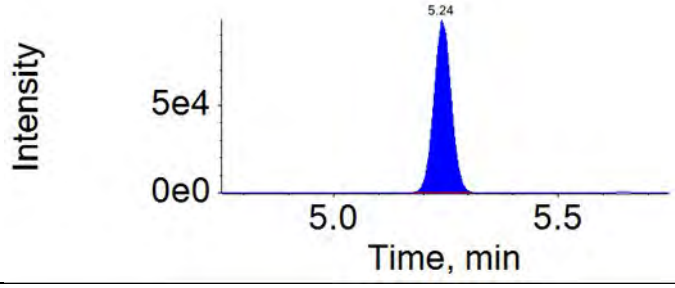
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



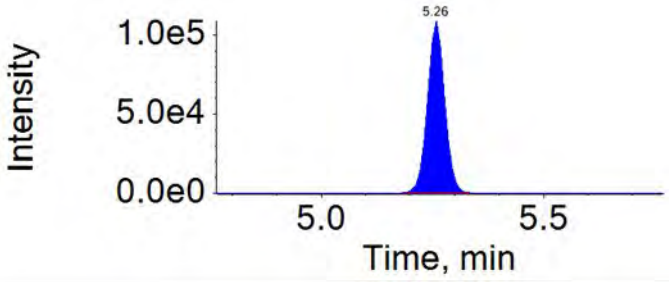


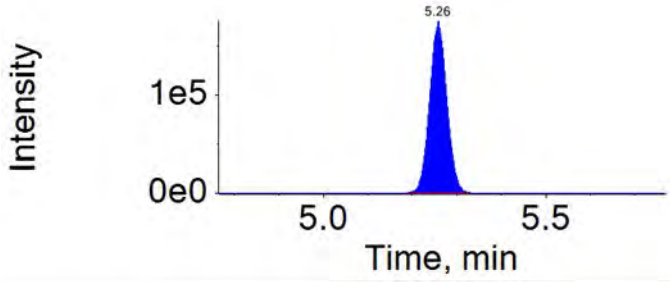
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

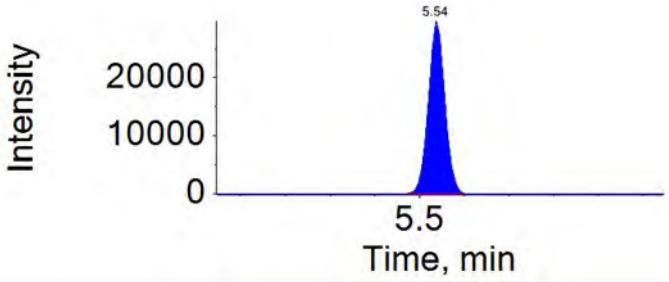
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

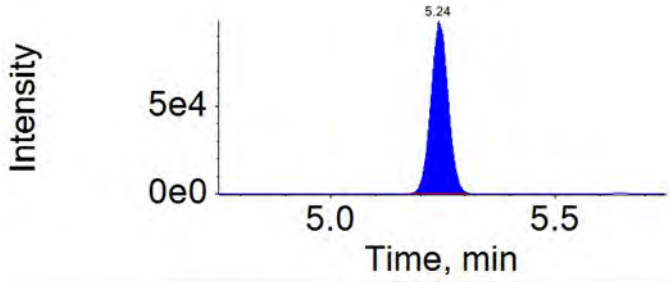
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



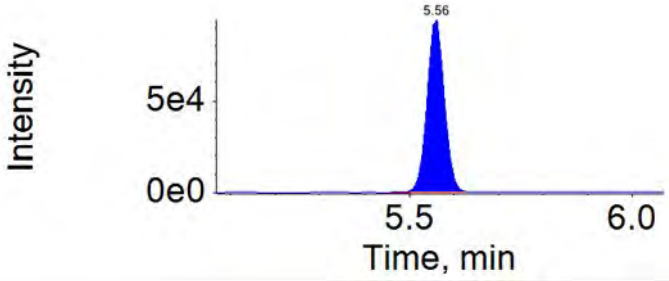


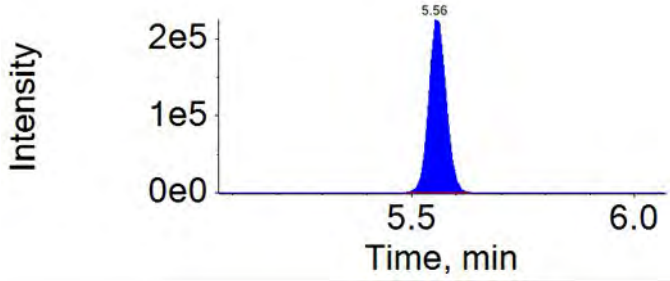
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



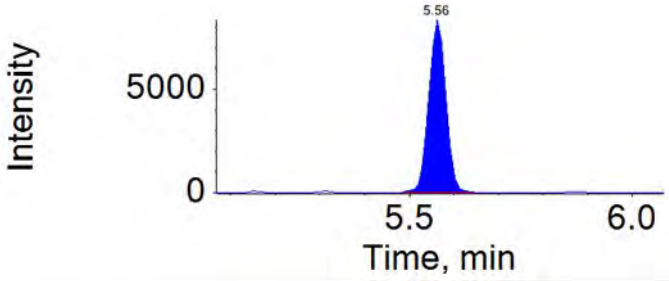


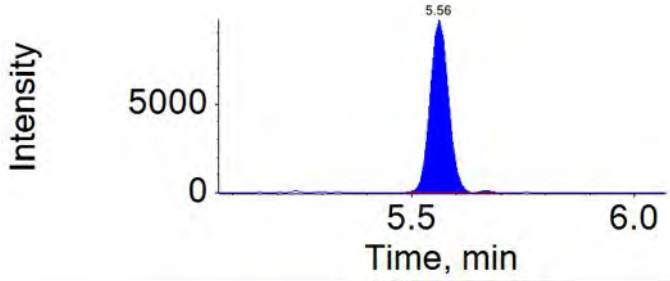
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



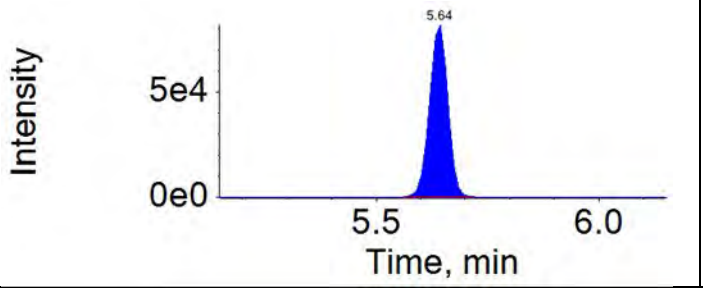


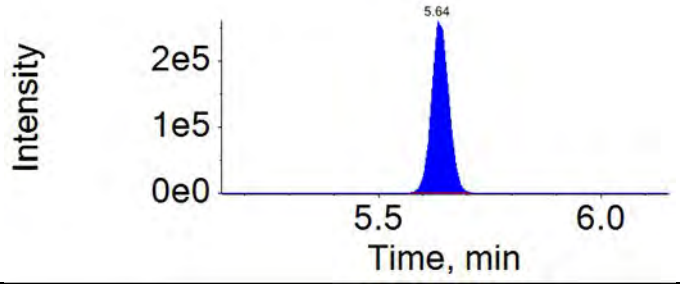
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

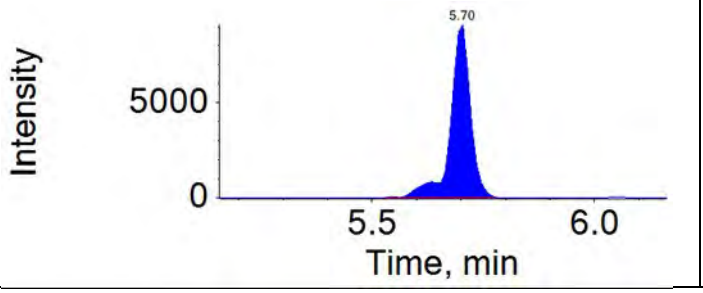
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

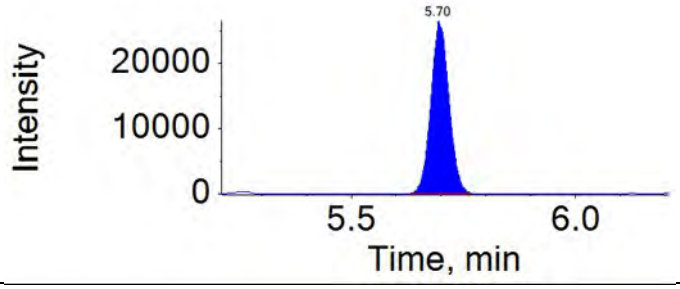
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



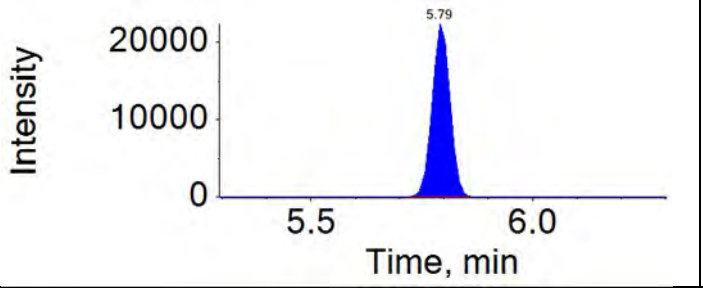


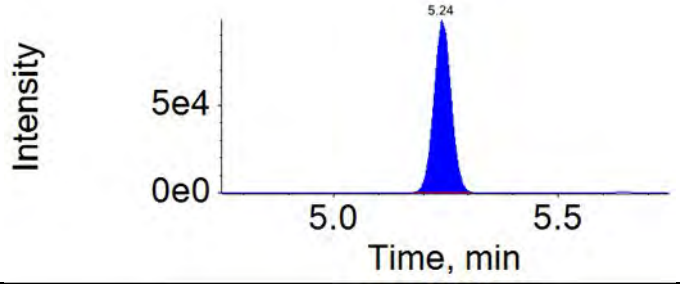
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



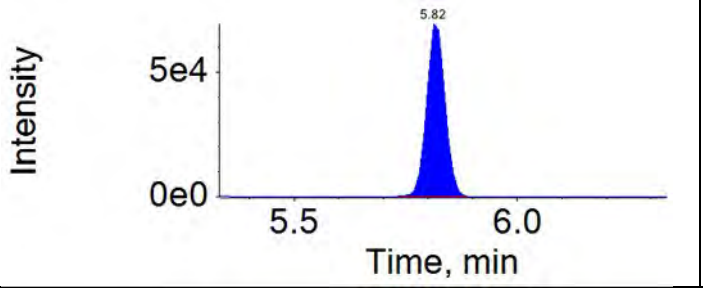


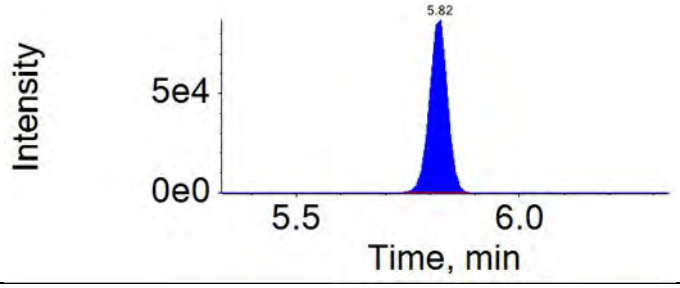
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



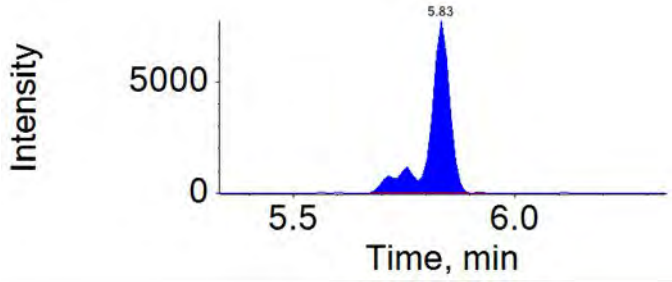


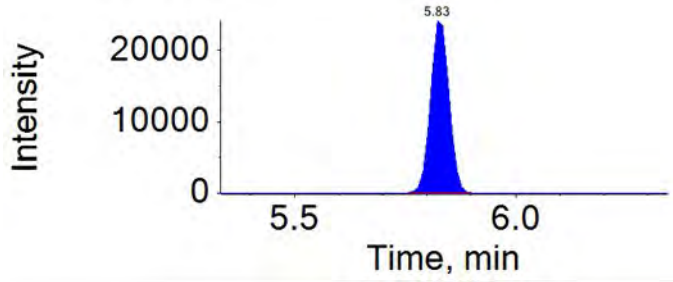
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

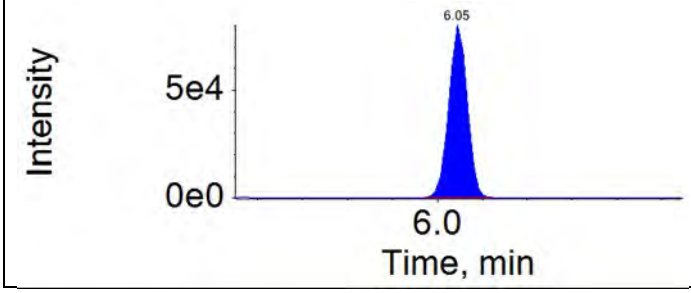
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

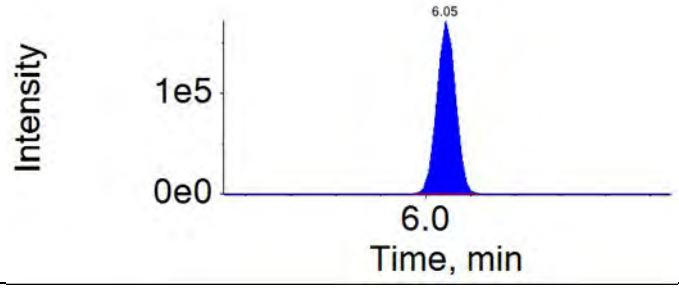
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



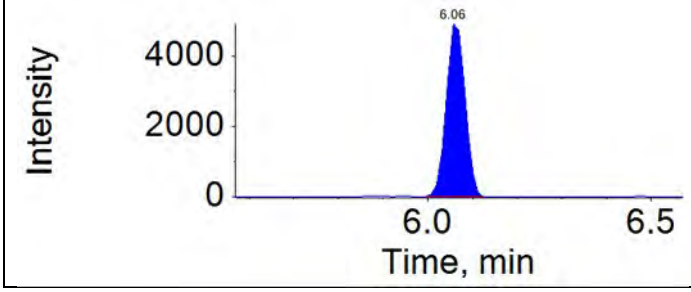


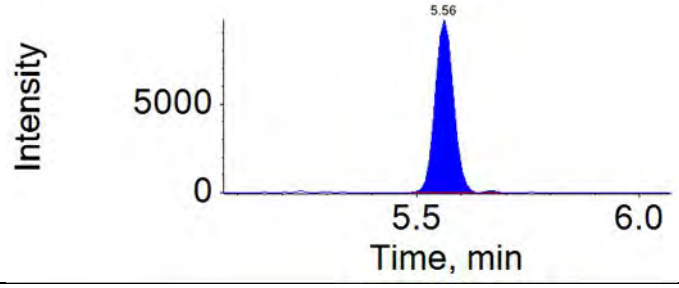
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



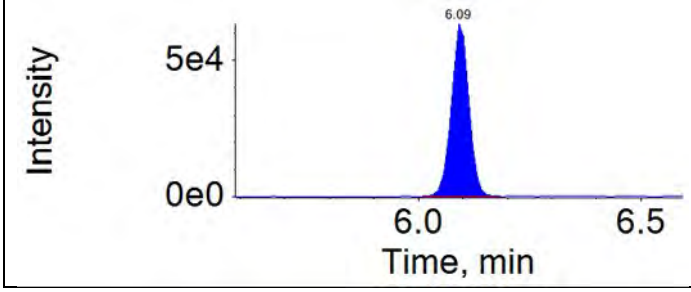


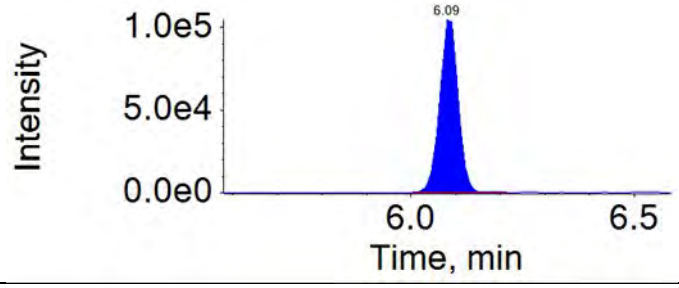
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



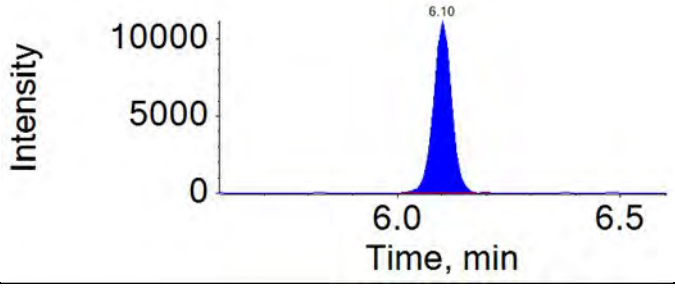


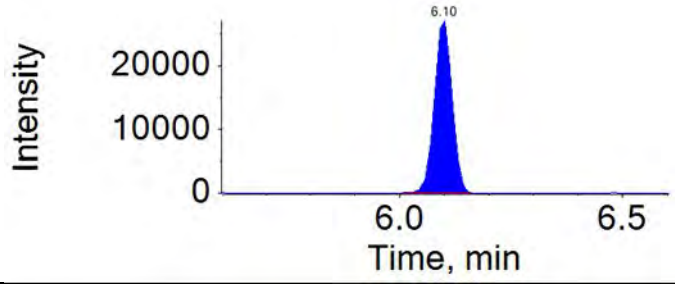
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

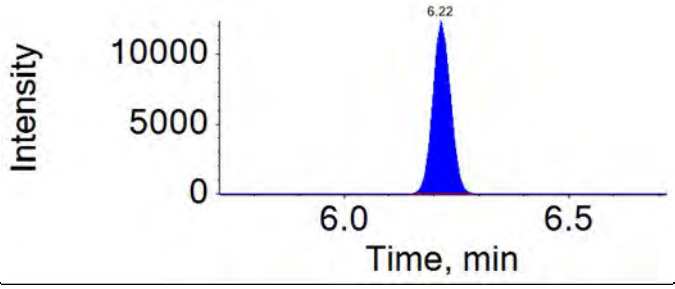
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

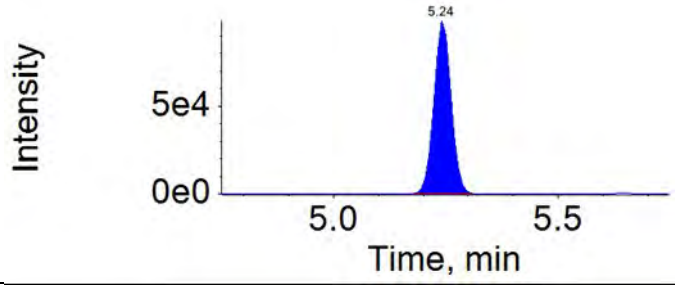
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



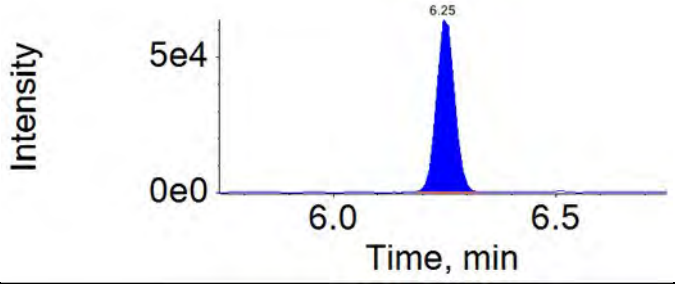


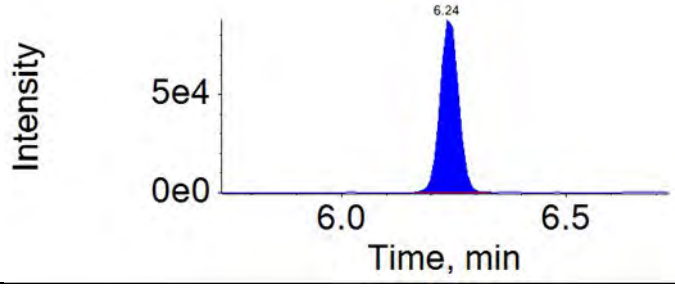
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



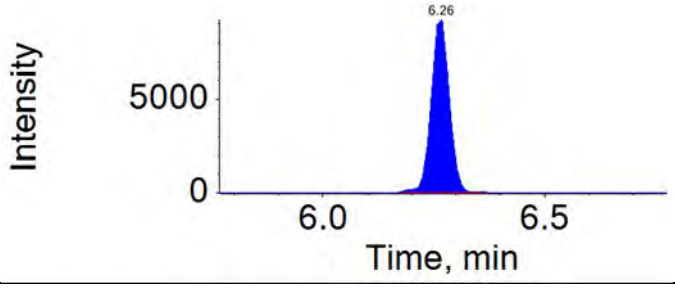


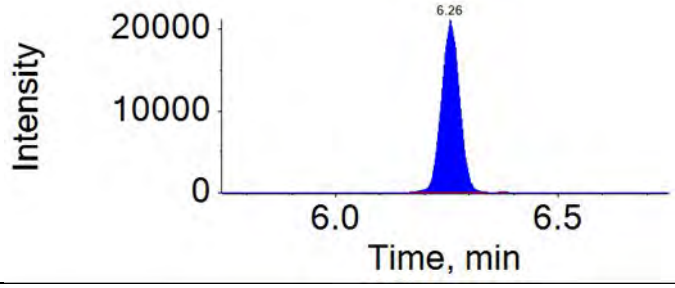
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



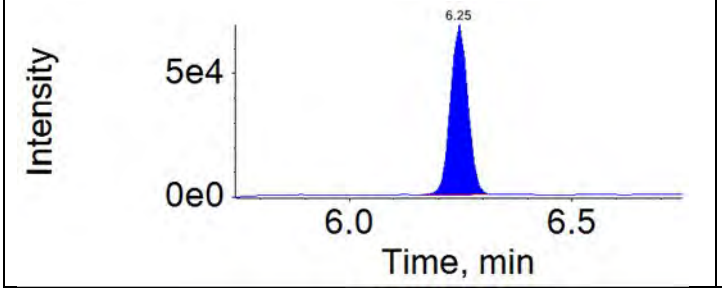


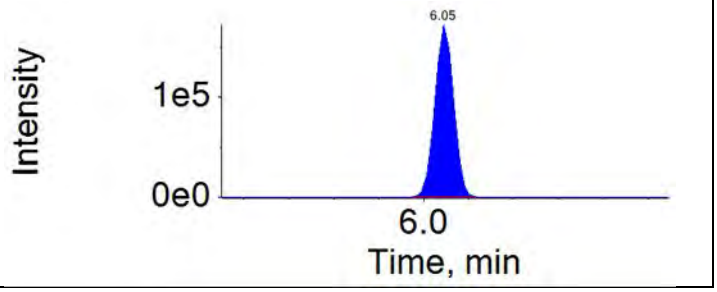
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

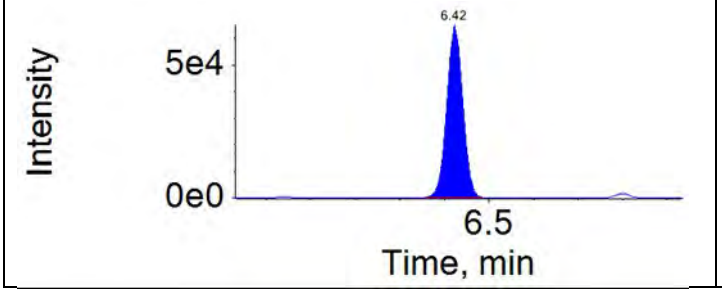
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV12DCAL 11/12/2018 6:14:07 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

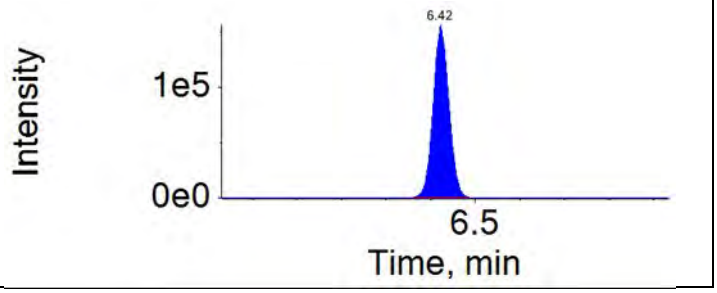
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



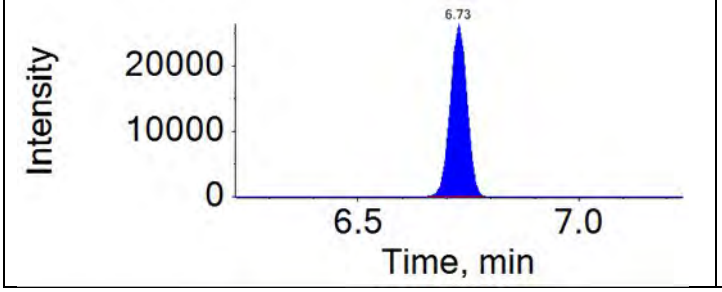


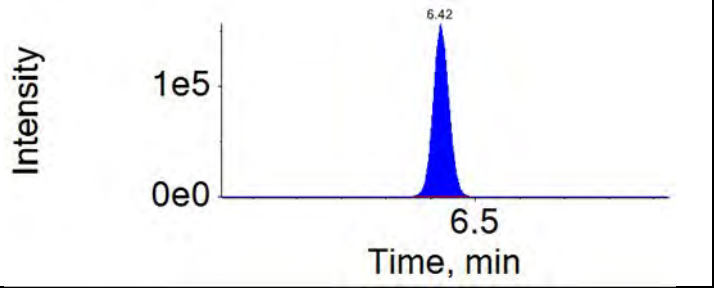
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



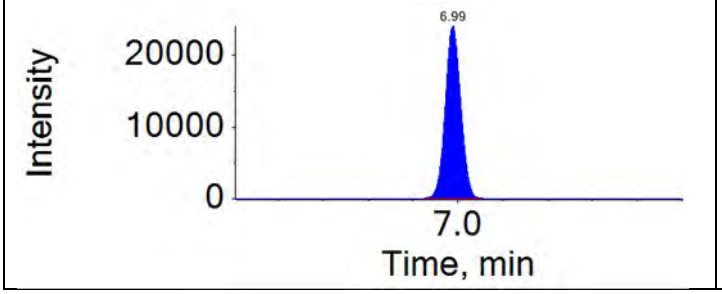


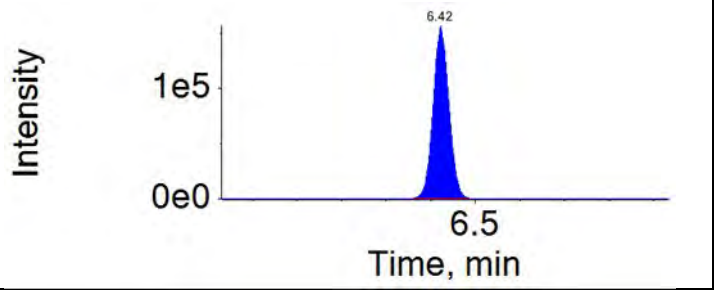
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



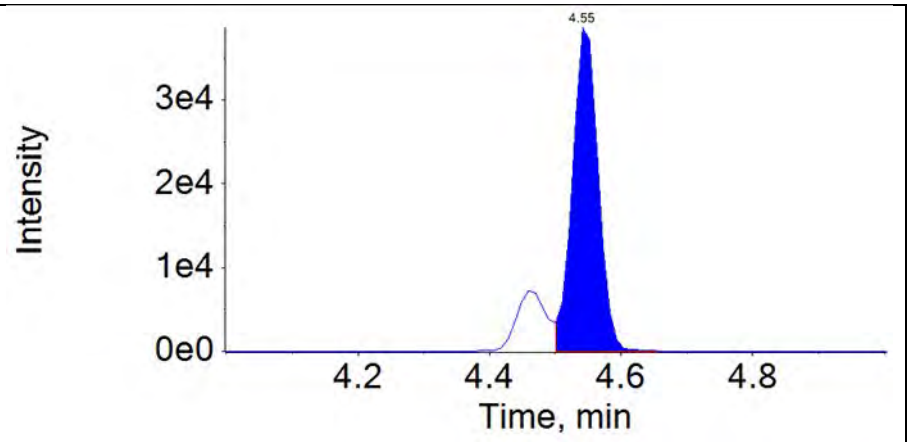


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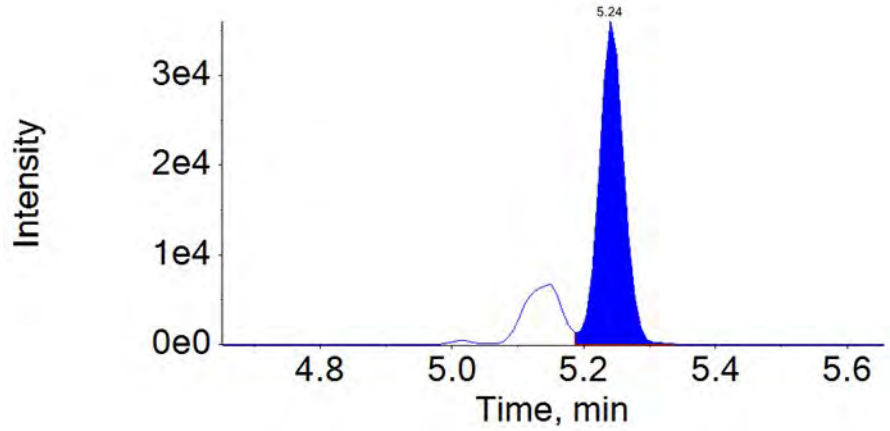
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.55
Peak Area:
105576.75
Mass Range:
399.0 / 80.0
File Name:
18NOV12DCAL-52.wiff
Sample Name:
CCV1_CAL3



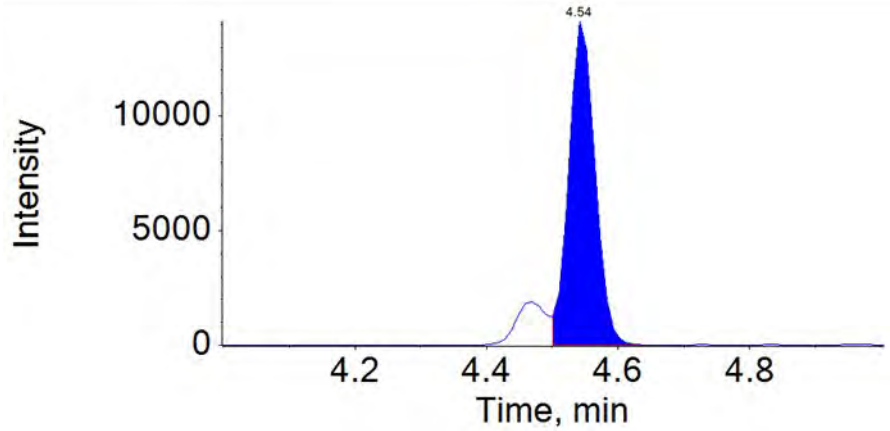
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
94723.88
Mass Range:
499.0 / 80.0
File Name:
18NOV12DCAL-52.wiff
Sample Name:
CCV1_CAL3



Integration Comment: incorrect integration

Component Name:
PFHxS_2
RT (min.):
4.54
Peak Area:
39165.47
Mass Range:
399.0 / 99.0
File Name:
18NOV12DCAL-52.wiff
Sample Name:
CCV1_CAL3



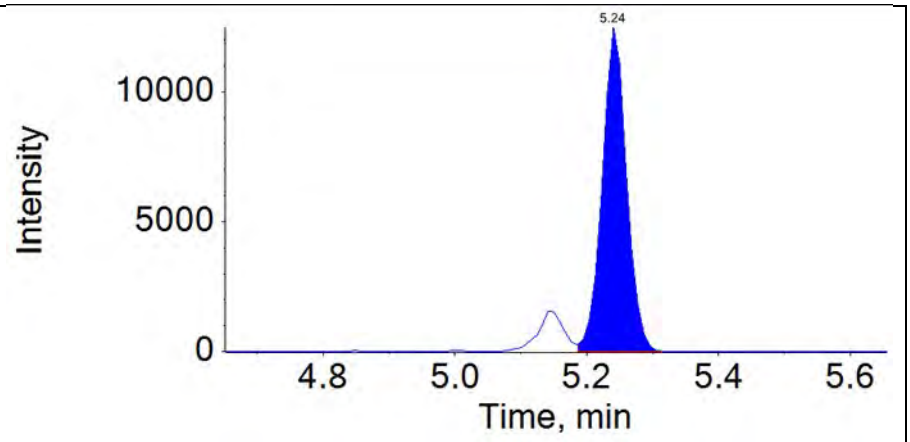
Integration Comment: incorrect integration

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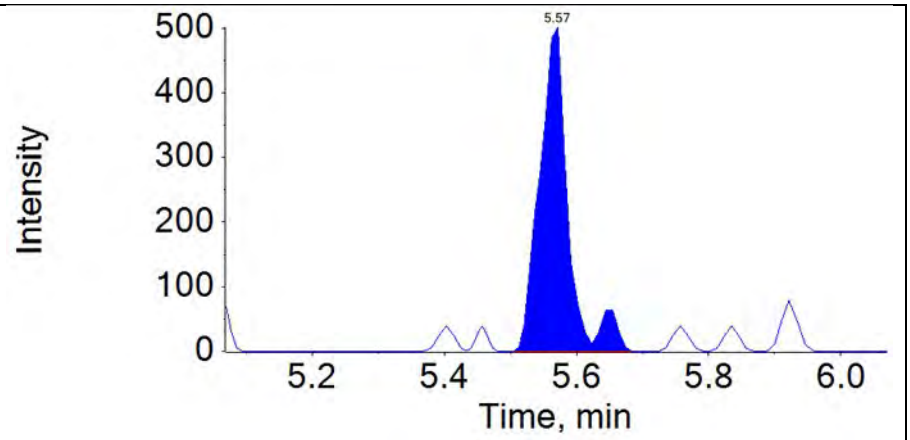
Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFOS_2
RT (min.):
5.24
Peak Area:
32024.51
Mass Range:
499.0 / 99.0
File Name:
18NOV12DCAL-52.wiff
Sample Name:
CCV1_CAL3



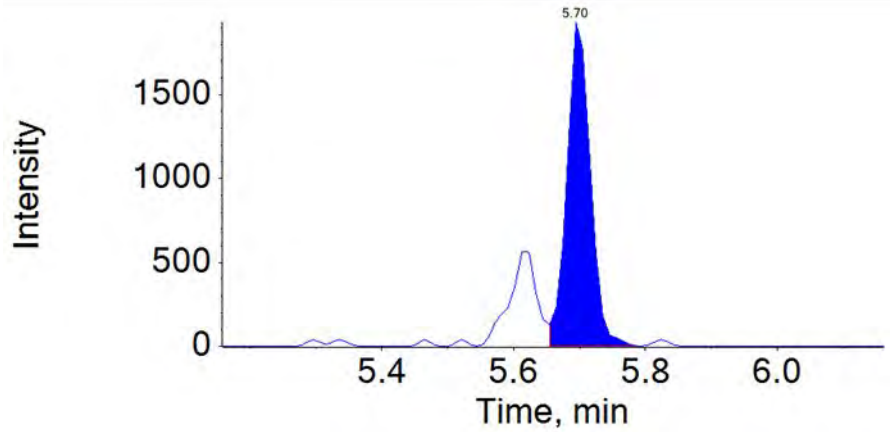
Integration Comment: incorrect integration

Component Name:
PFDA_2
RT (min.):
5.57
Peak Area:
1525.22
Mass Range:
513.0 / 169.0
File Name:
18NOV12DCAL-52.wiff
Sample Name:
CCV1_CAL3



Integration Comment: incorrect integration

Component Name:
NMeFOSAA_2
RT (min.):
5.70
Peak Area:
4786.64
Mass Range:
570.0 / 483.0
File Name:
18NOV12DCAL-52.wiff
Sample Name:
CCV1_CAL3

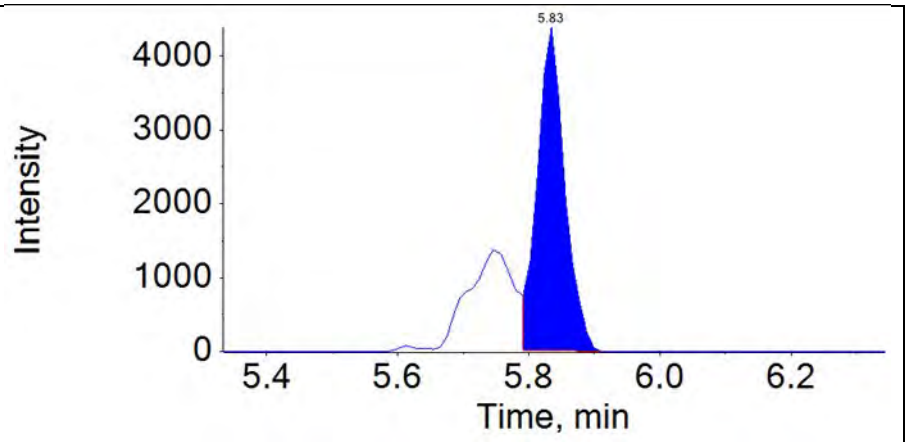


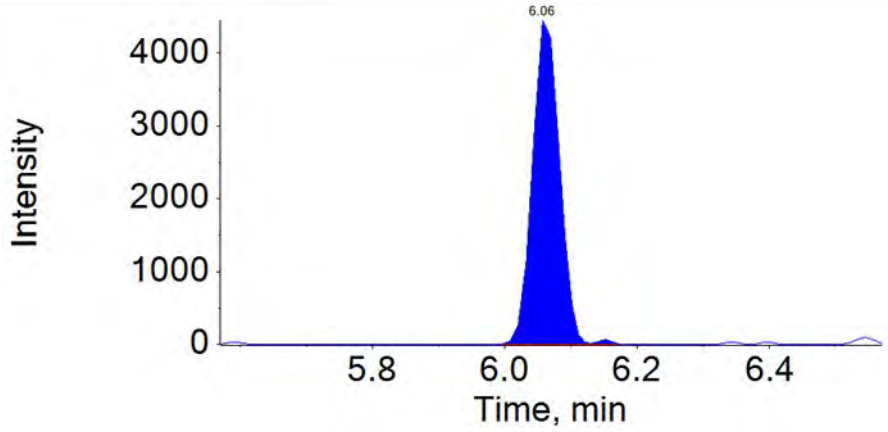
Integration Comment: incorrect integration

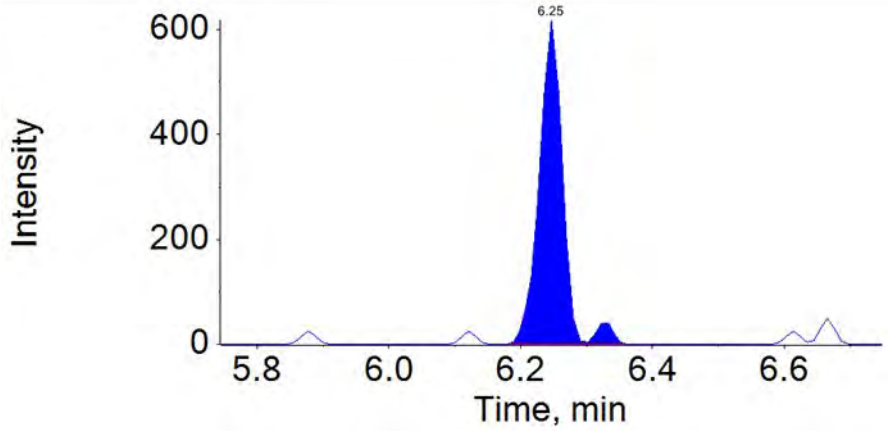
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: NEtFOSAA_2 **RT (min.):** 5.83 **Peak Area:** 12735.31 **Mass Range:** 584.0 / 526.0 **File Name:** 18NOV12DCAL-52.wiff **Sample Name:** CCV1_CAL3	 **Integration Comment:** incorrect integration

Component Name: 10:2 FTS_2 **RT (min.):** 6.06 **Peak Area:** 12750.49 **Mass Range:** 627.0 / 81.0 **File Name:** 18NOV12DCAL-52.wiff **Sample Name:** CCV1_CAL3	 **Integration Comment:** incorrect integration

Component Name: PFTrDA_2 **RT (min.):** 6.25 **Peak Area:** 1561.97 **Mass Range:** 663.0 / 169.0 **File Name:** 18NOV12DCAL-52.wiff **Sample Name:** CCV1_CAL3	 **Integration Comment:** incorrect integration

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REVIEWED
By HMK at 10:53 am, 11/13/18

Results Table Name: 18NOV12DCAL
Results Table Date: 11/12/2018 6:23:42 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

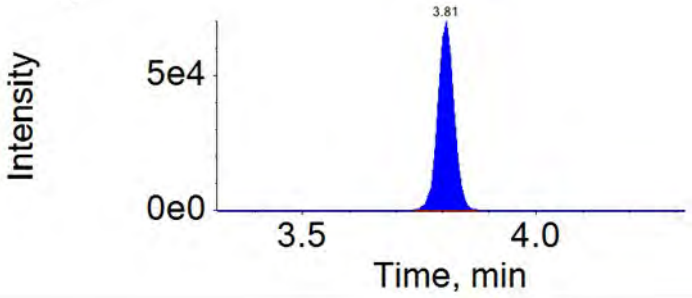
Sample Name: CCV1_CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV12DCAL-52.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	166889.60	A	0.3619	0.3759			
PFBS_2	3.81	1.00	62739.70	A	0.3619	0.3759	4	50	
4:2-FTS	4.12	1.00	33008.94	A	0.6730	0.6769			
4:2 FTS_2	4.12	1.00	22342.63	A	0.6730	0.6769		#NA!	
PFHxA	4.16	1.00	362325.97	A	0.0117	0.0114			
PFHxA_2	4.16	1.00	4119.87	A	0.0117	0.0114	-2	50	
PFPeS	4.18	1.10	87834.91	A	0.5191	0.5380			
PFPeS_2	4.17	1.10	47259.43	A	0.5191	0.5380	4	50	
PFHpA	4.54	1.00	361271.55	A	0.0563	0.0528			
PFHpA_2	4.54	1.00	19075.67	A	0.0563	0.0528	-6	50	
PFHxS	4.55	1.00	128396.13	M	0.3428	0.3526			
PFHxS_2	4.54	1.00	45266.10	M	0.3428	0.3526	3	50	
6:2-FTS	4.90	1.00	30500.72	A	0.6604	0.6139			
6:2 FTS_2	4.90	1.00	18723.69	A	0.6604	0.6139		#NA!	
PFHpS	4.91	1.08	122801.74	A	0.4066	0.3898			
PFHpS_2	4.91	1.08	47867.04	A	0.4066	0.3898	-4	50	
PFOA	4.91	1.00	370358.65	A	0.0562	0.0572			
PFOA_2	4.91	1.00	21182.05	A	0.0562	0.0572	2	50	
PFOS	5.24	1.00	122332.00	M	0.2968	0.2965			
PFOS_2	5.24	1.00	36275.78	M	0.2968	0.2965	0	50	
PFNA	5.26	1.00	292557.20	A	0.0229	0.0191			
PFNA_2	5.26	1.00	5601.50	A	0.0229	0.0191	-16	50	
PFNS	5.54	1.06	76021.24	A	0.4828	0.4752			
PFNS_2	5.54	1.06	36125.34	A	0.4828	0.4752	-2	50	
PFDA	5.56	1.00	253956.70	A	0.0081	0.0055			
PFDA_2	5.57	1.00	1404.60	M	0.0081	0.0055	-32	50	
8:2-FTS	5.56	1.00	22335.45	A	0.6814	0.6085			
8:2 FTS_2	5.56	1.00	13590.39	A	0.6814	0.6085		#NA!	
NMeFOSAA	5.70	1.00	28733.42	A	0.2569	0.2248			
NMeFOSAA_2	5.70	1.00	6459.32	M	0.2569	0.2248	-12	50	
PFDS	5.79	1.11	62507.84	A	0.5144	0.4958			
PFDS_2	5.79	1.10	30989.83	A	0.5144	0.4958	-4	50	
PFUnDA	5.82	1.00	199322.38	A	0.0058	0.0036			
PFUnDA_2	5.82	1.00	716.12	A	0.0058	0.0036	-38	50	
NEtFOSAA	5.83	1.00	24531.93	A	0.7253	0.7928			
NEtFOSAA_2	5.83	1.00	19448.32	M	0.7253	0.7928	9	50	
PFDoDA	6.05	1.00	228792.93	A	0.0157	0.0084			
PFDoDA_2	6.05	1.00	1930.67	A	0.0157	0.0084	-46	50	
10:2-FTS	6.06	1.09	14411.12	A	0.6356	0.8781			
10:2 FTS_2	6.06	1.09	12654.02	M	0.6356	0.8781		#NA!	
PFTrDA	6.25	1.03	185154.57	A	0.0086	0.0080			
PFTrDA_2	6.25	1.03	1486.41	M	0.0086	0.0080	-6	50	
PFTeDA	6.42	1.00	159904.63	A	0.0062	0.0061			
PFTeDA_2	6.42	1.00	982.46	A	0.0062	0.0061	-2	50	
PFHxDA	6.73	1.05	68393.80	A	0.0683	0.0584			
PFHxDA_2	6.73	1.05	3992.51	A	0.0683	0.0584	-14	50	
PFODA	6.99	1.09	58092.41	A	0.0277	0.0262			
PFODA_2	6.99	1.09	1524.27	A	0.0277	0.0262	-5	50	

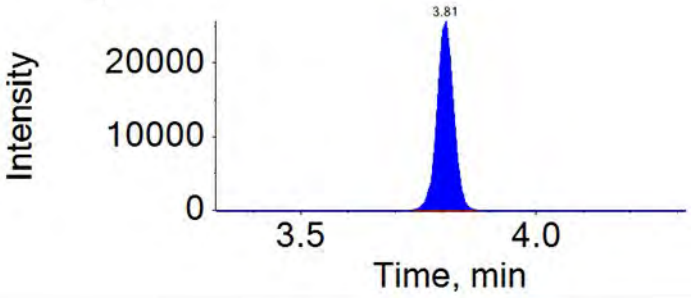
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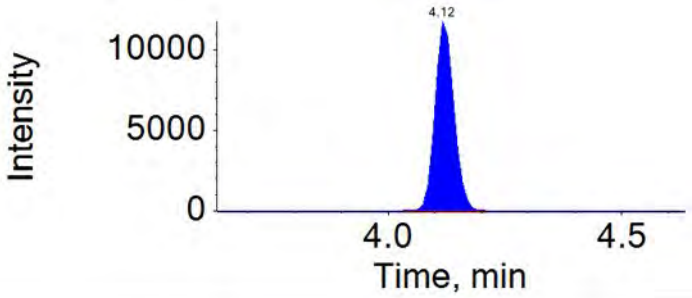
Component: PFBS
Primary Mass: 299.0 / 80.0



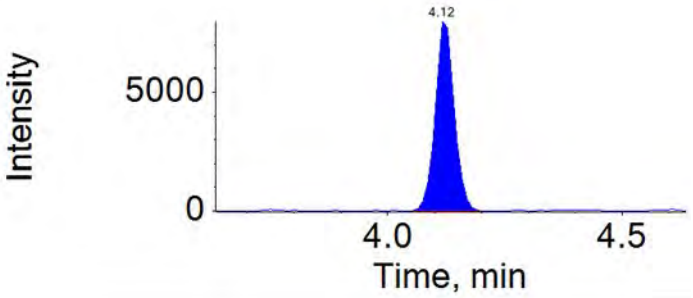
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



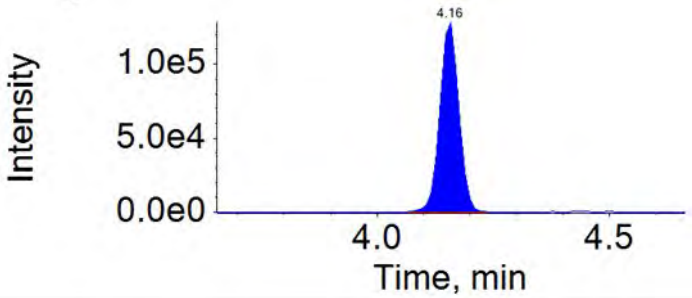
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



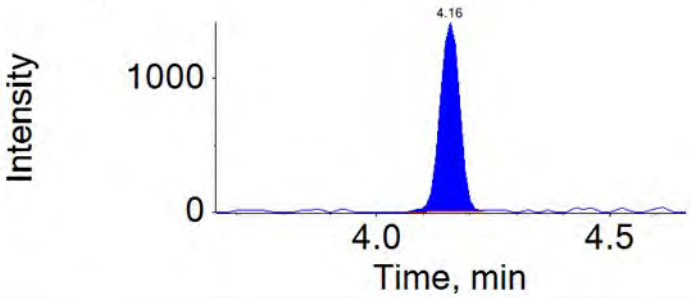
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



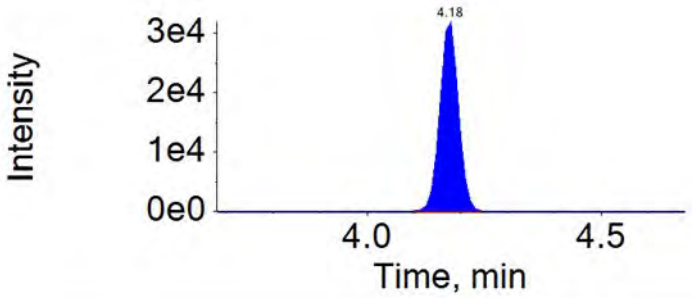
Component: PFHxA
Primary Mass: 313.0 / 269.0



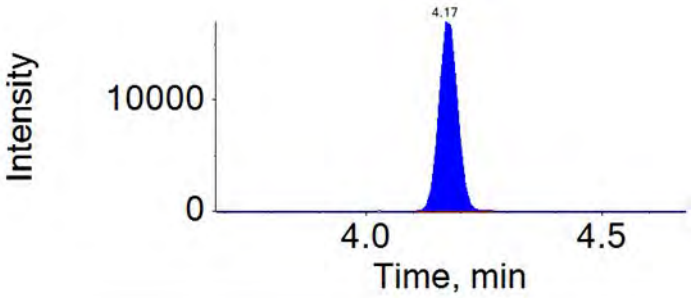
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



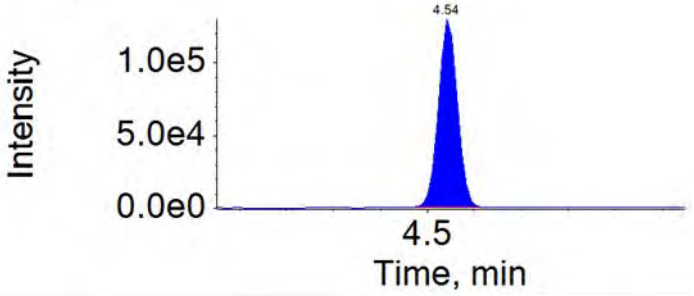
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



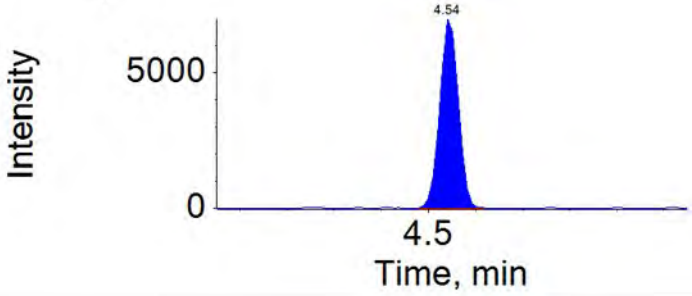
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By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

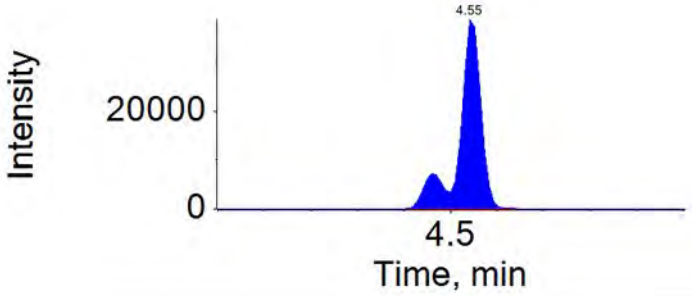
Component: PFHpA
Primary Mass: 363.0 / 319.0



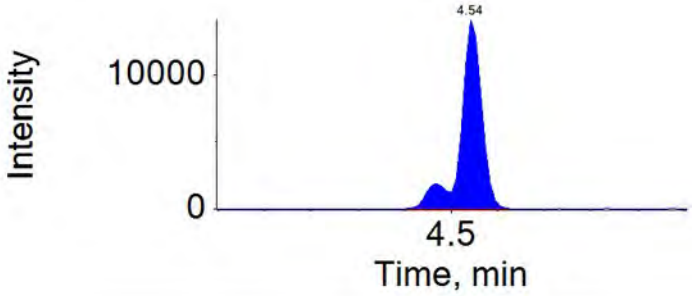
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



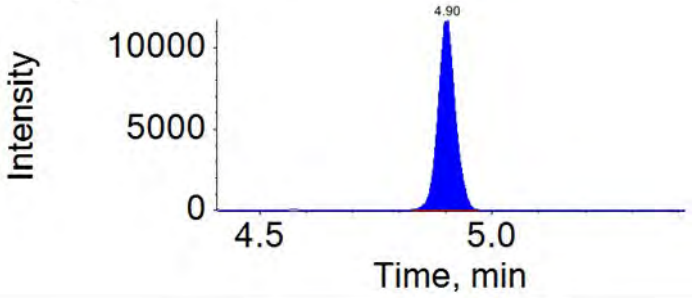
Component: PFHxS
Primary Mass: 399.0 / 80.0



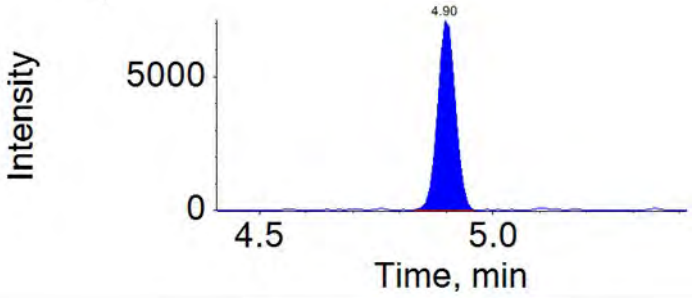
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



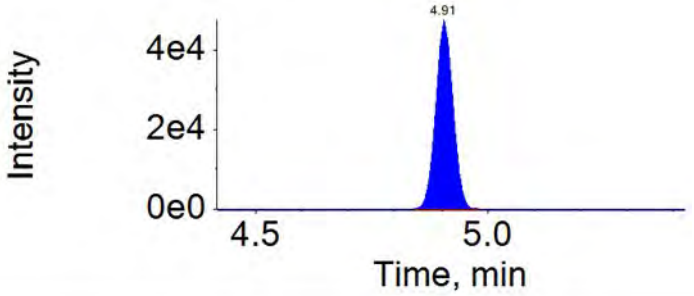
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



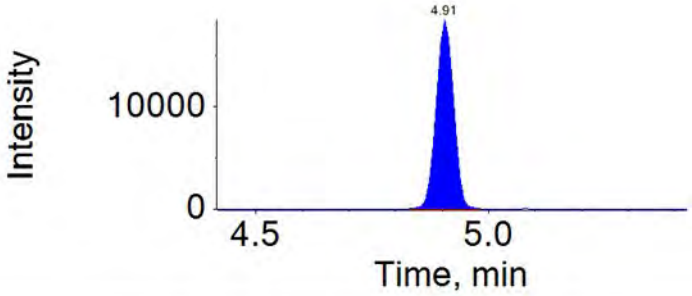
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



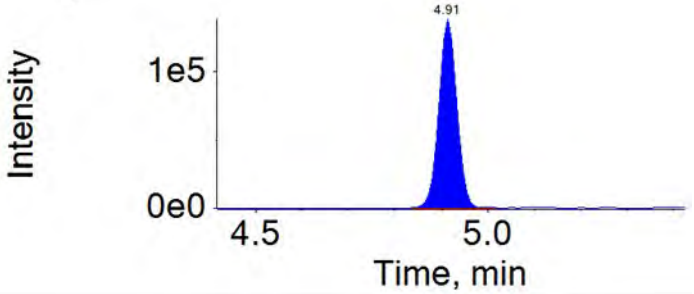
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



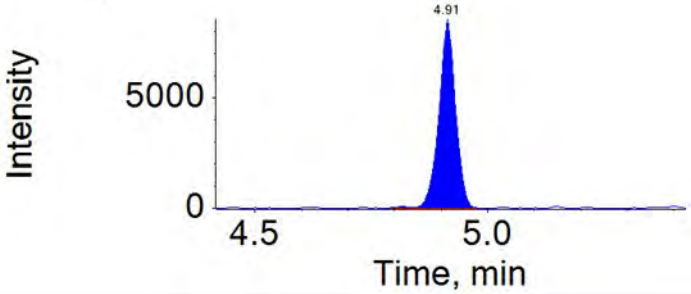
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

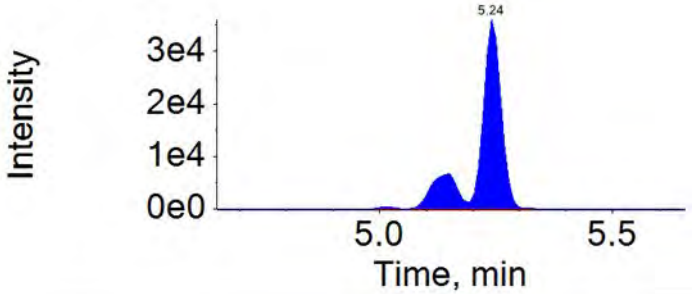
Component: PFOA
Primary Mass: 413.0 / 369.0



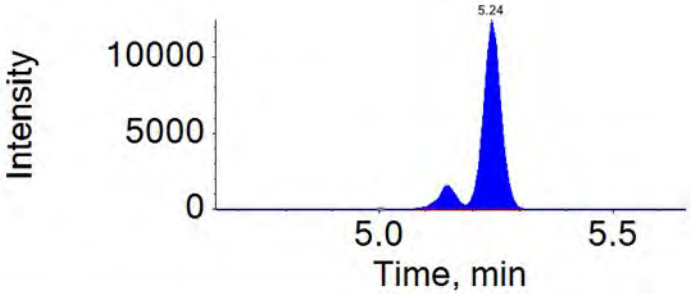
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



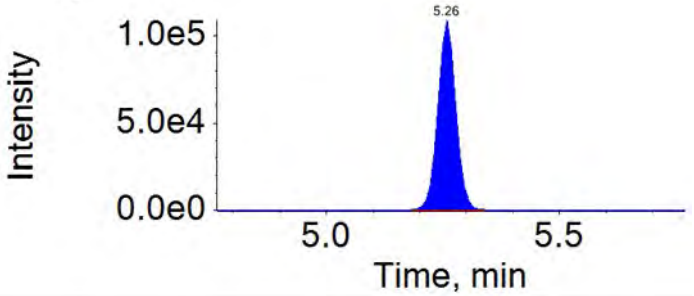
Component: PFOS
Primary Mass: 499.0 / 80.0



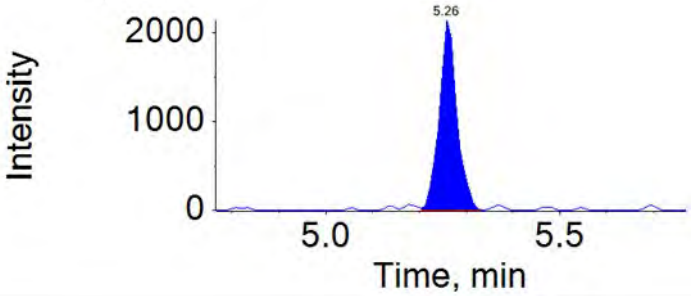
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



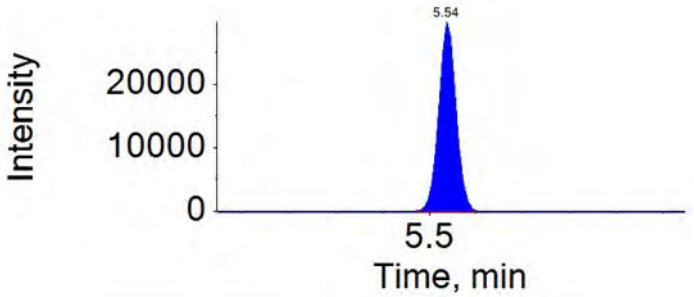
Component: PFNA
Primary Mass: 463.0 / 419.0



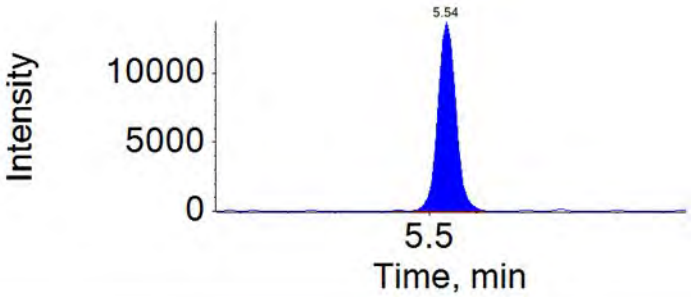
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



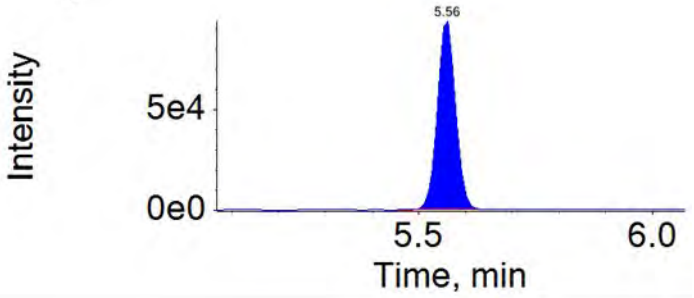
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



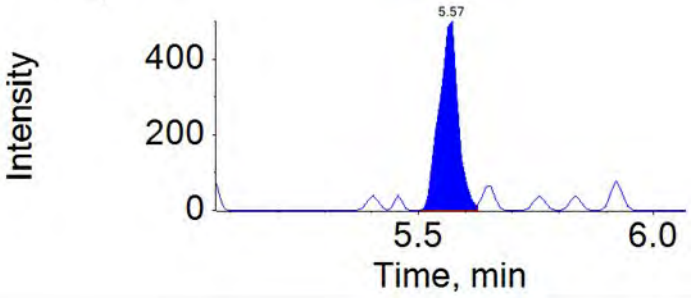
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

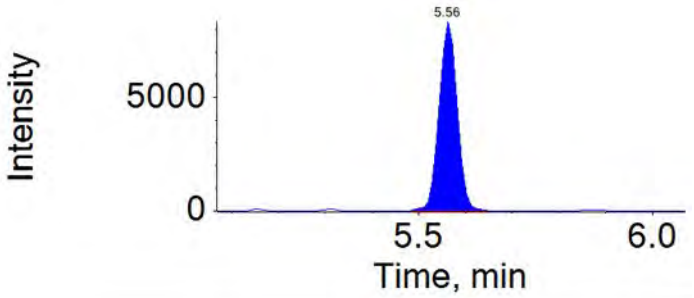
Component: PFDA
Primary Mass: 513.0 / 469.0



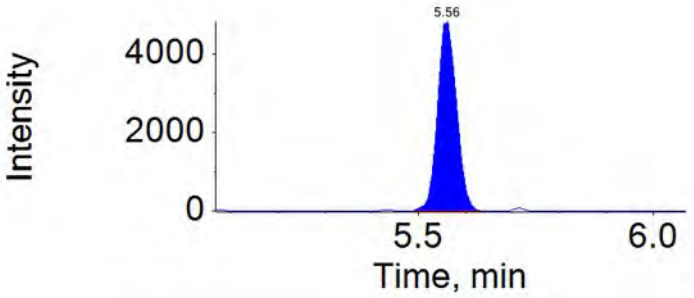
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



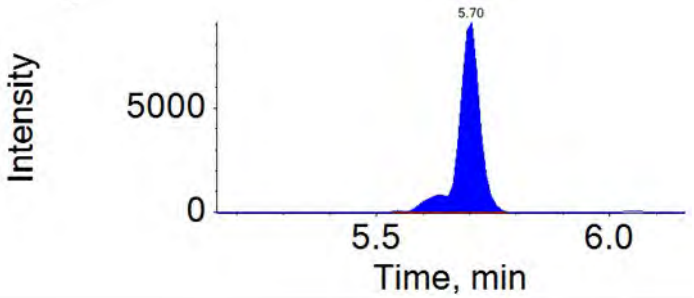
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



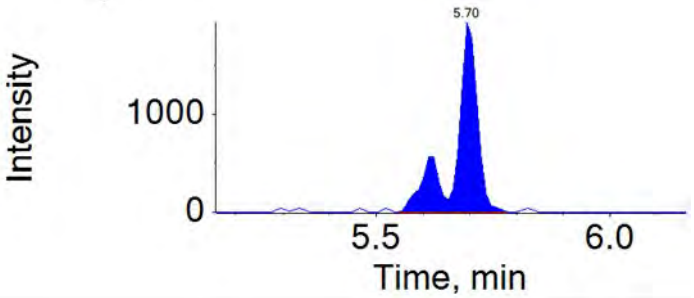
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



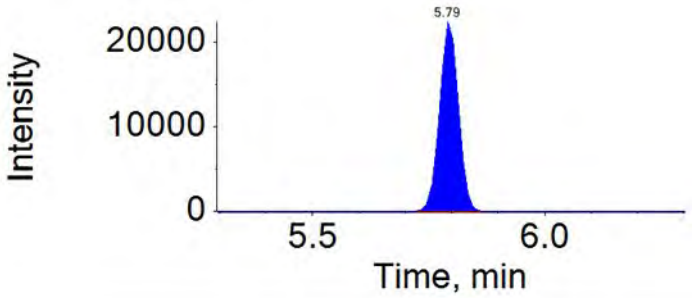
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



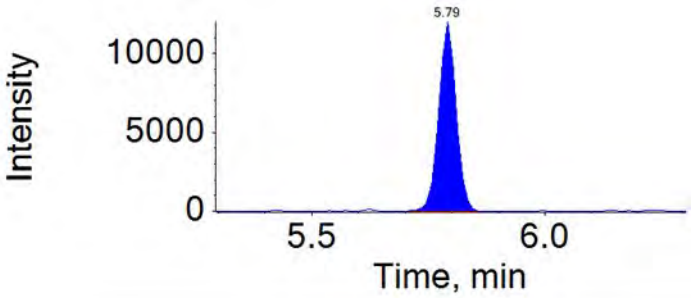
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



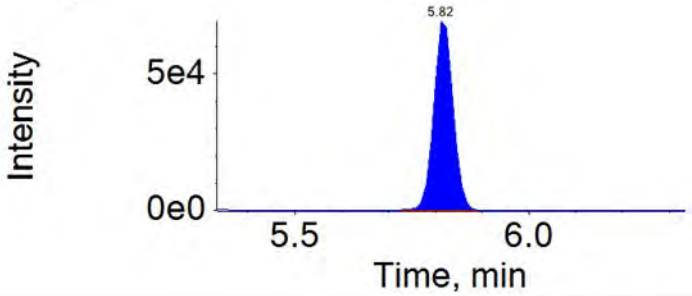
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



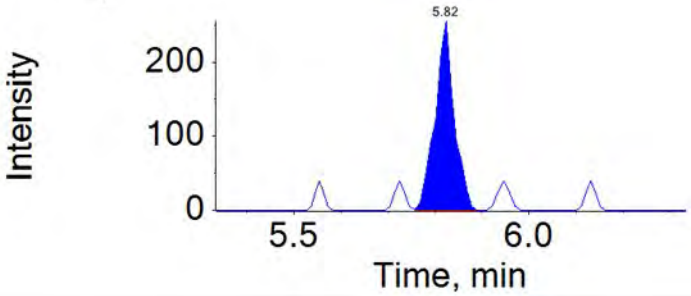
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

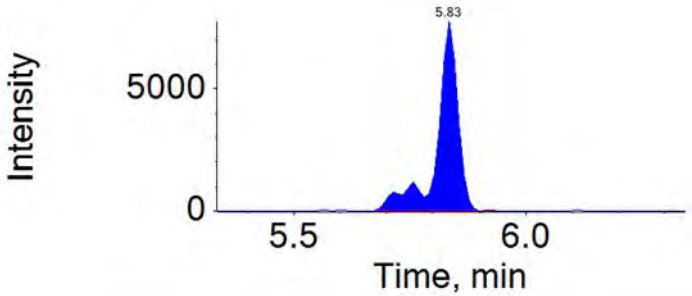
Component: PFUnDA
Primary Mass: 563.0 / 519.0



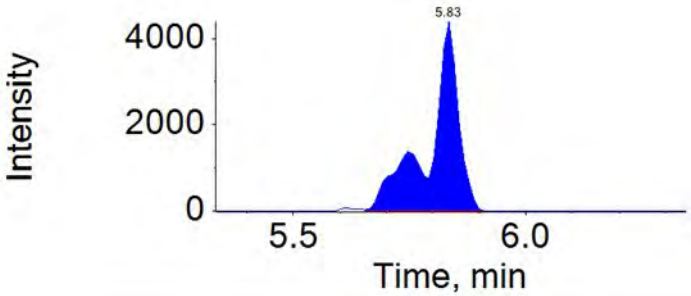
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



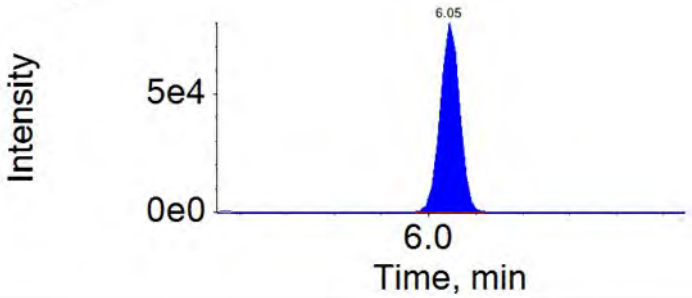
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



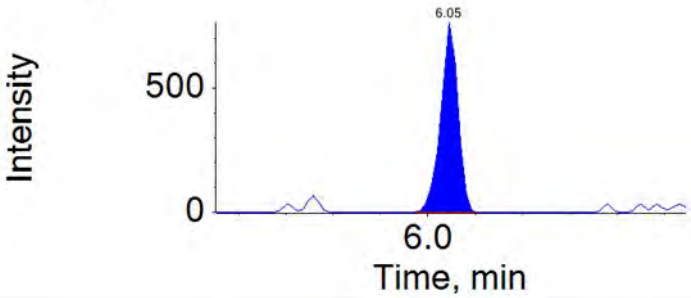
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



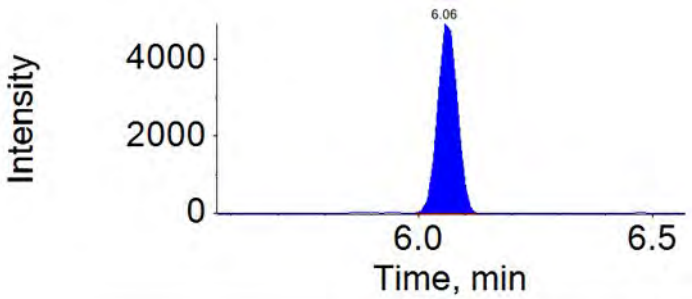
Component: PFDoDA
Primary Mass: 613.0 / 569.0



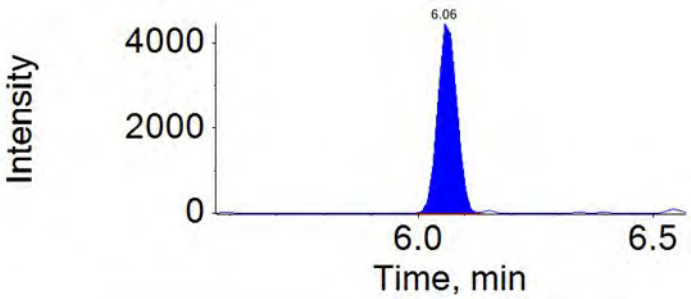
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



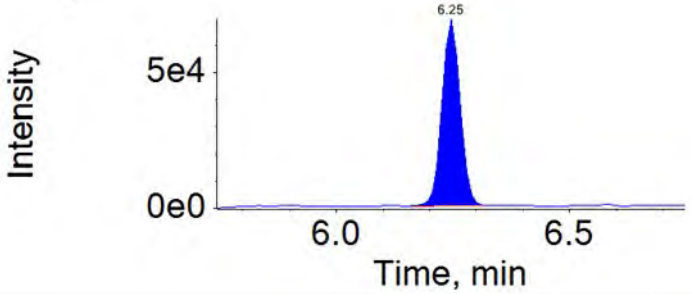
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



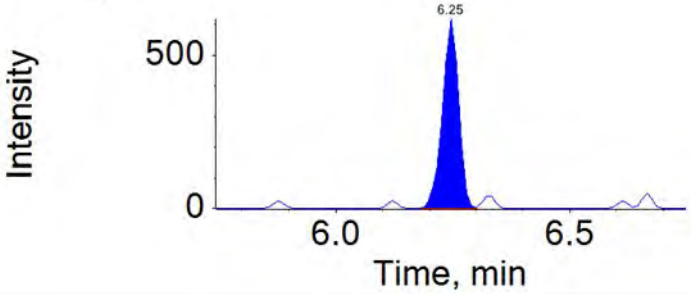
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

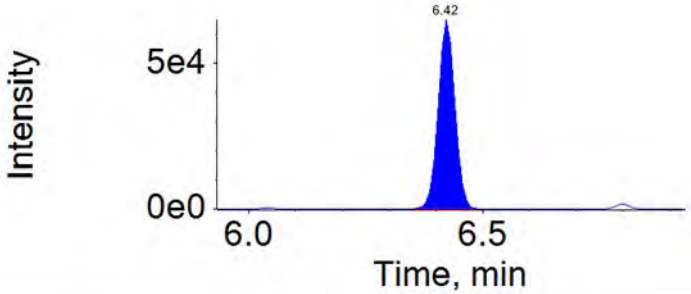
Component: PFTrDA
Primary Mass: 663.0 / 619.0



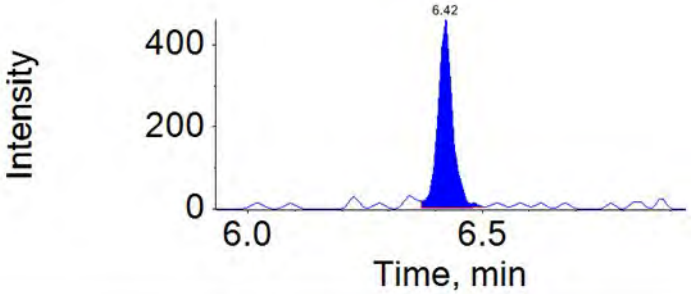
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



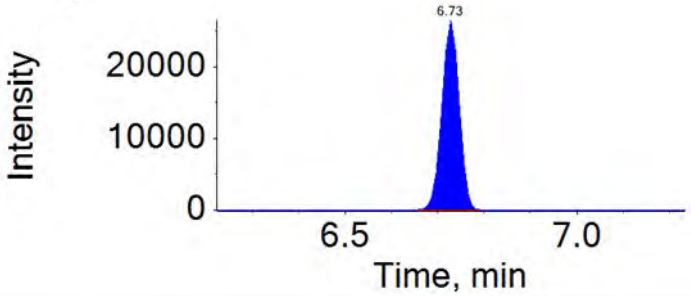
Component: PFTeDA
Primary Mass: 713.0 / 669.0



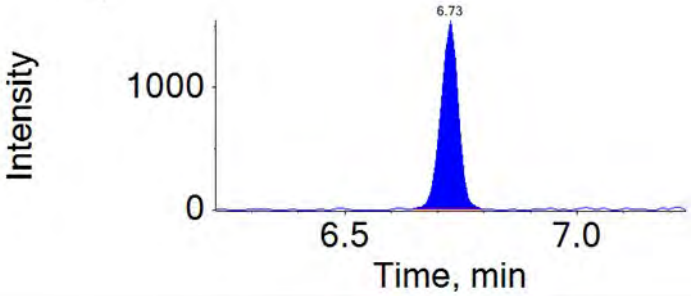
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



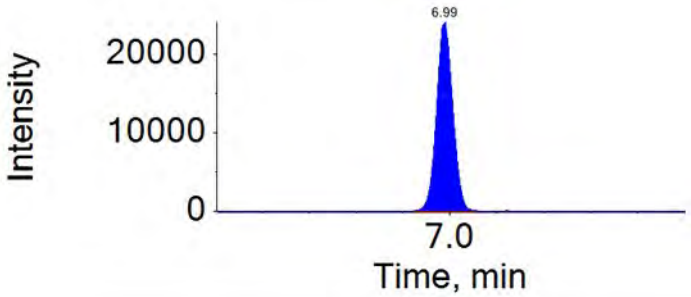
Component: PFHxDA
Primary Mass: 813.0 / 769.0



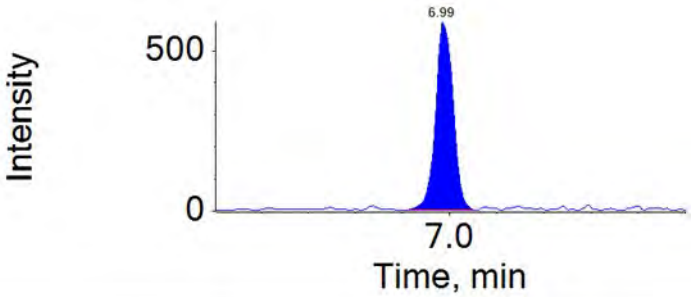
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



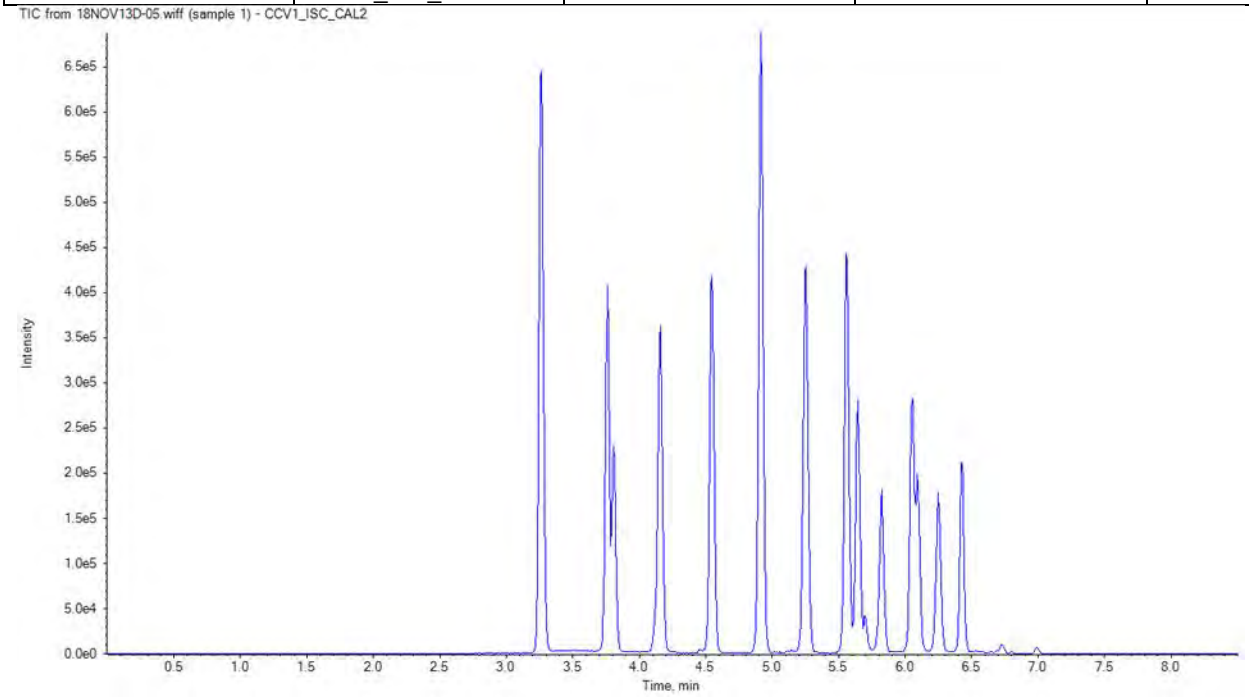
APPROVED
By MCD at 6:34 pm, 11/12/18

REVIEWED
By HMK at 10:53 am, 11/13/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV1_ISC_CAL2	CALBRN21833C	18NOV13D-05.wiff	2018-11-13T09:44:02



Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	661126.9	659926.2	0	50	
13C2-PFOA	5.0	466902.6	450219.7	4	50	
13C4-PFOS	4.8	247446.9	249205.8	-1	50	
13C2-PFDA	5.0	295381.6	278743.9	6	50	

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV1_ISC_CAL2	CALBRN21833C	18NOV13D-05.wiff	2018-11-13T09:44:02

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	80023.3	10	13C4-PFBA	766812.0	5.0	0.104	3.26	1.000	0.600	0.578	-4	30	
PFPeA	76472.6	11	13C5-PFPeA	751025.9	5.0	0.102	3.76	1.000	0.600	0.589	-2	30	
PFBS	41984.3	11	13C3-PFBS	427122.1	4.7	0.098	3.81	1.000	0.531	0.468	-12	30	
4:2-FTS	9629.9	12	13C2-4:2-FTS	54897.9	4.7	0.175	4.12	1.000	0.560	0.476	-15	30	
PFHxA	96444.0	12	13C5-PFHxA	705940.0	5.0	0.137	4.16	1.000	0.600	0.570	-5	30	
PFPeS	22297.9	11	13C3-PFBS	427122.1	4.7	0.052	4.18	1.100	0.563	0.507	-10	30	
PFHpA	93659.5	12	13C4-PFHpA	545224.8	5.0	0.172	4.55	1.000	0.600	0.569	-5	30	
PFHxS	34111.0	18	13C3-PFHxS	315188.2	4.7	0.108	4.55	1.000	0.547	0.525	-4	30	
6:2-FTS	9221.0	11	13C2-6:2-FTS	36348.0	4.8	0.254	4.90	1.000	0.569	0.614	8	30	
PFHpS	30798.1	11	13C3-PFHxS	315188.2	4.7	0.098	4.91	1.080	0.571	0.514	-10	30	
PFOA	100905.0	11	13C8-PFOA	916289.6	5.0	0.110	4.92	1.000	0.600	0.588	-2	30	
PFOS	34555.4	22	13C8-PFOS	283234.2	4.8	0.122	5.24	1.000	0.555	0.534	-4	30	
PFNA	70400.6	11	13C9-PFNA	459889.6	5.0	0.153	5.26	1.000	0.600	0.552	-8	30	
PFNS	17583.2	10	13C8-PFOS	283234.2	4.8	0.062	5.54	1.060	0.576	0.434	-25	30	
PFDA	68441.3	11	13C6-PFDA	633571.3	5.0	0.108	5.56	1.000	0.600	0.573	-5	30	
8:2-FTS	5551.6	11	13C2-8:2-FTS	28239.6	4.8	0.197	5.56	1.000	0.575	0.458	-20	30	
PFOSA	70097.0	12	13C8-PFOSA	581964.0	5.0	0.120	5.64	1.000	0.600	0.588	-2	30	
NMeFOSAA	7238.6	17	d3-NMeFOSAA	75677.4	5.0	0.096	5.71	1.000	0.600	0.541	-10	30	
PFDS	14746.9	12	13C8-PFOS	283234.2	4.8	0.052	5.80	1.110	0.578	0.472	-18	30	
PFUnDA	55065.8	12	13C7-PFUnDA	262614.2	5.0	0.210	5.82	1.000	0.600	0.548	-9	30	
NEtFOSAA	8391.3	19	d5-NEtFOSAA	67382.4	5.0	0.125	5.84	1.000	0.600	0.653	9	30	
PFDoDA	63306.6	12	13C2-PFDoDA	563416.3	5.0	0.112	6.05	1.000	0.600	0.572	-5	30	
10:2-FTS	4315.1	11	13C2-8:2-FTS	28239.6	4.8	0.153	6.07	1.090	0.578	0.509	-12	30	
NMePFOSAE	46107.4	12	d7-NMePFOSAE	315627.9	5.0	0.146	6.10	1.000	0.600	0.608	1	30	
NMePFOSA	7580.7	13	d3-NMePFOSA	81274.6	5.0	0.093	6.11	1.000	0.600	0.460	-23	30	
PFDoS	7907.3	11	13C8-PFOS	283234.2	4.8	0.028	6.22	1.190	0.581	0.489	-16	30	
NEtPFOSAE	46594.2	12	d9-NEtPFOSAE	264447.2	5.0	0.176	6.26	1.000	0.600	0.565	-6	30	
NEtPFOSA	7426.1	11	d5-NEtPFOSA	57059.6	5.0	0.130	6.27	1.000	0.600	0.598	0	30	
PFTrDA	52911.8	12	13C2-PFDoDA	563416.3	5.0	0.094	6.25	1.030	0.600	0.593	-1	30	
PFTeDA	38686.6	11	13C2-PFTeDA	412151.2	5.0	0.094	6.43	1.000	0.600	0.526	-12	30	
PFHxDA	18605.8	11	13C2-PFTeDA	412151.2	5.0	0.045	6.73	1.050	0.600	0.538	-10	30	
PFODA	15935.1	10	13C2-PFTeDA	412151.2	5.0	0.039	6.99	1.090	0.600	0.538	-10	30	

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV1_ISC_CAL2			**Data File:**		18NOV13D-05.wiff
Sample ID:	CALBRN21833C			**Acquis Date:**		2018-11-13T09:44:02
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	4			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV13DCCV1-4
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N/A			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV12DCAL-44

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	661126.9	659926.2	0	50	
13C2-PFOA	5.0	466902.6	450219.7	4	50	
13C4-PFOS	4.8	247446.9	249205.8	-1	50	
13C2-PFDA	5.0	295381.6	278743.9	6	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	766812.0	13C3-PFBA	661126.9	1.160	5.000	5.200	104	70-130	
E13C5-PFPeA	751025.9	13C3-PFBA	661126.9	1.136	5.000	5.095	102	70-130	
E13C3-PFBS	427122.1	13C3-PFBA	661126.9	0.646	4.650	4.561	98	70-130	
E13C2-4:2-FTS	54897.9	13C2-PFOA	466902.6	0.118	4.670	5.237	112	70-130	
E13C5-PFHxA	705940.0	13C2-PFOA	466902.6	1.512	5.000	5.462	109	70-130	
E13C3-PFHxS	315188.2	13C2-PFOA	466902.6	0.675	4.730	4.632	98	70-130	
E13C4-PFHpA	545224.8	13C2-PFOA	466902.6	1.168	5.000	5.261	105	70-130	
E13C2-6:2-FTS	36348.0	13C2-PFOA	466902.6	0.078	4.750	5.209	110	70-130	
E13C8-PFOA	916289.6	13C2-PFOA	466902.6	1.962	5.000	5.407	108	70-130	
E13C8-PFOS	283234.2	13C4-PFOS	247446.9	1.145	4.780	5.072	106	70-130	
E13C9-PFNA	459889.6	13C4-PFOS	247446.9	1.859	5.000	5.182	104	70-130	
E13C6-PFDA	633571.3	13C2-PFDA	295381.6	2.145	5.000	5.005	100	70-130	
E13C2-8:2-FTS	28239.6	13C2-PFDA	295381.6	0.096	4.790	4.768	100	70-130	
E13C8-PFOSA	581964.0	13C2-PFDA	295381.6	1.970	5.000	4.368	87	70-130	
Ed3-NMeFOSAA	75677.4	13C2-PFDA	295381.6	0.256	5.000	4.625	92	70-130	
E13C7-PFUnDA	262614.2	13C2-PFDA	295381.6	0.889	5.000	5.162	103	70-130	
Ed5-NEtFOSAA	67382.4	13C2-PFDA	295381.6	0.228	5.000	4.826	97	70-130	
E13C2-PFDoDA	563416.3	13C2-PFDA	295381.6	1.907	5.000	4.952	99	70-130	
Ed7-NMePFOSAE	315627.9	13C2-PFDA	295381.6	1.069	5.000	4.624	92	70-130	
Ed3-NMePFOSA	81274.6	13C2-PFDA	295381.6	0.275	5.000	4.999	100	70-130	
Ed9-NEtPFOSAE	264447.2	13C2-PFDA	295381.6	0.895	5.000	4.656	93	70-130	
Ed5-NEtPFOSA	57059.6	13C2-PFDA	295381.6	0.193	5.000	4.531	91	70-130	
E13C2-PFTeDA	412151.2	13C2-PFDA	295381.6	1.395	5.000	4.899	98	70-130	

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

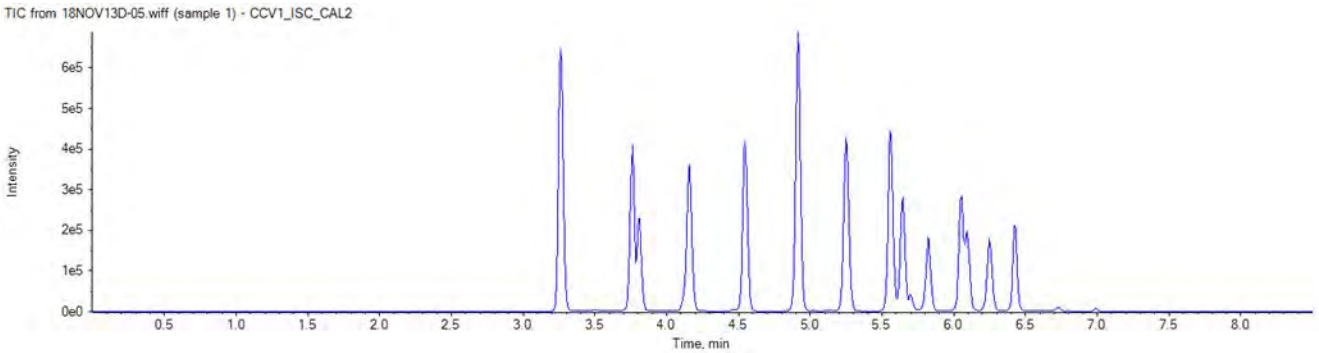
Analyte Quantitation Peak Table

Sample Name: CCV1_ISC_CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV13D-05.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	80023.3		A	13C4-PFBA	3.26	766812.0	0.104	0.578
PFPeA	3.76	1.000	76472.6		A	13C5-PFPeA	3.76	751025.9	0.102	0.589
PFBS	3.81	1.000	41984.3		A	13C3-PFBS	3.81	427122.1	0.098	0.468
4:2-FTS	4.12	1.000	9629.9		M	13C2-4:2-FTS	4.12	54897.9	0.175	0.476
PFHxA	4.16	1.000	96444.0		A	13C5-PFHxA	4.16	705940.0	0.137	0.570
PFPeS	4.18	1.100	22297.9		A	13C3-PFBS	3.81	427122.1	0.052	0.507
PFHpA	4.55	1.000	93659.5		A	13C4-PFHpA	4.55	545224.8	0.172	0.569
PFHxS	4.55	1.000	34111.0		M	13C3-PFHxS	4.55	315188.2	0.108	0.525
6:2-FTS	4.90	1.000	9221.0		M	13C2-6:2-FTS	4.90	36348.0	0.254	0.614
PFHpS	4.91	1.080	30798.1		A	13C3-PFHxS	4.55	315188.2	0.098	0.514
PFOA	4.92	1.000	100905.0		A	13C8-PFOA	4.91	916289.6	0.110	0.588
PFOS	5.24	1.000	34555.4		M	13C8-PFOS	5.24	283234.2	0.122	0.534
PFNA	5.26	1.000	70400.6		A	13C9-PFNA	5.26	459889.6	0.153	0.552
PFNS	5.54	1.060	17583.2		A	13C8-PFOS	5.24	283234.2	0.062	0.434
PFDA	5.56	1.000	68441.3		A	13C6-PFDA	5.56	633571.3	0.108	0.573
8:2-FTS	5.56	1.000	5551.6		A	13C2-8:2-FTS	5.56	28239.6	0.197	0.458
PFOSA	5.64	1.000	70097.0		A	13C8-PFOSA	5.64	581964.0	0.120	0.588
NMeFOSAA	5.71	1.000	7238.6		A	d3-NMeFOSAA	5.70	75677.4	0.096	0.541
PFDS	5.80	1.110	14746.9		A	13C8-PFOS	5.24	283234.2	0.052	0.472
PFUnDA	5.82	1.000	55065.8		A	13C7-PFUnDA	5.82	262614.2	0.210	0.548
NEtFOSAA	5.84	1.000	8391.3		M	d5-NEtFOSAA	5.83	67382.4	0.125	0.653
PFDoDA	6.05	1.000	63306.6		A	13C2-PFDoDA	6.05	563416.3	0.112	0.572
10:2-FTS	6.07	1.090	4315.1		A	13C2-8:2-FTS	5.56	28239.6	0.153	0.509
NMePFOSAE	6.10	1.000	46107.4		A	d7-NMePFOSAE	6.09	315627.9	0.146	0.608
NMePFOSA	6.11	1.000	7580.7		A	d3-NMePFOSA	6.10	81274.6	0.093	0.460
PFDoS	6.22	1.190	7907.3		A	13C8-PFOS	5.24	283234.2	0.028	0.489
NEtPFOSAE	6.26	1.000	46594.2		A	d9-NEtPFOSAE	6.25	264447.2	0.176	0.565
NEtPFOSA	6.27	1.000	7426.1		A	d5-NEtPFOSA	6.26	57059.6	0.130	0.598
PFTrDA	6.25	1.030	52911.8		M	13C2-PFDoDA	6.05	563416.3	0.094	0.593
PFTeDA	6.43	1.000	38686.6		A	13C2-PFTeDA	6.43	412151.2	0.094	0.526
PFHxDA	6.73	1.050	18605.8		A	13C2-PFTeDA	6.43	412151.2	0.045	0.538
PFODA	6.99	1.090	15935.1		A	13C2-PFTeDA	6.43	412151.2	0.039	0.538

Total Ion Chromatogram

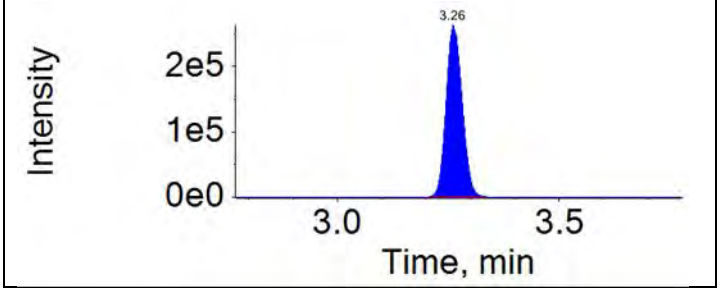


APPROVED
By JPT at 4:33 pm, 11/13/18

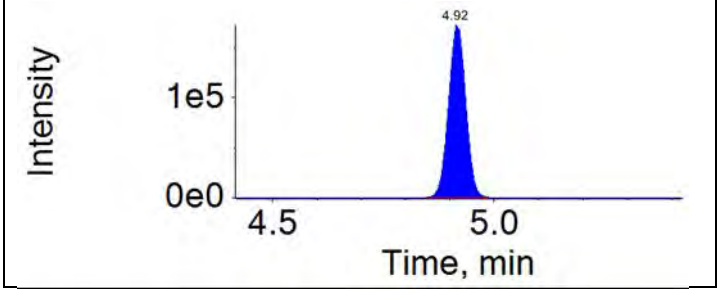
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

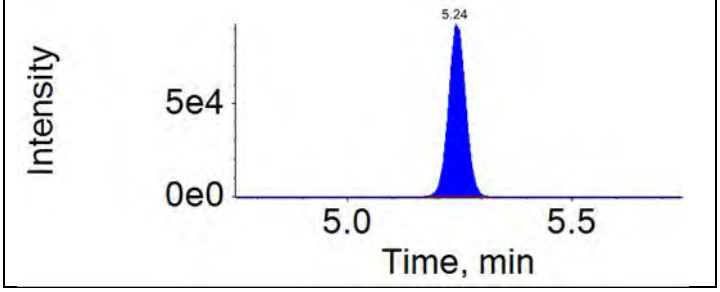
Injection Standard: 13C3-PFBA
216.0 / 172.0



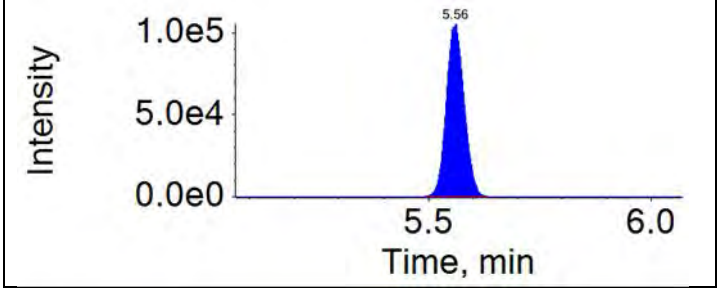
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

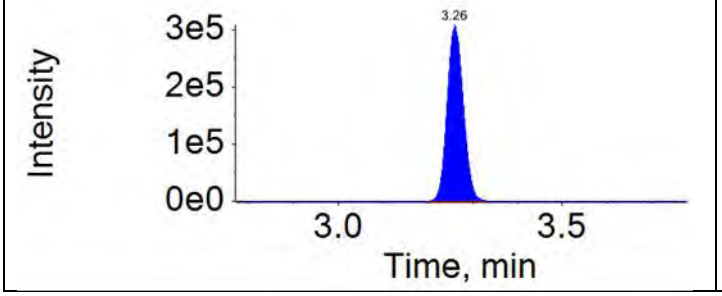


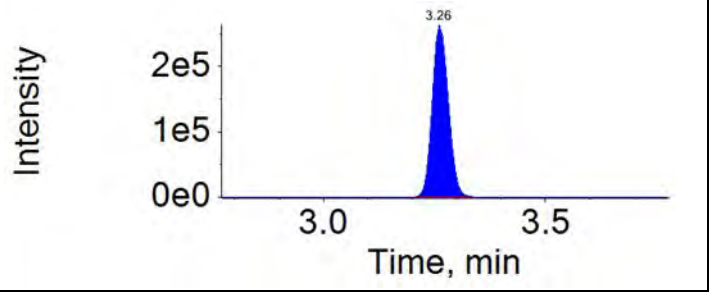
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

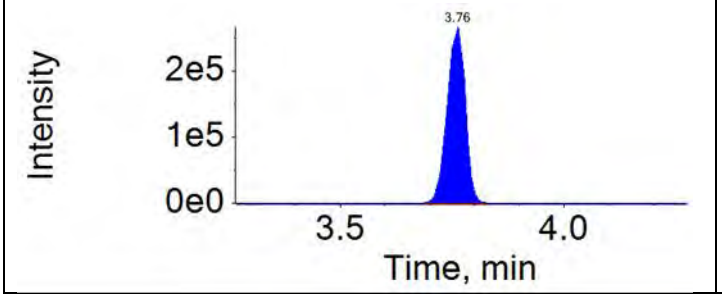
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

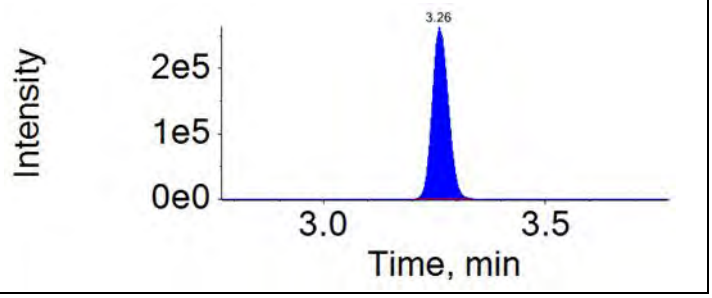
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



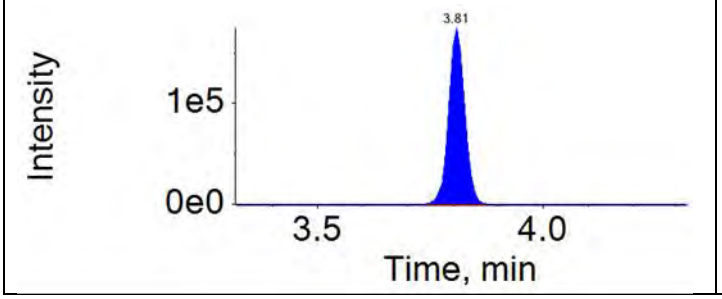


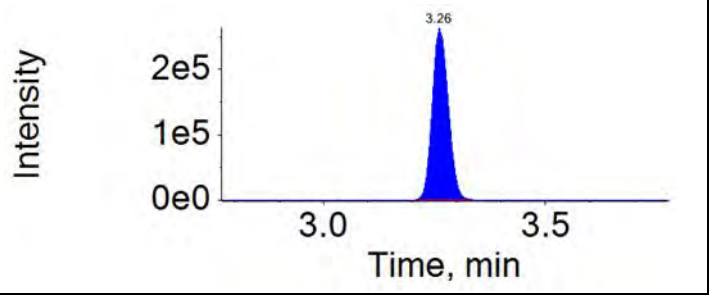
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



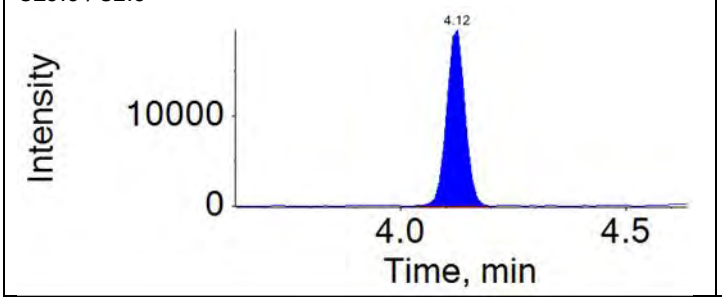


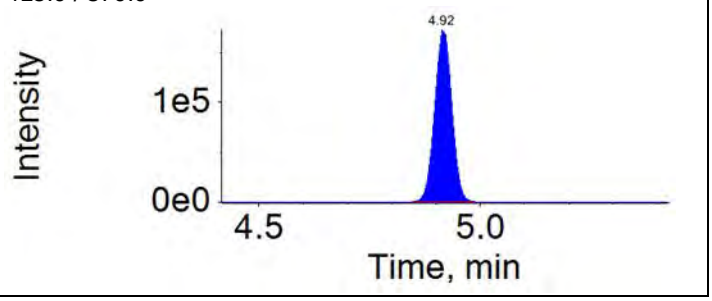
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0



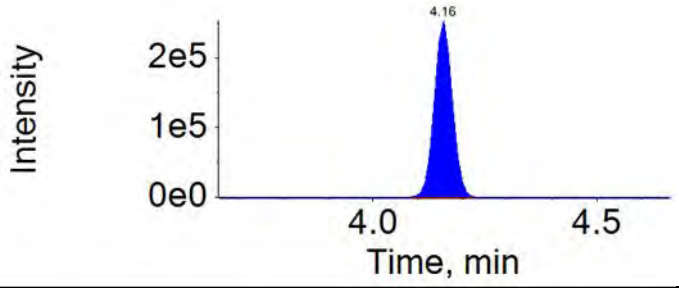
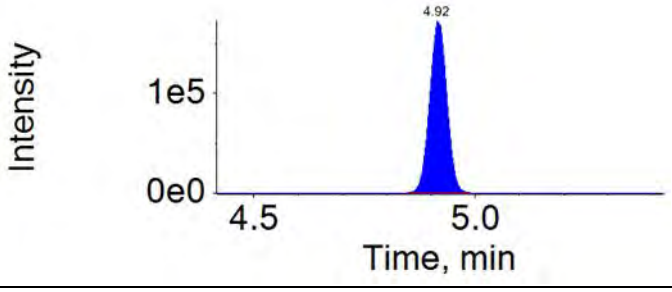


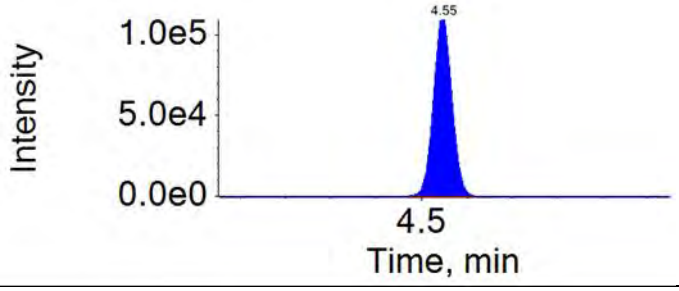
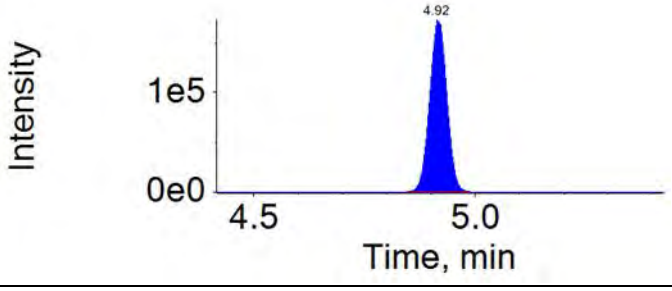
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

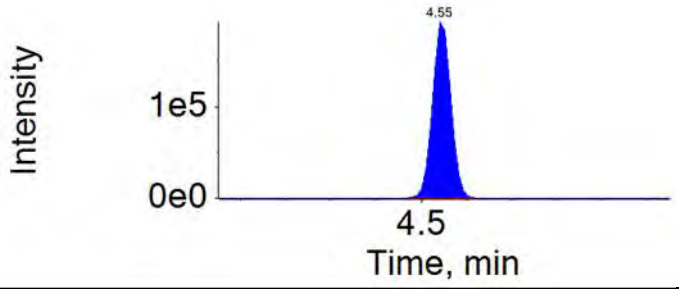
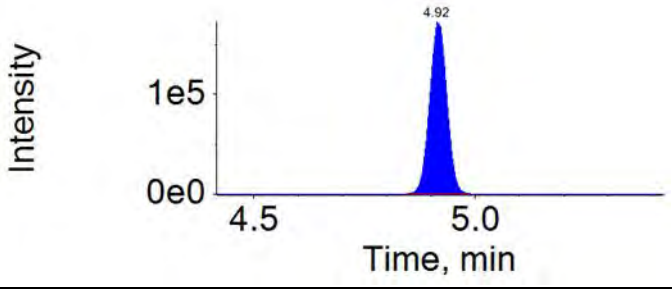


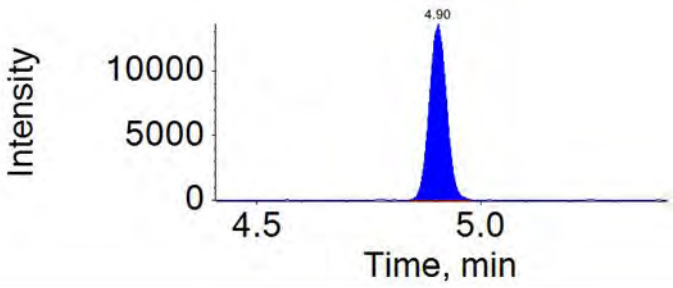
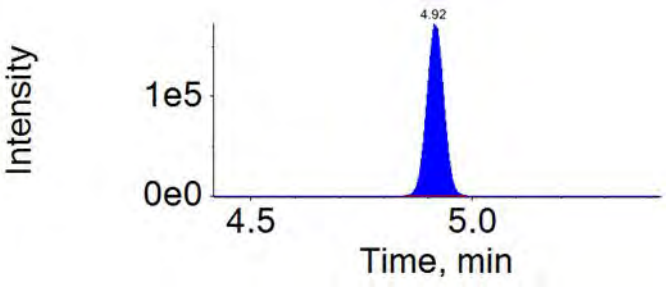


ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

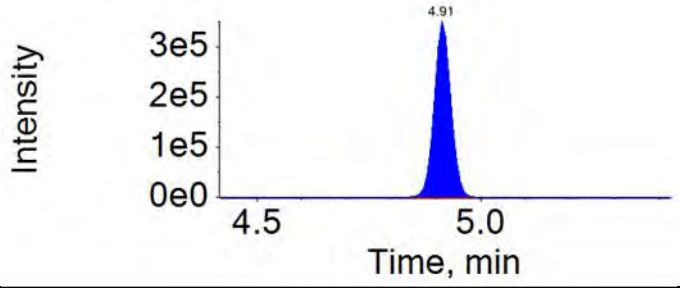
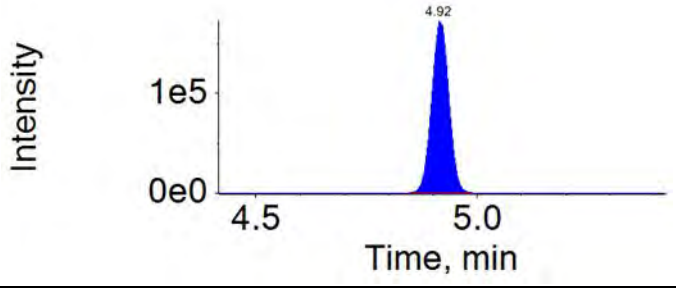
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

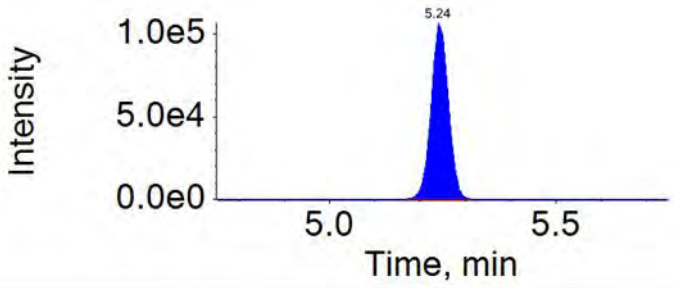
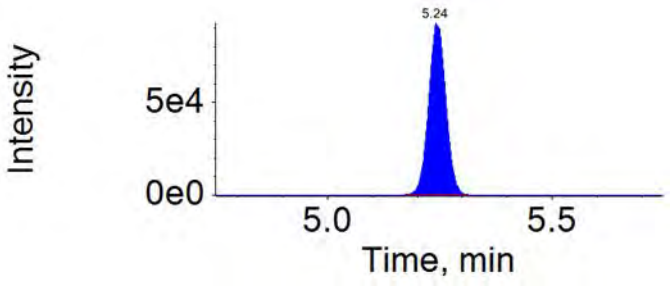
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

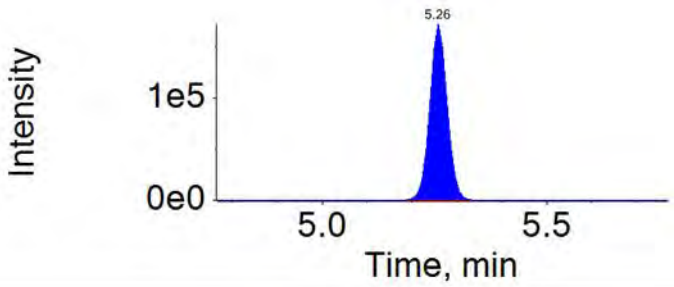
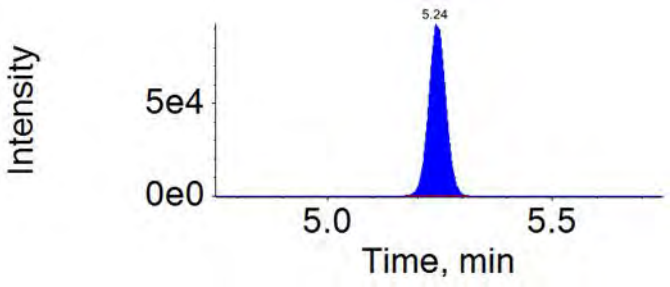
APPROVED
By JPT at 4:33 pm, 11/13/18

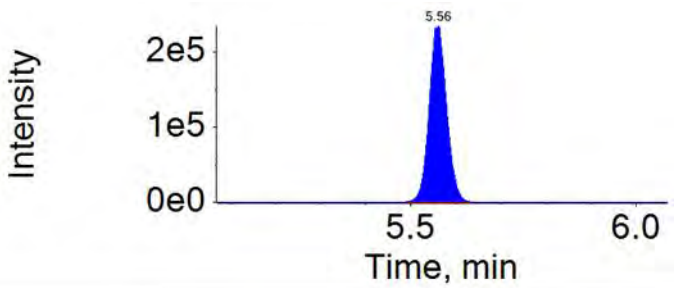
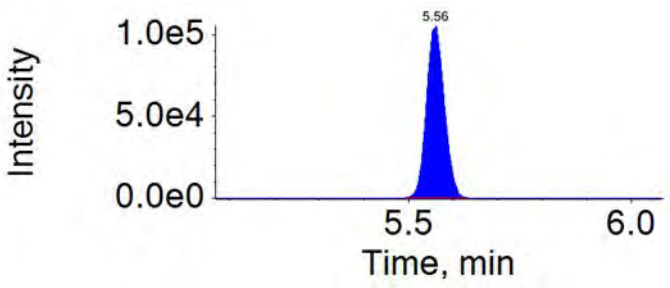
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

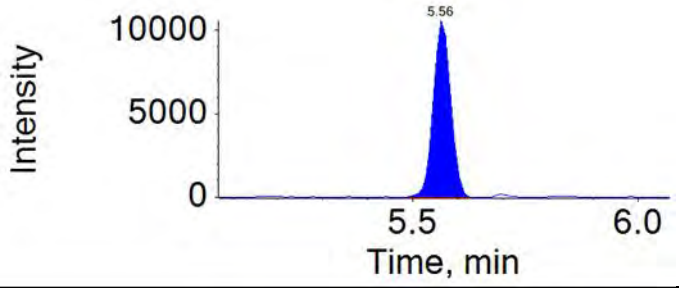
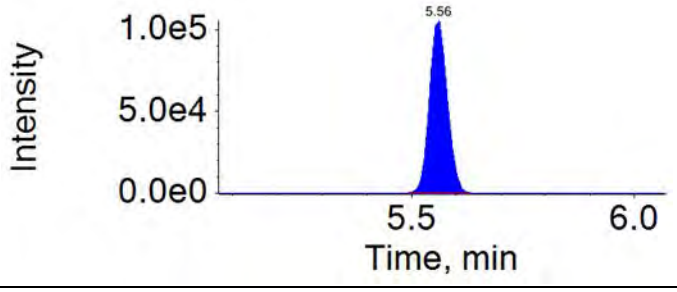
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

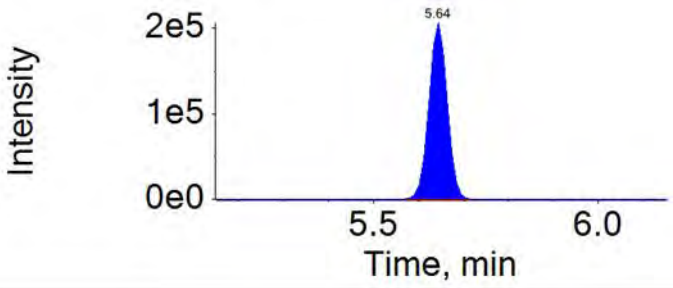
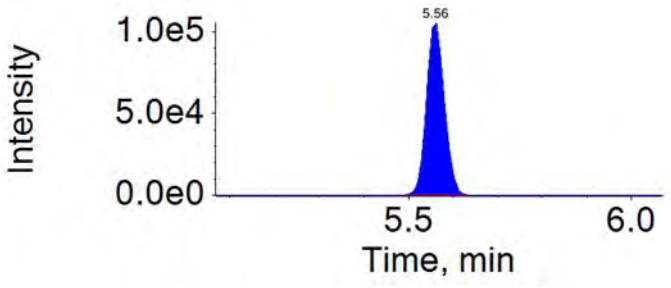
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

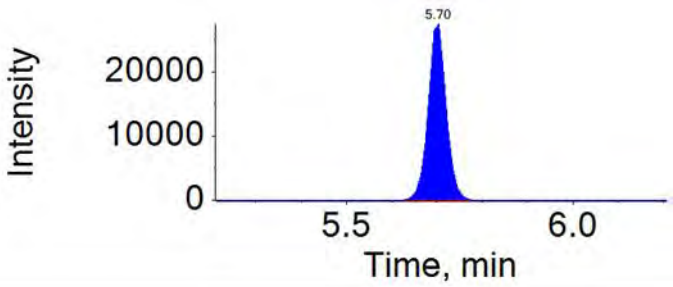
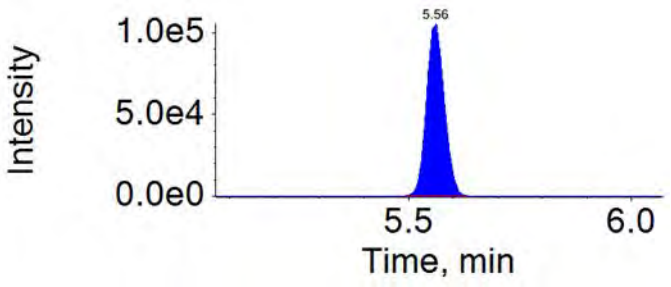
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

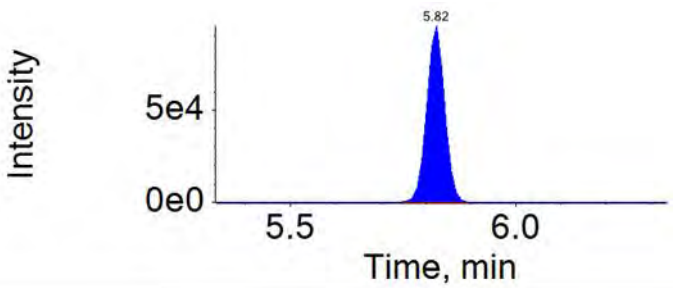
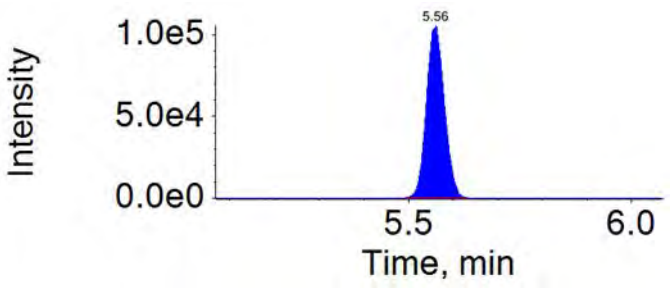
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

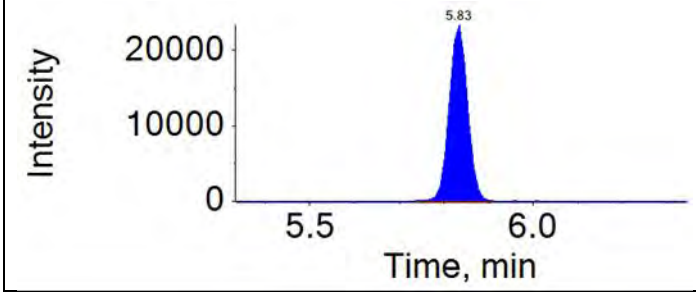
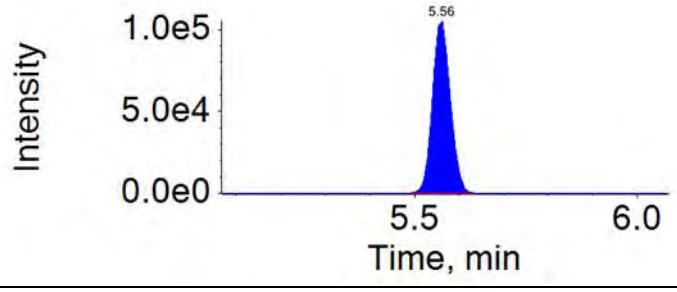
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

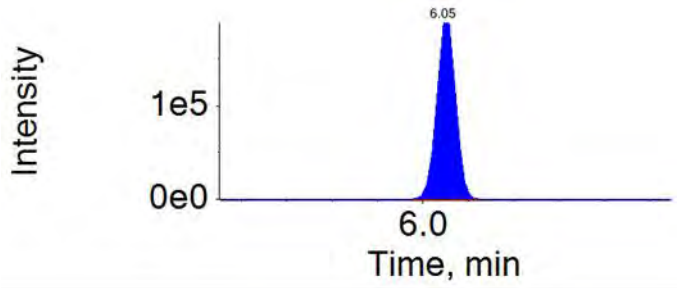
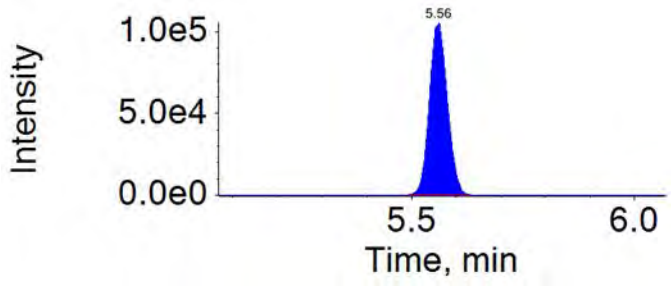
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

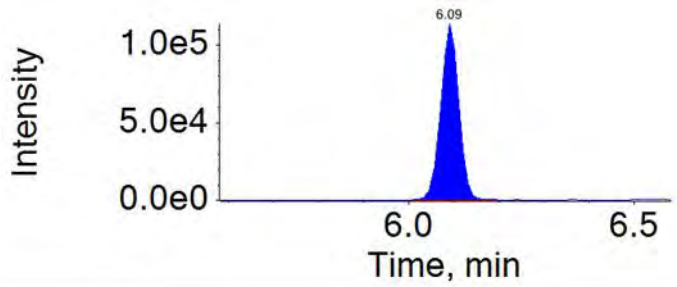
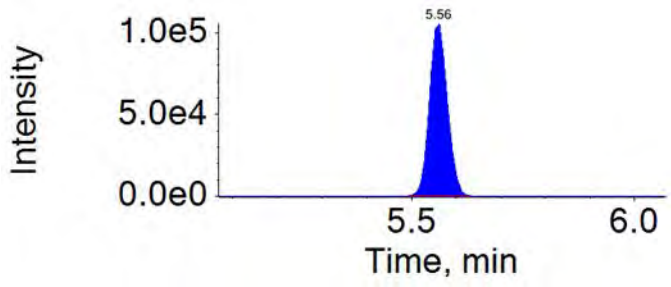
APPROVED
By JPT at 4:33 pm, 11/13/18

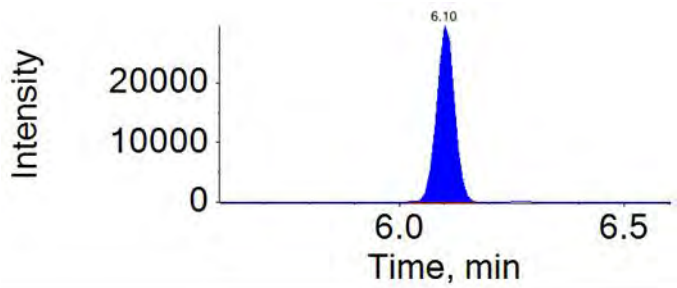
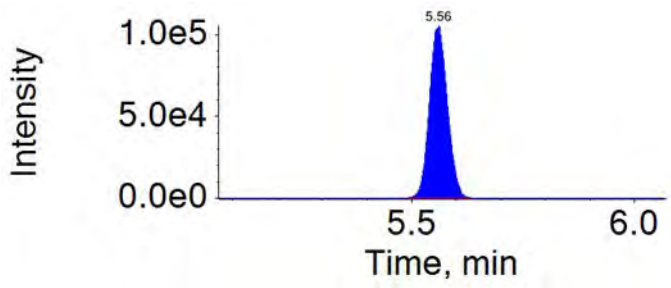
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

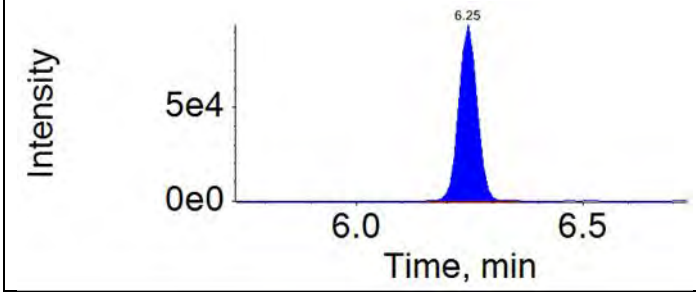
Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

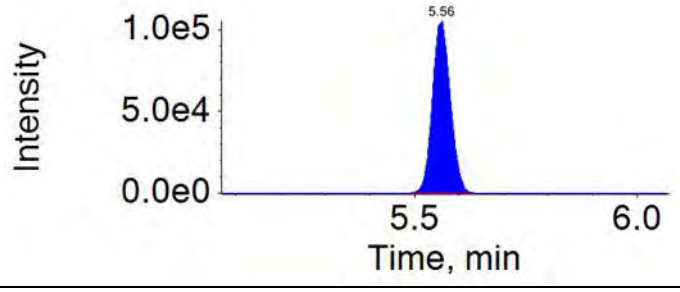
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

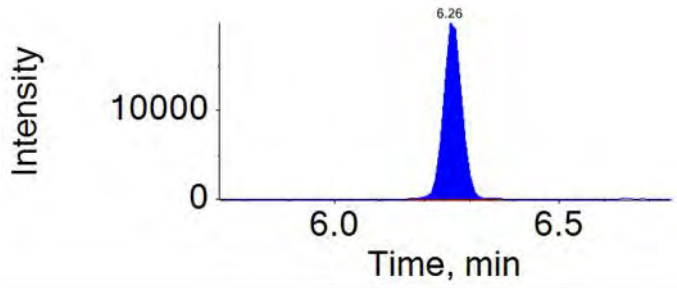
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

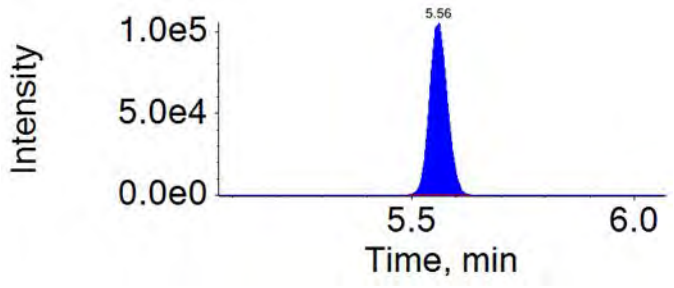
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



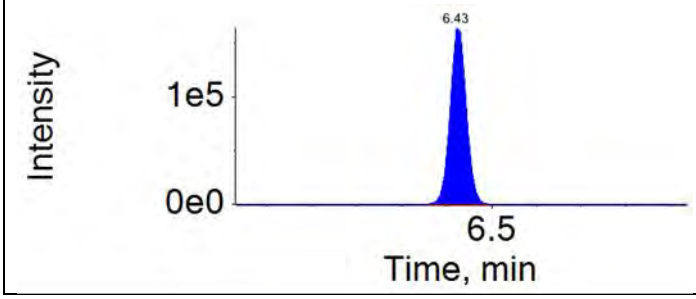


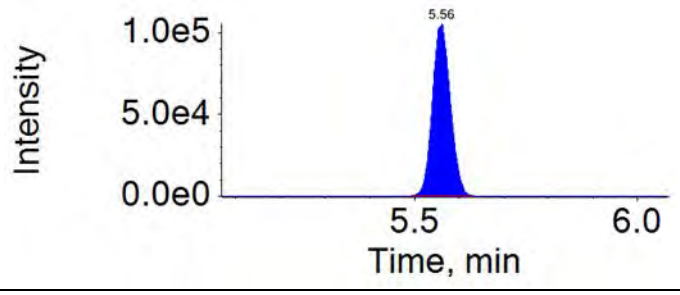
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



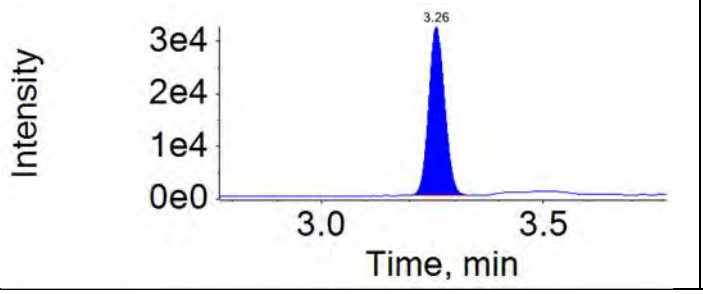


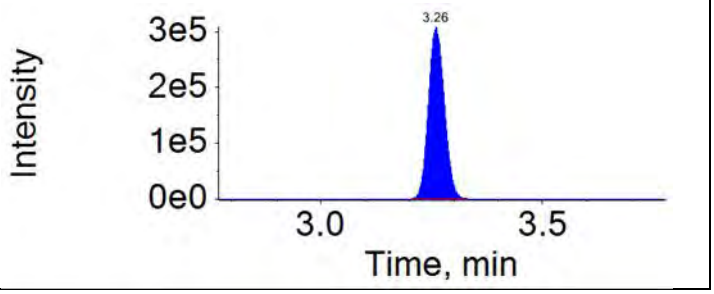
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

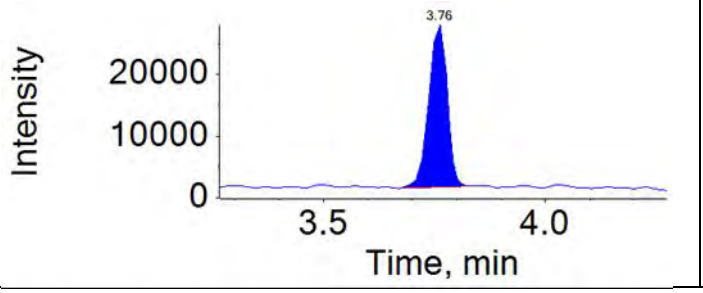
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

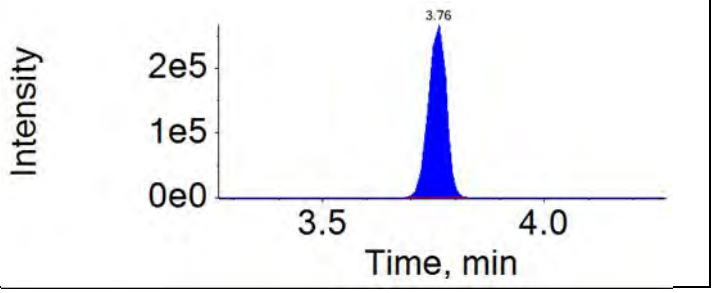
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



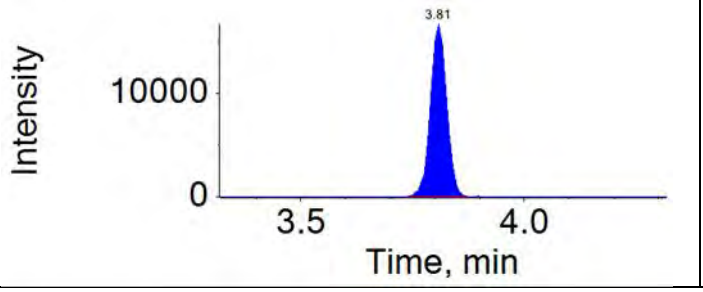


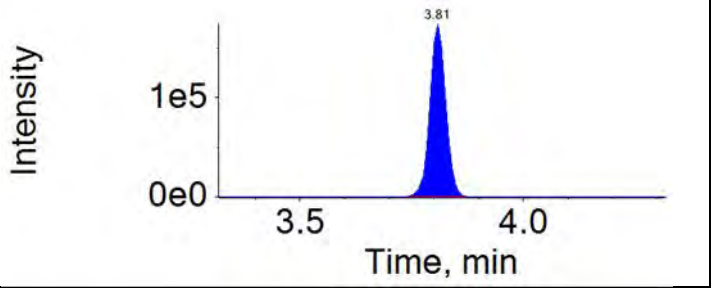
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



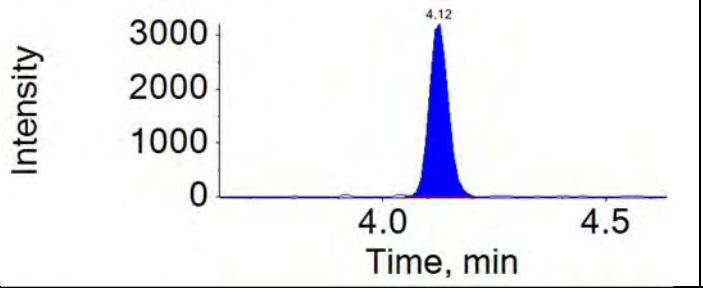


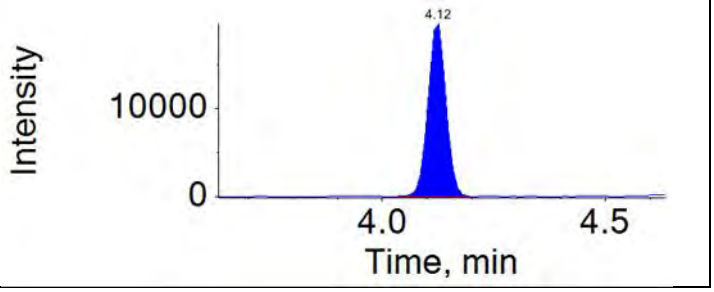
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



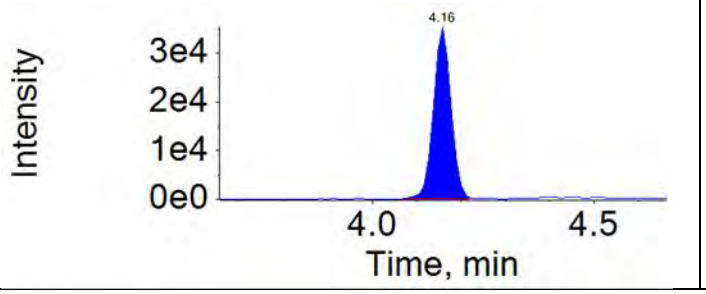


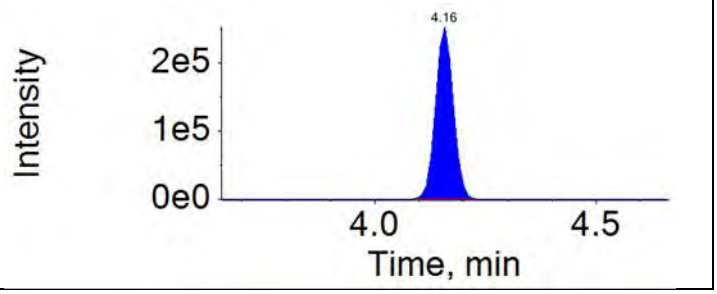
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

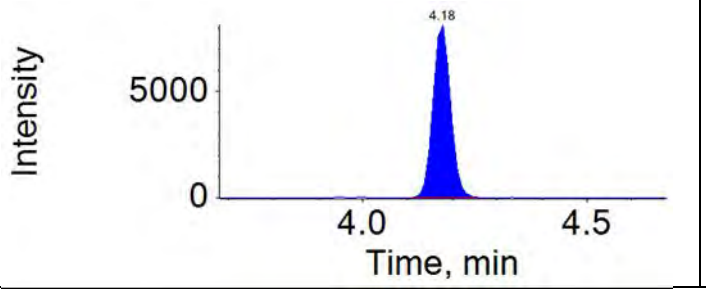
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

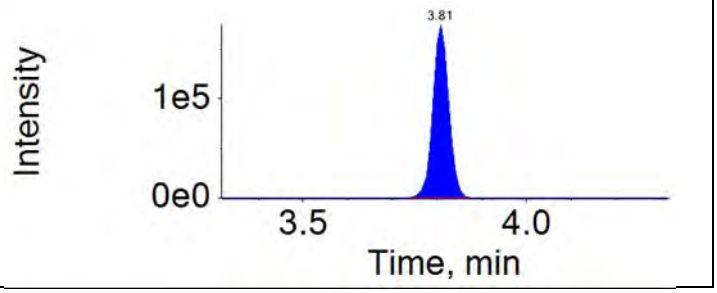
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



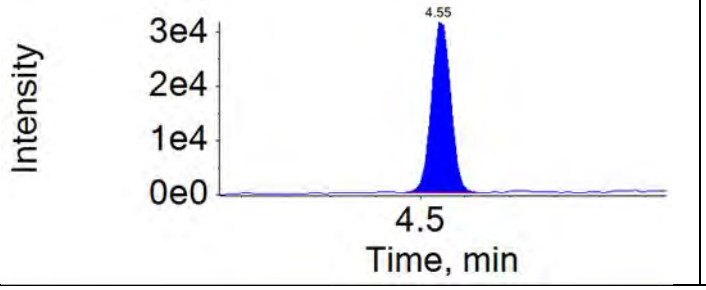


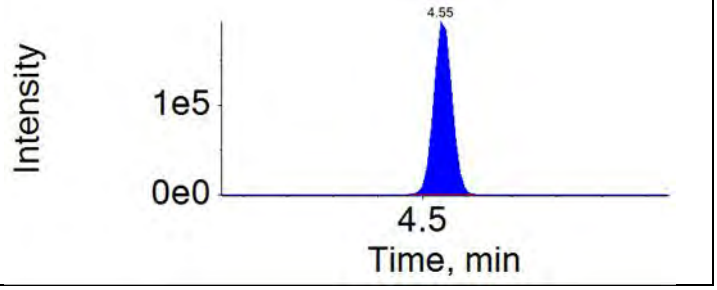
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



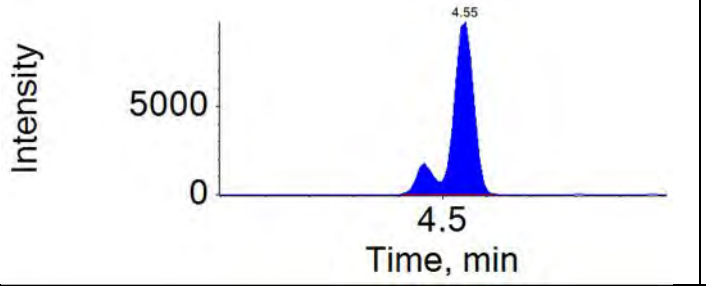


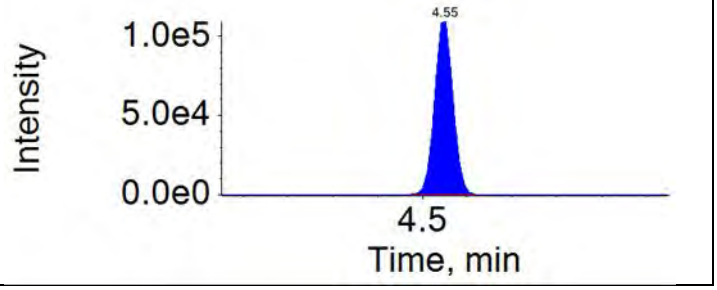
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

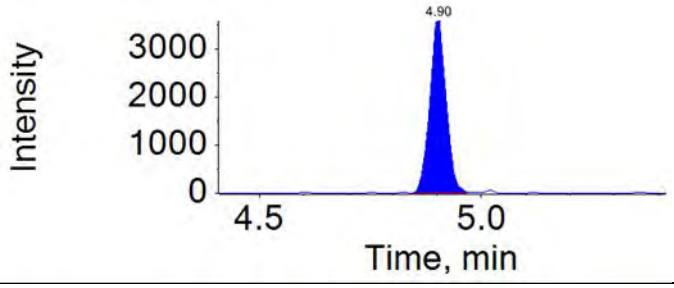
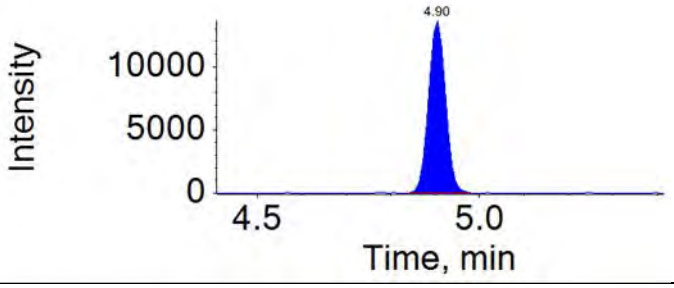


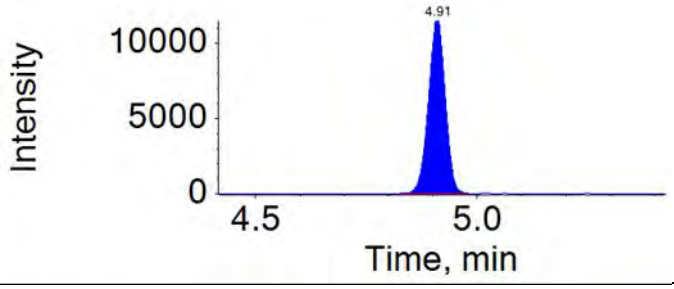
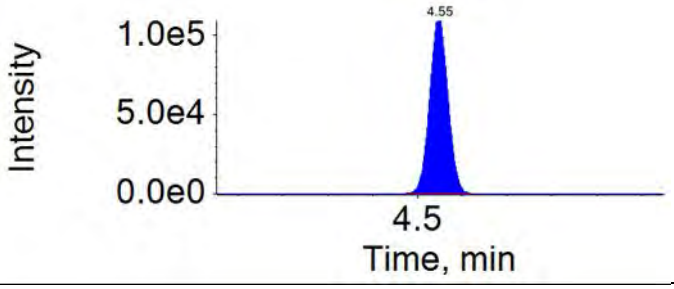


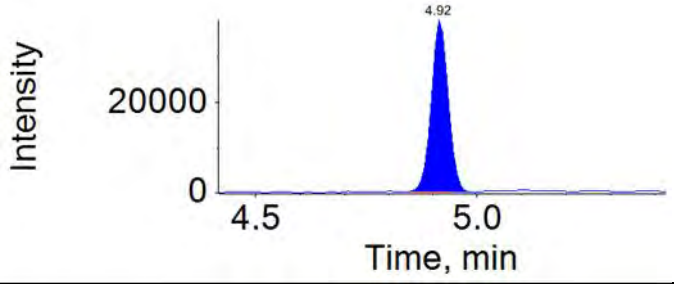
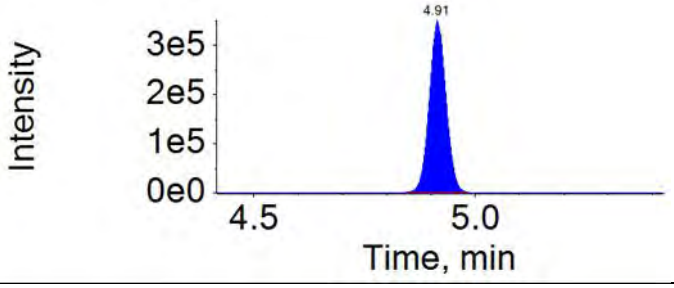
APPROVED
By JPT at 4:33 pm, 11/13/18

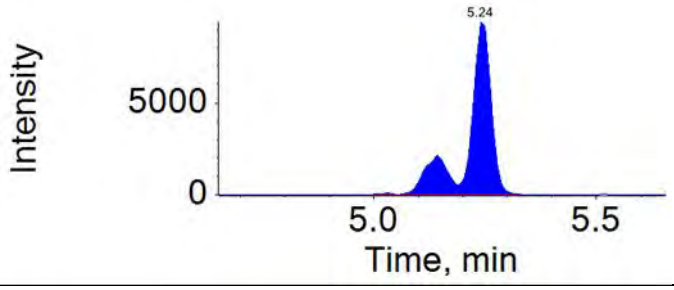
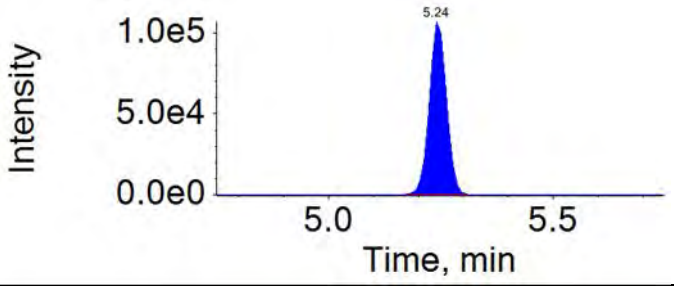
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

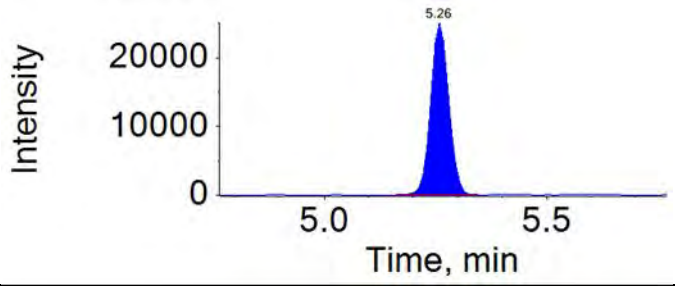
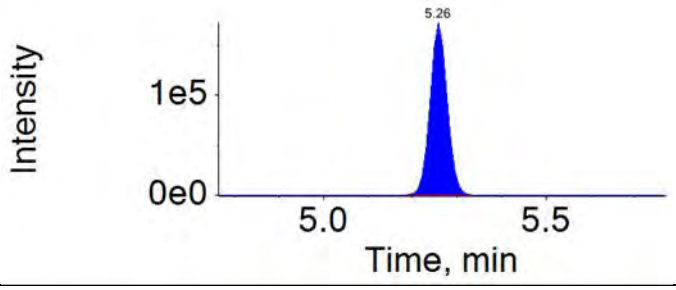
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

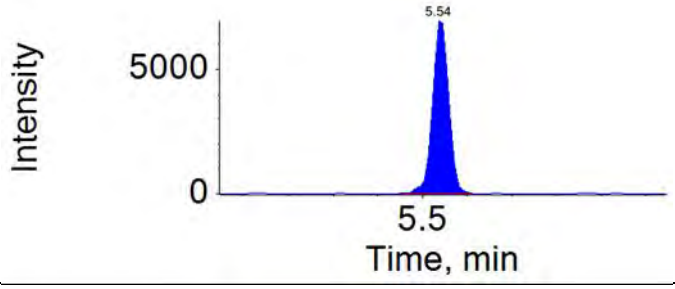
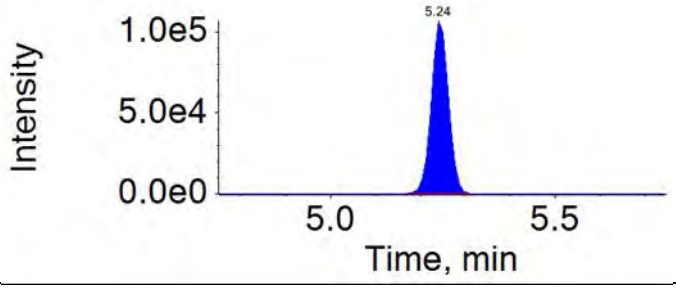
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

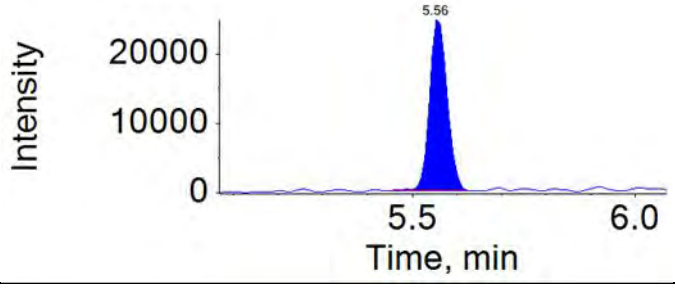
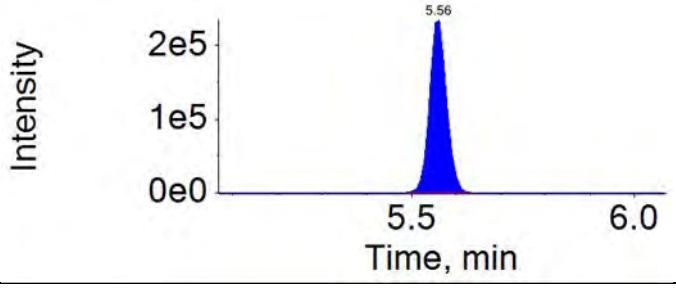
APPROVED
By JPT at 4:33 pm, 11/13/18

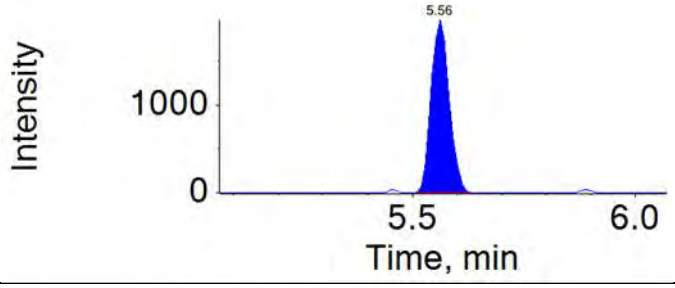
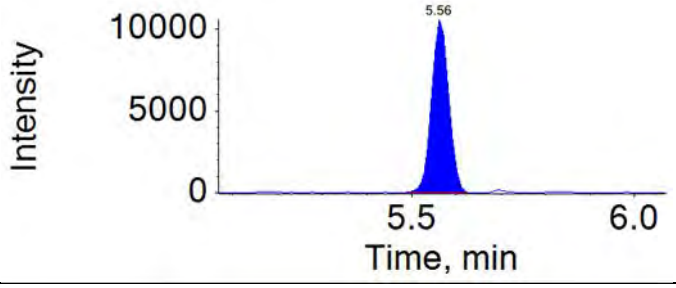
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0
	

Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0
	

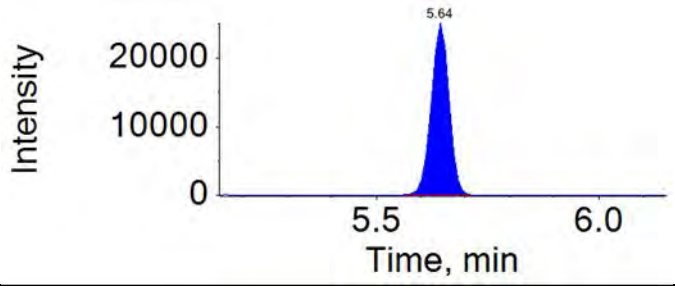
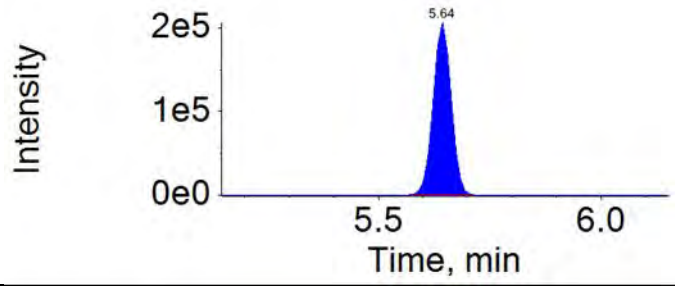
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0
	

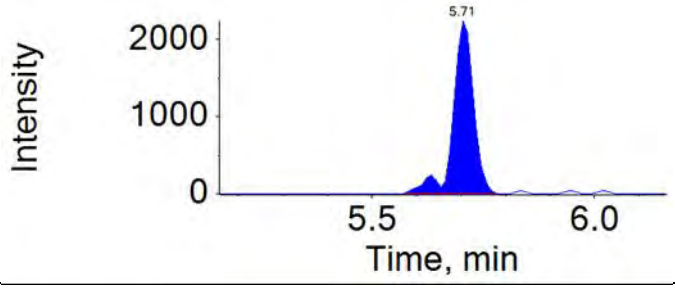
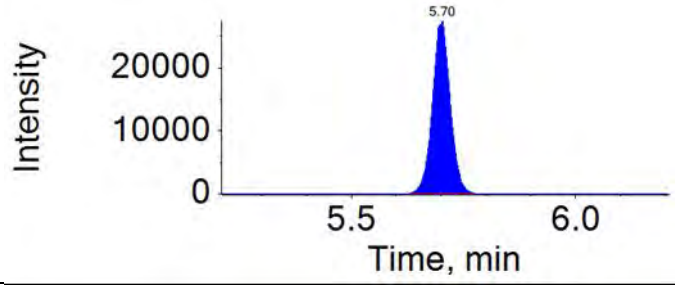
Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0
	

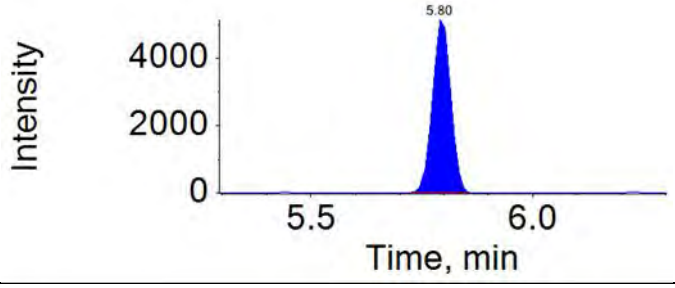
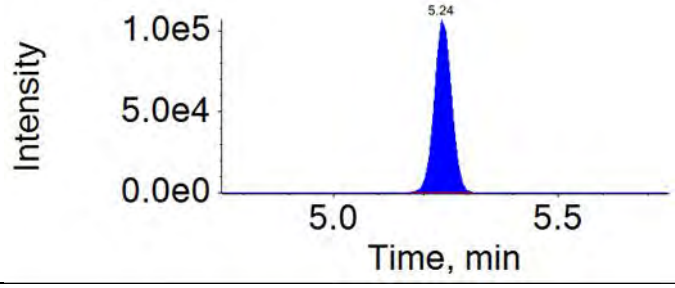
APPROVED
By JPT at 4:33 pm, 11/13/18

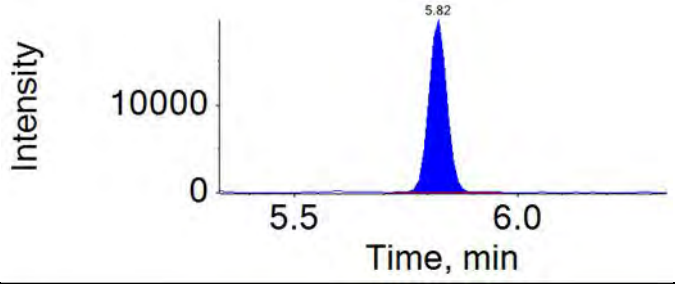
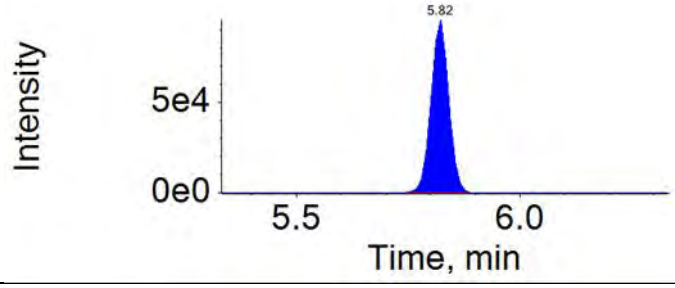
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0
	

Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0
	

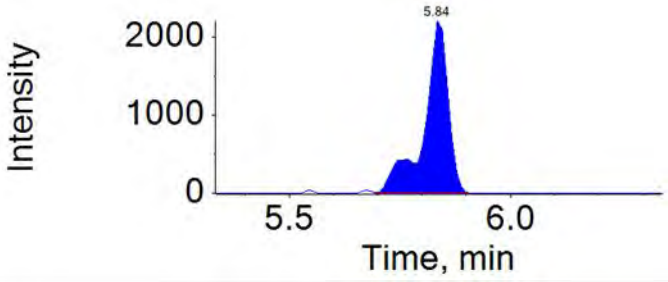
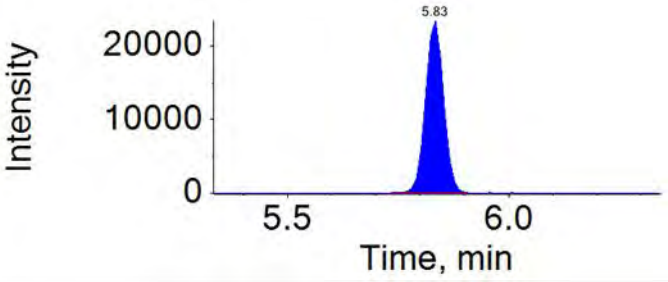
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0
	

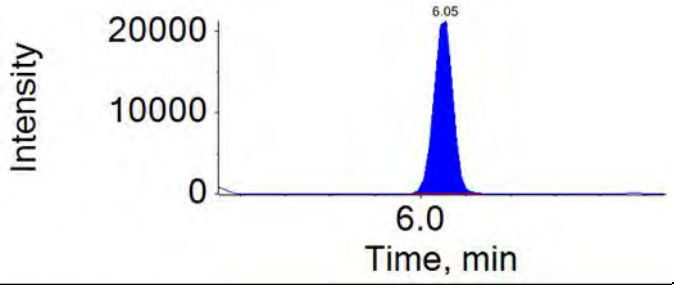
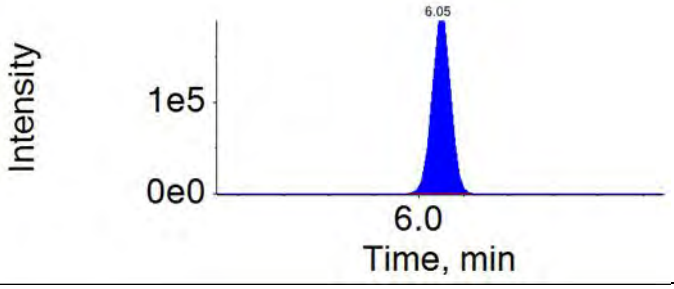
Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0
	

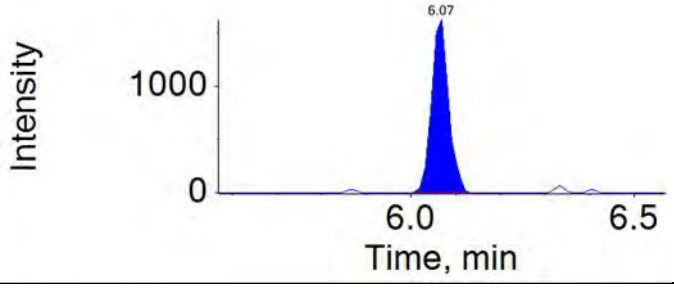
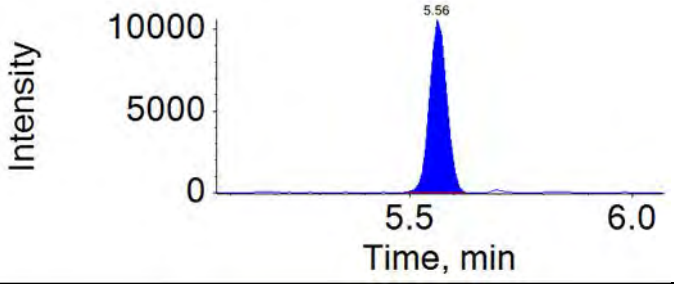
APPROVED
By JPT at 4:33 pm, 11/13/18

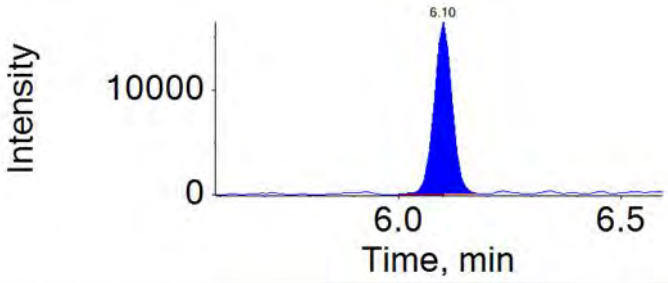
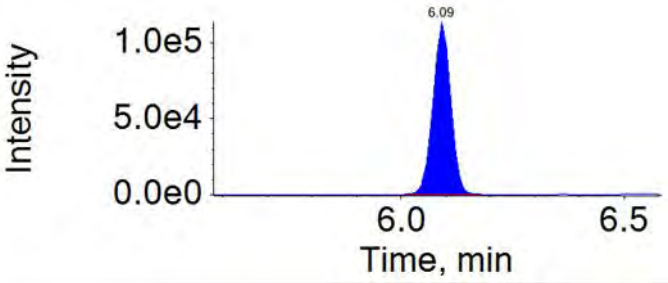
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0
	

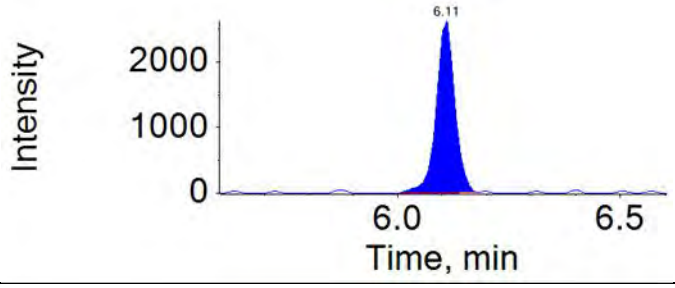
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0
	

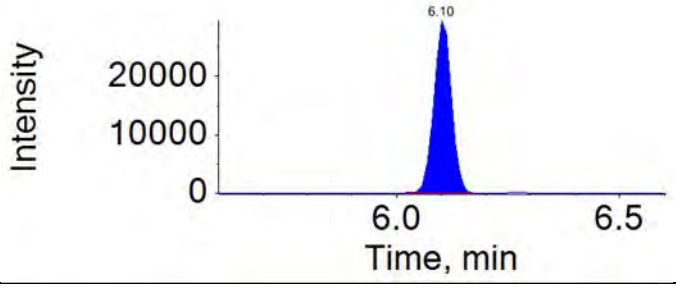
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0
	

Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0
	

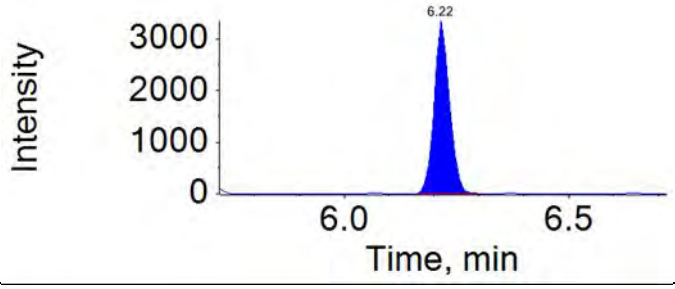
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

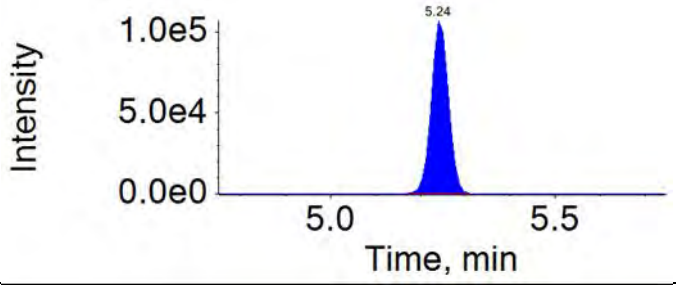
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



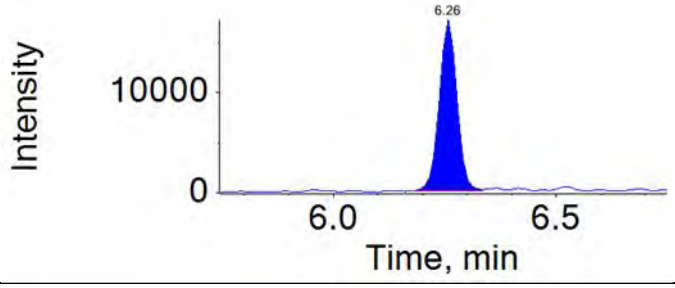


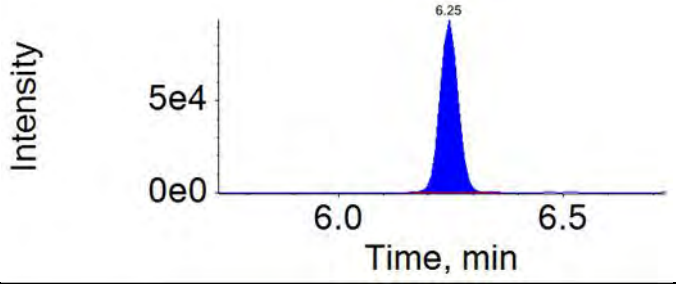
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



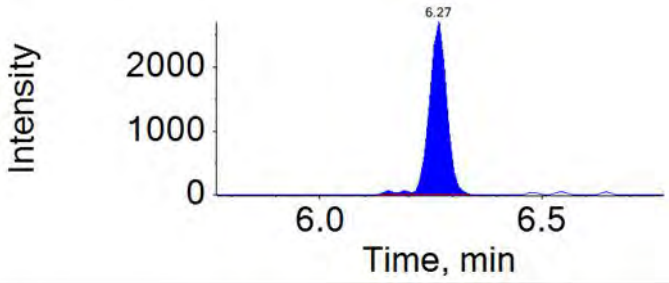


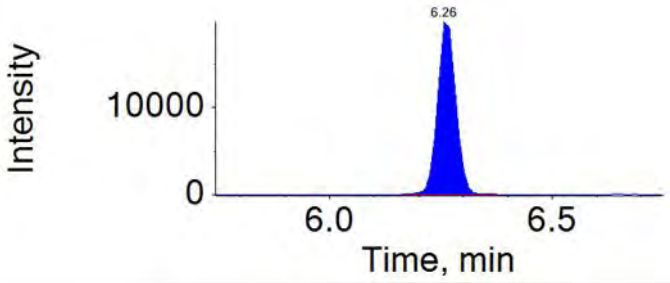
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

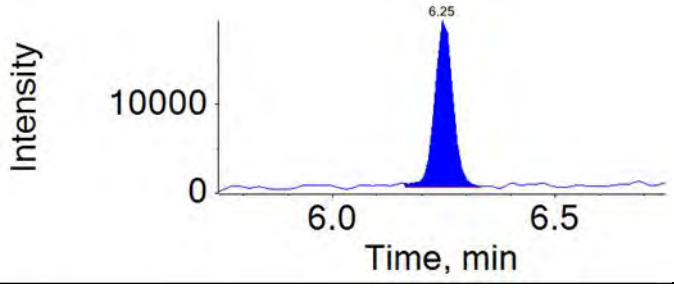
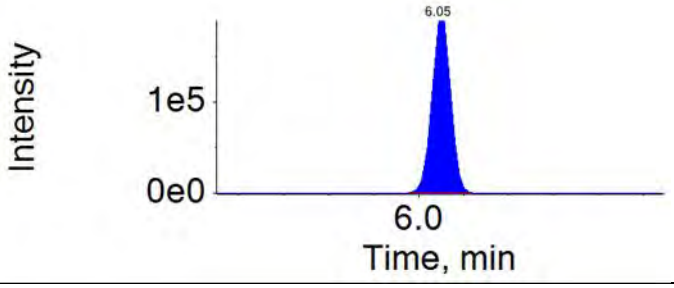


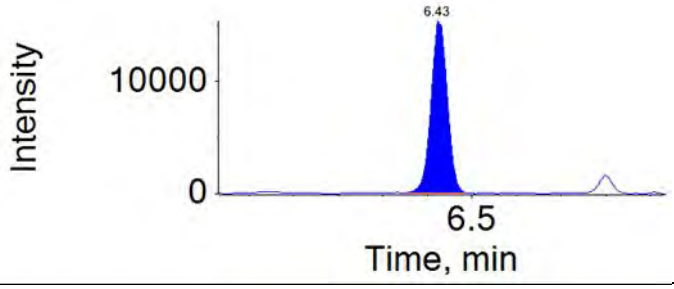
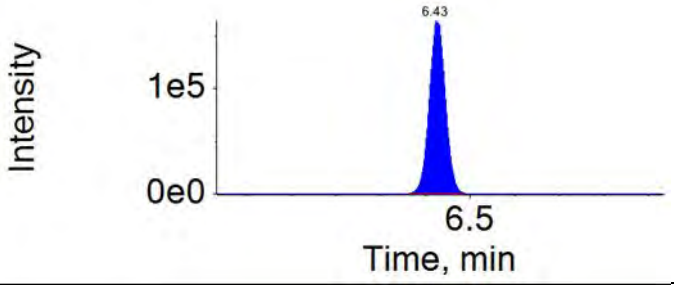


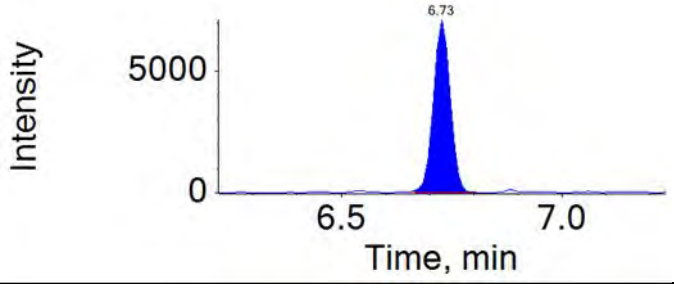
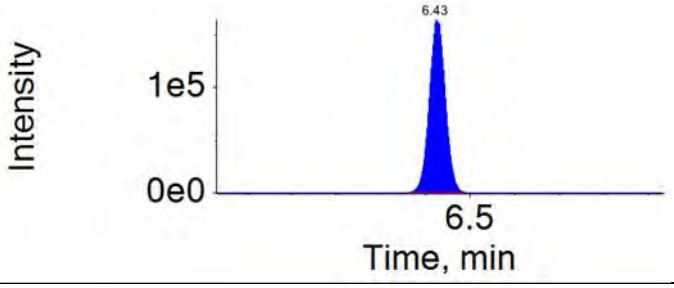
APPROVED
By JPT at 4:33 pm, 11/13/18

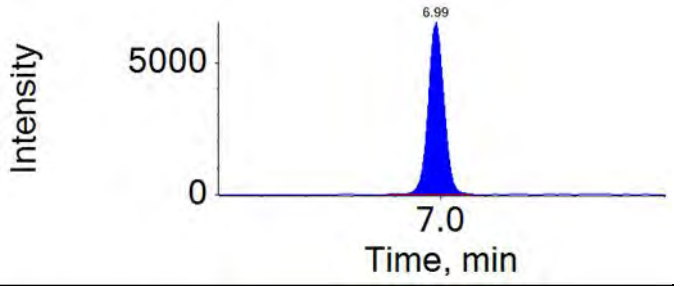
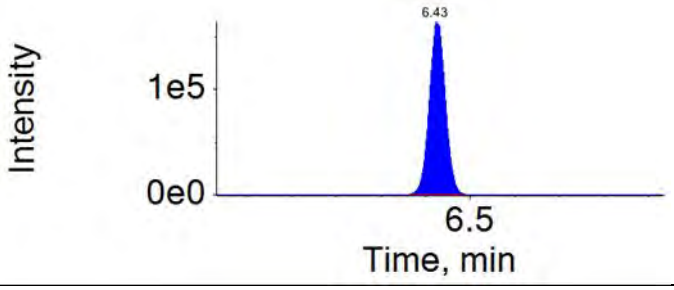
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

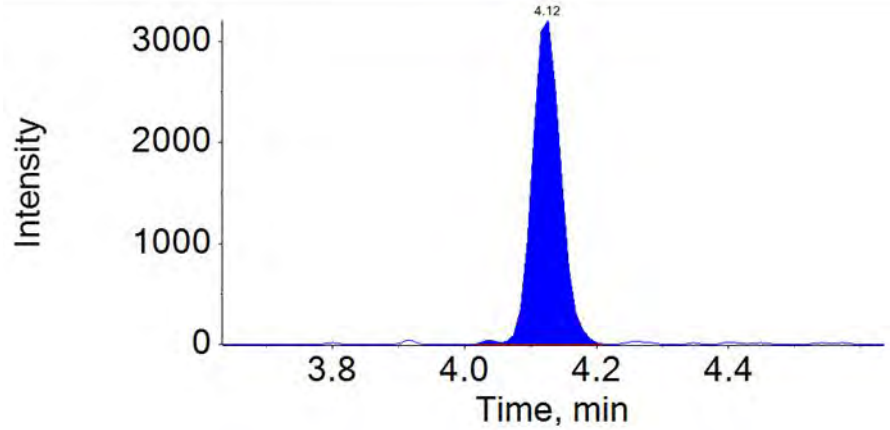
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

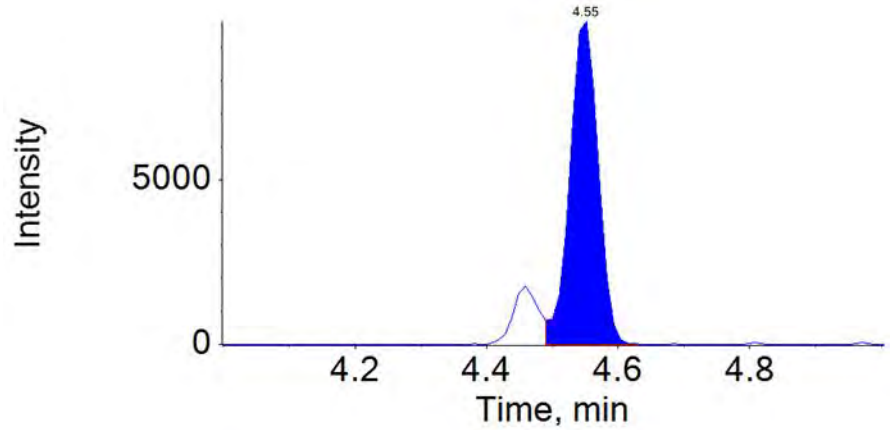
Results Table Name: 18NOV13DCCV1-4
Results Table Date: 11/13/2018 4:25:30 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
4:2-FTS
RT (min.):
4.12
Peak Area:
9681.3
Mass Range:
327.0 / 307.0
File Name:
18NOV13D-05.wiff
Sample Name:
CCV1_ISC_CAL2



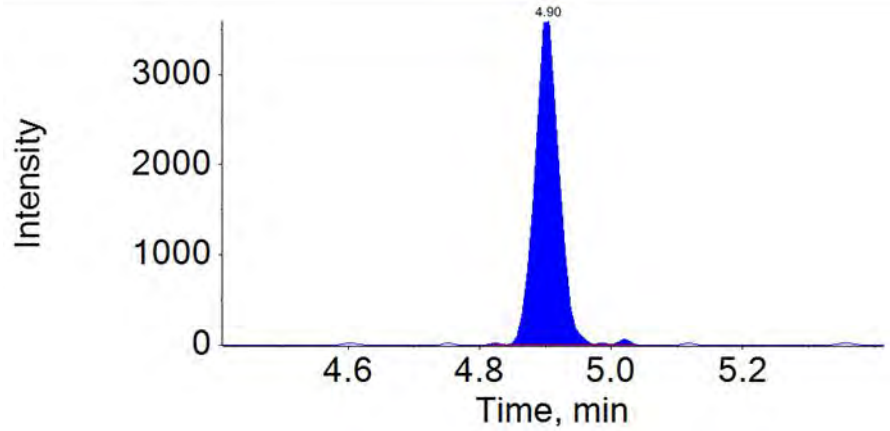
Integration Comment: incorrect integration

Component Name:
PFHxS
RT (min.):
4.55
Peak Area:
29488.0
Mass Range:
399.0 / 80.0
File Name:
18NOV13D-05.wiff
Sample Name:
CCV1_ISC_CAL2



Integration Comment: incorrect integration

Component Name:
6:2-FTS
RT (min.):
4.90
Peak Area:
9370.4
Mass Range:
427.0 / 407.0
File Name:
18NOV13D-05.wiff
Sample Name:
CCV1_ISC_CAL2

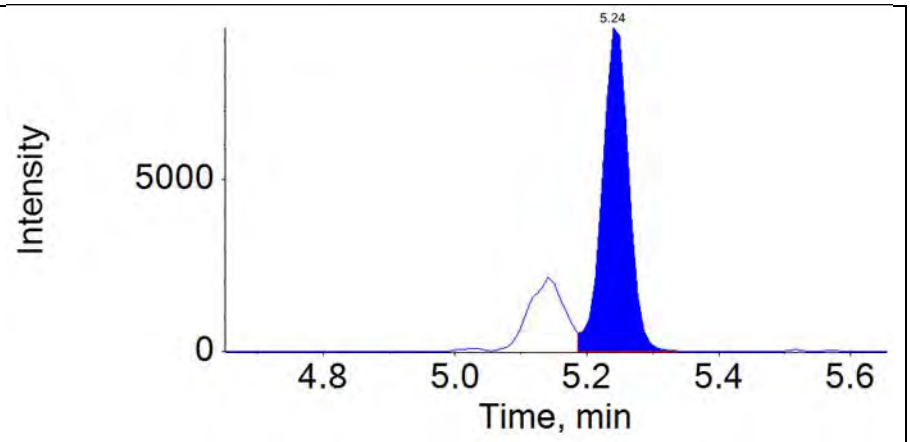


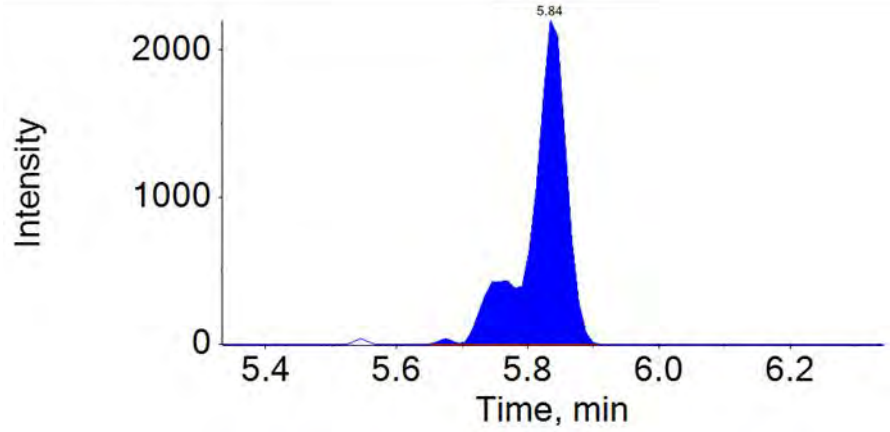
Integration Comment: incorrect integration

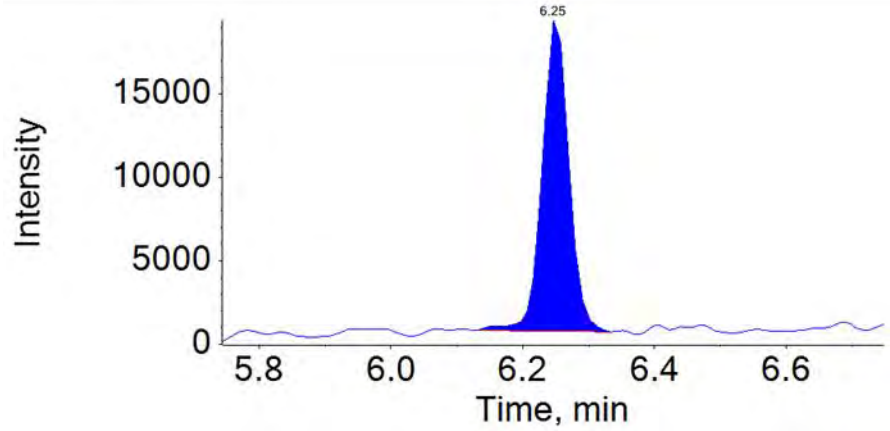
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

Results Table Name: 18NOV13DCCV1-4
Results Table Date: 11/13/2018 4:25:30 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFOS **RT (min.):** 5.24 **Peak Area:** 26298.4 **Mass Range:** 499.0 / 80.0 **File Name:** 18NOV13D-05.wiff **Sample Name:** CCV1_ISC_CAL2	 **Integration Comment:** incorrect integration

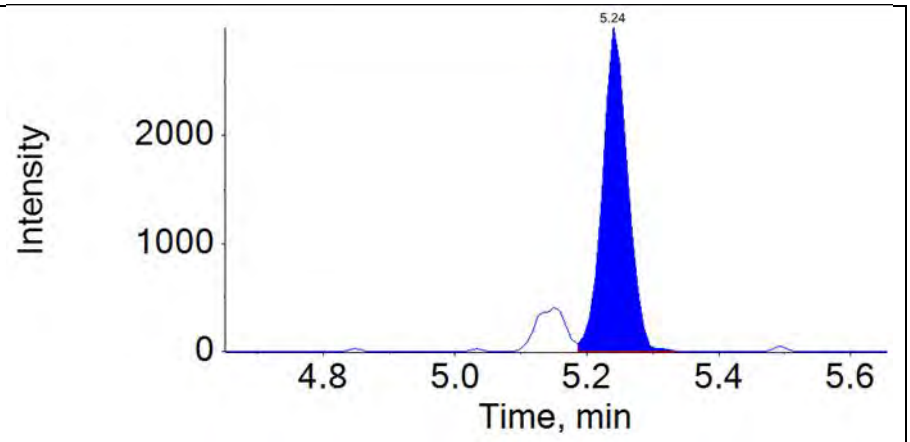
Component Name: NEtFOSAA **RT (min.):** 5.84 **Peak Area:** 8449.1 **Mass Range:** 584.0 / 419.0 **File Name:** 18NOV13D-05.wiff **Sample Name:** CCV1_ISC_CAL2	 **Integration Comment:** incorrect integration

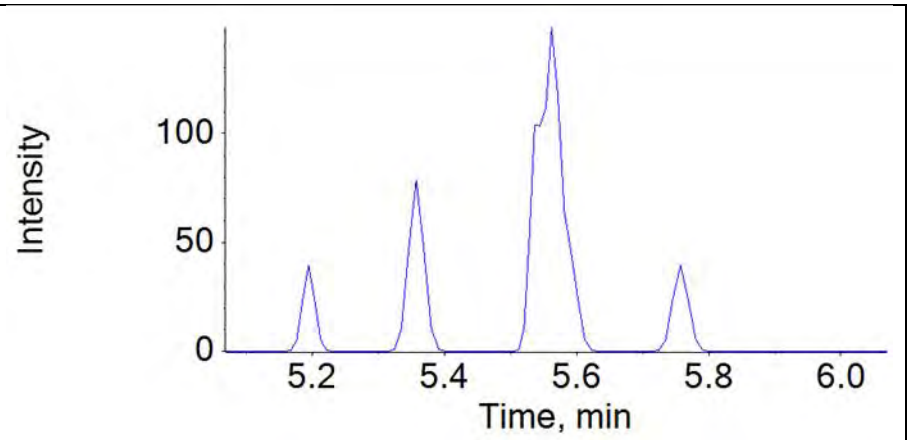
Component Name: PFTrDA **RT (min.):** 6.25 **Peak Area:** 52734.4 **Mass Range:** 663.0 / 619.0 **File Name:** 18NOV13D-05.wiff **Sample Name:** CCV1_ISC_CAL2	 **Integration Comment:** incorrect integration

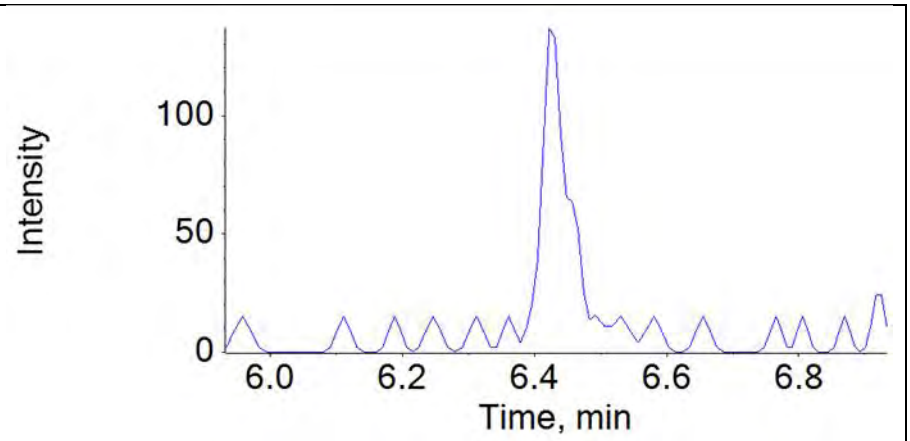
APPROVED
By JPT at 4:33 pm, 11/13/18

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By HMK at 1:48 pm, 11/14/18

Results Table Name: 18NOV13DCCV1-4
Results Table Date: 11/13/2018 4:25:30 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFOS_2 **RT (min.):** 5.24 **Peak Area:** 7996.8 **Mass Range:** 499.0 / 99.0 **File Name:** 18NOV13D-05.wiff **Sample Name:** CCV1_ISC_CAL2	 **Integration Comment:** incorrect integration

Component Name: PFDA_2 **RT (min.):** N/A **Peak Area:** N/A **Mass Range:** 513.0 / 169.0 **File Name:** 18NOV13D-05.wiff **Sample Name:** CCV1_ISC_CAL2	 **Integration Comment:** incorrect integration

Component Name: PFTeDA_2 **RT (min.):** N/A **Peak Area:** N/A **Mass Range:** 713.0 / 169.0 **File Name:** 18NOV13D-05.wiff **Sample Name:** CCV1_ISC_CAL2	 **Integration Comment:** incorrect integration

APPROVED
By JPT at 4:33 pm, 11/13/18

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By HMK at 1:48 pm, 11/14/18

Results Table Name: 18NOV13DCCV1-4
Results Table Date: 11/13/2018 4:25:30 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

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By HMK at 1:48 pm, 11/14/18

Ion Ratio Report

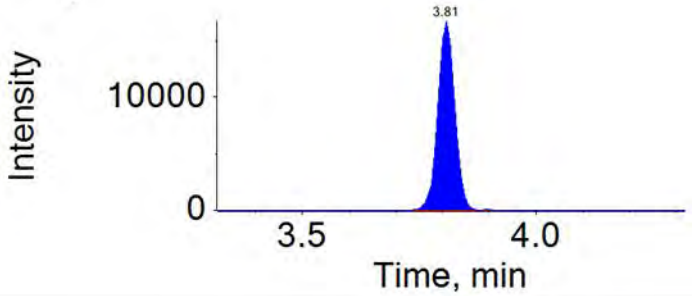
Sample Name: CCV1_ISC_CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV13D-05.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	41984.3	A	N/A	1.0000			
PFBS_2	3.81	1.00	15769.1	A	N/A	0.3756	3	50	
4:2-FTS	4.12	1.00	9629.9	M	N/A	1.0000			
4:2 FTS_2	4.12	1.00	7594.0	A	N/A	0.7886		#NA!	
PFHxA	4.16	1.00	96444.0	A	N/A	1.0000			
PFHxA_2	4.16	1.00	1277.6	A	N/A	0.0132	13	50	
PFPeS	4.18	1.10	22297.9	A	N/A	1.0000			
PFPeS_2	4.18	1.10	10707.8	A	N/A	0.4802	-8	50	
PFHpA	4.55	1.00	93659.5	A	N/A	1.0000			
PFHpA_2	4.55	1.00	4377.9	A	N/A	0.0467	-17	50	
PFHxS	4.55	1.00	34111.0	M	N/A	1.0000			
PFHxS_2	4.54	1.00	11982.0	A	N/A	0.3513	16	50	
6:2-FTS	4.90	1.00	9221.0	M	N/A	1.0000			
6:2 FTS_2	4.91	1.00	4725.6	A	N/A	0.5125		#NA!	
PFHpS	4.91	1.08	30798.1	A	N/A	1.0000			
PFHpS_2	4.91	1.08	13327.9	A	N/A	0.4328	6	50	
PFOA	4.92	1.00	100905.0	A	N/A	1.0000			
PFOA_2	4.91	1.00	5004.1	A	N/A	0.0496	-13	50	
PFOS	5.24	1.00	34555.4	M	N/A	1.0000			
PFOS_2	5.24	1.00	9315.9	M	N/A	0.2696	4	50	
PFNA	5.26	1.00	70400.6	A	N/A	1.0000			
PFNA_2	5.25	1.00	1189.7	A	N/A	0.0169	-26	50	
PFNS	5.54	1.06	17583.2	A	N/A	1.0000			
PFNS_2	5.54	1.06	8054.2	A	N/A	0.4581	-4	50	
PFDA	5.56	1.00	68441.3	A	N/A	1.0000			
PFDA_2	5.56	1.00	425.8	M	N/A	0.0062	-22	50	
8:2-FTS	5.56	1.00	5551.6	A	N/A	1.0000			
8:2 FTS_2	5.56	1.00	3895.7	A	N/A	0.7017		#NA!	
NMeFOSAA	5.71	1.00	7238.6	A	N/A	1.0000			
NMeFOSAA_2	5.70	1.00	1290.9	A	N/A	0.1783	-16	50	
PFDS	5.80	1.11	14746.9	A	N/A	1.0000			
PFDS_2	5.79	1.11	7890.7	A	N/A	0.5351	5	50	
PFUnDA	5.82	1.00	55065.8	A	N/A	1.0000			
PFUnDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
NEtFOSAA	5.84	1.00	8391.3	M	N/A	1.0000			
NEtFOSAA_2	5.84	1.00	4219.2	A	N/A	0.5028	-13	50	
PFDoDA	6.05	1.00	63306.6	A	N/A	1.0000			
PFDoDA_2	6.06	1.00	973.7	A	N/A	0.0154	-6	50	
10:2-FTS	6.07	1.09	4315.1	A	N/A	1.0000			
10:2 FTS_2	6.06	1.09	3603.0	A	N/A	0.8350		#NA!	
PFTrDA	6.25	1.03	52911.8	M	N/A	1.0000			
PFTrDA_2	6.25	1.03	567.3	A	N/A	0.0107	16	50	
PFTeDA	6.43	1.00	38686.6	A	N/A	1.0000			
PFTeDA_2	6.43	1.00	380.7	M	N/A	0.0098	54	50	OOS
PFHxDA	6.73	1.05	18605.8	A	N/A	1.0000			
PFHxDA_2	6.73	1.05	1083.6	A	N/A	0.0582	-14	50	
PFODA	6.99	1.09	15935.1	A	N/A	1.0000			
PFODA_2	6.99	1.09	437.9	A	N/A	0.0275	2	50	

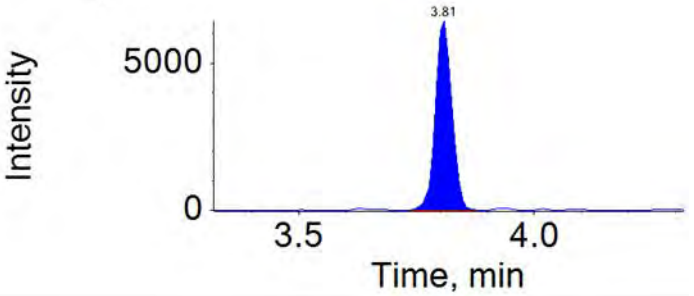
APPROVED
By JPT at 4:33 pm, 11/13/18

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By HMK at 1:48 pm, 11/14/18

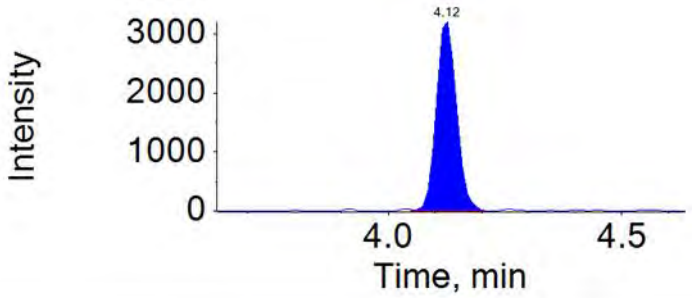
Component: PFBS
Primary Mass: 299.0 / 80.0



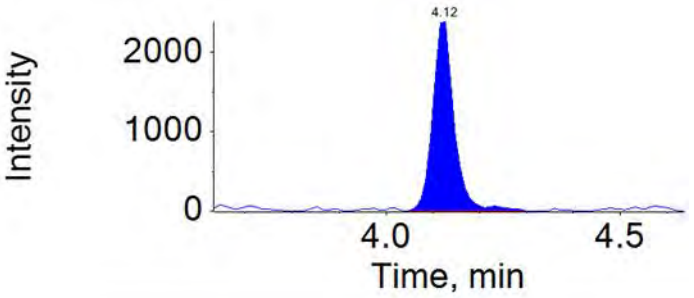
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



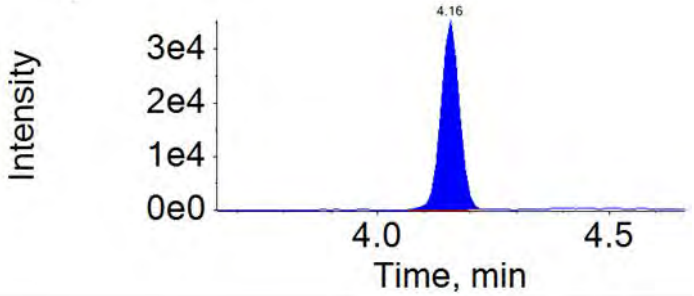
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



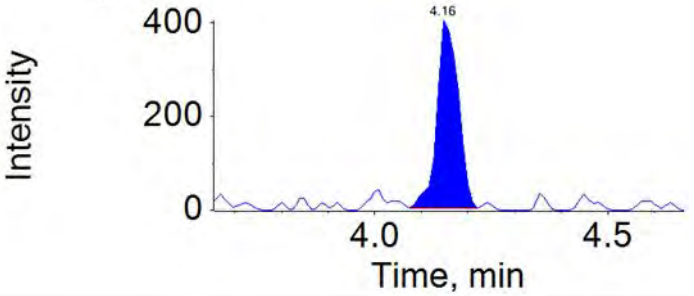
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



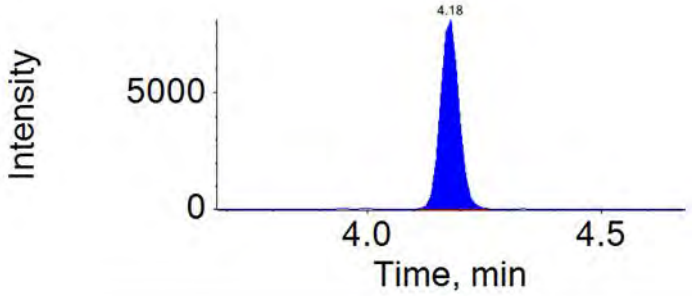
Component: PFHxA
Primary Mass: 313.0 / 269.0



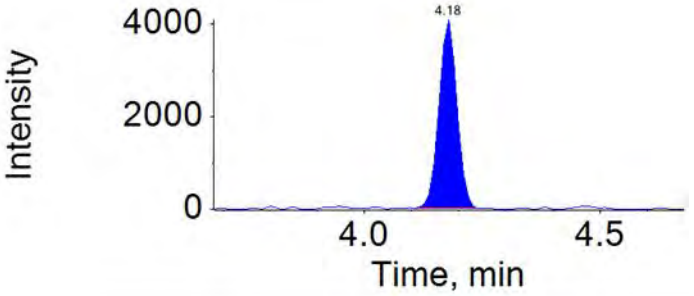
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



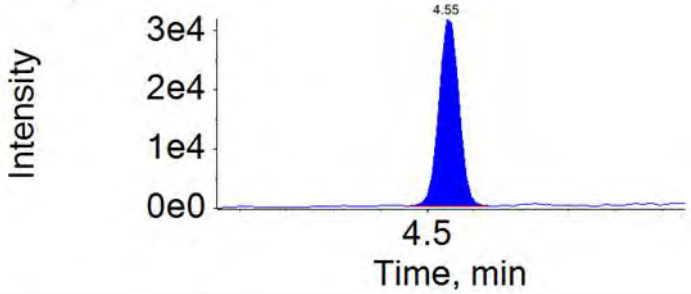
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



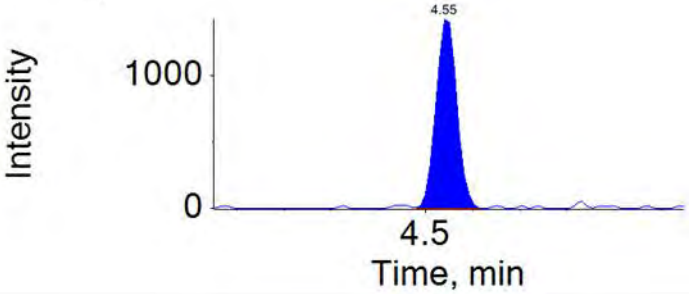
APPROVED
By JPT at 4:33 pm, 11/13/18

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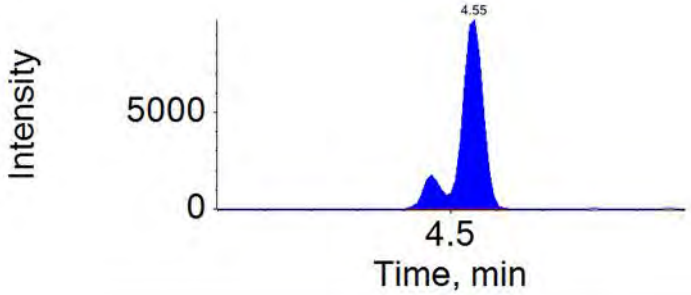
Component: PFHpA
Primary Mass: 363.0 / 319.0



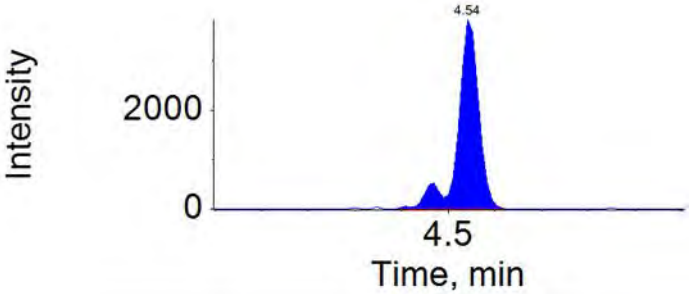
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



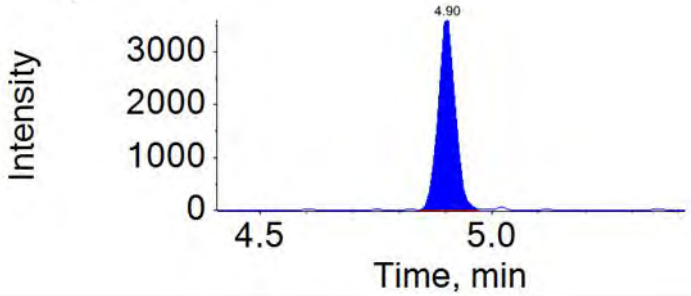
Component: PFHxS
Primary Mass: 399.0 / 80.0



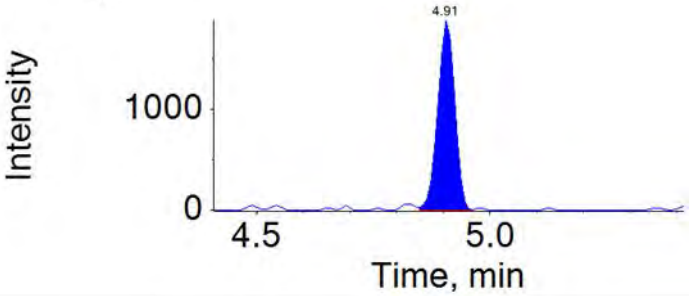
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



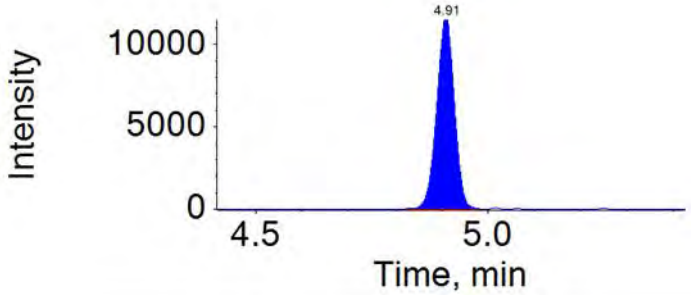
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



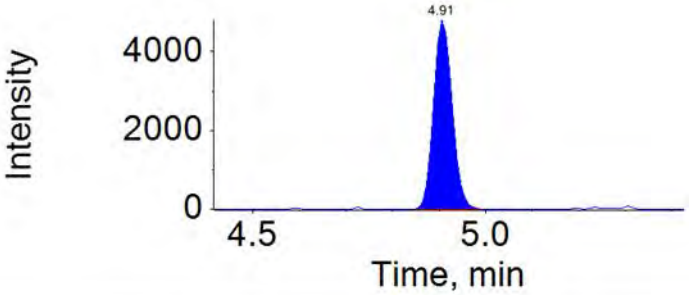
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



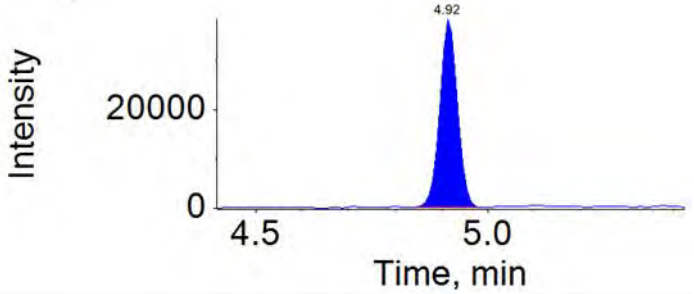
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



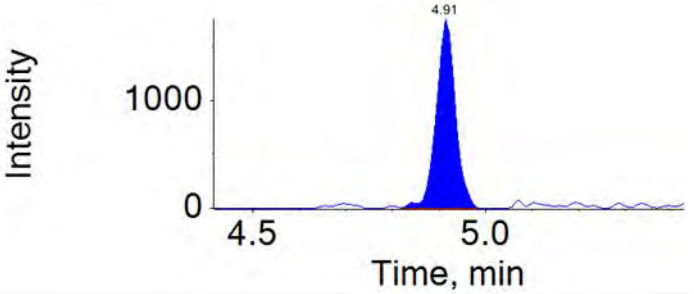
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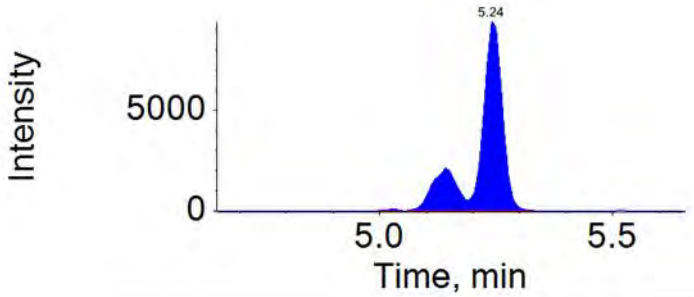
Component: PFOA
Primary Mass: 413.0 / 369.0



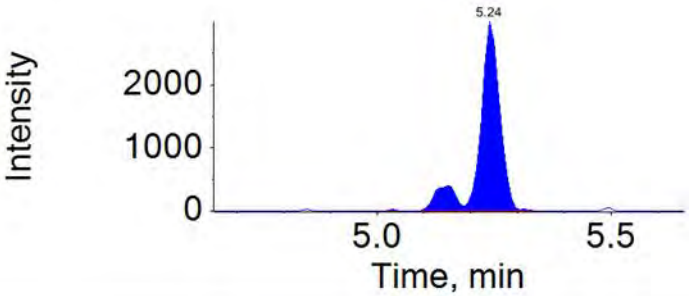
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



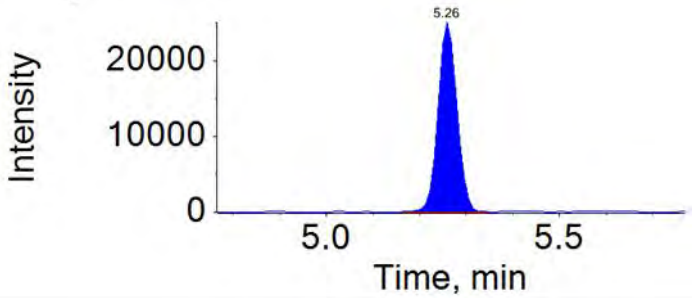
Component: PFOS
Primary Mass: 499.0 / 80.0



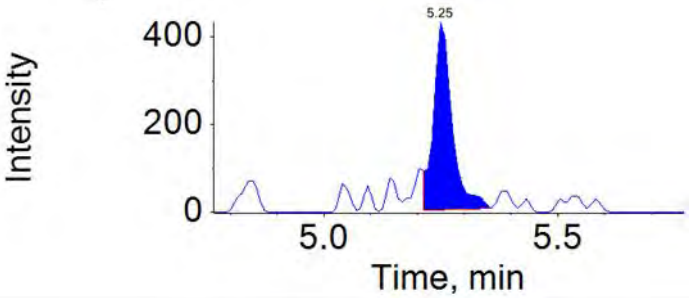
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



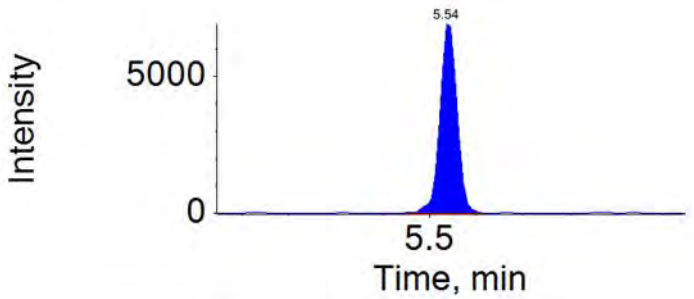
Component: PFNA
Primary Mass: 463.0 / 419.0



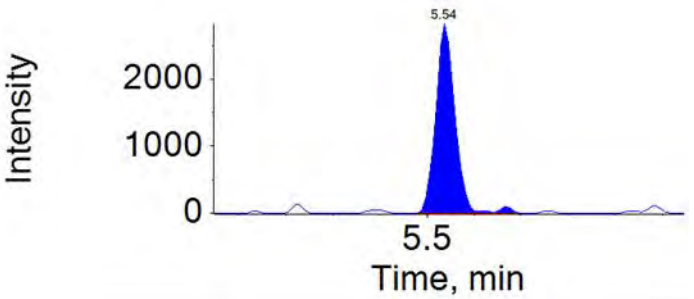
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



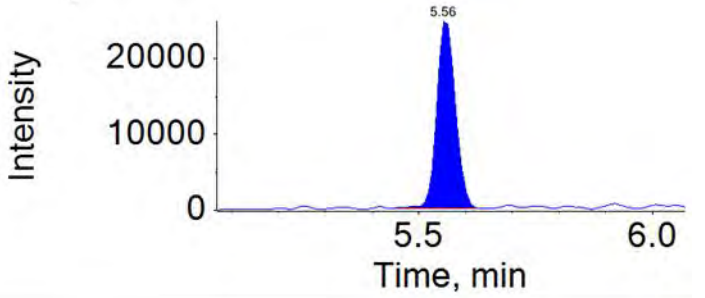
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



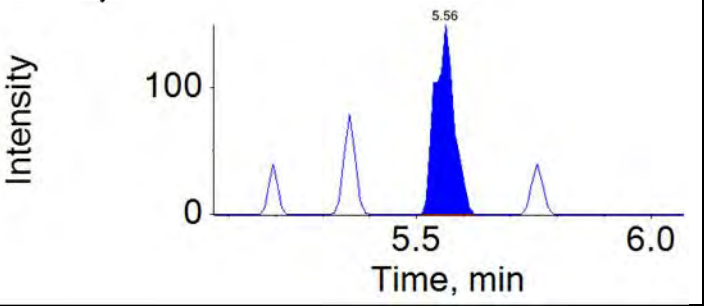
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

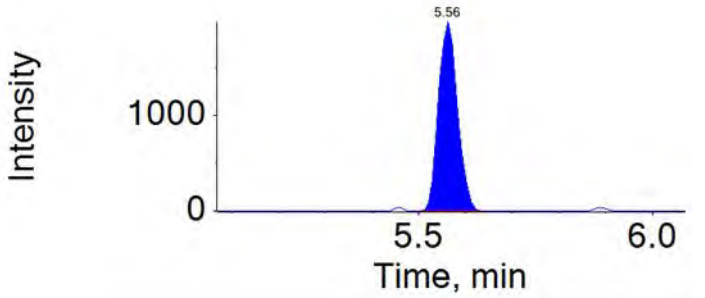
Component: PFDA
Primary Mass: 513.0 / 469.0



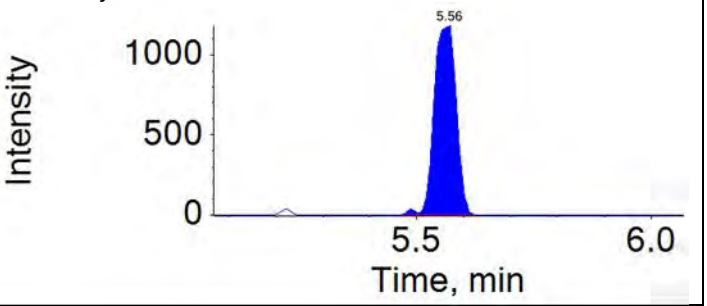
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



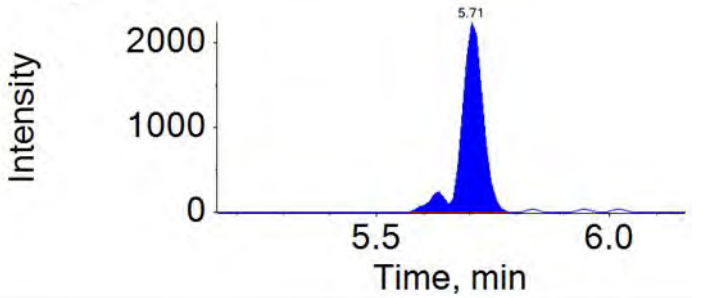
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



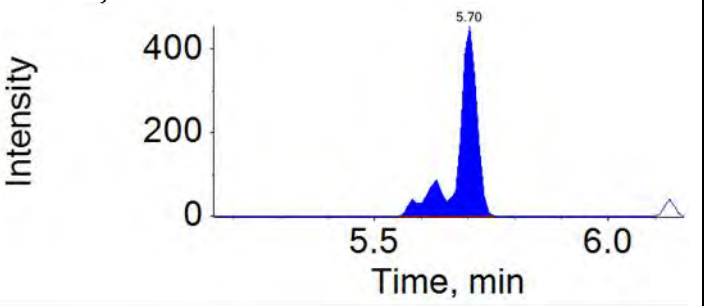
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



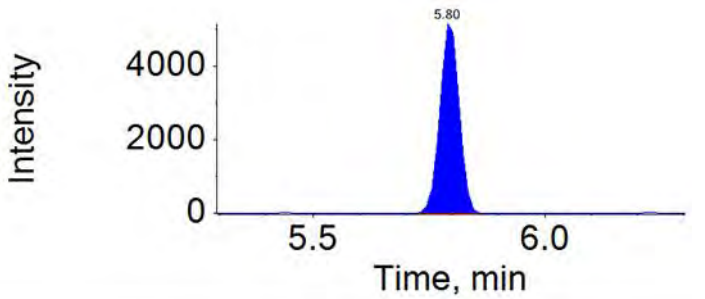
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



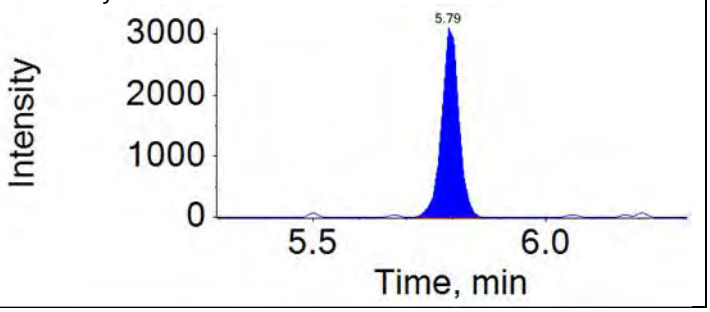
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



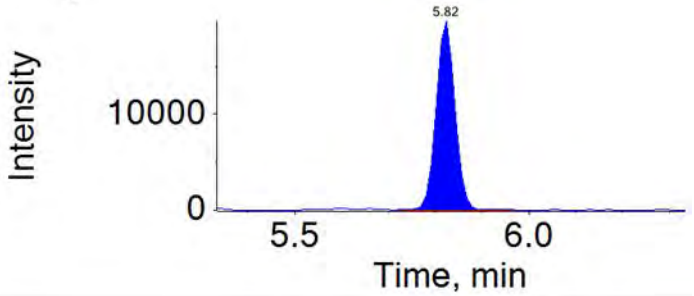
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



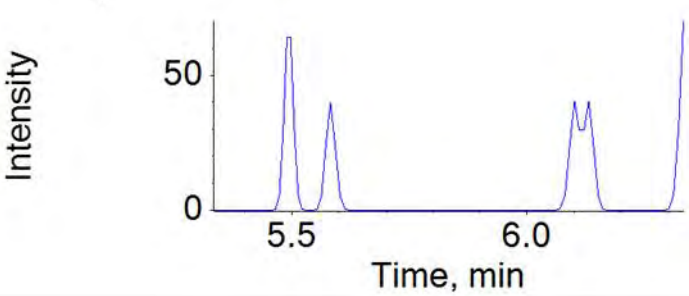
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

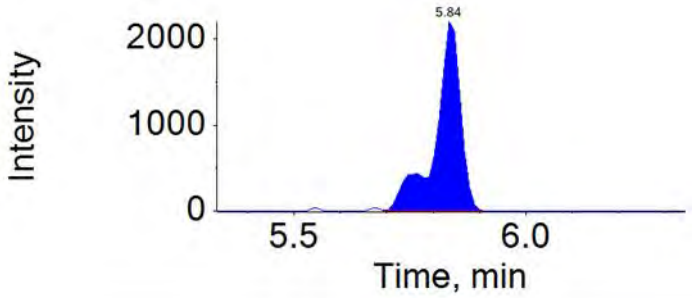
Component: PFUnDA
Primary Mass: 563.0 / 519.0



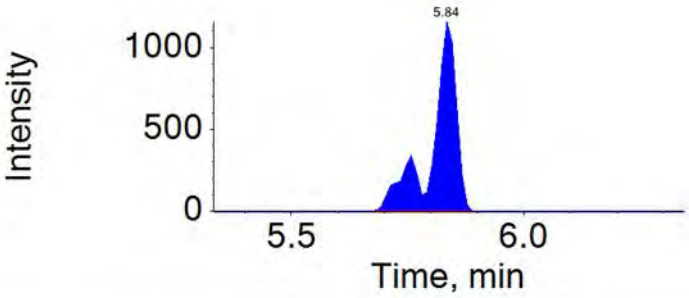
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



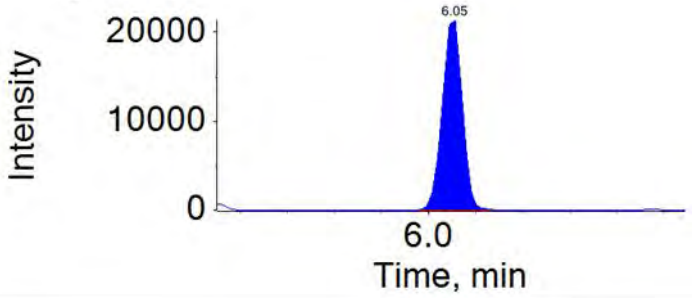
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



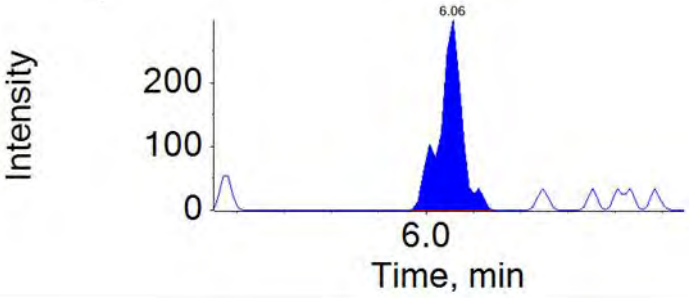
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



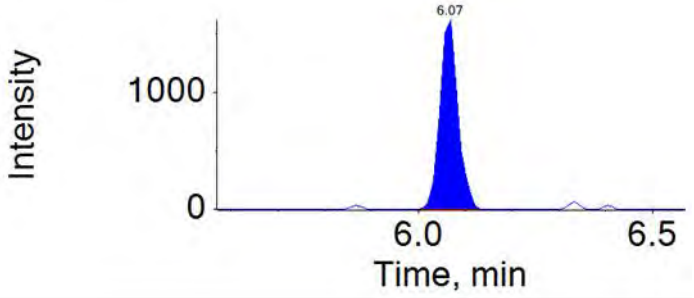
Component: PFDoDA
Primary Mass: 613.0 / 569.0



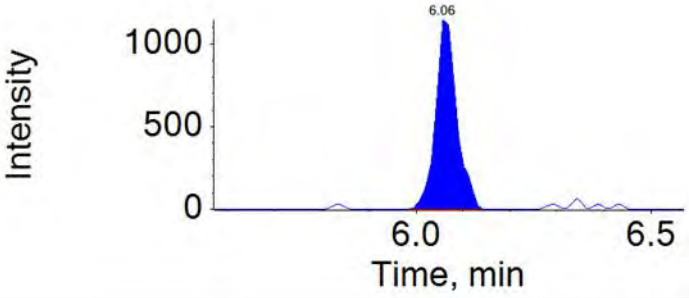
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



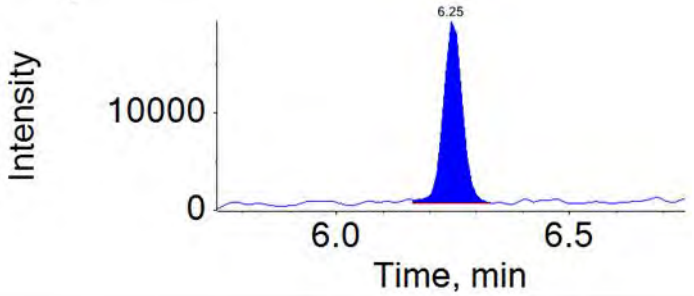
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



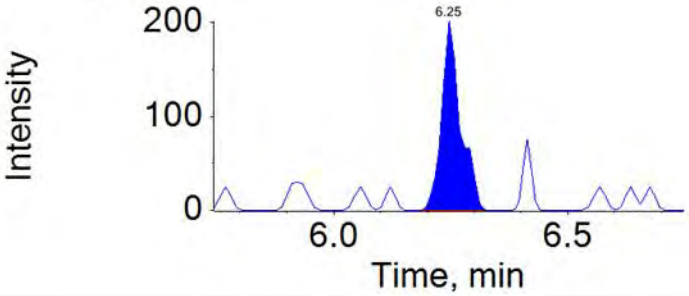
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

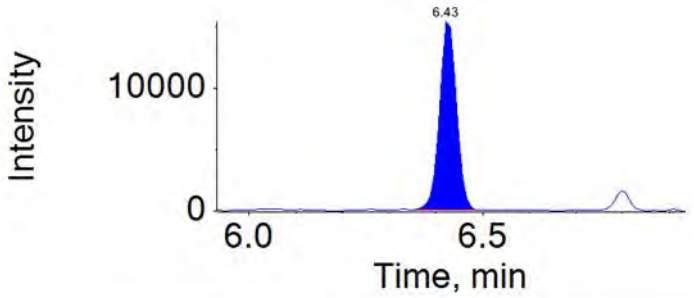
Component: PFTrDA
Primary Mass: 663.0 / 619.0



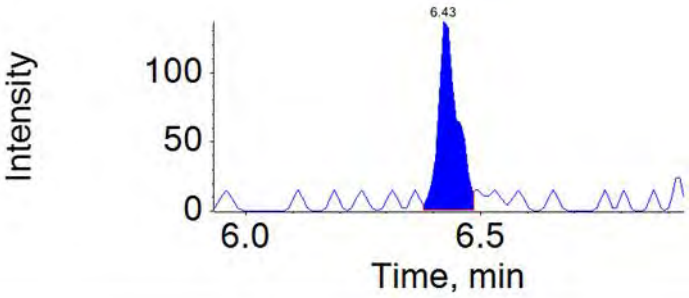
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



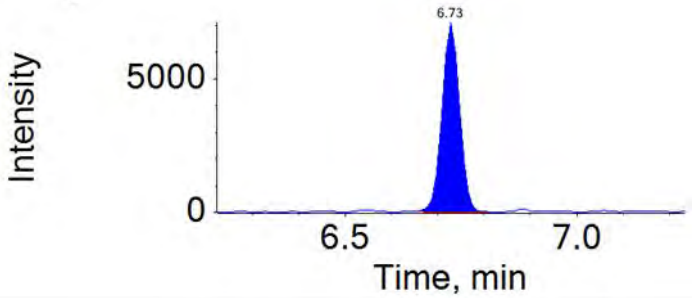
Component: PFTeDA
Primary Mass: 713.0 / 669.0



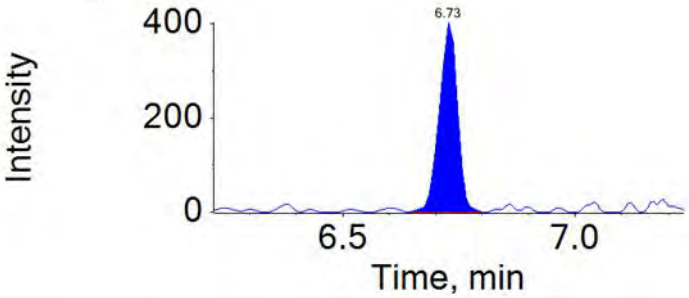
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



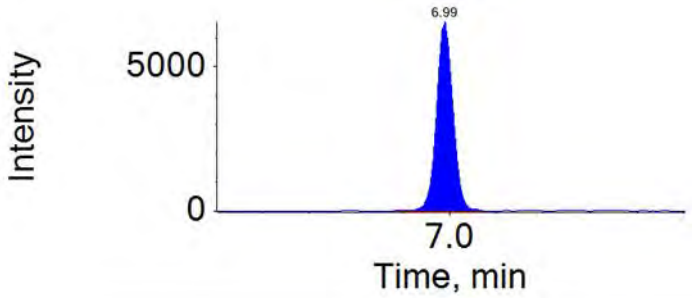
Component: PFHxDA
Primary Mass: 813.0 / 769.0



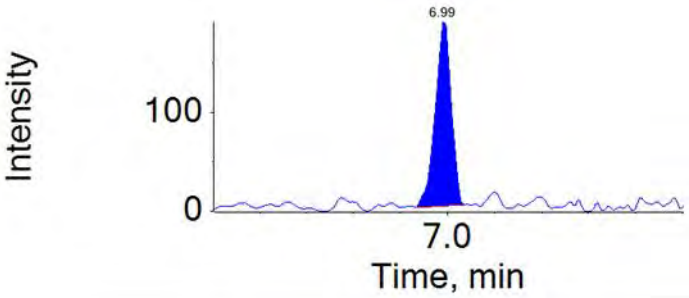
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	INBLK			**Data File:**		18NOV13D-06.wiff
Sample ID:	methanol + labels			**Acquis Date:**		2018-11-13T09:53:05
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	1			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV13DCCV1-4
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N/A			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	712182.6	661126.9	8	50	
13C2-PFOA	5.0	517114.2	466902.6	11	50	
13C4-PFOS	4.8	271947.8	247446.9	10	50	
13C2-PFDA	5.0	309024.7	295381.6	5	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	788556.3	13C3-PFBA	712182.6	1.107	5.000	4.964	99	70-130	
E13C5-PFPeA	789796.7	13C3-PFBA	712182.6	1.109	5.000	4.974	99	70-130	
E13C3-PFBS	465118.9	13C3-PFBA	712182.6	0.653	4.650	4.610	99	70-130	
E13C2-4:2-FTS	56775.7	13C2-PFOA	517114.2	0.110	4.670	4.890	105	70-130	
E13C5-PFHxA	691160.9	13C2-PFOA	517114.2	1.337	5.000	4.828	97	70-130	
E13C3-PFHxS	343877.9	13C2-PFOA	517114.2	0.665	4.730	4.563	96	70-130	
E13C4-PFHpA	573094.5	13C2-PFOA	517114.2	1.108	5.000	4.993	100	70-130	
E13C2-6:2-FTS	40405.9	13C2-PFOA	517114.2	0.078	4.750	5.228	110	70-130	
E13C8-PFOA	989330.5	13C2-PFOA	517114.2	1.913	5.000	5.271	105	70-130	
E13C8-PFOS	288721.3	13C4-PFOS	271947.8	1.062	4.780	4.704	98	70-130	
E13C9-PFNA	496672.5	13C4-PFOS	271947.8	1.826	5.000	5.092	102	70-130	
E13C6-PFDA	675627.9	13C2-PFDA	309024.7	2.186	5.000	5.102	102	70-130	
E13C2-8:2-FTS	30302.5	13C2-PFDA	309024.7	0.098	4.790	4.890	102	70-130	
E13C8-PFOSA	662561.8	13C2-PFDA	309024.7	2.144	5.000	4.753	95	70-130	
Ed3-NMeFOSAA	77164.8	13C2-PFDA	309024.7	0.250	5.000	4.507	90	70-130	
E13C7-PFUnDA	282164.2	13C2-PFDA	309024.7	0.913	5.000	5.301	106	70-130	
Ed5-NEtFOSAA	63151.8	13C2-PFDA	309024.7	0.204	5.000	4.323	86	70-130	
E13C2-PFDoDA	647992.1	13C2-PFDA	309024.7	2.097	5.000	5.444	109	70-130	
Ed7-NMePFOSAE	342687.6	13C2-PFDA	309024.7	1.109	5.000	4.799	96	70-130	
Ed3-NMePFOSA	79550.6	13C2-PFDA	309024.7	0.257	5.000	4.677	94	70-130	
Ed9-NEtPFOSAE	282226.0	13C2-PFDA	309024.7	0.913	5.000	4.750	95	70-130	
Ed5-NEtPFOSA	62508.0	13C2-PFDA	309024.7	0.202	5.000	4.745	95	70-130	
E13C2-PFTeDA	434458.5	13C2-PFDA	309024.7	1.406	5.000	4.936	99	70-130	

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

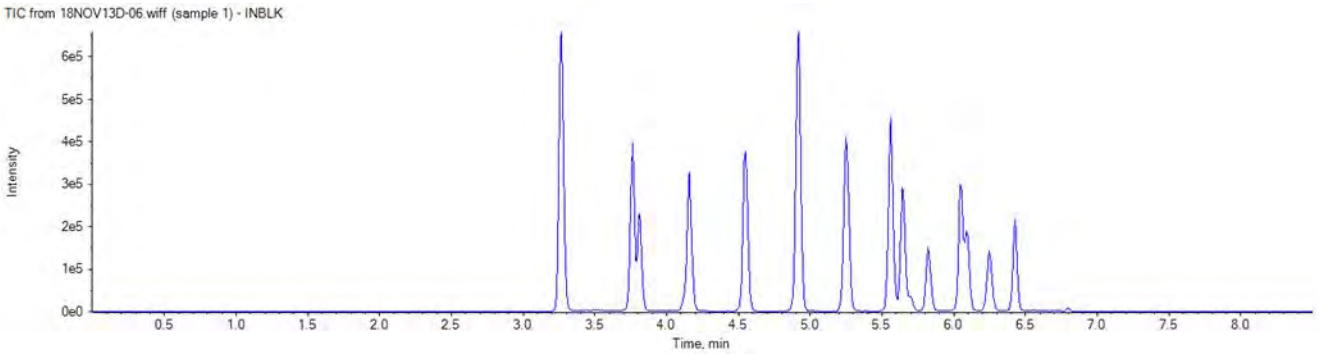
Analyte Quantitation Peak Table

Sample Name: INBLK **Instrument Name:** LM27631 **File Name:** 18NOV13D-06.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	N/A	N/A	N/A		A	13C4-PFBA	3.26	788556.3	N/A	
PFPeA	N/A	N/A	N/A		A	13C5-PFPeA	3.76	789796.7	N/A	
PFBS	N/A	N/A	N/A		A	13C3-PFBS	3.81	465118.9	N/A	
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.12	56775.7	N/A	
PFHxA	N/A	N/A	N/A		A	13C5-PFHxA	4.16	691160.9	N/A	
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.81	465118.9	N/A	
PFHpA	N/A	N/A	N/A		A	13C4-PFHpA	4.55	573094.5	N/A	
PFHxS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	343877.9	N/A	
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.91	40405.9	N/A	
PFHpS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	343877.9	N/A	
PFOA	N/A	N/A	N/A		A	13C8-PFOA	4.92	989330.5	N/A	
PFOS	N/A	N/A	N/A		A	13C8-PFOS	5.24	288721.3	N/A	
PFNA	N/A	N/A	N/A		A	13C9-PFNA	5.26	496672.5	N/A	
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.24	288721.3	N/A	
PFDA	N/A	N/A	N/A		A	13C6-PFDA	5.56	675627.9	N/A	
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.56	30302.5	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.65	662561.8	N/A	
NMeFOSAA	N/A	N/A	N/A		A	d3-NMeFOSAA	5.70	77164.8	N/A	
PFDS	N/A	N/A	N/A		A	13C8-PFOS	5.24	288721.3	N/A	
PFUnDA	N/A	N/A	N/A		A	13C7-PFUnDA	5.82	282164.2	N/A	
NEtFOSAA	N/A	N/A	N/A		A	d5-NEtFOSAA	5.83	63151.8	N/A	
PFDoDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	647992.1	N/A	
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.56	30302.5	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.09	342687.6	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.10	79550.6	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.24	288721.3	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.25	282226.0	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.26	62508.0	N/A	
PFTrDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	647992.1	N/A	
PFTeDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	434458.5	N/A	
PFHxDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	434458.5	N/A	
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	434458.5	N/A	

Total Ion Chromatogram

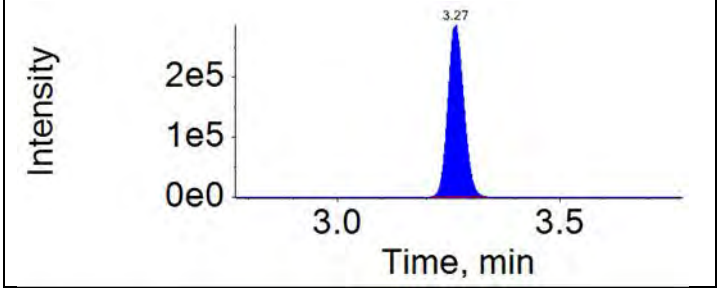


APPROVED
By JPT at 4:33 pm, 11/13/18

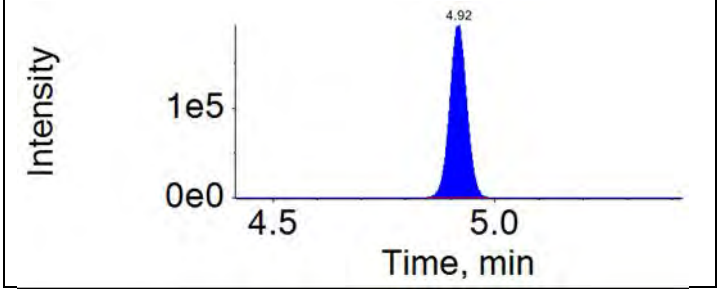
REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

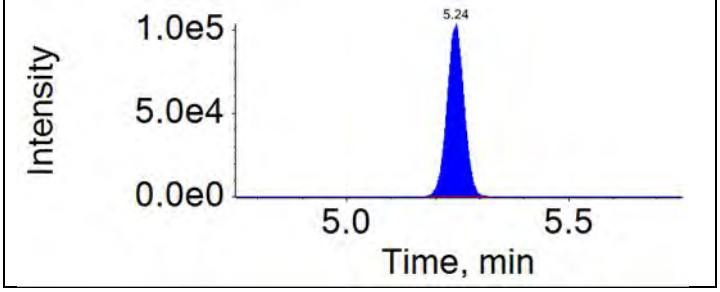
Injection Standard: 13C3-PFBA
216.0 / 172.0



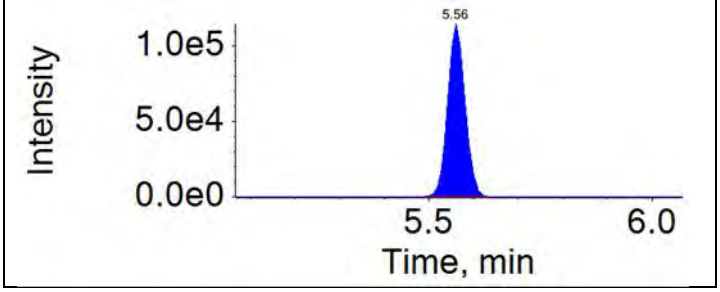
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



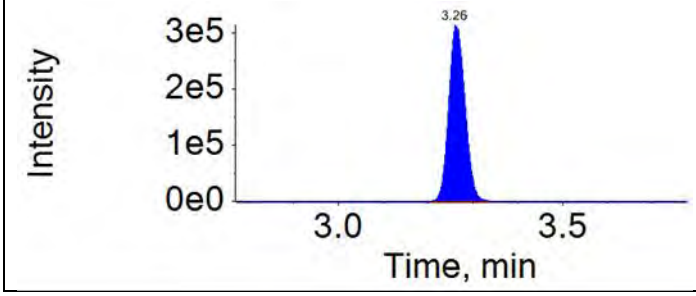
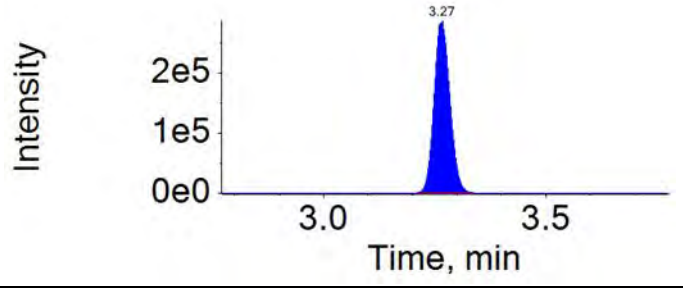
Injection Standard: 13C2-PFDA
515.0 / 470.0

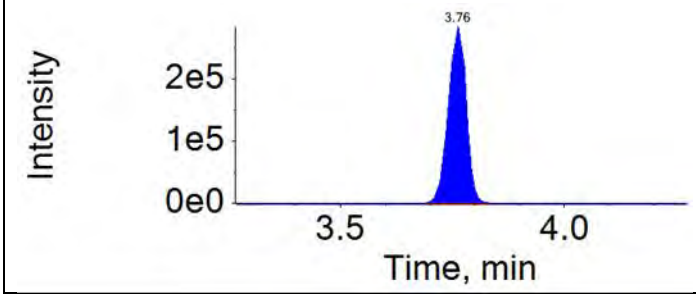
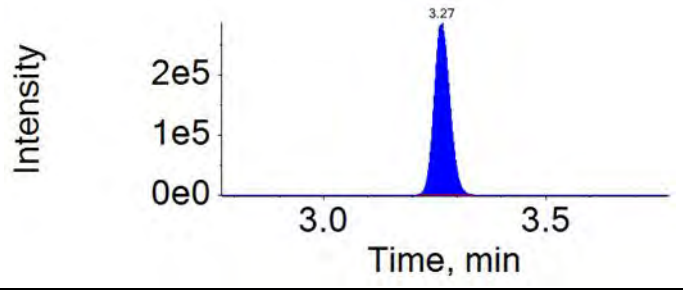


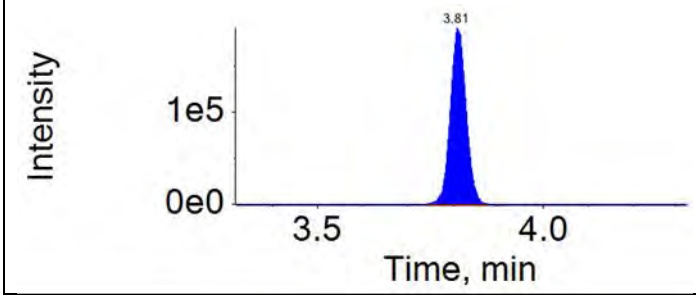
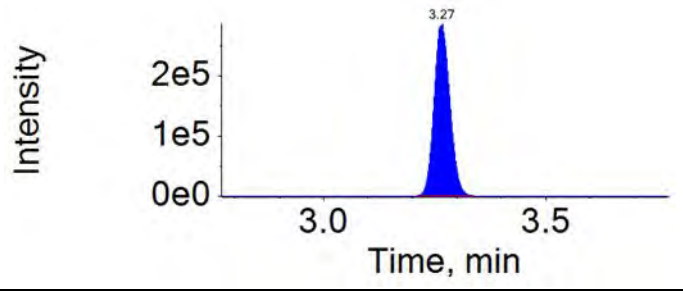
APPROVED
By JPT at 4:33 pm, 11/13/18

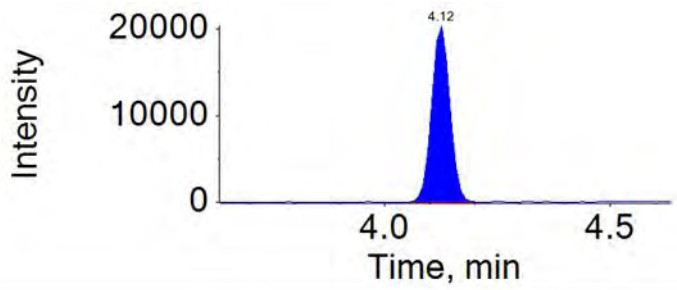
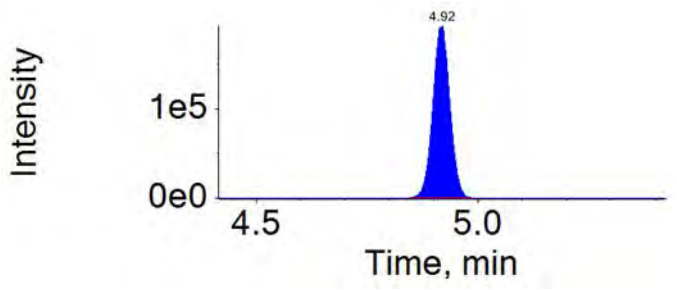
REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

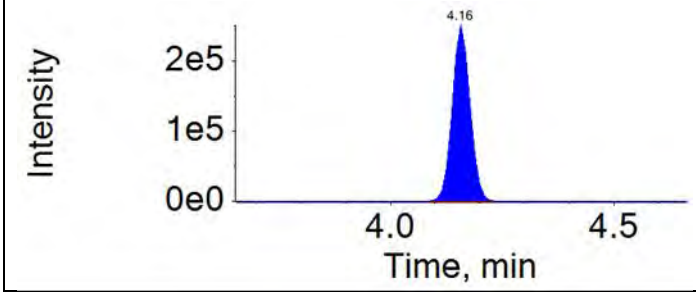
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

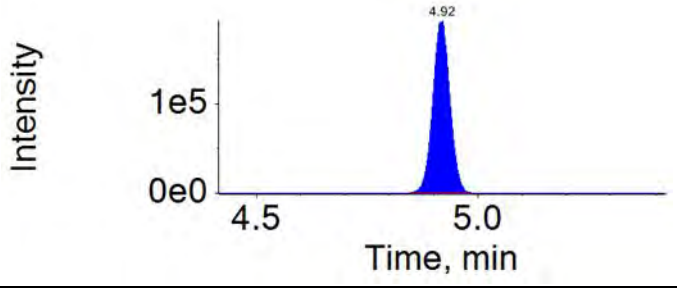
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

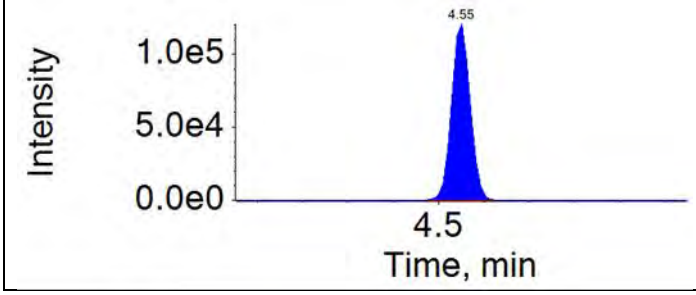
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

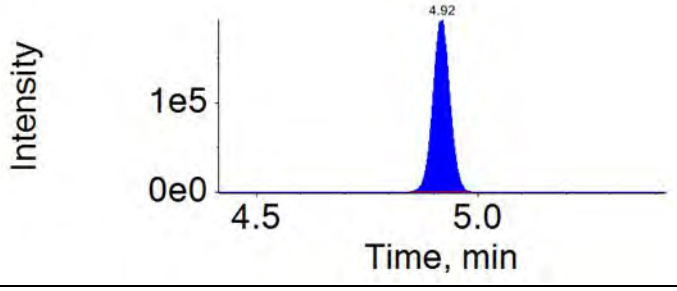
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



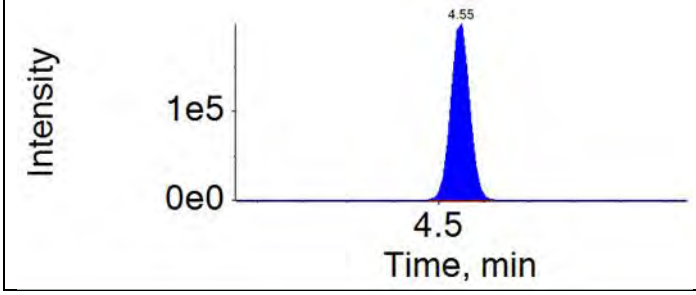


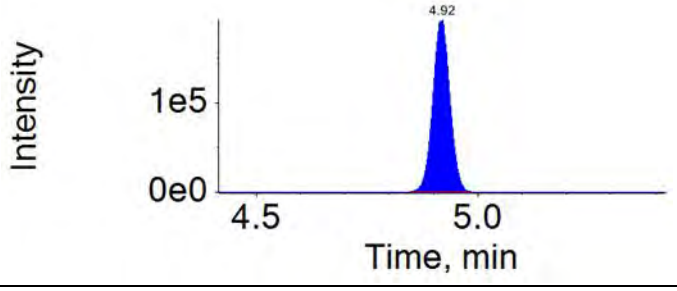
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



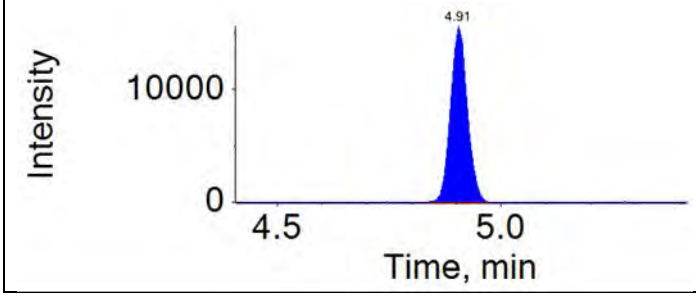


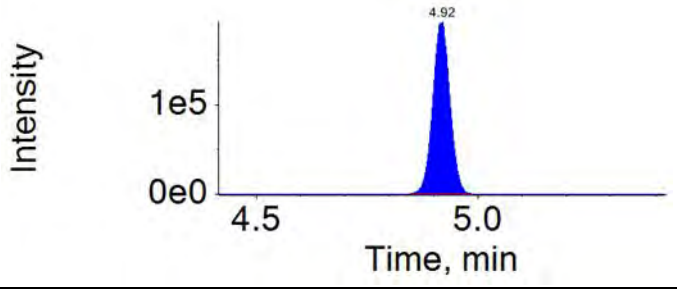
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0



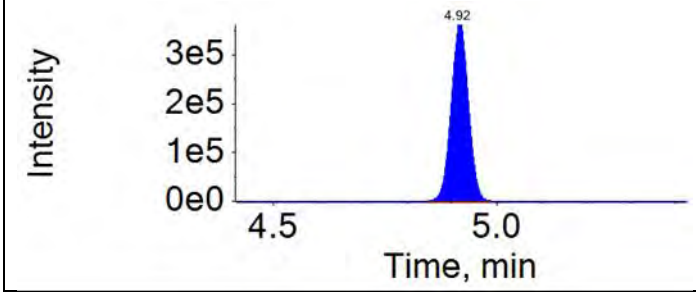
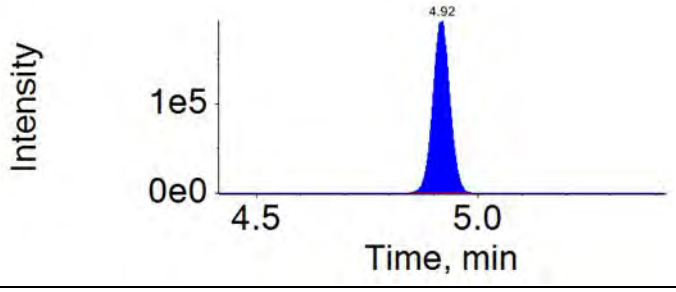


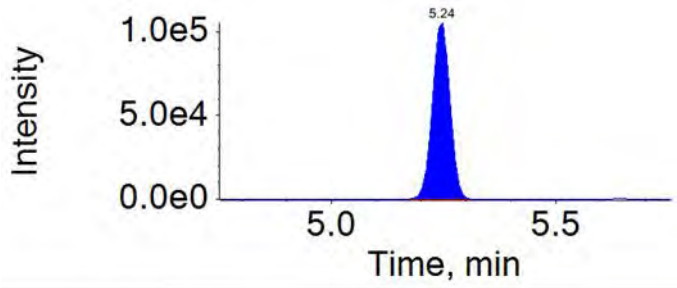
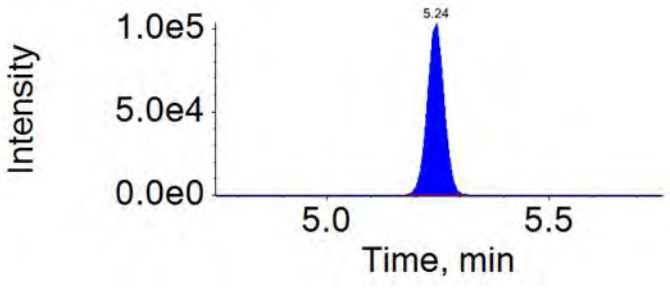
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

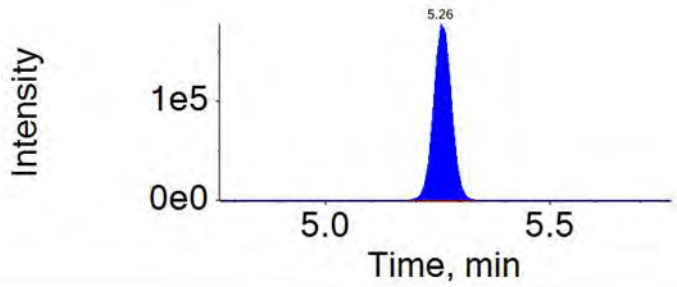
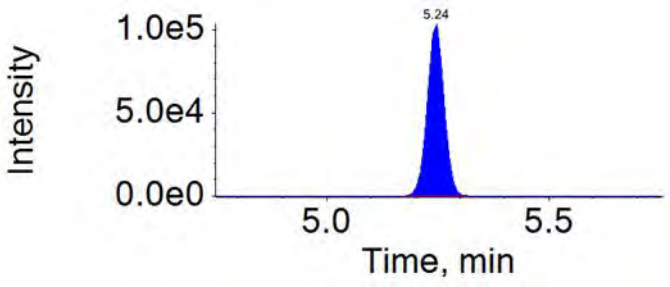


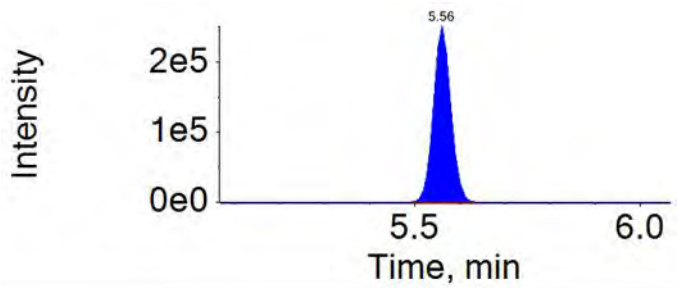
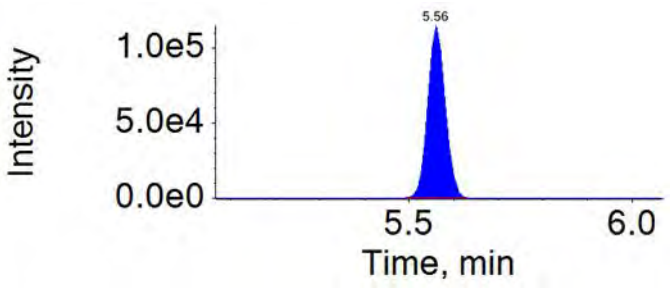


ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

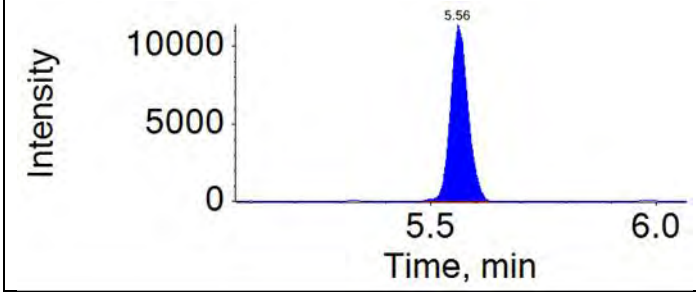
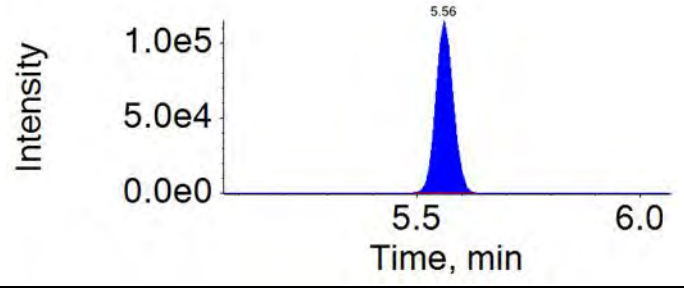
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

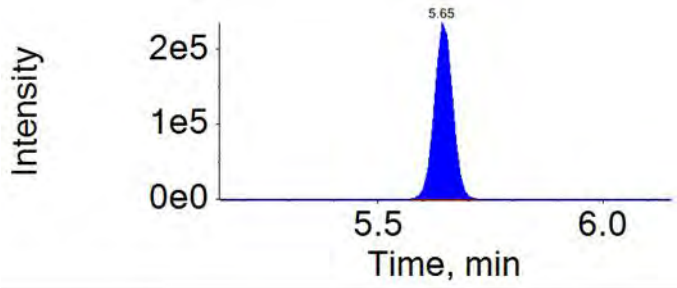
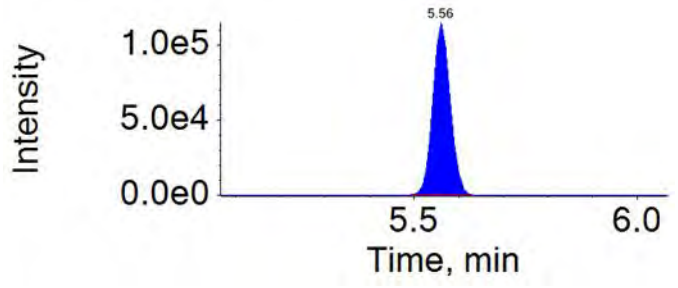
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

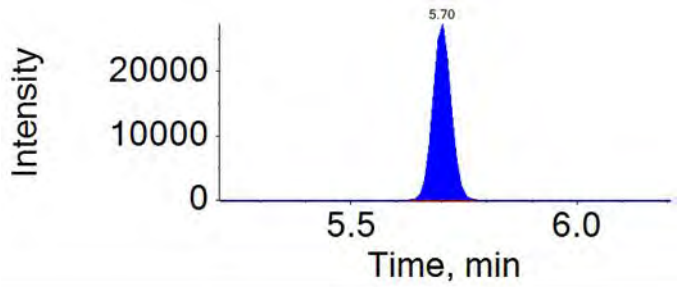
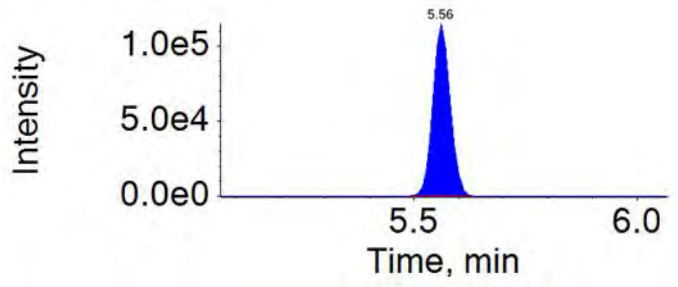
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

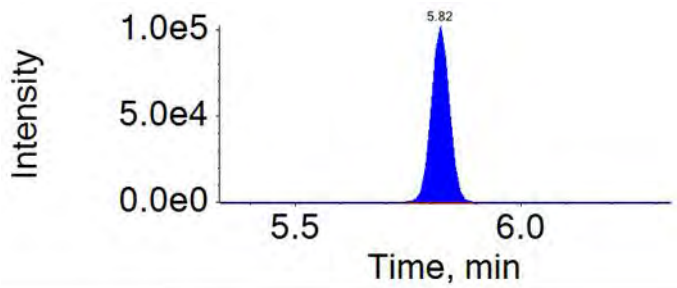
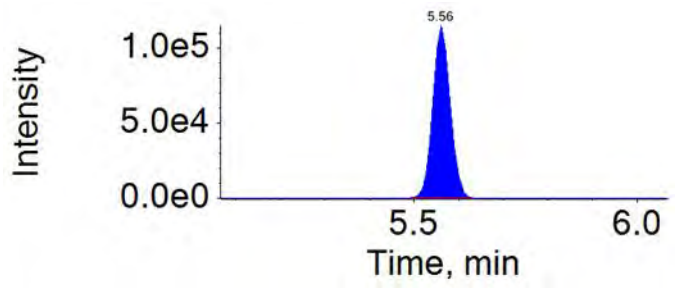
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

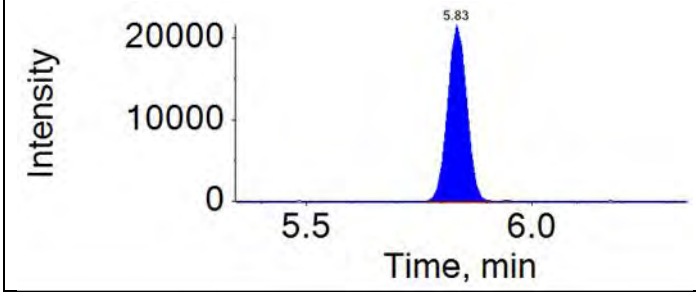
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

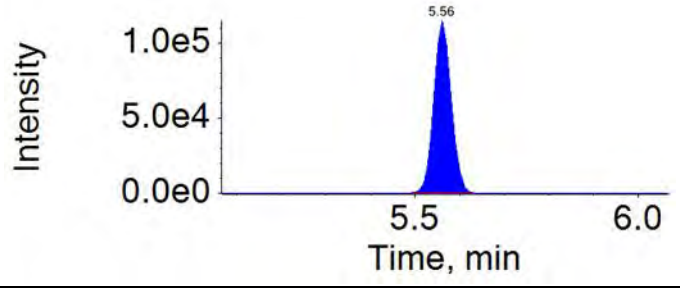
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

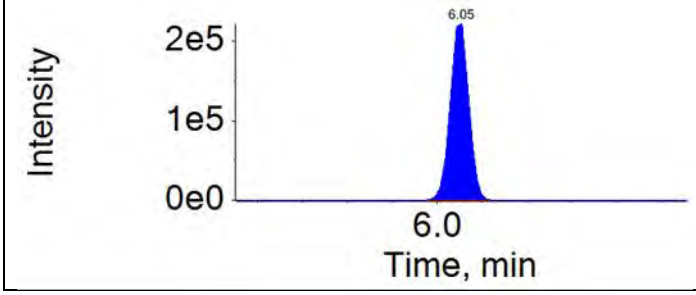
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

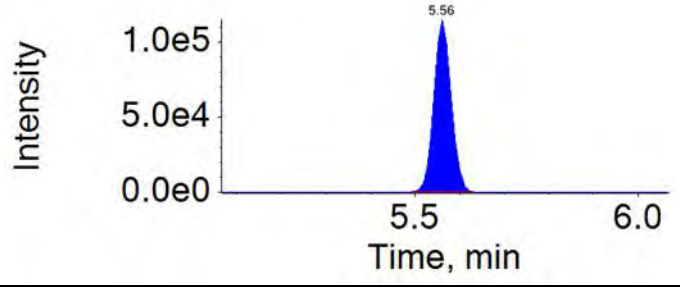
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



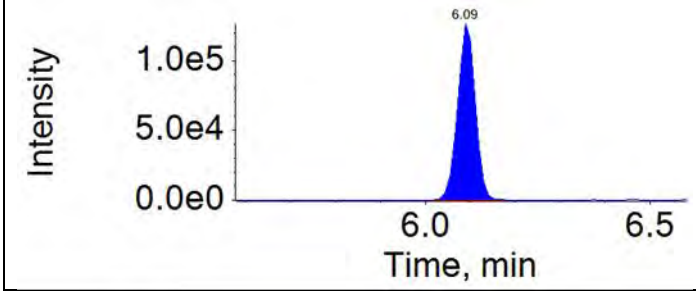


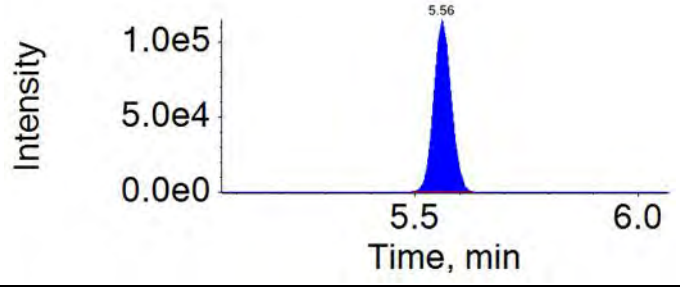
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



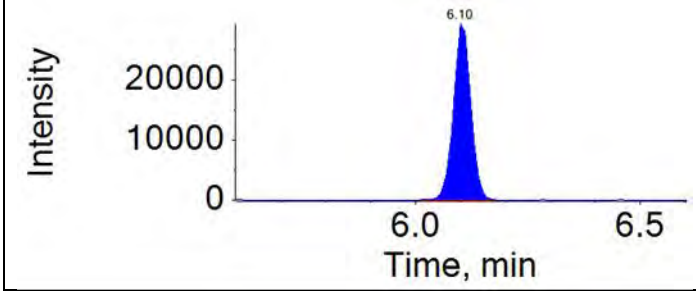


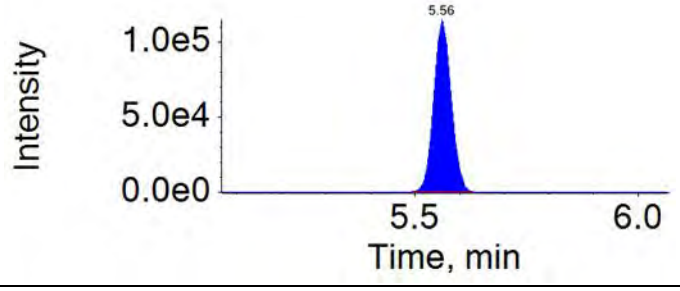
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



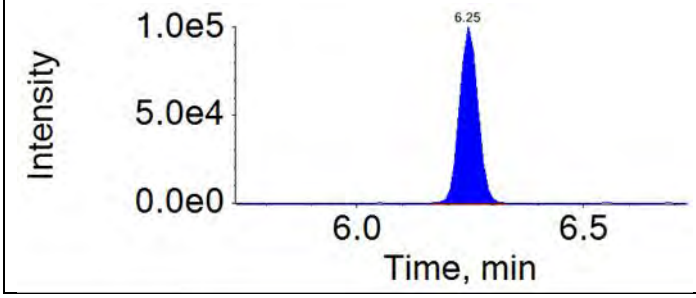


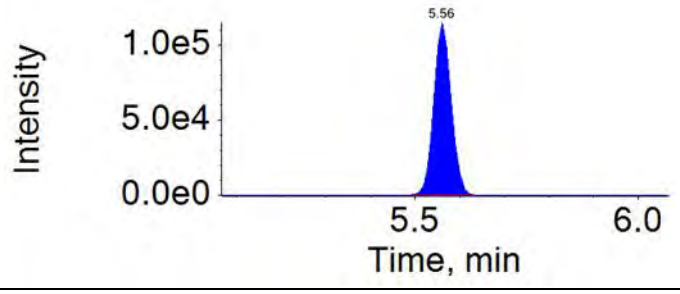
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

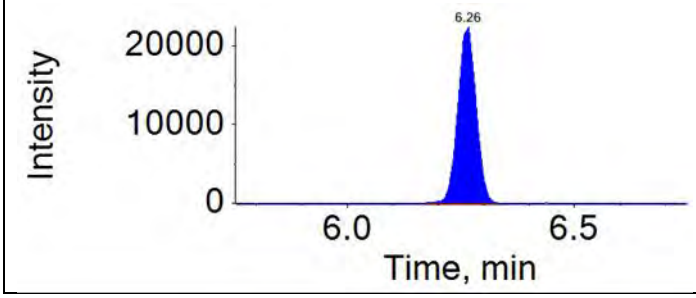
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

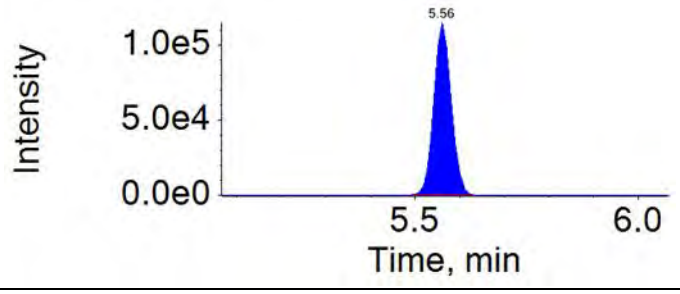
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



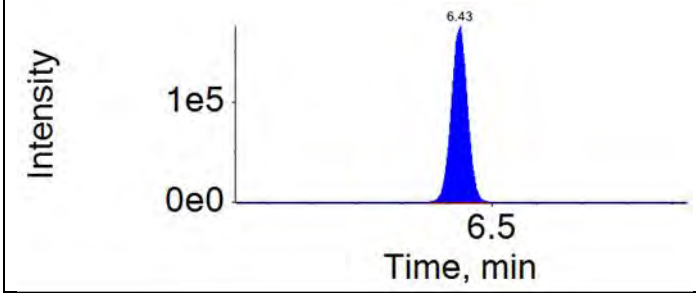


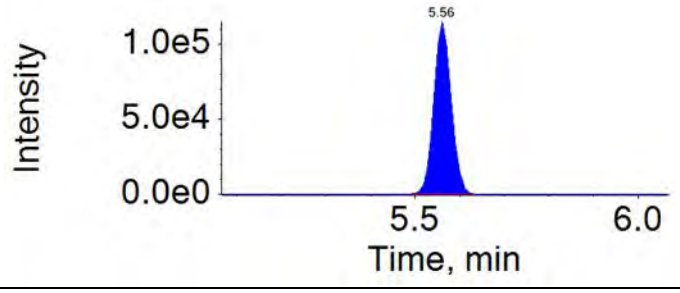
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



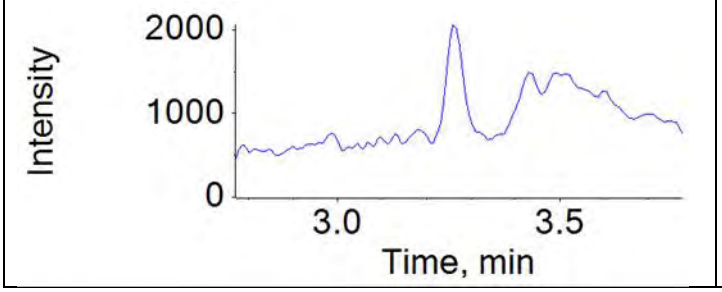


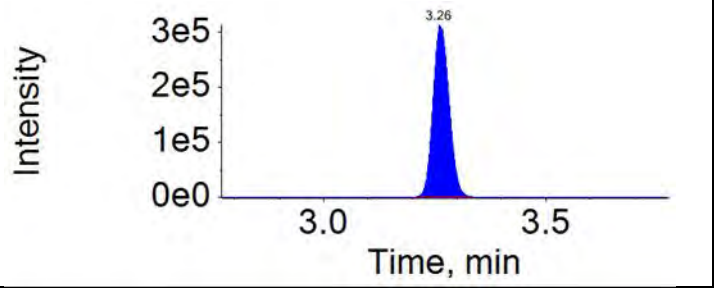
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

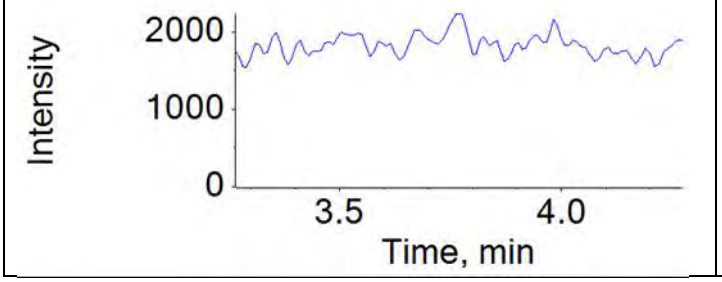
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

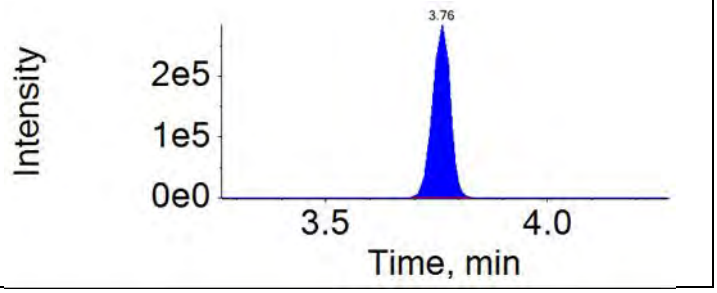
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



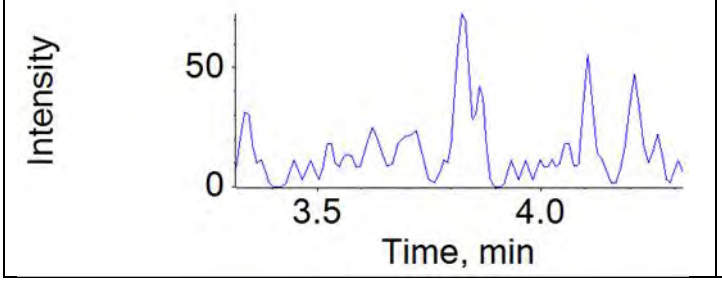


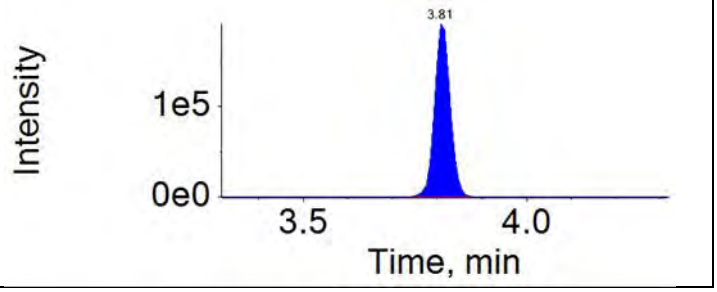
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



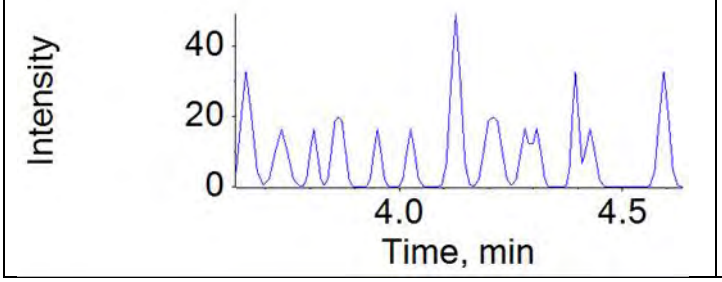


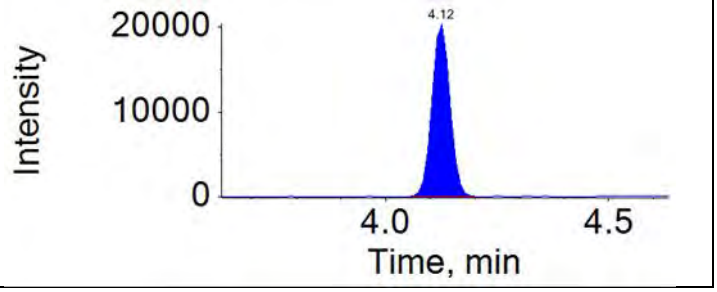
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



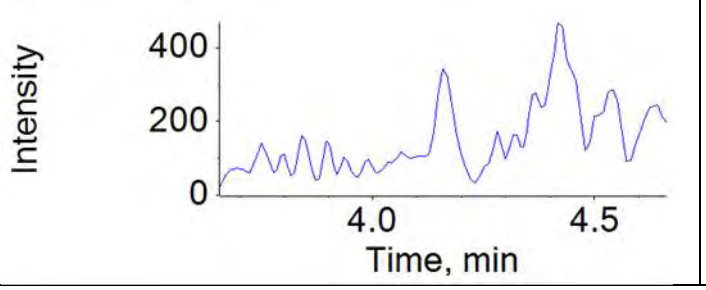


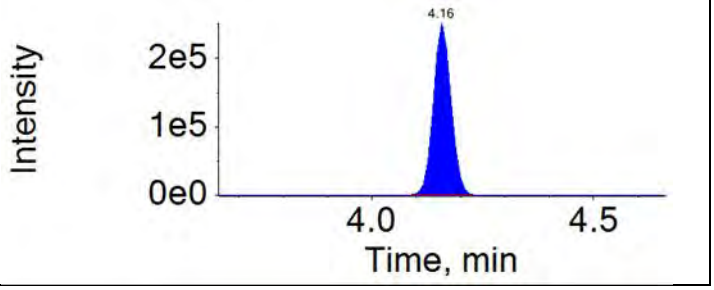
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

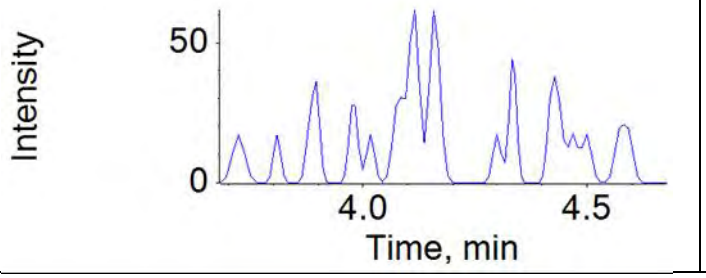
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

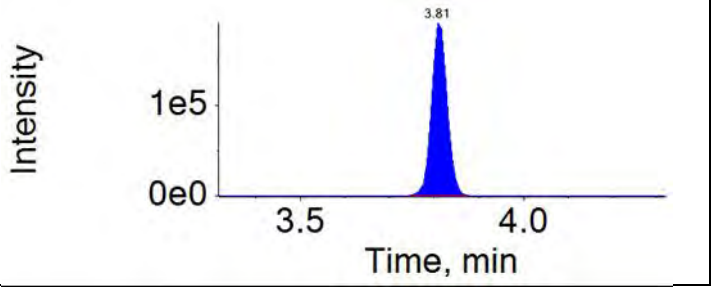
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



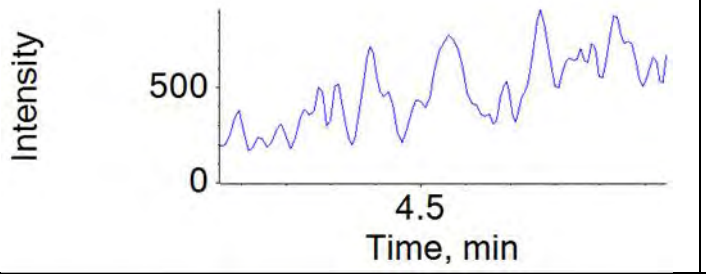


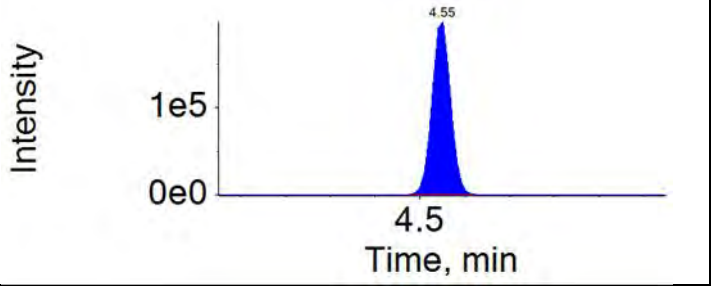
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



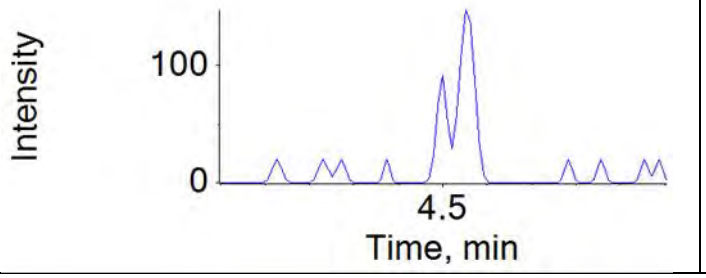


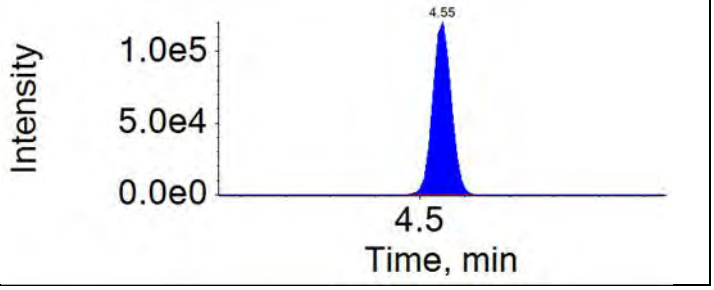
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



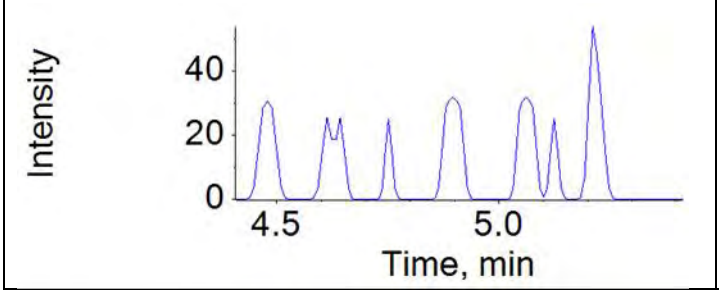


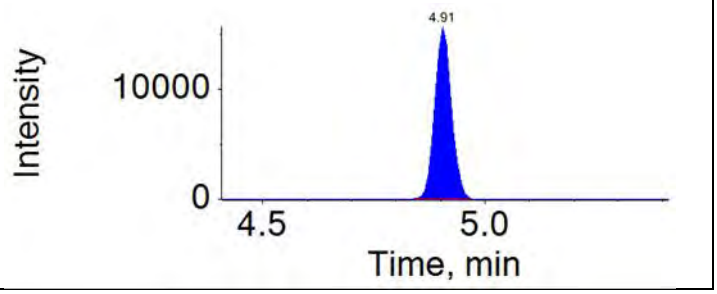
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

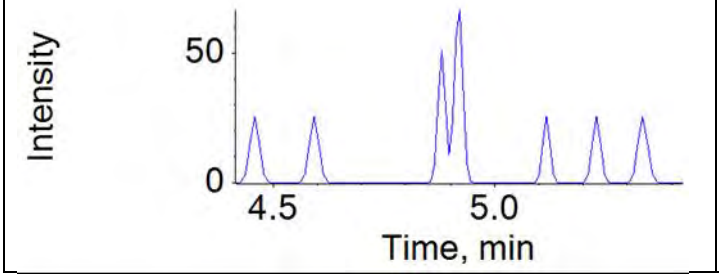
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QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

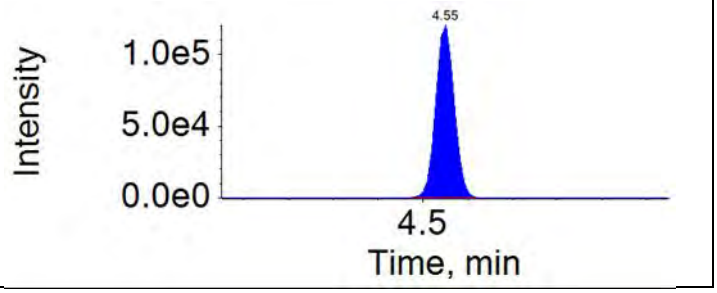
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



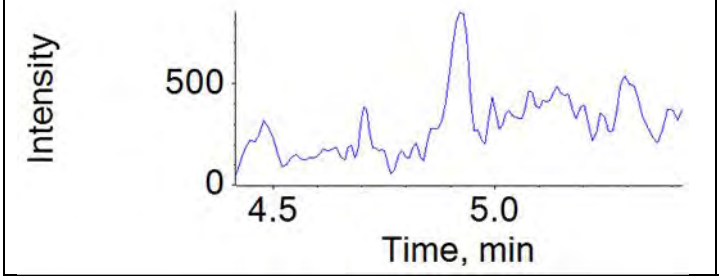


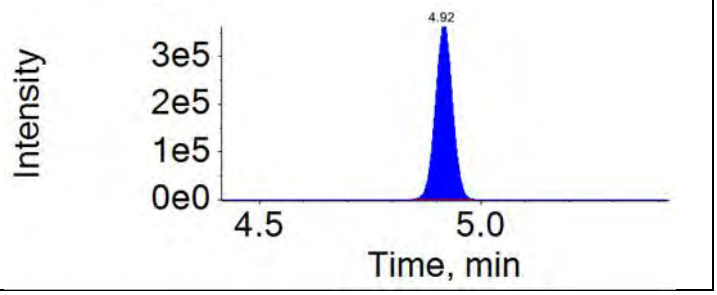
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



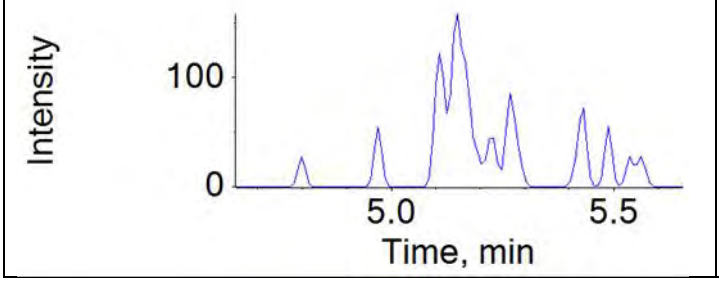


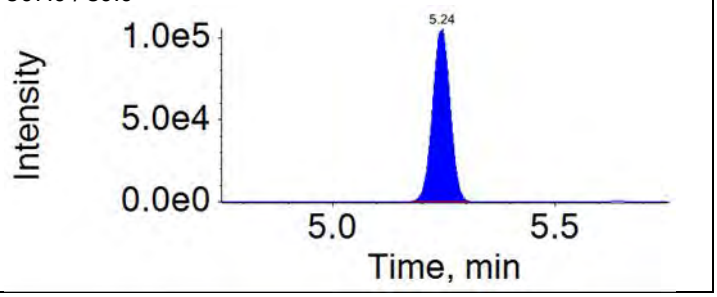
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



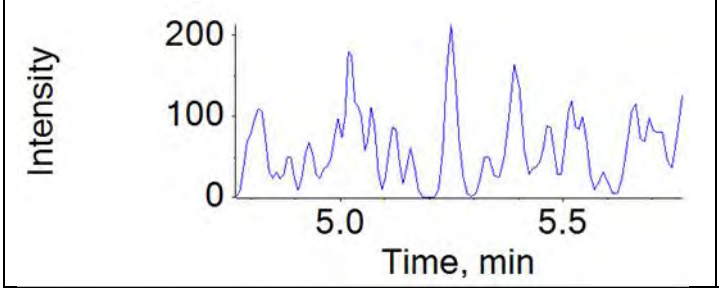


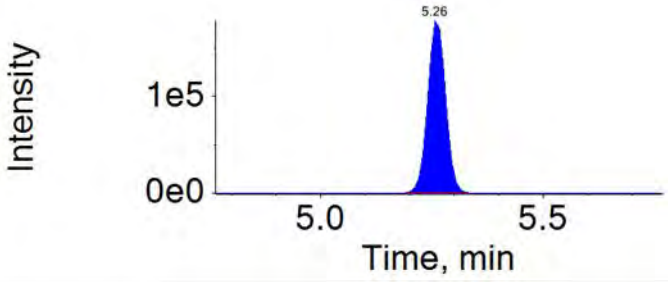
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

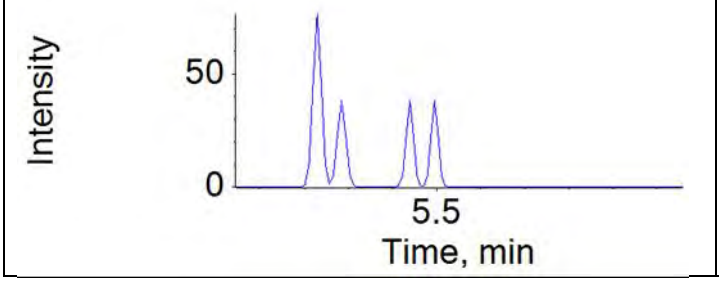
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

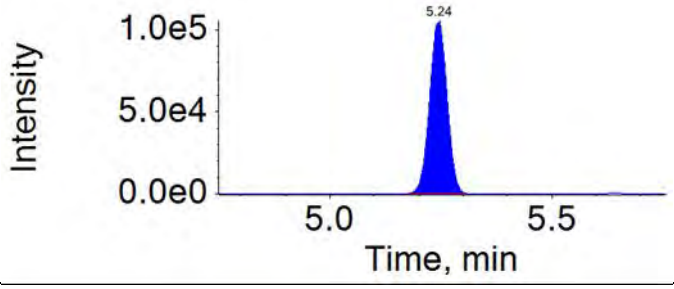
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



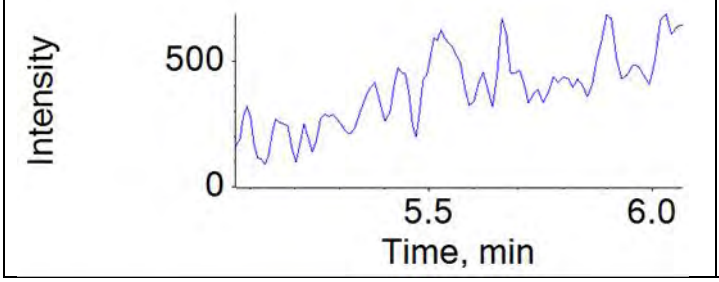


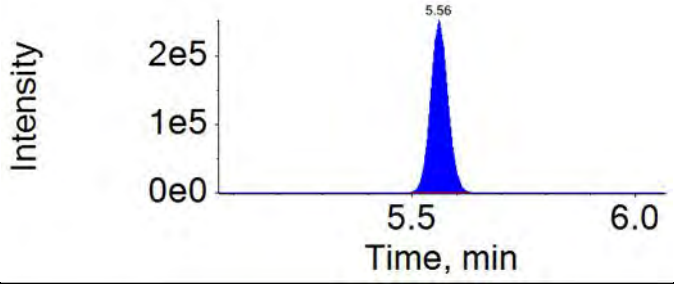
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



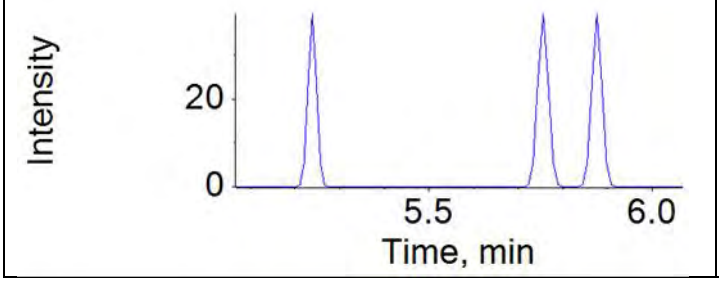


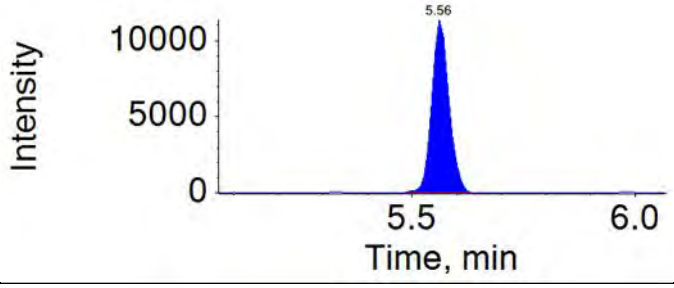
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





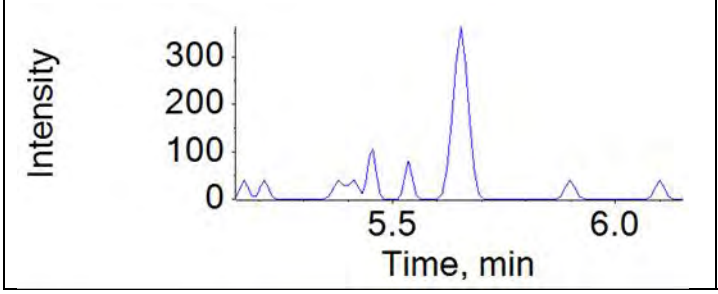
Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0

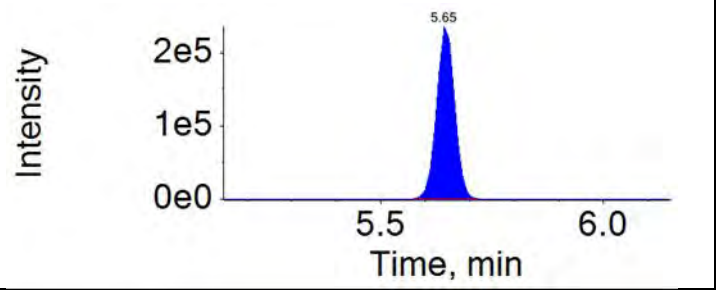




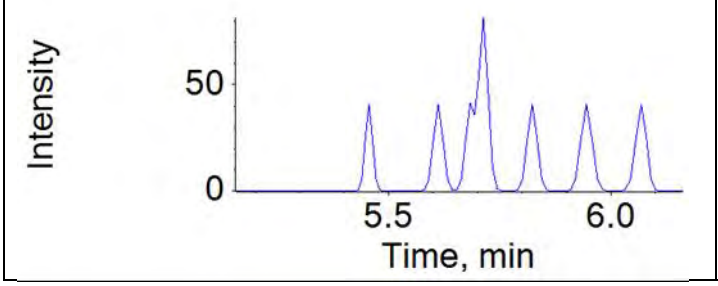
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

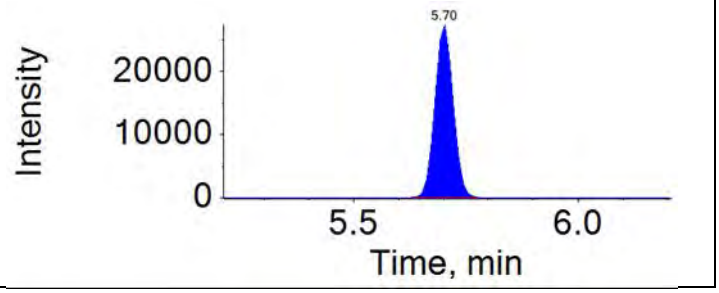
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



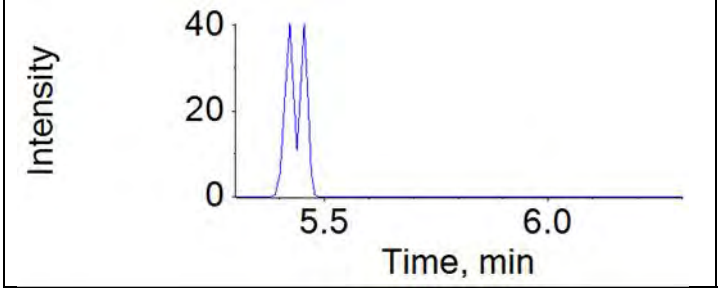


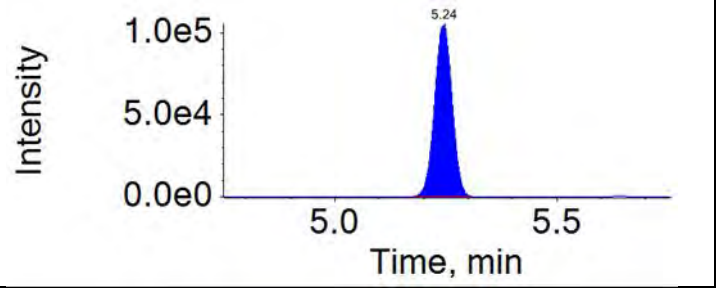
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



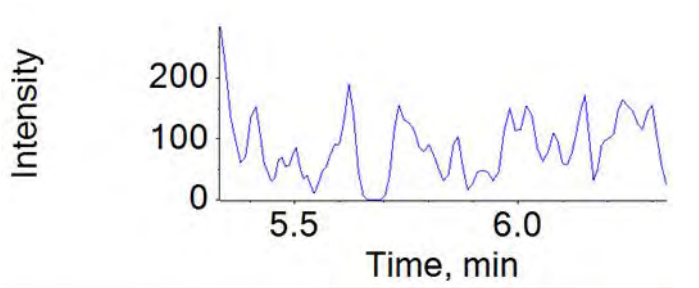


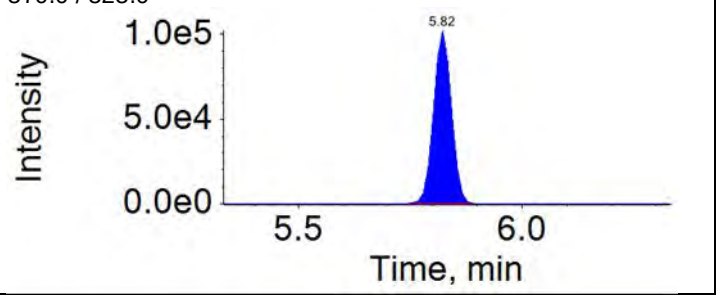
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



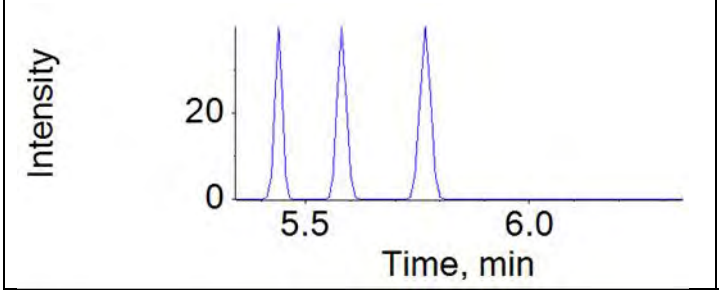


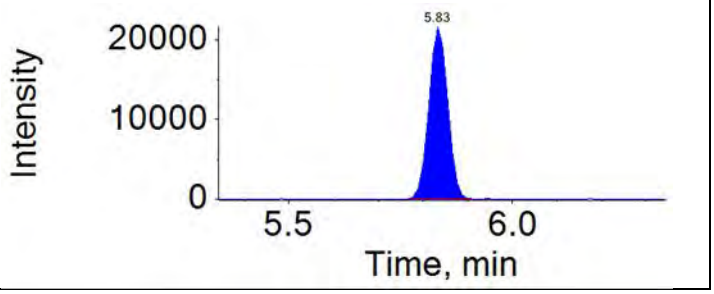
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

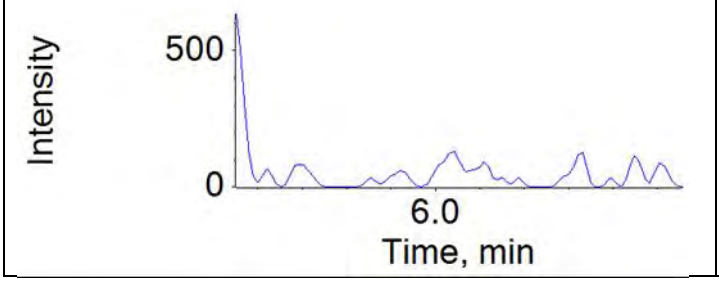
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

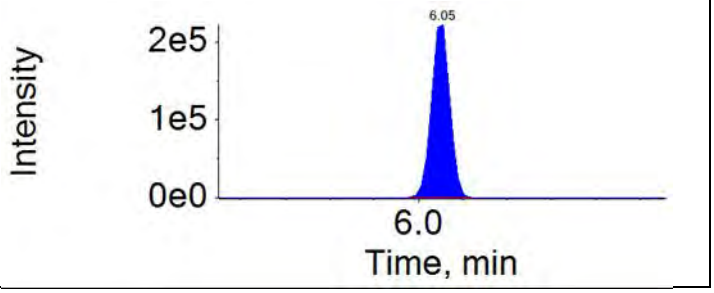
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



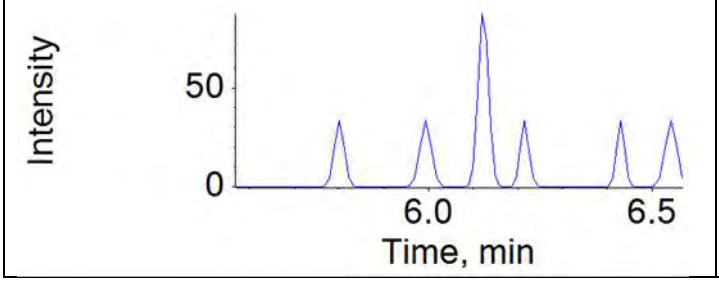


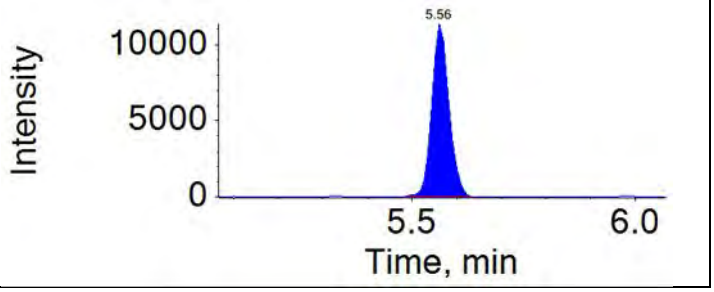
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



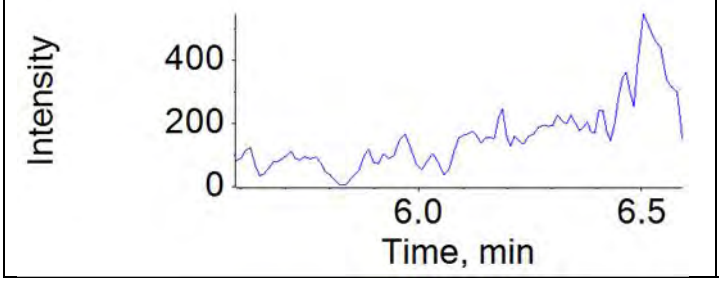


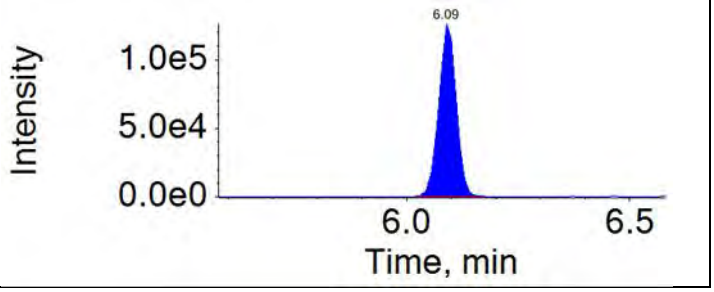
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



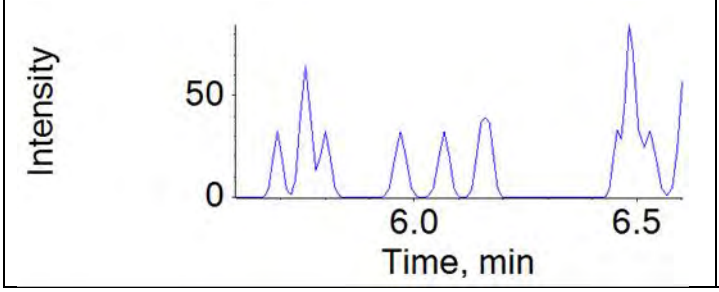


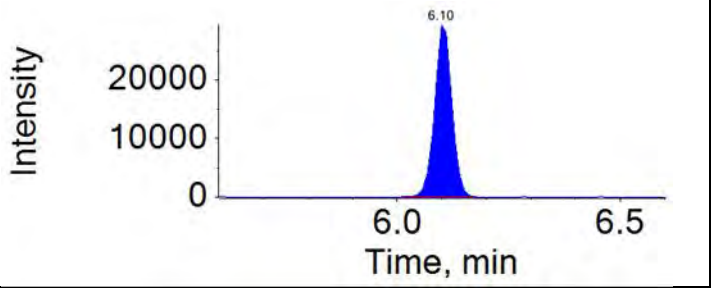
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

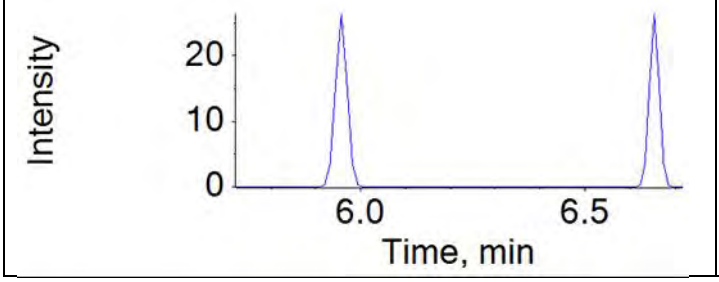
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

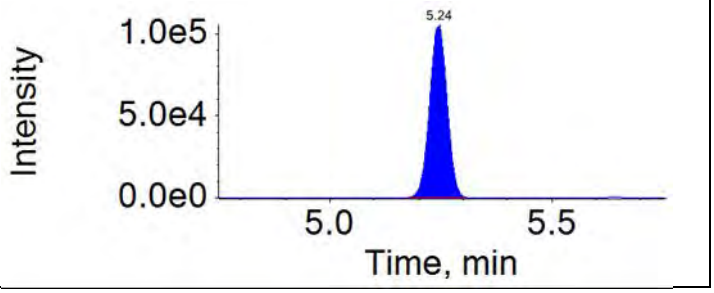
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



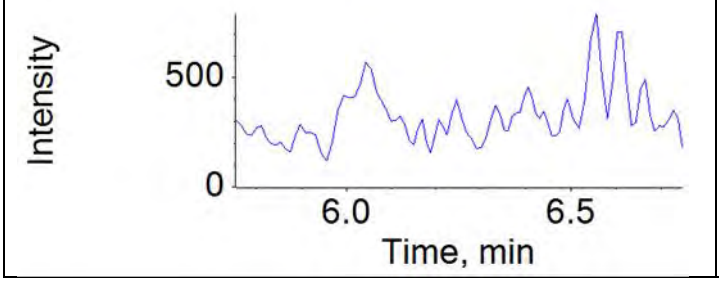


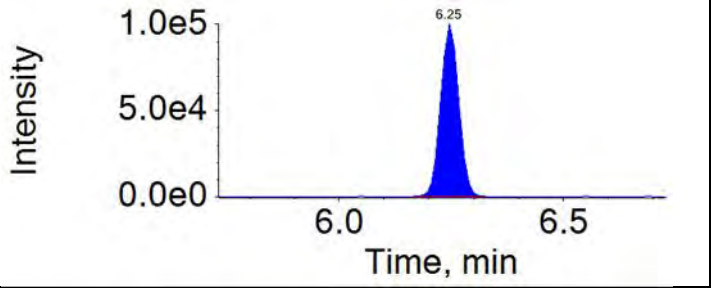
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



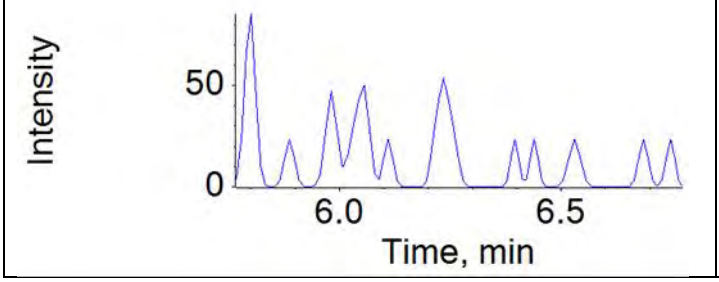


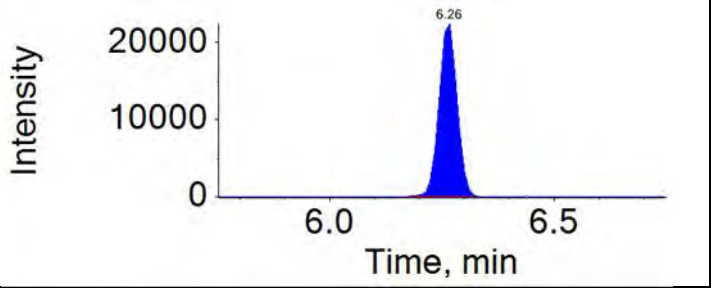
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





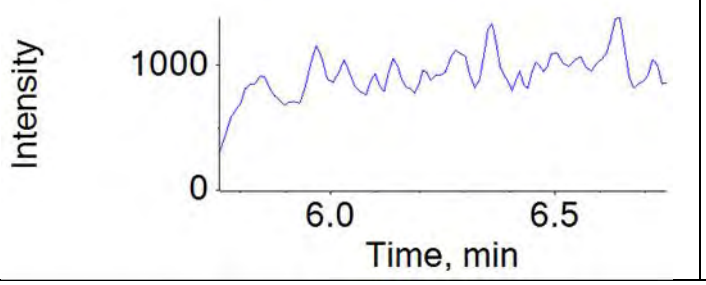
Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

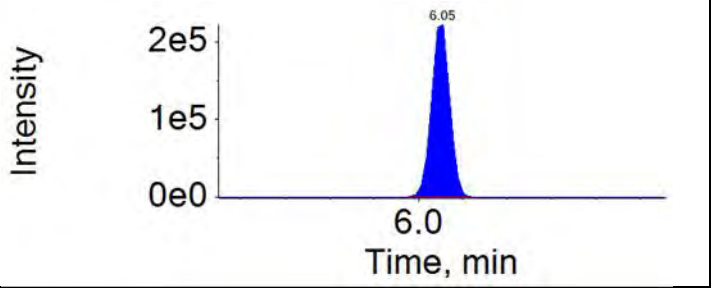




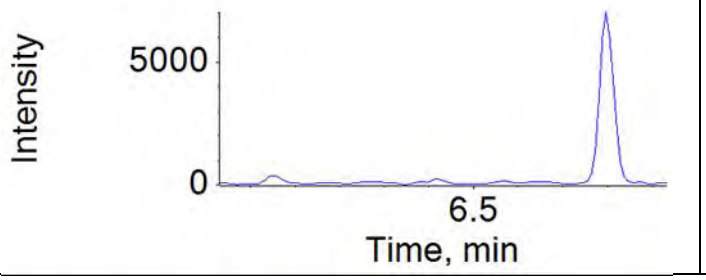
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

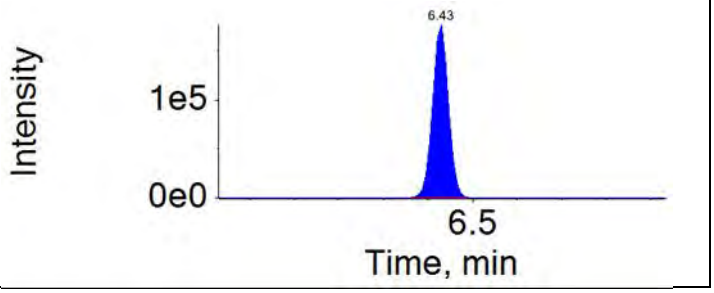
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



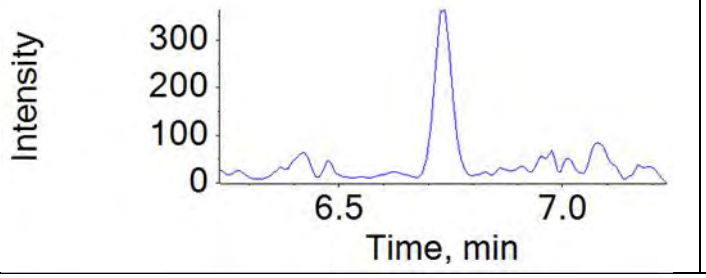


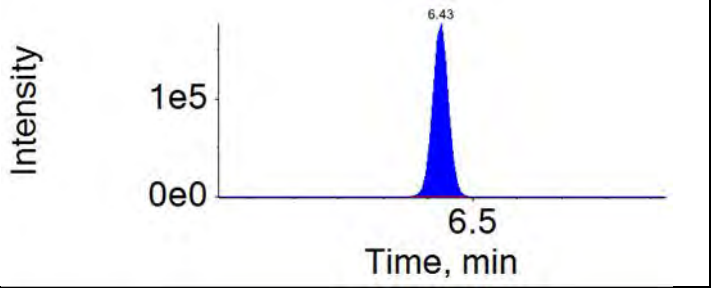
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



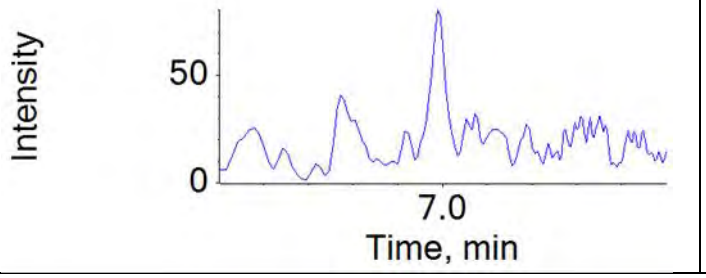


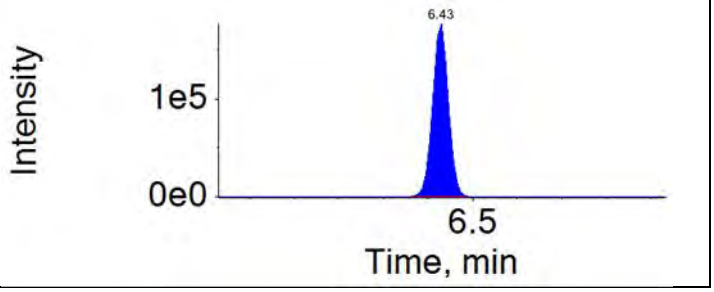
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0





APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

Ion Ratio Report

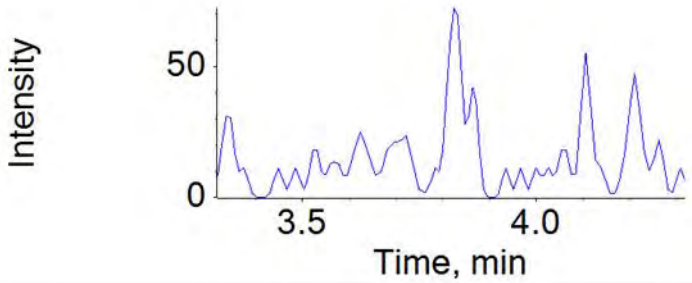
Sample Name: INBLK **Instrument Name:** LM27631 **File Name:** 18NOV13D-06.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	N/A	N/A	N/A	A	N/A	N/A			
PFBS_2	N/A	N/A	N/A	A	N/A	N/A		50	
4:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
4:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFHxA	N/A	N/A	N/A	A	N/A	N/A			
PFHxA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFPeS	N/A	N/A	N/A	A	N/A	N/A			
PFPeS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpA	N/A	N/A	N/A	A	N/A	N/A			
PFHpA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxS	N/A	N/A	N/A	A	N/A	N/A			
PFHxS_2	N/A	N/A	N/A	A	N/A	N/A		50	
6:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
6:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFHpS	N/A	N/A	N/A	A	N/A	N/A			
PFHpS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOA	N/A	N/A	N/A	A	N/A	N/A			
PFOA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOS	N/A	N/A	N/A	A	N/A	N/A			
PFOS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNA	N/A	N/A	N/A	A	N/A	N/A			
PFNA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNS	N/A	N/A	N/A	A	N/A	N/A			
PFNS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDA	N/A	N/A	N/A	A	N/A	N/A			
PFDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
8:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
8:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
NMeFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NMeFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDS	N/A	N/A	N/A	A	N/A	N/A			
PFDS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFUnDA	N/A	N/A	N/A	A	N/A	N/A			
PFUnDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
NEtFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NEtFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDoDA	N/A	N/A	N/A	A	N/A	N/A			
PFDoDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
10:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
10:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFTrDA	N/A	N/A	N/A	A	N/A	N/A			
PFTrDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTeDA	N/A	N/A	N/A	A	N/A	N/A			
PFTeDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxDA	N/A	N/A	N/A	A	N/A	N/A			
PFHxDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFODA	N/A	N/A	N/A	A	N/A	N/A			
PFODA_2	N/A	N/A	N/A	A	N/A	N/A		50	

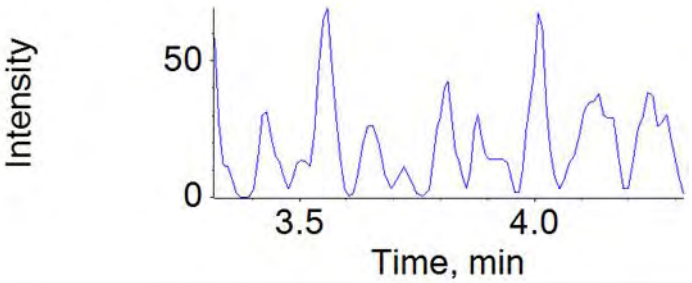
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

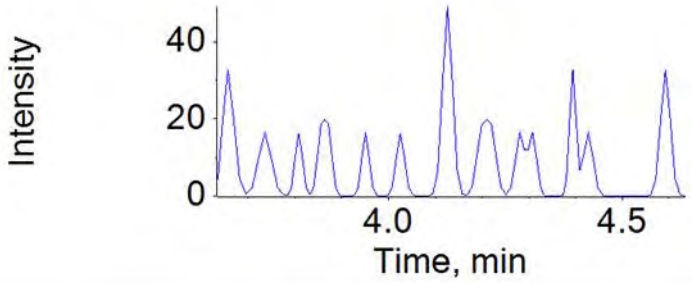
Component: PFBS
Primary Mass: 299.0 / 80.0



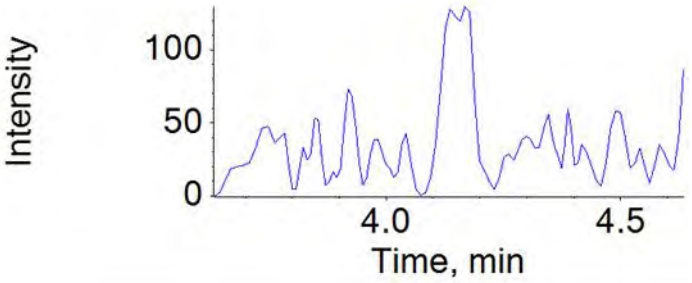
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



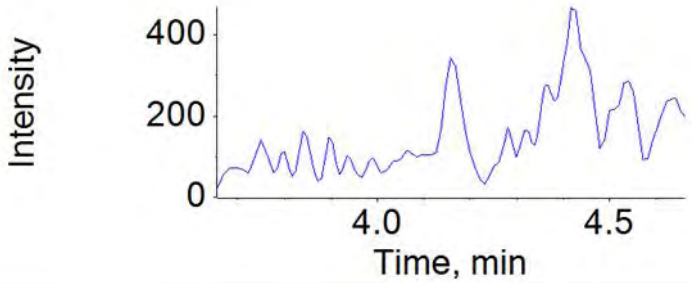
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



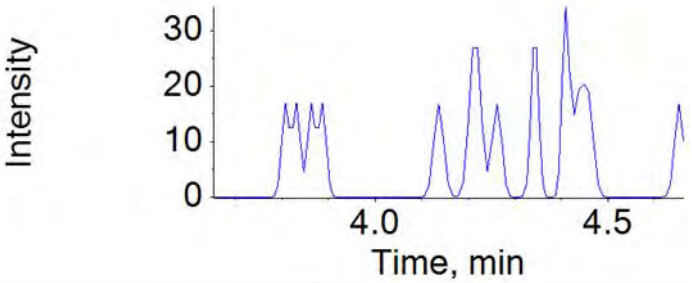
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



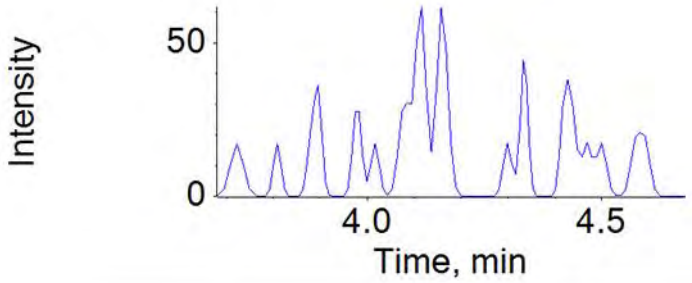
Component: PFHxA
Primary Mass: 313.0 / 269.0



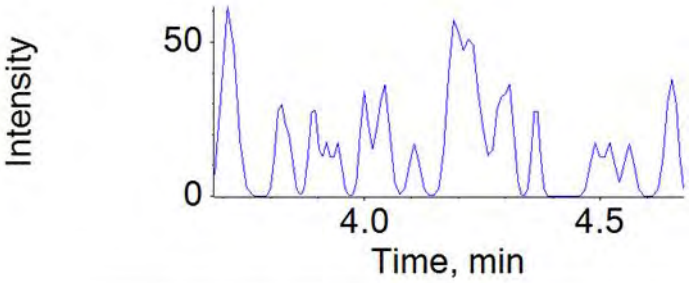
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



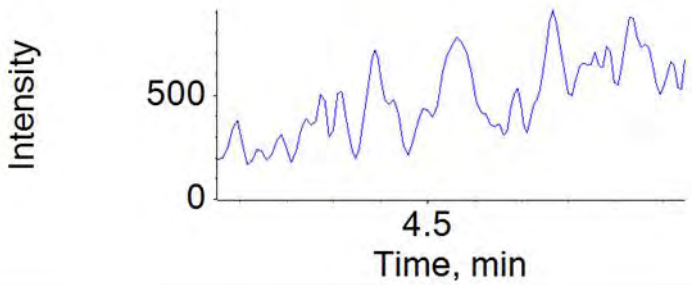
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



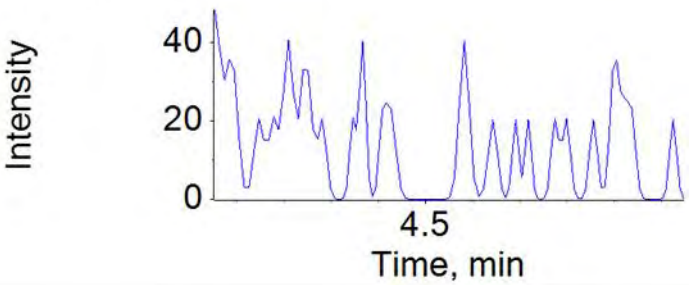
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

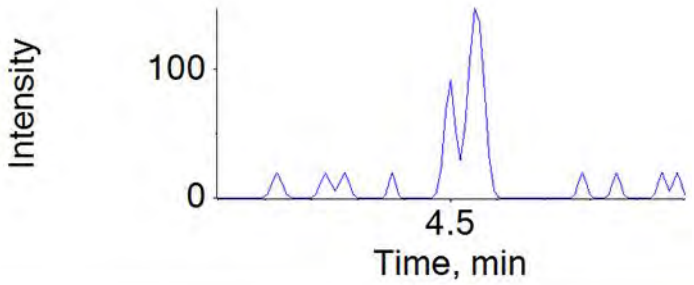
Component: PFHpA
Primary Mass: 363.0 / 319.0



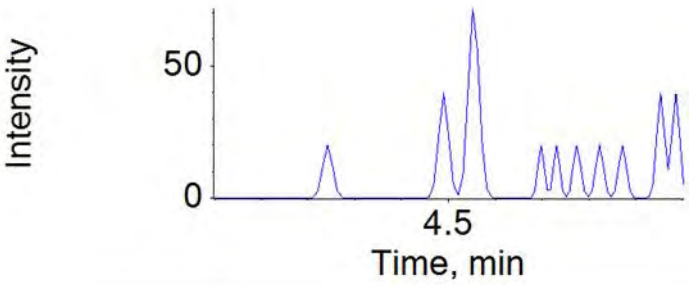
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



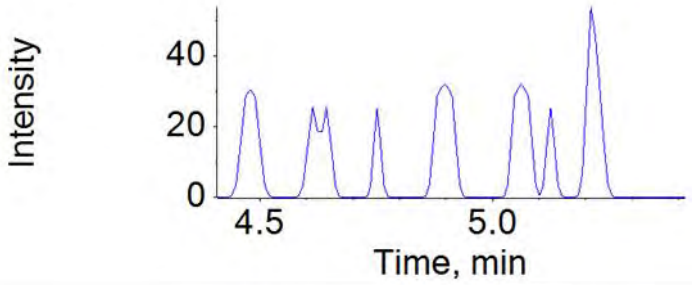
Component: PFHxS
Primary Mass: 399.0 / 80.0



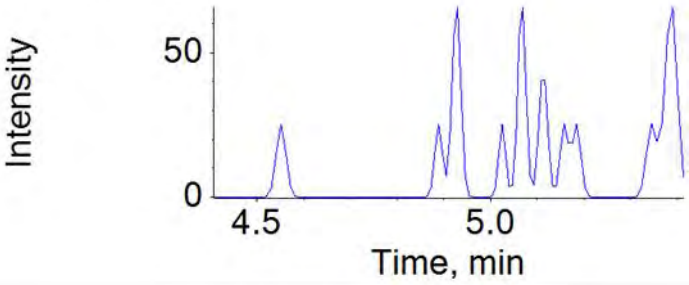
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Secondary Mass: 399.0 / 99.0



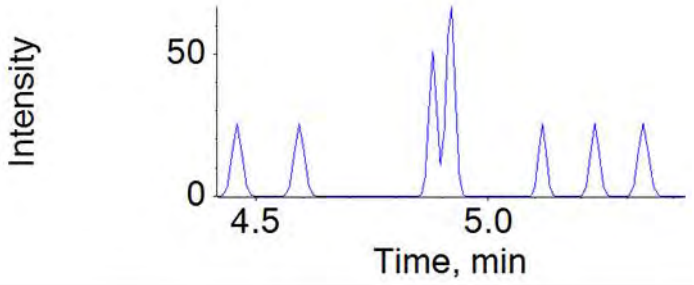
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



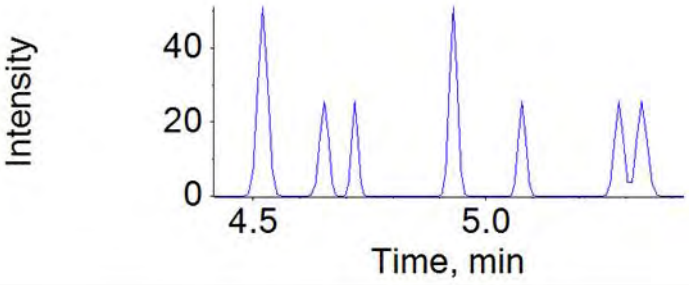
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



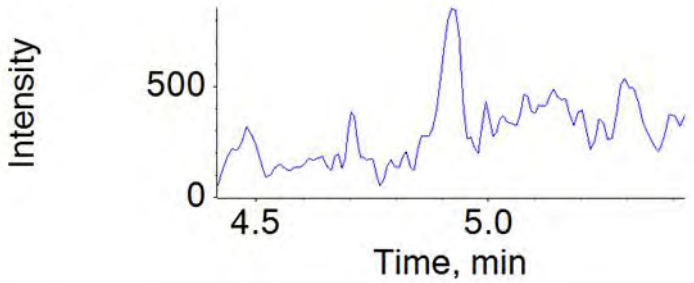
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



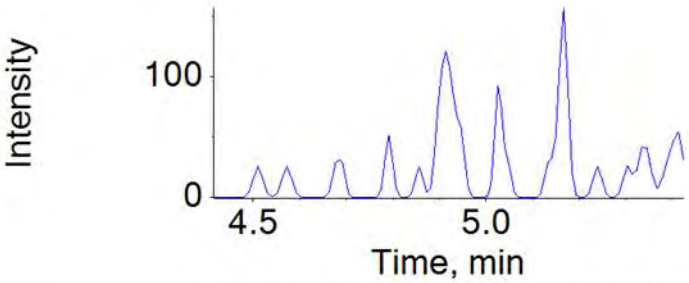
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

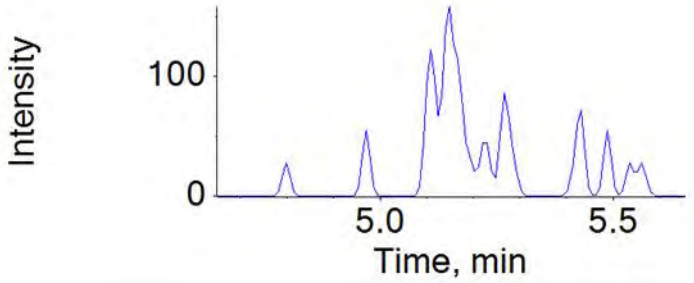
Component: PFOA
Primary Mass: 413.0 / 369.0



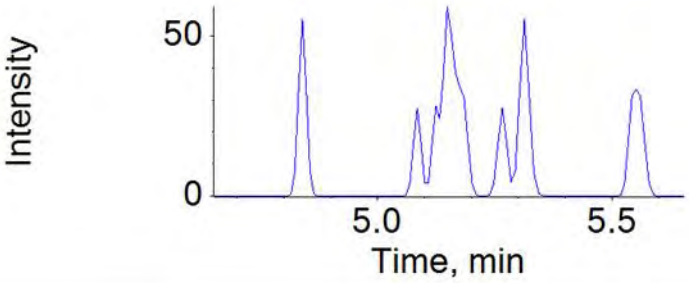
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



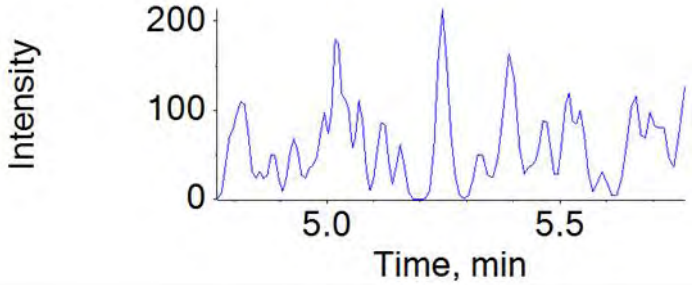
Component: PFOS
Primary Mass: 499.0 / 80.0



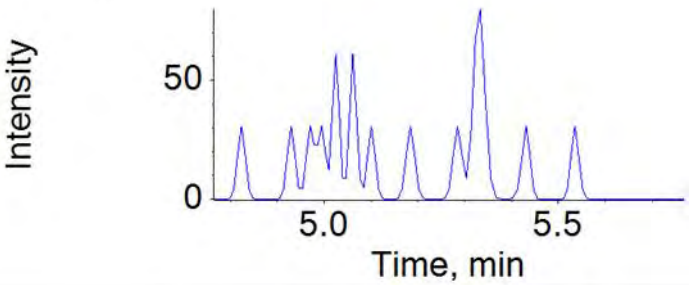
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



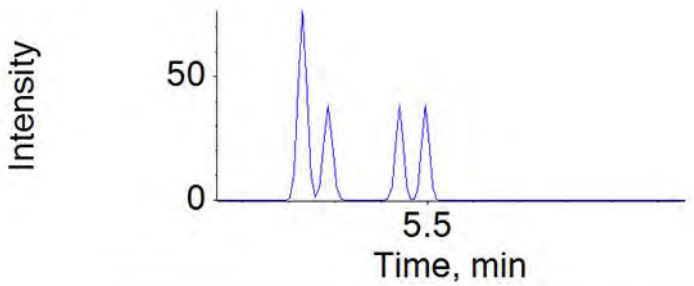
Component: PFNA
Primary Mass: 463.0 / 419.0



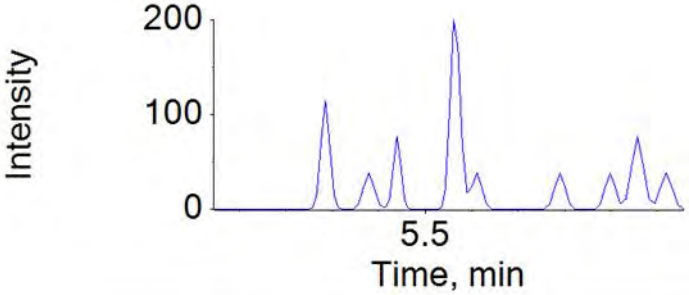
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



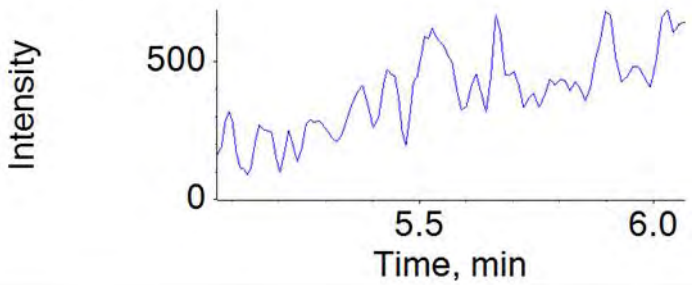
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



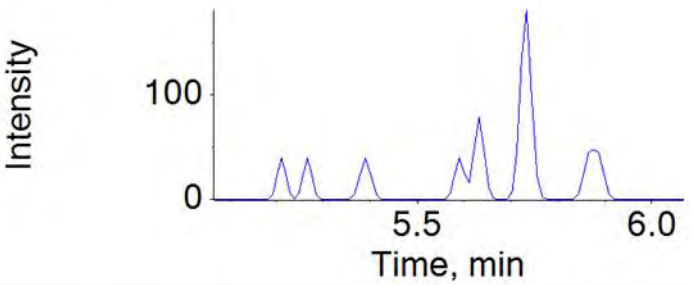
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

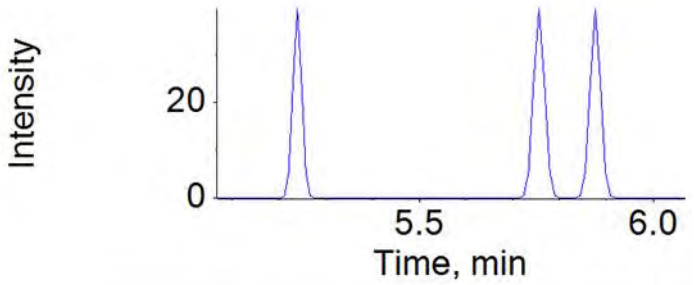
Component: PFDA
Primary Mass: 513.0 / 469.0



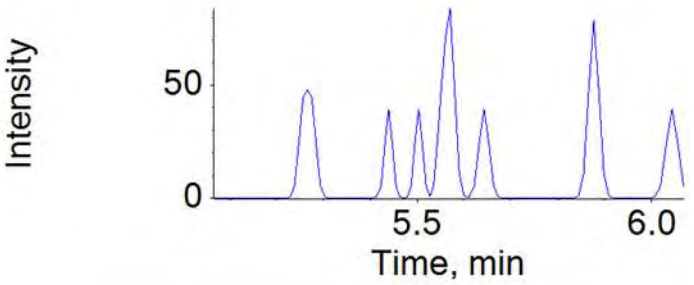
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



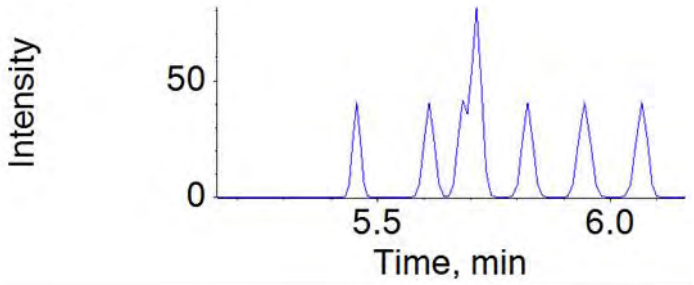
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



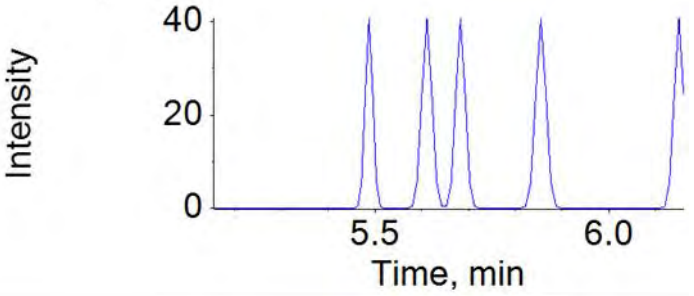
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



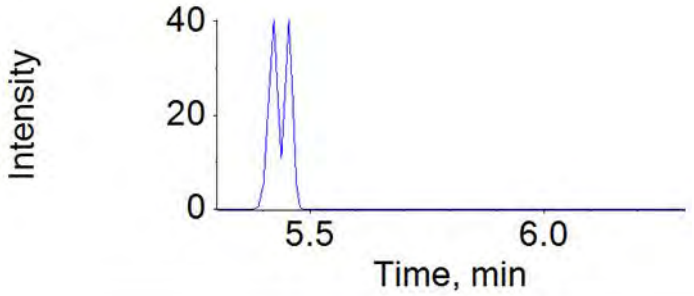
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



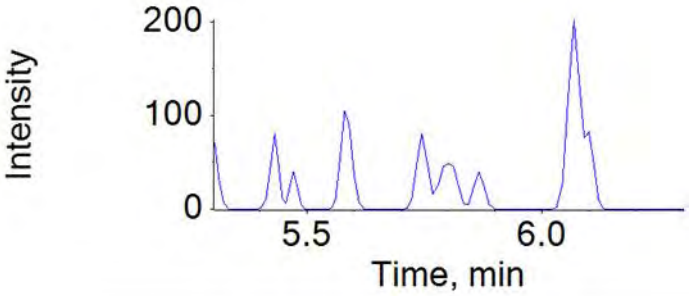
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



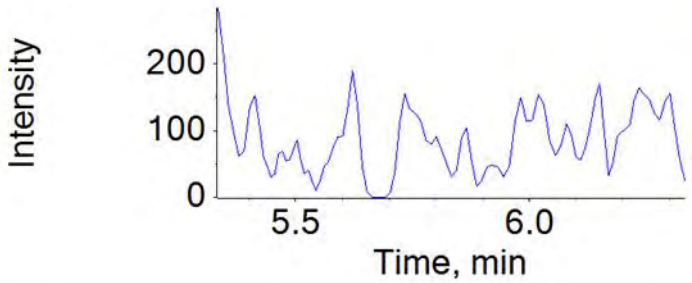
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



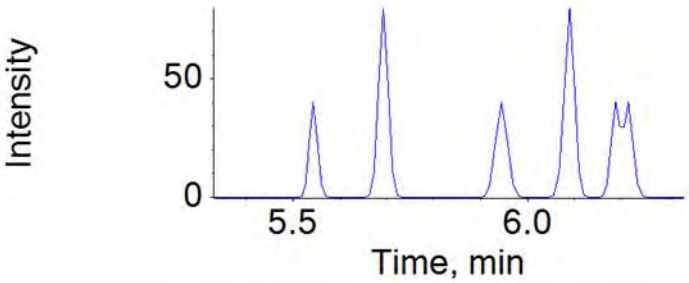
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

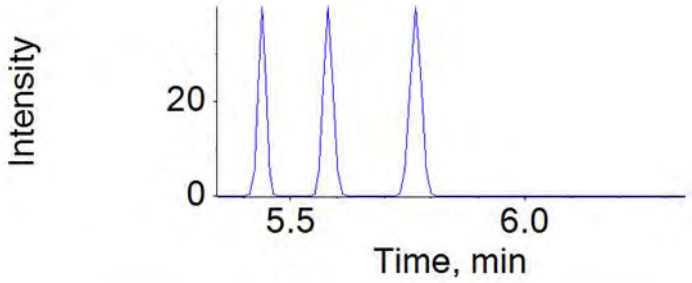
Component: PFUnDA
Primary Mass: 563.0 / 519.0



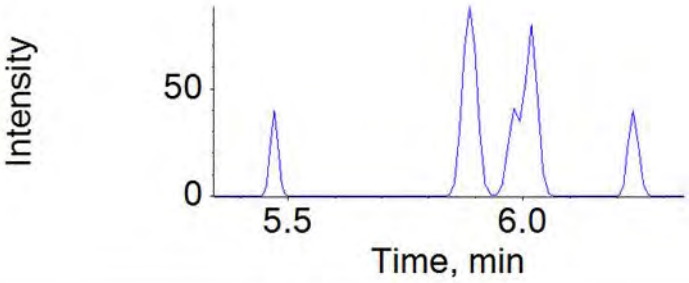
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



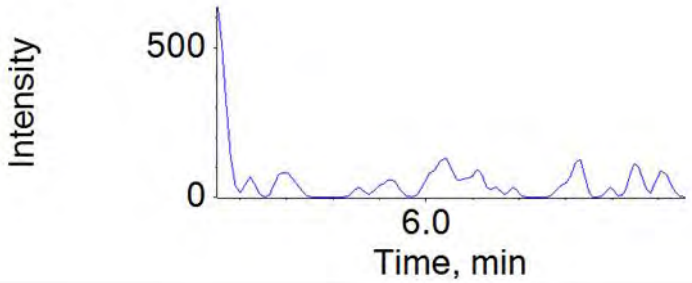
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



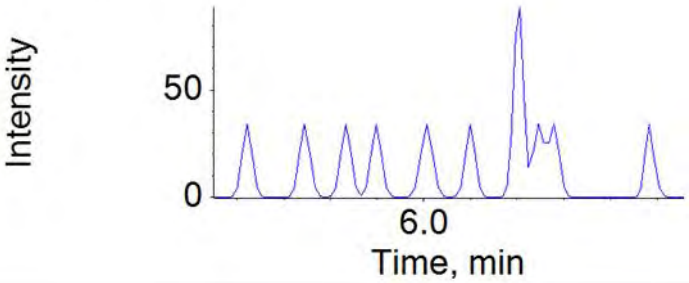
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



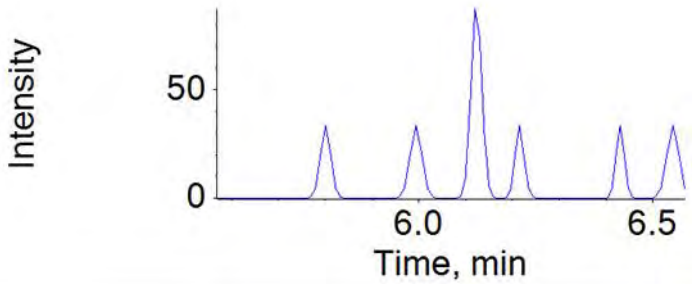
Component: PFDoDA
Primary Mass: 613.0 / 569.0



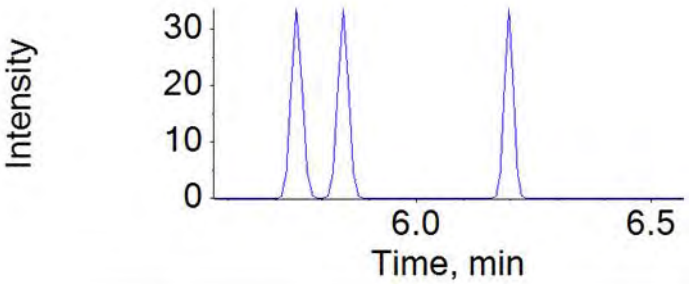
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



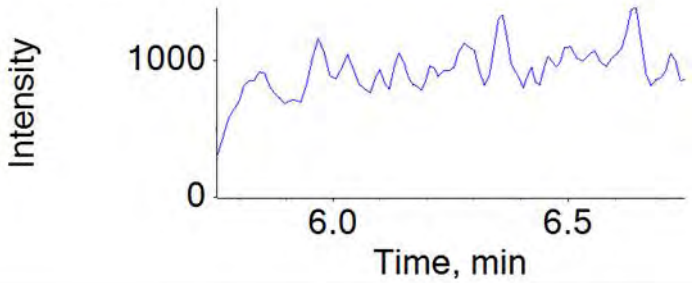
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



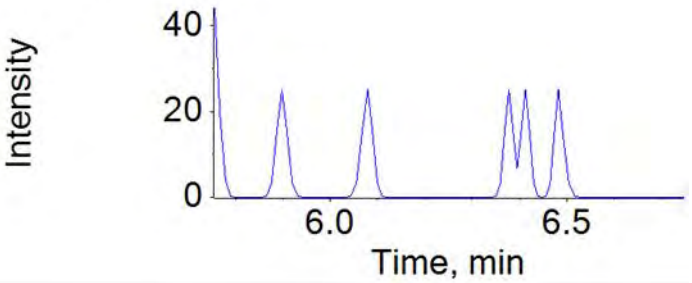
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

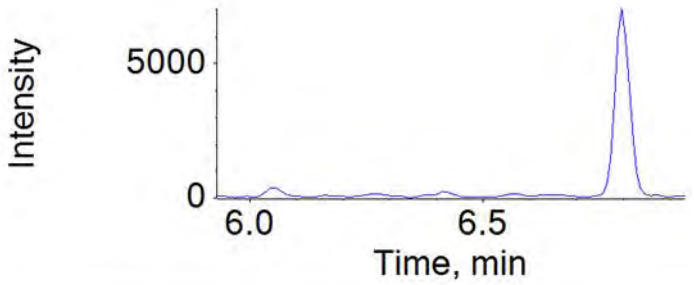
Component: PFTrDA
Primary Mass: 663.0 / 619.0



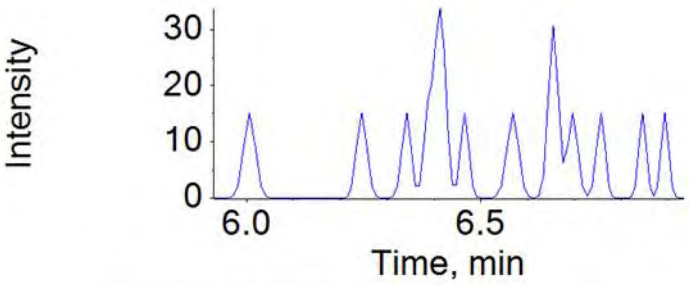
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



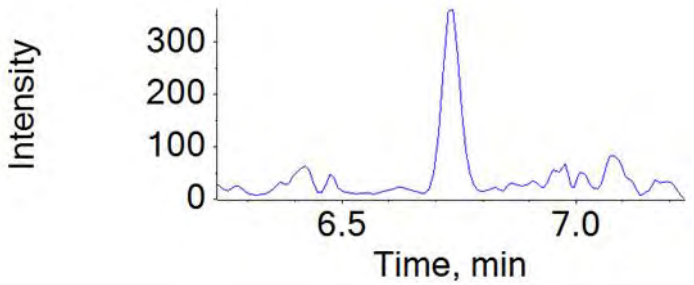
Component: PFTeDA
Primary Mass: 713.0 / 669.0



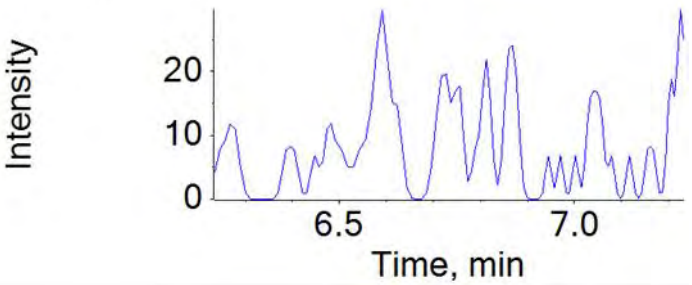
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



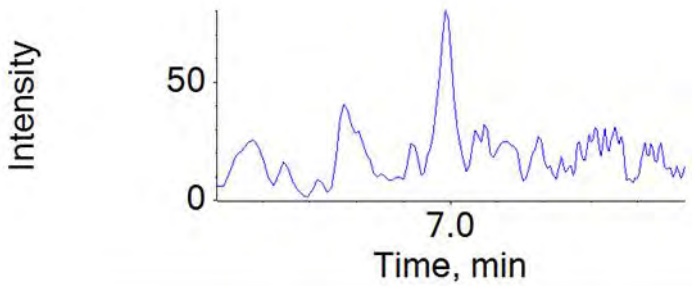
Component: PFHxDA
Primary Mass: 813.0 / 769.0



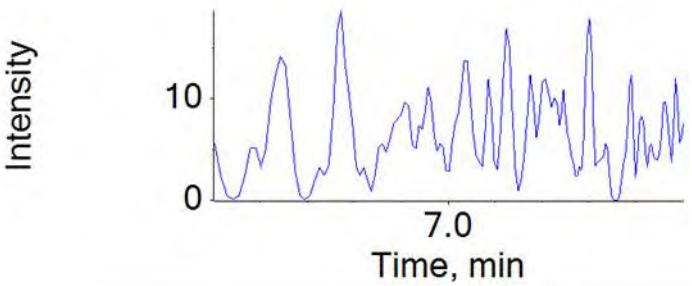
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



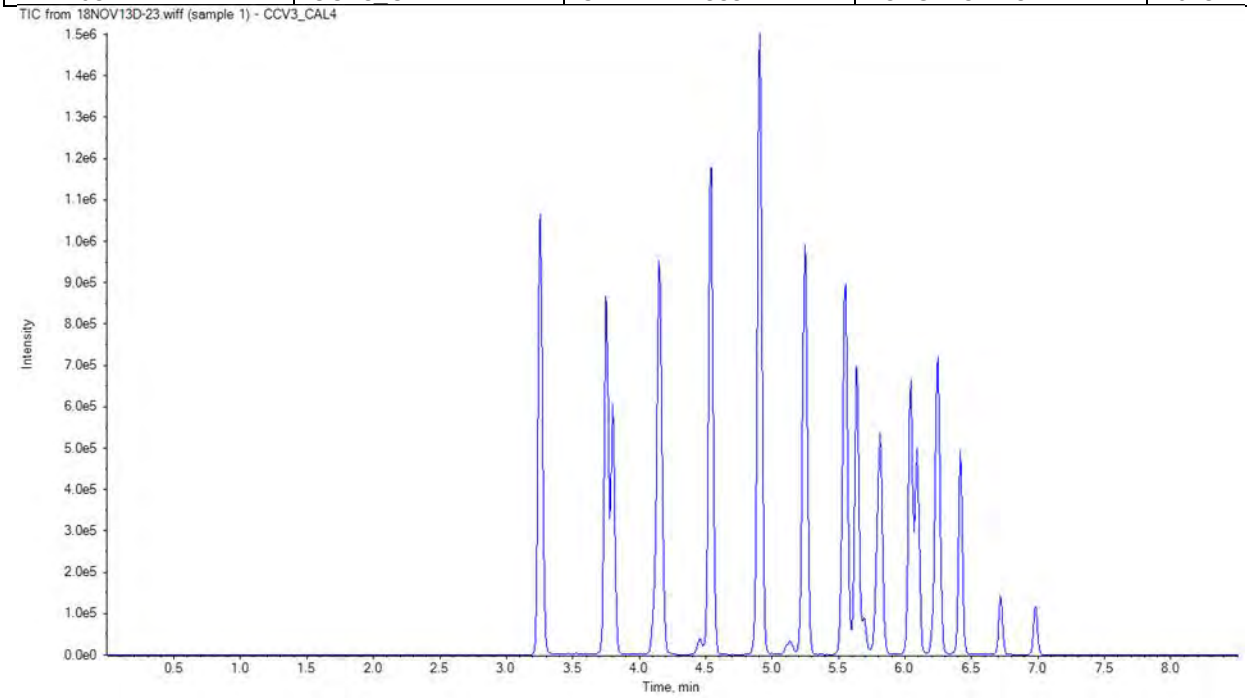
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV3_CAL4	CALBRN41833B	18NOV13D-23.wiff	2018-11-13T12:26:35



Injection Standard Area Reference File: 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	674532.6	661126.9	2	50	
13C2-PFOA	5.0	469240.0	466902.6	1	50	
13C4-PFOS	4.8	245294.7	247446.9	-1	50	
13C2-PFDA	5.0	299594.2	295381.6	1	50	

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV3_CAL4	CALBRN41833B	18NOV13D-23.wiff	2018-11-13T12:26:35

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	1076876.5	10	13C4-PFBA	726272.3	5.0	1.483	3.25	1.000	8.000	8.214	3	30	
PFPeA	1087870.4	11	13C5-PFPeA	745402.4	5.0	1.459	3.75	1.000	8.000	8.448	6	30	
PFBS	617597.3	11	13C3-PFBS	427494.9	4.7	1.445	3.80	1.000	7.080	6.872	-3	30	
4:2-FTS	141267.3	12	13C2-4:2-FTS	50472.7	4.7	2.799	4.12	1.000	7.470	7.599	2	30	
PFHxA	1280406.9	12	13C5-PFHxA	663434.2	5.0	1.930	4.15	1.000	8.000	8.058	1	30	
PFPeS	309863.8	11	13C3-PFBS	427494.9	4.7	0.725	4.17	1.100	7.500	7.037	-6	30	
PFHpA	1359613.4	11	13C4-PFHpA	519531.1	5.0	2.617	4.54	1.000	8.000	8.675	8	30	
PFHxS	458768.0	19	13C3-PFHxS	315686.3	4.7	1.453	4.54	1.000	7.300	7.046	-3	30	
6:2-FTS	108071.5	11	13C2-6:2-FTS	34757.5	4.8	3.109	4.90	1.000	7.580	7.524	-1	30	
PFHpS	446880.9	11	13C3-PFHxS	315686.3	4.7	1.416	4.90	1.080	7.610	7.452	-2	30	
PFOA	1362301.6	11	13C8-PFOA	887912.0	5.0	1.534	4.91	1.000	8.000	8.194	2	30	
PFOS	439272.9	22	13C8-PFOS	283430.9	4.8	1.550	5.24	1.000	7.400	6.778	-8	30	
PFNA	1141467.5	11	13C9-PFNA	446829.1	5.0	2.555	5.25	1.000	8.000	9.212	15	30	
PFNS	291902.2	11	13C8-PFOS	283430.9	4.8	1.030	5.53	1.060	7.680	7.205	-6	30	
PFDA	875408.9	11	13C6-PFDA	620184.2	5.0	1.412	5.55	1.000	8.000	7.483	-6	30	
8:2-FTS	86544.5	11	13C2-8:2-FTS	27394.6	4.8	3.159	5.55	1.000	7.660	7.366	-4	30	
PFOSA	962687.1	11	13C8-PFOSA	630662.9	5.0	1.526	5.64	1.000	8.000	7.456	-7	30	
NMeFOSAA	102800.4	19	d3-NMeFOSAA	68810.3	5.0	1.494	5.69	1.000	8.000	8.443	6	30	
PFDS	232494.5	11	13C8-PFOS	283430.9	4.8	0.820	5.79	1.110	7.700	7.433	-3	30	
PFUnDA	763658.8	12	13C7-PFUnDA	232744.0	5.0	3.281	5.81	1.000	8.000	8.578	7	30	
NEtFOSAA	94982.9	22	d5-NEtFOSAA	71296.2	5.0	1.332	5.83	1.000	8.000	6.984	-13	30	
PFDoDA	846251.4	12	13C2-PFDoDA	548137.6	5.0	1.544	6.04	1.000	8.000	7.862	-2	30	
10:2-FTS	60107.9	11	13C2-8:2-FTS	27394.6	4.8	2.194	6.06	1.090	7.710	7.308	-5	30	
NMePFOSAE	624149.1	11	d7-NMePFOSAE	325809.6	5.0	1.916	6.09	1.000	8.000	7.973	0	30	
NMePFOSA	118509.6	11	d3-NMePFOSA	75615.7	5.0	1.567	6.10	1.000	8.000	7.732	-3	30	
PFDoS	100927.8	11	13C8-PFOS	283430.9	4.8	0.356	6.21	1.190	7.740	6.237	-19	30	
NEtPFOSAE	656152.2	11	d9-NEtPFOSAE	266767.8	5.0	2.460	6.25	1.000	8.000	7.891	-1	30	
NEtPFOSA	96604.7	11	d5-NEtPFOSA	59516.7	5.0	1.623	6.26	1.000	8.000	7.454	-7	30	
PFTrDA	708052.2	11	13C2-PFDoDA	548137.6	5.0	1.292	6.24	1.030	8.000	8.153	2	30	
PFTeDA	586334.7	10	13C2-PFTeDA	423201.7	5.0	1.385	6.42	1.000	8.000	7.766	-3	30	
PFHxDA	271760.5	11	13C2-PFTeDA	423201.7	5.0	0.642	6.72	1.050	8.000	7.651	-4	30	
PFODA	243657.7	10	13C2-PFTeDA	423201.7	5.0	0.576	6.98	1.090	8.000	8.019	0	30	

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
Acquisition Method: 18AUG13_3uL.dam

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV3_CAL4			**Data File:**		18NOV13D-23.wiff
Sample ID:	CALBRN41833B			**Acquis Date:**		2018-11-13T12:26:35
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	6			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV13DCCV1-4
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N/A			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	674532.6	661126.9	2	50	
13C2-PFOA	5.0	469240.0	466902.6	1	50	
13C4-PFOS	4.8	245294.7	247446.9	-1	50	
13C2-PFDA	5.0	299594.2	295381.6	1	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	726272.3	13C3-PFBA	674532.6	1.077	5.000	4.827	97	70-130	
E13C5-PFPeA	745402.4	13C3-PFBA	674532.6	1.105	5.000	4.956	99	70-130	
E13C3-PFBS	427494.9	13C3-PFBA	674532.6	0.634	4.650	4.474	96	70-130	
E13C2-4:2-FTS	50472.7	13C2-PFOA	469240.0	0.108	4.670	4.791	103	70-130	
E13C5-PFHxA	663434.2	13C2-PFOA	469240.0	1.414	5.000	5.107	102	70-130	
E13C3-PFHxS	315686.3	13C2-PFOA	469240.0	0.673	4.730	4.616	98	70-130	
E13C4-PFHpA	519531.1	13C2-PFOA	469240.0	1.107	5.000	4.988	100	70-130	
E13C2-6:2-FTS	34757.5	13C2-PFOA	469240.0	0.074	4.750	4.956	104	70-130	
E13C8-PFOA	887912.0	13C2-PFOA	469240.0	1.892	5.000	5.213	104	70-130	
E13C8-PFOS	283430.9	13C4-PFOS	245294.7	1.155	4.780	5.120	107	70-130	
E13C9-PFNA	446829.1	13C4-PFOS	245294.7	1.822	5.000	5.079	102	70-130	
E13C6-PFDA	620184.2	13C2-PFDA	299594.2	2.070	5.000	4.831	97	70-130	
E13C2-8:2-FTS	27394.6	13C2-PFDA	299594.2	0.091	4.790	4.560	95	70-130	
E13C8-PFOSA	630662.9	13C2-PFDA	299594.2	2.105	5.000	4.667	93	70-130	
Ed3-NMeFOSAA	68810.3	13C2-PFDA	299594.2	0.230	5.000	4.146	83	70-130	
E13C7-PFUnDA	232744.0	13C2-PFDA	299594.2	0.777	5.000	4.510	90	70-130	
Ed5-NEtFOSAA	71296.2	13C2-PFDA	299594.2	0.238	5.000	5.035	101	70-130	
E13C2-PFDoDA	548137.6	13C2-PFDA	299594.2	1.830	5.000	4.750	95	70-130	
Ed7-NMePFOSAE	325809.6	13C2-PFDA	299594.2	1.088	5.000	4.706	94	70-130	
Ed3-NMePFOSA	75615.7	13C2-PFDA	299594.2	0.252	5.000	4.586	92	70-130	
Ed9-NEtPFOSAE	266767.8	13C2-PFDA	299594.2	0.890	5.000	4.631	93	70-130	
Ed5-NEtPFOSA	59516.7	13C2-PFDA	299594.2	0.199	5.000	4.660	93	70-130	
E13C2-PFTeDA	423201.7	13C2-PFDA	299594.2	1.413	5.000	4.959	99	70-130	

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

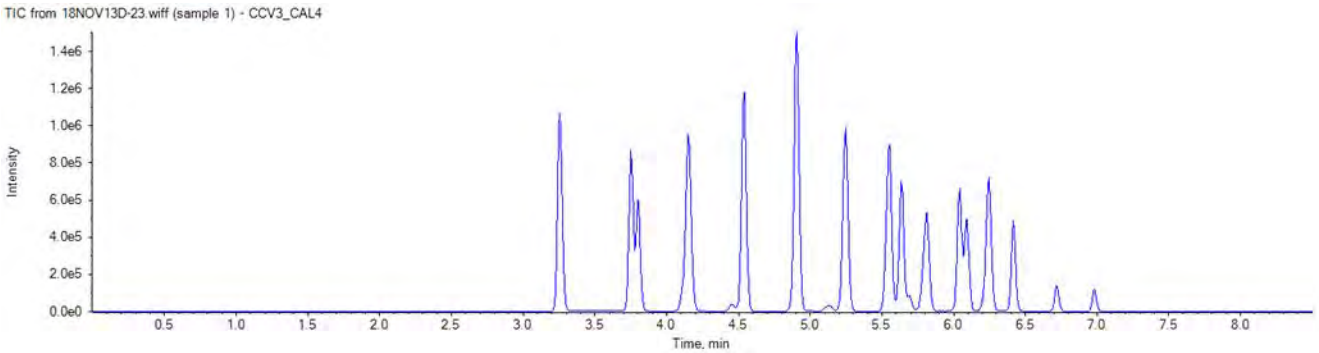
Analyte Quantitation Peak Table

Sample Name: CCV3_CAL4 **Instrument Name:** LM27631 **File Name:** 18NOV13D-23.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.25	1.000	1076876.5		A	13C4-PFBA	3.25	726272.3	1.483	8.214
PFPeA	3.75	1.000	1087870.4		A	13C5-PFPeA	3.75	745402.4	1.459	8.448
PFBS	3.80	1.000	617597.3		A	13C3-PFBS	3.80	427494.9	1.445	6.872
4:2-FTS	4.12	1.000	141267.3		A	13C2-4:2-FTS	4.11	50472.7	2.799	7.599
PFHxA	4.15	1.000	1280406.9		A	13C5-PFHxA	4.15	663434.2	1.930	8.058
PFPeS	4.17	1.100	309863.8		A	13C3-PFBS	3.80	427494.9	0.725	7.037
PFHpA	4.54	1.000	1359613.4		A	13C4-PFHpA	4.54	519531.1	2.617	8.675
PFHxS	4.54	1.000	458768.0		M	13C3-PFHxS	4.54	315686.3	1.453	7.046
6:2-FTS	4.90	1.000	108071.5		A	13C2-6:2-FTS	4.90	34757.5	3.109	7.524
PFHpS	4.90	1.080	446880.9		A	13C3-PFHxS	4.54	315686.3	1.416	7.452
PFOA	4.91	1.000	1362301.6		A	13C8-PFOA	4.91	887912.0	1.534	8.194
PFOS	5.24	1.000	439272.9		M	13C8-PFOS	5.24	283430.9	1.550	6.778
PFNA	5.25	1.000	1141467.5		A	13C9-PFNA	5.25	446829.1	2.555	9.212
PFNS	5.53	1.060	291902.2		A	13C8-PFOS	5.24	283430.9	1.030	7.205
PFDA	5.55	1.000	875408.9		A	13C6-PFDA	5.55	620184.2	1.412	7.483
8:2-FTS	5.55	1.000	86544.5		A	13C2-8:2-FTS	5.56	27394.6	3.159	7.366
PFOSA	5.64	1.000	962687.1		A	13C8-PFOSA	5.64	630662.9	1.526	7.456
NMeFOSAA	5.69	1.000	102800.4		M	d3-NMeFOSAA	5.69	68810.3	1.494	8.443
PFDS	5.79	1.110	232494.5		A	13C8-PFOS	5.24	283430.9	0.820	7.433
PFUnDA	5.81	1.000	763658.8		A	13C7-PFUnDA	5.81	232744.0	3.281	8.578
NEtFOSAA	5.83	1.000	94982.9		A	d5-NEtFOSAA	5.82	71296.2	1.332	6.984
PFDoDA	6.04	1.000	846251.4		A	13C2-PFDoDA	6.04	548137.6	1.544	7.862
10:2-FTS	6.06	1.090	60107.9		A	13C2-8:2-FTS	5.56	27394.6	2.194	7.308
NMePFOSAE	6.09	1.000	624149.1		A	d7-NMePFOSAE	6.08	325809.6	1.916	7.973
NMePFOSA	6.10	1.000	118509.6		A	d3-NMePFOSA	6.10	75615.7	1.567	7.732
PFDoS	6.21	1.190	100927.8		A	13C8-PFOS	5.24	283430.9	0.356	6.237
NEtPFOSAE	6.25	1.000	656152.2		A	d9-NEtPFOSAE	6.24	266767.8	2.460	7.891
NEtPFOSA	6.26	1.000	96604.7		A	d5-NEtPFOSA	6.26	59516.7	1.623	7.454
PFTrDA	6.24	1.030	708052.2		A	13C2-PFDoDA	6.04	548137.6	1.292	8.153
PFTeDA	6.42	1.000	586334.7		A	13C2-PFTeDA	6.42	423201.7	1.385	7.766
PFHxDA	6.72	1.050	271760.5		A	13C2-PFTeDA	6.42	423201.7	0.642	7.651
PFODA	6.98	1.090	243657.7		A	13C2-PFTeDA	6.42	423201.7	0.576	8.019

Total Ion Chromatogram

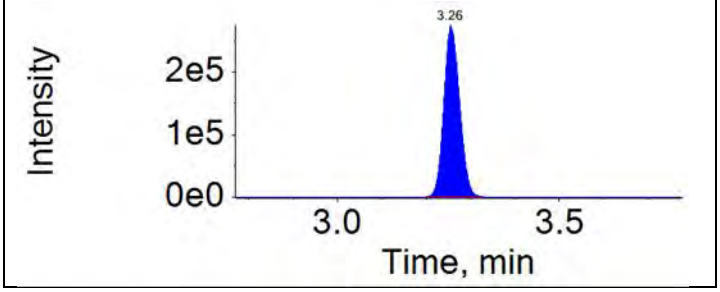


APPROVED
By JPT at 4:33 pm, 11/13/18

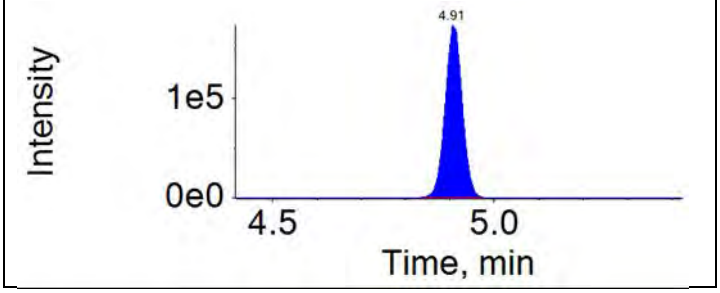
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

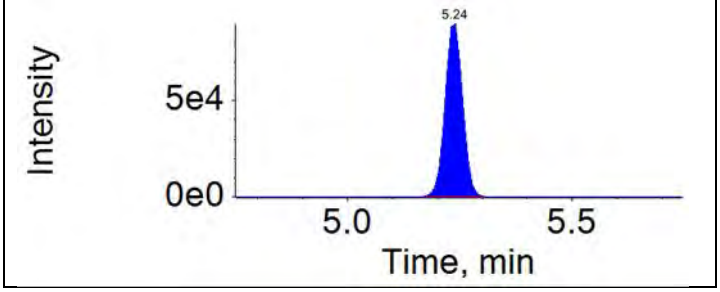
Injection Standard: 13C3-PFBA
216.0 / 172.0



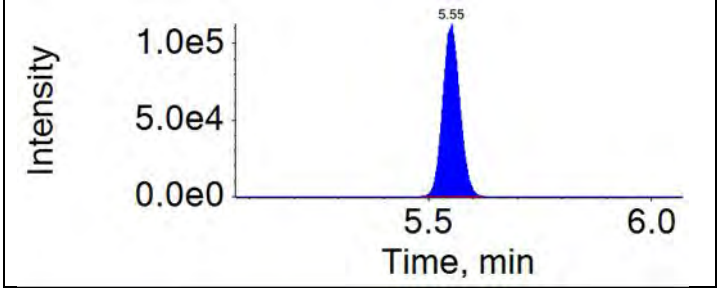
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



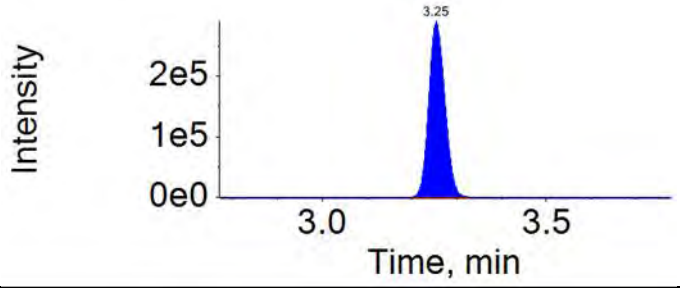
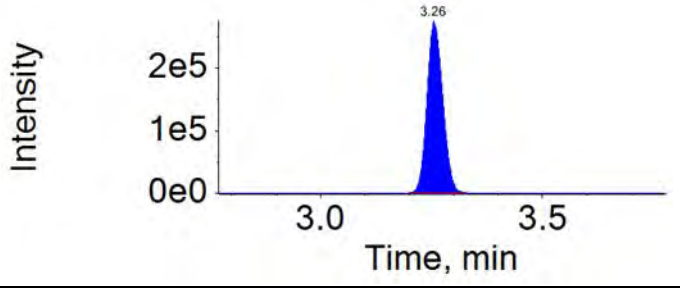
Injection Standard: 13C2-PFDA
515.0 / 470.0

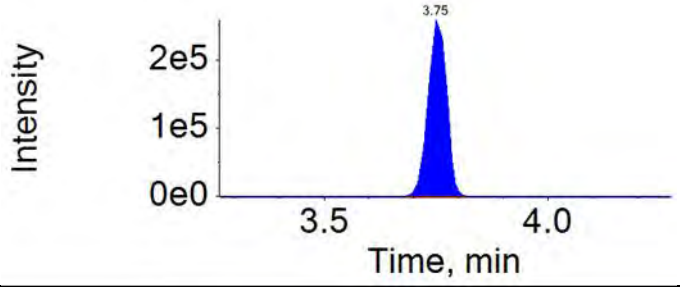
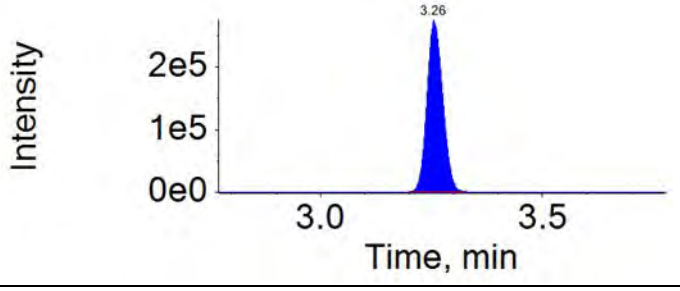


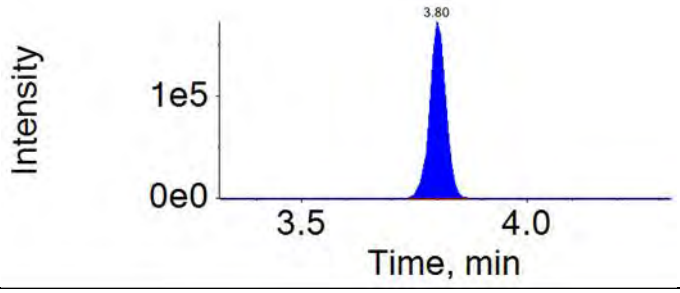
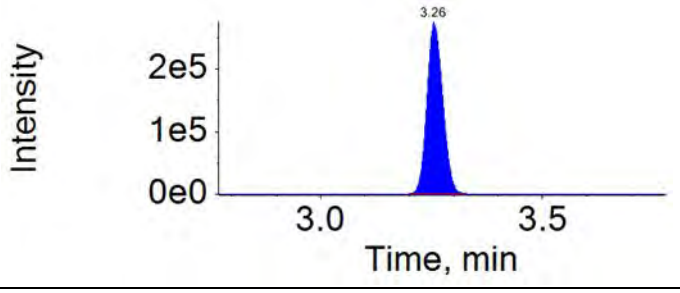
APPROVED
By JPT at 4:33 pm, 11/13/18

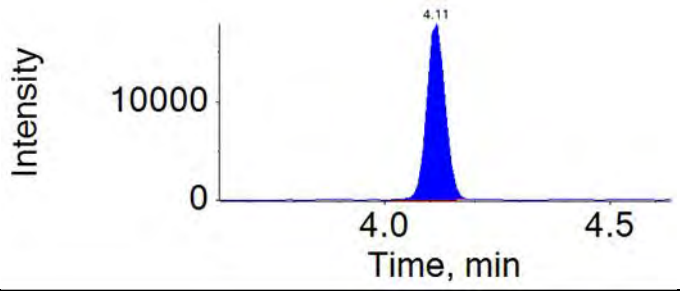
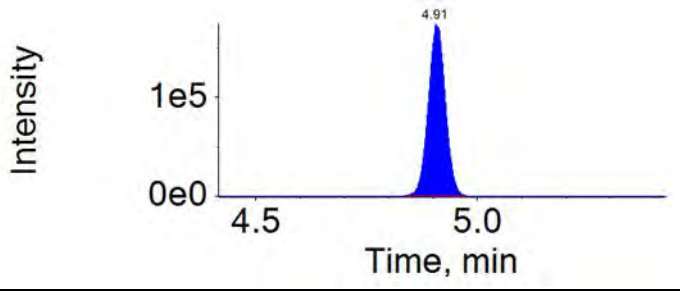
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

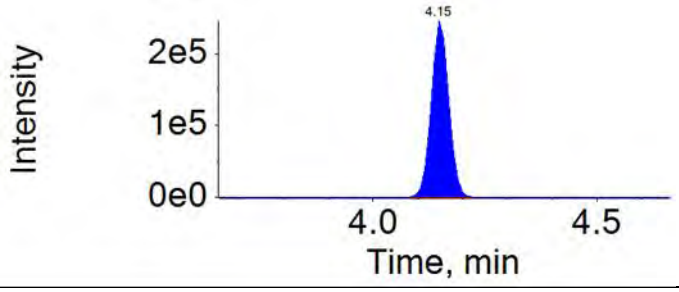
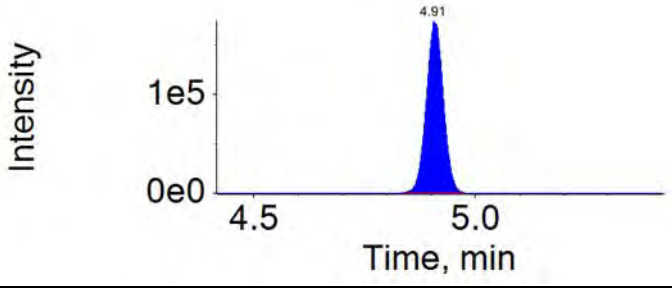
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

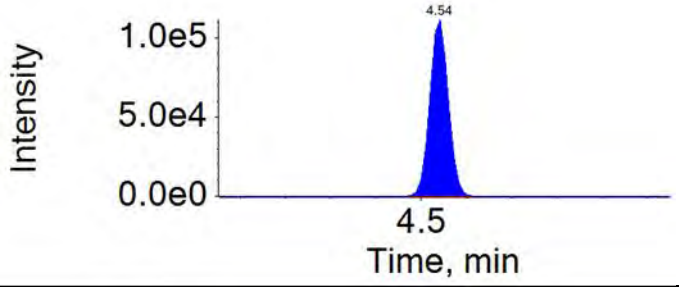
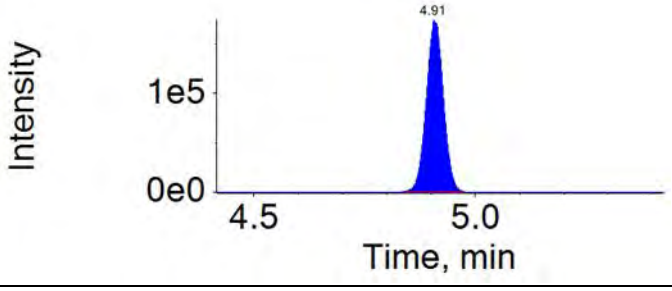
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

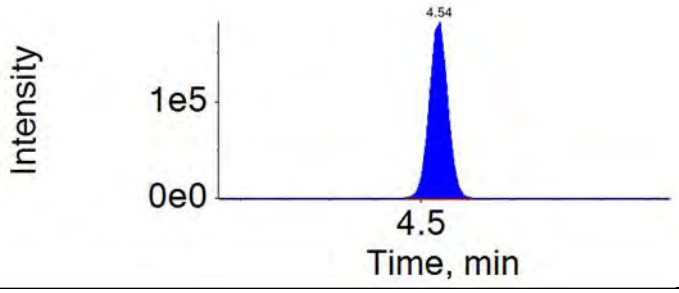
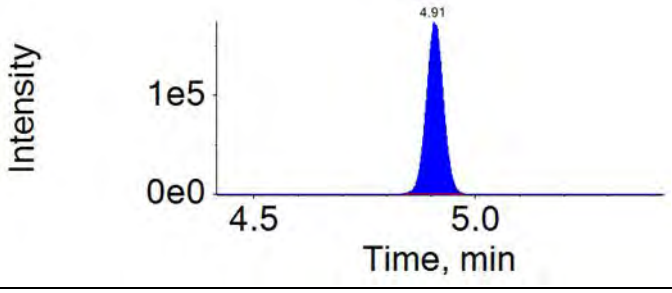
APPROVED
By JPT at 4:33 pm, 11/13/18

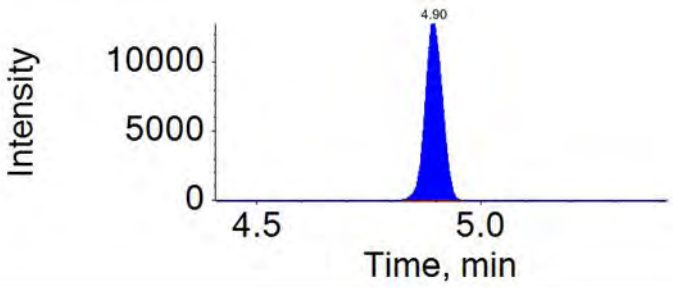
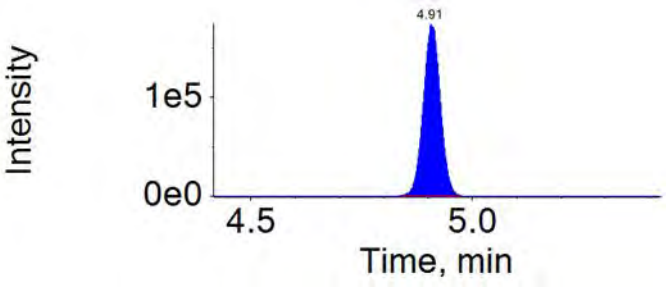
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

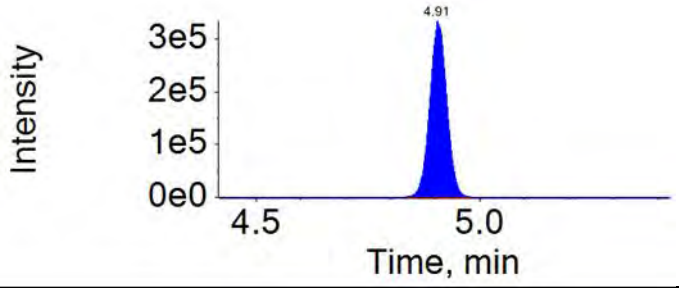
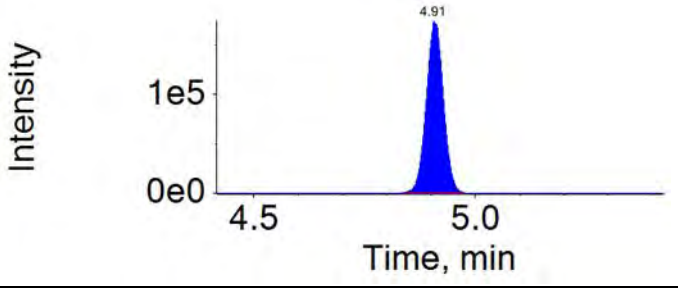
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

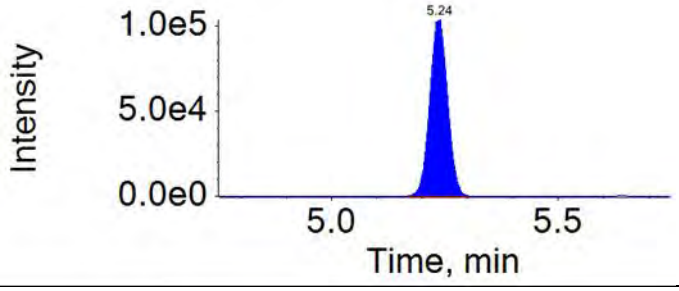
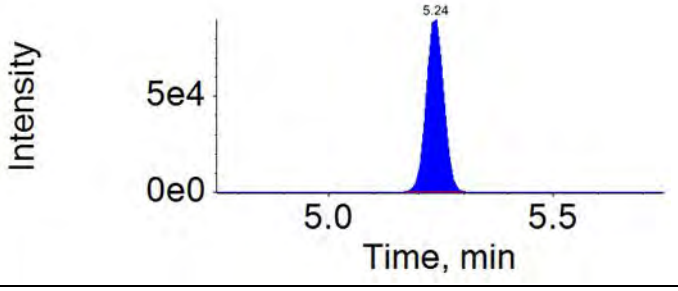
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

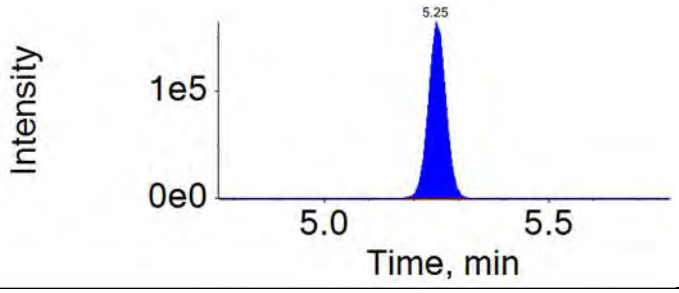
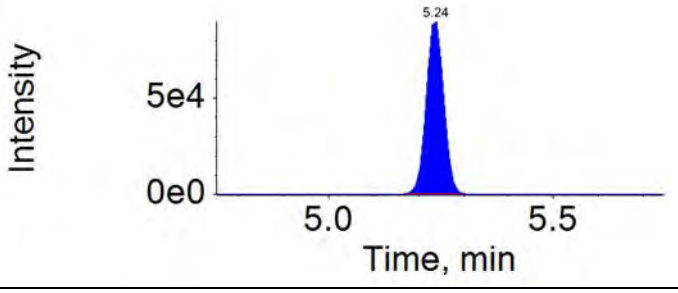
APPROVED
By JPT at 4:33 pm, 11/13/18

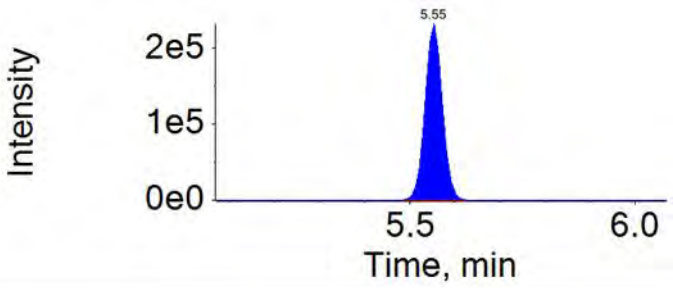
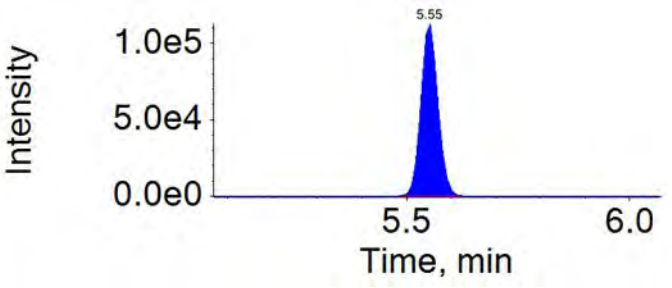
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

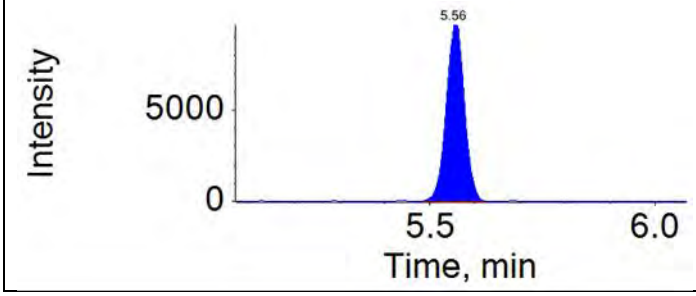
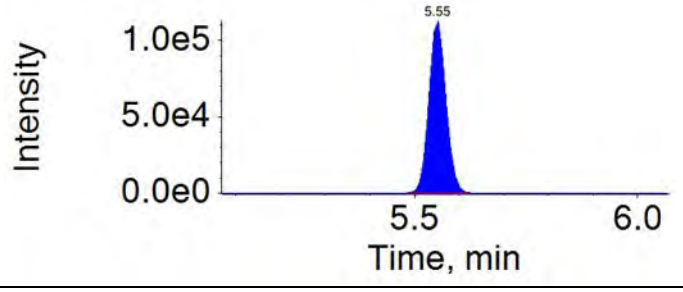
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

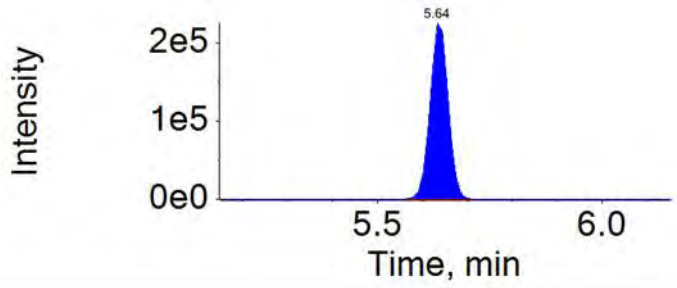
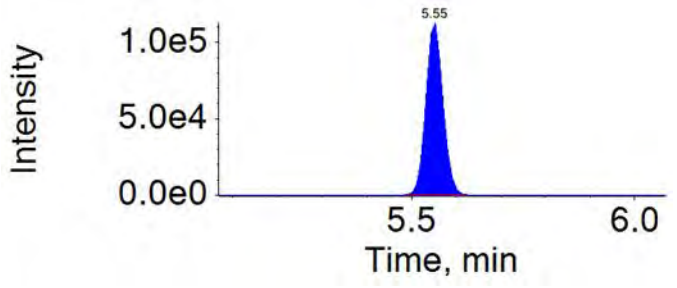
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

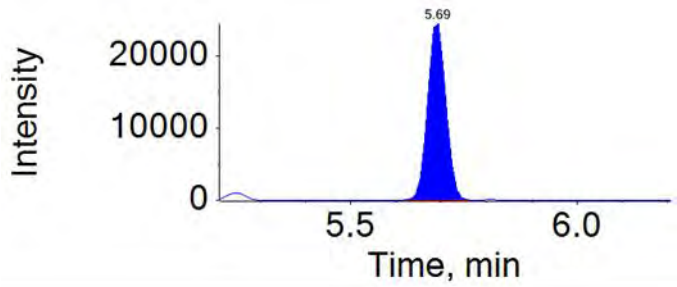
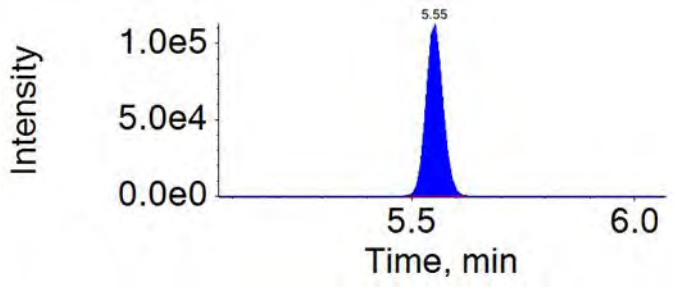
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

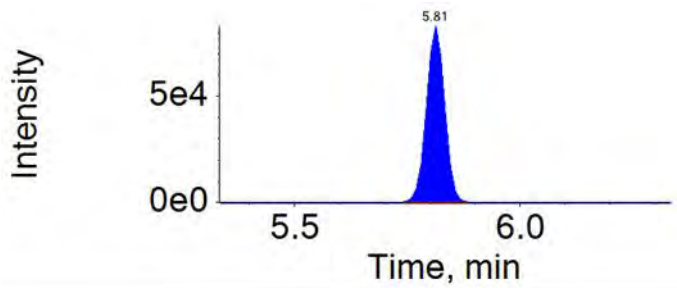
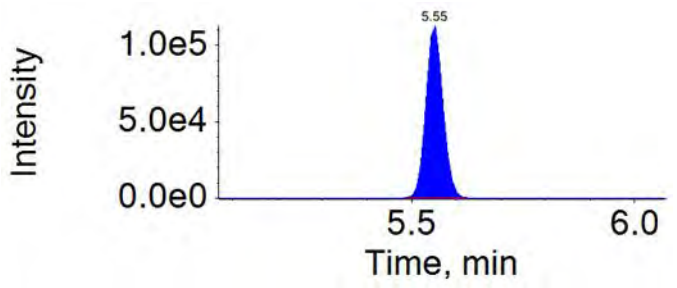
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

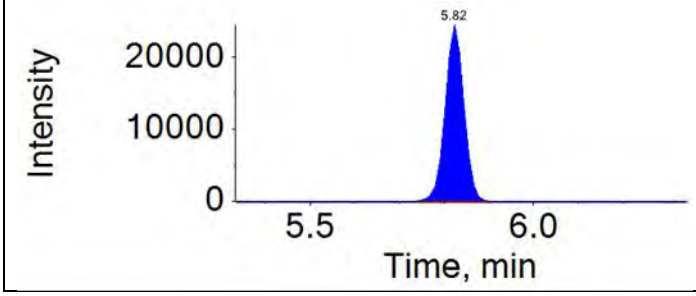
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

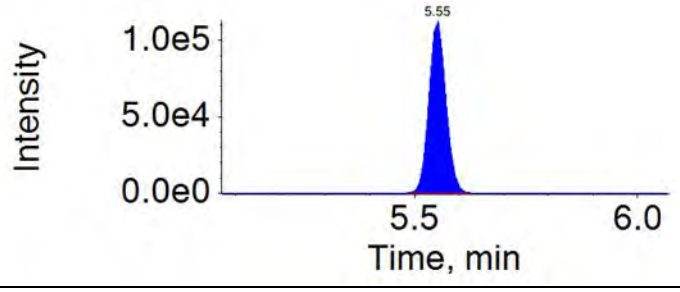
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

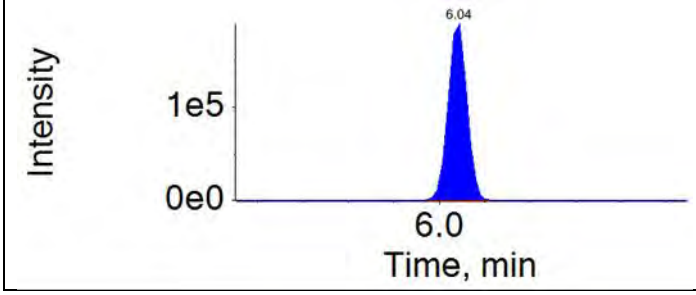
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

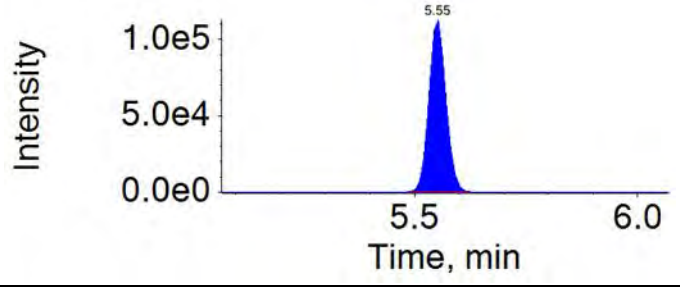
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



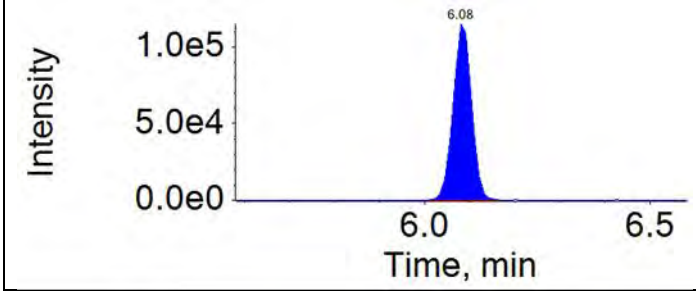


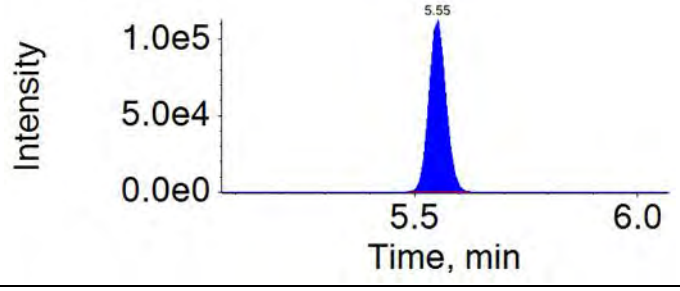
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



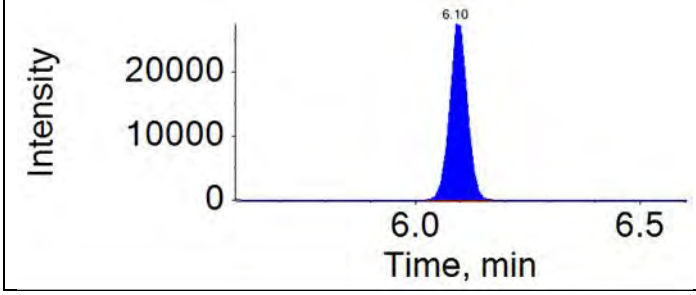


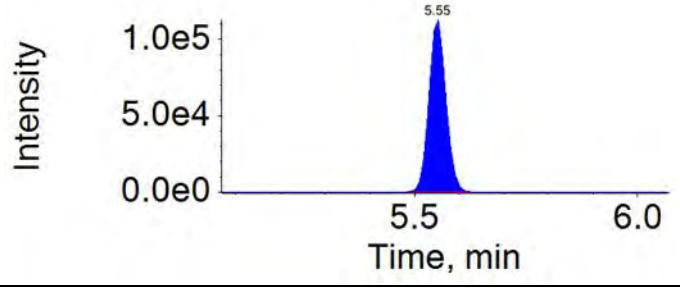
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



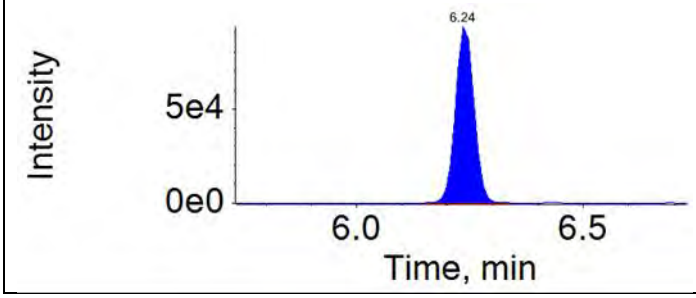


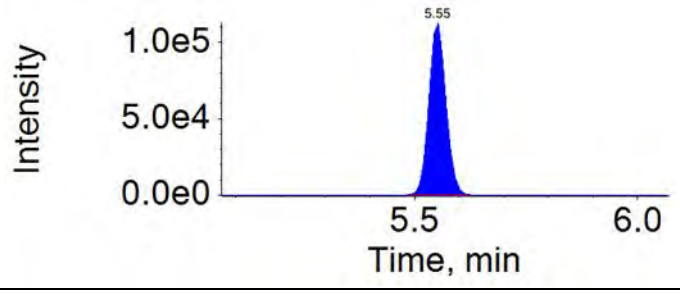
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

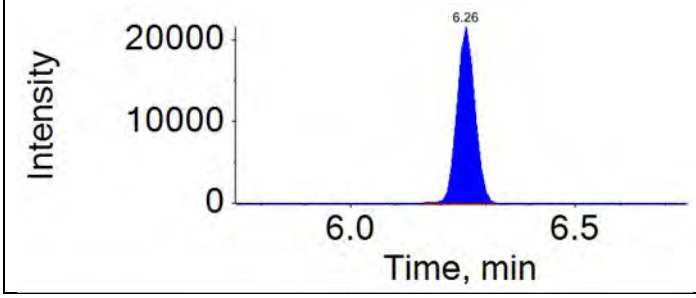
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

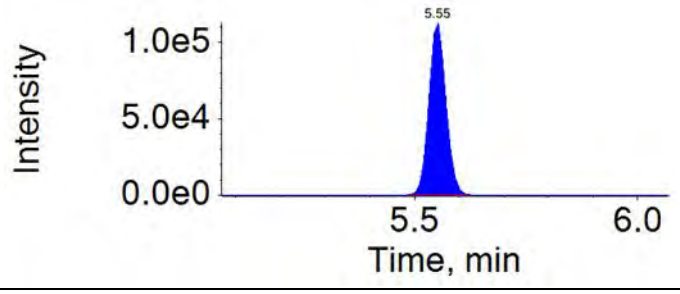
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



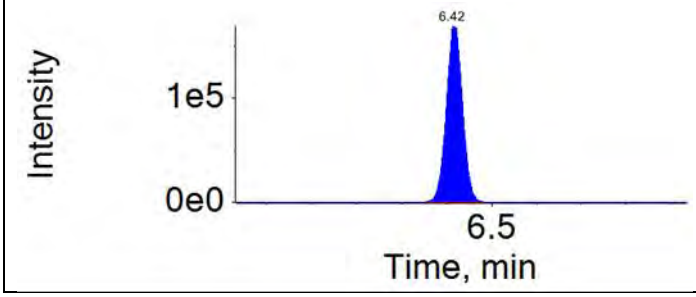


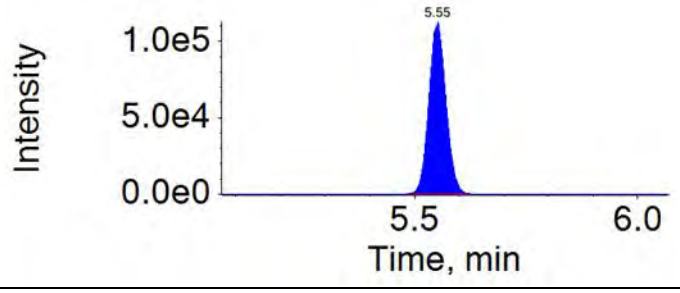
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



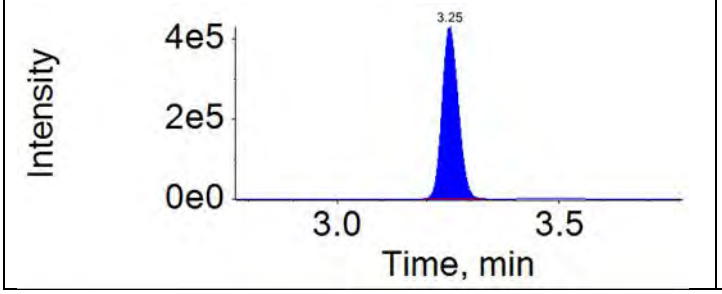


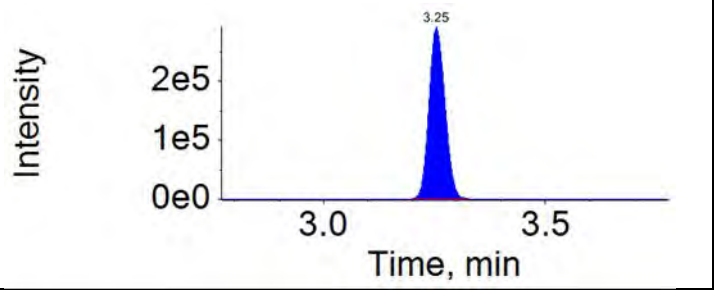
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

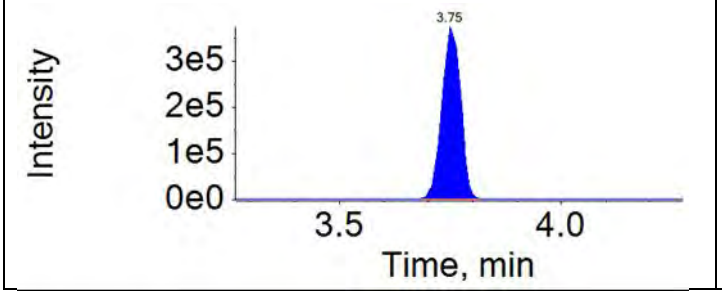
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

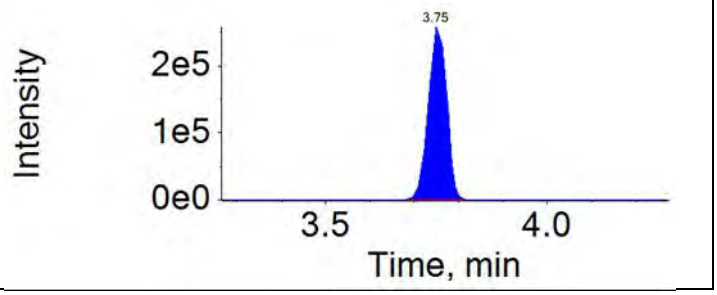
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



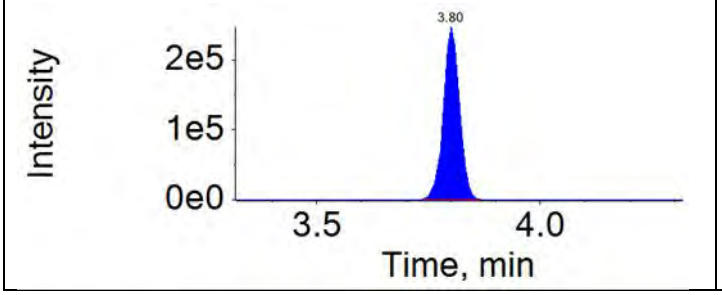


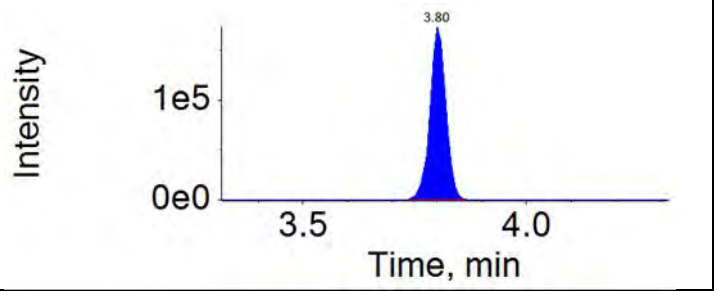
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



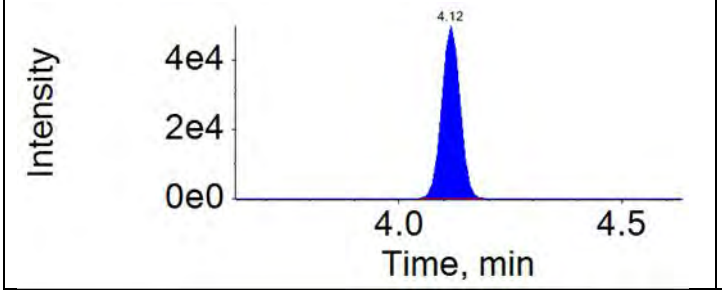


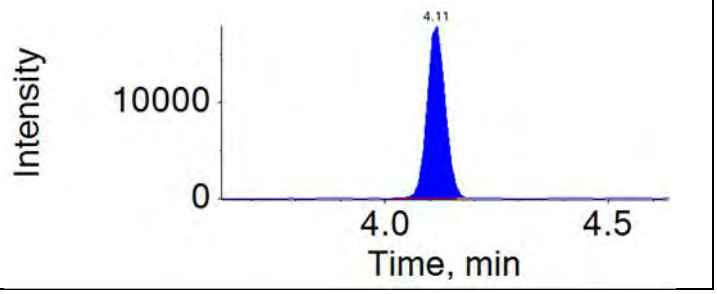
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



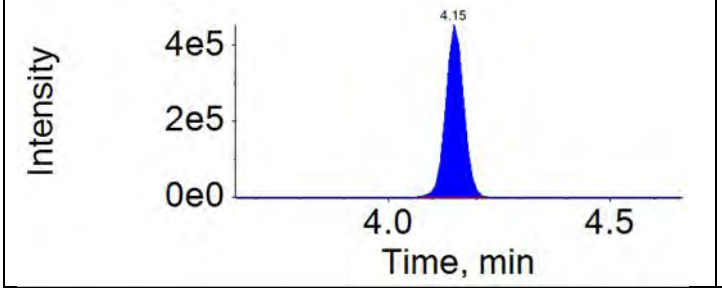


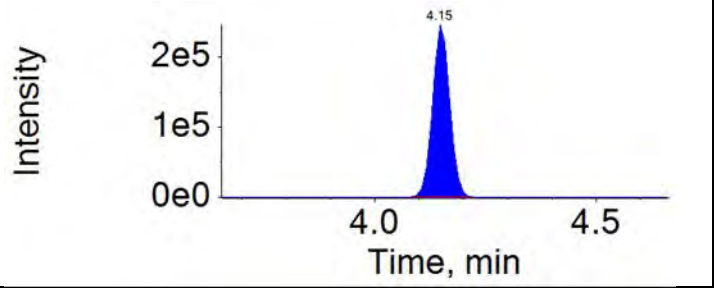
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

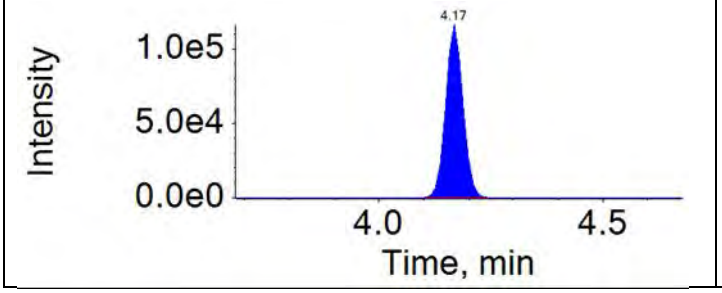
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

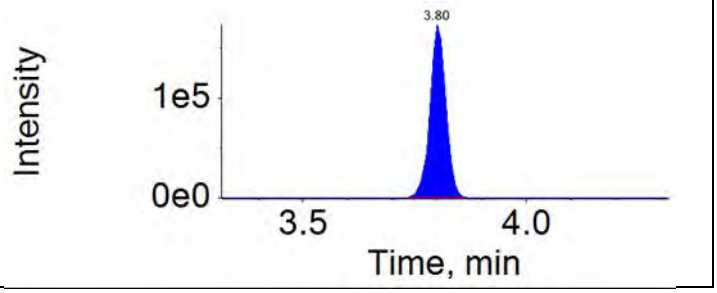
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



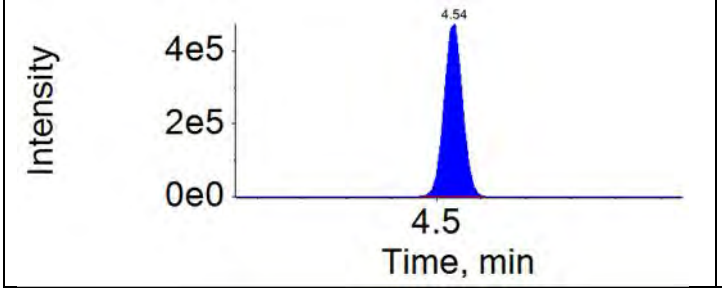


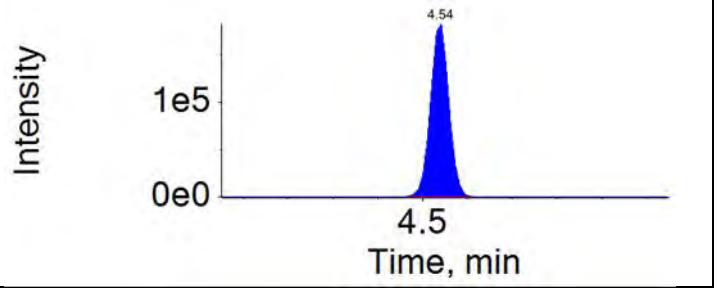
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



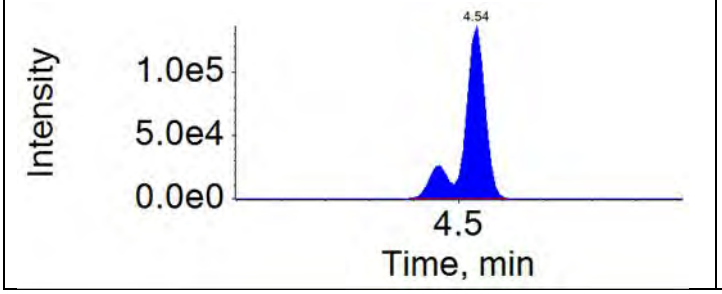


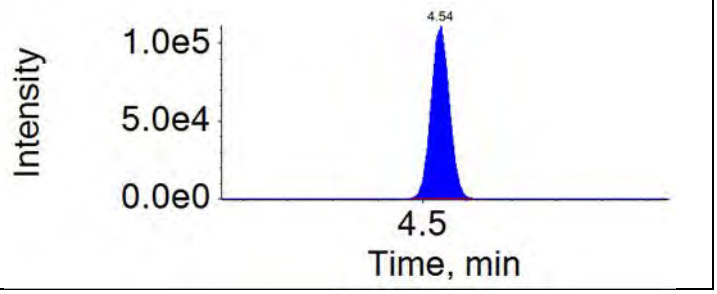
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

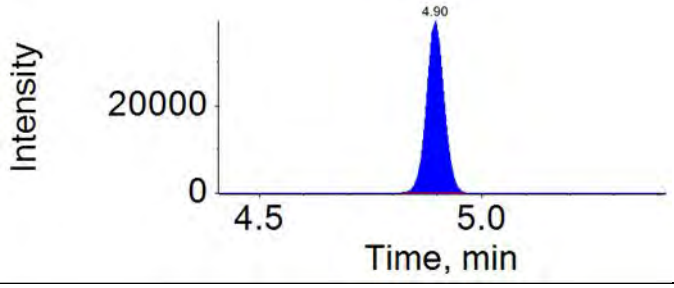
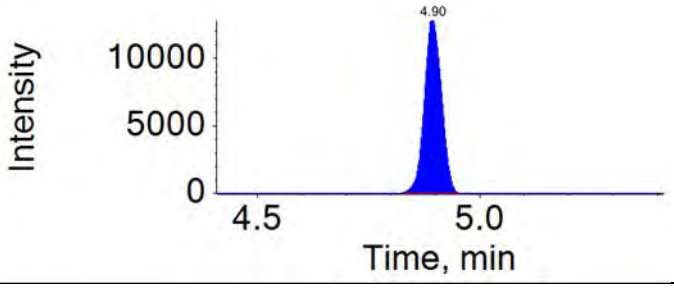


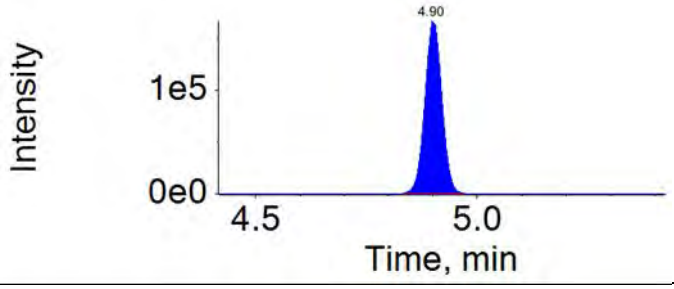
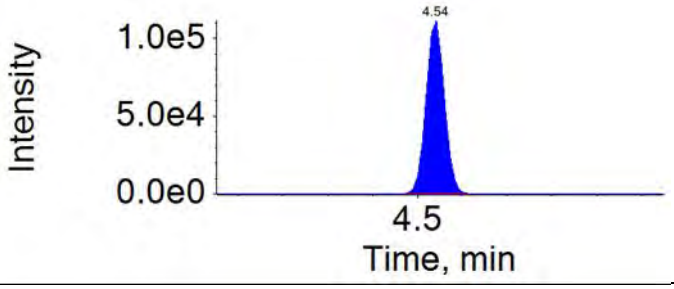


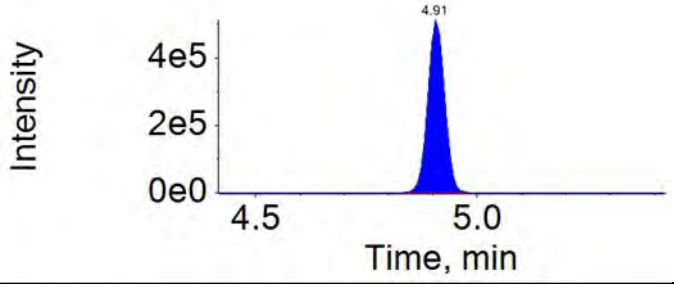
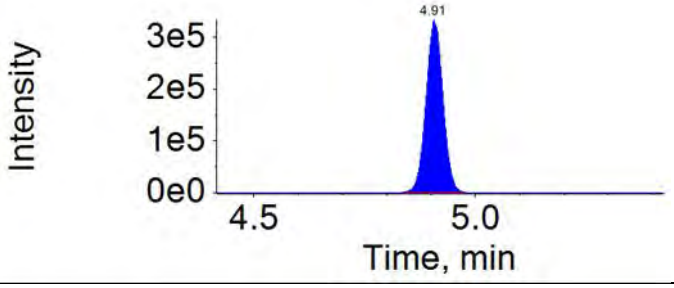
APPROVED
By JPT at 4:33 pm, 11/13/18

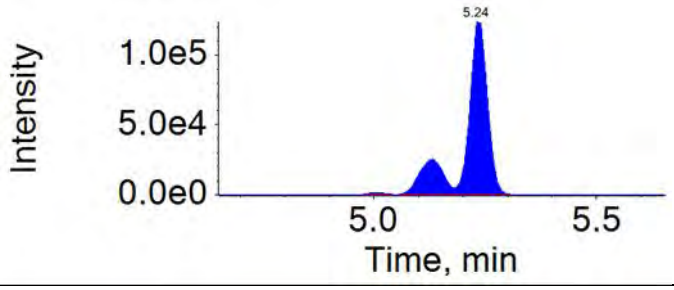
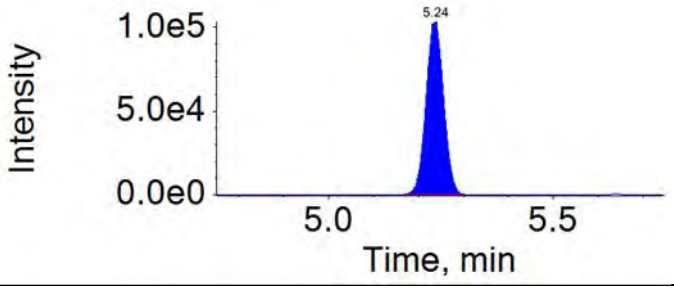
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

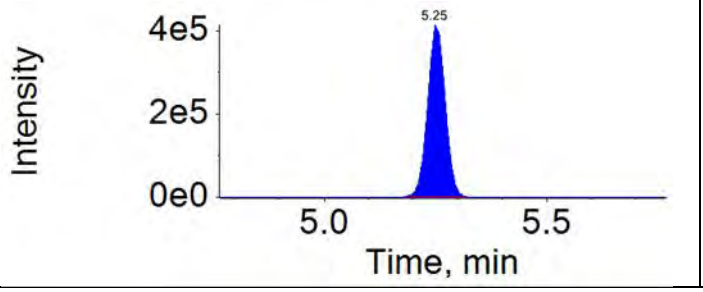
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

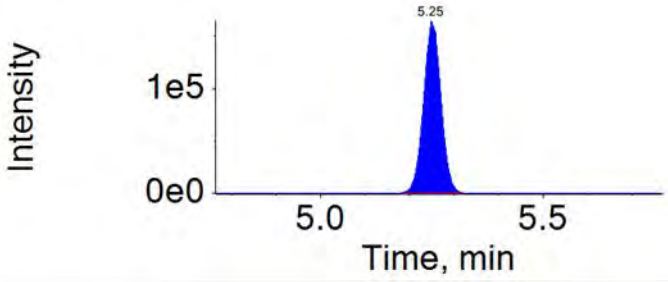
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

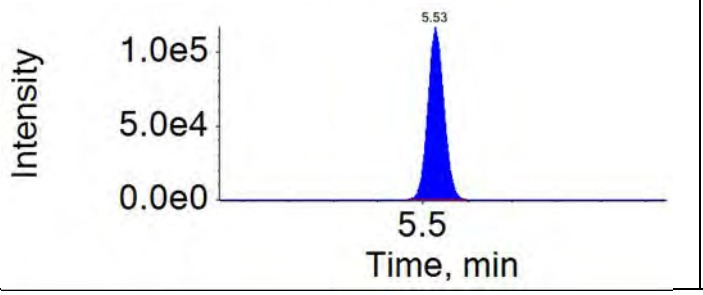
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

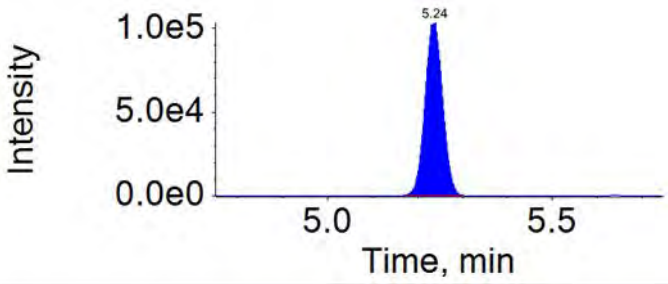
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



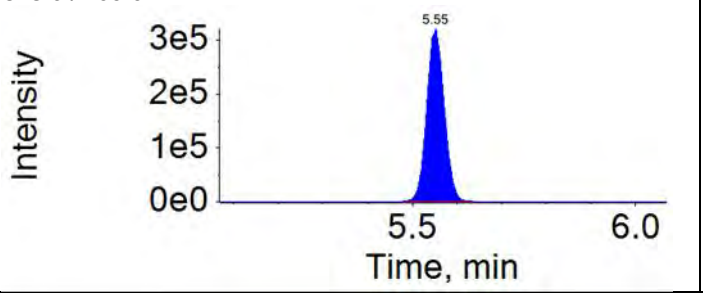


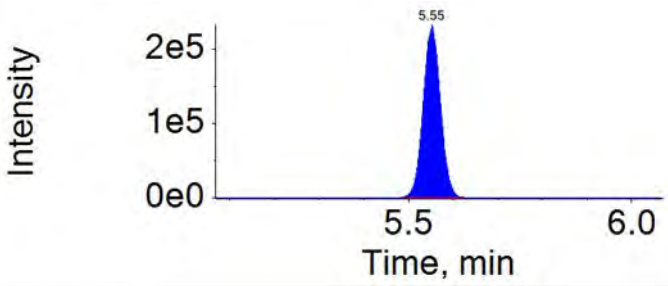
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



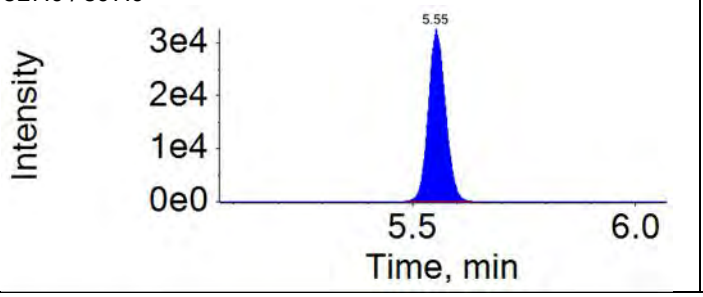


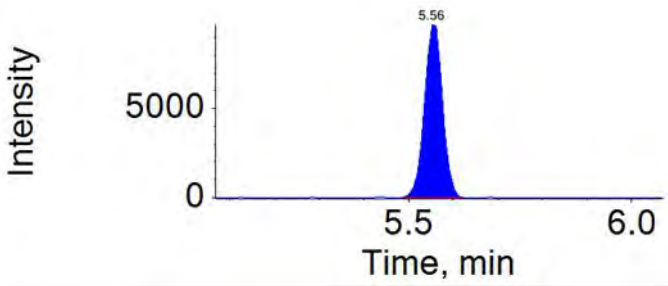
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0

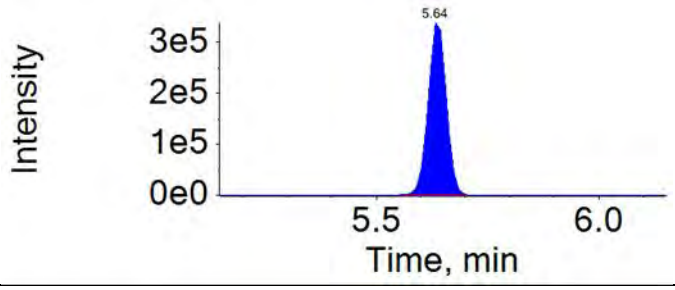
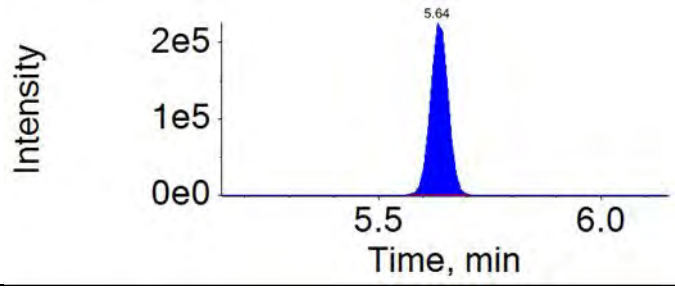


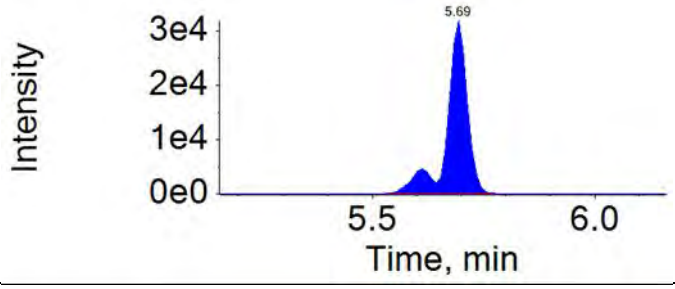
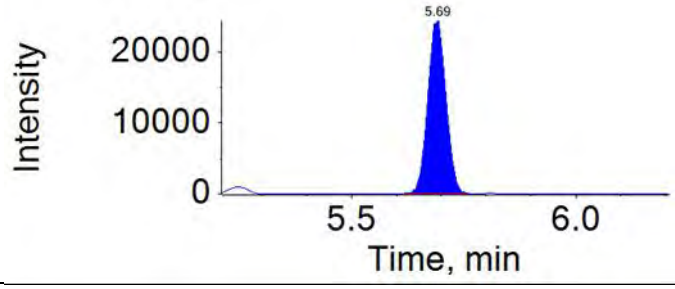


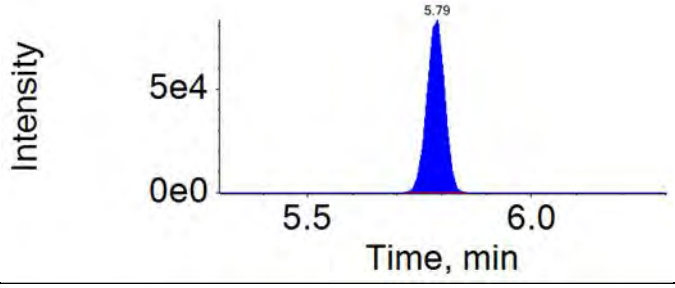
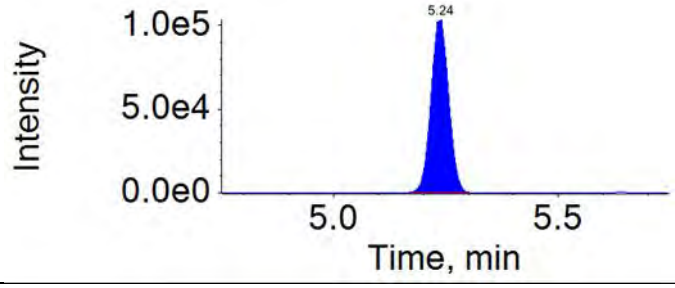
APPROVED
By JPT at 4:33 pm, 11/13/18

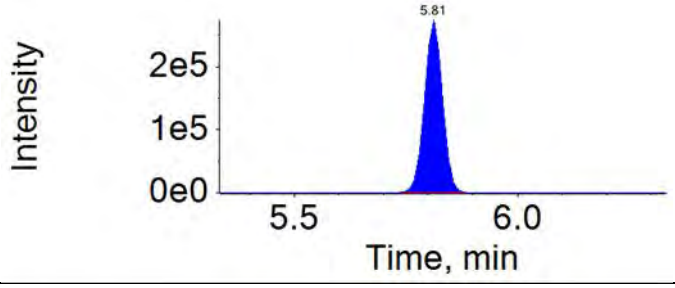
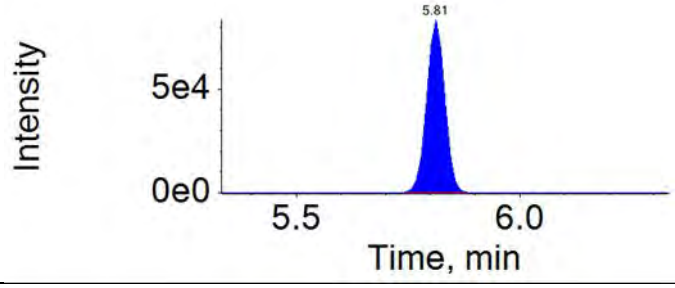
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0
	

Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0
	

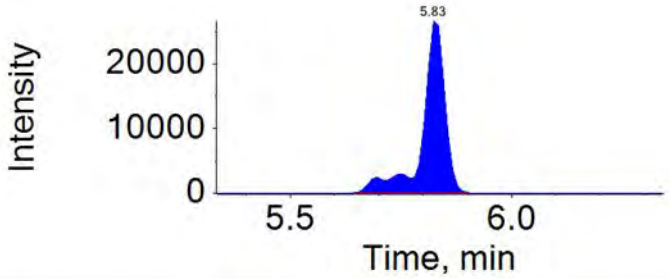
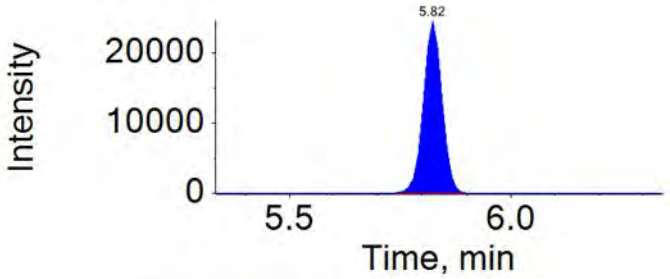
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0
	

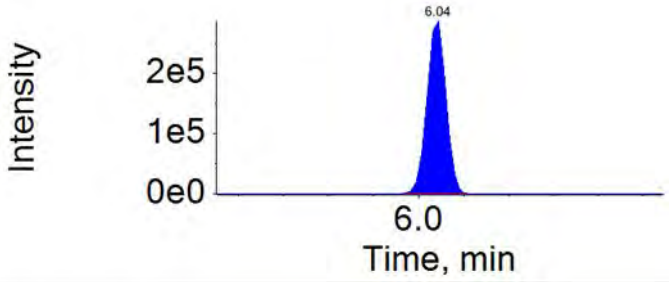
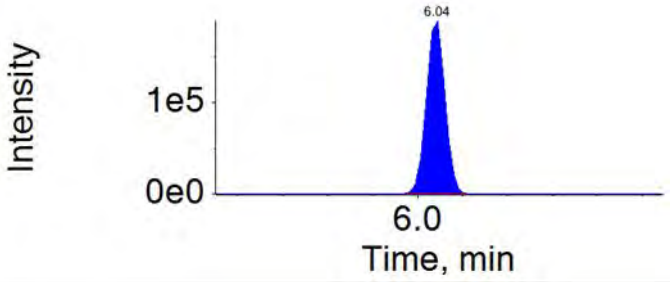
Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0
	

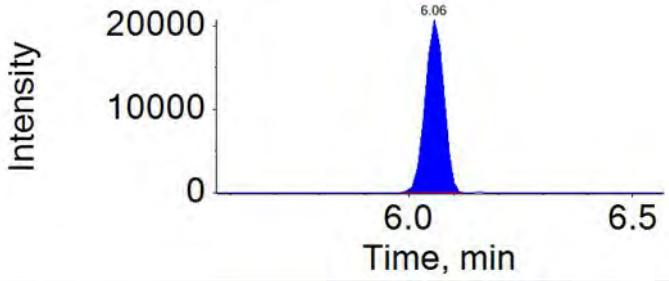
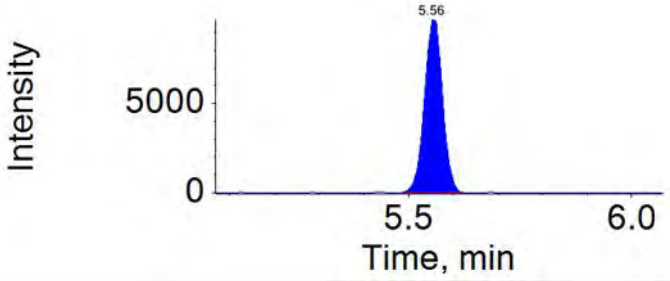
APPROVED
By JPT at 4:33 pm, 11/13/18

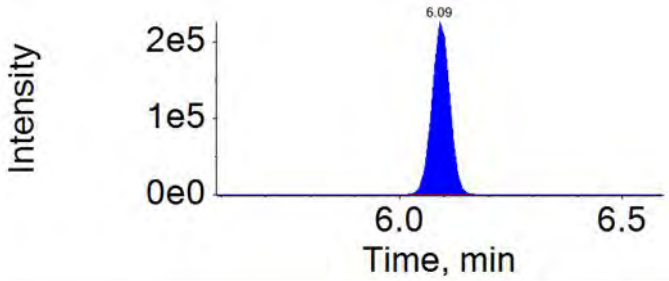
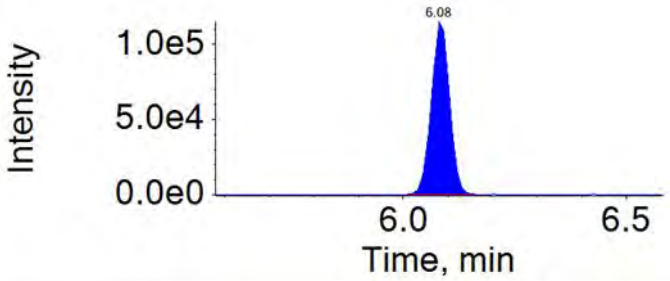
REVIEWED
By HMK at 1:48 pm, 11/14/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0
	

Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0
	

Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0
	

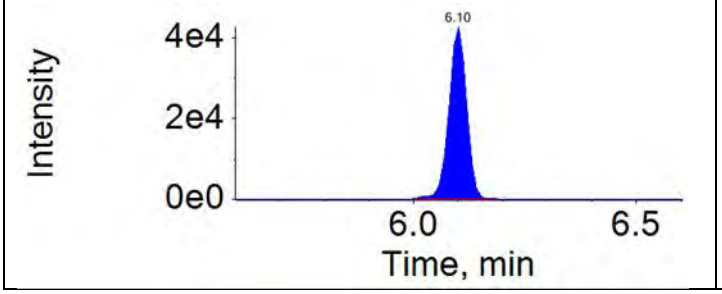
Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0
	

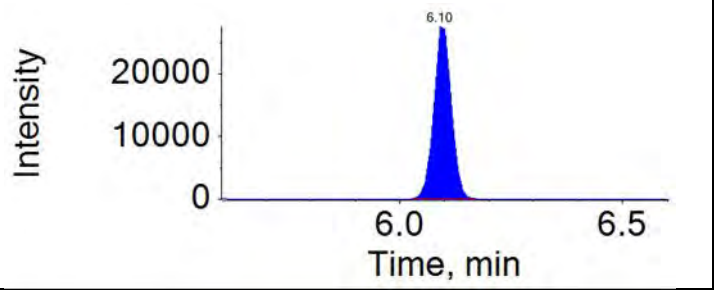
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

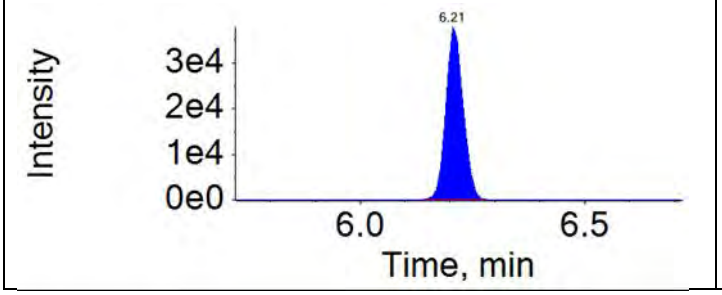
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

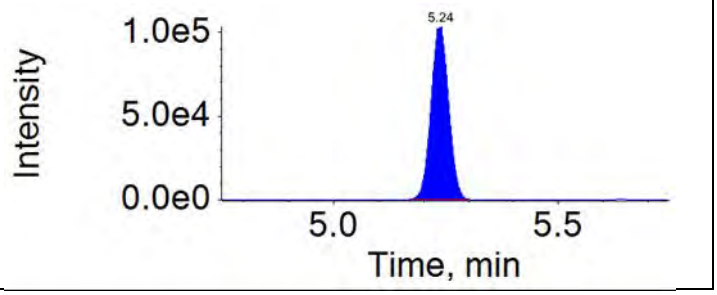
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



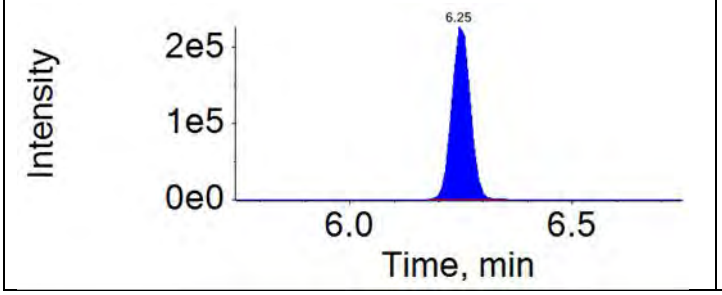


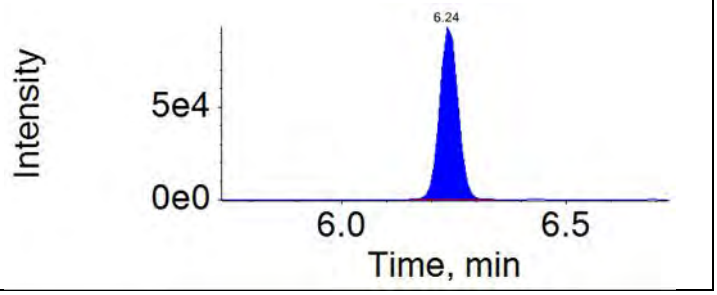
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



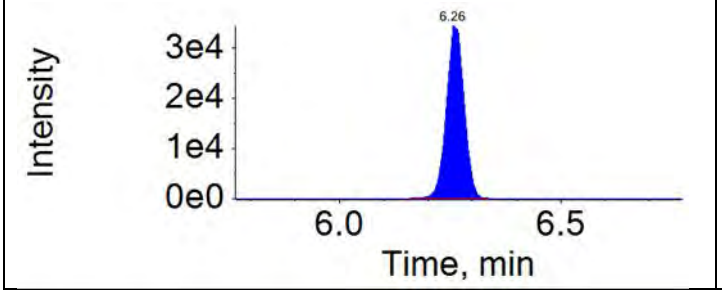


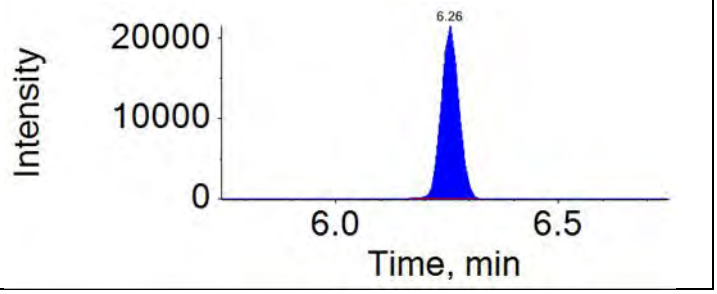
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



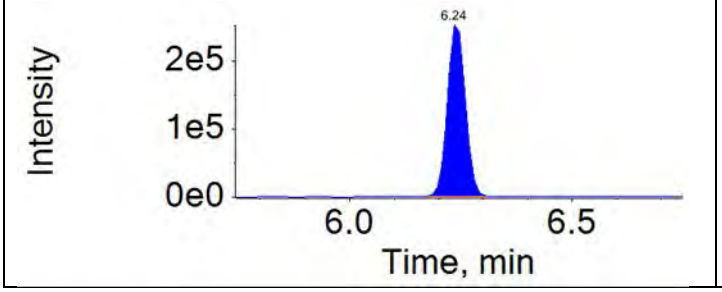


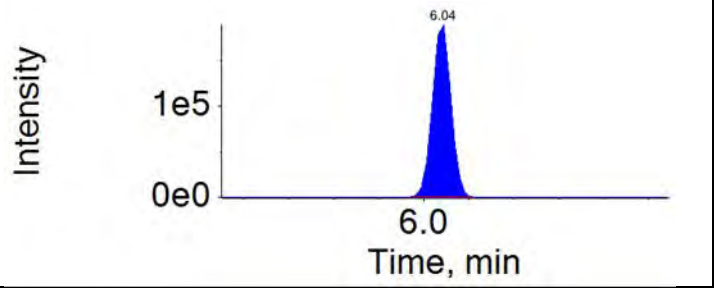
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

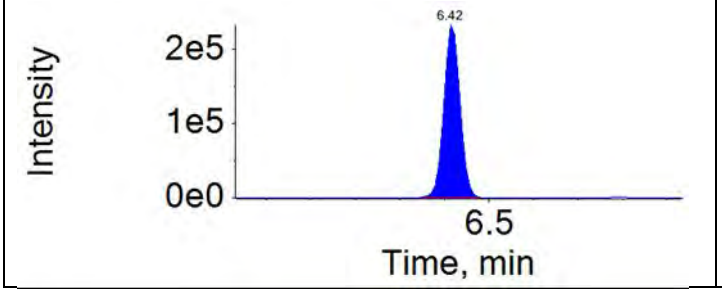
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

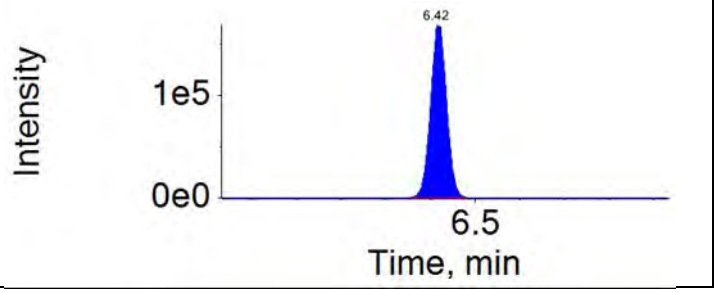
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



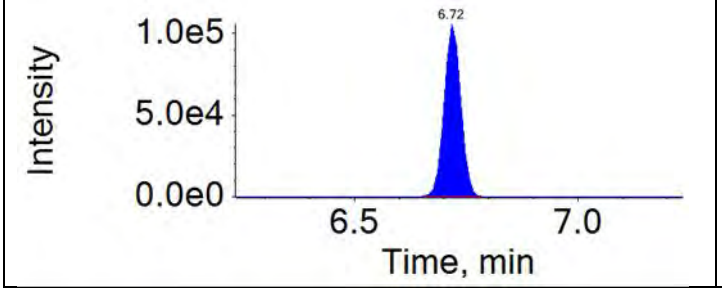


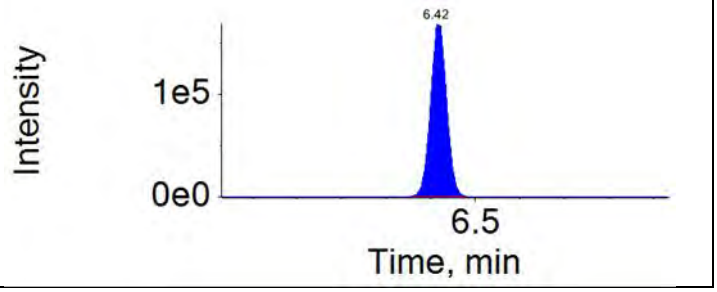
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



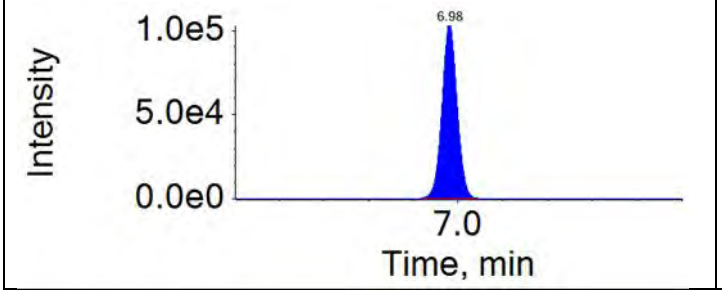


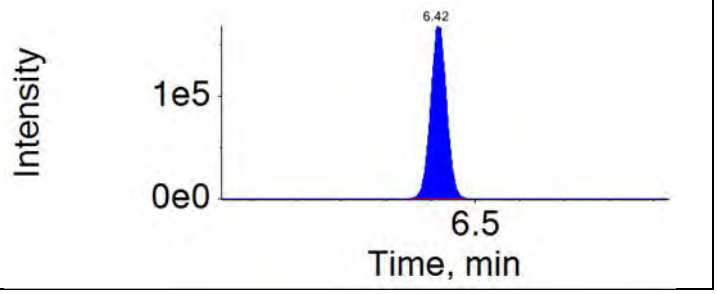
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



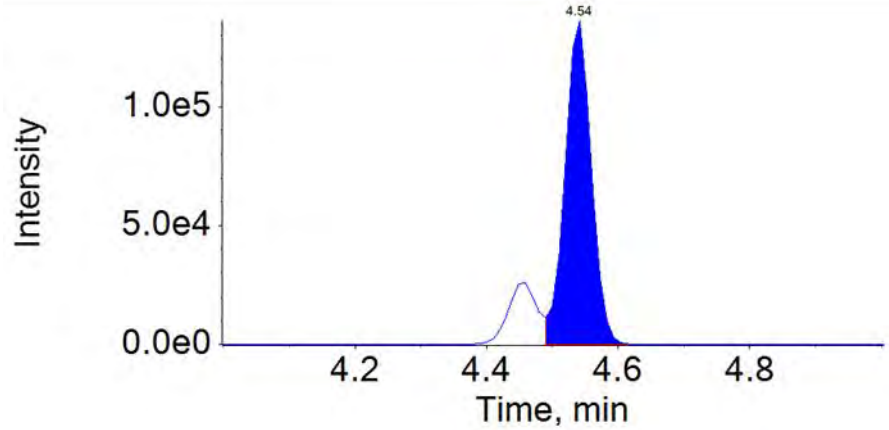


APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

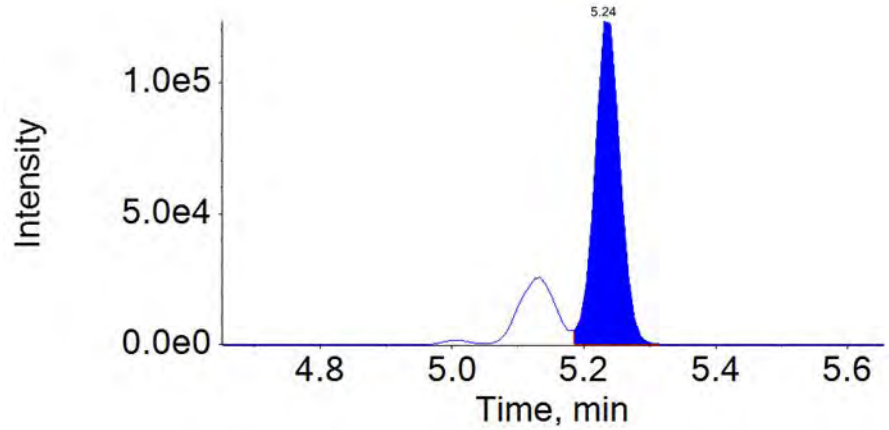
Results Table Name: 18NOV13DCCV1-4
Results Table Date: 11/13/2018 4:25:30 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.54
Peak Area:
379499.6
Mass Range:
399.0 / 80.0
File Name:
18NOV13D-23.wiff
Sample Name:
CCV3_CAL4



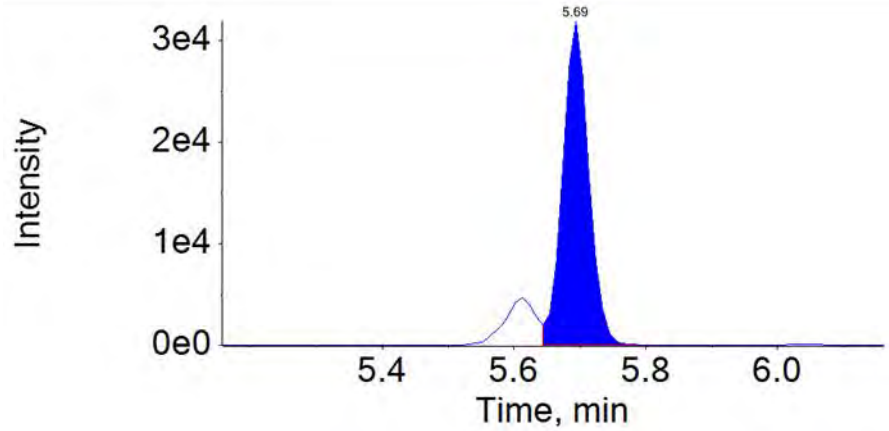
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
334920.9
Mass Range:
499.0 / 80.0
File Name:
18NOV13D-23.wiff
Sample Name:
CCV3_CAL4



Integration Comment: incorrect integration

Component Name:
NMeFOSAA
RT (min.):
5.69
Peak Area:
87601.1
Mass Range:
570.0 / 419.0
File Name:
18NOV13D-23.wiff
Sample Name:
CCV3_CAL4

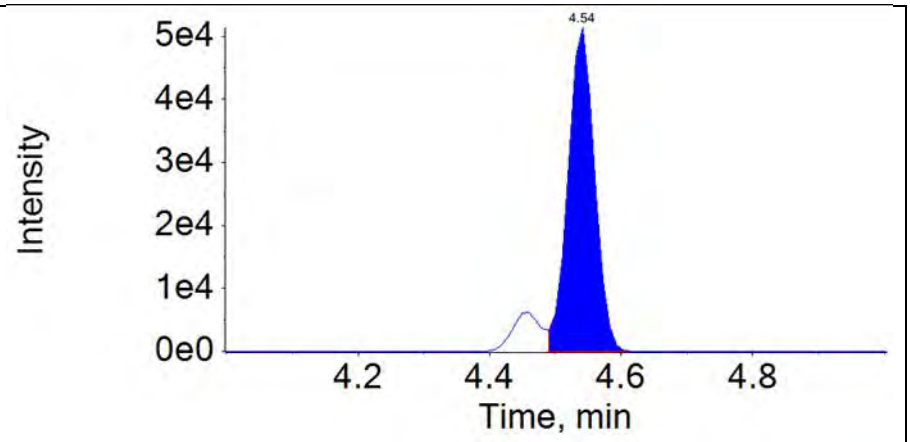


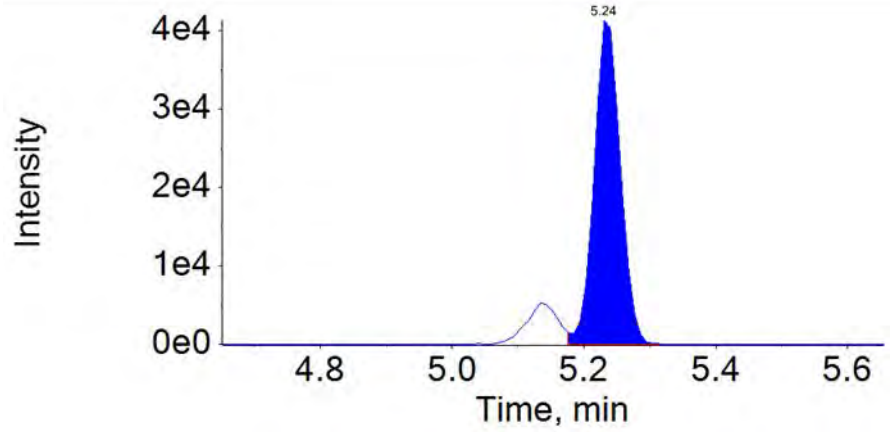
Integration Comment: incorrect integration

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

Results Table Name: 18NOV13DCCV1-4
Results Table Date: 11/13/2018 4:25:30 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFHxS_2 **RT (min.):** 4.54 **Peak Area:** 144084.3 **Mass Range:** 399.0 / 99.0 **File Name:** 18NOV13D-23.wiff **Sample Name:** CCV3_CAL4	 **Integration Comment:** incorrect integration

Component Name: PFOS_2 **RT (min.):** 5.24 **Peak Area:** 114964.1 **Mass Range:** 499.0 / 99.0 **File Name:** 18NOV13D-23.wiff **Sample Name:** CCV3_CAL4	 **Integration Comment:** incorrect integration

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

Results Table Name: 18NOV13DCCV1-4
Results Table Date: 11/13/2018 4:25:30 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

Ion Ratio Report

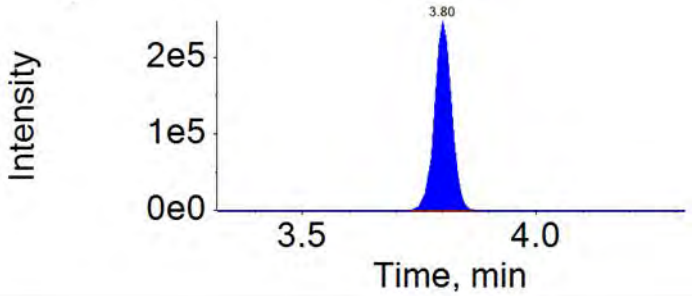
Sample Name: CCV3_CAL4 **Instrument Name:** LM27631 **File Name:** 18NOV13D-23.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.80	1.00	617597.3	A	N/A	1.0000			
PFBS_2	3.80	1.00	229777.3	A	N/A	0.3721	2	50	
4:2-FTS	4.12	1.00	141267.3	A	N/A	1.0000			
4:2 FTS_2	4.12	1.00	79686.5	A	N/A	0.5641		#NA!	
PFHxA	4.15	1.00	1280406.9	A	N/A	1.0000			
PFHxA_2	4.15	1.00	14066.0	A	N/A	0.0110	-7	50	
PFPeS	4.17	1.10	309863.8	A	N/A	1.0000			
PFPeS_2	4.17	1.10	162616.7	A	N/A	0.5248	1	50	
PFHpA	4.54	1.00	1359613.4	A	N/A	1.0000			
PFHpA_2	4.54	1.00	80199.9	A	N/A	0.0590	5	50	
PFHxS	4.54	1.00	458768.0	M	N/A	1.0000			
PFHxS_2	4.54	1.00	162757.7	M	N/A	0.3548	17	50	
6:2-FTS	4.90	1.00	108071.5	A	N/A	1.0000			
6:2 FTS_2	4.90	1.00	70004.2	A	N/A	0.6478		#NA!	
PFHpS	4.90	1.08	446880.9	A	N/A	1.0000			
PFHpS_2	4.90	1.08	176897.1	A	N/A	0.3958	-3	50	
PFOA	4.91	1.00	1362301.6	A	N/A	1.0000			
PFOA_2	4.91	1.00	76080.7	A	N/A	0.0558	-2	50	
PFOS	5.24	1.00	439272.9	M	N/A	1.0000			
PFOS_2	5.24	1.00	132645.4	M	N/A	0.3020	17	50	
PFNA	5.25	1.00	1141467.5	A	N/A	1.0000			
PFNA_2	5.25	1.00	23667.8	A	N/A	0.0207	-10	50	
PFNS	5.53	1.06	291902.2	A	N/A	1.0000			
PFNS_2	5.53	1.06	137864.3	A	N/A	0.4723	-1	50	
PFDA	5.55	1.00	875408.9	A	N/A	1.0000			
PFDA_2	5.55	1.00	6521.3	A	N/A	0.0074	-6	50	
8:2-FTS	5.55	1.00	86544.5	A	N/A	1.0000			
8:2 FTS_2	5.55	1.00	53086.1	A	N/A	0.6134		#NA!	
NMeFOSAA	5.69	1.00	102800.4	M	N/A	1.0000			
NMeFOSAA_2	5.69	1.00	32106.2	A	N/A	0.3123	47	50	
PFDS	5.79	1.11	232494.5	A	N/A	1.0000			
PFDS_2	5.79	1.11	110722.6	A	N/A	0.4762	-6	50	
PFUnDA	5.81	1.00	763658.8	A	N/A	1.0000			
PFUnDA_2	5.81	1.00	2419.0	A	N/A	0.0032	-24	50	
NEtFOSAA	5.83	1.00	94982.9	A	N/A	1.0000			
NEtFOSAA_2	5.83	1.00	66066.5	A	N/A	0.6956	20	50	
PFDoDA	6.04	1.00	846251.4	A	N/A	1.0000			
PFDoDA_2	6.04	1.00	9239.4	A	N/A	0.0109	-33	50	
10:2-FTS	6.06	1.09	60107.9	A	N/A	1.0000			
10:2 FTS_2	6.06	1.09	43917.0	A	N/A	0.7306		#NA!	
PFTrDA	6.24	1.03	708052.2	A	N/A	1.0000			
PFTrDA_2	6.24	1.03	6363.9	A	N/A	0.0090	-3	50	
PFTeDA	6.42	1.00	586334.7	A	N/A	1.0000			
PFTeDA_2	6.42	1.00	3765.2	A	N/A	0.0064	0	50	
PFHxDA	6.72	1.05	271760.5	A	N/A	1.0000			
PFHxDA_2	6.72	1.05	17697.9	A	N/A	0.0651	-4	50	
PFODA	6.98	1.09	243657.7	A	N/A	1.0000			
PFODA_2	6.98	1.09	6199.0	A	N/A	0.0254	-6	50	

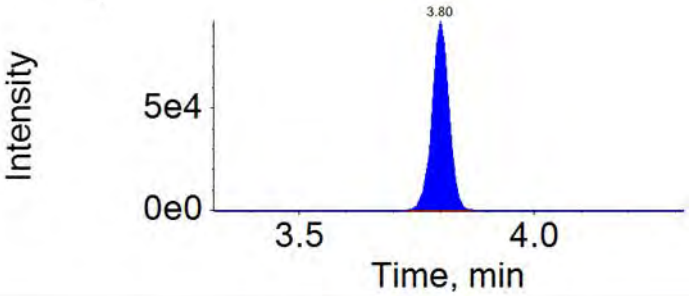
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

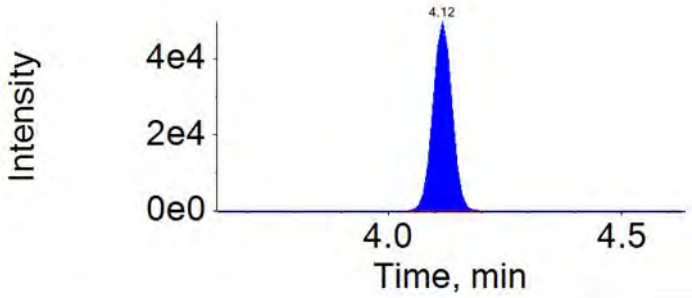
Component: PFBS
Primary Mass: 299.0 / 80.0



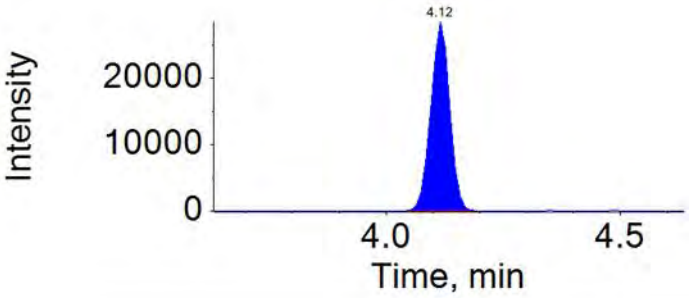
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



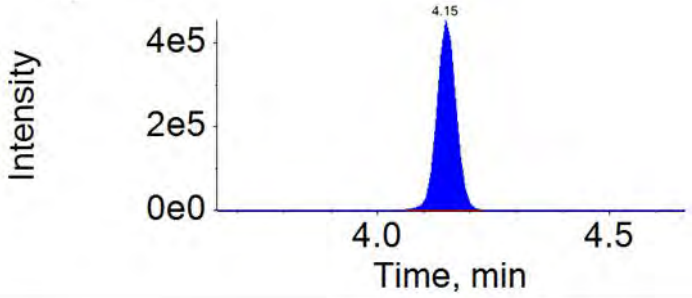
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



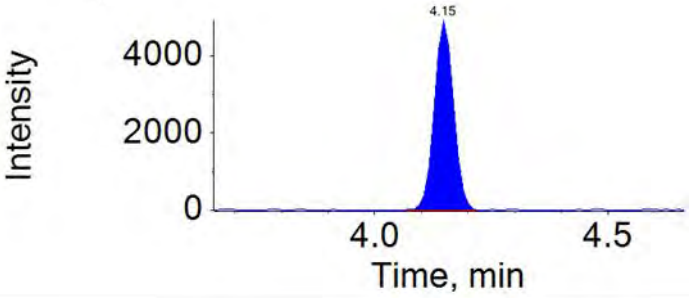
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



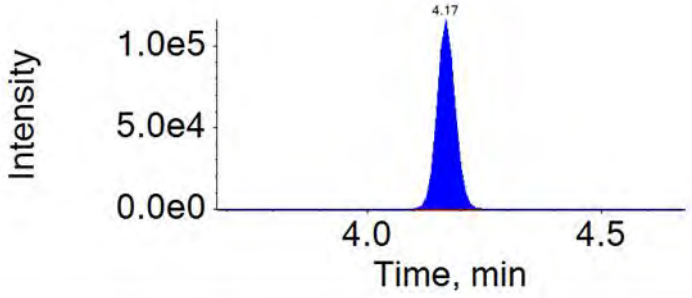
Component: PFHxA
Primary Mass: 313.0 / 269.0



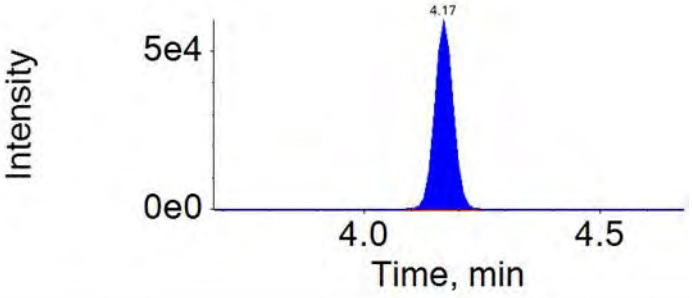
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



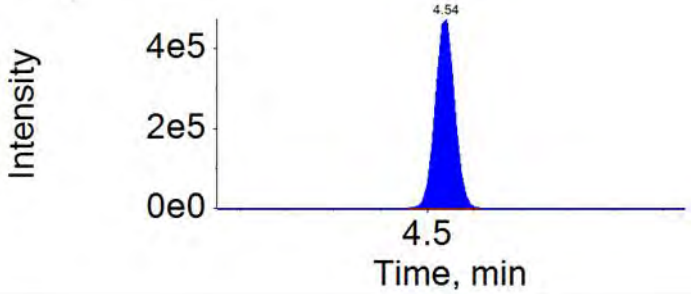
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



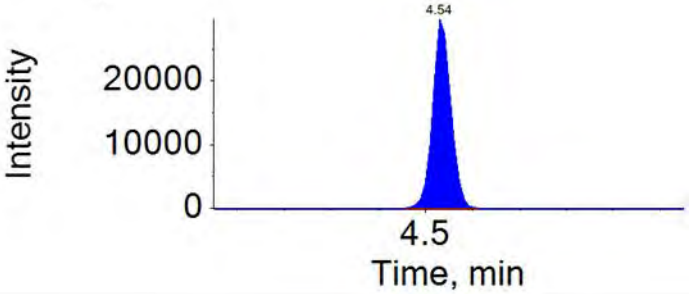
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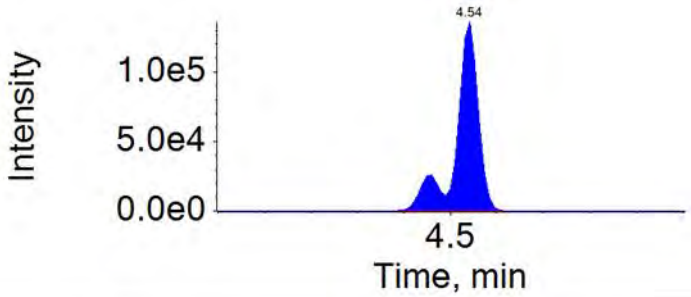
Component: PFHpA
Primary Mass: 363.0 / 319.0



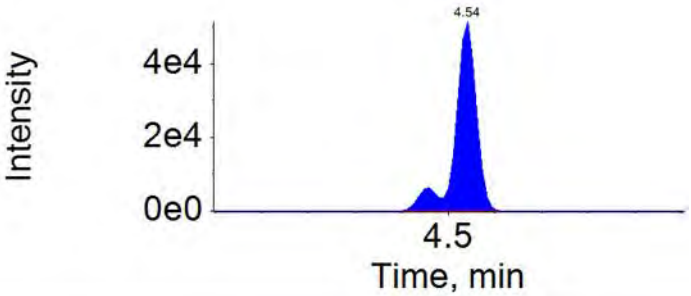
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



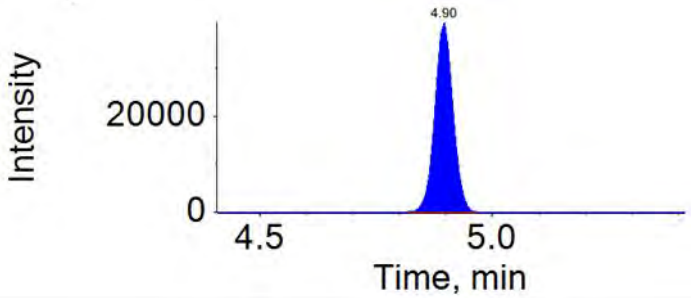
Component: PFHxS
Primary Mass: 399.0 / 80.0



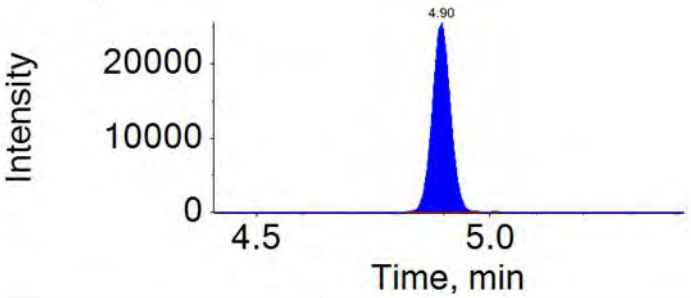
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



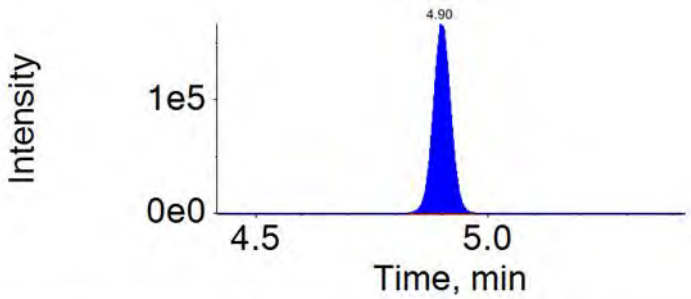
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



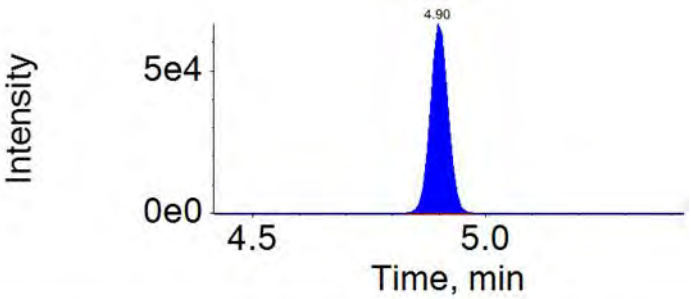
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



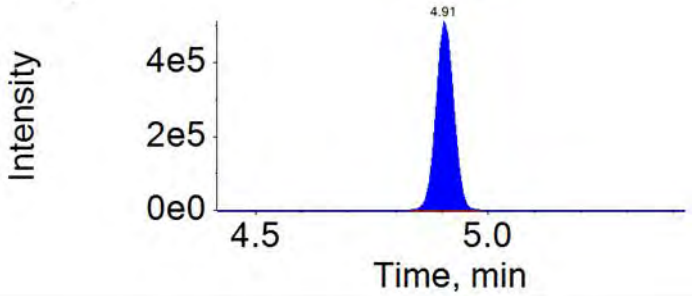
Component: PFHpS
Primary Mass: 449.0 / 80.0



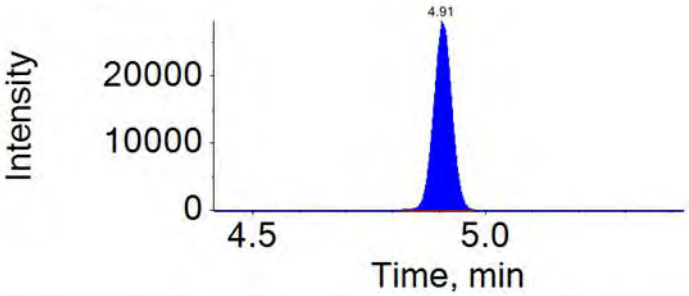
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



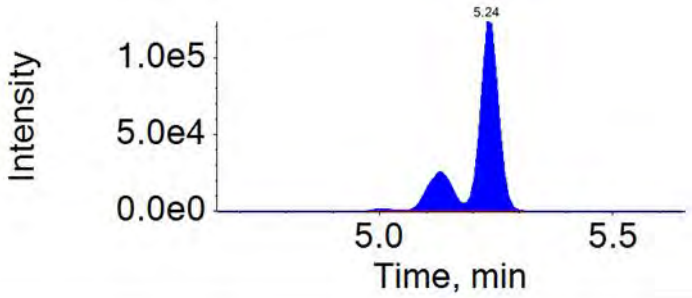
Component: PFOA
Primary Mass: 413.0 / 369.0



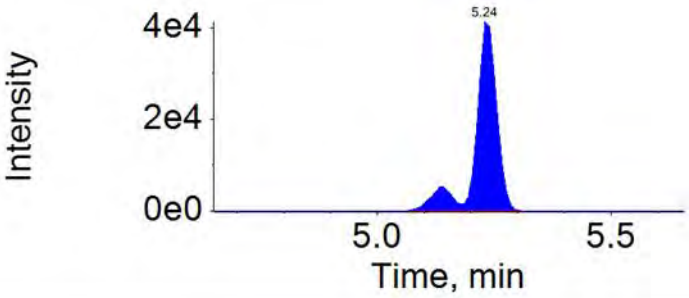
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



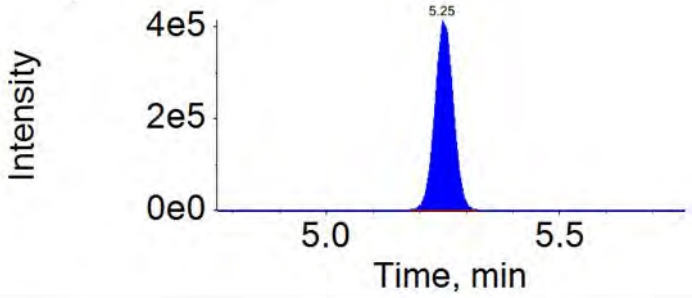
Component: PFOS
Primary Mass: 499.0 / 80.0



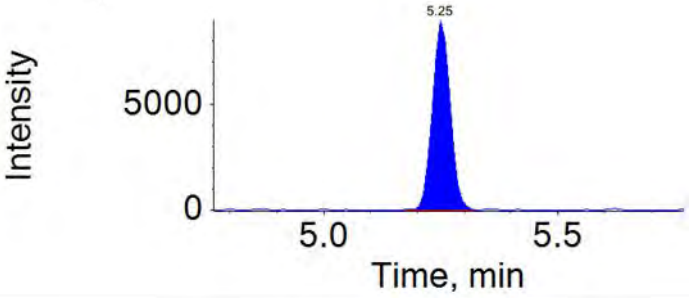
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



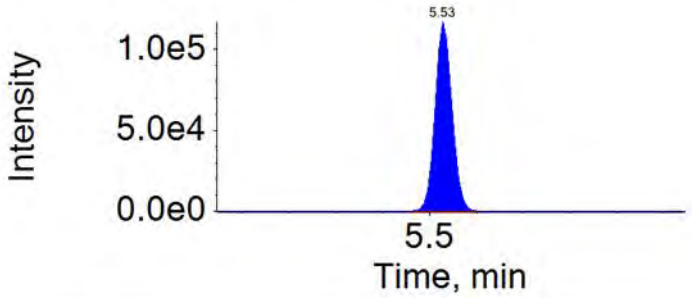
Component: PFNA
Primary Mass: 463.0 / 419.0



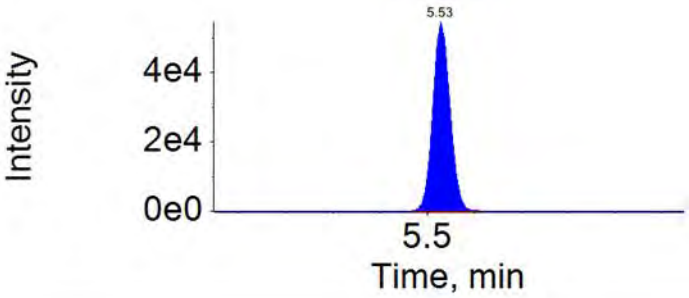
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



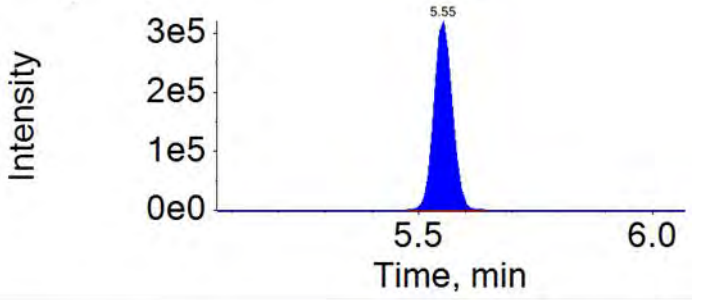
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



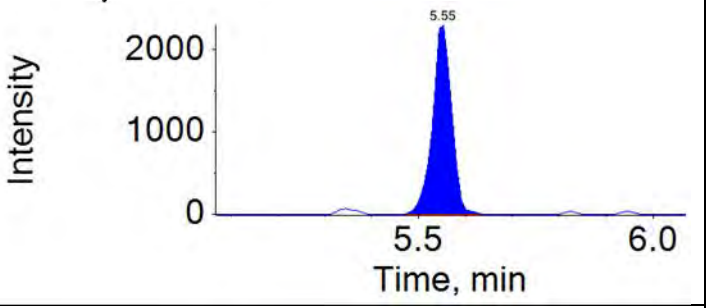
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By HMK at 1:48 pm, 11/14/18

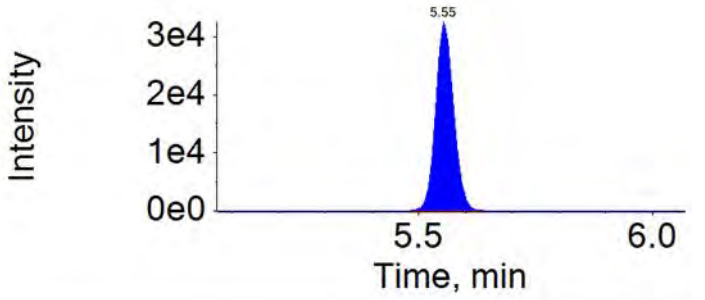
Component: PFDA
Primary Mass: 513.0 / 469.0



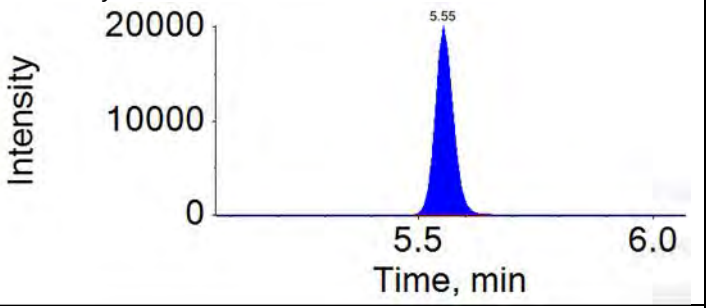
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



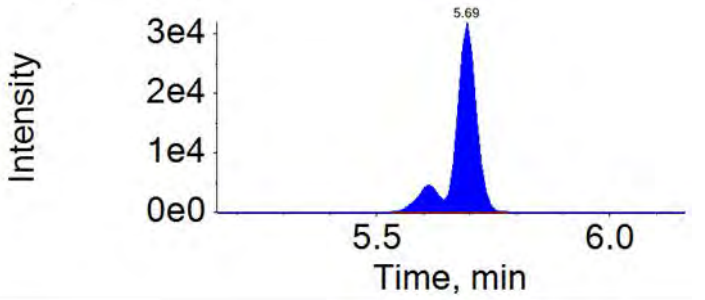
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



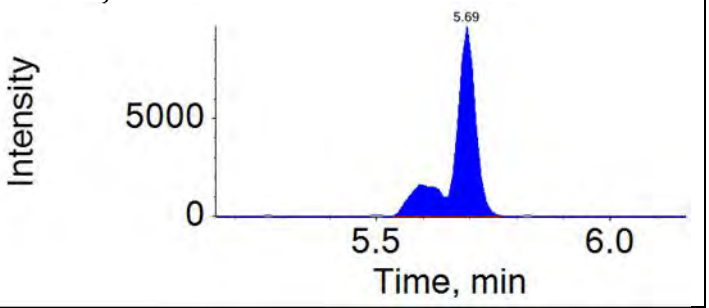
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



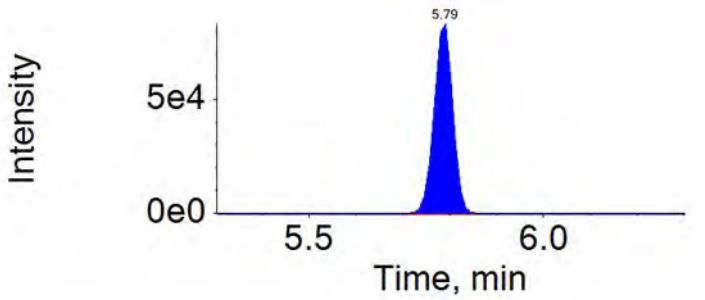
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



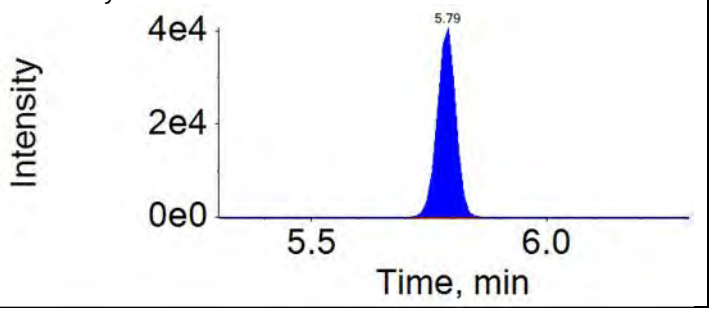
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



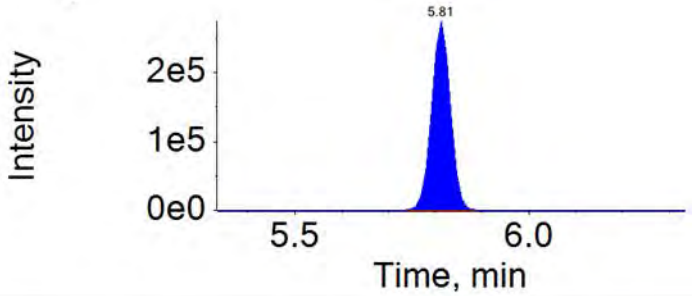
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Secondary Mass: 599.0 / 99.0



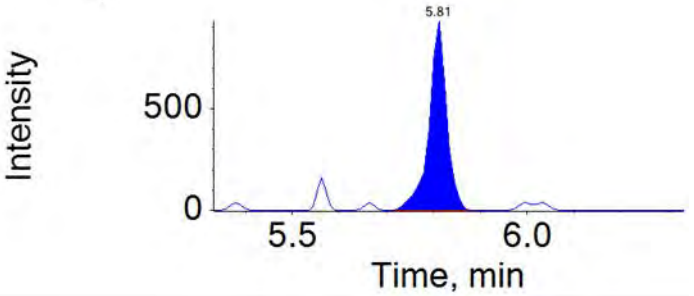
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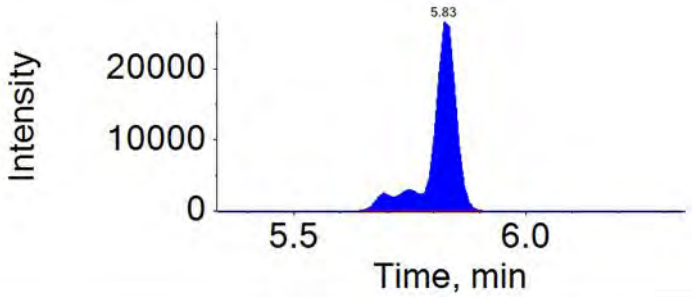
Component: PFUnDA
Primary Mass: 563.0 / 519.0



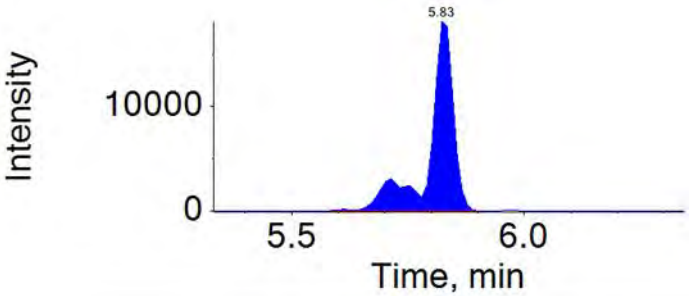
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



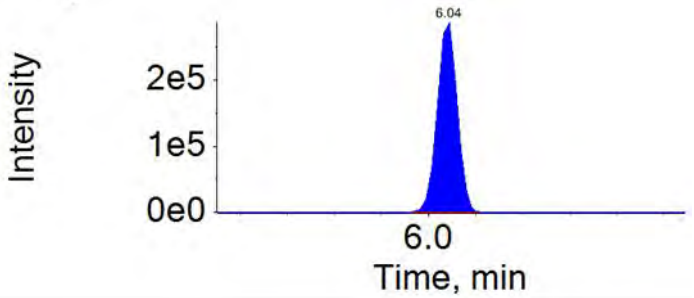
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



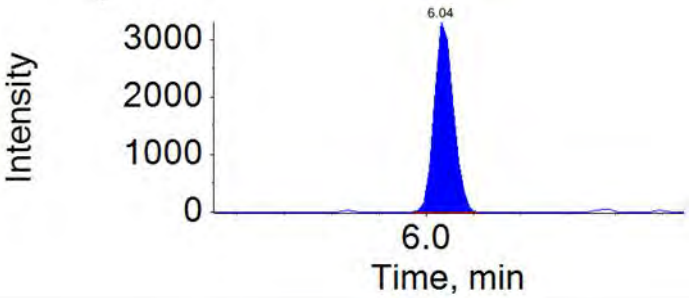
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



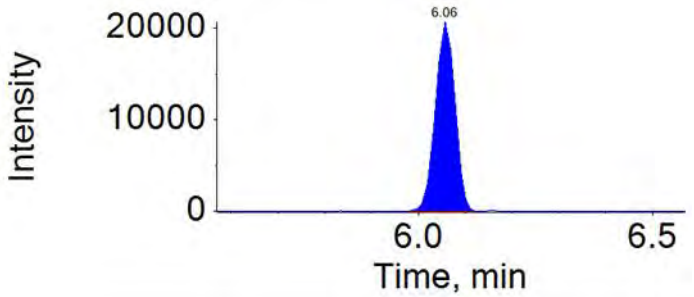
Component: PFDoDA
Primary Mass: 613.0 / 569.0



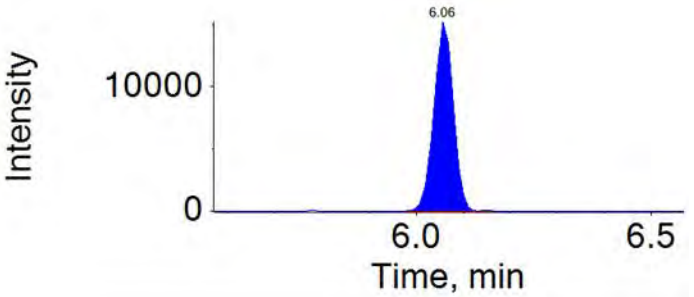
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



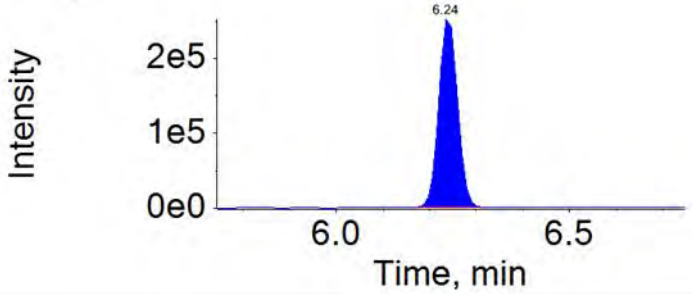
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



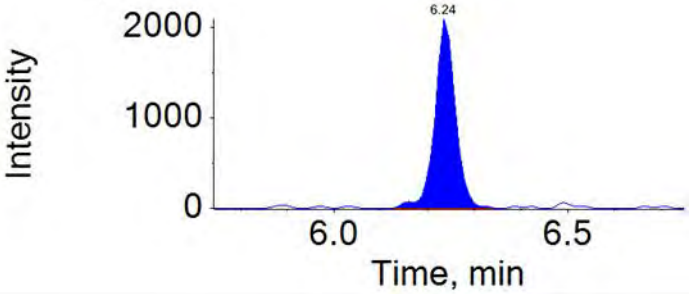
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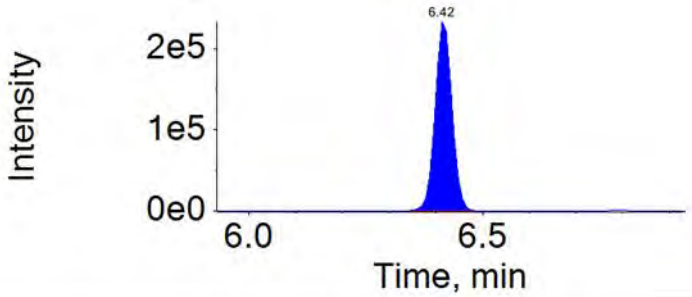
Component: PFTrDA
Primary Mass: 663.0 / 619.0



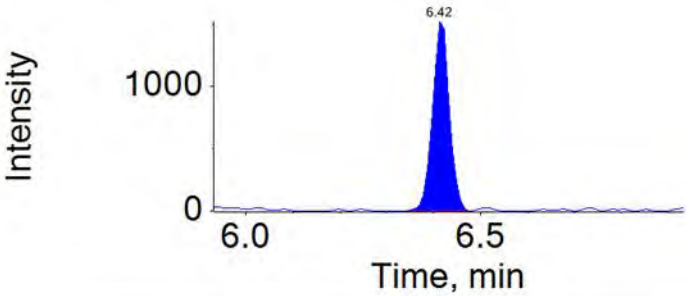
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



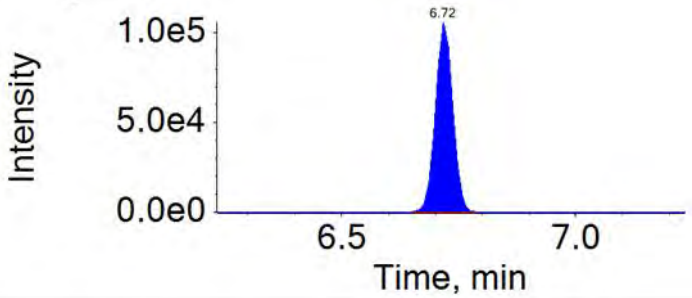
Component: PFTeDA
Primary Mass: 713.0 / 669.0



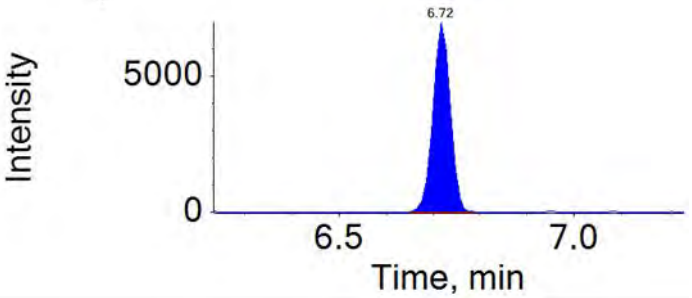
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



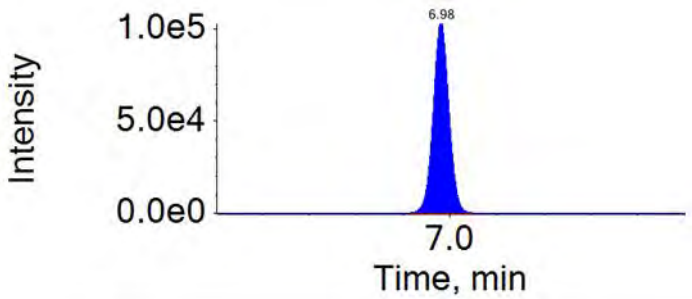
Component: PFHxDA
Primary Mass: 813.0 / 769.0



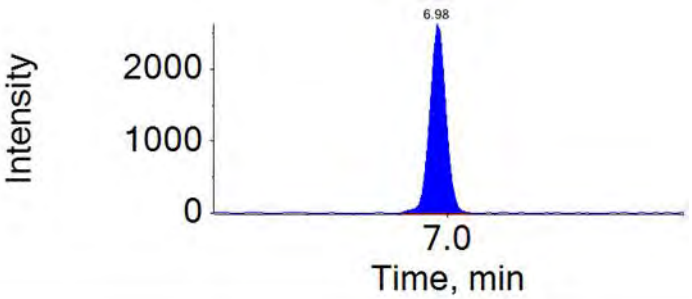
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



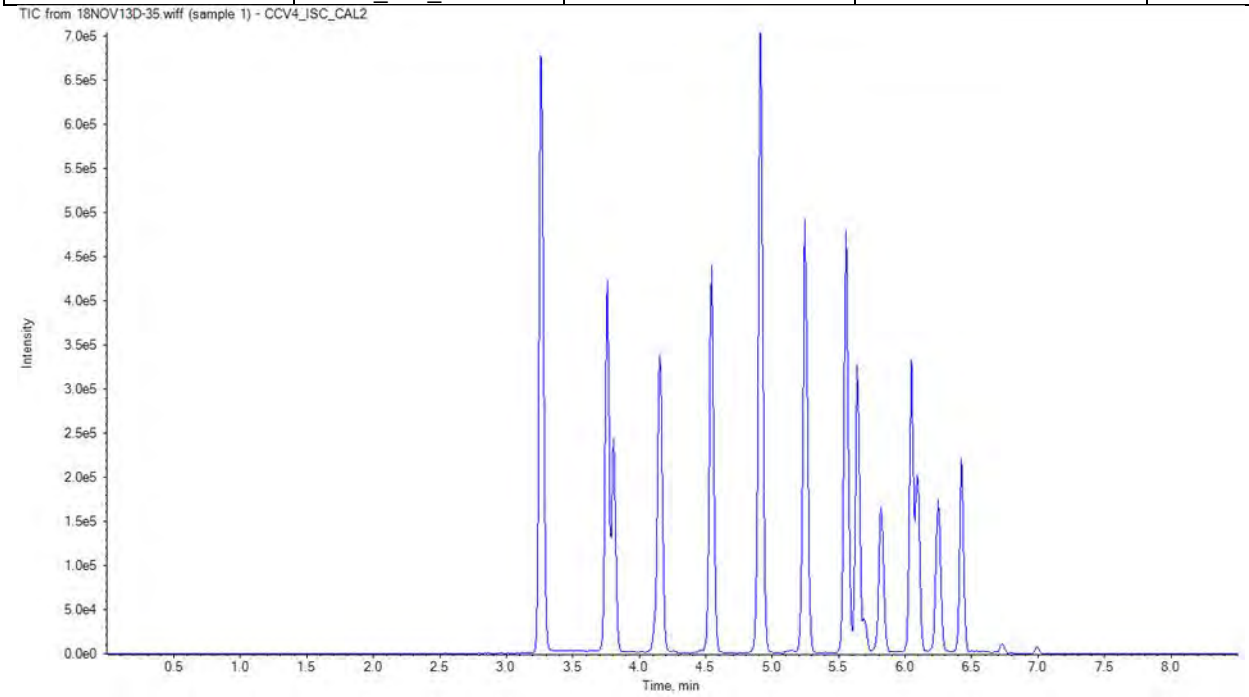
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By HMK at 1:48 pm, 11/14/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV4_ISC_CAL2	CALBRN21833C	18NOV13D-35.wiff	2018-11-13T14:50:05



Injection Standard Area Reference File: 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	676507.8	661126.9	2	50	
13C2-PFOA	5.0	456340.5	466902.6	-2	50	
13C4-PFOS	4.8	243882.3	247446.9	-1	50	
13C2-PFDA	5.0	295199.0	295381.6	0	50	

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV4_ISC_CAL2	CALBRN21833C	18NOV13D-35.wiff	2018-11-13T14:50:05

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	83542.0	10	13C4-PFBA	793411.2	5.0	0.105	3.26	1.000	0.600	0.583	-3	30	
PFPeA	79594.8	11	13C5-PFPeA	772163.1	5.0	0.103	3.76	1.000	0.600	0.597	-1	30	
PFBS	45706.2	10	13C3-PFBS	434935.5	4.7	0.105	3.81	1.000	0.531	0.500	-6	30	
4:2-FTS	10413.5	11	13C2-4:2-FTS	51183.2	4.7	0.203	4.12	1.000	0.560	0.552	-1	30	
PFHxA	96228.3	12	13C5-PFHxA	684967.5	5.0	0.140	4.16	1.000	0.600	0.587	-2	30	
PFPeS	22230.8	11	13C3-PFBS	434935.5	4.7	0.051	4.17	1.100	0.563	0.496	-12	30	
PFHpA	102421.2	12	13C4-PFHpA	539414.2	5.0	0.190	4.54	1.000	0.600	0.629	5	30	
PFHxS	33058.8	18	13C3-PFHxS	320032.3	4.7	0.103	4.54	1.000	0.547	0.501	-8	30	
6:2-FTS	9288.1	12	13C2-6:2-FTS	35426.1	4.8	0.262	4.90	1.000	0.569	0.634	12	30	
PFHpS	32964.6	11	13C3-PFHxS	320032.3	4.7	0.103	4.91	1.080	0.571	0.542	-5	30	
PFOA	100522.0	11	13C8-PFOA	945889.4	5.0	0.106	4.91	1.000	0.600	0.568	-5	30	
PFOS	33602.8	22	13C8-PFOS	279193.2	4.8	0.120	5.24	1.000	0.555	0.526	-5	30	
PFNA	77741.1	12	13C9-PFNA	537019.1	5.0	0.145	5.26	1.000	0.600	0.522	-13	30	
PFNS	21345.1	11	13C8-PFOS	279193.2	4.8	0.076	5.54	1.060	0.576	0.535	-7	30	
PFDA	67467.8	11	13C6-PFDA	644545.7	5.0	0.105	5.56	1.000	0.600	0.555	-8	30	
8:2-FTS	5464.6	11	13C2-8:2-FTS	28375.5	4.8	0.193	5.56	1.000	0.575	0.449	-22	30	
PFOSA	65447.7	11	13C8-PFOSA	663223.9	5.0	0.099	5.64	1.000	0.600	0.482	-20	30	
NMeFOSAA	6912.0	19	d3-NMeFOSAA	77244.4	5.0	0.089	5.70	1.000	0.600	0.506	-16	30	
PFDS	15131.2	11	13C8-PFOS	279193.2	4.8	0.054	5.79	1.110	0.578	0.491	-15	30	
PFUnDA	62038.1	12	13C7-PFUnDA	262457.8	5.0	0.236	5.82	1.000	0.600	0.618	3	30	
NEtFOSAA	7265.9	20	d5-NEtFOSAA	70492.9	5.0	0.103	5.84	1.000	0.600	0.540	-10	30	
PFDoDA	68920.5	11	13C2-PFDoDA	597021.0	5.0	0.115	6.05	1.000	0.600	0.588	-2	30	
10:2-FTS	3993.2	12	13C2-8:2-FTS	28375.5	4.8	0.141	6.06	1.090	0.578	0.469	-19	30	
NMePFOSAE	45689.8	11	d7-NMePFOSAE	335666.4	5.0	0.136	6.10	1.000	0.600	0.567	-6	30	
NMePFOSA	9603.5	12	d3-NMePFOSA	77091.0	5.0	0.125	6.10	1.000	0.600	0.615	2	30	
PFDoS	7558.1	11	13C8-PFOS	279193.2	4.8	0.027	6.22	1.190	0.581	0.474	-18	30	
NEtPFOSAE	46931.6	11	d9-NEtPFOSAE	267308.0	5.0	0.176	6.26	1.000	0.600	0.563	-6	30	
NEtPFOSA	7335.3	12	d5-NEtPFOSA	60704.4	5.0	0.121	6.27	1.000	0.600	0.555	-8	30	
PFTrDA	52009.4	11	13C2-PFDoDA	597021.0	5.0	0.087	6.25	1.030	0.600	0.550	-8	30	
PFTeDA	40149.8	10	13C2-PFTeDA	406531.9	5.0	0.099	6.42	1.000	0.600	0.554	-8	30	
PFHxDA	19788.9	11	13C2-PFTeDA	406531.9	5.0	0.049	6.73	1.050	0.600	0.580	-3	30	
PFODA	16708.0	10	13C2-PFTeDA	406531.9	5.0	0.041	6.99	1.090	0.600	0.572	-5	30	

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV4_ISC_CAL2			**Data File:**		18NOV13D-35.wiff
Sample ID:	CALBRN21833C			**Acquis Date:**		2018-11-13T14:50:05
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	4			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV13DCCV1-4
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N/A			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	676507.8	661126.9	2	50	
13C2-PFOA	5.0	456340.5	466902.6	-2	50	
13C4-PFOS	4.8	243882.3	247446.9	-1	50	
13C2-PFDA	5.0	295199.0	295381.6	0	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	793411.2	13C3-PFBA	676507.8	1.173	5.000	5.258	105	70-130	
E13C5-PFPeA	772163.1	13C3-PFBA	676507.8	1.141	5.000	5.119	102	70-130	
E13C3-PFBS	434935.5	13C3-PFBA	676507.8	0.643	4.650	4.538	98	70-130	
E13C2-4:2-FTS	51183.2	13C2-PFOA	456340.5	0.112	4.670	4.995	107	70-130	
E13C5-PFHxA	684967.5	13C2-PFOA	456340.5	1.501	5.000	5.422	108	70-130	
E13C3-PFHxS	320032.3	13C2-PFOA	456340.5	0.701	4.730	4.812	102	70-130	
E13C4-PFHpA	539414.2	13C2-PFOA	456340.5	1.182	5.000	5.325	107	70-130	
E13C2-6:2-FTS	35426.1	13C2-PFOA	456340.5	0.078	4.750	5.194	109	70-130	
E13C8-PFOA	945889.4	13C2-PFOA	456340.5	2.073	5.000	5.711	114	70-130	
E13C8-PFOS	279193.2	13C4-PFOS	243882.3	1.145	4.780	5.072	106	70-130	
E13C9-PFNA	537019.1	13C4-PFOS	243882.3	2.202	5.000	6.139	123	70-130	
E13C6-PFDA	644545.7	13C2-PFDA	295199.0	2.183	5.000	5.095	102	70-130	
E13C2-8:2-FTS	28375.5	13C2-PFDA	295199.0	0.096	4.790	4.794	100	70-130	
E13C8-PFOSA	663223.9	13C2-PFDA	295199.0	2.247	5.000	4.981	100	70-130	
Ed3-NMeFOSAA	77244.4	13C2-PFDA	295199.0	0.262	5.000	4.723	94	70-130	
E13C7-PFUnDA	262457.8	13C2-PFDA	295199.0	0.889	5.000	5.162	103	70-130	
Ed5-NEtFOSAA	70492.9	13C2-PFDA	295199.0	0.239	5.000	5.052	101	70-130	
E13C2-PFDoDA	597021.0	13C2-PFDA	295199.0	2.022	5.000	5.251	105	70-130	
Ed7-NMePFOSAE	335666.4	13C2-PFDA	295199.0	1.137	5.000	4.921	98	70-130	
Ed3-NMePFOSA	77091.0	13C2-PFDA	295199.0	0.261	5.000	4.745	95	70-130	
Ed9-NEtPFOSAE	267308.0	13C2-PFDA	295199.0	0.906	5.000	4.710	94	70-130	
Ed5-NEtPFOSA	60704.4	13C2-PFDA	295199.0	0.206	5.000	4.824	96	70-130	
E13C2-PFTeDA	406531.9	13C2-PFDA	295199.0	1.377	5.000	4.835	97	70-130	

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

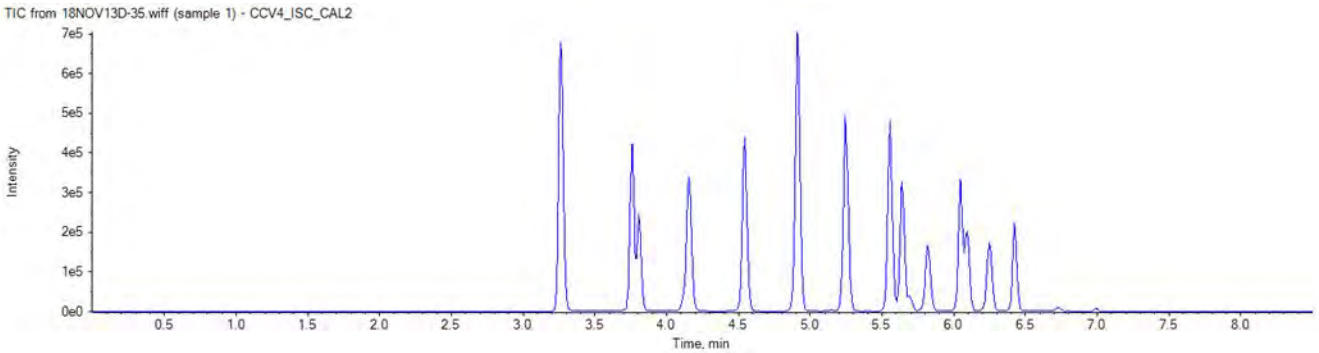
Analyte Quantitation Peak Table

Sample Name: CCV4_ISC_CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV13D-35.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	83542.0		A	13C4-PFBA	3.26	793411.2	0.105	0.583
PFPeA	3.76	1.000	79594.8		A	13C5-PFPeA	3.76	772163.1	0.103	0.597
PFBS	3.81	1.000	45706.2		A	13C3-PFBS	3.81	434935.5	0.105	0.500
4:2-FTS	4.12	1.000	10413.5		A	13C2-4:2-FTS	4.12	51183.2	0.203	0.552
PFHxA	4.16	1.000	96228.3		A	13C5-PFHxA	4.16	684967.5	0.140	0.587
PFPeS	4.17	1.100	22230.8		A	13C3-PFBS	3.81	434935.5	0.051	0.496
PFHpA	4.54	1.000	102421.2		A	13C4-PFHpA	4.54	539414.2	0.190	0.629
PFHxS	4.54	1.000	33058.8		M	13C3-PFHxS	4.54	320032.3	0.103	0.501
6:2-FTS	4.90	1.000	9288.1		A	13C2-6:2-FTS	4.90	35426.1	0.262	0.634
PFHpS	4.91	1.080	32964.6		A	13C3-PFHxS	4.54	320032.3	0.103	0.542
PFOA	4.91	1.000	100522.0		A	13C8-PFOA	4.91	945889.4	0.106	0.568
PFOS	5.24	1.000	33602.8		M	13C8-PFOS	5.24	279193.2	0.120	0.526
PFNA	5.26	1.000	77741.1		A	13C9-PFNA	5.25	537019.1	0.145	0.522
PFNS	5.54	1.060	21345.1		A	13C8-PFOS	5.24	279193.2	0.076	0.535
PFDA	5.56	1.000	67467.8		A	13C6-PFDA	5.55	644545.7	0.105	0.555
8:2-FTS	5.56	1.000	5464.6		M	13C2-8:2-FTS	5.56	28375.5	0.193	0.449
PFOSA	5.64	1.000	65447.7		A	13C8-PFOSA	5.64	663223.9	0.099	0.482
NMeFOSAA	5.70	1.000	6912.0		M	d3-NMeFOSAA	5.70	77244.4	0.089	0.506
PFDS	5.79	1.110	15131.2		A	13C8-PFOS	5.24	279193.2	0.054	0.491
PFUnDA	5.82	1.000	62038.1		A	13C7-PFUnDA	5.82	262457.8	0.236	0.618
NEtFOSAA	5.84	1.000	7265.9		A	d5-NEtFOSAA	5.83	70492.9	0.103	0.540
PFDoDA	6.05	1.000	68920.5		A	13C2-PFDoDA	6.05	597021.0	0.115	0.588
10:2-FTS	6.06	1.090	3993.2		A	13C2-8:2-FTS	5.56	28375.5	0.141	0.469
NMePFOSAE	6.10	1.000	45689.8		M	d7-NMePFOSAE	6.09	335666.4	0.136	0.567
NMePFOSA	6.10	1.000	9603.5		M	d3-NMePFOSA	6.10	77091.0	0.125	0.615
PFDoS	6.22	1.190	7558.1		A	13C8-PFOS	5.24	279193.2	0.027	0.474
NEtPFOSAE	6.26	1.000	46931.6		A	d9-NEtPFOSAE	6.24	267308.0	0.176	0.563
NEtPFOSA	6.27	1.000	7335.3		A	d5-NEtPFOSA	6.26	60704.4	0.121	0.555
PFTrDA	6.25	1.030	52009.4		A	13C2-PFDoDA	6.05	597021.0	0.087	0.550
PFTeDA	6.42	1.000	40149.8		A	13C2-PFTeDA	6.42	406531.9	0.099	0.554
PFHxDA	6.73	1.050	19788.9		A	13C2-PFTeDA	6.42	406531.9	0.049	0.580
PFODA	6.99	1.090	16708.0		A	13C2-PFTeDA	6.42	406531.9	0.041	0.572

Total Ion Chromatogram

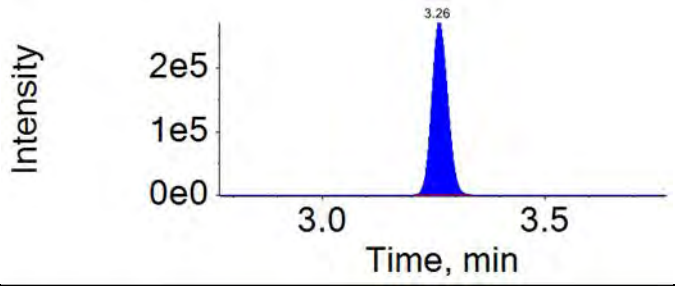


APPROVED
By JPT at 4:33 pm, 11/13/18

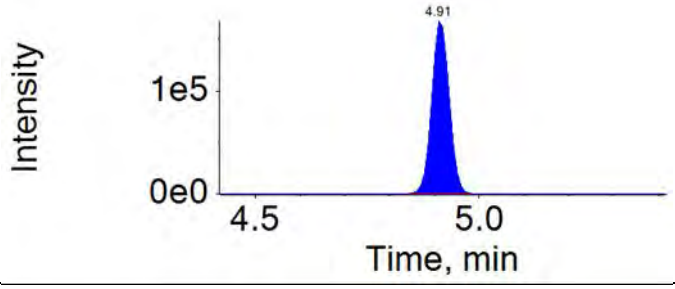
REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

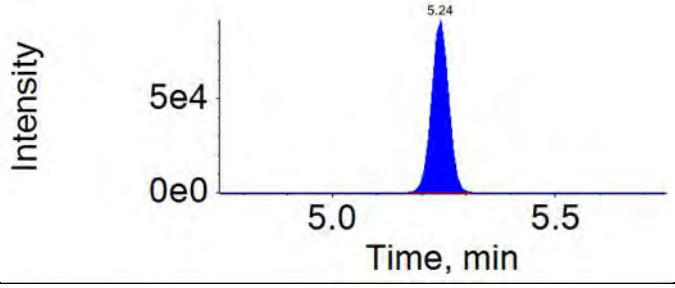
Injection Standard: 13C3-PFBA
216.0 / 172.0



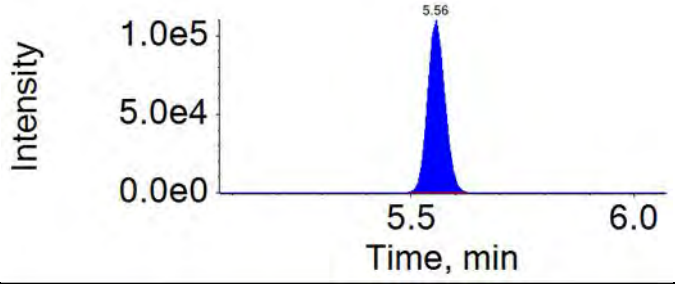
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



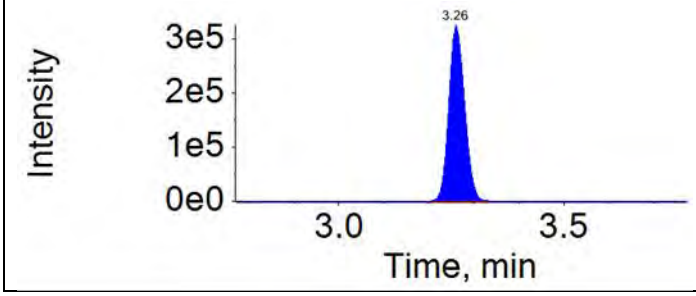
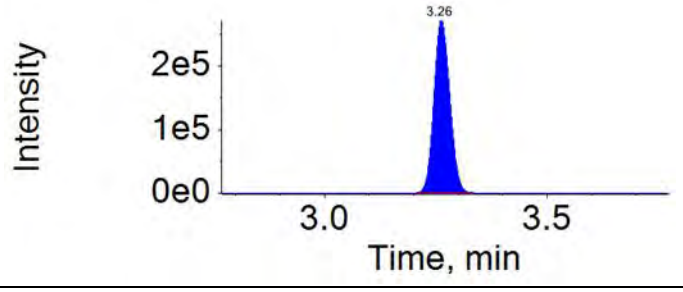
Injection Standard: 13C2-PFDA
515.0 / 470.0

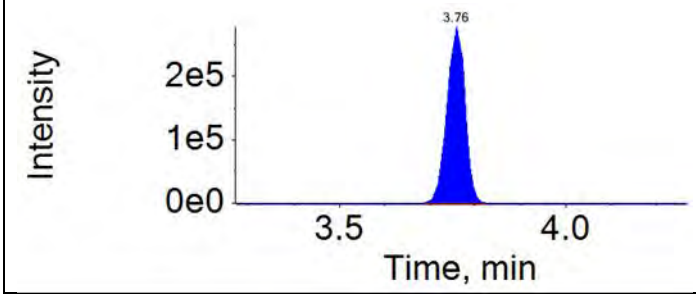
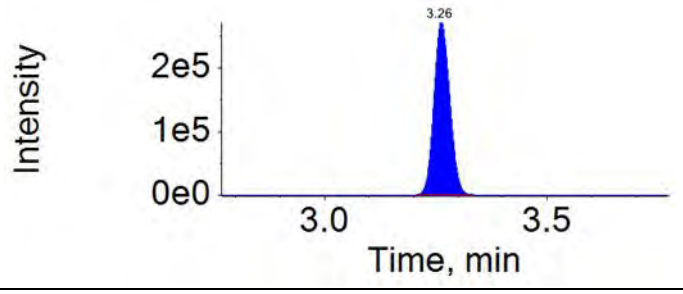


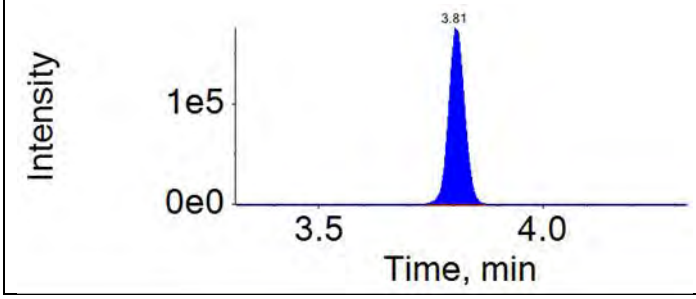
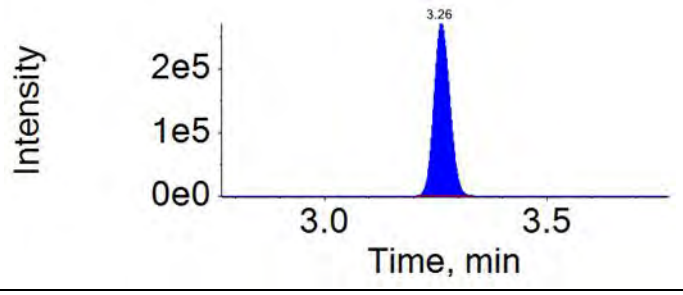
APPROVED
By JPT at 4:33 pm, 11/13/18

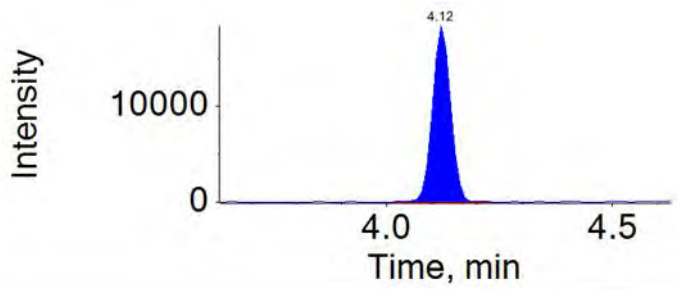
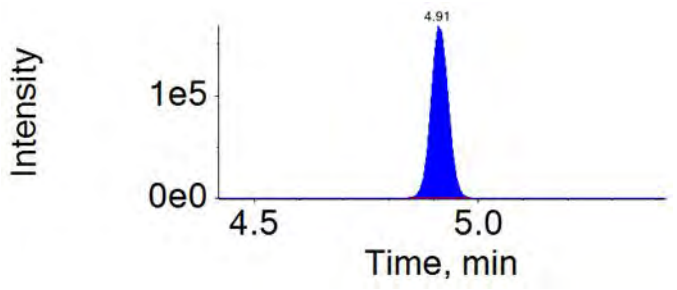
REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

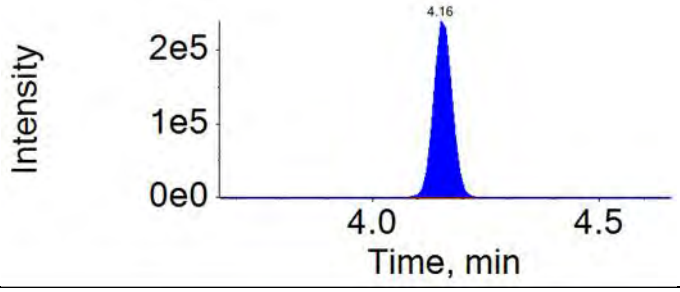
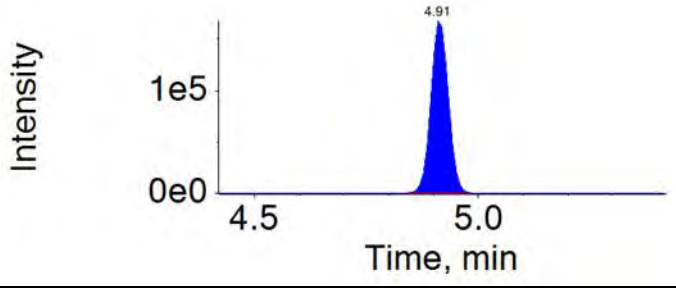
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

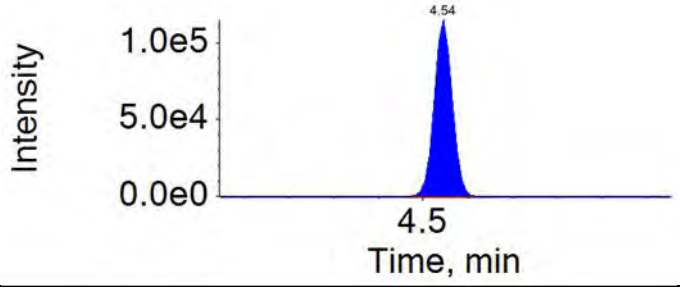
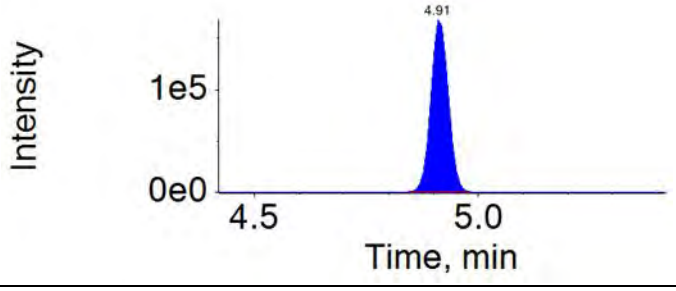
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

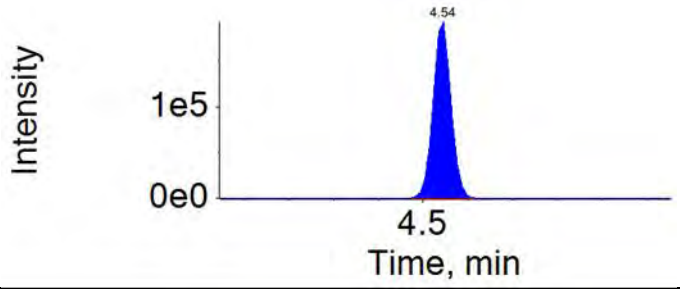
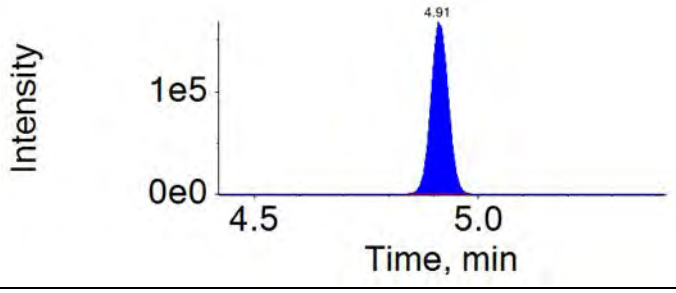
APPROVED
By JPT at 4:33 pm, 11/13/18

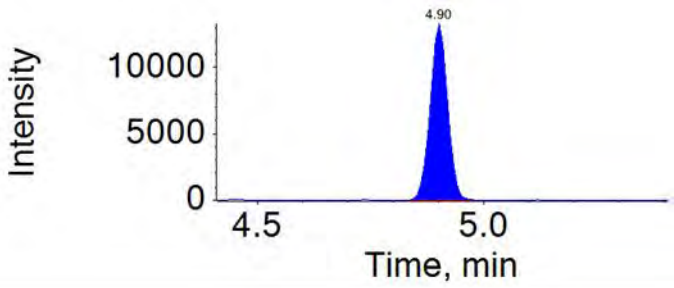
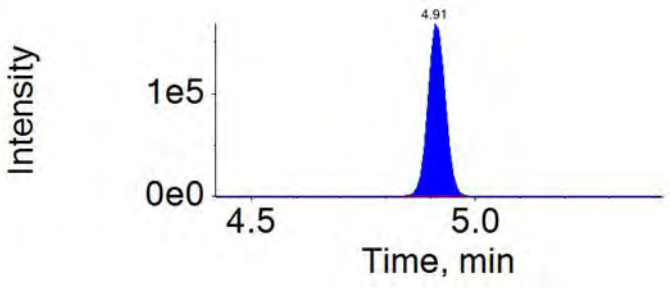
REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

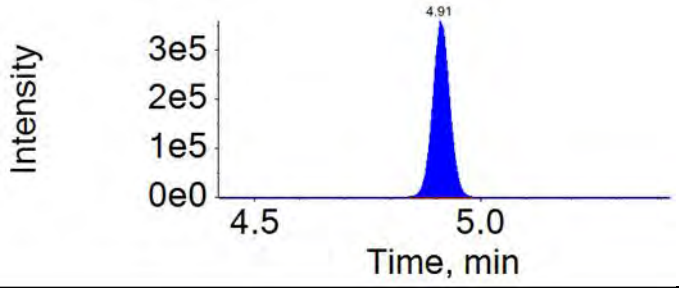
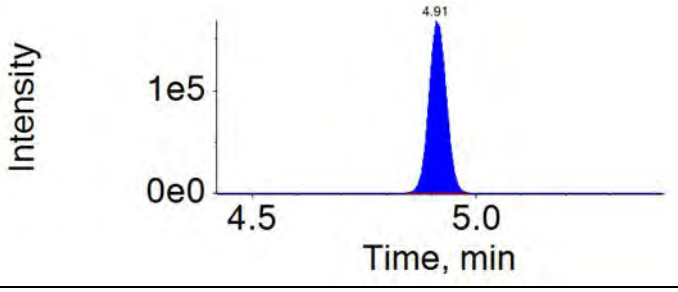
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

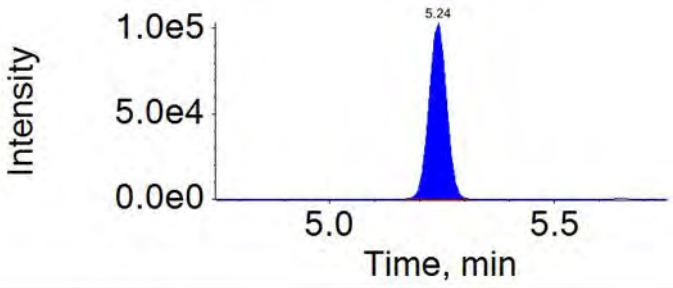
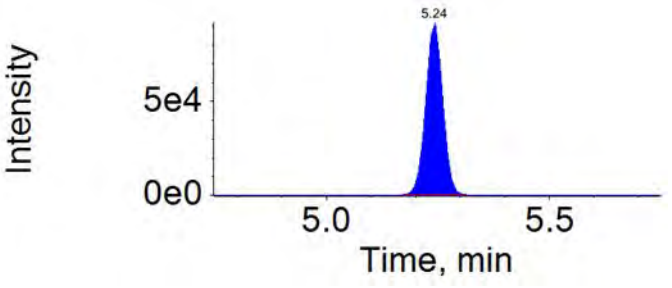
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

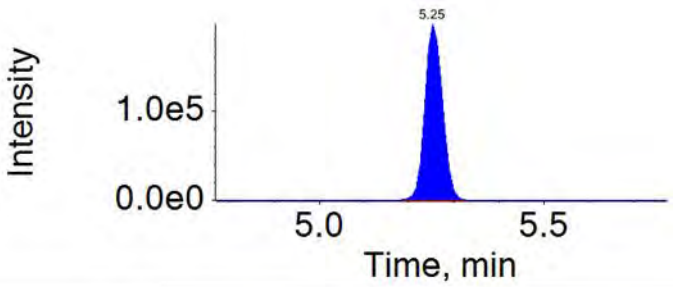
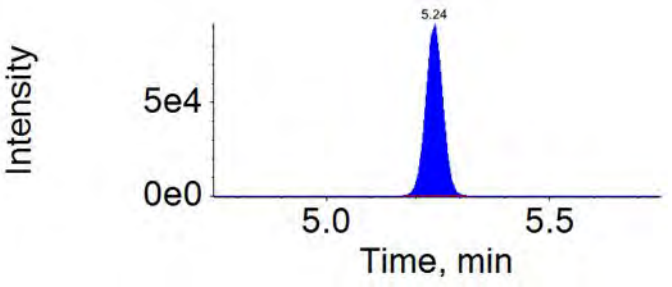
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

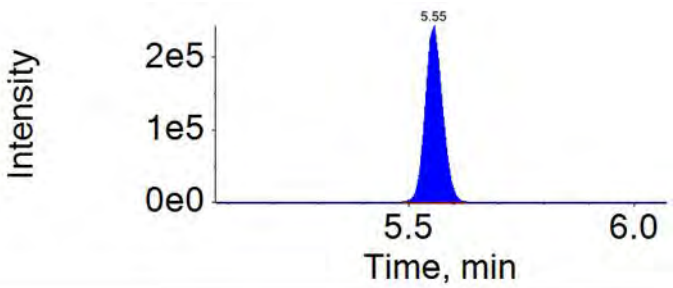
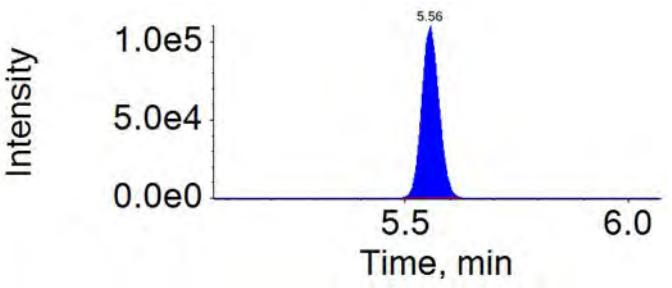
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

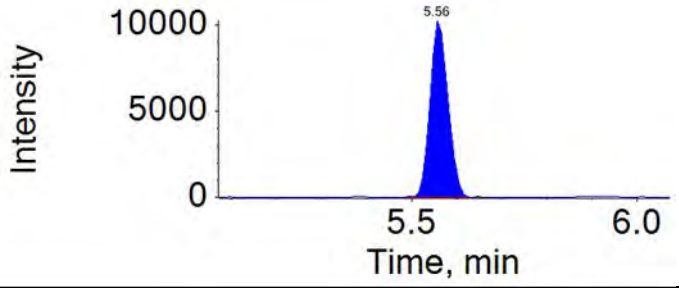
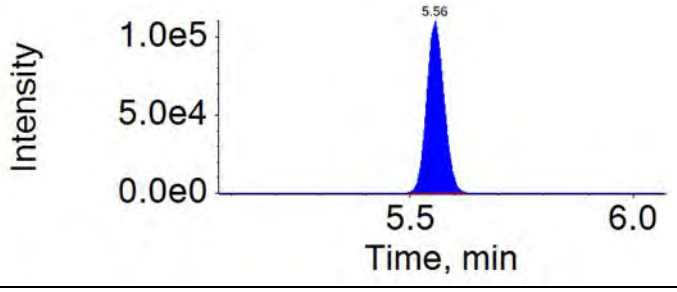
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

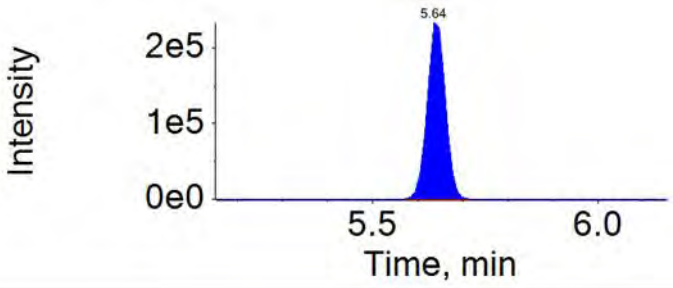
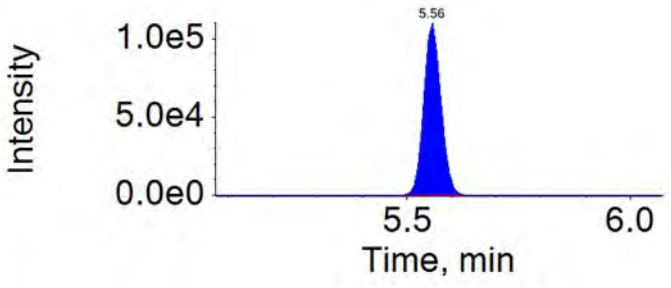
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

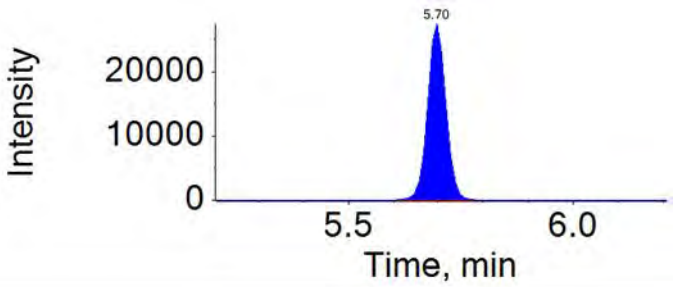
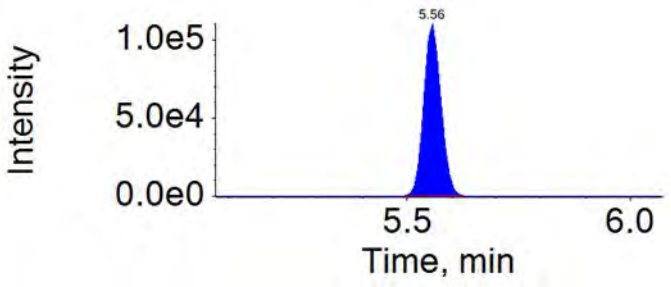
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

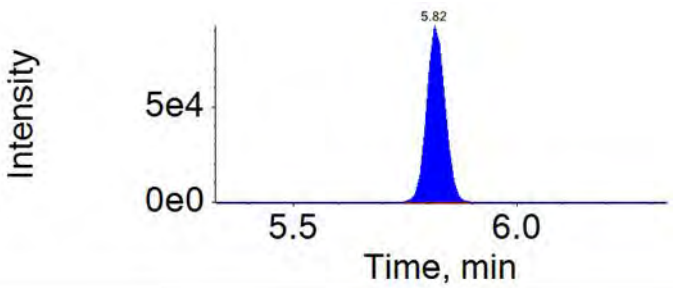
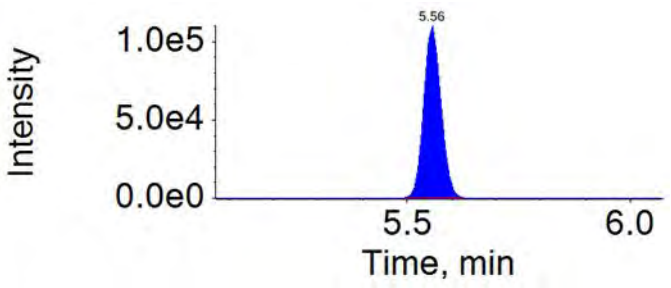
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

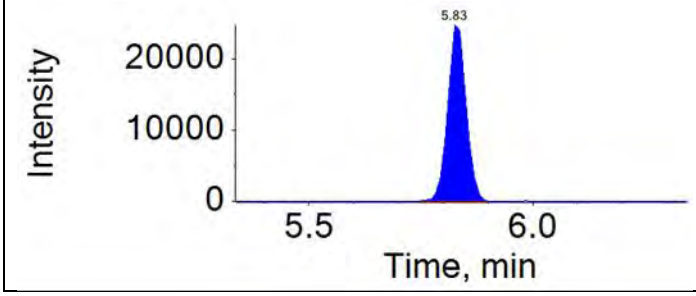
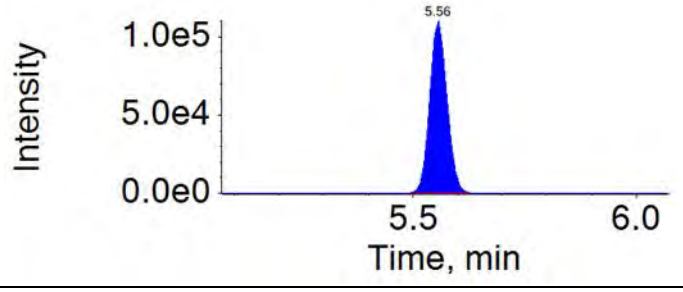
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

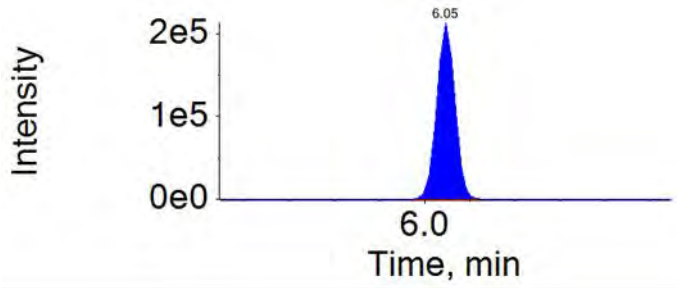
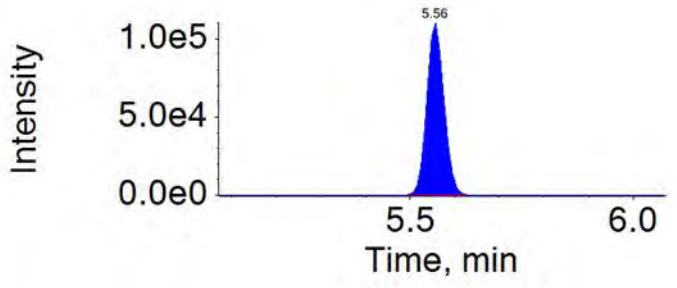
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

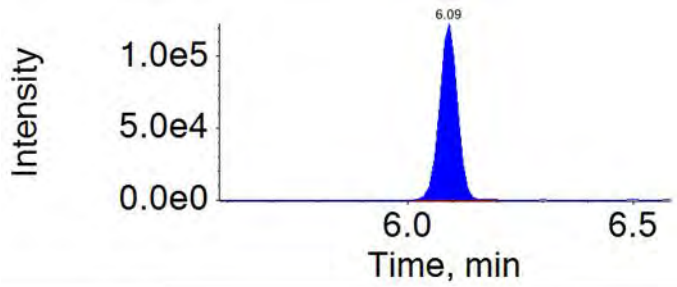
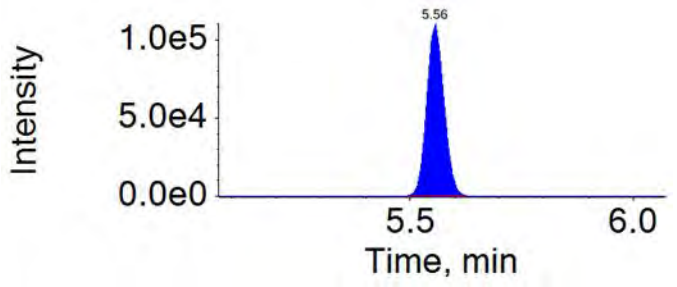
APPROVED
By JPT at 4:33 pm, 11/13/18

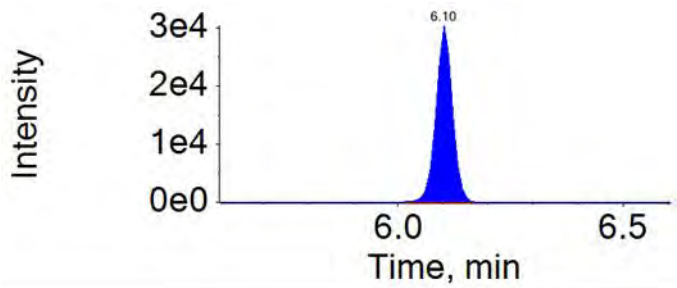
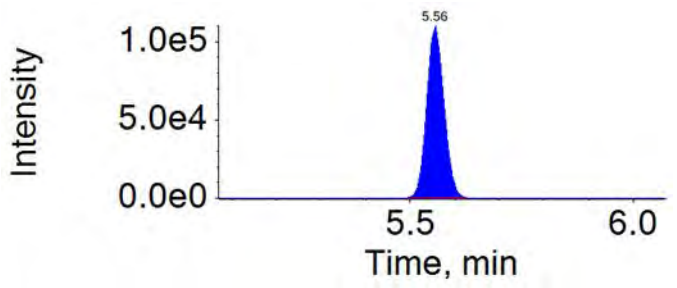
REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

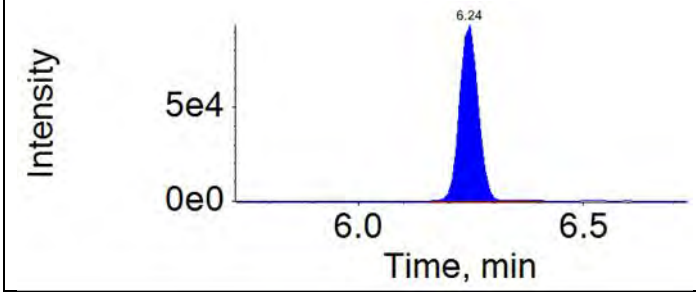
Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

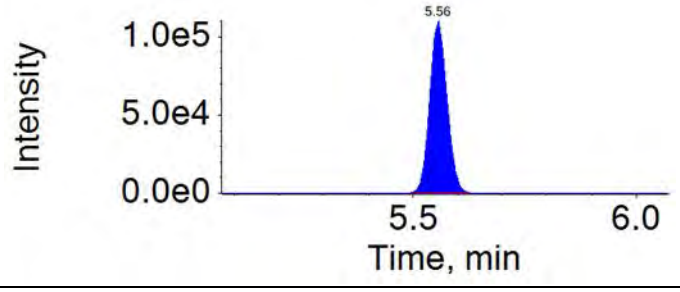
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
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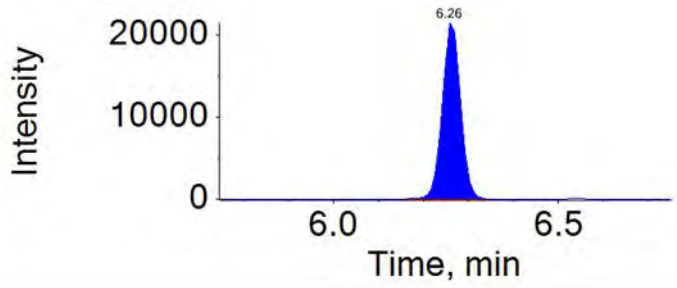
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

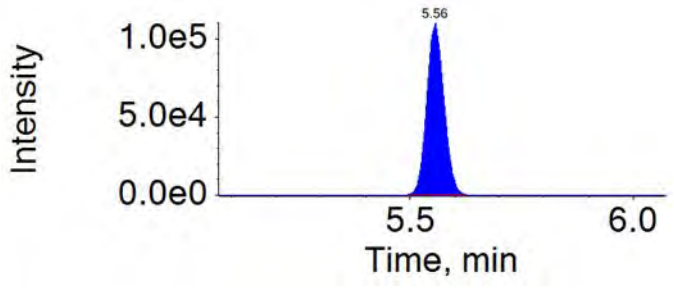
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



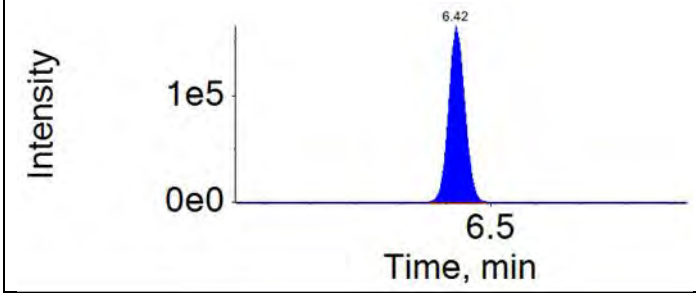


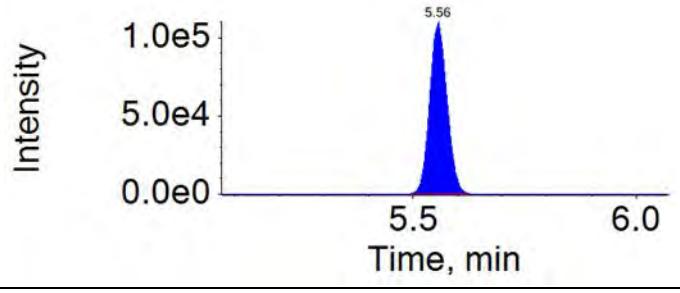
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



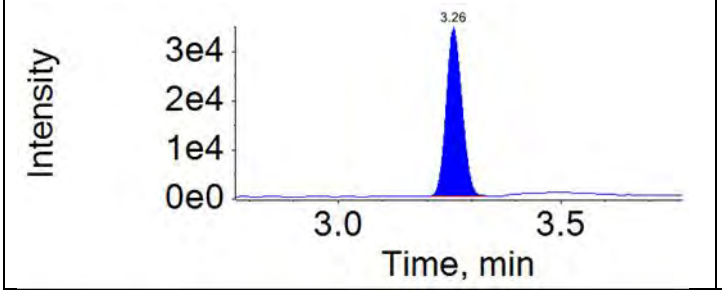


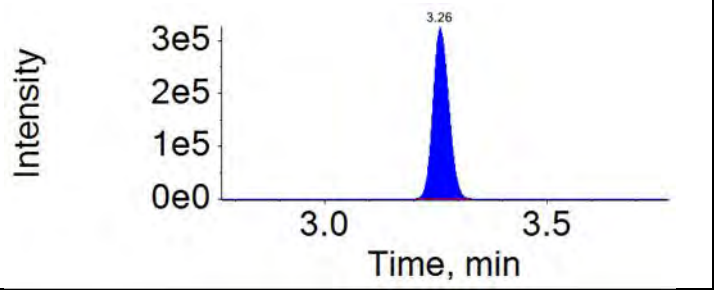
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

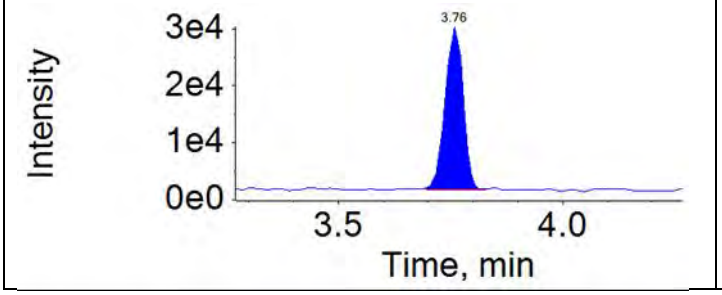
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

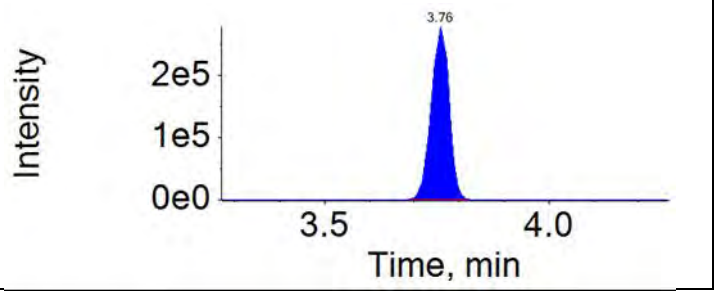
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



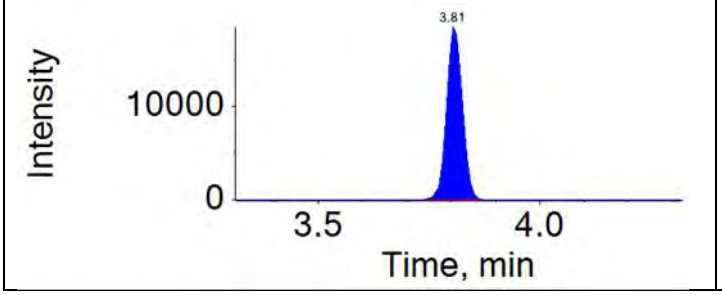


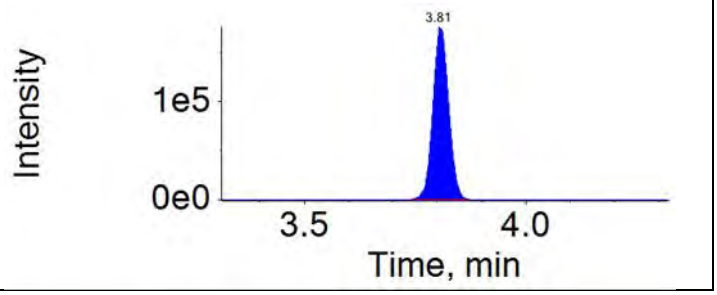
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



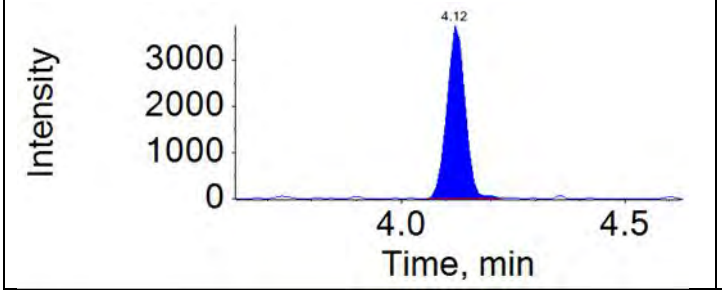


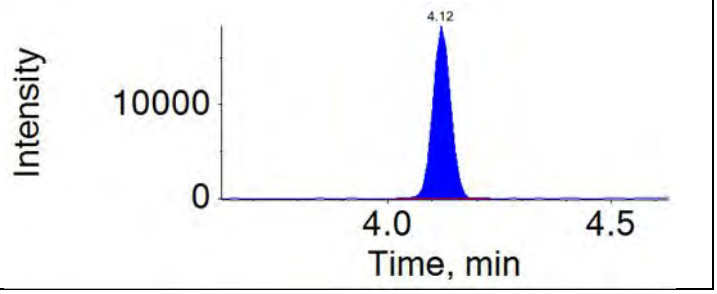
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0

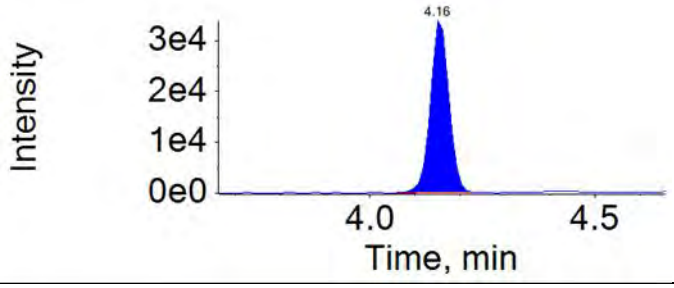
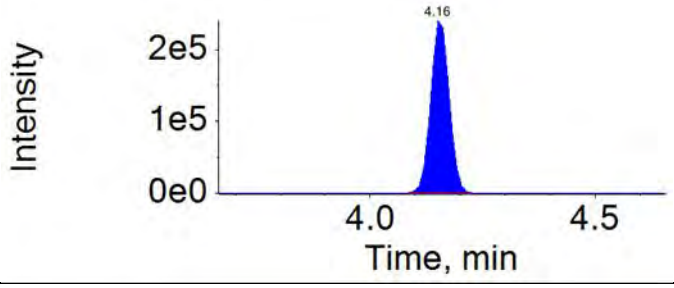


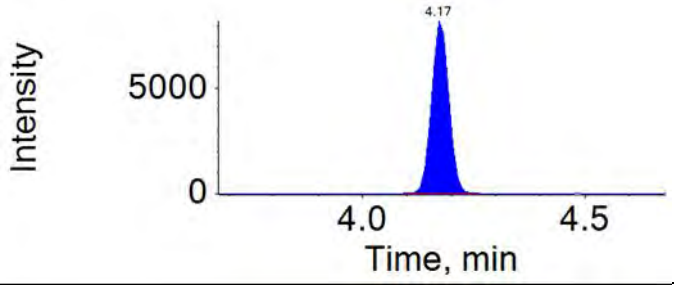
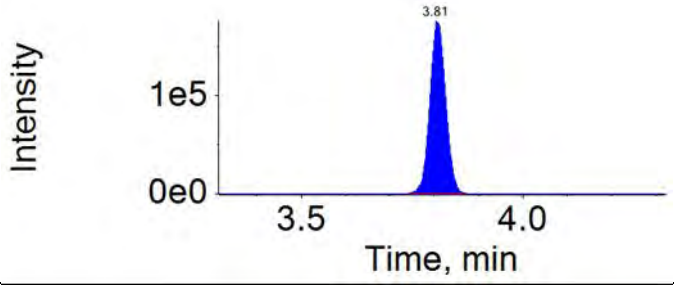


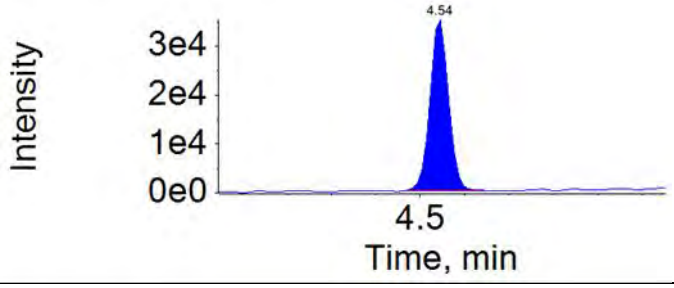
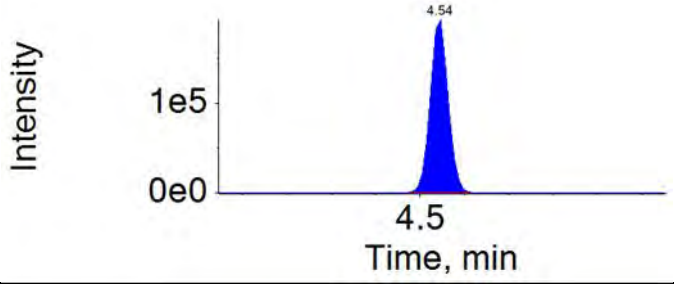
APPROVED
By JPT at 4:33 pm, 11/13/18

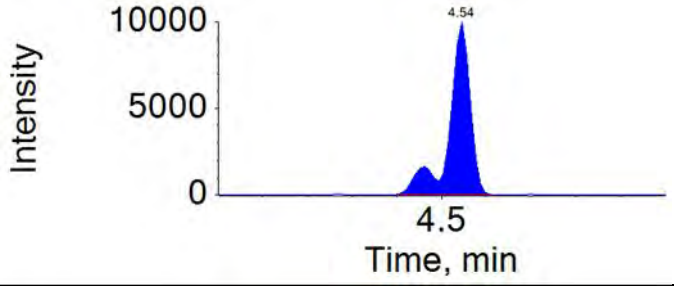
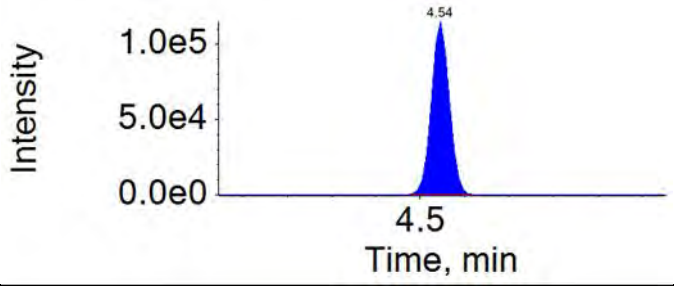
REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0
	

Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0
	

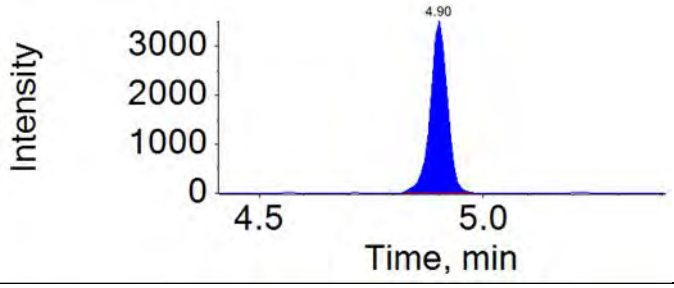
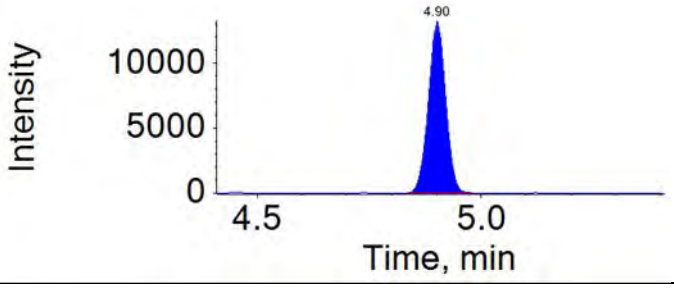
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0
	

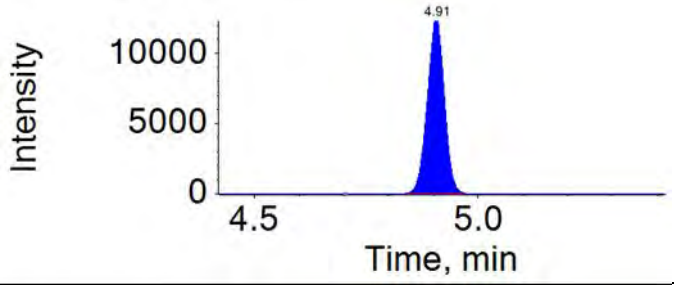
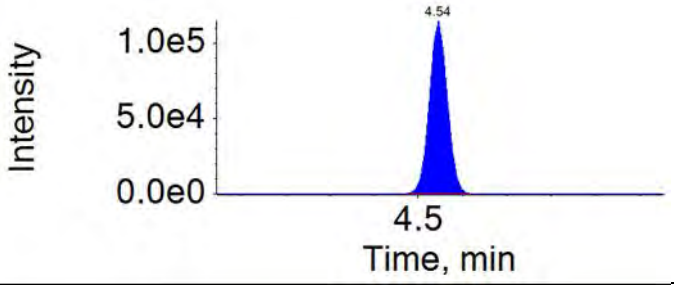
Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0
	

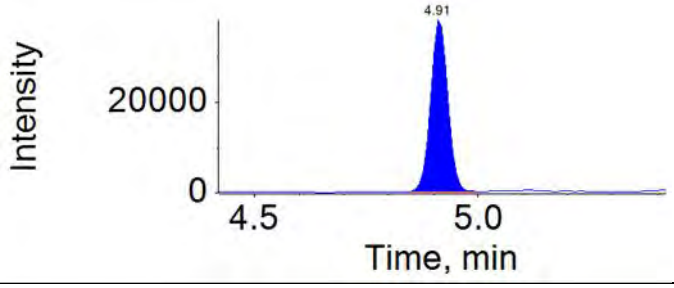
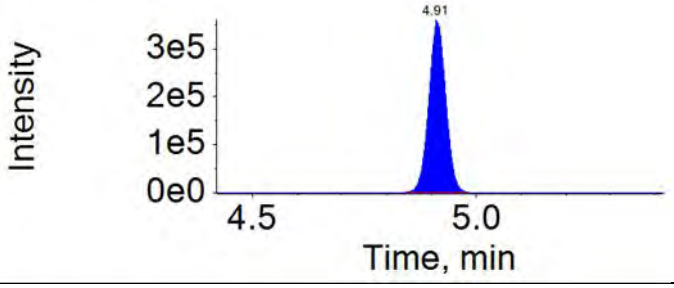
APPROVED
By JPT at 4:33 pm, 11/13/18

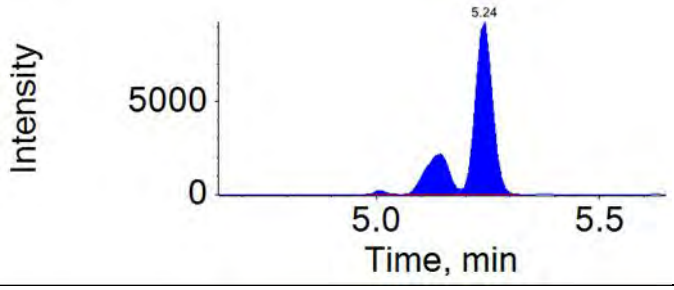
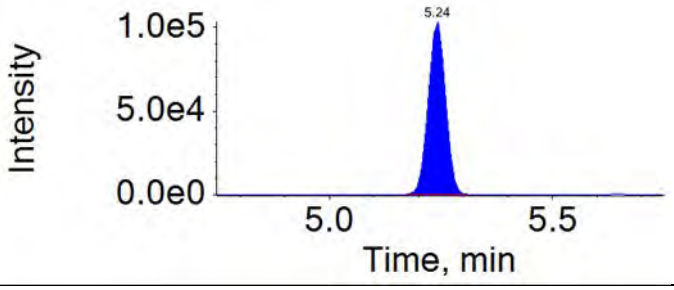
REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

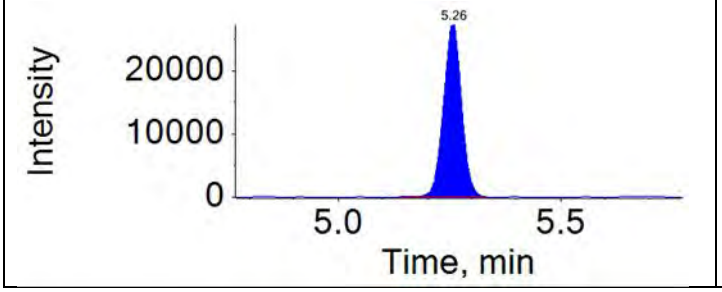
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

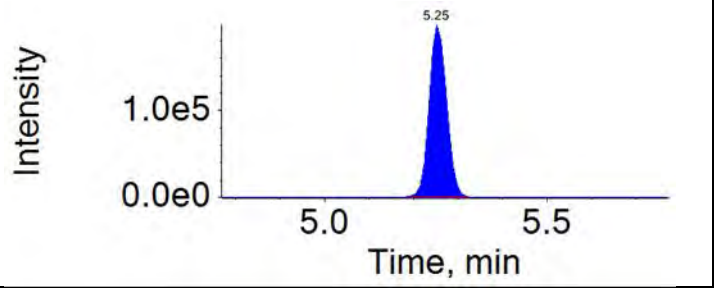
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

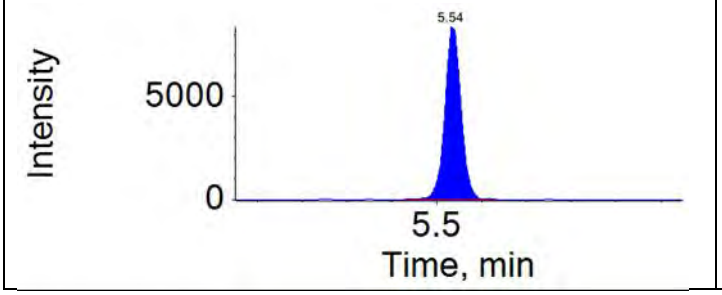
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

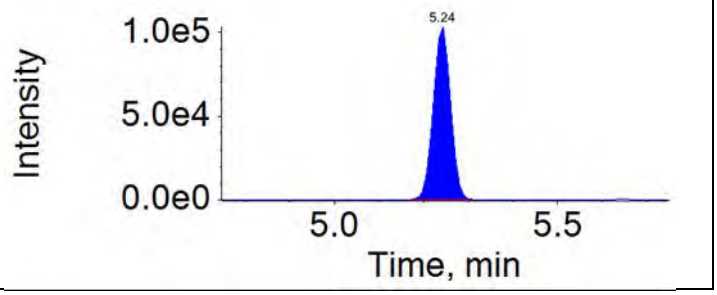
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



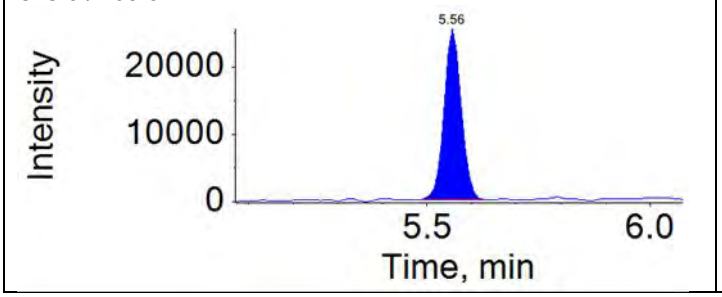


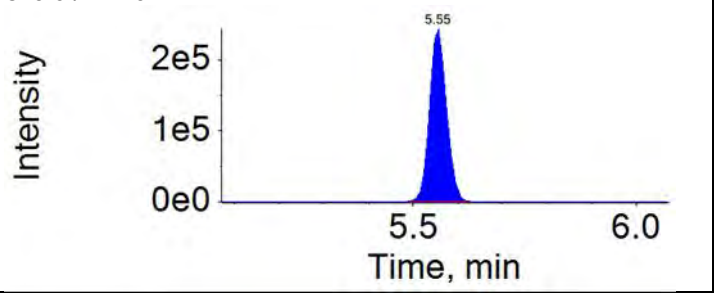
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



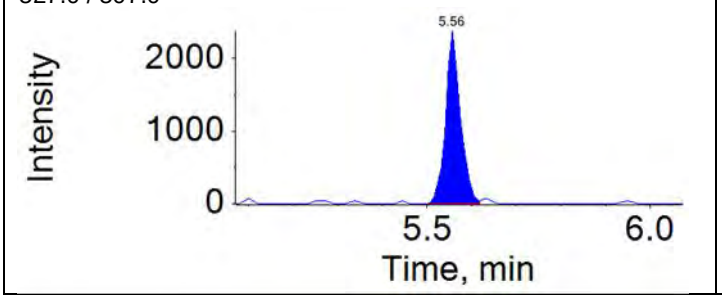


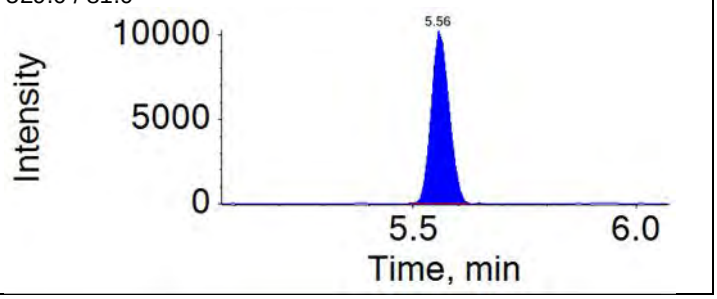
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0

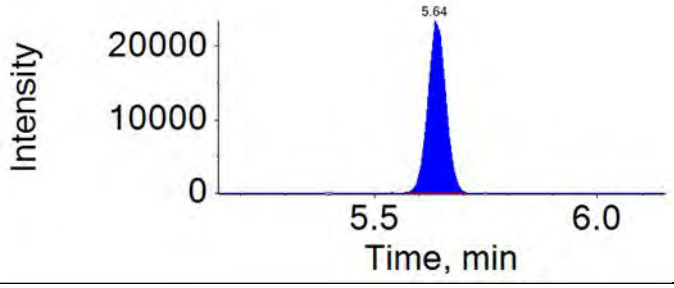
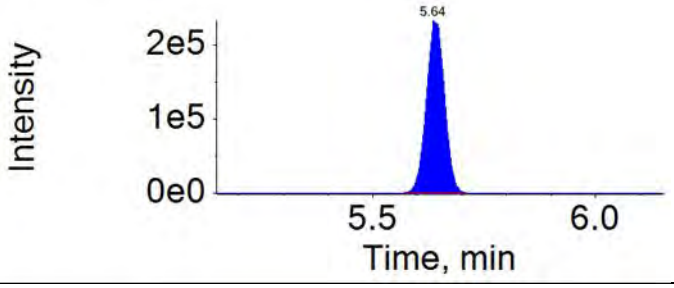


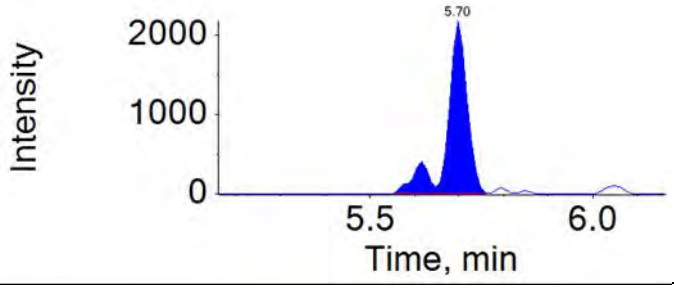
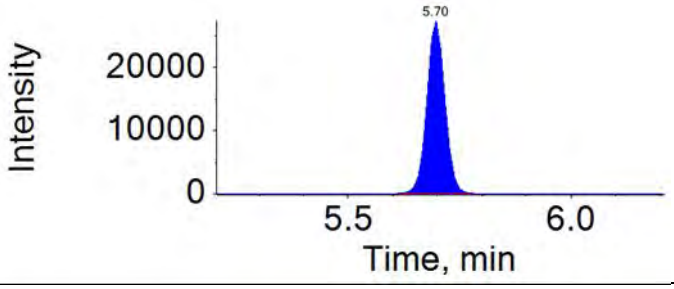


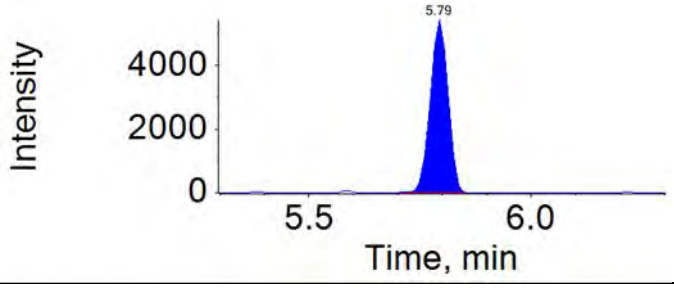
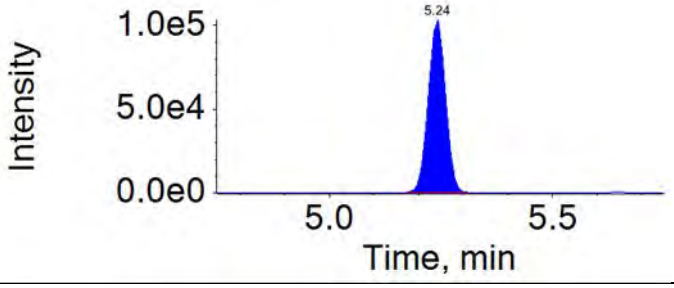
APPROVED
By JPT at 4:33 pm, 11/13/18

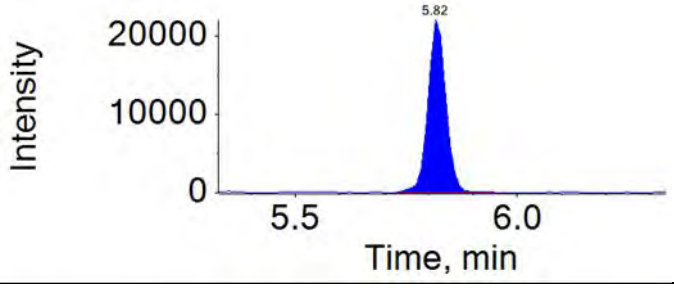
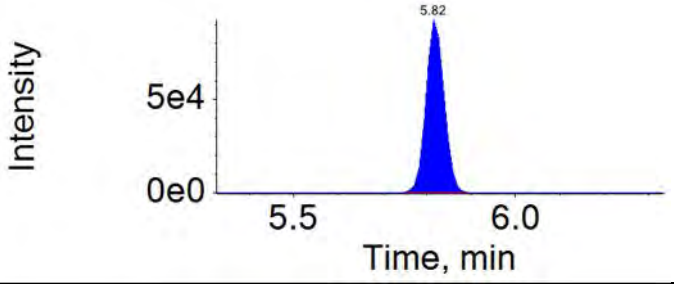
REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0
	

Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0
	

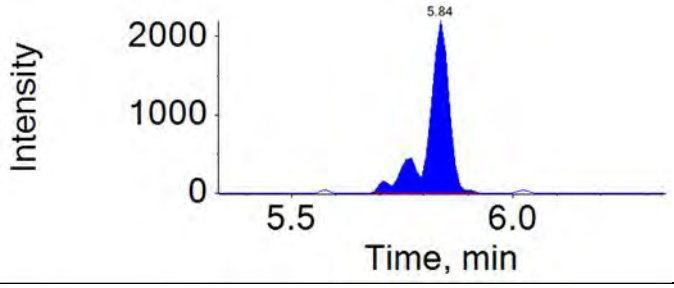
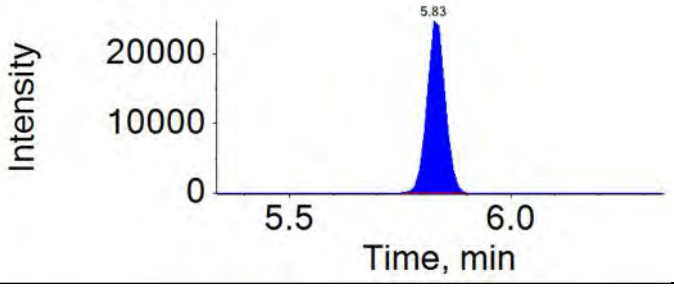
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0
	

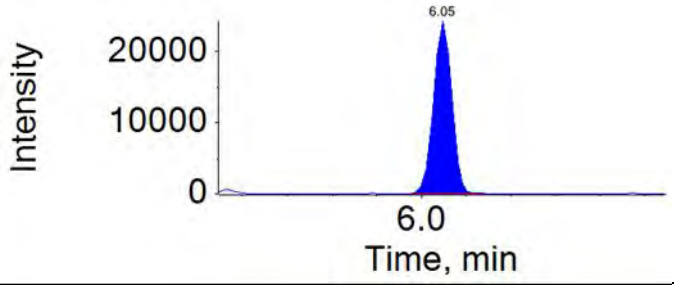
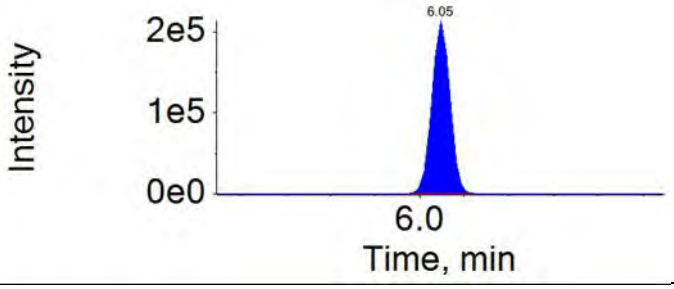
Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0
	

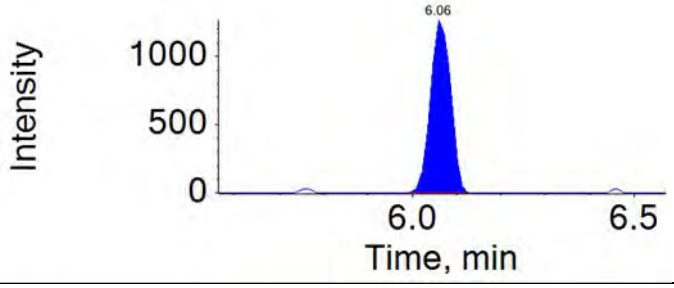
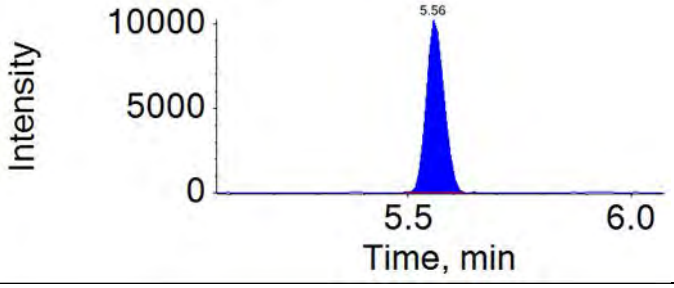
APPROVED
By JPT at 4:33 pm, 11/13/18

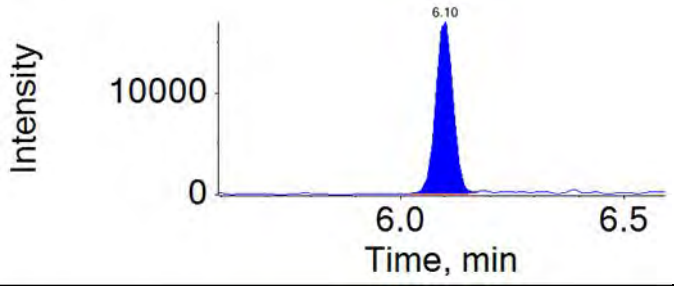
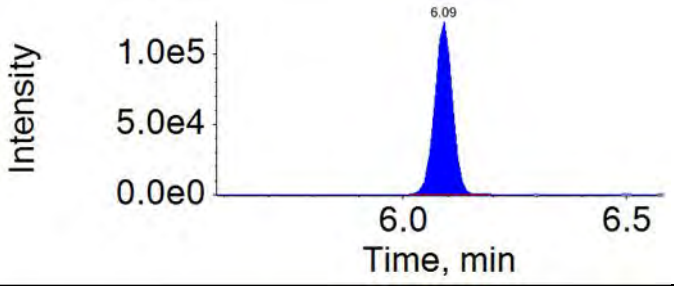
REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0
	

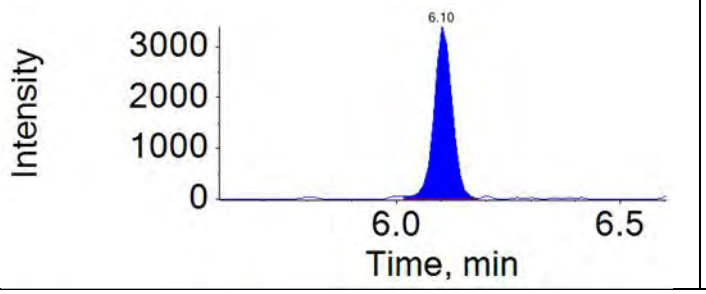
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0
	

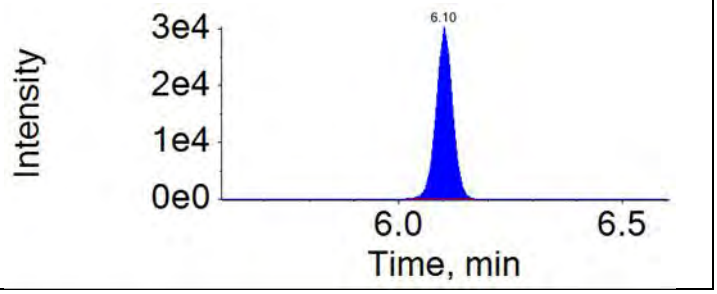
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0
	

Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0
	

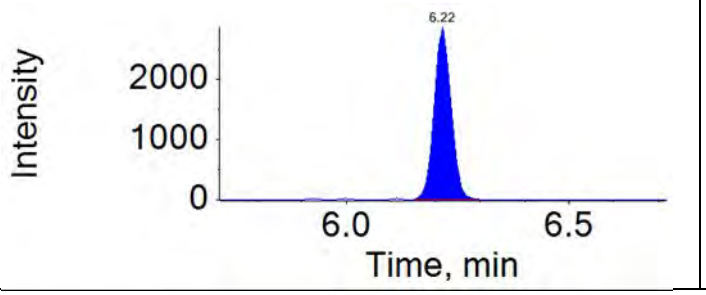
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

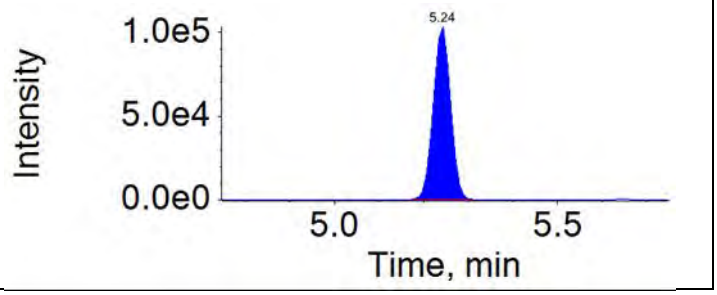
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



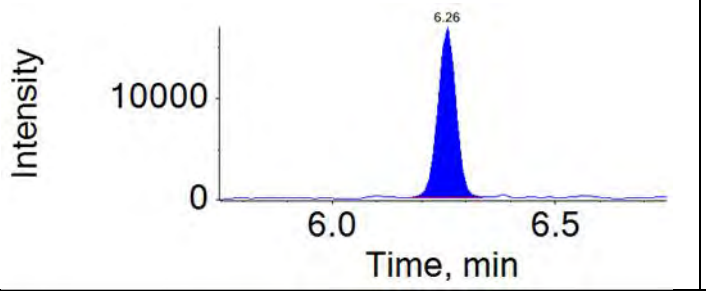


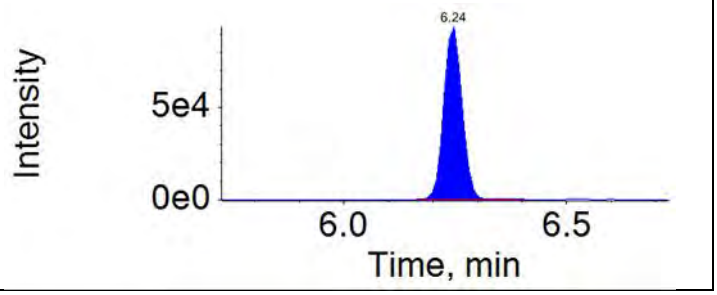
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



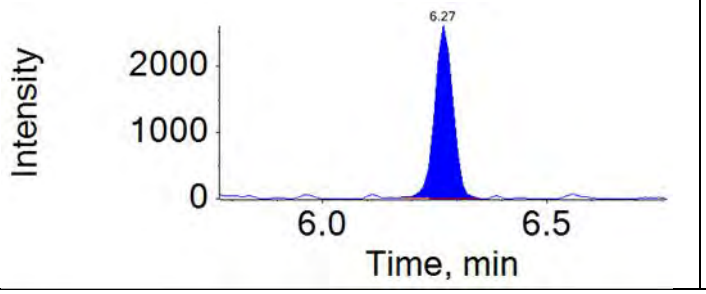


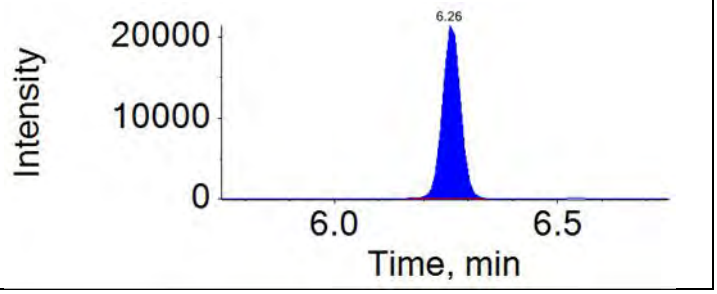
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

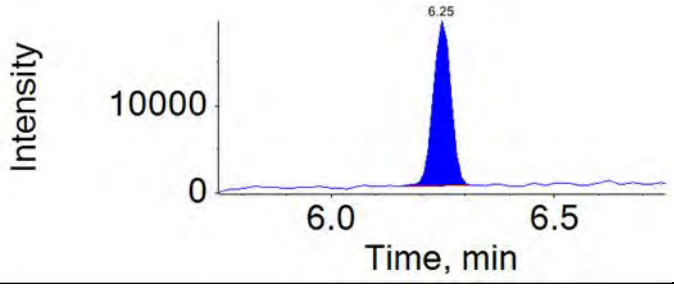
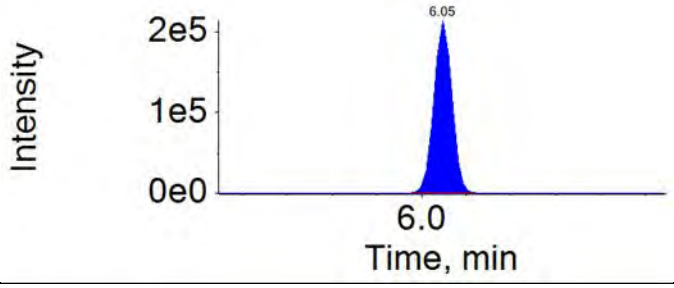


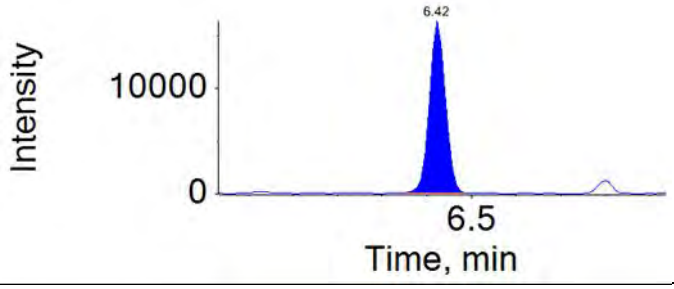
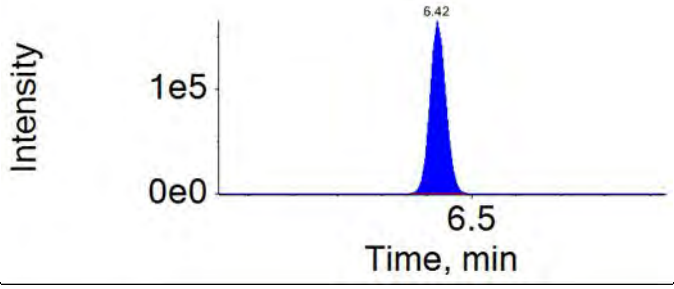


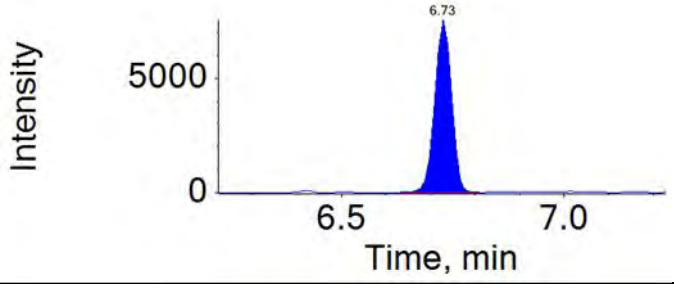
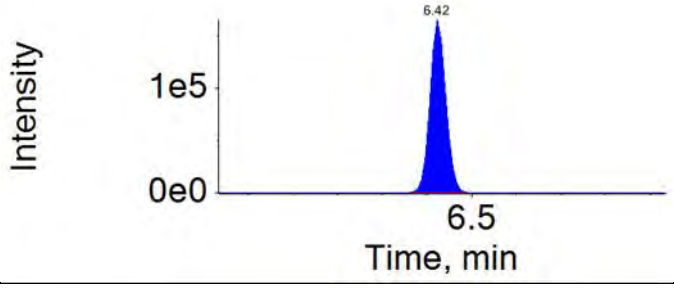
APPROVED
By JPT at 4:33 pm, 11/13/18

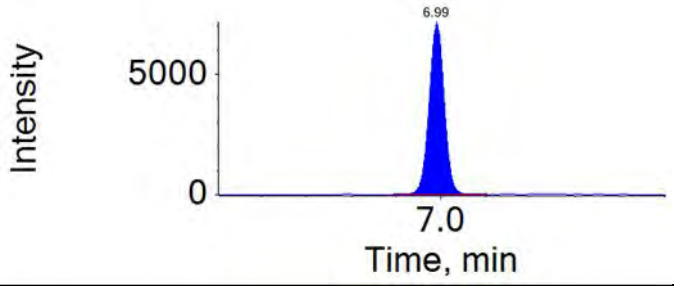
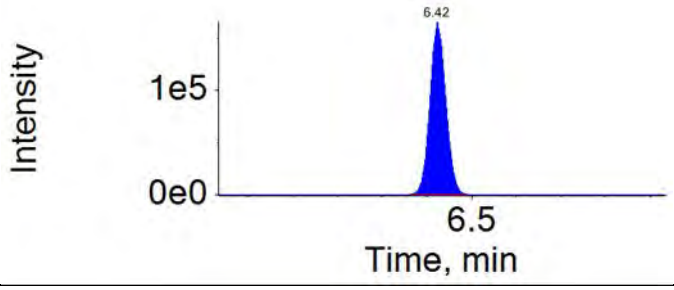
REVIEWED
By umar at 5:40 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV1-4 11/13/2018 4:25:30 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

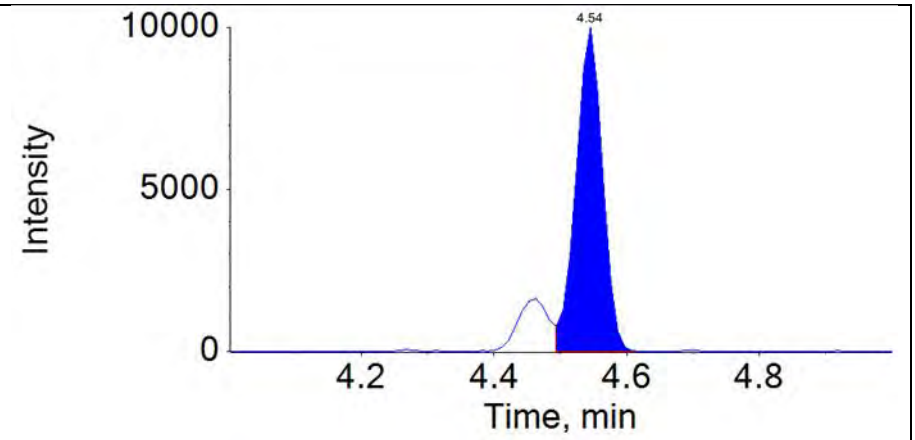
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

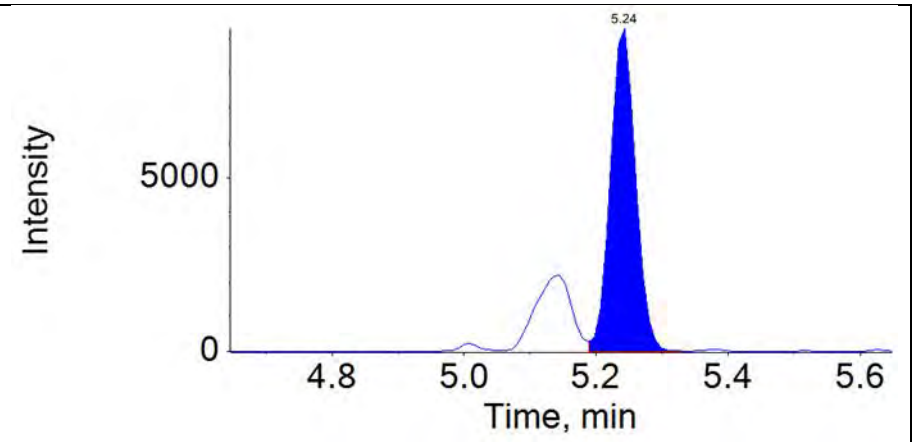
Results Table Name: 18NOV13DCCV1-4
Results Table Date: 11/13/2018 4:25:30 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.54
Peak Area:
27828.5
Mass Range:
399.0 / 80.0
File Name:
18NOV13D-35.wiff
Sample Name:
CCV4_ISC_CAL2



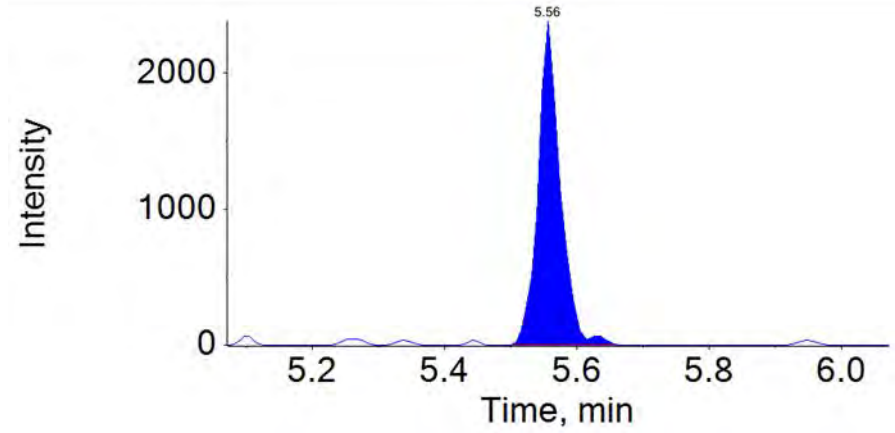
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
24662.1
Mass Range:
499.0 / 80.0
File Name:
18NOV13D-35.wiff
Sample Name:
CCV4_ISC_CAL2



Integration Comment: incorrect integration

Component Name:
8:2-FTS
RT (min.):
5.56
Peak Area:
5576.8
Mass Range:
527.0 / 507.0
File Name:
18NOV13D-35.wiff
Sample Name:
CCV4_ISC_CAL2

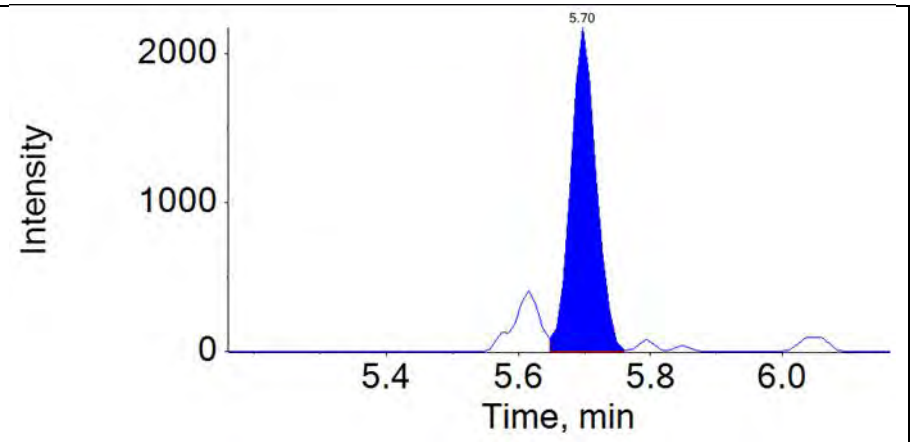


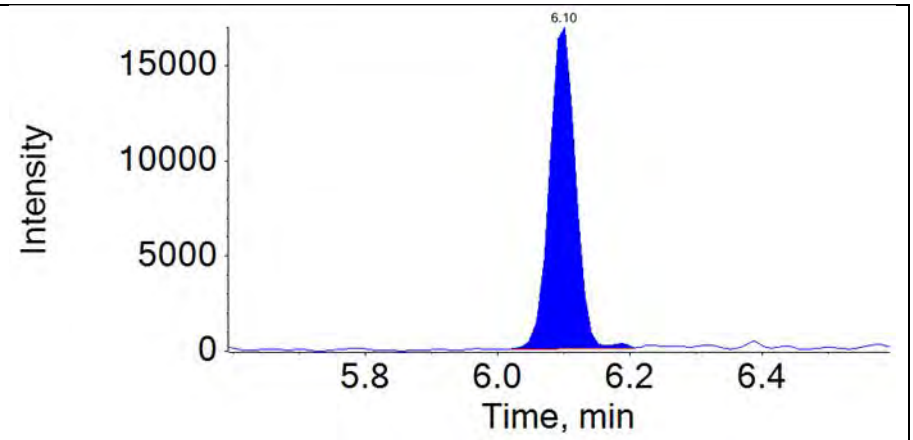
Integration Comment: incorrect integration

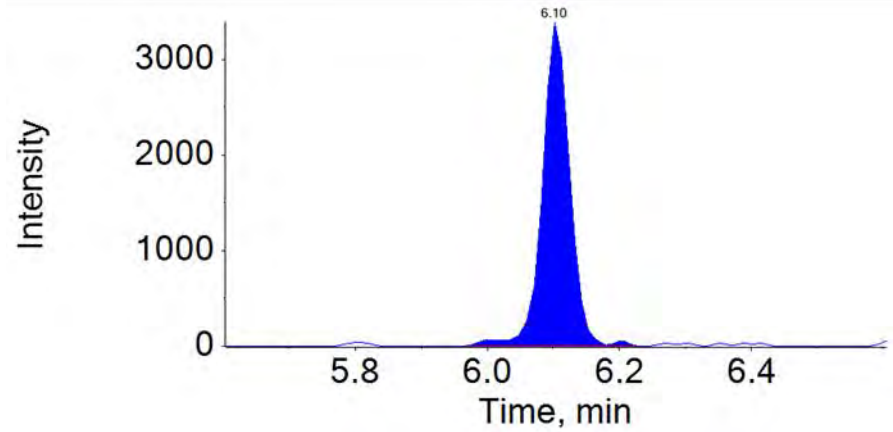
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

Results Table Name: 18NOV13DCCV1-4
Results Table Date: 11/13/2018 4:25:30 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: NMeFOSAA **RT (min.):** 5.70 **Peak Area:** 5812.0 **Mass Range:** 570.0 / 419.0 **File Name:** 18NOV13D-35.wiff **Sample Name:** CCV4_ISC_CAL2	 **Integration Comment:** incorrect integration

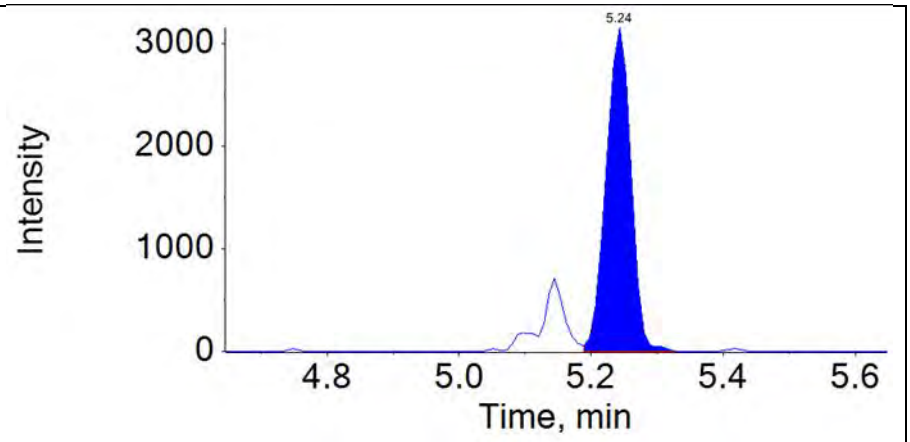
Component Name: NMePFOSAE **RT (min.):** 6.10 **Peak Area:** 46010.6 **Mass Range:** 616.0 / 59.0 **File Name:** 18NOV13D-35.wiff **Sample Name:** CCV4_ISC_CAL2	 **Integration Comment:** incorrect integration

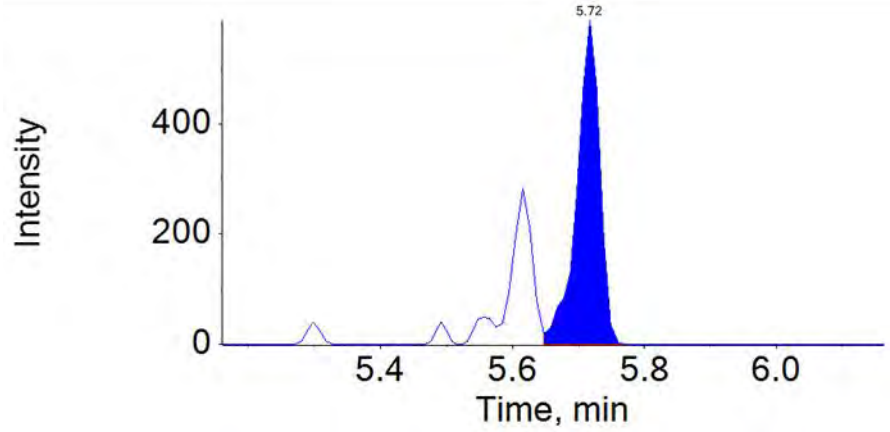
Component Name: NMePFOSA **RT (min.):** 6.10 **Peak Area:** 9829.6 **Mass Range:** 512.0 / 169.0 **File Name:** 18NOV13D-35.wiff **Sample Name:** CCV4_ISC_CAL2	 **Integration Comment:** incorrect integration

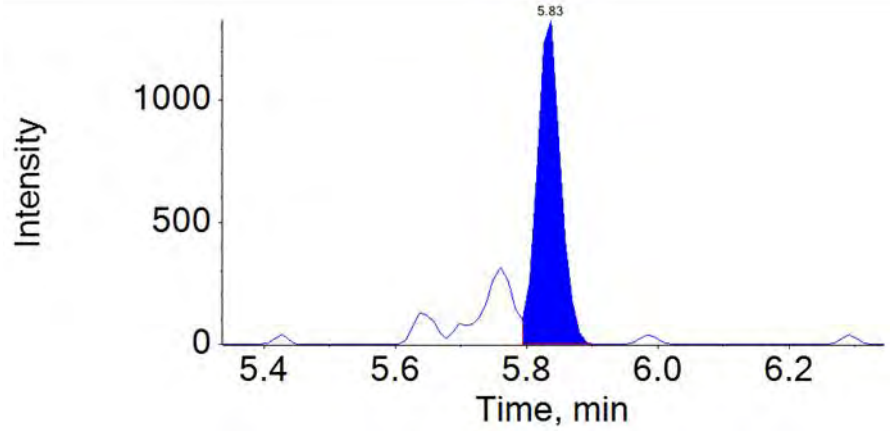
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

Results Table Name: 18NOV13DCCV1-4
Results Table Date: 11/13/2018 4:25:30 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFOS_2 **RT (min.):** 5.24 **Peak Area:** 8265.4 **Mass Range:** 499.0 / 99.0 **File Name:** 18NOV13D-35.wiff **Sample Name:** CCV4_ISC_CAL2	 **Integration Comment:** incorrect integration

Component Name: NMeFOSAA_2 **RT (min.):** 5.72 **Peak Area:** 1422.6 **Mass Range:** 570.0 / 483.0 **File Name:** 18NOV13D-35.wiff **Sample Name:** CCV4_ISC_CAL2	 **Integration Comment:** incorrect integration

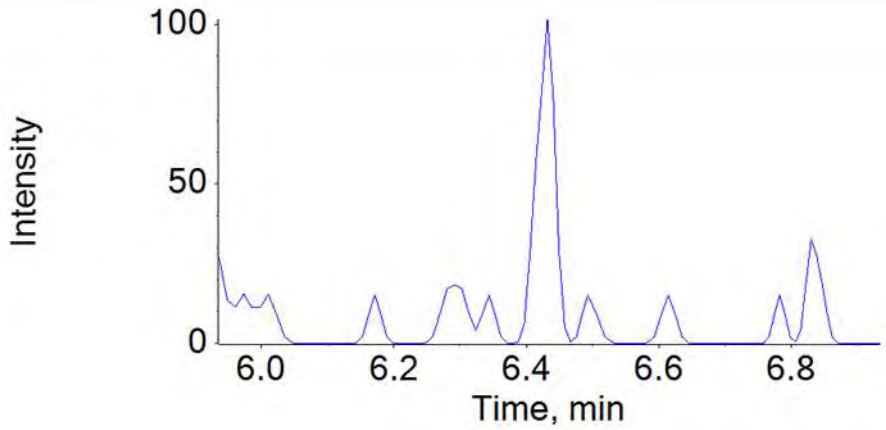
Component Name: NEtFOSAA_2 **RT (min.):** 5.83 **Peak Area:** 3291.8 **Mass Range:** 584.0 / 526.0 **File Name:** 18NOV13D-35.wiff **Sample Name:** CCV4_ISC_CAL2	 **Integration Comment:** incorrect integration

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

Results Table Name: 18NOV13DCCV1-4
Results Table Date: 11/13/2018 4:25:30 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFTeDA_2
RT (min.):
N/A
Peak Area:
N/A
Mass Range:
713.0 / 169.0
File Name:
18NOV13D-35.wiff
Sample Name:
CCV4_ISC_CAL2



Integration Comment: incorrect integration

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

Results Table Name: 18NOV13DCCV1-4
Results Table Date: 11/13/2018 4:25:30 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

Ion Ratio Report

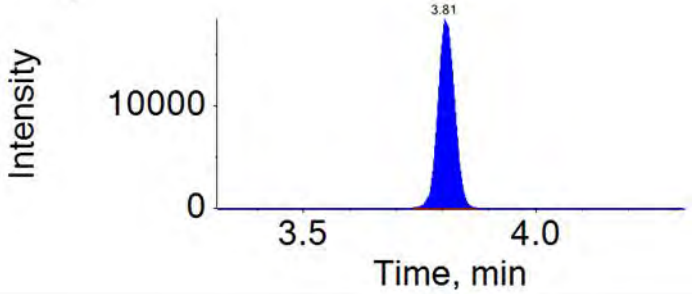
Sample Name: CCV4_ISC_CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV13D-35.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	45706.2	A	N/A	1.0000			
PFBS_2	3.81	1.00	16037.7	A	N/A	0.3509	-4	50	
4:2-FTS	4.12	1.00	10413.5	A	N/A	1.0000			
4:2 FTS_2	4.12	1.00	7231.1	A	N/A	0.6944		#NA!	
PFHxA	4.16	1.00	96228.3	A	N/A	1.0000			
PFHxA_2	4.16	1.00	1183.9	A	N/A	0.0123	5	50	
PFPeS	4.17	1.10	22230.8	A	N/A	1.0000			
PFPeS_2	4.18	1.10	11943.1	A	N/A	0.5372	3	50	
PFHpA	4.54	1.00	102421.2	A	N/A	1.0000			
PFHpA_2	4.54	1.00	5606.1	A	N/A	0.0547	-3	50	
PFHxS	4.54	1.00	33058.8	M	N/A	1.0000			
PFHxS_2	4.55	1.00	11347.0	A	N/A	0.3432	13	50	
6:2-FTS	4.90	1.00	9288.1	A	N/A	1.0000			
6:2 FTS_2	4.90	1.00	4792.0	A	N/A	0.5159		#NA!	
PFHpS	4.91	1.08	32964.6	A	N/A	1.0000			
PFHpS_2	4.91	1.08	13090.4	A	N/A	0.3971	-2	50	
PFOA	4.91	1.00	100522.0	A	N/A	1.0000			
PFOA_2	4.91	1.00	6112.2	A	N/A	0.0608	7	50	
PFOS	5.24	1.00	33602.8	M	N/A	1.0000			
PFOS_2	5.24	1.00	10043.5	M	N/A	0.2989	16	50	
PFNA	5.26	1.00	77741.1	A	N/A	1.0000			
PFNA_2	5.26	1.00	1184.6	A	N/A	0.0152	-34	50	
PFNS	5.54	1.06	21345.1	A	N/A	1.0000			
PFNS_2	5.54	1.06	9263.0	A	N/A	0.4340	-9	50	
PFDA	5.56	1.00	67467.8	A	N/A	1.0000			
PFDA_2	5.56	1.00	520.0	A	N/A	0.0077	-3	50	
8:2-FTS	5.56	1.00	5464.6	M	N/A	1.0000			
8:2 FTS_2	5.56	1.00	4909.2	A	N/A	0.8984		#NA!	
NMeFOSAA	5.70	1.00	6912.0	M	N/A	1.0000			
NMeFOSAA_2	5.72	1.00	2101.5	M	N/A	0.3040	43	50	
PFDS	5.79	1.11	15131.2	A	N/A	1.0000			
PFDS_2	5.79	1.11	5584.3	A	N/A	0.3691	-27	50	
PFUnDA	5.82	1.00	62038.1	A	N/A	1.0000			
PFUnDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
NEtFOSAA	5.84	1.00	7265.9	A	N/A	1.0000			
NEtFOSAA_2	5.83	1.00	4347.4	M	N/A	0.5983	3	50	
PFDoDA	6.05	1.00	68920.5	A	N/A	1.0000			
PFDoDA_2	6.04	1.00	437.0	A	N/A	0.0063	-61	50	OOS
10:2-FTS	6.06	1.09	3993.2	A	N/A	1.0000			
10:2 FTS_2	6.06	1.09	3262.3	A	N/A	0.8170		#NA!	
PFTrDA	6.25	1.03	52009.4	A	N/A	1.0000			
PFTrDA_2	6.25	1.03	687.4	A	N/A	0.0132	43	50	
PFTeDA	6.42	1.00	40149.8	A	N/A	1.0000			
PFTeDA_2	6.43	1.00	200.5	M	N/A	0.0050	-22	50	
PFHxDA	6.73	1.05	19788.9	A	N/A	1.0000			
PFHxDA_2	6.74	1.05	1120.2	A	N/A	0.0566	-16	50	
PFODA	6.99	1.09	16708.0	A	N/A	1.0000			
PFODA_2	6.99	1.09	461.4	A	N/A	0.0276	2	50	

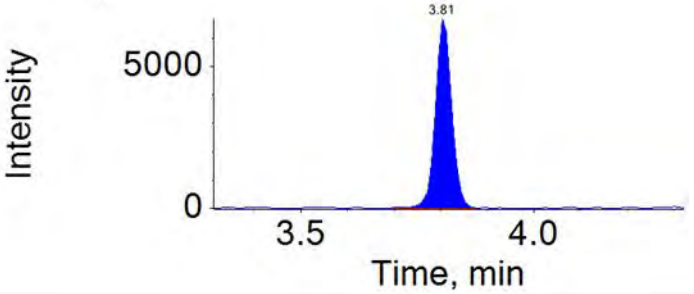
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

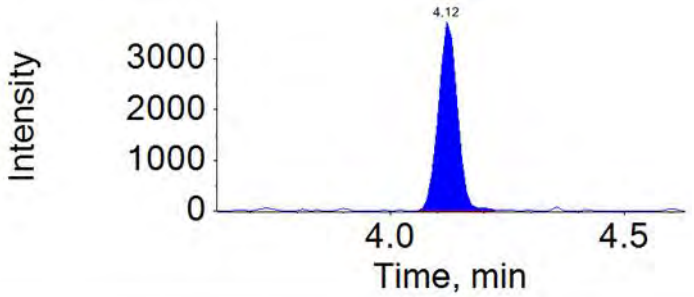
Component: PFBS
Primary Mass: 299.0 / 80.0



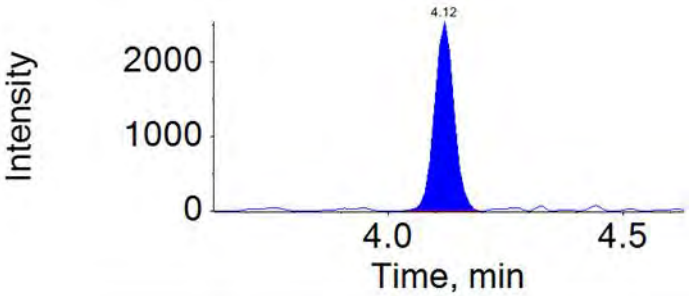
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



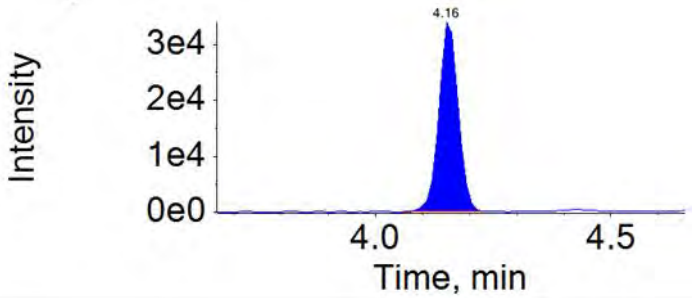
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



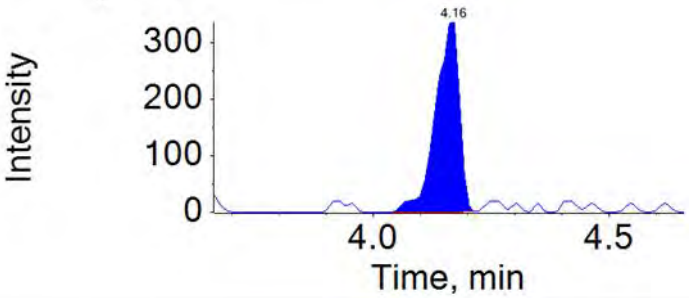
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



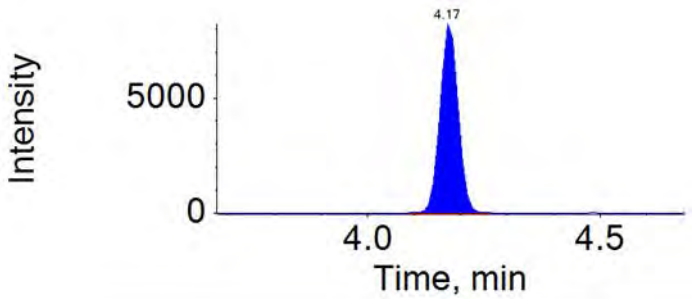
Component: PFHxA
Primary Mass: 313.0 / 269.0



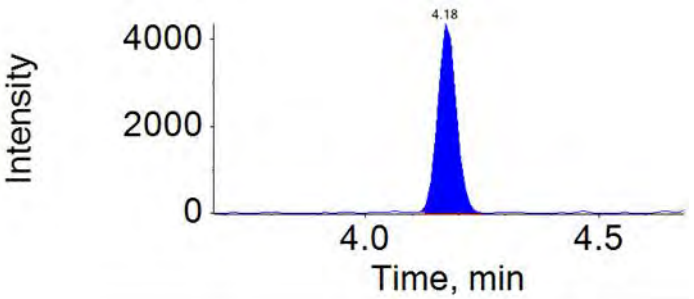
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



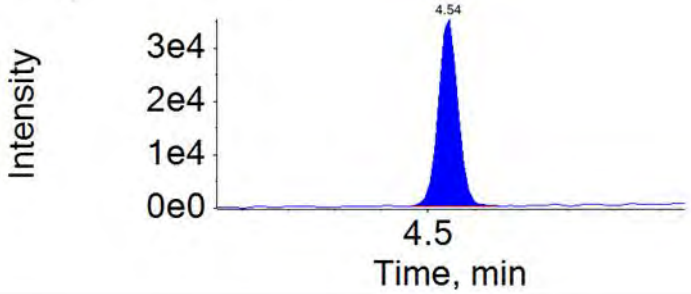
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



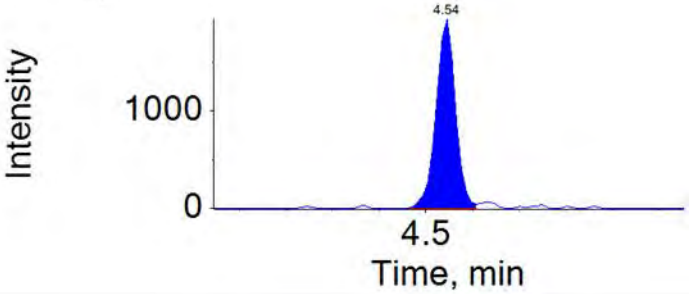
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

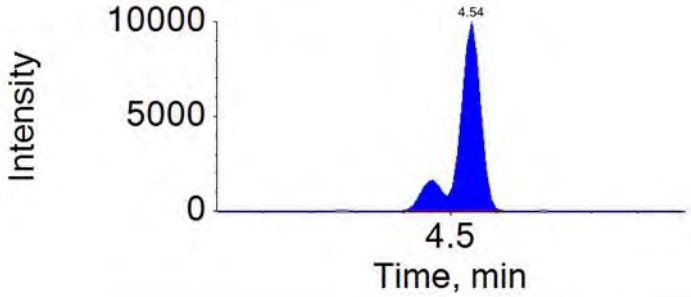
Component: PFHpA
Primary Mass: 363.0 / 319.0



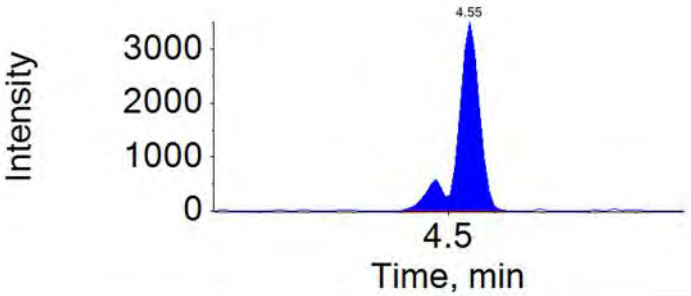
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



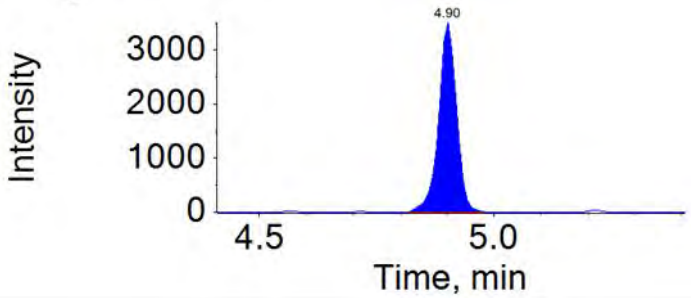
Component: PFHxS
Primary Mass: 399.0 / 80.0



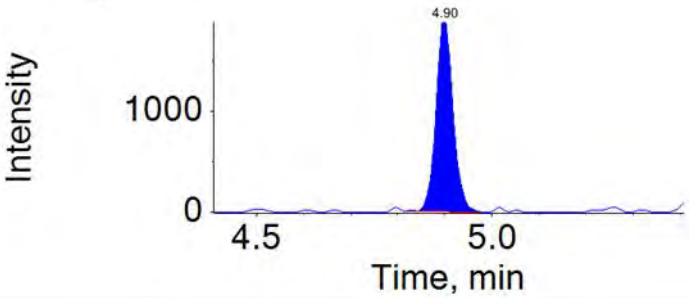
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



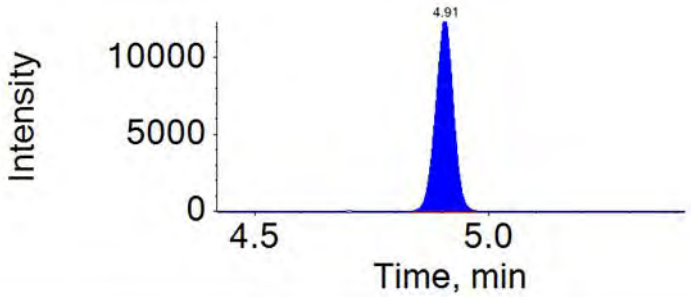
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



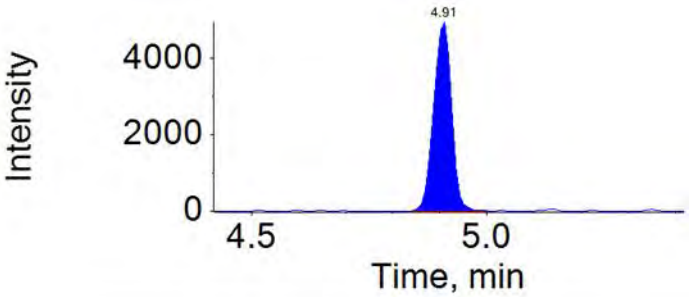
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



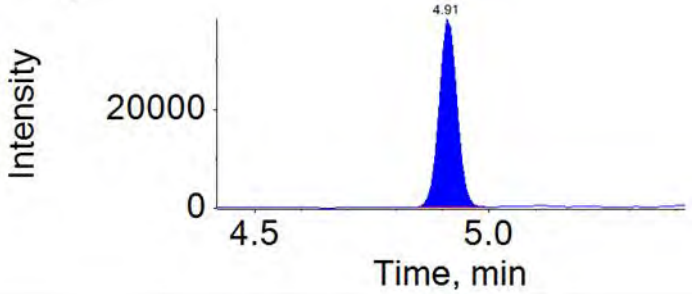
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



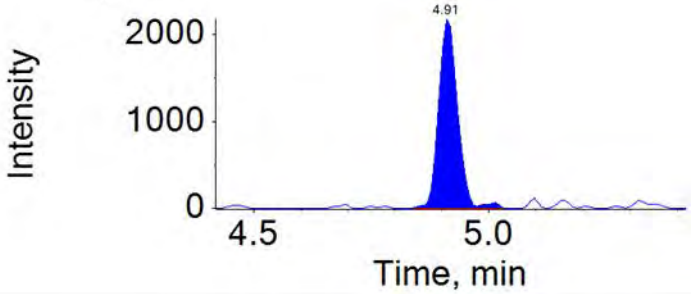
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

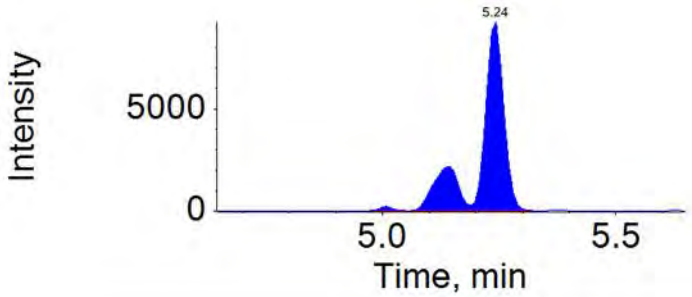
Component: PFOA
Primary Mass: 413.0 / 369.0



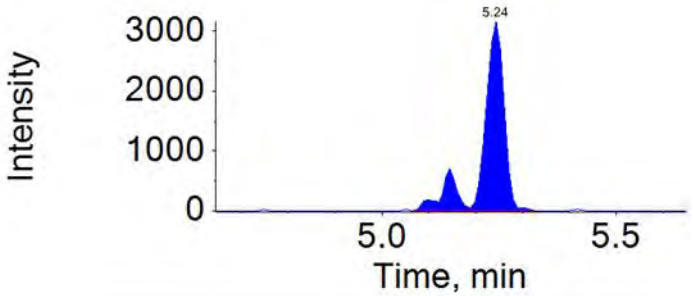
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



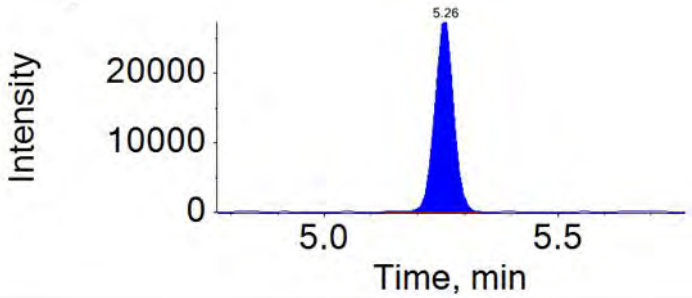
Component: PFOS
Primary Mass: 499.0 / 80.0



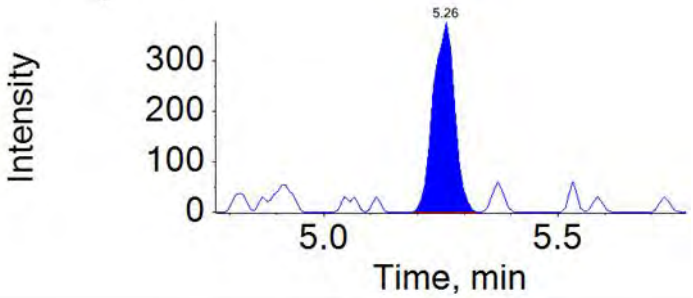
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



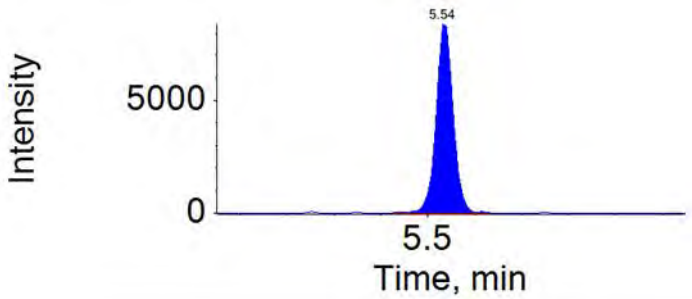
Component: PFNA
Primary Mass: 463.0 / 419.0



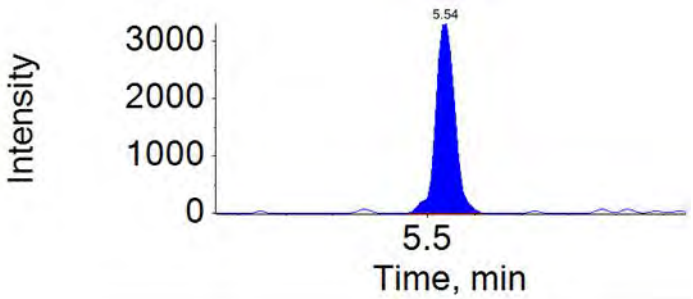
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



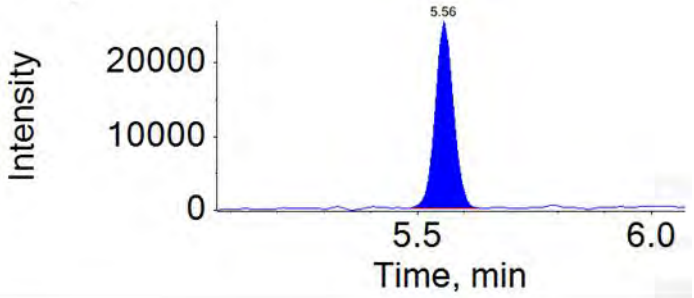
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



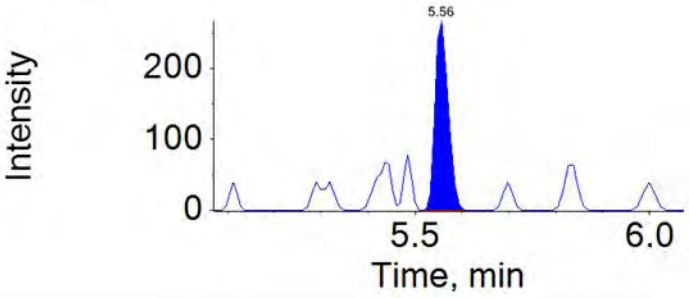
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

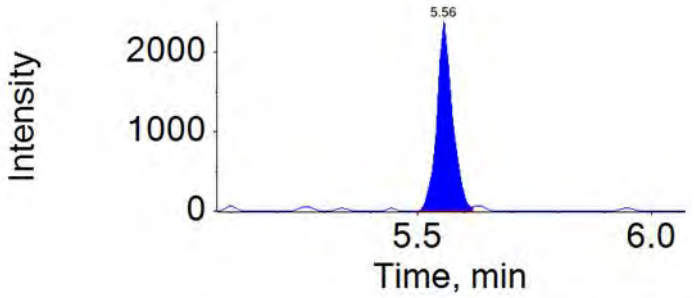
Component: PFDA
Primary Mass: 513.0 / 469.0



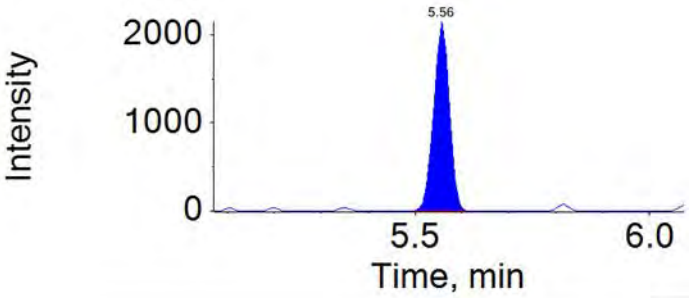
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



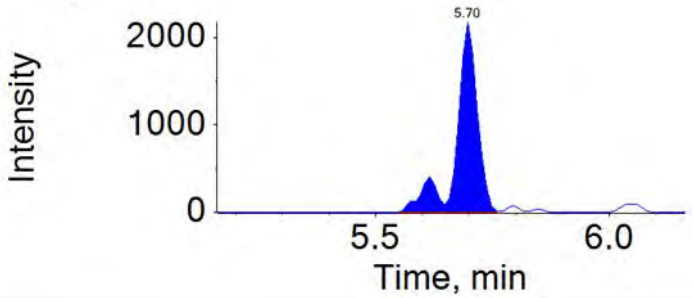
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



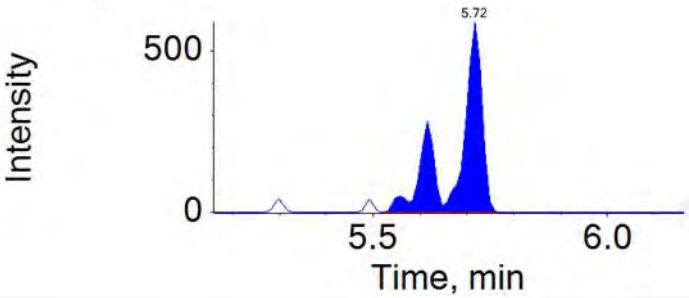
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



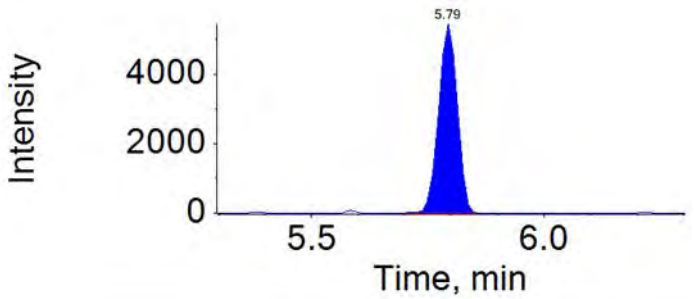
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



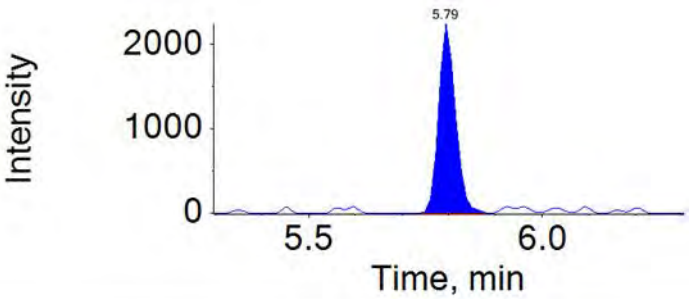
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



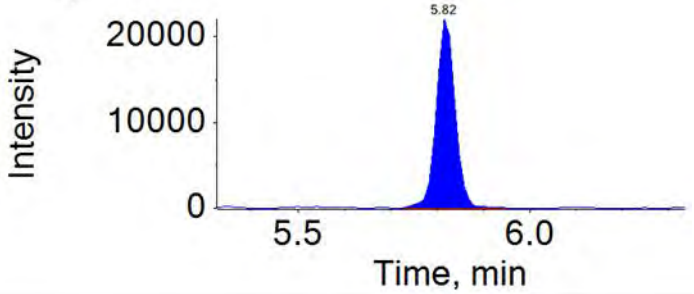
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



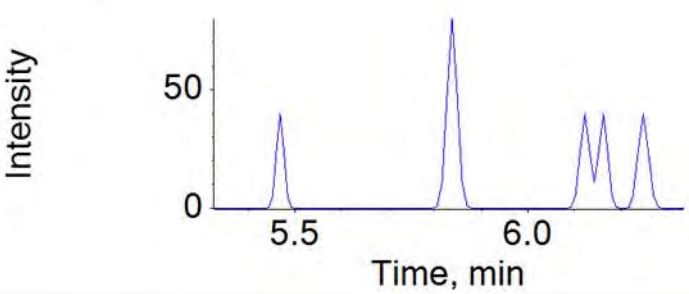
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

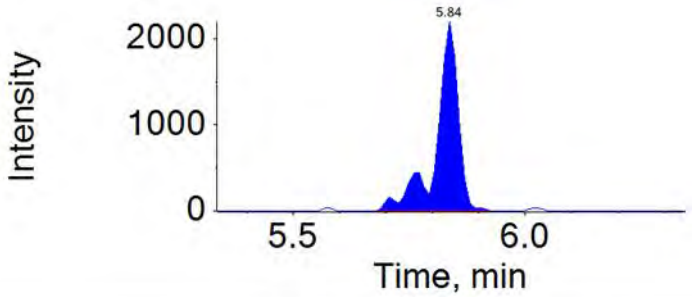
Component: PFUnDA
Primary Mass: 563.0 / 519.0



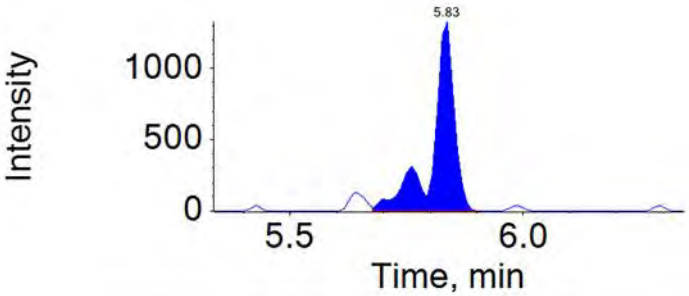
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



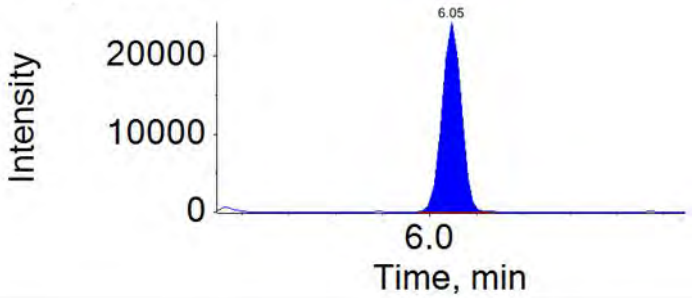
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



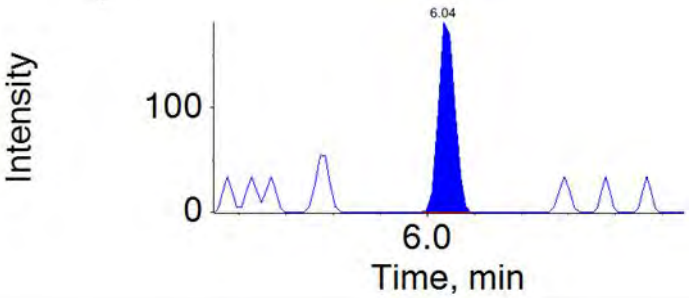
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



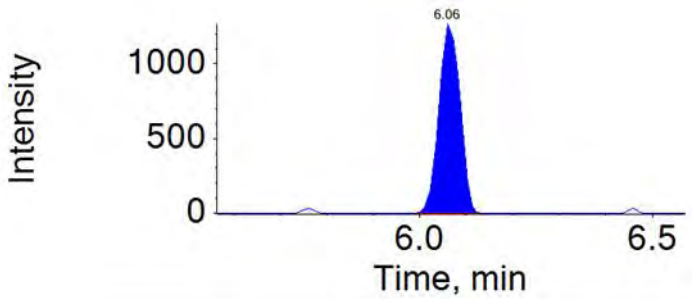
Component: PFDoDA
Primary Mass: 613.0 / 569.0



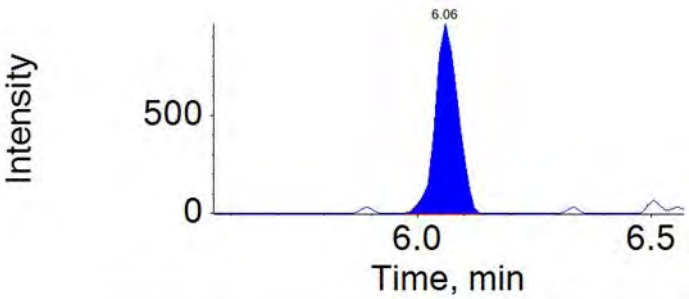
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



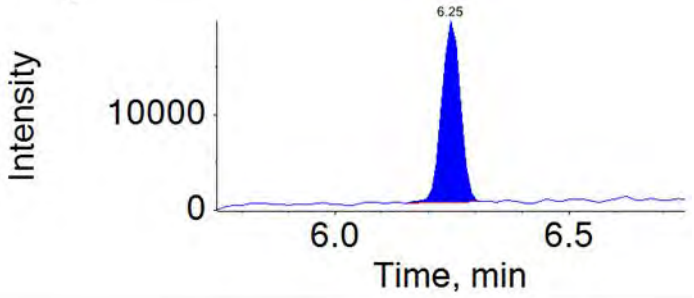
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



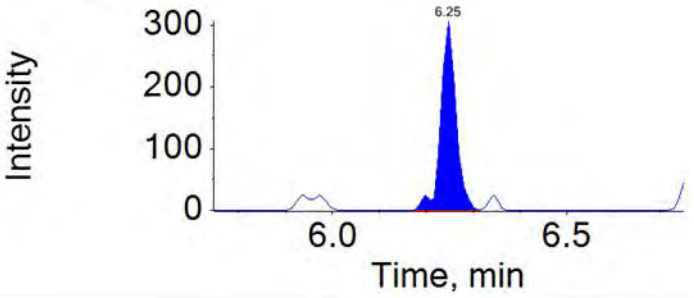
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

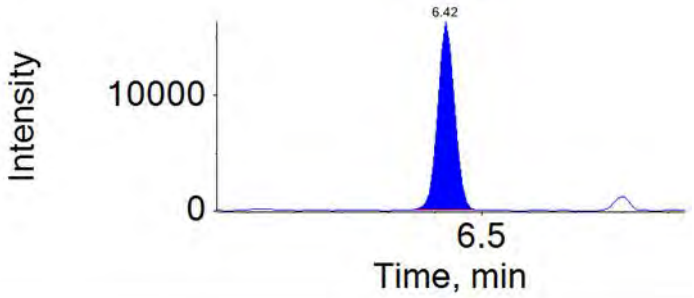
Component: PFTrDA
Primary Mass: 663.0 / 619.0



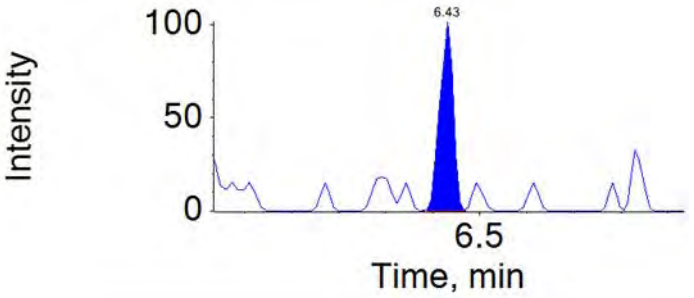
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



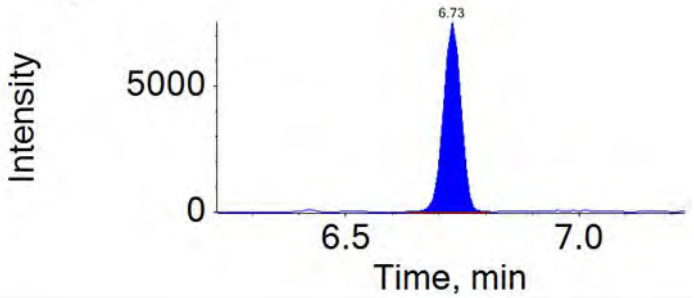
Component: PFTeDA
Primary Mass: 713.0 / 669.0



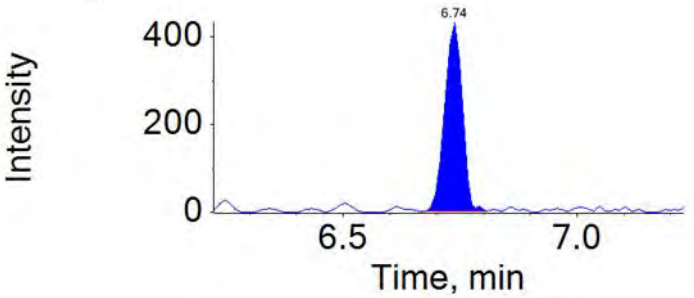
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



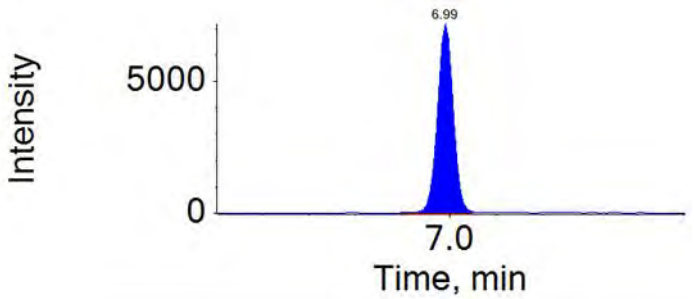
Component: PFHxDA
Primary Mass: 813.0 / 769.0



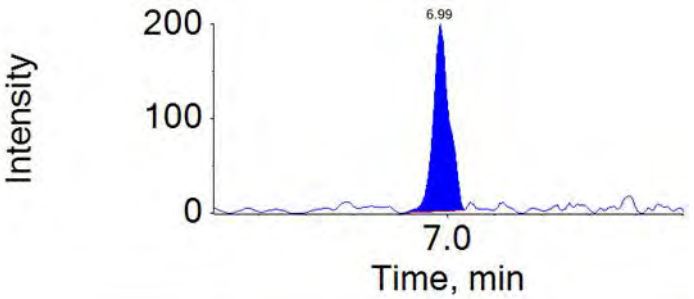
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



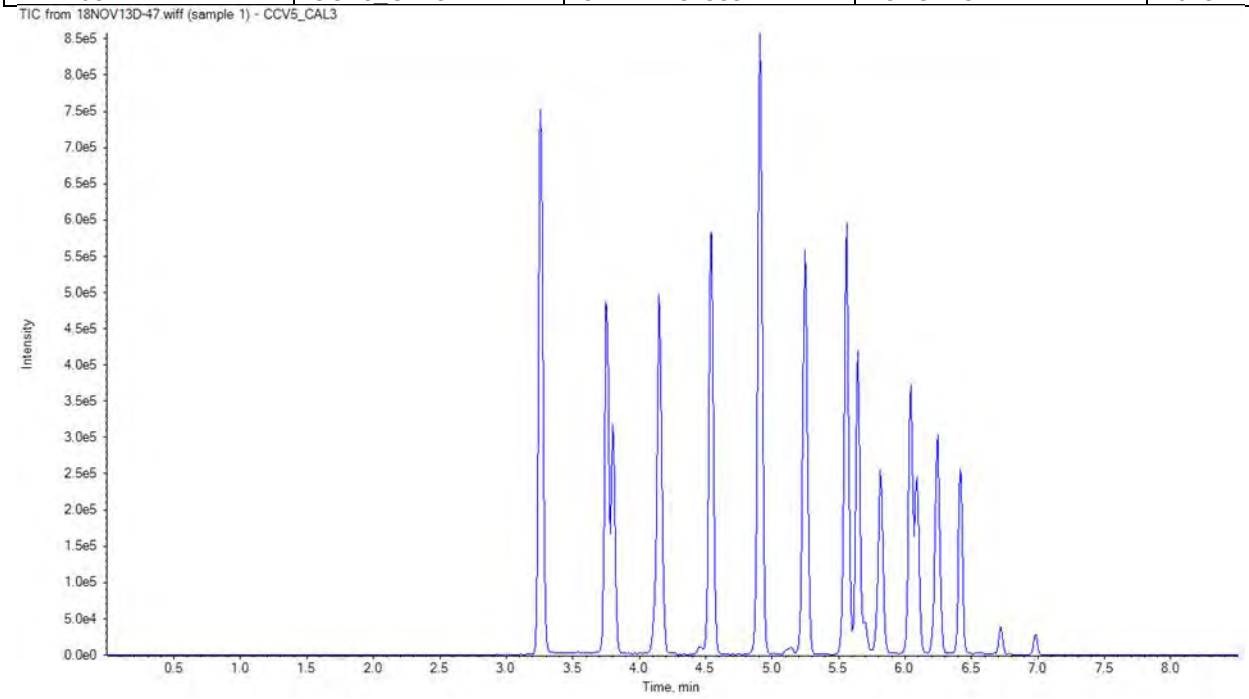
APPROVED
By JPT at 4:33 pm, 11/13/18

REVIEWED
By umar at 5:40 pm, 11/13/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV5_CAL3	CALBRN31833B	18NOV13D-47.wiff	2018-11-13T16:38:29



Injection Standard Area Reference File: 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	658776.2	661126.9	0	50	
13C2-PFOA	5.0	461523.7	466902.6	-1	50	
13C4-PFOS	4.8	249261.5	247446.9	1	50	
13C2-PFDA	5.0	278804.3	295381.6	-6	50	

APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV5_CAL3	CALBRN31833B	18NOV13D-47.wiff	2018-11-13T16:38:29

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	307991.5	10	13C4-PFBA	752496.6	5.0	0.409	3.26	1.000	2.000	2.267	13	30	
PFPeA	295604.4	11	13C5-PFPeA	743769.5	5.0	0.397	3.76	1.000	2.000	2.301	15	30	
PFBS	173380.5	11	13C3-PFBS	423188.1	4.7	0.410	3.80	1.000	1.770	1.949	10	30	
4:2-FTS	39454.2	12	13C2-4:2-FTS	45745.2	4.7	0.862	4.12	1.000	1.870	2.342	25	30	
PFHxA	359338.4	11	13C5-PFHxA	670326.8	5.0	0.536	4.15	1.000	2.000	2.238	12	30	
PFPeS	86328.6	11	13C3-PFBS	423188.1	4.7	0.204	4.17	1.100	1.880	1.980	5	30	
PFHpA	366823.7	12	13C4-PFHpA	522354.9	5.0	0.702	4.54	1.000	2.000	2.328	16	30	
PFHxS	129050.1	18	13C3-PFHxS	314815.3	4.7	0.410	4.54	1.000	1.820	1.988	9	30	
6:2-FTS	28406.1	11	13C2-6:2-FTS	34309.0	4.8	0.828	4.90	1.000	1.900	2.004	5	30	
PFHpS	120412.1	11	13C3-PFHxS	314815.3	4.7	0.382	4.90	1.080	1.900	2.013	6	30	
PFOA	386893.4	11	13C8-PFOA	884816.5	5.0	0.437	4.91	1.000	2.000	2.335	17	30	
PFOS	124584.3	22	13C8-PFOS	257886.0	4.8	0.483	5.24	1.000	1.850	2.113	14	30	
PFNA	306064.7	11	13C9-PFNA	455726.4	5.0	0.672	5.25	1.000	2.000	2.422	21	30	
PFNS	81247.8	11	13C8-PFOS	257886.0	4.8	0.315	5.54	1.060	1.920	2.204	15	30	
PFDA	262885.4	11	13C6-PFDA	630322.1	5.0	0.417	5.56	1.000	2.000	2.211	11	30	
8:2-FTS	26997.8	11	13C2-8:2-FTS	26954.4	4.8	1.002	5.56	1.000	1.920	2.335	22	30	
PFOSA	277186.5	11	13C8-PFOSA	633039.8	5.0	0.438	5.64	1.000	2.000	2.139	7	30	
NMeFOSAA	26509.8	19	d3-NMeFOSAA	70625.2	5.0	0.375	5.70	1.000	2.000	2.121	6	30	
PFDS	57377.5	11	13C8-PFOS	257886.0	4.8	0.222	5.79	1.110	1.930	2.016	4	30	
PFUnDA	206119.4	11	13C7-PFUnDA	249545.0	5.0	0.826	5.82	1.000	2.000	2.159	8	30	
NEtFOSAA	24747.7	22	d5-NEtFOSAA	70781.7	5.0	0.350	5.83	1.000	2.000	1.833	-8	30	
PFDoDA	244015.0	12	13C2-PFDoDA	544733.3	5.0	0.448	6.04	1.000	2.000	2.281	14	30	
10:2-FTS	17038.2	12	13C2-8:2-FTS	26954.4	4.8	0.632	6.06	1.090	1.930	2.105	9	30	
NMePFOSAE	169972.6	11	d7-NMePFOSAE	305460.2	5.0	0.556	6.09	1.000	2.000	2.316	16	30	
NMePFOSA	31410.7	11	d3-NMePFOSA	76278.4	5.0	0.412	6.10	1.000	2.000	2.031	2	30	
PFDoS	28874.2	11	13C8-PFOS	257886.0	4.8	0.112	6.21	1.190	1.940	1.961	1	30	
NEtPFOSAE	179928.9	11	d9-NEtPFOSAE	263429.6	5.0	0.683	6.25	1.000	2.000	2.191	10	30	
NEtPFOSA	26596.2	11	d5-NEtPFOSA	59536.9	5.0	0.447	6.26	1.000	2.000	2.052	3	30	
PFTrDA	189964.3	11	13C2-PFDoDA	544733.3	5.0	0.349	6.24	1.030	2.000	2.201	10	30	
PFTeDA	156391.7	11	13C2-PFTeDA	396961.1	5.0	0.394	6.42	1.000	2.000	2.208	10	30	
PFHxDA	72132.1	11	13C2-PFTeDA	396961.1	5.0	0.182	6.72	1.050	2.000	2.165	8	30	
PFODA	59386.3	10	13C2-PFTeDA	396961.1	5.0	0.150	6.98	1.090	2.000	2.084	4	30	

APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18NOV13DCCV5 11/13/2018 4:55:52 PM
Acquisition Method: 18AUG13_3uL.dam

APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV5_CAL3			**Data File:**		18NOV13D-47.wiff
Sample ID:	CALBRN31833B			**Acquis Date:**		11/13/2018 4:38:29 PM
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	5			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV13DCCV5
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N/A			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	658776.2	661126.9	0	50	
13C2-PFOA	5.0	461523.7	466902.6	-1	50	
13C4-PFOS	4.8	249261.5	247446.9	1	50	
13C2-PFDA	5.0	278804.3	295381.6	-6	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	752496.6	13C3-PFBA	658776.2	1.142	5.000	5.121	102	70-130	
E13C5-PFPeA	743769.5	13C3-PFBA	658776.2	1.129	5.000	5.064	101	70-130	
E13C3-PFBS	423188.1	13C3-PFBA	658776.2	0.642	4.650	4.535	98	70-130	
E13C2-4:2-FTS	45745.2	13C2-PFOA	461523.7	0.099	4.670	4.415	95	70-130	
E13C5-PFHxA	670326.8	13C2-PFOA	461523.7	1.452	5.000	5.247	105	70-130	
E13C3-PFHxS	314815.3	13C2-PFOA	461523.7	0.682	4.730	4.681	99	70-130	
E13C4-PFHpA	522354.9	13C2-PFOA	461523.7	1.132	5.000	5.099	102	70-130	
E13C2-6:2-FTS	34309.0	13C2-PFOA	461523.7	0.074	4.750	4.974	105	70-130	
E13C8-PFOA	884816.5	13C2-PFOA	461523.7	1.917	5.000	5.282	106	70-130	
E13C8-PFOS	257886.0	13C4-PFOS	249261.5	1.035	4.780	4.584	96	70-130	
E13C9-PFNA	455726.4	13C4-PFOS	249261.5	1.828	5.000	5.098	102	70-130	
E13C6-PFDA	630322.1	13C2-PFDA	278804.3	2.261	5.000	5.276	106	70-130	
E13C2-8:2-FTS	26954.4	13C2-PFDA	278804.3	0.097	4.790	4.821	101	70-130	
E13C8-PFOSA	633039.8	13C2-PFDA	278804.3	2.271	5.000	5.034	101	70-130	
Ed3-NMeFOSAA	70625.1	13C2-PFDA	278804.3	0.253	5.000	4.572	91	70-130	
E13C7-PFUnDA	249545.0	13C2-PFDA	278804.3	0.895	5.000	5.197	104	70-130	
Ed5-NEtFOSAA	70781.7	13C2-PFDA	278804.3	0.254	5.000	5.371	107	70-130	
E13C2-PFDoDA	544733.3	13C2-PFDA	278804.3	1.954	5.000	5.073	101	70-130	
Ed7-NMePFOSAE	305460.2	13C2-PFDA	278804.3	1.096	5.000	4.741	95	70-130	
Ed3-NMePFOSA	76278.4	13C2-PFDA	278804.3	0.274	5.000	4.971	99	70-130	
Ed9-NEtPFOSAE	263429.6	13C2-PFDA	278804.3	0.945	5.000	4.914	98	70-130	
Ed5-NEtPFOSA	59536.9	13C2-PFDA	278804.3	0.214	5.000	5.009	100	70-130	
E13C2-PFTeDA	396961.1	13C2-PFDA	278804.3	1.424	5.000	4.999	100	70-130	

APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

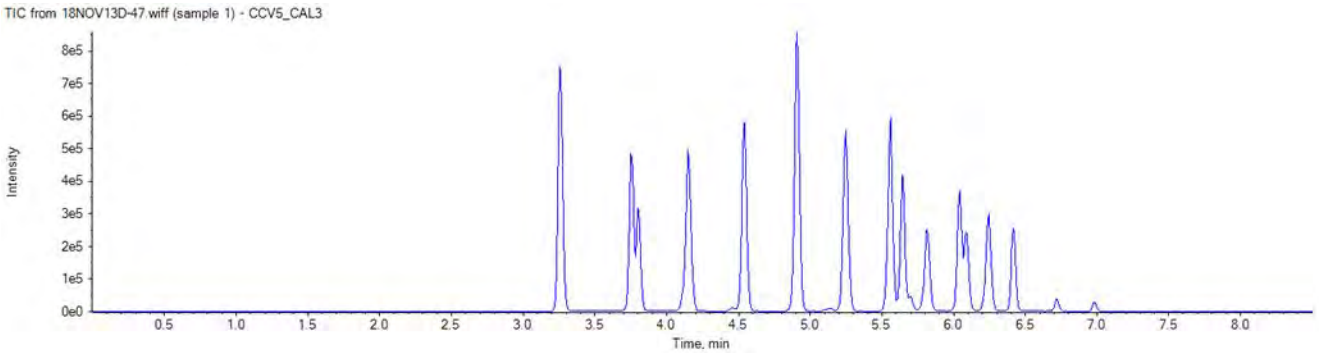
Analyte Quantitation Peak Table

Sample Name: CCV5_CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV13D-47.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	307991.5		A	13C4-PFBA	3.26	752496.6	0.409	2.267
PFPeA	3.76	1.000	295604.4		A	13C5-PFPeA	3.76	743769.5	0.397	2.301
PFBS	3.80	1.000	173380.5		A	13C3-PFBS	3.80	423188.1	0.410	1.949
4:2-FTS	4.12	1.000	39454.2		A	13C2-4:2-FTS	4.12	45745.2	0.862	2.342
PFHxA	4.15	1.000	359338.4		A	13C5-PFHxA	4.15	670326.8	0.536	2.238
PFPeS	4.17	1.100	86328.6		A	13C3-PFBS	3.80	423188.1	0.204	1.980
PFHpA	4.54	1.000	366823.7		A	13C4-PFHpA	4.54	522354.9	0.702	2.328
PFHxS	4.54	1.000	129050.1		M	13C3-PFHxS	4.54	314815.3	0.410	1.988
6:2-FTS	4.90	1.000	28406.1		A	13C2-6:2-FTS	4.90	34309.0	0.828	2.004
PFHpS	4.90	1.080	120412.1		A	13C3-PFHxS	4.54	314815.3	0.382	2.013
PFOA	4.91	1.000	386893.4		A	13C8-PFOA	4.91	884816.5	0.437	2.335
PFOS	5.24	1.000	124584.3		M	13C8-PFOS	5.24	257886.0	0.483	2.113
PFNA	5.25	1.000	306064.7		A	13C9-PFNA	5.25	455726.4	0.672	2.422
PFNS	5.54	1.060	81247.8		A	13C8-PFOS	5.24	257886.0	0.315	2.204
PFDA	5.56	1.000	262885.4		A	13C6-PFDA	5.56	630322.1	0.417	2.211
8:2-FTS	5.56	1.000	26997.8		M	13C2-8:2-FTS	5.56	26954.4	1.002	2.335
PFOSA	5.64	1.000	277186.5		A	13C8-PFOSA	5.64	633039.8	0.438	2.139
NMeFOSAA	5.70	1.000	26509.8		M	d3-NMeFOSAA	5.70	70625.2	0.375	2.121
PFDS	5.79	1.110	57377.5		A	13C8-PFOS	5.24	257886.0	0.222	2.016
PFUnDA	5.82	1.000	206119.4		A	13C7-PFUnDA	5.82	249545.0	0.826	2.159
NEtFOSAA	5.83	1.000	24747.7		M	d5-NEtFOSAA	5.83	70781.7	0.350	1.833
PFDoDA	6.04	1.000	244015.0		A	13C2-PFDoDA	6.04	544733.3	0.448	2.281
10:2-FTS	6.06	1.090	17038.2		A	13C2-8:2-FTS	5.56	26954.4	0.632	2.105
NMePFOSAE	6.09	1.000	169972.6		A	d7-NMePFOSAE	6.08	305460.2	0.556	2.316
NMePFOSA	6.10	1.000	31410.7		A	d3-NMePFOSA	6.10	76278.4	0.412	2.031
PFDoS	6.21	1.190	28874.2		A	13C8-PFOS	5.24	257886.0	0.112	1.961
NEtPFOSAE	6.25	1.000	179928.9		A	d9-NEtPFOSAE	6.24	263429.6	0.683	2.191
NEtPFOSA	6.26	1.000	26596.2		A	d5-NEtPFOSA	6.26	59536.9	0.447	2.052
PFTrDA	6.24	1.030	189964.3		A	13C2-PFDoDA	6.04	544733.3	0.349	2.201
PFTeDA	6.42	1.000	156391.7		A	13C2-PFTeDA	6.42	396961.1	0.394	2.208
PFHxDA	6.72	1.050	72132.1		A	13C2-PFTeDA	6.42	396961.1	0.182	2.165
PFODA	6.98	1.090	59386.3		A	13C2-PFTeDA	6.42	396961.1	0.150	2.084

Total Ion Chromatogram

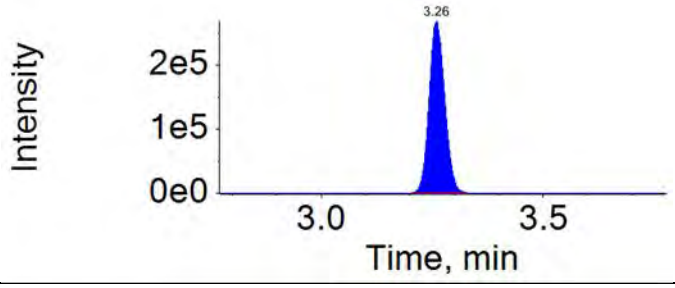


APPROVED
By JPT at 5:00 pm, 11/13/18

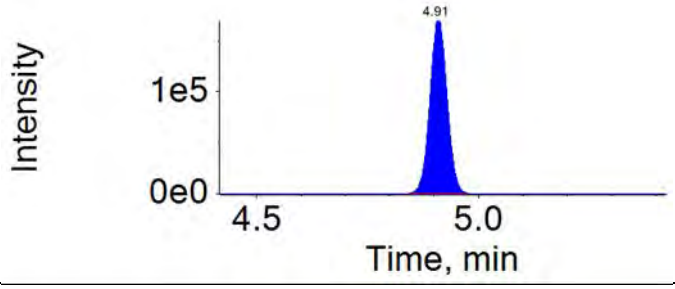
REVIEWED
By umar at 5:42 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

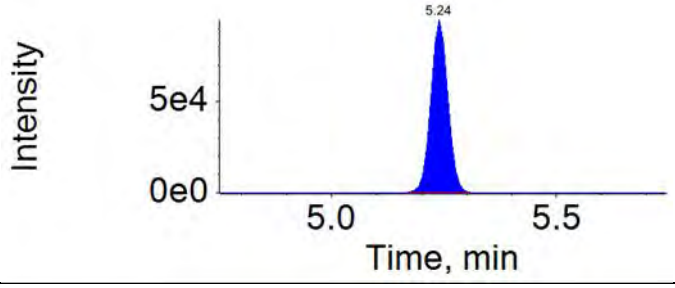
Injection Standard: 13C3-PFBA
216.0 / 172.0



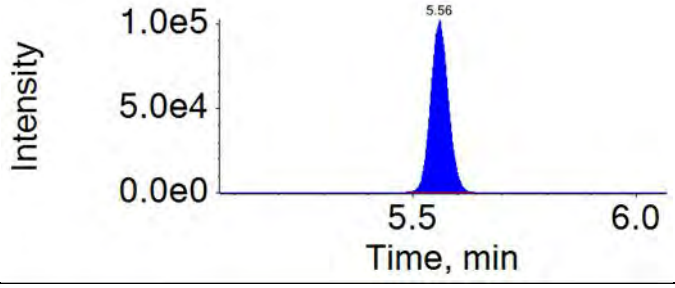
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

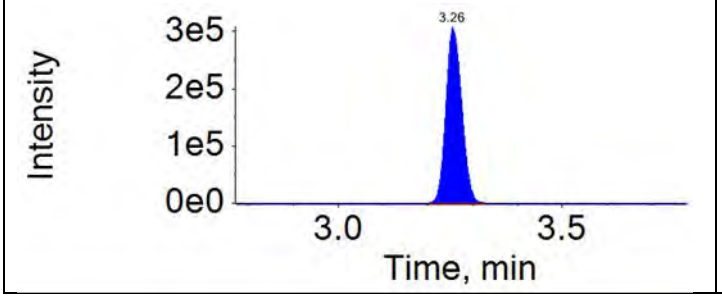


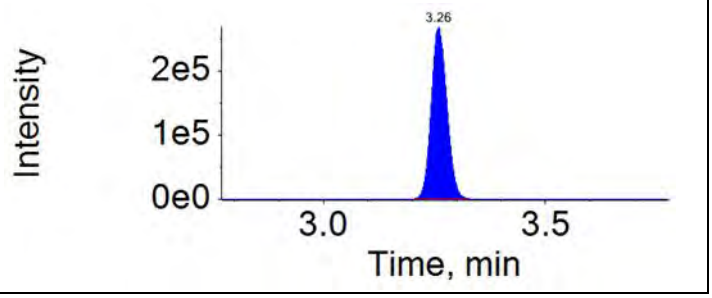
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

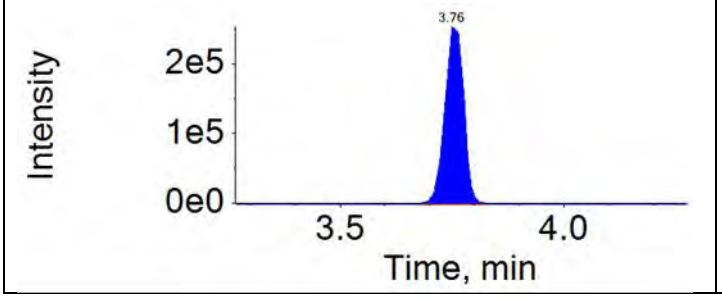
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

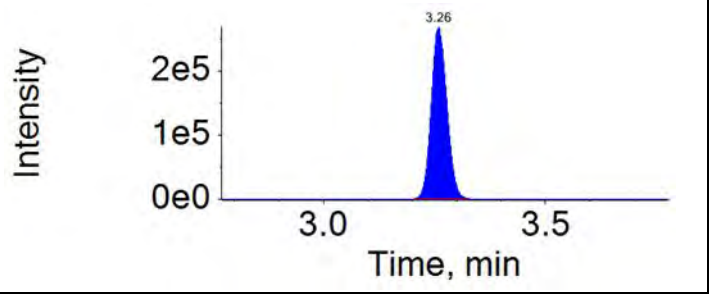
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



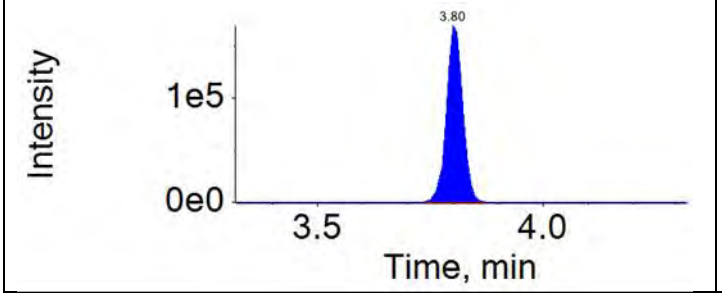


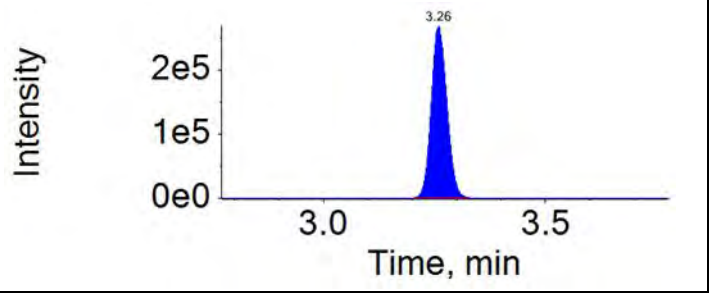
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268.0 / 223.0	216.0 / 172.0



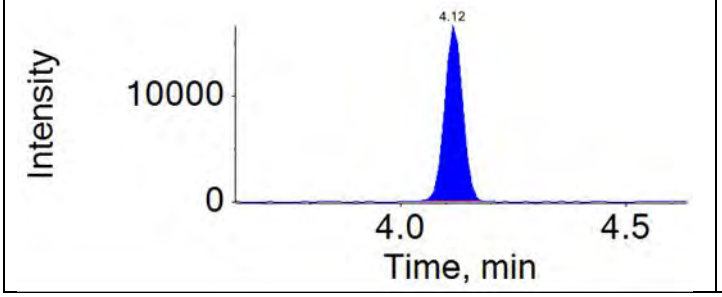


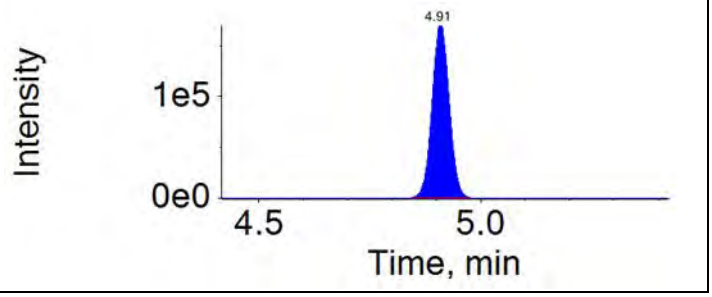
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



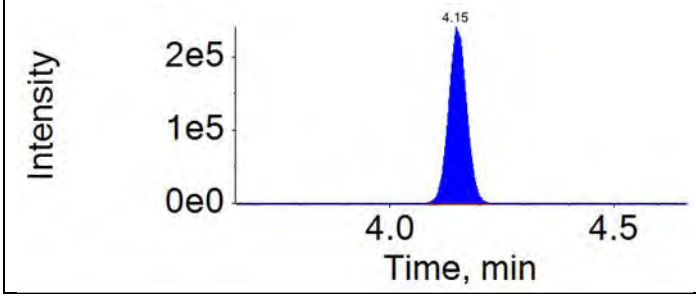


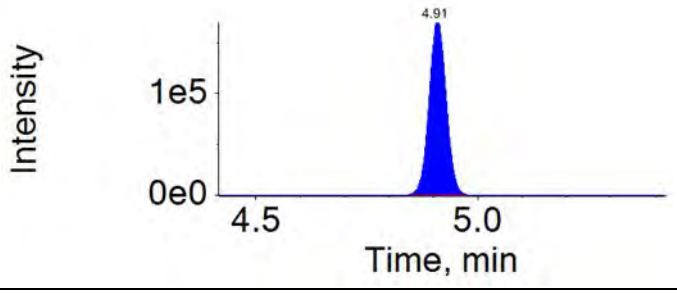
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

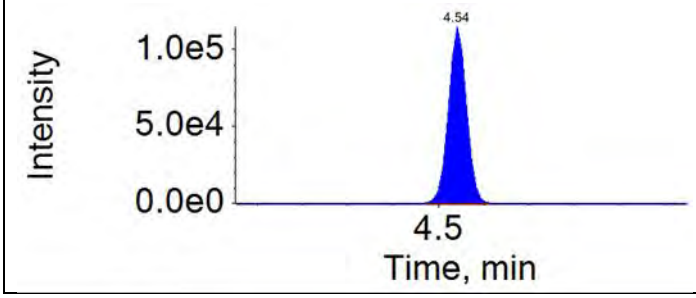
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

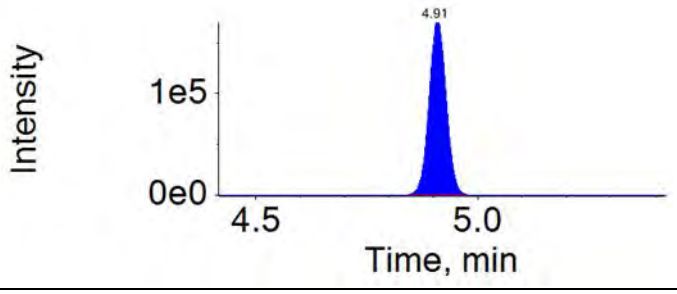
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



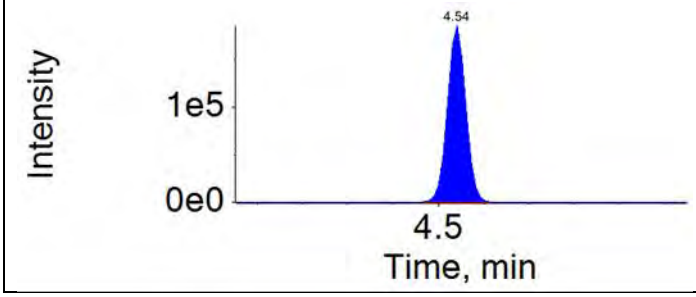


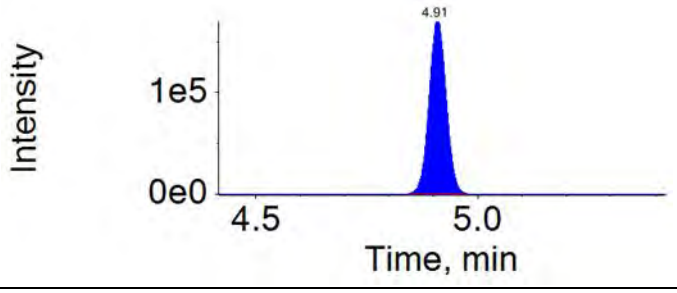
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



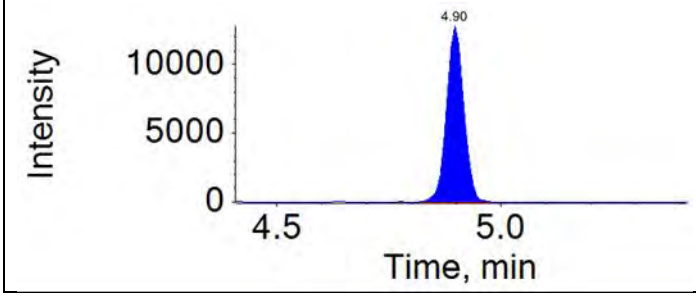


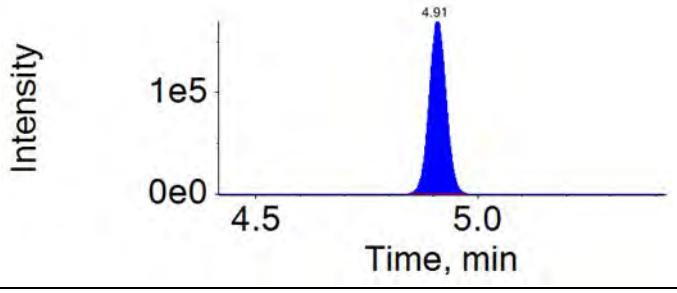
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367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

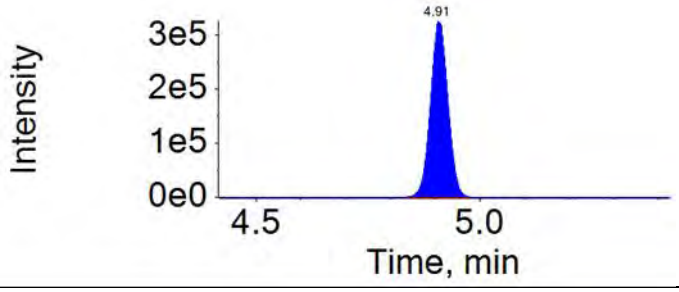
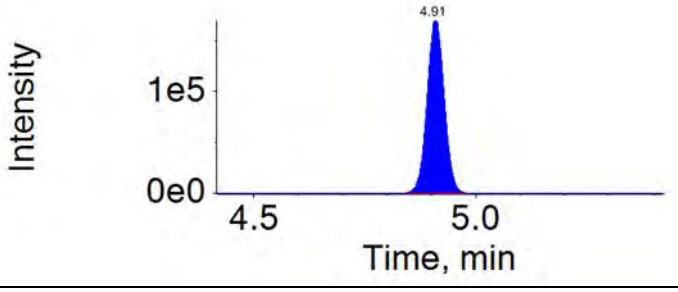


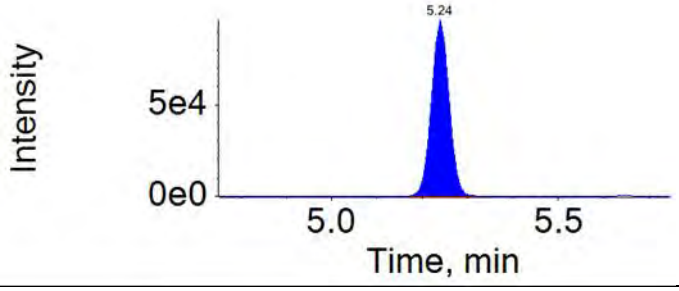
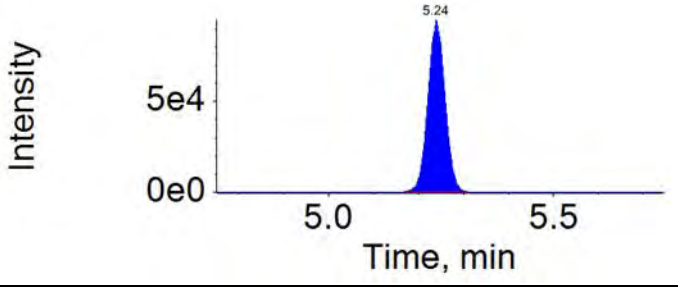


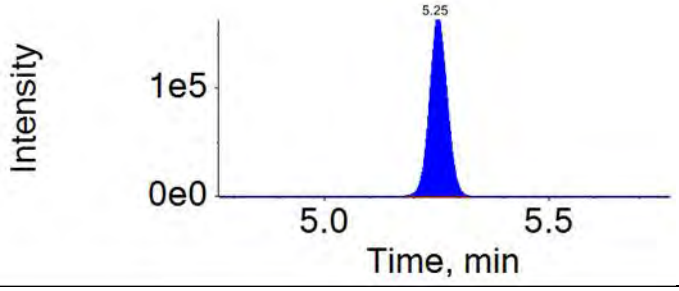
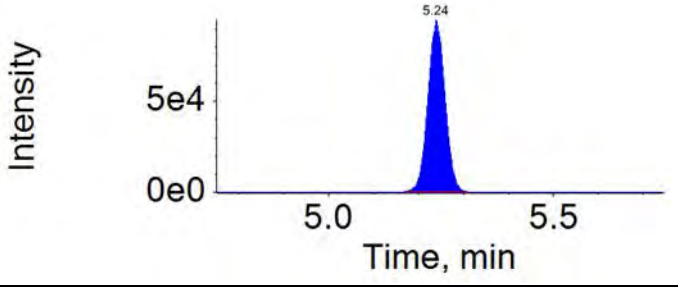
APPROVED
By JPT at 5:00 pm, 11/13/18

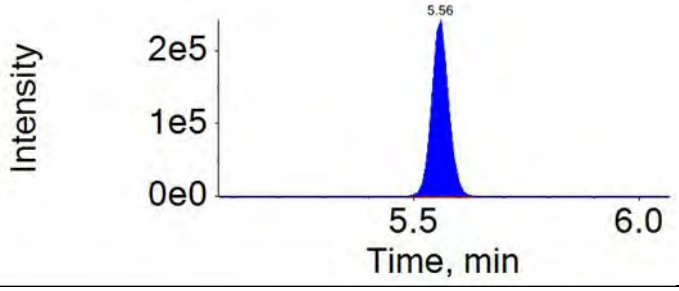
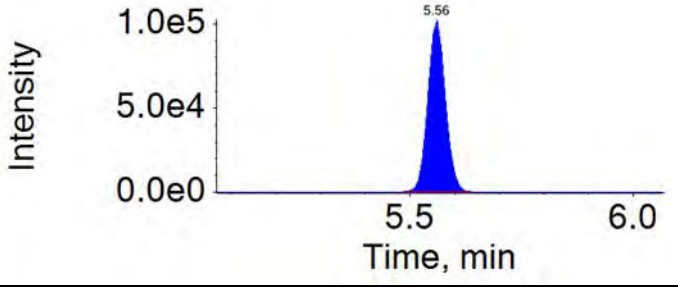
REVIEWED
By umar at 5:42 pm, 11/13/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

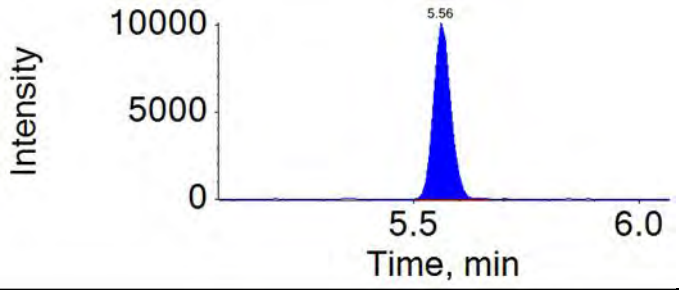
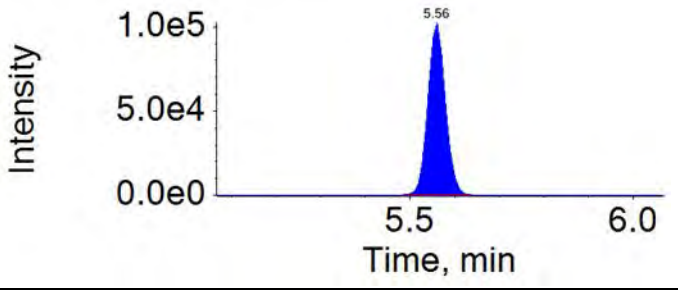
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

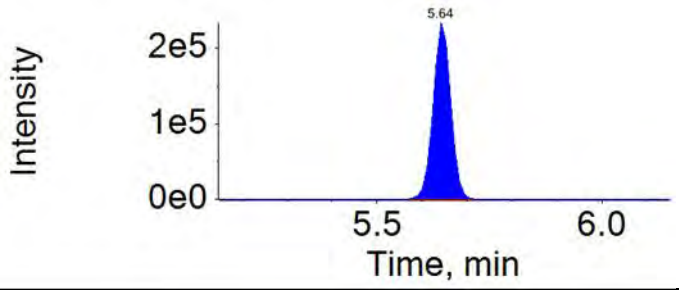
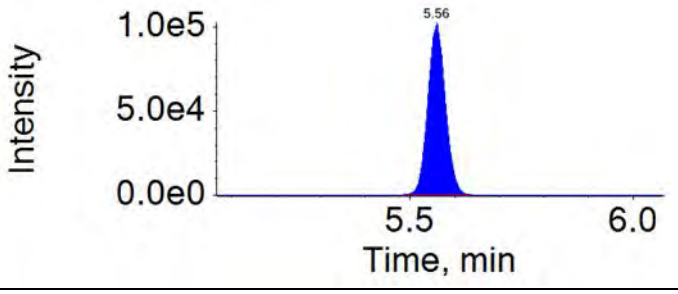
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

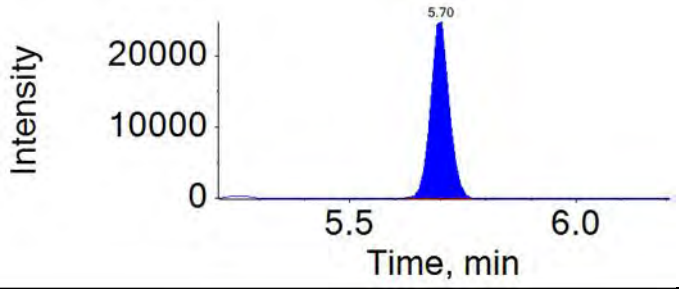
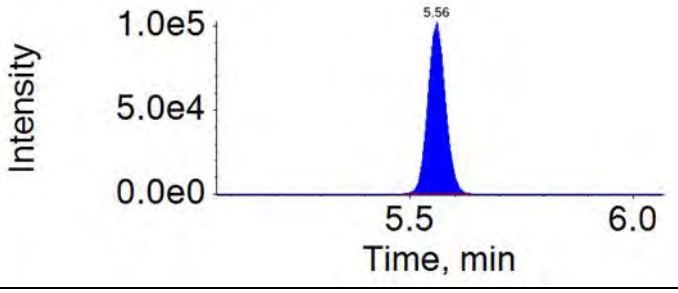
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

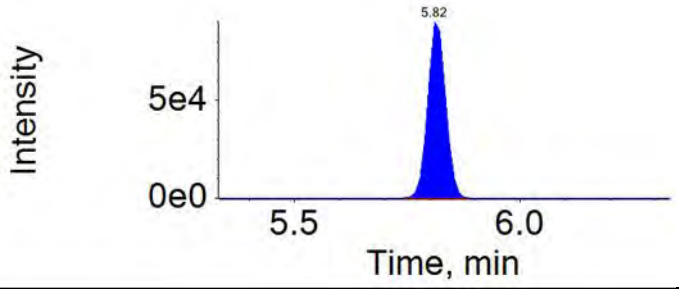
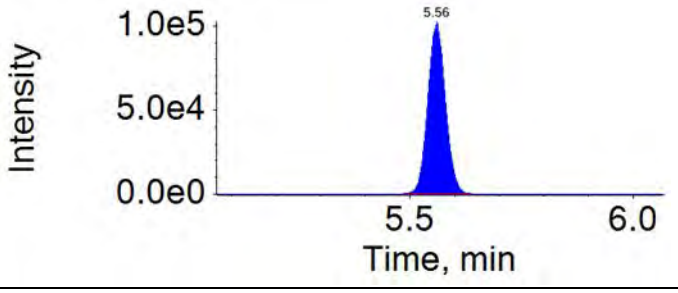
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

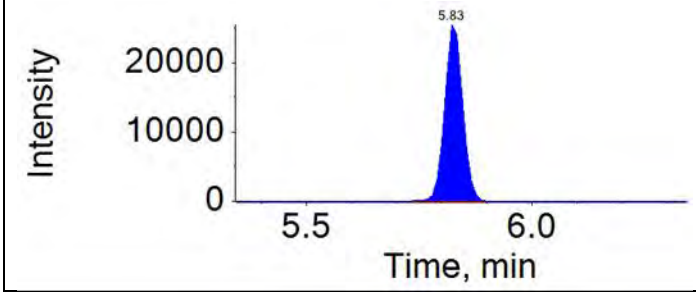
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

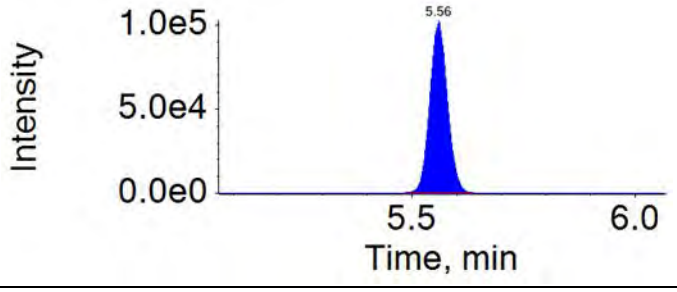
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

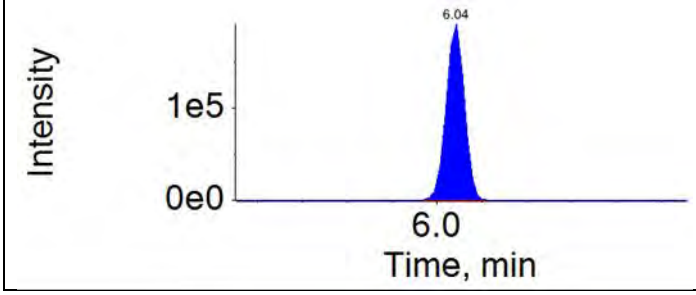
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

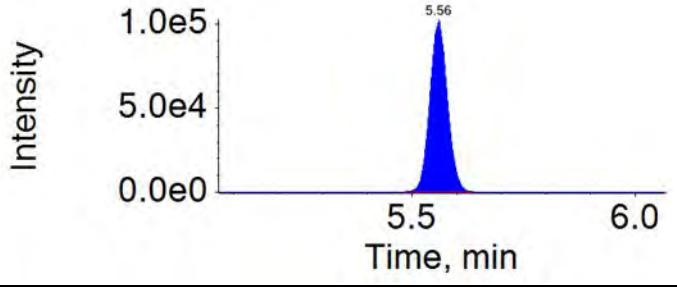
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



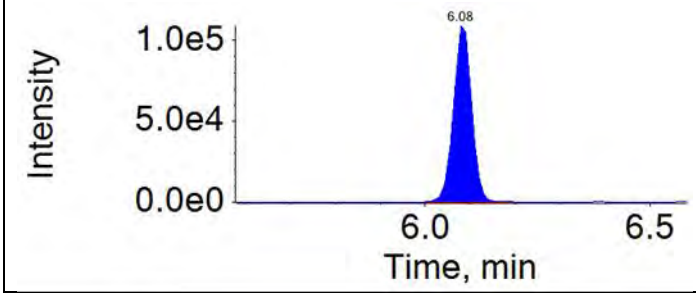


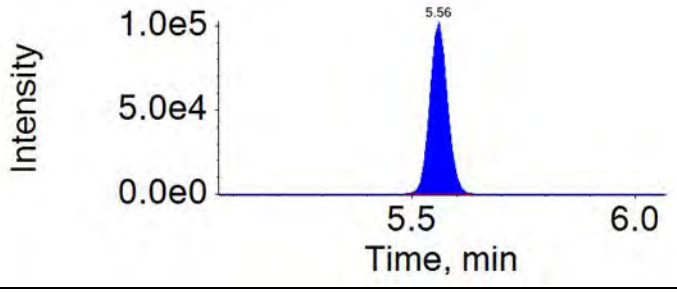
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



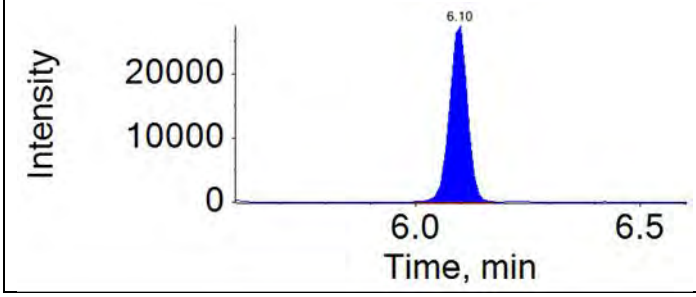


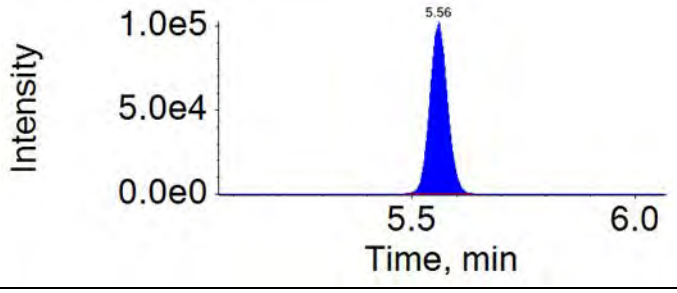
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



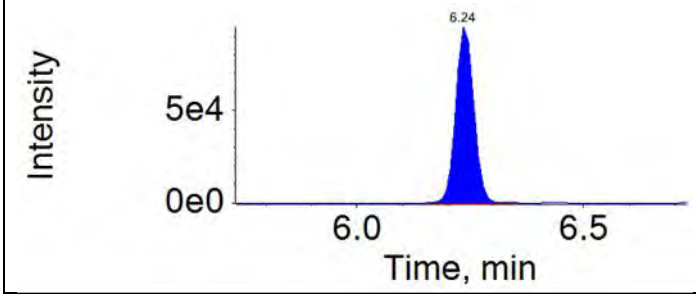


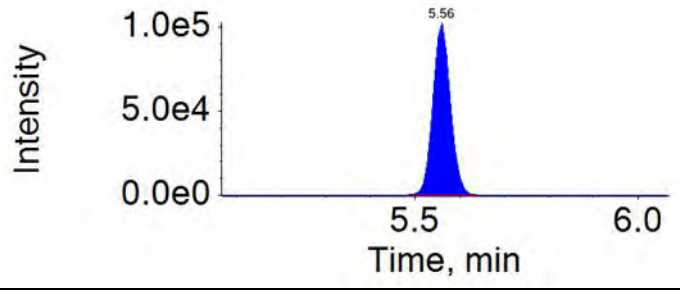
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

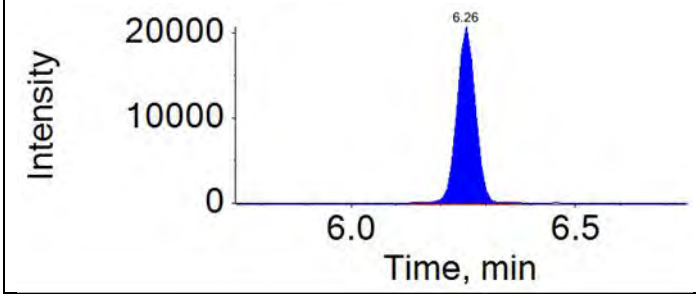
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

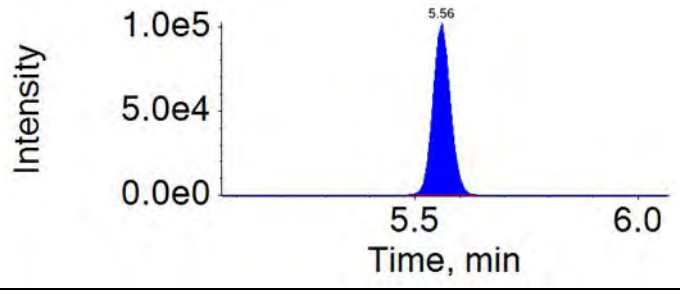
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



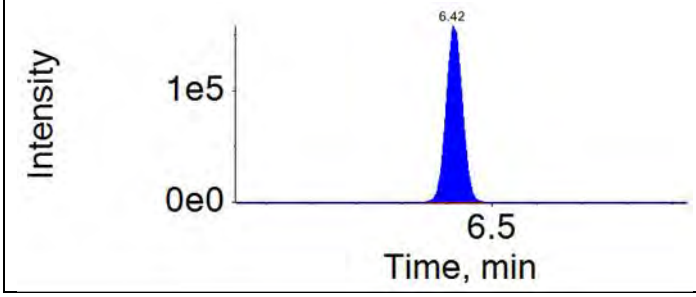


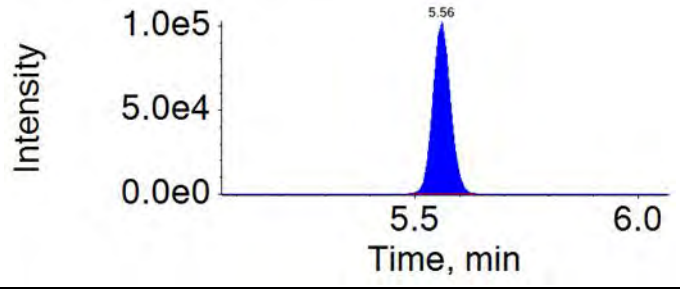
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



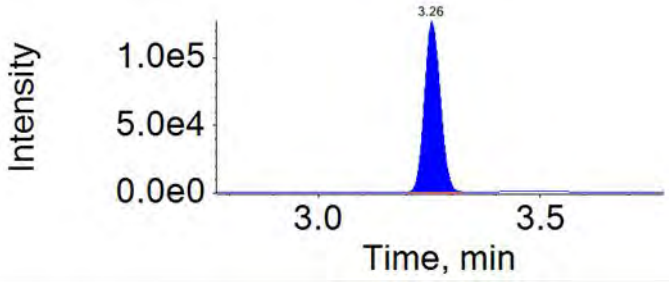


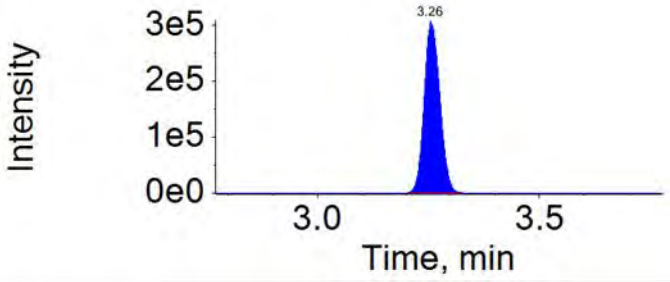
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

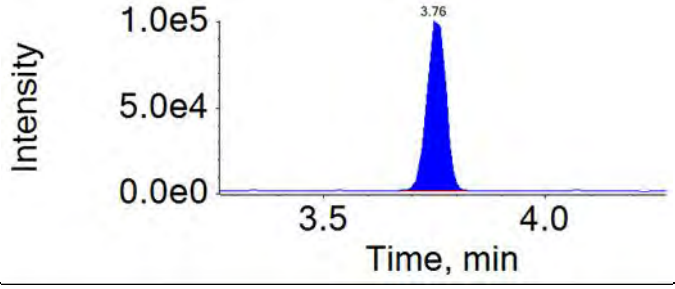
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

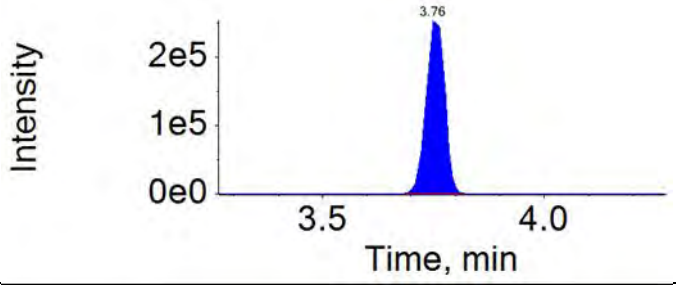
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



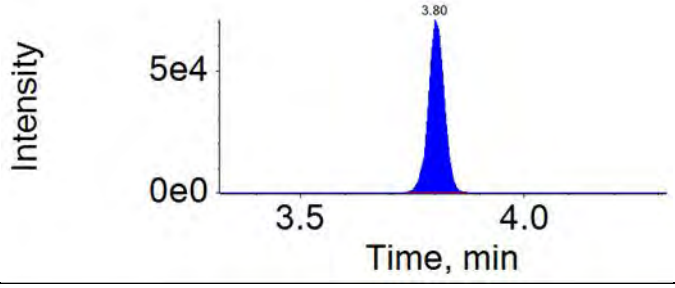


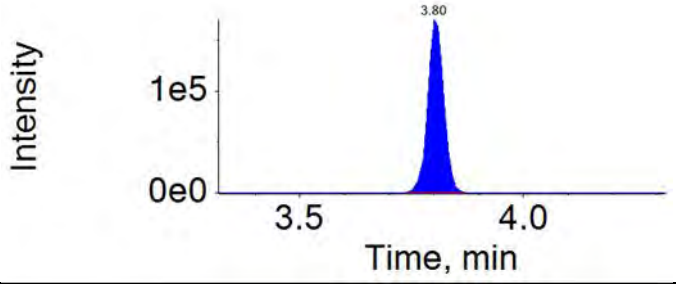
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



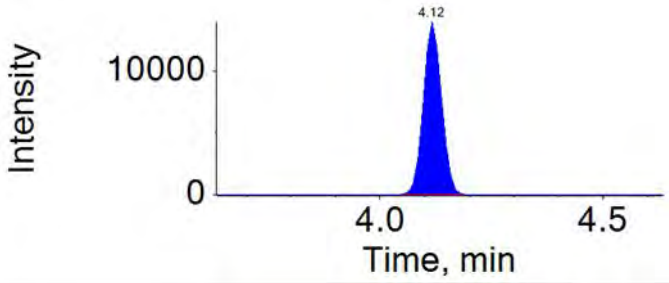


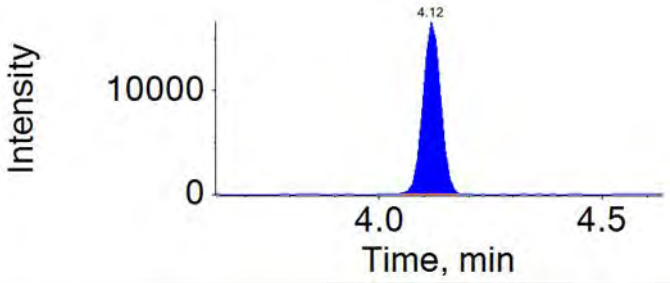
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



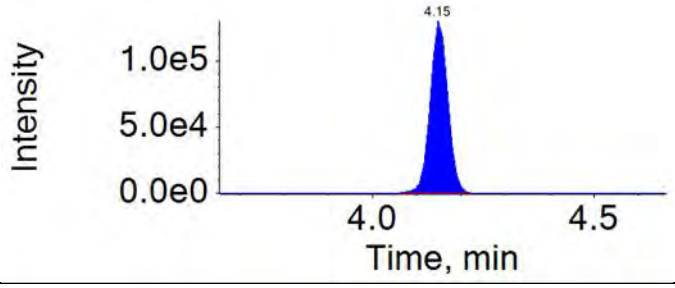


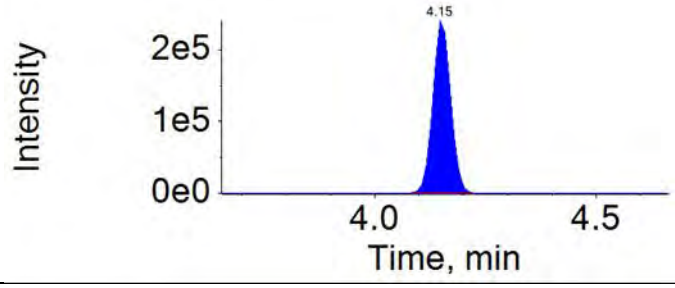
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

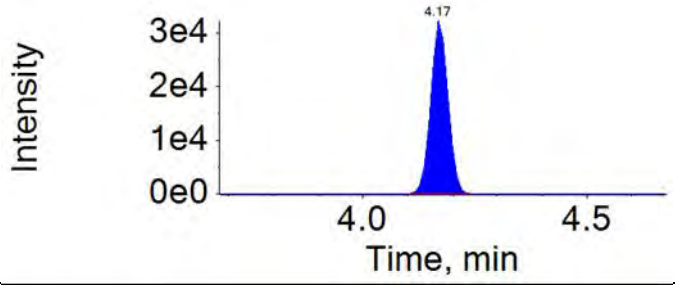
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

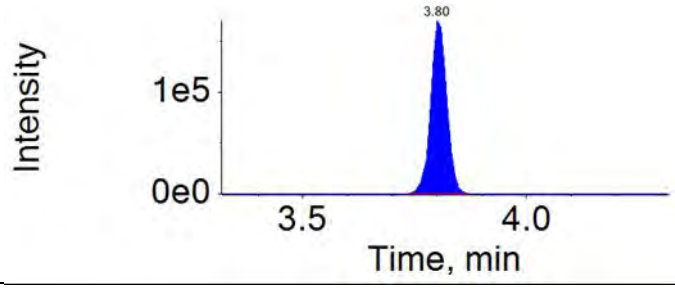
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



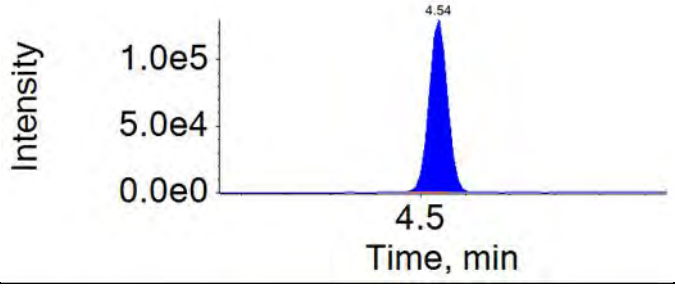


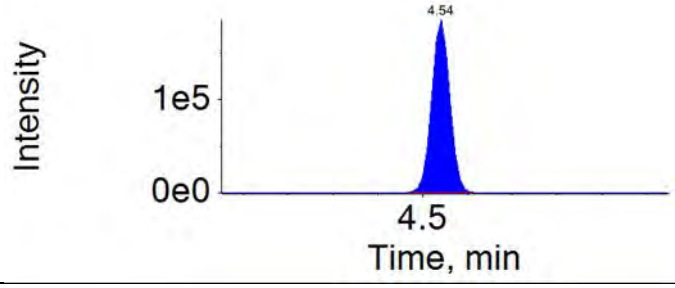
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



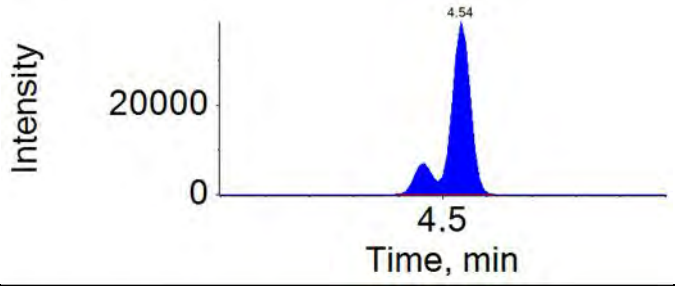


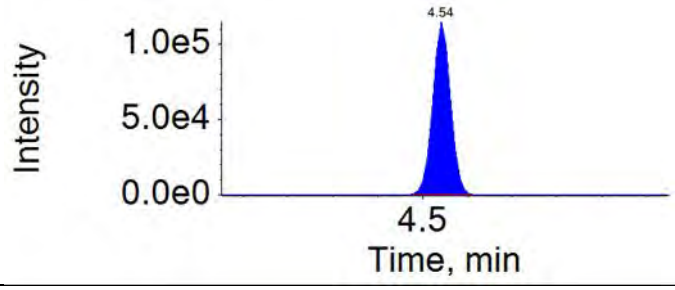
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0



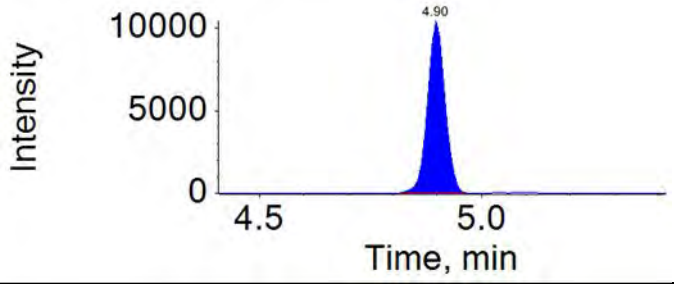
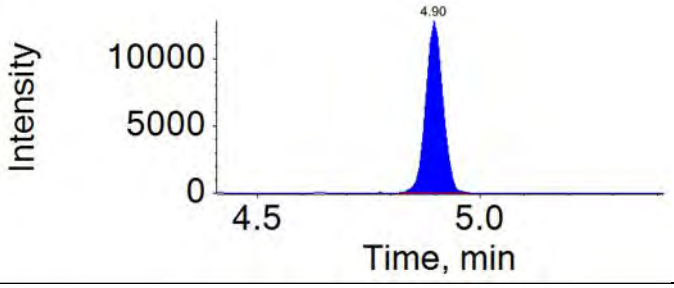


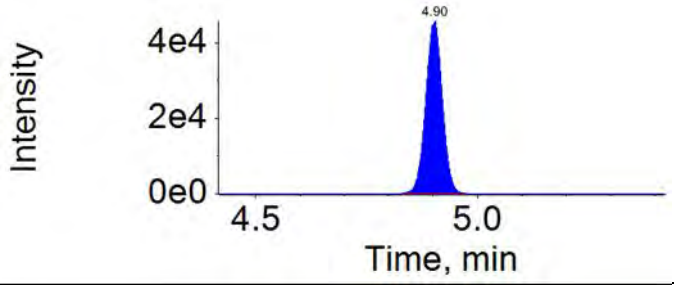
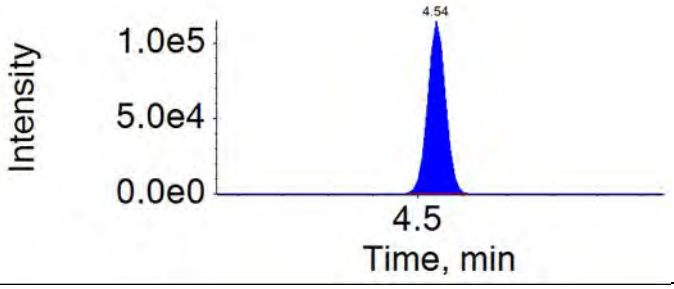
Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

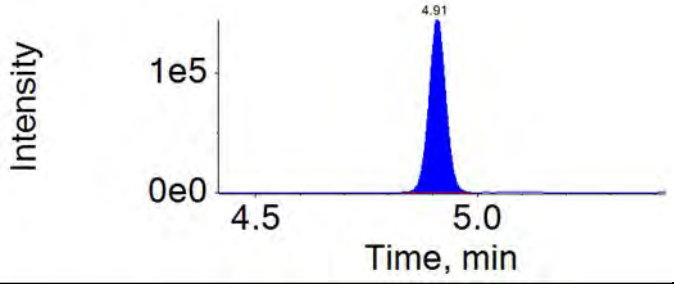
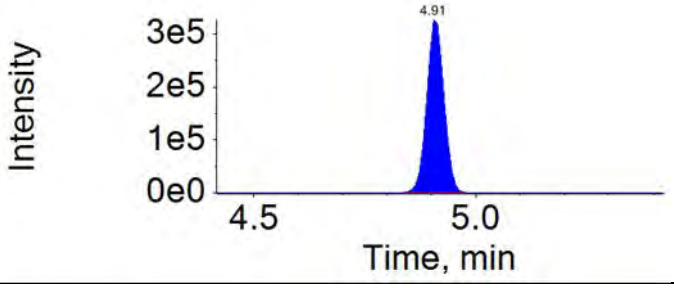


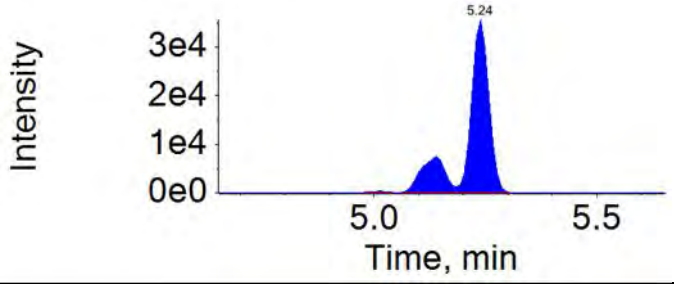
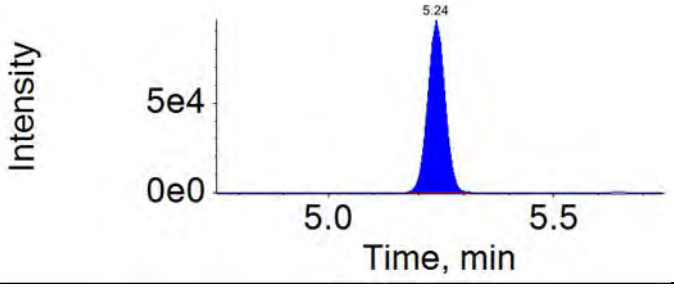


ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

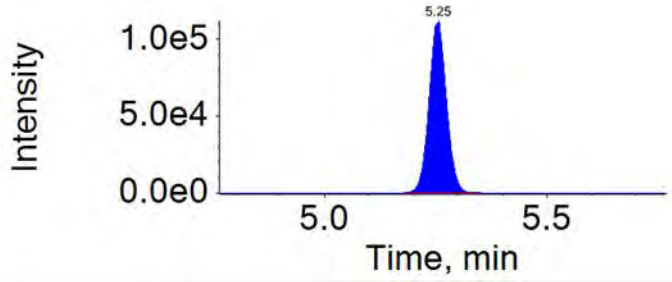
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

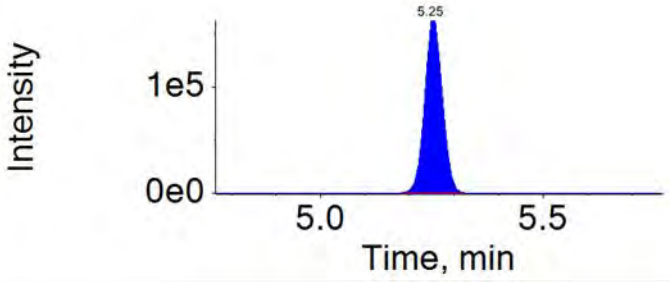
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

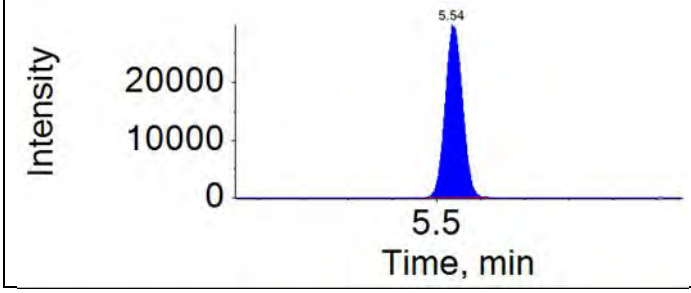
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

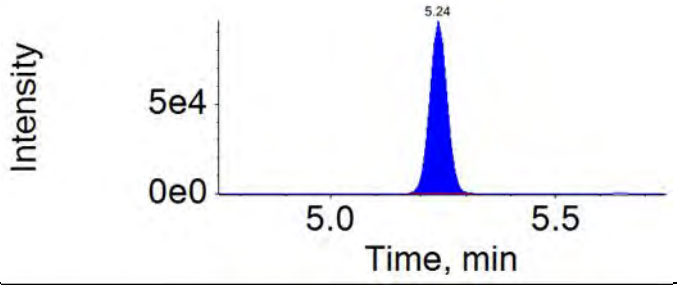
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



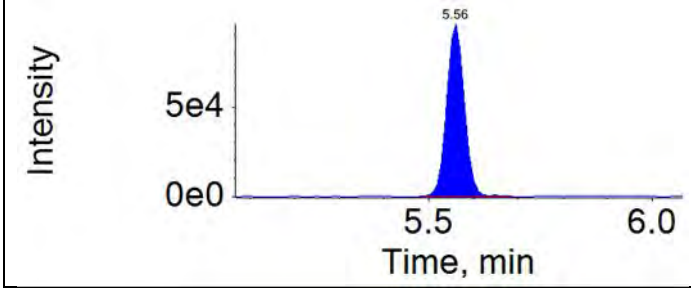


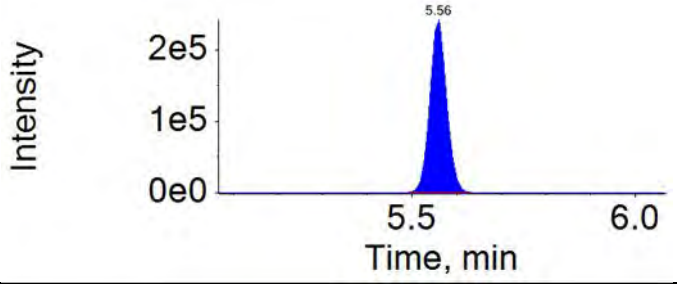
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



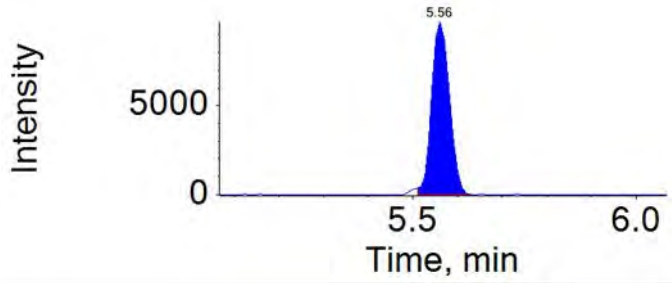


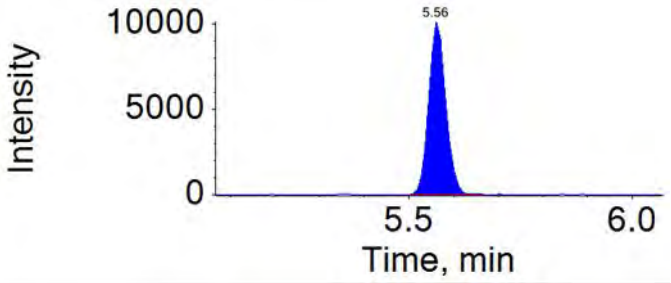
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



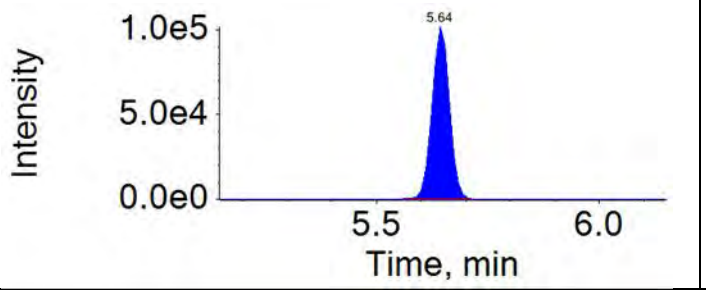


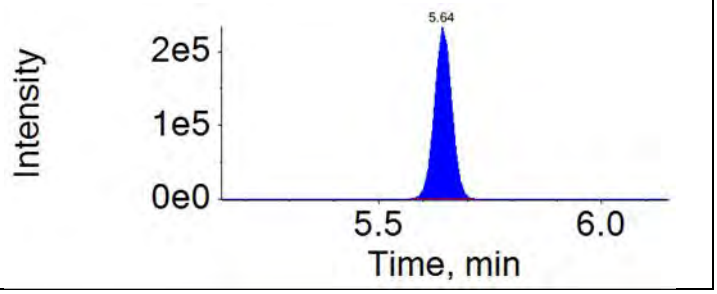
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

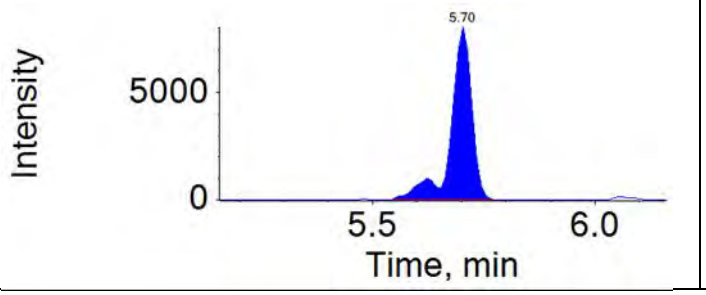
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

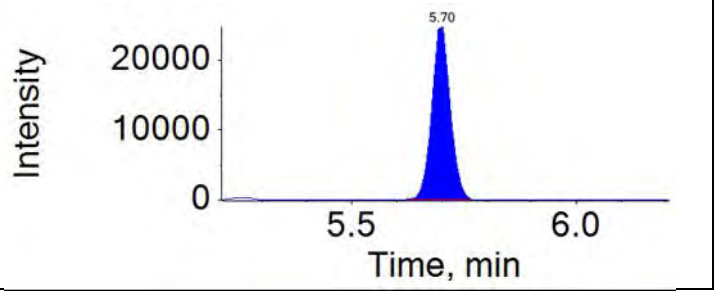
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



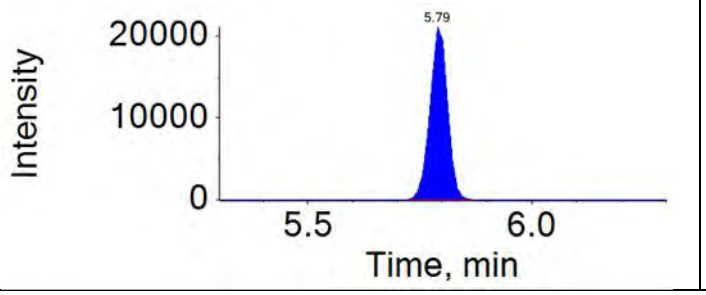


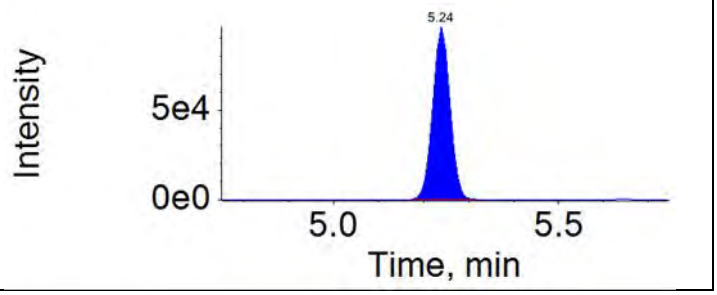
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



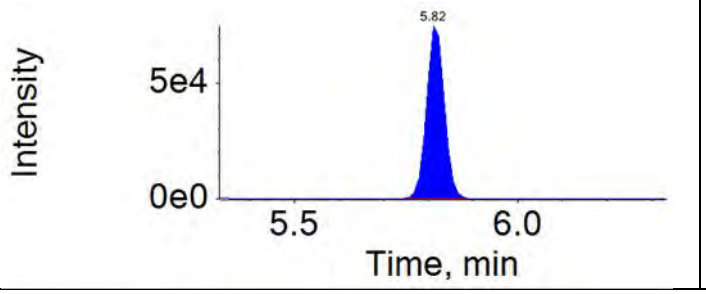


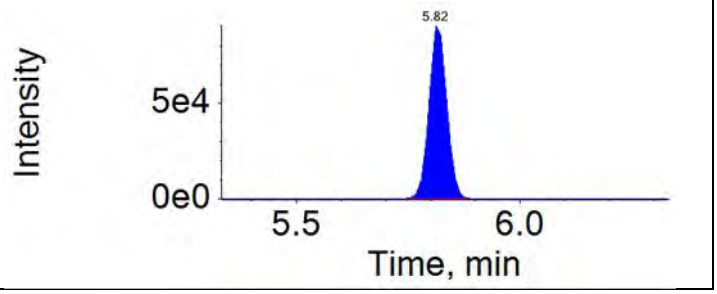
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



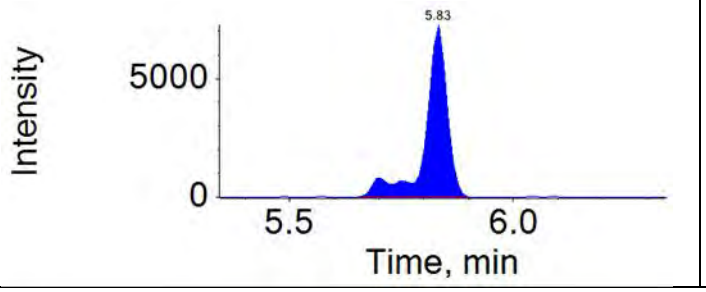


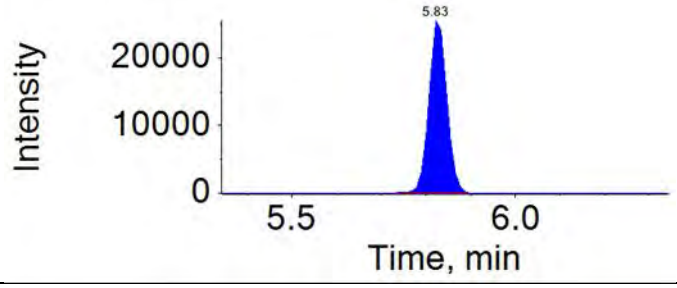
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

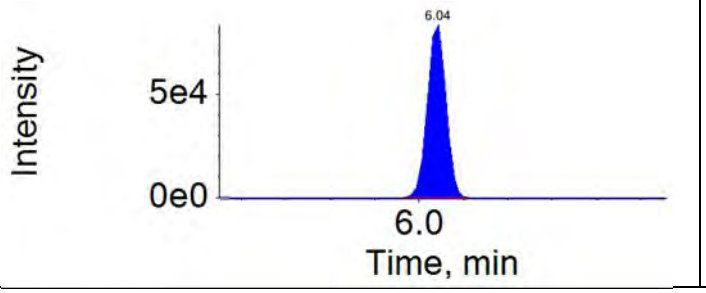
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

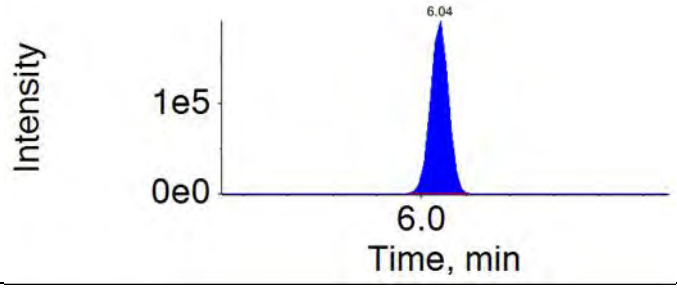
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



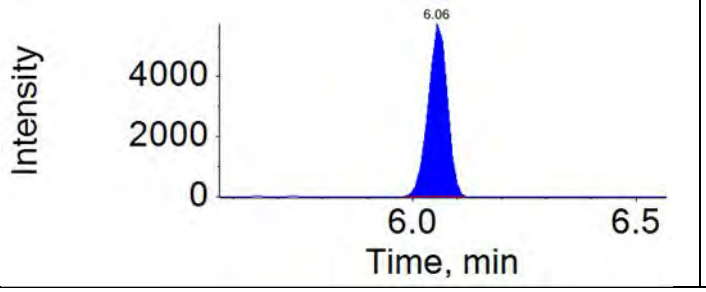


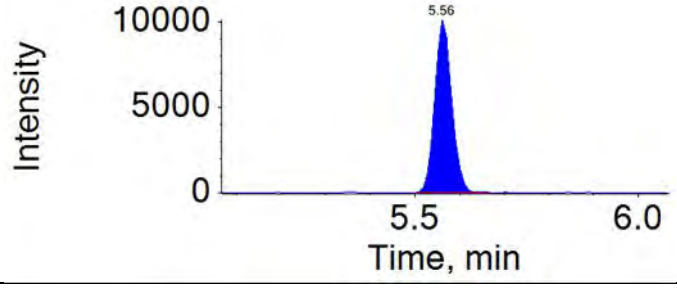
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



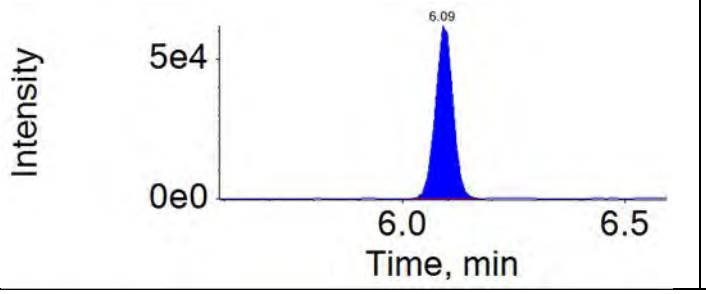


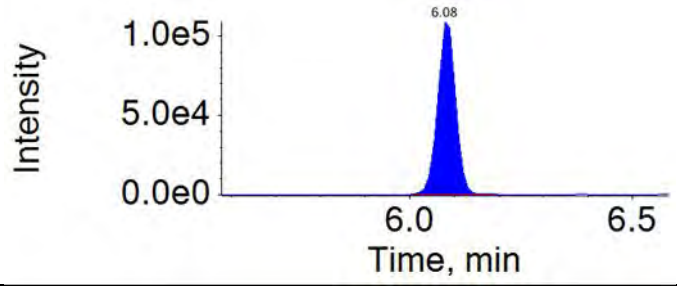
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



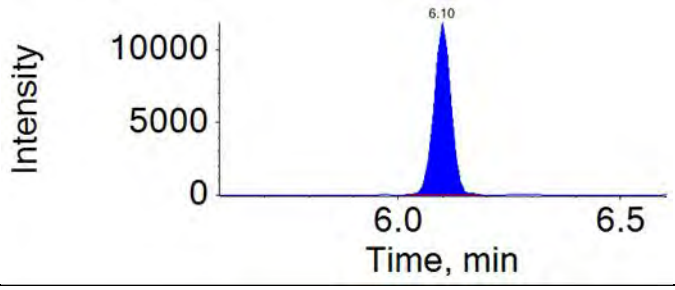


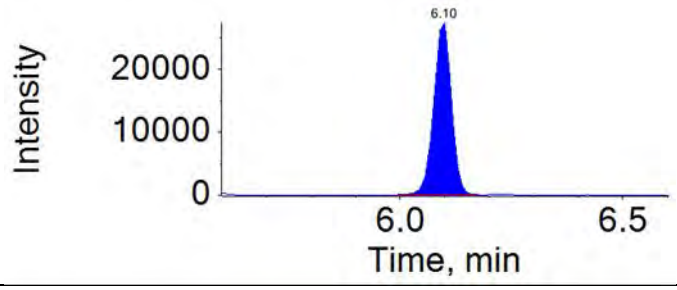
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

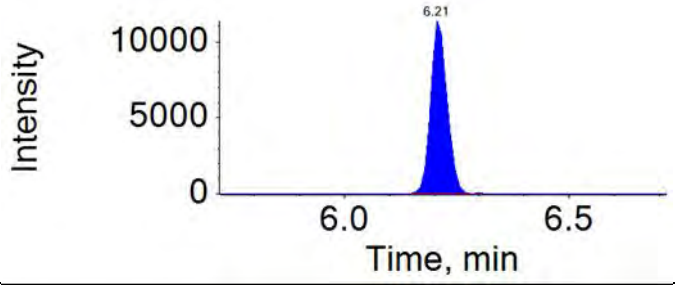
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

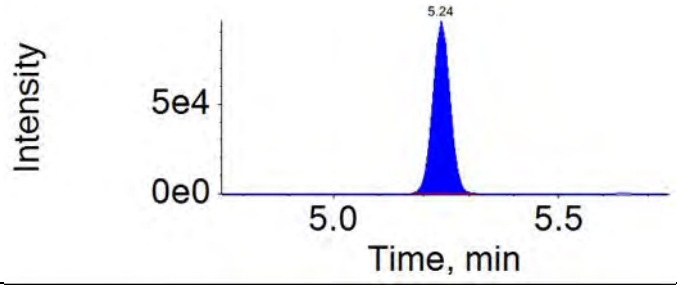
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



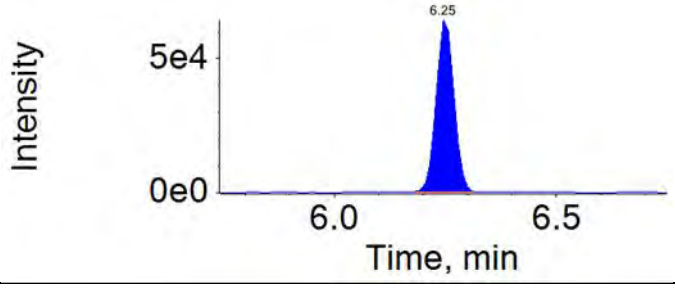


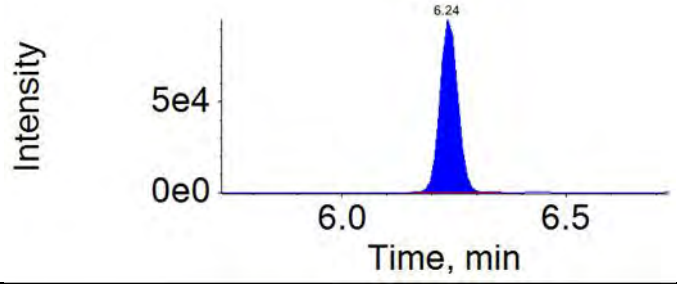
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



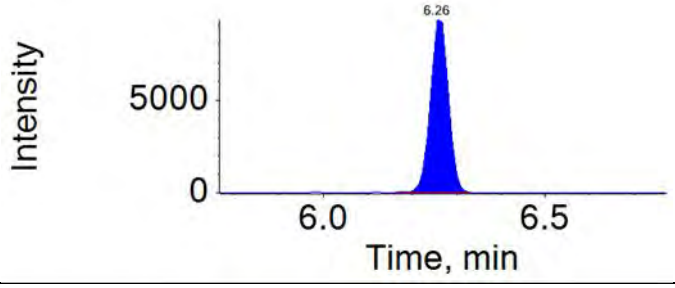


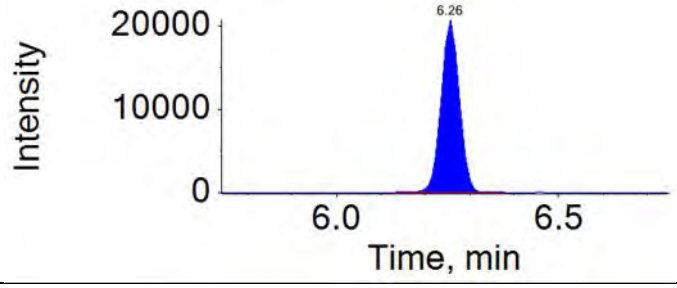
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



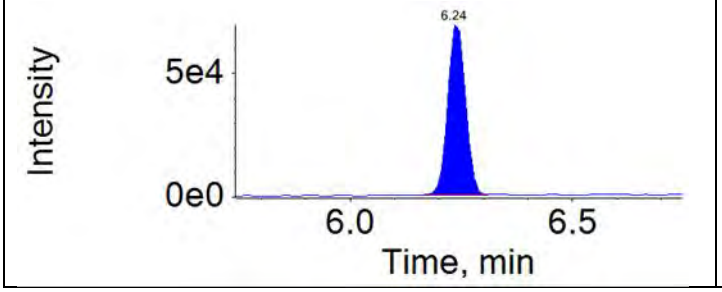


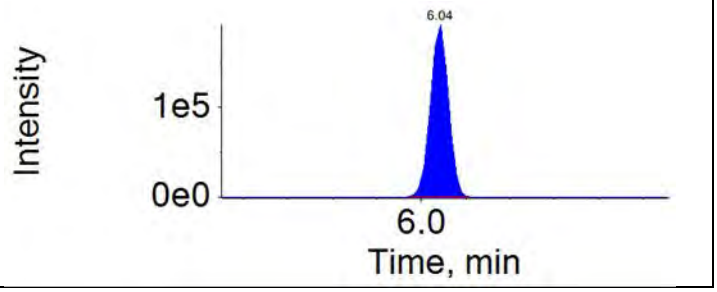
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

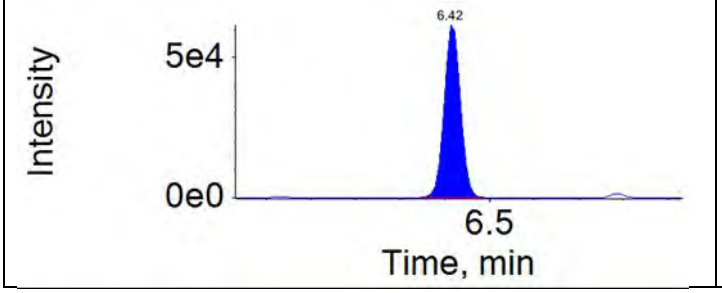
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV13DCCV5 11/13/2018 4:55:52 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

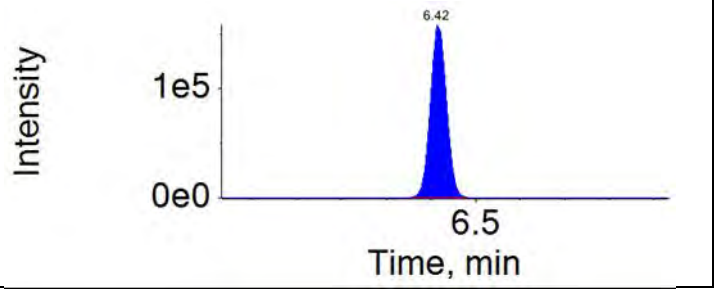
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



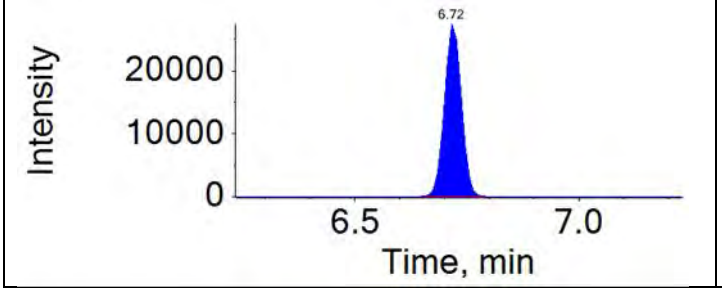


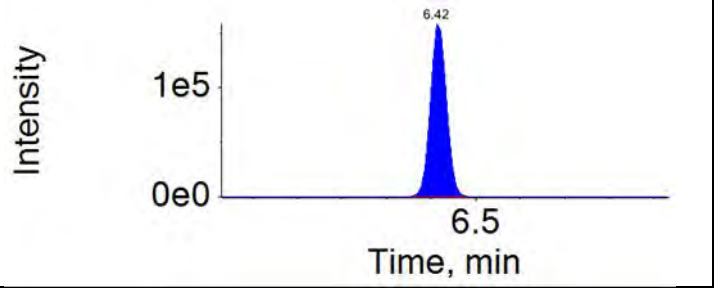
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



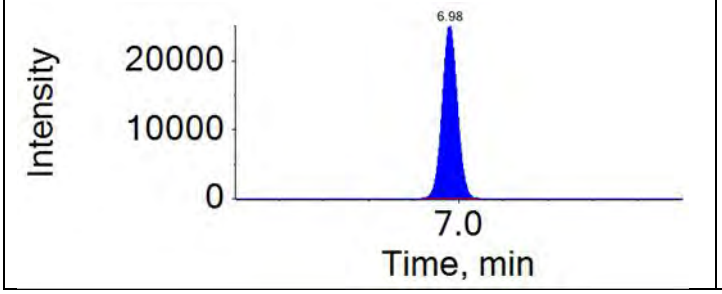


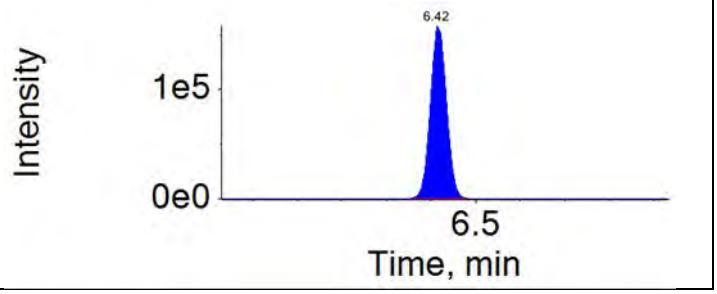
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



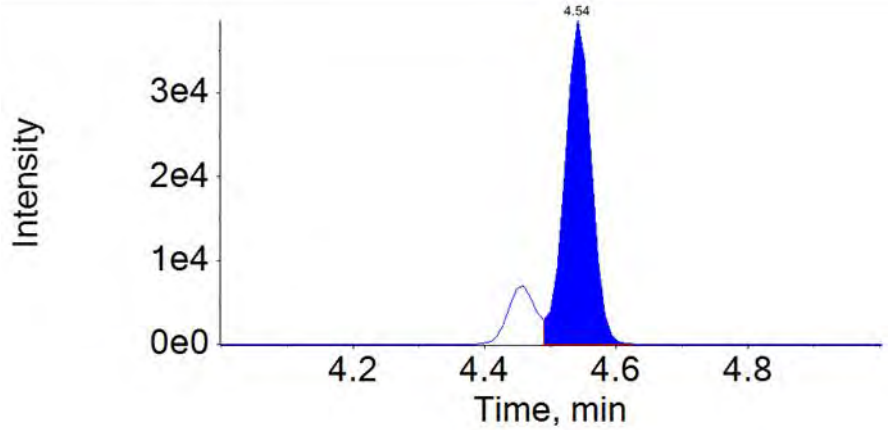


APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

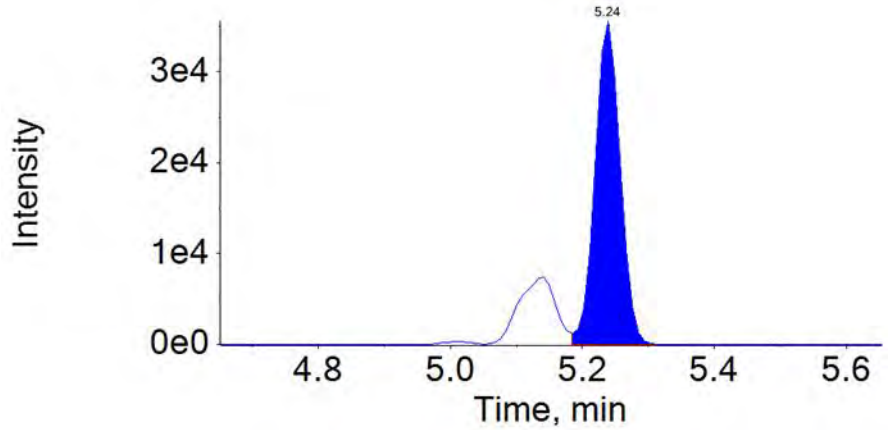
Results Table Name: 18NOV13DCCV5
Results Table Date: 11/13/2018 4:55:52 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.54
Peak Area:
108769.4
Mass Range:
399.0 / 80.0
File Name:
18NOV13D-47.wiff
Sample Name:
CCV5_CAL3



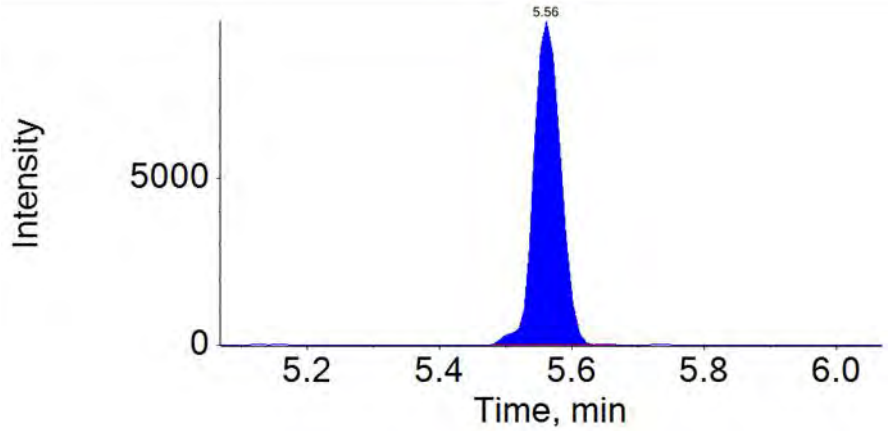
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
94626.0
Mass Range:
499.0 / 80.0
File Name:
18NOV13D-47.wiff
Sample Name:
CCV5_CAL3



Integration Comment: incorrect integration

Component Name:
8:2-FTS
RT (min.):
5.56
Peak Area:
27504.4
Mass Range:
527.0 / 507.0
File Name:
18NOV13D-47.wiff
Sample Name:
CCV5_CAL3

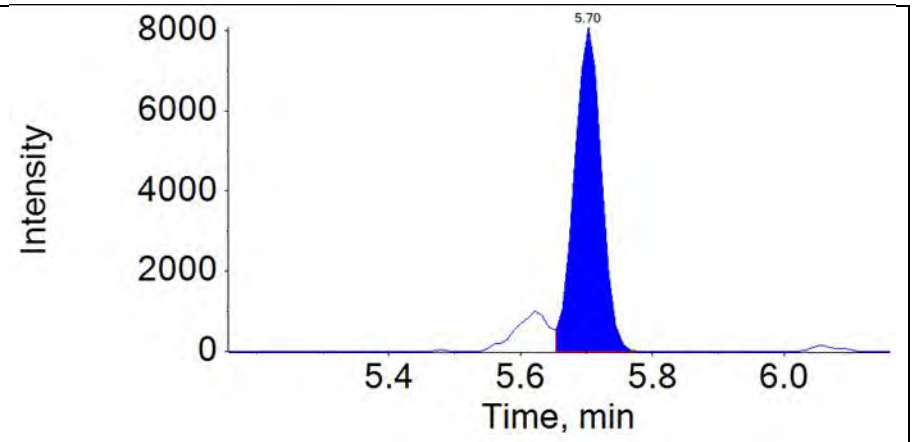


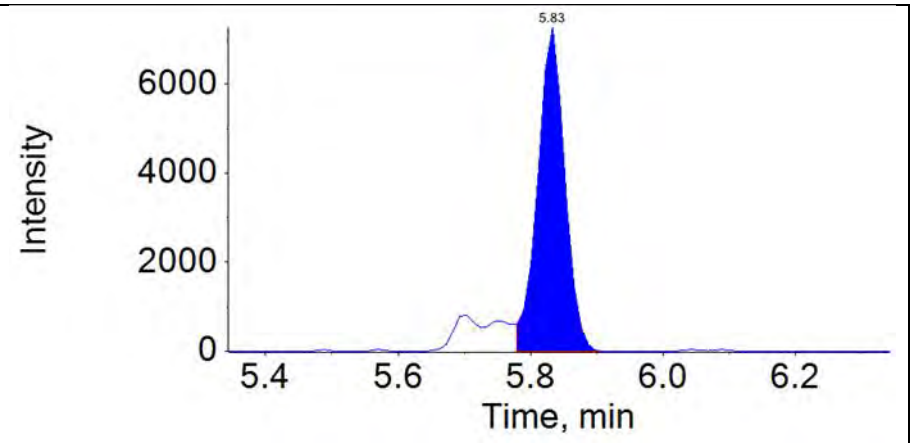
Integration Comment: incorrect integration

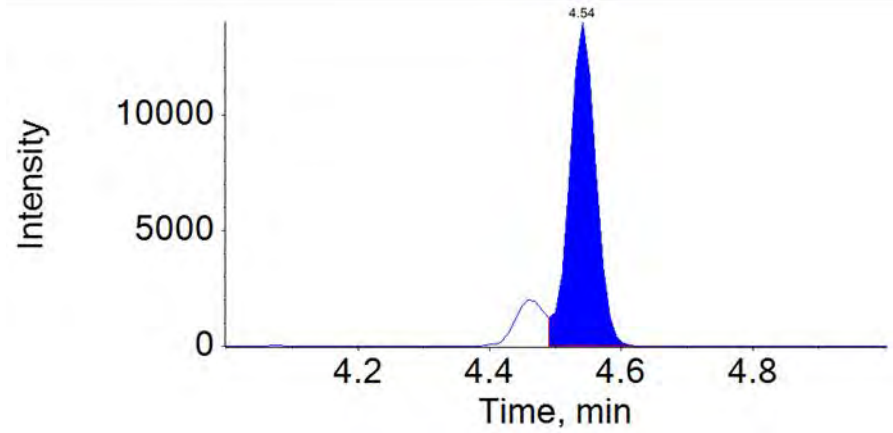
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

Results Table Name: 18NOV13DCCV5
Results Table Date: 11/13/2018 4:55:52 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: NMeFOSAA **RT (min.):** 5.70 **Peak Area:** 22968.6 **Mass Range:** 570.0 / 419.0 **File Name:** 18NOV13D-47.wiff **Sample Name:** CCV5_CAL3	 **Integration Comment:** incorrect integration

Component Name: NEtFOSAA **RT (min.):** 5.83 **Peak Area:** 20716.3 **Mass Range:** 584.0 / 419.0 **File Name:** 18NOV13D-47.wiff **Sample Name:** CCV5_CAL3	 **Integration Comment:** incorrect integration

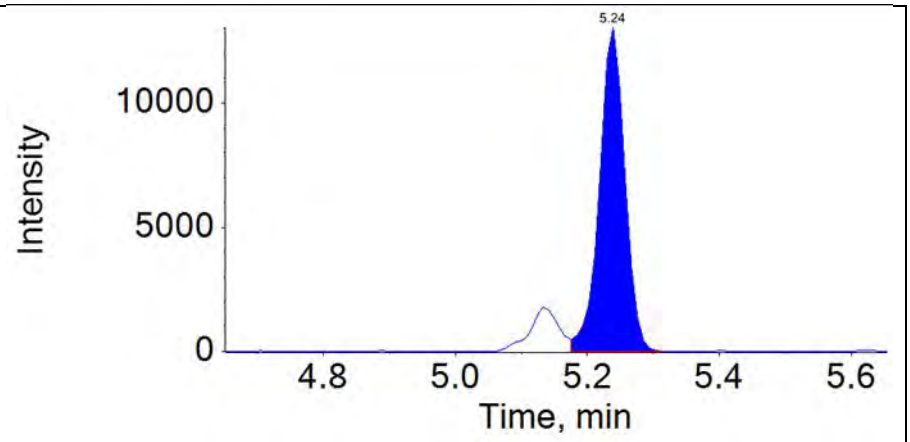
Component Name: PFHxS_2 **RT (min.):** 4.54 **Peak Area:** 38766.8 **Mass Range:** 399.0 / 99.0 **File Name:** 18NOV13D-47.wiff **Sample Name:** CCV5_CAL3	 **Integration Comment:** incorrect integration

APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

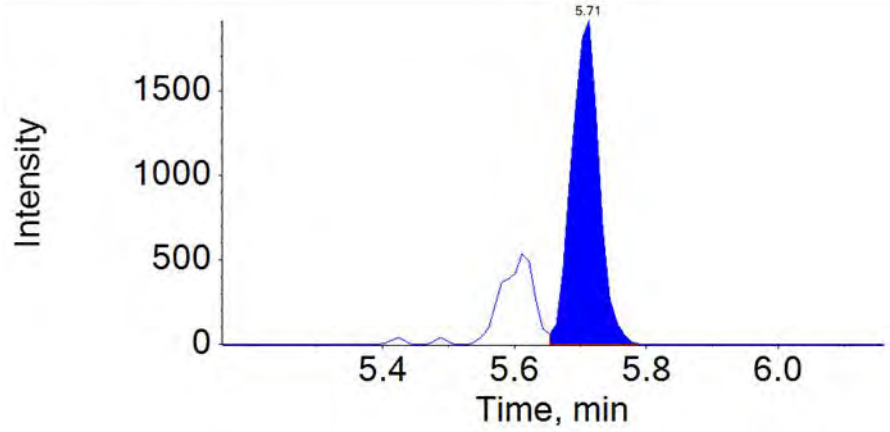
Results Table Name: 18NOV13DCCV5
Results Table Date: 11/13/2018 4:55:52 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFOS_2
RT (min.):
5.24
Peak Area:
34981.3
Mass Range:
499.0 / 99.0
File Name:
18NOV13D-47.wiff
Sample Name:
CCV5_CAL3



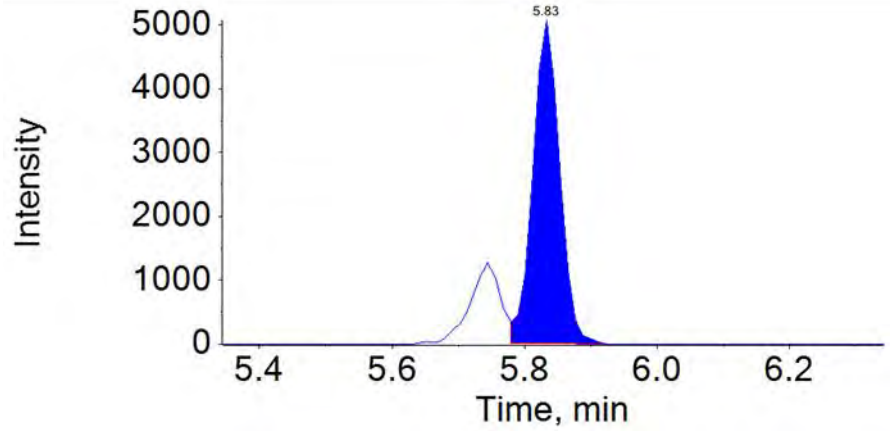
Integration Comment: incorrect integration

Component Name:
NMeFOSAA_2
RT (min.):
5.71
Peak Area:
5588.4
Mass Range:
570.0 / 483.0
File Name:
18NOV13D-47.wiff
Sample Name:
CCV5_CAL3



Integration Comment: incorrect integration

Component Name:
NEtFOSAA_2
RT (min.):
5.83
Peak Area:
14264.5
Mass Range:
584.0 / 526.0
File Name:
18NOV13D-47.wiff
Sample Name:
CCV5_CAL3



Integration Comment: incorrect integration

APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

Results Table Name: 18NOV13DCCV5
Results Table Date: 11/13/2018 4:55:52 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

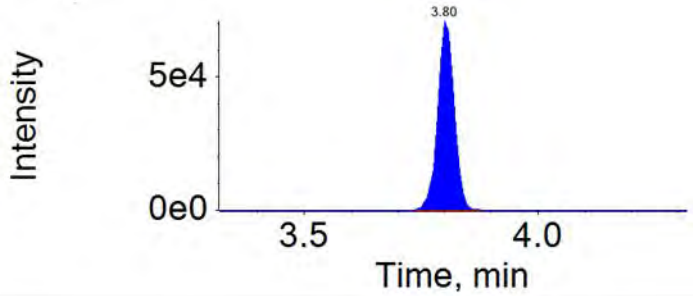
Sample Name: CCV5_CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV13D-47.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.80	1.00	173380.5	A	N/A	1.0000			
PFBS_2	3.80	1.00	61512.5	A	N/A	0.3548	-3	50	
4:2-FTS	4.12	1.00	39454.2	A	N/A	1.0000			
4:2 FTS_2	4.12	1.00	23650.9	A	N/A	0.5995		#NA!	
PFHxA	4.15	1.00	359338.4	A	N/A	1.0000			
PFHxA_2	4.15	1.00	4198.0	A	N/A	0.0117	-1	50	
PFPeS	4.17	1.10	86328.6	A	N/A	1.0000			
PFPeS_2	4.17	1.10	44335.6	A	N/A	0.5136	-1	50	
PFHpA	4.54	1.00	366823.7	A	N/A	1.0000			
PFHpA_2	4.54	1.00	21736.9	A	N/A	0.0593	5	50	
PFHxS	4.54	1.00	129050.1	M	N/A	1.0000			
PFHxS_2	4.54	1.00	44840.4	M	N/A	0.3475	14	50	
6:2-FTS	4.90	1.00	28406.1	A	N/A	1.0000			
6:2 FTS_2	4.90	1.00	18809.6	A	N/A	0.6622		#NA!	
PFHpS	4.90	1.08	120412.1	A	N/A	1.0000			
PFHpS_2	4.90	1.08	52184.3	A	N/A	0.4334	7	50	
PFOA	4.91	1.00	386893.4	A	N/A	1.0000			
PFOA_2	4.91	1.00	22543.1	A	N/A	0.0583	2	50	
PFOS	5.24	1.00	124584.3	M	N/A	1.0000			
PFOS_2	5.24	1.00	40408.3	M	N/A	0.3243	25	50	
PFNA	5.25	1.00	306064.7	A	N/A	1.0000			
PFNA_2	5.25	1.00	6242.3	A	N/A	0.0204	-11	50	
PFNS	5.54	1.06	81247.8	A	N/A	1.0000			
PFNS_2	5.54	1.06	36368.0	A	N/A	0.4476	-6	50	
PFDA	5.56	1.00	262885.4	A	N/A	1.0000			
PFDA_2	5.56	1.00	2149.2	A	N/A	0.0082	3	50	
8:2-FTS	5.56	1.00	26997.8	M	N/A	1.0000			
8:2 FTS_2	5.56	1.00	16168.3	A	N/A	0.5989		#NA!	
NMeFOSAA	5.70	1.00	26509.8	M	N/A	1.0000			
NMeFOSAA_2	5.71	1.00	7430.7	M	N/A	0.2803	32	50	
PFDS	5.79	1.11	57377.5	A	N/A	1.0000			
PFDS_2	5.79	1.11	32258.4	A	N/A	0.5622	10	50	
PFUnDA	5.82	1.00	206119.4	A	N/A	1.0000			
PFUnDA_2	5.81	1.00	715.1	A	N/A	0.0035	-17	50	
NEtFOSAA	5.83	1.00	24747.7	M	N/A	1.0000			
NEtFOSAA_2	5.83	1.00	18439.9	M	N/A	0.7451	28	50	
PFDoDA	6.04	1.00	244015.0	A	N/A	1.0000			
PFDoDA_2	6.04	1.00	4086.0	A	N/A	0.0167	3	50	
10:2-FTS	6.06	1.09	17038.2	A	N/A	1.0000			
10:2 FTS_2	6.06	1.09	12887.4	A	N/A	0.7564		#NA!	
PFTrDA	6.24	1.03	189964.3	A	N/A	1.0000			
PFTrDA_2	6.24	1.03	1890.9	A	N/A	0.0100	8	50	
PFTeDA	6.42	1.00	156391.7	A	N/A	1.0000			
PFTeDA_2	6.41	1.00	1243.6	A	N/A	0.0080	24	50	
PFHxDA	6.72	1.05	72132.1	A	N/A	1.0000			
PFHxDA_2	6.72	1.05	4816.8	A	N/A	0.0668	-1	50	
PFODA	6.98	1.09	59386.3	A	N/A	1.0000			
PFODA_2	6.98	1.09	1490.9	A	N/A	0.0251	-7	50	

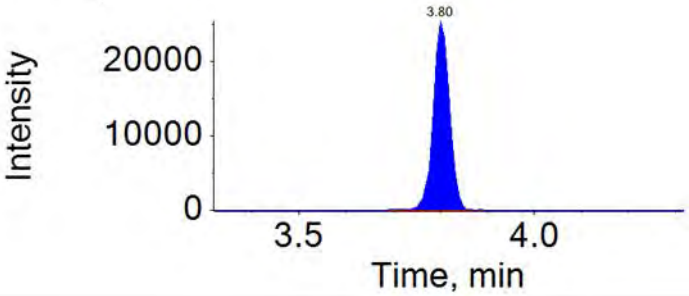
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

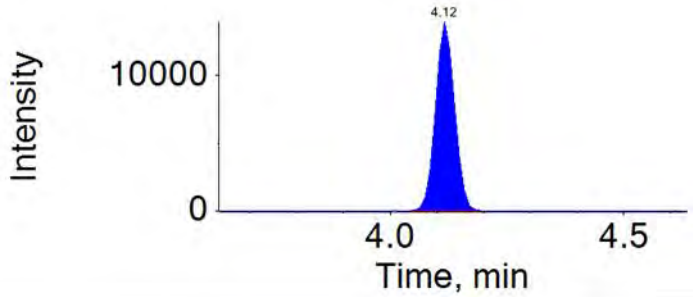
Component: PFBS
Primary Mass: 299.0 / 80.0



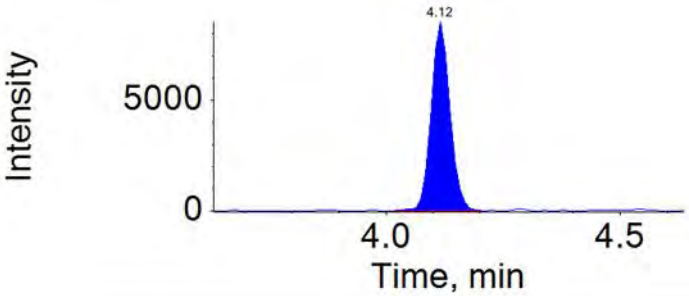
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



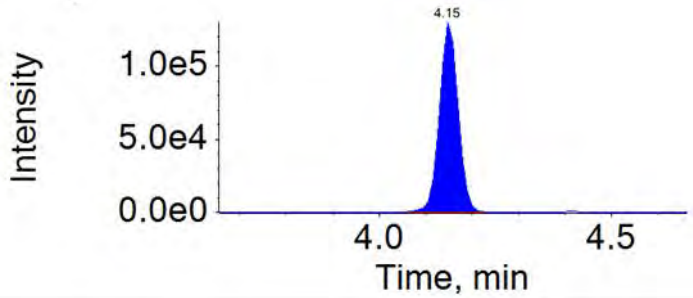
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



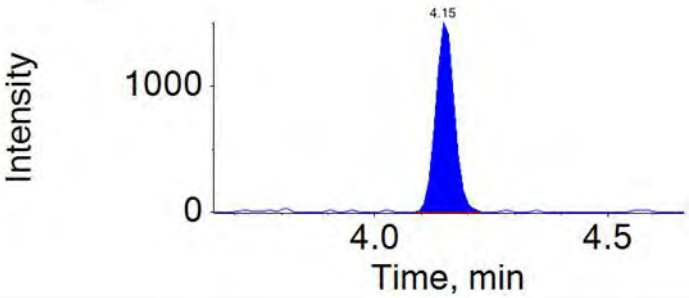
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



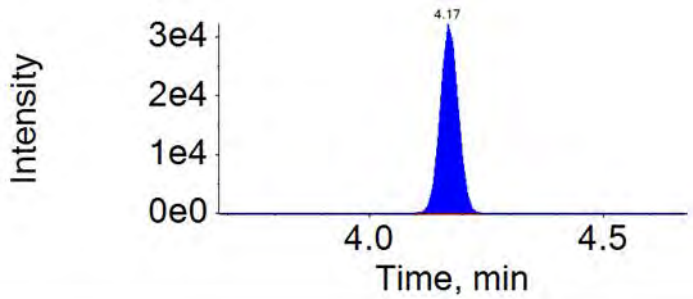
Component: PFHxA
Primary Mass: 313.0 / 269.0



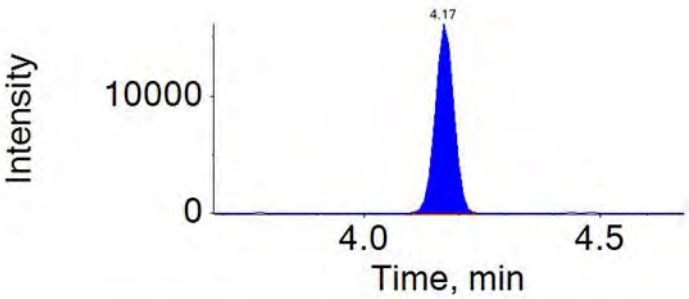
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



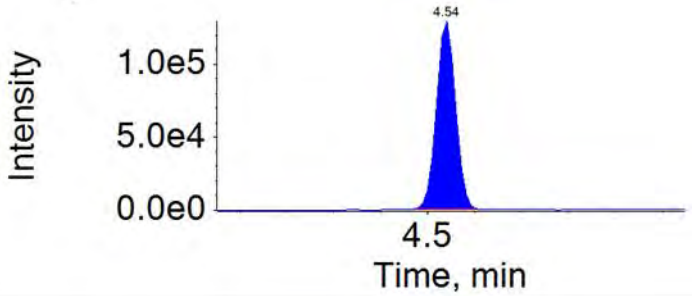
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



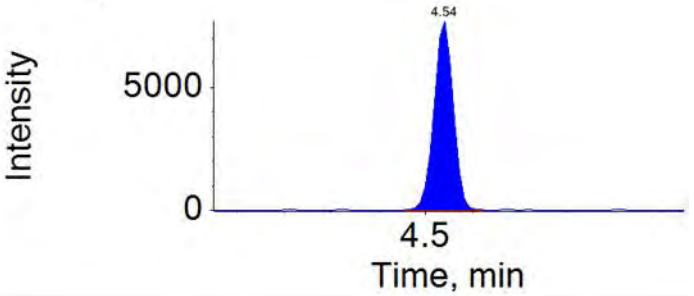
APPROVED
By JPT at 5:00 pm, 11/13/18

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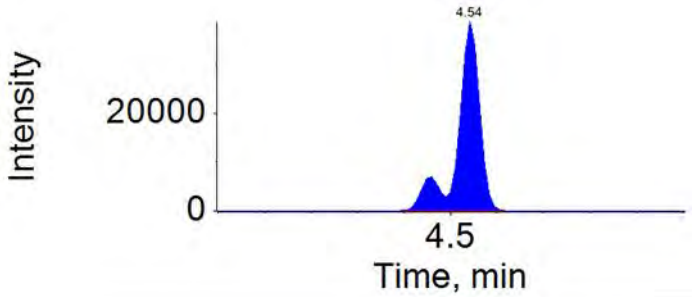
Component: PFHpA
Primary Mass: 363.0 / 319.0



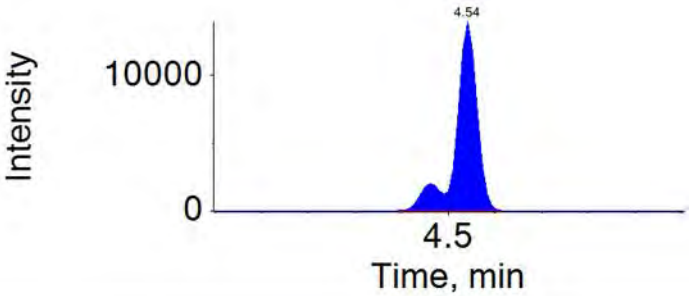
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Secondary Mass: 363.0 / 169.0



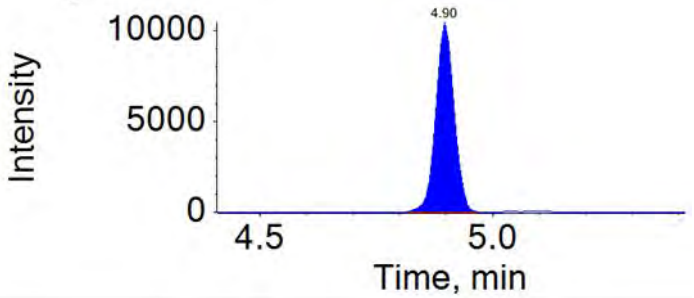
Component: PFHxS
Primary Mass: 399.0 / 80.0



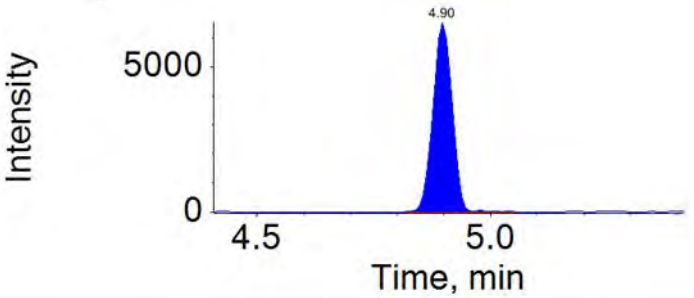
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



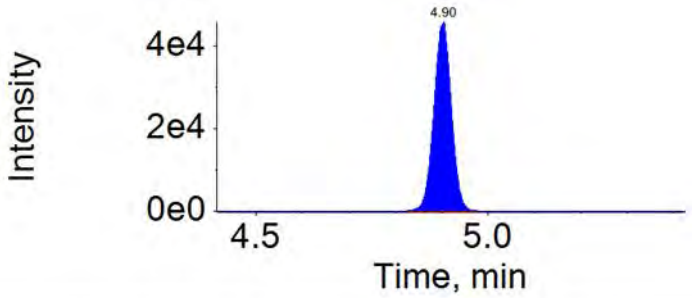
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



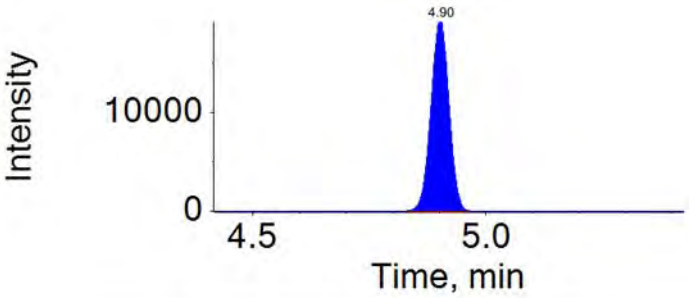
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



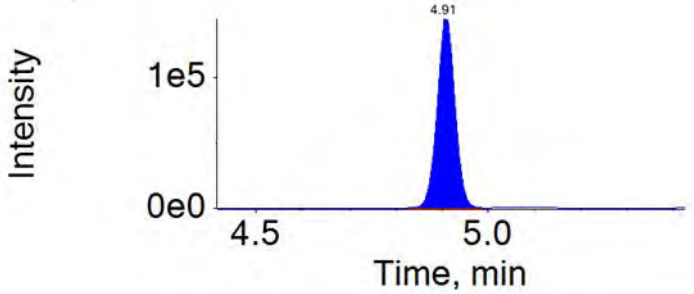
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



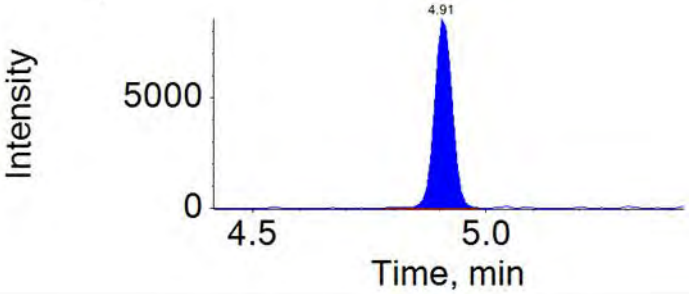
APPROVED
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REVIEWED
By umar at 5:42 pm, 11/13/18

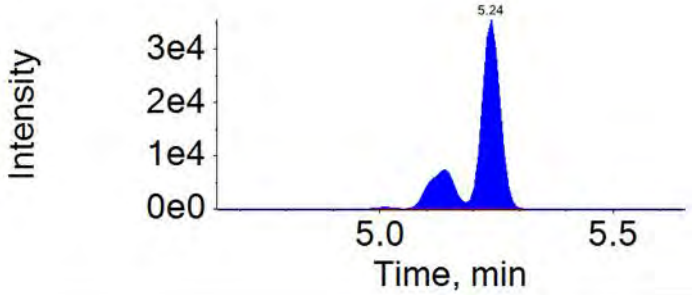
Component: PFOA
Primary Mass: 413.0 / 369.0



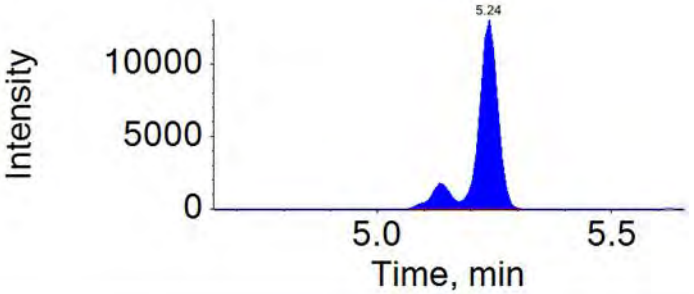
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



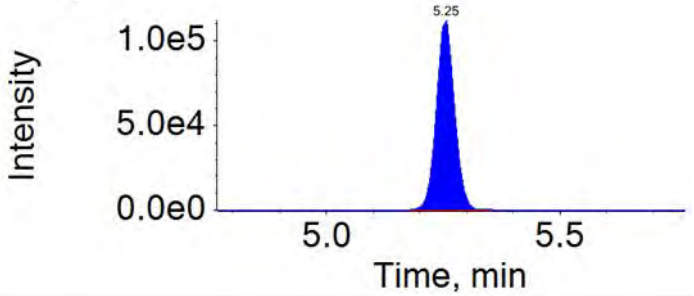
Component: PFOS
Primary Mass: 499.0 / 80.0



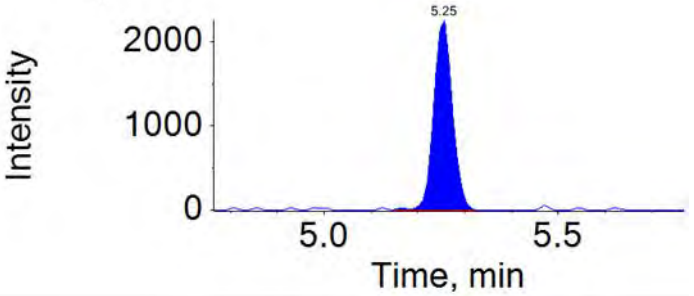
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



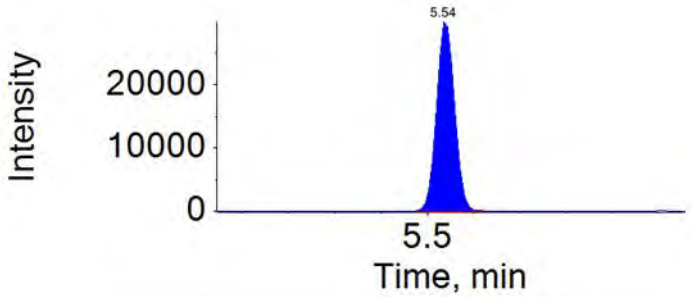
Component: PFNA
Primary Mass: 463.0 / 419.0



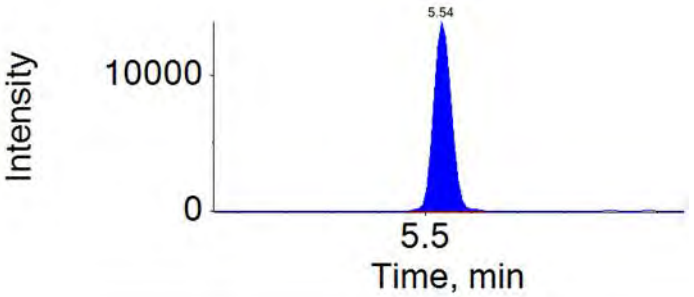
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



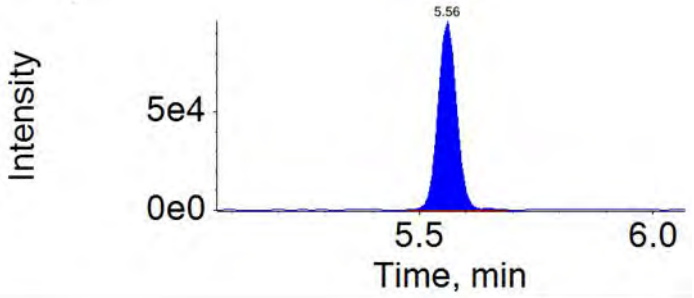
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



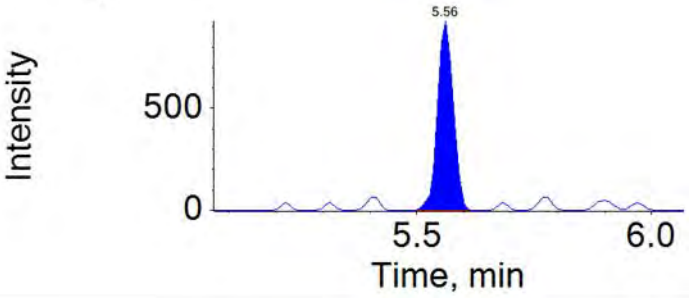
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

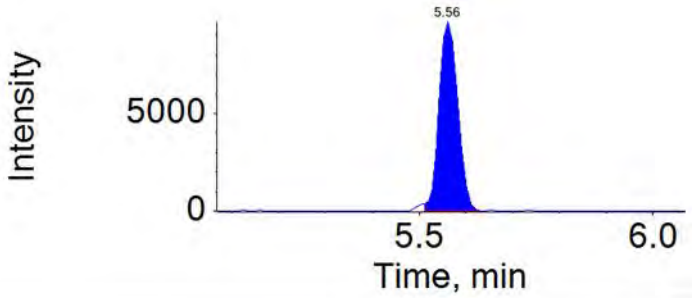
Component: PFDA
Primary Mass: 513.0 / 469.0



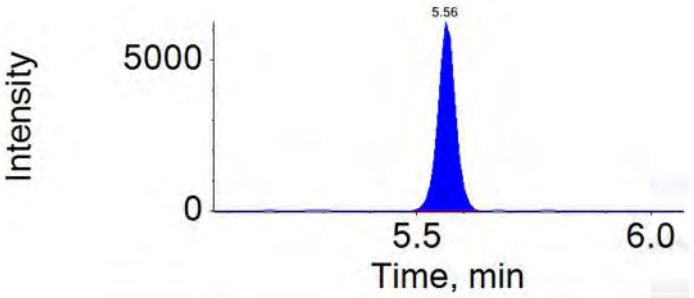
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



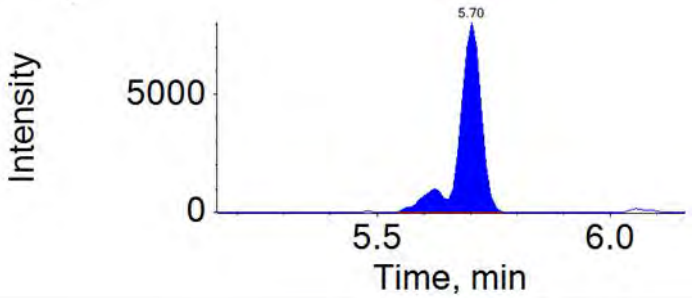
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



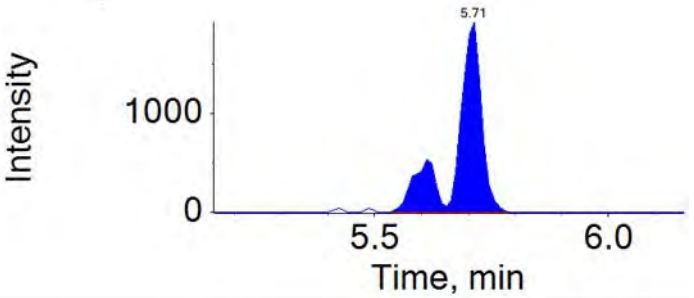
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



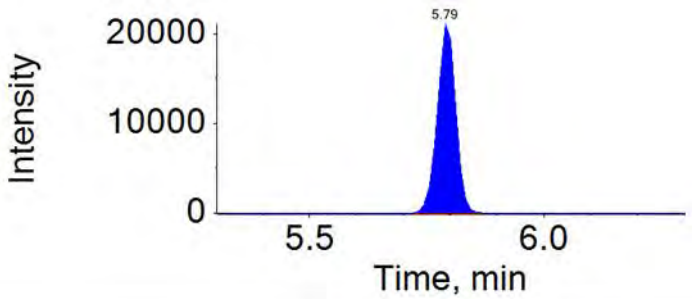
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



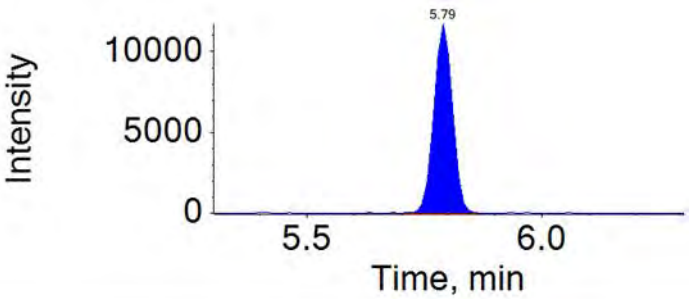
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



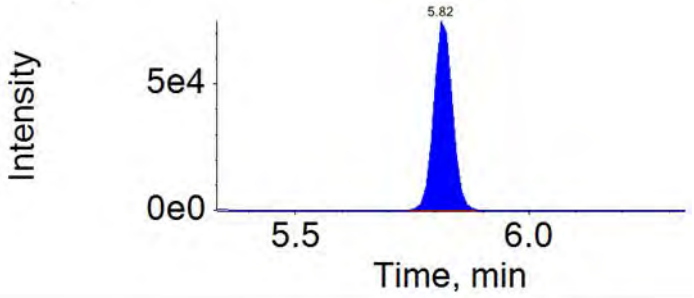
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



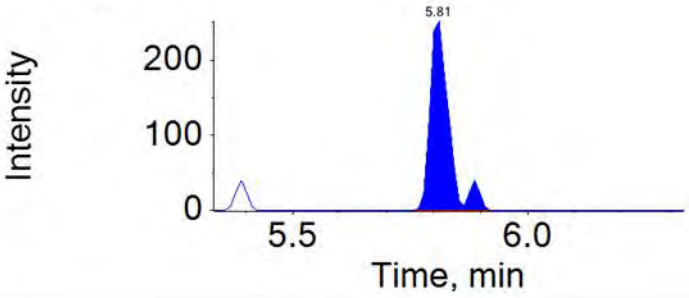
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

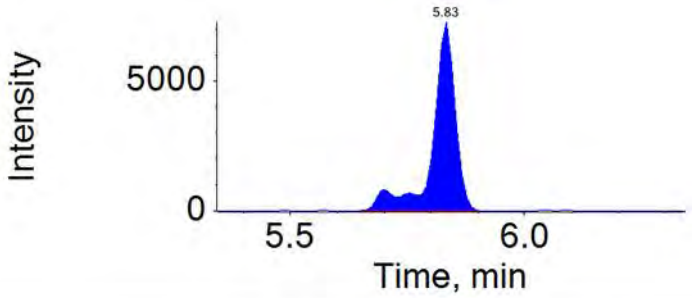
Component: PFUnDA
Primary Mass: 563.0 / 519.0



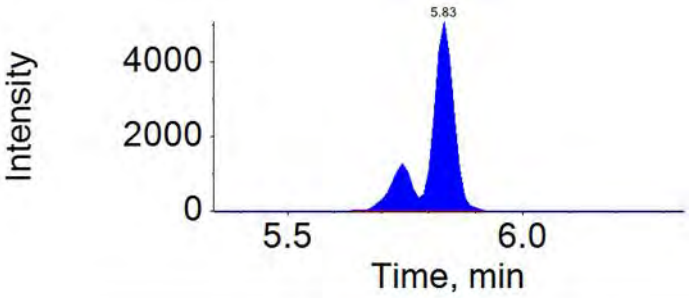
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



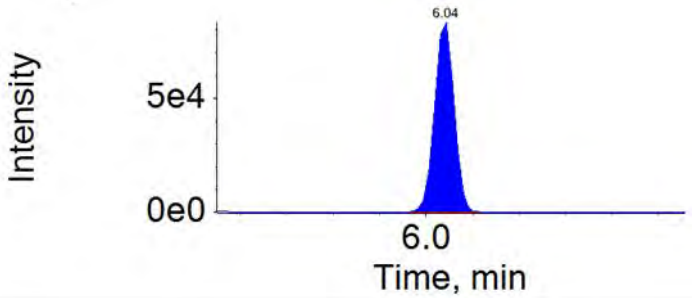
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



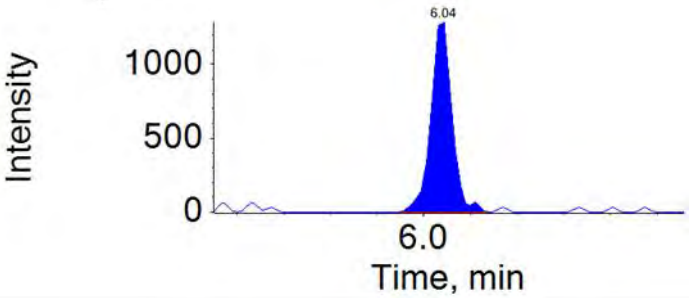
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



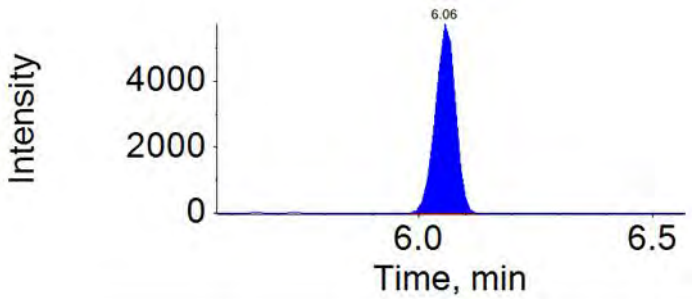
Component: PFDoDA
Primary Mass: 613.0 / 569.0



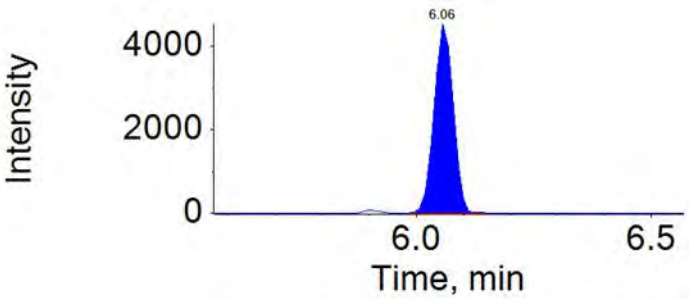
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



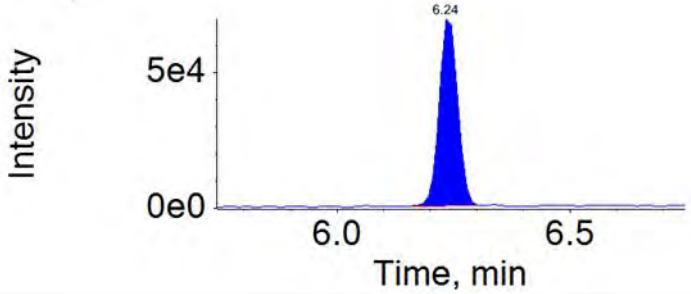
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



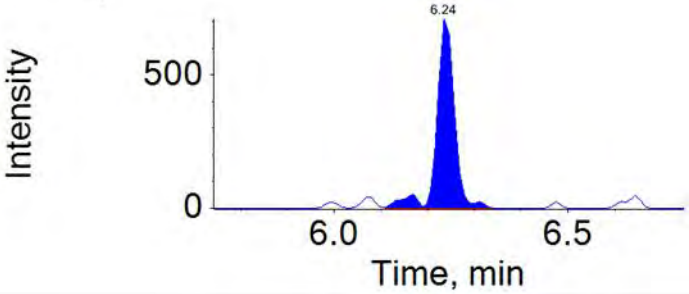
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

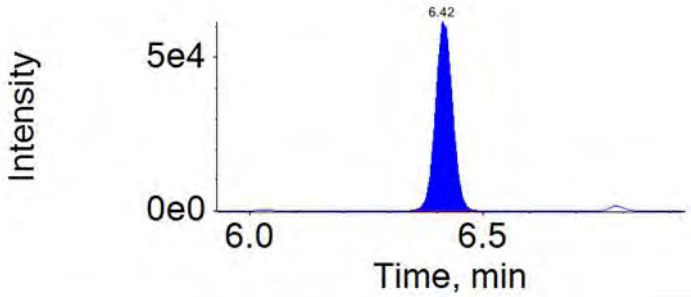
Component: PFTrDA
Primary Mass: 663.0 / 619.0



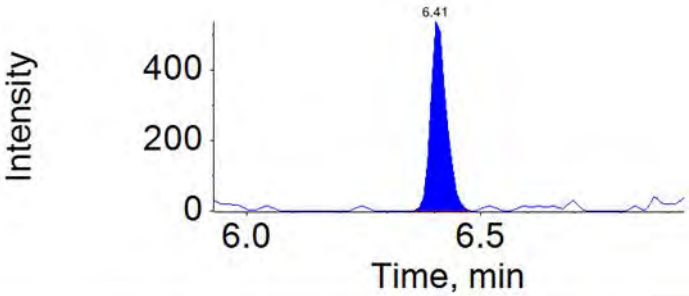
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



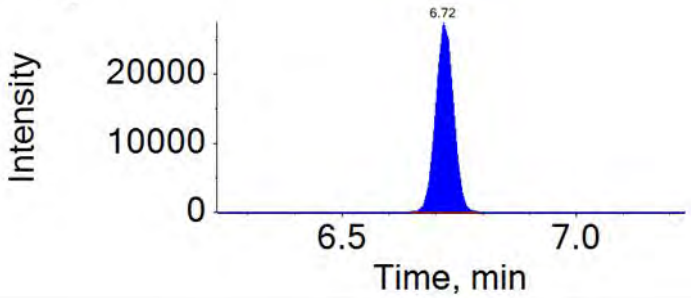
Component: PFTeDA
Primary Mass: 713.0 / 669.0



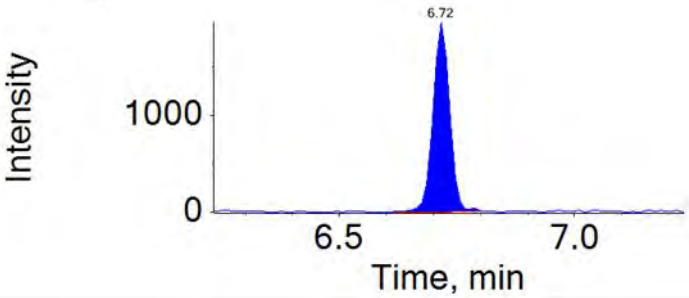
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



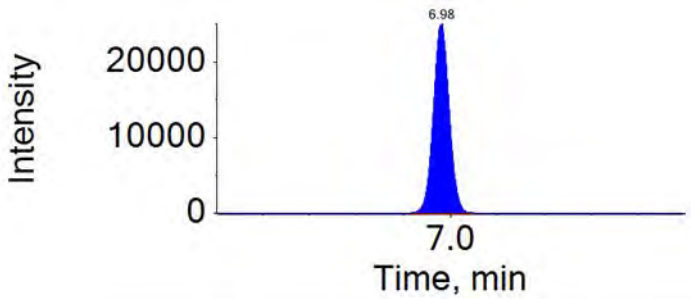
Component: PFHxDA
Primary Mass: 813.0 / 769.0



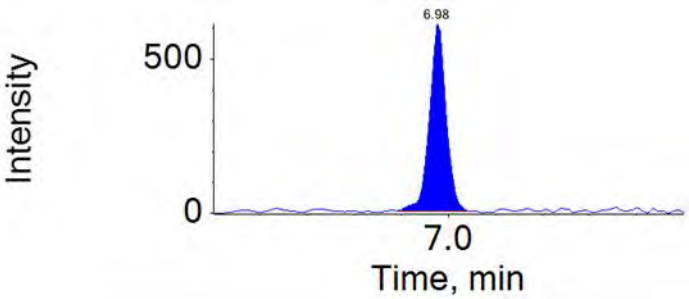
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



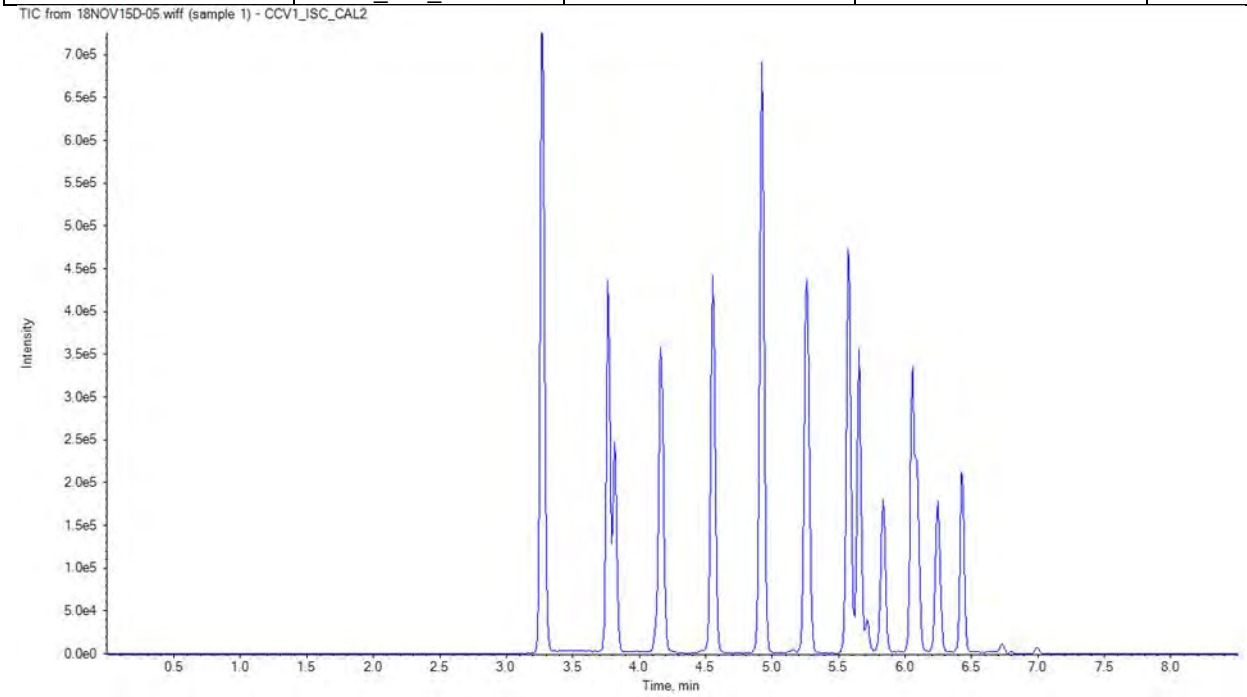
APPROVED
By JPT at 5:00 pm, 11/13/18

REVIEWED
By umar at 5:42 pm, 11/13/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV1_ISC_CAL2	CALBRN21833C	18NOV15D-05.wiff	2018-11-15T12:39:12



Injection Standard Area Reference File: 18NOV14D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	732179.1	700694.9	4	50	
13C2-PFOA	5.0	479663.2	493563.9	-3	50	
13C4-PFOS	4.8	269685.3	254050.4	6	50	
13C2-PFDA	5.0	302309.9	286010.1	6	50	

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV1_ISC_CAL2	CALBRN21833C	18NOV15D-05.wiff	2018-11-15T12:39:12

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	89981.7	10	13C4-PFBA	834116.1	5.0	0.108	3.27	1.000	0.600	0.598	0	30	
PFPeA	82459.6	12	13C5-PFPeA	794670.3	5.0	0.104	3.77	1.000	0.600	0.601	0	30	
PFBS	43949.1	10	13C3-PFBS	438912.8	4.7	0.100	3.82	1.000	0.531	0.476	-10	30	
4:2-FTS	10004.2	11	13C2-4:2-FTS	52105.6	4.7	0.192	4.13	1.000	0.560	0.521	-7	30	
PFHxA	100146.0	12	13C5-PFHxA	721373.5	5.0	0.139	4.16	1.000	0.600	0.580	-3	30	
PFPeS	23408.3	11	13C3-PFBS	438912.8	4.7	0.053	4.18	1.100	0.563	0.518	-8	30	
PFHpA	102557.6	12	13C4-PFHpA	550528.1	5.0	0.186	4.55	1.000	0.600	0.618	3	30	
PFHxS	33173.1	18	13C3-PFHxS	348032.6	4.7	0.095	4.56	1.000	0.547	0.462	-16	30	
6:2-FTS	8730.1	11	13C2-6:2-FTS	35792.4	4.8	0.244	4.91	1.000	0.569	0.590	4	30	
PFHpS	34554.4	11	13C3-PFHxS	348032.6	4.7	0.099	4.91	1.080	0.571	0.523	-8	30	
PFOA	101483.1	11	13C8-PFOA	933319.5	5.0	0.109	4.92	1.000	0.600	0.581	-3	30	
PFOS	33155.1	22	13C8-PFOS	308307.9	4.8	0.108	5.25	1.000	0.555	0.470	-15	30	
PFNA	82368.1	12	13C9-PFNA	495918.4	5.0	0.166	5.27	1.000	0.600	0.599	0	30	
PFNS	22643.7	11	13C8-PFOS	308307.9	4.8	0.073	5.55	1.060	0.576	0.514	-11	30	
PFDA	72511.4	12	13C6-PFDA	659112.5	5.0	0.110	5.57	1.000	0.600	0.583	-3	30	
8:2-FTS	5899.7	11	13C2-8:2-FTS	27837.3	4.8	0.212	5.58	1.000	0.575	0.494	-14	30	
PFOSA	79551.3	11	13C8-PFOSA	674851.4	5.0	0.118	5.65	1.000	0.600	0.576	-4	30	
NMeFOSAA	8526.2	18	d3-NMeFOSAA	76975.2	5.0	0.111	5.72	1.000	0.600	0.626	4	30	
PFDS	16839.4	11	13C8-PFOS	308307.9	4.8	0.055	5.81	1.110	0.578	0.495	-14	30	
PFUnDA	58763.0	12	13C7-PFUnDA	275106.7	5.0	0.214	5.83	1.000	0.600	0.558	-7	30	
NEtFOSAA	6799.8	21	d5-NEtFOSAA	72633.4	5.0	0.094	5.84	1.000	0.600	0.491	-18	30	
PFDoDA	69810.9	12	13C2-PFDoDA	609426.5	5.0	0.115	6.05	1.000	0.600	0.583	-3	30	
10:2-FTS	4486.1	12	13C2-8:2-FTS	27837.3	4.8	0.161	6.07	1.090	0.578	0.537	-7	30	
NMePFOSAE	47071.2	12	d7-NMePFOSAE	336103.9	5.0	0.140	6.10	1.000	0.600	0.583	-3	30	
NMePFOSA	9187.2	11	d3-NMePFOSA	80686.5	5.0	0.114	6.10	1.000	0.600	0.562	-6	30	
PFDoS	7550.7	11	13C8-PFOS	308307.9	4.8	0.024	6.22	1.180	0.581	0.429	-26	30	
NEtPFOSAE	51565.0	11	d9-NEtPFOSAE	267032.8	5.0	0.193	6.25	1.000	0.600	0.620	3	30	
NEtPFOSA	8085.5	11	d5-NEtPFOSA	61678.7	5.0	0.131	6.26	1.000	0.600	0.602	0	30	
PFTrDA	54960.7	12	13C2-PFDoDA	609426.5	5.0	0.090	6.25	1.030	0.600	0.569	-5	30	
PFTeDA	41384.0	11	13C2-PFTeDA	419854.5	5.0	0.099	6.43	1.000	0.600	0.553	-8	30	
PFHxDA	19352.2	11	13C2-PFTeDA	419854.5	5.0	0.046	6.73	1.050	0.600	0.549	-8	30	
PFODA	15579.3	10	13C2-PFTeDA	419854.5	5.0	0.037	6.99	1.090	0.600	0.517	-14	30	

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV1_ISC_CAL2			**Data File:**		18NOV15D-05.wiff
Sample ID:	CALBRN21833C			**Acquis Date:**		2018-11-15T12:39:12
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	4			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV15DCCV1-4
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N/A			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV14D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	732179.1	700694.9	4	50	
13C2-PFOA	5.0	479663.2	493563.9	-3	50	
13C4-PFOS	4.8	269685.3	254050.4	6	50	
13C2-PFDA	5.0	302309.9	286010.1	6	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	834116.1	13C3-PFBA	732179.1	1.139	5.000	5.108	102	70-130	
E13C5-PFPeA	794670.3	13C3-PFBA	732179.1	1.085	5.000	4.868	97	70-130	
E13C3-PFBS	438912.8	13C3-PFBA	732179.1	0.599	4.650	4.232	91	70-130	
E13C2-4:2-FTS	52105.6	13C2-PFOA	479663.2	0.109	4.670	4.838	104	70-130	
E13C5-PFHxA	721373.5	13C2-PFOA	479663.2	1.504	5.000	5.433	109	70-130	
E13C3-PFHxS	348032.6	13C2-PFOA	479663.2	0.726	4.730	4.979	105	70-130	
E13C4-PFHpA	550528.1	13C2-PFOA	479663.2	1.148	5.000	5.171	103	70-130	
E13C2-6:2-FTS	35792.4	13C2-PFOA	479663.2	0.075	4.750	4.992	105	70-130	
E13C8-PFOA	933319.5	13C2-PFOA	479663.2	1.946	5.000	5.361	107	70-130	
E13C8-PFOS	308307.9	13C4-PFOS	269685.3	1.143	4.780	5.065	106	70-130	
E13C9-PFNA	495918.4	13C4-PFOS	269685.3	1.839	5.000	5.127	103	70-130	
E13C6-PFDA	659112.5	13C2-PFDA	302309.9	2.180	5.000	5.088	102	70-130	
E13C2-8:2-FTS	27837.3	13C2-PFDA	302309.9	0.092	4.790	4.592	96	70-130	
E13C8-PFOSA	674851.4	13C2-PFDA	302309.9	2.232	5.000	4.949	99	70-130	
Ed3-NMeFOSAA	76975.2	13C2-PFDA	302309.9	0.255	5.000	4.596	92	70-130	
E13C7-PFUnDA	275106.7	13C2-PFDA	302309.9	0.910	5.000	5.283	106	70-130	
Ed5-NEtFOSAA	72633.4	13C2-PFDA	302309.9	0.240	5.000	5.083	102	70-130	
E13C2-PFDoDA	609426.5	13C2-PFDA	302309.9	2.016	5.000	5.234	105	70-130	
Ed7-NMePFOSAE	336103.9	13C2-PFDA	302309.9	1.112	5.000	4.811	96	70-130	
Ed3-NMePFOSA	80686.5	13C2-PFDA	302309.9	0.267	5.000	4.849	97	70-130	
Ed9-NEtPFOSAE	267032.7	13C2-PFDA	302309.9	0.883	5.000	4.594	92	70-130	
Ed5-NEtPFOSA	61678.7	13C2-PFDA	302309.9	0.204	5.000	4.786	96	70-130	
E13C2-PFTeDA	419854.5	13C2-PFDA	302309.9	1.389	5.000	4.876	98	70-130	

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

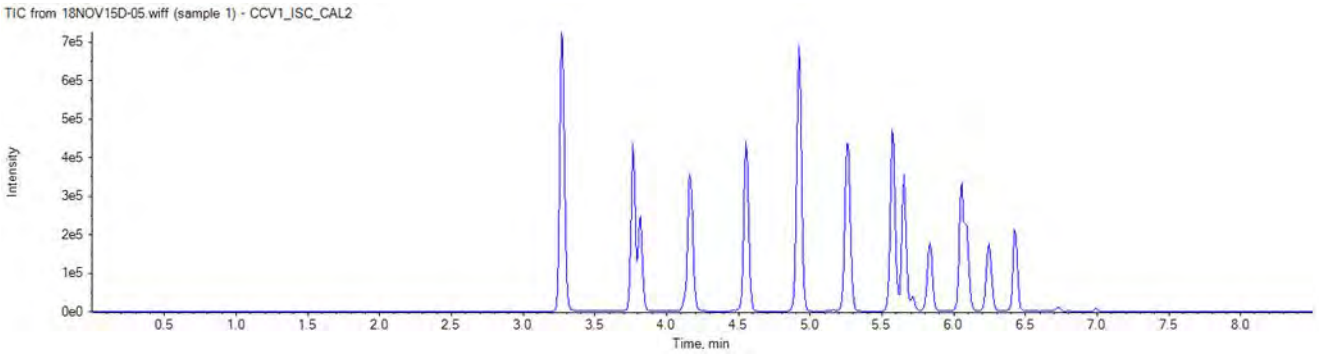
Analyte Quantitation Peak Table

Sample Name: CCV1_ISC_CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV15D-05.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	89981.7		A	13C4-PFBA	3.27	834116.1	0.108	0.598
PFPeA	3.77	1.000	82459.6		A	13C5-PFPeA	3.77	794670.3	0.104	0.601
PFBS	3.82	1.000	43949.1		A	13C3-PFBS	3.82	438912.8	0.100	0.476
4:2-FTS	4.13	1.000	10004.2		M	13C2-4:2-FTS	4.13	52105.6	0.192	0.521
PFHxA	4.16	1.000	100146.0		A	13C5-PFHxA	4.16	721373.5	0.139	0.580
PFPeS	4.18	1.100	23408.3		A	13C3-PFBS	3.82	438912.8	0.053	0.518
PFHpA	4.55	1.000	102557.6		A	13C4-PFHpA	4.55	550528.1	0.186	0.618
PFHxS	4.56	1.000	33173.1		M	13C3-PFHxS	4.56	348032.6	0.095	0.462
6:2-FTS	4.91	1.000	8730.1		A	13C2-6:2-FTS	4.91	35792.4	0.244	0.590
PFHpS	4.91	1.080	34554.4		A	13C3-PFHxS	4.56	348032.6	0.099	0.523
PFOA	4.92	1.000	101483.1		A	13C8-PFOA	4.92	933319.5	0.109	0.581
PFOS	5.25	1.000	33155.1		M	13C8-PFOS	5.25	308307.9	0.108	0.470
PFNA	5.27	1.000	82368.1		A	13C9-PFNA	5.27	495918.4	0.166	0.599
PFNS	5.55	1.060	22643.7		A	13C8-PFOS	5.25	308307.9	0.073	0.514
PFDA	5.57	1.000	72511.4		A	13C6-PFDA	5.57	659112.5	0.110	0.583
8:2-FTS	5.58	1.000	5899.7		M	13C2-8:2-FTS	5.58	27837.3	0.212	0.494
PFOSA	5.65	1.000	79551.3		A	13C8-PFOSA	5.65	674851.4	0.118	0.576
NMeFOSAA	5.72	1.000	8526.2		M	d3-NMeFOSAA	5.71	76975.2	0.111	0.626
PFDS	5.81	1.110	16839.4		A	13C8-PFOS	5.25	308307.9	0.055	0.495
PFUnDA	5.83	1.000	58763.0		A	13C7-PFUnDA	5.83	275106.7	0.214	0.558
NEtFOSAA	5.84	1.000	6799.8		M	d5-NEtFOSAA	5.84	72633.4	0.094	0.491
PFDoDA	6.05	1.000	69810.9		A	13C2-PFDoDA	6.05	609426.5	0.115	0.583
10:2-FTS	6.07	1.090	4486.1		A	13C2-8:2-FTS	5.58	27837.3	0.161	0.537
NMePFOSAE	6.10	1.000	47071.2		A	d7-NMePFOSAE	6.09	336103.9	0.140	0.583
NMePFOSA	6.10	1.000	9187.2		A	d3-NMePFOSA	6.10	80686.5	0.114	0.562
PFDoS	6.22	1.180	7550.7		M	13C8-PFOS	5.25	308307.9	0.024	0.429
NEtPFOSAE	6.25	1.000	51565.0		M	d9-NEtPFOSAE	6.24	267032.8	0.193	0.620
NEtPFOSA	6.26	1.000	8085.5		A	d5-NEtPFOSA	6.26	61678.7	0.131	0.602
PFTrDA	6.25	1.030	54960.7		M	13C2-PFDoDA	6.05	609426.5	0.090	0.569
PFTeDA	6.43	1.000	41384.0		M	13C2-PFTeDA	6.43	419854.5	0.099	0.553
PFHxDA	6.73	1.050	19352.2		A	13C2-PFTeDA	6.43	419854.5	0.046	0.549
PFODA	6.99	1.090	15579.3		A	13C2-PFTeDA	6.43	419854.5	0.037	0.517

Total Ion Chromatogram

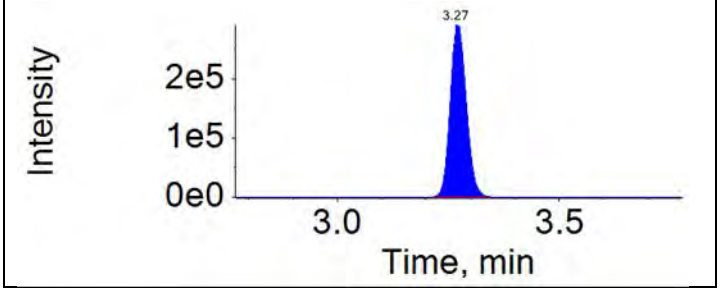


APPROVED
By JPT at 8:56 am, 11/16/18

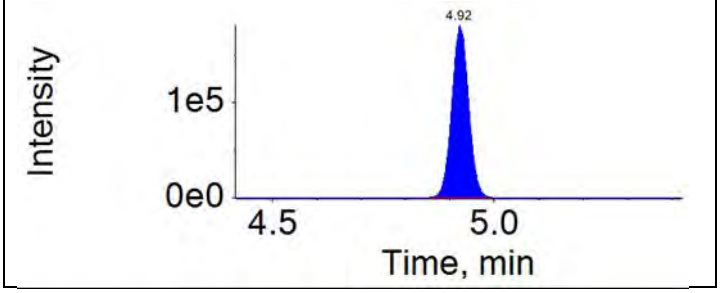
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

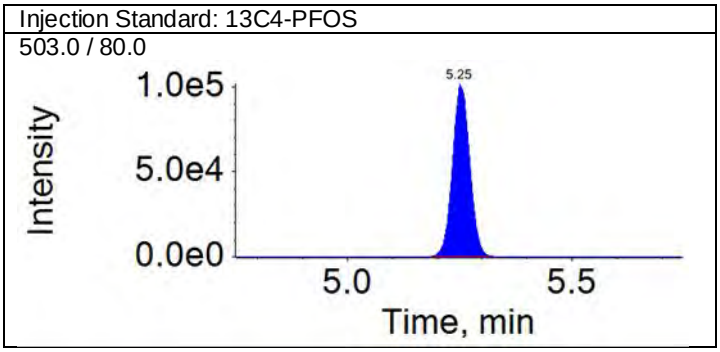
Injection Standard: 13C3-PFBA
216.0 / 172.0



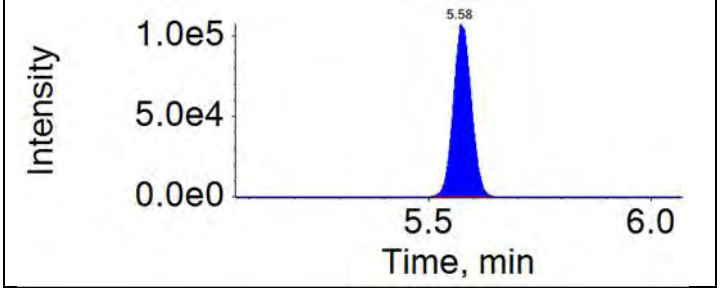
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



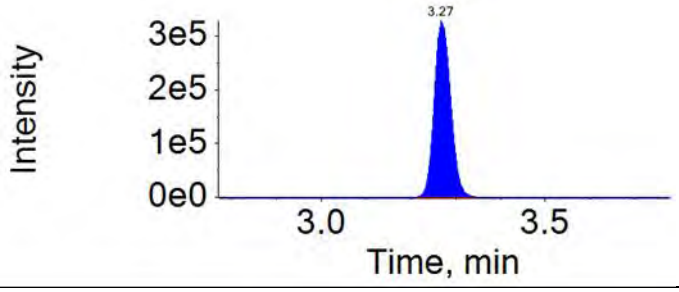
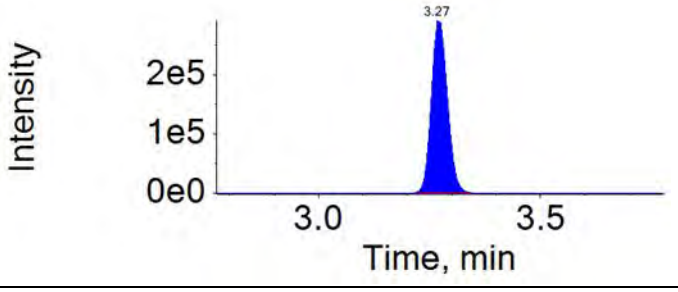
Injection Standard: 13C2-PFDA
515.0 / 470.0

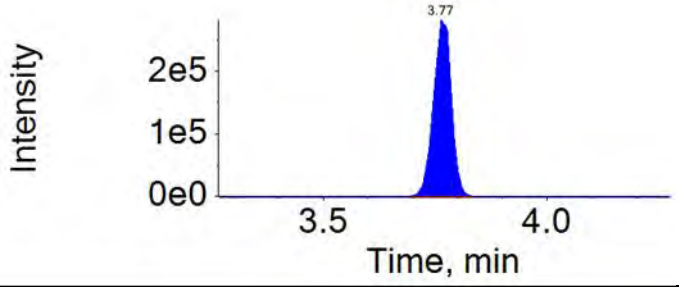
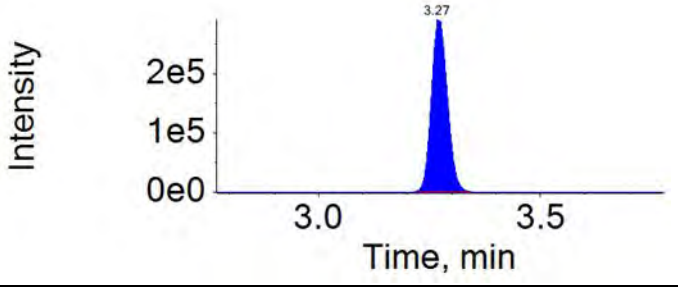


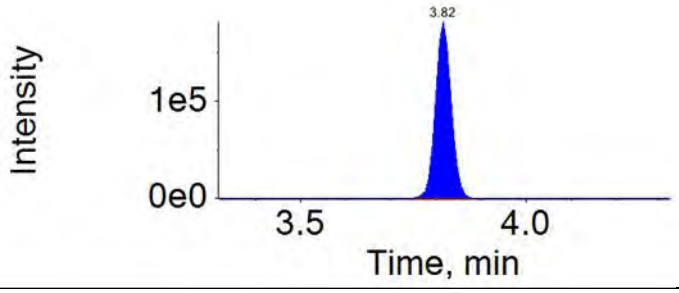
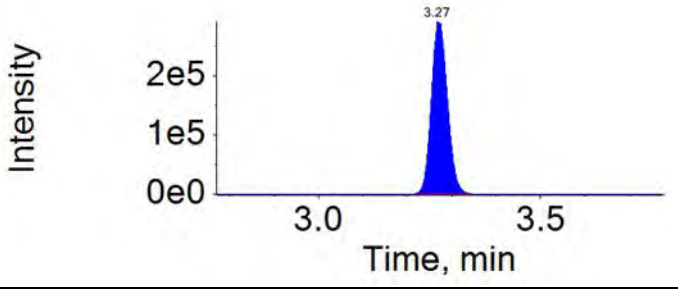
APPROVED
By JPT at 8:56 am, 11/16/18

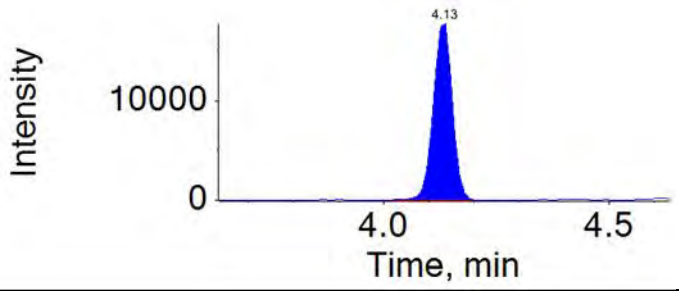
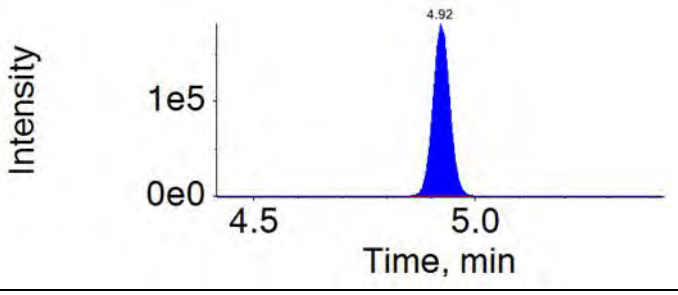
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

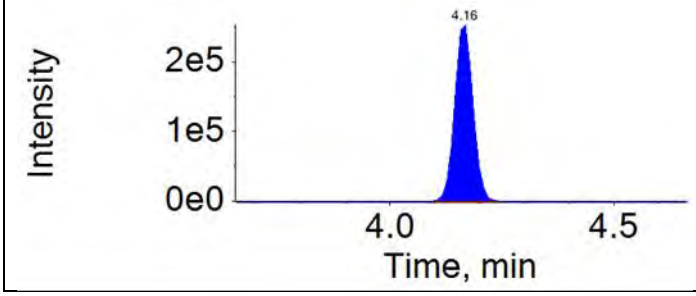
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

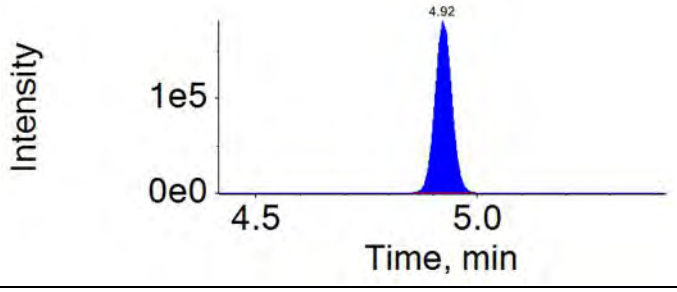
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

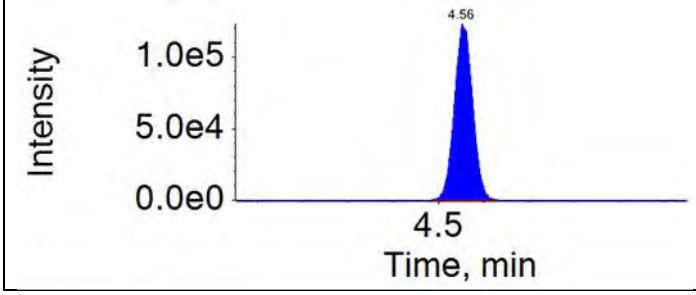
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

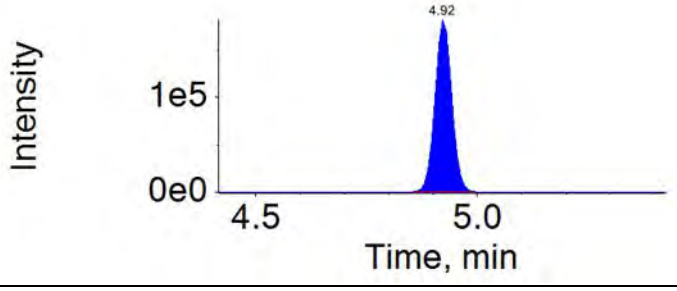
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



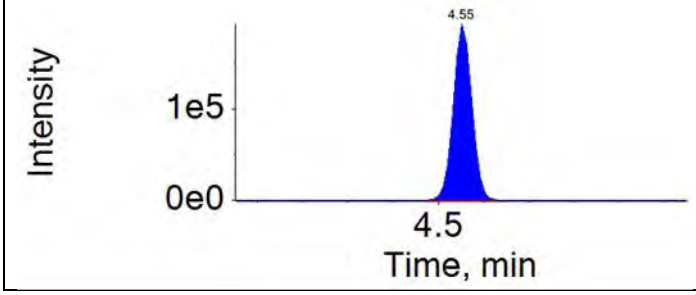


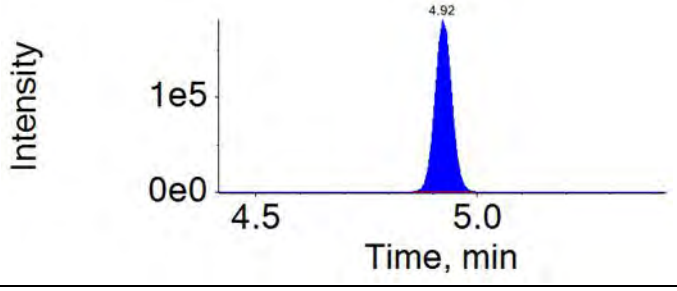
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



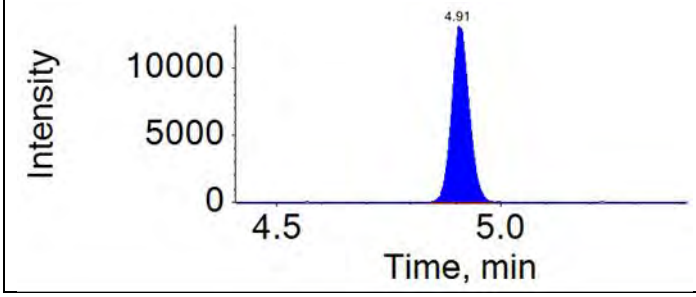


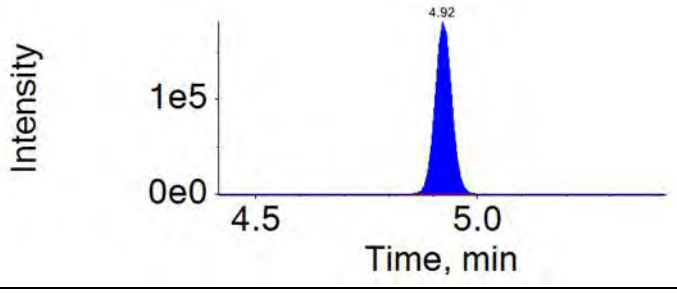
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

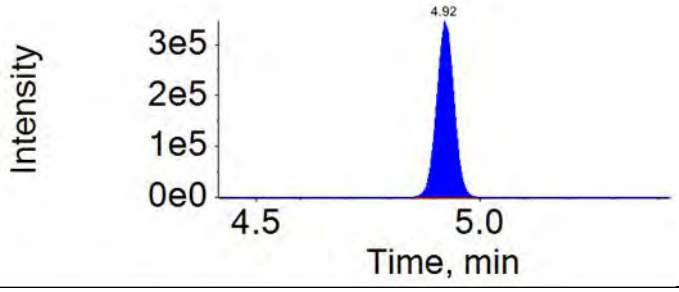
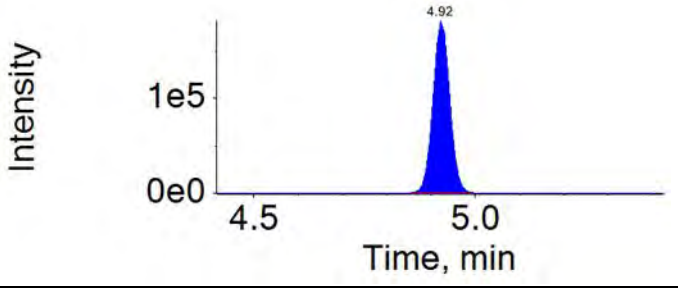


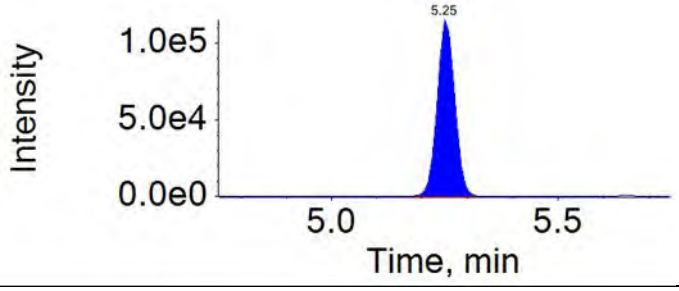
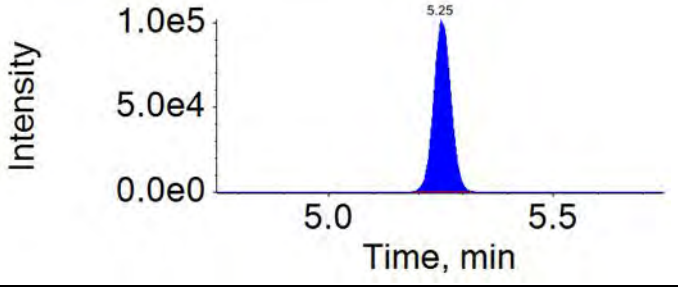


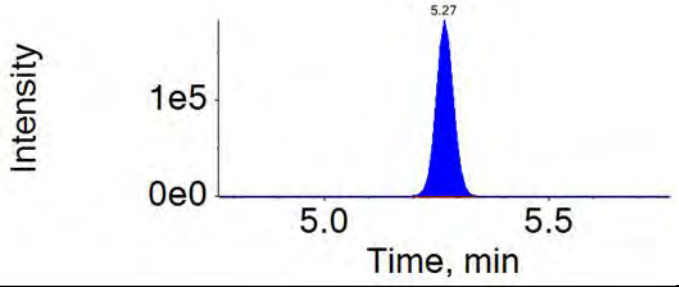
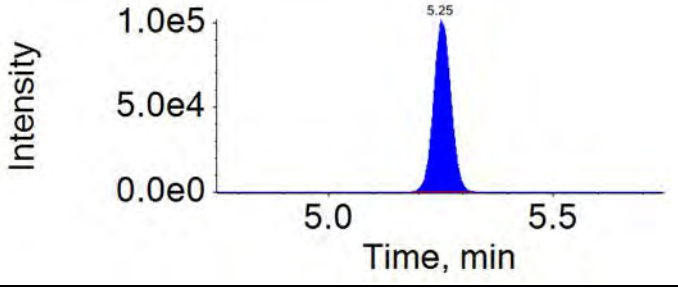
APPROVED
By JPT at 8:56 am, 11/16/18

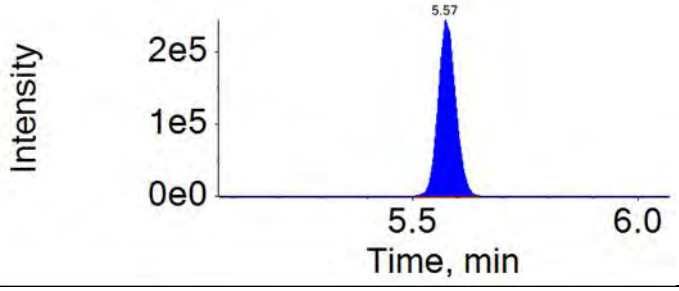
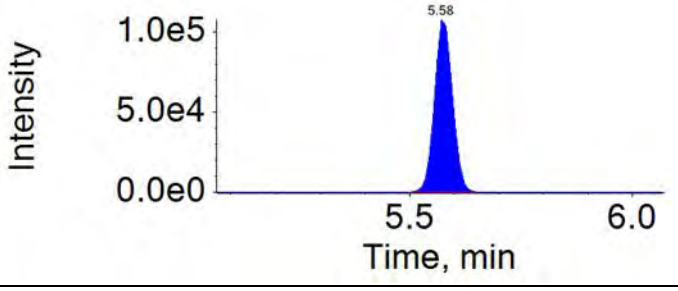
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

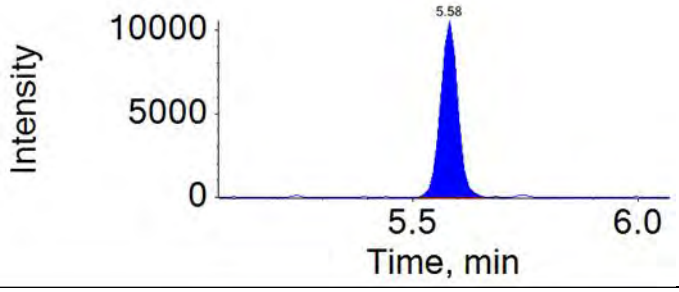
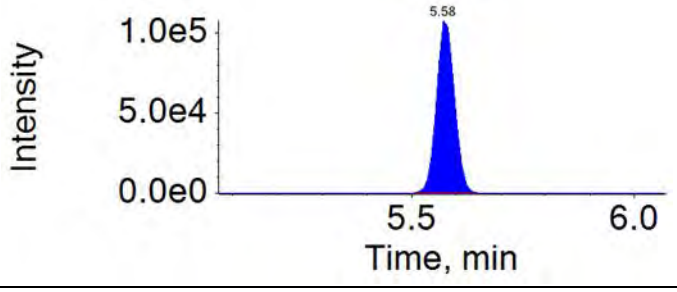
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

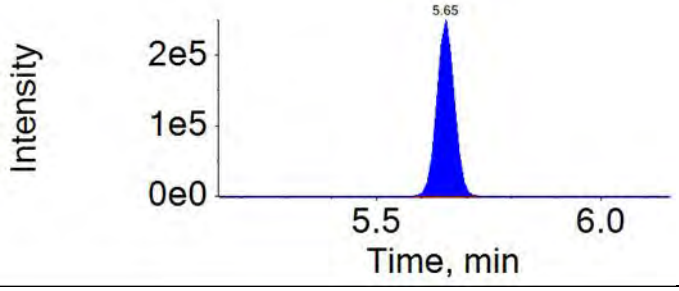
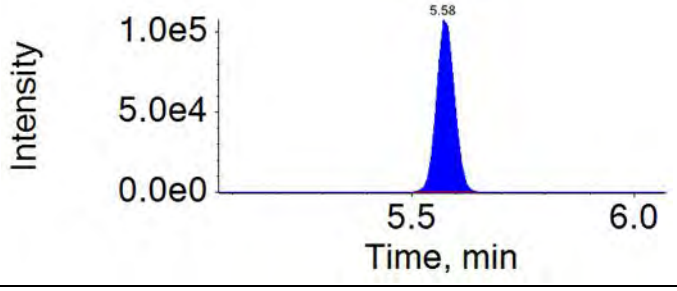
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

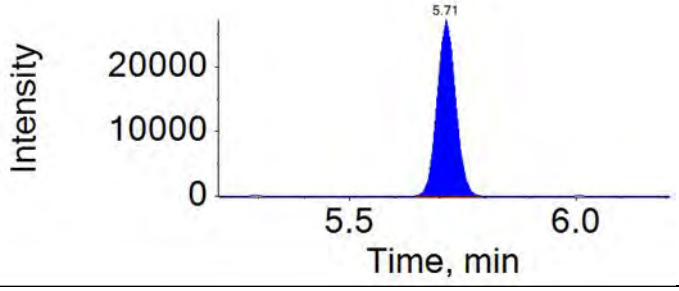
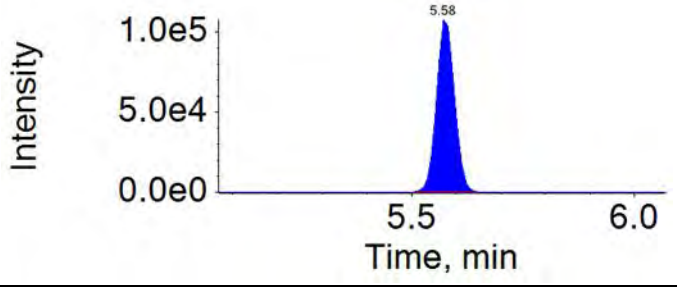
APPROVED
By JPT at 8:56 am, 11/16/18

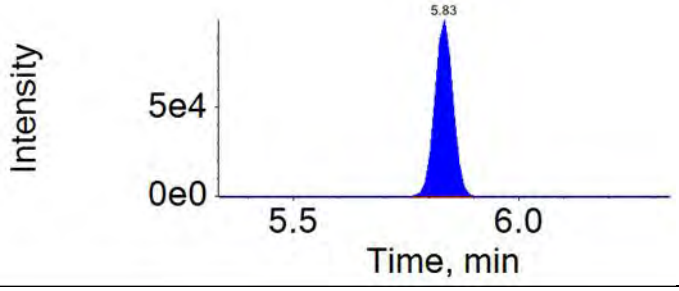
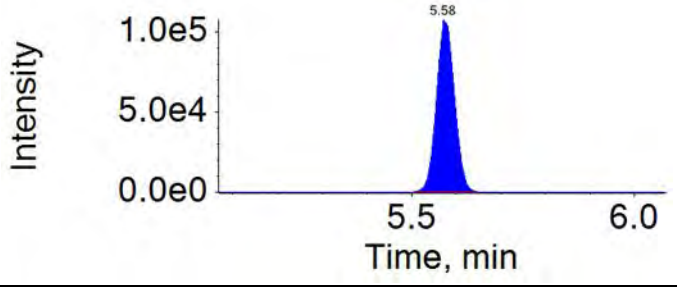
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

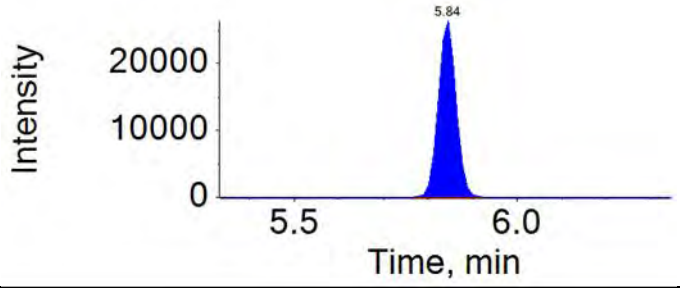
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

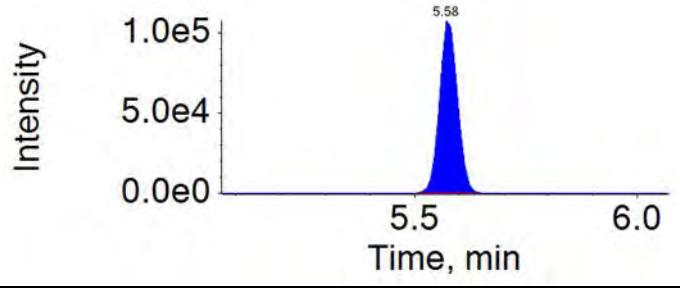
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

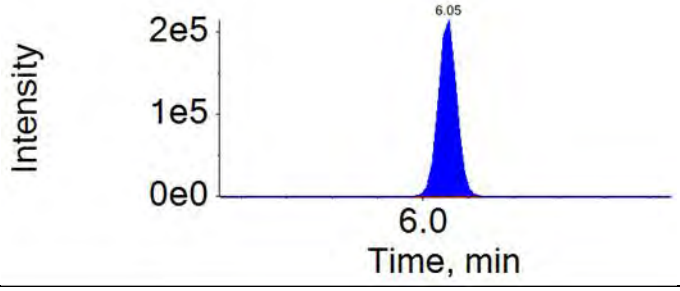
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

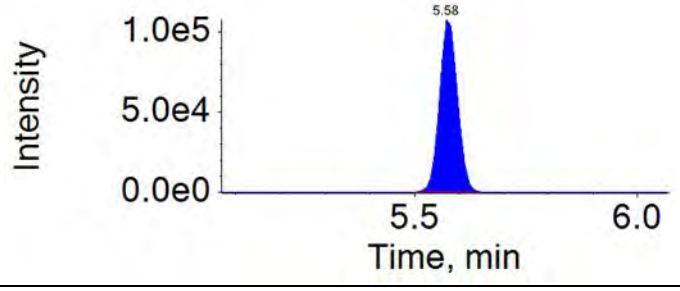
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



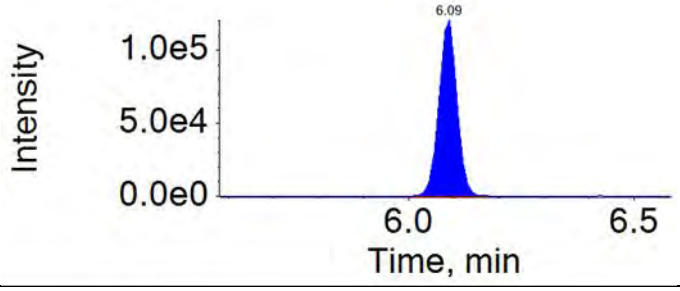


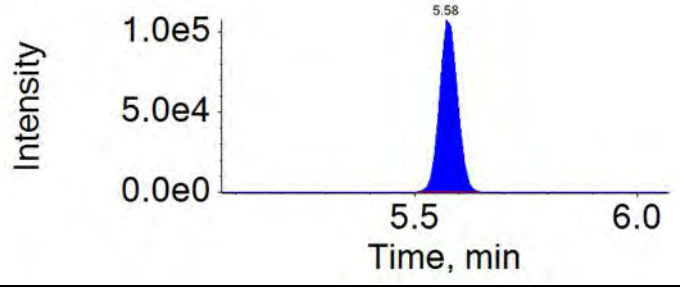
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



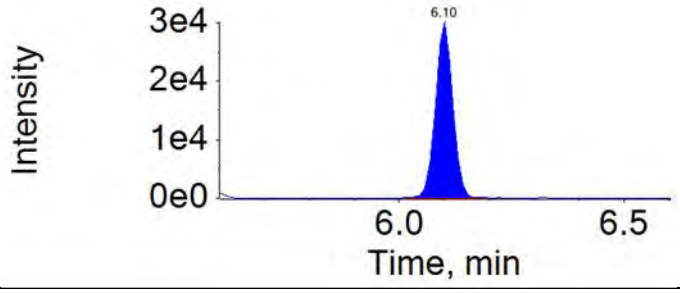


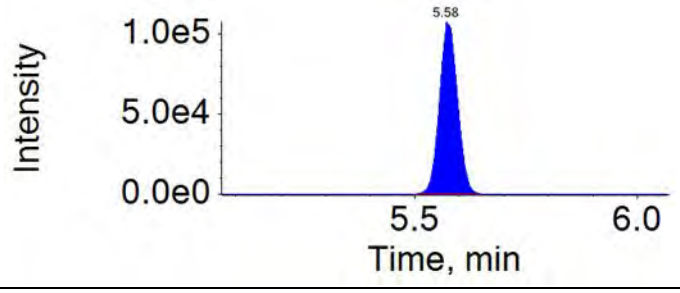
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



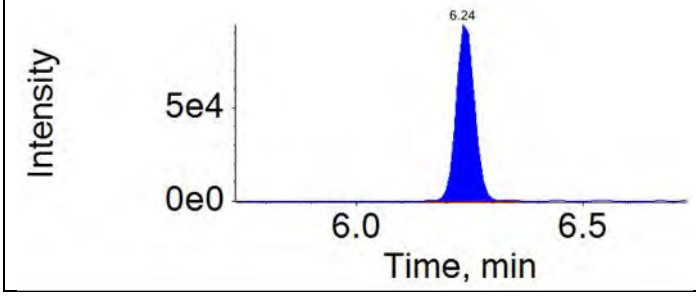


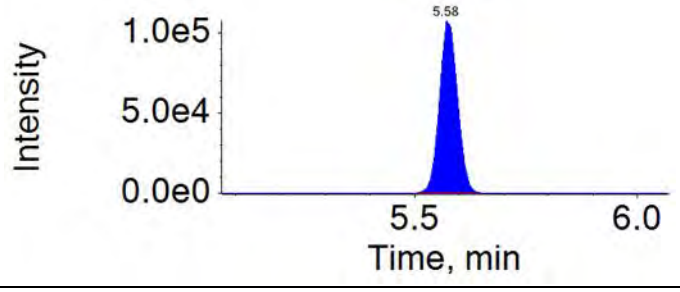
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

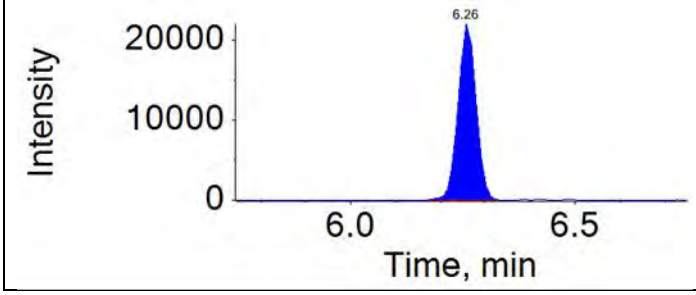
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

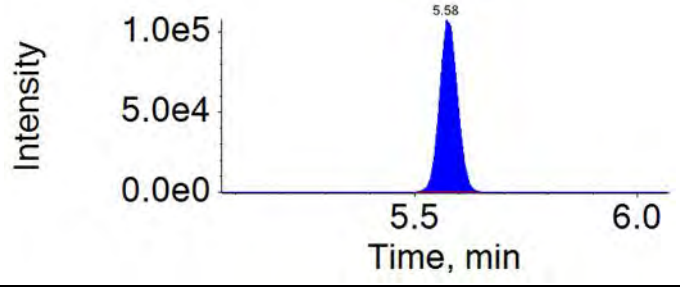
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



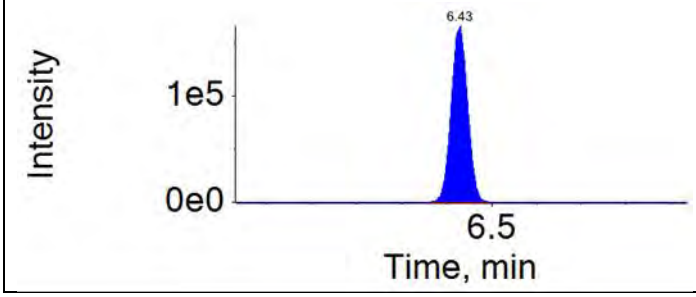


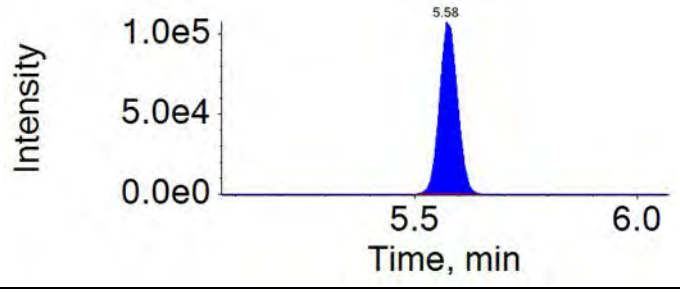
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



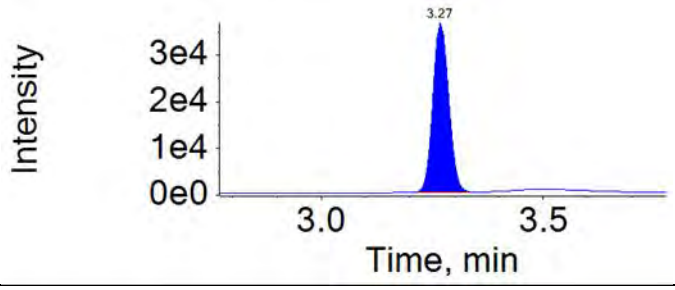


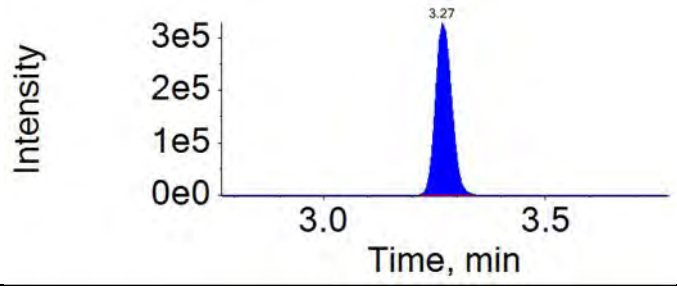
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

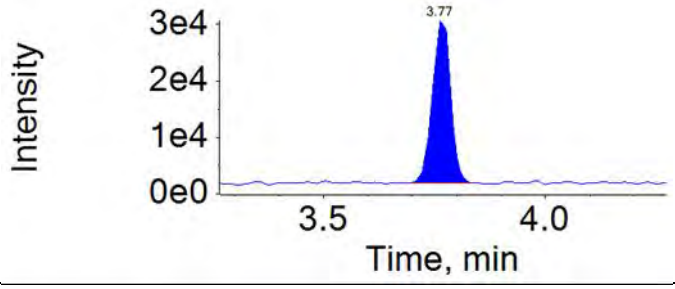
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

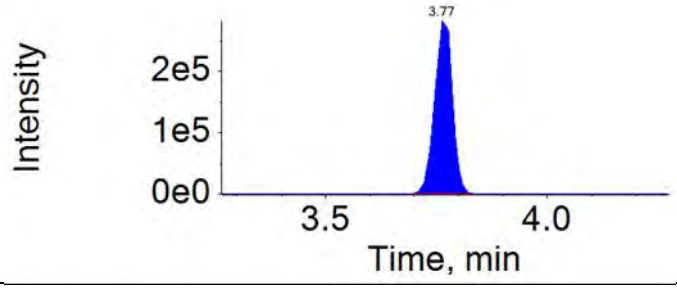
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



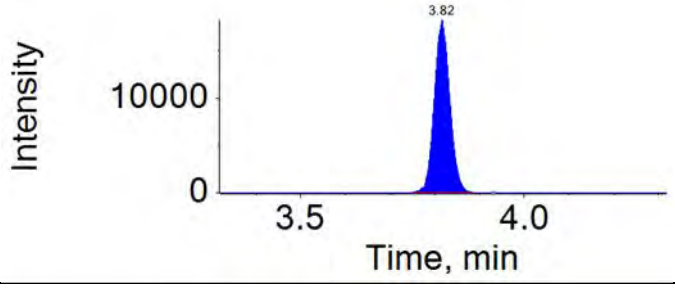


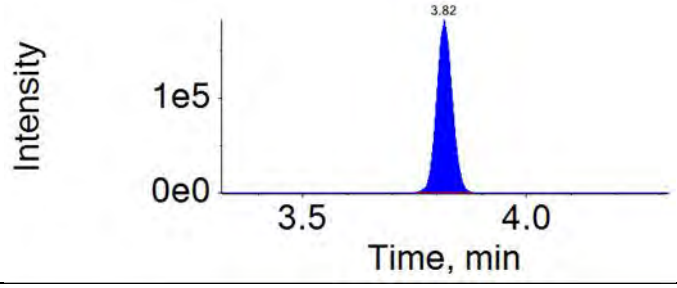
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



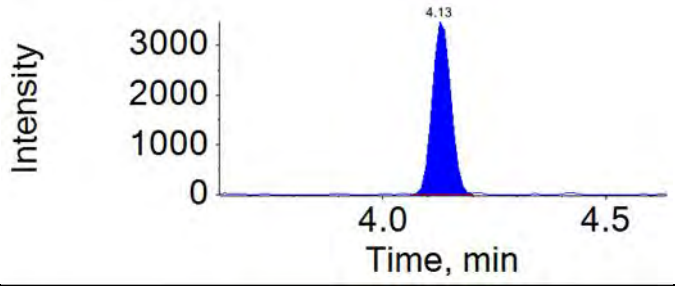


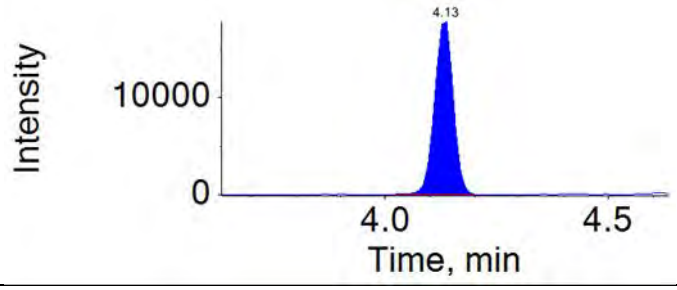
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



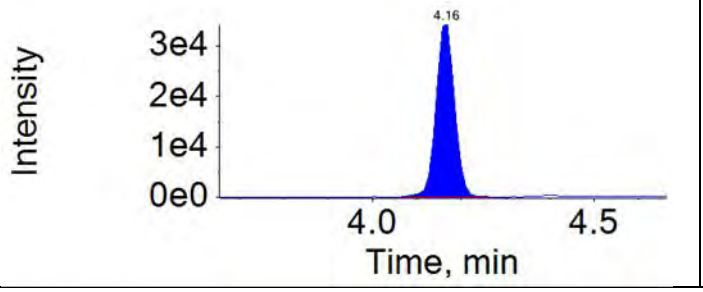


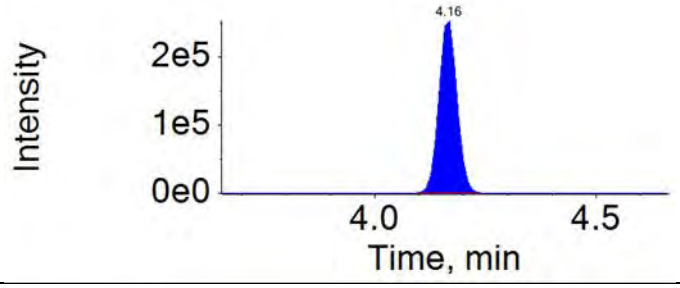
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

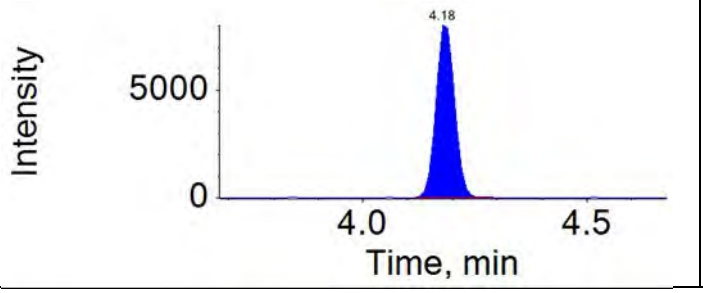
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

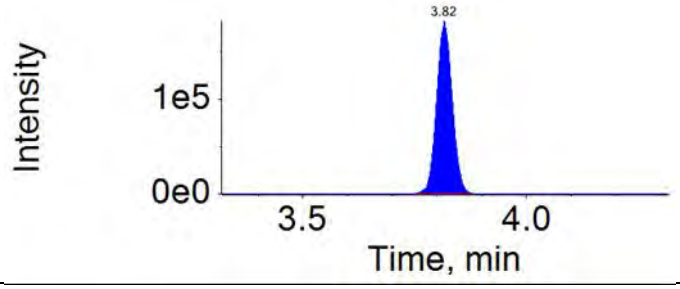
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



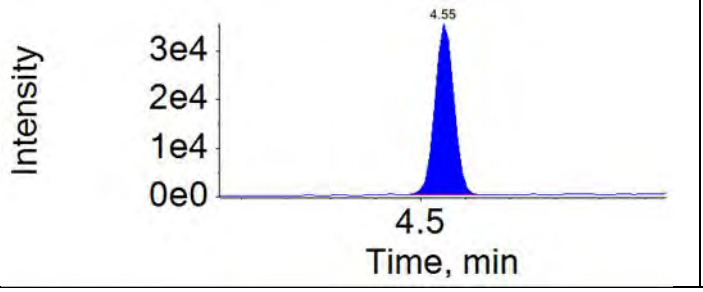


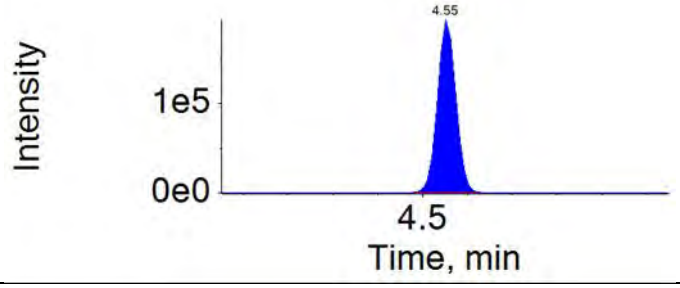
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



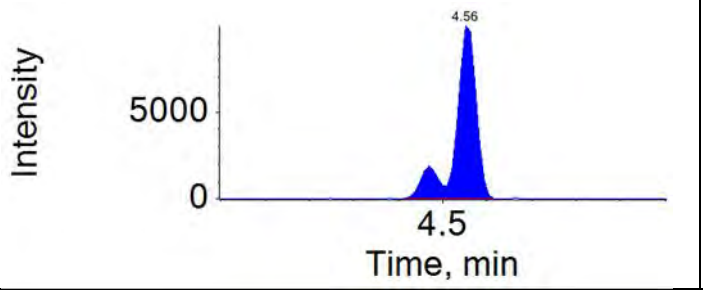


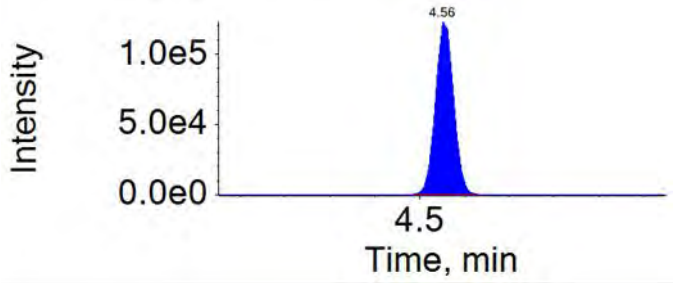
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



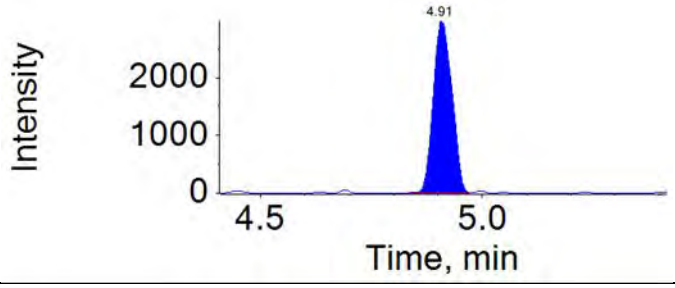


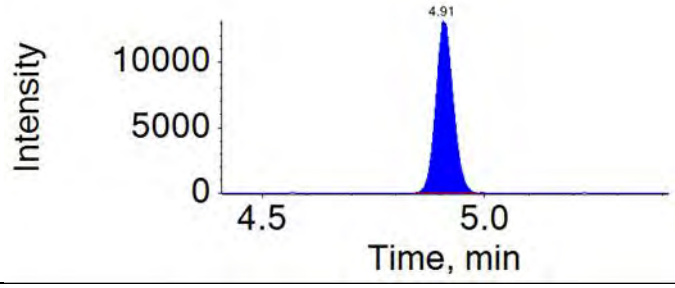
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

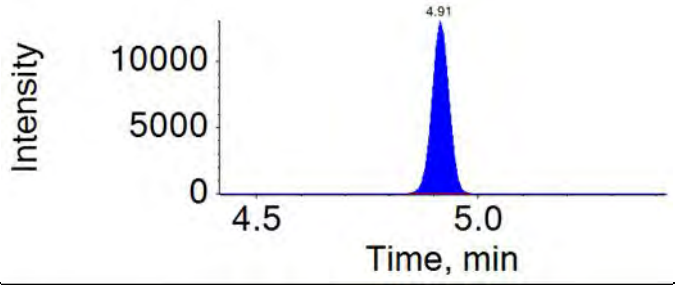
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

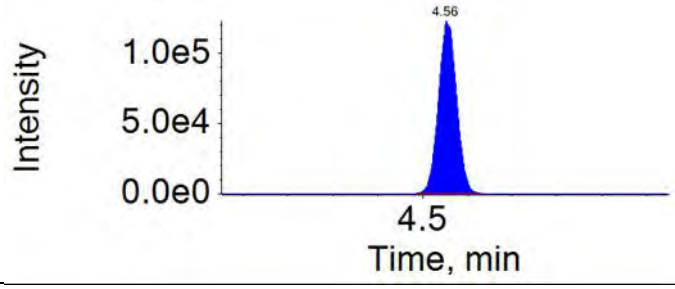
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



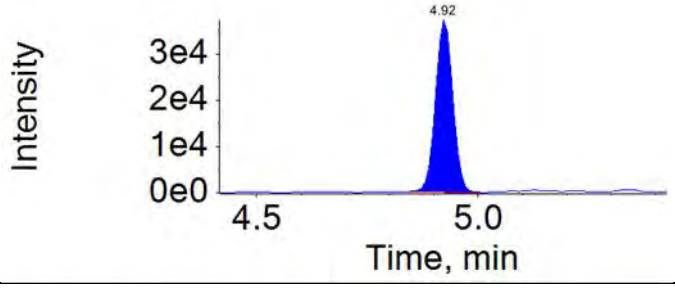


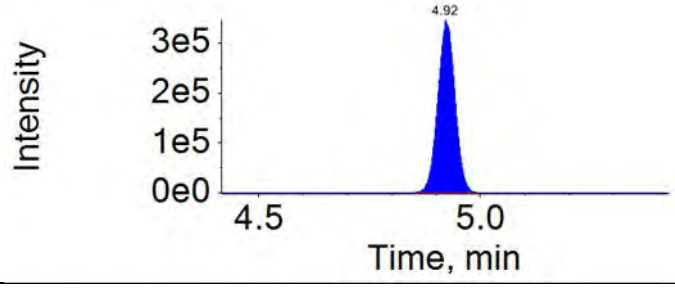
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



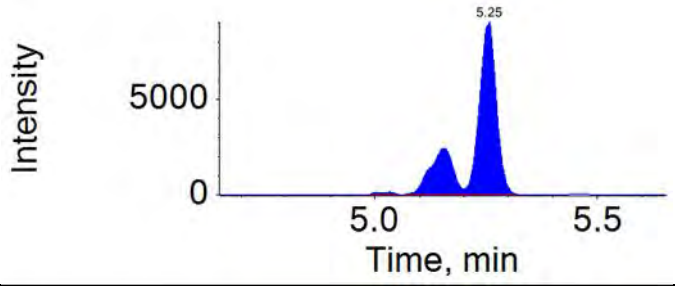


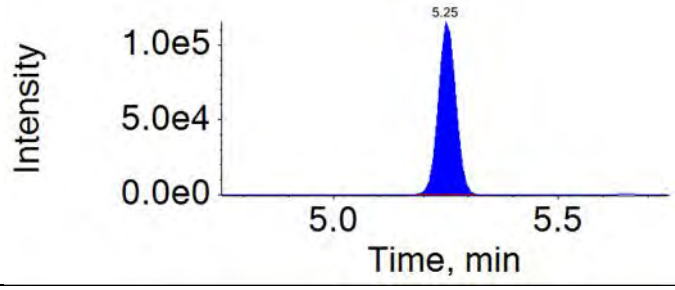
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



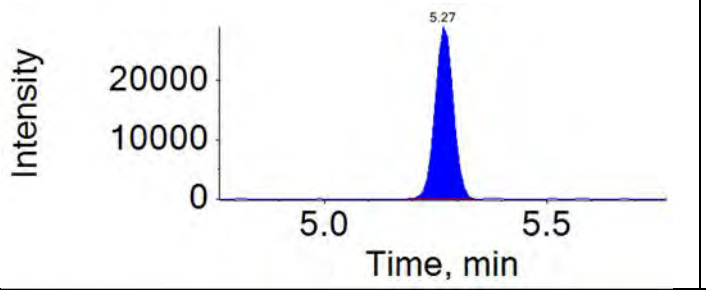


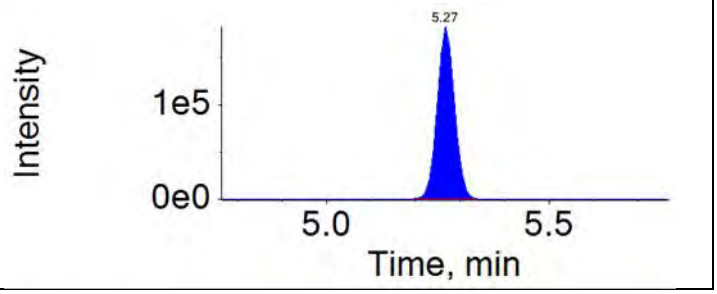
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

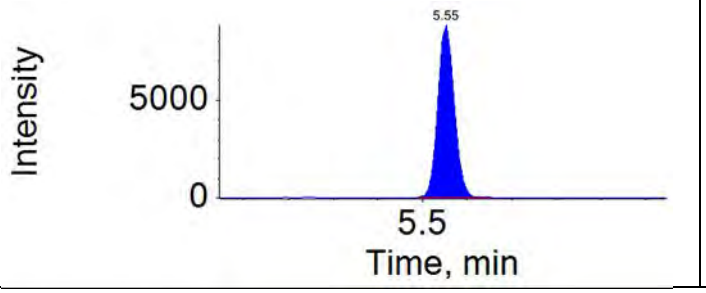
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

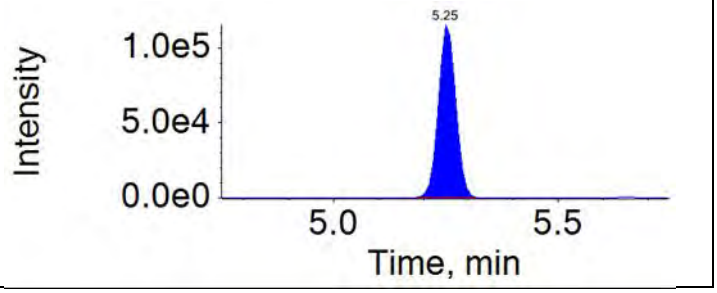
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



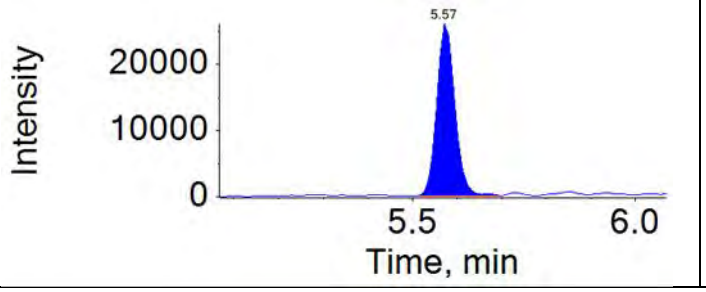


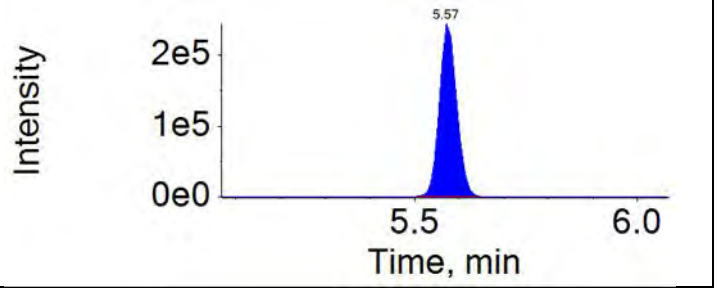
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



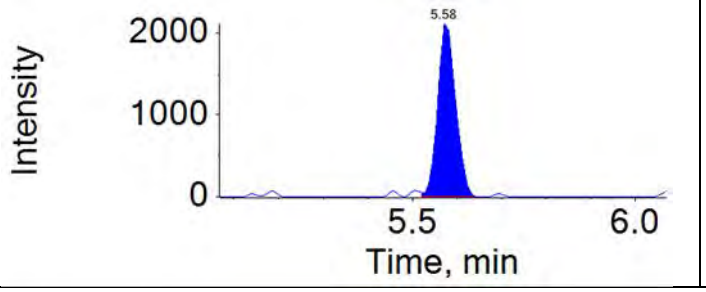


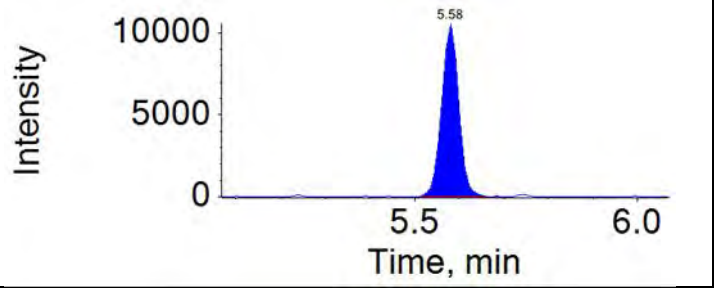
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



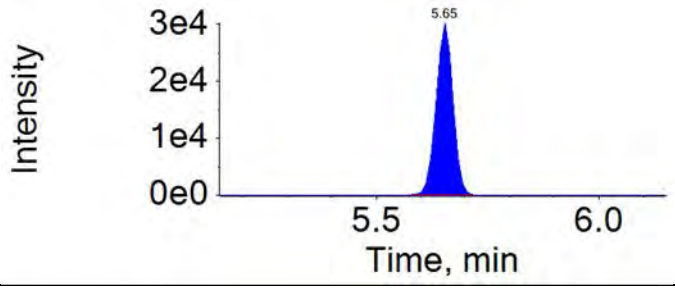


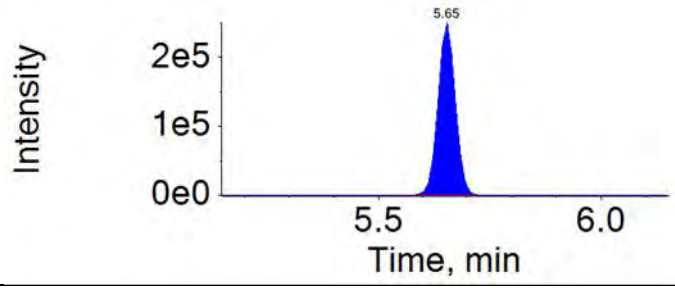
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

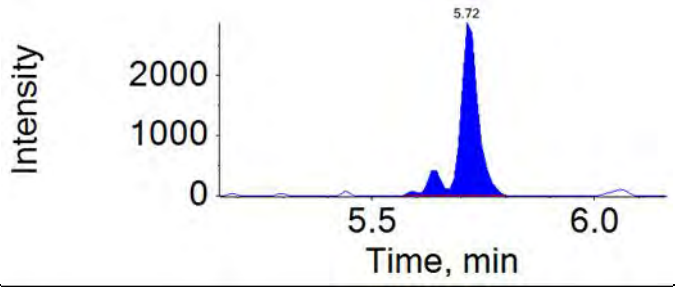
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

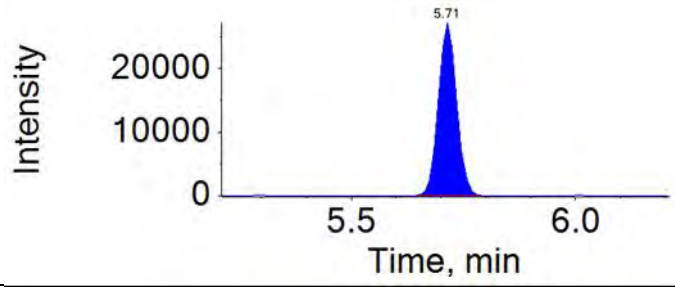
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



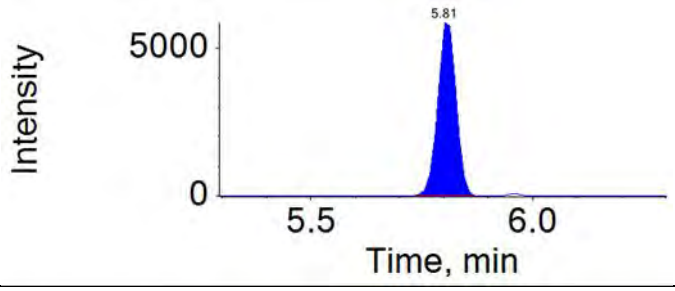


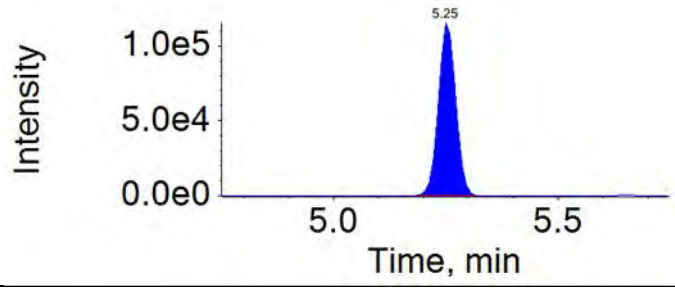
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



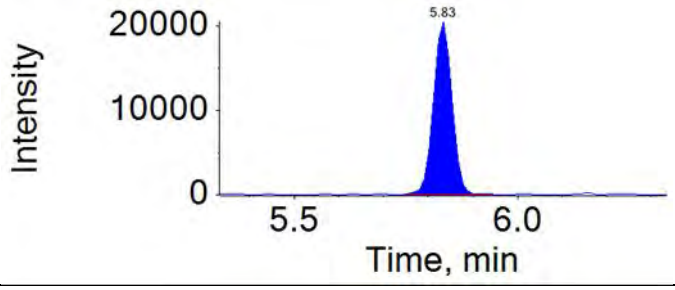


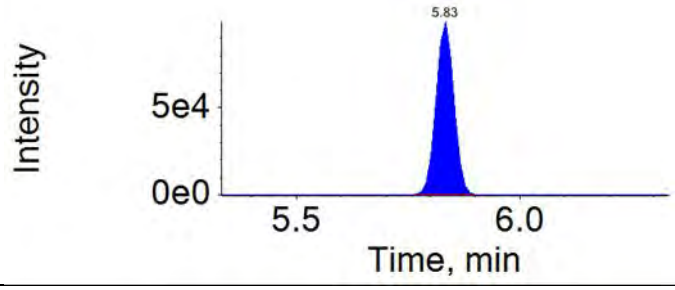
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0

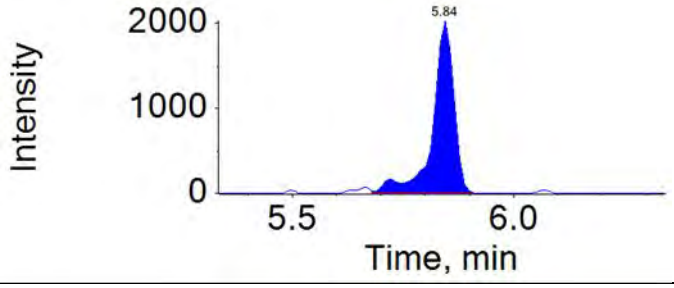
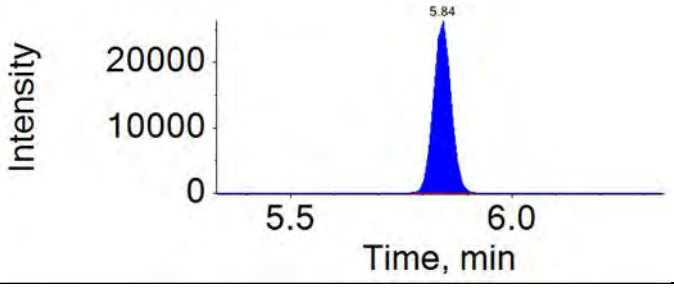


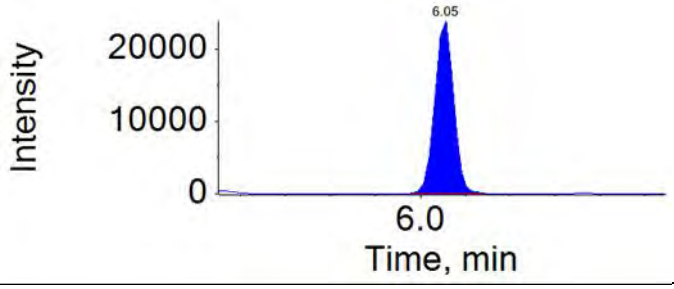
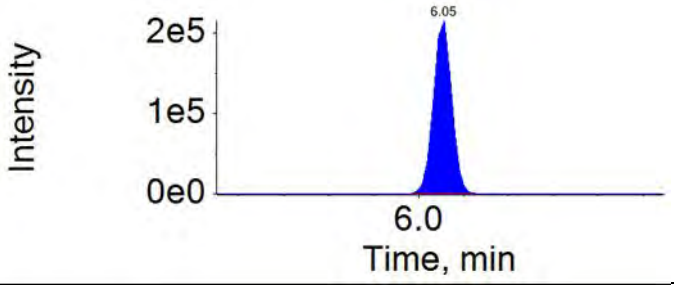


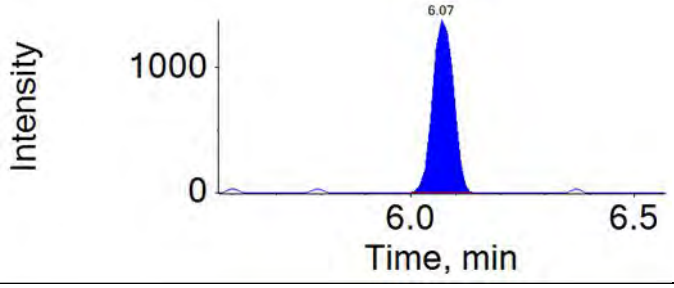
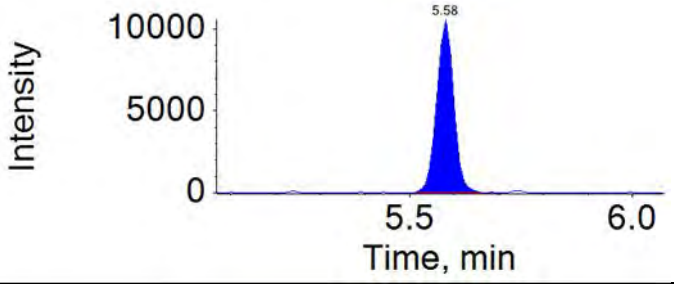
APPROVED
By JPT at 8:56 am, 11/16/18

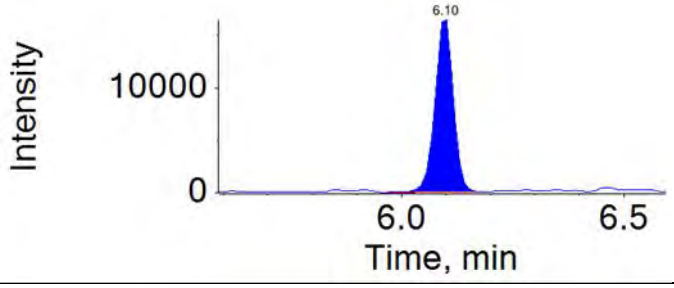
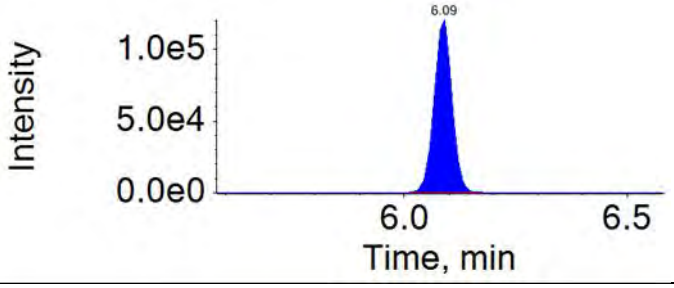
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0
	

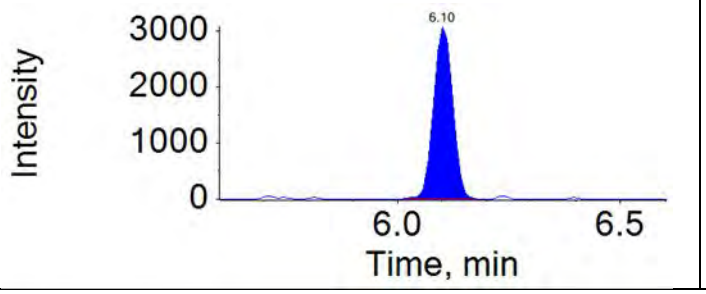
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0
	

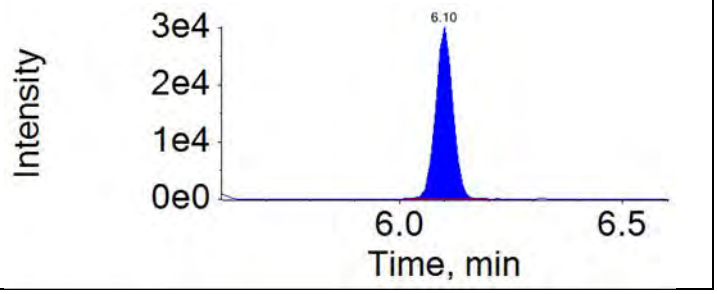
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0
	

Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0
	

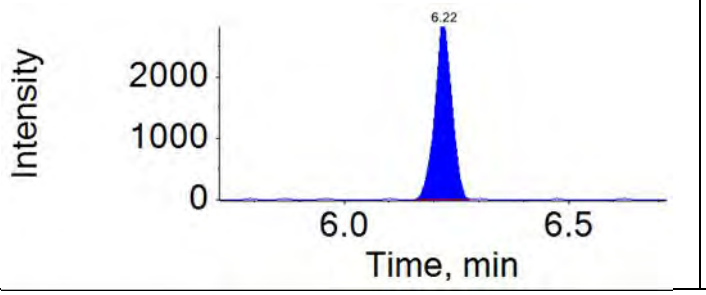
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

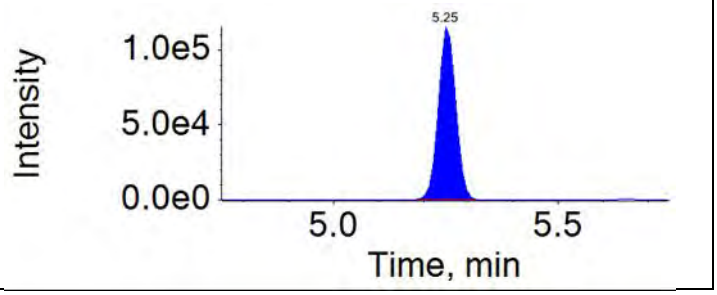
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



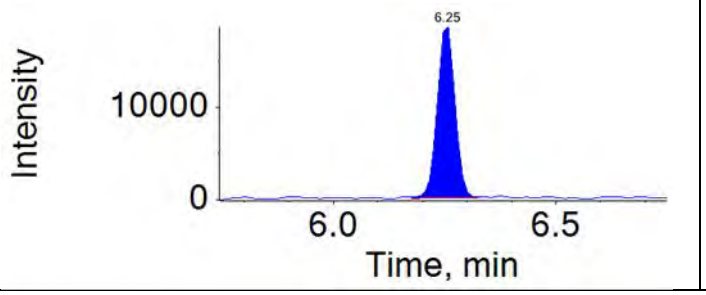


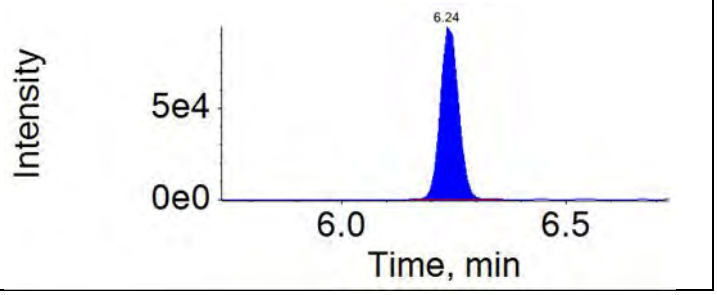
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



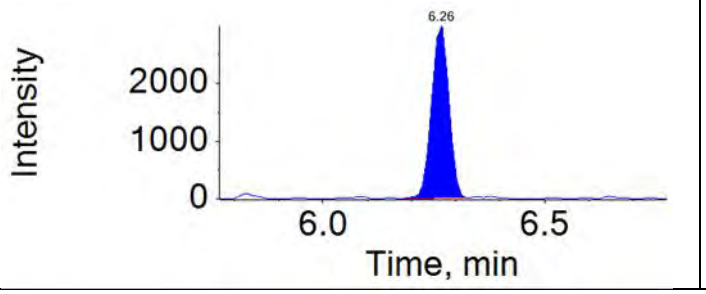


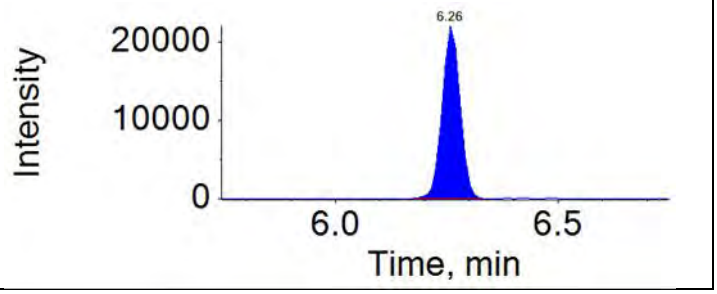
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



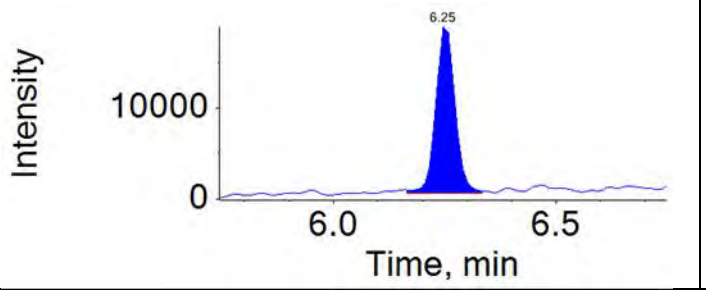


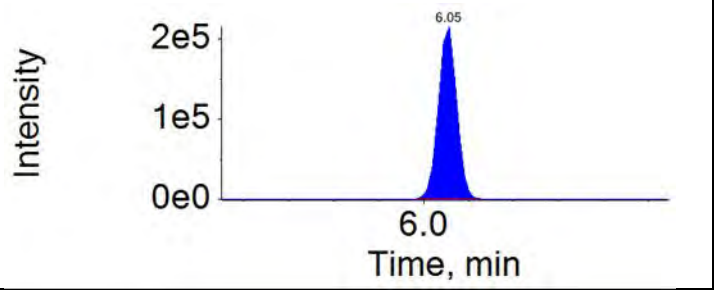
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

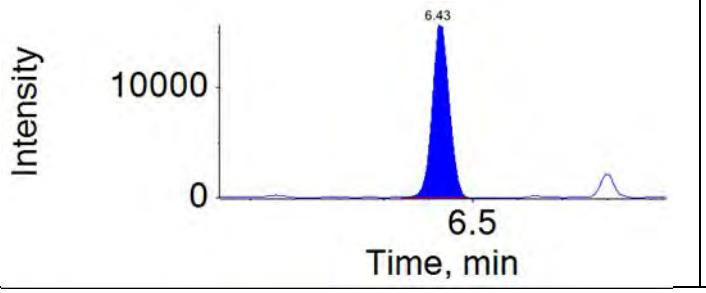
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

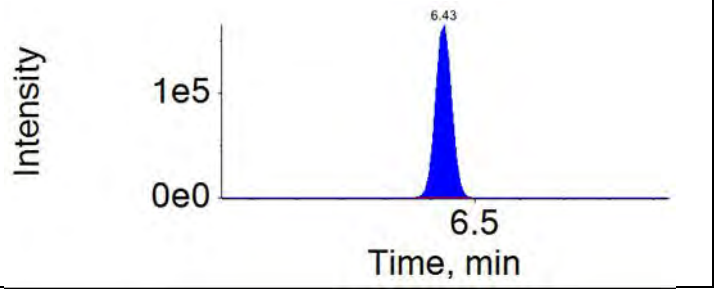
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



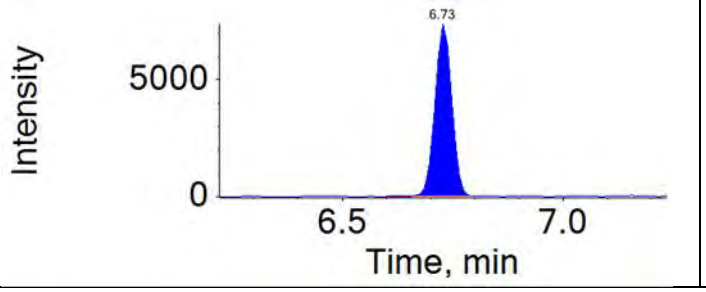


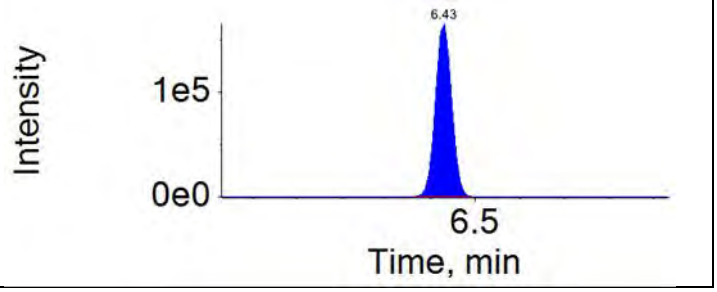
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



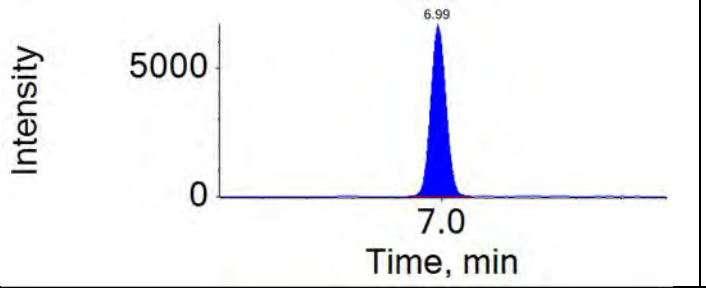


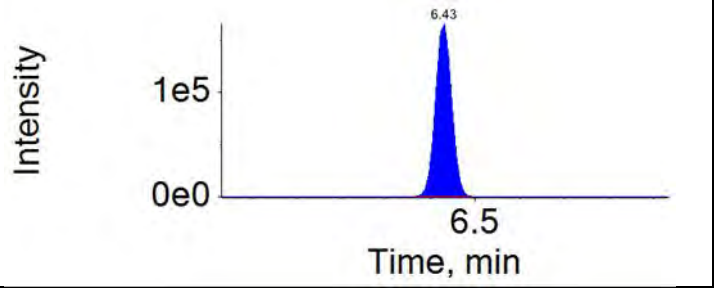
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



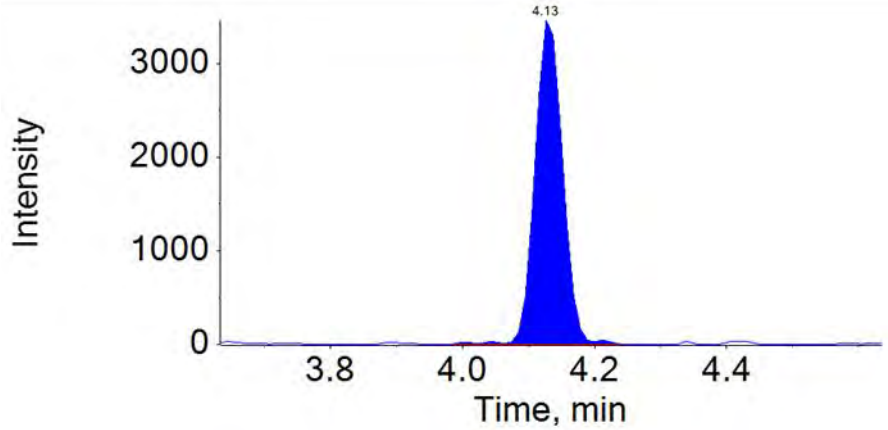


APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

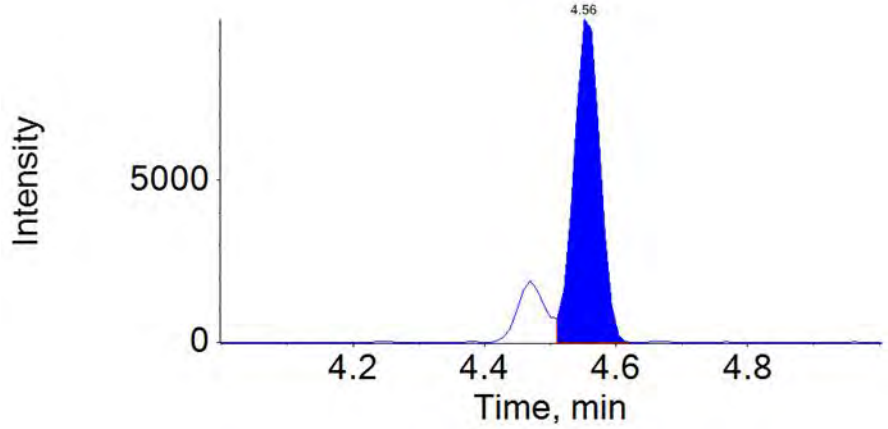
Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
4:2-FTS
RT (min.):
4.13
Peak Area:
10165.0
Mass Range:
327.0 / 307.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



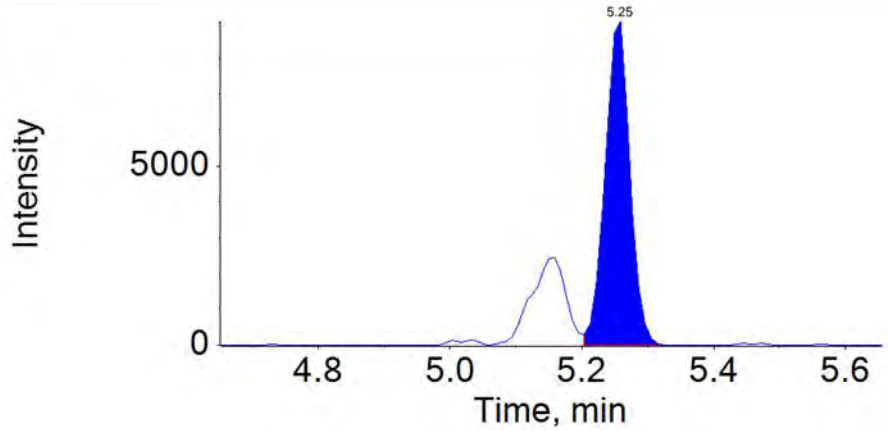
Integration Comment: incorrect integration

Component Name:
PFHxS
RT (min.):
4.56
Peak Area:
27581.5
Mass Range:
399.0 / 80.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
23710.7
Mass Range:
499.0 / 80.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



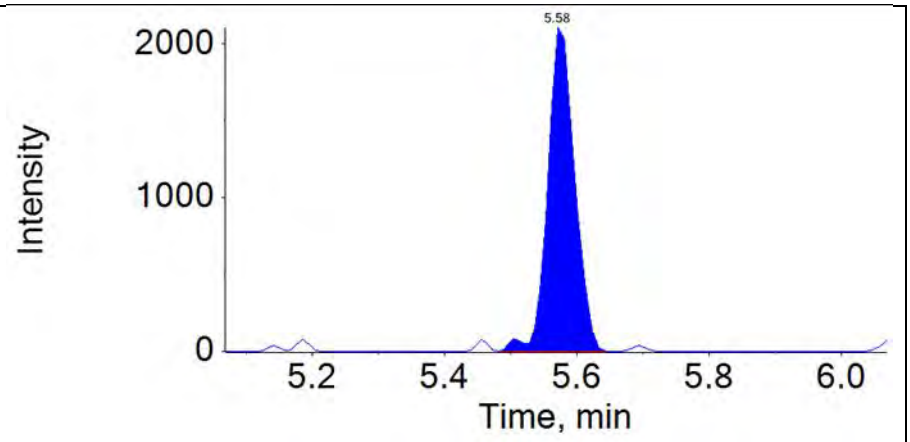
Integration Comment: incorrect integration

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

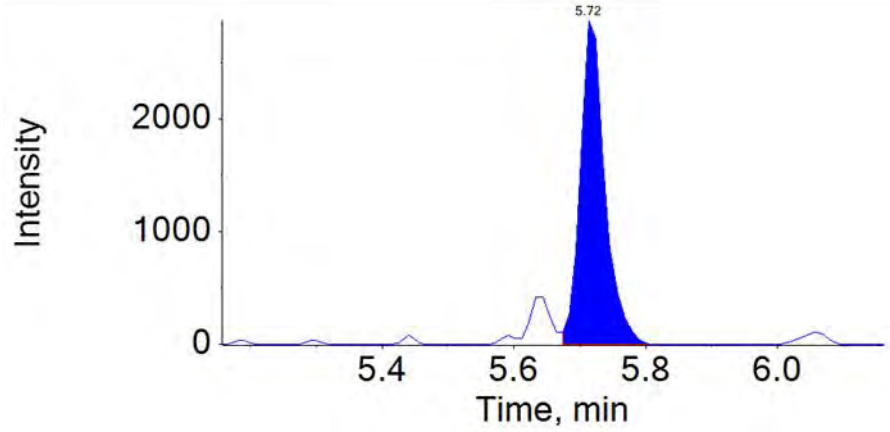
Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
8:2-FTS
RT (min.):
5.58
Peak Area:
6017.4
Mass Range:
527.0 / 507.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



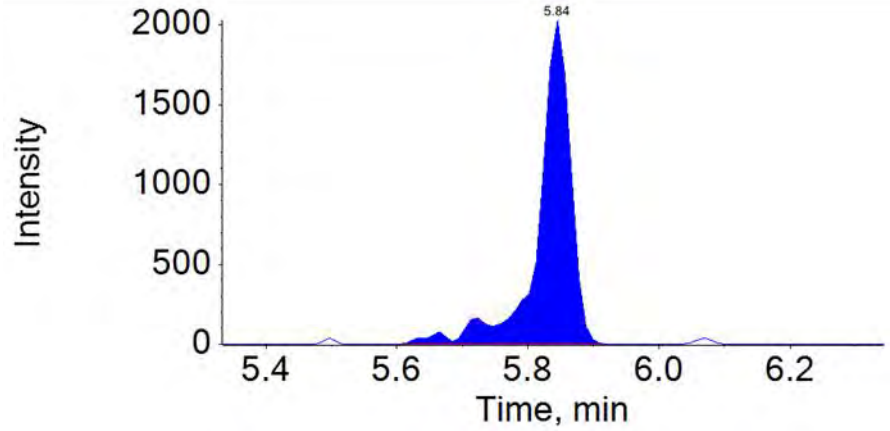
Integration Comment: incorrect integration

Component Name:
NMeFOSAA
RT (min.):
5.72
Peak Area:
7464.3
Mass Range:
570.0 / 419.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



Integration Comment: incorrect integration

Component Name:
NEtFOSAA
RT (min.):
5.84
Peak Area:
6975.1
Mass Range:
584.0 / 419.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



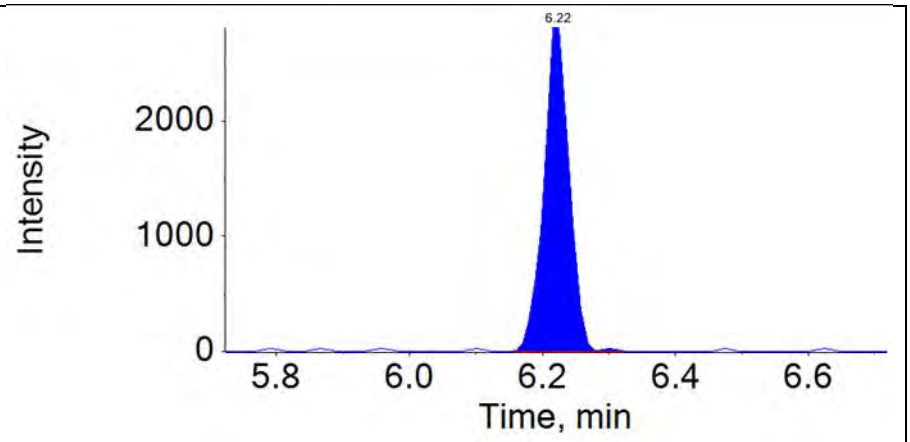
Integration Comment: incorrect integration

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

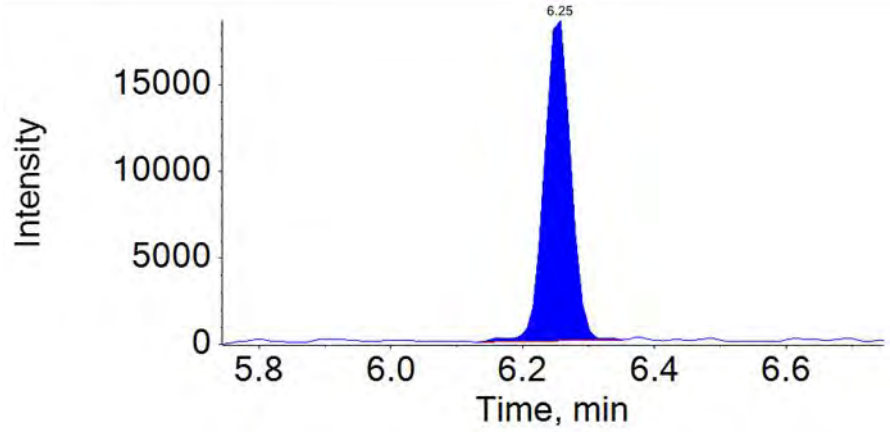
Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFDoS
RT (min.):
6.22
Peak Area:
7594.2
Mass Range:
699.0 / 80.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



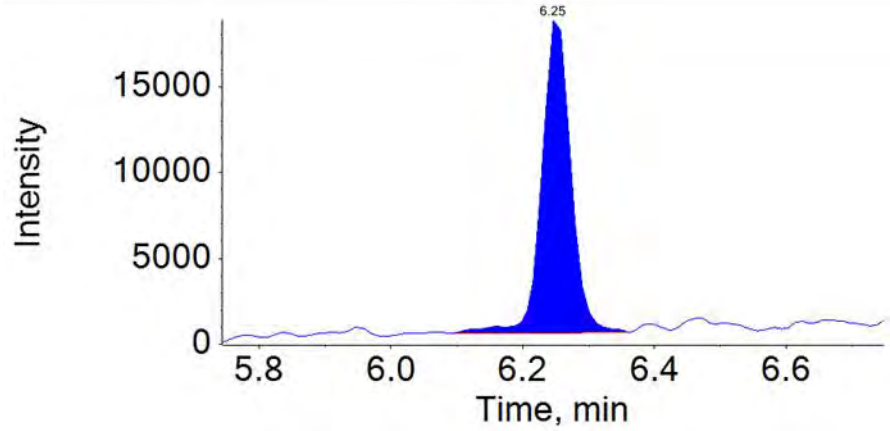
Integration Comment: incorrect integration

Component Name:
NEtPFOSAE
RT (min.):
6.25
Peak Area:
51963.9
Mass Range:
630.0 / 59.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



Integration Comment: incorrect integration

Component Name:
PFTrDA
RT (min.):
6.25
Peak Area:
56262.0
Mass Range:
663.0 / 619.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



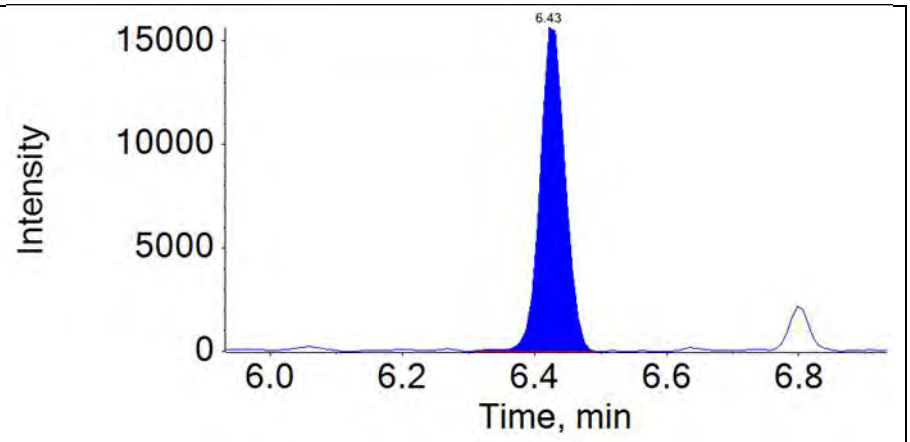
Integration Comment: incorrect integration

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

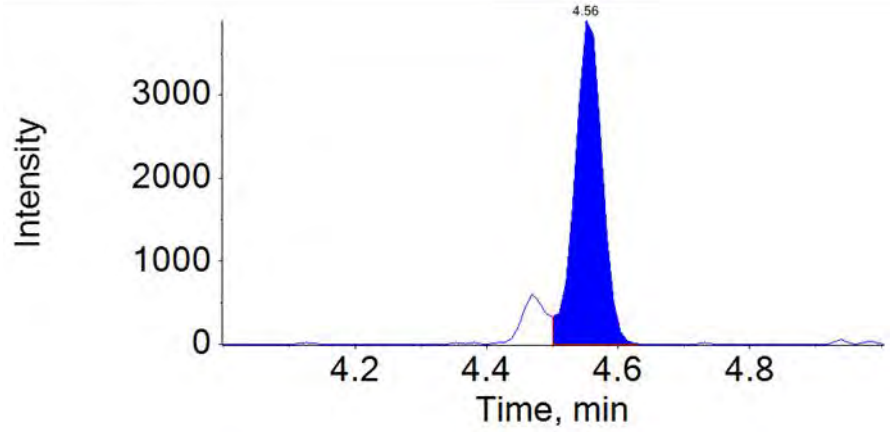
Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFTeDA
RT (min.):
6.43
Peak Area:
41424.1
Mass Range:
713.0 / 669.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



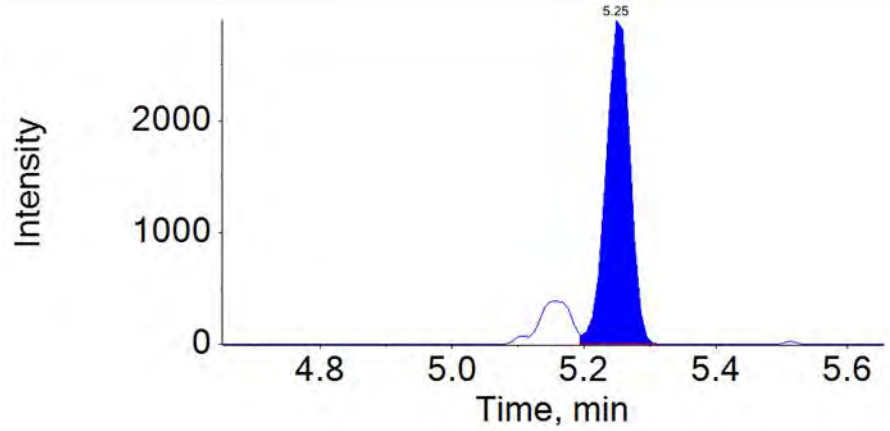
Integration Comment: incorrect integration

Component Name:
PFHxS_2
RT (min.):
4.56
Peak Area:
11251.5
Mass Range:
399.0 / 99.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.25
Peak Area:
7439.1
Mass Range:
499.0 / 99.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



Integration Comment: incorrect integration

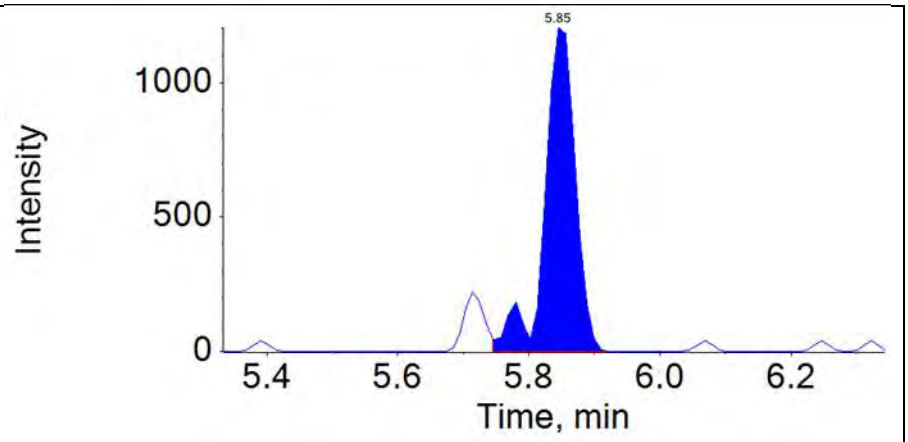
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NEtFOSAA_2
RT (min.):
5.85
Peak Area:
3974.9
Mass Range:
584.0 / 526.0
File Name:
18NOV15D-05.wiff
Sample Name:
CCV1_ISC_CAL2



Integration Comment: incorrect integration

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

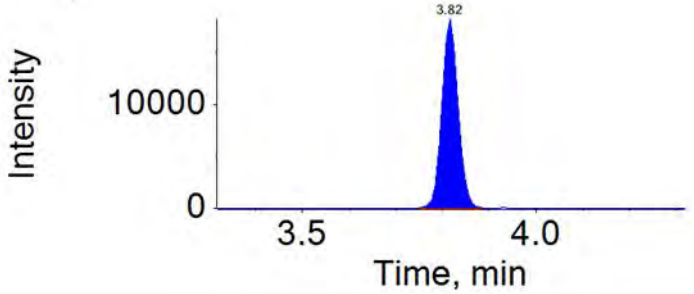
Sample Name: CCV1_ISC_CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV15D-05.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	43949.1	A	N/A	1.0000			
PFBS_2	3.81	1.00	16763.3	A	N/A	0.3814	5	50	
4:2-FTS	4.13	1.00	10004.2	M	N/A	1.0000			
4:2 FTS_2	4.13	1.00	5937.7	A	N/A	0.5935		#NA!	
PFHxA	4.16	1.00	100146.0	A	N/A	1.0000			
PFHxA_2	4.17	1.00	1051.1	A	N/A	0.0105	-11	50	
PFPeS	4.18	1.10	23408.3	A	N/A	1.0000			
PFPeS_2	4.19	1.10	12242.3	A	N/A	0.5230	1	50	
PFHpA	4.55	1.00	102557.6	A	N/A	1.0000			
PFHpA_2	4.55	1.00	5680.1	A	N/A	0.0554	-2	50	
PFHxS	4.56	1.00	33173.1	M	N/A	1.0000			
PFHxS_2	4.56	1.00	12761.3	M	N/A	0.3847	12	50	
6:2-FTS	4.91	1.00	8730.1	A	N/A	1.0000			
6:2 FTS_2	4.91	1.00	4596.8	A	N/A	0.5265		#NA!	
PFHpS	4.91	1.08	34554.4	A	N/A	1.0000			
PFHpS_2	4.92	1.08	13298.6	A	N/A	0.3849	-5	50	
PFOA	4.92	1.00	101483.1	A	N/A	1.0000			
PFOA_2	4.92	1.00	6066.4	A	N/A	0.0598	5	50	
PFOS	5.25	1.00	33155.1	M	N/A	1.0000			
PFOS_2	5.25	1.00	8776.7	M	N/A	0.2647	-11	50	
PFNA	5.27	1.00	82368.1	A	N/A	1.0000			
PFNA_2	5.27	1.00	2107.4	A	N/A	0.0256	13	50	
PFNS	5.55	1.06	22643.7	A	N/A	1.0000			
PFNS_2	5.55	1.06	8812.1	A	N/A	0.3892	-18	50	
PFDA	5.57	1.00	72511.4	A	N/A	1.0000			
PFDA_2	5.58	1.00	406.5	A	N/A	0.0056	-29	50	
8:2-FTS	5.58	1.00	5899.7	M	N/A	1.0000			
8:2 FTS_2	5.58	1.00	4890.0	A	N/A	0.8289		#NA!	
NMeFOSAA	5.72	1.00	8526.2	M	N/A	1.0000			
NMeFOSAA_2	5.72	1.00	1811.6	A	N/A	0.2125	-18	50	
PFDS	5.81	1.11	16839.4	A	N/A	1.0000			
PFDS_2	5.81	1.11	8965.0	A	N/A	0.5324	5	50	
PFUnDA	5.83	1.00	58763.0	A	N/A	1.0000			
PFUnDA_2	5.84	1.00	259.6	A	N/A	0.0044	-20	50	
NEtFOSAA	5.84	1.00	6799.8	M	N/A	1.0000			
NEtFOSAA_2	5.85	1.00	4445.0	M	N/A	0.6537	-9	50	
PFDoDA	6.05	1.00	69810.9	A	N/A	1.0000			
PFDoDA_2	6.05	1.00	789.4	A	N/A	0.0113	-27	50	
10:2-FTS	6.07	1.09	4486.1	A	N/A	1.0000			
10:2 FTS_2	6.08	1.09	3329.2	A	N/A	0.7421		#NA!	
PFTrDA	6.25	1.03	54960.7	M	N/A	1.0000			
PFTrDA_2	6.25	1.03	610.1	A	N/A	0.0111	30	50	
PFTeDA	6.43	1.00	41384.0	M	N/A	1.0000			
PFTeDA_2	6.42	1.00	242.3	A	N/A	0.0059	-6	50	
PFHxDA	6.73	1.05	19352.2	A	N/A	1.0000			
PFHxDA_2	6.73	1.05	1411.7	A	N/A	0.0729	8	50	
PFODA	6.99	1.09	15579.3	A	N/A	1.0000			
PFODA_2	6.99	1.09	436.2	A	N/A	0.0280	2	50	

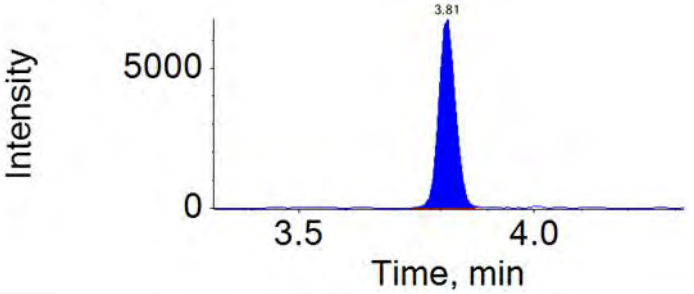
APPROVED
By JPT at 8:56 am, 11/16/18

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By HMK at 7:38 am, 11/19/18

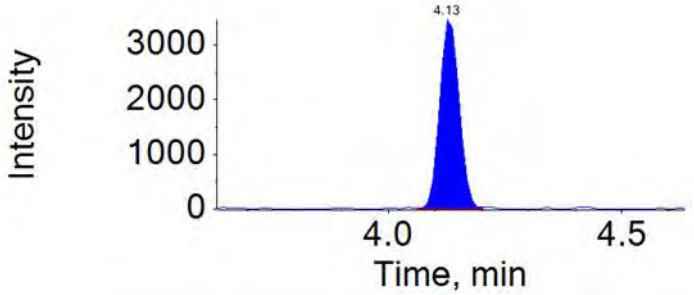
Component: PFBS
Primary Mass: 299.0 / 80.0



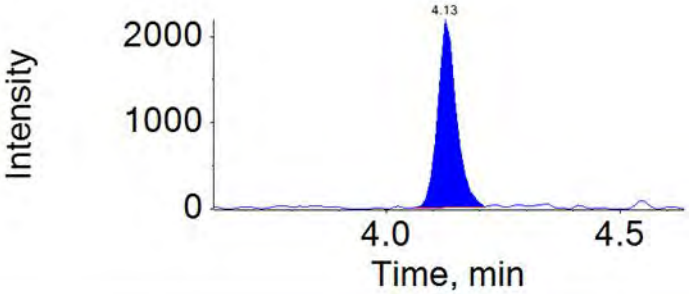
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



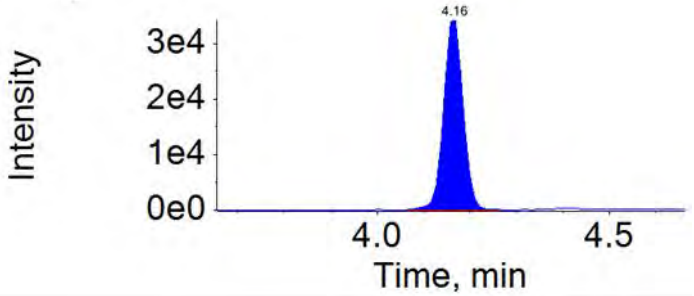
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



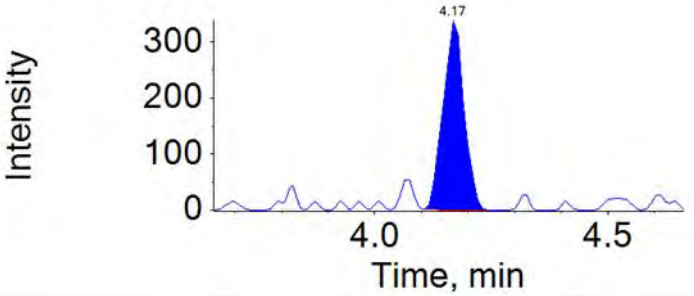
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



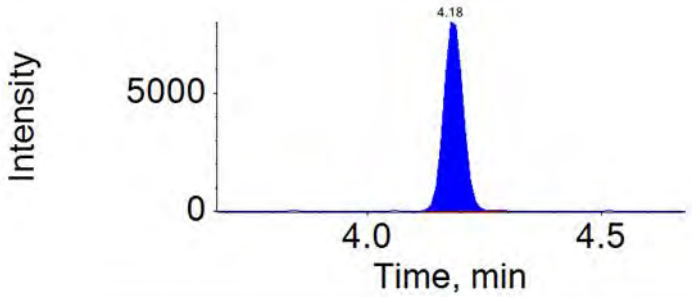
Component: PFHxA
Primary Mass: 313.0 / 269.0



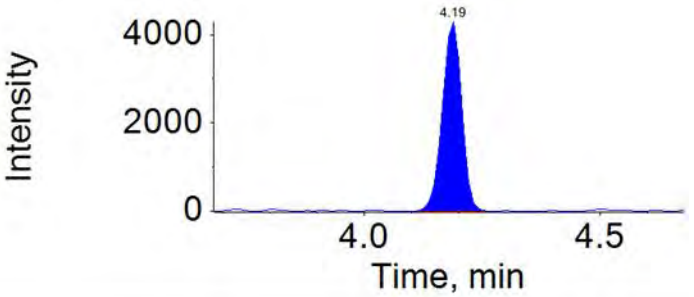
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



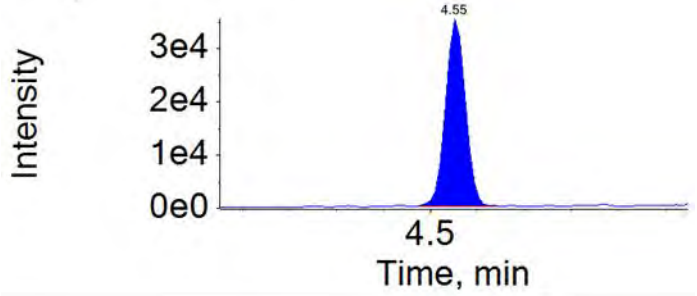
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



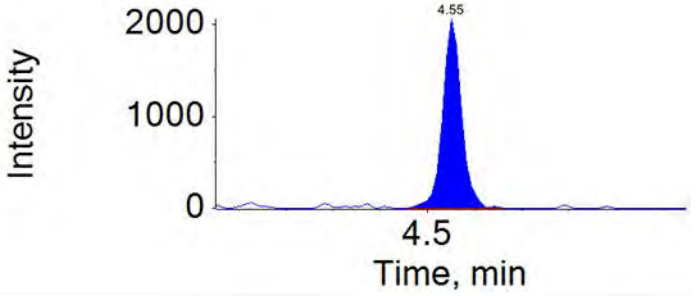
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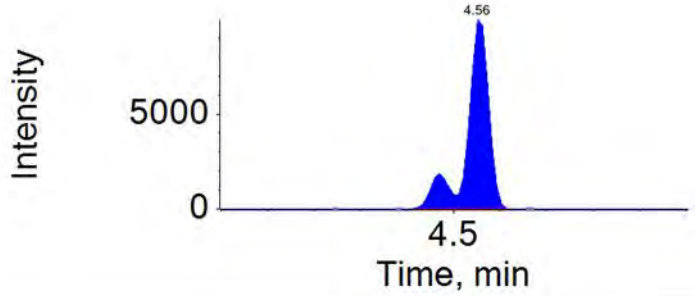
Component: PFHpA
Primary Mass: 363.0 / 319.0



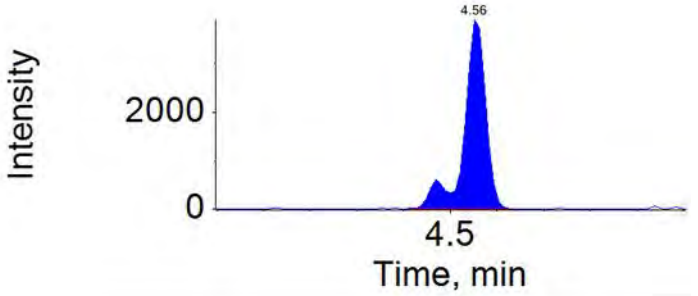
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



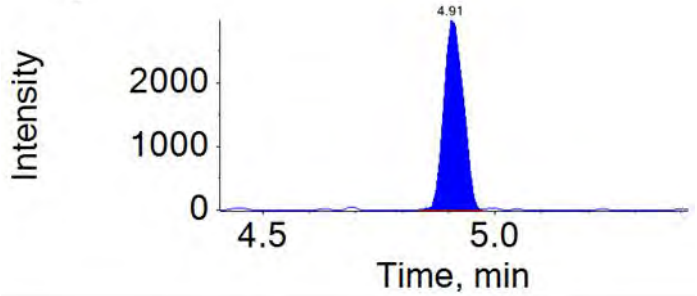
Component: PFHxS
Primary Mass: 399.0 / 80.0



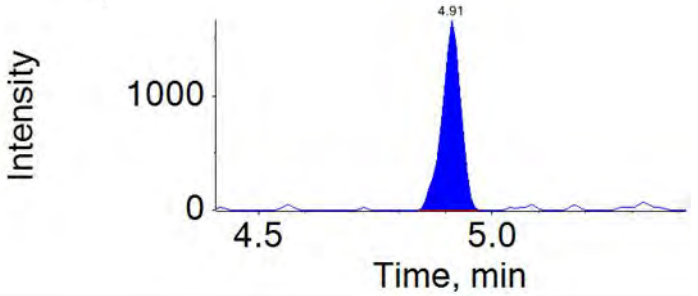
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



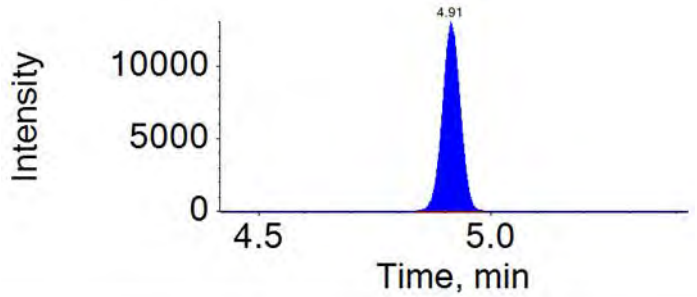
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



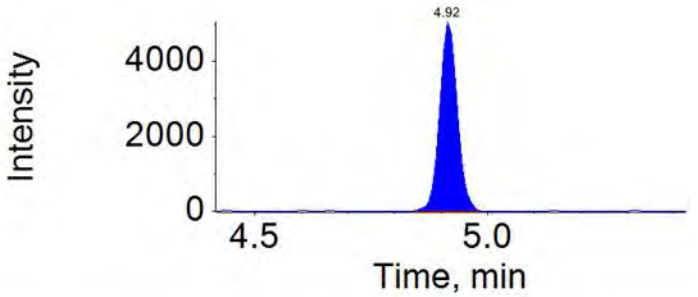
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



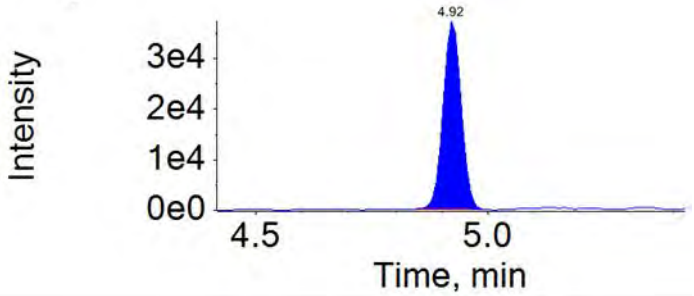
Component: PFHpS
Primary Mass: 449.0 / 80.0



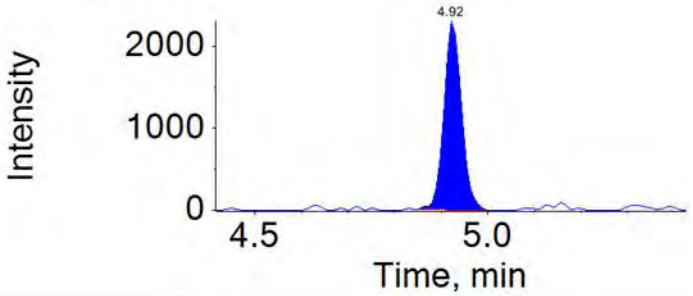
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



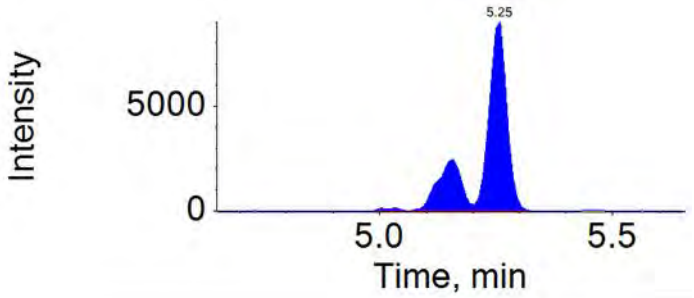
Component: PFOA
Primary Mass: 413.0 / 369.0



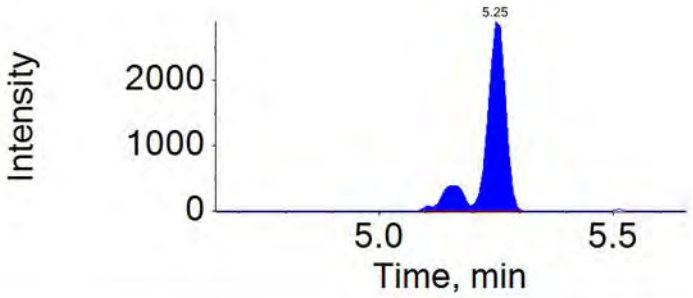
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



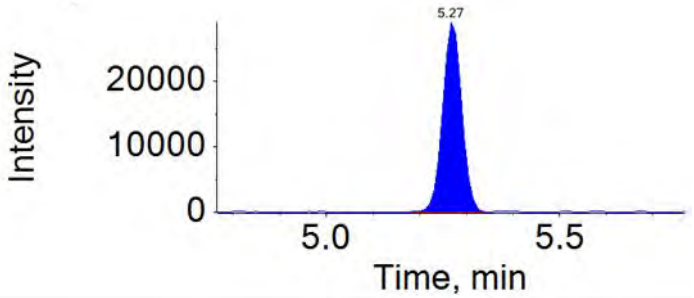
Component: PFOS
Primary Mass: 499.0 / 80.0



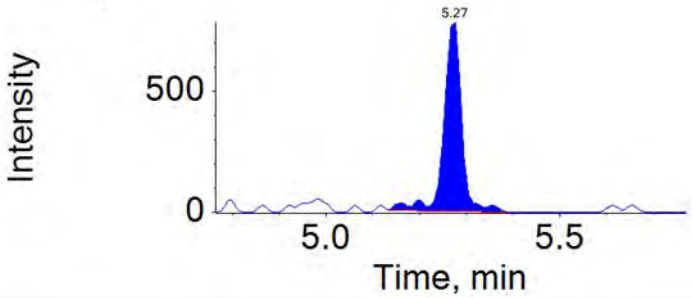
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Secondary Mass: 499.0 / 99.0



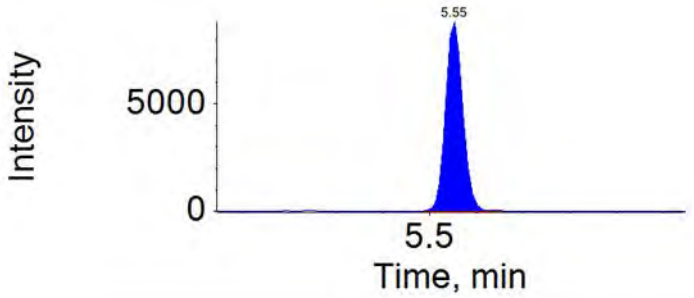
Component: PFNA
Primary Mass: 463.0 / 419.0



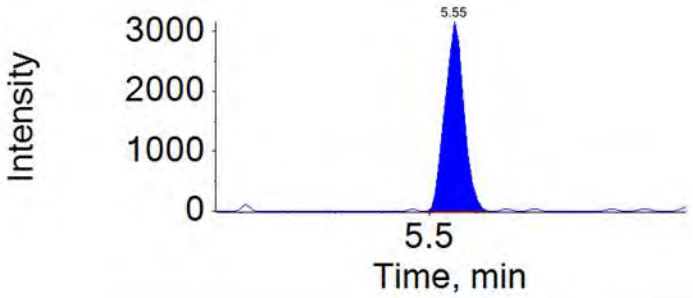
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



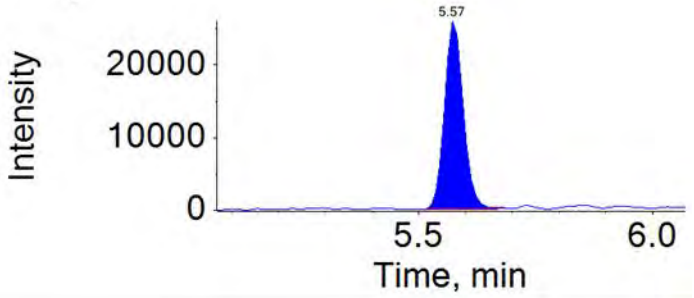
Component: PFNS
Primary Mass: 549.0 / 80.0



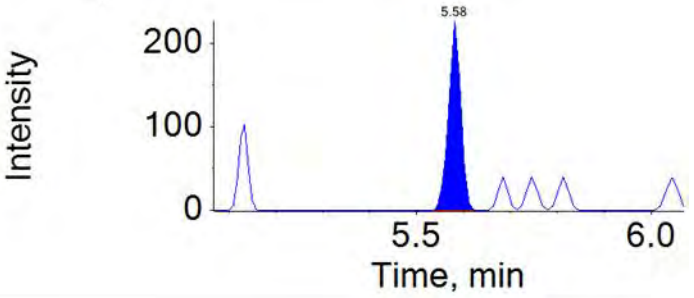
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Secondary Mass: 549.0 / 99.0



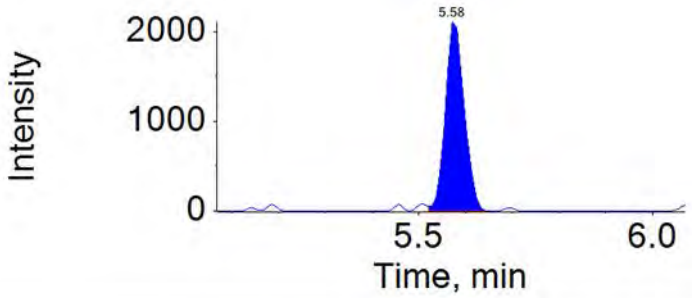
Component: PFDA
Primary Mass: 513.0 / 469.0



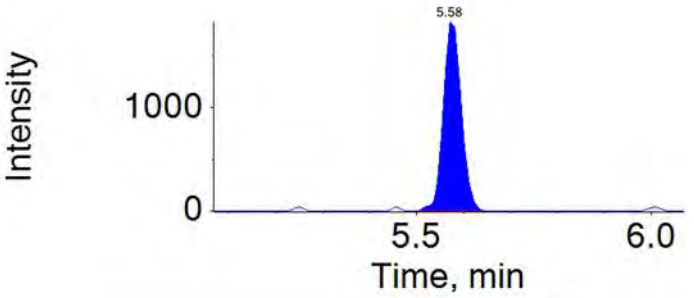
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Secondary Mass: 513.0 / 169.0



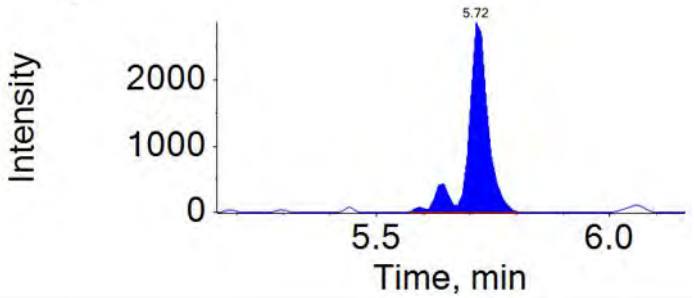
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



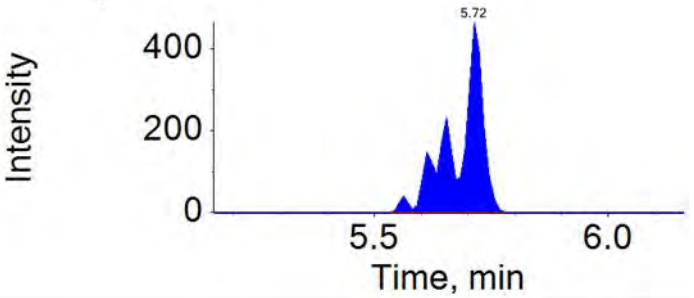
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



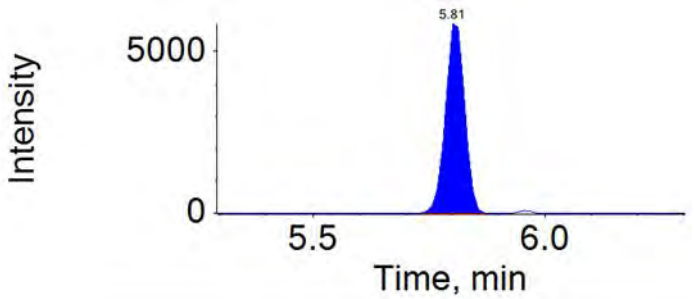
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



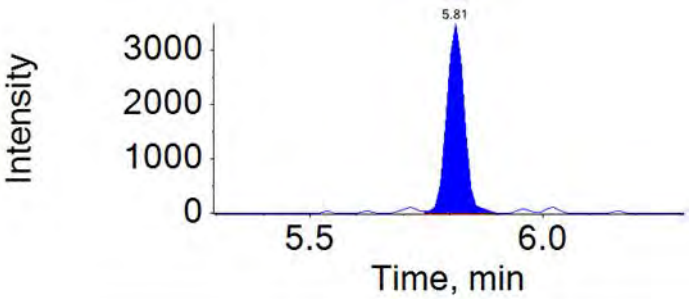
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



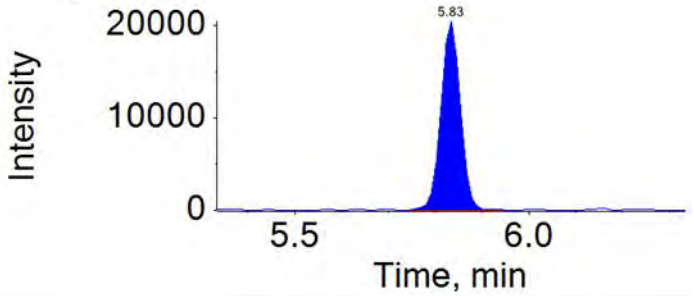
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Secondary Mass: 599.0 / 99.0



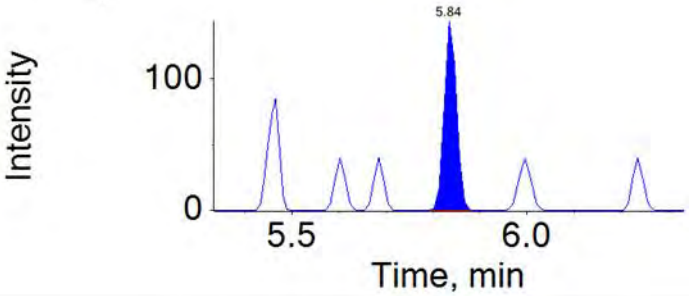
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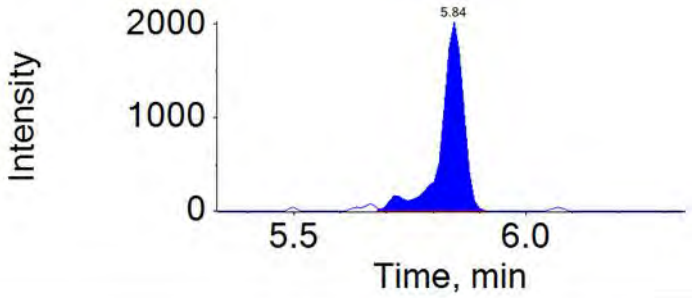
Component: PFUnDA
Primary Mass: 563.0 / 519.0



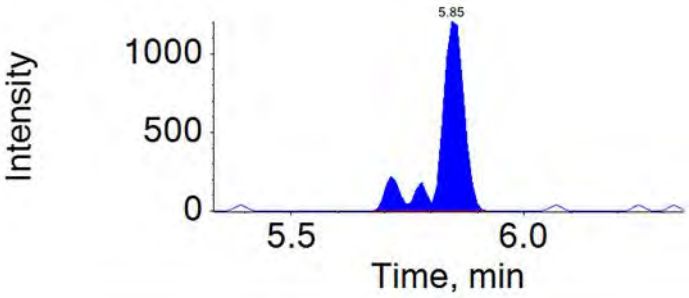
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Secondary Mass: 563.0 / 169.0



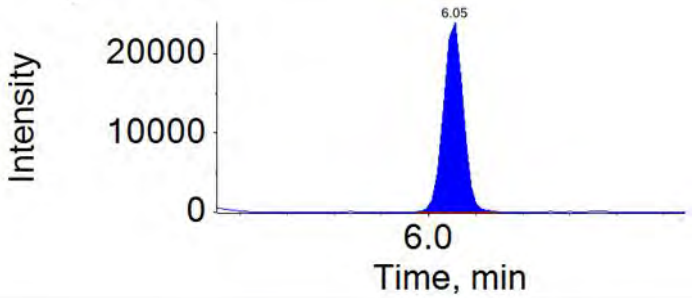
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



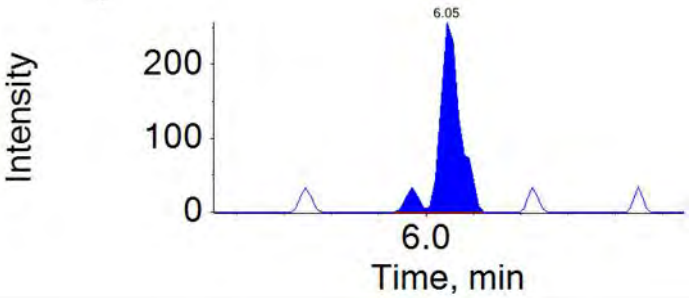
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



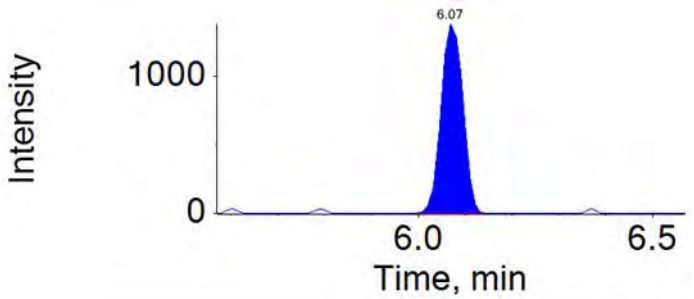
Component: PFDoDA
Primary Mass: 613.0 / 569.0



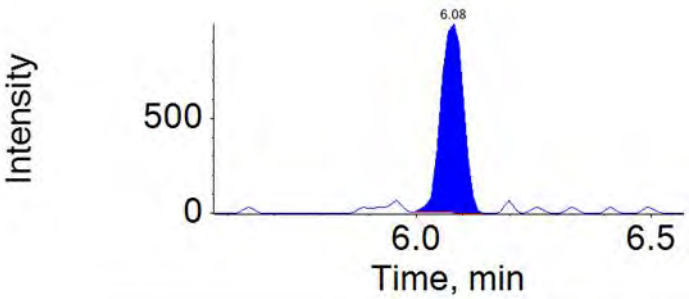
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



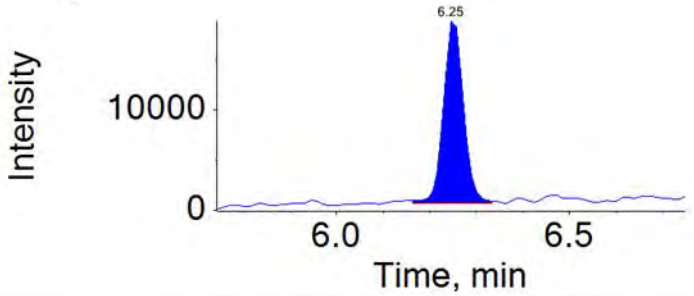
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



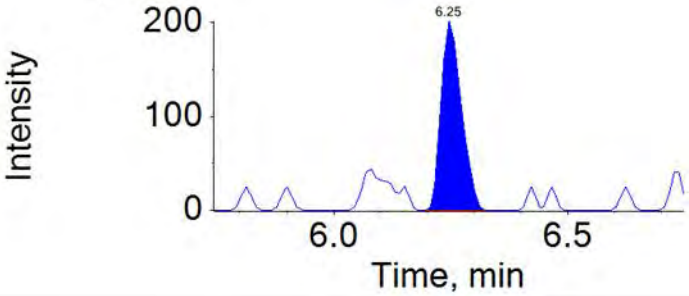
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

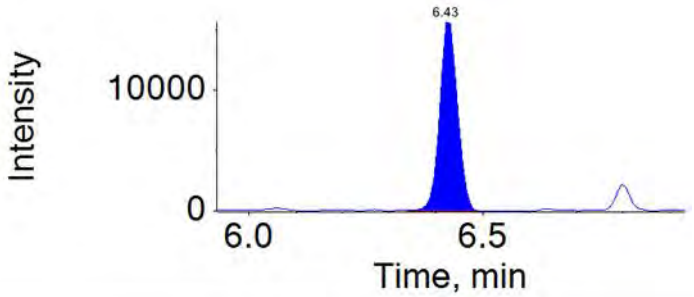
Component: PFTrDA
Primary Mass: 663.0 / 619.0



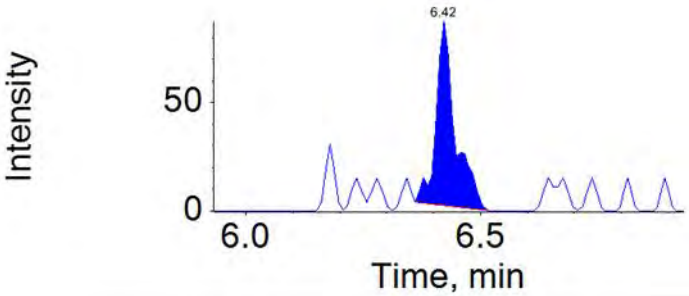
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



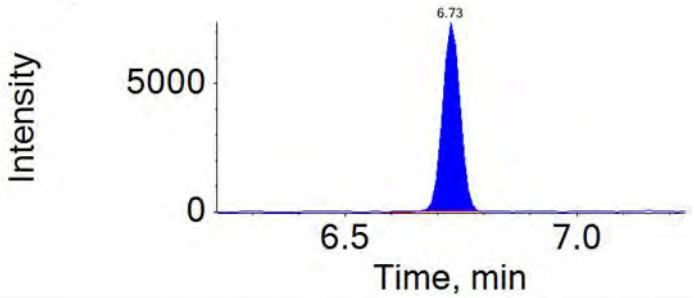
Component: PFTeDA
Primary Mass: 713.0 / 669.0



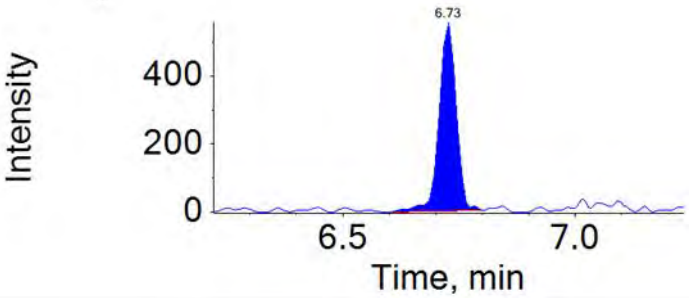
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



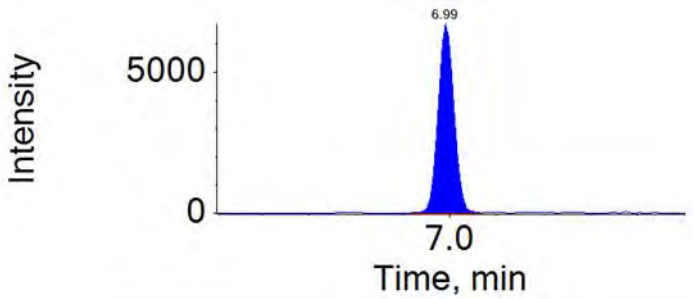
Component: PFHxDA
Primary Mass: 813.0 / 769.0



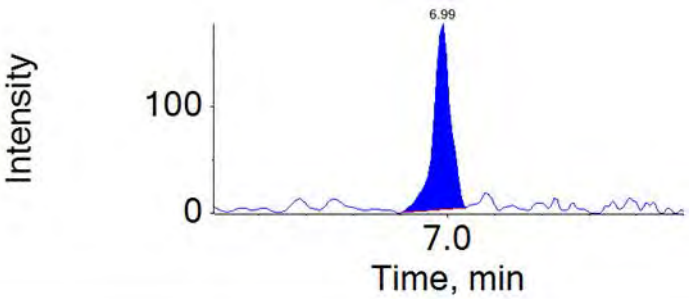
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	INBLK			**Data File:**		18NOV15D-06.wiff
Sample ID:	methanol + labels			**Acquis Date:**		2018-11-15T12:48:12
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	1			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV15DCCV1-4
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N/A			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV15D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	752690.7	732179.1	3	50	
13C2-PFOA	5.0	524540.4	479663.2	9	50	
13C4-PFOS	4.8	277209.8	269685.3	3	50	
13C2-PFDA	5.0	320842.0	302309.9	6	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	846144.3	13C3-PFBA	752690.7	1.124	5.000	5.040	101	70-130	
E13C5-PFPeA	794384.0	13C3-PFBA	752690.7	1.055	5.000	4.734	95	70-130	
E13C3-PFBS	498508.5	13C3-PFBA	752690.7	0.662	4.650	4.675	101	70-130	
E13C2-4:2-FTS	54878.9	13C2-PFOA	524540.4	0.105	4.670	4.660	100	70-130	
E13C5-PFHxA	710258.0	13C2-PFOA	524540.4	1.354	5.000	4.891	98	70-130	
E13C3-PFHxS	363590.9	13C2-PFOA	524540.4	0.693	4.730	4.756	101	70-130	
E13C4-PFHpA	564796.4	13C2-PFOA	524540.4	1.077	5.000	4.851	97	70-130	
E13C2-6:2-FTS	40761.5	13C2-PFOA	524540.4	0.078	4.750	5.199	109	70-130	
E13C8-PFOA	982107.7	13C2-PFOA	524540.4	1.872	5.000	5.158	103	70-130	
E13C8-PFOS	296151.8	13C4-PFOS	277209.8	1.068	4.780	4.734	99	70-130	
E13C9-PFNA	505858.8	13C4-PFOS	277209.8	1.825	5.000	5.088	102	70-130	
E13C6-PFDA	706781.0	13C2-PFDA	320842.0	2.203	5.000	5.141	103	70-130	
E13C2-8:2-FTS	29281.7	13C2-PFDA	320842.0	0.091	4.790	4.552	95	70-130	
E13C8-PFOSA	717711.5	13C2-PFDA	320842.0	2.237	5.000	4.959	99	70-130	
Ed3-NMeFOSAA	82084.3	13C2-PFDA	320842.0	0.256	5.000	4.618	92	70-130	
E13C7-PFUnDA	288799.8	13C2-PFDA	320842.0	0.900	5.000	5.226	105	70-130	
Ed5-NEtFOSAA	67339.9	13C2-PFDA	320842.0	0.210	5.000	4.440	89	70-130	
E13C2-PFDoDA	596655.3	13C2-PFDA	320842.0	1.860	5.000	4.828	97	70-130	
Ed7-NMePFOSAE	360623.2	13C2-PFDA	320842.0	1.124	5.000	4.864	97	70-130	
Ed3-NMePFOSA	79780.5	13C2-PFDA	320842.0	0.249	5.000	4.518	90	70-130	
Ed9-NEtPFOSAE	293338.6	13C2-PFDA	320842.0	0.914	5.000	4.755	95	70-130	
Ed5-NEtPFOSA	63584.6	13C2-PFDA	320842.0	0.198	5.000	4.649	93	70-130	
E13C2-PFTeDA	458603.0	13C2-PFDA	320842.0	1.429	5.000	5.018	100	70-130	

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

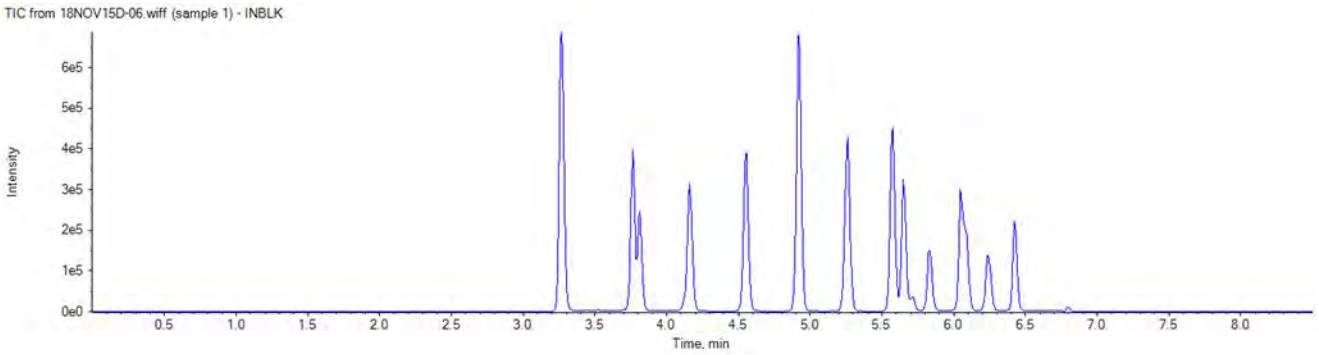
Analyte Quantitation Peak Table

Sample Name: INBLK **Instrument Name:** LM27631 **File Name:** 18NOV15D-06.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	N/A	N/A	N/A		A	13C4-PFBA	3.27	846144.3	N/A	
PFPeA	N/A	N/A	N/A		A	13C5-PFPeA	3.76	794384.0	N/A	
PFBS	N/A	N/A	N/A		A	13C3-PFBS	3.81	498508.5	N/A	
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.13	54878.9	N/A	
PFHxA	N/A	N/A	N/A		A	13C5-PFHxA	4.16	710258.0	N/A	
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.81	498508.5	N/A	
PFHpA	N/A	N/A	N/A		A	13C4-PFHpA	4.55	564796.4	N/A	
PFHxS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	363590.9	N/A	
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.91	40761.5	N/A	
PFHpS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	363590.9	N/A	
PFOA	N/A	N/A	N/A		A	13C8-PFOA	4.92	982107.7	N/A	
PFOS	N/A	N/A	N/A		A	13C8-PFOS	5.25	296151.8	N/A	
PFNA	N/A	N/A	N/A		A	13C9-PFNA	5.27	505858.8	N/A	
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.25	296151.8	N/A	
PFDA	N/A	N/A	N/A		A	13C6-PFDA	5.57	706781.0	N/A	
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.58	29281.7	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.65	717711.5	N/A	
NMeFOSAA	N/A	N/A	N/A		A	d3-NMeFOSAA	5.71	82084.3	N/A	
PFDS	N/A	N/A	N/A		A	13C8-PFOS	5.25	296151.8	N/A	
PFUnDA	N/A	N/A	N/A		A	13C7-PFUnDA	5.83	288799.8	N/A	
NEtFOSAA	N/A	N/A	N/A		A	d5-NEtFOSAA	5.84	67339.9	N/A	
PFDoDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	596655.3	N/A	
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.58	29281.7	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.09	360623.2	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.10	79780.5	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.25	296151.8	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.24	293338.6	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.26	63584.6	N/A	
PFTrDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	596655.3	N/A	
PFTeDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	458603.0	N/A	
PFHxDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	458603.0	N/A	
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	458603.0	N/A	

Total Ion Chromatogram

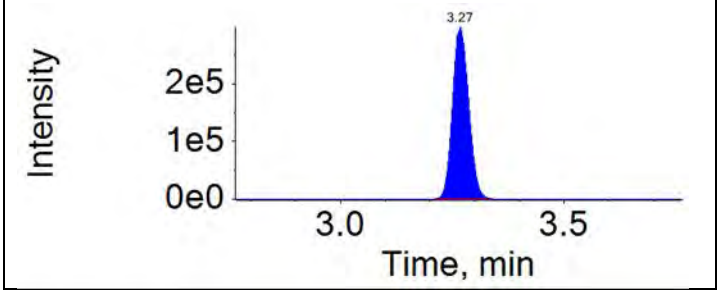


APPROVED
By JPT at 8:56 am, 11/16/18

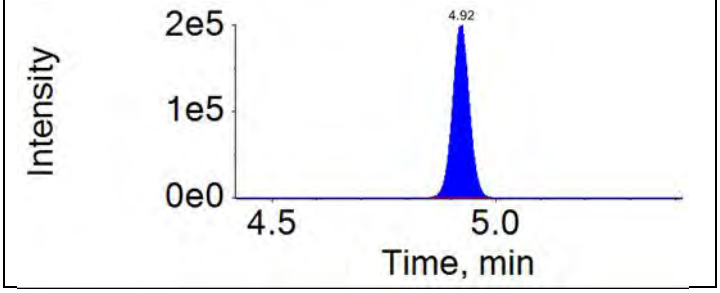
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

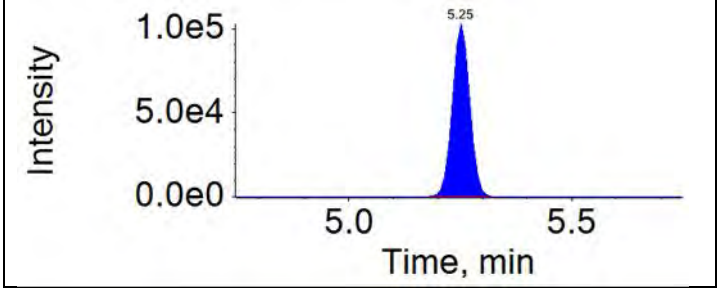
Injection Standard: 13C3-PFBA
216.0 / 172.0



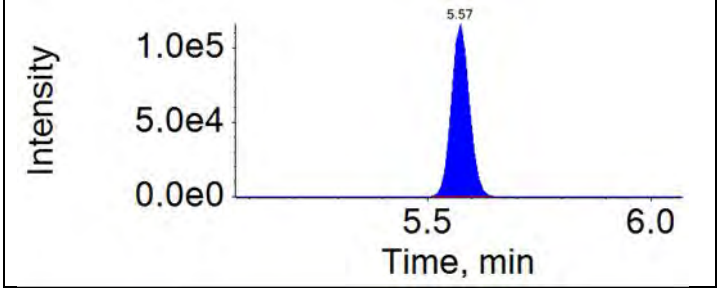
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

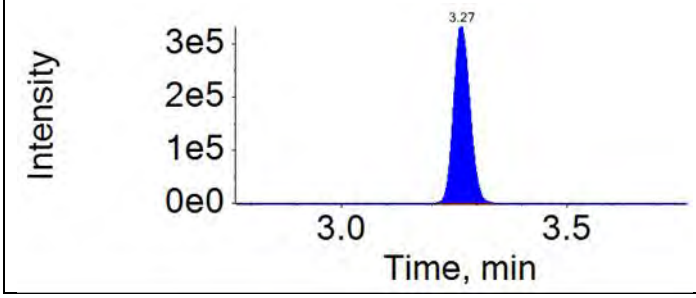


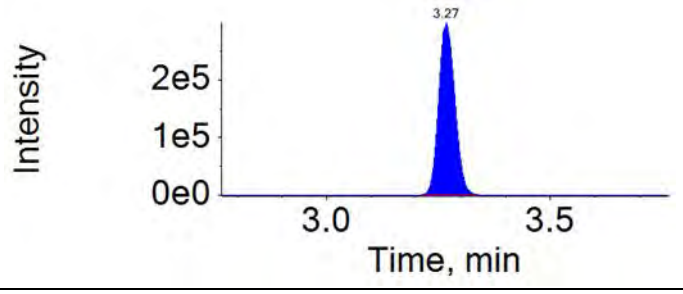
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

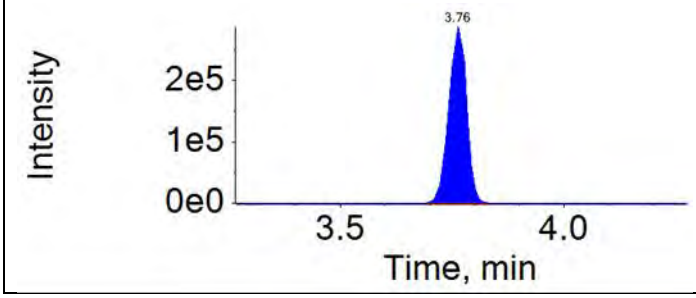
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

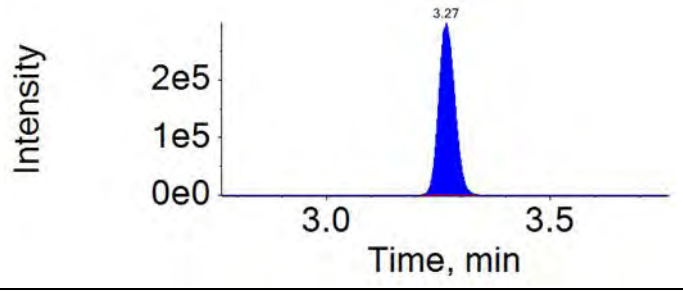
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



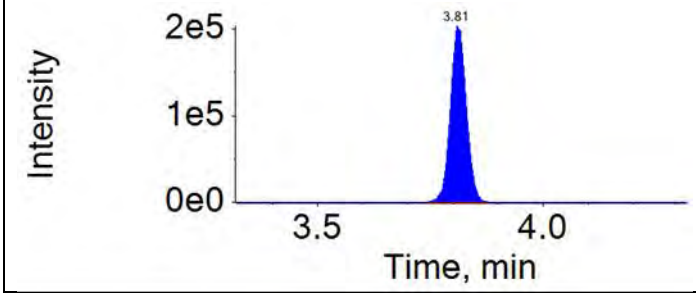


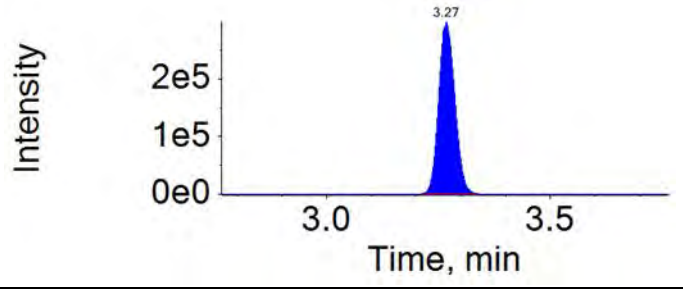
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



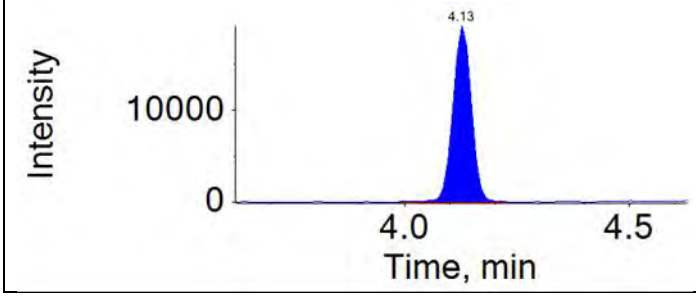


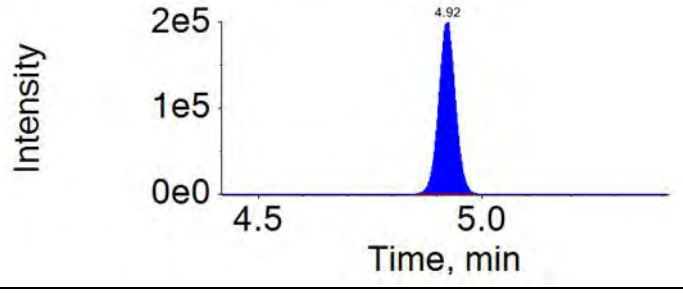
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





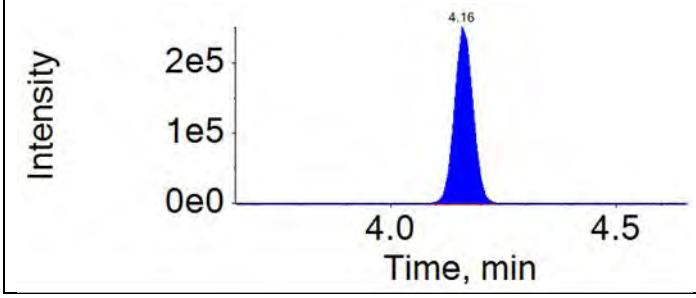
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

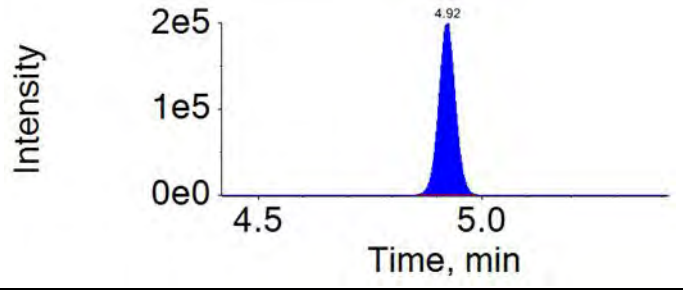




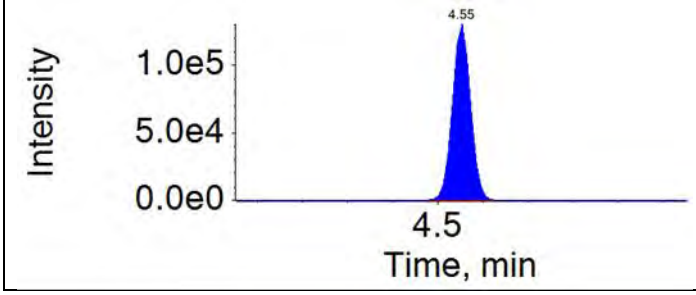
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

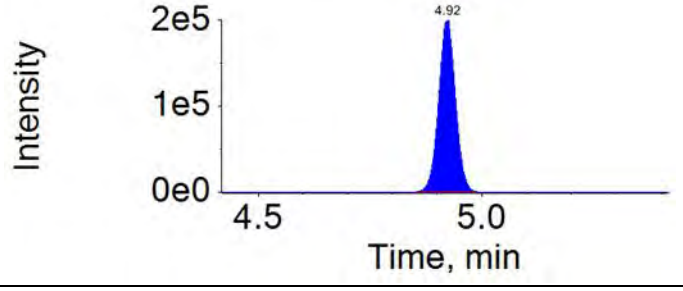
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



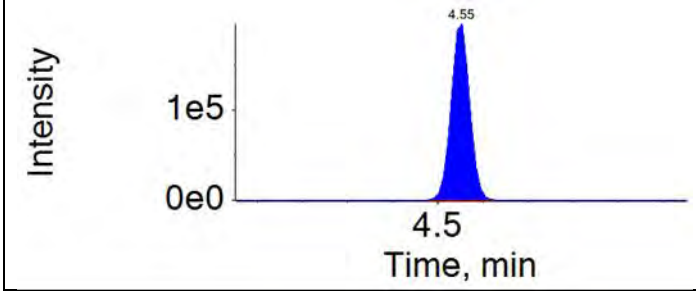


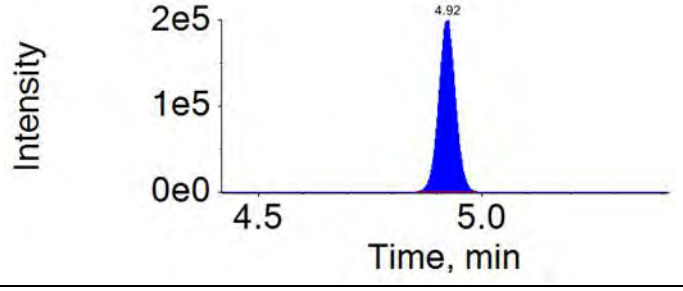
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



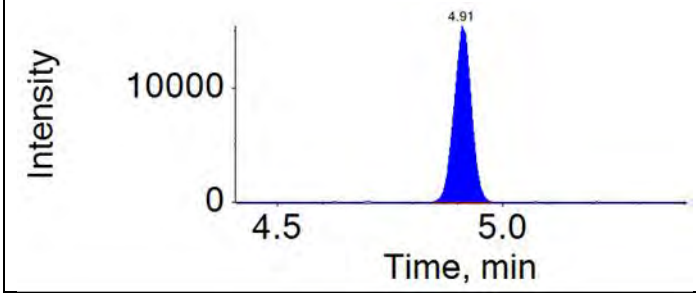


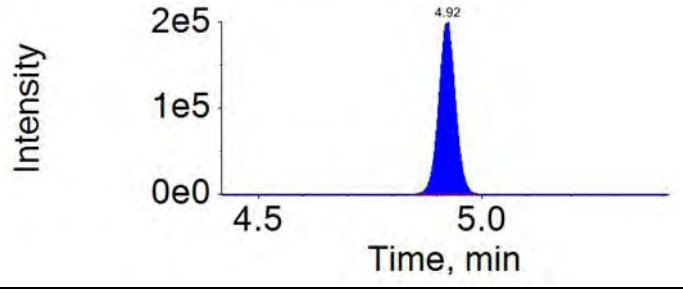
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

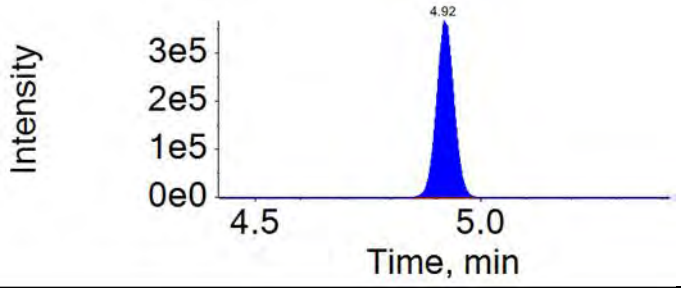
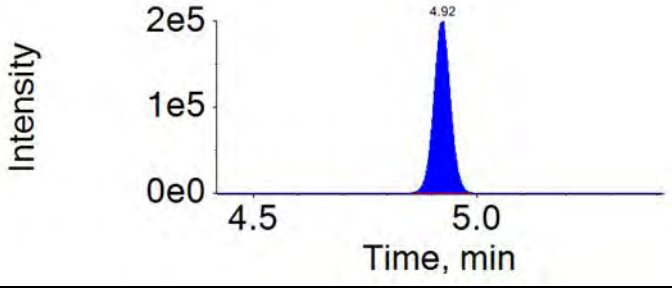


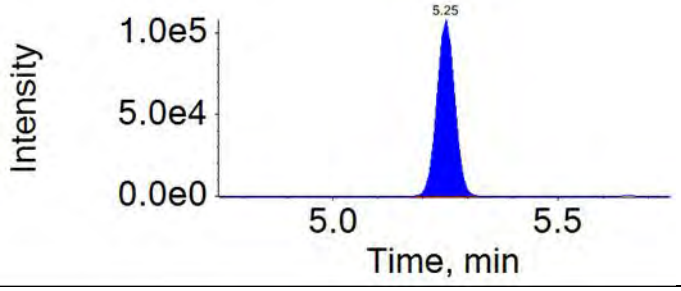
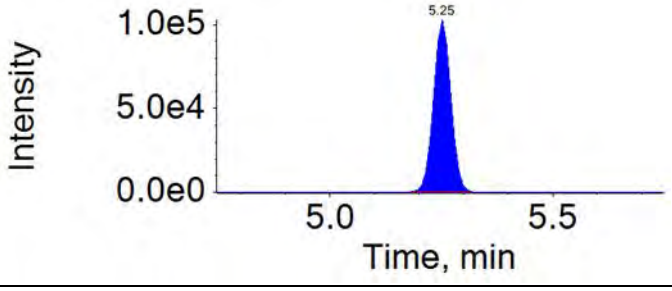


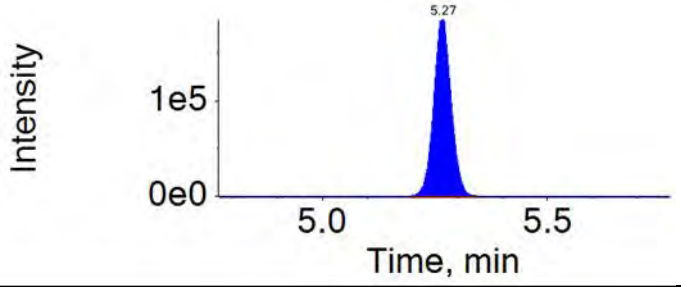
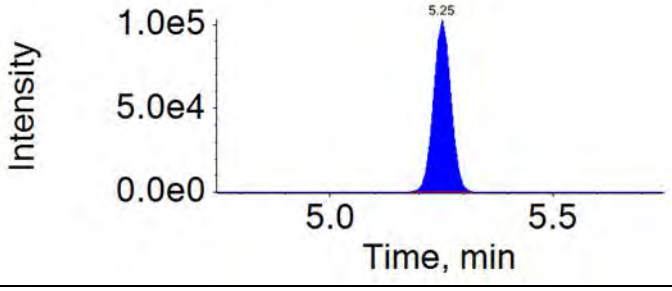
APPROVED
By JPT at 8:56 am, 11/16/18

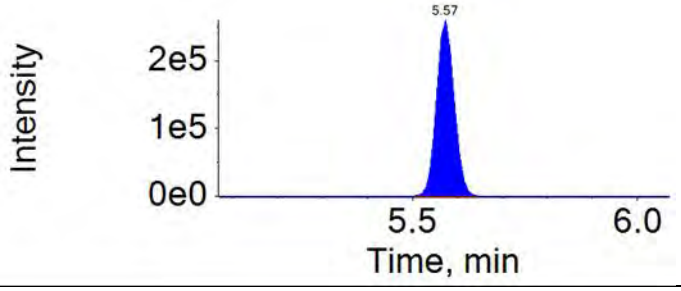
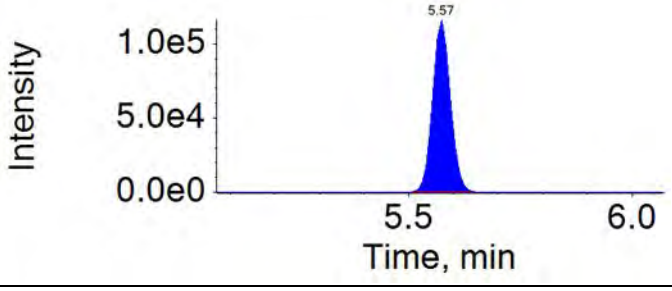
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

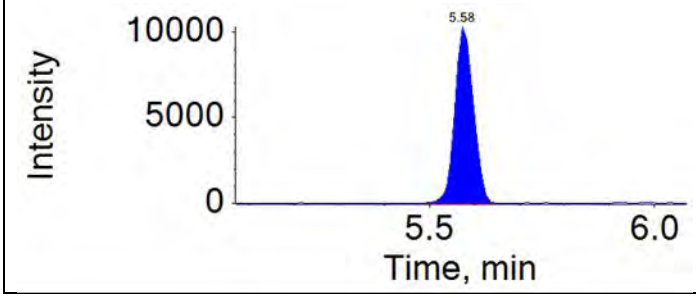
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

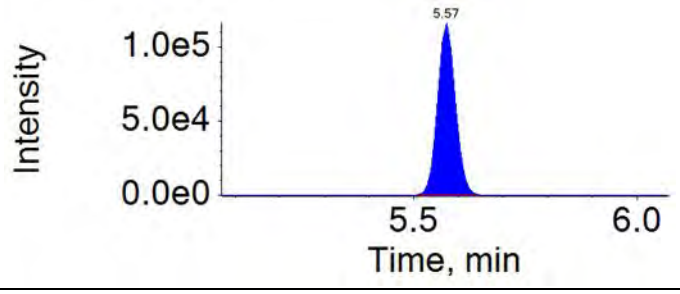
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

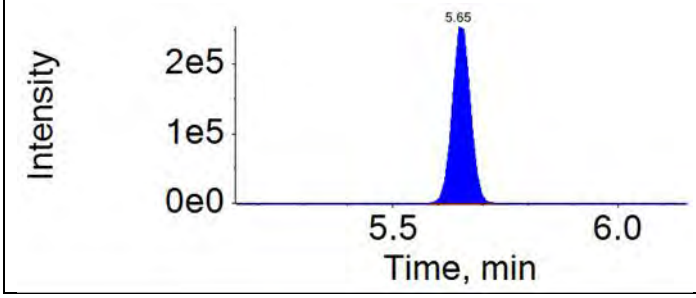
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

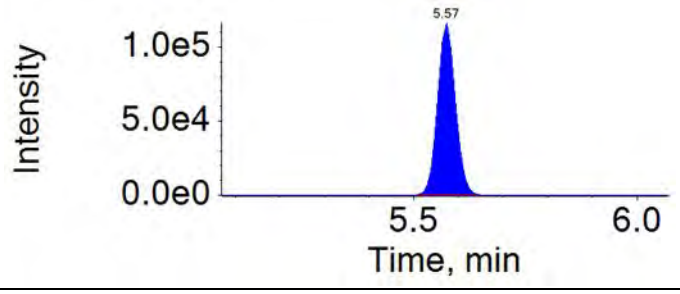
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



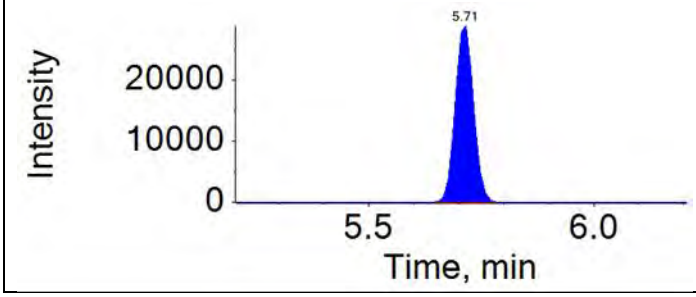


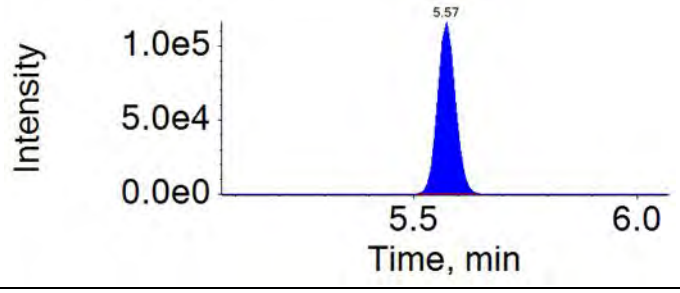
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



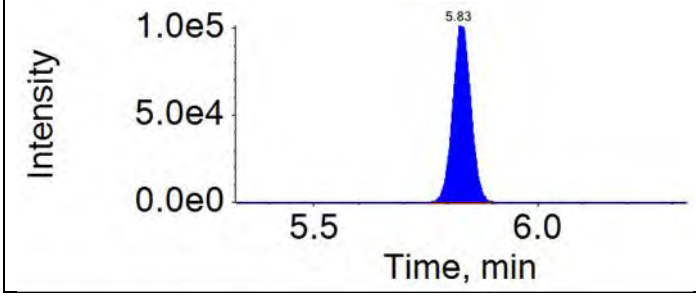


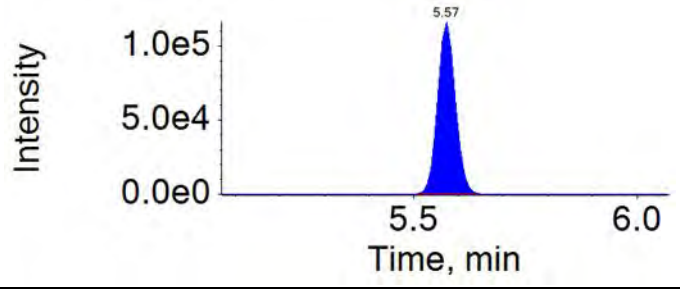
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0

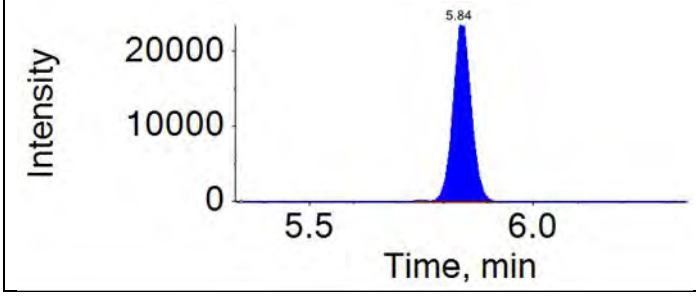
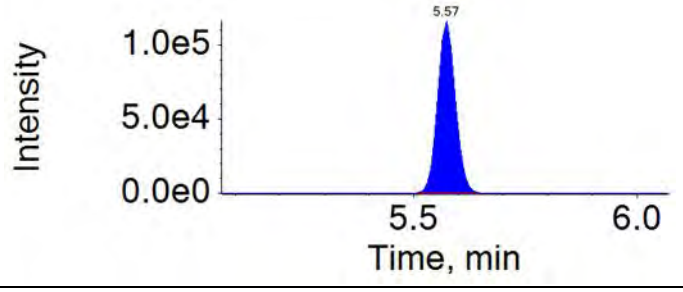


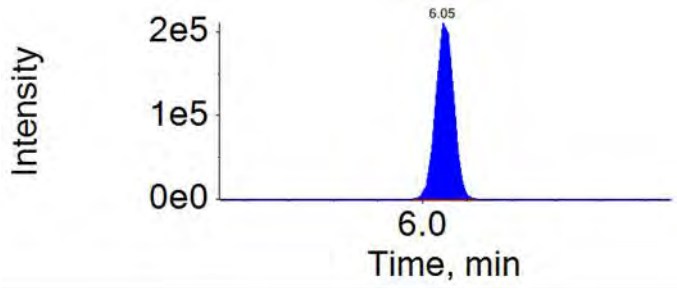
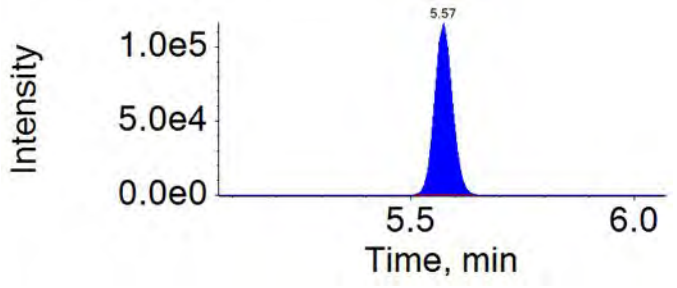


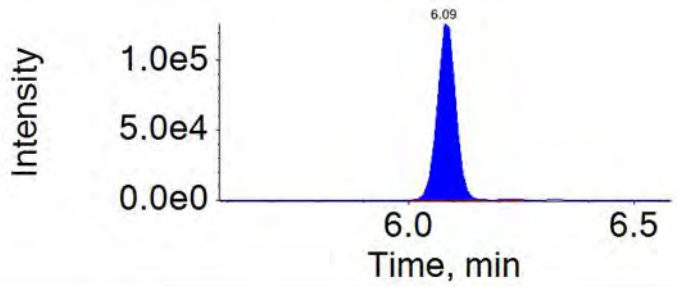
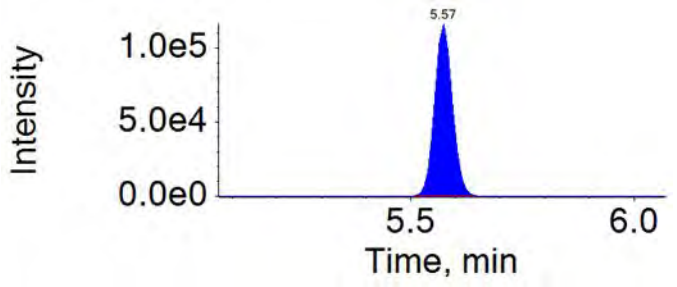
APPROVED
By JPT at 8:56 am, 11/16/18

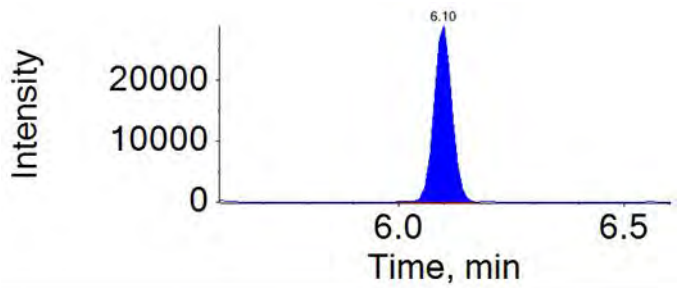
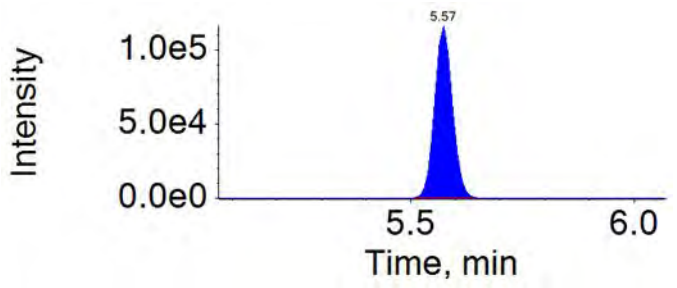
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

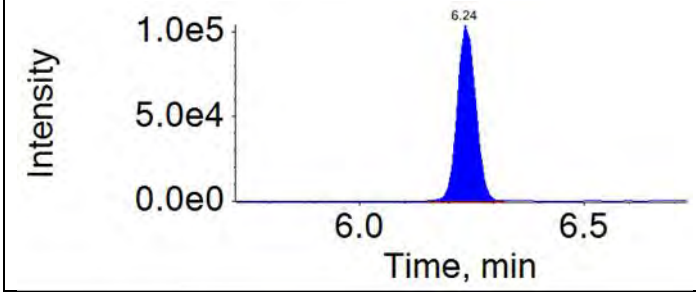
Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

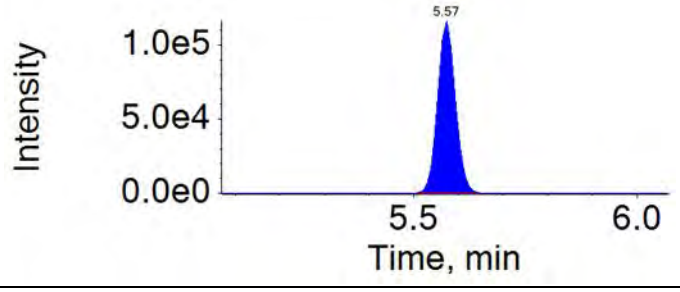
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

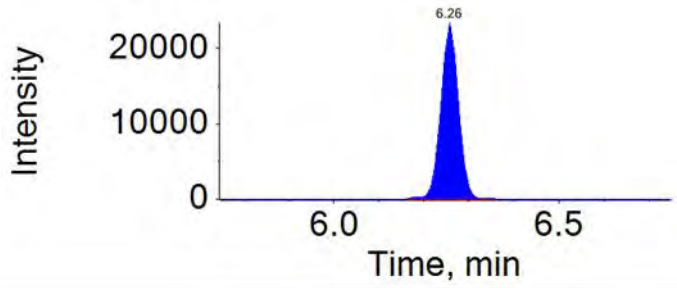
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

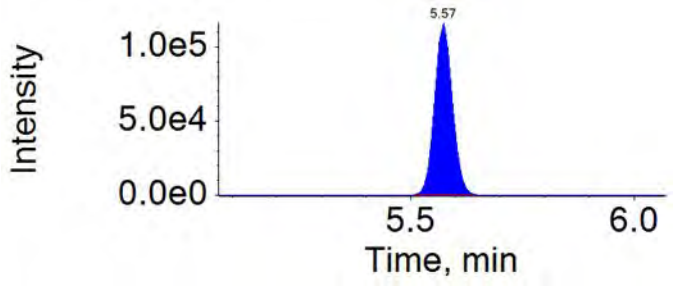
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



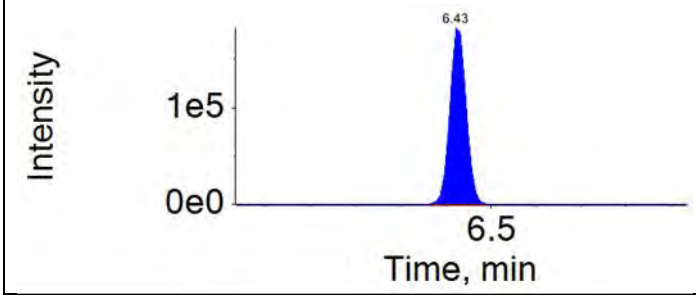


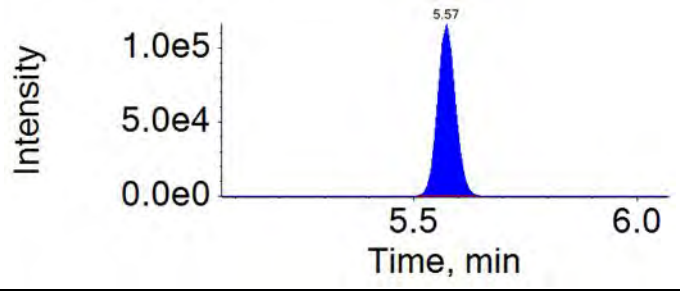
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





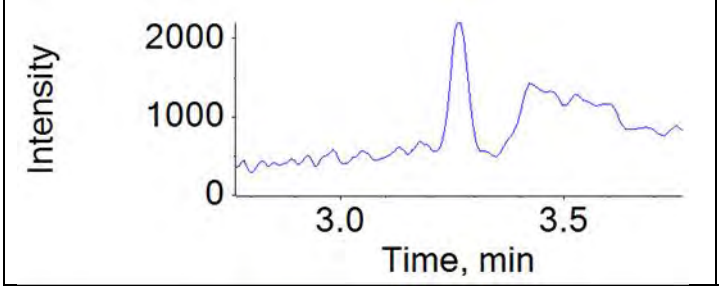
Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0

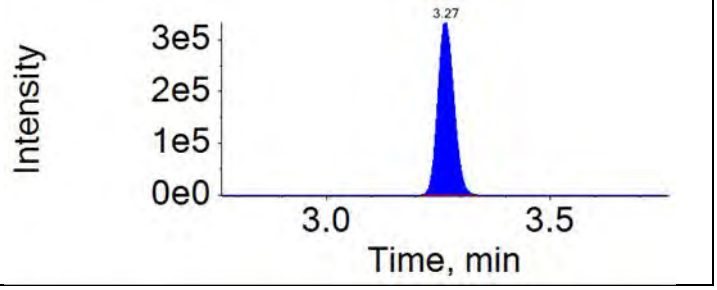




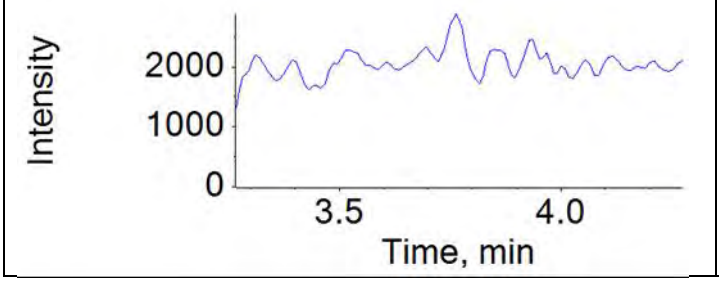
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

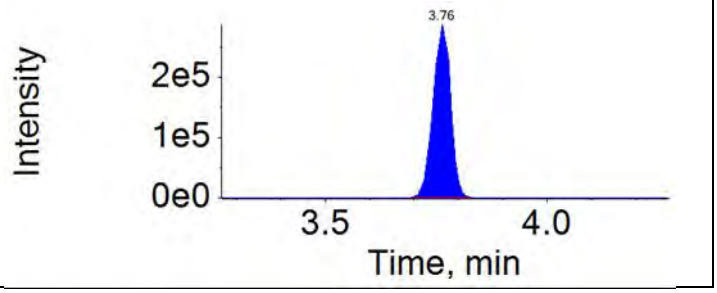
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



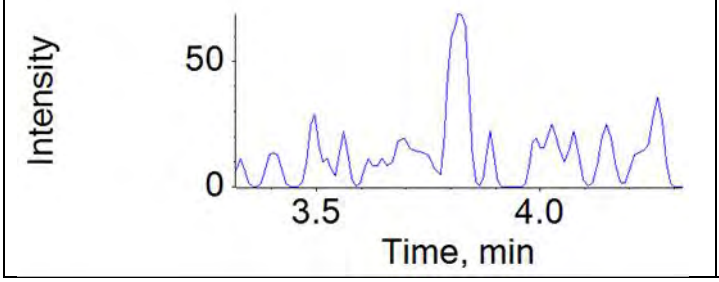


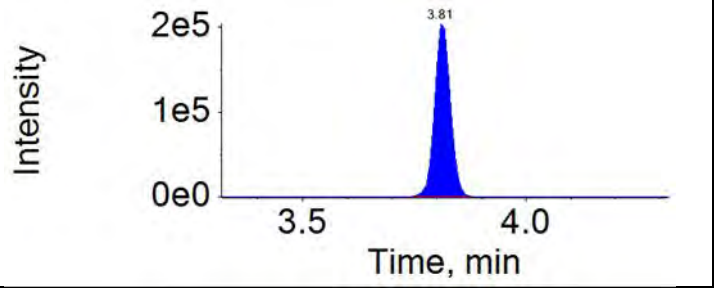
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



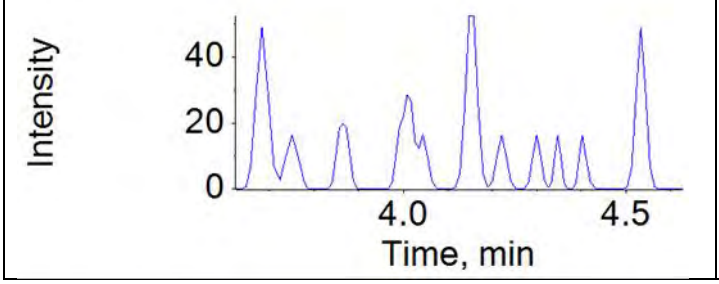


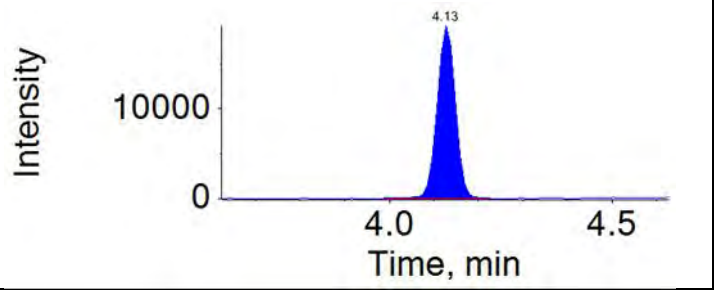
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



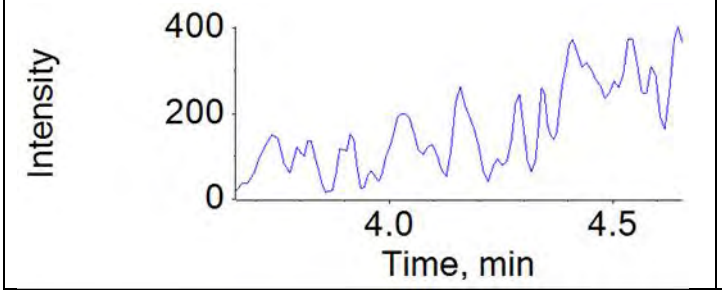


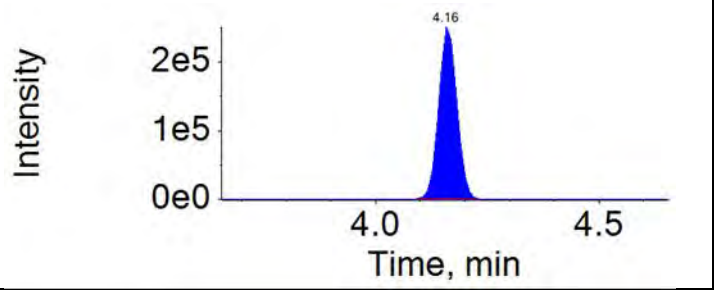
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

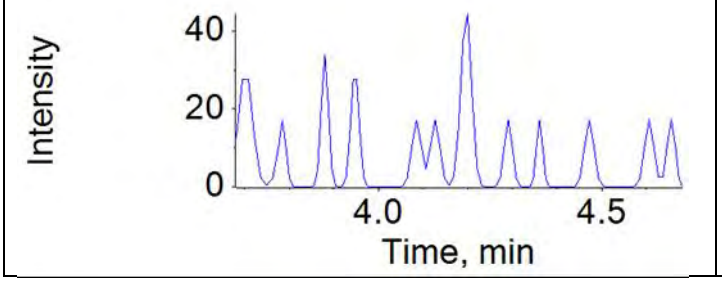
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

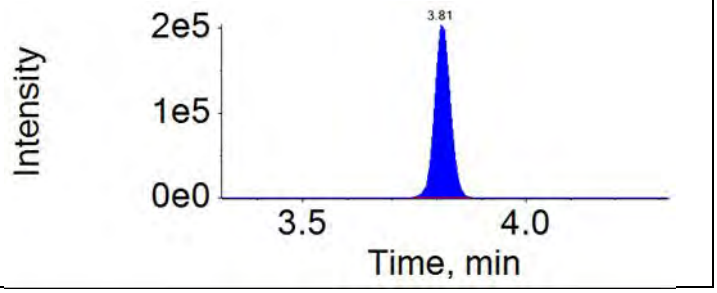
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



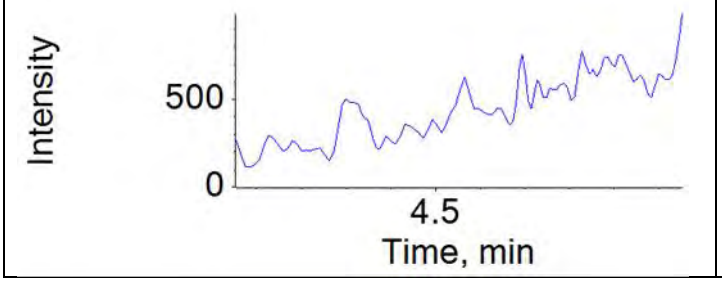


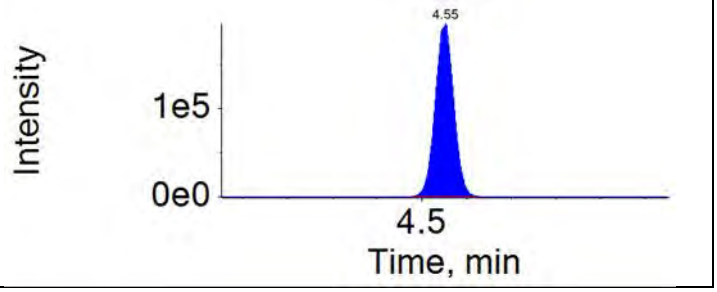
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



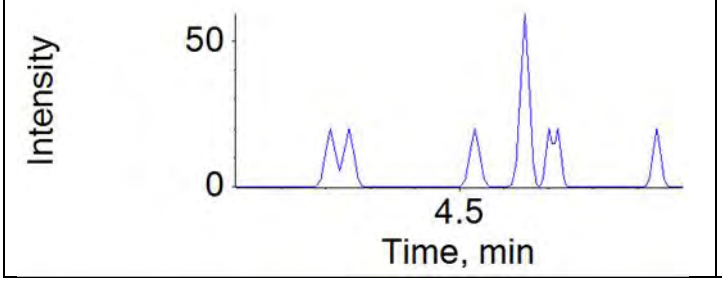


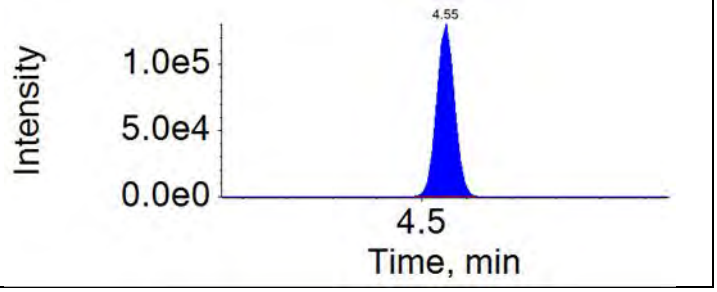
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0



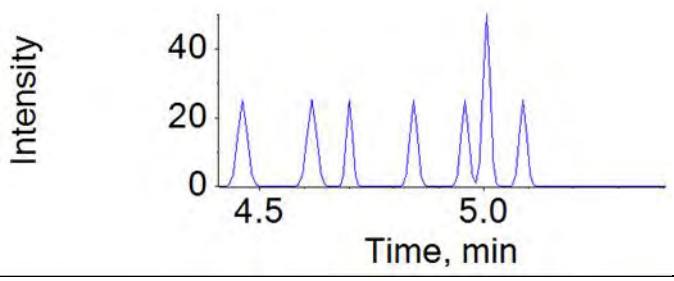
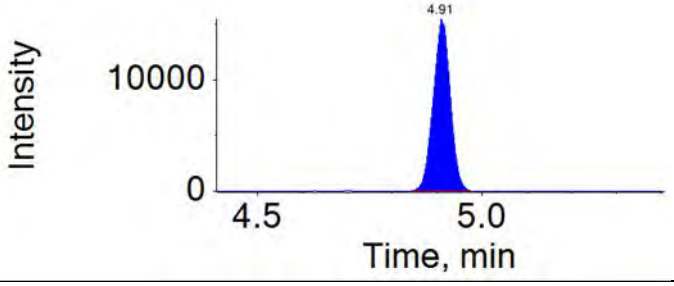


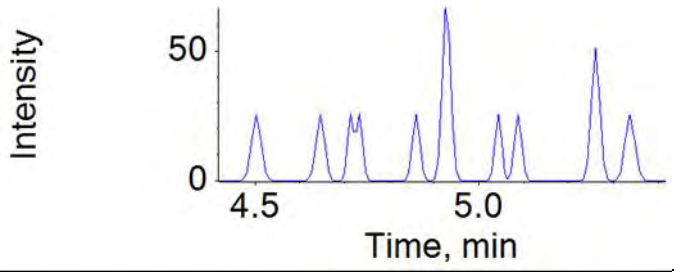
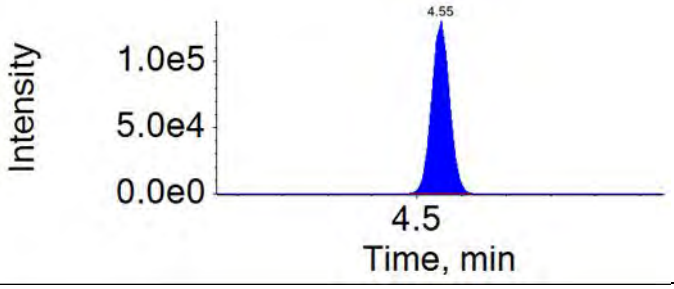
Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

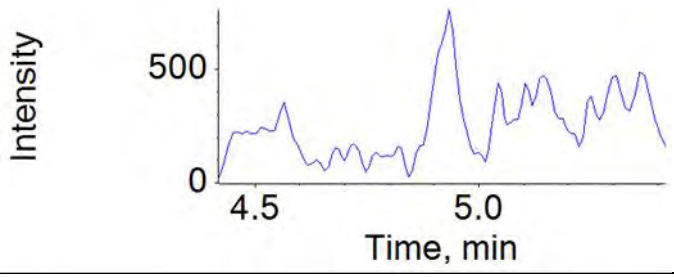
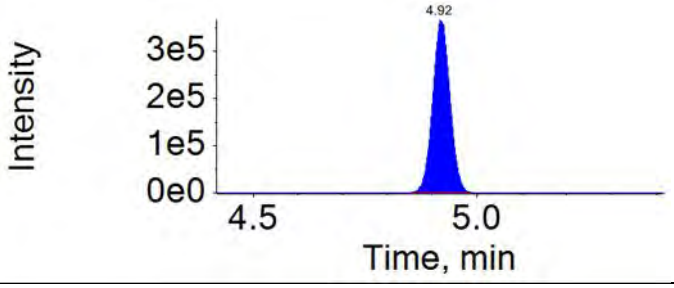


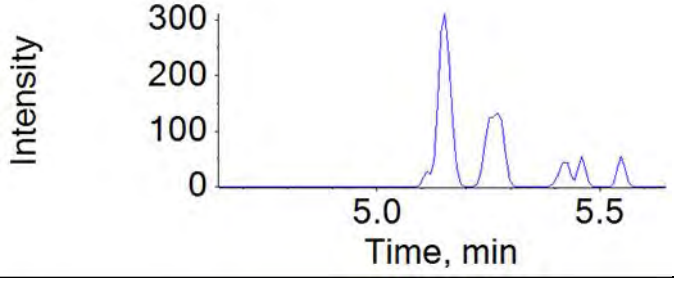
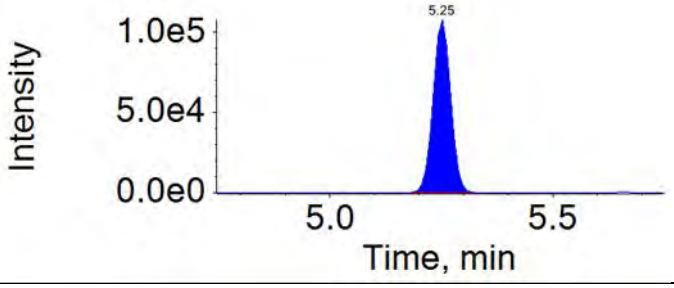


ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

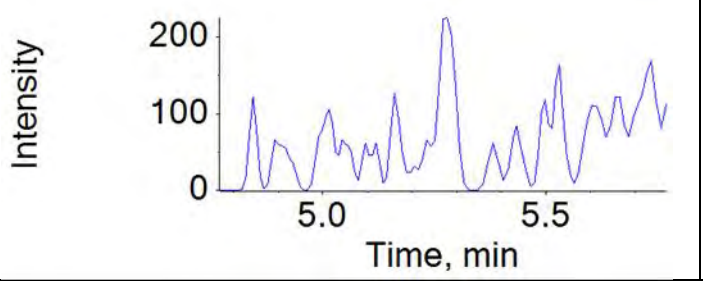
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

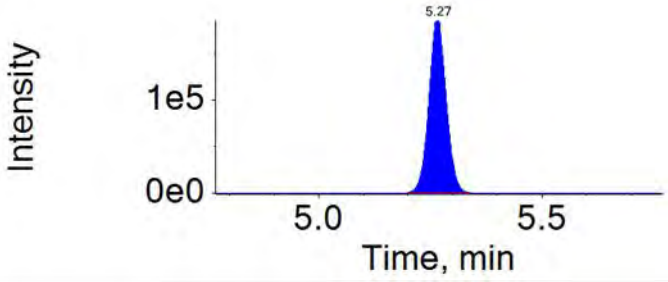
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

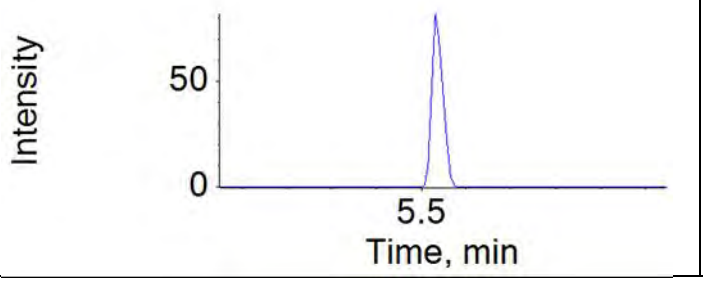
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

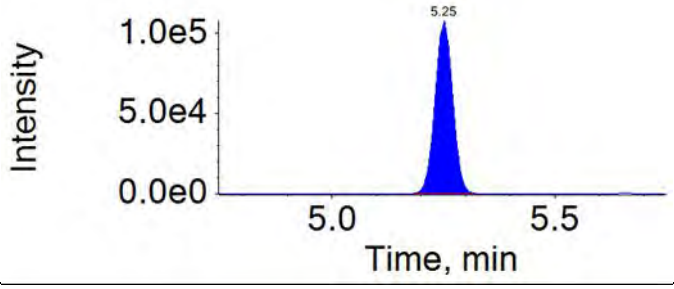
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



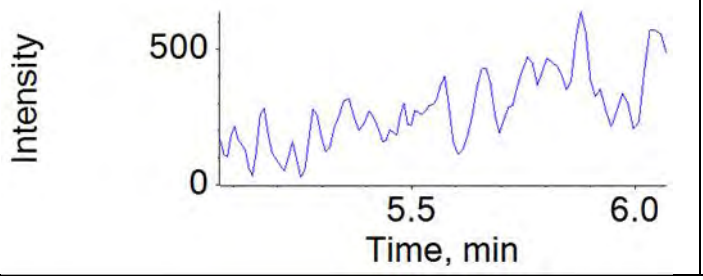


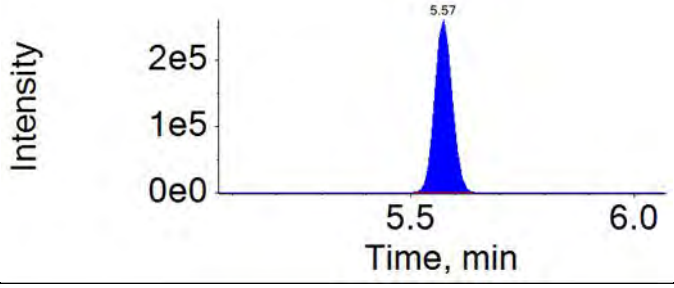
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



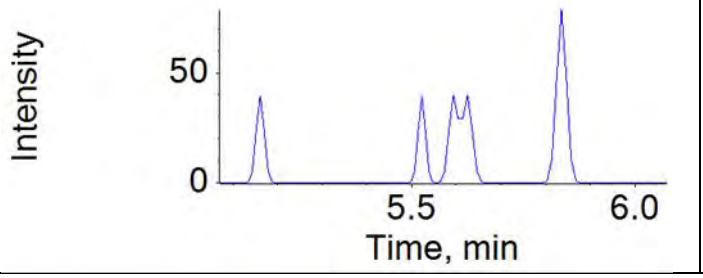


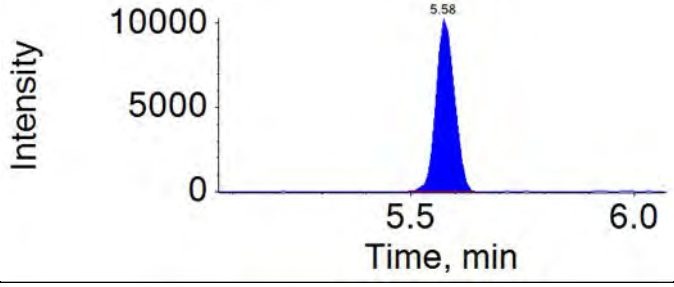
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



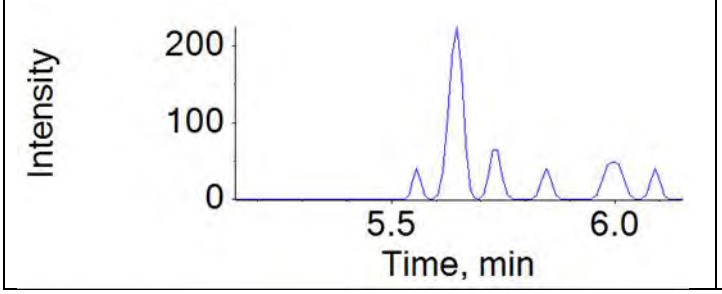


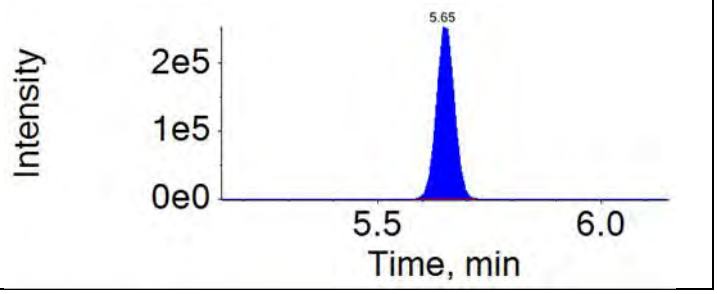
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

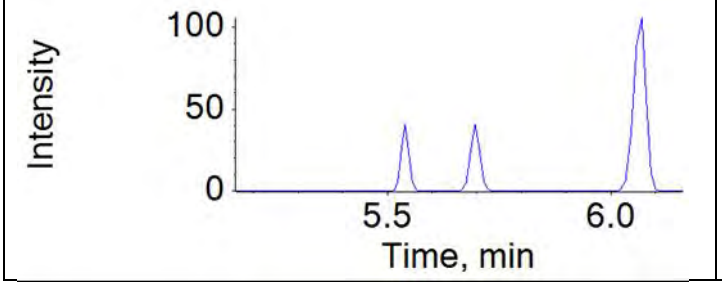
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

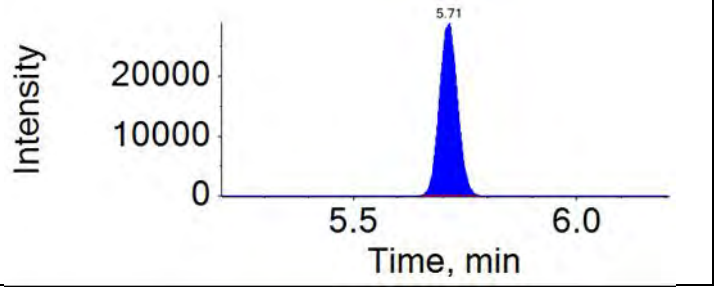
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



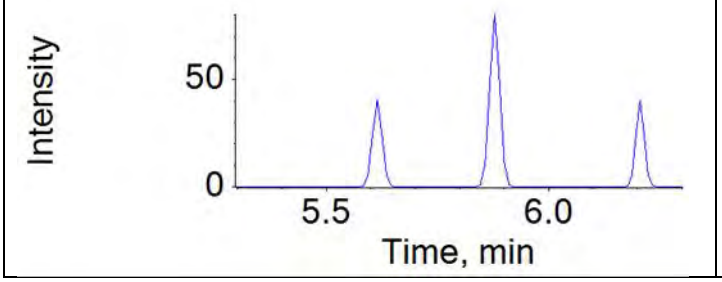


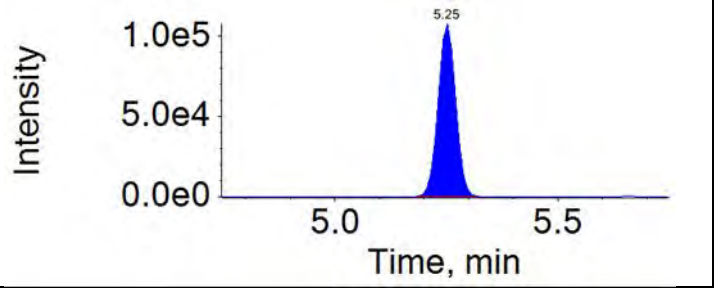
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



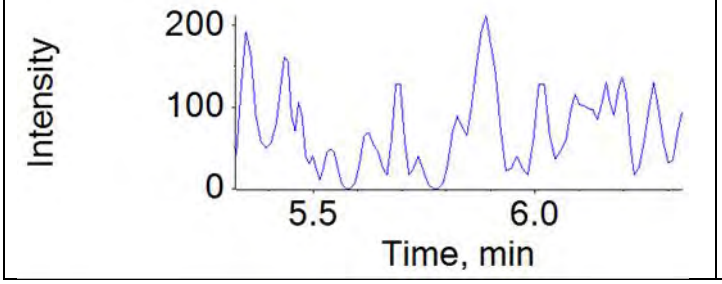


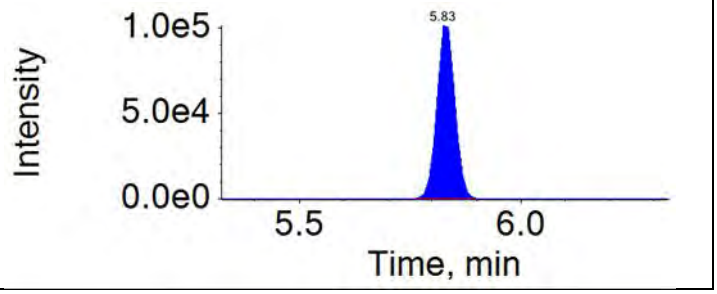
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



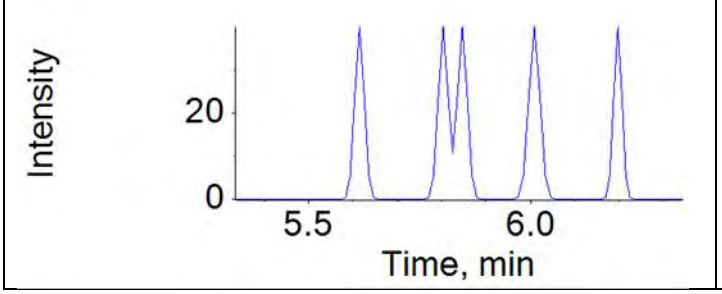


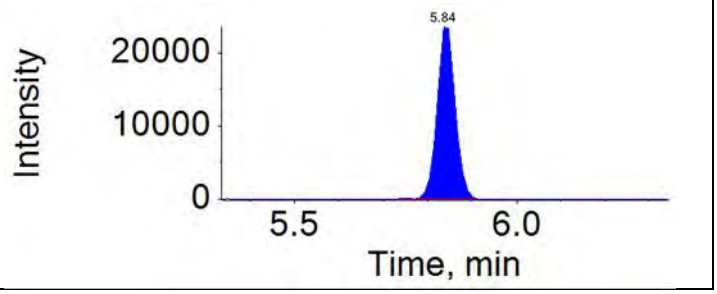
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

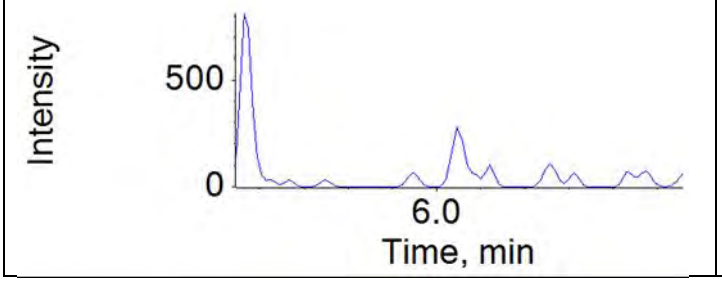
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

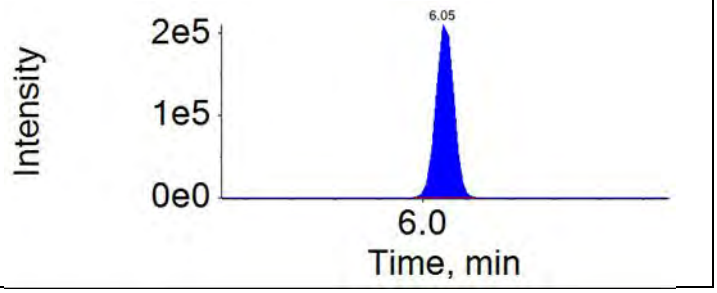
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



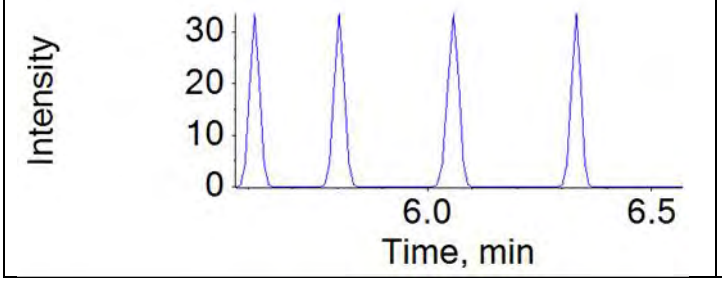


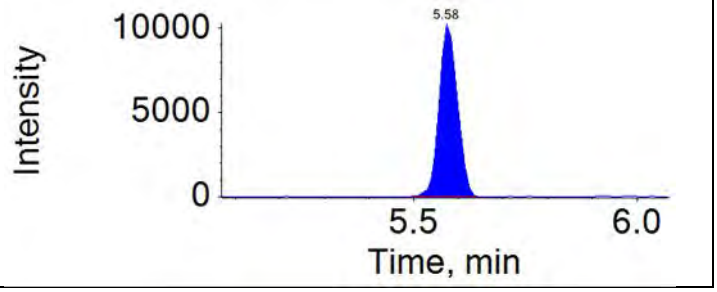
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



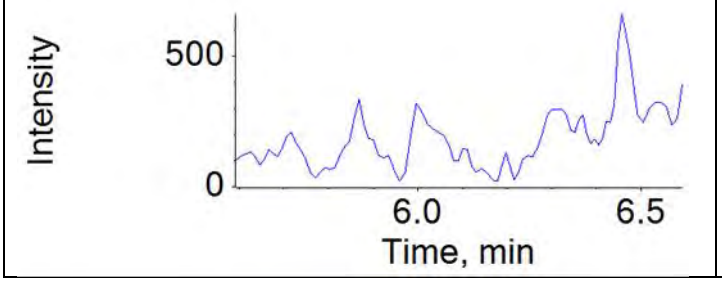


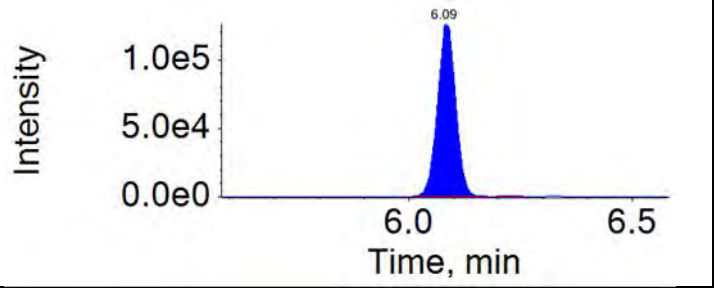
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



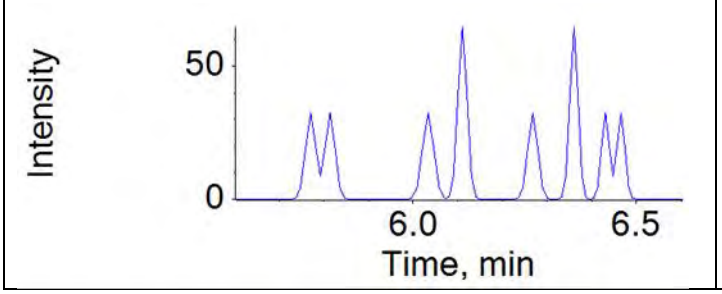


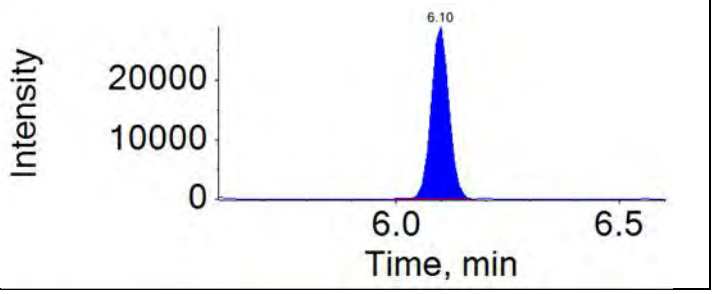
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

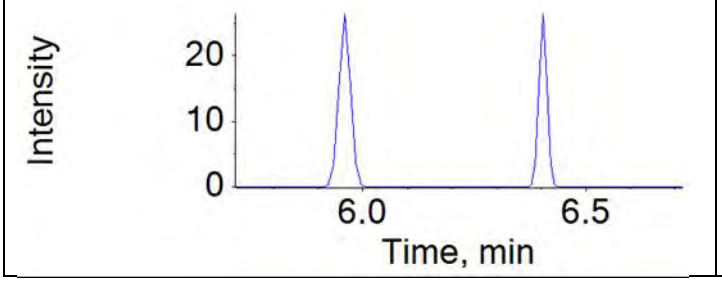
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

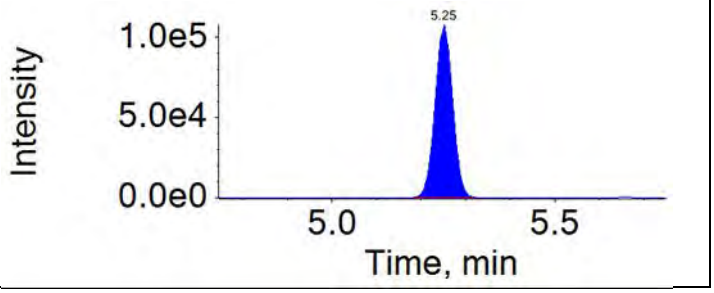
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



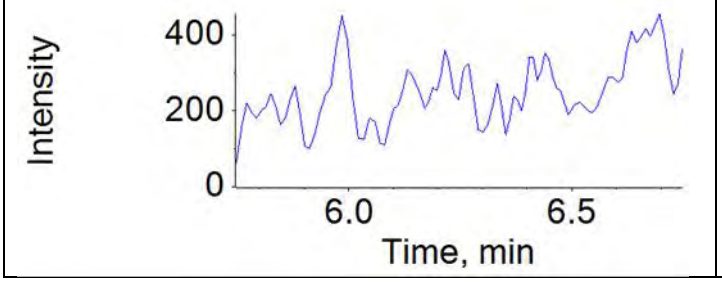


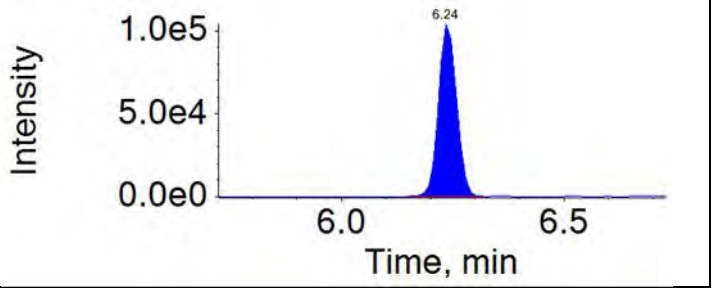
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



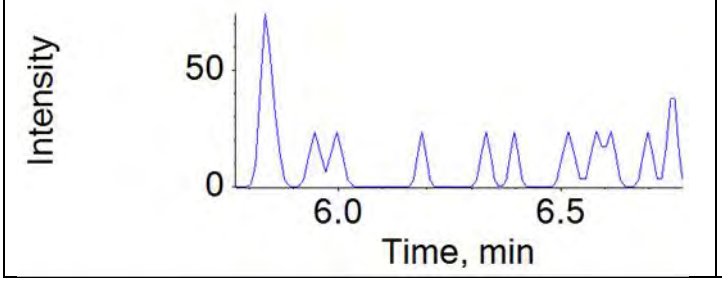


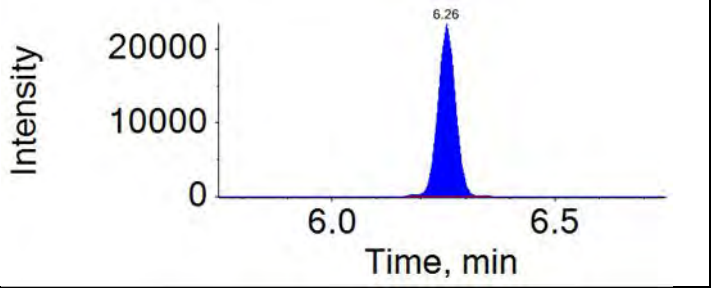
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



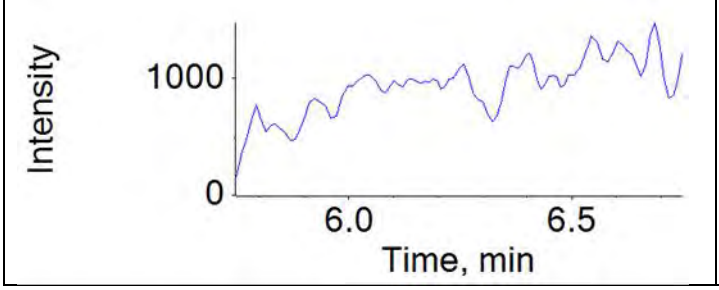


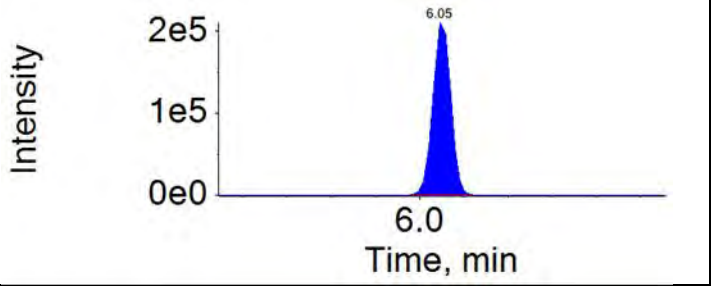
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

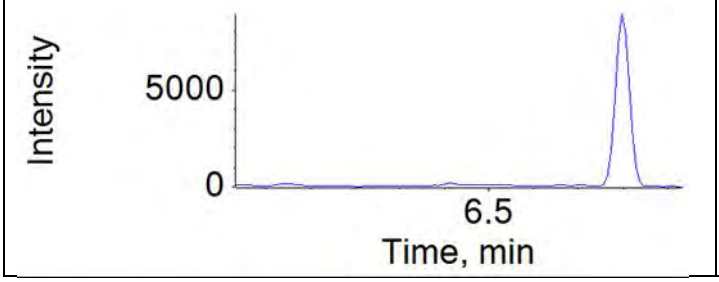
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

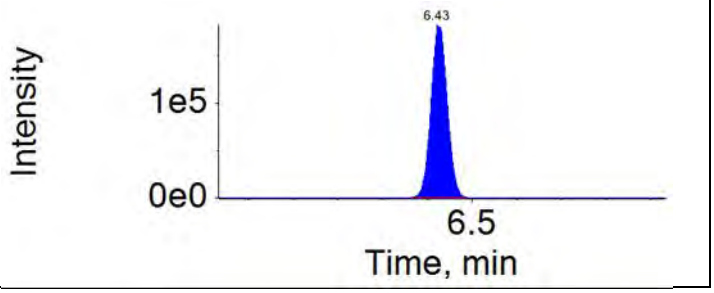
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



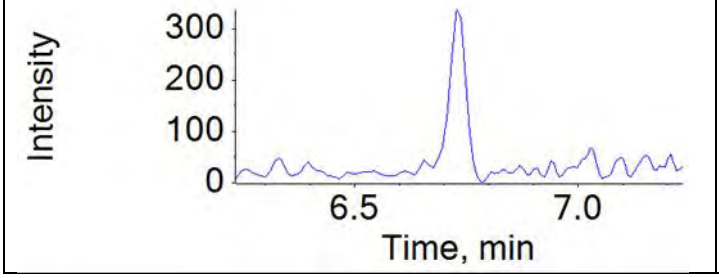


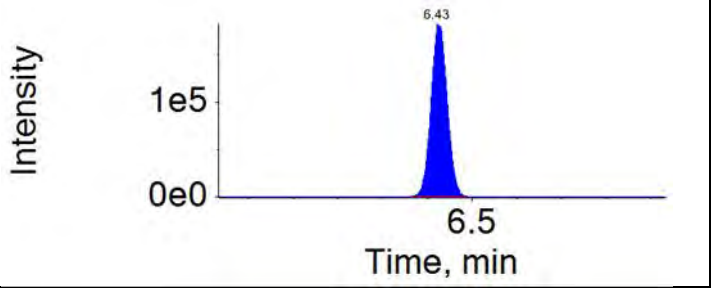
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



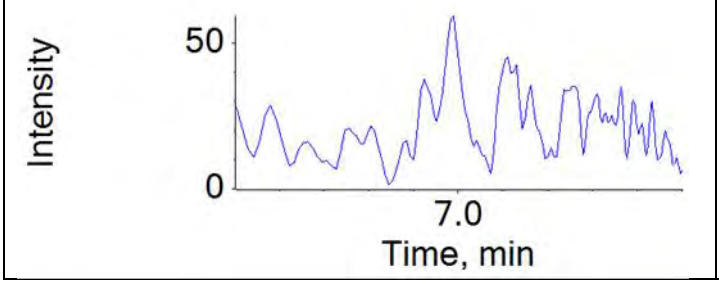


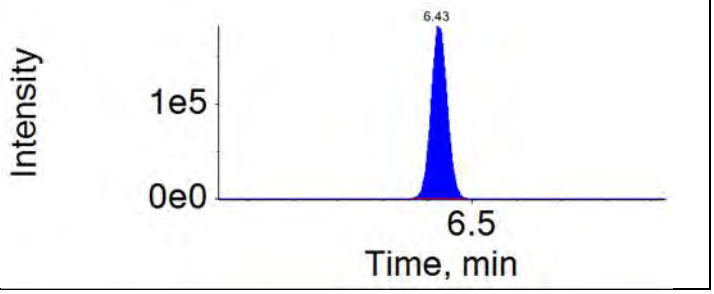
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0





APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Ion Ratio Report

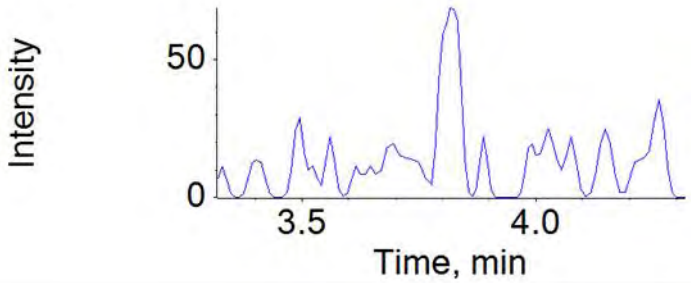
Sample Name: INBLK **Instrument Name:** LM27631 **File Name:** 18NOV15D-06.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	N/A	N/A	N/A	A	N/A	N/A			
PFBS_2	N/A	N/A	N/A	A	N/A	N/A		50	
4:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
4:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFHxA	N/A	N/A	N/A	A	N/A	N/A			
PFHxA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFPeS	N/A	N/A	N/A	A	N/A	N/A			
PFPeS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpA	N/A	N/A	N/A	A	N/A	N/A			
PFHpA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxS	N/A	N/A	N/A	A	N/A	N/A			
PFHxS_2	N/A	N/A	N/A	A	N/A	N/A		50	
6:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
6:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFHpS	N/A	N/A	N/A	A	N/A	N/A			
PFHpS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOA	N/A	N/A	N/A	A	N/A	N/A			
PFOA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOS	N/A	N/A	N/A	A	N/A	N/A			
PFOS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNA	N/A	N/A	N/A	A	N/A	N/A			
PFNA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNS	N/A	N/A	N/A	A	N/A	N/A			
PFNS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDA	N/A	N/A	N/A	A	N/A	N/A			
PFDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
8:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
8:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
NMeFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NMeFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDS	N/A	N/A	N/A	A	N/A	N/A			
PFDS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFUnDA	N/A	N/A	N/A	A	N/A	N/A			
PFUnDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
NEtFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NEtFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDoDA	N/A	N/A	N/A	A	N/A	N/A			
PFDoDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
10:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
10:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFTrDA	N/A	N/A	N/A	A	N/A	N/A			
PFTrDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTeDA	N/A	N/A	N/A	A	N/A	N/A			
PFTeDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxDA	N/A	N/A	N/A	A	N/A	N/A			
PFHxDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFODA	N/A	N/A	N/A	A	N/A	N/A			
PFODA_2	N/A	N/A	N/A	A	N/A	N/A		50	

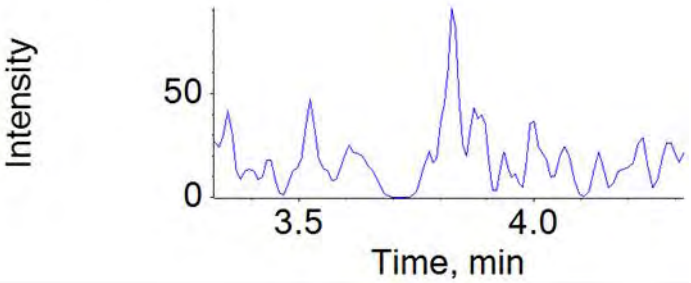
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

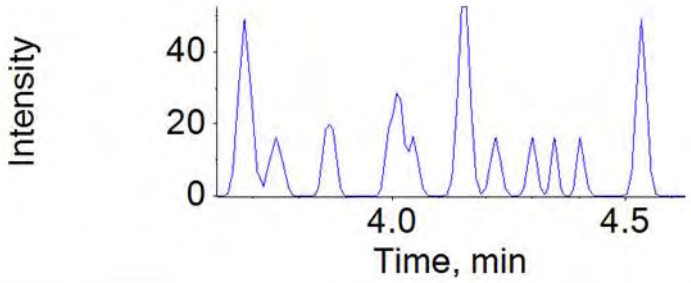
Component: PFBS
Primary Mass: 299.0 / 80.0



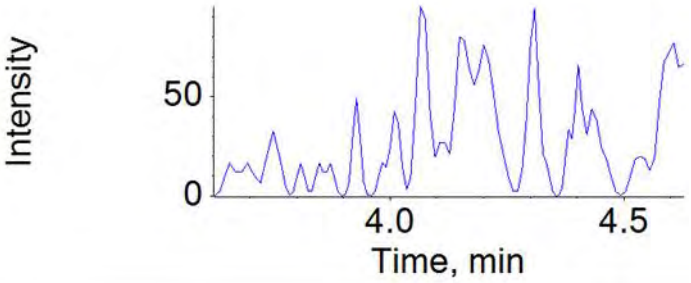
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



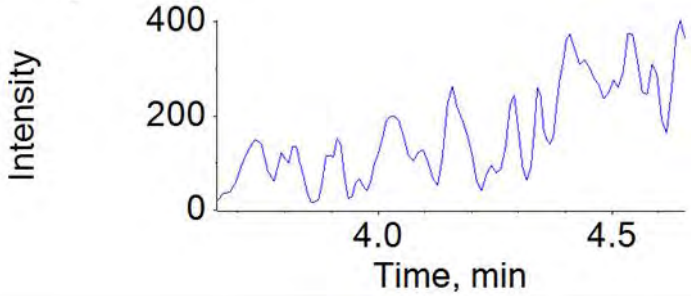
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



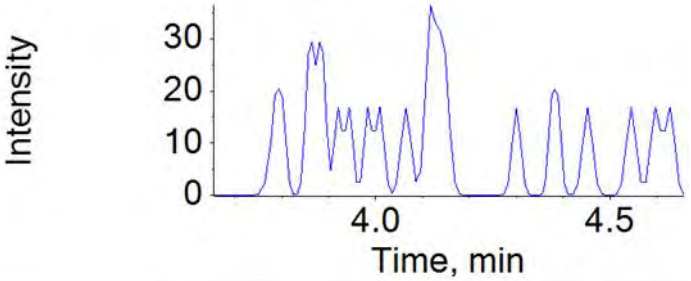
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



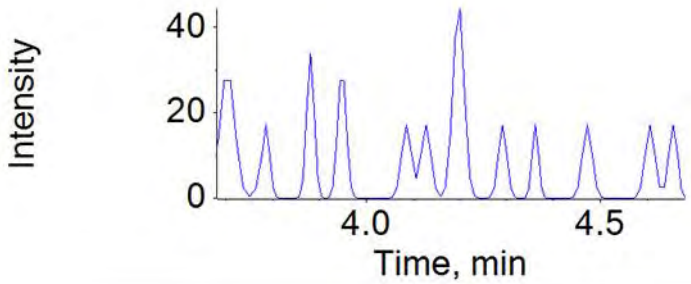
Component: PFHxA
Primary Mass: 313.0 / 269.0



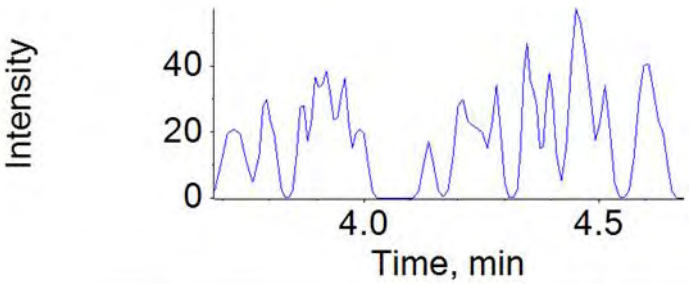
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



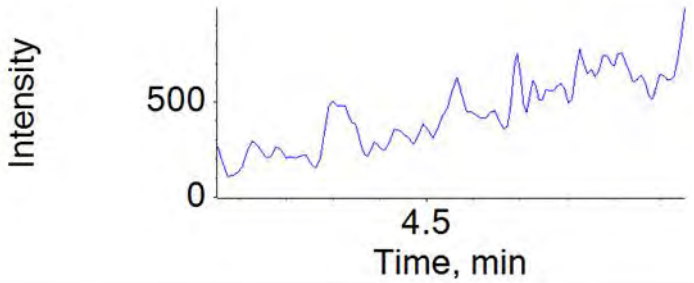
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



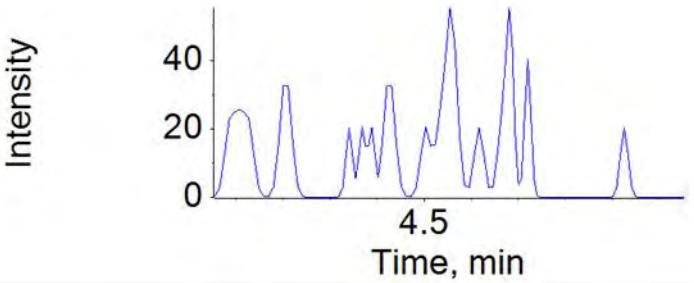
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By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

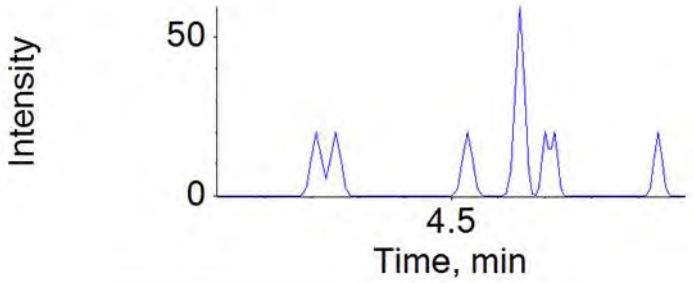
Component: PFHpA
Primary Mass: 363.0 / 319.0



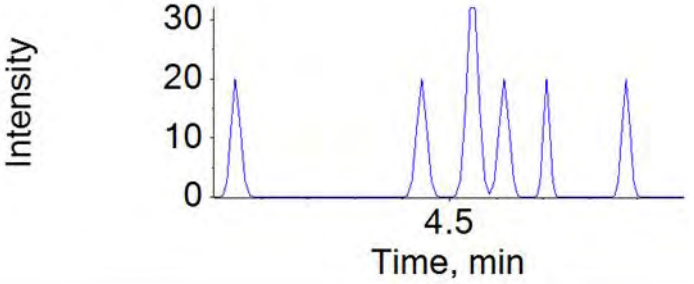
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



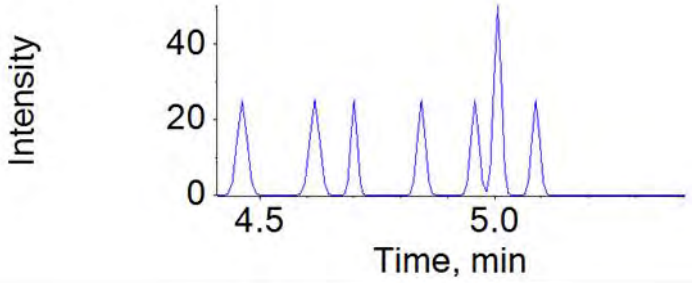
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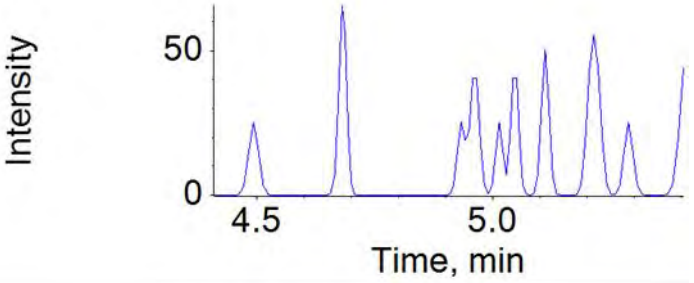
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



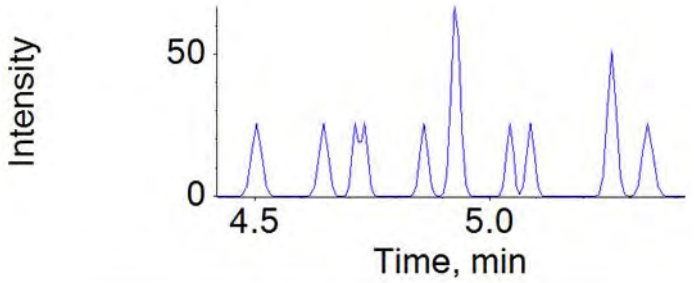
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



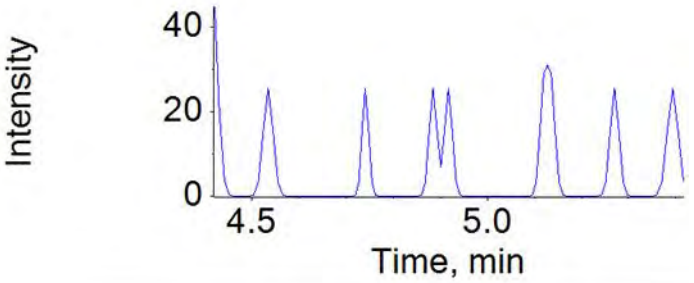
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



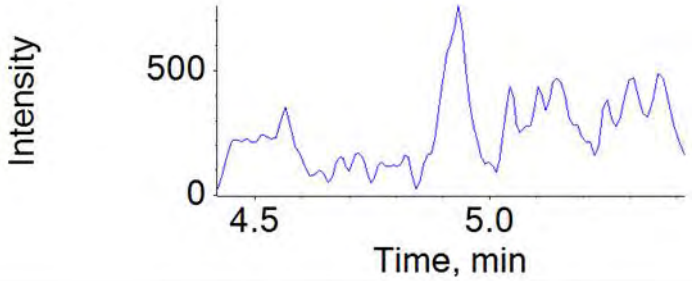
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



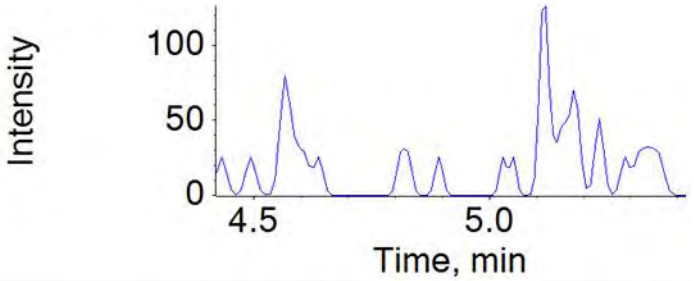
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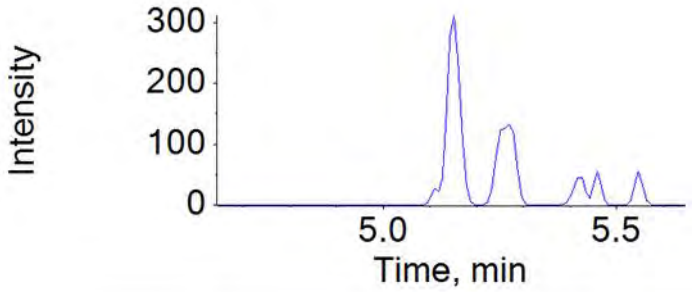
Component: PFOA
Primary Mass: 413.0 / 369.0



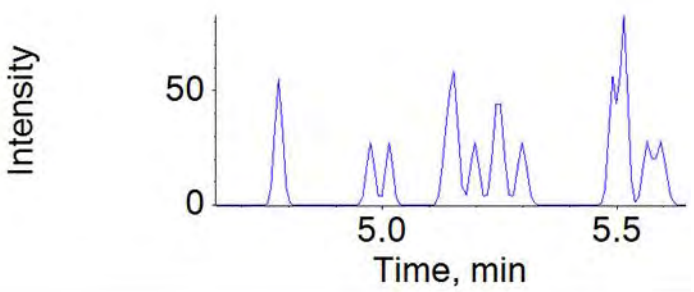
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



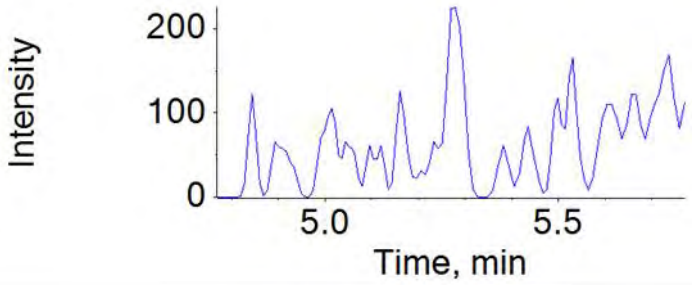
Component: PFOS
Primary Mass: 499.0 / 80.0



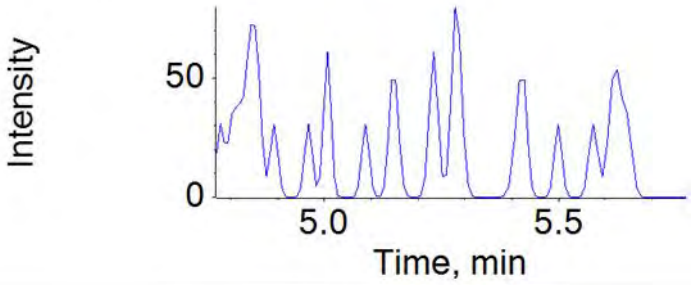
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



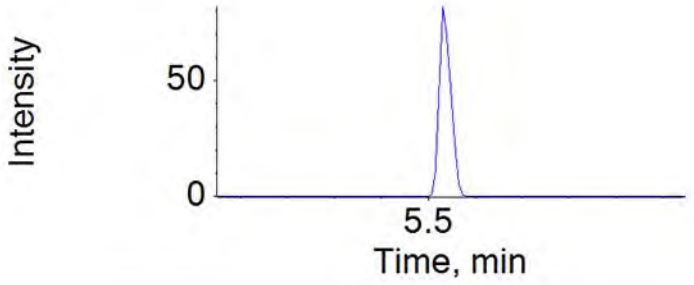
Component: PFNA
Primary Mass: 463.0 / 419.0



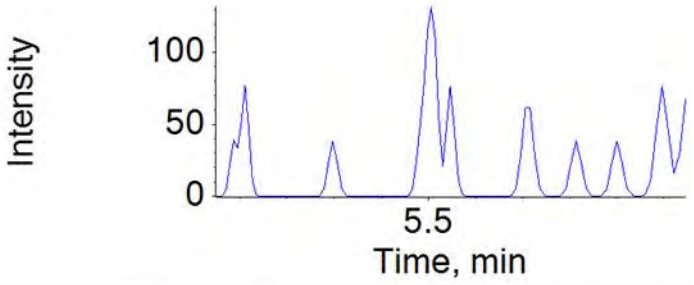
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



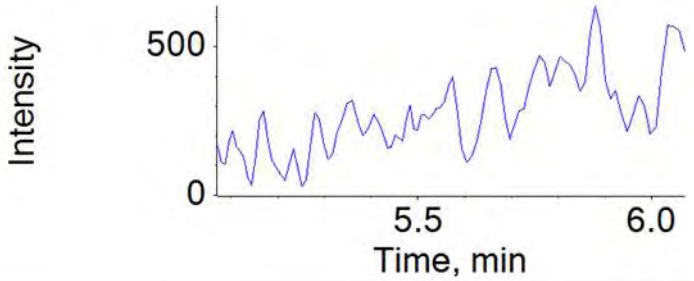
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Secondary Mass: 549.0 / 99.0



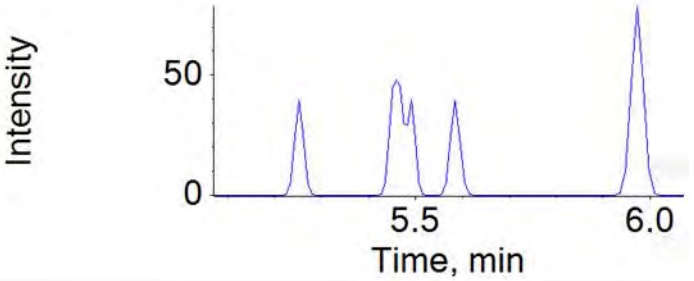
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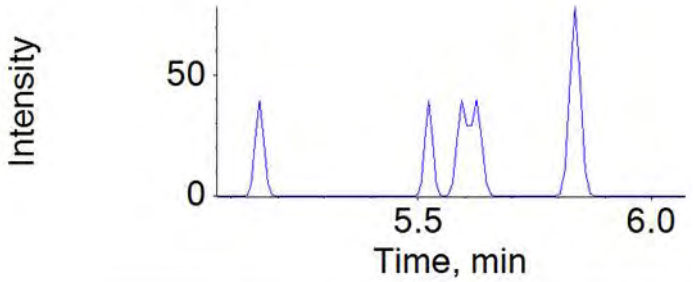
Component: PFDA
Primary Mass: 513.0 / 469.0



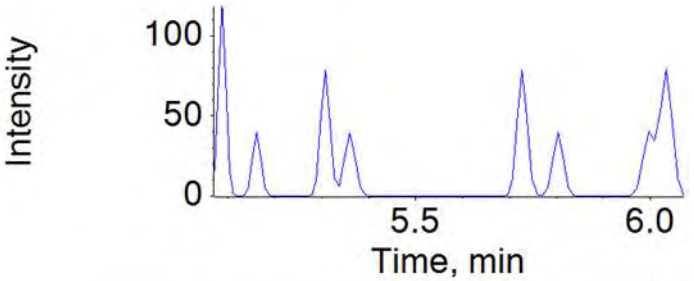
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Secondary Mass: 513.0 / 169.0



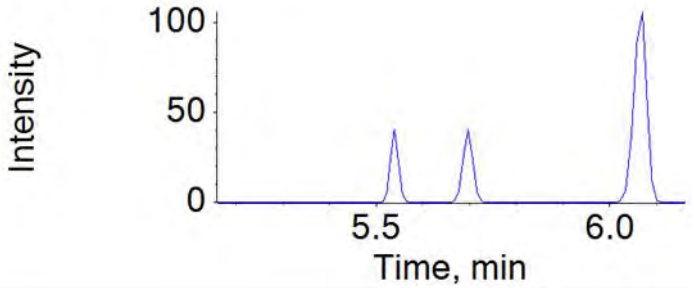
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



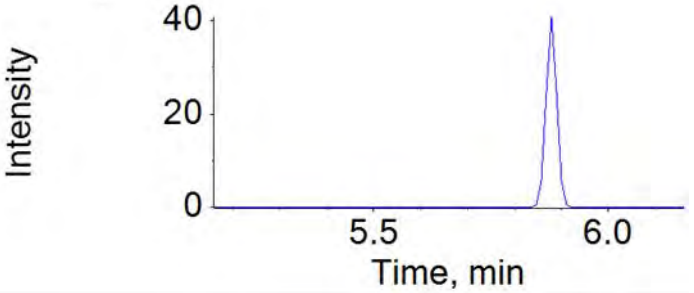
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



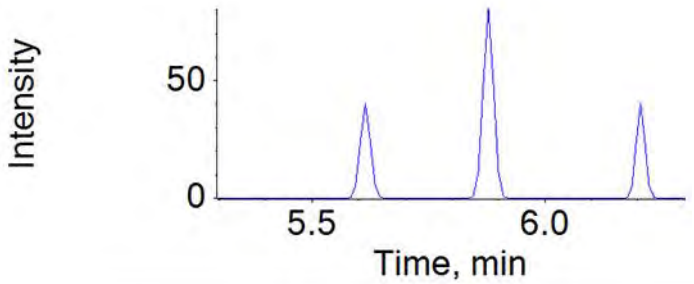
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



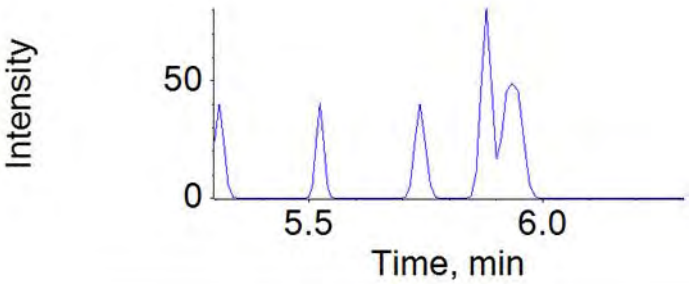
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



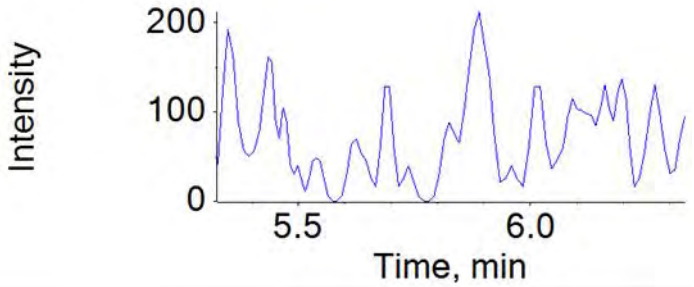
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



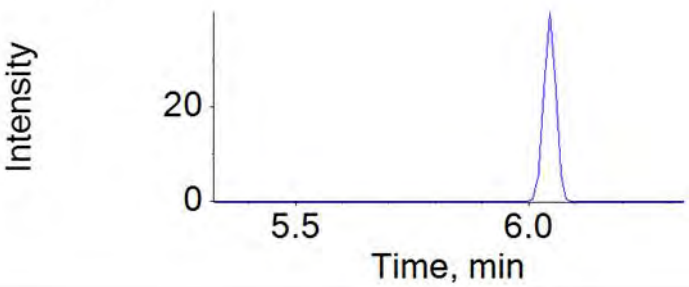
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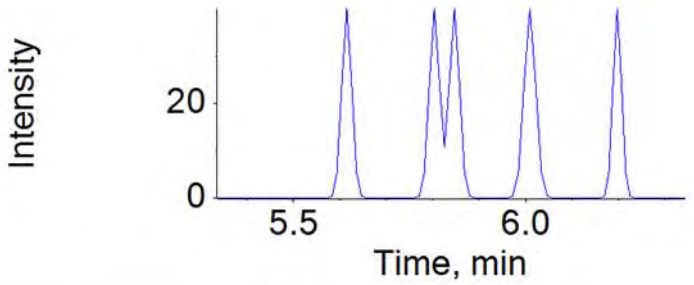
Component: PFUnDA
Primary Mass: 563.0 / 519.0



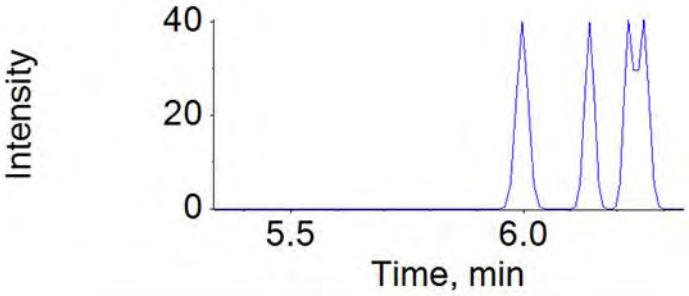
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



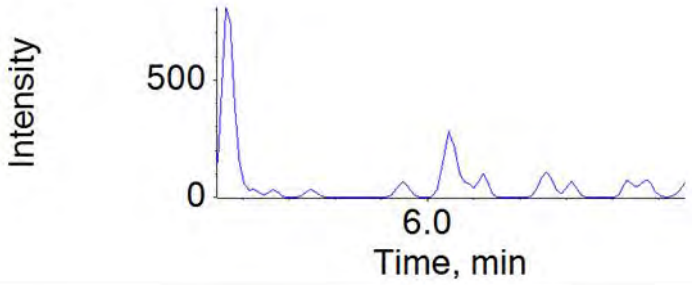
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



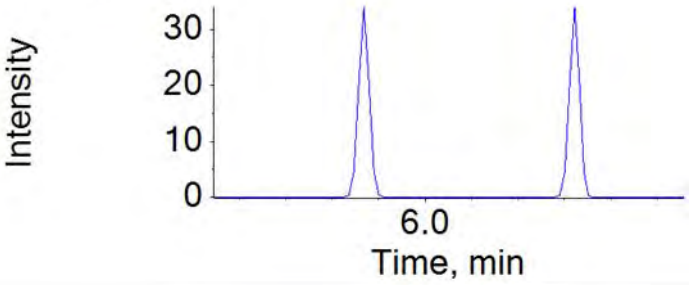
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



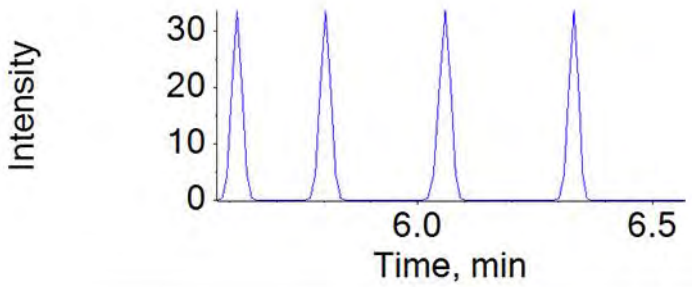
Component: PFDoDA
Primary Mass: 613.0 / 569.0



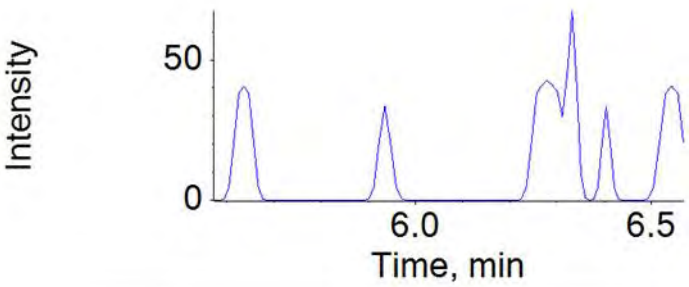
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



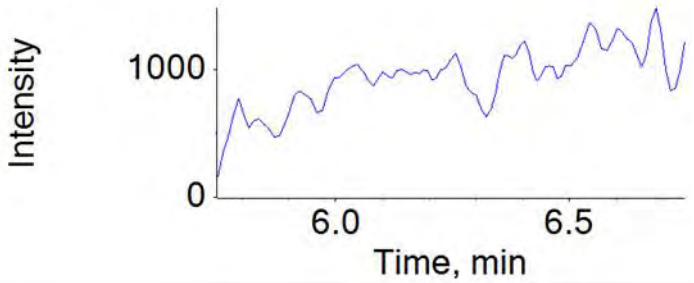
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



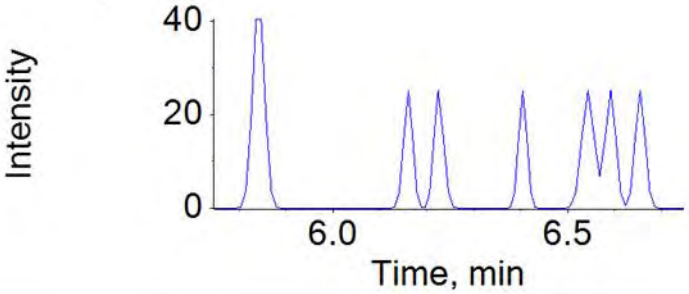
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

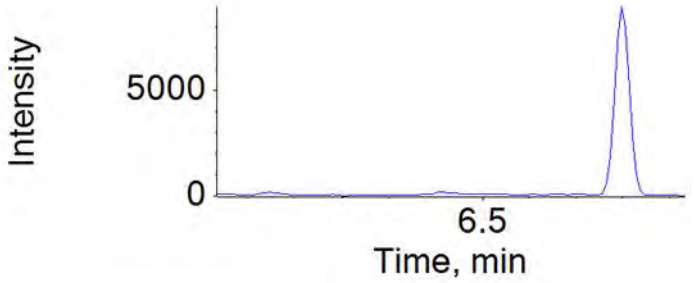
Component: PFTrDA
Primary Mass: 663.0 / 619.0



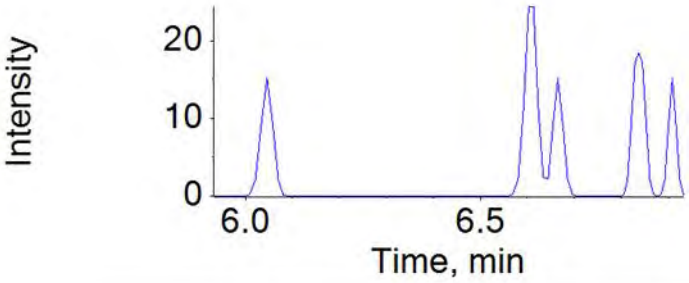
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



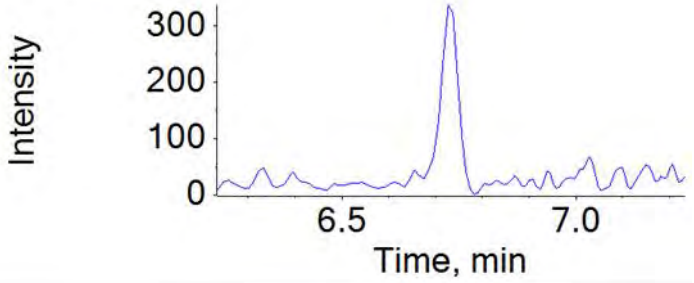
Component: PFTeDA
Primary Mass: 713.0 / 669.0



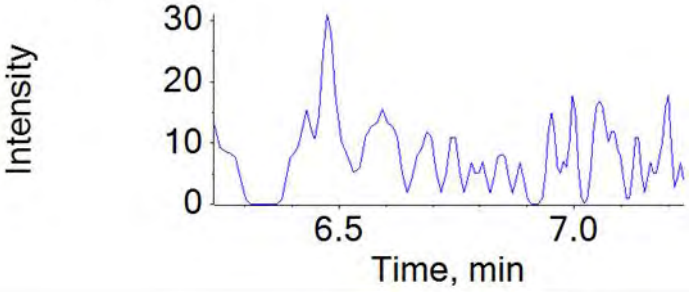
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



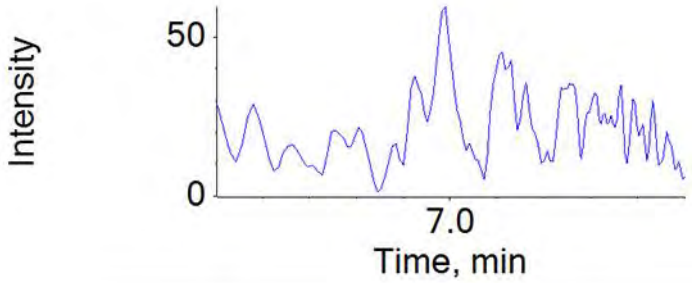
Component: PFHxDA
Primary Mass: 813.0 / 769.0



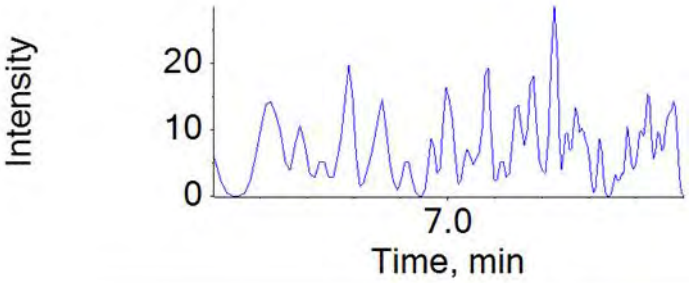
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



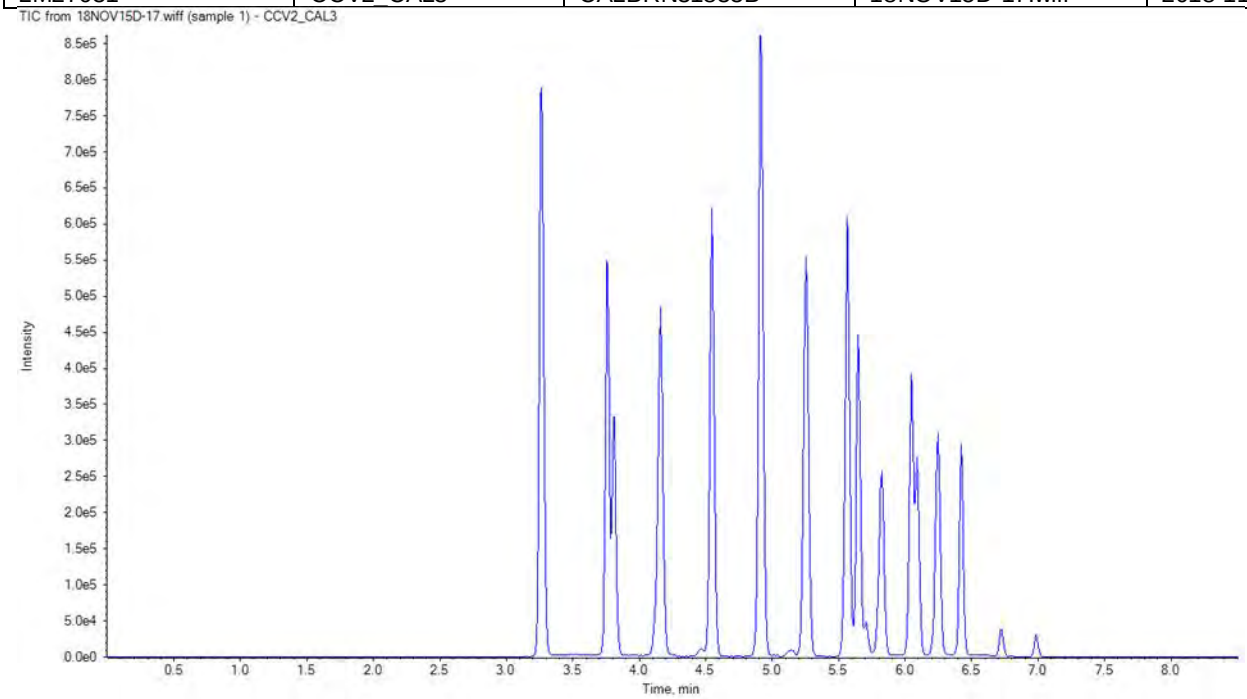
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV2_CAL3	CALBRN31833B	18NOV15D-17.wiff	2018-11-15T14:27:27



Injection Standard Area Reference File: 18NOV15D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	708681.5	732179.1	-3	50	
13C2-PFOA	5.0	483368.6	479663.2	1	50	
13C4-PFOS	4.8	262609.5	269685.3	-3	50	
13C2-PFDA	5.0	300649.2	302309.9	-1	50	

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV2_CAL3	CALBRN31833B	18NOV15D-17.wiff	2018-11-15T14:27:27

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	330111.6	10	13C4-PFBA	805100.8	5.0	0.410	3.26	1.000	2.000	2.271	14	30	
PFPeA	311444.5	11	13C5-PFPeA	795910.6	5.0	0.391	3.76	1.000	2.000	2.265	13	30	
PFBS	170752.0	10	13C3-PFBS	440796.1	4.7	0.387	3.81	1.000	1.770	1.843	4	30	
4:2-FTS	38005.5	11	13C2-4:2-FTS	53277.3	4.7	0.713	4.12	1.000	1.870	1.937	4	30	
PFHxA	331266.2	12	13C5-PFHxA	698560.7	5.0	0.474	4.16	1.000	2.000	1.980	-1	30	
PFPeS	92420.6	11	13C3-PFBS	440796.1	4.7	0.210	4.18	1.100	1.880	2.036	8	30	
PFHpA	392775.4	11	13C4-PFHpA	536513.8	5.0	0.732	4.55	1.000	2.000	2.427	21	30	
PFHxS	127507.7	19	13C3-PFHxS	318911.8	4.7	0.400	4.55	1.000	1.820	1.939	7	30	
6:2-FTS	30390.4	11	13C2-6:2-FTS	35048.1	4.8	0.867	4.90	1.000	1.900	2.098	10	30	
PFHpS	127618.9	11	13C3-PFHxS	318911.8	4.7	0.400	4.91	1.080	1.900	2.107	11	30	
PFOA	378071.7	11	13C8-PFOA	919301.7	5.0	0.411	4.92	1.000	2.000	2.196	10	30	
PFOS	125131.3	22	13C8-PFOS	276362.5	4.8	0.453	5.25	1.000	1.850	1.980	7	30	
PFNA	313870.7	11	13C9-PFNA	486368.3	5.0	0.645	5.26	1.000	2.000	2.327	16	30	
PFNS	82338.4	11	13C8-PFOS	276362.5	4.8	0.298	5.54	1.060	1.920	2.084	9	30	
PFDA	253223.2	11	13C6-PFDA	664128.1	5.0	0.381	5.57	1.000	2.000	2.021	1	30	
8:2-FTS	24874.7	11	13C2-8:2-FTS	25867.9	4.8	0.962	5.57	1.000	1.920	2.242	17	30	
PFOSA	287731.8	11	13C8-PFOSA	691277.8	5.0	0.416	5.65	1.000	2.000	2.033	2	30	
NMeFOSAA	28588.3	18	d3-NMeFOSAA	69878.3	5.0	0.409	5.71	1.000	2.000	2.312	16	30	
PFDS	61289.2	11	13C8-PFOS	276362.5	4.8	0.222	5.80	1.110	1.930	2.009	4	30	
PFUnDA	212907.1	11	13C7-PFUnDA	276387.0	5.0	0.770	5.82	1.000	2.000	2.014	1	30	
NEtFOSAA	26369.1	22	d5-NEtFOSAA	67326.9	5.0	0.392	5.84	1.000	2.000	2.053	3	30	
PFDoDA	239087.4	11	13C2-PFDoDA	544644.0	5.0	0.439	6.05	1.000	2.000	2.235	12	30	
10:2-FTS	18636.1	11	13C2-8:2-FTS	25867.9	4.8	0.720	6.06	1.090	1.930	2.400	24	30	
NMePFOSAE	179582.3	11	d7-NMePFOSAE	325506.1	5.0	0.552	6.09	1.000	2.000	2.296	15	30	
NMePFOSA	32647.0	12	d3-NMePFOSA	77095.3	5.0	0.423	6.10	1.000	2.000	2.089	4	30	
PFDoS	31258.0	11	13C8-PFOS	276362.5	4.8	0.113	6.21	1.180	1.940	1.981	2	30	
NEtPFOSAE	186894.4	11	d9-NEtPFOSAE	275243.8	5.0	0.679	6.25	1.000	2.000	2.178	9	30	
NEtPFOSA	28095.6	11	d5-NEtPFOSA	63071.4	5.0	0.445	6.26	1.000	2.000	2.046	2	30	
PFTrDA	196890.1	11	13C2-PFDoDA	544644.0	5.0	0.362	6.25	1.030	2.000	2.282	14	30	
PFTeDA	170072.7	10	13C2-PFTeDA	423538.7	5.0	0.402	6.42	1.000	2.000	2.251	13	30	
PFHxDA	74302.7	11	13C2-PFTeDA	423538.7	5.0	0.175	6.72	1.050	2.000	2.090	5	30	
PFODA	61703.9	10	13C2-PFTeDA	423538.7	5.0	0.146	6.99	1.090	2.000	2.029	1	30	

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
Acquisition Method: 18AUG13_3uL.dam

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV2_CAL3			**Data File:**		18NOV15D-17.wiff
Sample ID:	CALBRN31833B			**Acquis Date:**		2018-11-15T14:27:27
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	5			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV15DCCV1-4
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N/A			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV15D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	708681.5	732179.1	-3	50	
13C2-PFOA	5.0	483368.6	479663.2	1	50	
13C4-PFOS	4.8	262609.5	269685.3	-3	50	
13C2-PFDA	5.0	300649.2	302309.9	-1	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	805100.8	13C3-PFBA	708681.5	1.136	5.000	5.093	102	70-130	
E13C5-PFPeA	795910.6	13C3-PFBA	708681.5	1.123	5.000	5.037	101	70-130	
E13C3-PFBS	440796.1	13C3-PFBA	708681.5	0.622	4.650	4.391	94	70-130	
E13C2-4:2-FTS	53277.3	13C2-PFOA	483368.6	0.110	4.670	4.909	105	70-130	
E13C5-PFHxA	698560.7	13C2-PFOA	483368.6	1.445	5.000	5.221	104	70-130	
E13C3-PFHxS	318911.8	13C2-PFOA	483368.6	0.660	4.730	4.527	96	70-130	
E13C4-PFHpA	536513.8	13C2-PFOA	483368.6	1.110	5.000	5.000	100	70-130	
E13C2-6:2-FTS	35048.1	13C2-PFOA	483368.6	0.073	4.750	4.851	102	70-130	
E13C8-PFOA	919301.7	13C2-PFOA	483368.6	1.902	5.000	5.240	105	70-130	
E13C8-PFOS	276362.5	13C4-PFOS	262609.5	1.052	4.780	4.663	98	70-130	
E13C9-PFNA	486368.3	13C4-PFOS	262609.5	1.852	5.000	5.164	103	70-130	
E13C6-PFDA	664128.1	13C2-PFDA	300649.2	2.209	5.000	5.155	103	70-130	
E13C2-8:2-FTS	25867.9	13C2-PFDA	300649.2	0.086	4.790	4.291	90	70-130	
E13C8-PFOSA	691277.8	13C2-PFDA	300649.2	2.299	5.000	5.097	102	70-130	
Ed3-NMeFOSAA	69878.3	13C2-PFDA	300649.2	0.232	5.000	4.195	84	70-130	
E13C7-PFUnDA	276387.0	13C2-PFDA	300649.2	0.919	5.000	5.337	107	70-130	
Ed5-NEtFOSAA	67326.9	13C2-PFDA	300649.2	0.224	5.000	4.738	95	70-130	
E13C2-PFDoDA	544644.0	13C2-PFDA	300649.2	1.812	5.000	4.703	94	70-130	
Ed7-NMePFOSAE	325506.1	13C2-PFDA	300649.2	1.083	5.000	4.685	94	70-130	
Ed3-NMePFOSA	77095.3	13C2-PFDA	300649.2	0.256	5.000	4.659	93	70-130	
Ed9-NEtPFOSAE	275243.8	13C2-PFDA	300649.2	0.915	5.000	4.762	95	70-130	
Ed5-NEtPFOSA	63071.3	13C2-PFDA	300649.2	0.210	5.000	4.921	98	70-130	
E13C2-PFTeDA	423538.7	13C2-PFDA	300649.2	1.409	5.000	4.946	99	70-130	

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

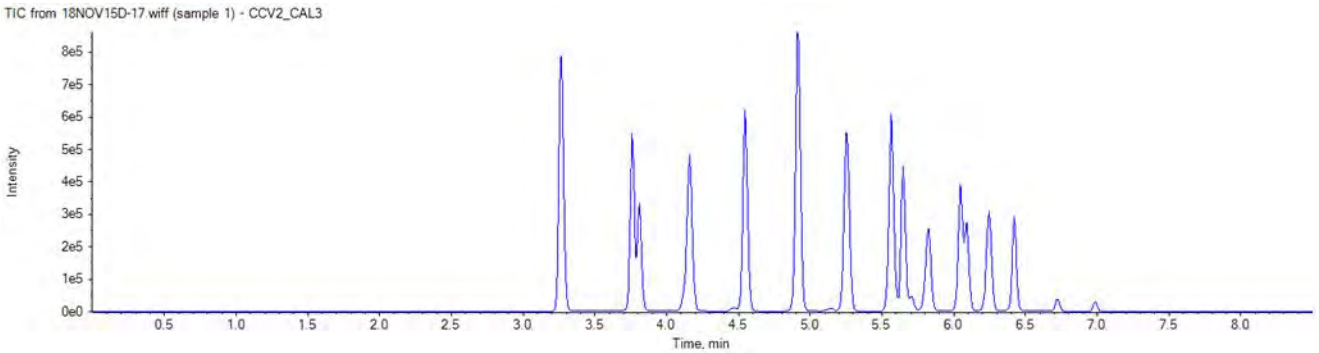
Analyte Quantitation Peak Table

Sample Name: CCV2_CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV15D-17.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	330111.6		A	13C4-PFBA	3.26	805100.8	0.410	2.271
PFPeA	3.76	1.000	311444.5		A	13C5-PFPeA	3.76	795910.6	0.391	2.265
PFBS	3.81	1.000	170752.0		A	13C3-PFBS	3.81	440796.1	0.387	1.843
4:2-FTS	4.12	1.000	38005.5		A	13C2-4:2-FTS	4.12	53277.3	0.713	1.937
PFHxA	4.16	1.000	331266.2		A	13C5-PFHxA	4.16	698560.7	0.474	1.980
PFPeS	4.18	1.100	92420.6		A	13C3-PFBS	3.81	440796.1	0.210	2.036
PFHpA	4.55	1.000	392775.4		A	13C4-PFHpA	4.55	536513.8	0.732	2.427
PFHxS	4.55	1.000	127507.7		M	13C3-PFHxS	4.55	318911.8	0.400	1.939
6:2-FTS	4.90	1.000	30390.4		A	13C2-6:2-FTS	4.90	35048.1	0.867	2.098
PFHpS	4.91	1.080	127618.9		A	13C3-PFHxS	4.55	318911.8	0.400	2.107
PFOA	4.92	1.000	378071.7		A	13C8-PFOA	4.92	919301.7	0.411	2.196
PFOS	5.25	1.000	125131.3		M	13C8-PFOS	5.25	276362.5	0.453	1.980
PFNA	5.26	1.000	313870.7		A	13C9-PFNA	5.26	486368.3	0.645	2.327
PFNS	5.54	1.060	82338.4		A	13C8-PFOS	5.25	276362.5	0.298	2.084
PFDA	5.57	1.000	253223.2		A	13C6-PFDA	5.57	664128.1	0.381	2.021
8:2-FTS	5.57	1.000	24874.7		A	13C2-8:2-FTS	5.57	25867.9	0.962	2.242
PFOSA	5.65	1.000	287731.8		A	13C8-PFOSA	5.65	691277.8	0.416	2.033
NMeFOSAA	5.71	1.000	28588.3		A	d3-NMeFOSAA	5.70	69878.3	0.409	2.312
PFDS	5.80	1.110	61289.2		A	13C8-PFOS	5.25	276362.5	0.222	2.009
PFUnDA	5.82	1.000	212907.1		A	13C7-PFUnDA	5.82	276387.0	0.770	2.014
NEtFOSAA	5.84	1.000	26369.1		M	d5-NEtFOSAA	5.83	67326.9	0.392	2.053
PFDoDA	6.05	1.000	239087.4		A	13C2-PFDoDA	6.05	544644.0	0.439	2.235
10:2-FTS	6.06	1.090	18636.1		A	13C2-8:2-FTS	5.57	25867.9	0.720	2.400
NMePFOSAE	6.09	1.000	179582.3		A	d7-NMePFOSAE	6.09	325506.1	0.552	2.296
NMePFOSA	6.10	1.000	32647.0		A	d3-NMePFOSA	6.10	77095.3	0.423	2.089
PFDoS	6.21	1.180	31258.0		A	13C8-PFOS	5.25	276362.5	0.113	1.981
NEtPFOSAE	6.25	1.000	186894.4		A	d9-NEtPFOSAE	6.24	275243.8	0.679	2.178
NEtPFOSA	6.26	1.000	28095.6		A	d5-NEtPFOSA	6.26	63071.4	0.445	2.046
PFTrDA	6.25	1.030	196890.1		A	13C2-PFDoDA	6.05	544644.0	0.362	2.282
PFTeDA	6.42	1.000	170072.7		A	13C2-PFTeDA	6.42	423538.7	0.402	2.251
PFHxDA	6.72	1.050	74302.7		A	13C2-PFTeDA	6.42	423538.7	0.175	2.090
PFODA	6.99	1.090	61703.9		A	13C2-PFTeDA	6.42	423538.7	0.146	2.029

Total Ion Chromatogram

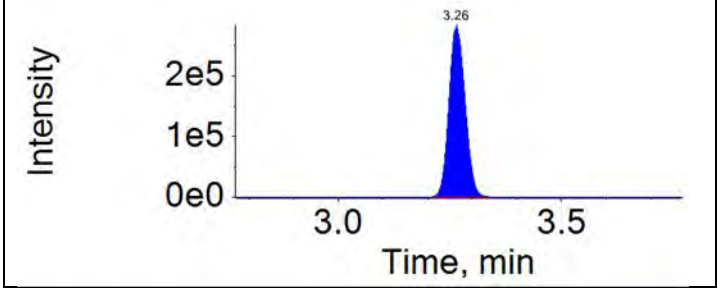


APPROVED
By JPT at 8:56 am, 11/16/18

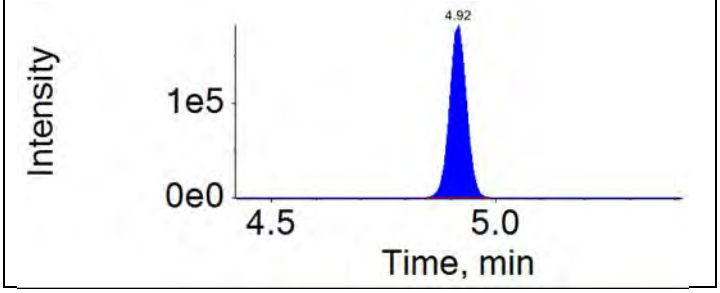
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

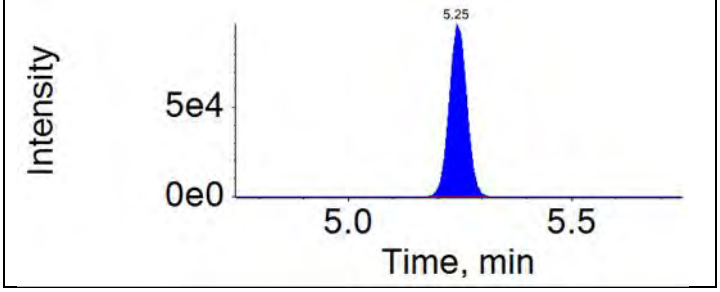
Injection Standard: 13C3-PFBA
216.0 / 172.0



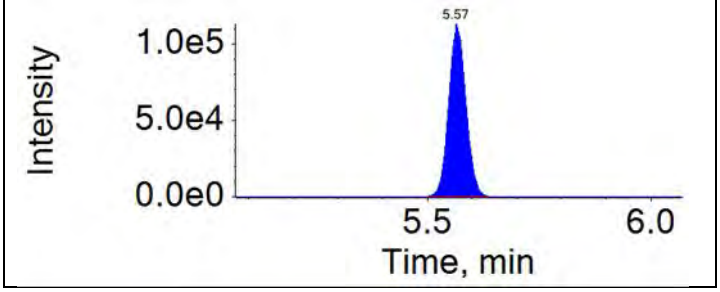
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



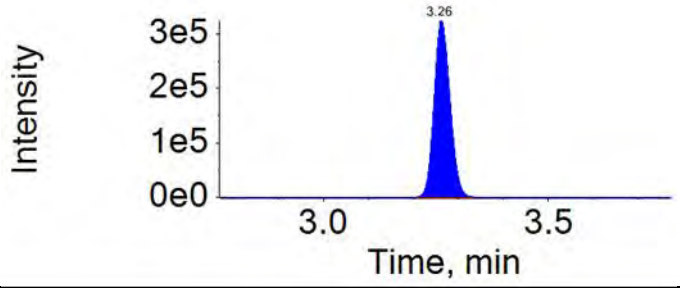
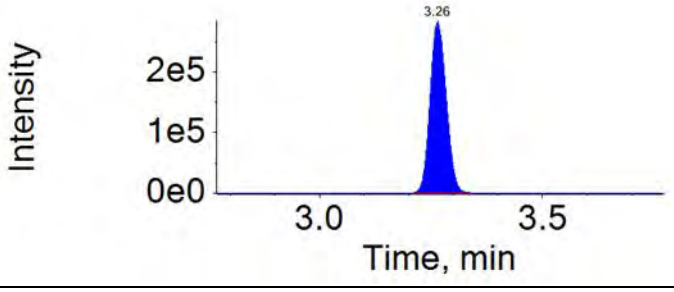
Injection Standard: 13C2-PFDA
515.0 / 470.0

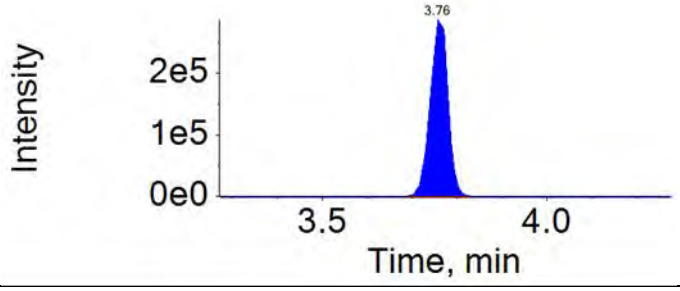
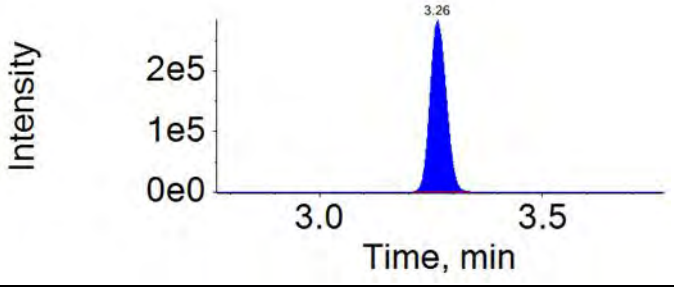


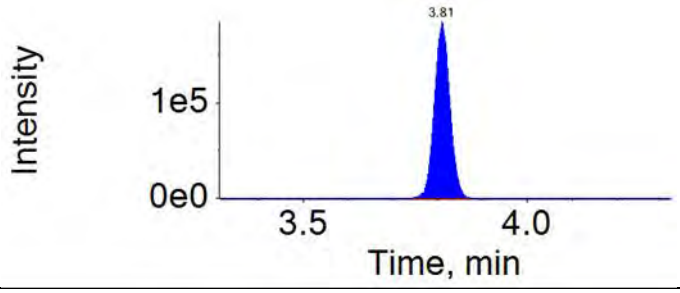
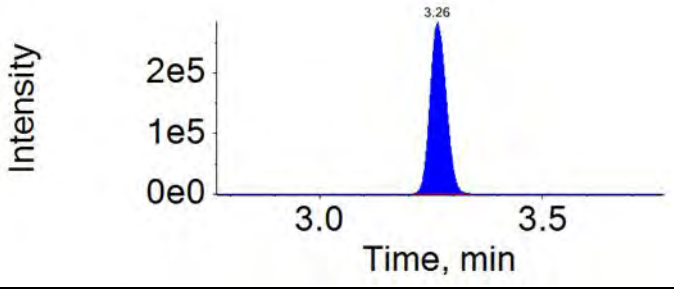
APPROVED
By JPT at 8:56 am, 11/16/18

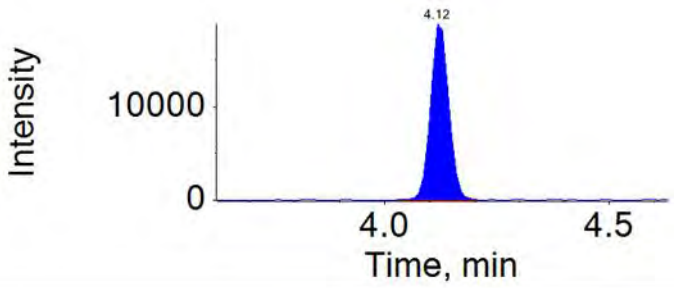
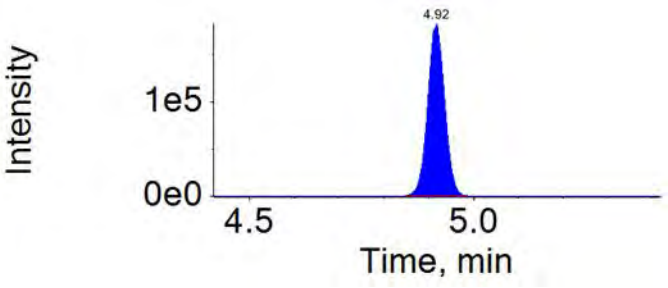
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

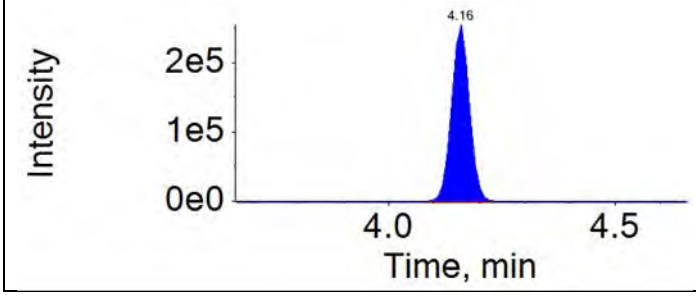
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

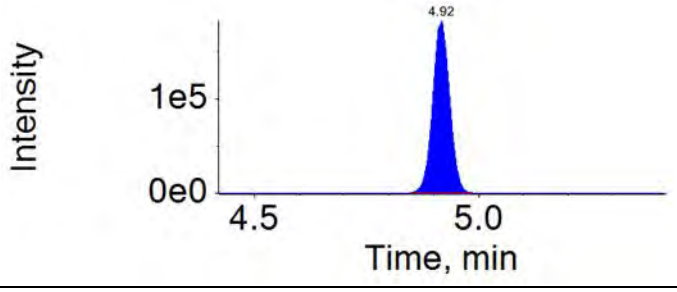
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

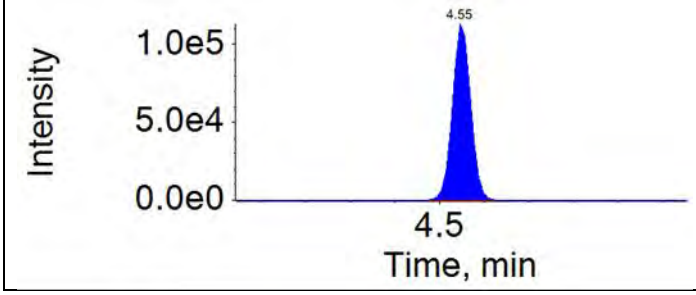
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

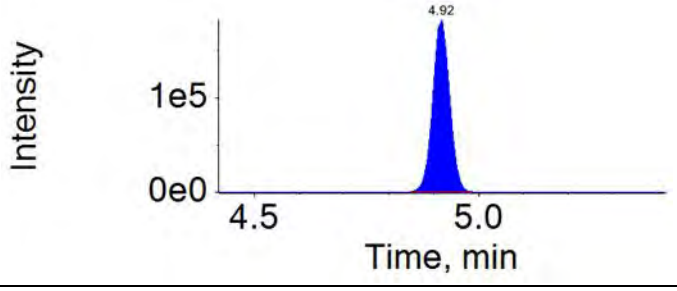
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



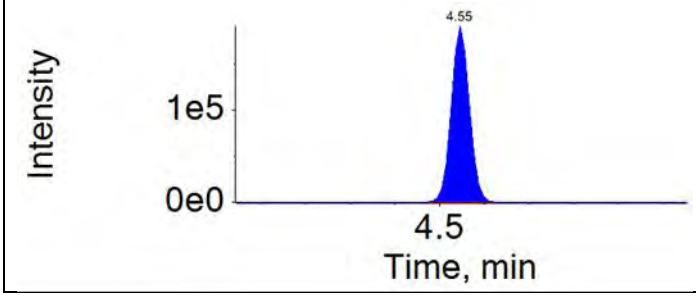


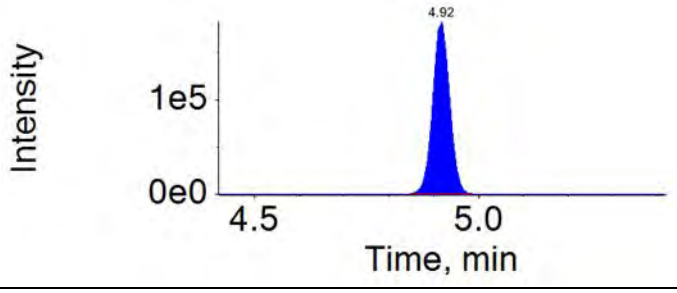
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



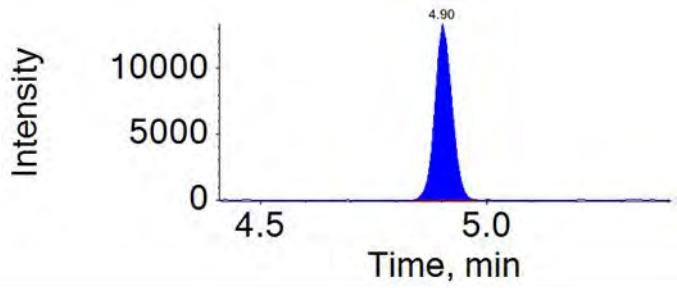


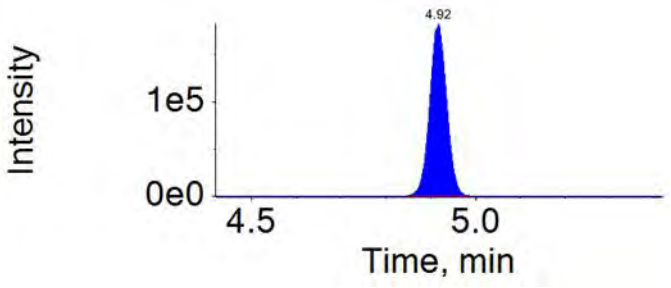
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

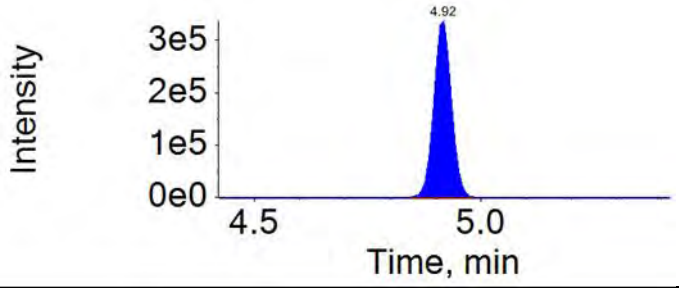
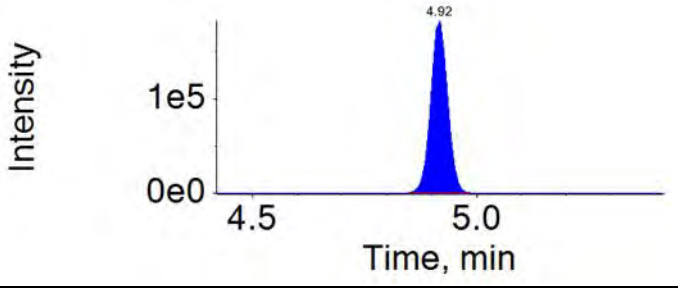


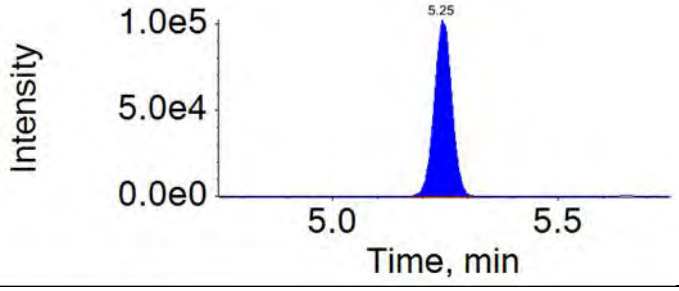
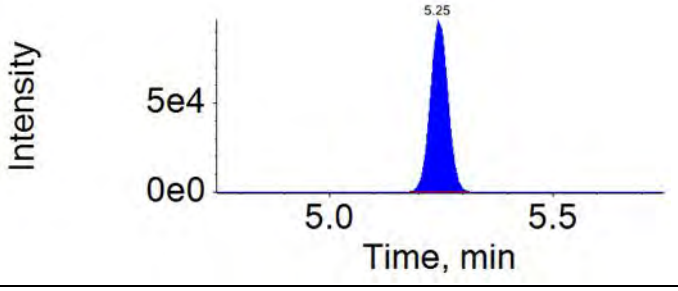


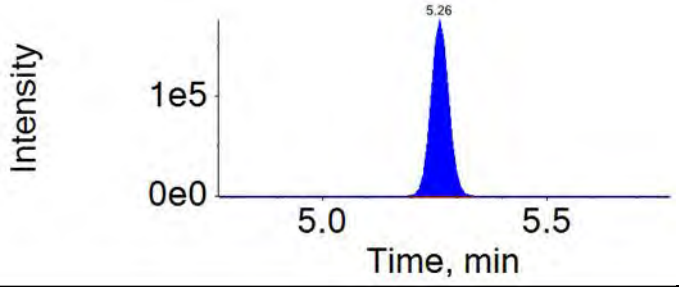
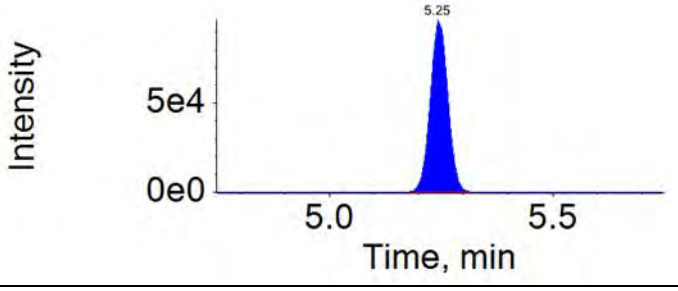
APPROVED
By JPT at 8:56 am, 11/16/18

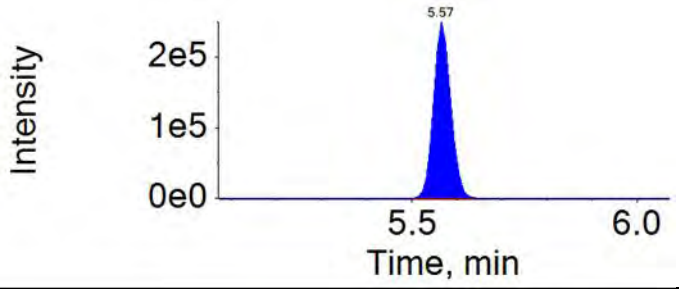
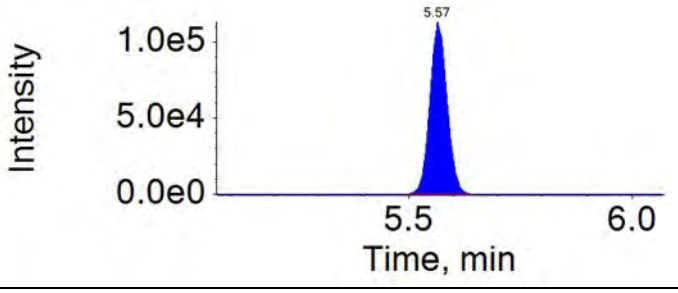
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

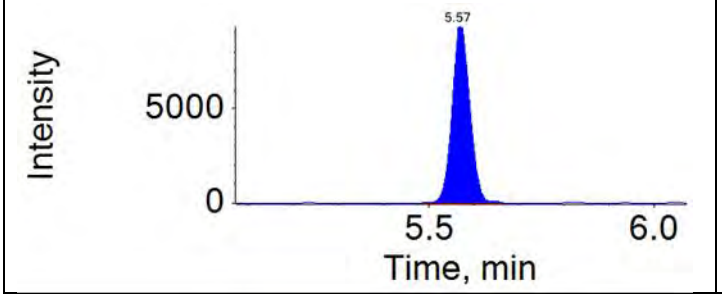
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

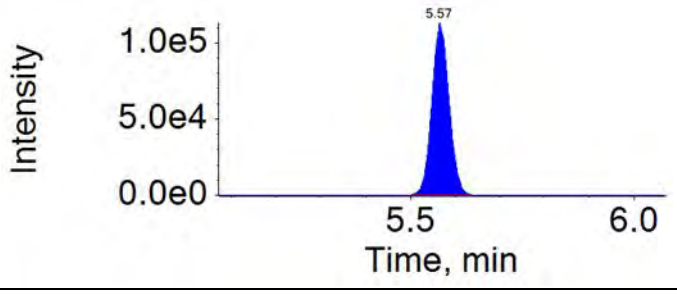
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

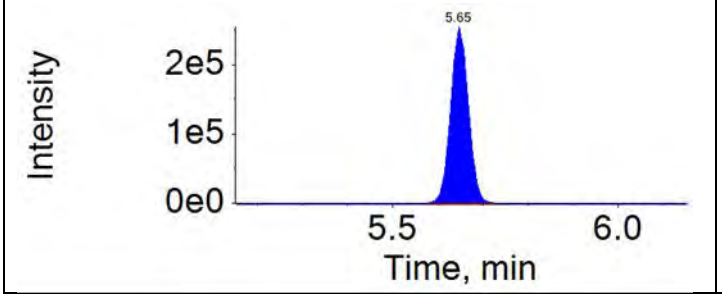
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

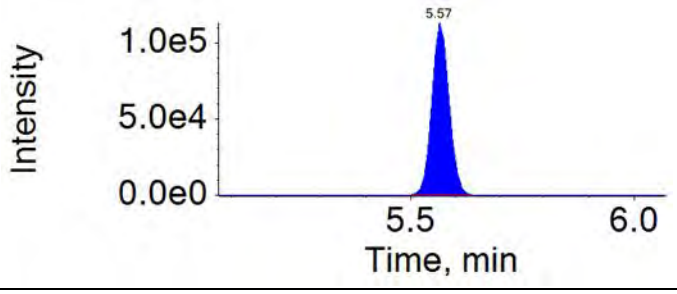
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



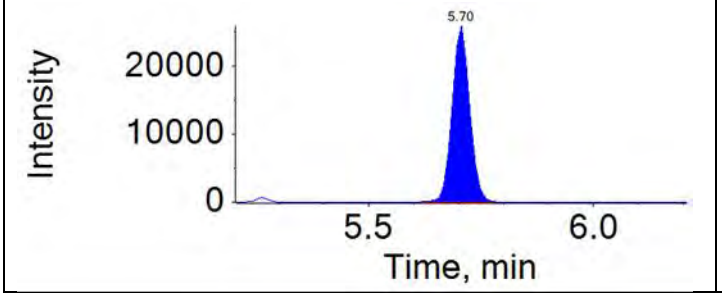


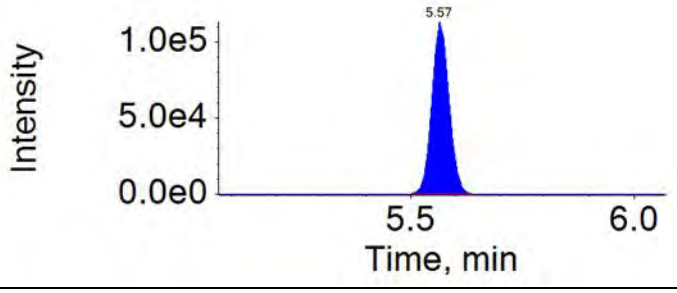
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



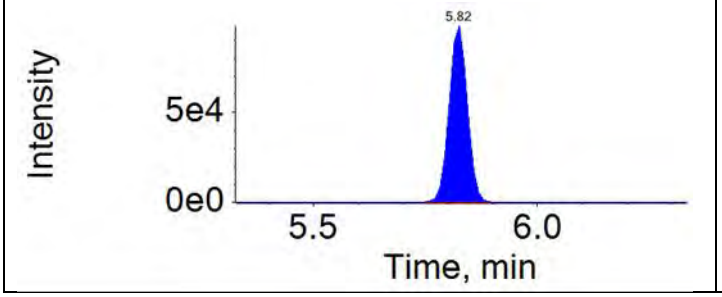


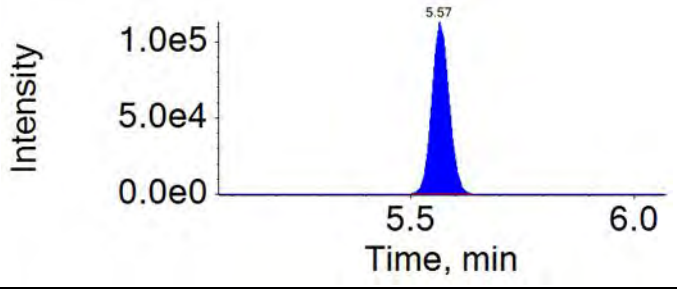
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0

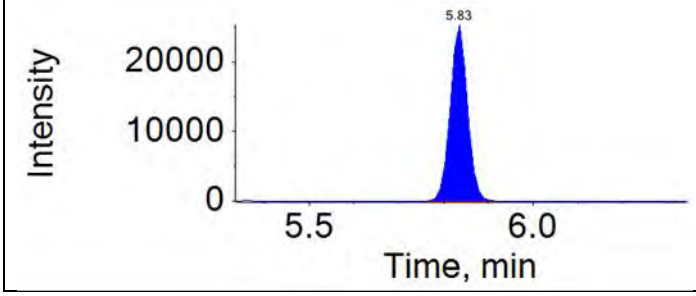
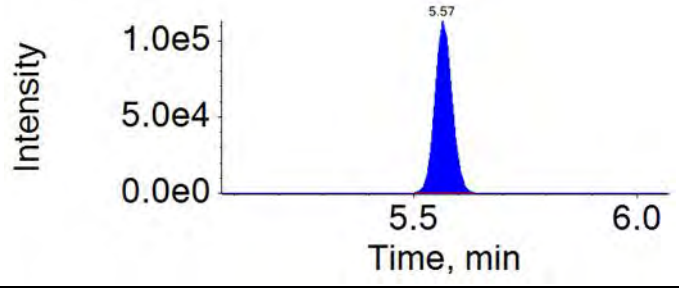


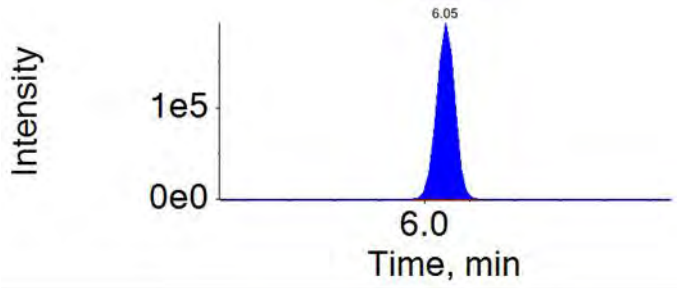
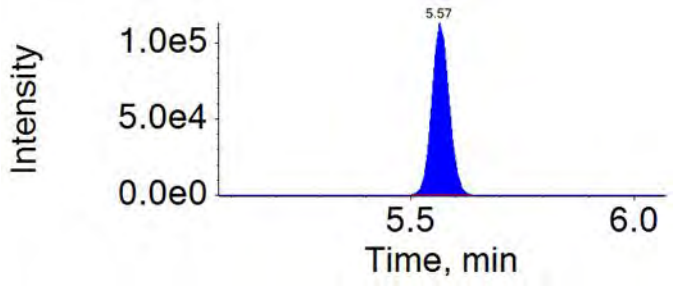


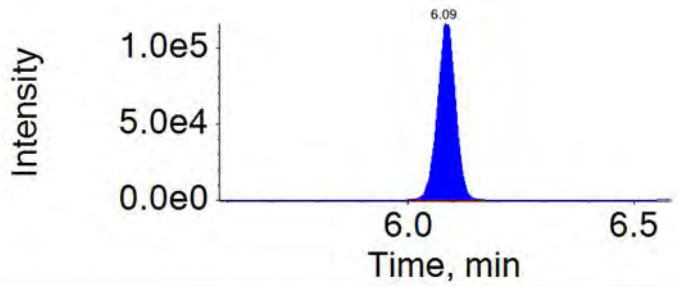
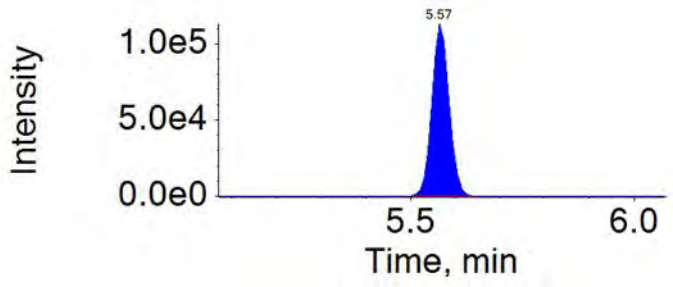
APPROVED
By JPT at 8:56 am, 11/16/18

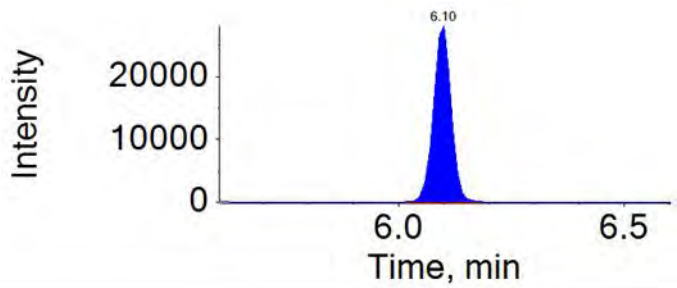
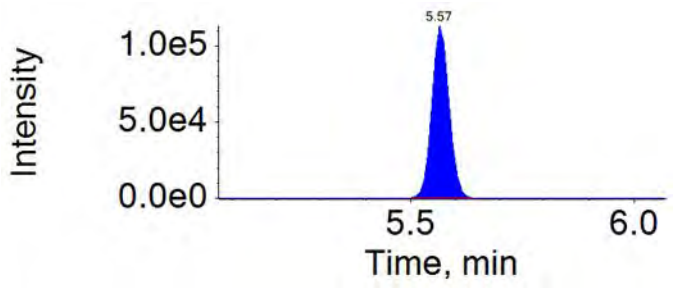
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

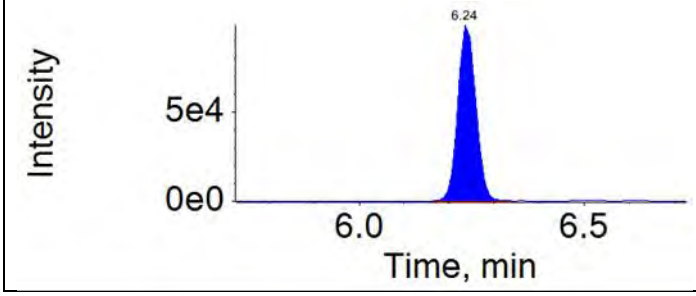
Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

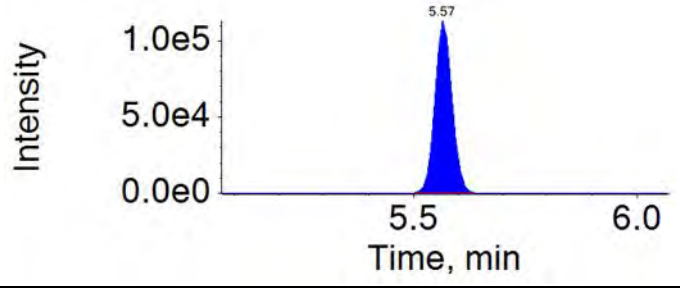
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

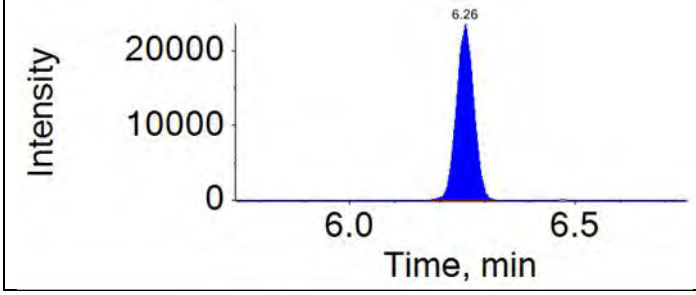
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

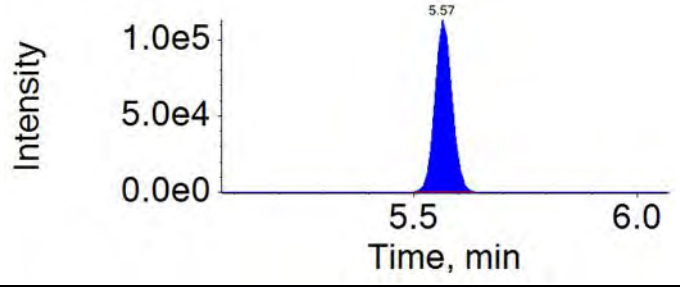
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



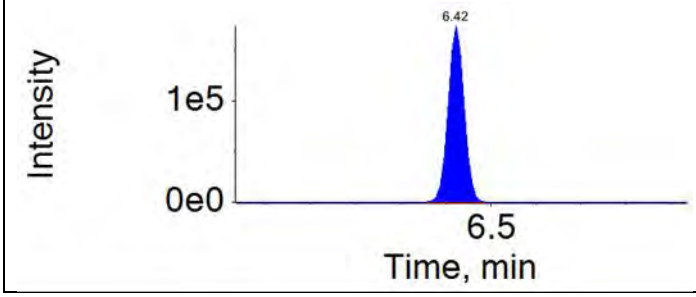


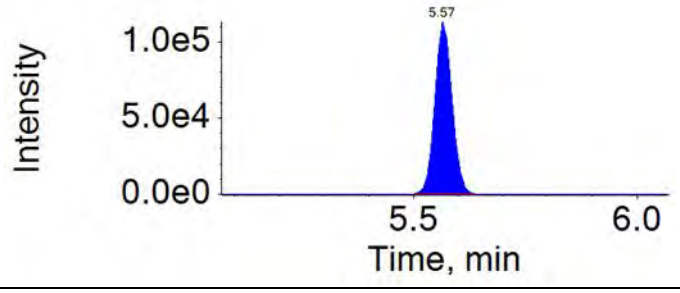
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





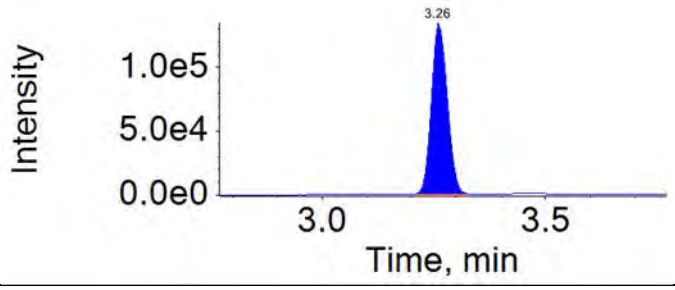
Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0

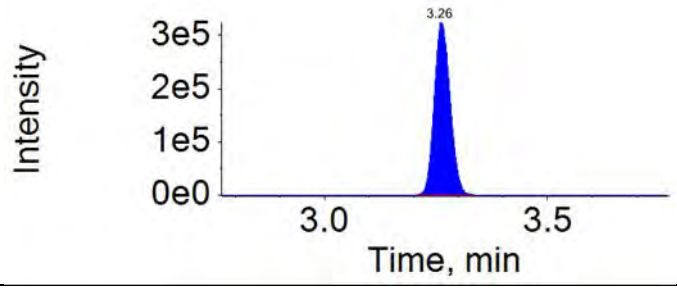




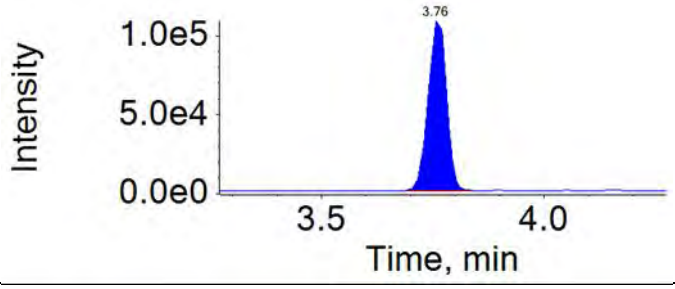
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

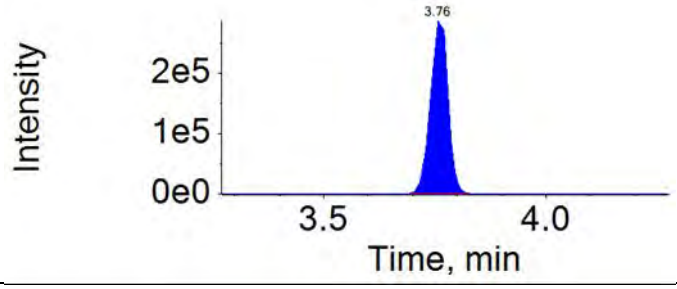
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



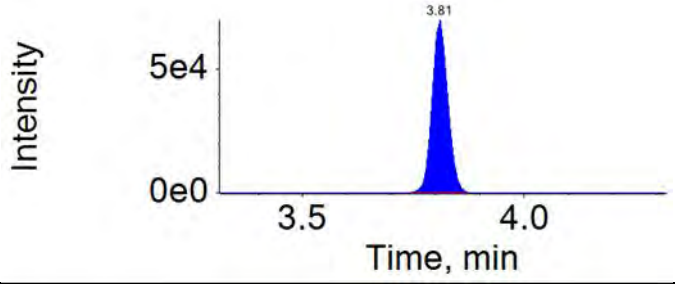


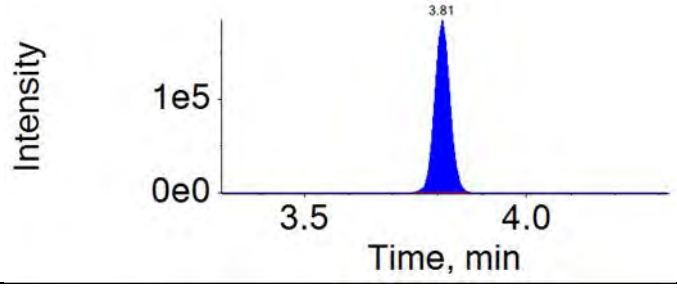
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



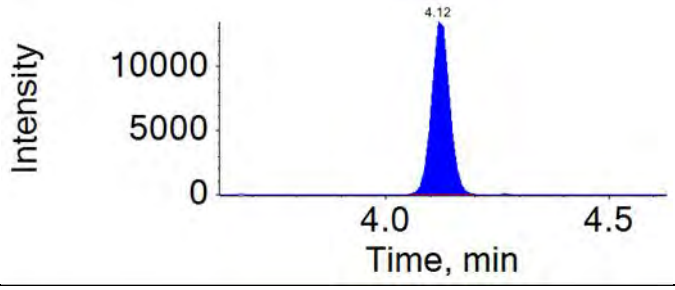


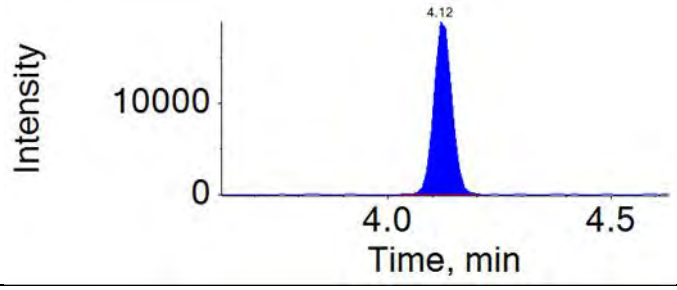
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



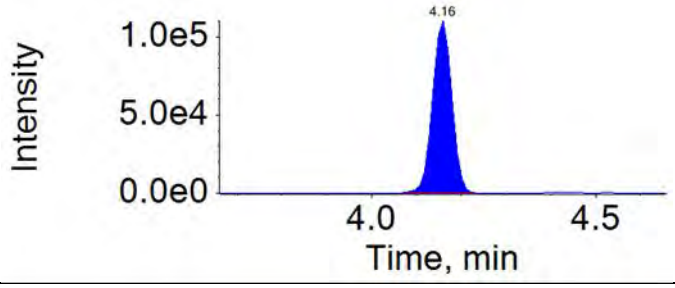


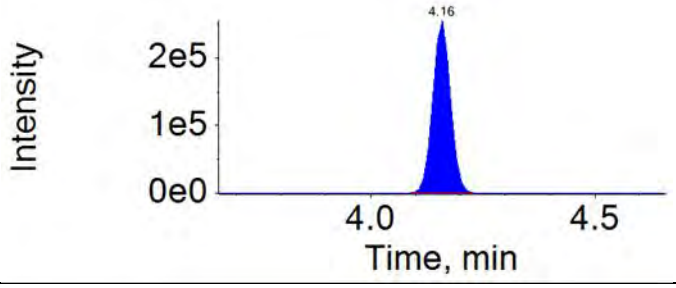
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

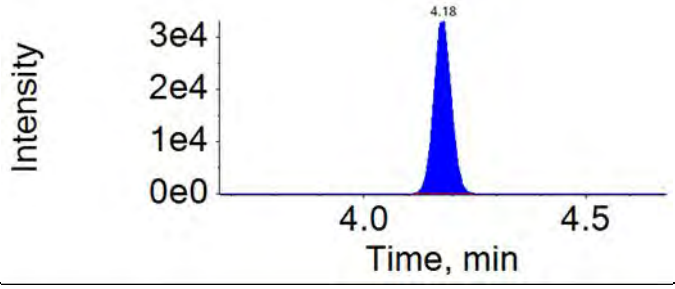
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

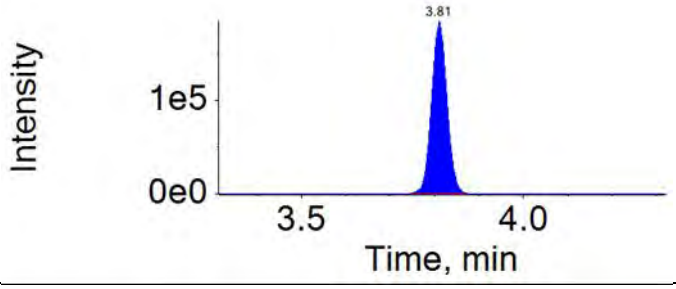
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



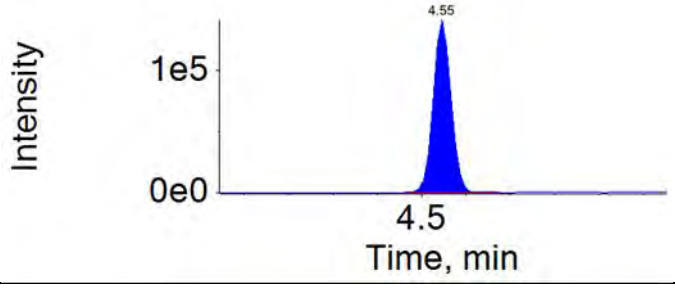


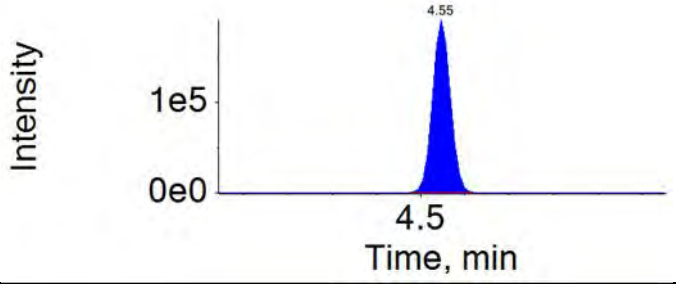
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



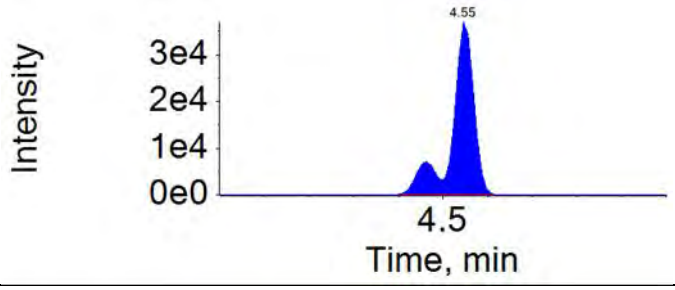


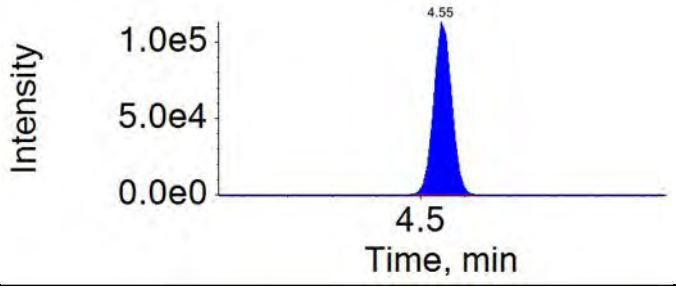
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



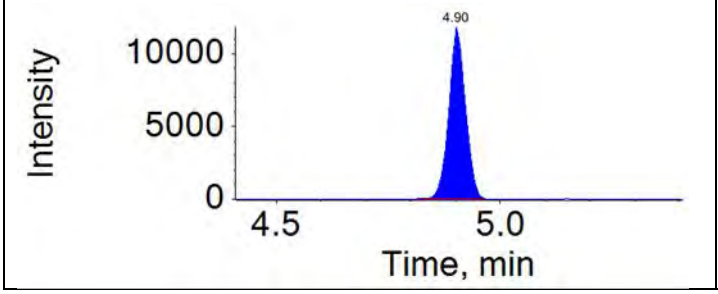


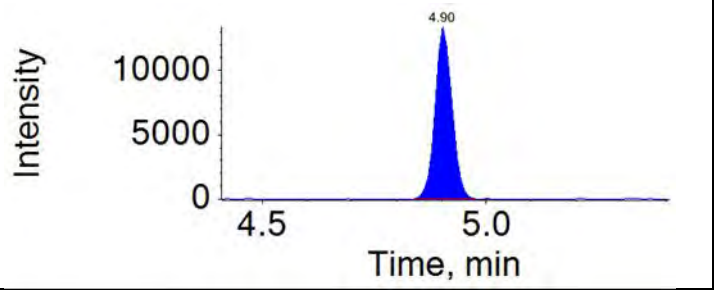
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

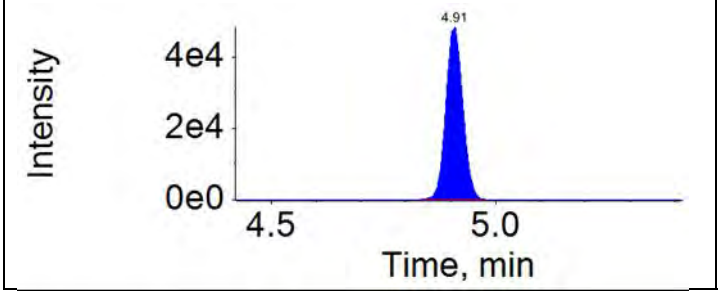
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

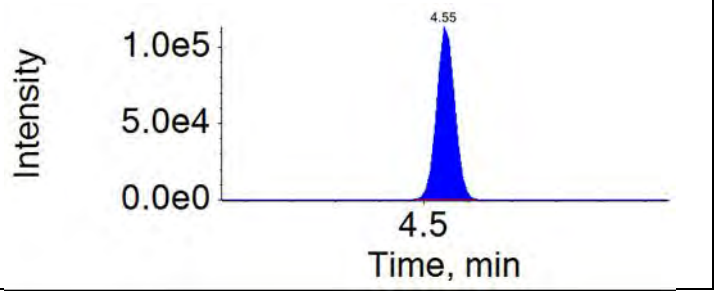
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



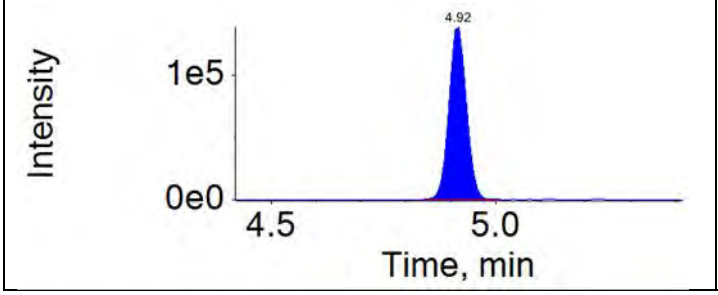


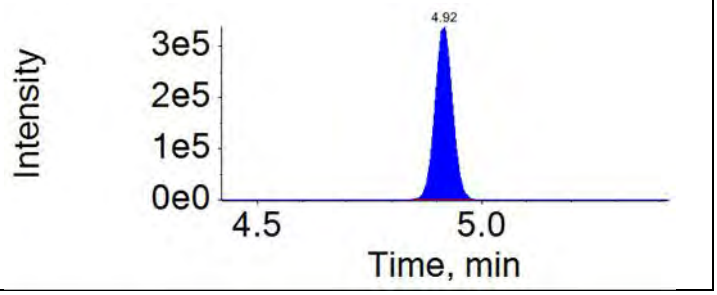
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



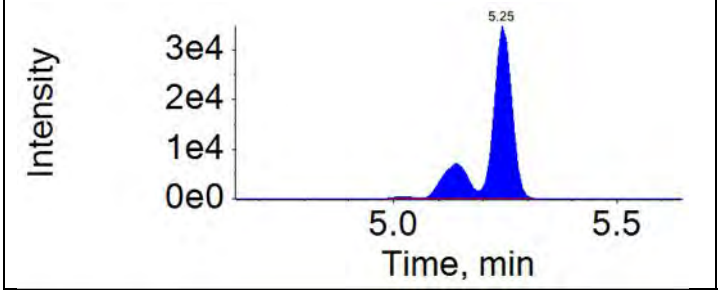


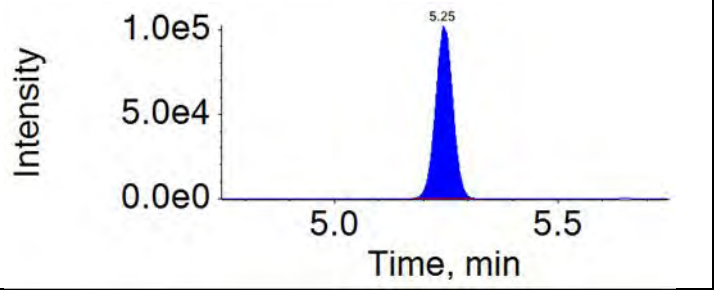
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



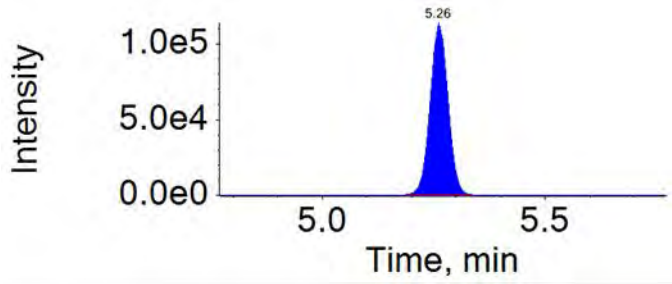


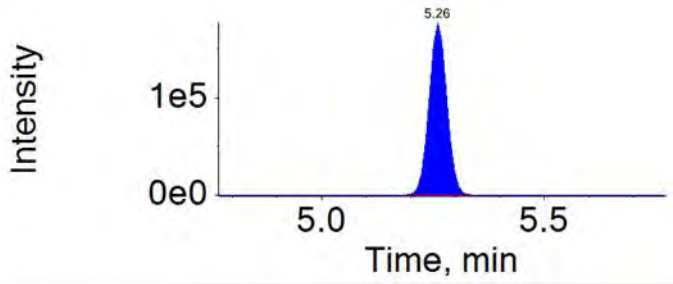
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

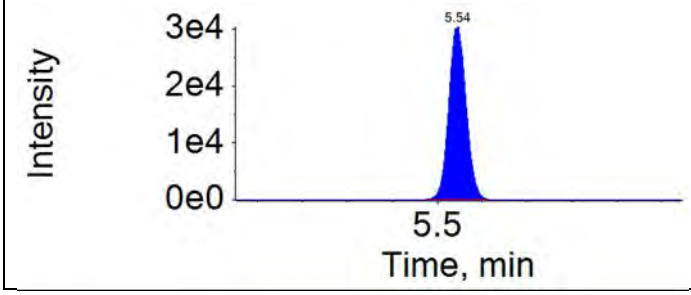
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

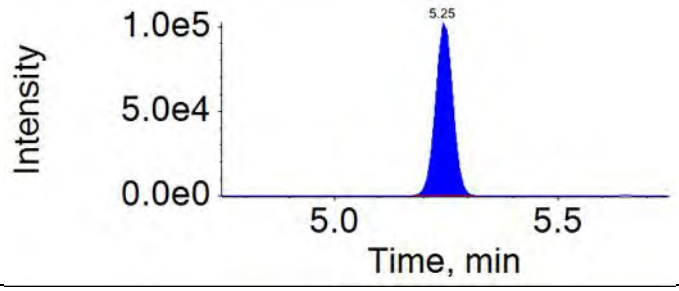
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



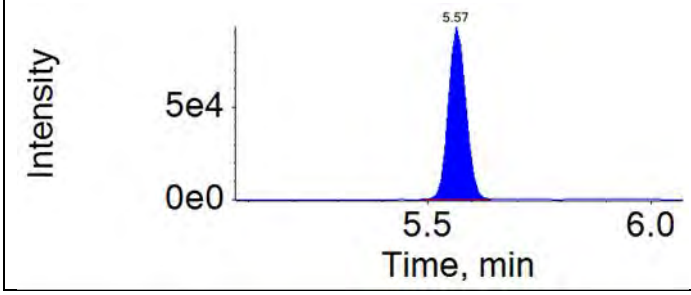


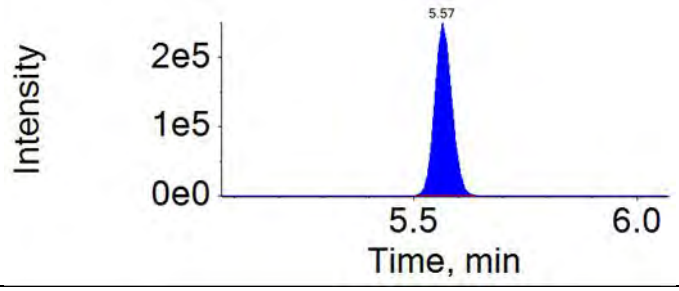
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



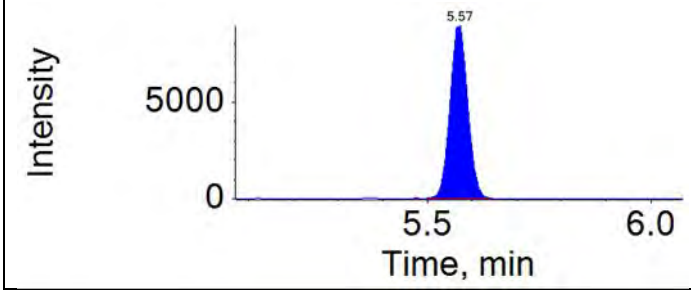


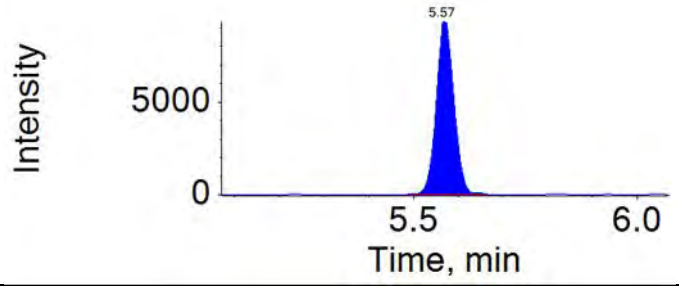
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



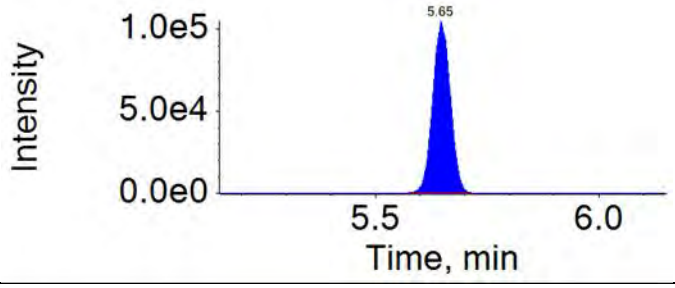


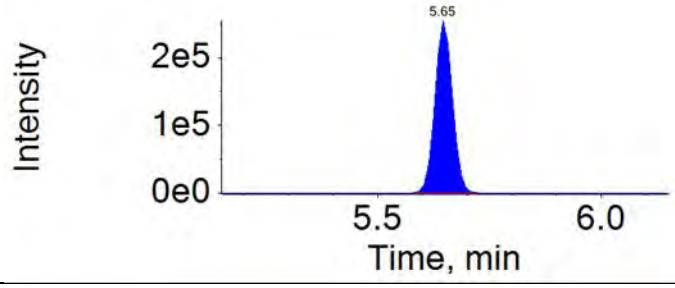
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

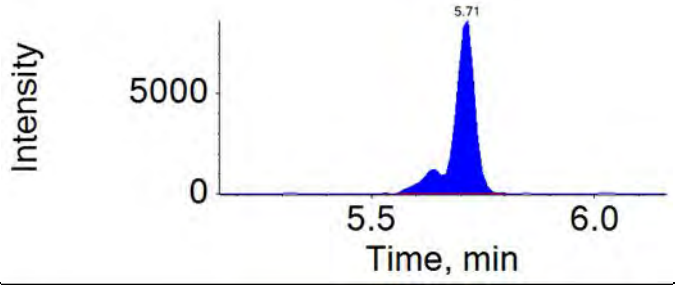
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

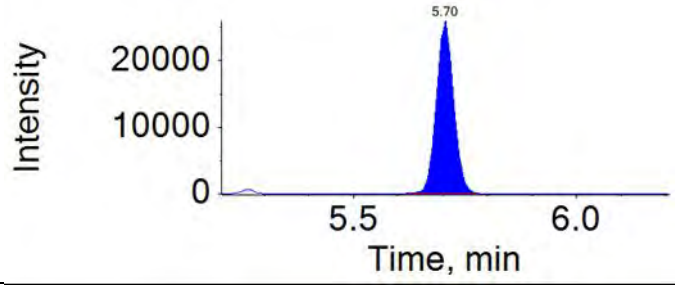
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



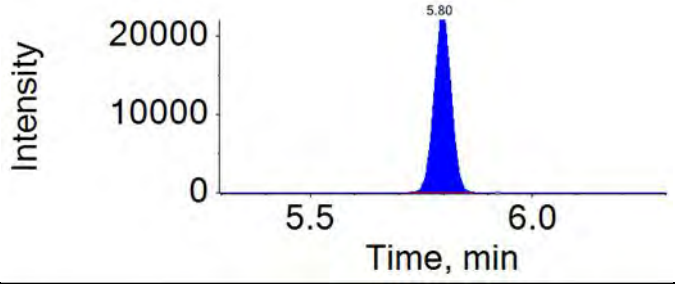


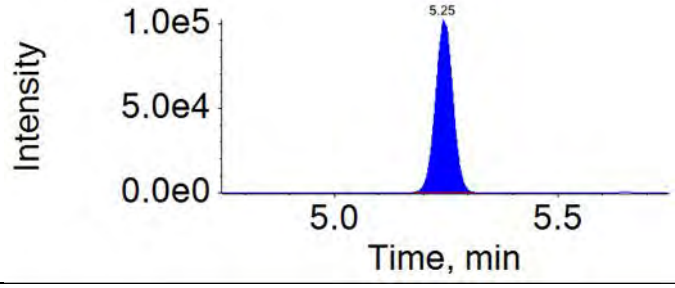
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



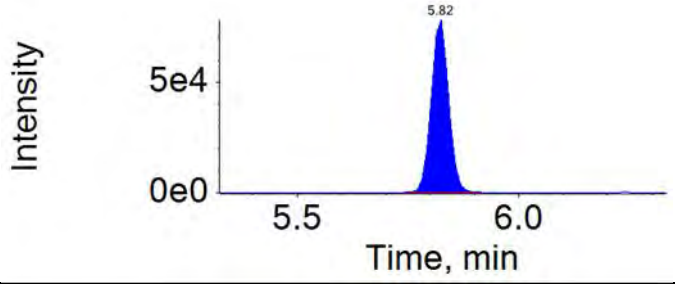


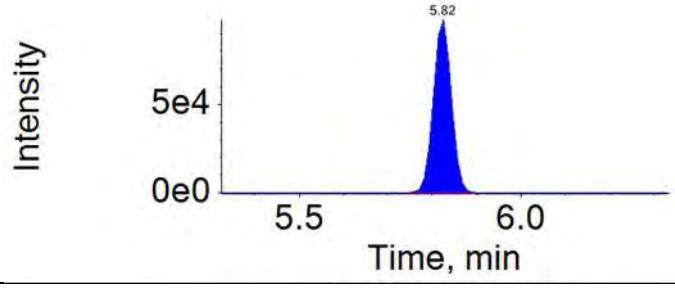
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



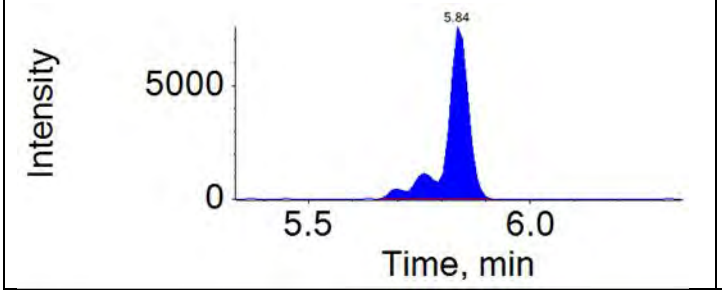


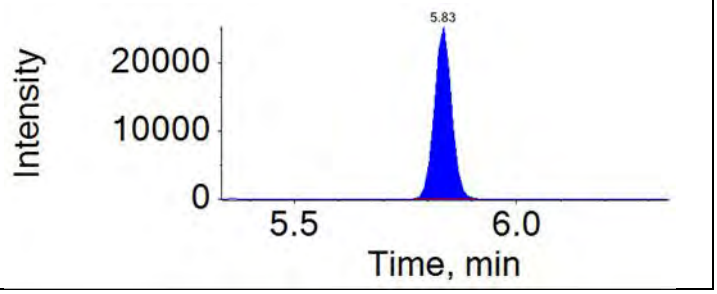
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

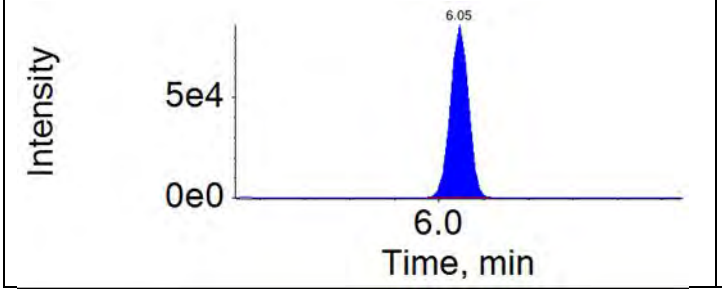
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

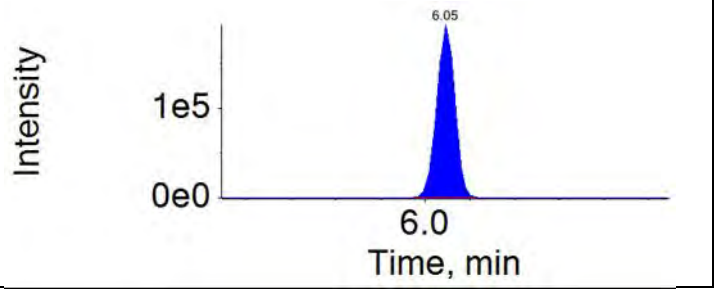
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



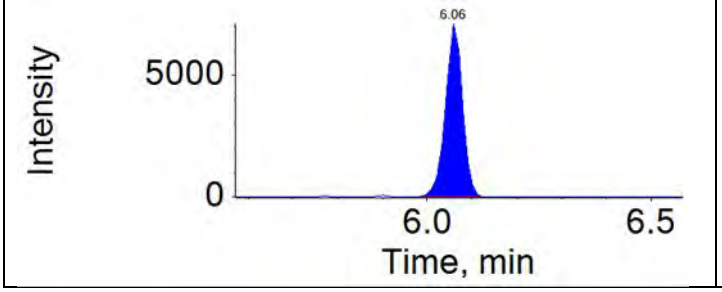


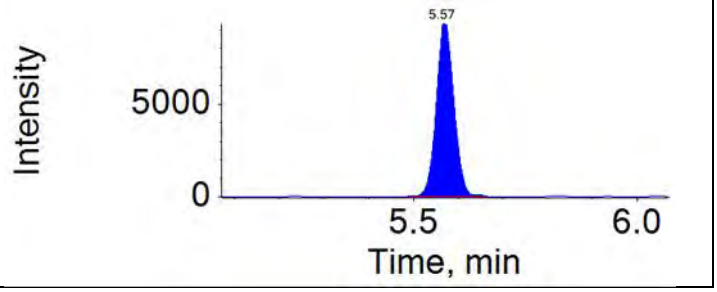
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



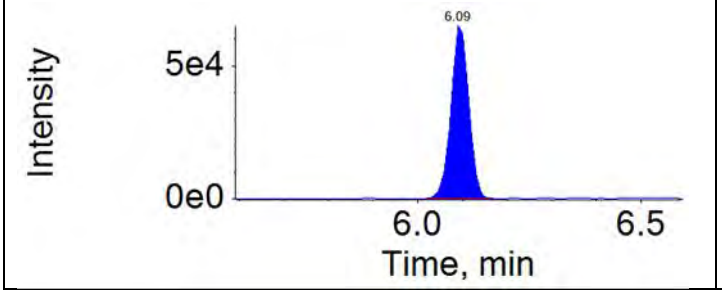


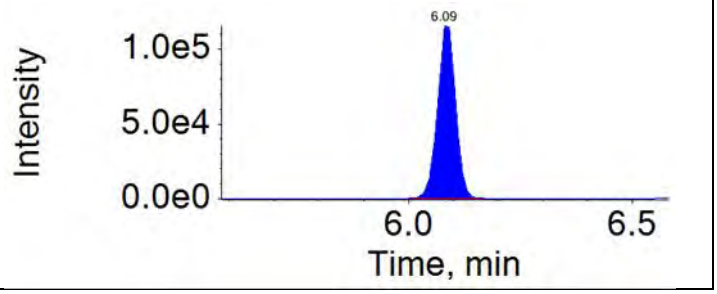
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



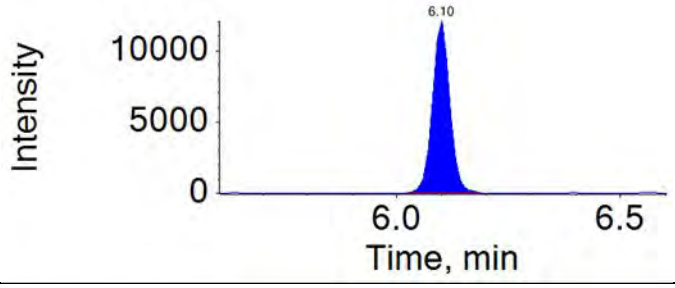


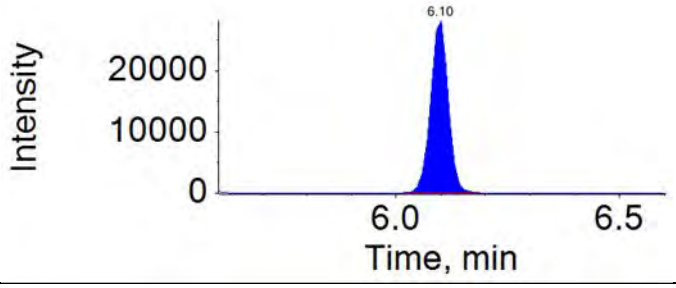
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

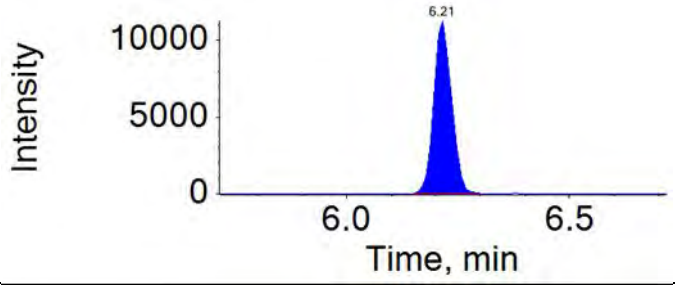
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

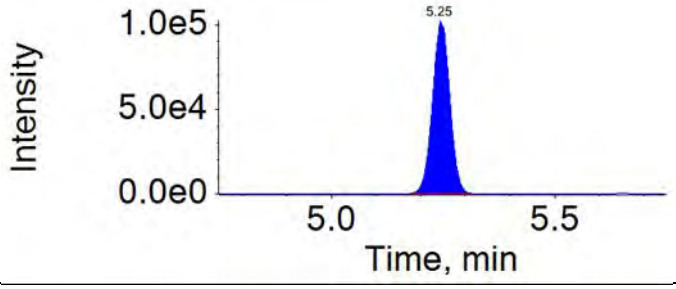
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



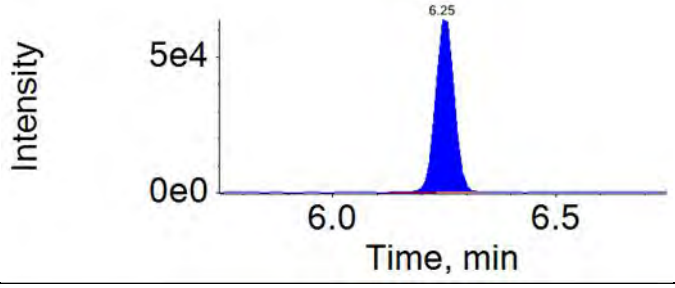


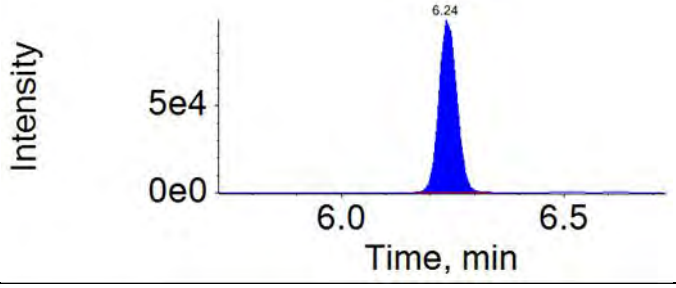
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



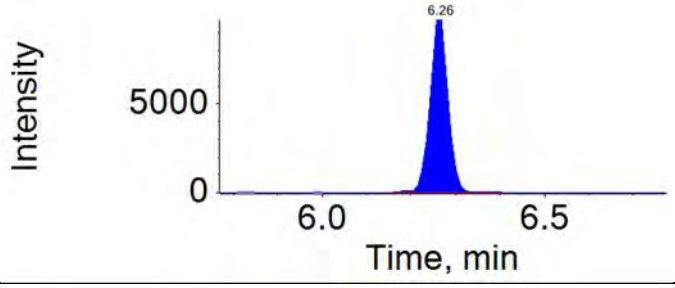


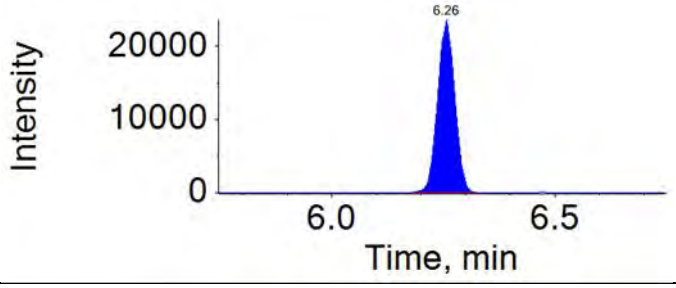
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



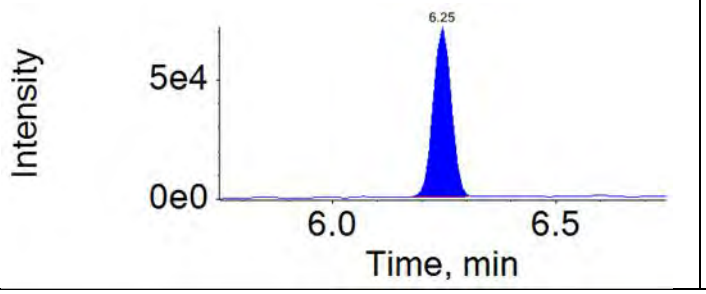


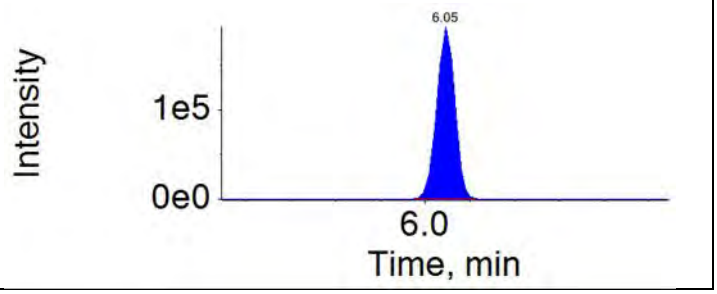
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

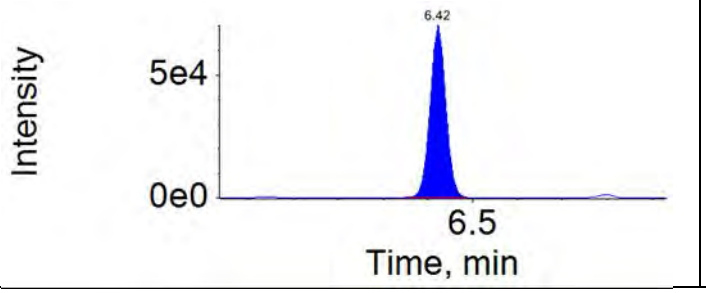
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

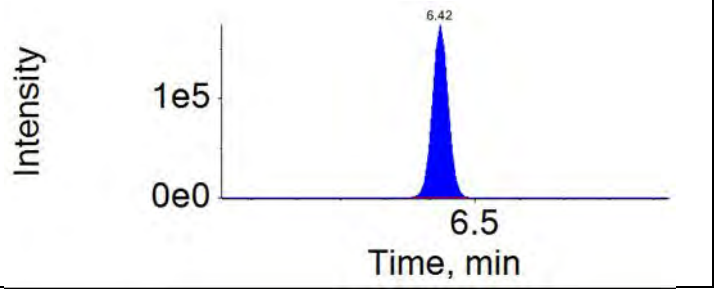
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



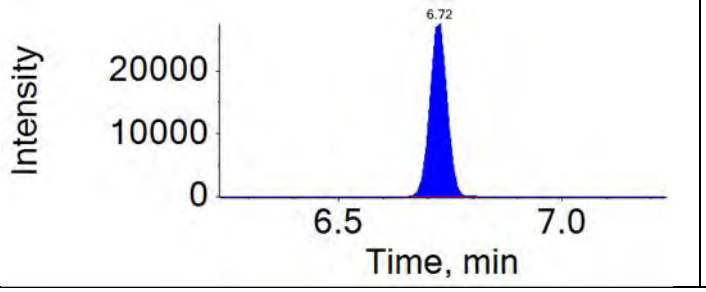


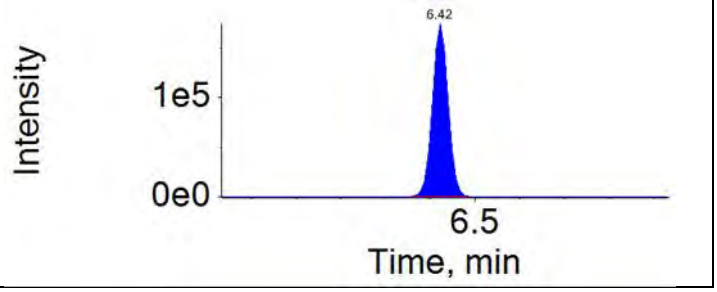
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



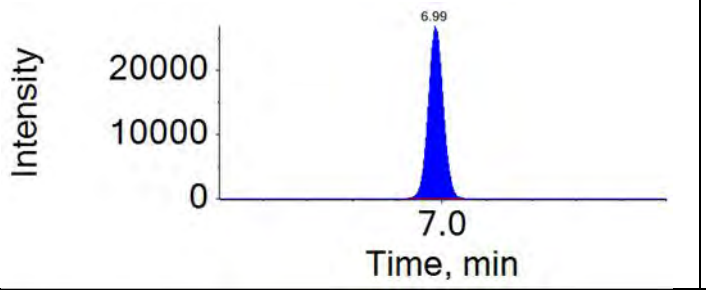


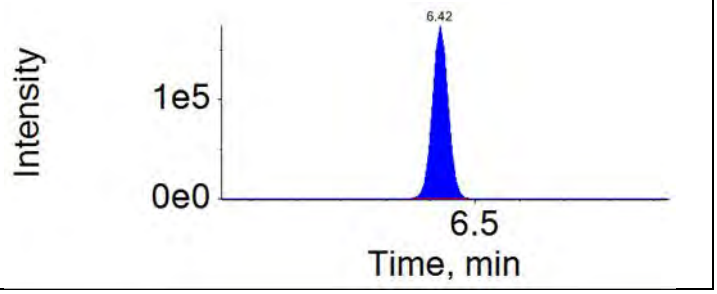
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0

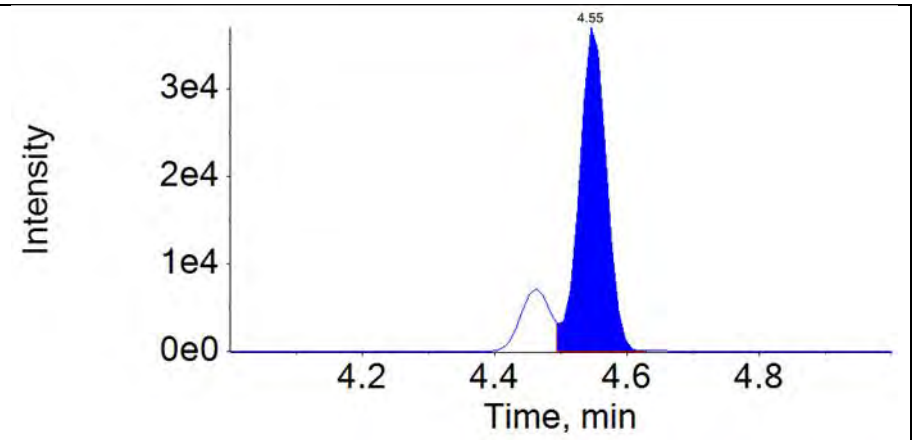


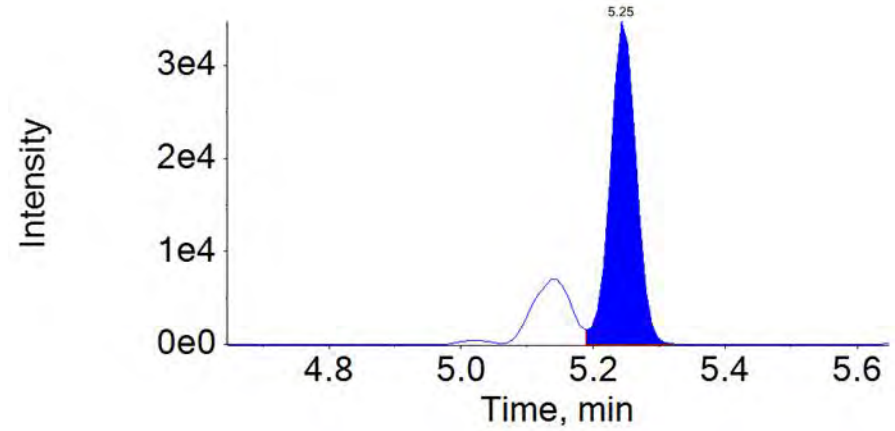


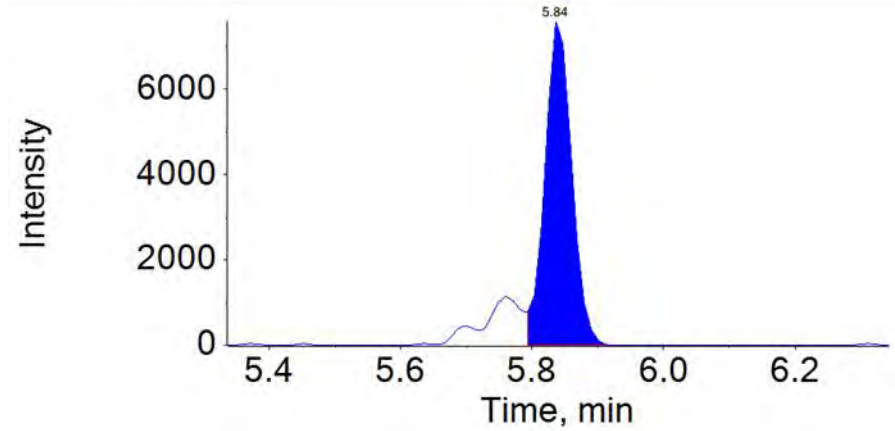
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFHxS **RT (min.):** 4.55 **Peak Area:** 105613.5 **Mass Range:** 399.0 / 80.0 **File Name:** 18NOV15D-17.wiff **Sample Name:** CCV2_CAL3	 **Integration Comment:** incorrect integration

Component Name: PFOS **RT (min.):** 5.25 **Peak Area:** 95008.8 **Mass Range:** 499.0 / 80.0 **File Name:** 18NOV15D-17.wiff **Sample Name:** CCV2_CAL3	 **Integration Comment:** incorrect integration

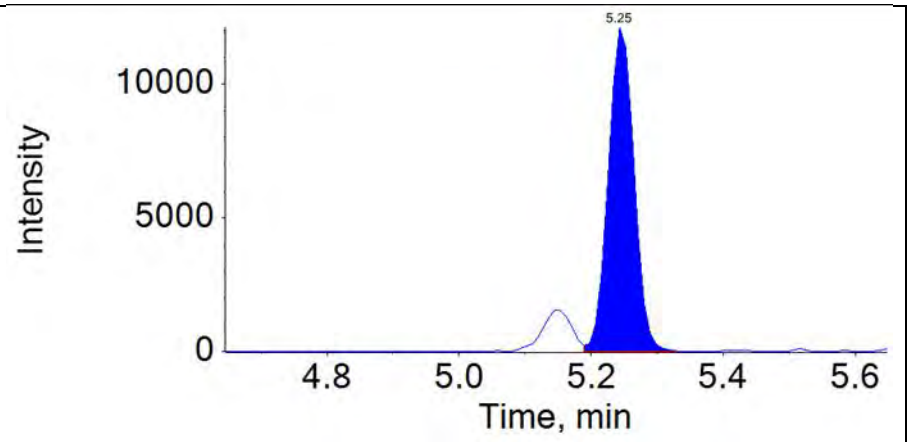
Component Name: NEtFOSAA **RT (min.):** 5.84 **Peak Area:** 21660.4 **Mass Range:** 584.0 / 419.0 **File Name:** 18NOV15D-17.wiff **Sample Name:** CCV2_CAL3	 **Integration Comment:** incorrect integration

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

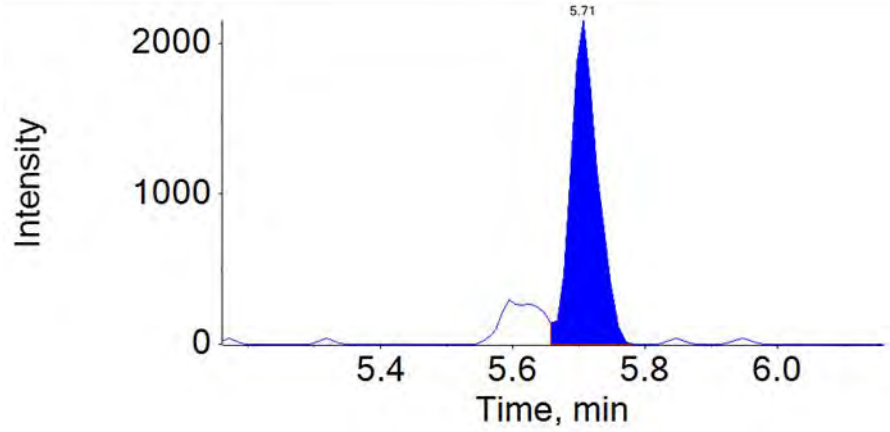
Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFOS_2
RT (min.):
5.25
Peak Area:
32951.7
Mass Range:
499.0 / 99.0
File Name:
18NOV15D-17.wiff
Sample Name:
CCV2_CAL3



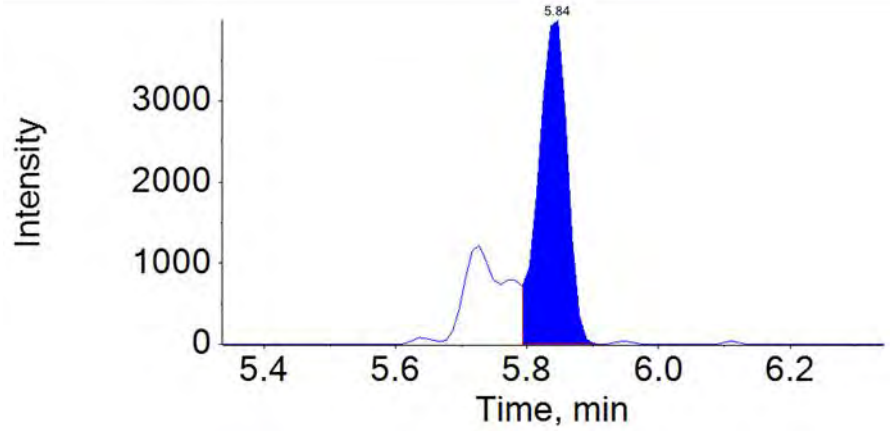
Integration Comment: incorrect integration

Component Name:
NMeFOSAA_2
RT (min.):
5.71
Peak Area:
6100.5
Mass Range:
570.0 / 483.0
File Name:
18NOV15D-17.wiff
Sample Name:
CCV2_CAL3



Integration Comment: incorrect integration

Component Name:
NEtFOSAA_2
RT (min.):
5.84
Peak Area:
12155.7
Mass Range:
584.0 / 526.0
File Name:
18NOV15D-17.wiff
Sample Name:
CCV2_CAL3



Integration Comment: incorrect integration

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

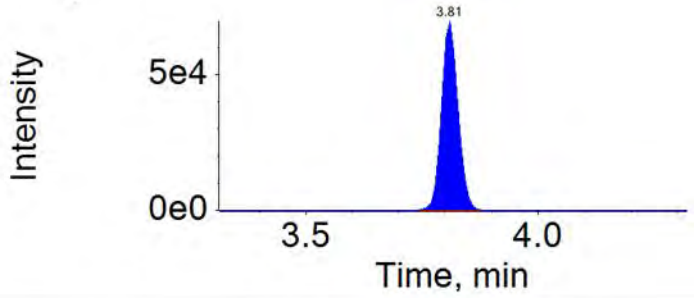
Sample Name: CCV2_CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV15D-17.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	170752.0	A	N/A	1.0000			
PFBS_2	3.81	1.00	63379.7	A	N/A	0.3712	2	50	
4:2-FTS	4.12	1.00	38005.5	A	N/A	1.0000			
4:2 FTS_2	4.12	1.00	23298.9	A	N/A	0.6130		#NA!	
PFHxA	4.16	1.00	331266.2	A	N/A	1.0000			
PFHxA_2	4.15	1.00	4913.1	A	N/A	0.0148	26	50	
PFPeS	4.18	1.10	92420.6	A	N/A	1.0000			
PFPeS_2	4.18	1.10	46455.5	A	N/A	0.5027	-3	50	
PFHpA	4.55	1.00	392775.4	A	N/A	1.0000			
PFHpA_2	4.55	1.00	20837.8	A	N/A	0.0531	-6	50	
PFHxS	4.55	1.00	127507.7	M	N/A	1.0000			
PFHxS_2	4.55	1.00	46126.5	A	N/A	0.3618	5	50	
6:2-FTS	4.90	1.00	30390.4	A	N/A	1.0000			
6:2 FTS_2	4.90	1.00	21288.3	A	N/A	0.7005		#NA!	
PFHpS	4.91	1.08	127618.9	A	N/A	1.0000			
PFHpS_2	4.91	1.08	52060.7	A	N/A	0.4079	0	50	
PFOA	4.92	1.00	378071.7	A	N/A	1.0000			
PFOA_2	4.92	1.00	20981.9	A	N/A	0.0555	-2	50	
PFOS	5.25	1.00	125131.3	M	N/A	1.0000			
PFOS_2	5.25	1.00	37718.5	M	N/A	0.3014	2	50	
PFNA	5.26	1.00	313870.7	A	N/A	1.0000			
PFNA_2	5.26	1.00	5766.9	A	N/A	0.0184	-19	50	
PFNS	5.54	1.06	82338.4	A	N/A	1.0000			
PFNS_2	5.54	1.06	37960.6	A	N/A	0.4610	-3	50	
PFDA	5.57	1.00	253223.2	A	N/A	1.0000			
PFDA_2	5.57	1.00	1673.2	A	N/A	0.0066	-17	50	
8:2-FTS	5.57	1.00	24874.7	A	N/A	1.0000			
8:2 FTS_2	5.57	1.00	16031.9	A	N/A	0.6445		#NA!	
NMeFOSAA	5.71	1.00	28588.3	A	N/A	1.0000			
NMeFOSAA_2	5.71	1.00	7354.6	M	N/A	0.2573	-1	50	
PFDS	5.80	1.11	61289.2	A	N/A	1.0000			
PFDS_2	5.80	1.11	32420.8	A	N/A	0.5290	4	50	
PFUnDA	5.82	1.00	212907.1	A	N/A	1.0000			
PFUnDA_2	5.84	1.00	584.2	A	N/A	0.0027	-50	50	
NEtFOSAA	5.84	1.00	26369.1	M	N/A	1.0000			
NEtFOSAA_2	5.84	1.00	17495.0	M	N/A	0.6635	-8	50	
PFDoDA	6.05	1.00	239087.4	A	N/A	1.0000			
PFDoDA_2	6.05	1.00	3379.4	A	N/A	0.0141	-8	50	
10:2-FTS	6.06	1.09	18636.1	A	N/A	1.0000			
10:2 FTS_2	6.06	1.09	11927.4	A	N/A	0.6400		#NA!	
PFTrDA	6.25	1.03	196890.1	A	N/A	1.0000			
PFTrDA_2	6.25	1.03	2351.7	A	N/A	0.0119	40	50	
PFTeDA	6.42	1.00	170072.7	A	N/A	1.0000			
PFTeDA_2	6.42	1.00	1048.5	A	N/A	0.0062	-1	50	
PFHxDA	6.72	1.05	74302.7	A	N/A	1.0000			
PFHxDA_2	6.72	1.05	4851.2	A	N/A	0.0653	-4	50	
PFODA	6.99	1.09	61703.9	A	N/A	1.0000			
PFODA_2	6.98	1.09	1412.0	A	N/A	0.0229	-17	50	

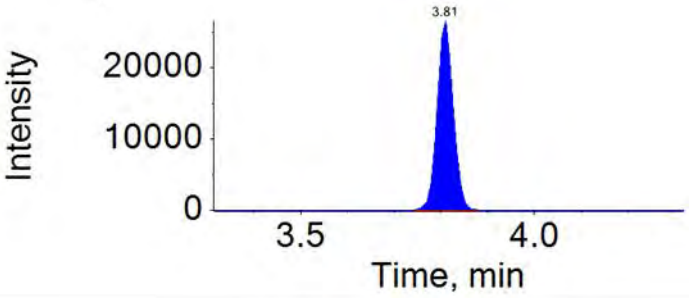
APPROVED
By JPT at 8:56 am, 11/16/18

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By HMK at 7:38 am, 11/19/18

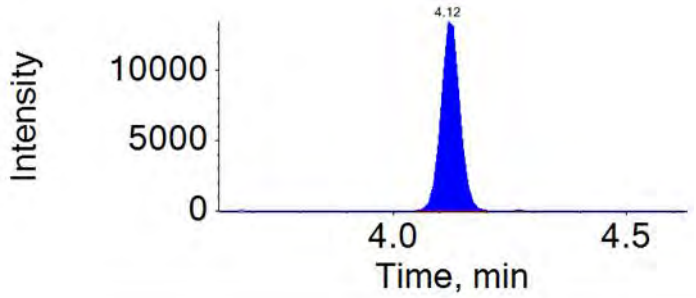
Component: PFBS
Primary Mass: 299.0 / 80.0



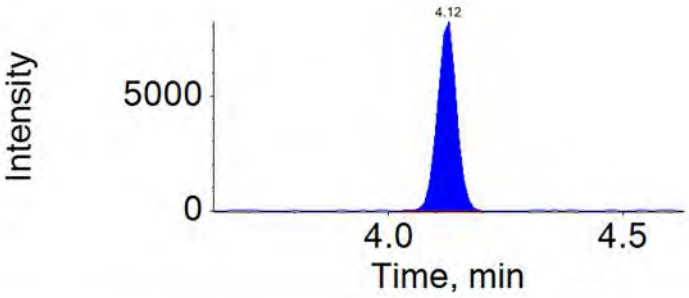
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



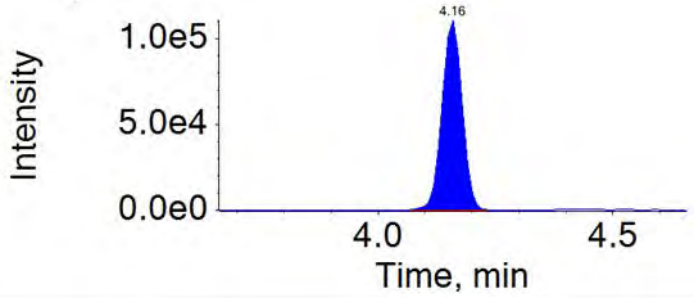
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



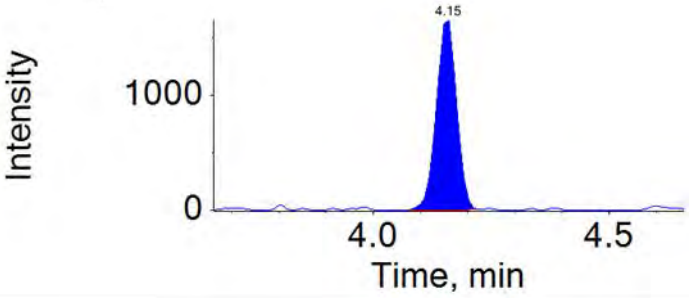
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



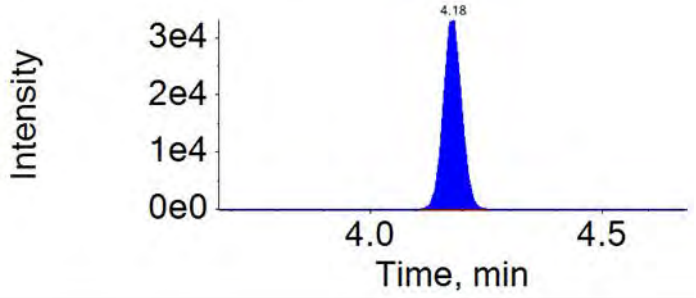
Component: PFHxA
Primary Mass: 313.0 / 269.0



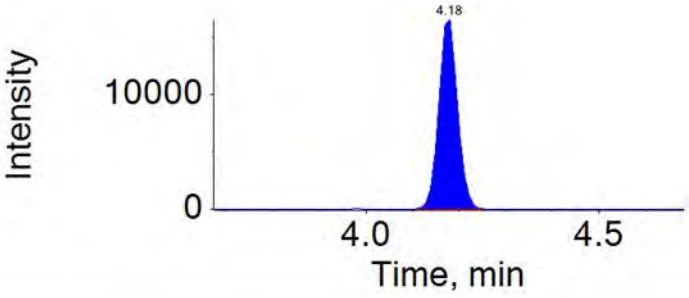
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



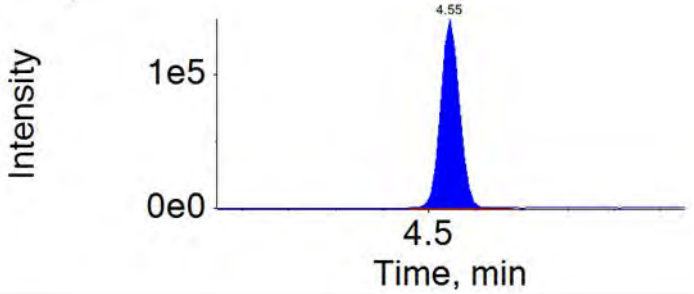
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



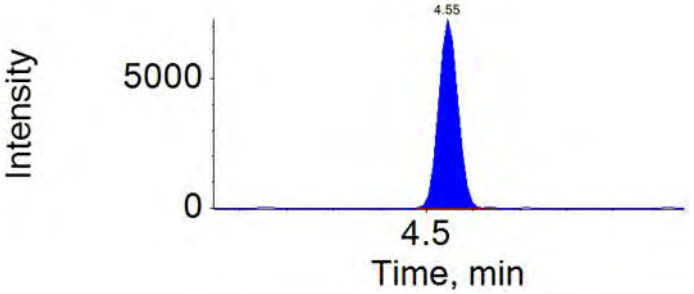
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By HMK at 7:38 am, 11/19/18

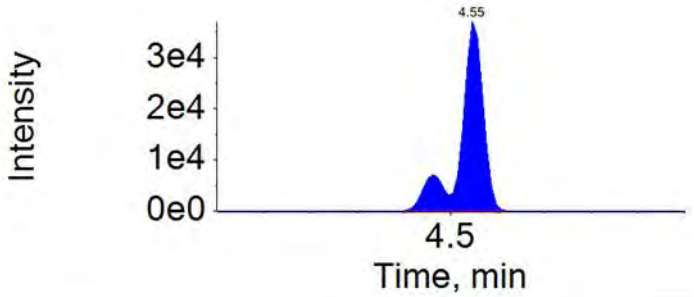
Component: PFHpA
Primary Mass: 363.0 / 319.0



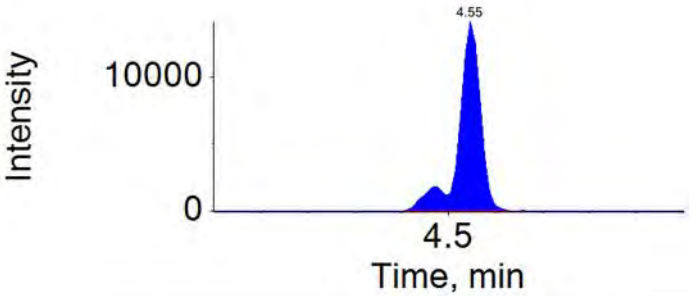
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



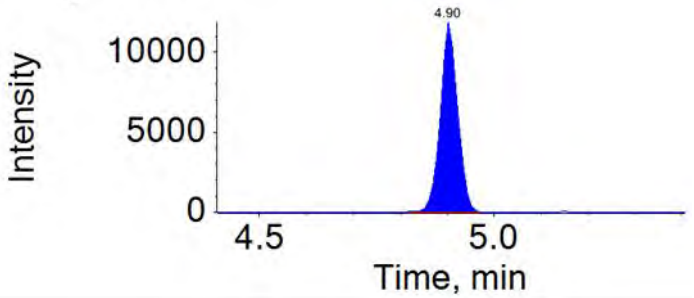
Component: PFHxS
Primary Mass: 399.0 / 80.0



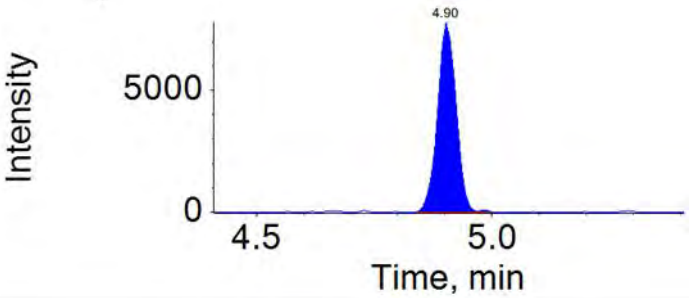
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



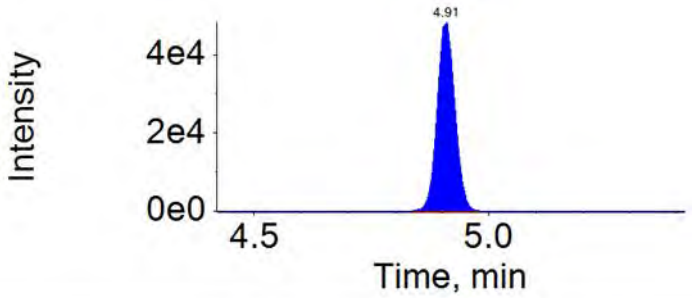
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



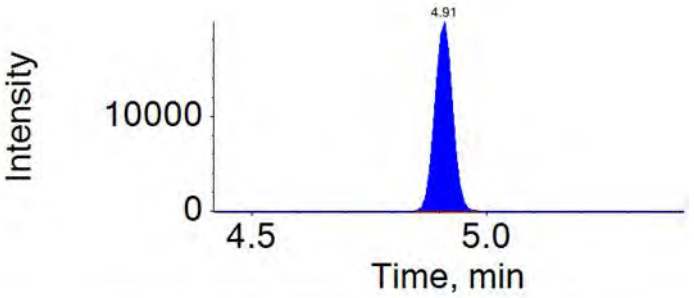
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



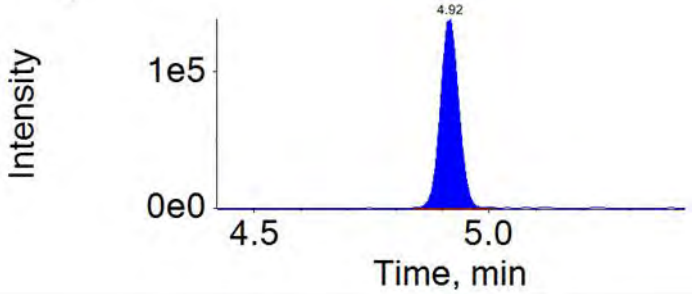
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



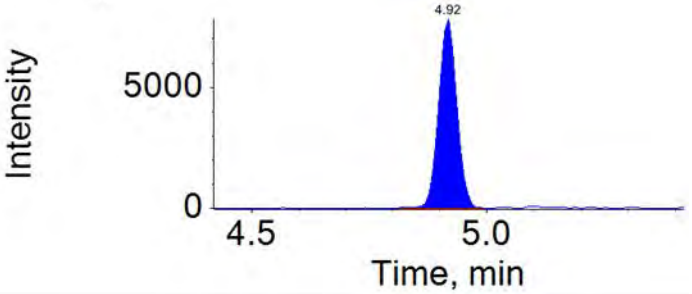
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

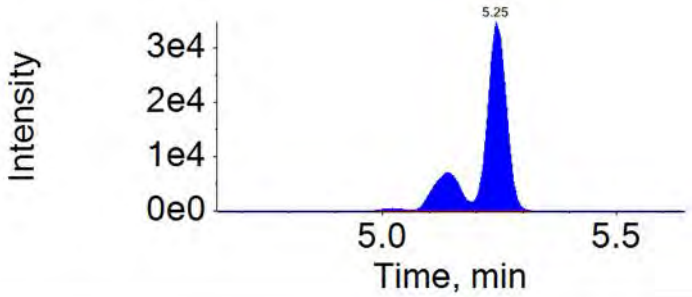
Component: PFOA
Primary Mass: 413.0 / 369.0



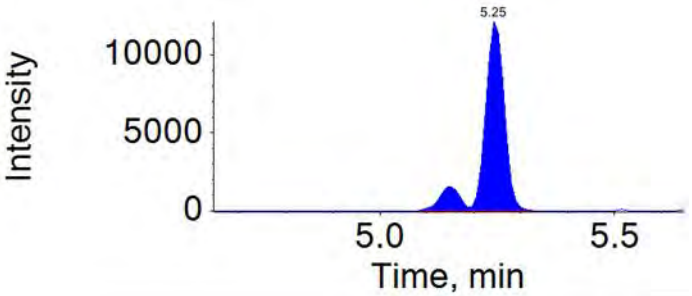
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



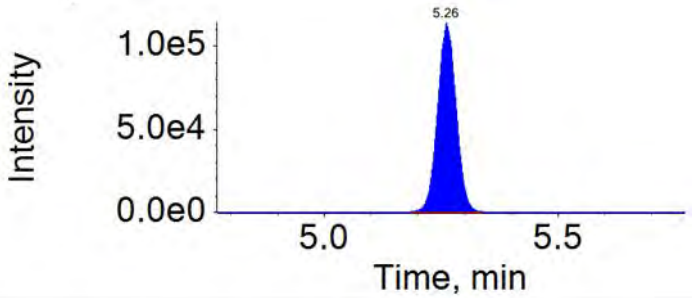
Component: PFOS
Primary Mass: 499.0 / 80.0



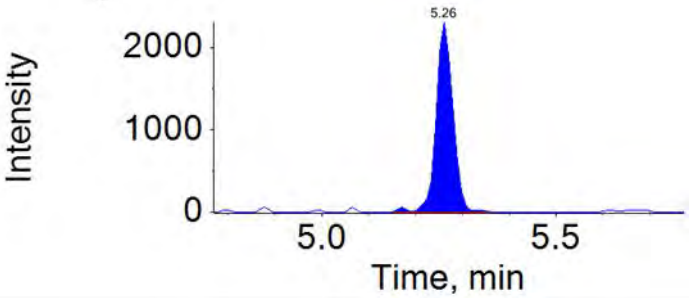
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



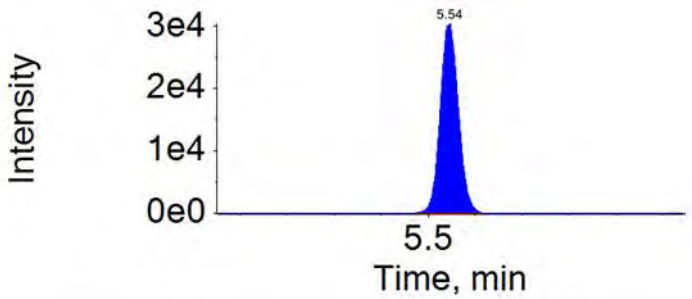
Component: PFNA
Primary Mass: 463.0 / 419.0



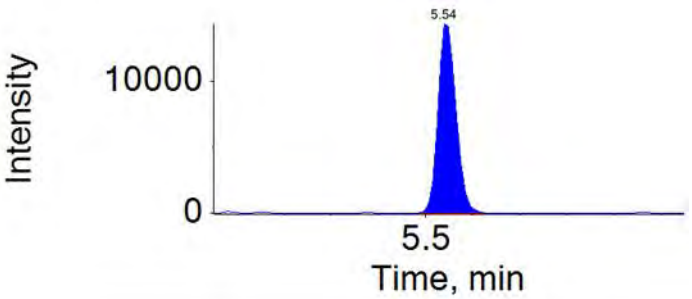
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



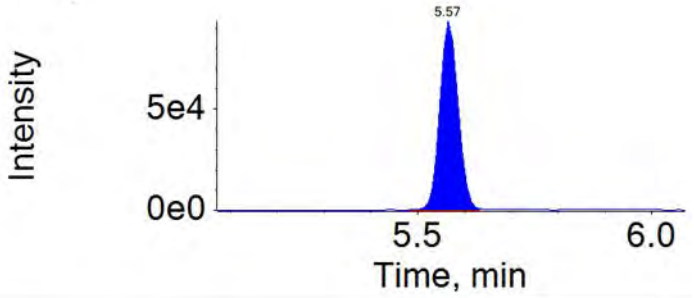
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



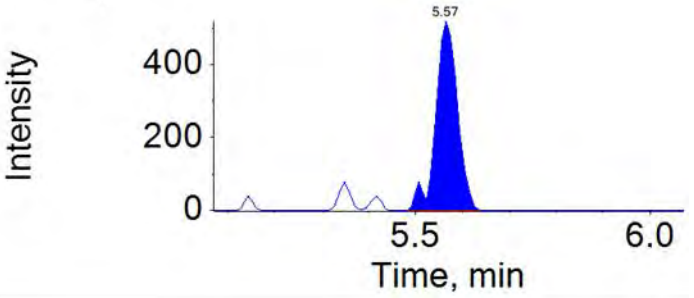
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

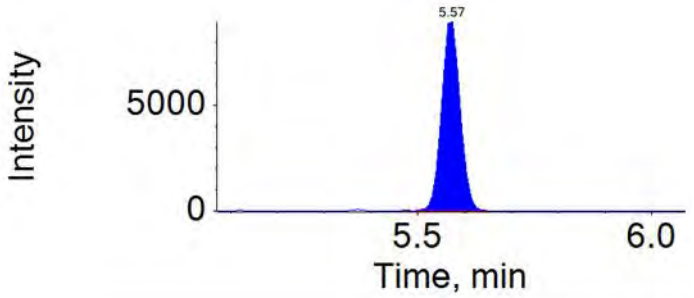
Component: PFDA
Primary Mass: 513.0 / 469.0



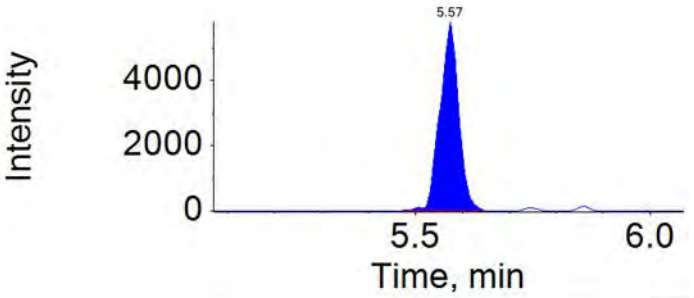
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



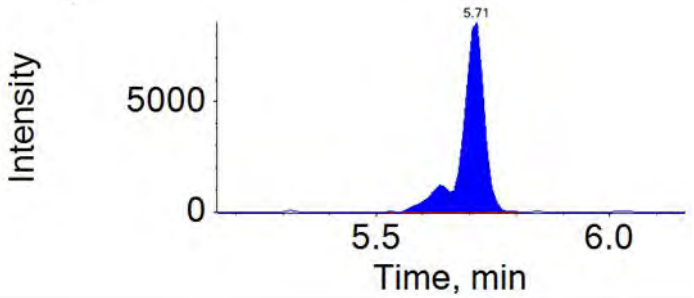
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



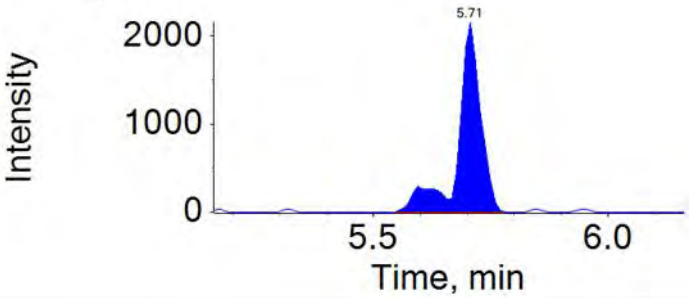
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



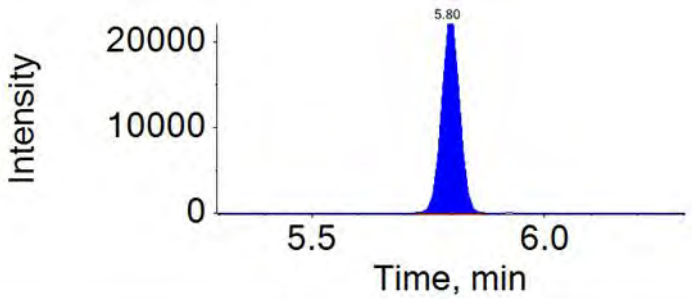
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



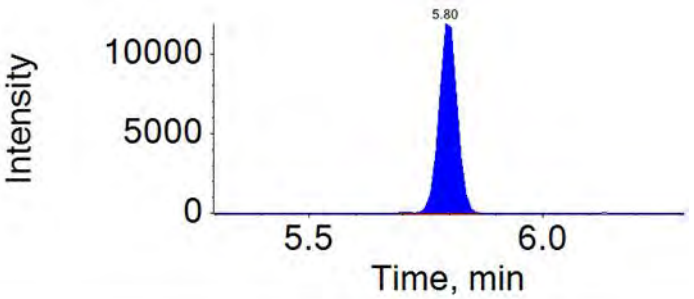
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



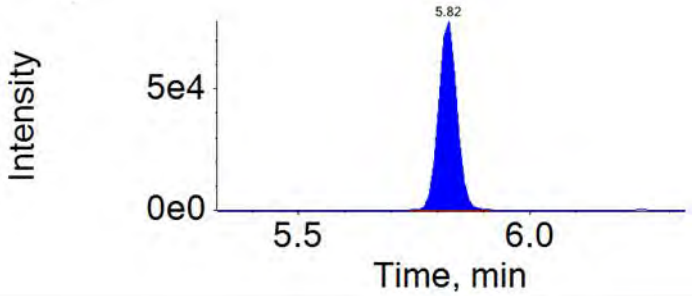
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



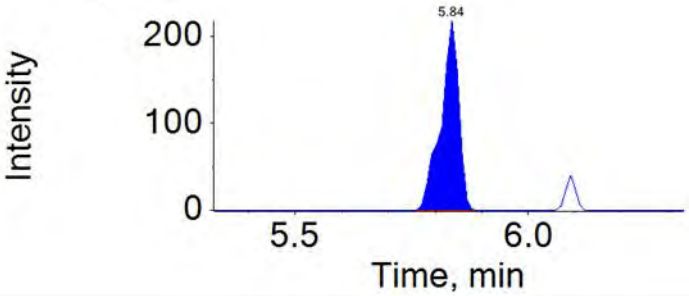
APPROVED
By JPT at 8:56 am, 11/16/18

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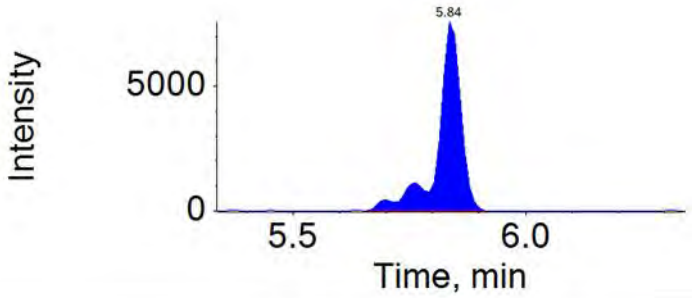
Component: PFUnDA
Primary Mass: 563.0 / 519.0



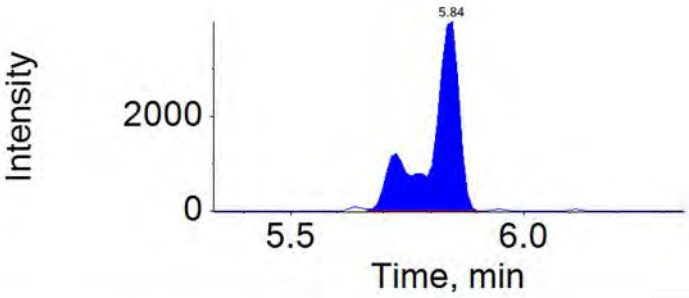
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



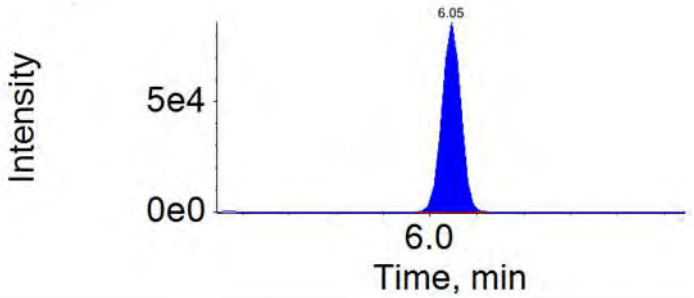
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



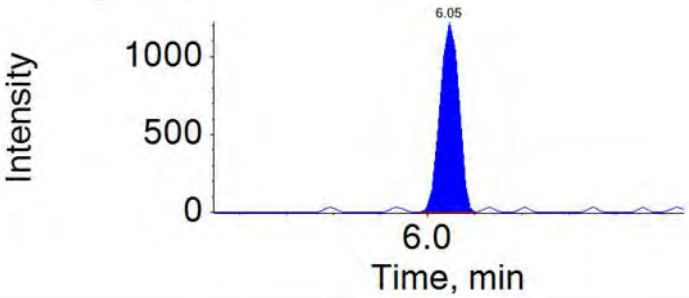
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



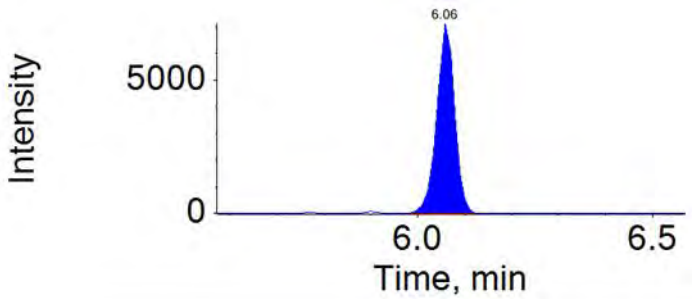
Component: PFDoDA
Primary Mass: 613.0 / 569.0



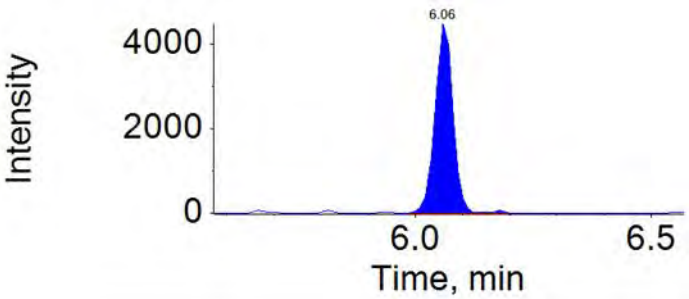
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



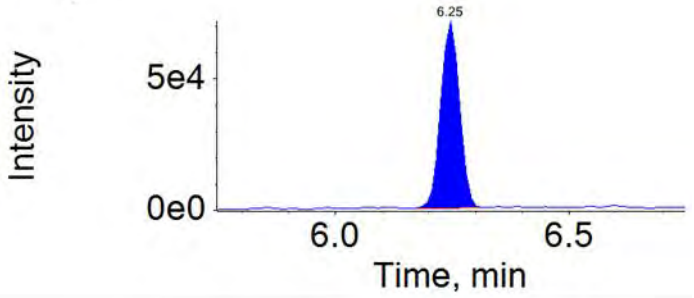
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



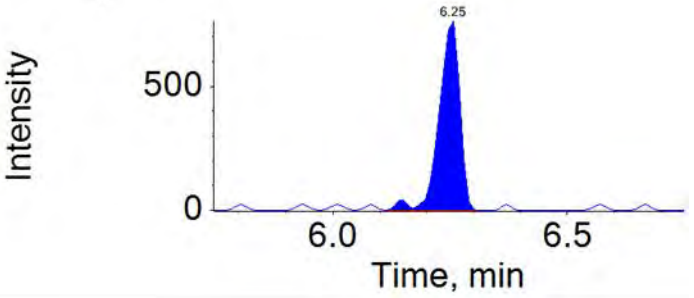
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

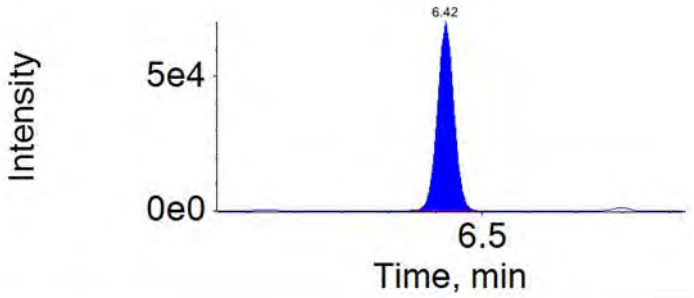
Component: PFTrDA
Primary Mass: 663.0 / 619.0



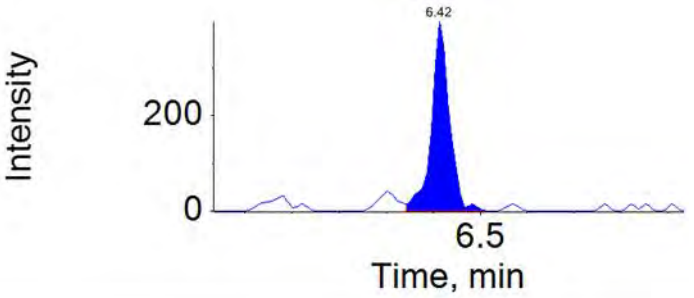
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



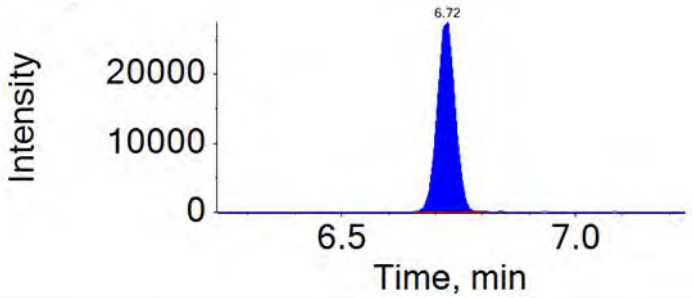
Component: PFTeDA
Primary Mass: 713.0 / 669.0



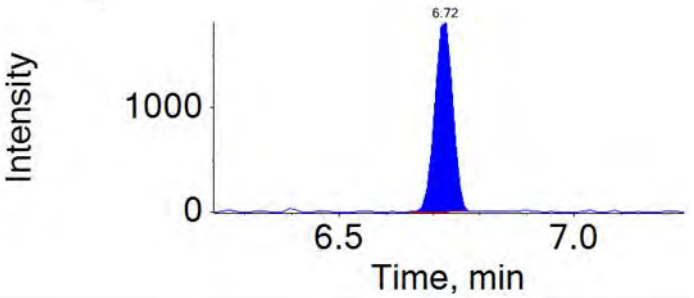
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



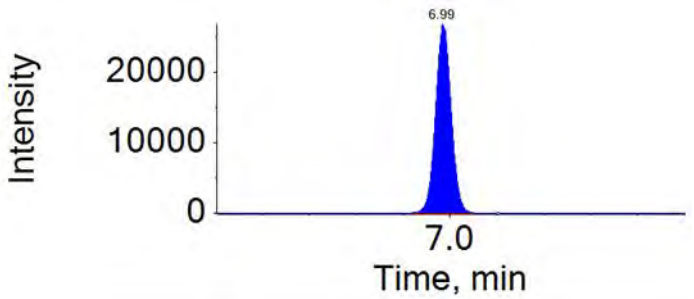
Component: PFHxDA
Primary Mass: 813.0 / 769.0



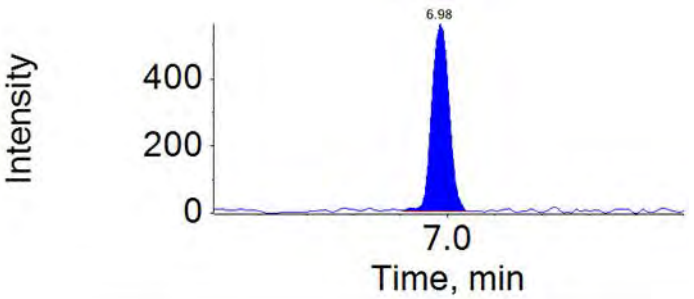
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



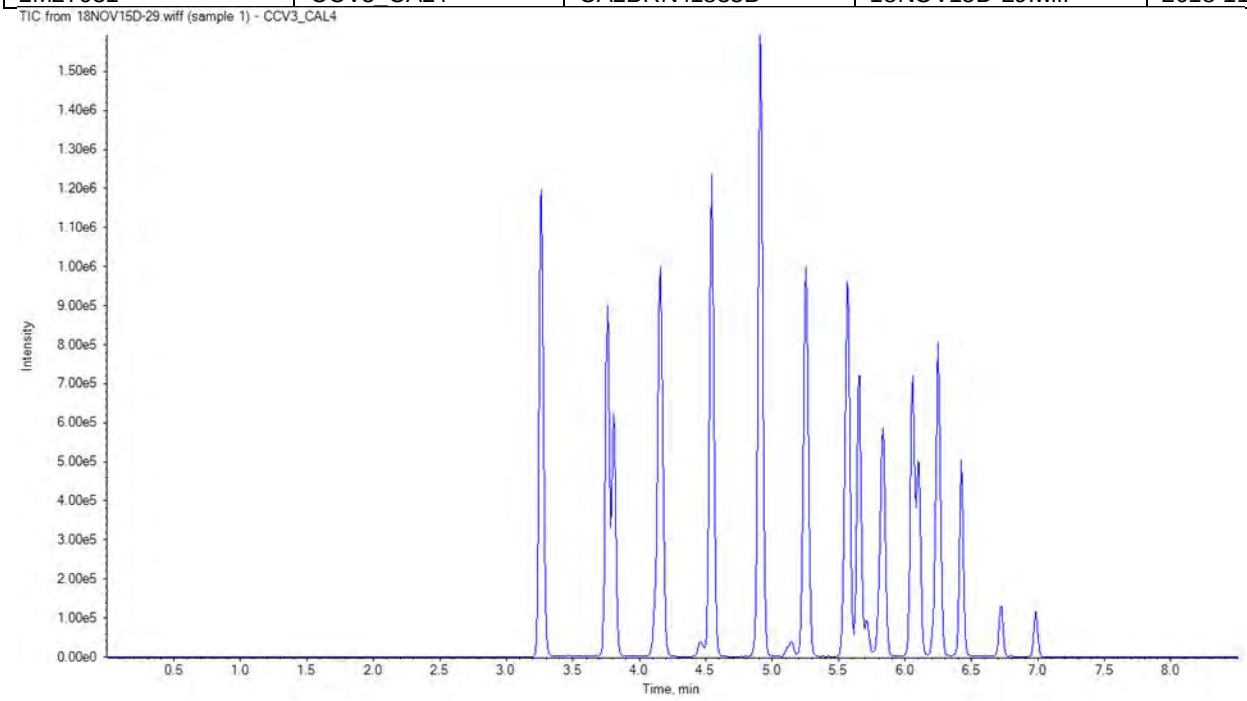
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV3_CAL4	CALBRN41833B	18NOV15D-29.wiff	2018-11-15T16:15:35



Injection Standard Area Reference File: 18NOV15D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	731273.5	732179.1	0	50	
13C2-PFOA	5.0	509361.7	479663.2	6	50	
13C4-PFOS	4.8	280144.9	269685.3	4	50	
13C2-PFDA	5.0	308820.8	302309.9	2	50	

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV3_CAL4	CALBRN41833B	18NOV15D-29.wiff	2018-11-15T16:15:35

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	1175309.6	10	13C4-PFBA	803371.9	5.0	1.463	3.26	1.000	8.000	8.104	1	30	
PFPeA	1136977.1	11	13C5-PFPeA	795295.4	5.0	1.430	3.76	1.000	8.000	8.276	3	30	
PFBS	639117.9	11	13C3-PFBS	436366.7	4.7	1.465	3.81	1.000	7.080	6.967	-2	30	
4:2-FTS	136748.3	11	13C2-4:2-FTS	51826.2	4.7	2.639	4.12	1.000	7.470	7.164	-4	30	
PFHxA	1378660.6	12	13C5-PFHxA	680063.6	5.0	2.027	4.16	1.000	8.000	8.464	6	30	
PFPeS	333118.9	11	13C3-PFBS	436366.7	4.7	0.763	4.18	1.100	7.500	7.411	-1	30	
PFHpA	1386373.1	12	13C4-PFHpA	549471.2	5.0	2.523	4.54	1.000	8.000	8.363	5	30	
PFHxS	466246.7	19	13C3-PFHxS	324286.6	4.7	1.438	4.55	1.000	7.300	6.971	-5	30	
6:2-FTS	108795.0	11	13C2-6:2-FTS	35385.8	4.8	3.075	4.90	1.000	7.580	7.440	-2	30	
PFHpS	477473.9	11	13C3-PFHxS	324286.6	4.7	1.472	4.91	1.080	7.610	7.751	2	30	
PFOA	1409760.6	11	13C8-PFOA	915448.8	5.0	1.540	4.91	1.000	8.000	8.225	3	30	
PFOS	469289.4	22	13C8-PFOS	279356.0	4.8	1.680	5.24	1.000	7.400	7.346	-1	30	
PFNA	1119473.7	11	13C9-PFNA	472819.9	5.0	2.368	5.26	1.000	8.000	8.538	7	30	
PFNS	320473.6	11	13C8-PFOS	279356.0	4.8	1.147	5.55	1.060	7.680	8.026	5	30	
PFDA	958718.1	11	13C6-PFDA	643195.4	5.0	1.491	5.57	1.000	8.000	7.902	-1	30	
8:2-FTS	88811.3	12	13C2-8:2-FTS	25861.5	4.8	3.434	5.57	1.000	7.660	8.007	5	30	
PFOSA	1033454.1	12	13C8-PFOSA	644694.0	5.0	1.603	5.65	1.000	8.000	7.830	-2	30	
NMeFOSAA	112844.6	19	d3-NMeFOSAA	76863.2	5.0	1.468	5.71	1.000	8.000	8.297	4	30	
PFDS	237235.2	11	13C8-PFOS	279356.0	4.8	0.849	5.81	1.110	7.700	7.695	0	30	
PFUnDA	810481.8	11	13C7-PFUnDA	275172.0	5.0	2.945	5.83	1.000	8.000	7.700	-4	30	
NEtFOSAA	94950.7	21	d5-NEtFOSAA	77138.6	5.0	1.231	5.85	1.000	8.000	6.453	-19	30	
PFDoDA	885673.4	11	13C2-PFDoDA	596233.0	5.0	1.485	6.06	1.000	8.000	7.564	-5	30	
10:2-FTS	66917.7	11	13C2-8:2-FTS	25861.5	4.8	2.588	6.07	1.090	7.710	8.619	12	30	
NMePFOSAE	629785.0	11	d7-NMePFOSAE	336230.3	5.0	1.873	6.10	1.000	8.000	7.796	-3	30	
NMePFOSA	117445.7	11	d3-NMePFOSA	78489.4	5.0	1.496	6.11	1.000	8.000	7.382	-8	30	
PFDoS	122142.9	11	13C8-PFOS	279356.0	4.8	0.437	6.21	1.190	7.740	7.658	-1	30	
NEtPFOSAE	699439.6	11	d9-NEtPFOSAE	281116.4	5.0	2.488	6.25	1.000	8.000	7.982	0	30	
NEtPFOSA	104179.3	11	d5-NEtPFOSA	59931.8	5.0	1.738	6.27	1.000	8.000	7.983	0	30	
PFTrDA	703394.0	11	13C2-PFDoDA	596233.0	5.0	1.180	6.24	1.030	8.000	7.446	-7	30	
PFTeDA	595045.7	10	13C2-PFTeDA	414599.5	5.0	1.435	6.42	1.000	8.000	8.045	1	30	
PFHxDA	269235.8	11	13C2-PFTeDA	414599.5	5.0	0.649	6.72	1.050	8.000	7.737	-3	30	
PFODA	235049.1	10	13C2-PFTeDA	414599.5	5.0	0.567	6.98	1.090	8.000	7.896	-1	30	

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Continuing Calibration Verfication

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
Acquisition Method: 18AUG13_3uL.dam

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV3_CAL4			**Data File:**		18NOV15D-29.wiff
Sample ID:	CALBRN41833B			**Acquis Date:**		2018-11-15T16:15:35
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	6			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV15DCCV1-4
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	N/A			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV15D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	731273.5	732179.1	0	50	
13C2-PFOA	5.0	509361.7	479663.2	6	50	
13C4-PFOS	4.8	280144.9	269685.3	4	50	
13C2-PFDA	5.0	308820.8	302309.9	2	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	803371.9	13C3-PFBA	731273.5	1.099	5.000	4.925	99	70-130	
E13C5-PFPeA	795295.4	13C3-PFBA	731273.5	1.088	5.000	4.878	98	70-130	
E13C3-PFBS	436366.7	13C3-PFBA	731273.5	0.597	4.650	4.212	91	70-130	
E13C2-4:2-FTS	51826.2	13C2-PFOA	509361.7	0.102	4.670	4.532	97	70-130	
E13C5-PFHxA	680063.6	13C2-PFOA	509361.7	1.335	5.000	4.823	96	70-130	
E13C3-PFHxS	324286.6	13C2-PFOA	509361.7	0.637	4.730	4.369	92	70-130	
E13C4-PFHpA	549471.2	13C2-PFOA	509361.7	1.079	5.000	4.860	97	70-130	
E13C2-6:2-FTS	35385.8	13C2-PFOA	509361.7	0.069	4.750	4.648	98	70-130	
E13C8-PFOA	915448.8	13C2-PFOA	509361.7	1.797	5.000	4.952	99	70-130	
E13C8-PFOS	279356.0	13C4-PFOS	280144.9	0.997	4.780	4.418	92	70-130	
E13C9-PFNA	472819.9	13C4-PFOS	280144.9	1.688	5.000	4.706	94	70-130	
E13C6-PFDA	643195.4	13C2-PFDA	308820.8	2.083	5.000	4.860	97	70-130	
E13C2-8:2-FTS	25861.5	13C2-PFDA	308820.8	0.084	4.790	4.176	87	70-130	
E13C8-PFOSA	644694.0	13C2-PFDA	308820.8	2.088	5.000	4.628	93	70-130	
Ed3-NMeFOSAA	76863.2	13C2-PFDA	308820.8	0.249	5.000	4.493	90	70-130	
E13C7-PFUnDA	275172.0	13C2-PFDA	308820.8	0.891	5.000	5.173	103	70-130	
Ed5-NEtFOSAA	77138.6	13C2-PFDA	308820.8	0.250	5.000	5.285	106	70-130	
E13C2-PFDoDA	596233.0	13C2-PFDA	308820.8	1.931	5.000	5.013	100	70-130	
Ed7-NMePFOSAE	336230.3	13C2-PFDA	308820.8	1.089	5.000	4.712	94	70-130	
Ed3-NMePFOSA	78489.4	13C2-PFDA	308820.8	0.254	5.000	4.618	92	70-130	
Ed9-NEtPFOSAE	281116.4	13C2-PFDA	308820.8	0.910	5.000	4.734	95	70-130	
Ed5-NEtPFOSA	59931.8	13C2-PFDA	308820.8	0.194	5.000	4.552	91	70-130	
E13C2-PFTeDA	414599.5	13C2-PFDA	308820.8	1.343	5.000	4.713	94	70-130	

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

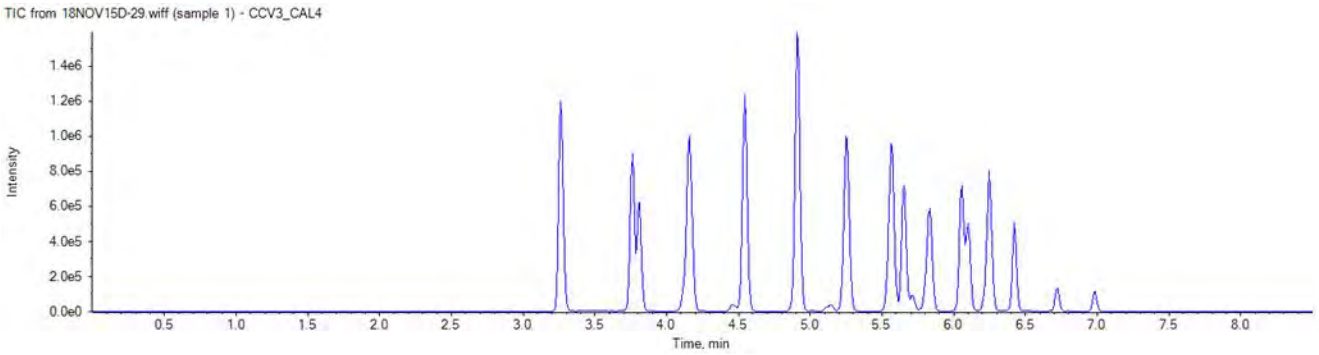
Analyte Quantitation Peak Table

Sample Name: CCV3_CAL4 **Instrument Name:** LM27631 **File Name:** 18NOV15D-29.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	1175309.6		A	13C4-PFBA	3.26	803371.9	1.463	8.104
PFPeA	3.76	1.000	1136977.1		A	13C5-PFPeA	3.76	795295.4	1.430	8.276
PFBS	3.81	1.000	639117.9		A	13C3-PFBS	3.81	436366.7	1.465	6.967
4:2-FTS	4.12	1.000	136748.3		A	13C2-4:2-FTS	4.12	51826.2	2.639	7.164
PFHxA	4.16	1.000	1378660.6		A	13C5-PFHxA	4.16	680063.6	2.027	8.464
PFPeS	4.18	1.100	333118.9		A	13C3-PFBS	3.81	436366.7	0.763	7.411
PFHpA	4.54	1.000	1386373.1		A	13C4-PFHpA	4.54	549471.2	2.523	8.363
PFHxS	4.55	1.000	466246.7		M	13C3-PFHxS	4.55	324286.6	1.438	6.971
6:2-FTS	4.90	1.000	108795.0		A	13C2-6:2-FTS	4.90	35385.8	3.075	7.440
PFHpS	4.91	1.080	477473.9		A	13C3-PFHxS	4.55	324286.6	1.472	7.751
PFOA	4.91	1.000	1409760.6		A	13C8-PFOA	4.91	915448.8	1.540	8.225
PFOS	5.24	1.000	469289.4		M	13C8-PFOS	5.24	279356.0	1.680	7.346
PFNA	5.26	1.000	1119473.7		A	13C9-PFNA	5.26	472819.9	2.368	8.538
PFNS	5.55	1.060	320473.6		A	13C8-PFOS	5.24	279356.0	1.147	8.026
PFDA	5.57	1.000	958718.1		A	13C6-PFDA	5.57	643195.4	1.491	7.902
8:2-FTS	5.57	1.000	88811.3		A	13C2-8:2-FTS	5.57	25861.5	3.434	8.007
PFOSA	5.65	1.000	1033454.1		A	13C8-PFOSA	5.65	644694.0	1.603	7.830
NMeFOSAA	5.71	1.000	112844.6		M	d3-NMeFOSAA	5.71	76863.2	1.468	8.297
PFDS	5.81	1.110	237235.2		A	13C8-PFOS	5.24	279356.0	0.849	7.695
PFUnDA	5.83	1.000	810481.8		A	13C7-PFUnDA	5.83	275172.0	2.945	7.700
NEtFOSAA	5.85	1.000	94950.7		A	d5-NEtFOSAA	5.84	77138.6	1.231	6.453
PFDoDA	6.06	1.000	885673.4		A	13C2-PFDoDA	6.06	596233.0	1.485	7.564
10:2-FTS	6.07	1.090	66917.7		A	13C2-8:2-FTS	5.57	25861.5	2.588	8.619
NMePFOSAE	6.10	1.000	629785.0		A	d7-NMePFOSAE	6.09	336230.3	1.873	7.796
NMePFOSA	6.11	1.000	117445.7		A	d3-NMePFOSA	6.11	78489.4	1.496	7.382
PFDoS	6.21	1.190	122142.9		A	13C8-PFOS	5.24	279356.0	0.437	7.658
NEtPFOSAE	6.25	1.000	699439.6		A	d9-NEtPFOSAE	6.24	281116.4	2.488	7.982
NEtPFOSA	6.27	1.000	104179.3		A	d5-NEtPFOSA	6.26	59931.8	1.738	7.983
PFTrDA	6.24	1.030	703394.0		A	13C2-PFDoDA	6.06	596233.0	1.180	7.446
PFTeDA	6.42	1.000	595045.7		A	13C2-PFTeDA	6.42	414599.5	1.435	8.045
PFHxDA	6.72	1.050	269235.8		A	13C2-PFTeDA	6.42	414599.5	0.649	7.737
PFODA	6.98	1.090	235049.1		A	13C2-PFTeDA	6.42	414599.5	0.567	7.896

Total Ion Chromatogram

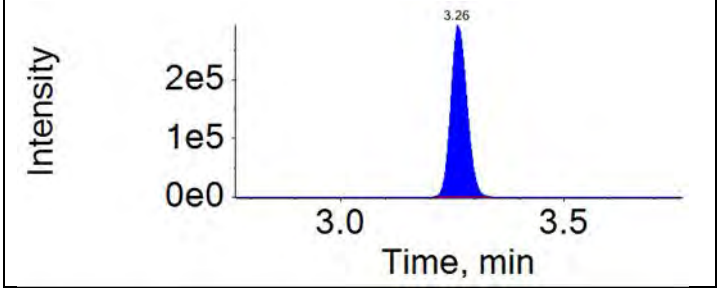


APPROVED
By JPT at 8:56 am, 11/16/18

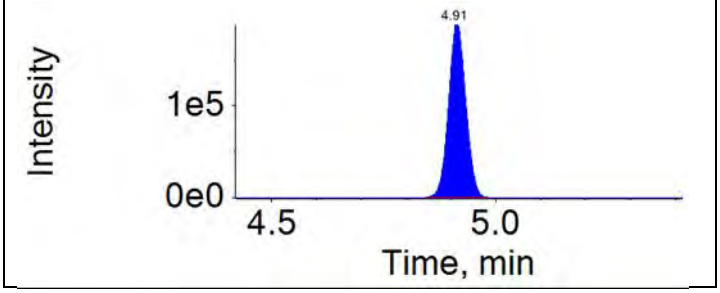
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

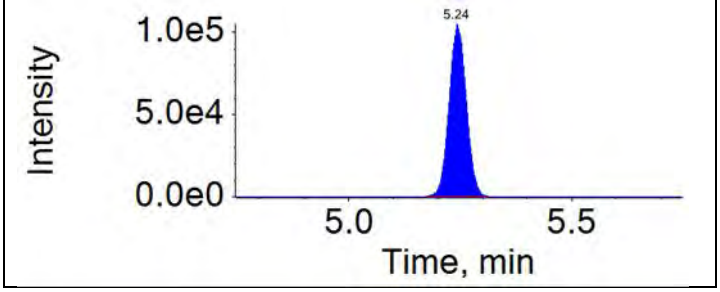
Injection Standard: 13C3-PFBA
216.0 / 172.0



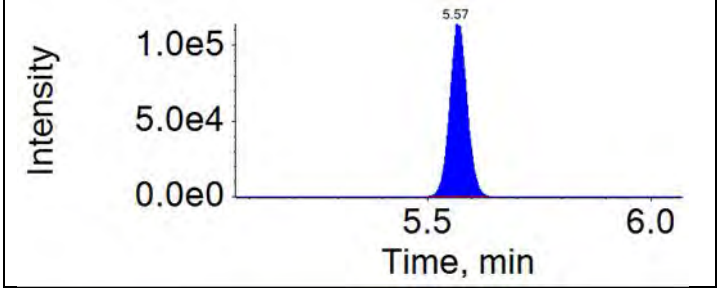
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



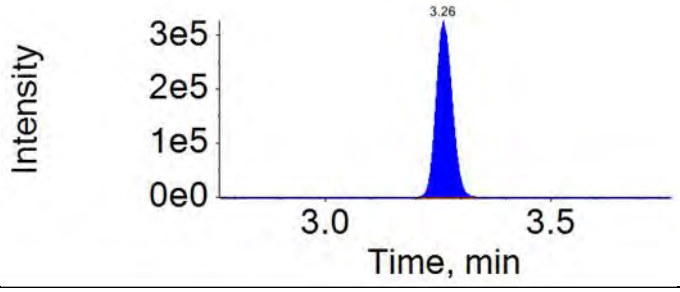
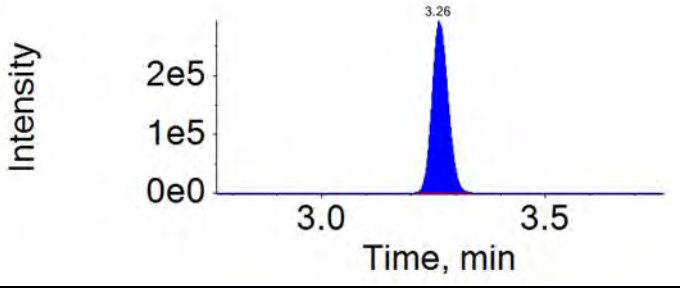
Injection Standard: 13C2-PFDA
515.0 / 470.0

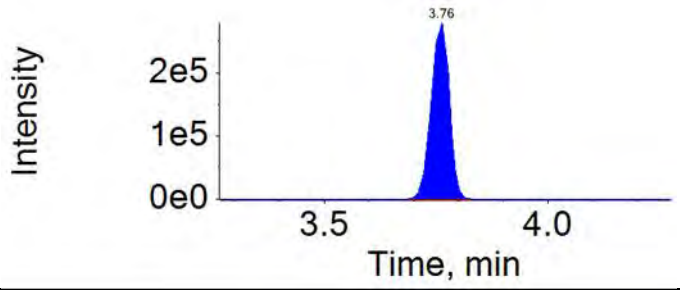
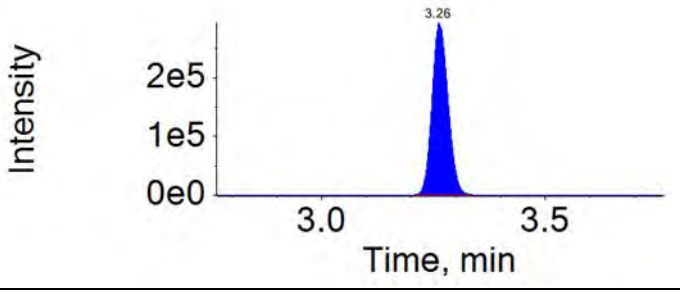


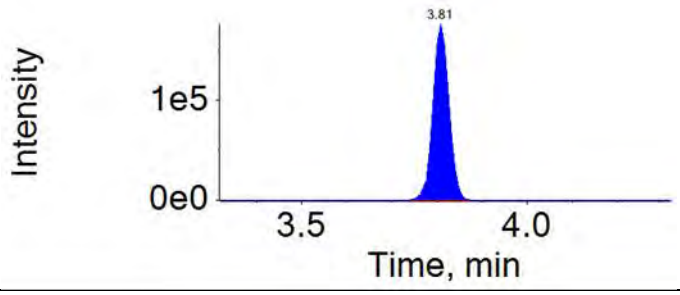
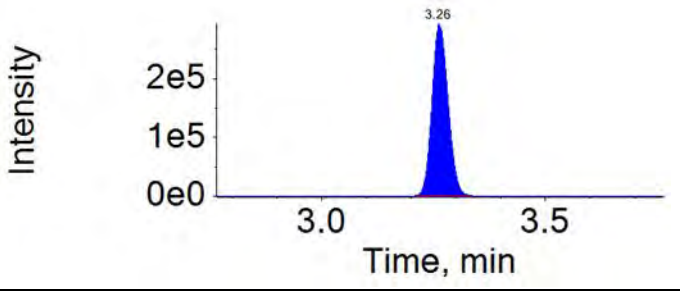
APPROVED
By JPT at 8:56 am, 11/16/18

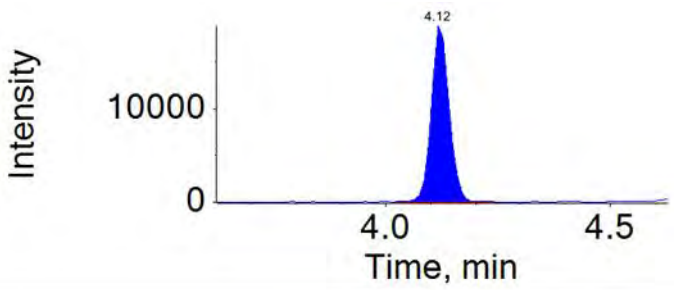
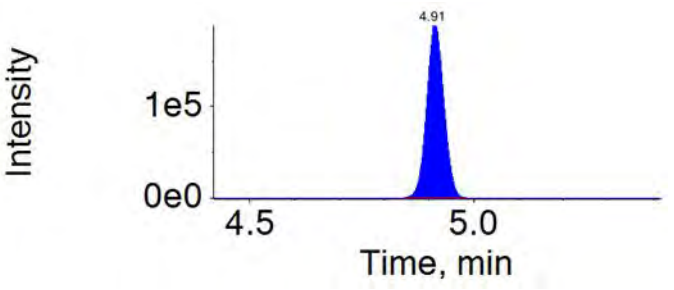
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

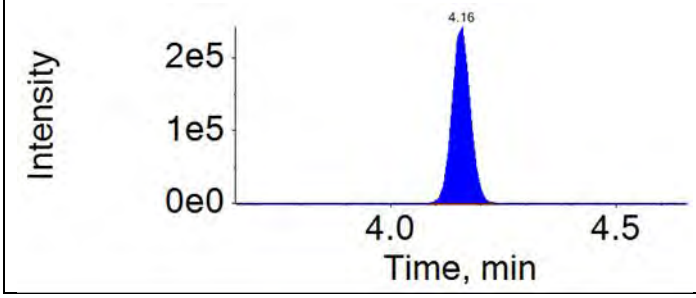
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

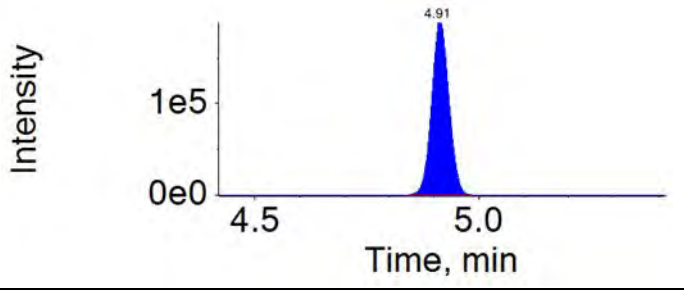
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

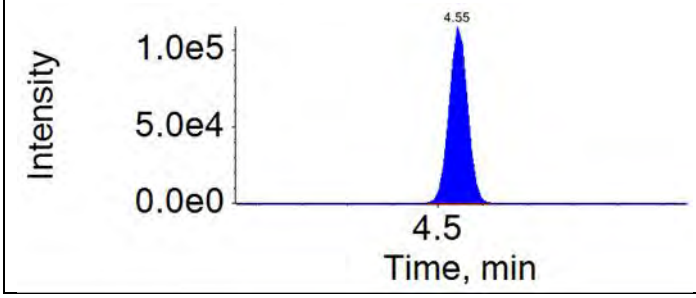
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

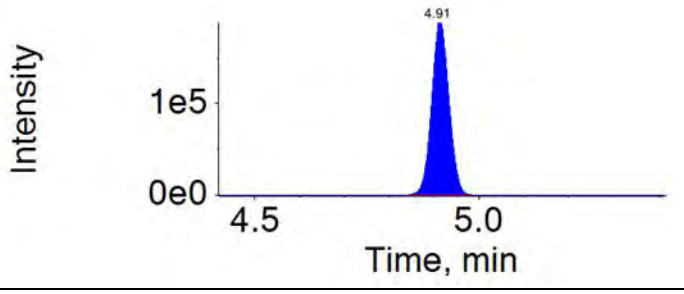
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



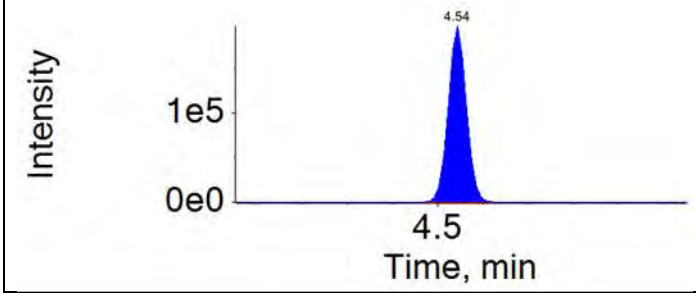


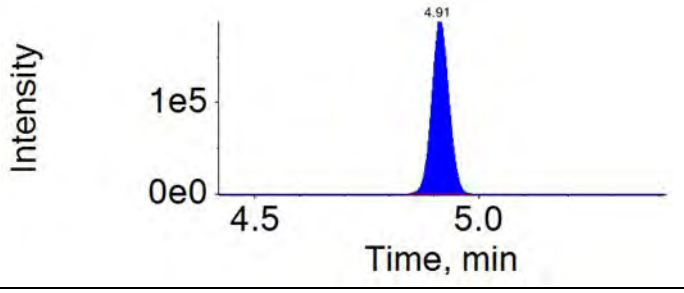
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



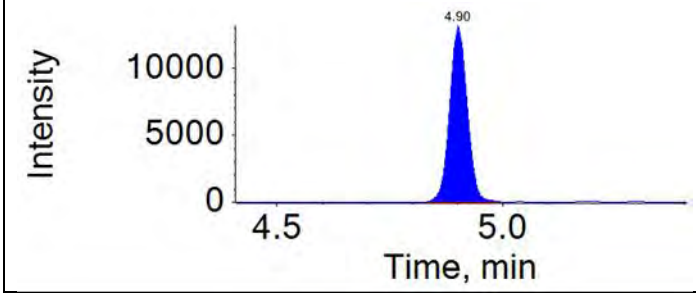


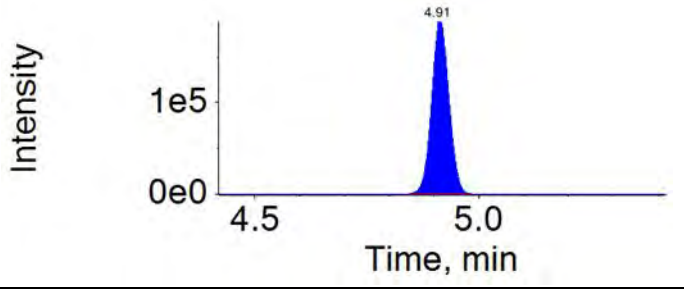
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

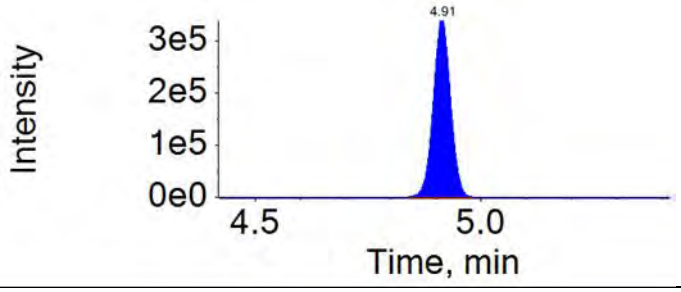
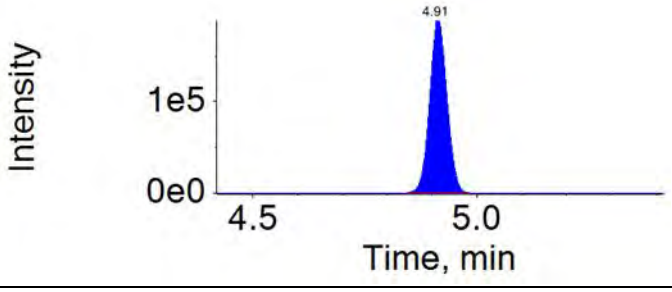


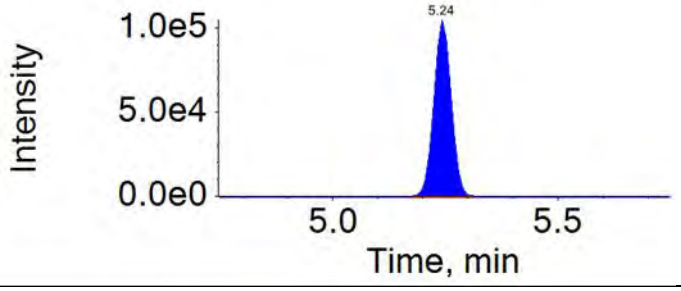
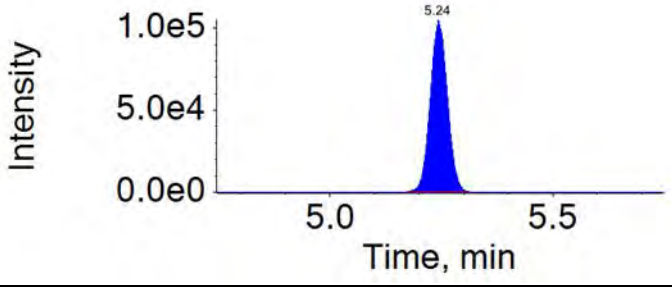


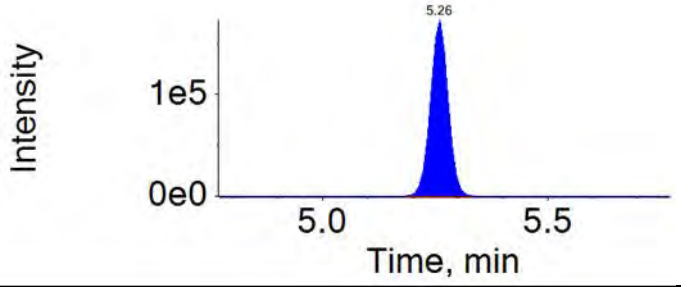
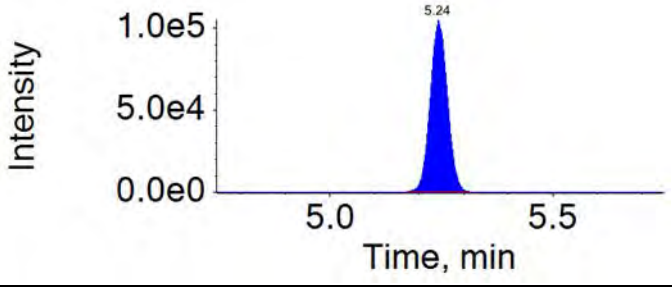
APPROVED
By JPT at 8:56 am, 11/16/18

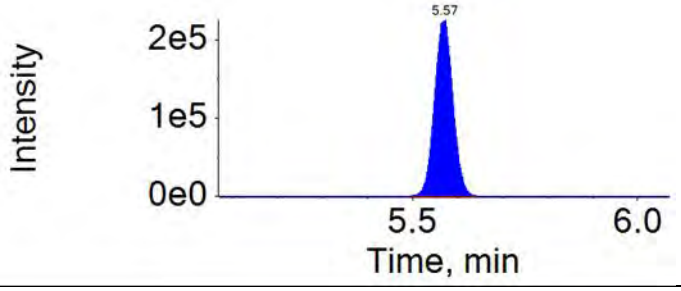
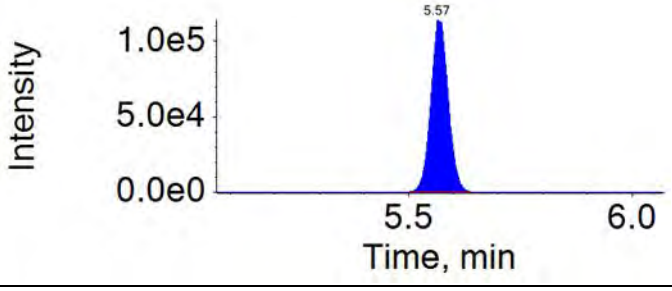
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

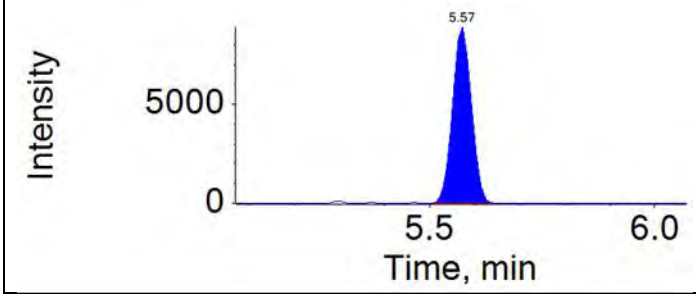
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

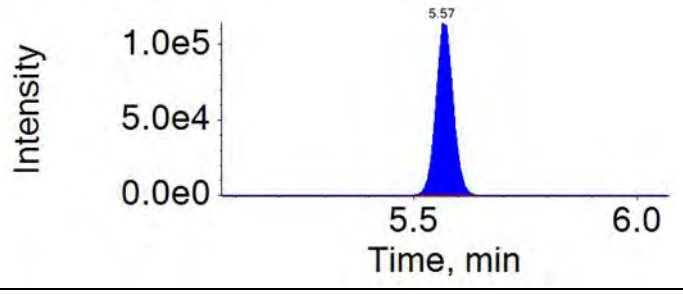
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

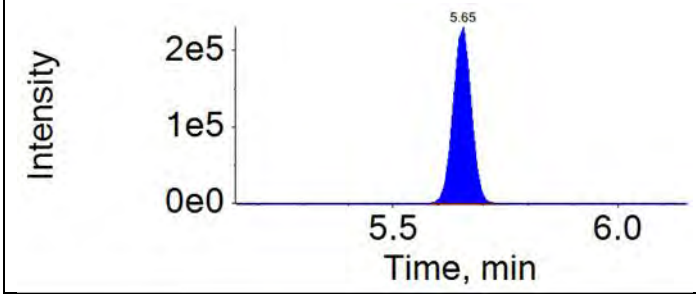
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

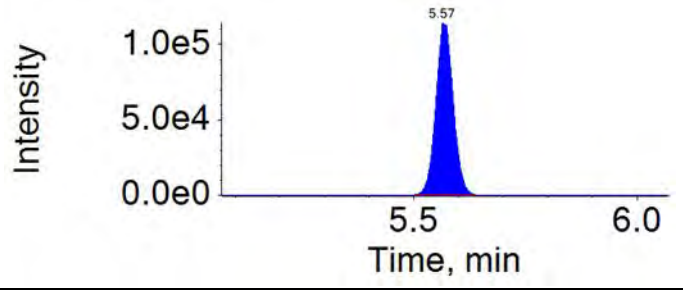
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



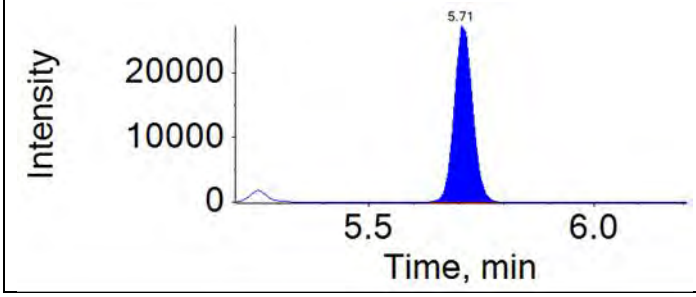


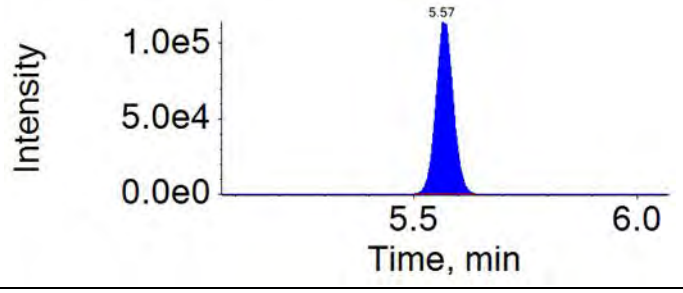
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



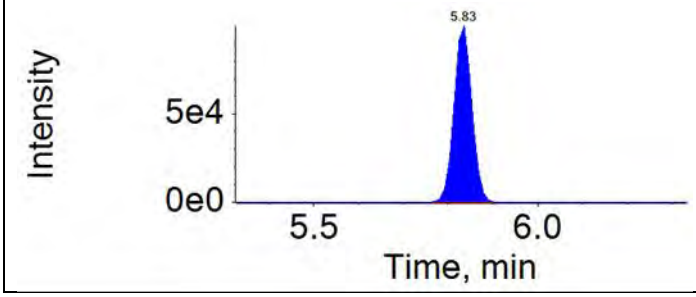


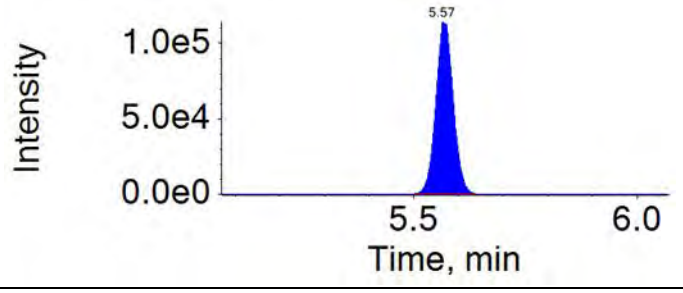
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0

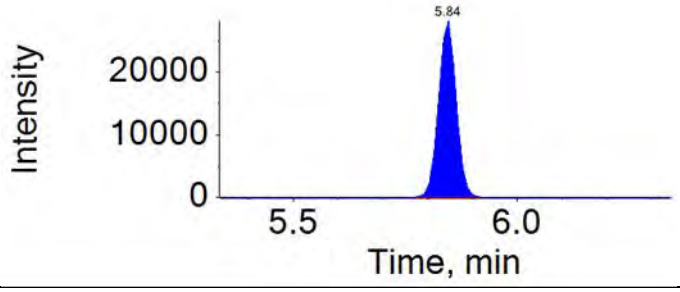
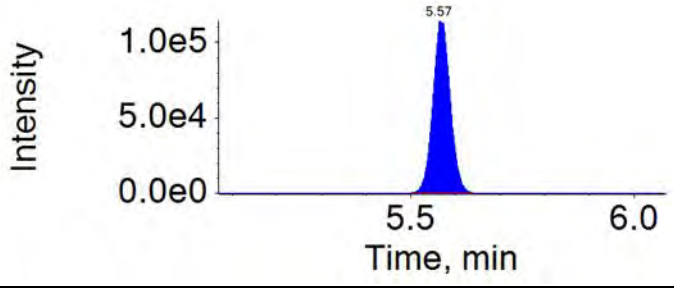


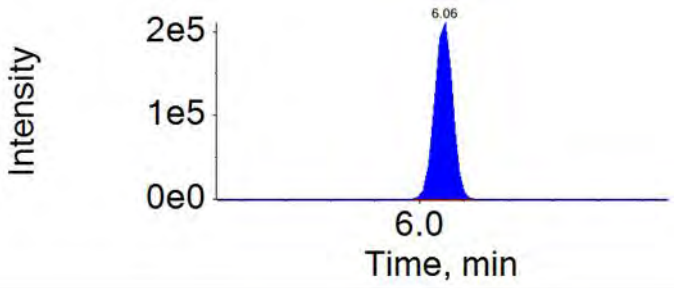
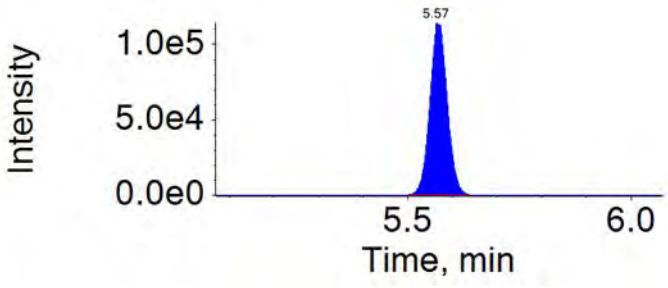


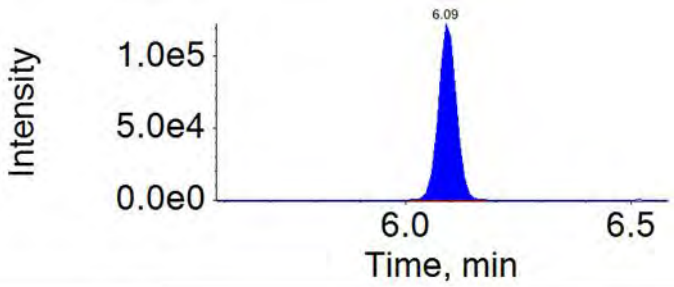
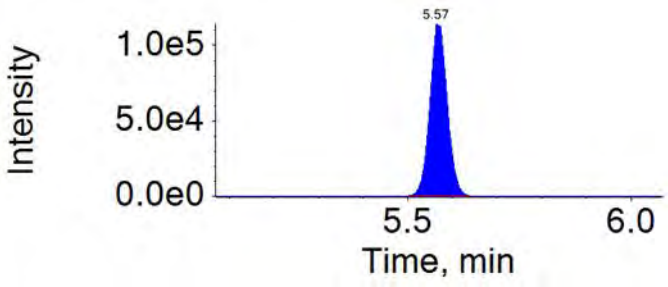
APPROVED
By JPT at 8:56 am, 11/16/18

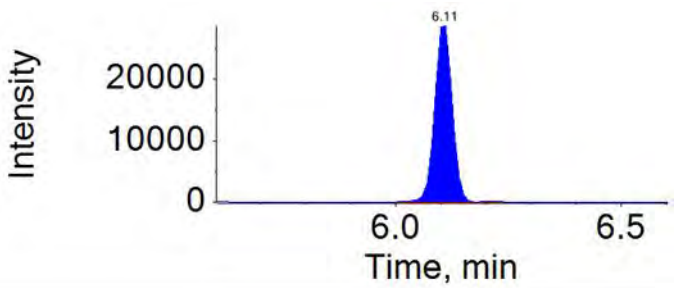
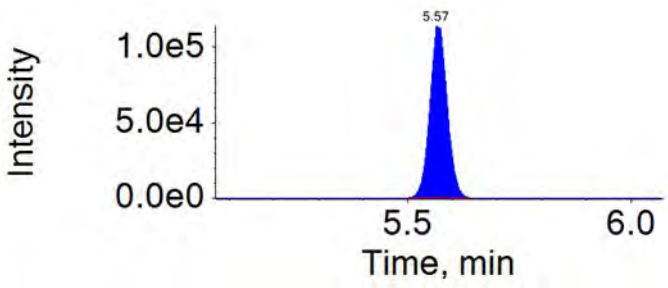
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

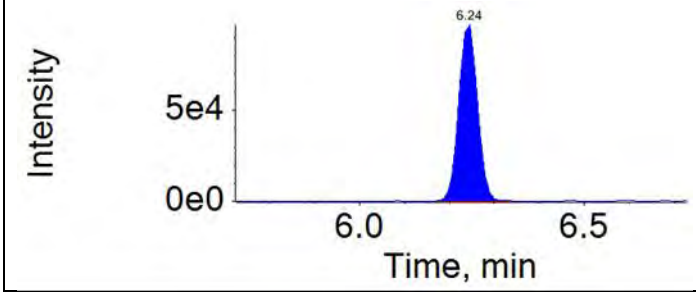
Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

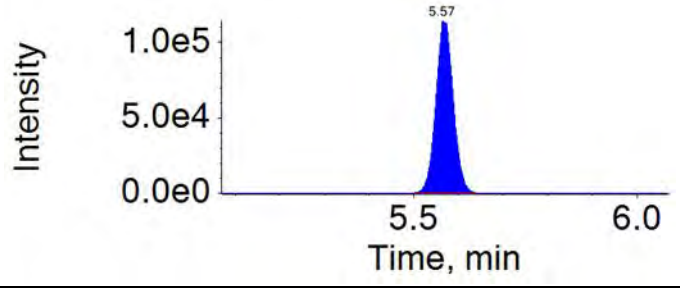
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

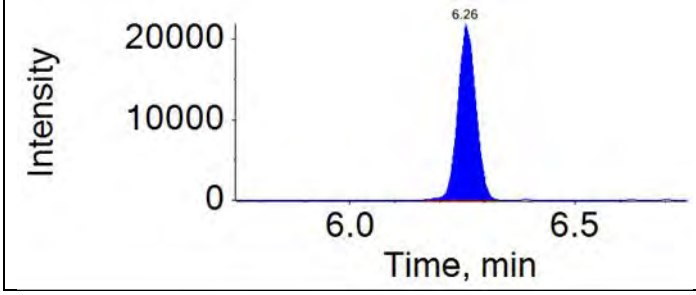
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

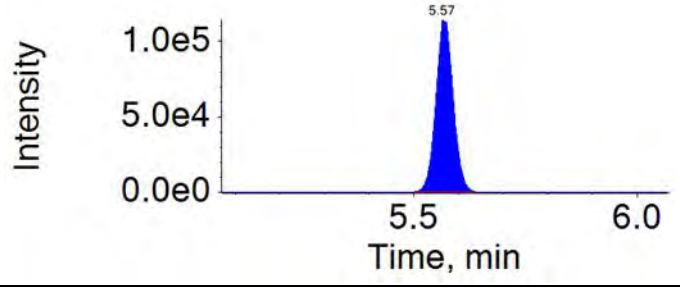
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



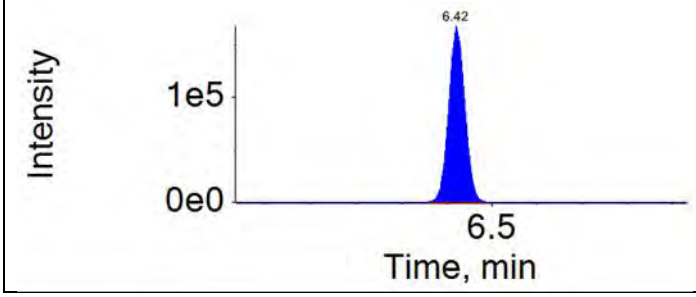


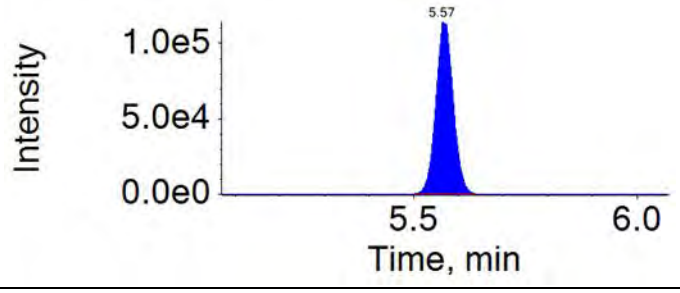
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



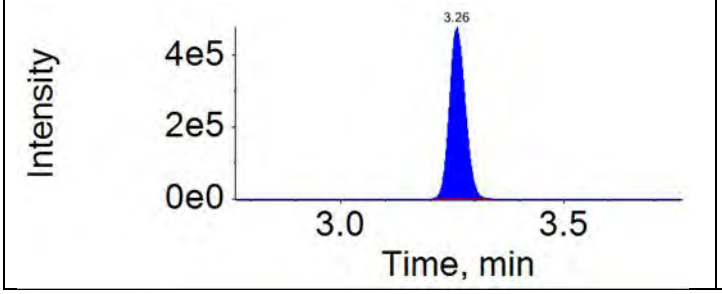


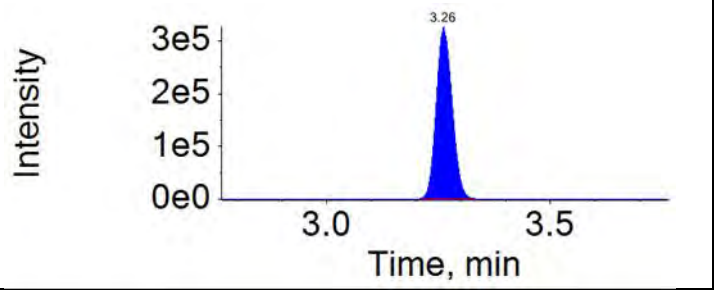
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

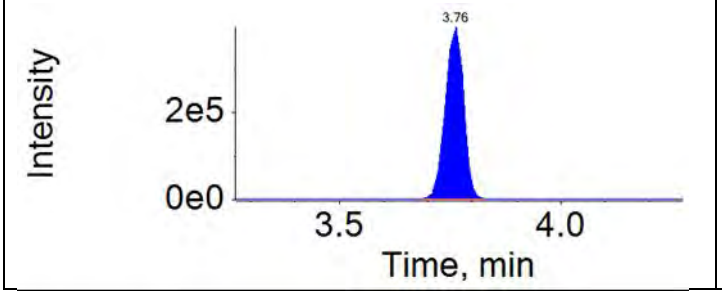
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

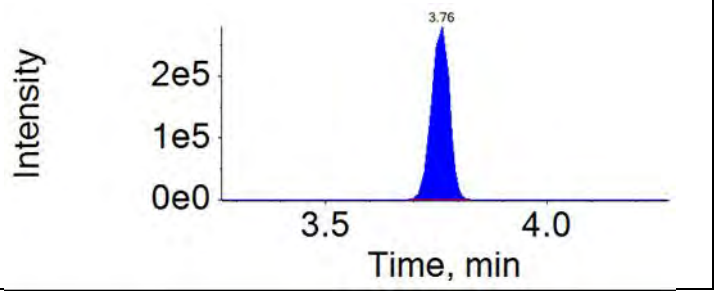
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



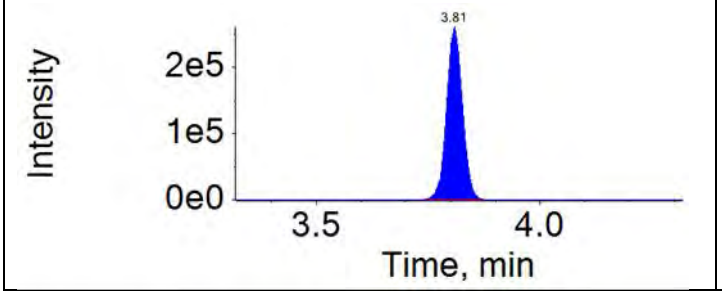


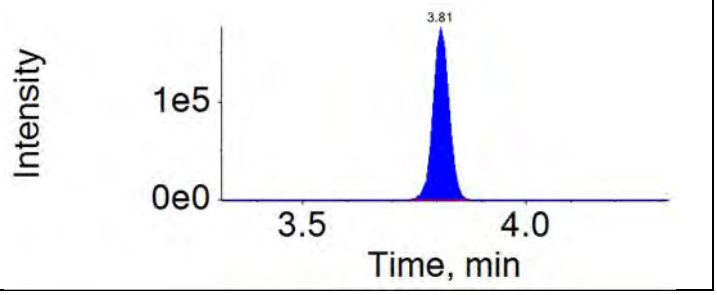
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



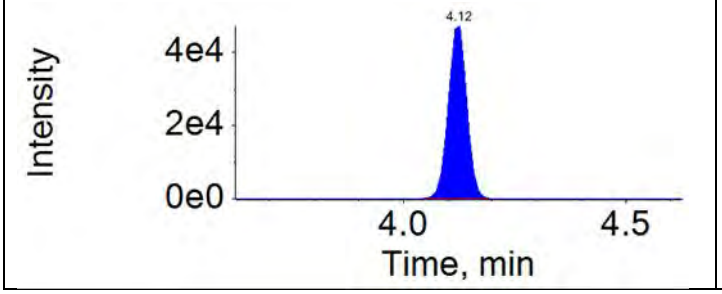


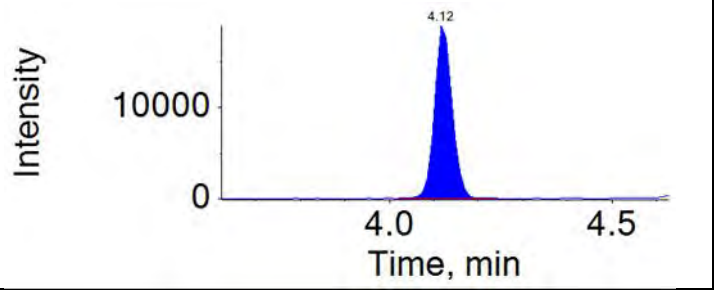
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



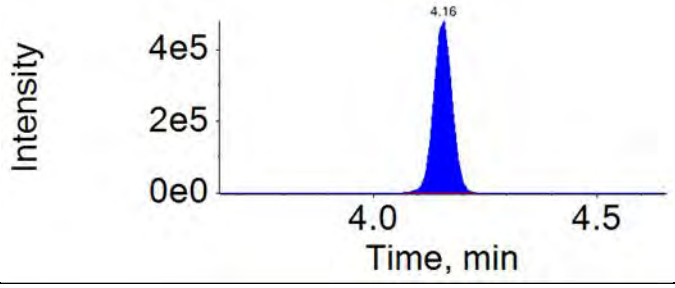


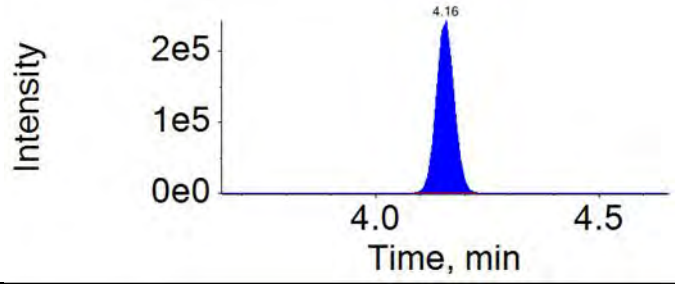
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

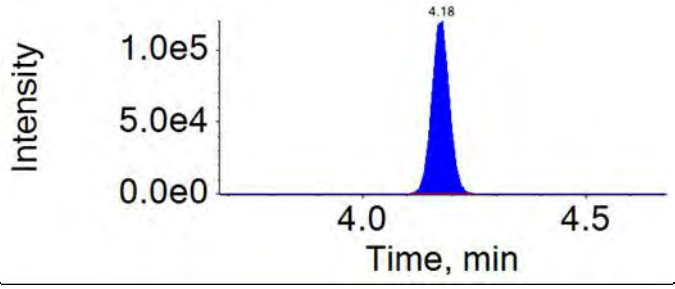
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

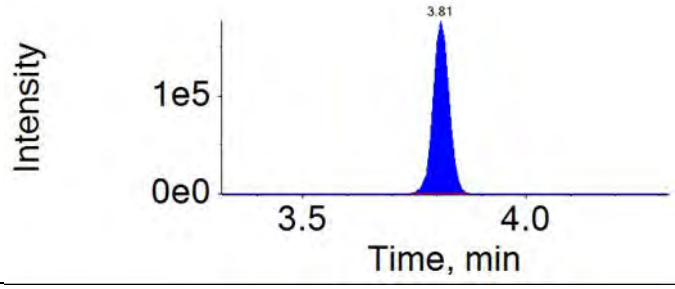
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



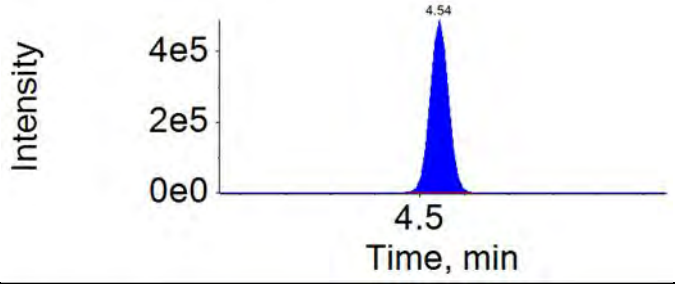


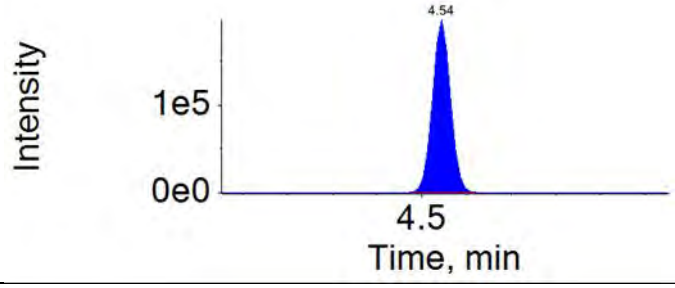
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



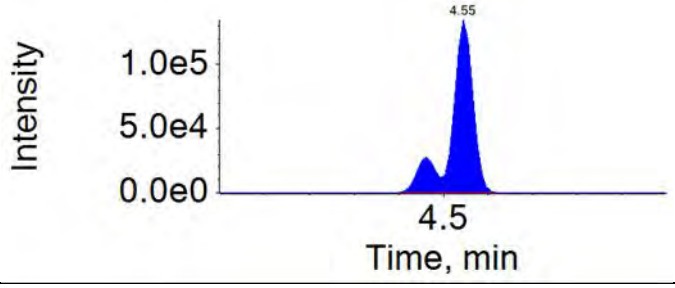


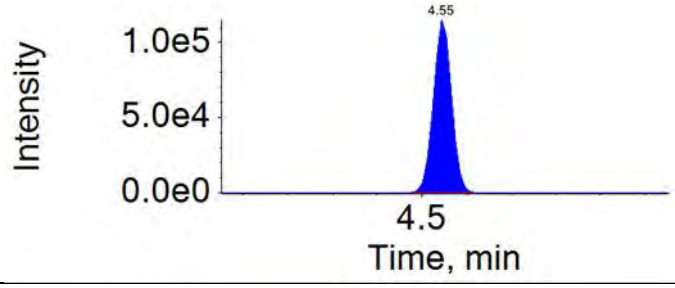
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

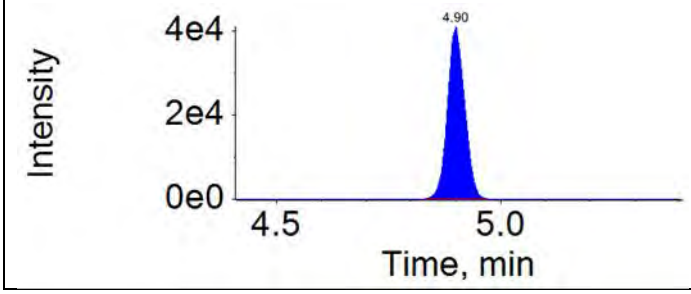
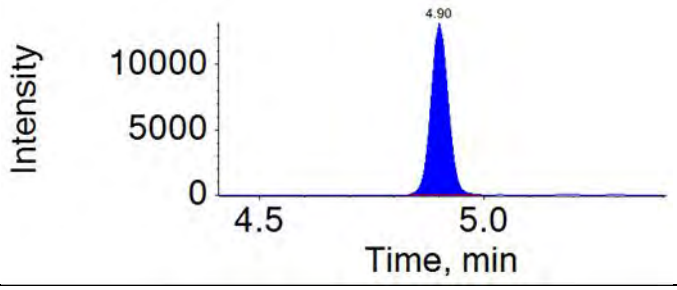


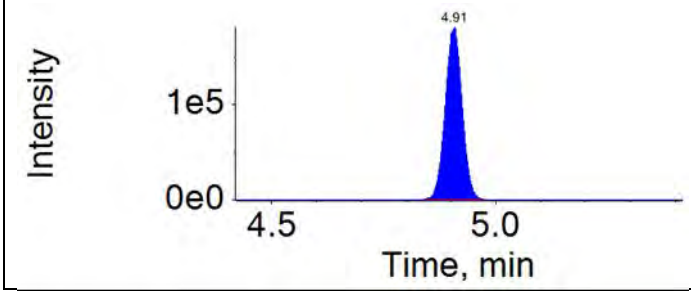
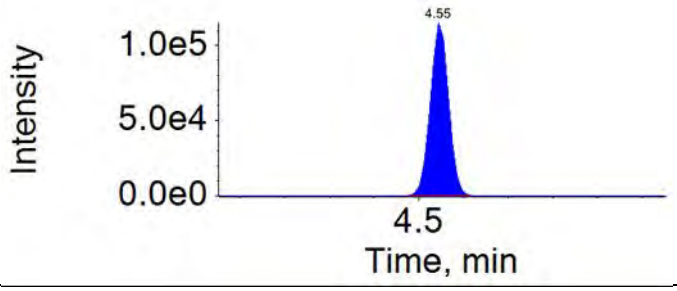


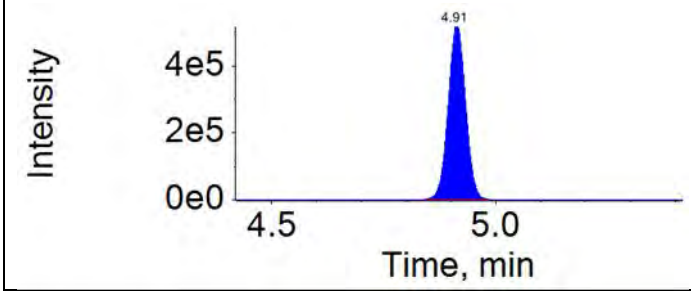
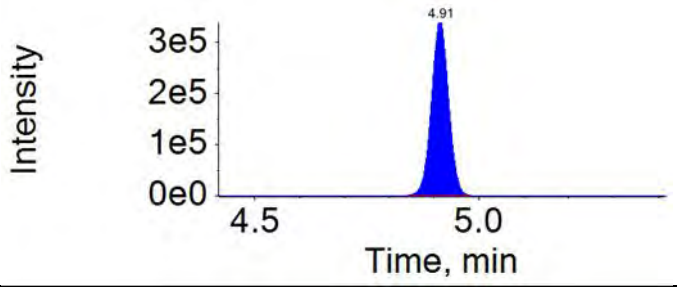
APPROVED
By JPT at 8:56 am, 11/16/18

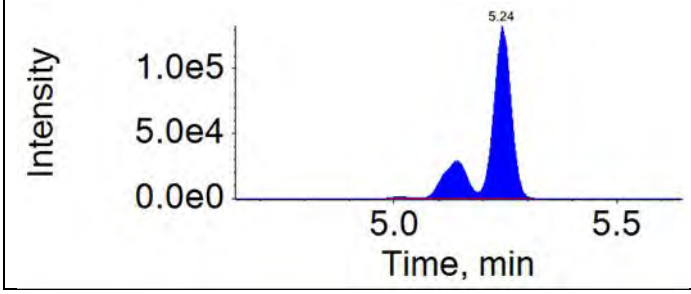
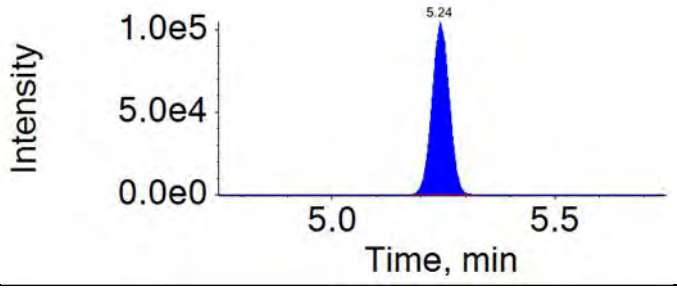
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

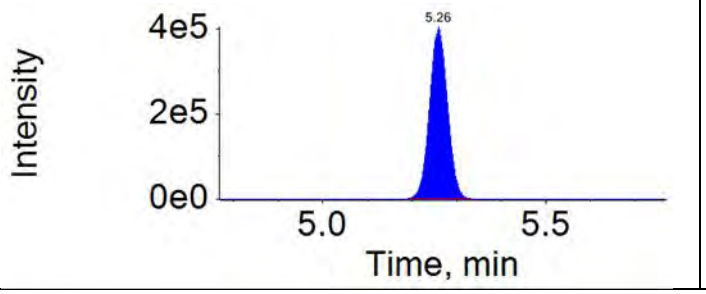
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

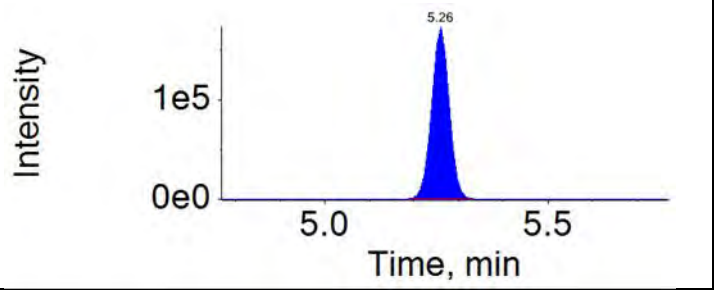
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

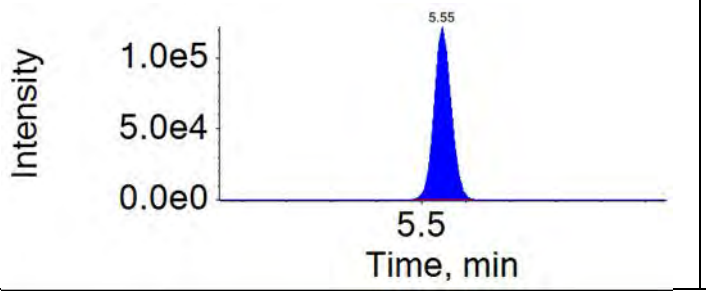
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

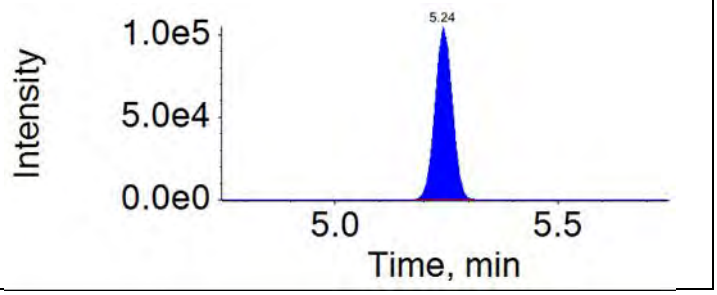
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



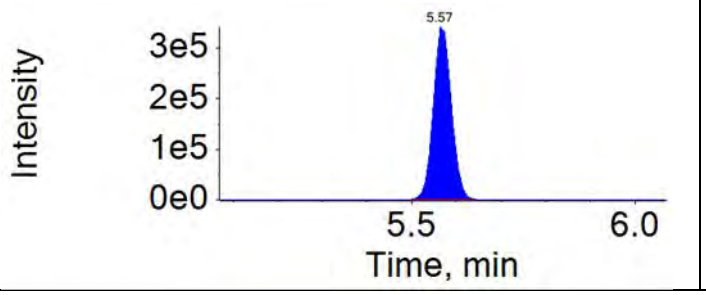


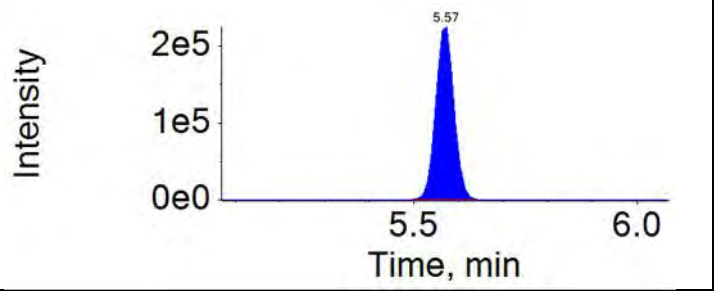
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



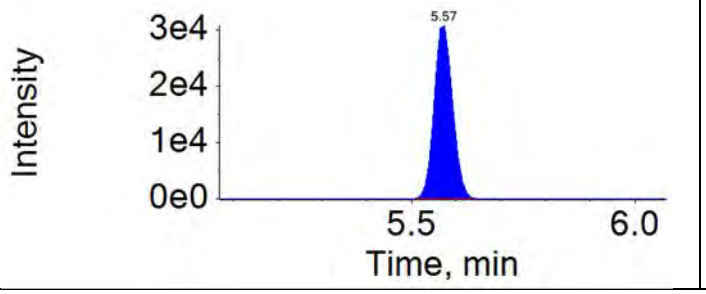


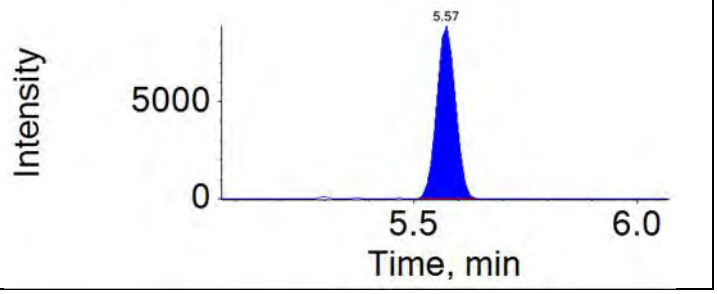
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



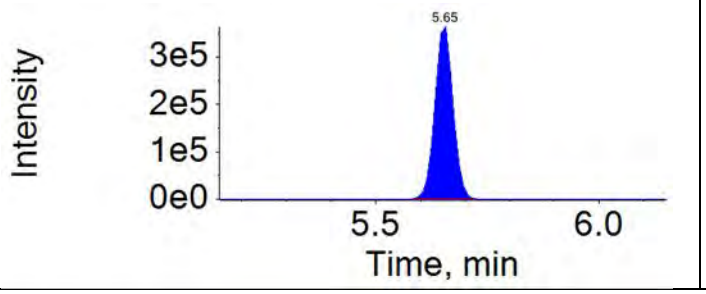


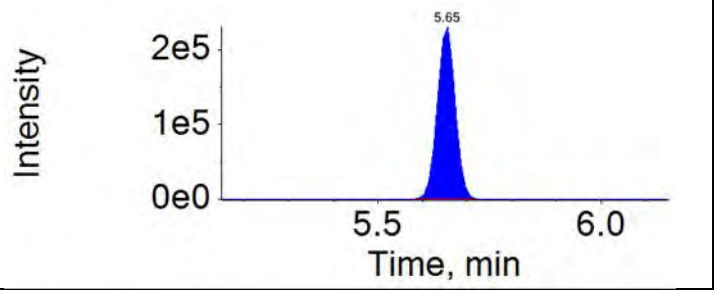
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

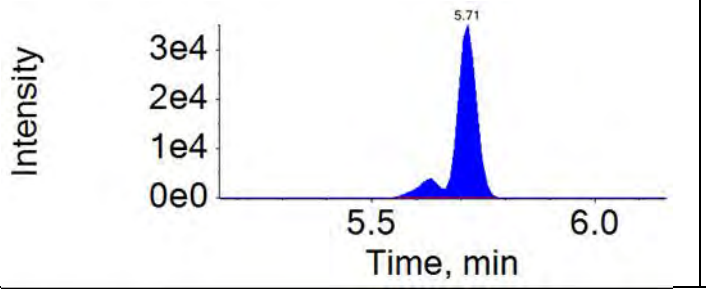
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

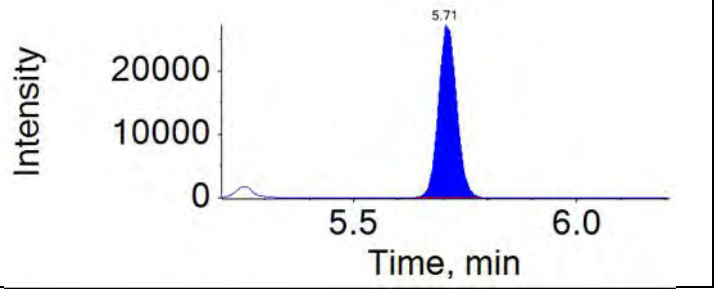
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



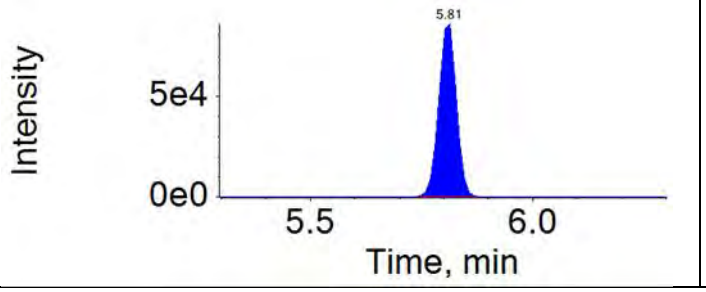


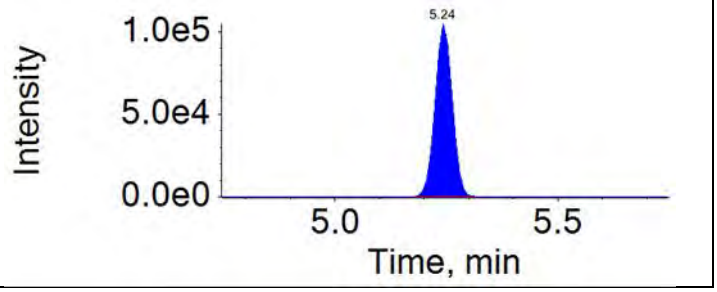
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



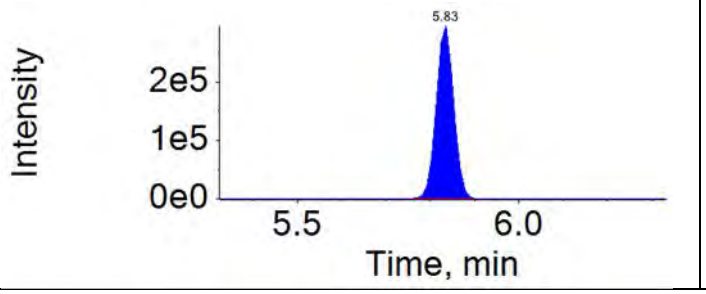


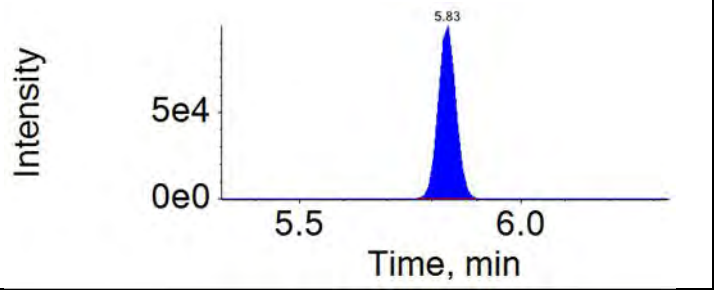
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0

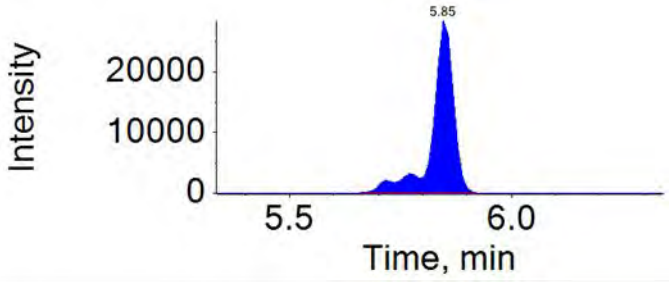
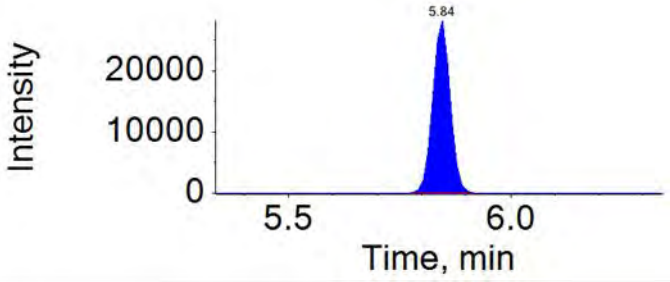


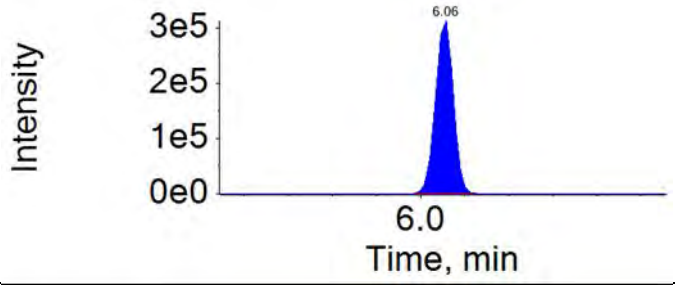
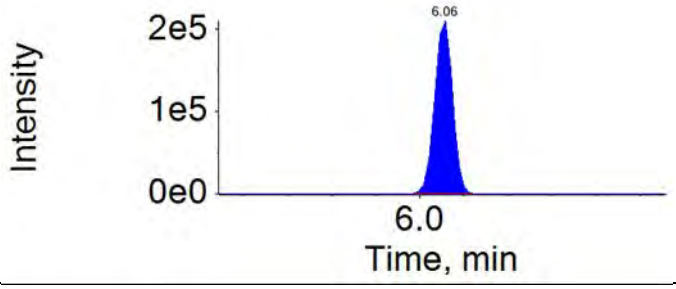


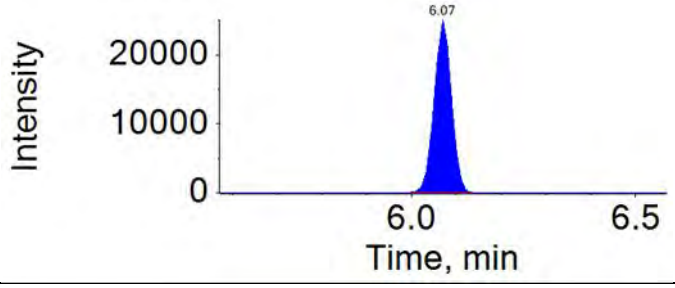
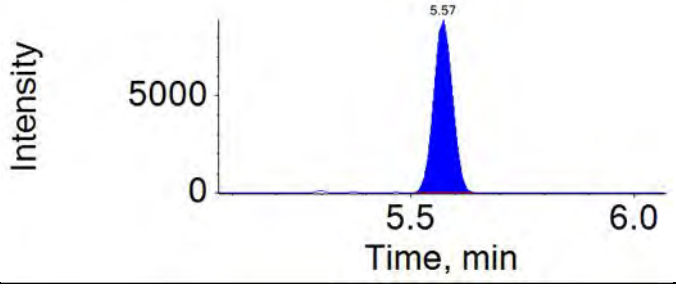
APPROVED
By JPT at 8:56 am, 11/16/18

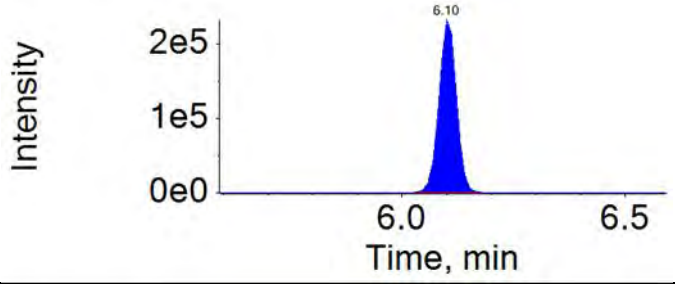
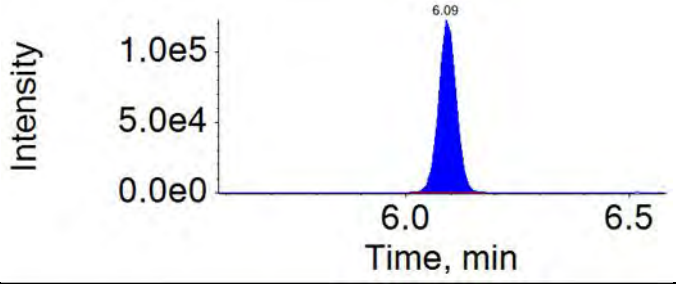
REVIEWED
By HMK at 7:38 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0
	

Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0
	

Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0
	

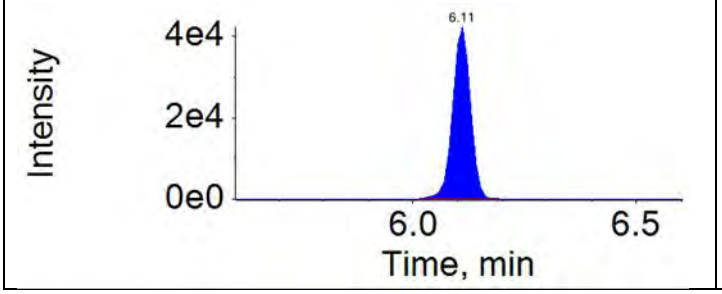
Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0
	

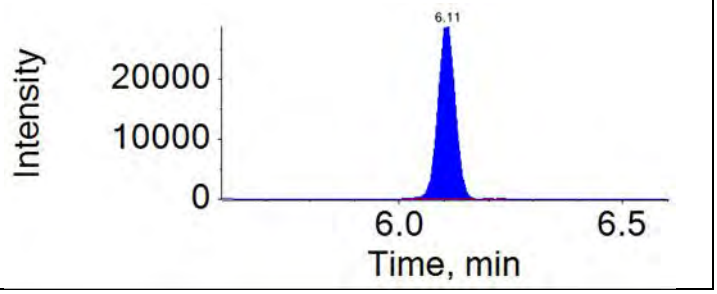
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

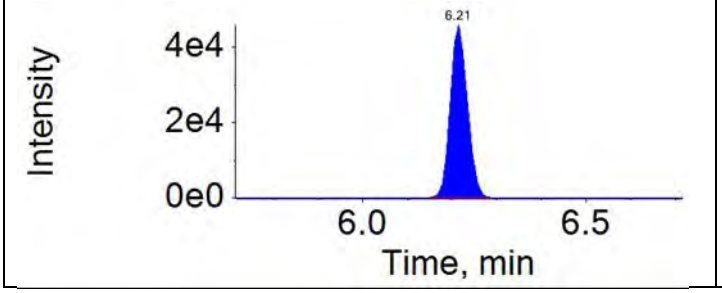
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

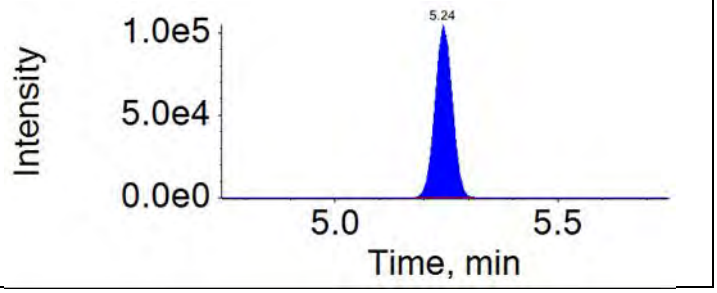
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



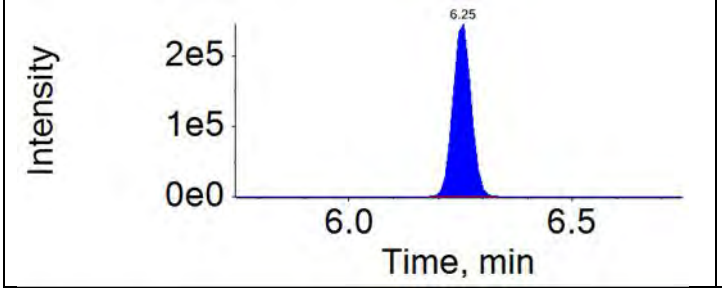


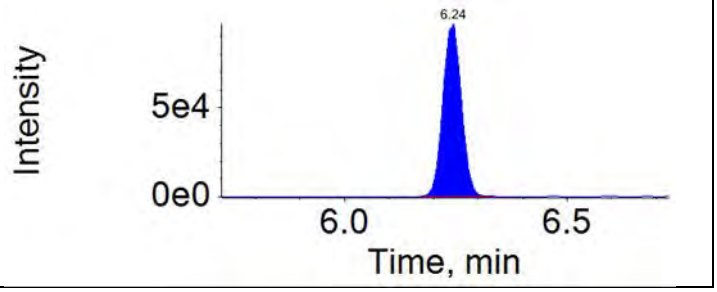
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



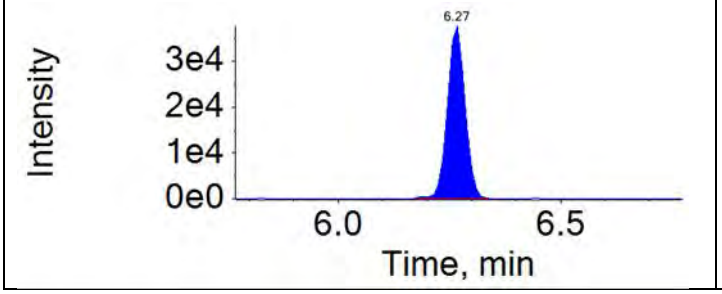


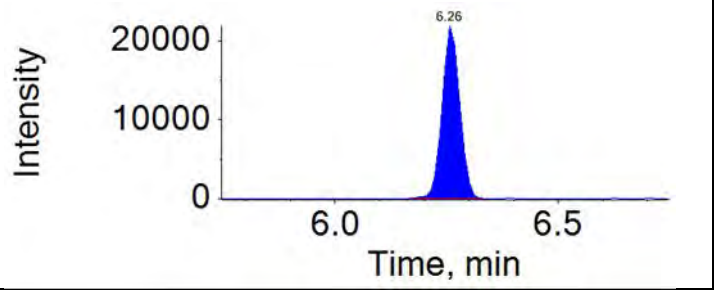
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



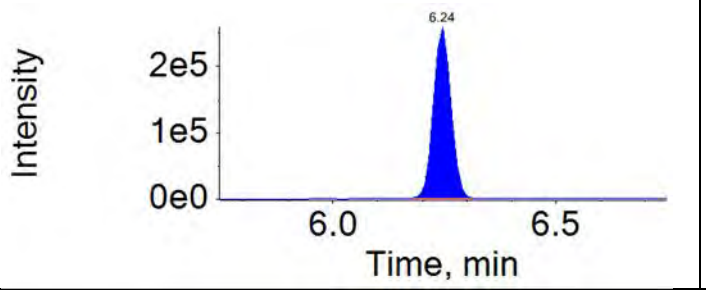


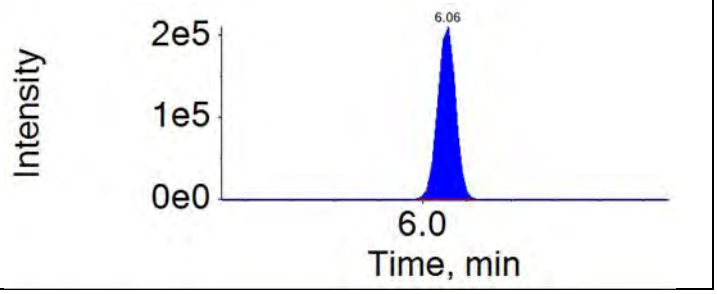
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

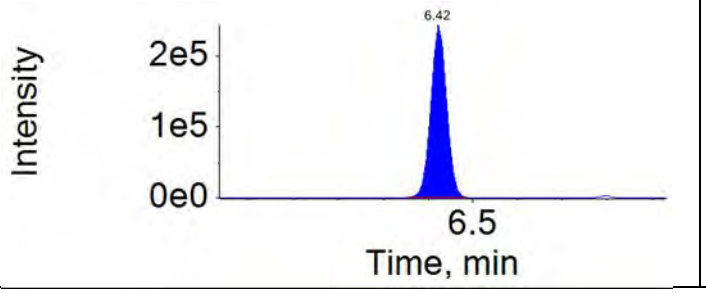
ICAL Name: 18NOV12DCAL **Result Table:** 18NOV15DCCV1-4 11/16/2018 8:47:00 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

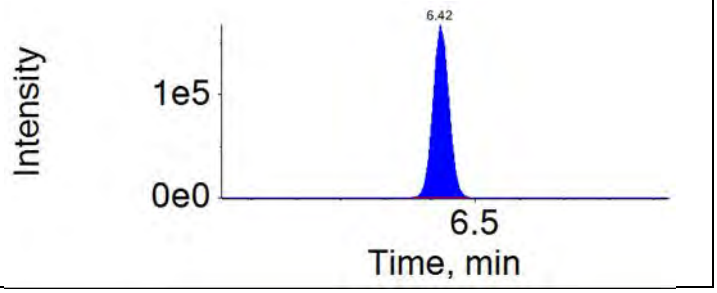
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



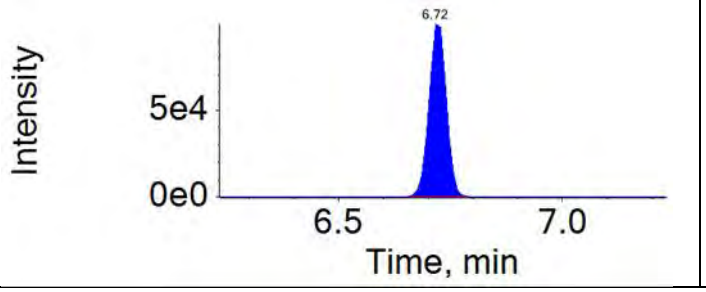


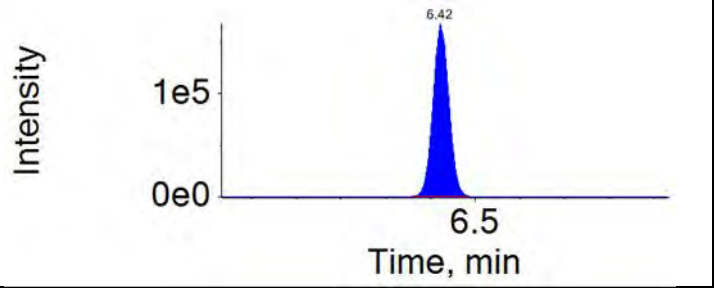
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



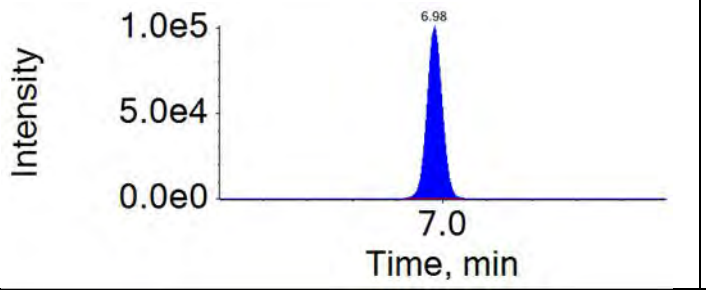


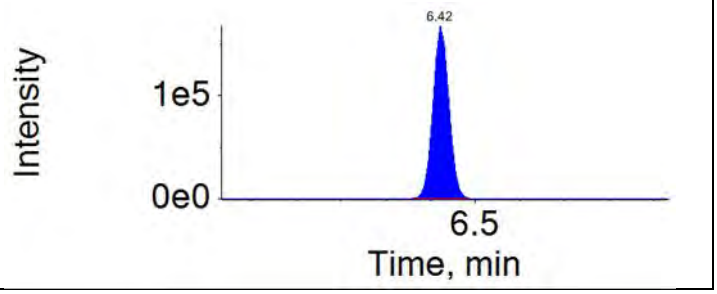
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



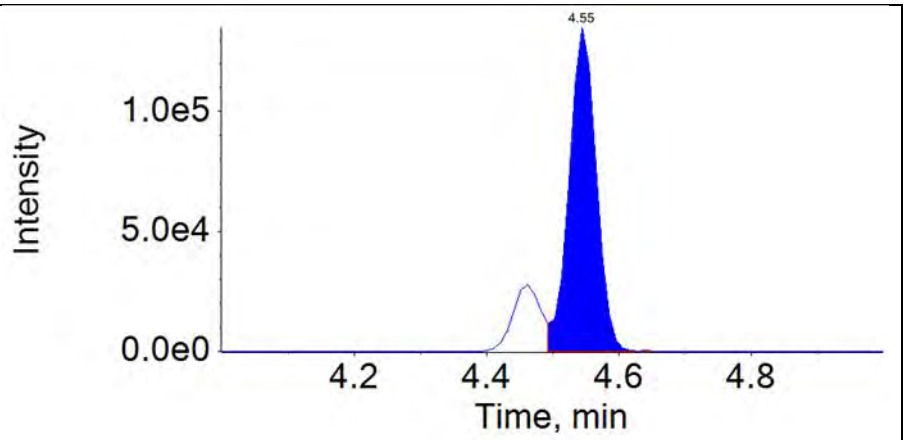


APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

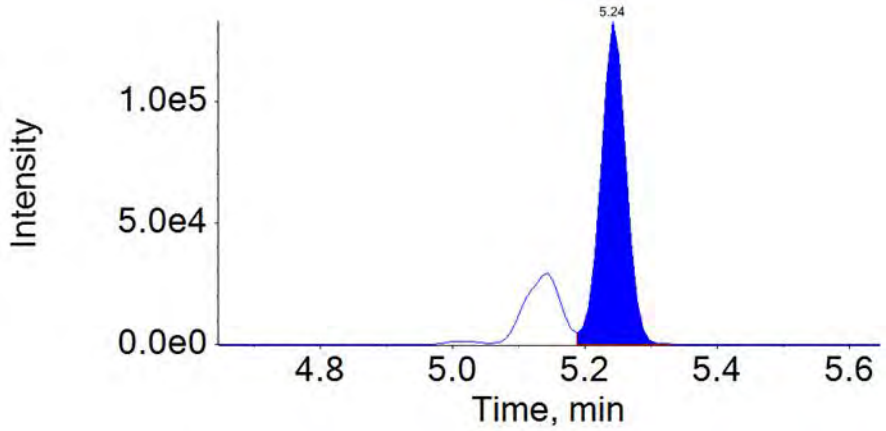
Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.55
Peak Area:
385732.7
Mass Range:
399.0 / 80.0
File Name:
18NOV15D-29.wiff
Sample Name:
CCV3_CAL4



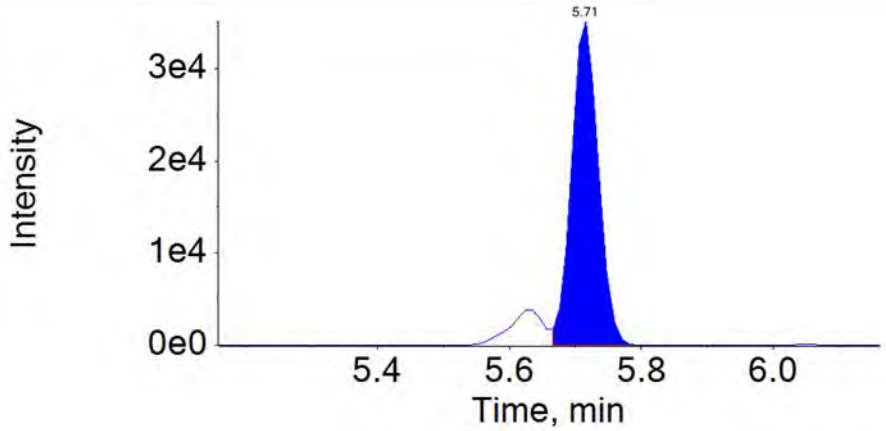
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
353094.9
Mass Range:
499.0 / 80.0
File Name:
18NOV15D-29.wiff
Sample Name:
CCV3_CAL4



Integration Comment: incorrect integration

Component Name:
NMeFOSAA
RT (min.):
5.71
Peak Area:
98902.4
Mass Range:
570.0 / 419.0
File Name:
18NOV15D-29.wiff
Sample Name:
CCV3_CAL4



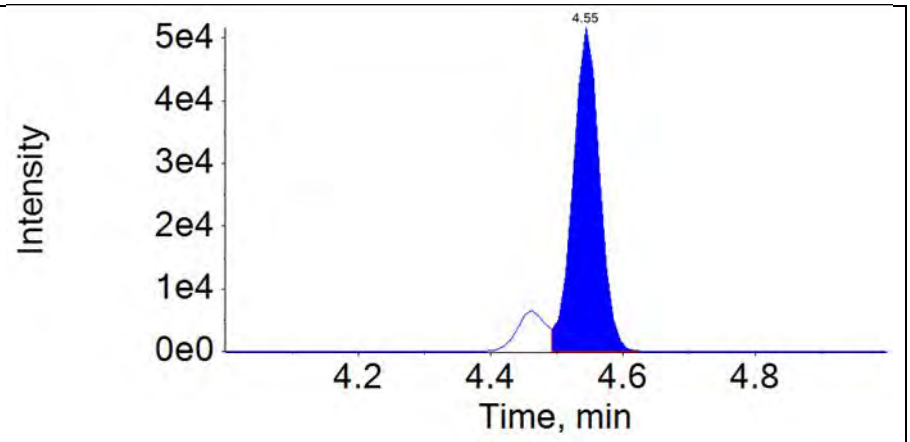
Integration Comment: incorrect integration

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

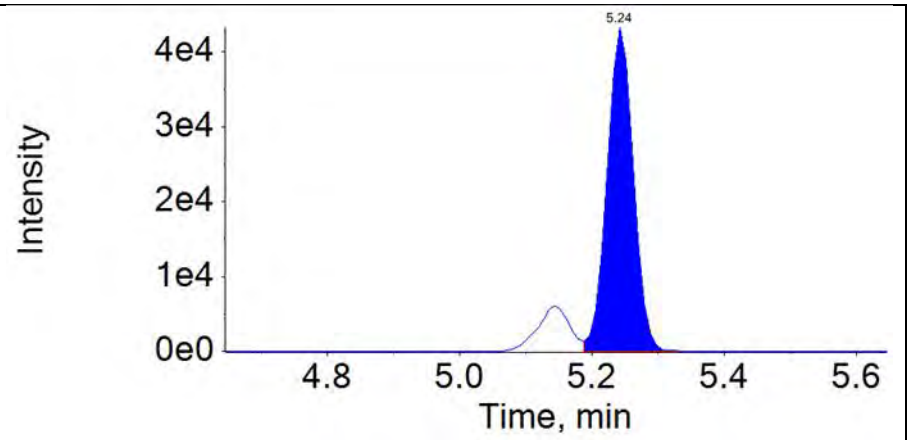
Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS_2
RT (min.):
4.55
Peak Area:
144108.3
Mass Range:
399.0 / 99.0
File Name:
18NOV15D-29.wiff
Sample Name:
CCV3_CAL4



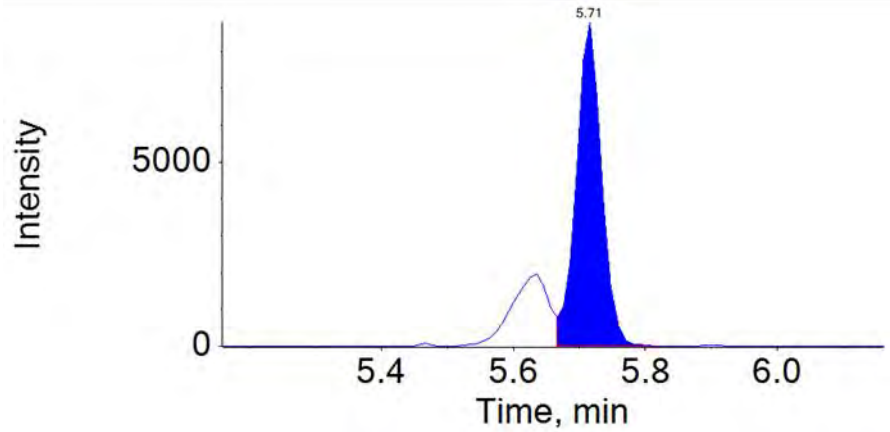
Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.24
Peak Area:
119896.3
Mass Range:
499.0 / 99.0
File Name:
18NOV15D-29.wiff
Sample Name:
CCV3_CAL4



Integration Comment: incorrect integration

Component Name:
NMeFOSAA_2
RT (min.):
5.71
Peak Area:
23378.7
Mass Range:
570.0 / 483.0
File Name:
18NOV15D-29.wiff
Sample Name:
CCV3_CAL4



Integration Comment: incorrect integration

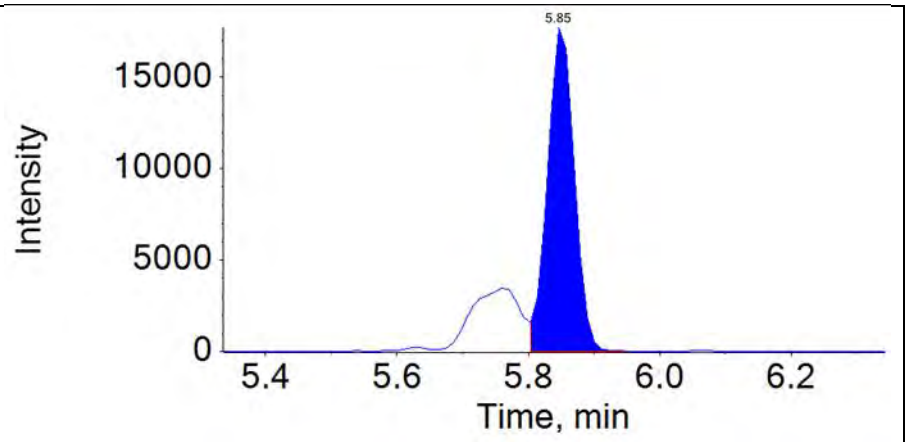
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NEtFOSAA_2
RT (min.):
5.85
Peak Area:
50374.0
Mass Range:
584.0 / 526.0
File Name:
18NOV15D-29.wiff
Sample Name:
CCV3_CAL4



Integration Comment: incorrect integration

APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

Results Table Name: 18NOV15DCCV1-4
Results Table Date: 11/16/2018 8:47:00 AM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

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By JPT at 8:56 am, 11/16/18

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Ion Ratio Report

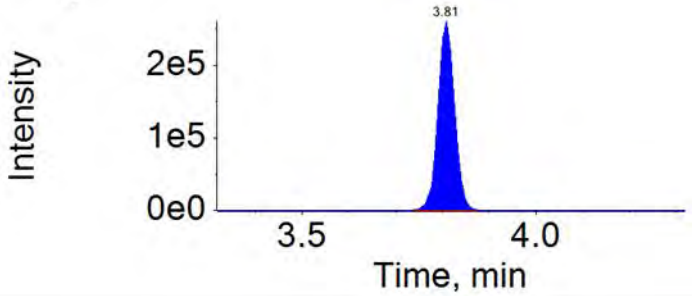
Sample Name: CCV3_CAL4 **Instrument Name:** LM27631 **File Name:** 18NOV15D-29.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	639117.9	A	N/A	1.0000			
PFBS_2	3.81	1.00	233610.1	A	N/A	0.3655	0	50	
4:2-FTS	4.12	1.00	136748.3	A	N/A	1.0000			
4:2 FTS_2	4.12	1.00	93506.2	A	N/A	0.6838		#NA!	
PFHxA	4.16	1.00	1378660.6	A	N/A	1.0000			
PFHxA_2	4.16	1.00	15332.0	A	N/A	0.0111	-5	50	
PFPeS	4.18	1.10	333118.9	A	N/A	1.0000			
PFPeS_2	4.18	1.10	163542.8	A	N/A	0.4909	-5	50	
PFHpA	4.54	1.00	1386373.1	A	N/A	1.0000			
PFHpA_2	4.54	1.00	76737.1	A	N/A	0.0554	-2	50	
PFHxS	4.55	1.00	466246.7	M	N/A	1.0000			
PFHxS_2	4.55	1.00	163325.7	M	N/A	0.3503	2	50	
6:2-FTS	4.90	1.00	108795.0	A	N/A	1.0000			
6:2 FTS_2	4.90	1.00	68122.2	A	N/A	0.6262		#NA!	
PFHpS	4.91	1.08	477473.9	A	N/A	1.0000			
PFHpS_2	4.91	1.08	192308.3	A	N/A	0.4028	-1	50	
PFOA	4.91	1.00	1409760.6	A	N/A	1.0000			
PFOA_2	4.91	1.00	77844.3	A	N/A	0.0552	-3	50	
PFOS	5.24	1.00	469289.4	M	N/A	1.0000			
PFOS_2	5.24	1.00	140478.1	M	N/A	0.2993	1	50	
PFNA	5.26	1.00	1119473.7	A	N/A	1.0000			
PFNA_2	5.26	1.00	21011.3	A	N/A	0.0188	-17	50	
PFNS	5.55	1.06	320473.6	A	N/A	1.0000			
PFNS_2	5.55	1.06	148854.2	A	N/A	0.4645	-3	50	
PFDA	5.57	1.00	958718.1	A	N/A	1.0000			
PFDA_2	5.57	1.00	6334.6	A	N/A	0.0066	-17	50	
8:2-FTS	5.57	1.00	88811.3	A	N/A	1.0000			
8:2 FTS_2	5.57	1.00	56959.5	A	N/A	0.6414		#NA!	
NMeFOSAA	5.71	1.00	112844.6	M	N/A	1.0000			
NMeFOSAA_2	5.71	1.00	31016.7	M	N/A	0.2749	6	50	
PFDS	5.81	1.11	237235.2	A	N/A	1.0000			
PFDS_2	5.81	1.11	110713.5	A	N/A	0.4667	-8	50	
PFUnDA	5.83	1.00	810481.8	A	N/A	1.0000			
PFUnDA_2	5.83	1.00	2987.8	A	N/A	0.0037	-33	50	
NEtFOSAA	5.85	1.00	94950.7	A	N/A	1.0000			
NEtFOSAA_2	5.85	1.00	68273.4	M	N/A	0.7190	0	50	
PFDoDA	6.06	1.00	885673.4	A	N/A	1.0000			
PFDoDA_2	6.06	1.00	11160.2	A	N/A	0.0126	-18	50	
10:2-FTS	6.07	1.09	66917.7	A	N/A	1.0000			
10:2 FTS_2	6.07	1.09	44748.8	A	N/A	0.6687		#NA!	
PFTrDA	6.24	1.03	703394.0	A	N/A	1.0000			
PFTrDA_2	6.24	1.03	6378.3	A	N/A	0.0091	6	50	
PFTeDA	6.42	1.00	595045.7	A	N/A	1.0000			
PFTeDA_2	6.42	1.00	3377.0	A	N/A	0.0057	-9	50	
PFHxDA	6.72	1.05	269235.8	A	N/A	1.0000			
PFHxDA_2	6.72	1.05	17212.8	A	N/A	0.0639	-6	50	
PFODA	6.98	1.09	235049.1	A	N/A	1.0000			
PFODA_2	6.98	1.09	5852.2	A	N/A	0.0249	-10	50	

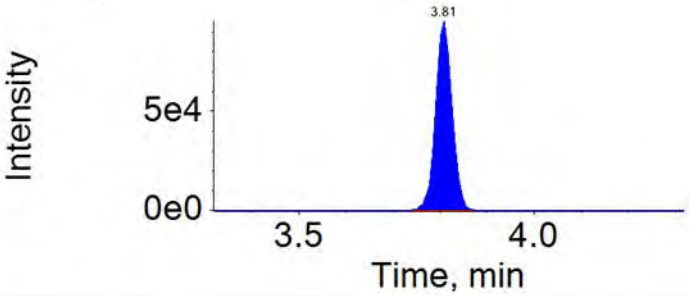
APPROVED
By JPT at 8:56 am, 11/16/18

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By HMK at 7:38 am, 11/19/18

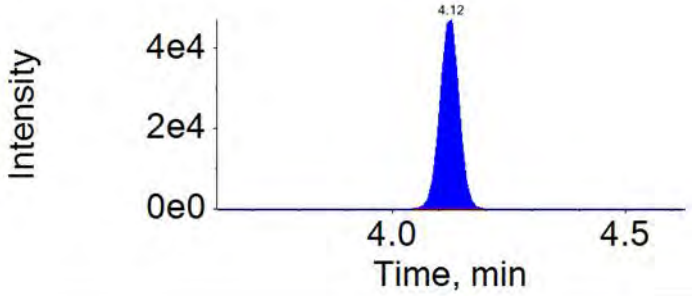
Component: PFBS
Primary Mass: 299.0 / 80.0



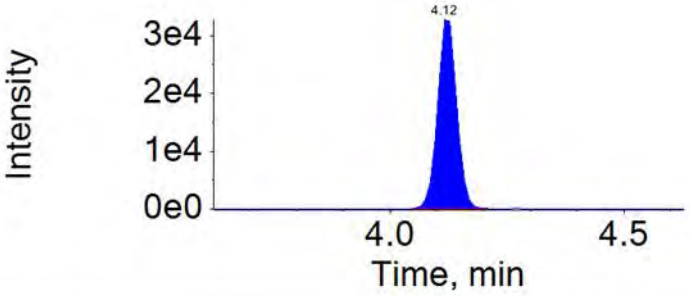
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



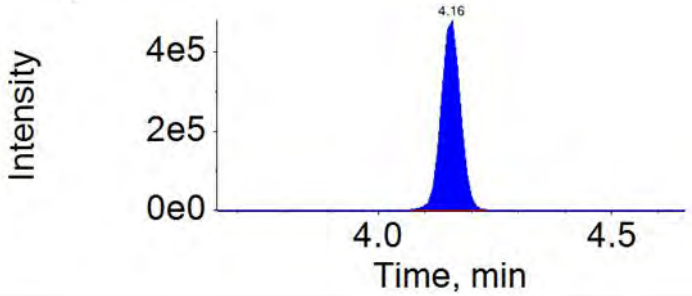
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



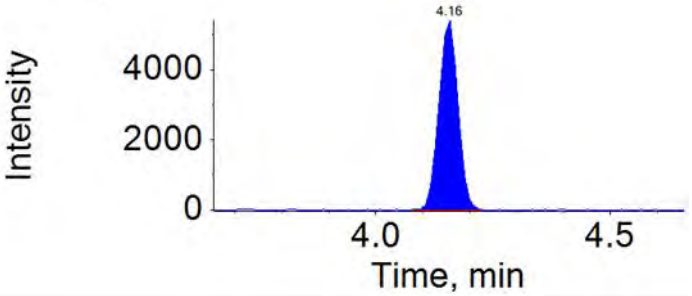
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



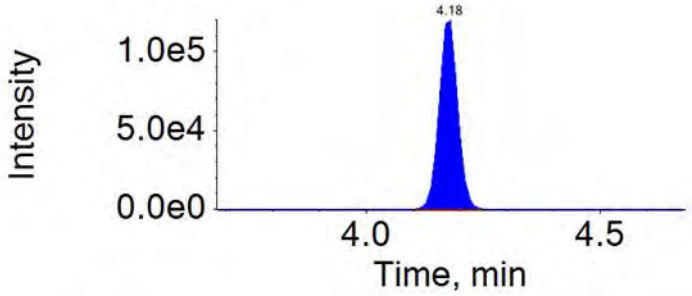
Component: PFHxA
Primary Mass: 313.0 / 269.0



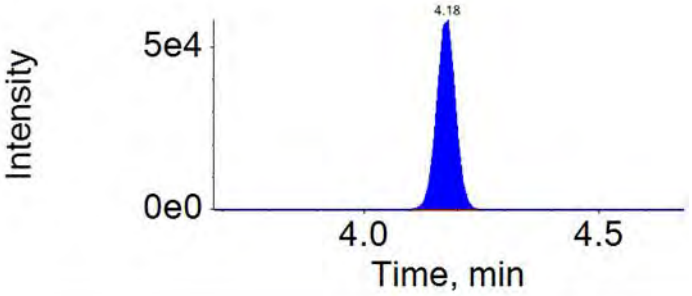
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



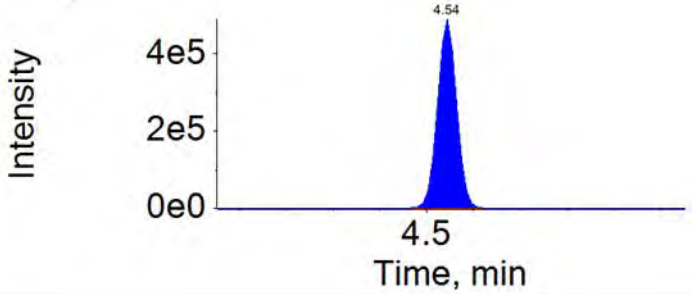
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



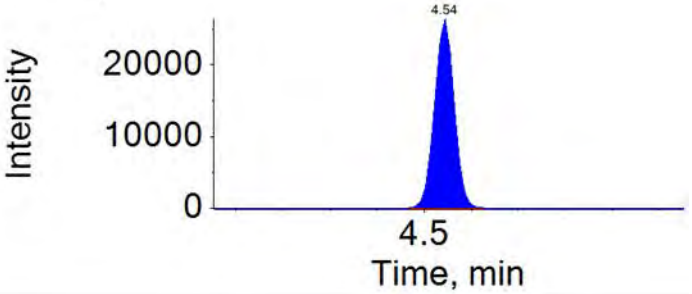
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By JPT at 8:56 am, 11/16/18

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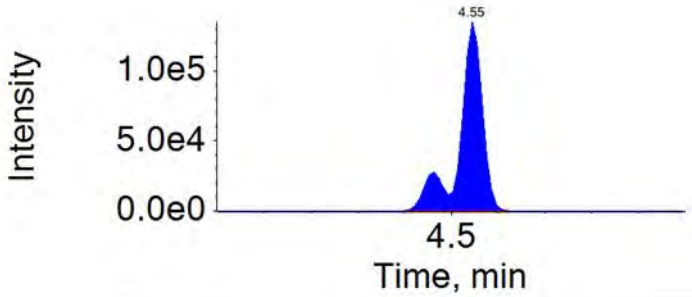
Component: PFHpA
Primary Mass: 363.0 / 319.0



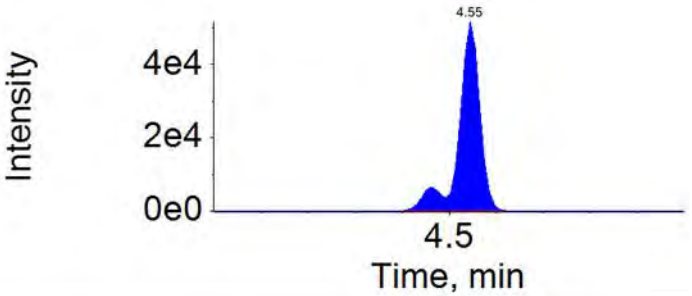
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



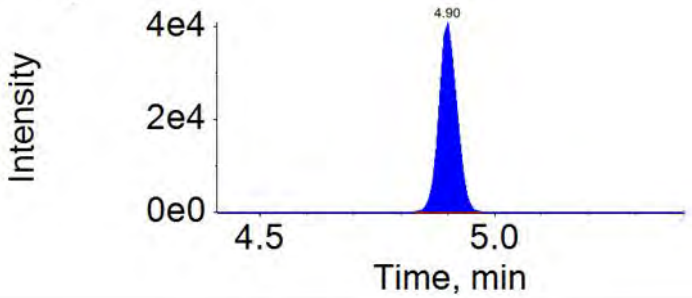
Component: PFHxS
Primary Mass: 399.0 / 80.0



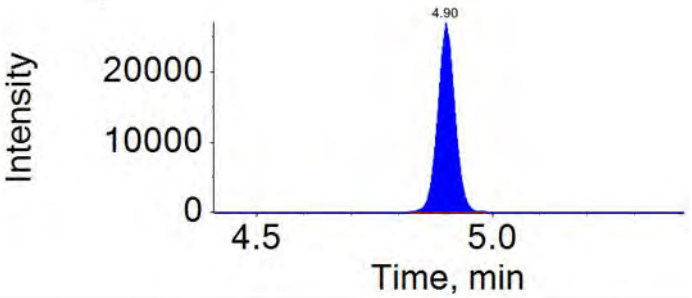
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



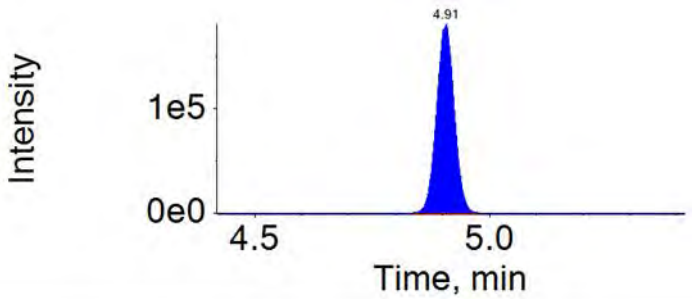
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



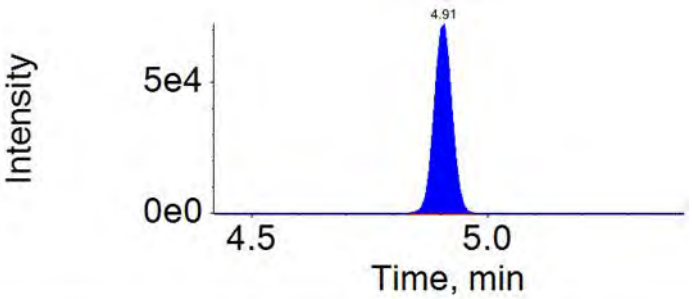
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



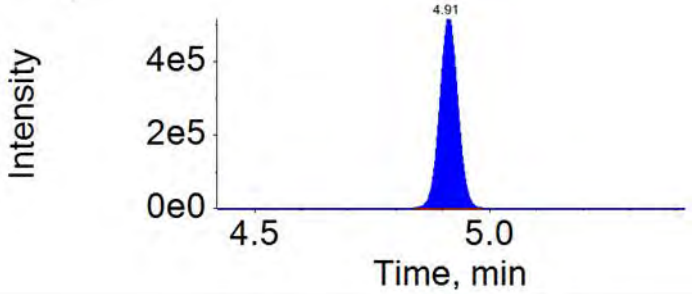
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



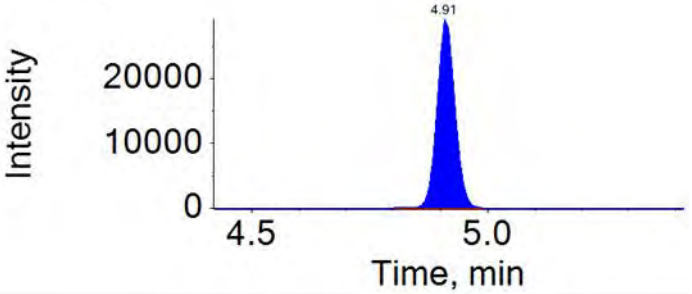
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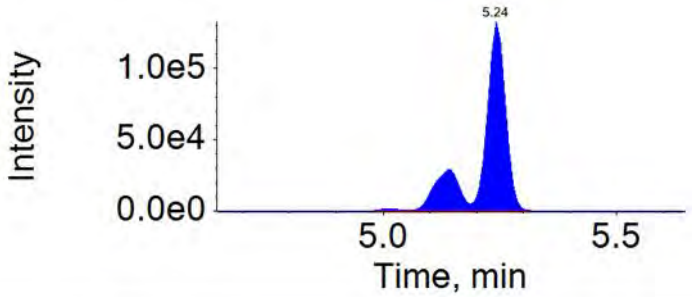
Component: PFOA
Primary Mass: 413.0 / 369.0



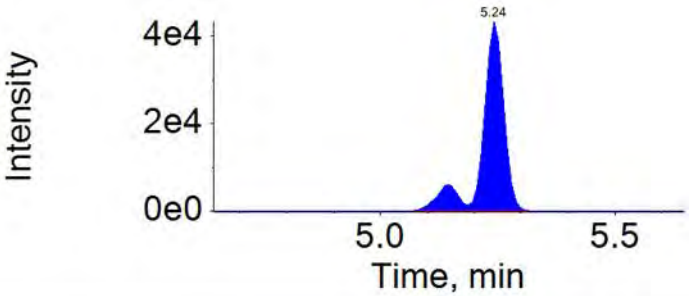
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



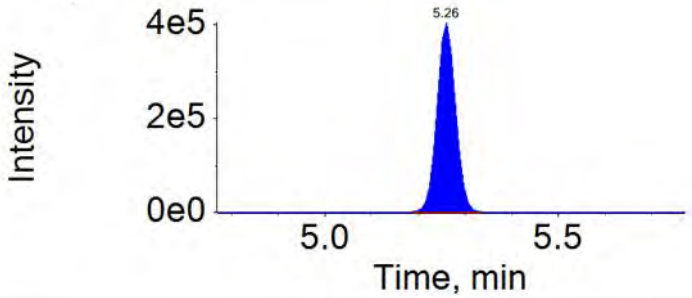
Component: PFOS
Primary Mass: 499.0 / 80.0



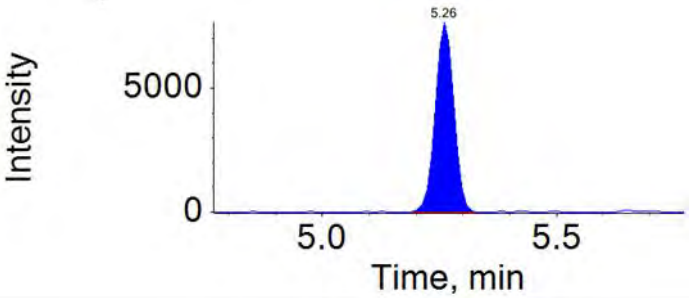
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



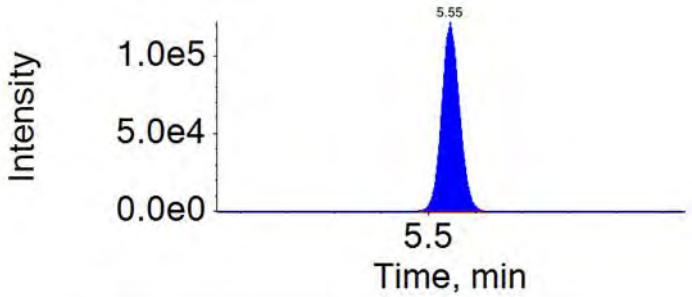
Component: PFNA
Primary Mass: 463.0 / 419.0



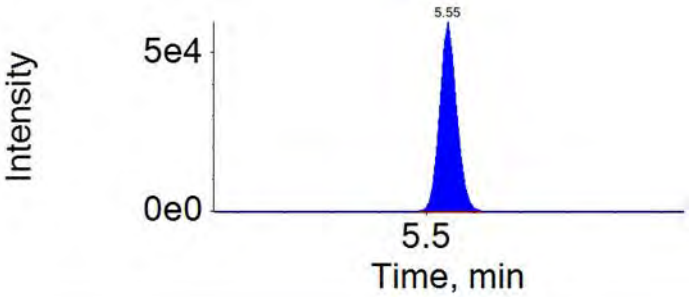
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



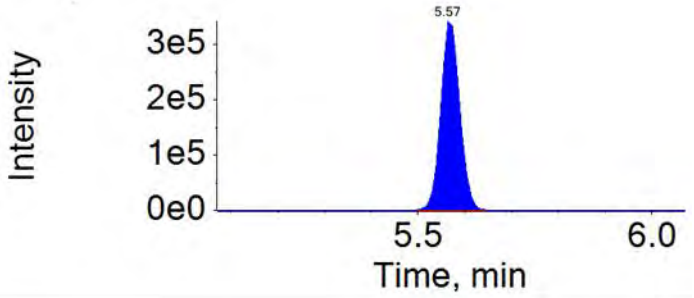
Component: PFNS
Primary Mass: 549.0 / 80.0



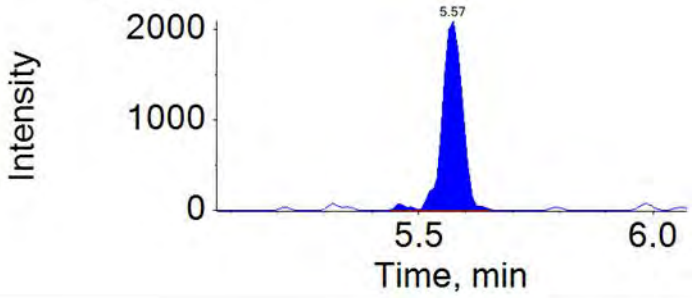
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



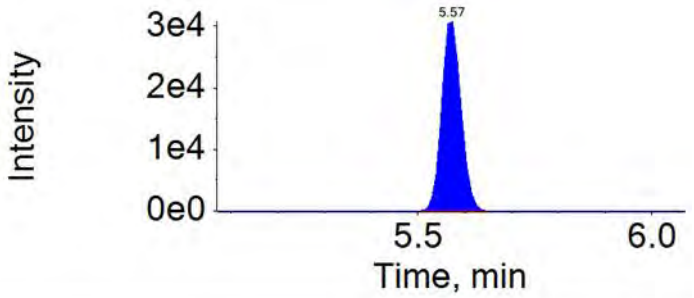
Component: PFDA
Primary Mass: 513.0 / 469.0



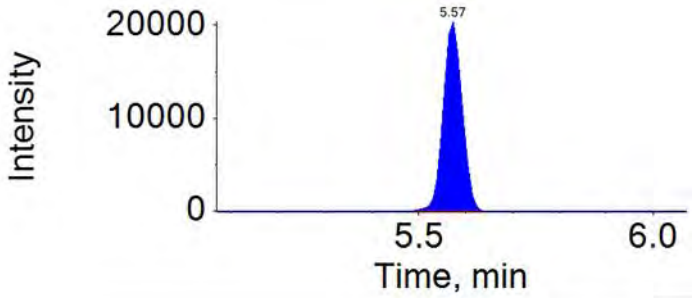
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



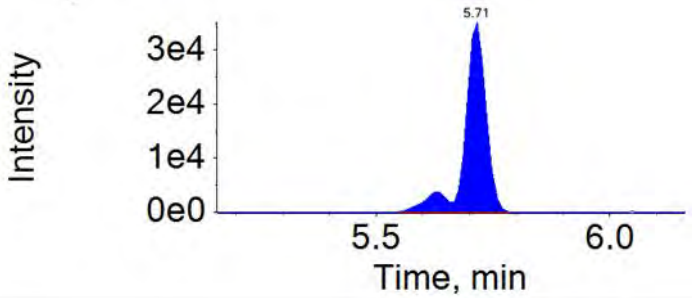
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



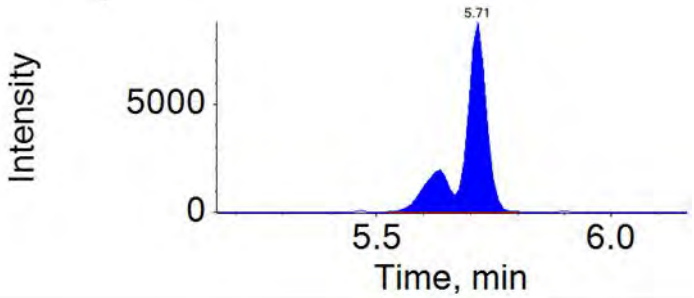
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



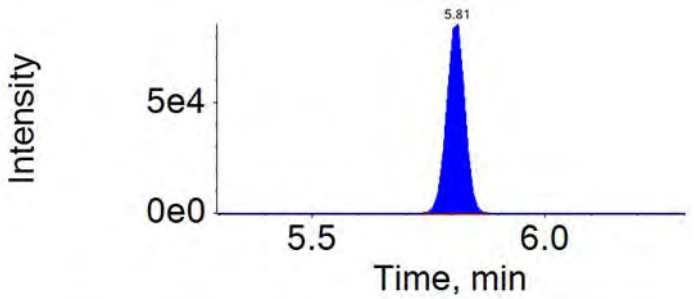
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



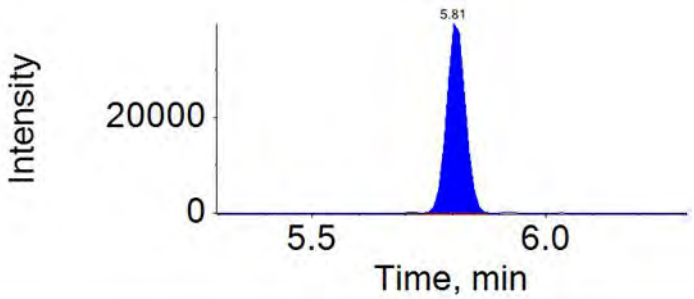
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



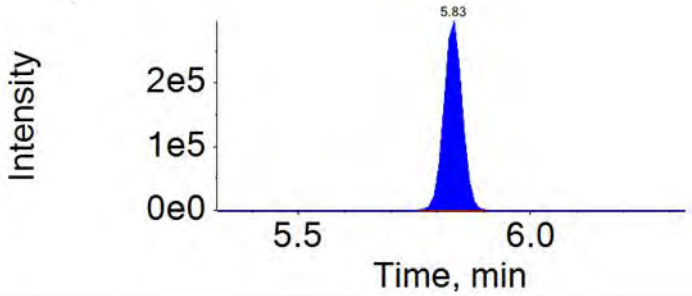
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



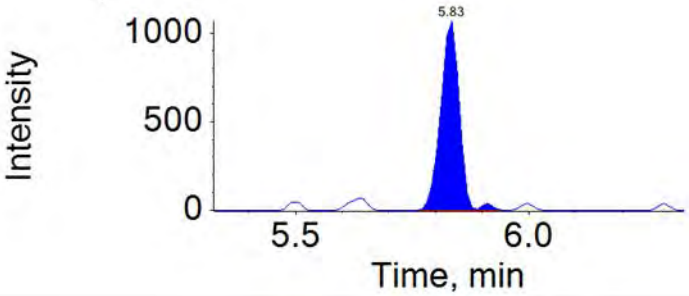
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

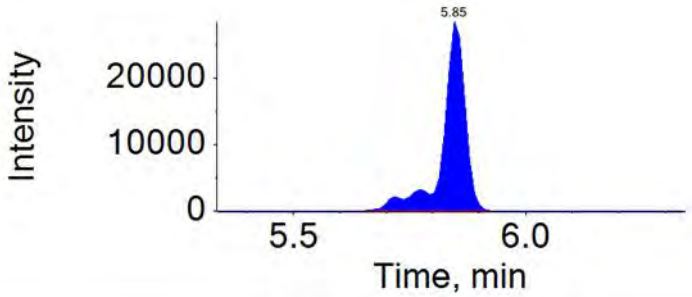
Component: PFUnDA
Primary Mass: 563.0 / 519.0



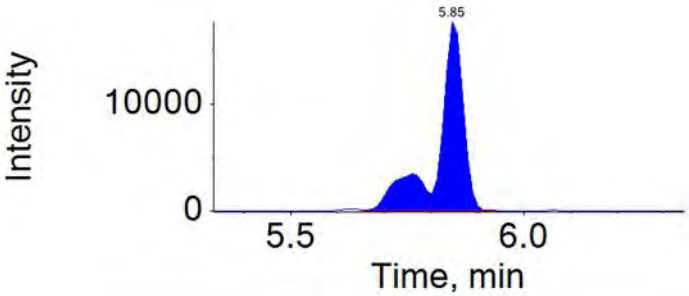
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



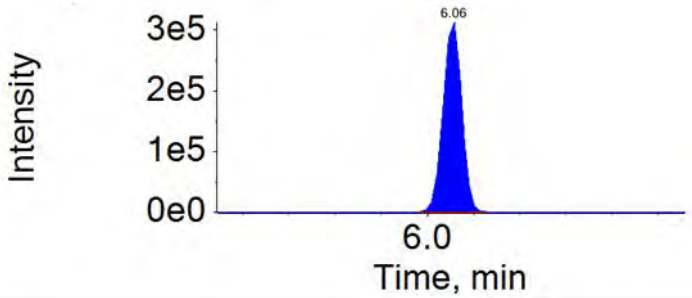
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



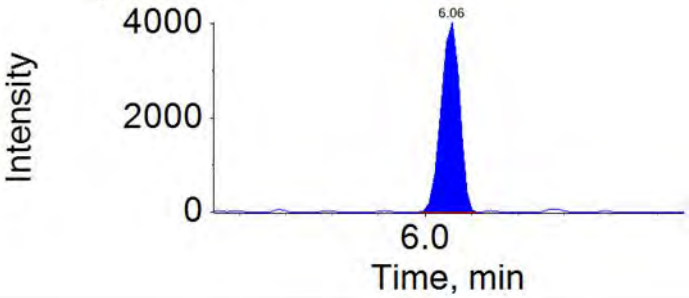
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



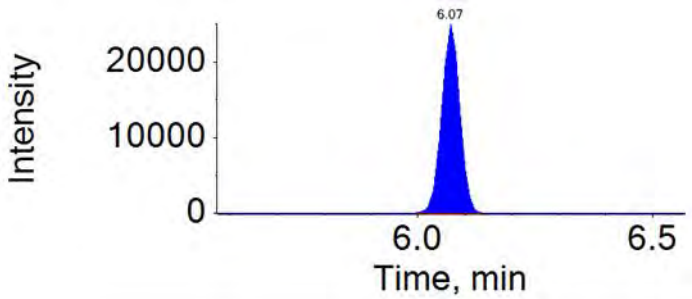
Component: PFDoDA
Primary Mass: 613.0 / 569.0



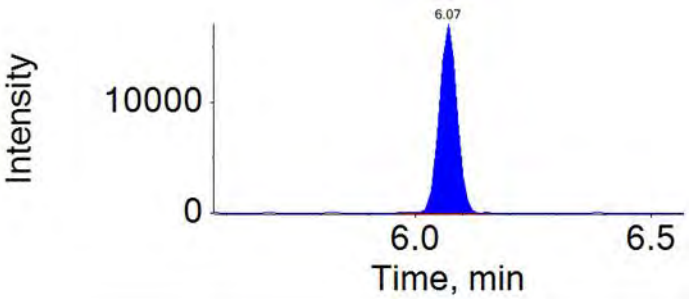
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



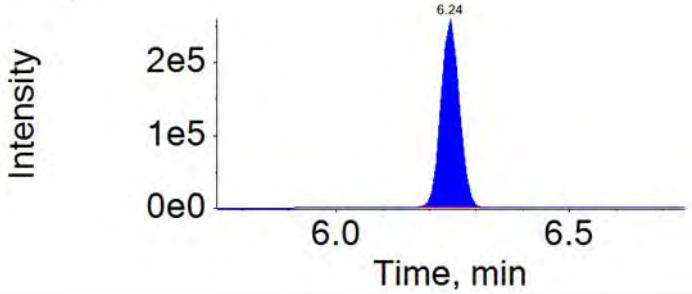
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



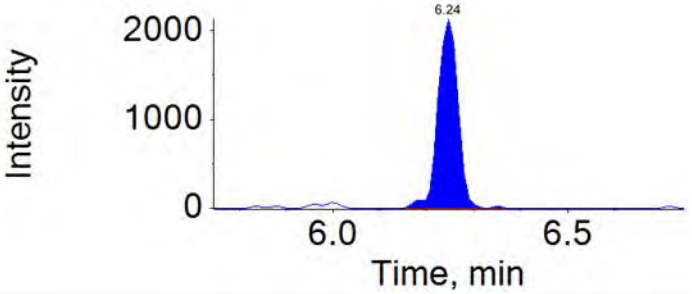
APPROVED
By JPT at 8:56 am, 11/16/18

REVIEWED
By HMK at 7:38 am, 11/19/18

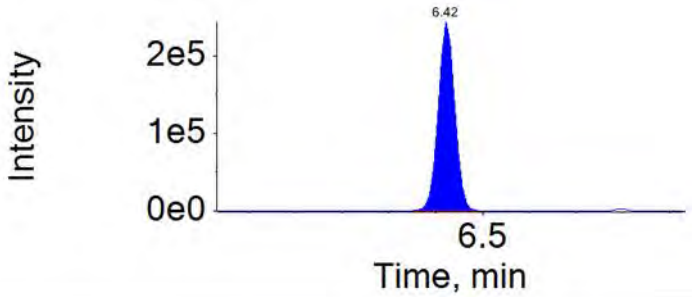
Component: PFTrDA
Primary Mass: 663.0 / 619.0



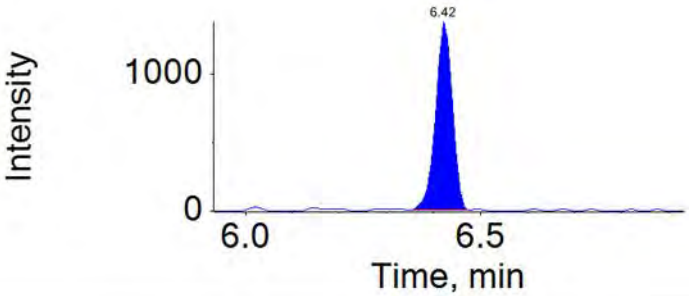
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



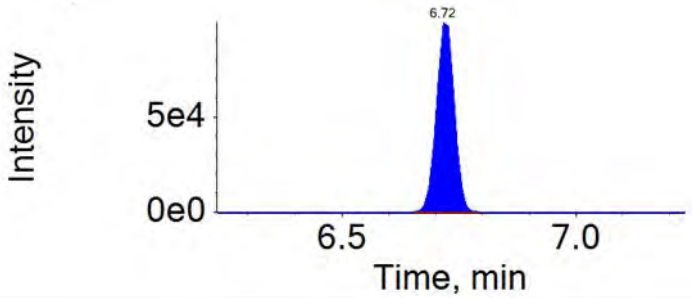
Component: PFTeDA
Primary Mass: 713.0 / 669.0



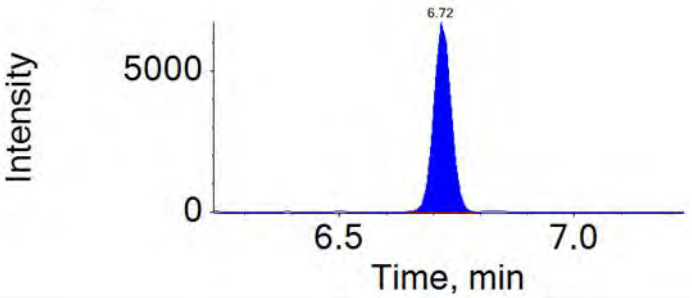
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



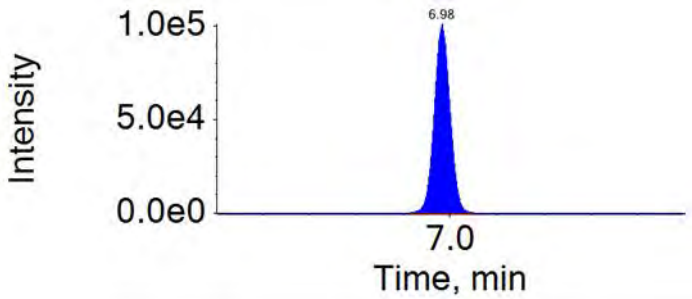
Component: PFHxDA
Primary Mass: 813.0 / 769.0



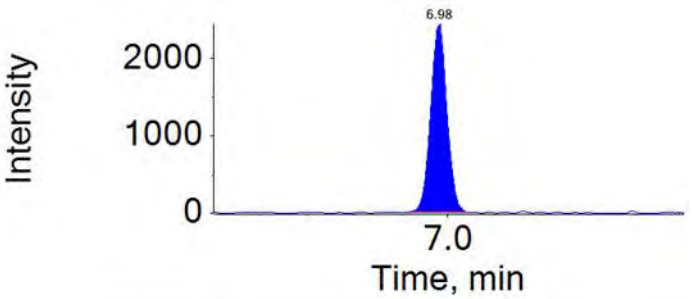
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

Sample File Name	Acquisition Date	Sample ID	Sample Name
18NOV28DCAL-06.wiff	11/28/2018 1:42:10 PM	CALBRN11833C	CAL1
18NOV28DCAL-07.wiff	11/28/2018 1:51:13 PM	CALBRN21833C	CAL2
18NOV28DCAL-08.wiff	11/28/2018 2:00:13 PM	CALBRN31833B	CAL3
18NOV28DCAL-09.wiff	11/28/2018 2:09:13 PM	CALBRN41833B	CAL4
18NOV28DCAL-10.wiff	11/28/2018 2:18:16 PM	CALBRN51833B	CAL5
18NOV28DCAL-11.wiff	11/28/2018 2:27:16 PM	CALBRN61833B	CAL6
18NOV28DCAL-12.wiff	11/28/2018 2:36:16 PM	CALBRN71833B	CAL7

CAL3 Injection Standard Areas

Sample Name	Injection Std Name	Injection Std Area
CAL3	13C3-PFBA	887248.9
CAL3	13C2-PFOA	498501.6
CAL3	13C4-PFOS	283214.2
CAL3	13C2-PFDA	441790.6

APPROVED
By MCD at 3:40 pm, 1/10/19

REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

Response Factor Table

Analyte Name	CAL 1	CAL 2	CAL 3	CAL 4	CAL 5	CAL 6	CAL 7	%RSD	Limit	OOS	r^2	OOS
PFBA	1.080	0.888	1.015	0.915	0.953	0.891	N/A	7	20		0.999	
PFPeA	1.146	0.858	1.164	0.972	1.027	N/A	N/A	11	20		0.997	
PFBS	1.048	0.856	1.054	0.915	0.956	0.951	0.964	7	20		1.000	
4:2-FTS	1.863	1.681	1.998	1.784	1.847	1.760	1.708	6	20		0.999	
PFHxA	1.451	1.216	1.377	1.252	1.229	N/A	N/A	7	20		0.999	
PFPeS	0.506	0.448	0.528	0.456	0.472	0.446	0.463	6	20		0.999	
PFHpA	1.943	1.531	1.813	1.585	1.614	N/A	N/A	9	20		0.999	
PFHxS	1.004	0.803	1.016	0.911	1.002	0.973	1.040	8	20		0.999	
6:2-FTS	2.165	1.891	2.059	2.052	1.835	1.766	N/A	7	20		0.998	
PFHpS	1.044	0.805	0.986	0.926	0.943	0.954	0.947	7	20		1.000	
PFOA	1.031	0.860	1.063	1.011	0.988	0.950	N/A	7	20		0.999	
PFOS	1.059	0.938	1.163	1.051	1.126	1.119	1.160	7	20		0.999	
PFNA	1.496	1.303	1.470	1.315	1.403	1.256	N/A	6	20		0.997	
PFNS	0.763	0.638	0.735	0.777	0.756	0.755	0.758	6	20		1.000	
PFDA	0.983	0.901	1.042	0.908	0.922	0.863	0.880	6	20		0.999	
8:2-FTS	2.600	2.366	2.661	2.405	2.587	N/A	N/A	5	20		0.999	
PFOSA	1.045	0.925	1.050	0.976	1.003	0.980	N/A	4	20		1.000	
NMeFOSAA	0.755	0.760	0.870	0.777	0.807	0.800	0.770	5	20		0.999	
PFDS	0.533	0.491	0.644	0.594	0.609	0.592	0.608	8	20		1.000	
PFUnDA	1.551	1.312	1.564	1.466	1.465	1.452	1.350	6	20		0.998	
NEtFOSAA	0.994	0.958	1.016	0.921	1.027	1.030	1.034	4	20		1.000	
PFDoDA	1.137	0.896	1.115	0.896	0.918	0.904	N/A	11	20		0.999	
10:2-FTS	2.409	2.294	2.697	2.170	2.584	2.172	2.078	9	20		0.994	
NMePFOSAE	1.232	1.162	1.330	1.183	1.252	1.229	1.152	5	20		0.999	
NMePFOSA	0.955	0.904	1.028	0.928	0.970	0.938	0.940	4	20		1.000	
PFDoS	0.310	0.304	0.325	0.333	0.321	0.319	0.343	4	20		0.999	
NEtPFOSAE	1.702	1.382	1.766	1.478	1.516	1.392	1.348	10	20		0.998	
NEtPFOSA	1.208	0.986	1.184	1.112	1.104	1.170	1.090	6	20		0.999	
PFTrDA	1.034	0.859	1.068	0.881	0.826	0.812	N/A	11	20		0.998	
PFTeDA	0.975	0.858	1.016	0.886	0.921	0.861	N/A	6	20		0.999	
PFHxDA	0.549	0.429	0.516	0.455	0.493	0.431	0.426	10	20		0.997	
PFODA	0.411	0.354	0.413	0.374	0.405	0.373	0.370	6	20		0.999	

APPROVED
By MCD at 3:40 pm, 1/10/19

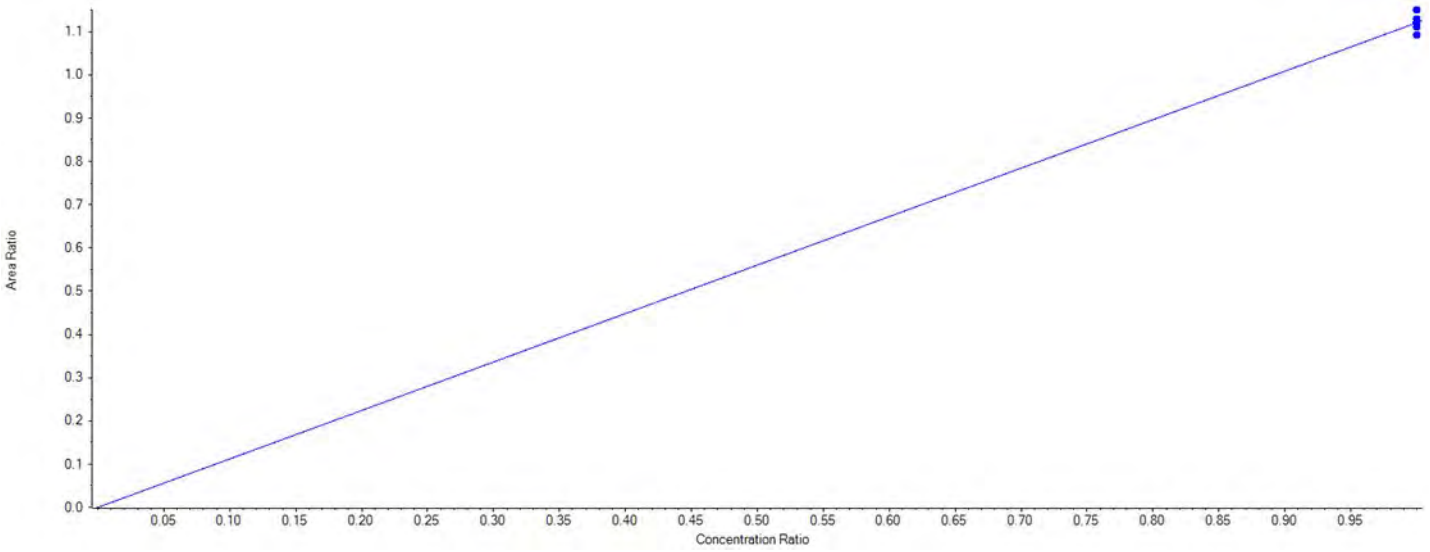
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C4-PFBA

y = 1.12068 x (std. dev. = 0.01800) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C4-PFBA Area	13C3-PFBA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	1018752.8	907350.543	True	5.00	1.123	3.28	1.000	5.000	5.009	0	30	
CAL2	1033122.1	898154.232	True	5.00	1.150	3.27	1.000	5.000	5.132	3	30	
CAL3	993144.1	887248.863	True	5.00	1.119	3.28	1.000	5.000	4.994	0	30	
CAL4	974000.9	892443.927	True	5.00	1.091	3.28	1.000	5.000	4.869	-3	30	
CAL5	951695.0	857159.817	True	5.00	1.110	3.28	1.000	5.000	4.954	-1	30	
CAL6	897566.7	793954.989	True	5.00	1.131	3.27	1.000	5.000	5.044	1	30	
CAL7	803704.8	717475.737	True	5.00	1.120	3.27	1.000	5.000	4.998	0	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

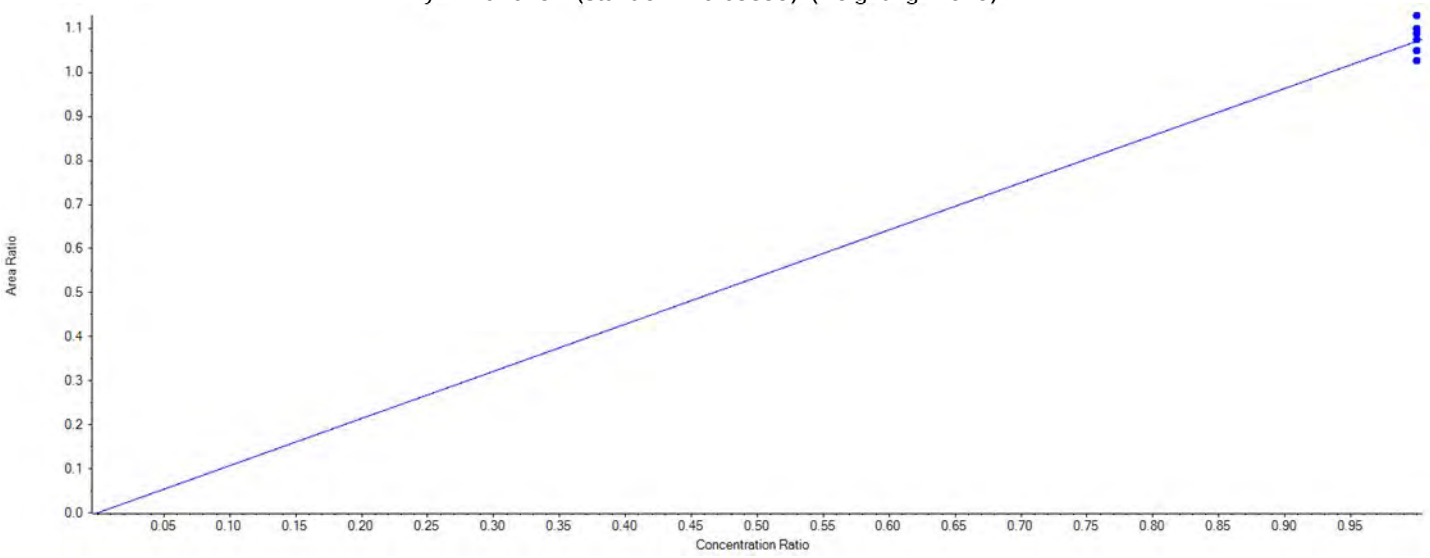
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C5-PFPeA

y = 1.07075 x (std. dev. = 0.03855) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C5-PFPeA Area	13C3-PFBA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	975339.0	907350.543	True	5.00	1.075	3.77	1.150	5.000	5.019	0	30	
CAL2	1014125.0	898154.232	True	5.00	1.129	3.77	1.150	5.000	5.273	5	30	
CAL3	910953.7	887248.863	True	5.00	1.027	3.78	1.150	5.000	4.794	-4	30	
CAL4	915824.6	892443.927	True	5.00	1.026	3.77	1.150	5.000	4.792	-4	30	
CAL5	900153.4	857159.817	True	5.00	1.050	3.78	1.150	5.000	4.904	-2	30	
CAL6	872922.6	793954.989	True	5.00	1.099	3.77	1.150	5.000	5.134	3	30	
CAL7	781113.8	717475.737	True	5.00	1.089	3.77	1.150	5.000	5.084	2	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

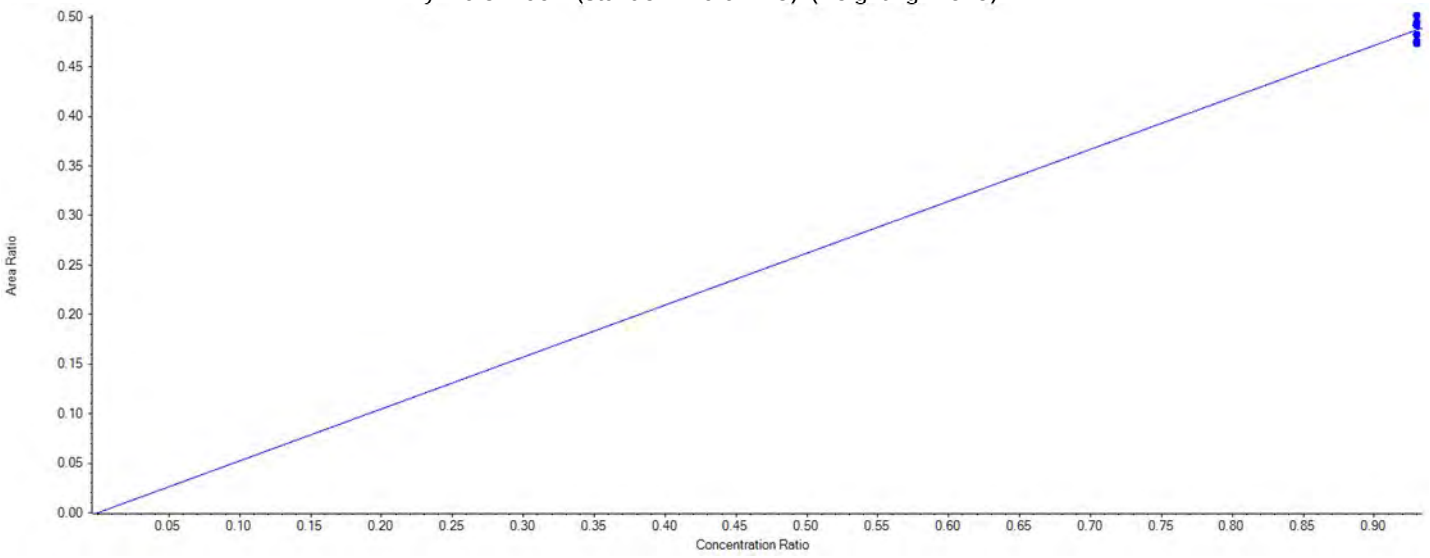
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C3-PFBS

y = 0.52409 x (std. dev. = 0.01145) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C3-PFBS Area	13C3-PFBA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	437838.9	907350.543	True	5.00	0.483	3.82	1.160	4.650	4.604	-1	30	
CAL2	442149.9	898154.232	True	5.00	0.492	3.82	1.160	4.650	4.697	1	30	
CAL3	419929.2	887248.863	True	5.00	0.473	3.82	1.170	4.650	4.515	-3	30	
CAL4	424041.3	892443.927	True	5.00	0.475	3.82	1.160	4.650	4.533	-3	30	
CAL5	424059.2	857159.817	True	5.00	0.495	3.83	1.160	4.650	4.720	2	30	
CAL6	398441.3	793954.989	True	5.00	0.502	3.82	1.160	4.650	4.788	3	30	
CAL7	352994.8	717475.737	True	5.00	0.492	3.82	1.160	4.650	4.694	1	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

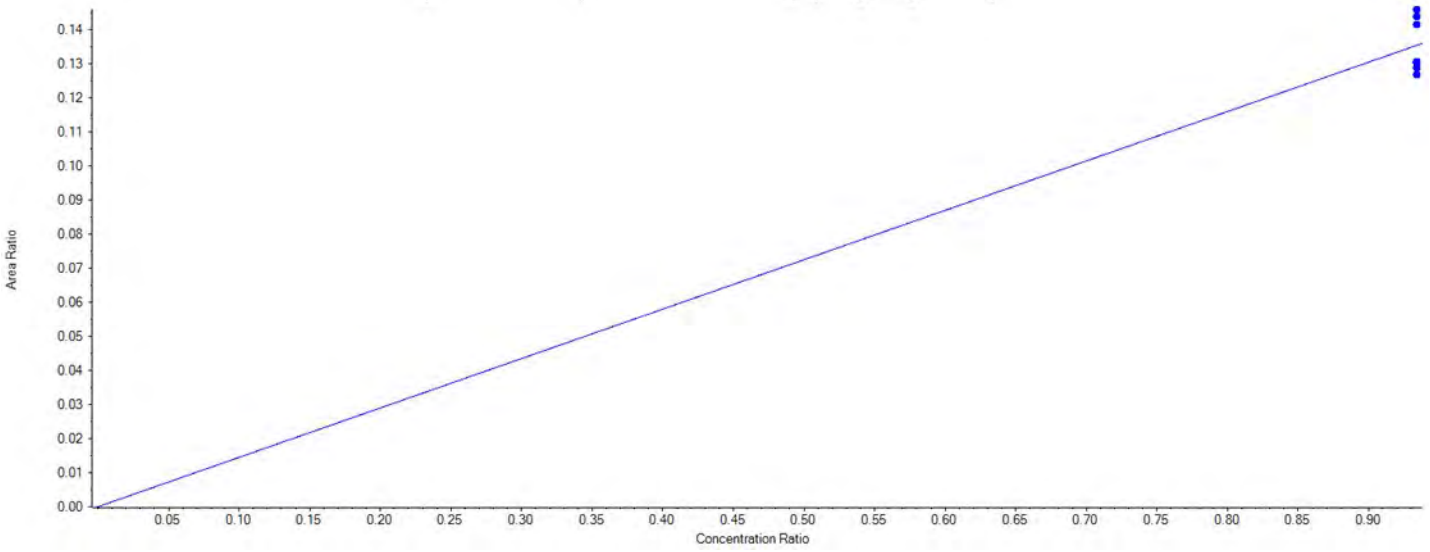
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C2-4:2-FTS

y = 0.14509 x (std. dev. = 0.00860) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C2-4:2-FTS Area	13C2-PFOA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	75119.1	521822.847	True	5.00	0.144	4.13	0.840	4.670	4.961	6	30	
CAL2	72067.1	493545.206	True	5.00	0.146	4.13	0.840	4.670	5.032	8	30	
CAL3	70629.1	498501.619	True	5.00	0.142	4.14	0.840	4.670	4.883	5	30	
CAL4	67043.7	528506.765	True	5.00	0.127	4.13	0.840	4.670	4.372	-6	30	
CAL5	67423.0	516457.167	True	5.00	0.131	4.14	0.840	4.670	4.499	-4	30	
CAL6	65255.4	499608.504	True	5.00	0.131	4.13	0.840	4.670	4.501	-4	30	
CAL7	62236.8	482796.463	True	5.00	0.129	4.13	0.840	4.670	4.442	-5	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

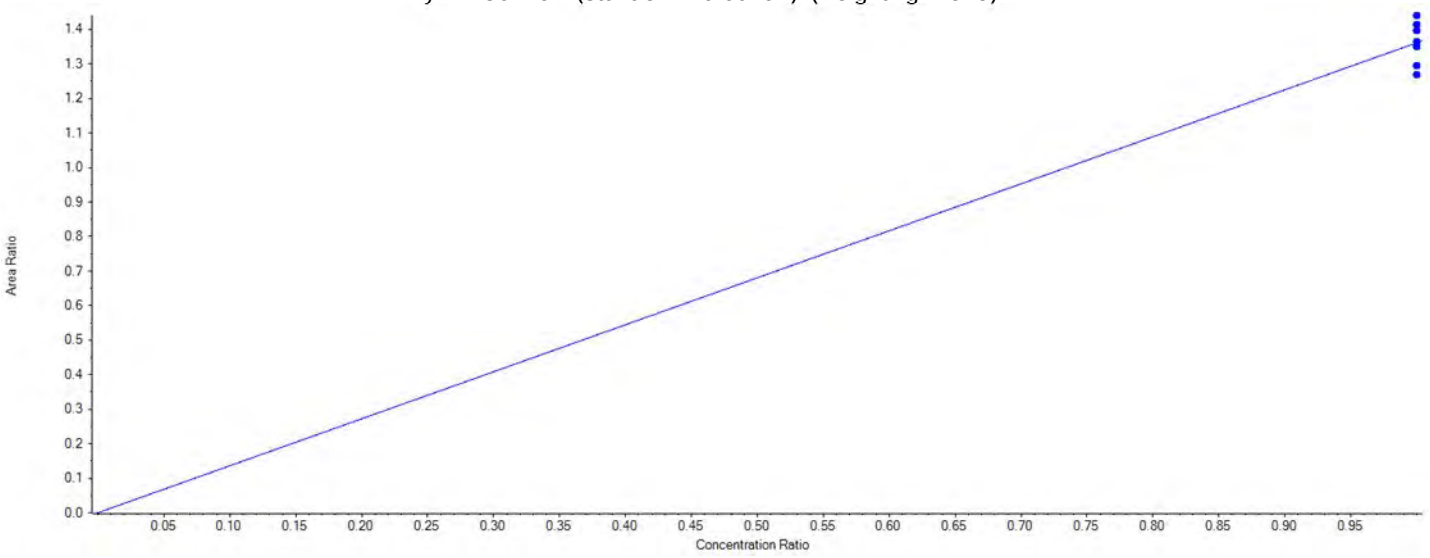
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C5-PFHxA

y = 1.36129 x (std. dev. = 0.06204) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C5-PFHxA Area	13C2-PFOA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	728340.5	521822.847	True	5.00	1.396	4.17	0.850	5.000	5.127	3	30	
CAL2	697229.0	493545.206	True	5.00	1.413	4.16	0.850	5.000	5.189	4	30	
CAL3	717900.1	498501.619	True	5.00	1.440	4.17	0.850	5.000	5.290	6	30	
CAL4	670407.7	528506.765	True	5.00	1.268	4.17	0.850	5.000	4.659	-7	30	
CAL5	704953.5	516457.167	True	5.00	1.365	4.17	0.850	5.000	5.014	0	30	
CAL6	675219.8	499608.504	True	5.00	1.351	4.16	0.850	5.000	4.964	-1	30	
CAL7	625449.8	482796.463	True	5.00	1.295	4.16	0.850	5.000	4.758	-5	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

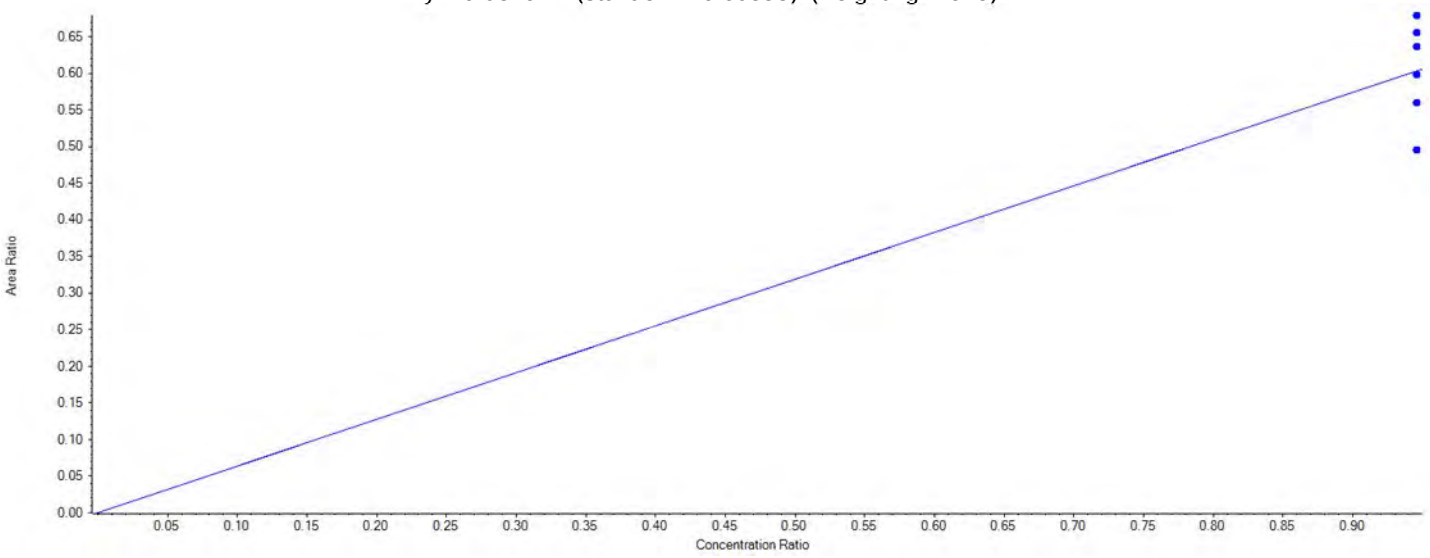
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C3-PFHxS

y = 0.63794 x (std. dev. = 0.06553) (weighting: None)



Extraction Standard Calibration Verification

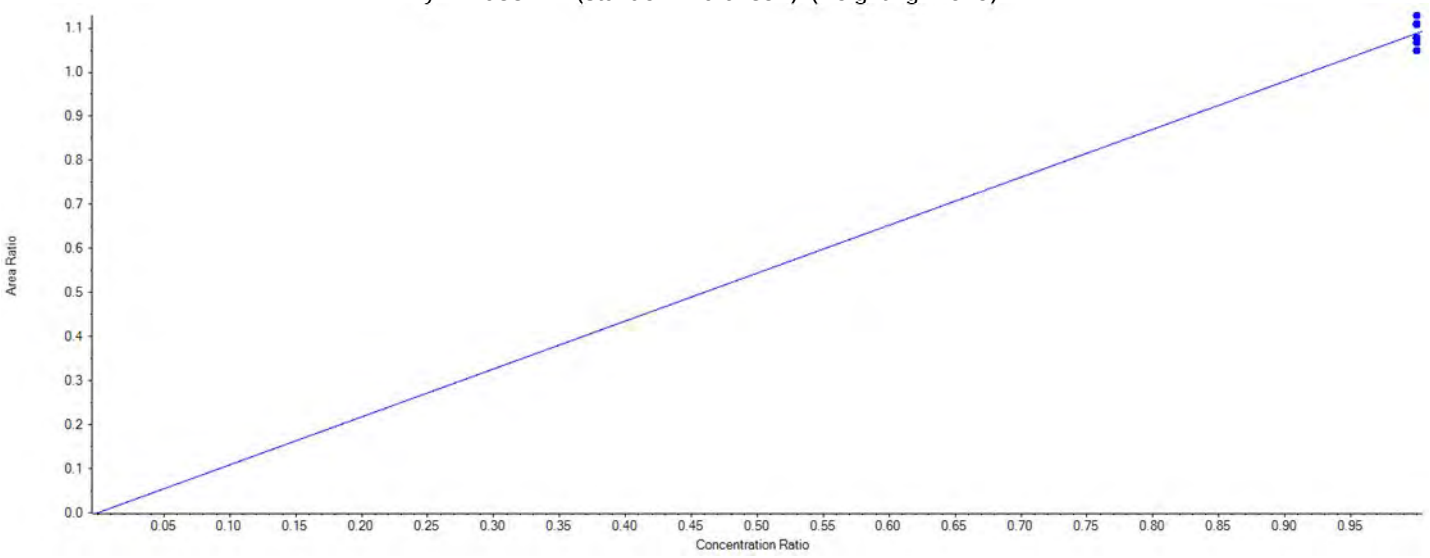
Sample Name	E13C3-PFHxS Area	13C2-PFOA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	331982.9	521822.847	True	5.00	0.636	4.56	0.930	4.730	4.986	5	30	
CAL2	335129.7	493545.206	True	5.00	0.679	4.55	0.930	4.730	5.322	13	30	
CAL3	326982.4	498501.619	True	5.00	0.656	4.56	0.930	4.730	5.141	9	30	
CAL4	316393.3	528506.765	True	5.00	0.599	4.56	0.930	4.730	4.692	-1	30	
CAL5	309184.7	516457.167	True	5.00	0.599	4.56	0.930	4.730	4.692	-1	30	
CAL6	279894.6	499608.504	True	5.00	0.560	4.55	0.930	4.730	4.391	-7	30	
CAL7	239327.4	482796.463	True	5.00	0.496	4.56	0.930	4.730	3.885	-18	30	

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C4-PFHpA

y = 1.08817 x (std. dev. = 0.02857) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C4-PFHpA Area	13C2-PFOA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	547365.1	521822.847	True	5.00	1.049	4.55	0.920	5.000	4.820	-4	30	
CAL2	547372.0	493545.206	True	5.00	1.109	4.55	0.920	5.000	5.096	2	30	
CAL3	535993.3	498501.619	True	5.00	1.075	4.56	0.920	5.000	4.940	-1	30	
CAL4	563673.9	528506.765	True	5.00	1.067	4.55	0.920	5.000	4.901	-2	30	
CAL5	556455.9	516457.167	True	5.00	1.077	4.56	0.920	5.000	4.951	-1	30	
CAL6	555281.5	499608.504	True	5.00	1.111	4.55	0.920	5.000	5.107	2	30	
CAL7	544866.9	482796.463	True	5.00	1.129	4.55	0.920	5.000	5.186	4	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

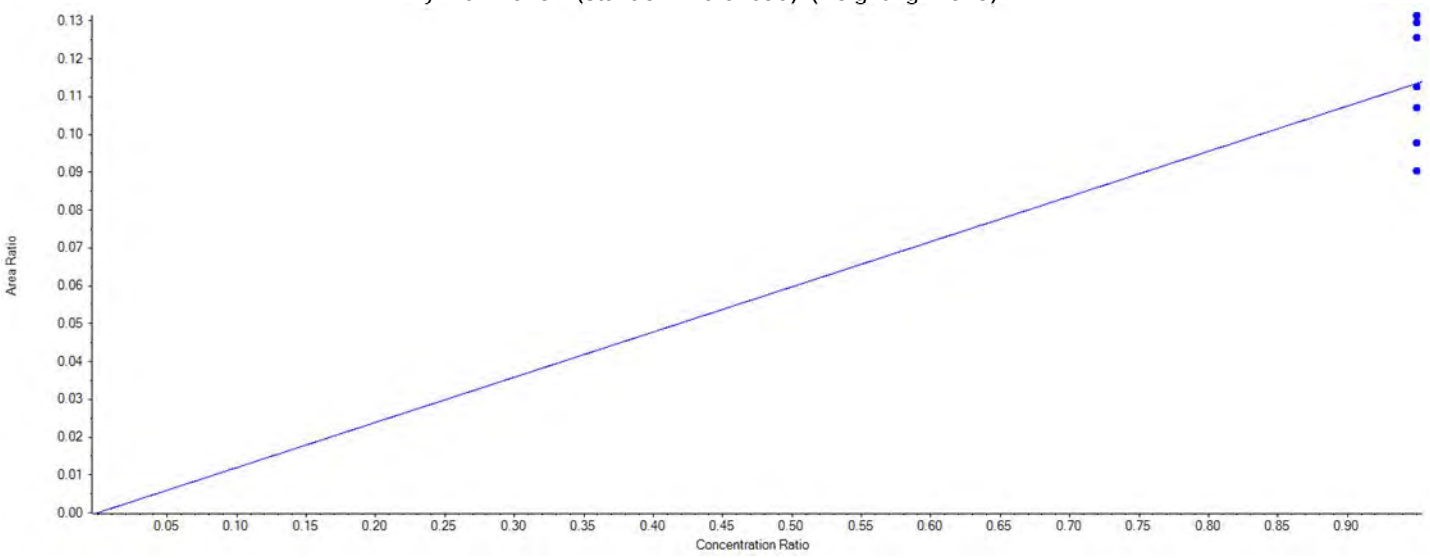
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C2-6:2-FTS

y = 0.11945 x (std. dev. = 0.01690) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C2-6:2-FTS Area	13C2-PFOA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	65543.8	521822.847	True	5.00	0.126	4.91	1.000	4.750	5.258	11	30	
CAL2	63922.7	493545.206	True	5.00	0.130	4.91	1.000	4.750	5.422	14	30	
CAL3	65518.3	498501.619	True	5.00	0.131	4.92	1.000	4.750	5.502	16	30	
CAL4	56580.1	528506.765	True	5.00	0.107	4.91	1.000	4.750	4.481	-6	30	
CAL5	58122.8	516457.167	True	5.00	0.113	4.92	1.000	4.750	4.711	-1	30	
CAL6	48807.6	499608.504	True	5.00	0.098	4.91	1.000	4.750	4.089	-14	30	
CAL7	43678.3	482796.463	True	5.00	0.090	4.91	1.000	4.750	3.787	-20	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

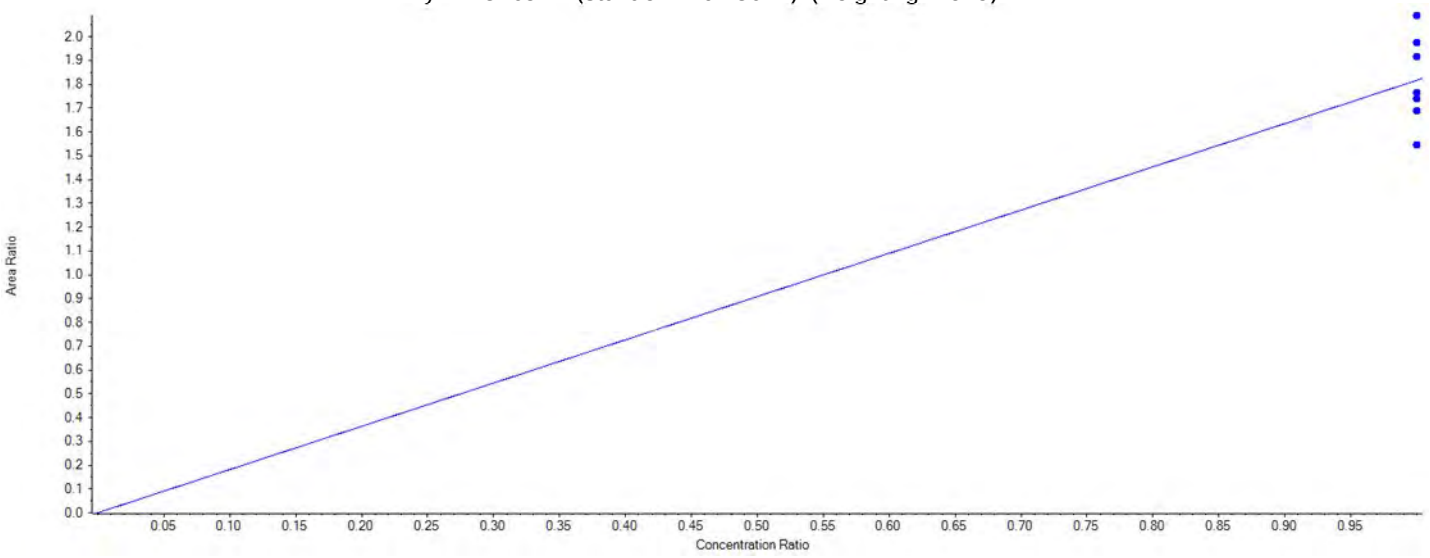
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C8-PFOA

y = 1.81654 x (std. dev. = 0.18621) (weighting: None)



Extraction Standard Calibration Verification

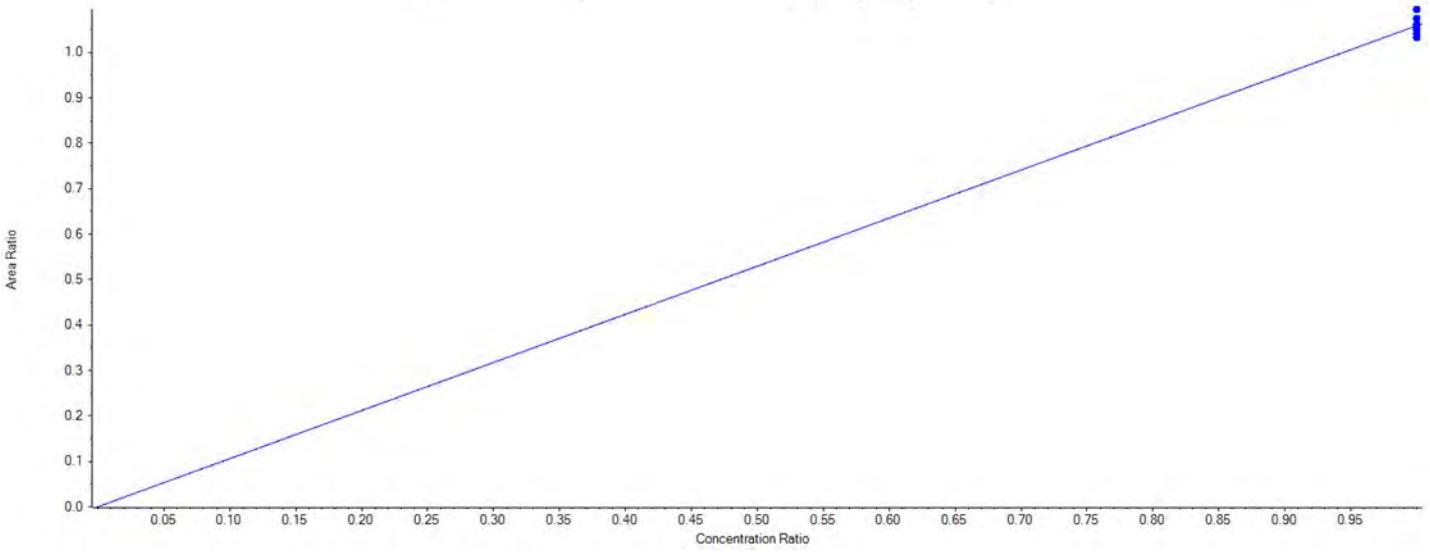
Sample Name	E13C8-PFOA Area	13C2-PFOA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	1030597.9	521822.847	True	5.00	1.975	4.92	1.000	5.000	5.436	9	30	
CAL2	1030866.6	493545.206	True	5.00	2.089	4.92	1.000	5.000	5.749	15	30	
CAL3	954678.0	498501.619	True	5.00	1.915	4.93	1.000	5.000	5.271	5	30	
CAL4	918995.3	528506.765	True	5.00	1.739	4.92	1.000	5.000	4.786	-4	30	
CAL5	911756.1	516457.167	True	5.00	1.765	4.93	1.000	5.000	4.859	-3	30	
CAL6	843522.3	499608.504	True	5.00	1.688	4.92	1.000	5.000	4.647	-7	30	
CAL7	745616.3	482796.463	True	5.00	1.544	4.92	1.000	5.000	4.251	-15	30	

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C8-PFOS

y = 1.05888 x (std. dev. = 0.02078) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C8-PFOS Area	13C4-PFOS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	318525.4	296225.157	True	4.78	1.075	5.25	1.000	4.780	4.854	2	30	
CAL2	313894.3	295669.685	True	4.78	1.062	5.25	1.000	4.780	4.792	0	30	
CAL3	309913.7	283214.231	True	4.78	1.094	5.26	1.000	4.780	4.940	3	30	
CAL4	296147.5	281778.555	True	4.78	1.051	5.25	1.000	4.780	4.744	-1	30	
CAL5	299574.5	287732.638	True	4.78	1.041	5.26	1.000	4.780	4.700	-2	30	
CAL6	279204.4	264408.934	True	4.78	1.056	5.25	1.000	4.780	4.767	0	30	
CAL7	250004.2	242045.223	True	4.78	1.033	5.25	1.000	4.780	4.663	-2	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

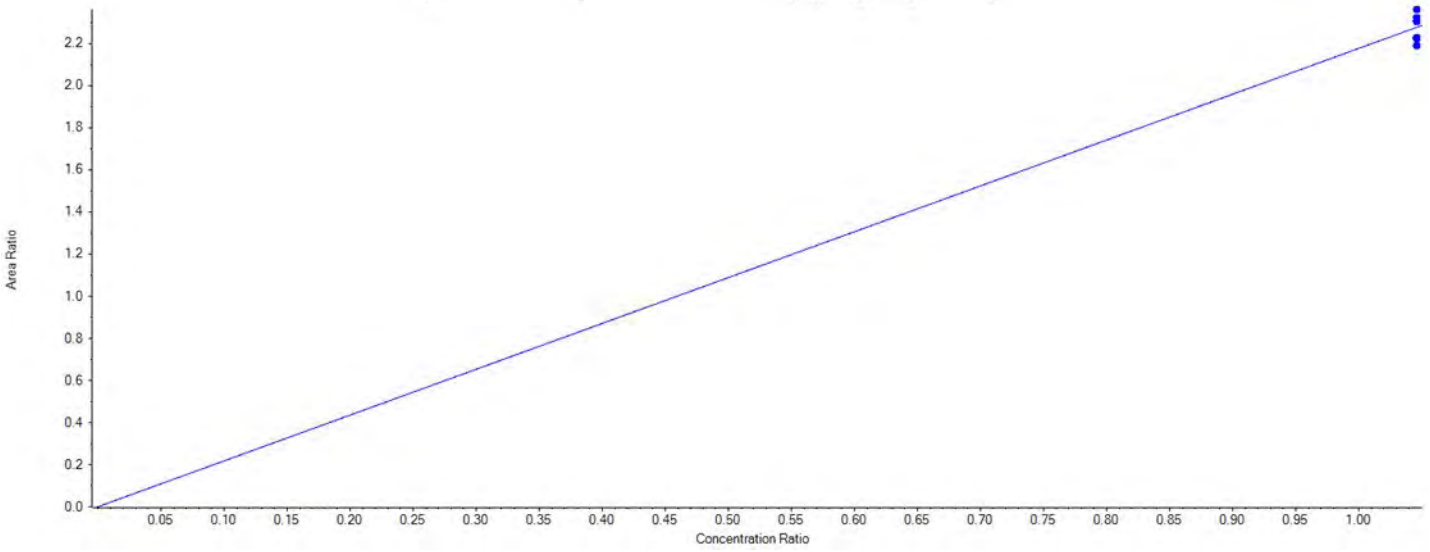
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C9-PFNA

y = 2.17630 x (std. dev. = 0.05982) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C9-PFNA Area	13C4-PFOS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	659714.6	296225.157	True	4.78	2.227	5.27	1.000	5.000	4.892	-2	30	
CAL2	682380.7	295669.685	True	4.78	2.308	5.26	1.000	5.000	5.069	1	30	
CAL3	629954.6	283214.231	True	4.78	2.224	5.27	1.000	5.000	4.885	-2	30	
CAL4	648727.0	281778.555	True	4.78	2.302	5.27	1.000	5.000	5.057	1	30	
CAL5	630201.5	287732.638	True	4.78	2.190	5.27	1.000	5.000	4.811	-4	30	
CAL6	624202.7	264408.934	True	4.78	2.361	5.26	1.000	5.000	5.185	4	30	
CAL7	562206.9	242045.223	True	4.78	2.323	5.27	1.000	5.000	5.102	2	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

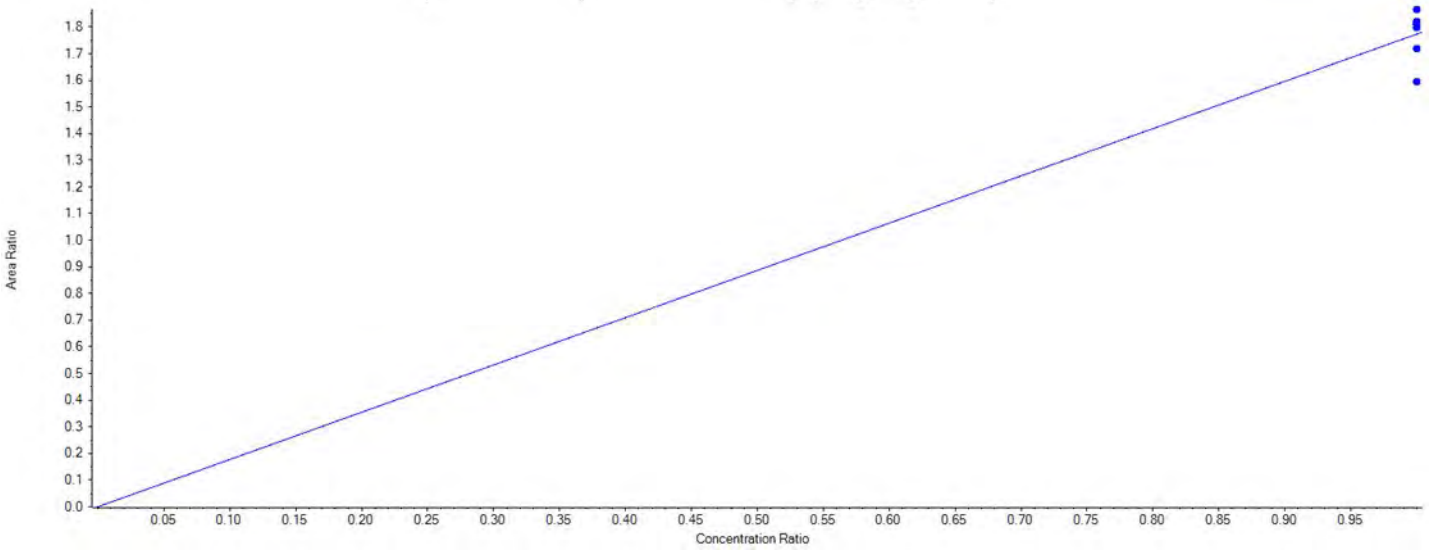
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C6-PFDA

y = 1.77338 x (std. dev. = 0.09043) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C6-PFDA Area	13C2-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	855362.9	476146.560	True	5.00	1.796	5.57	1.000	5.000	5.065	1	30	
CAL2	839100.7	460926.236	True	5.00	1.820	5.56	1.000	5.000	5.133	3	30	
CAL3	824072.9	441790.617	True	5.00	1.865	5.57	1.000	5.000	5.259	5	30	
CAL4	841970.5	489439.830	True	5.00	1.720	5.57	1.000	5.000	4.850	-3	30	
CAL5	833462.1	460232.679	True	5.00	1.811	5.57	1.000	5.000	5.106	2	30	
CAL6	758832.8	419913.240	True	5.00	1.807	5.56	1.000	5.000	5.095	2	30	
CAL7	645932.5	405454.995	True	5.00	1.593	5.57	1.000	5.000	4.492	-10	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

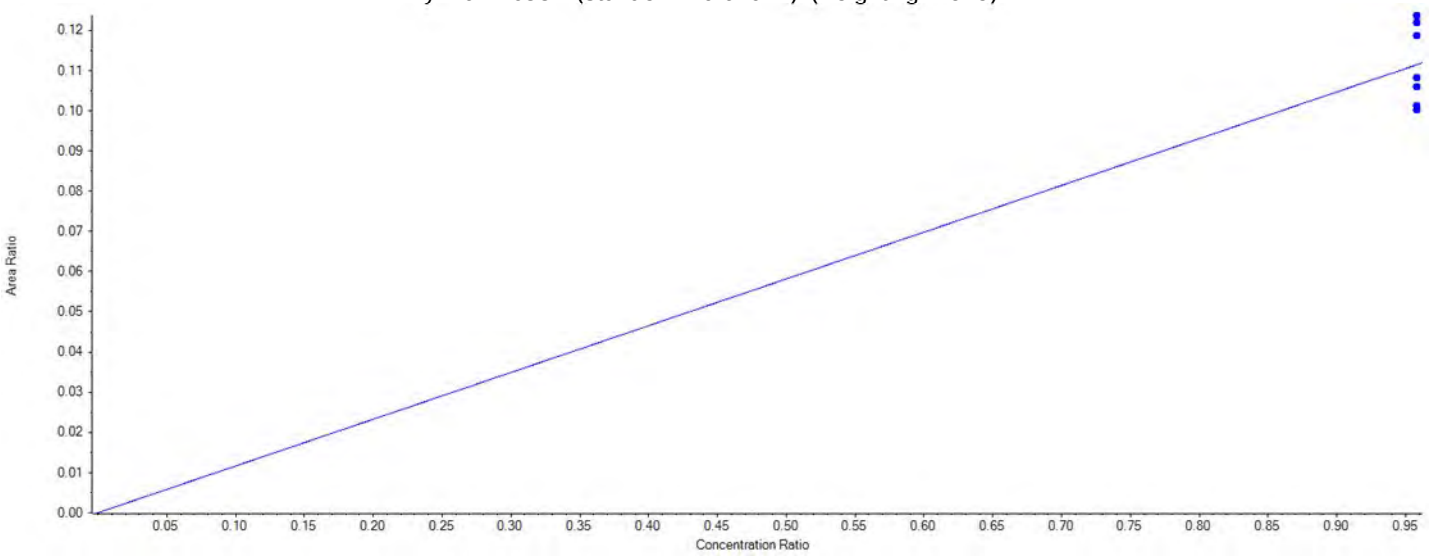
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C2-8:2-FTS

y = 0.11633 x (std. dev. = 0.01027) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C2-8:2-FTS Area	13C2-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	58895.0	476146.560	True	5.00	0.124	5.57	1.000	4.790	5.316	11	30	
CAL2	54757.9	460926.236	True	5.00	0.119	5.57	1.000	4.790	5.106	7	30	
CAL3	53847.1	441790.617	True	5.00	0.122	5.58	1.000	4.790	5.239	9	30	
CAL4	52961.9	489439.830	True	5.00	0.108	5.57	1.000	4.790	4.651	-3	30	
CAL5	46142.4	460232.679	True	5.00	0.100	5.58	1.000	4.790	4.309	-10	30	
CAL6	44487.5	419913.240	True	5.00	0.106	5.57	1.000	4.790	4.553	-5	30	
CAL7	41093.0	405454.995	True	5.00	0.101	5.57	1.000	4.790	4.356	-9	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

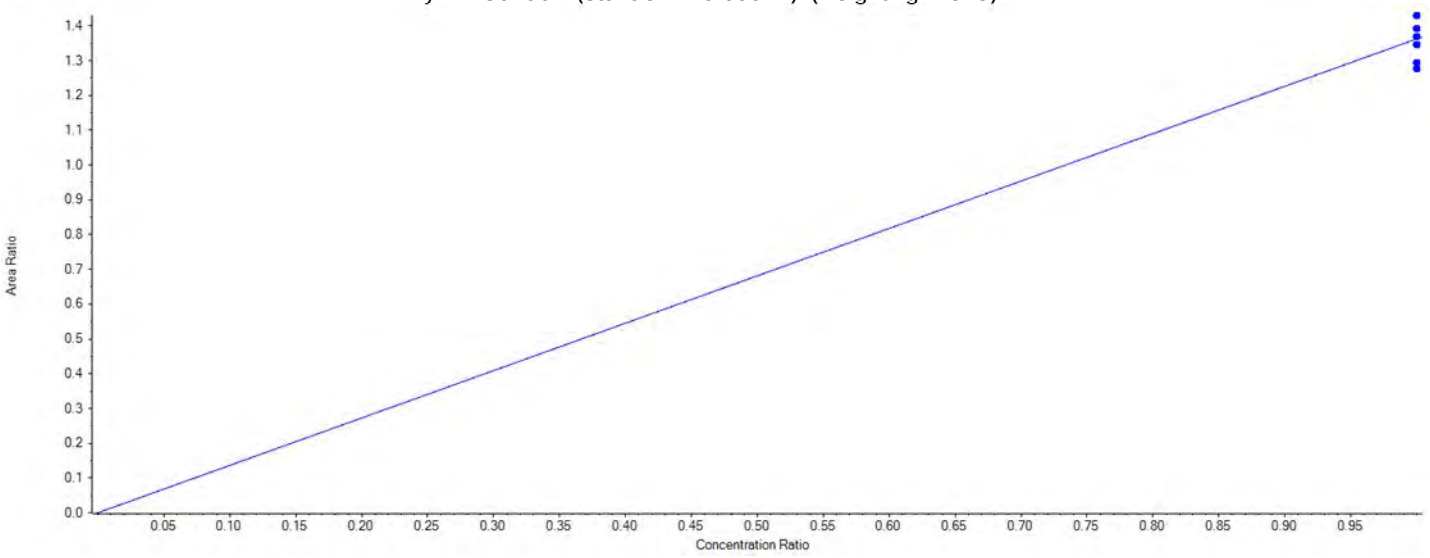
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C8-PFOSA

y = 1.36266 x (std. dev. = 0.06042) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C8-PFOSA Area	13C2-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	662264.7	476146.560	True	5.00	1.391	5.65	1.020	5.000	5.104	2	30	
CAL2	658778.5	460926.236	True	5.00	1.429	5.65	1.020	5.000	5.244	5	30	
CAL3	631627.9	441790.617	True	5.00	1.430	5.66	1.020	5.000	5.246	5	30	
CAL4	625021.8	489439.830	True	5.00	1.277	5.65	1.020	5.000	4.686	-6	30	
CAL5	596189.5	460232.679	True	5.00	1.295	5.66	1.020	5.000	4.753	-5	30	
CAL6	565326.0	419913.240	True	5.00	1.346	5.65	1.020	5.000	4.940	-1	30	
CAL7	555500.5	405454.995	True	5.00	1.370	5.65	1.020	5.000	5.027	1	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

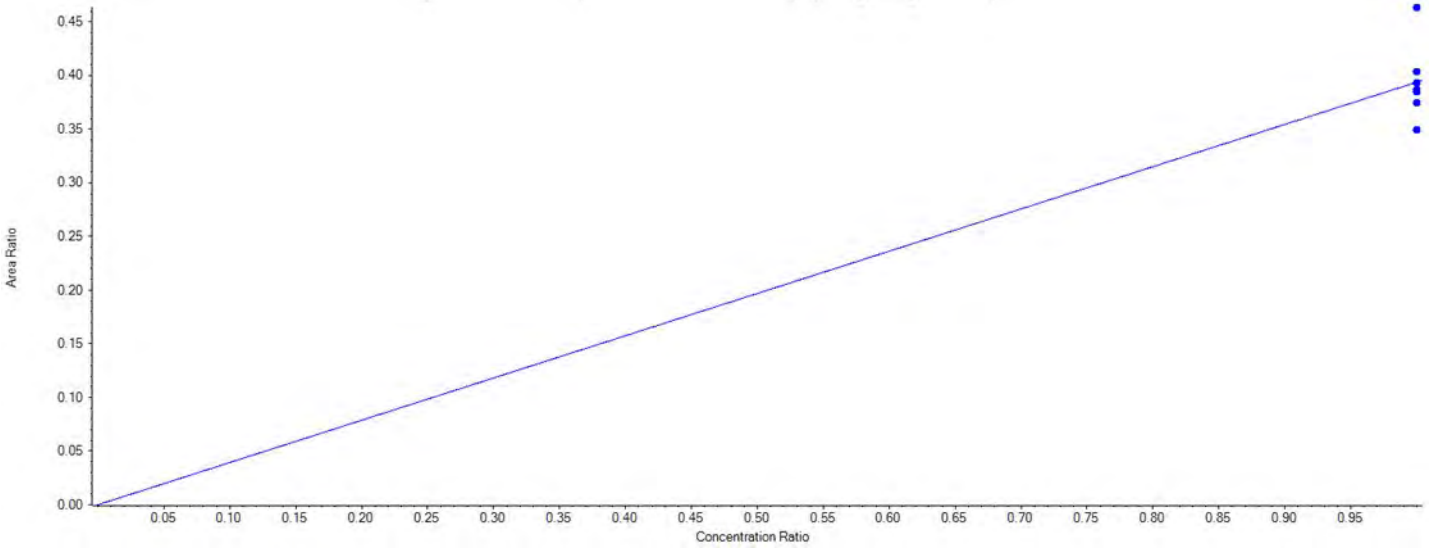
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

Ed3-NMeFOSAA

y = 0.39380 x (std. dev. = 0.03499) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	Ed3-NMeFOSAA Area	13C2-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	220597.3	476146.560	True	5.00	0.463	5.71	1.030	5.000	5.882	18	30	
CAL2	181261.2	460926.236	True	5.00	0.393	5.70	1.020	5.000	4.993	0	30	
CAL3	178338.1	441790.617	True	5.00	0.404	5.71	1.020	5.000	5.125	3	30	
CAL4	171203.9	489439.830	True	5.00	0.350	5.71	1.030	5.000	4.441	-11	30	
CAL5	172574.2	460232.679	True	5.00	0.375	5.71	1.020	5.000	4.761	-5	30	
CAL6	161673.3	419913.240	True	5.00	0.385	5.70	1.030	5.000	4.888	-2	30	
CAL7	156760.8	405454.995	True	5.00	0.387	5.71	1.030	5.000	4.909	-2	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

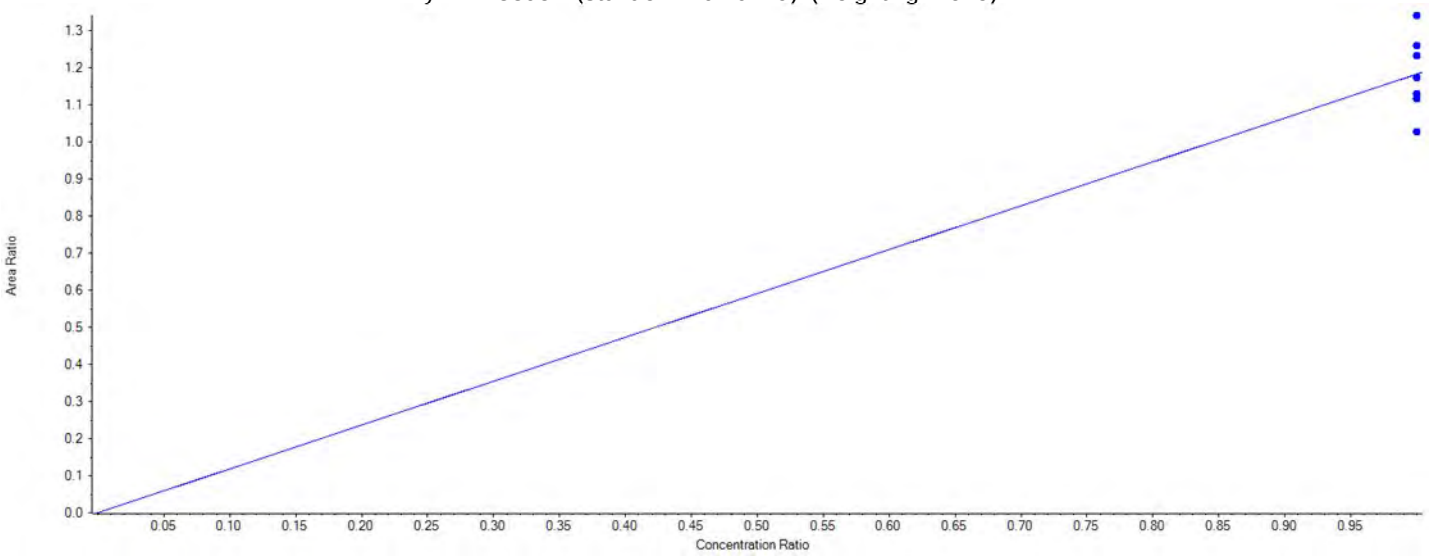
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C7-PFUnDA

y = 1.18305 x (std. dev. = 0.10419) (weighting: None)



Extraction Standard Calibration Verification

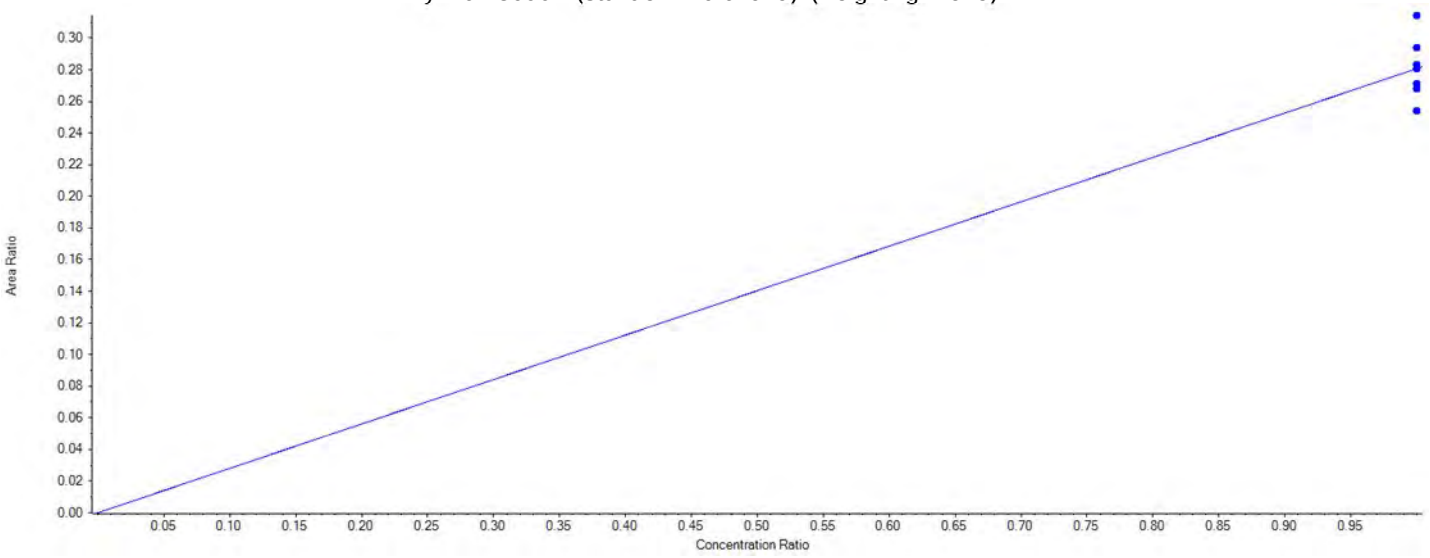
Sample Name	E13C7-PFUnDA Area	13C2-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	587155.4	476146.560	True	5.00	1.233	5.83	1.050	5.000	5.212	4	30	
CAL2	581207.0	460926.236	True	5.00	1.261	5.82	1.050	5.000	5.329	7	30	
CAL3	592495.7	441790.617	True	5.00	1.341	5.83	1.050	5.000	5.668	13	30	
CAL4	546359.3	489439.830	True	5.00	1.116	5.83	1.050	5.000	4.718	-6	30	
CAL5	539842.9	460232.679	True	5.00	1.173	5.83	1.050	5.000	4.957	-1	30	
CAL6	474122.1	419913.240	True	5.00	1.129	5.82	1.050	5.000	4.772	-5	30	
CAL7	416723.9	405454.995	True	5.00	1.028	5.83	1.050	5.000	4.344	-13	30	

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

Ed5-NEtFOSAA

y = 0.28066 x (std. dev. = 0.01949) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	Ed5-NEtFOSAA Area	13C2-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	127543.5	476146.560	True	5.00	0.268	5.84	1.050	5.000	4.772	-5	30	
CAL2	144803.2	460926.236	True	5.00	0.314	5.83	1.050	5.000	5.597	12	30	
CAL3	129810.7	441790.617	True	5.00	0.294	5.84	1.050	5.000	5.235	5	30	
CAL4	138500.8	489439.830	True	5.00	0.283	5.84	1.050	5.000	5.041	1	30	
CAL5	124785.0	460232.679	True	5.00	0.271	5.85	1.050	5.000	4.830	-3	30	
CAL6	117934.2	419913.240	True	5.00	0.281	5.83	1.050	5.000	5.004	0	30	
CAL7	102891.6	405454.995	True	5.00	0.254	5.84	1.050	5.000	4.521	-10	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

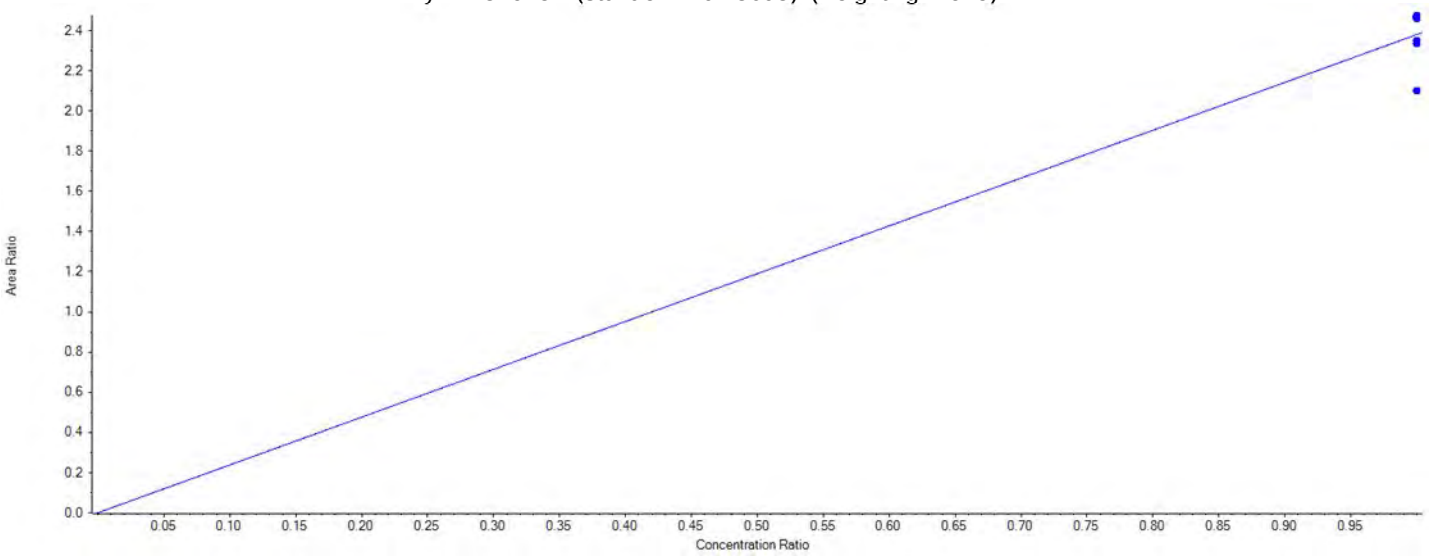
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C2-PFDoDA

y = 2.37975 x (std. dev. = 0.13603) (weighting: None)



Extraction Standard Calibration Verification

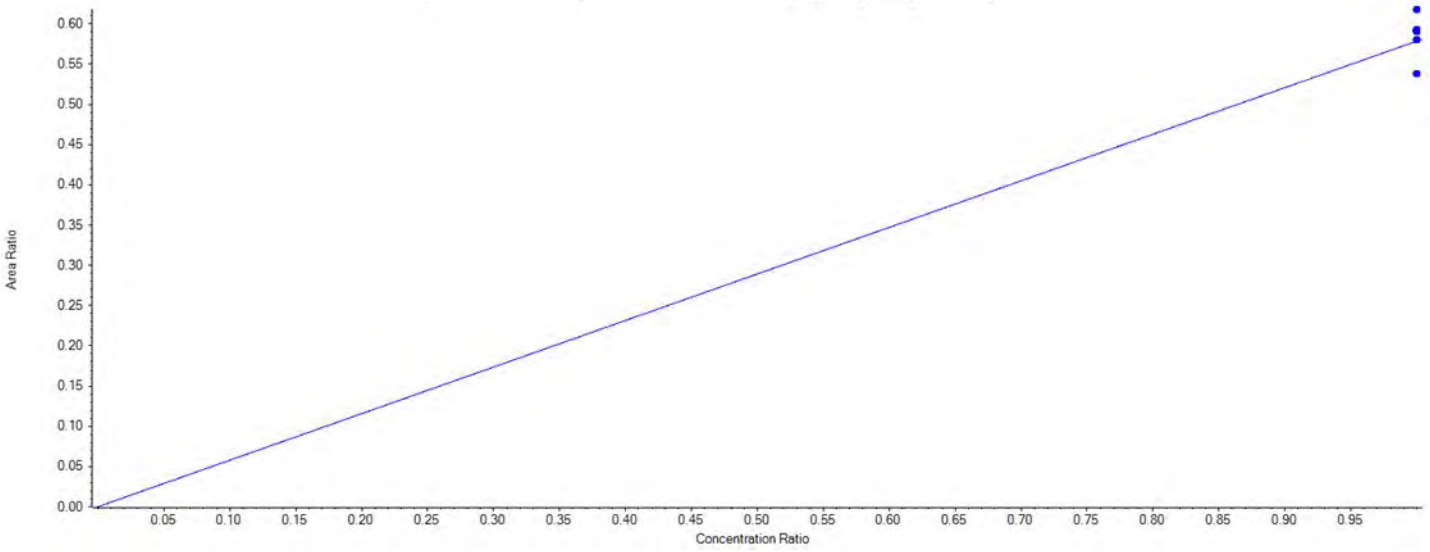
Sample Name	E13C2-PFDoDA Area	13C2-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	1173339.1	476146.560	True	5.00	2.464	6.06	1.090	5.000	5.178	4	30	
CAL2	1140522.3	460926.236	True	5.00	2.474	6.05	1.090	5.000	5.199	4	30	
CAL3	1091194.9	441790.617	True	5.00	2.470	6.06	1.090	5.000	5.189	4	30	
CAL4	1150927.4	489439.830	True	5.00	2.352	6.06	1.090	5.000	4.941	-1	30	
CAL5	1133027.9	460232.679	True	5.00	2.462	6.06	1.090	5.000	5.173	3	30	
CAL6	980215.4	419913.240	True	5.00	2.334	6.05	1.090	5.000	4.905	-2	30	
CAL7	852235.6	405454.995	True	5.00	2.102	6.06	1.090	5.000	4.416	-12	30	

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

Ed7-NMePFOSAE

y = 0.57855 x (std. dev. = 0.02979) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	Ed7-NMePFOSAE Area	13C2-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	281912.7	476146.560	True	5.00	0.592	6.09	1.090	5.000	5.117	2	30	
CAL2	272071.3	460926.236	True	5.00	0.590	6.09	1.090	5.000	5.101	2	30	
CAL3	256577.3	441790.617	True	5.00	0.581	6.10	1.090	5.000	5.019	0	30	
CAL4	263412.8	489439.830	True	5.00	0.538	6.10	1.090	5.000	4.651	-7	30	
CAL5	247663.8	460232.679	True	5.00	0.538	6.10	1.090	5.000	4.651	-7	30	
CAL6	248871.1	419913.240	True	5.00	0.593	6.09	1.100	5.000	5.122	2	30	
CAL7	250467.6	405454.995	True	5.00	0.618	6.10	1.090	5.000	5.339	7	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

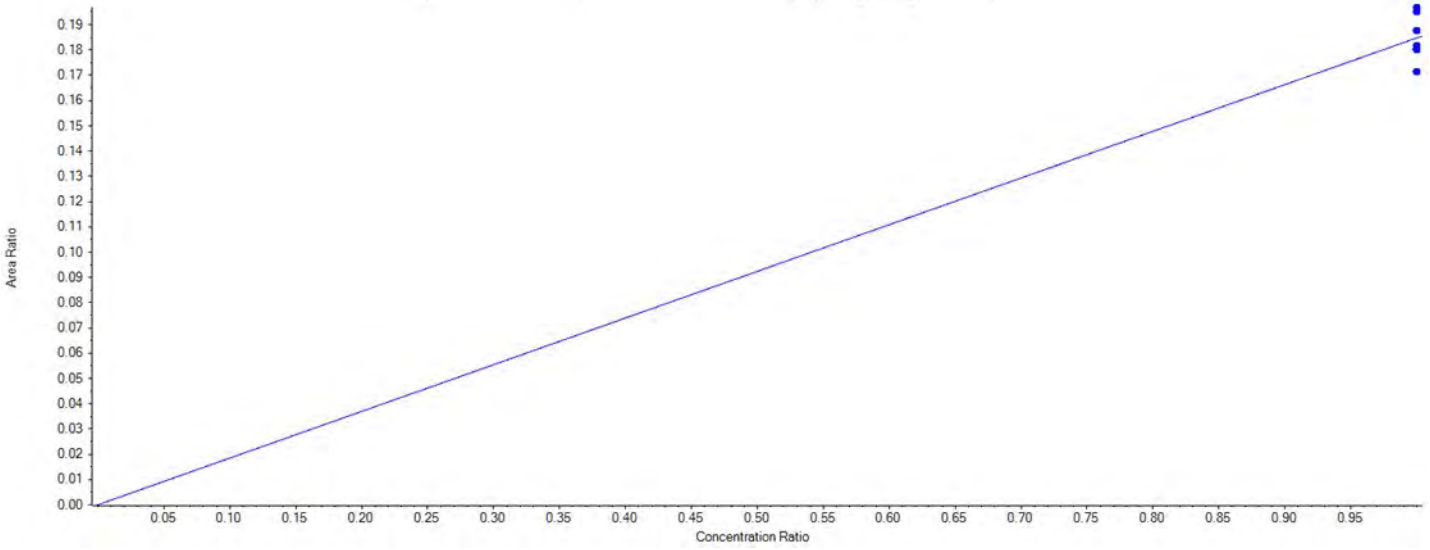
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

Ed3-NMePFOSA

y = 0.18475 x (std. dev. = 0.00902) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	Ed3-NMePFOSA Area	13C2-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	85678.0	476146.560	True	5.00	0.180	6.11	1.100	5.000	4.870	-3	30	
CAL2	86471.7	460926.236	True	5.00	0.188	6.10	1.100	5.000	5.077	2	30	
CAL3	80294.1	441790.617	True	5.00	0.182	6.11	1.100	5.000	4.919	-2	30	
CAL4	83886.6	489439.830	True	5.00	0.171	6.11	1.100	5.000	4.639	-7	30	
CAL5	83129.0	460232.679	True	5.00	0.181	6.11	1.100	5.000	4.888	-2	30	
CAL6	81949.3	419913.240	True	5.00	0.195	6.10	1.100	5.000	5.282	6	30	
CAL7	79780.2	405454.995	True	5.00	0.197	6.11	1.100	5.000	5.325	7	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

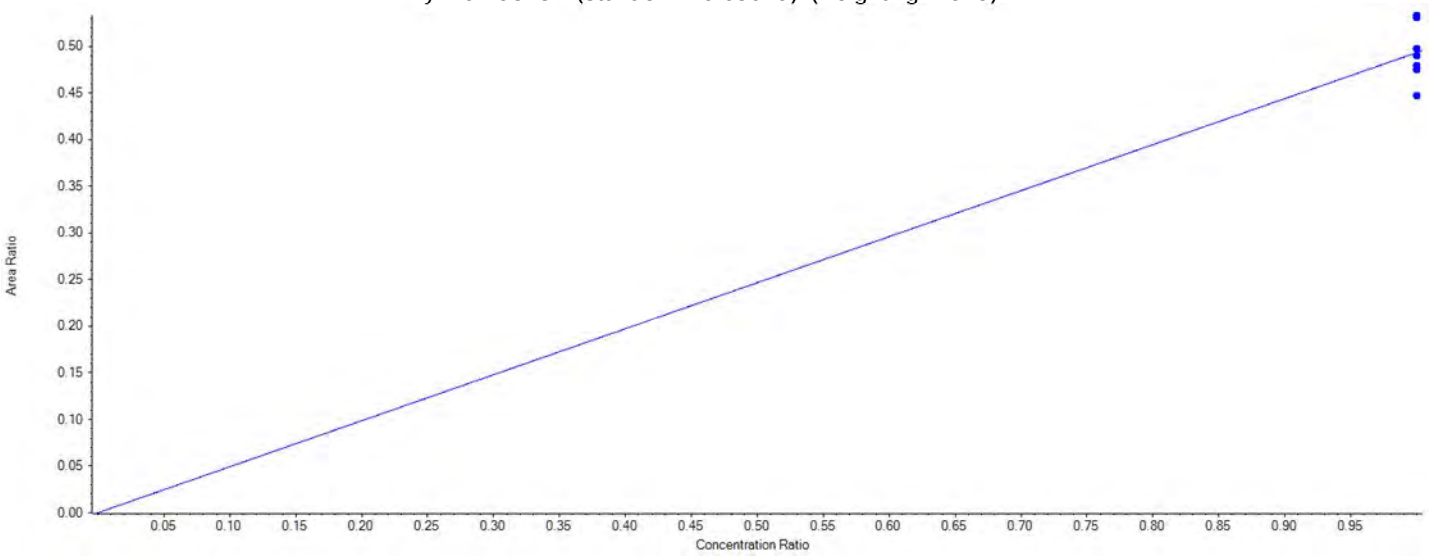
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

Ed9-NEtPFOSAE

y = 0.49318 x (std. dev. = 0.03079) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	Ed9-NEtPFOSAE Area	13C2-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	226256.0	476146.560	True	5.00	0.475	6.25	1.120	5.000	4.818	-4	30	
CAL2	229050.7	460926.236	True	5.00	0.497	6.24	1.120	5.000	5.038	1	30	
CAL3	216571.5	441790.617	True	5.00	0.490	6.25	1.120	5.000	4.970	-1	30	
CAL4	218635.8	489439.830	True	5.00	0.447	6.25	1.120	5.000	4.529	-9	30	
CAL5	220689.9	460232.679	True	5.00	0.480	6.26	1.120	5.000	4.861	-3	30	
CAL6	222924.1	419913.240	True	5.00	0.531	6.24	1.120	5.000	5.382	8	30	
CAL7	216042.0	405454.995	True	5.00	0.533	6.25	1.120	5.000	5.402	8	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

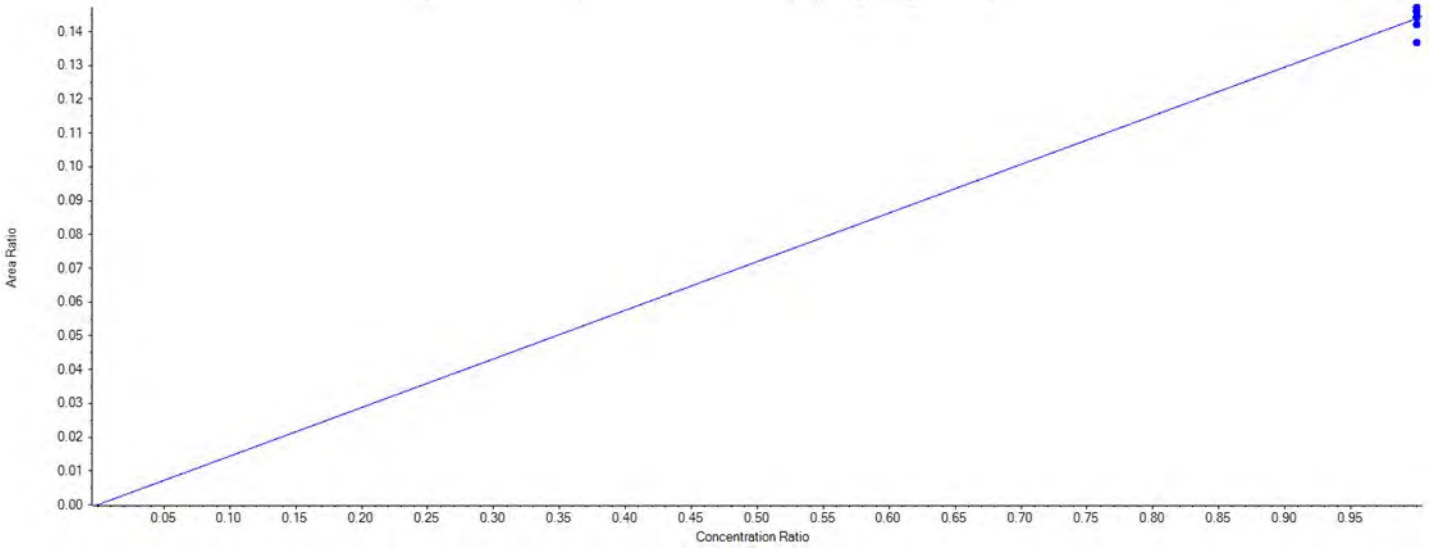
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

Ed5-NEtPFOSA

y = 0.14390 x (std. dev. = 0.00352) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	Ed5-NEtPFOSA Area	13C2-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	70050.4	476146.560	True	5.00	0.147	6.27	1.130	5.000	5.112	2	30	
CAL2	66646.8	460926.236	True	5.00	0.145	6.26	1.130	5.000	5.024	0	30	
CAL3	64623.7	441790.617	True	5.00	0.146	6.27	1.130	5.000	5.083	2	30	
CAL4	66966.4	489439.830	True	5.00	0.137	6.27	1.130	5.000	4.754	-5	30	
CAL5	66384.6	460232.679	True	5.00	0.144	6.27	1.130	5.000	5.012	0	30	
CAL6	59705.8	419913.240	True	5.00	0.142	6.26	1.130	5.000	4.941	-1	30	
CAL7	59209.1	405454.995	True	5.00	0.146	6.27	1.130	5.000	5.074	1	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

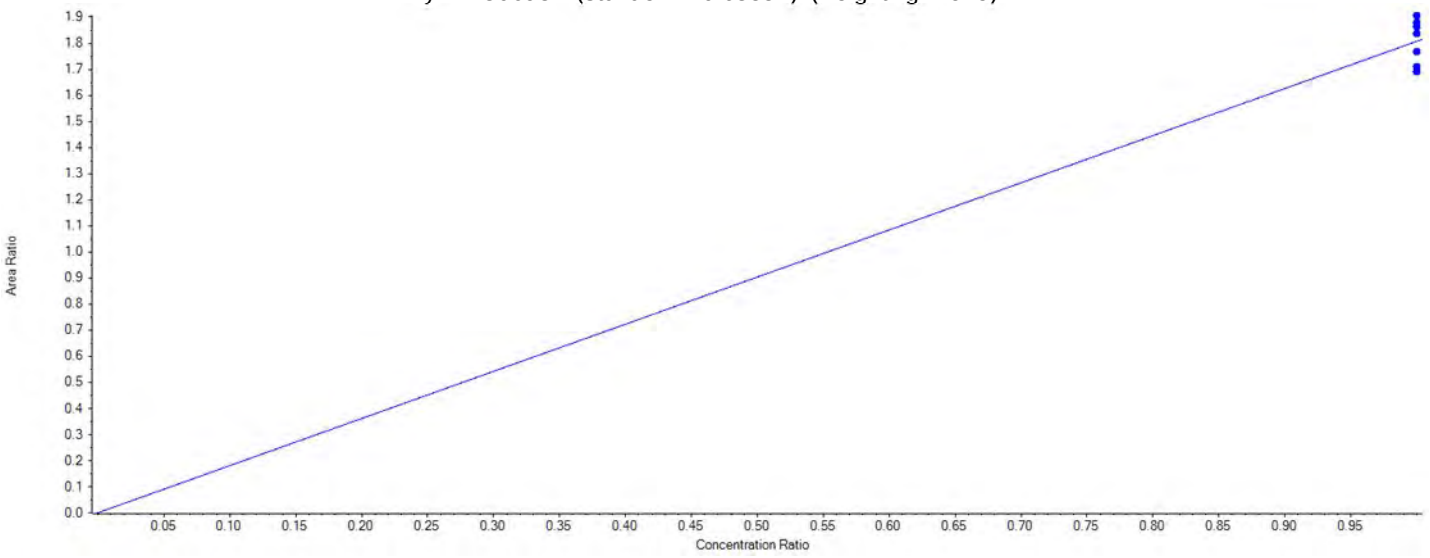
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

E13C2-PFTeDA

y = 1.80693 x (std. dev. = 0.08557) (weighting: None)



Extraction Standard Calibration Verification

Sample Name	E13C2-PFTeDA Area	13C2-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	873945.6	476146.560	True	5.00	1.835	6.43	1.160	5.000	5.079	2	30	
CAL2	858145.1	460926.236	True	5.00	1.862	6.43	1.150	5.000	5.152	3	30	
CAL3	841931.1	441790.617	True	5.00	1.906	6.43	1.150	5.000	5.273	5	30	
CAL4	826670.0	489439.830	True	5.00	1.689	6.43	1.160	5.000	4.674	-7	30	
CAL5	786107.5	460232.679	True	5.00	1.708	6.44	1.150	5.000	4.726	-5	30	
CAL6	789168.4	419913.240	True	5.00	1.879	6.43	1.160	5.000	5.200	4	30	
CAL7	717297.7	405454.995	True	5.00	1.769	6.43	1.160	5.000	4.895	-2	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

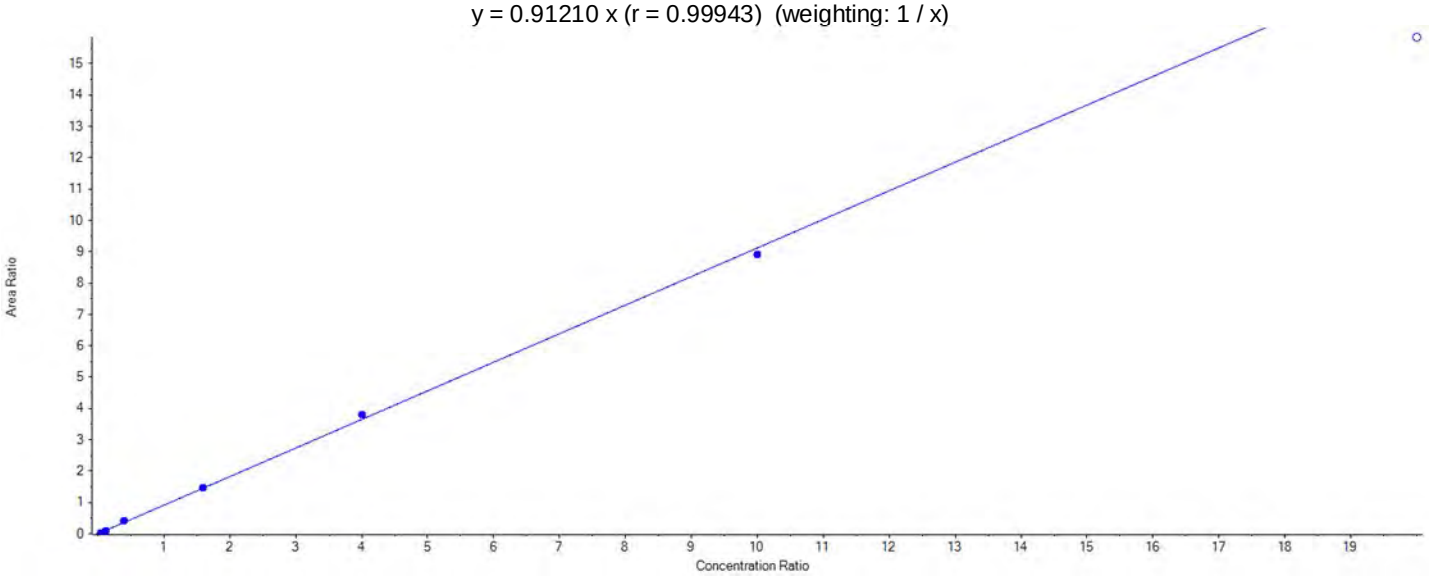
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFBA

y = 0.91210 x (r = 0.99943) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFBA Area	S/N	13C4-PFBA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	43996.2	249.7	1018752.836	True	5.00	0.043	3.28	1.000	0.200	0.237	18	30	
CAL2	110036.6	487.6	1033122.100	True	5.00	0.107	3.27	1.000	0.600	0.584	-3	30	
CAL3	403055.8	822.1	993144.063	True	5.00	0.406	3.28	1.000	2.000	2.225	11	30	
CAL4	1425164.4	1298.8	974000.882	True	5.00	1.463	3.28	1.000	8.000	8.021	0	30	
CAL5	3627061.5	1931.2	951694.967	True	5.00	3.811	3.28	1.000	20.000	20.892	4	30	
CAL6	7996964.8	2615.4	897566.729	True	5.00	8.910	3.27	1.000	50.000	48.841	-2	30	
CAL7	12734942.7	3050.8	803704.793	False	5.00	15.845	3.27	1.000	100.000	86.862	-13	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

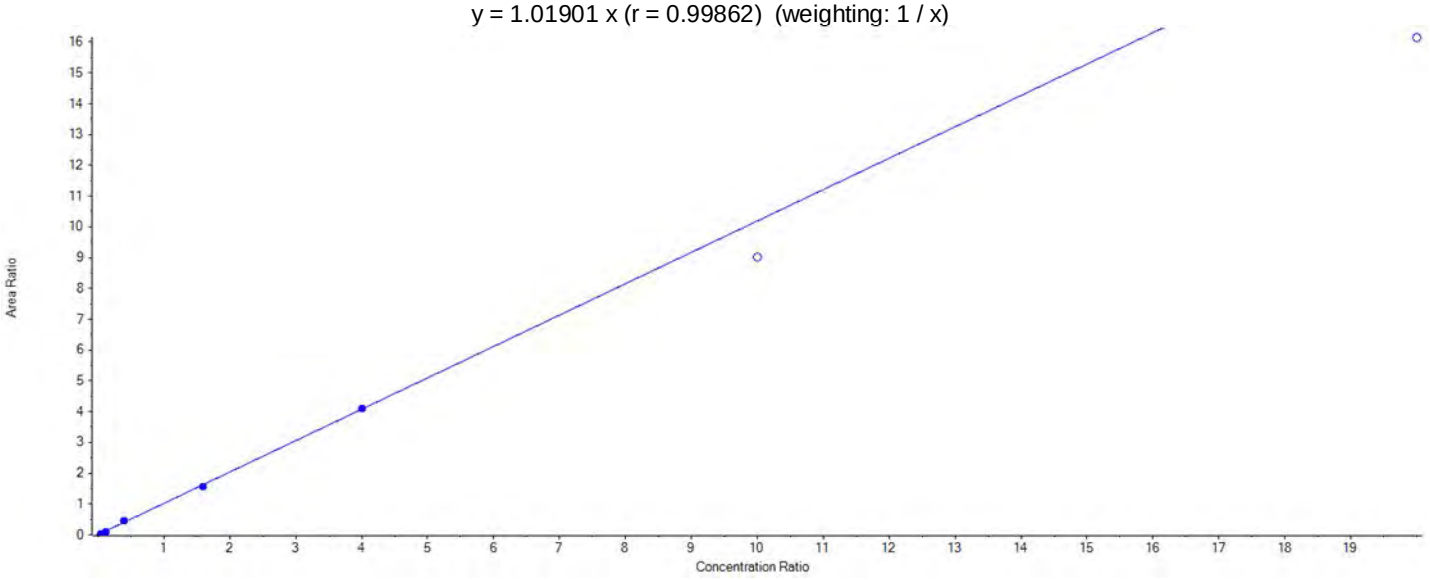
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFPeA

y = 1.01901 x (r = 0.99862) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFPeA Area	S/N	13C5-PFPeA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	44706.1	168.1	975339.046	True	5.00	0.046	3.77	1.000	0.200	0.225	12	30	
CAL2	104393.1	258.3	1014125.030	True	5.00	0.103	3.77	1.000	0.600	0.505	-16	30	
CAL3	424089.1	470.0	910953.705	True	5.00	0.466	3.78	1.000	2.000	2.284	14	30	
CAL4	1424845.3	869.3	915824.561	True	5.00	1.556	3.77	1.000	8.000	7.634	-5	30	
CAL5	3696889.3	1332.4	900153.389	True	5.00	4.107	3.78	1.000	20.000	20.152	1	30	
CAL6	7873655.4	2197.1	872922.614	False	5.00	9.020	3.77	1.000	50.000	44.258	-11	30	
CAL7	12611040.3	1779.7	781113.823	False	5.00	16.145	3.77	1.000	100.000	79.219	-21	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

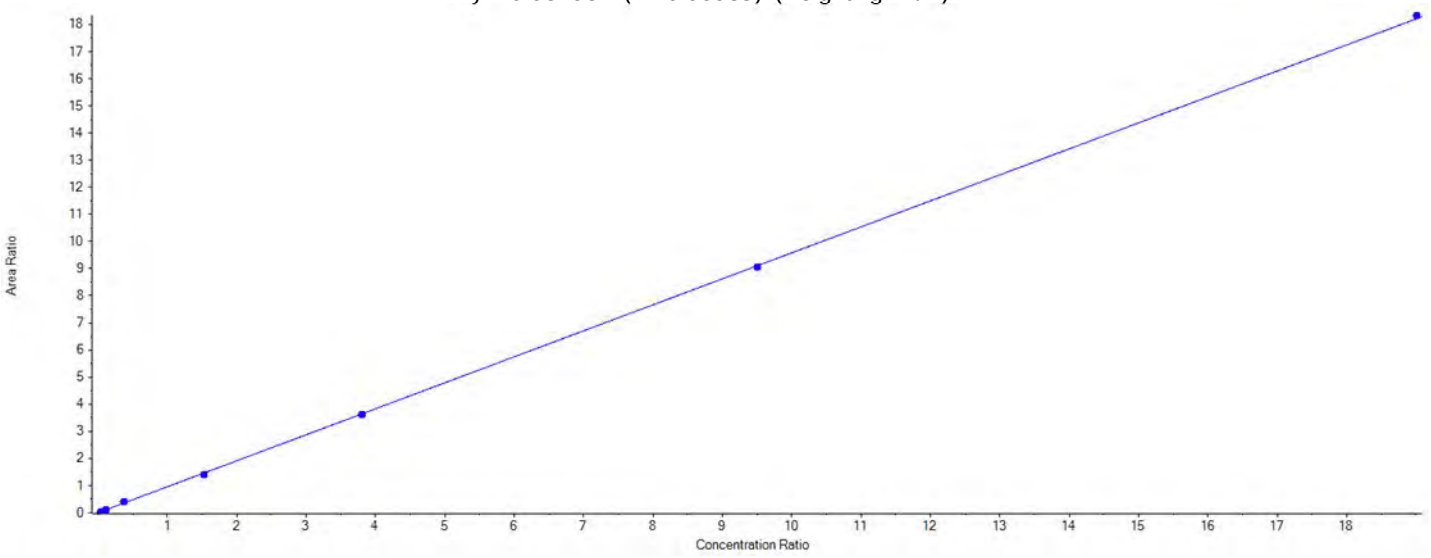
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DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFBS

y = 0.95795 x (r = 0.99985) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFBS Area	S/N	13C3-PFBS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	17465.3	759.3	437838.938	True	4.65	0.040	3.82	1.000	0.177	0.194	9	30	
CAL2	43237.4	921.9	442149.949	True	4.65	0.098	3.81	1.000	0.531	0.475	-11	30	
CAL3	168534.1	2117.3	419929.218	True	4.65	0.401	3.82	1.000	1.770	1.948	10	30	
CAL4	590590.2	3233.1	424041.313	True	4.65	1.393	3.82	1.000	7.080	6.761	-5	30	
CAL5	1542881.7	3193.4	424059.219	True	4.65	3.638	3.82	1.000	17.700	17.661	0	30	
CAL6	3600470.8	4364.1	398441.322	True	4.65	9.036	3.82	1.000	44.200	43.864	-1	30	
CAL7	6468971.4	4045.2	352994.776	True	4.65	18.326	3.82	1.000	88.400	88.956	1	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

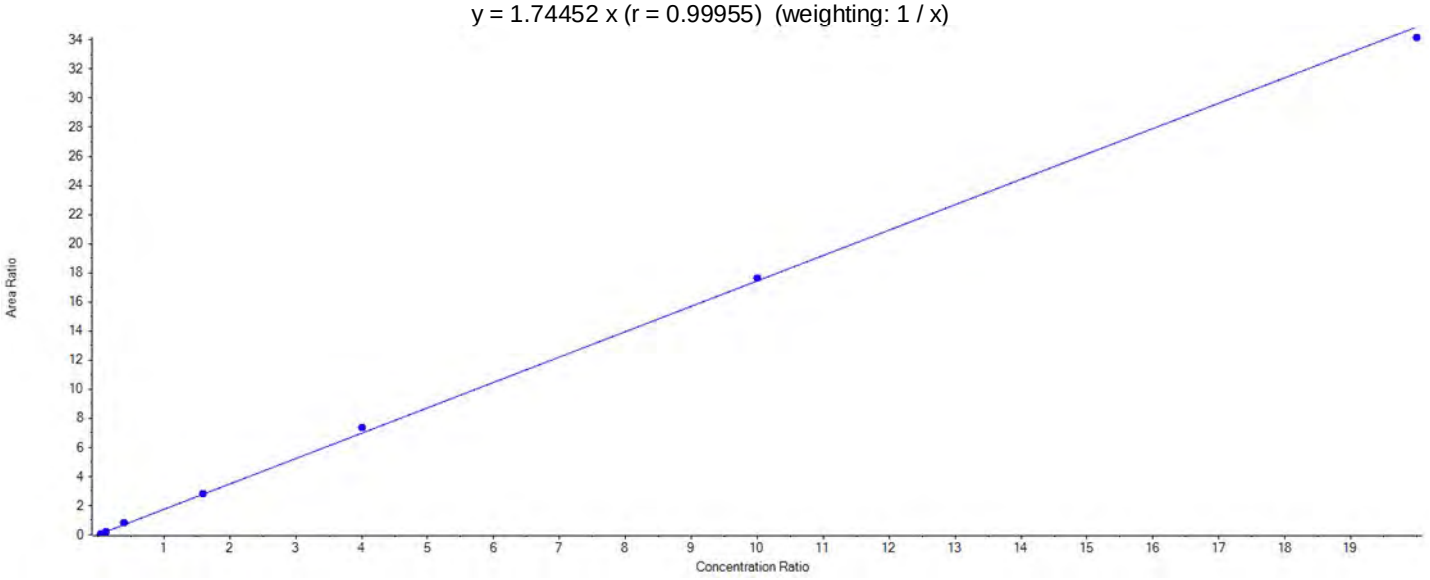
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DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

4:2-FTS

y = 1.74452 x (r = 0.99955) (weighting: 1 / x)



Component Calibration Verification

Sample Name	4:2-FTS Area	S/N	13C2-4:2-FTS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	5603.8	2243.2	75119.122	True	4.67	0.075	4.13	1.000	0.187	0.200	7	30	
CAL2	14524.8	4777.1	72067.149	True	4.67	0.202	4.13	1.000	0.560	0.540	-4	30	
CAL3	56502.5	1225.4	70629.114	True	4.67	0.800	4.14	1.000	1.870	2.142	15	30	
CAL4	191344.6	1753.2	67043.698	True	4.67	2.854	4.13	1.000	7.470	7.640	2	30	
CAL5	498650.7	4269.7	67422.965	True	4.67	7.396	4.14	1.000	18.700	19.798	6	30	
CAL6	1148569.2	2995.6	65255.390	True	4.67	17.601	4.13	1.000	46.700	47.117	1	30	
CAL7	2126148.2	3609.5	62236.773	True	4.67	34.162	4.13	1.000	93.400	91.451	-2	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

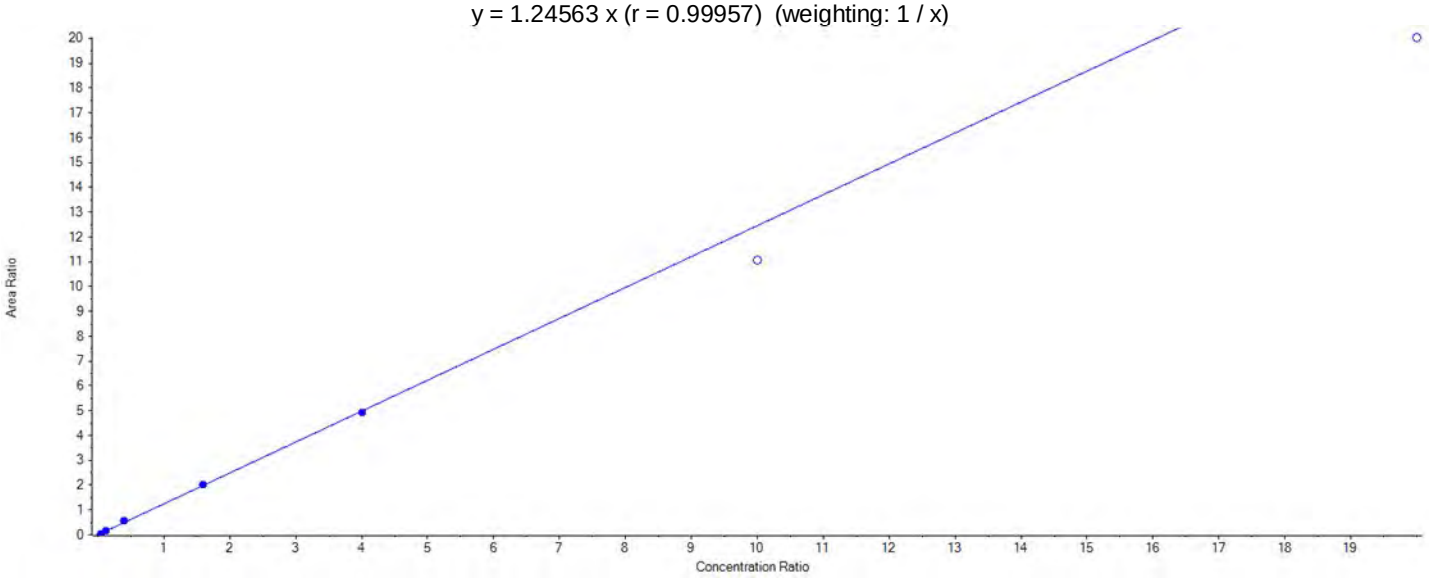
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFHxA

y = 1.24563 x (r = 0.99957) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFHxA Area	S/N	13C5-PFHxA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	42281.8	270.9	728340.451	True	5.00	0.058	4.17	1.000	0.200	0.233	17	30	
CAL2	101713.2	383.4	697229.019	True	5.00	0.146	4.16	1.000	0.600	0.586	-2	30	
CAL3	395421.4	731.7	717900.058	True	5.00	0.551	4.17	1.000	2.000	2.211	11	30	
CAL4	1343216.4	1177.9	670407.711	True	5.00	2.004	4.16	1.000	8.000	8.042	1	30	
CAL5	3464657.3	1836.2	704953.498	True	5.00	4.915	4.17	1.000	20.000	19.728	-1	30	
CAL6	7468739.1	2191.3	675219.804	False	5.00	11.061	4.16	1.000	50.000	44.400	-11	30	
CAL7	12530843.0	2376.6	625449.752	False	5.00	20.035	4.16	1.000	100.000	80.421	-20	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

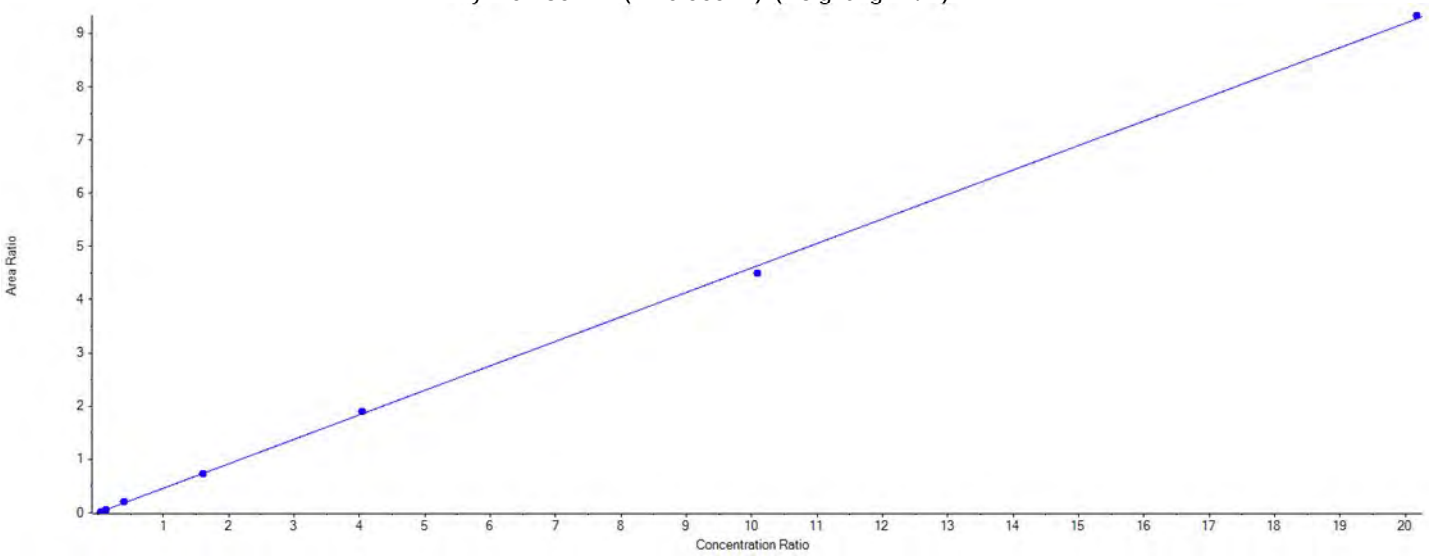
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFPeS

y = 0.45971 x (r = 0.99971) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFPeS Area	S/N	13C3-PFBS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	8956.0	383.7	437838.938	True	4.65	0.020	4.19	1.100	0.188	0.207	10	30	
CAL2	24007.2	778.6	442149.949	True	4.65	0.054	4.18	1.100	0.563	0.549	-2	30	
CAL3	89559.7	2347.5	419929.218	True	4.65	0.213	4.19	1.100	1.880	2.157	15	30	
CAL4	311741.6	2021.0	424041.313	True	4.65	0.735	4.19	1.100	7.500	7.436	-1	30	
CAL5	809728.0	3003.6	424059.219	True	4.65	1.909	4.19	1.100	18.800	19.314	3	30	
CAL6	1793808.0	3890.0	398441.322	True	4.65	4.502	4.18	1.100	46.900	45.538	-3	30	
CAL7	3295381.6	3138.3	352994.776	True	4.65	9.335	4.18	1.100	93.800	94.429	1	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

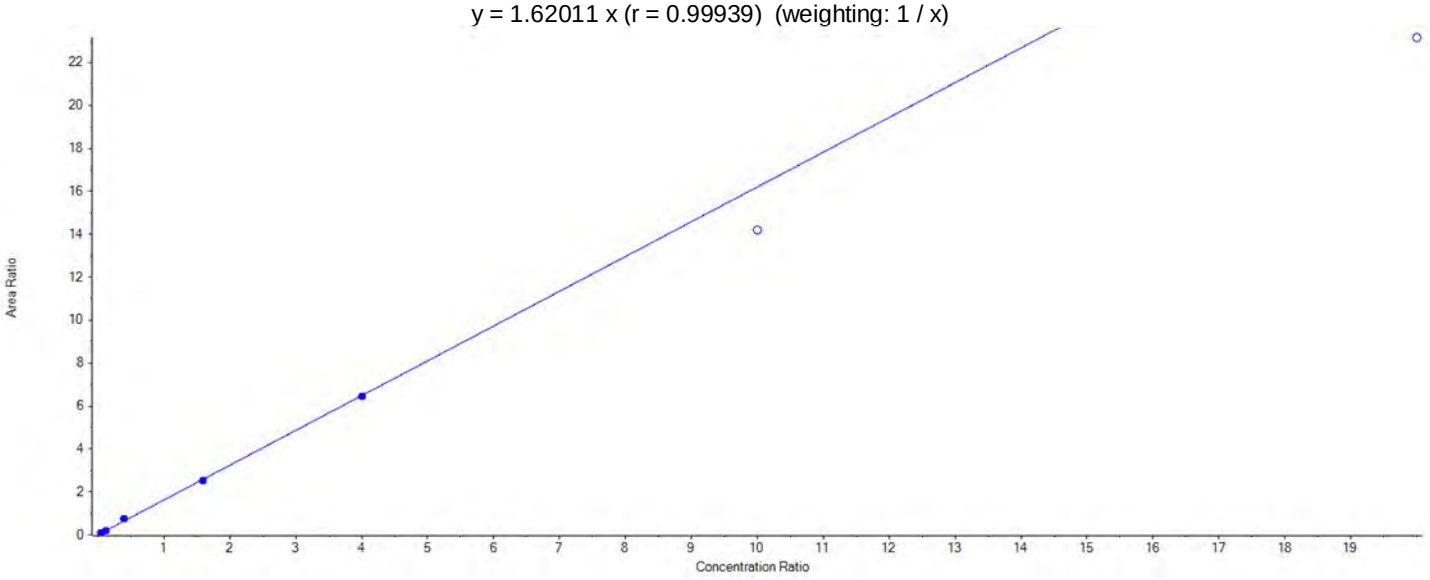
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFHpA

y = 1.62011 x (r = 0.99939) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFHpA Area	S/N	13C4-PFHpA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	42530.6	366.7	547365.130	True	5.00	0.078	4.56	1.000	0.200	0.240	20	30	
CAL2	100593.8	599.3	547371.985	True	5.00	0.184	4.55	1.000	0.600	0.567	-5	30	
CAL3	388626.7	1091.3	535993.324	True	5.00	0.725	4.56	1.000	2.000	2.238	12	30	
CAL4	1429895.3	2152.8	563673.949	True	5.00	2.537	4.55	1.000	8.000	7.829	-2	30	
CAL5	3592806.2	2355.3	556455.908	True	5.00	6.457	4.56	1.000	20.000	19.926	0	30	
CAL6	7873271.2	3361.6	555281.473	False	5.00	14.179	4.55	1.000	50.000	43.759	-12	30	
CAL7	12619701.6	2617.8	544866.925	False	5.00	23.161	4.55	1.000	100.000	71.480	-29	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

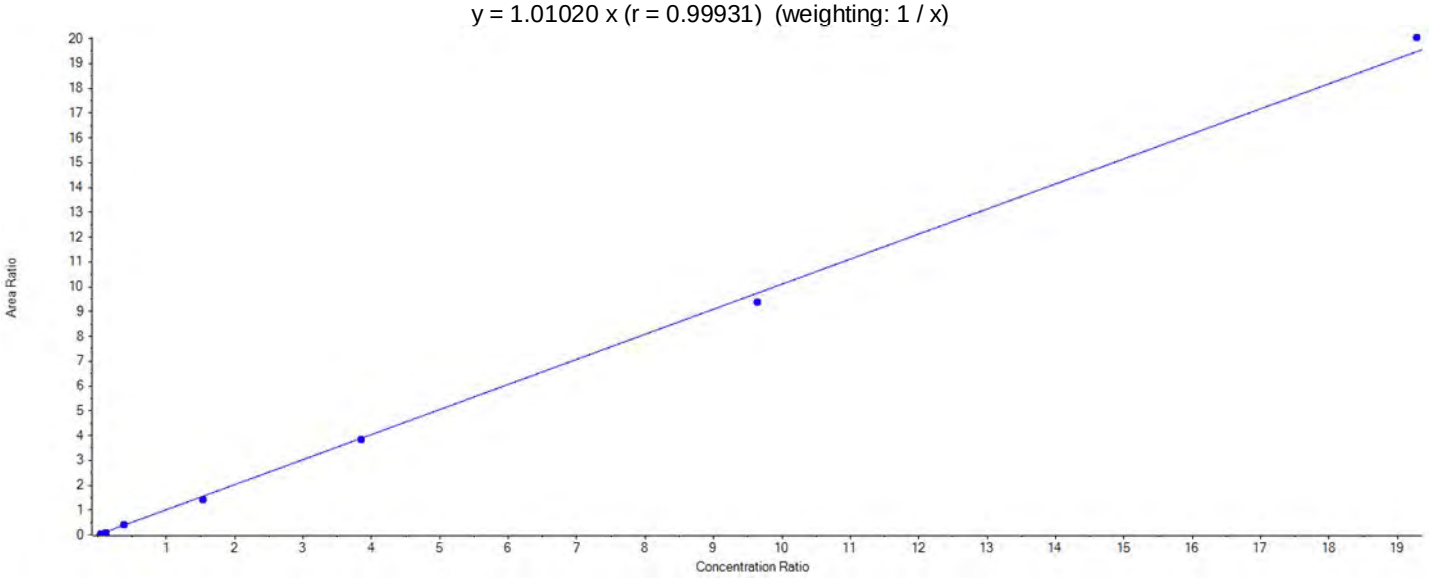
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFHxS

y = 1.01020 x (r = 0.99931) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFHxS Area	S/N	13C3-PFHxS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	12830.8	10643.6	331982.904	True	4.73	0.039	4.56	1.000	0.182	0.181	-1	30	
CAL2	31104.5	1568.4	335129.691	True	4.73	0.093	4.55	1.000	0.547	0.435	-21	30	
CAL3	127889.2	1553.1	326982.370	True	4.73	0.391	4.56	1.000	1.820	1.831	1	30	
CAL4	444626.0	1772.0	316393.280	True	4.73	1.405	4.56	1.000	7.300	6.580	-10	30	
CAL5	1191482.7	2091.1	309184.702	True	4.73	3.854	4.56	1.000	18.200	18.044	-1	30	
CAL6	2625950.9	1900.1	279894.643	True	4.73	9.382	4.55	1.000	45.600	43.929	-4	30	
CAL7	4797026.7	1752.4	239327.412	True	4.73	20.044	4.55	1.000	91.200	93.850	3	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

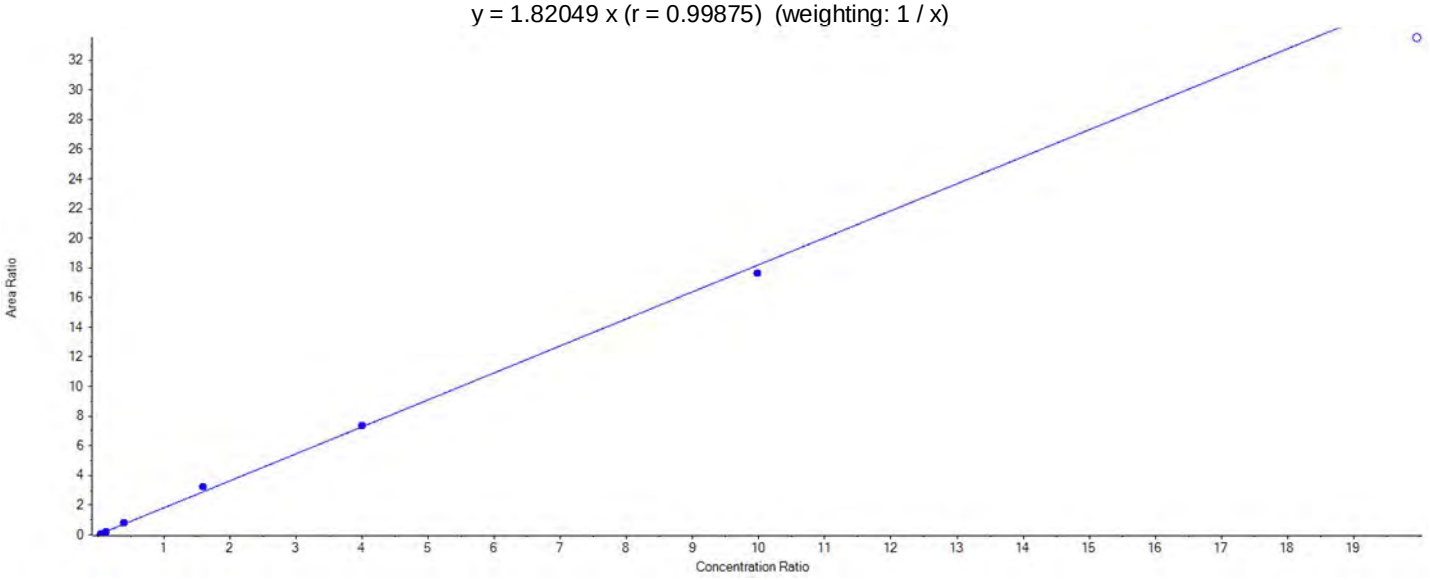
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

6:2-FTS

y = 1.82049 x (r = 0.99875) (weighting: 1 / x)



Component Calibration Verification

Sample Name	6:2-FTS Area	S/N	13C2-6:2-FTS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	5676.7	534.7	65543.766	True	4.75	0.087	4.91	1.000	0.190	0.226	19	30	
CAL2	14479.8	1089.2	63922.654	True	4.75	0.227	4.91	1.000	0.569	0.591	4	30	
CAL3	53951.0	2408.1	65518.288	True	4.75	0.823	4.92	1.000	1.900	2.149	13	30	
CAL4	185311.5	2003.0	56580.079	True	4.75	3.275	4.91	1.000	7.580	8.546	13	30	
CAL5	426727.7	3587.1	58122.789	True	4.75	7.342	4.92	1.000	19.000	19.156	1	30	
CAL6	859948.6	2867.7	48807.560	True	4.75	17.619	4.90	1.000	47.400	45.972	-3	30	
CAL7	1464447.0	3167.3	43678.325	False	4.75	33.528	4.91	1.000	94.800	87.481	-8	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

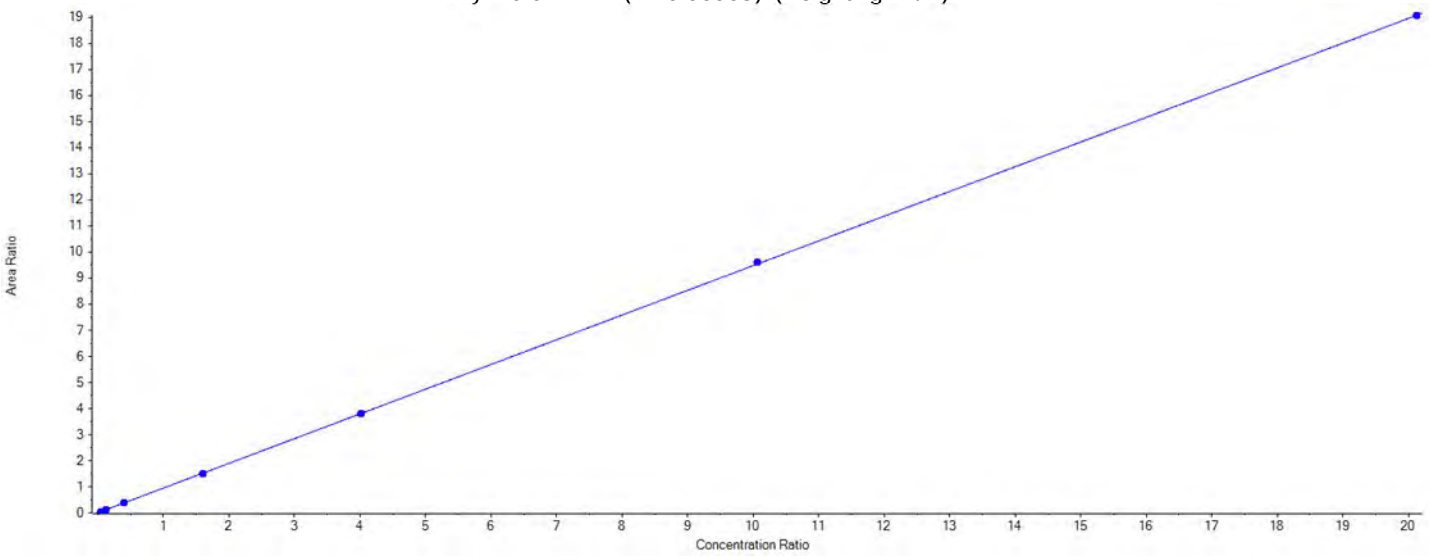
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFHpS

y = 0.94774 x (r = 0.99993) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFHpS Area	S/N	13C3-PFHxS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	13921.8	19272.6	331982.904	True	4.73	0.042	4.92	1.080	0.190	0.209	10	30	
CAL2	32553.7	4447.1	335129.691	True	4.73	0.097	4.91	1.080	0.571	0.485	-15	30	
CAL3	129450.9	9073.5	326982.370	True	4.73	0.396	4.92	1.080	1.900	1.976	4	30	
CAL4	471580.6	3167.3	316393.280	True	4.73	1.490	4.92	1.080	7.610	7.439	-2	30	
CAL5	1171216.6	2826.6	309184.702	True	4.73	3.788	4.92	1.080	19.000	18.906	0	30	
CAL6	2686833.3	2573.7	279894.643	True	4.73	9.599	4.91	1.080	47.600	47.909	1	30	
CAL7	4562639.6	2438.6	239327.412	True	4.73	19.064	4.91	1.080	95.200	95.147	0	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

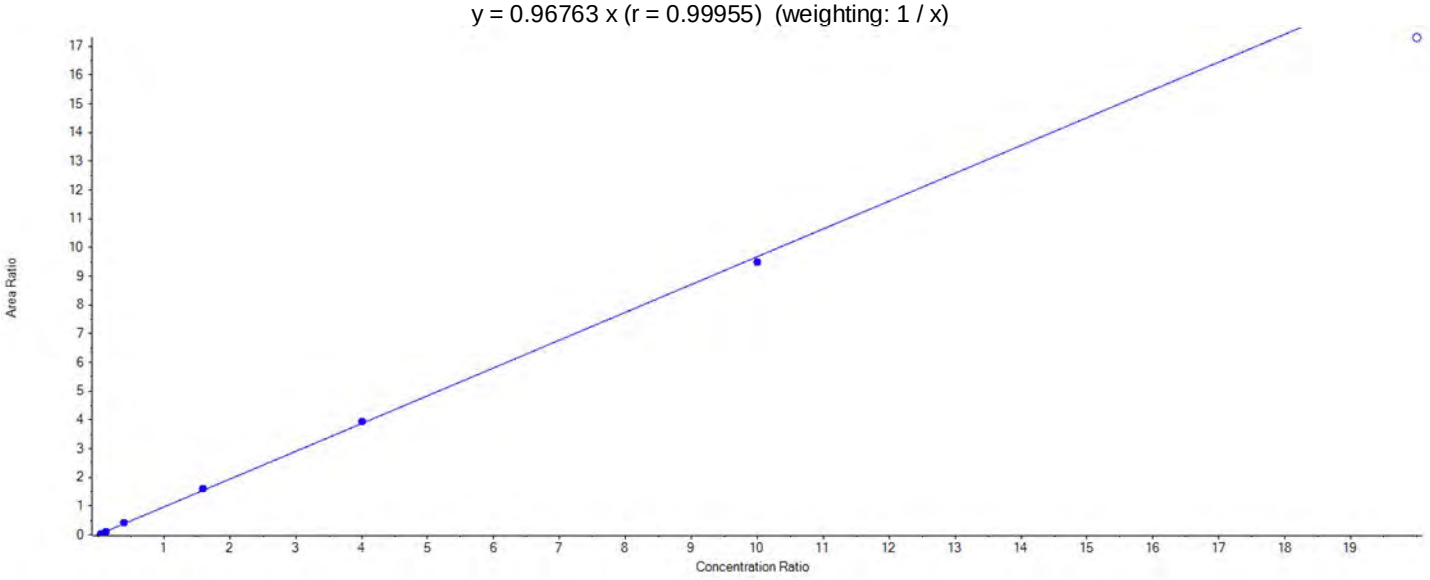
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFOA

y = 0.96763 x (r = 0.99955) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFOA Area	S/N	13C8-PFOA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	42517.4	185.7	1030597.916	True	5.00	0.041	4.93	1.000	0.200	0.213	7	30	
CAL2	106420.8	337.5	1030866.619	True	5.00	0.103	4.92	1.000	0.600	0.533	-11	30	
CAL3	405879.4	495.1	954677.960	True	5.00	0.425	4.93	1.000	2.000	2.197	10	30	
CAL4	1486960.4	1291.2	918995.325	True	5.00	1.618	4.92	1.000	8.000	8.361	5	30	
CAL5	3601538.3	1584.3	911756.077	True	5.00	3.950	4.93	1.000	20.000	20.411	2	30	
CAL6	8012665.3	1863.3	843522.332	True	5.00	9.499	4.92	1.000	50.000	49.084	-2	30	
CAL7	12900182.7	2063.6	745616.325	False	5.00	17.301	4.92	1.000	100.000	89.401	-11	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

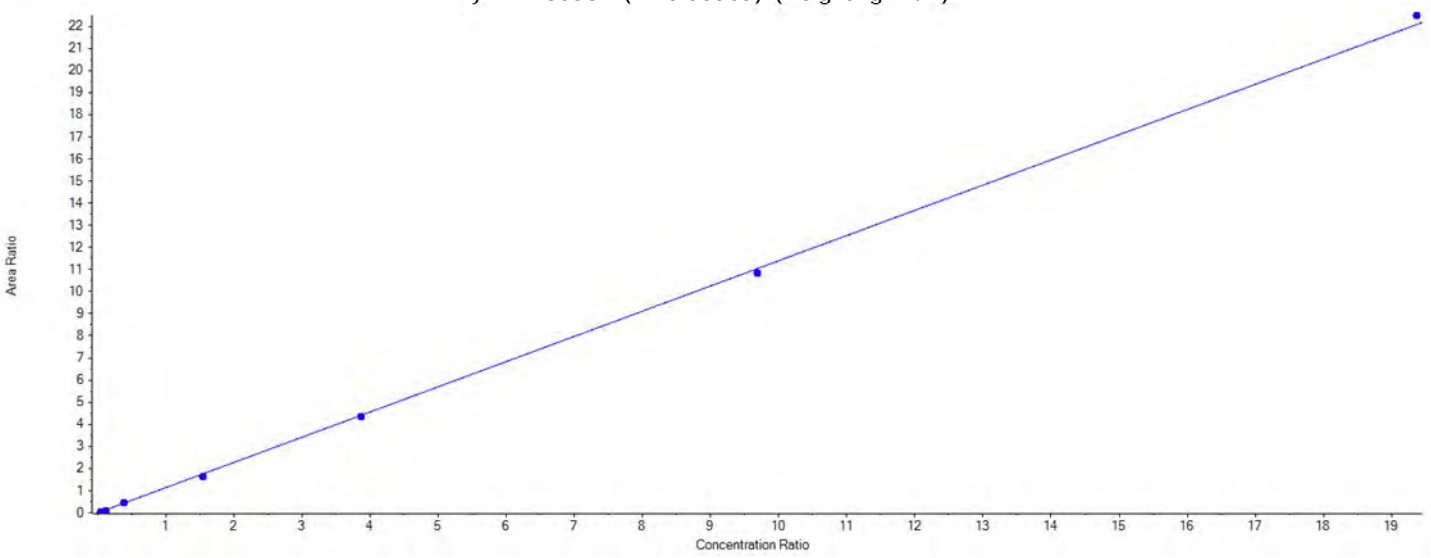
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFOS

y = 1.13953 x (r = 0.99969) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFOS Area	S/N	13C8-PFOS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	13060.0	1060.4	318525.429	True	4.78	0.041	5.25	1.000	0.185	0.172	-7	30	
CAL2	34203.6	972.6	313894.271	True	4.78	0.109	5.25	1.000	0.555	0.457	-18	30	
CAL3	139506.6	732.7	309913.737	True	4.78	0.450	5.26	1.000	1.850	1.888	2	30	
CAL4	481950.0	1137.9	296147.525	True	4.78	1.627	5.25	1.000	7.400	6.826	-8	30	
CAL5	1305020.5	988.3	299574.476	True	4.78	4.356	5.26	1.000	18.500	18.273	-1	30	
CAL6	3026664.4	1448.1	279204.362	True	4.78	10.840	5.25	1.000	46.300	45.472	-2	30	
CAL7	5620329.0	1278.0	250004.233	True	4.78	22.481	5.25	1.000	92.600	94.301	2	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

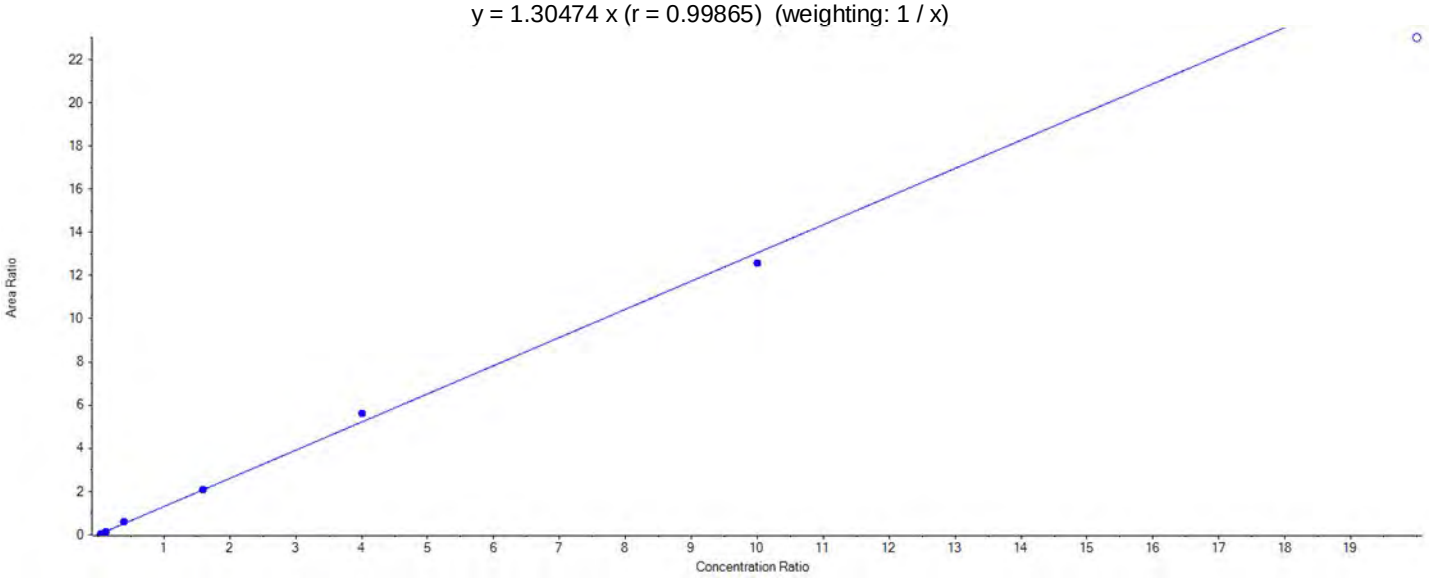
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By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFNA

y = 1.30474 x (r = 0.99865) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFNA Area	S/N	13C9-PFNA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	39485.1	336.0	659714.648	True	5.00	0.060	5.27	1.000	0.200	0.229	15	30	
CAL2	106720.9	560.6	682380.696	True	5.00	0.156	5.26	1.000	0.600	0.599	0	30	
CAL3	370292.0	1397.5	629954.590	True	5.00	0.588	5.27	1.000	2.000	2.253	13	30	
CAL4	1365056.4	2099.1	648727.023	True	5.00	2.104	5.27	1.000	8.000	8.064	1	30	
CAL5	3536255.1	3740.5	630201.519	True	5.00	5.611	5.27	1.000	20.000	21.504	8	30	
CAL6	7843086.9	3448.1	624202.702	True	5.00	12.565	5.26	1.000	50.000	48.151	-4	30	
CAL7	12939629.1	3220.8	562206.893	False	5.00	23.016	5.27	1.000	100.000	88.201	-12	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

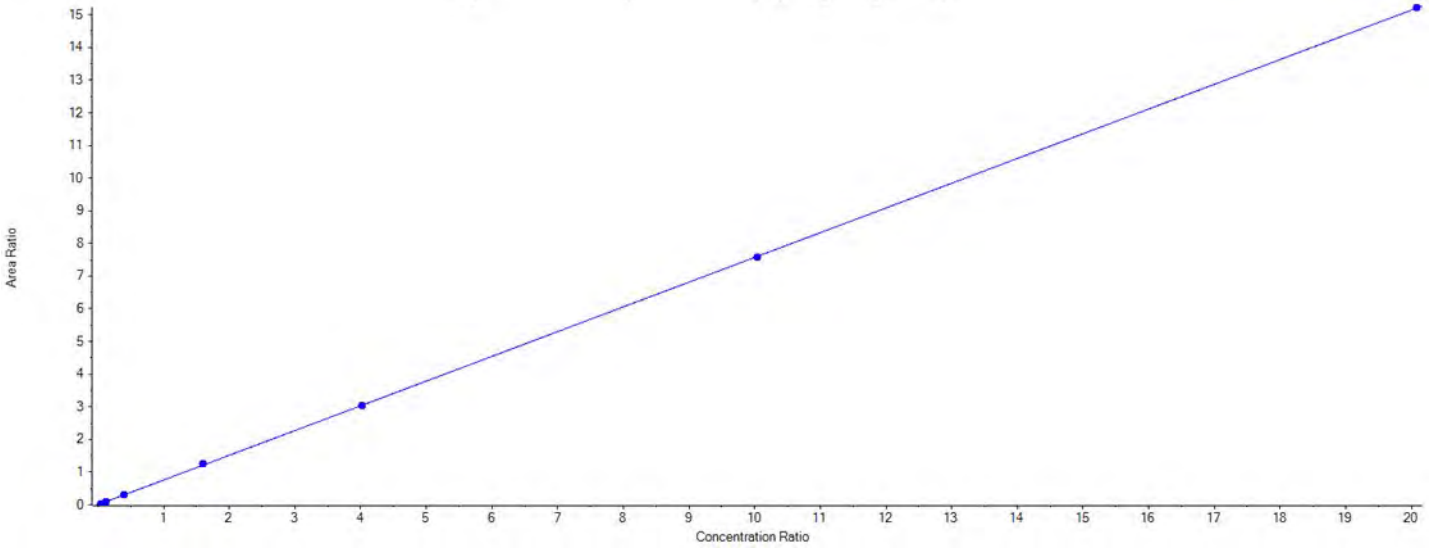
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFNS

y = 0.75705 x (r = 0.99994) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFNS Area	S/N	13C8-PFOS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	9756.6	2226.5	318525.429	True	4.78	0.031	5.55	1.060	0.192	0.193	1	30	
CAL2	24149.9	10822.9	313894.271	True	4.78	0.077	5.54	1.060	0.576	0.486	-16	30	
CAL3	91471.0	43486.9	309913.737	True	4.78	0.295	5.55	1.060	1.920	1.864	-3	30	
CAL4	369833.4	4460.8	296147.525	True	4.78	1.249	5.55	1.060	7.680	7.885	3	30	
CAL5	909879.2	4615.6	299574.476	True	4.78	3.037	5.55	1.060	19.200	19.177	0	30	
CAL6	2116661.5	2721.3	279204.362	True	4.78	7.581	5.54	1.060	48.000	47.867	0	30	
CAL7	3804945.2	2191.8	250004.233	True	4.78	15.220	5.54	1.060	96.000	96.096	0	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

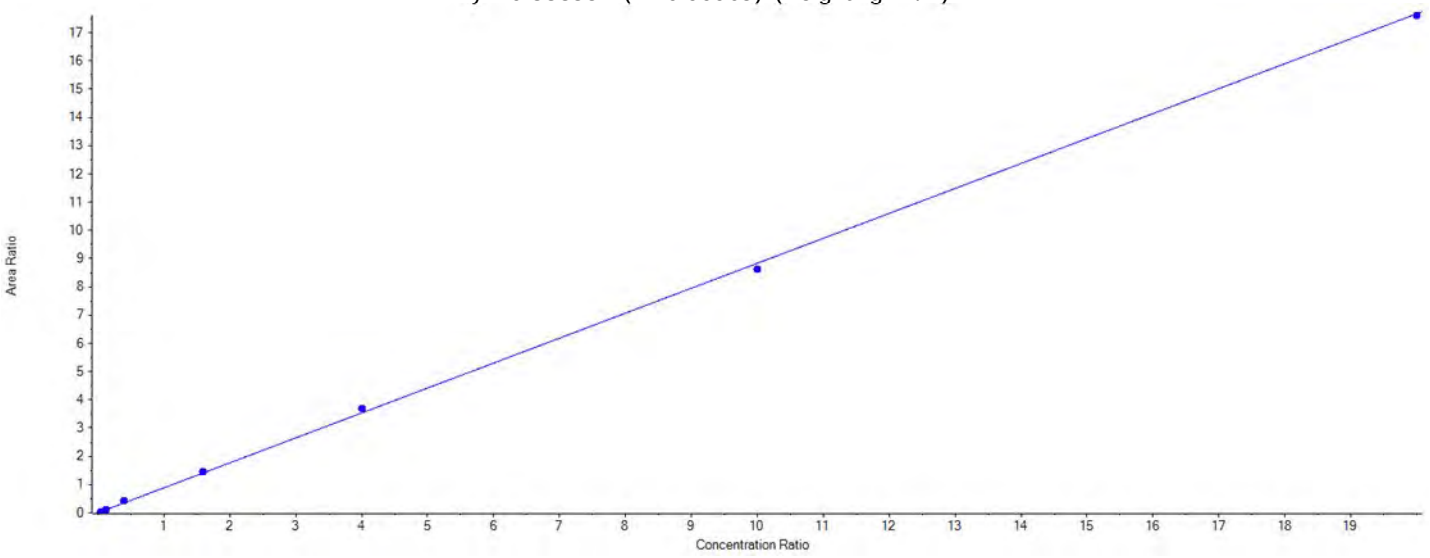
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFDA

y = 0.88335 x (r = 0.99965) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFDA Area	S/N	13C6-PFDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	33621.2	252.1	855362.920	True	5.00	0.039	5.57	1.000	0.200	0.222	11	30	
CAL2	90730.3	547.0	839100.670	True	5.00	0.108	5.57	1.000	0.600	0.612	2	30	
CAL3	343523.0	1010.2	824072.930	True	5.00	0.417	5.57	1.000	2.000	2.360	18	30	
CAL4	1223810.4	1419.5	841970.480	True	5.00	1.454	5.57	1.000	8.000	8.227	3	30	
CAL5	3072749.0	2173.2	833462.150	True	5.00	3.687	5.57	1.000	20.000	20.868	4	30	
CAL6	6551370.5	3228.5	758832.768	True	5.00	8.633	5.56	1.000	50.000	48.868	-2	30	
CAL7	11371047.0	2538.0	645932.474	True	5.00	17.604	5.57	1.000	100.000	99.643	0	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

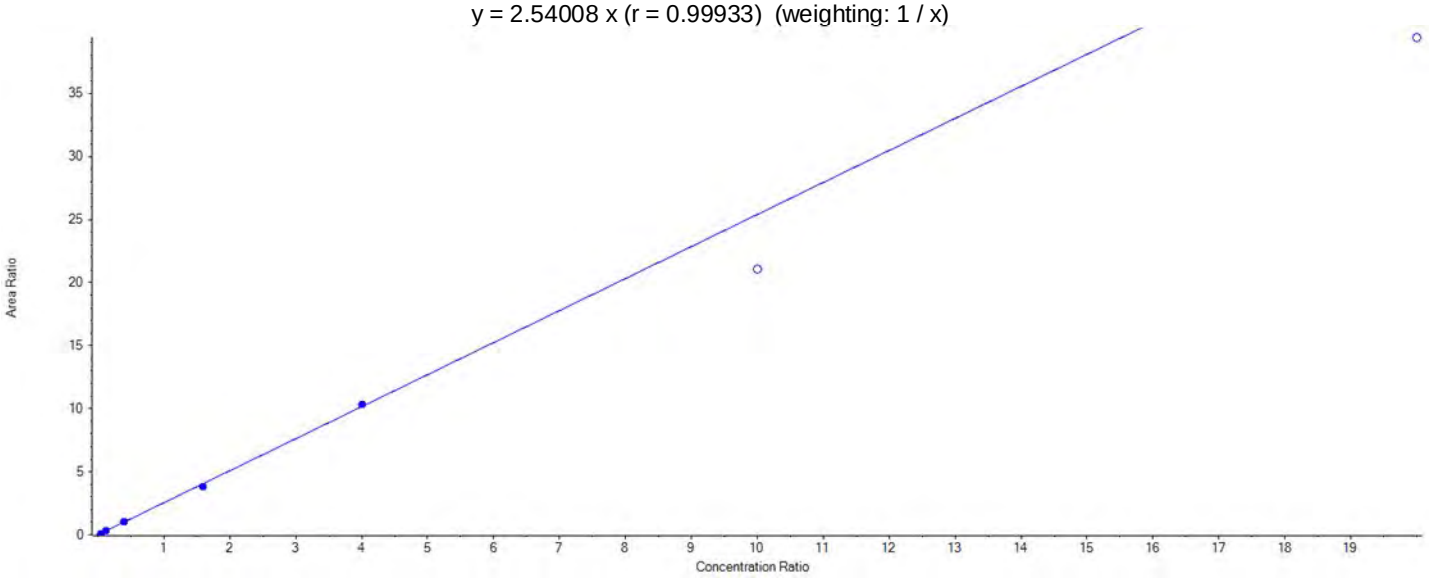
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

8:2-FTS

y = 2.54008 x (r = 0.99933) (weighting: 1 / x)



Component Calibration Verification

Sample Name	8:2-FTS Area	S/N	13C2-8:2-FTS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	6138.7	138.9	58895.024	True	4.79	0.104	5.57	1.000	0.192	0.197	2	30	
CAL2	15550.2	278.8	54757.914	True	4.79	0.284	5.57	1.000	0.575	0.536	-7	30	
CAL3	57433.9	686.2	53847.149	True	4.79	1.067	5.57	1.000	1.920	2.011	5	30	
CAL4	203687.7	1309.3	52961.880	True	4.79	3.846	5.57	1.000	7.660	7.253	-5	30	
CAL5	478390.1	1550.6	46142.417	True	4.79	10.368	5.58	1.000	19.200	19.551	2	30	
CAL6	938590.1	1617.4	44487.495	False	4.79	21.098	5.57	1.000	47.900	39.786	-17	30	
CAL7	1620286.0	2884.0	41093.046	False	4.79	39.430	5.57	1.000	95.800	74.355	-22	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

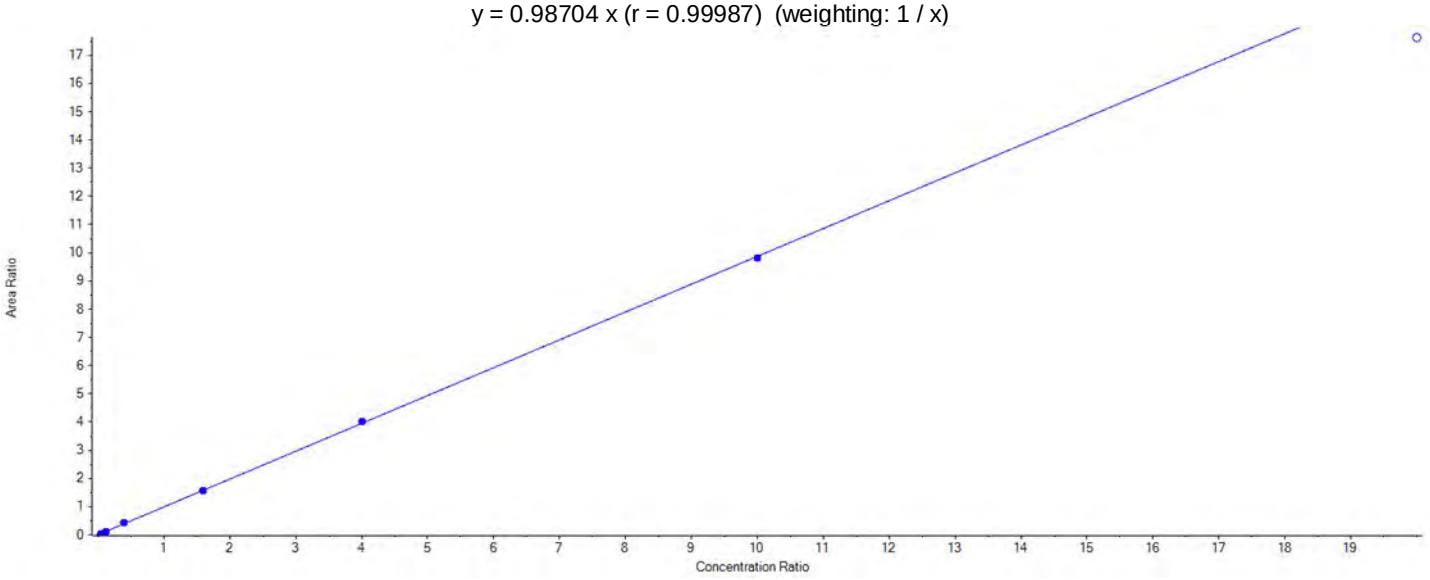
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFOSA

y = 0.98704 x (r = 0.99987) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFOSA Area	S/N	13C8-PFOSA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	27693.0	14496.4	662264.748	True	5.00	0.042	5.65	1.000	0.200	0.212	6	30	
CAL2	73112.3	749.8	658778.467	True	5.00	0.111	5.65	1.000	0.600	0.562	-6	30	
CAL3	265394.0	1340.3	631627.878	True	5.00	0.420	5.66	1.000	2.000	2.128	6	30	
CAL4	976434.1	2479.8	625021.840	True	5.00	1.562	5.65	1.000	8.000	7.914	-1	30	
CAL5	2392584.6	2838.0	596189.464	True	5.00	4.013	5.66	1.000	20.000	20.329	2	30	
CAL6	5541493.1	2884.6	565326.016	True	5.00	9.802	5.65	1.000	50.000	49.655	-1	30	
CAL7	9792009.5	2446.5	555500.490	False	5.00	17.627	5.65	1.000	100.000	89.294	-11	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

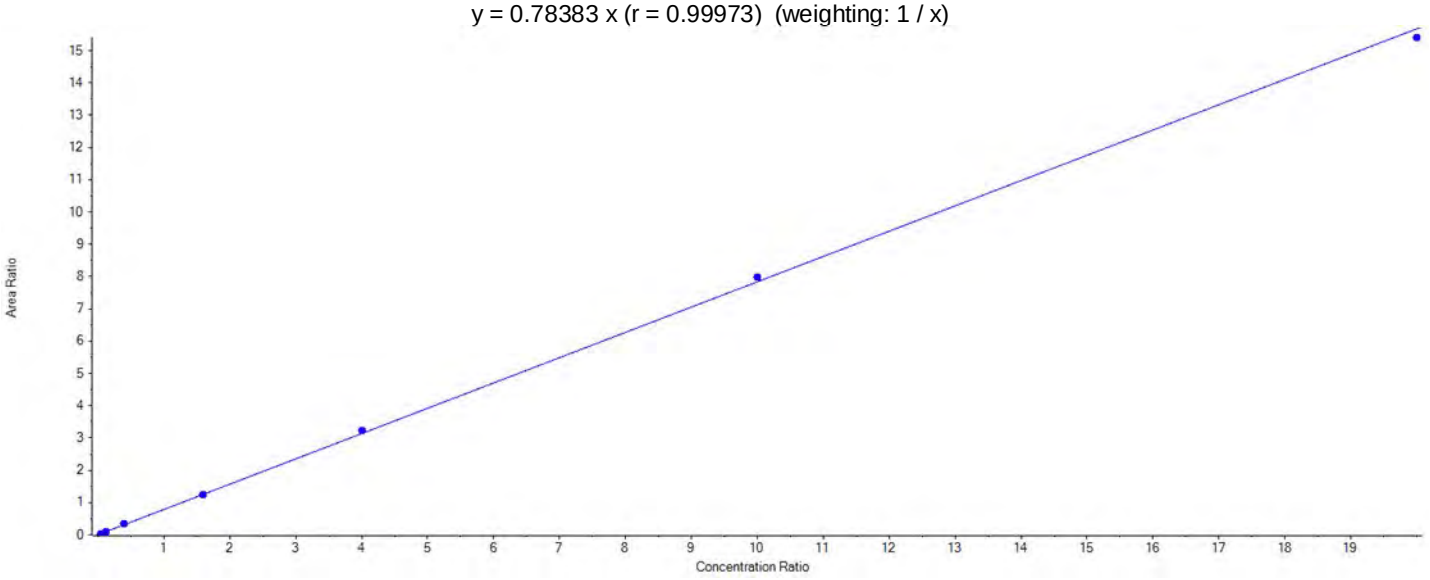
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

NMeFOSAA

y = 0.78383 x (r = 0.99973) (weighting: 1 / x)



Component Calibration Verification

Sample Name	NMeFOSAA Area	S/N	d3-NMeFOSAA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	6661.0	153.4	220597.274	True	5.00	0.030	5.71	1.000	0.200	0.193	-4	30	
CAL2	16533.1	308.9	181261.245	True	5.00	0.091	5.70	1.000	0.600	0.582	-3	30	
CAL3	62054.8	533.8	178338.072	True	5.00	0.348	5.71	1.000	2.000	2.220	11	30	
CAL4	212775.3	1656.4	171203.949	True	5.00	1.243	5.71	1.000	8.000	7.928	-1	30	
CAL5	557354.6	1407.3	172574.166	True	5.00	3.230	5.71	1.000	20.000	20.602	3	30	
CAL6	1292829.8	1422.7	161673.270	True	5.00	7.997	5.70	1.000	50.000	51.010	2	30	
CAL7	2414874.8	1441.0	156760.846	True	5.00	15.405	5.71	1.000	100.000	98.267	-2	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

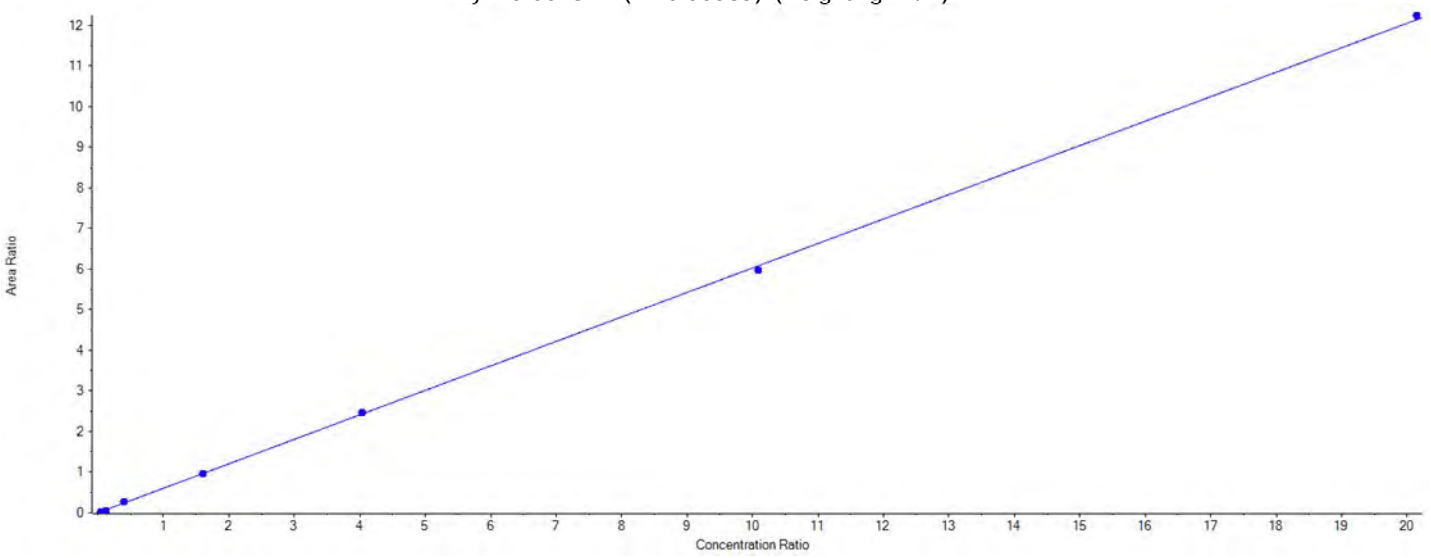
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFDS

y = 0.60287 x (r = 0.99985) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFDS Area	S/N	13C8-PFOS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	6850.7	4223.9	318525.429	True	4.78	0.022	5.81	1.110	0.193	0.171	-12	30	
CAL2	18654.8	1288.4	313894.271	True	4.78	0.059	5.80	1.100	0.578	0.471	-18	30	
CAL3	80537.4	288059.6	309913.737	True	4.78	0.260	5.80	1.100	1.930	2.060	7	30	
CAL4	283198.5	3741.0	296147.525	True	4.78	0.956	5.80	1.100	7.700	7.582	-2	30	
CAL5	737231.9	1757.0	299574.476	True	4.78	2.461	5.81	1.100	19.300	19.512	1	30	
CAL6	1665920.2	2887.4	279204.362	True	4.78	5.967	5.80	1.100	48.200	47.309	-2	30	
CAL7	3061543.5	4095.0	250004.233	True	4.78	12.246	5.80	1.110	96.300	97.096	1	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

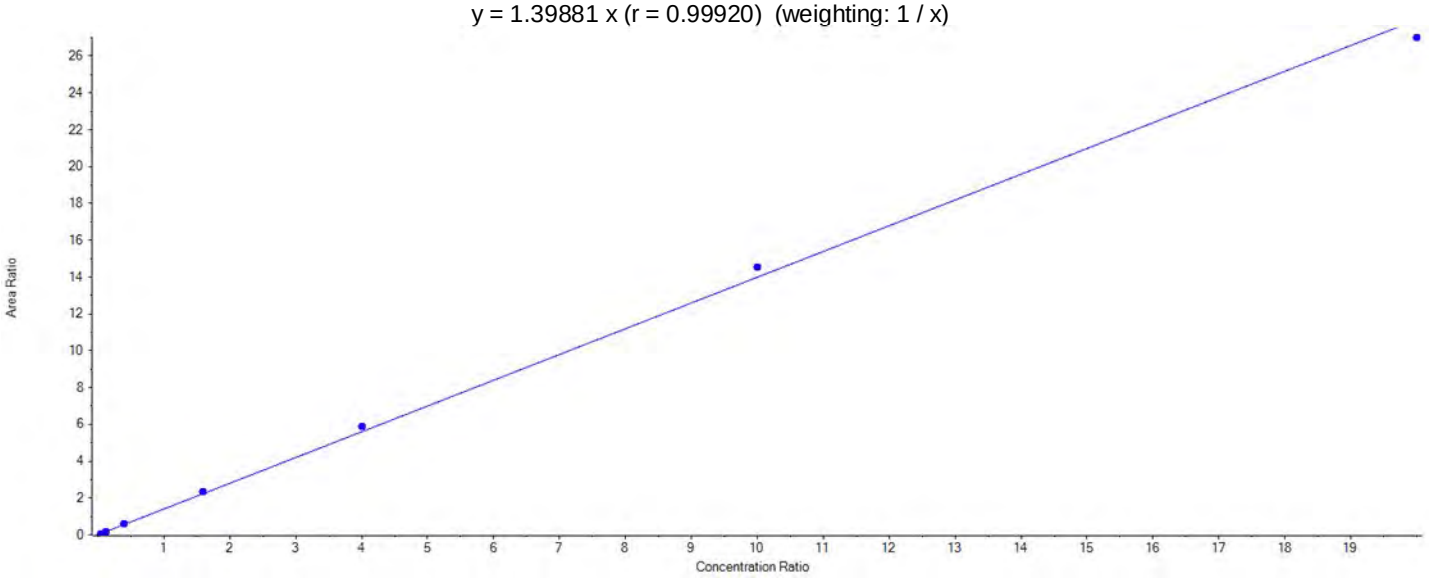
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFUnDA

y = 1.39881 x (r = 0.99920) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFUnDA Area	S/N	13C7-PFUnDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	36428.0	274.5	587155.422	True	5.00	0.062	5.82	1.000	0.200	0.222	11	30	
CAL2	91490.4	441.2	581206.992	True	5.00	0.157	5.82	1.000	0.600	0.563	-6	30	
CAL3	370693.6	883.5	592495.657	True	5.00	0.626	5.83	1.000	2.000	2.236	12	30	
CAL4	1281938.5	1471.5	546359.257	True	5.00	2.346	5.83	1.000	8.000	8.387	5	30	
CAL5	3163283.8	2050.7	539842.914	True	5.00	5.860	5.83	1.000	20.000	20.945	5	30	
CAL6	6885622.6	2756.7	474122.075	True	5.00	14.523	5.82	1.000	50.000	51.912	4	30	
CAL7	11254483.8	2696.8	416723.902	True	5.00	27.007	5.83	1.000	100.000	96.536	-3	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

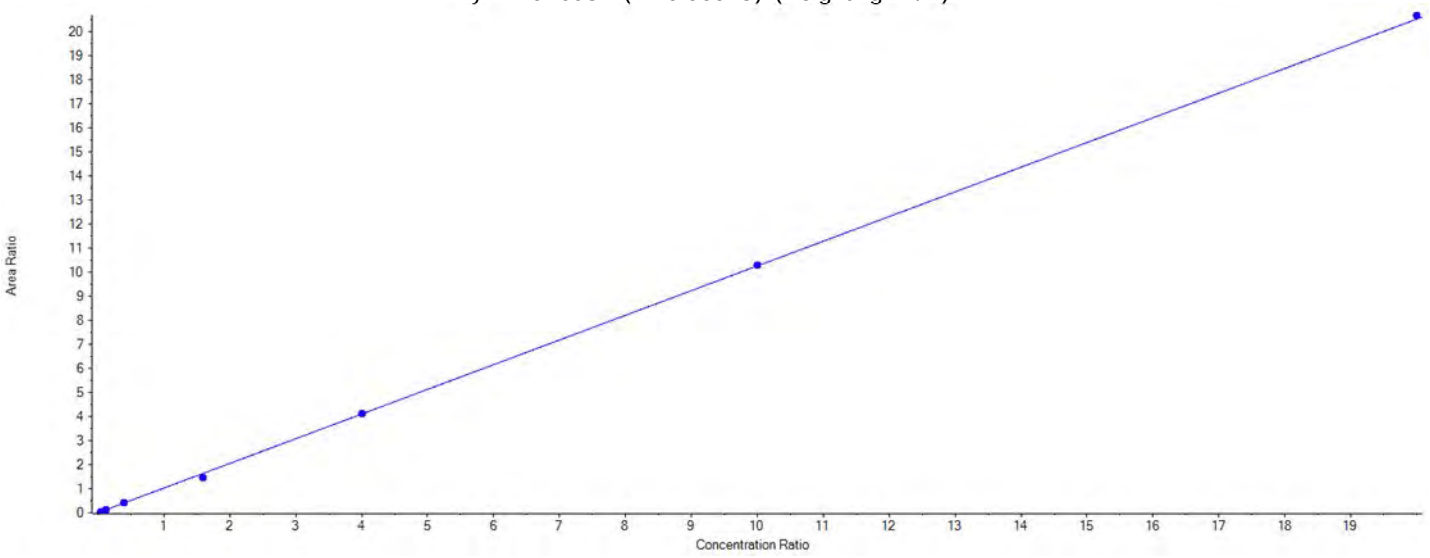
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

NEtFOSAA

y = 1.02663 x (r = 0.99975) (weighting: 1 / x)



Component Calibration Verification

Sample Name	NEtFOSAA Area	S/N	d5-NEtFOSAA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	5069.2	122.5	127543.478	True	5.00	0.040	5.85	1.000	0.200	0.194	-3	30	
CAL2	16643.3	670.6	144803.235	True	5.00	0.115	5.84	1.000	0.600	0.560	-7	30	
CAL3	52769.5	534.0	129810.704	True	5.00	0.407	5.84	1.000	2.000	1.980	-1	30	
CAL4	204048.6	1145.4	138500.791	True	5.00	1.473	5.84	1.000	8.000	7.175	-10	30	
CAL5	512792.4	1631.6	124785.046	True	5.00	4.109	5.85	1.000	20.000	20.014	0	30	
CAL6	1214766.4	1707.9	117934.241	True	5.00	10.300	5.84	1.000	50.000	50.166	0	30	
CAL7	2127663.4	1866.1	102891.604	True	5.00	20.679	5.85	1.000	100.000	100.712	1	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

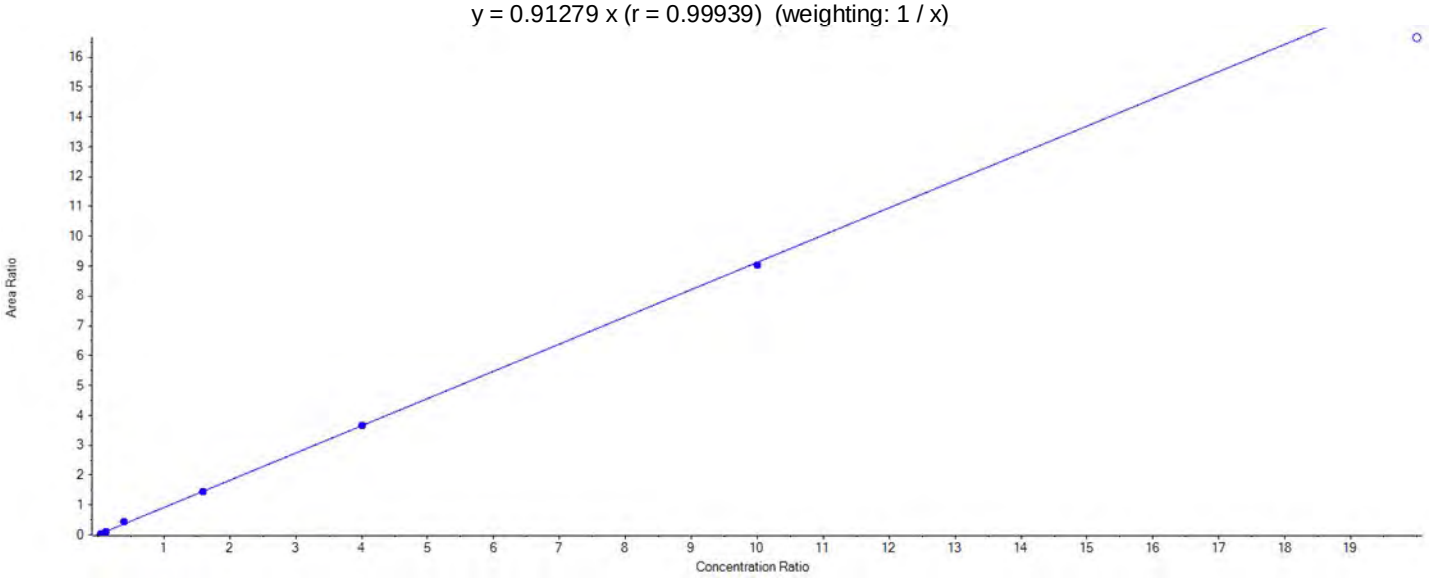
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFDoDA

y = 0.91279 x (r = 0.99939) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFDoDA Area	S/N	13C2-PFDoDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	53386.6	440.3	1173339.125	True	5.00	0.045	6.06	1.000	0.200	0.249	25	30	
CAL2	122586.0	435.7	1140522.314	True	5.00	0.107	6.05	1.000	0.600	0.589	-2	30	
CAL3	486489.2	1014.9	1091194.874	True	5.00	0.446	6.06	1.000	2.000	2.442	22	30	
CAL4	1650301.1	2076.9	1150927.360	True	5.00	1.434	6.06	1.000	8.000	7.854	-2	30	
CAL5	4161895.9	2283.1	1133027.856	True	5.00	3.673	6.06	1.000	20.000	20.121	1	30	
CAL6	8865844.7	2437.0	980215.411	True	5.00	9.045	6.05	1.000	50.000	49.545	-1	30	
CAL7	14195839.1	2288.5	852235.609	False	5.00	16.657	6.06	1.000	100.000	91.243	-9	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

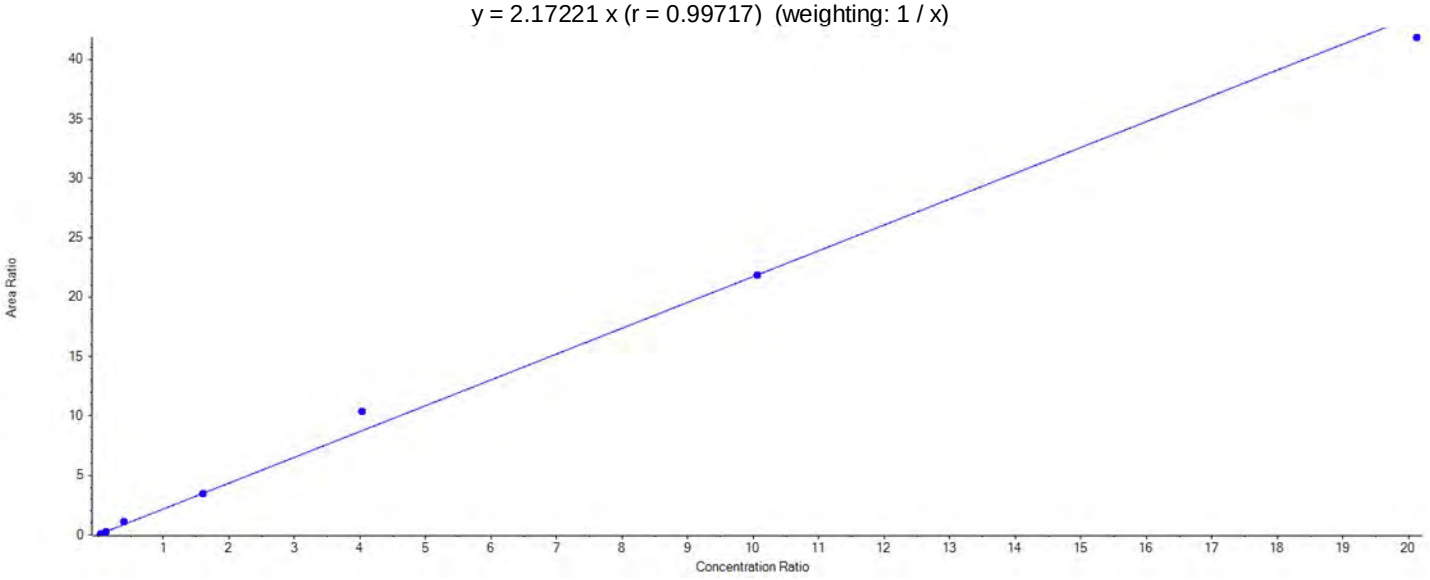
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By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

10:2-FTS

y = 2.17221 x (r = 0.99717) (weighting: 1 / x)



Component Calibration Verification

Sample Name	10:2-FTS Area	S/N	13C2-8:2-FTS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	5717.7	1172.1	58895.024	True	4.79	0.097	6.07	1.090	0.193	0.214	11	30	
CAL2	15157.8	2880.5	54757.914	True	4.79	0.277	6.07	1.090	0.578	0.610	6	30	
CAL3	58508.2	2664.2	53847.149	True	4.79	1.087	6.07	1.090	1.930	2.396	24	30	
CAL4	184968.5	809.2	52961.880	True	4.79	3.492	6.08	1.090	7.710	7.701	0	30	
CAL5	480384.1	12789.5	46142.417	True	4.79	10.411	6.08	1.090	19.300	22.957	19	30	
CAL6	972346.8	3139.7	44487.495	True	4.79	21.857	6.07	1.090	48.200	48.197	0	30	
CAL7	1718827.3	2423.5	41093.046	True	4.79	41.828	6.08	1.090	96.400	92.235	-4	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

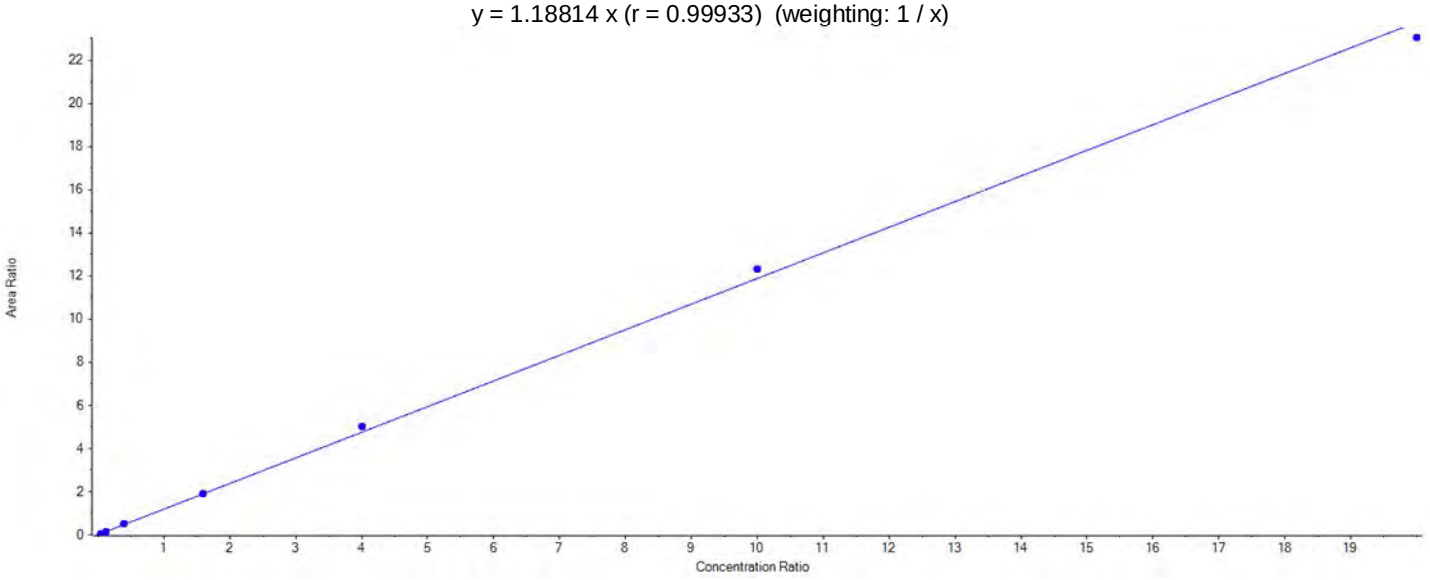
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

NMePFOSAE

y = 1.18814 x (r = 0.99933) (weighting: 1 / x)



Component Calibration Verification

Sample Name	NMePFOSAE Area	S/N	d7-NMePFOSAE Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	13889.2	162.0	281912.738	True	5.00	0.049	6.10	1.000	0.200	0.207	4	30	
CAL2	37932.7	340.7	272071.295	True	5.00	0.139	6.10	1.000	0.600	0.587	-2	30	
CAL3	136518.3	546.2	256577.302	True	5.00	0.532	6.11	1.000	2.000	2.239	12	30	
CAL4	498735.8	911.9	263412.818	True	5.00	1.893	6.11	1.000	8.000	7.968	0	30	
CAL5	1240182.1	1072.1	247663.757	True	5.00	5.008	6.11	1.000	20.000	21.073	5	30	
CAL6	3059430.5	1565.7	248871.057	True	5.00	12.293	6.10	1.000	50.000	51.733	3	30	
CAL7	5772837.2	1358.0	250467.595	True	5.00	23.048	6.11	1.000	100.000	96.993	-3	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

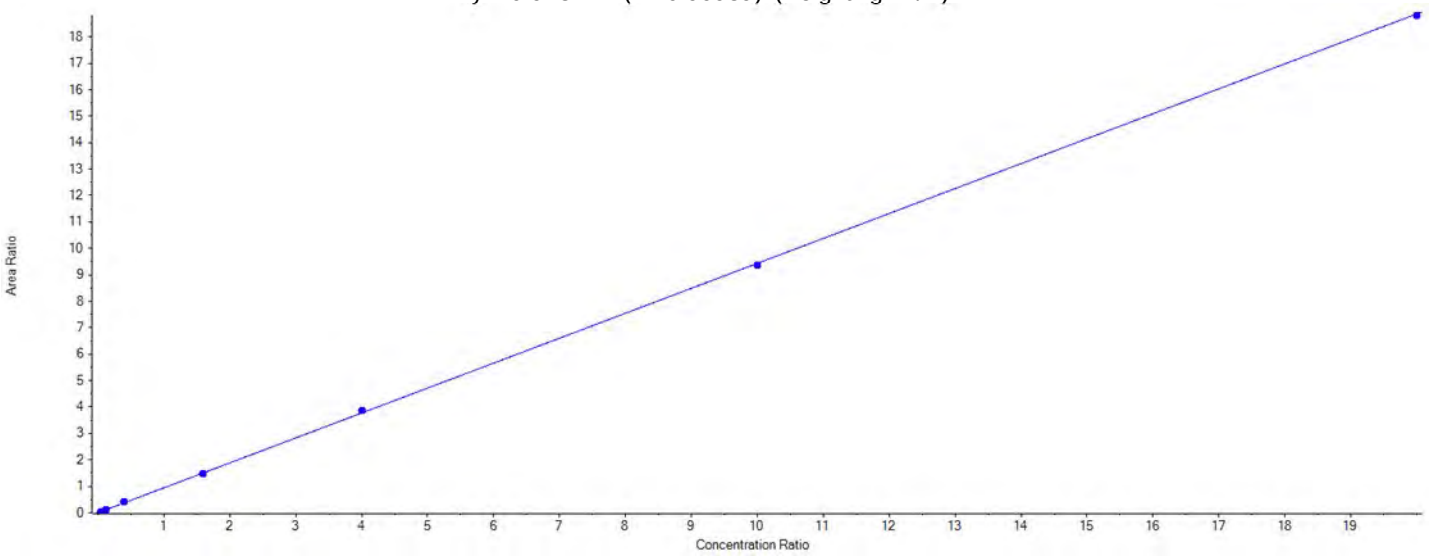
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By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

NMePFOSA

y = 0.94317 x (r = 0.99989) (weighting: 1 / x)



Component Calibration Verification

Sample Name	NMePFOSA Area	S/N	d3-NMePFOSA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	3274.2	928.4	85677.959	True	5.00	0.038	6.11	1.000	0.200	0.203	1	30	
CAL2	9381.3	543.9	86471.674	True	5.00	0.108	6.11	1.000	0.600	0.575	-4	30	
CAL3	33009.7	588.1	80294.101	True	5.00	0.411	6.11	1.000	2.000	2.179	9	30	
CAL4	124582.5	1113.8	83886.643	True	5.00	1.485	6.11	1.000	8.000	7.873	-2	30	
CAL5	322671.1	1106.7	83129.042	True	5.00	3.882	6.12	1.000	20.000	20.577	3	30	
CAL6	768521.6	1393.3	81949.264	True	5.00	9.378	6.11	1.000	50.000	49.716	-1	30	
CAL7	1500056.2	1711.5	79780.244	True	5.00	18.802	6.11	1.000	100.000	99.677	0	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

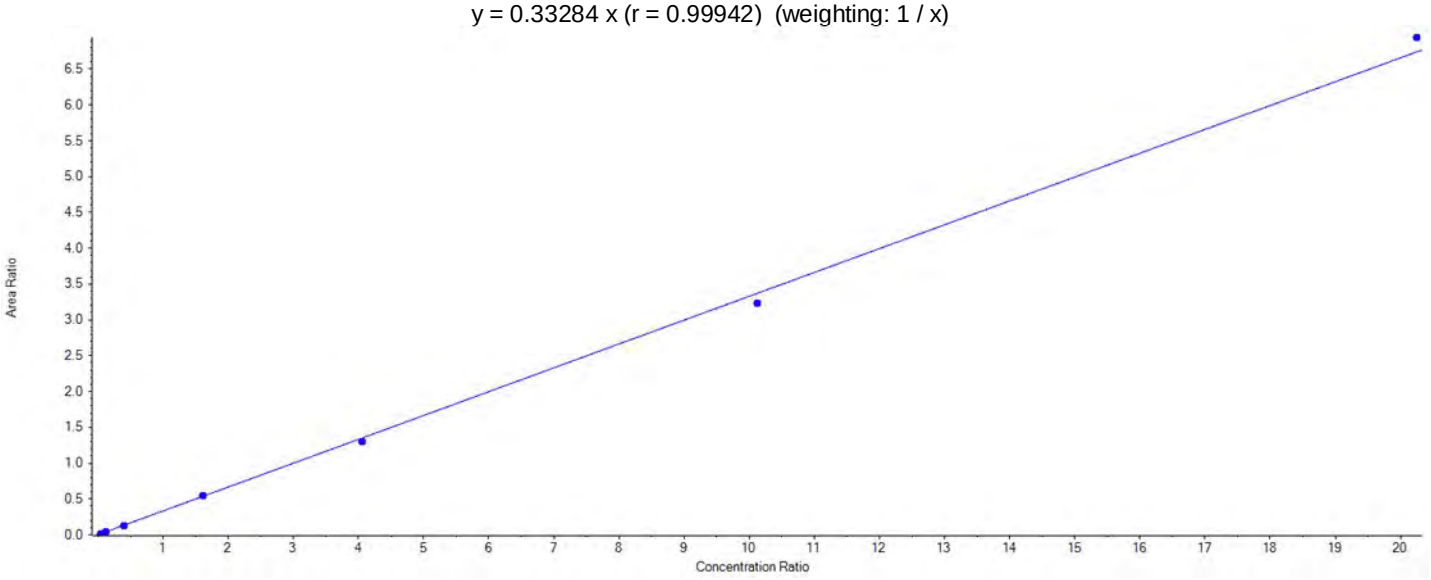
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By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFDoS

y = 0.33284 x (r = 0.99942) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFDoS Area	S/N	13C8-PFOS Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	4012.1	80345.8	318525.429	True	4.78	0.013	6.23	1.190	0.194	0.181	-7	30	
CAL2	11606.3	870710.1	313894.271	True	4.78	0.037	6.22	1.190	0.581	0.531	-9	30	
CAL3	40838.1	5802.7	309913.737	True	4.78	0.132	6.23	1.180	1.940	1.892	-2	30	
CAL4	159682.3	51383.7	296147.525	True	4.78	0.539	6.23	1.190	7.740	7.744	0	30	
CAL5	390444.7	2445.2	299574.476	True	4.78	1.303	6.23	1.190	19.400	18.718	-4	30	
CAL6	900508.4	3292.0	279204.362	True	4.78	3.225	6.22	1.190	48.400	46.320	-4	30	
CAL7	1735049.5	2191.9	250004.233	True	4.78	6.940	6.22	1.190	96.800	99.670	3	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

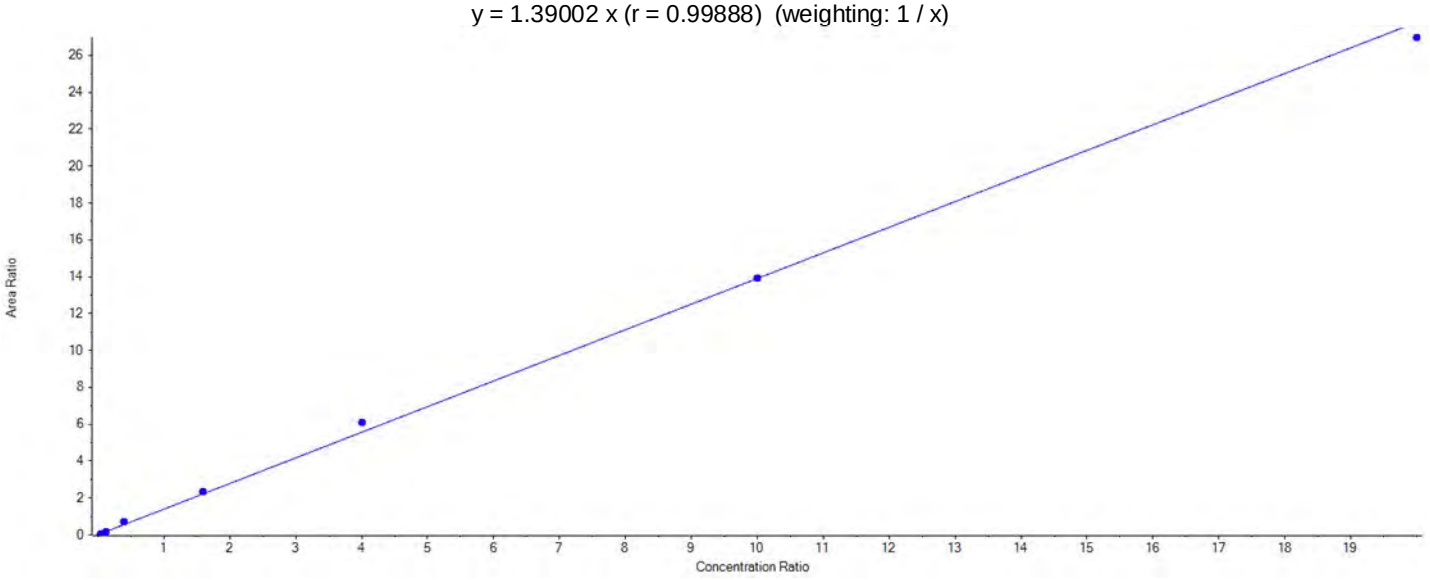
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

NEtPFOSAE

y = 1.39002 x (r = 0.99888) (weighting: 1 / x)



Component Calibration Verification

Sample Name	NEtPFOSAE Area	S/N	d9-NEtPFOSAE Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	15402.7	148.0	226256.026	True	5.00	0.068	6.26	1.000	0.200	0.245	22	30	
CAL2	37977.7	267.1	229050.658	True	5.00	0.166	6.26	1.000	0.600	0.596	-1	30	
CAL3	152952.1	535.6	216571.501	True	5.00	0.706	6.26	1.000	2.000	2.540	27	30	
CAL4	516882.1	779.8	218635.780	True	5.00	2.364	6.26	1.000	8.000	8.504	6	30	
CAL5	1338584.5	1109.4	220689.862	True	5.00	6.065	6.27	1.000	20.000	21.818	9	30	
CAL6	3104174.6	1257.6	222924.109	True	5.00	13.925	6.26	1.000	50.000	50.088	0	30	
CAL7	5826370.7	1137.3	216042.000	True	5.00	26.969	6.26	1.000	100.000	97.008	-3	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

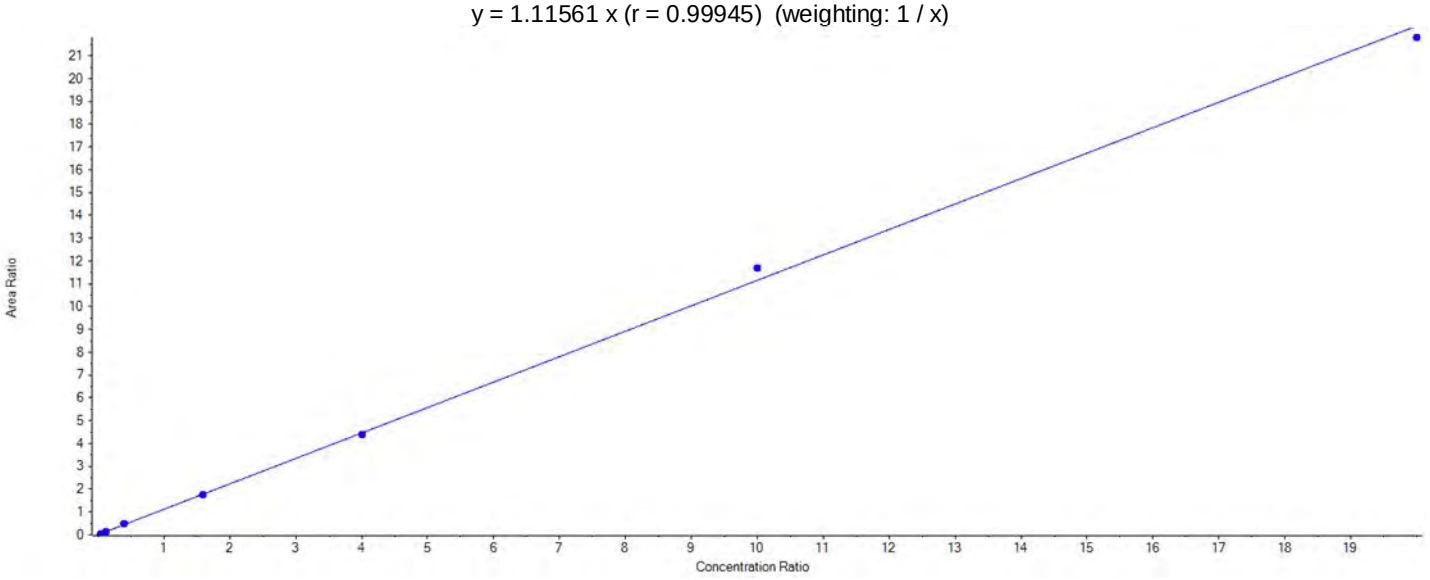
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

NEtPFOSA

y = 1.11561 x (r = 0.99945) (weighting: 1 / x)



Component Calibration Verification

Sample Name	NEtPFOSA Area	S/N	d5-NEtPFOSA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	3384.4	107.2	70050.412	True	5.00	0.048	6.27	1.000	0.200	0.217	8	30	
CAL2	7883.3	201.2	66646.838	True	5.00	0.118	6.27	1.000	0.600	0.530	-12	30	
CAL3	30595.3	507.0	64623.659	True	5.00	0.473	6.27	1.000	2.000	2.122	6	30	
CAL4	119152.1	624.5	66966.371	True	5.00	1.779	6.28	1.000	8.000	7.975	0	30	
CAL5	293215.8	1053.2	66384.647	True	5.00	4.417	6.28	1.000	20.000	19.796	-1	30	
CAL6	698744.6	1184.9	59705.755	True	5.00	11.703	6.27	1.000	50.000	52.452	5	30	
CAL7	1290814.8	1076.0	59209.120	True	5.00	21.801	6.27	1.000	100.000	97.709	-2	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

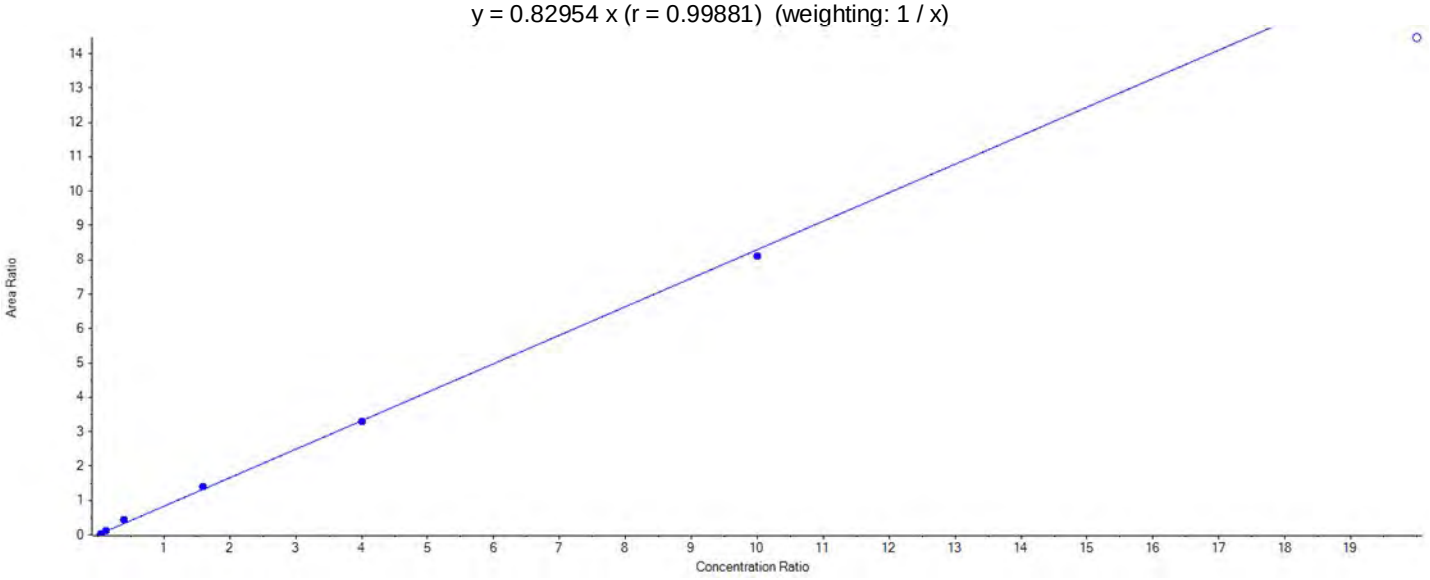
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFTrDA

y = 0.82954 x (r = 0.99881) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFTrDA Area	S/N	13C2-PFDoDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	48537.6	415.6	1173339.125	True	5.00	0.041	6.26	1.030	0.200	0.249	25	30	
CAL2	117562.3	613.3	1140522.314	True	5.00	0.103	6.25	1.030	0.600	0.621	4	30	
CAL3	466266.9	1132.7	1091194.874	True	5.00	0.427	6.26	1.030	2.000	2.576	29	30	
CAL4	1622977.7	2016.4	1150927.360	True	5.00	1.410	6.26	1.030	8.000	8.500	6	30	
CAL5	3743763.6	1689.2	1133027.856	True	5.00	3.304	6.26	1.030	20.000	19.916	0	30	
CAL6	7958673.4	2584.3	980215.411	True	5.00	8.119	6.25	1.030	50.000	48.938	-2	30	
CAL7	12329126.1	2217.5	852235.609	False	5.00	14.467	6.26	1.030	100.000	87.197	-13	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

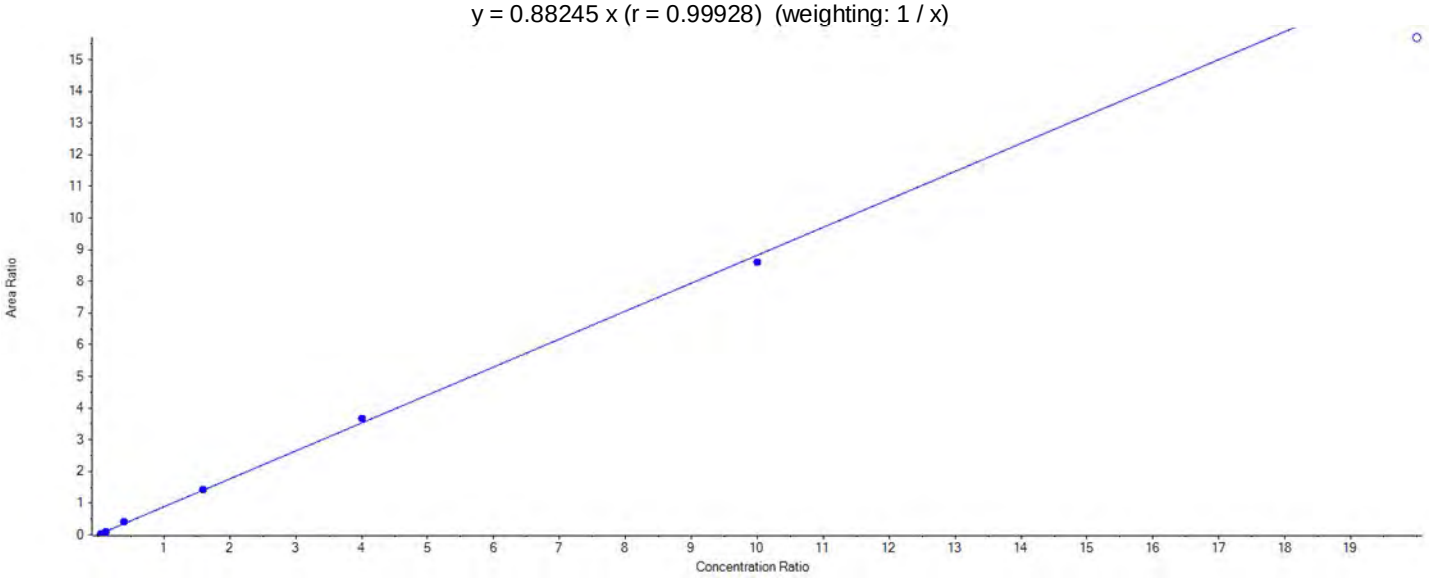
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFTeDA

y = 0.88245 x (r = 0.99928) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFTeDA Area	S/N	13C2-PFTeDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	34099.2	261.8	873945.602	True	5.00	0.039	6.43	1.000	0.200	0.221	11	30	
CAL2	88360.3	524.6	858145.146	True	5.00	0.103	6.43	1.000	0.600	0.583	-3	30	
CAL3	342239.8	919.9	841931.091	True	5.00	0.406	6.43	1.000	2.000	2.303	15	30	
CAL4	1172052.0	1455.1	826669.980	True	5.00	1.418	6.43	1.000	8.000	8.033	0	30	
CAL5	2897106.2	1865.2	786107.475	True	5.00	3.685	6.44	1.000	20.000	20.882	4	30	
CAL6	6793735.3	2537.2	789168.429	True	5.00	8.609	6.43	1.000	50.000	48.777	-2	30	
CAL7	11258874.1	2188.3	717297.714	False	5.00	15.696	6.43	1.000	100.000	88.936	-11	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

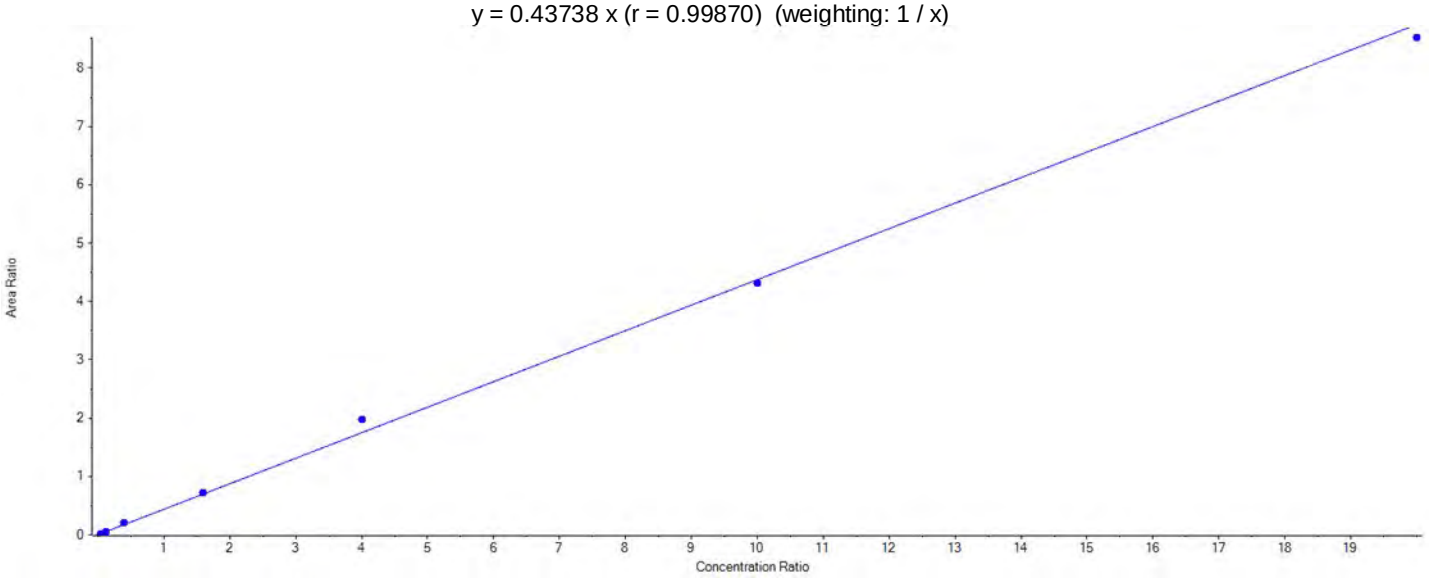
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFHxDA

y = 0.43738 x (r = 0.99870) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFHxDA Area	S/N	13C2-PFTeDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	19206.4	679.6	873945.602	True	5.00	0.022	6.74	1.050	0.200	0.251	26	30	
CAL2	44164.6	964.5	858145.146	True	5.00	0.051	6.73	1.050	0.600	0.588	-2	30	
CAL3	173721.0	2652.8	841931.091	True	5.00	0.206	6.74	1.050	2.000	2.359	18	30	
CAL4	601723.8	3198.2	826669.980	True	5.00	0.728	6.74	1.050	8.000	8.321	4	30	
CAL5	1551331.1	2619.4	786107.475	True	5.00	1.973	6.74	1.050	20.000	22.560	13	30	
CAL6	3402004.4	2973.0	789168.429	True	5.00	4.311	6.73	1.050	50.000	49.281	-1	30	
CAL7	6113985.1	2964.4	717297.714	True	5.00	8.524	6.73	1.050	100.000	97.440	-3	30	

APPROVED
By MCD at 3:40 pm, 1/10/19

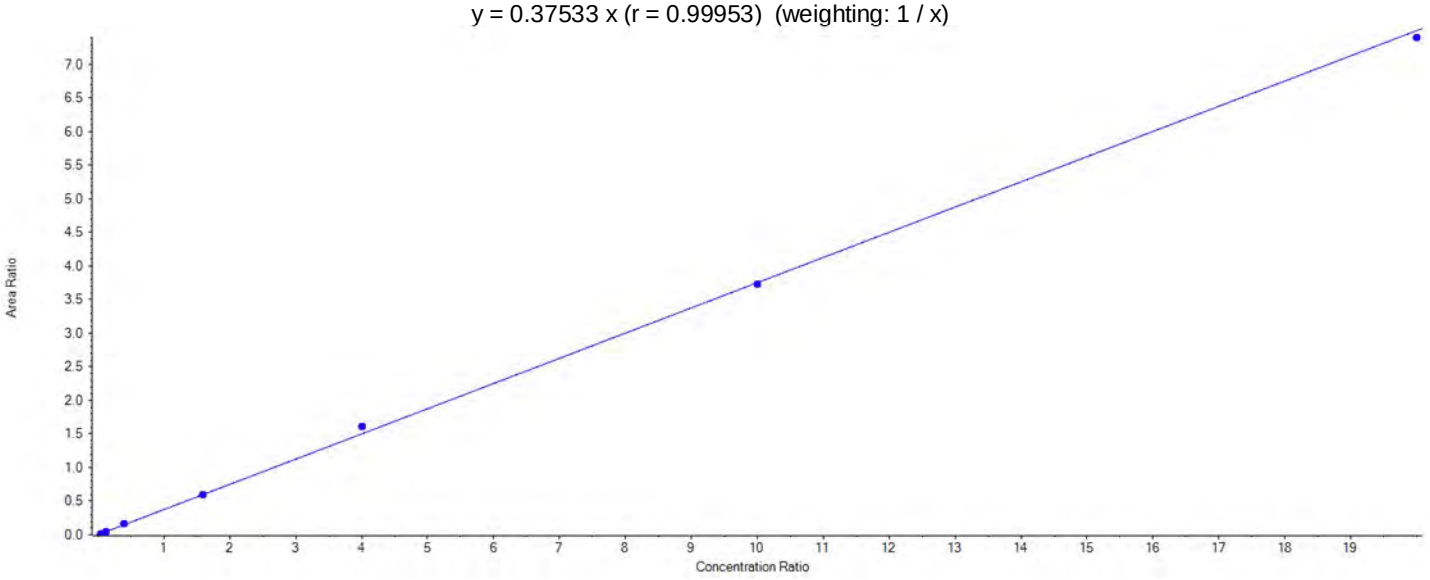
REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFODA

y = 0.37533 x (r = 0.99953) (weighting: 1 / x)



Component Calibration Verification

Sample Name	PFODA Area	S/N	13C2-PFTeDA Area	Used	ES Conc	Area Ratio	RT (min)	RRT	Spec Amount	Calc Amount	%Diff	%D Limit	%D OOS
CAL1	14378.0	1085.0	873945.602	True	5.00	0.016	7.00	1.090	0.200	0.219	10	30	
CAL2	36421.5	1561.1	858145.146	True	5.00	0.042	6.99	1.090	0.600	0.565	-6	30	
CAL3	139071.5	2402.7	841931.091	True	5.00	0.165	7.00	1.090	2.000	2.201	10	30	
CAL4	494210.7	3411.6	826669.980	True	5.00	0.598	7.00	1.090	8.000	7.964	0	30	
CAL5	1272897.4	4522.2	786107.475	True	5.00	1.619	7.00	1.090	20.000	21.571	8	30	
CAL6	2942000.1	3495.7	789168.429	True	5.00	3.728	6.99	1.090	50.000	49.663	-1	30	
CAL7	5309889.9	3965.5	717297.714	True	5.00	7.403	7.00	1.090	100.000	98.616	-1	30	

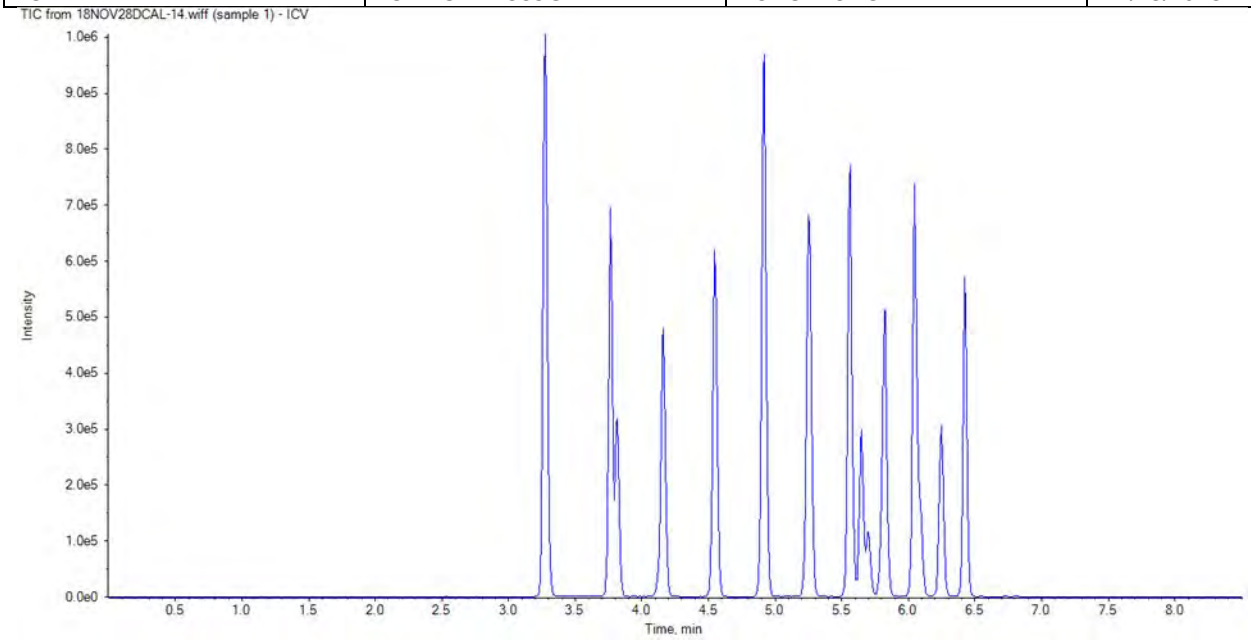
APPROVED
By MCD at 3:40 pm, 1/10/19

REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name	Sample ID:	Sample File:	Acquisition Date:
ICV	ICVMODX1833G	18NOV28DCAL-14.wiff	11/28/2018 2:54:22 PM



Injection Standard Name	Inj Std Conc	Injection Std Peak Area	CAL3 Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.000	909586.4	887248.9	2.5	50	
13C2-PFOA	5.000	531347.1	498501.6	6.6	50	
13C4-PFOS	4.780	296756.3	283214.2	4.8	50	
13C2-PFDA	5.000	468972.3	441790.6	6.2	50	

APPROVED
By MCD at 3:40 pm, 1/10/19

REVIEWED
By UCMR at 7:00 pm, 1/21/19

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name	Sample ID:	Sample File:	Acquisition Date:
ICV	ICVMODX1833G	18NOV28DCAL-14.wiff	11/28/2018 2:54:22 PM

Analyte Name	Analyte Area	Ext Std Name	Ext Std Area	Ext Std Con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	387187.0	13C4-PFBA	992615.758	5.00	0.390	3.27	1.00	2.000	2.138	7	30	
PFPeA	377961.6	13C5-PFPeA	975580.855	5.00	0.387	3.77	1.00	2.000	1.901	-5	30	
PFBS	159425.0	13C3-PFBS	446010.999	4.65	0.357	3.81	1.00	1.769	1.735	-2	30	
4:2-FTS	N/A	13C2-4:2-FTS	68184.320	4.67	N/A	N/A	N/A	0.000	N/A		30	
PFHxA	369137.1	13C5-PFHxA	699371.272	5.00	0.528	4.16	1.00	2.000	2.119	6	30	
PFPeS	N/A	13C3-PFBS	446010.999	4.65	N/A	N/A	N/A	0.000	N/A		30	
PFHpA	373590.8	13C4-PFHpA	556403.086	5.00	0.671	4.55	1.00	2.000	2.072	4	30	
PFHxS	125085.3	13C3-PFHxS	317108.955	4.73	0.394	4.55	1.00	1.890	1.847	-2	30	
6:2-FTS	N/A	13C2-6:2-FTS	63350.515	4.75	N/A	N/A	N/A	0.000	N/A		30	
PFHpS	131043.1	13C3-PFHxS	317108.955	4.73	0.413	4.91	1.08	1.900	2.062	9	30	
PFOA	404358.9	13C8-PFOA	1001731.379	5.00	0.404	4.92	1.00	2.000	2.086	4	30	
PFOS	122334.6	13C8-PFOS	316117.130	4.78	0.387	5.25	1.00	1.910	1.623	-15	30	
PFNA	351872.0	13C9-PFNA	647064.116	5.00	0.544	5.26	1.00	2.000	2.084	4	30	
PFNS	N/A	13C8-PFOS	316117.130	4.78	N/A	N/A	N/A	0.000	N/A		30	
PFDA	325191.9	13C6-PFDA	857032.881	5.00	0.379	5.56	1.00	2.000	2.148	7	30	
8:2-FTS	N/A	13C2-8:2-FTS	51912.864	4.79	N/A	N/A	N/A	0.000	N/A		30	
PFOSA	N/A	13C8-PFOSA	637370.645	5.00	N/A	N/A	N/A	0.000	N/A		30	
NMeFOSAA	74168.8	d3-NMeFOSAA	183040.018	5.00	0.405	5.70	1.00	2.000	2.585	29	30	
PFDS	72374.3	13C8-PFOS	316117.130	4.78	0.229	5.79	1.10	1.930	1.815	-6	30	
PFUnDA	354099.8	13C7-PFUnDA	559327.431	5.00	0.633	5.82	1.00	2.000	2.263	13	30	
NEtFOSAA	57367.9	d5-NEtFOSAA	140839.958	5.00	0.407	5.83	1.00	2.000	1.984	-1	30	
PFDoDA	427818.9	13C2-PFDoDA	1134142.098	5.00	0.377	6.05	1.00	2.000	2.066	3	30	
10:2-FTS	N/A	13C2-8:2-FTS	51912.864	4.79	N/A	N/A	N/A	0.000	N/A		30	
NMePFOSAE	N/A	d7-NMePFOSAE	262732.239	5.00	N/A	N/A	N/A	0.000	N/A		30	
NMePFOSA	N/A	d3-NMePFOSA	81059.543	5.00	N/A	N/A	N/A	0.000	N/A		30	
PFDoS	N/A	13C8-PFOS	316117.130	4.78	N/A	N/A	N/A	0.000	N/A		30	
NEtPFOSAE	N/A	d9-NEtPFOSAE	227167.682	5.00	N/A	N/A	N/A	0.000	N/A		30	
NEtPFOSA	N/A	d5-NEtPFOSA	67297.847	5.00	N/A	N/A	N/A	0.000	N/A		30	

DOD Initial Calibration Verification

Instrument ID: LM27631 **ICAL Name:** 18NOV28DCAL **QMethod Name:** 18AUG20QM
Result Table: 18NOV28DCAL_Updated1/10/2019 3:36:50 PM **Acquisition Method:** 18AUG13_3uL.dam

PFTrDA	416758.4	13C2-PFDoDA	1134142.098	5.00	0.367	6.25	1.03	2.000	2.215	11	30	
PFTeDA	312632.1	13C2-PFTeDA	820071.667	5.00	0.381	6.42	1.00	2.000	2.160	8	30	
PFHxDA	N/A	13C2-PFTeDA	820071.667	5.00	N/A	N/A	N/A	0.000	N/A		30	
PFODA	N/A	13C2-PFTeDA	820071.667	5.00	N/A	N/A	N/A	0.000	N/A		30	

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL1			**Data File:**		18NOV28DCAL-06.wiff
Sample ID:	CALBRN11833C			**Acquis Date:**		2018-11-28T13:42:10
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	3			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV28DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	907350.5	887248.9	2	50	
13C2-PFOA	5.0	521822.9	498501.6	5	50	
13C4-PFOS	4.8	296225.2	283214.2	5	50	
13C2-PFDA	5.0	476146.6	441790.6	8	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	1018752.8	13C3-PFBA	907350.5	1.123	5.000	5.009	100	70-130	
E13C5-PFPeA	975339.1	13C3-PFBA	907350.5	1.075	5.000	5.019	100	70-130	
E13C3-PFBS	437838.9	13C3-PFBA	907350.5	0.483	4.650	4.604	99	70-130	
E13C2-4:2-FTS	75119.1	13C2-PFOA	521822.9	0.144	4.670	4.961	106	70-130	
E13C5-PFHxA	728340.5	13C2-PFOA	521822.9	1.396	5.000	5.127	103	70-130	
E13C3-PFHxS	331982.9	13C2-PFOA	521822.9	0.636	4.730	4.986	105	70-130	
E13C4-PFHpA	547365.1	13C2-PFOA	521822.9	1.049	5.000	4.820	96	70-130	
E13C2-6:2-FTS	65543.8	13C2-PFOA	521822.9	0.126	4.750	5.258	111	70-130	
E13C8-PFOA	1030597.9	13C2-PFOA	521822.9	1.975	5.000	5.436	109	70-130	
E13C8-PFOS	318525.4	13C4-PFOS	296225.2	1.075	4.780	4.854	102	70-130	
E13C9-PFNA	659714.7	13C4-PFOS	296225.2	2.227	5.000	4.892	98	70-130	
E13C6-PFDA	855362.9	13C2-PFDA	476146.6	1.796	5.000	5.065	101	70-130	
E13C2-8:2-FTS	58895.0	13C2-PFDA	476146.6	0.124	4.790	5.316	111	70-130	
E13C8-PFOSA	662264.8	13C2-PFDA	476146.6	1.391	5.000	5.104	102	70-130	
Ed3-NMeFOSAA	220597.3	13C2-PFDA	476146.6	0.463	5.000	5.882	118	70-130	
E13C7-PFUnDA	587155.4	13C2-PFDA	476146.6	1.233	5.000	5.212	104	70-130	
Ed5-NEtFOSAA	127543.5	13C2-PFDA	476146.6	0.268	5.000	4.772	95	70-130	
E13C2-PFDoDA	1173339.1	13C2-PFDA	476146.6	2.464	5.000	5.178	104	70-130	
Ed7-NMePFOSAE	281912.7	13C2-PFDA	476146.6	0.592	5.000	5.117	102	70-130	
Ed3-NMePFOSA	85678.0	13C2-PFDA	476146.6	0.180	5.000	4.870	97	70-130	
Ed9-NEtPFOSAE	226256.0	13C2-PFDA	476146.6	0.475	5.000	4.818	96	70-130	
Ed5-NEtPFOSA	70050.4	13C2-PFDA	476146.6	0.147	5.000	5.112	102	70-130	
E13C2-PFTeDA	873945.6	13C2-PFDA	476146.6	1.835	5.000	5.079	102	70-130	

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:21 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

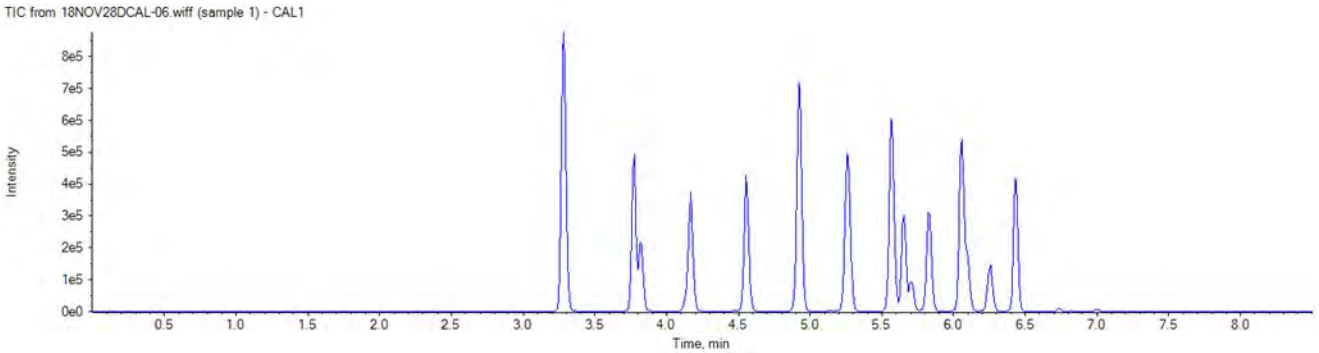
Analyte Quantitation Peak Table

Sample Name: CAL1 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-06.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.28	1.000	43996.2		A	13C4-PFBA	3.28	1018752.8	0.043	0.237
PFPeA	3.77	1.000	44706.1		A	13C5-PFPeA	3.77	975339.1	0.046	0.225
PFBS	3.82	1.000	17465.3		A	13C3-PFBS	3.82	437838.9	0.040	0.194
4:2-FTS	4.13	1.000	5603.9		A	13C2-4:2-FTS	4.13	75119.1	0.075	0.200
PFHxA	4.17	1.000	42281.8		A	13C5-PFHxA	4.17	728340.5	0.058	0.233
PFPeS	4.19	1.100	8956.0		A	13C3-PFBS	3.82	437838.9	0.020	0.207
PFHpA	4.56	1.000	42530.6		A	13C4-PFHpA	4.55	547365.1	0.078	0.240
PFHxS	4.56	1.000	12830.8		M	13C3-PFHxS	4.56	331982.9	0.039	0.181
6:2-FTS	4.91	1.000	5676.8		A	13C2-6:2-FTS	4.91	65543.8	0.087	0.226
PFHpS	4.92	1.080	13921.8		A	13C3-PFHxS	4.56	331982.9	0.042	0.209
PFOA	4.93	1.000	42517.4		A	13C8-PFOA	4.92	1030597.9	0.041	0.213
PFOS	5.25	1.000	13060.0		M	13C8-PFOS	5.25	318525.4	0.041	0.172
PFNA	5.27	1.000	39485.1		A	13C9-PFNA	5.27	659714.7	0.060	0.229
PFNS	5.55	1.060	9756.6		A	13C8-PFOS	5.25	318525.4	0.031	0.193
PFDA	5.57	1.000	33621.2		A	13C6-PFDA	5.57	855362.9	0.039	0.222
8:2-FTS	5.57	1.000	6138.7		A	13C2-8:2-FTS	5.57	58895.0	0.104	0.197
PFOSA	5.65	1.000	27693.0		A	13C8-PFOSA	5.65	662264.8	0.042	0.212
NMeFOSAA	5.71	1.000	6661.0		M	d3-NMeFOSAA	5.71	220597.3	0.030	0.193
PFDS	5.81	1.110	6850.7		A	13C8-PFOS	5.25	318525.4	0.022	0.171
PFUnDA	5.82	1.000	36428.0		A	13C7-PFUnDA	5.83	587155.4	0.062	0.222
NEtFOSAA	5.85	1.000	5069.2		M	d5-NEtFOSAA	5.84	127543.5	0.040	0.194
PFDoDA	6.06	1.000	53386.6		A	13C2-PFDoDA	6.06	1173339.1	0.045	0.249
10:2-FTS	6.07	1.090	5717.7		A	13C2-8:2-FTS	5.57	58895.0	0.097	0.214
NMePFOSAE	6.10	1.000	13889.2		A	d7-NMePFOSAE	6.09	281912.7	0.049	0.207
NMePFOSA	6.11	1.000	3274.2		A	d3-NMePFOSA	6.11	85678.0	0.038	0.203
PFDoS	6.23	1.190	4012.1		A	13C8-PFOS	5.25	318525.4	0.013	0.181
NEtPFOSAE	6.26	1.000	15402.7		A	d9-NEtPFOSAE	6.25	226256.0	0.068	0.245
NEtPFOSA	6.27	1.000	3384.4		A	d5-NEtPFOSA	6.27	70050.4	0.048	0.217
PFTrDA	6.26	1.030	48537.6		A	13C2-PFDoDA	6.06	1173339.1	0.041	0.249
PFTeDA	6.43	1.000	34099.2		A	13C2-PFTeDA	6.43	873945.6	0.039	0.221
PFHxDA	6.74	1.050	19206.4		A	13C2-PFTeDA	6.43	873945.6	0.022	0.251
PFODA	7.00	1.090	14378.0		A	13C2-PFTeDA	6.43	873945.6	0.016	0.219

Total Ion Chromatogram

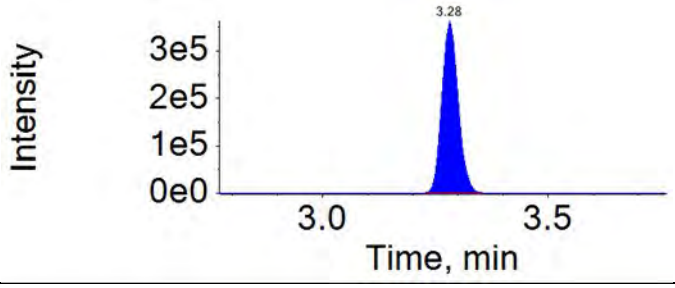


APPROVED
By MCD at 5:00 pm, 11/28/18

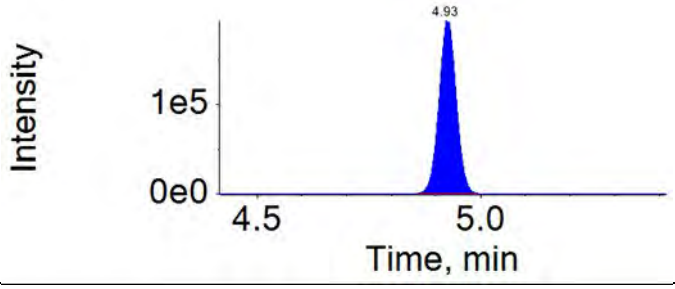
REVIEWED
By HMK at 12:21 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

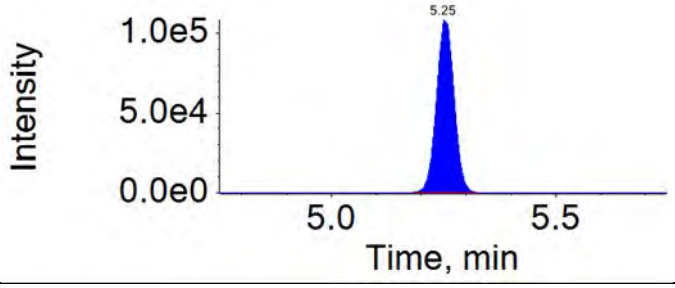
Injection Standard: 13C3-PFBA
216.0 / 172.0



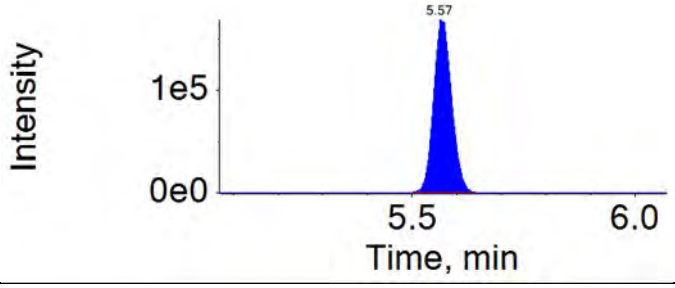
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0

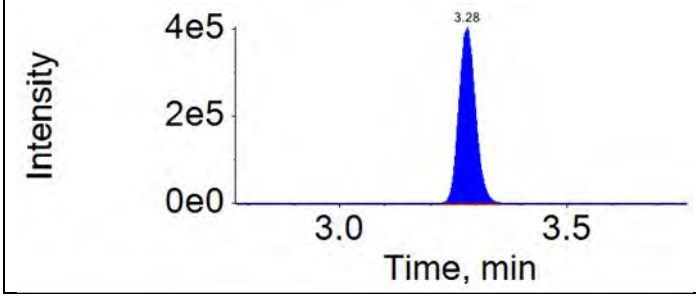


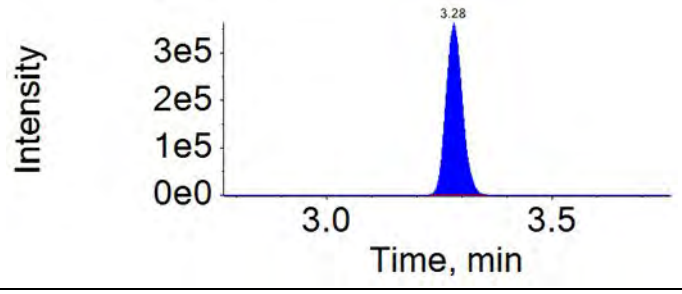
Injection Standard: 13C2-PFDA
515.0 / 470.0



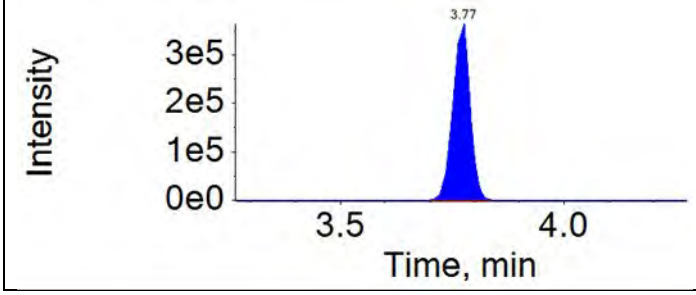
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

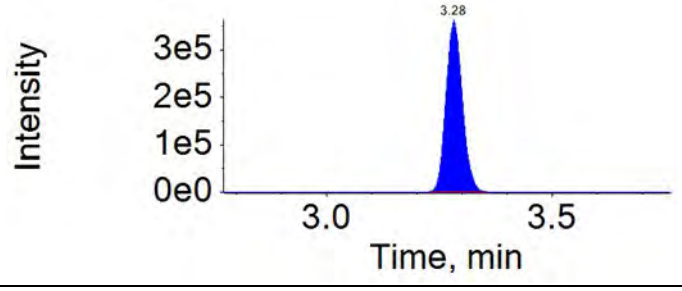
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



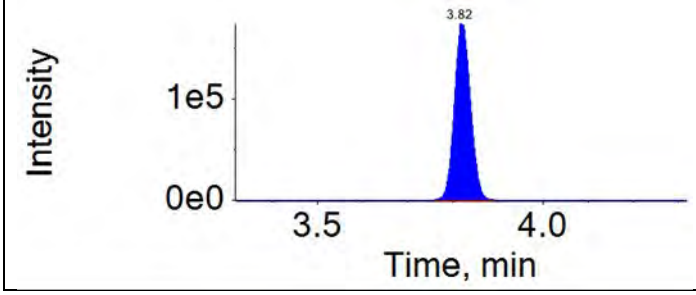


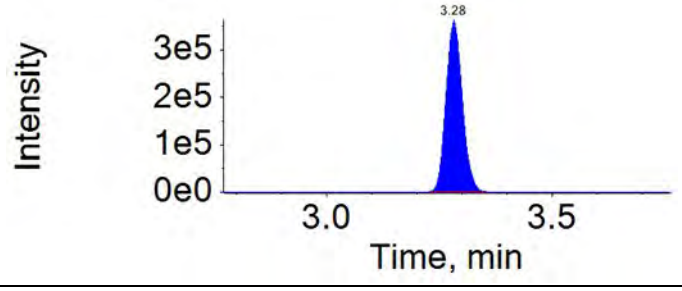
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



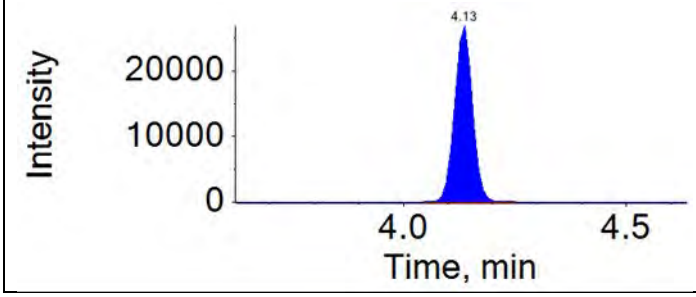


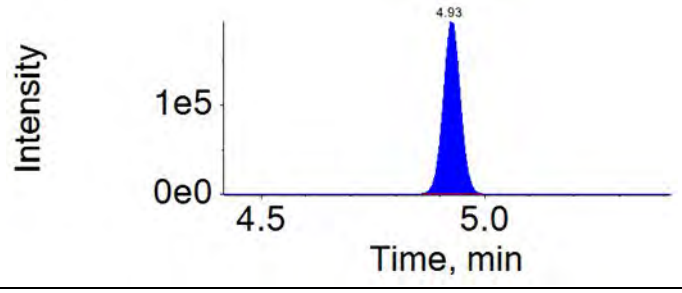
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





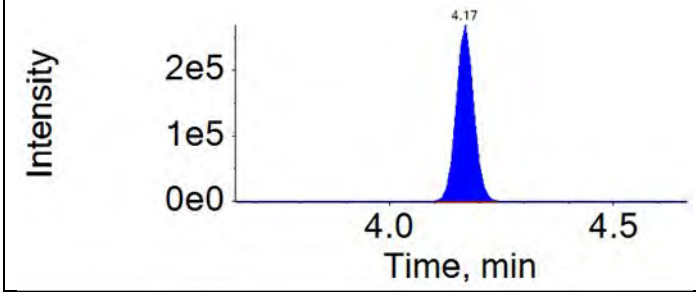
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

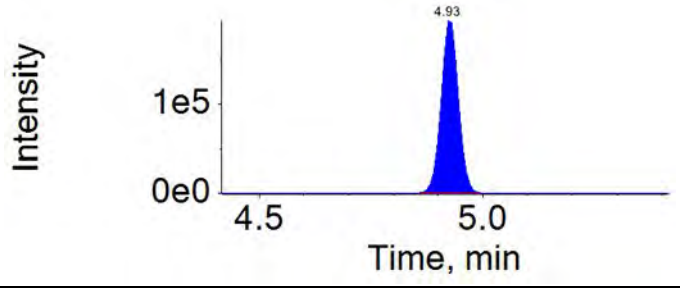




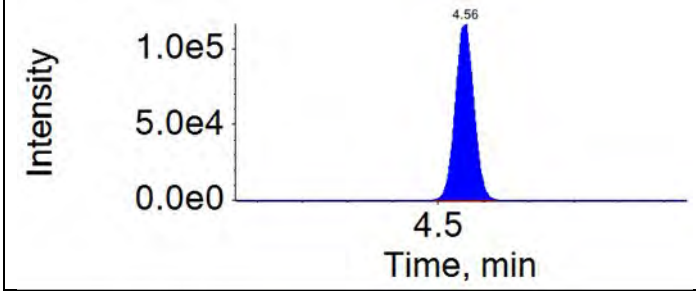
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

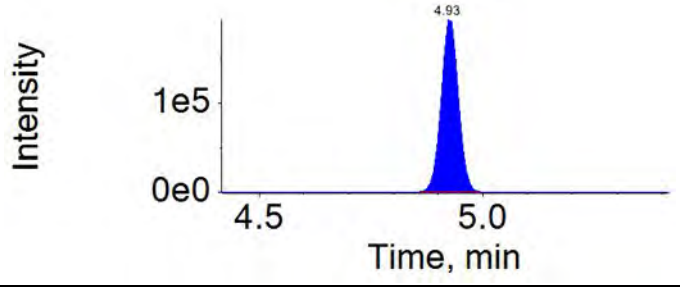
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



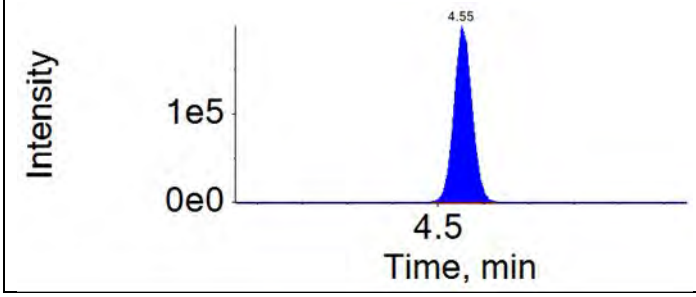


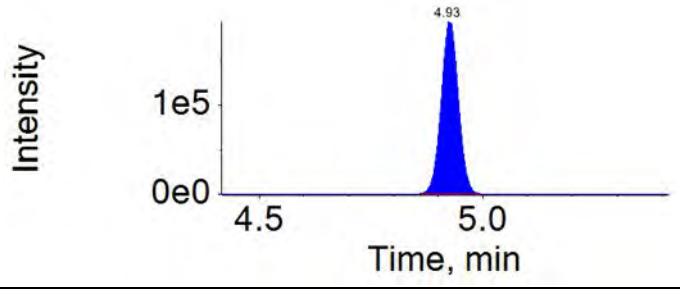
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



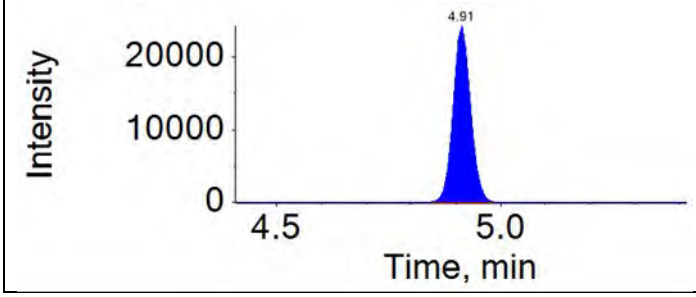


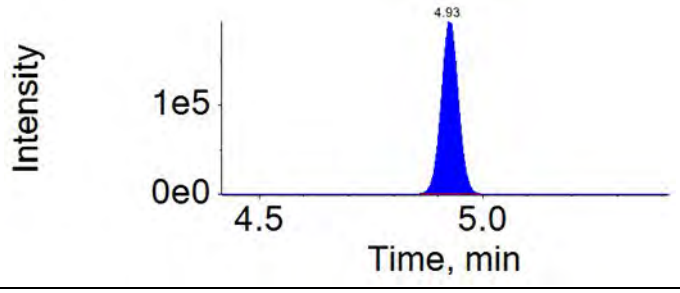
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0



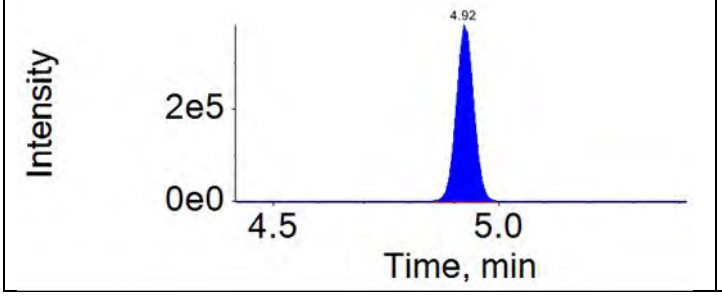


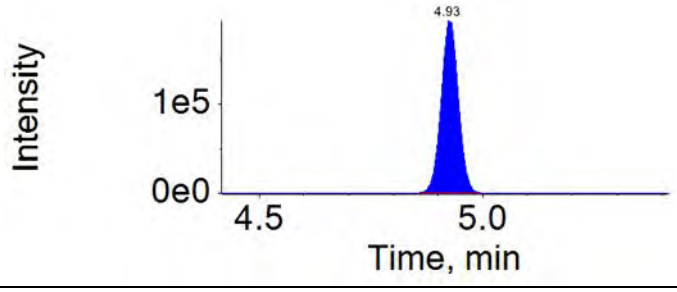
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

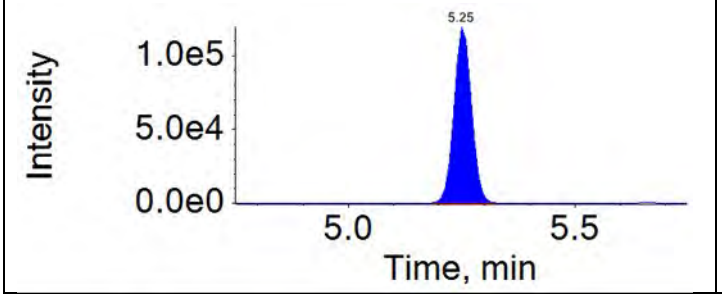
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

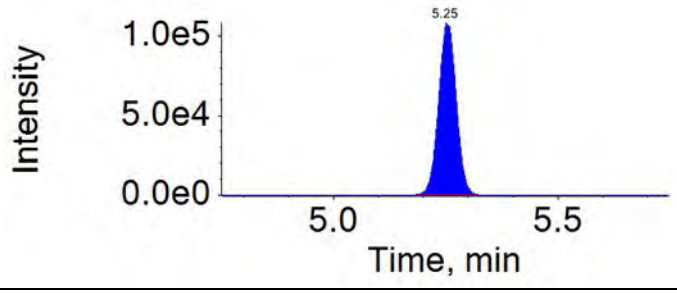
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0



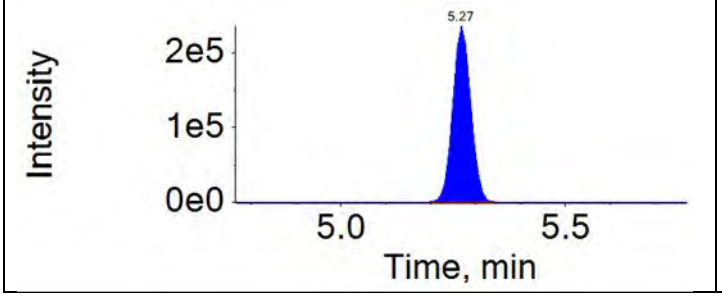


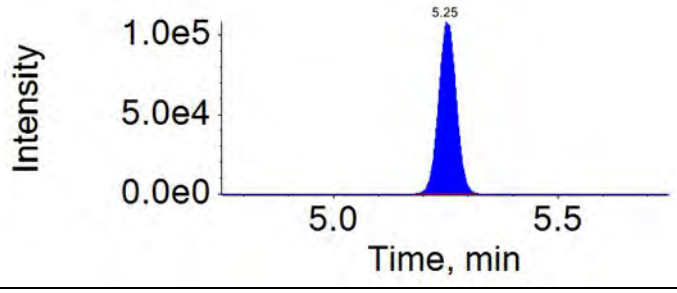
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0



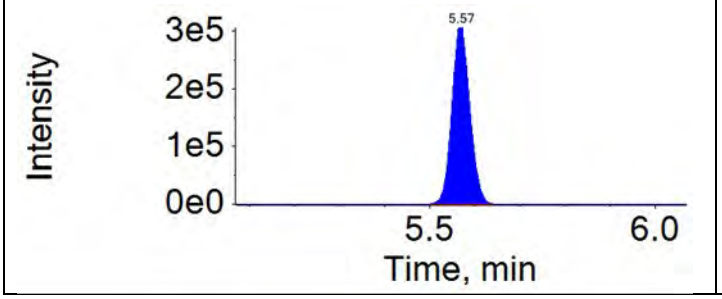


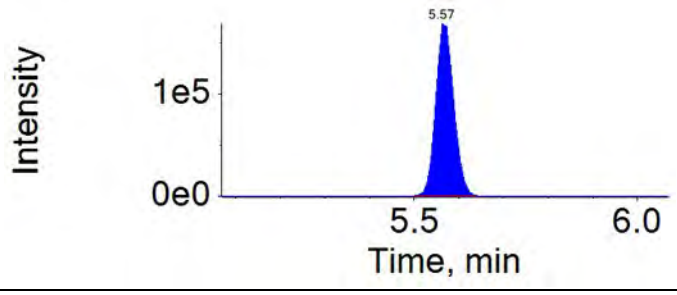
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0





Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0

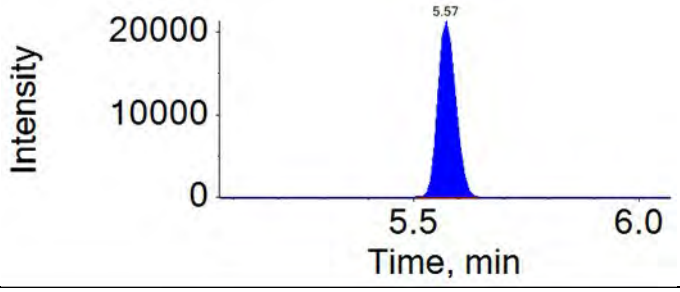
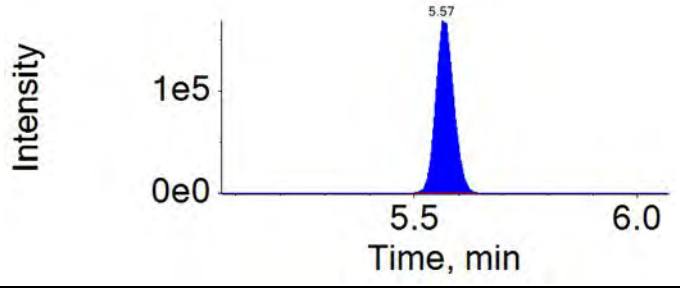


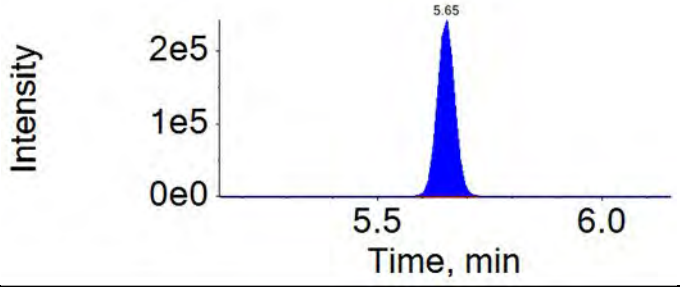
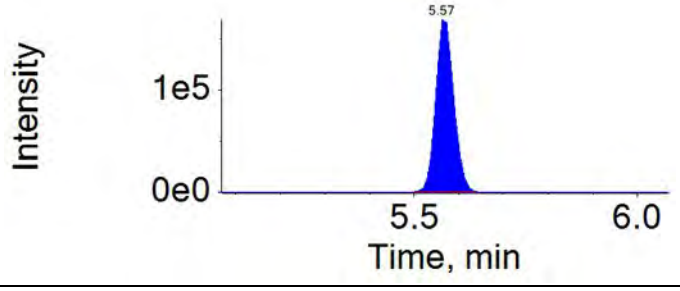


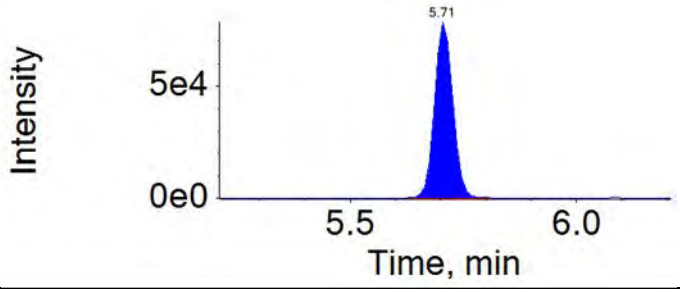
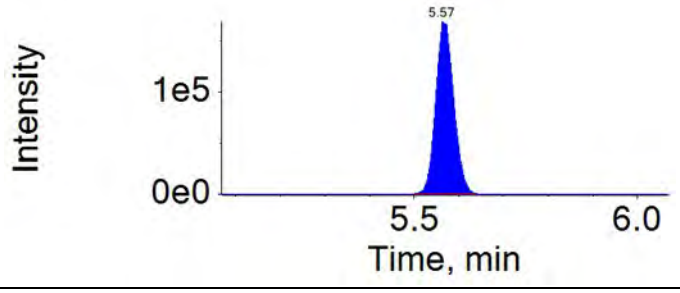
APPROVED
By MCD at 5:00 pm, 11/28/18

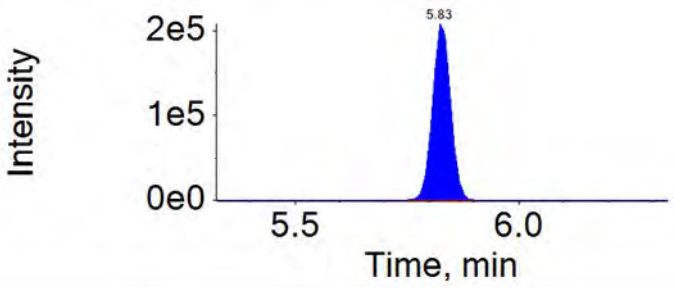
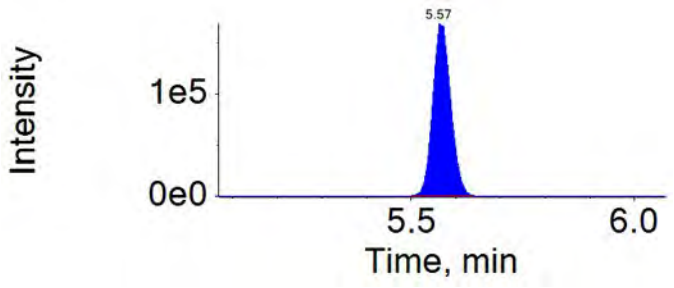
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

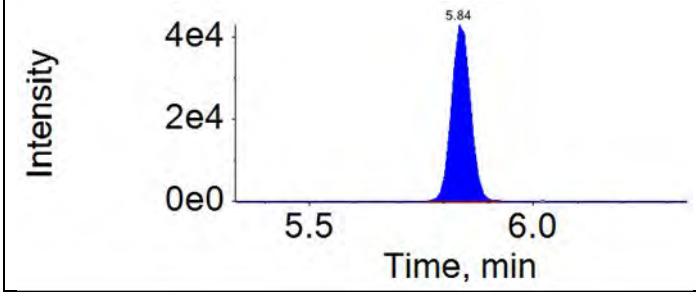
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

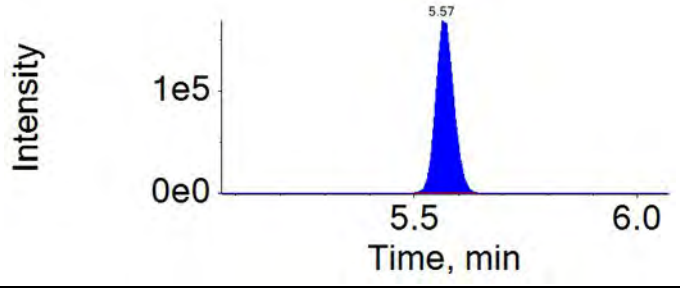
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

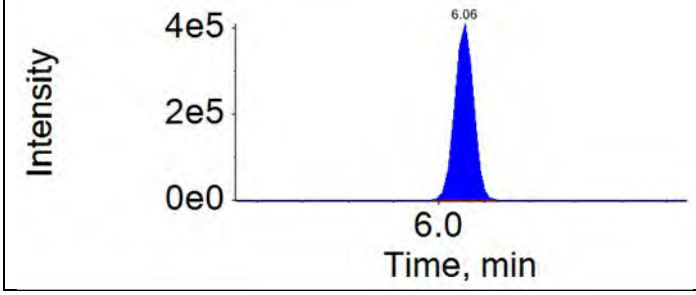
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

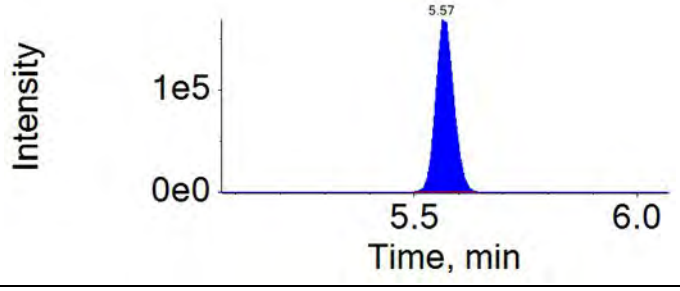
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



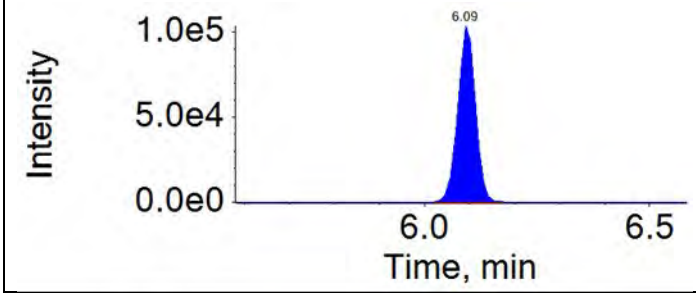


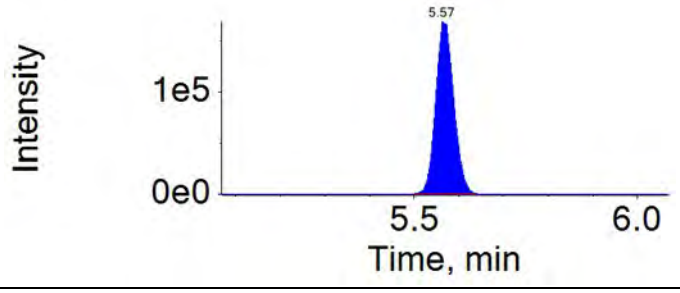
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



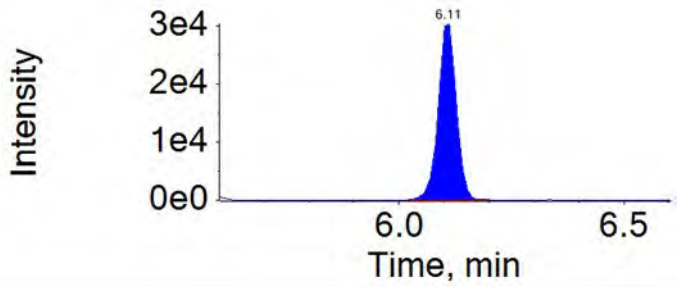


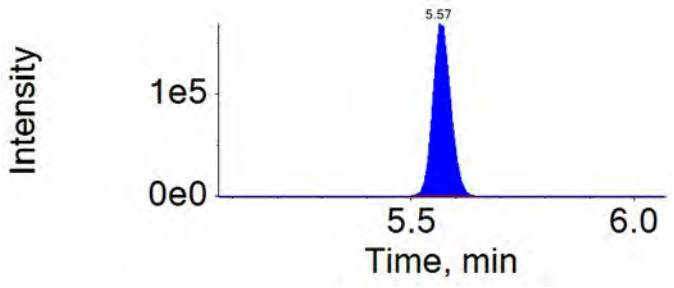
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



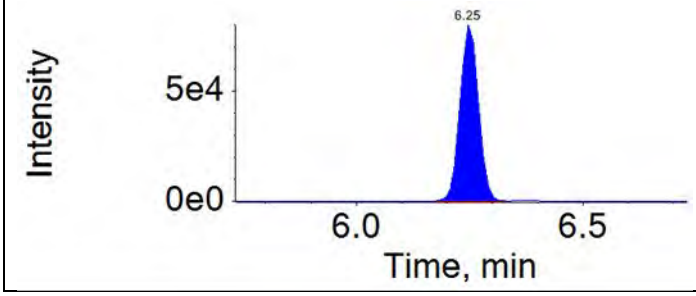


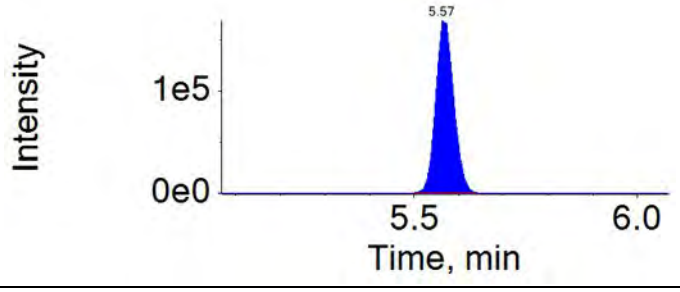
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

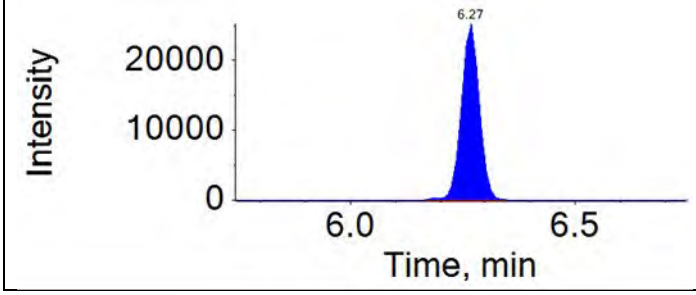
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

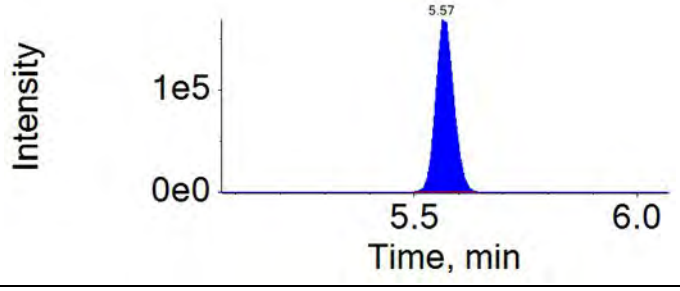
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



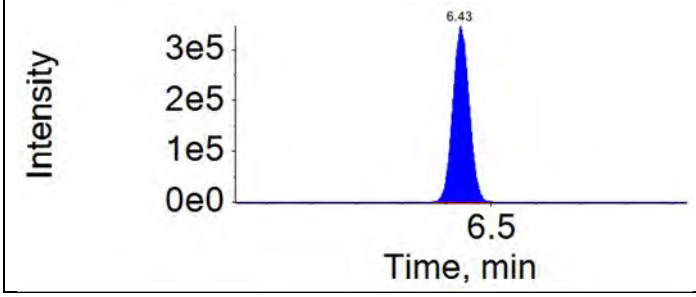


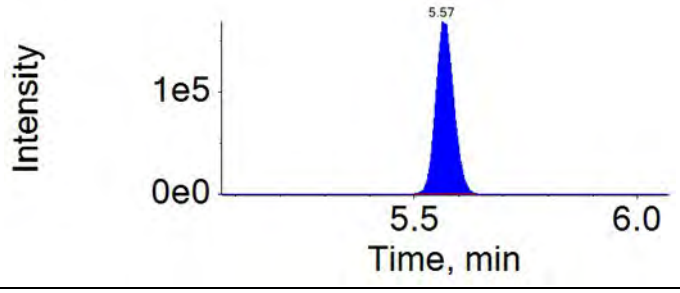
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



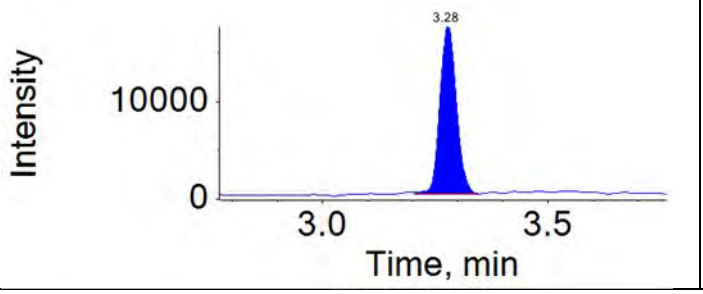


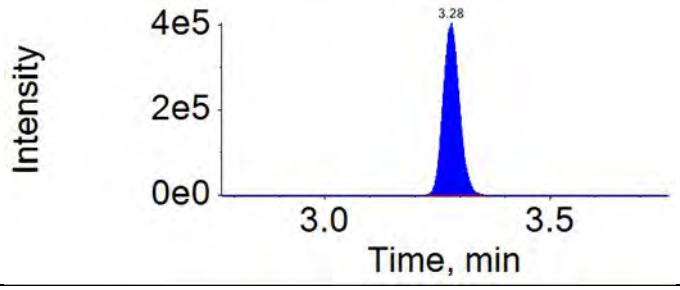
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

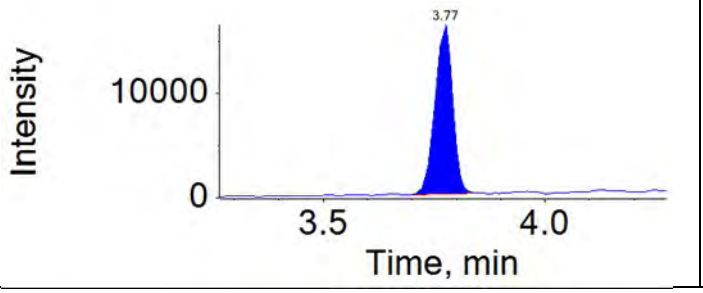
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

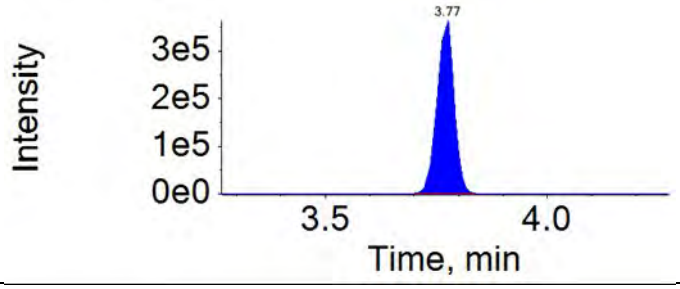
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



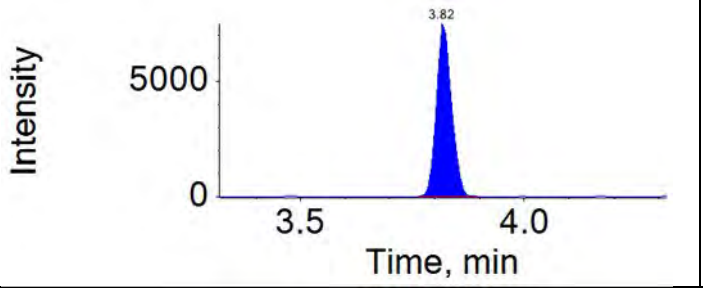


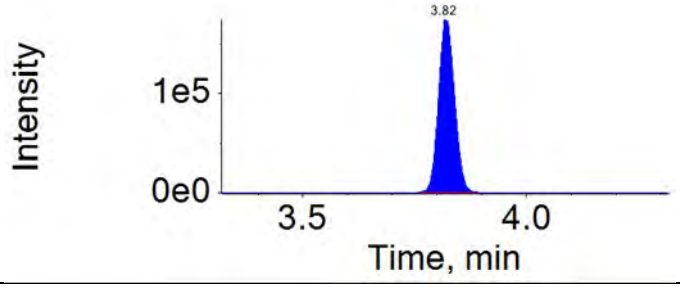
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



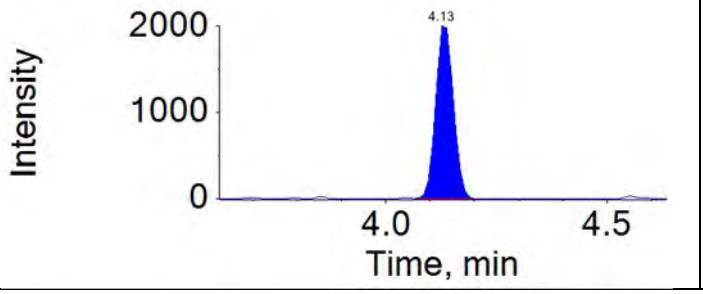


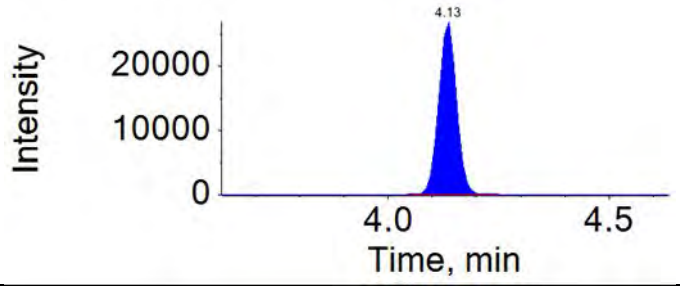
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



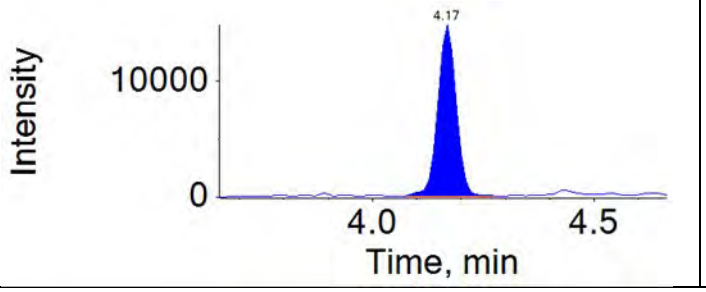


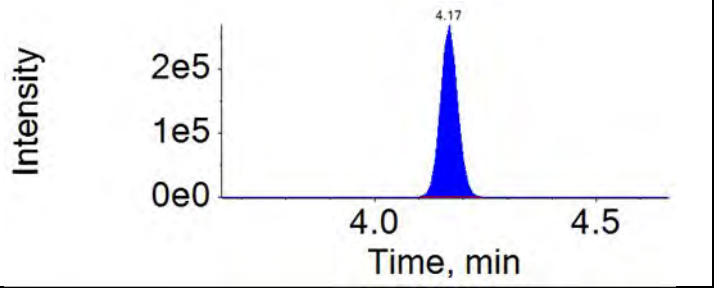
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

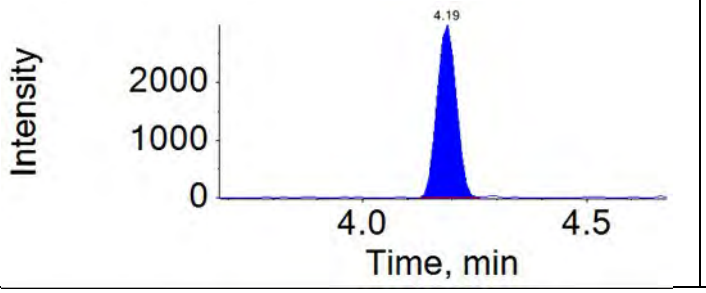
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

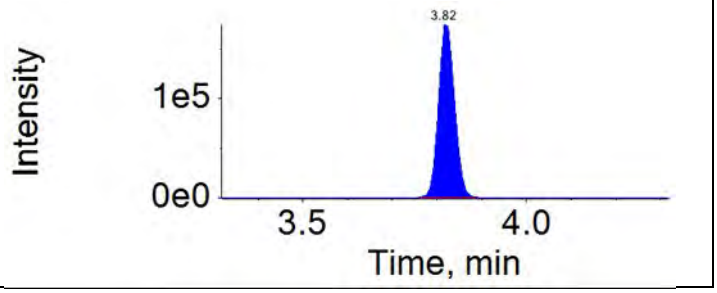
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



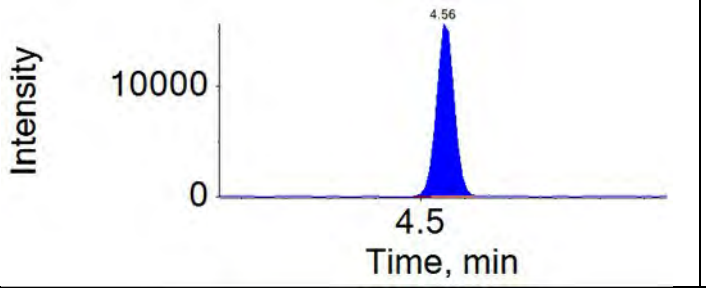


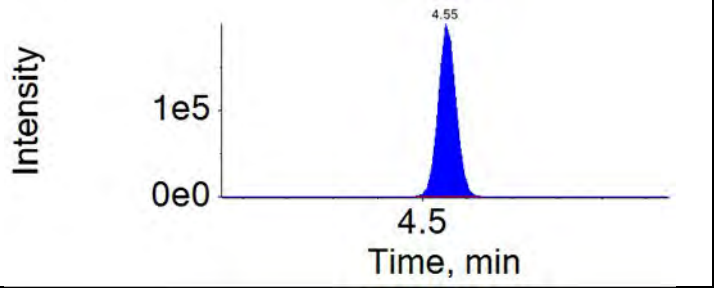
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



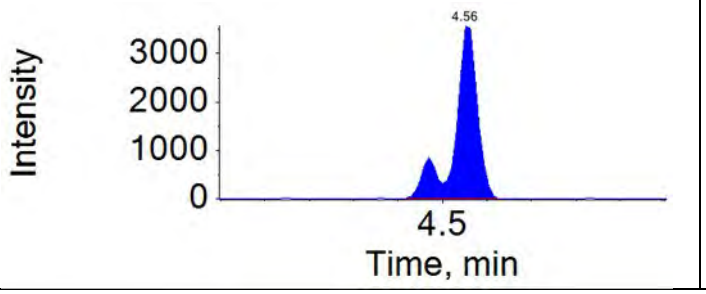


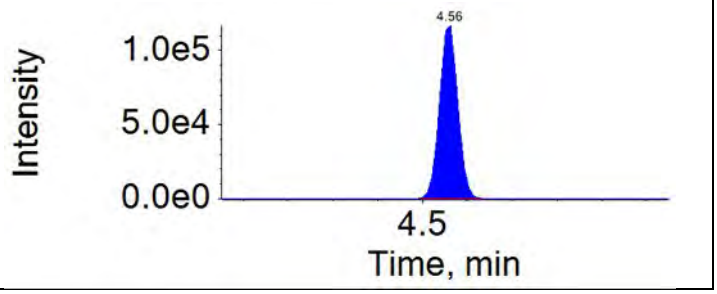
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

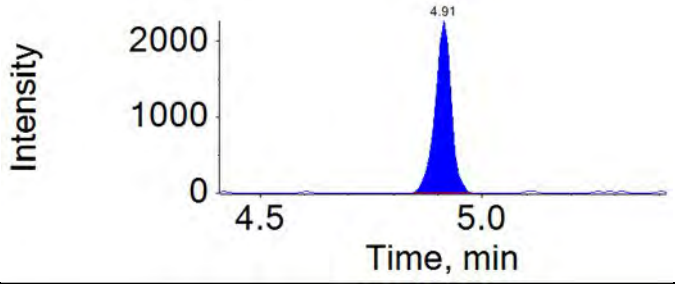
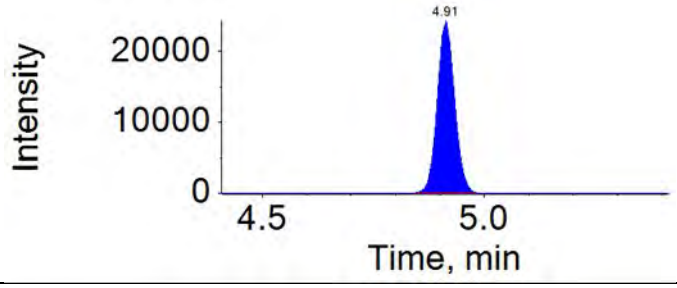


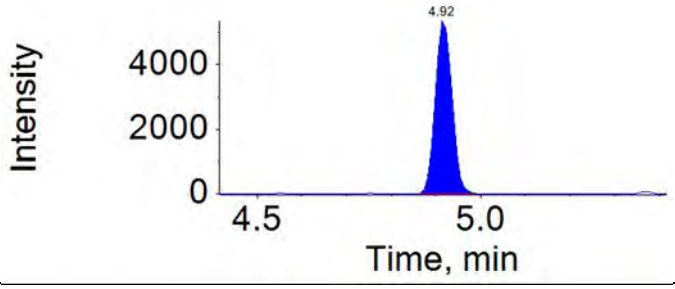
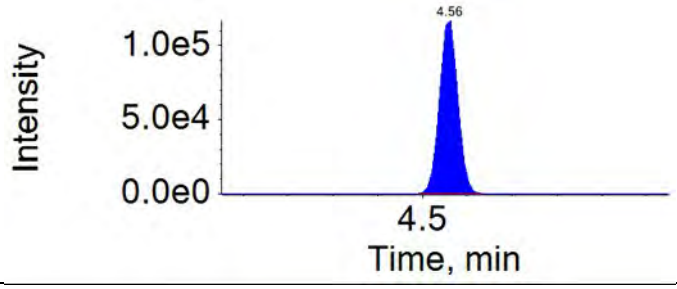


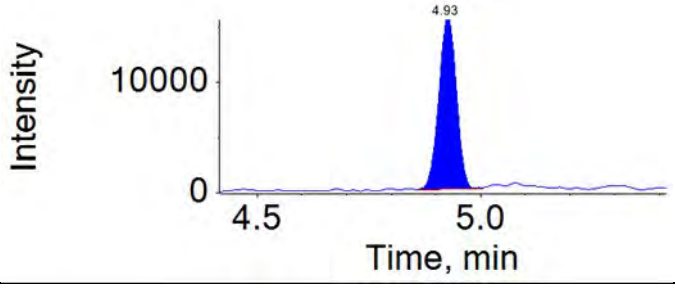
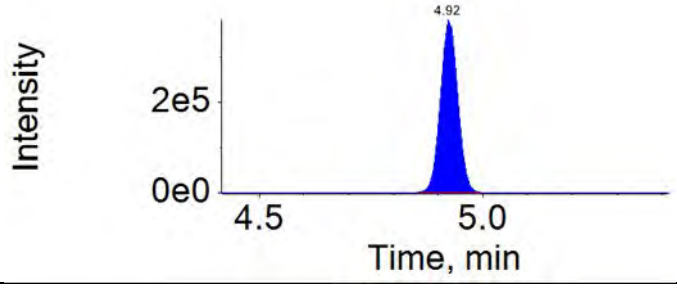
APPROVED
By MCD at 5:00 pm, 11/28/18

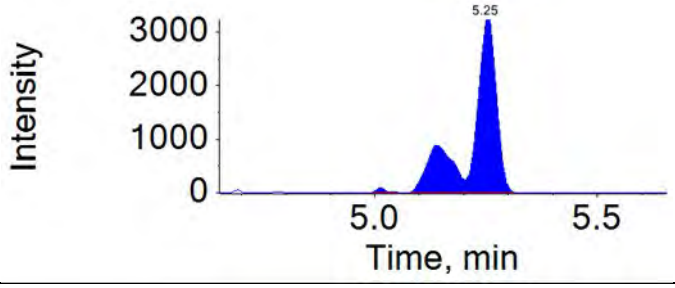
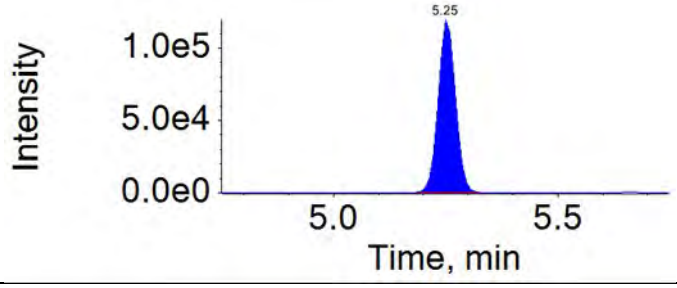
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

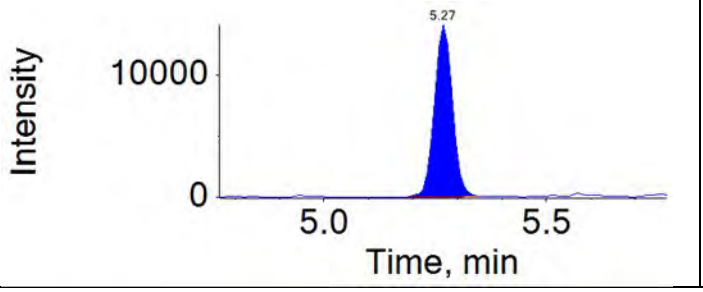
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

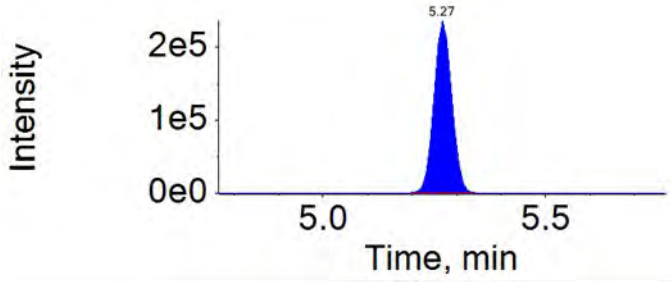
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

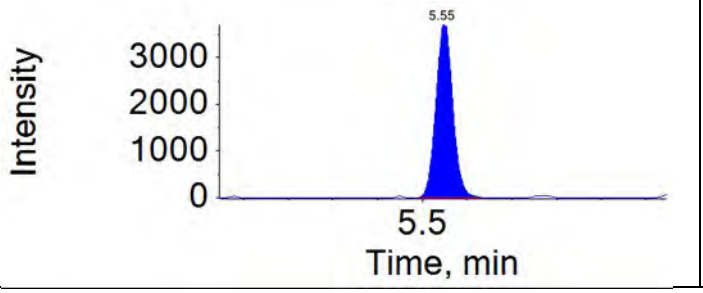
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

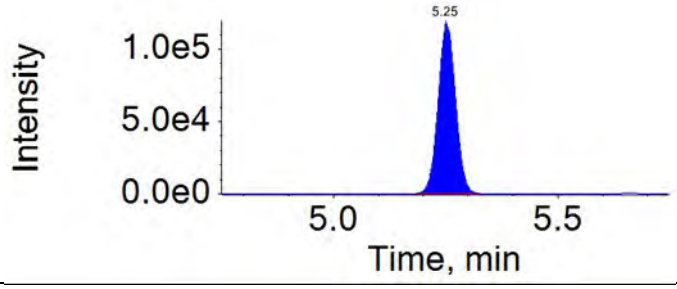
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



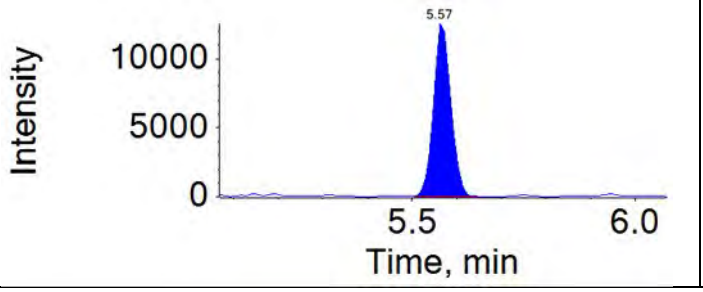


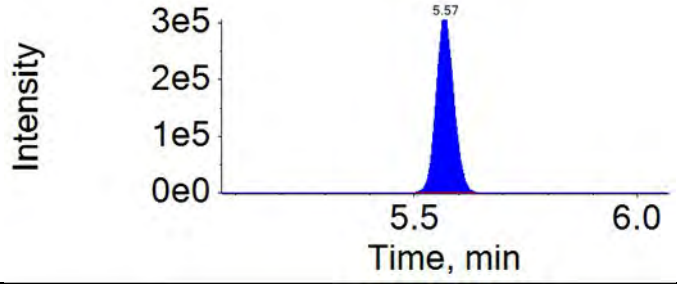
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



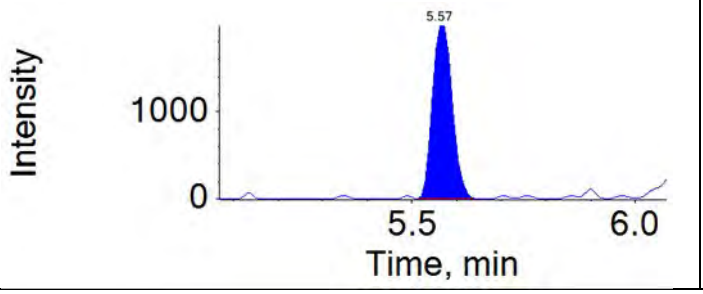


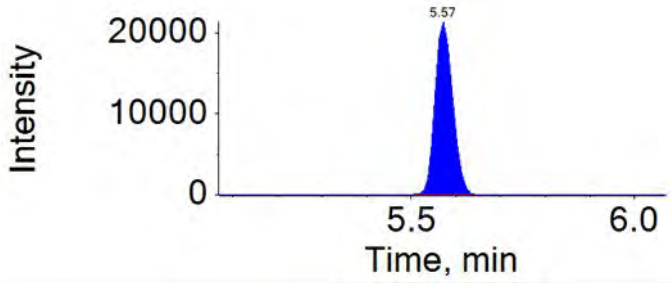
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



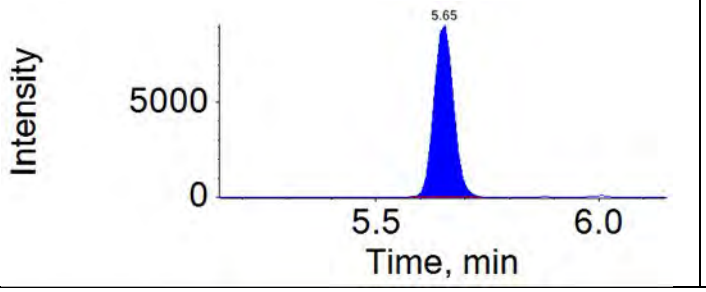


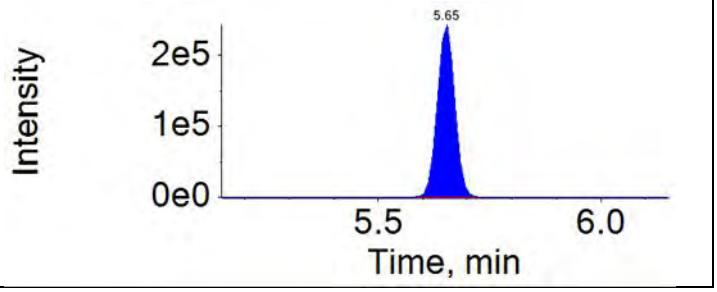
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

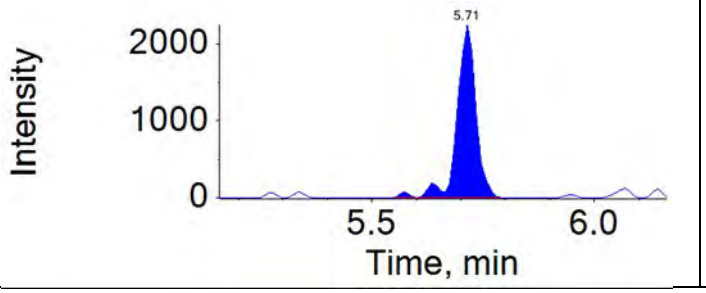
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

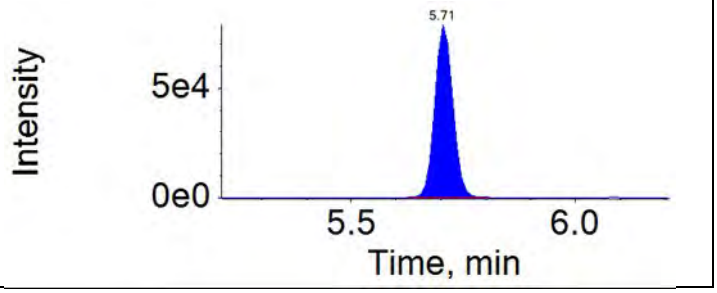
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



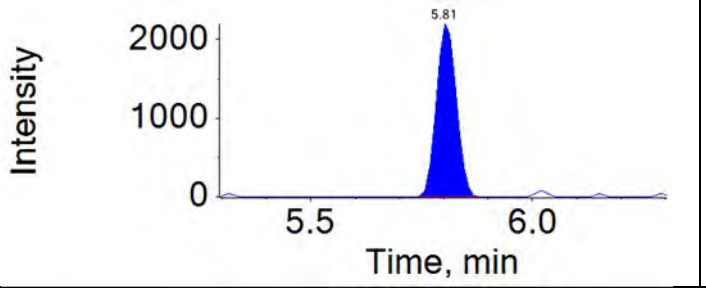


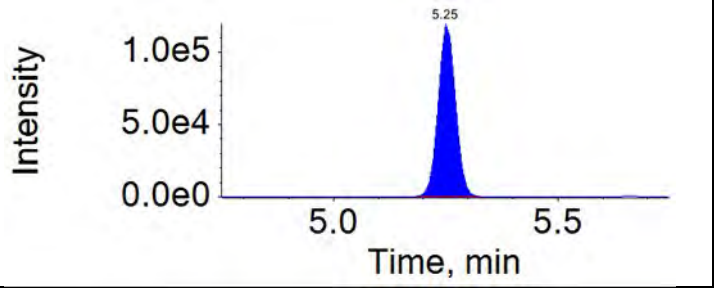
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



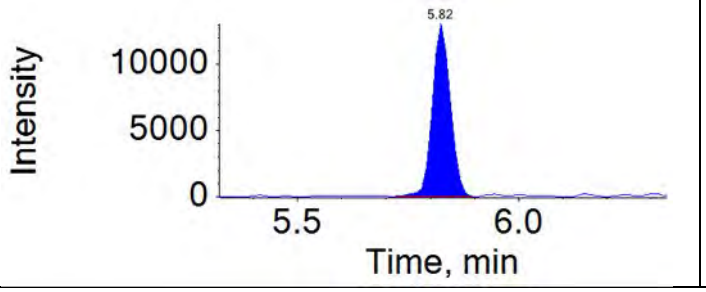


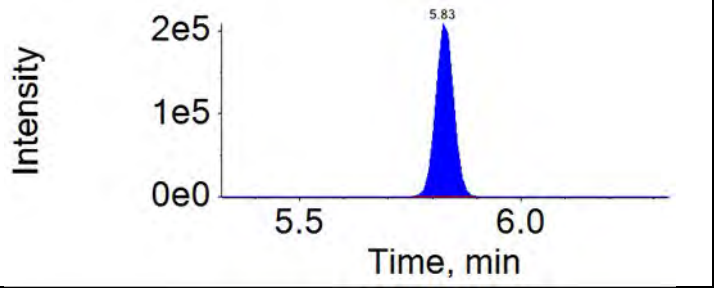
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



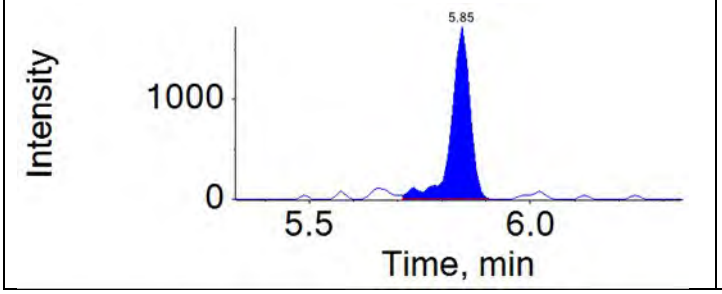


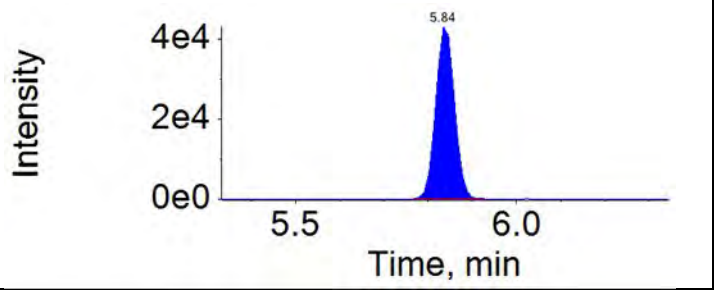
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

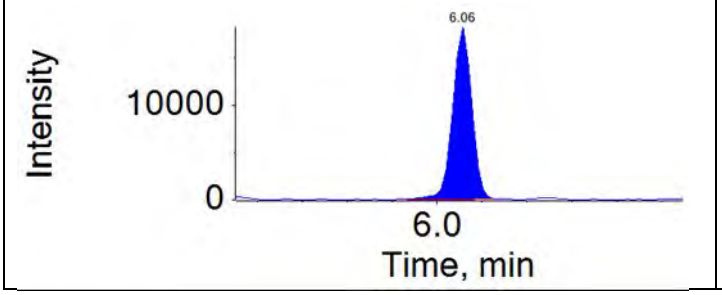
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

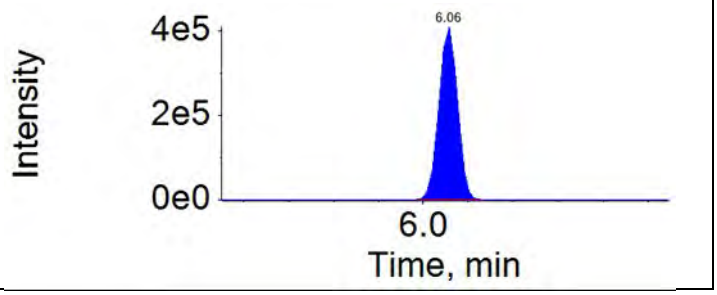
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



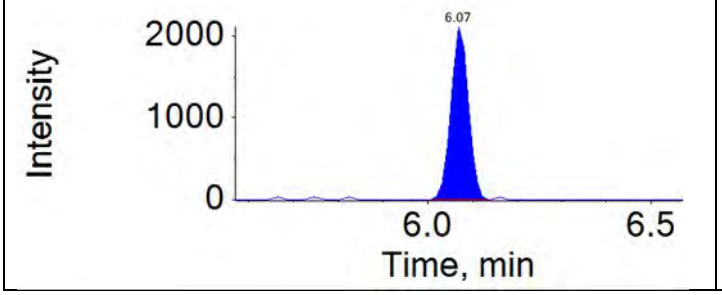


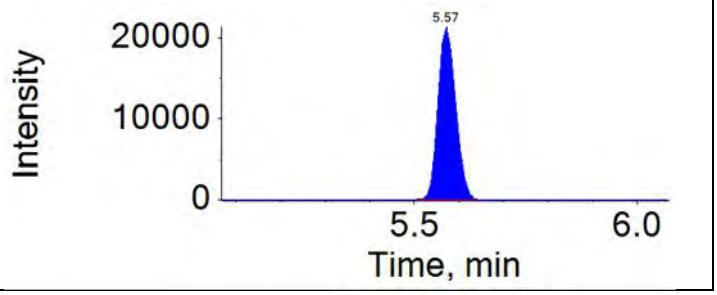
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



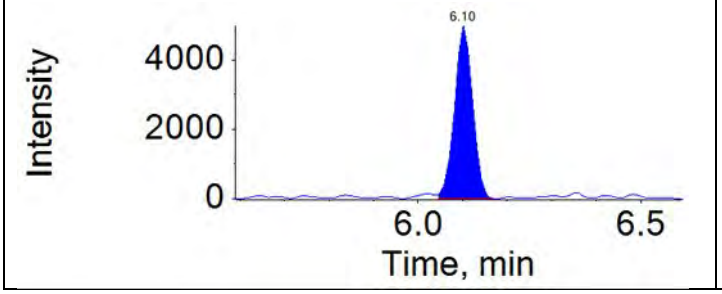


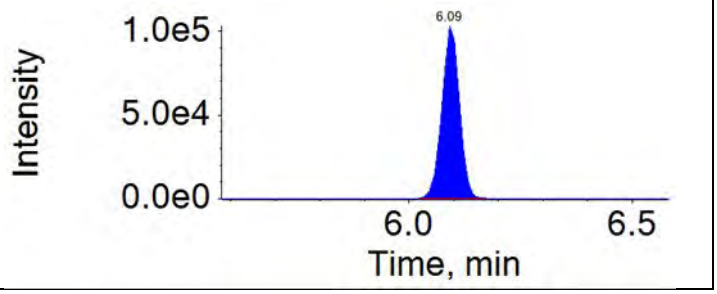
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



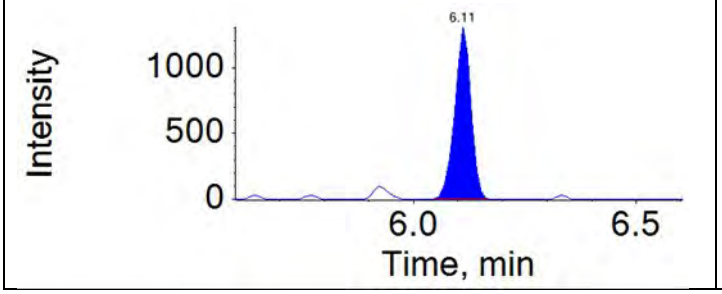


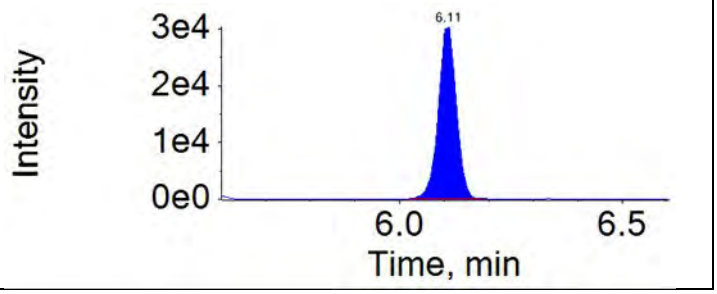
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

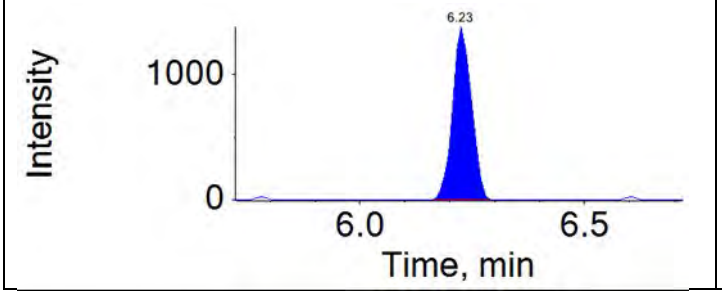
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

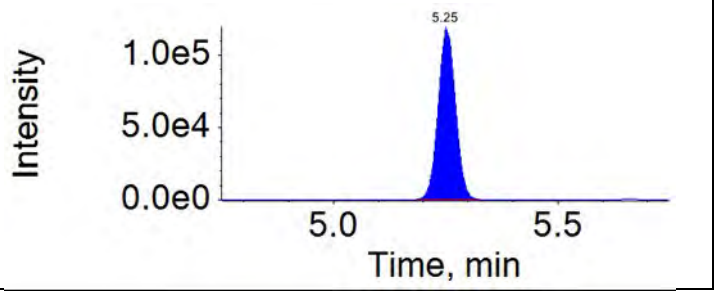
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



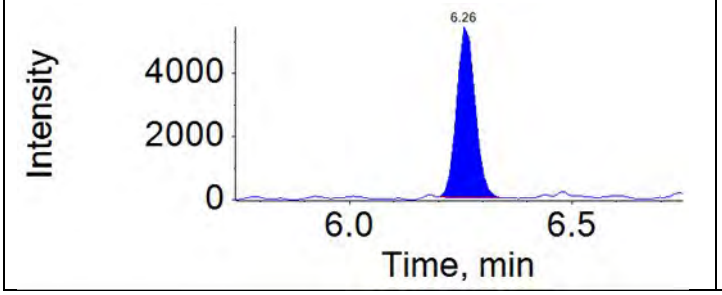


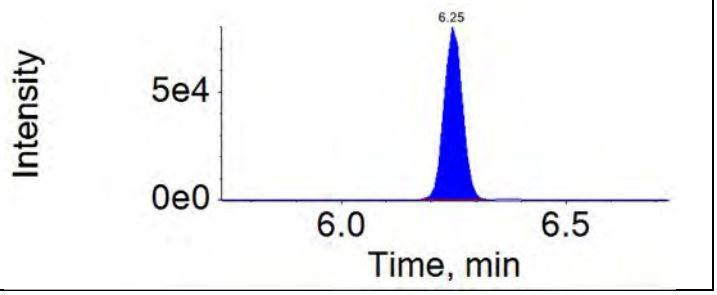
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



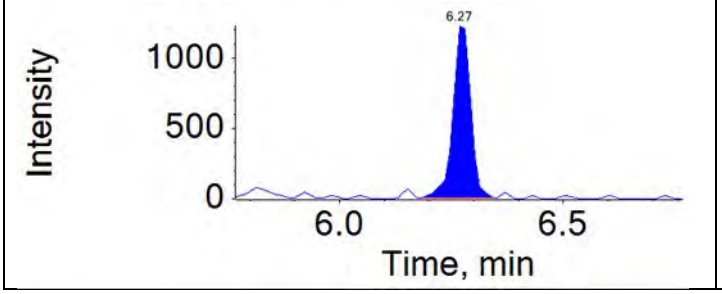


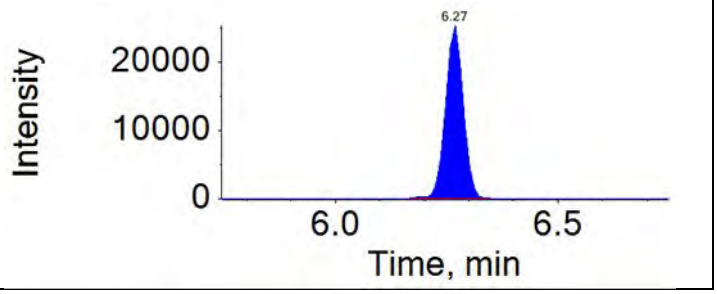
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

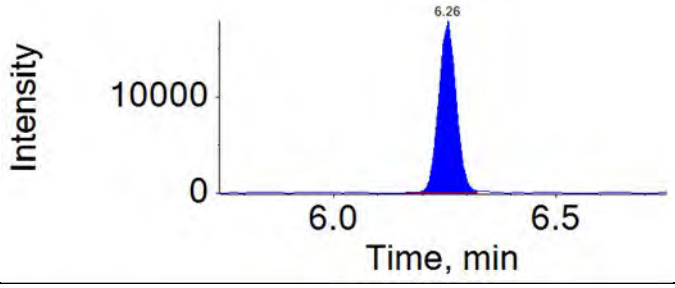
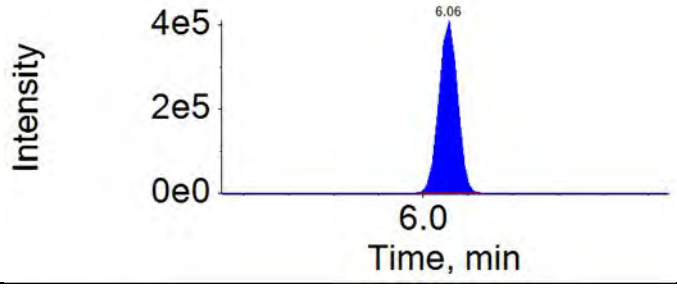


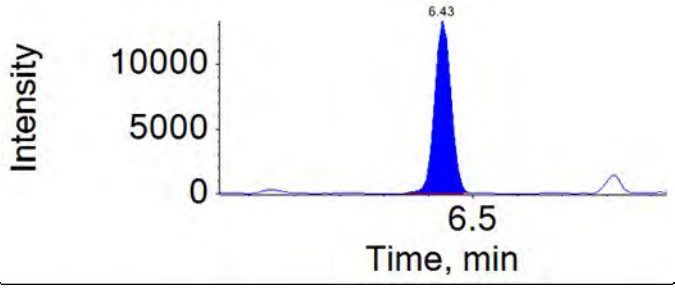
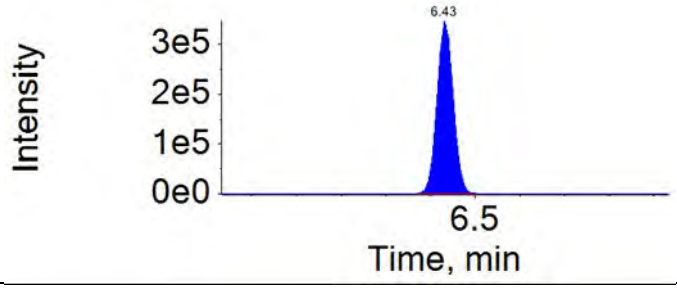


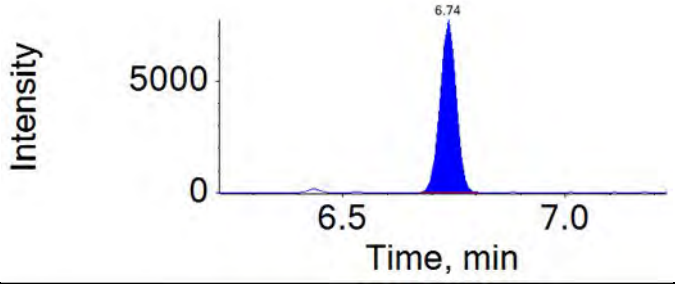
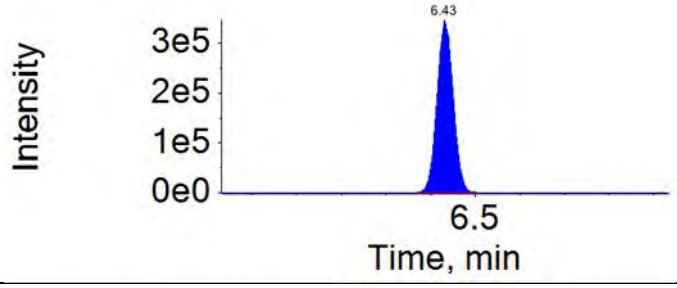
APPROVED
By MCD at 5:00 pm, 11/28/18

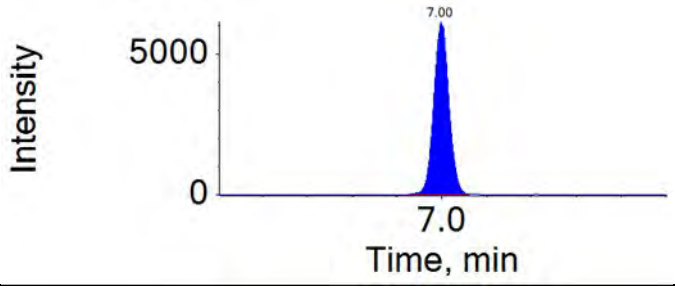
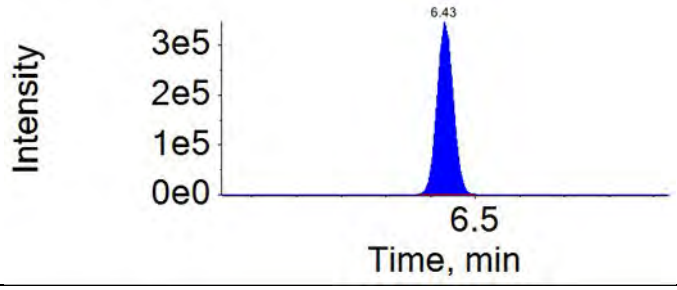
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

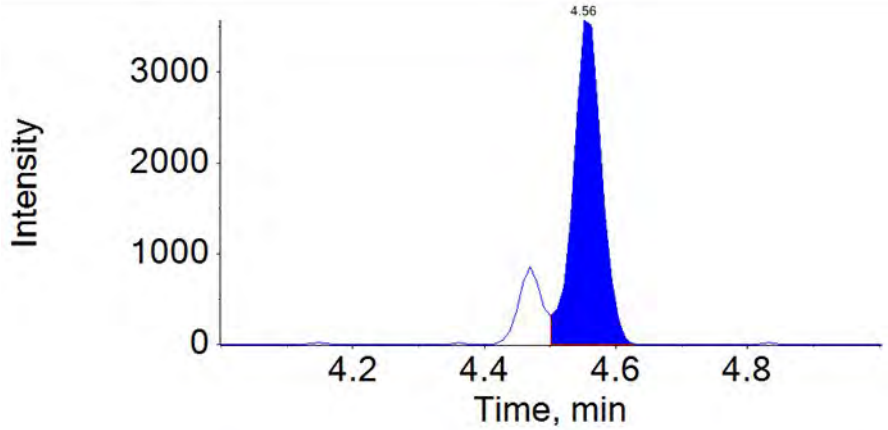
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

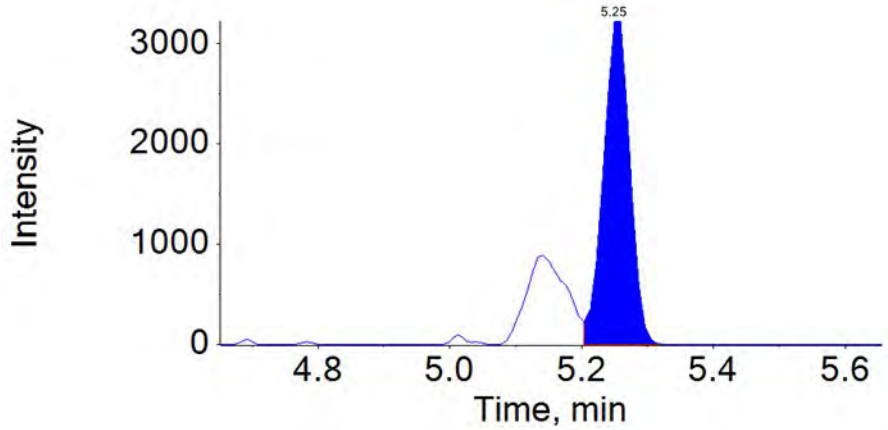
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.56
Peak Area:
10746.52
Mass Range:
399.0 / 80.0
File Name:
18NOV28DCAL-06.wiff
Sample Name:
CAL1



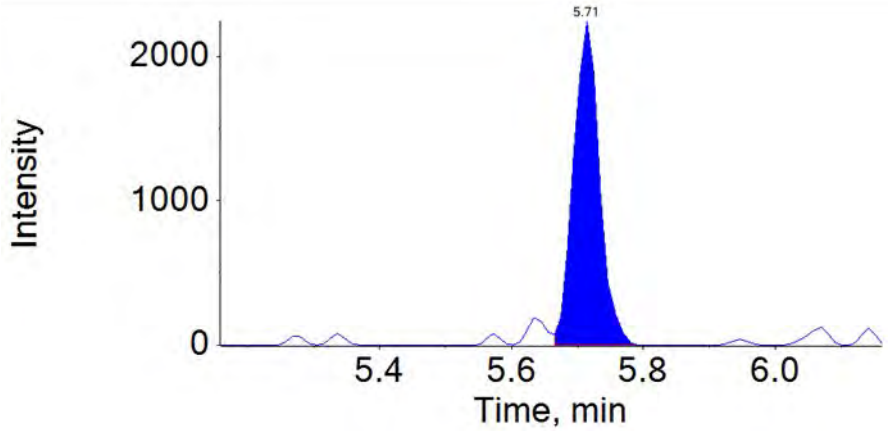
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
9112.28
Mass Range:
499.0 / 80.0
File Name:
18NOV28DCAL-06.wiff
Sample Name:
CAL1



Integration Comment: incorrect integration

Component Name:
NMeFOSAA
RT (min.):
5.71
Peak Area:
6150.80
Mass Range:
570.0 / 419.0
File Name:
18NOV28DCAL-06.wiff
Sample Name:
CAL1



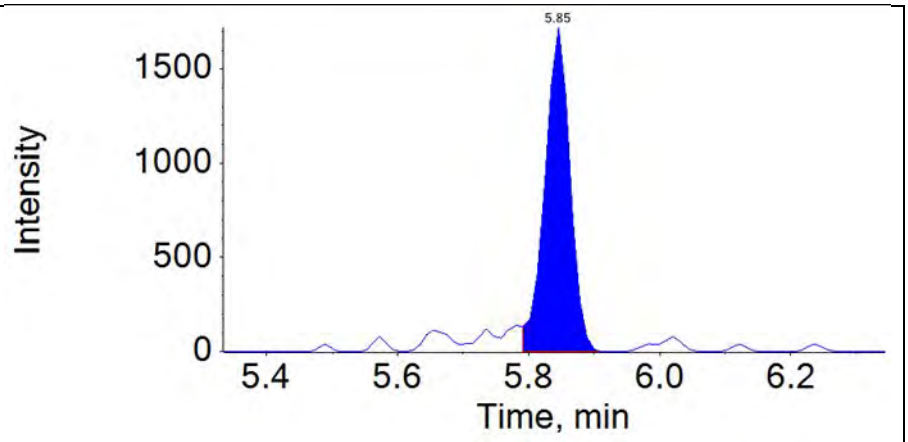
Integration Comment: incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

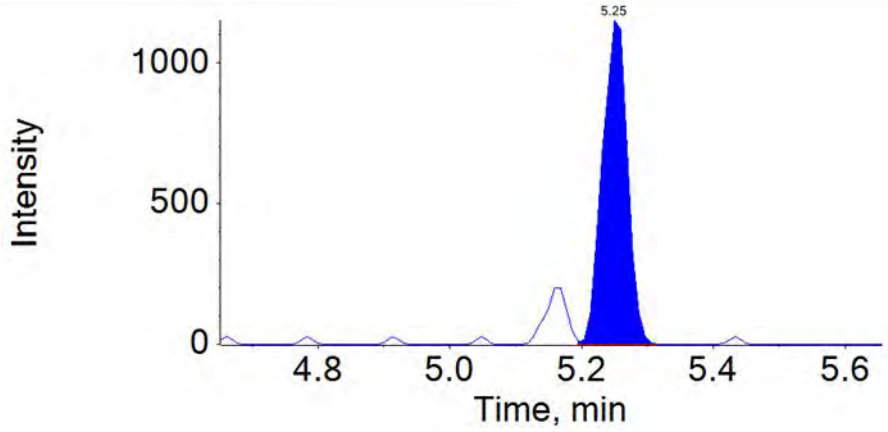
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NEtFOSAA
RT (min.):
5.85
Peak Area:
4598.18
Mass Range:
584.0 / 419.0
File Name:
18NOV28DCAL-06.wiff
Sample Name:
CAL1



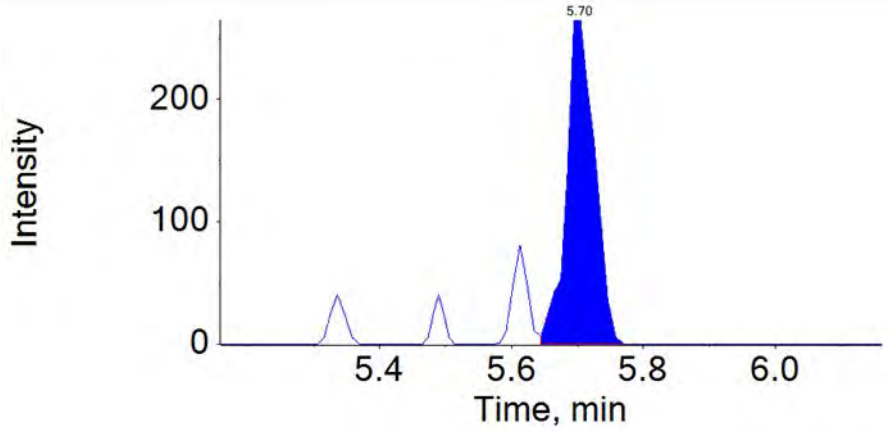
Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.25
Peak Area:
3075.05
Mass Range:
499.0 / 99.0
File Name:
18NOV28DCAL-06.wiff
Sample Name:
CAL1



Integration Comment: incorrect integration

Component Name:
NMeFOSAA_2
RT (min.):
5.70
Peak Area:
797.95
Mass Range:
570.0 / 483.0
File Name:
18NOV28DCAL-06.wiff
Sample Name:
CAL1



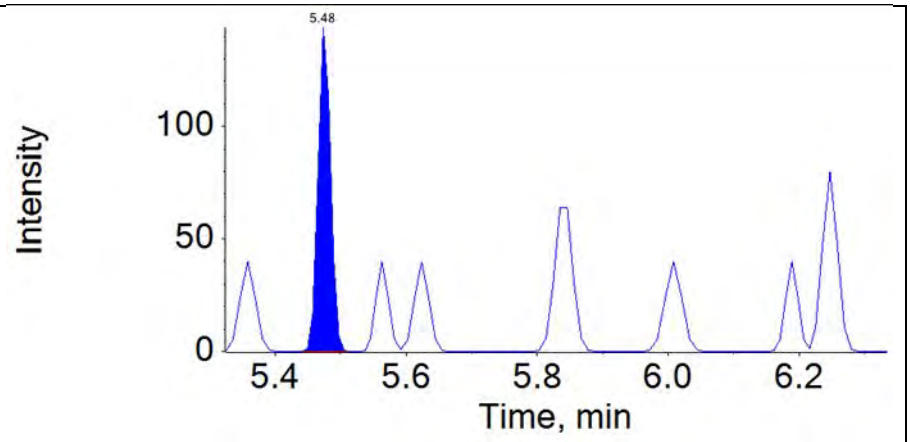
Integration Comment: incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

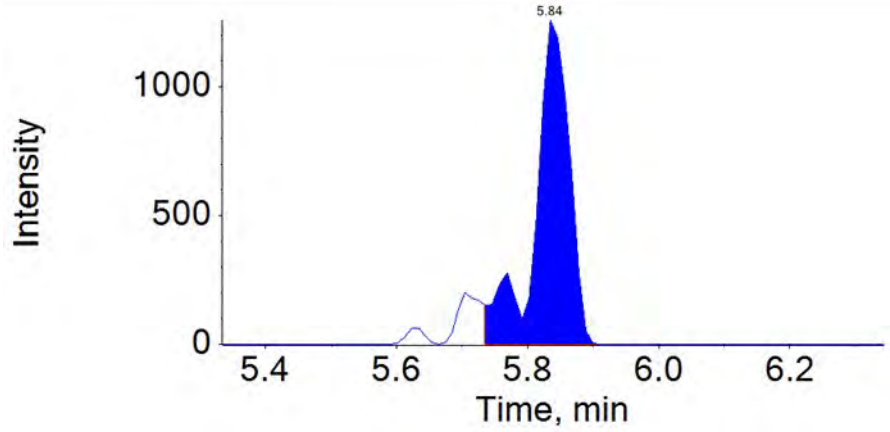
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFUnDA_2
RT (min.):
5.48
Peak Area:
191.73
Mass Range:
563.0 / 169.0
File Name:
18NOV28DCAL-06.wiff
Sample Name:
CAL1



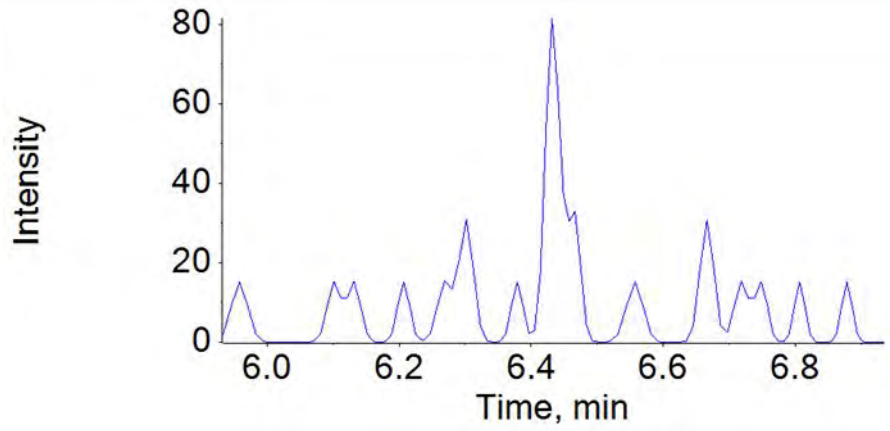
Integration Comment: incorrect integration

Component Name:
NEtFOSAA_2
RT (min.):
5.84
Peak Area:
4606.52
Mass Range:
584.0 / 526.0
File Name:
18NOV28DCAL-06.wiff
Sample Name:
CAL1



Integration Comment: incorrect integration

Component Name:
PFTeDA_2
RT (min.):
N/A
Peak Area:
N/A
Mass Range:
713.0 / 169.0
File Name:
18NOV28DCAL-06.wiff
Sample Name:
CAL1



Integration Comment: incorrect integration

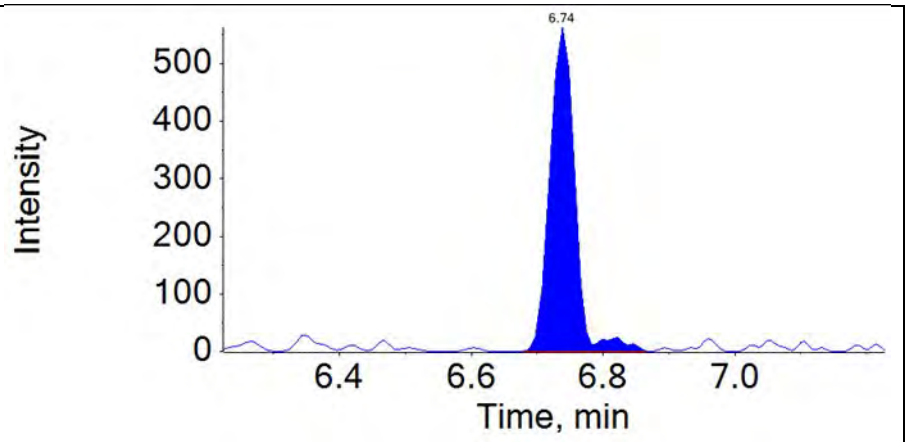
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxDA_2
RT (min.):
6.74
Peak Area:
1494.10
Mass Range:
813.0 / 169.0
File Name:
18NOV28DCAL-06.wiff
Sample Name:
CAL1



Integration Comment: incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Ion Ratio Report

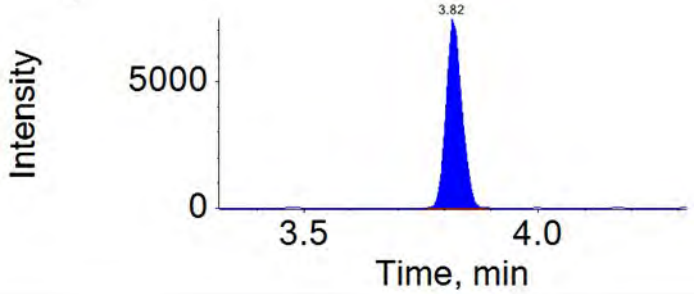
Sample Name: CAL1 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-06.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	17465.33	A	0.3655	0.3500			
PFBS_2	3.82	1.00	6112.35	A	0.3655	0.3500	-4	50	
4:2-FTS	4.13	1.00	5603.85	A	0.6383	0.6370			
4:2-FTS_2	4.14	1.00	3569.81	A	0.6383	0.6370	0	50	
PFHxA	4.17	1.00	42281.82	A	0.0103	0.0074			
PFHxA_2	4.16	1.00	313.30	A	0.0103	0.0074	-28	50	
PFPeS	4.19	1.10	8955.98	A	0.4976	0.5230			
PFPeS_2	4.18	1.10	4684.40	A	0.4976	0.5230	5	50	
PFHpA	4.56	1.00	42530.61	A	0.0557	0.0604			
PFHpA_2	4.55	1.00	2568.03	A	0.0557	0.0604	8	50	
PFHxS	4.56	1.00	12830.81	M	0.3693	0.3957			
PFHxS_2	4.56	1.00	5077.16	A	0.3693	0.3957	7	50	
6:2-FTS	4.91	1.00	5676.75	A	0.6625	0.7816			
6:2-FTS_2	4.91	1.00	4436.90	A	0.6625	0.7816	18	50	
PFHpS	4.92	1.08	13921.77	A	0.3915	0.3588			
PFHpS_2	4.92	1.08	4994.54	A	0.3915	0.3588	-8	50	
PFOA	4.93	1.00	42517.38	A	0.0573	0.0573			
PFOA_2	4.93	1.00	2436.09	A	0.0573	0.0573	0	50	
PFOS	5.25	1.00	13060.03	M	0.2960	0.2736			
PFOS_2	5.25	1.00	3573.10	M	0.2960	0.2736	-8	50	
PFNA	5.27	1.00	39485.10	A	0.0201	0.0194			
PFNA_2	5.27	1.00	766.34	A	0.0201	0.0194	-3	50	
PFNS	5.55	1.06	9756.60	A	0.4794	0.4912			
PFNS_2	5.55	1.06	4792.59	A	0.4794	0.4912	2	50	
PFDA	5.57	1.00	33621.18	A	0.0075	0.0082			
PFDA_2	5.57	1.00	276.74	A	0.0075	0.0082	10	50	
8:2-FTS	5.57	1.00	6138.74	A	0.5380	0.4422			
8:2-FTS_2	5.57	1.00	2714.43	A	0.5380	0.4422	-18	50	
NMeFOSAA	5.71	1.00	6660.95	M	0.2305	0.1393			
NMeFOSAA_2	5.70	1.00	927.90	M	0.2305	0.1393	-40	50	
PFDS	5.81	1.11	6850.74	A	0.5356	0.6929			
PFDS_2	5.80	1.10	4746.55	A	0.5356	0.6929	29	50	
PFUnDA	5.82	1.00	36428.01	A	0.0038	0.0036			
PFUnDA_2	5.84	1.00	129.75	M	0.0038	0.0036	-6	50	
NEtFOSAA	5.85	1.00	5069.19	M	0.7356	1.0075			
NEtFOSAA_2	5.84	1.00	5107.05	M	0.7356	1.0075	37	50	
PFDoDA	6.06	1.00	53386.61	A	0.0130	0.0169			
PFDoDA_2	6.06	1.00	904.01	A	0.0130	0.0169	30	50	
10:2-FTS	6.07	1.09	5717.74	A	0.6989	0.8898			
10:2-FTS_2	6.07	1.09	5087.40	A	0.6989	0.8898	27	50	
PFTrDA	6.26	1.03	48537.57	A	0.0090	0.0125			
PFTrDA_2	6.26	1.03	607.67	A	0.0090	0.0125	39	50	
PFTeDA	6.43	1.00	34099.24	A	0.0056	0.0053			
PFTeDA_2	6.43	1.00	180.96	M	0.0056	0.0053	-5	50	
PFHxDA	6.74	1.05	19206.41	A	0.0646	0.0740			
PFHxDA_2	6.74	1.05	1422.14	M	0.0646	0.0740	15	50	
PFODA	7.00	1.09	14377.98	A	0.0264	0.0304			
PFODA_2	7.00	1.09	436.46	A	0.0264	0.0304	15	50	

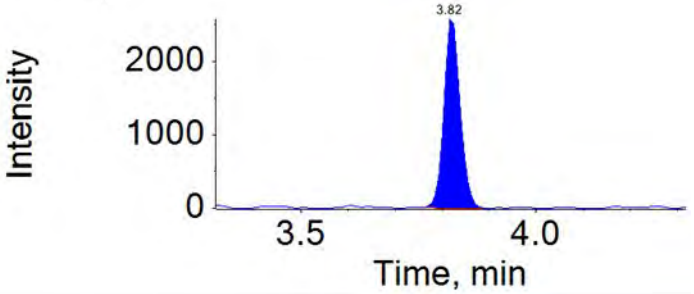
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

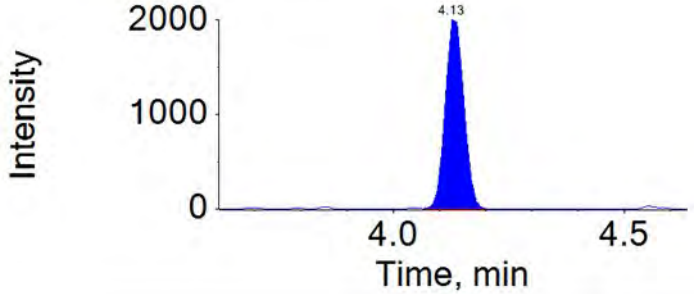
Component: PFBS
Primary Mass: 299.0 / 80.0



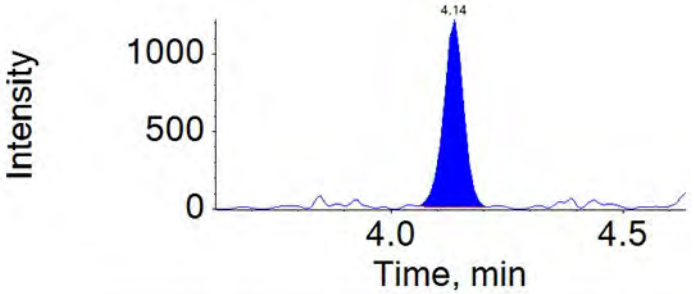
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



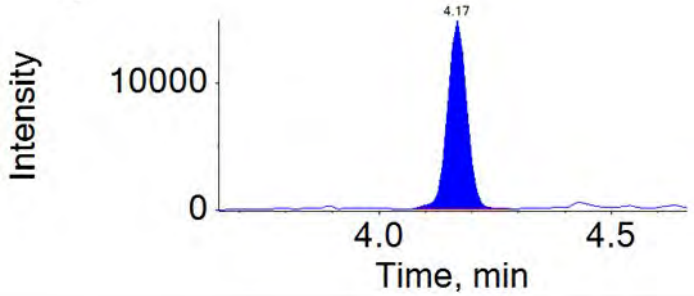
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



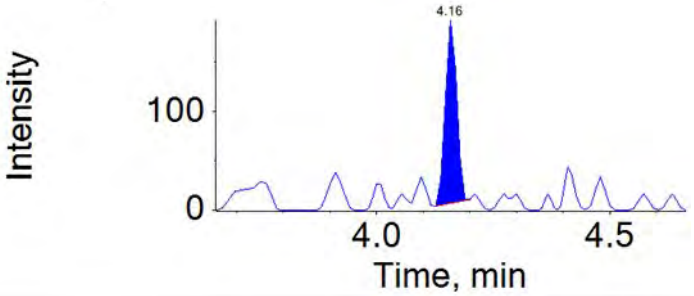
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



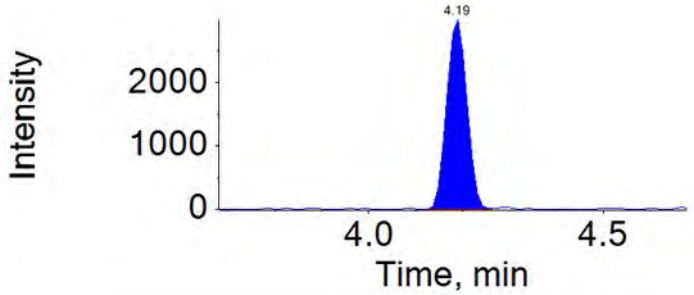
Component: PFHxA
Primary Mass: 313.0 / 269.0



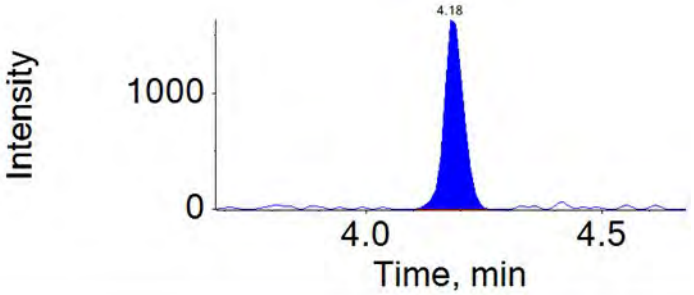
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



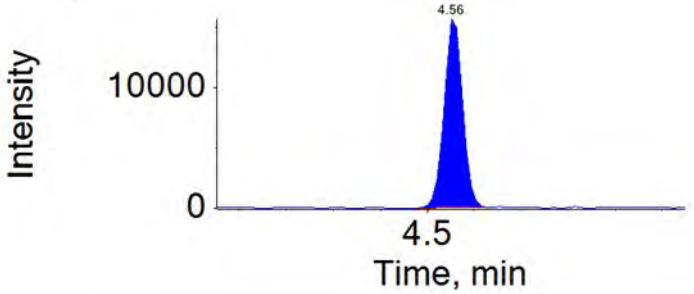
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



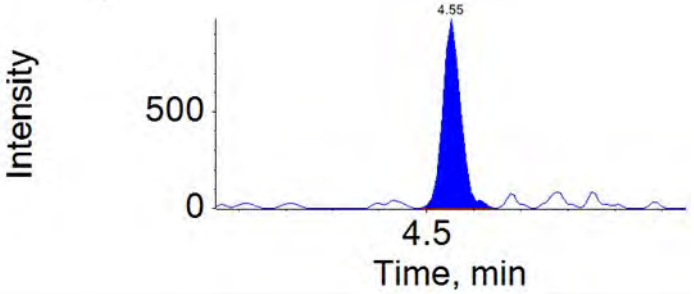
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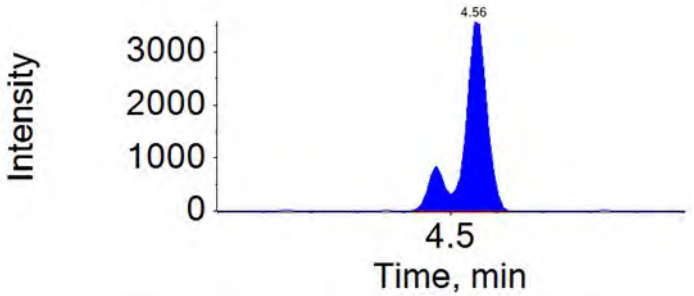
Component: PFHpA
Primary Mass: 363.0 / 319.0



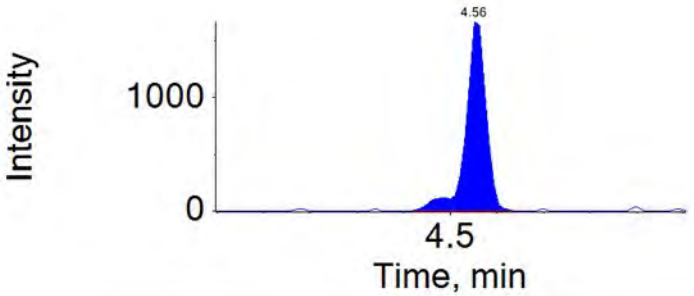
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



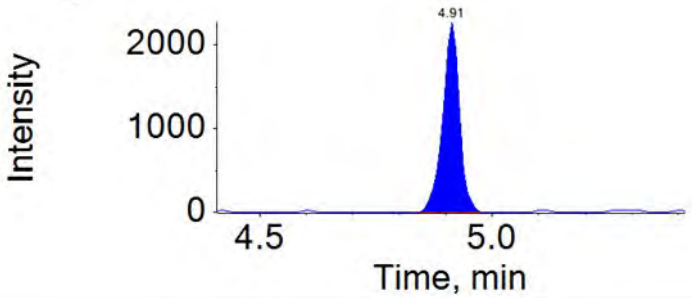
Component: PFHxS
Primary Mass: 399.0 / 80.0



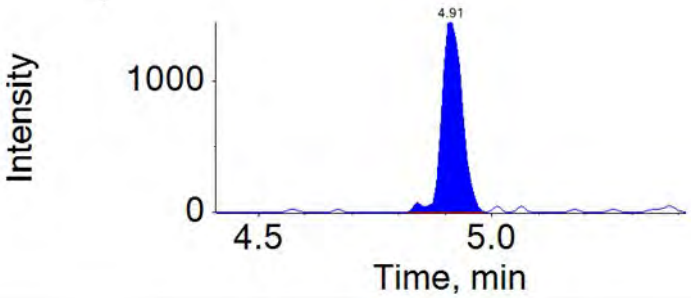
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



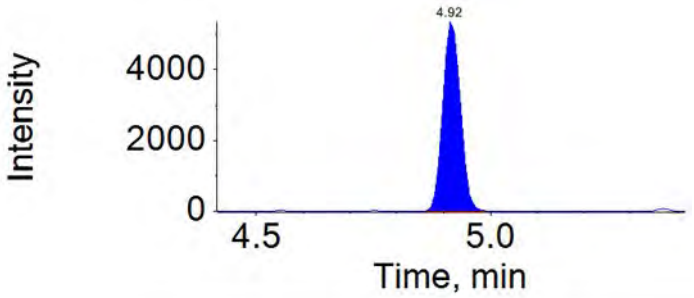
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



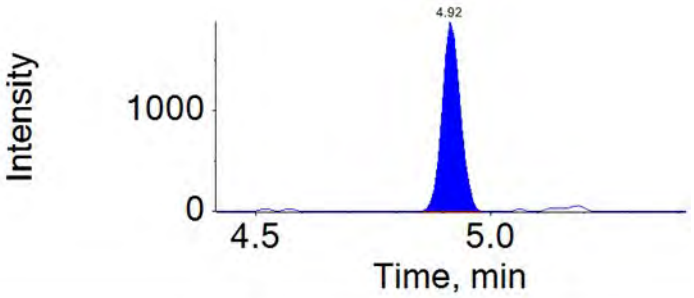
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



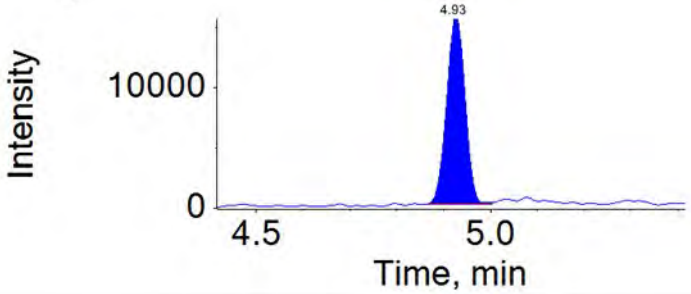
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



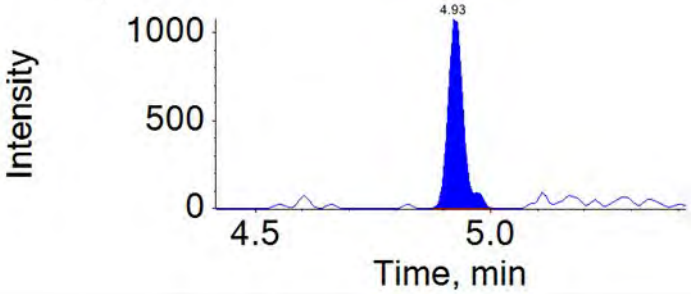
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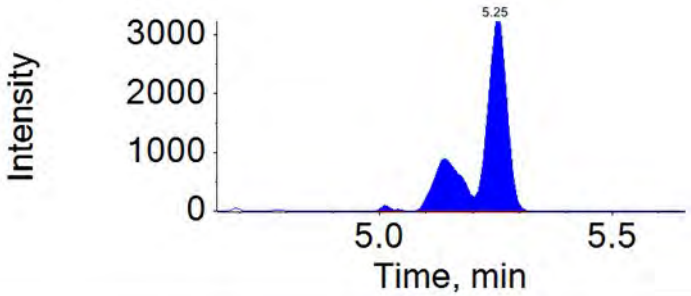
Component: PFOA
Primary Mass: 413.0 / 369.0



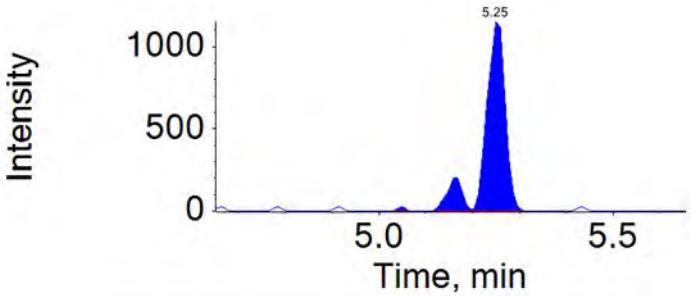
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



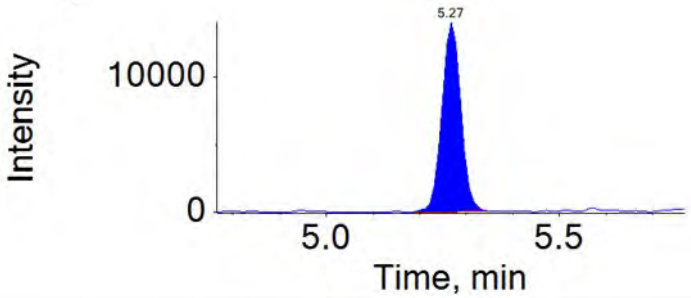
Component: PFOS
Primary Mass: 499.0 / 80.0



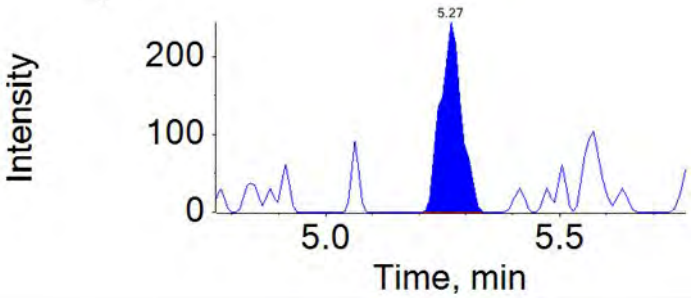
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



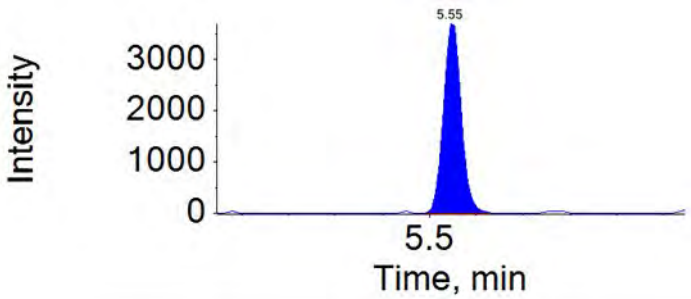
Component: PFNA
Primary Mass: 463.0 / 419.0



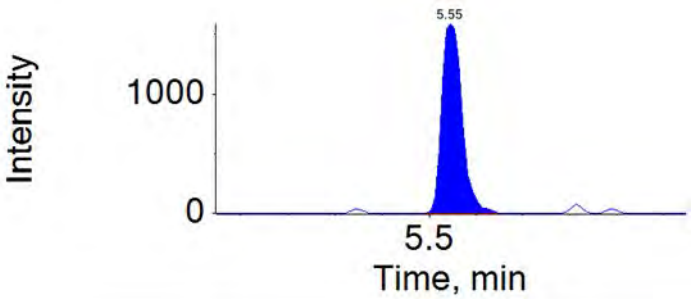
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



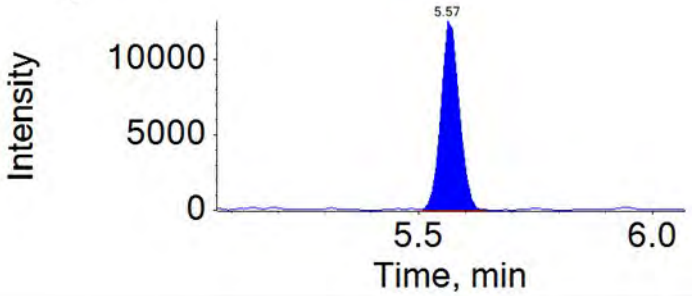
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



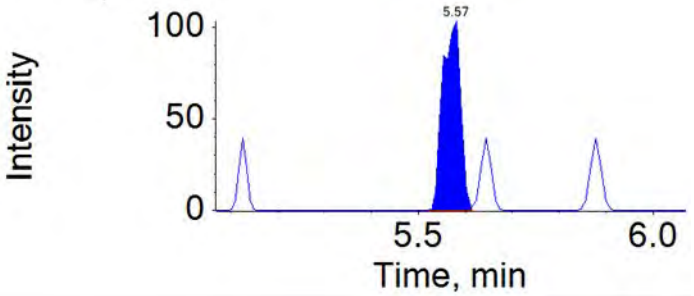
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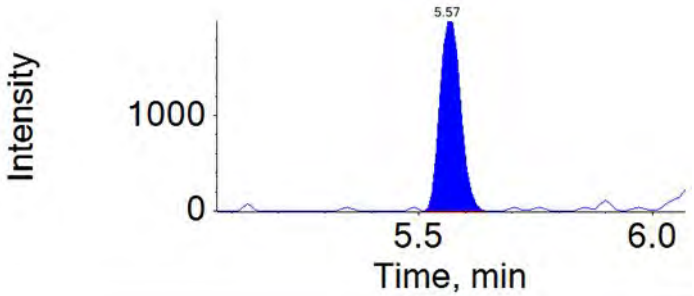
Component: PFDA
Primary Mass: 513.0 / 469.0



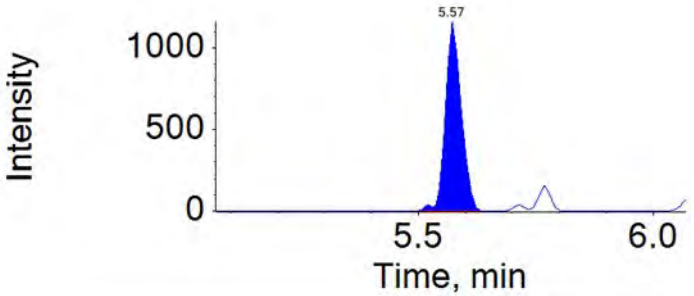
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



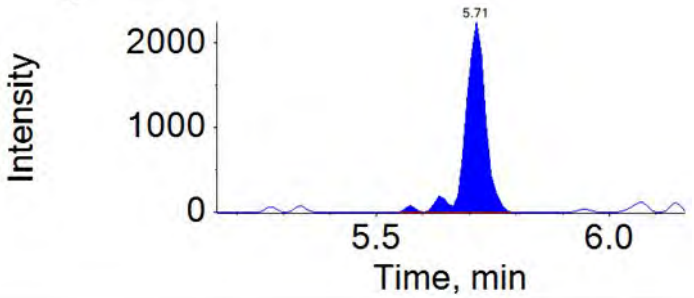
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



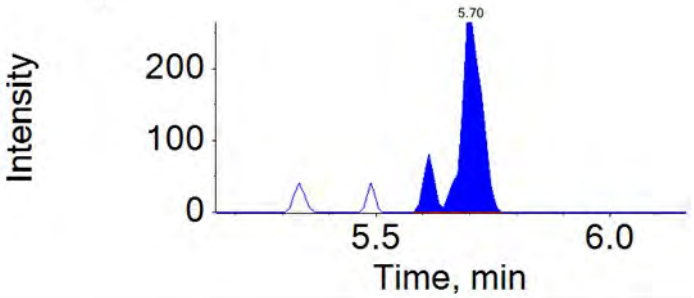
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



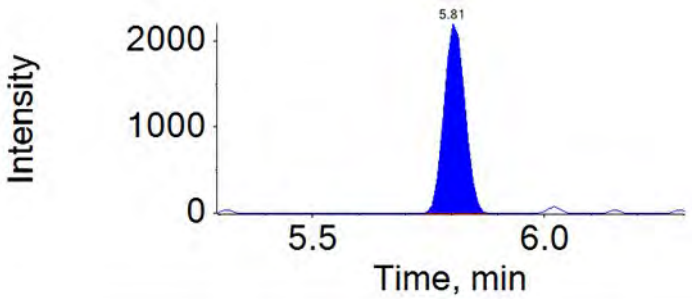
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



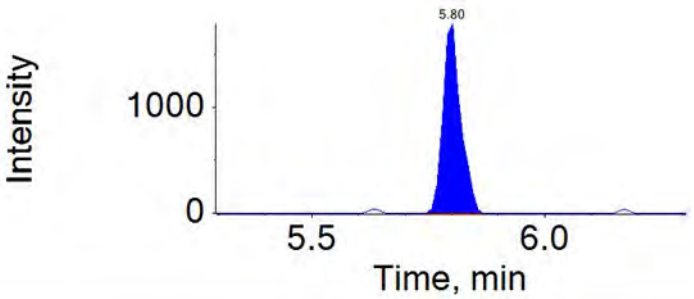
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



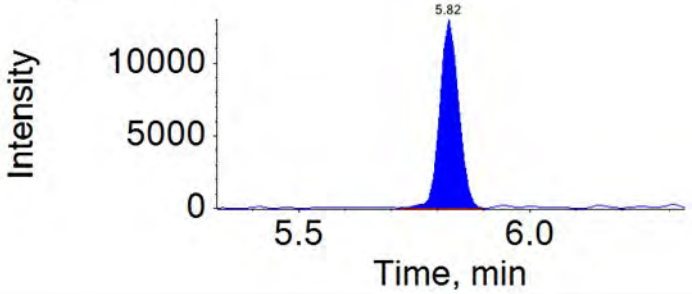
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



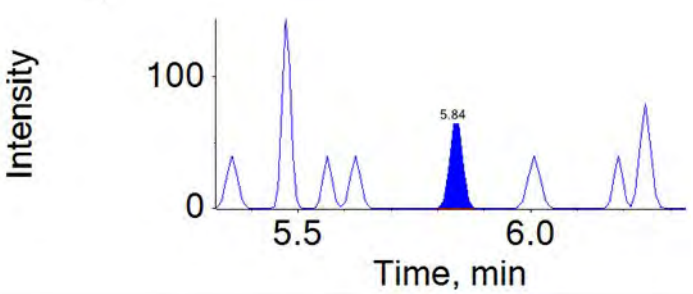
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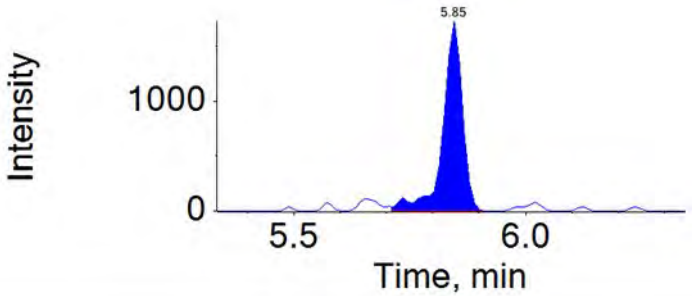
Component: PFUnDA
Primary Mass: 563.0 / 519.0



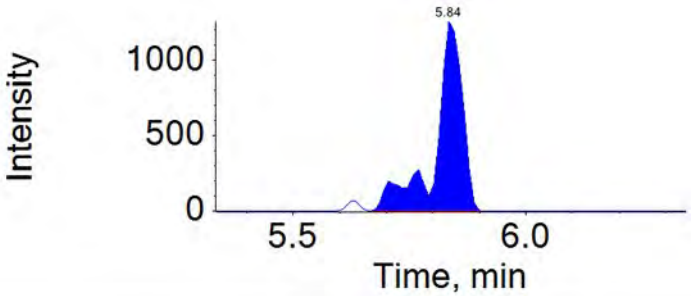
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



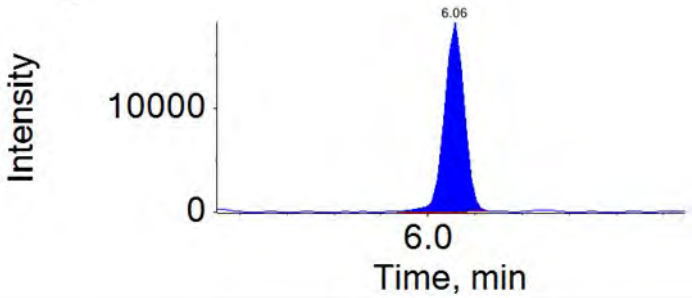
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



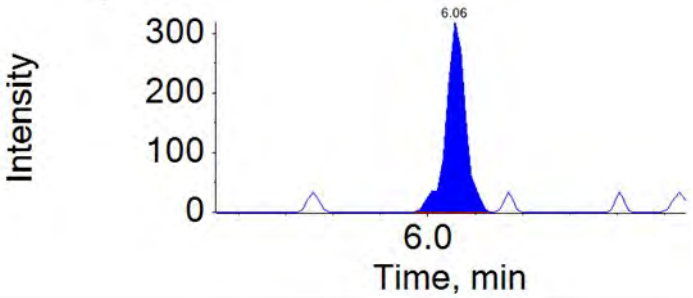
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



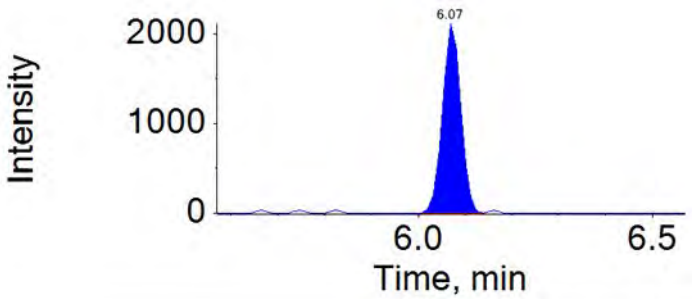
Component: PFDoDA
Primary Mass: 613.0 / 569.0



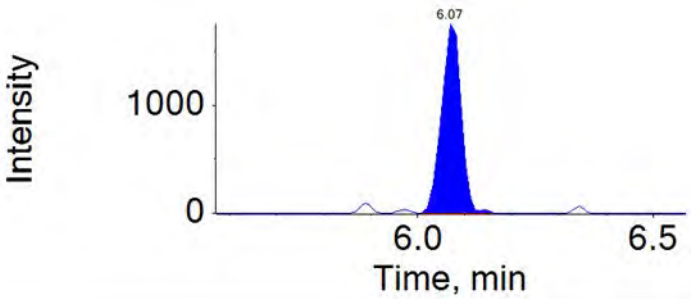
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



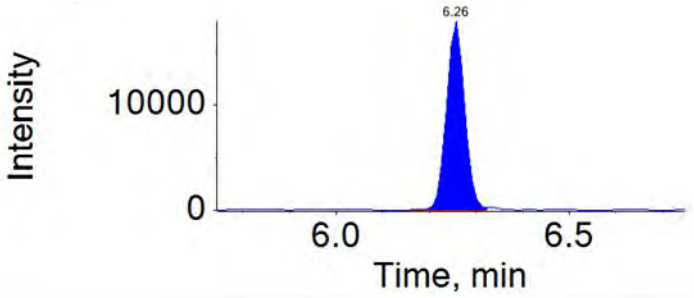
Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



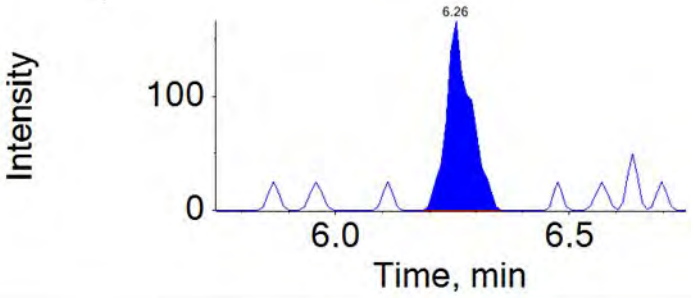
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



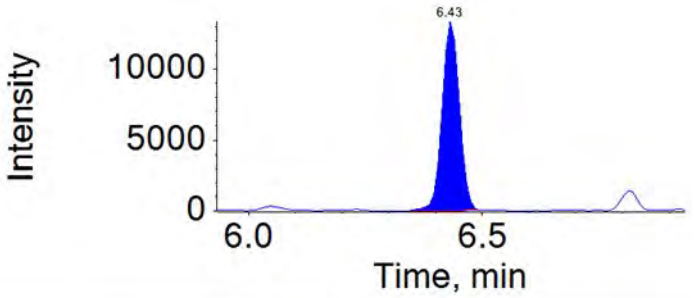
Component: PFTrDA
Primary Mass: 663.0 / 619.0



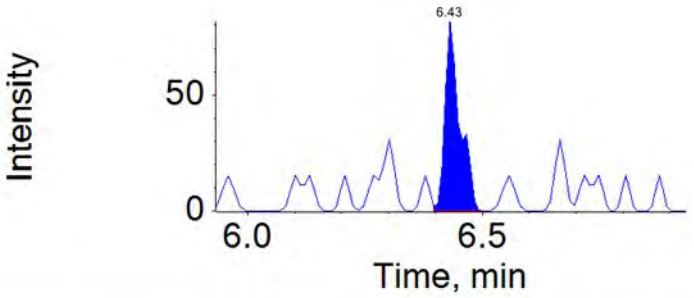
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Secondary Mass: 663.0 / 169.0



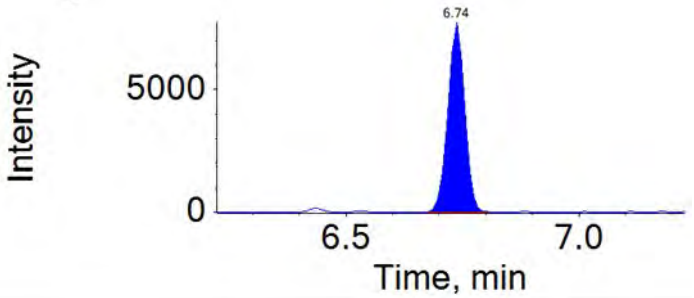
Component: PFTeDA
Primary Mass: 713.0 / 669.0



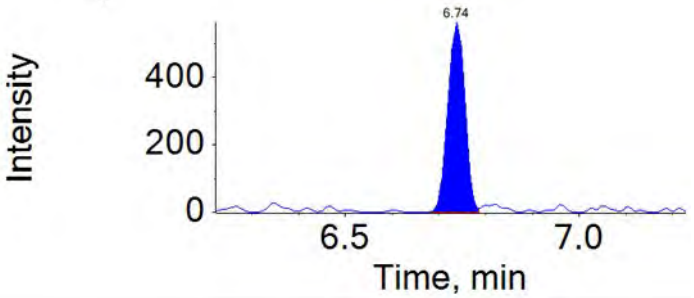
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



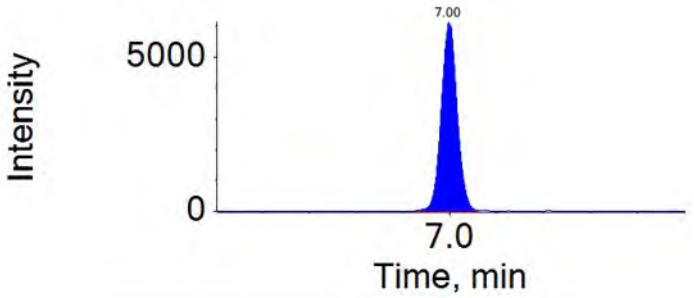
Component: PFHxDA
Primary Mass: 813.0 / 769.0



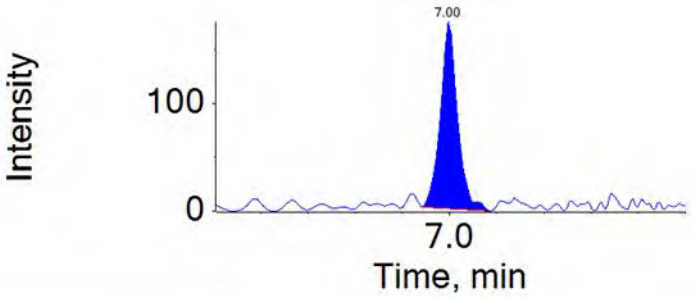
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL2			**Data File:**		18NOV28DCAL-07.wiff
Sample ID:	CALBRN21833C			**Acquis Date:**		2018-11-28T13:51:13
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	4			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV28DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	898154.2	887248.9	1	50	
13C2-PFOA	5.0	493545.2	498501.6	-1	50	
13C4-PFOS	4.8	295669.7	283214.2	4	50	
13C2-PFDA	5.0	460926.2	441790.6	4	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	1033122.1	13C3-PFBA	898154.2	1.150	5.000	5.132	103	70-130	
E13C5-PFPeA	1014125.0	13C3-PFBA	898154.2	1.129	5.000	5.273	105	70-130	
E13C3-PFBS	442150.0	13C3-PFBA	898154.2	0.492	4.650	4.697	101	70-130	
E13C2-4:2-FTS	72067.2	13C2-PFOA	493545.2	0.146	4.670	5.032	108	70-130	
E13C5-PFHxA	697229.0	13C2-PFOA	493545.2	1.413	5.000	5.189	104	70-130	
E13C3-PFHxS	335129.7	13C2-PFOA	493545.2	0.679	4.730	5.322	113	70-130	
E13C4-PFHpA	547372.0	13C2-PFOA	493545.2	1.109	5.000	5.096	102	70-130	
E13C2-6:2-FTS	63922.7	13C2-PFOA	493545.2	0.130	4.750	5.422	114	70-130	
E13C8-PFOA	1030866.6	13C2-PFOA	493545.2	2.089	5.000	5.749	115	70-130	
E13C8-PFOS	313894.3	13C4-PFOS	295669.7	1.062	4.780	4.792	100	70-130	
E13C9-PFNA	682380.7	13C4-PFOS	295669.7	2.308	5.000	5.069	101	70-130	
E13C6-PFDA	839100.7	13C2-PFDA	460926.2	1.820	5.000	5.133	103	70-130	
E13C2-8:2-FTS	54757.9	13C2-PFDA	460926.2	0.119	4.790	5.106	107	70-130	
E13C8-PFOSA	658778.5	13C2-PFDA	460926.2	1.429	5.000	5.244	105	70-130	
Ed3-NMeFOSAA	181261.3	13C2-PFDA	460926.2	0.393	5.000	4.993	100	70-130	
E13C7-PFUnDA	581207.0	13C2-PFDA	460926.2	1.261	5.000	5.329	107	70-130	
Ed5-NEtFOSAA	144803.2	13C2-PFDA	460926.2	0.314	5.000	5.597	112	70-130	
E13C2-PFDoDA	1140522.3	13C2-PFDA	460926.2	2.474	5.000	5.199	104	70-130	
Ed7-NMePFOSAE	272071.3	13C2-PFDA	460926.2	0.590	5.000	5.101	102	70-130	
Ed3-NMePFOSA	86471.7	13C2-PFDA	460926.2	0.188	5.000	5.077	102	70-130	
Ed9-NEtPFOSAE	229050.7	13C2-PFDA	460926.2	0.497	5.000	5.038	101	70-130	
Ed5-NEtPFOSA	66646.8	13C2-PFDA	460926.2	0.145	5.000	5.024	100	70-130	
E13C2-PFTeDA	858145.2	13C2-PFDA	460926.2	1.862	5.000	5.152	103	70-130	

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

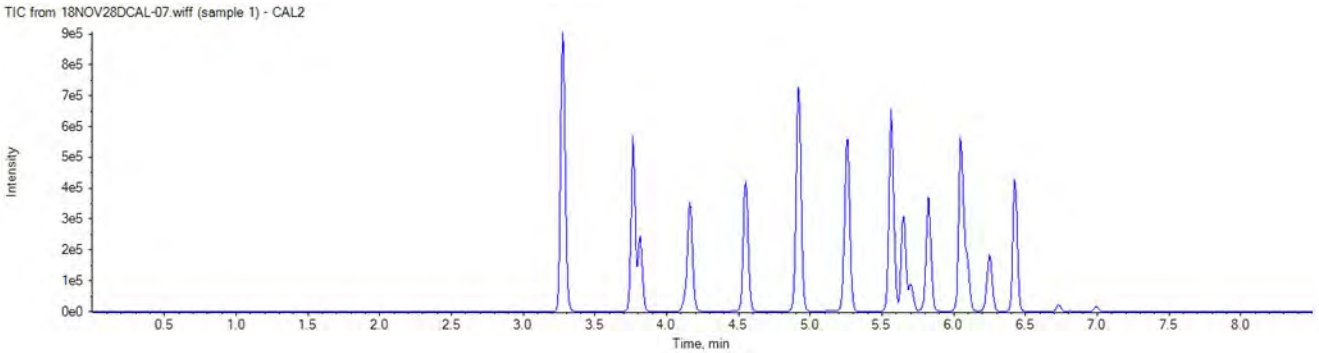
Analyte Quantitation Peak Table

Sample Name: CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-07.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	110036.6		A	13C4-PFBA	3.27	1033122.1	0.107	0.584
PFPeA	3.77	1.000	104393.1		A	13C5-PFPeA	3.77	1014125.0	0.103	0.505
PFBS	3.81	1.000	43237.4		A	13C3-PFBS	3.82	442150.0	0.098	0.475
4:2-FTS	4.13	1.000	14524.8		A	13C2-4:2-FTS	4.13	72067.2	0.202	0.540
PFHxA	4.16	1.000	101713.2		A	13C5-PFHxA	4.16	697229.0	0.146	0.586
PFPeS	4.18	1.100	24007.3		A	13C3-PFBS	3.82	442150.0	0.054	0.549
PFHpA	4.55	1.000	100593.8		A	13C4-PFHpA	4.55	547372.0	0.184	0.567
PFHxS	4.55	1.000	31104.5		M	13C3-PFHxS	4.55	335129.7	0.093	0.435
6:2-FTS	4.91	1.000	14479.8		A	13C2-6:2-FTS	4.91	63922.7	0.227	0.591
PFHpS	4.91	1.080	32553.7		A	13C3-PFHxS	4.55	335129.7	0.097	0.485
PFOA	4.92	1.000	106420.8		A	13C8-PFOA	4.92	1030866.6	0.103	0.533
PFOS	5.25	1.000	34203.6		M	13C8-PFOS	5.25	313894.3	0.109	0.457
PFNA	5.26	1.000	106720.9		A	13C9-PFNA	5.26	682380.7	0.156	0.599
PFNS	5.54	1.060	24149.9		A	13C8-PFOS	5.25	313894.3	0.077	0.486
PFDA	5.57	1.000	90730.3		A	13C6-PFDA	5.56	839100.7	0.108	0.612
8:2-FTS	5.57	1.000	15550.2		A	13C2-8:2-FTS	5.57	54757.9	0.284	0.536
PFOSA	5.65	1.000	73112.3		A	13C8-PFOSA	5.65	658778.5	0.111	0.562
NMeFOSAA	5.70	1.000	16533.1		A	d3-NMeFOSAA	5.70	181261.3	0.091	0.582
PFDS	5.80	1.100	18654.8		A	13C8-PFOS	5.25	313894.3	0.059	0.471
PFUnDA	5.82	1.000	91490.4		A	13C7-PFUnDA	5.82	581207.0	0.157	0.563
NEtFOSAA	5.84	1.000	16643.3		A	d5-NEtFOSAA	5.83	144803.2	0.115	0.560
PFDoDA	6.05	1.000	122586.0		A	13C2-PFDoDA	6.05	1140522.3	0.107	0.589
10:2-FTS	6.07	1.090	15157.8		A	13C2-8:2-FTS	5.57	54757.9	0.277	0.610
NMePFOSAE	6.10	1.000	37932.7		A	d7-NMePFOSAE	6.09	272071.3	0.139	0.587
NMePFOSA	6.11	1.000	9381.3		A	d3-NMePFOSA	6.10	86471.7	0.108	0.575
PFDoS	6.22	1.190	11606.3		A	13C8-PFOS	5.25	313894.3	0.037	0.531
NEtPFOSAE	6.26	1.000	37977.7		A	d9-NEtPFOSAE	6.24	229050.7	0.166	0.596
NEtPFOSA	6.27	1.000	7883.3		A	d5-NEtPFOSA	6.26	66646.8	0.118	0.530
PFTrDA	6.25	1.030	117562.3		A	13C2-PFDoDA	6.05	1140522.3	0.103	0.621
PFTeDA	6.43	1.000	88360.3		A	13C2-PFTeDA	6.43	858145.2	0.103	0.583
PFHxDA	6.73	1.050	44164.6		A	13C2-PFTeDA	6.43	858145.2	0.051	0.588
PFODA	6.99	1.090	36421.5		A	13C2-PFTeDA	6.43	858145.2	0.042	0.565

Total Ion Chromatogram

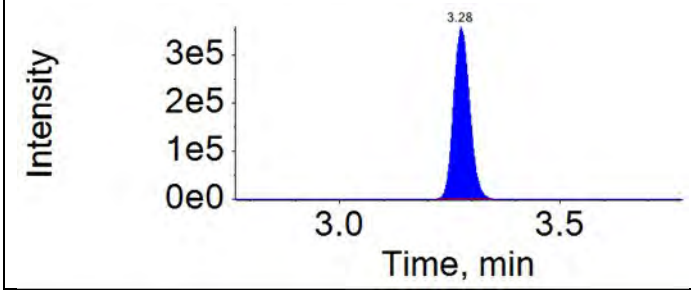


APPROVED
By MCD at 5:00 pm, 11/28/18

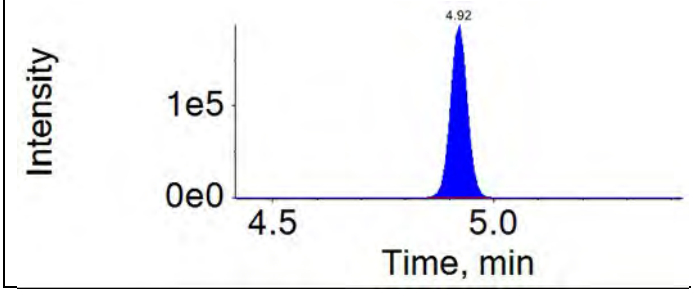
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

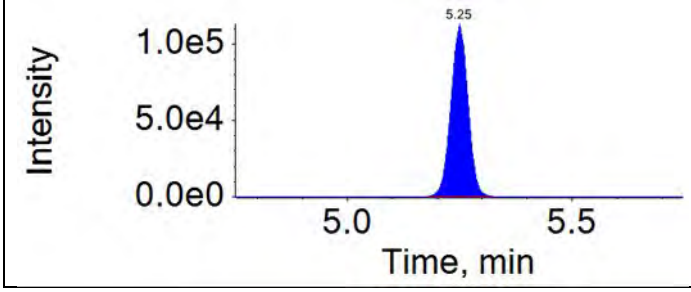
Injection Standard: 13C3-PFBA
216.0 / 172.0



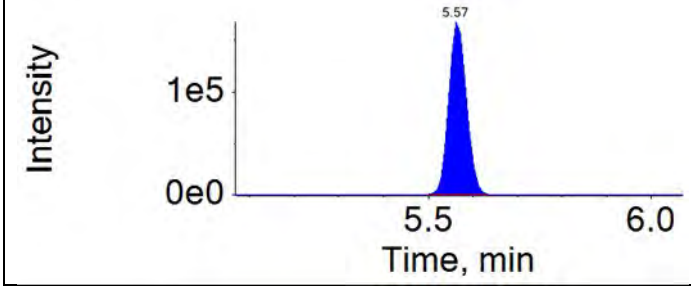
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0

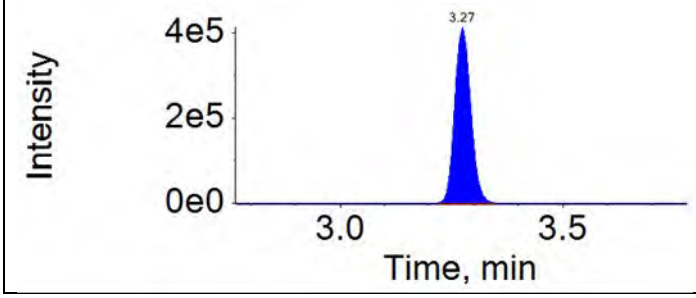


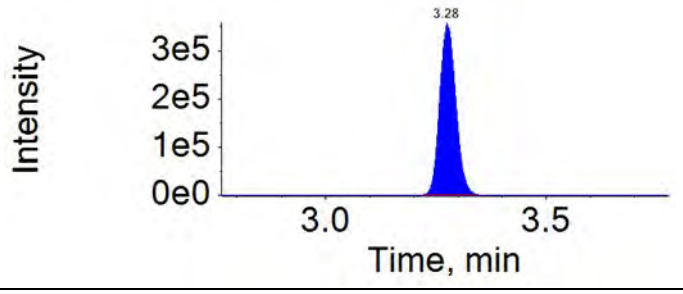
Injection Standard: 13C2-PFDA
515.0 / 470.0



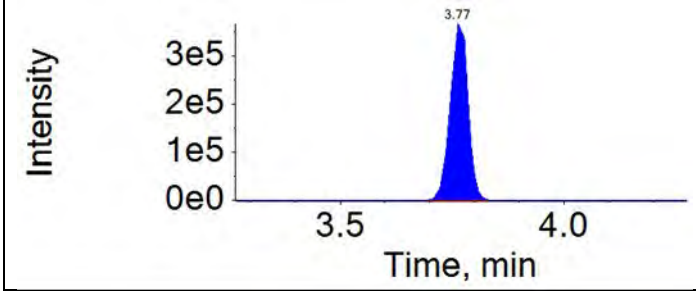
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

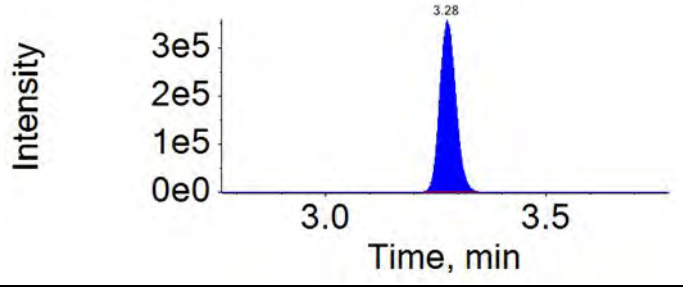
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



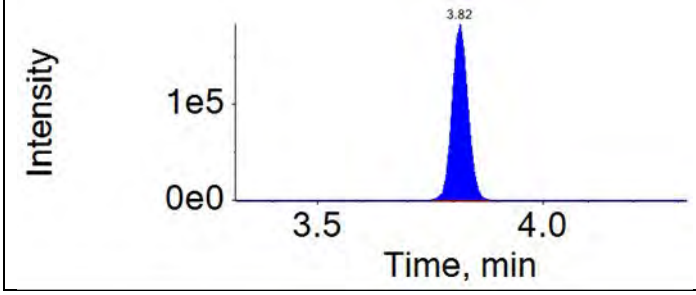


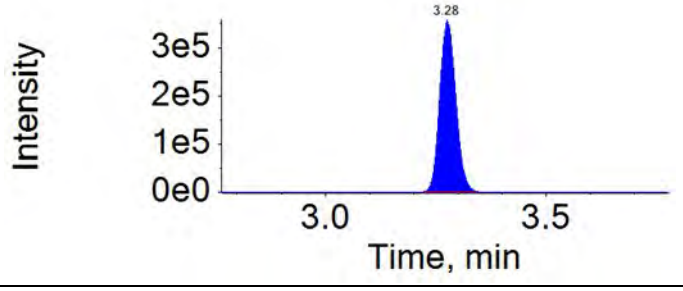
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



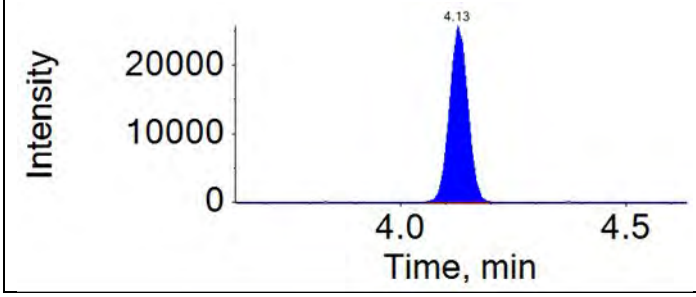


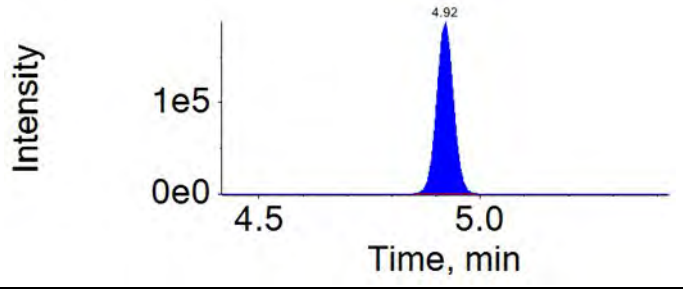
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





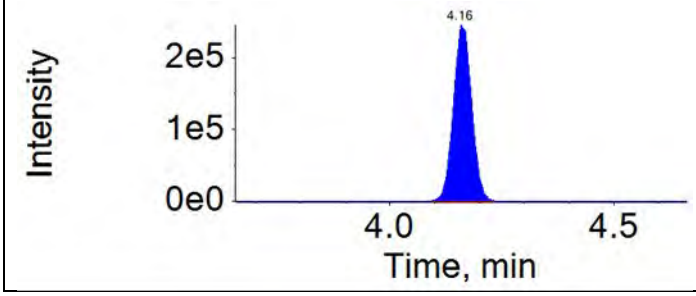
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

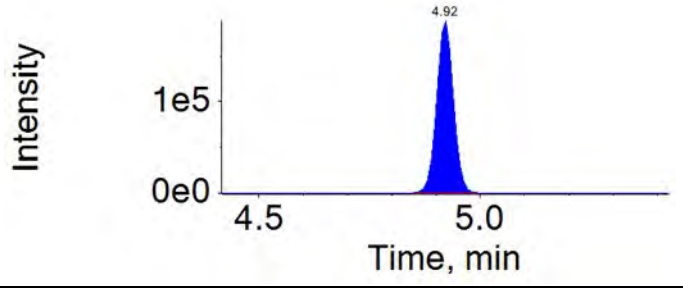




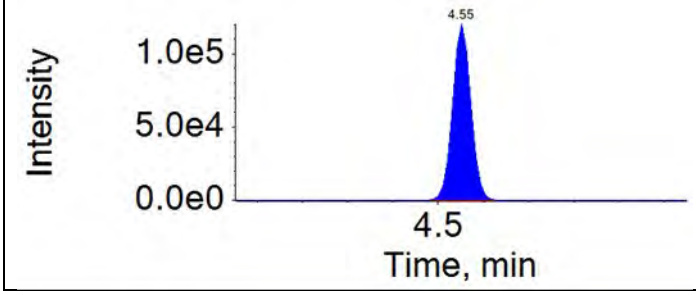
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

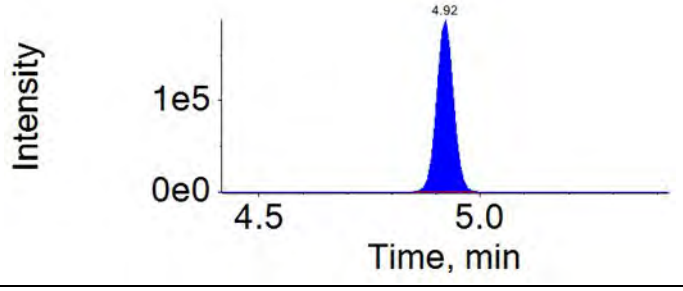
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



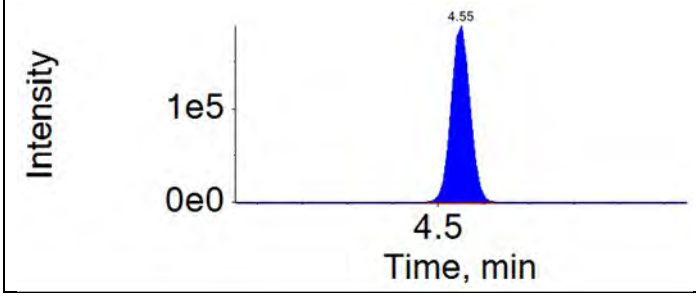


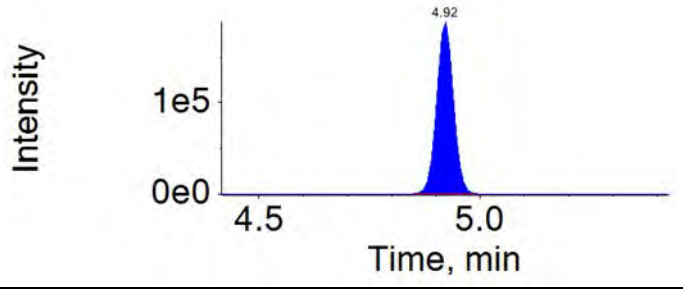
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



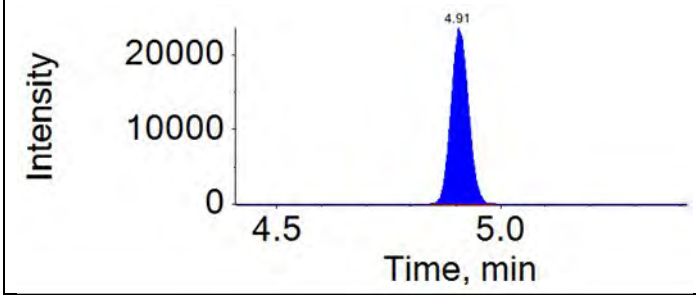


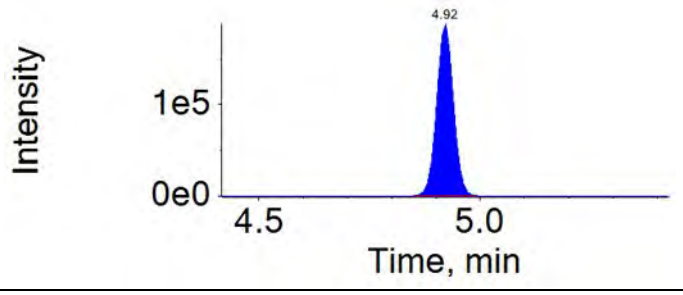
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

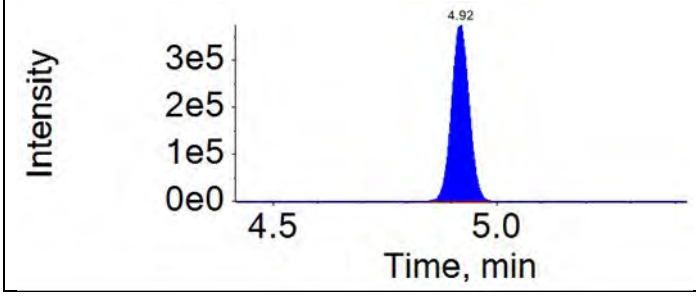
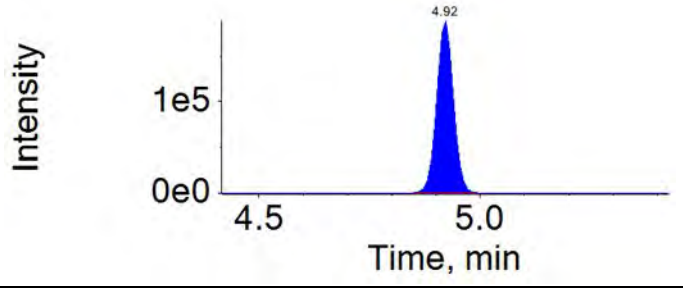


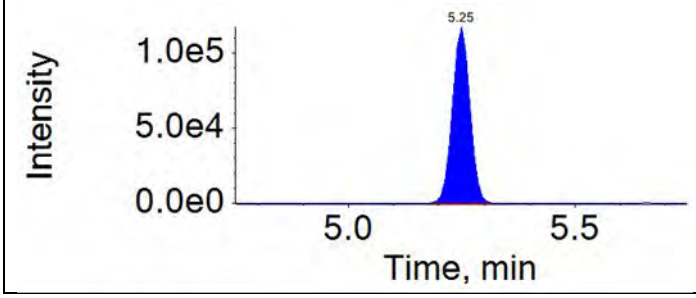
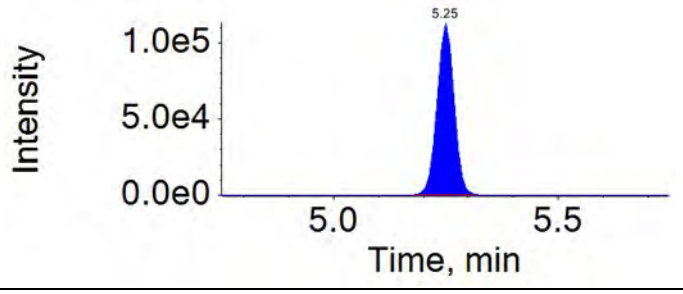


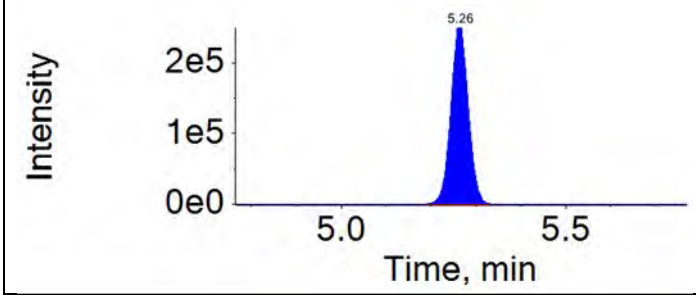
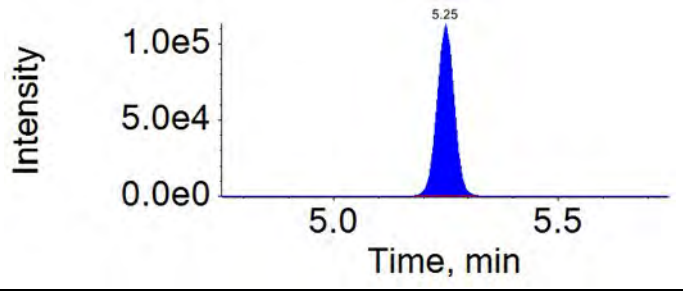
APPROVED
By MCD at 5:00 pm, 11/28/18

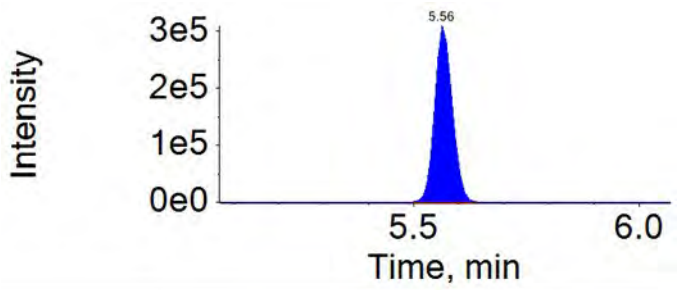
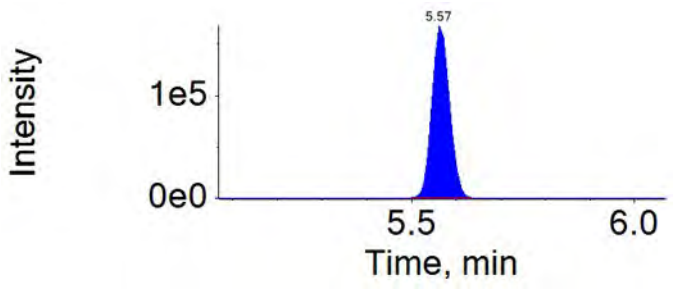
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

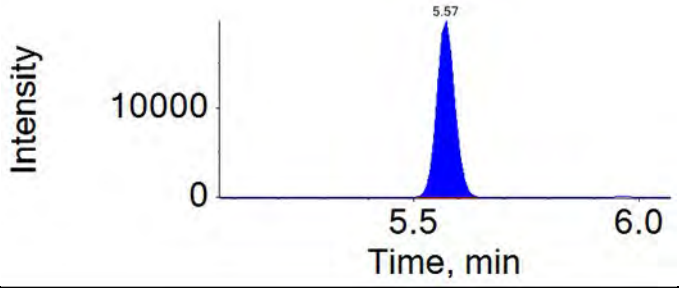
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

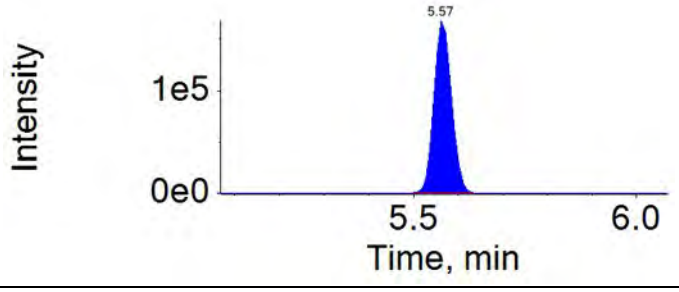
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

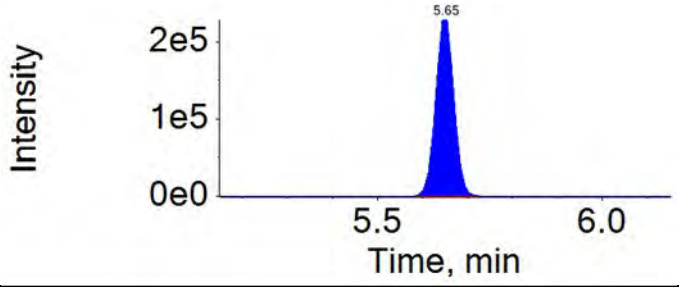
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

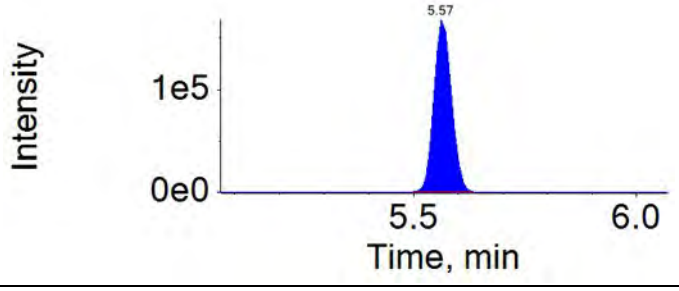
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



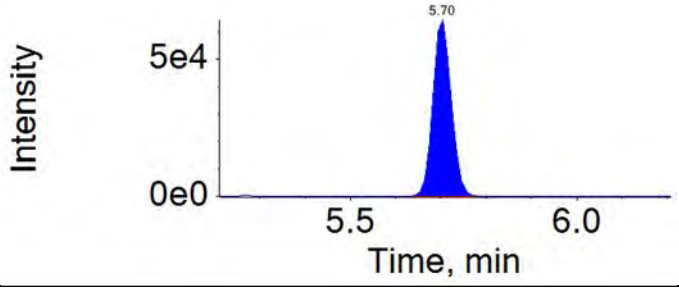


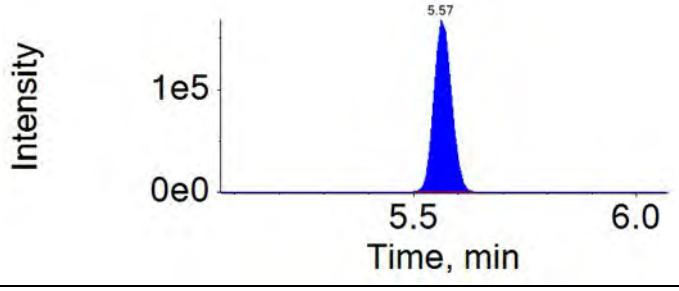
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



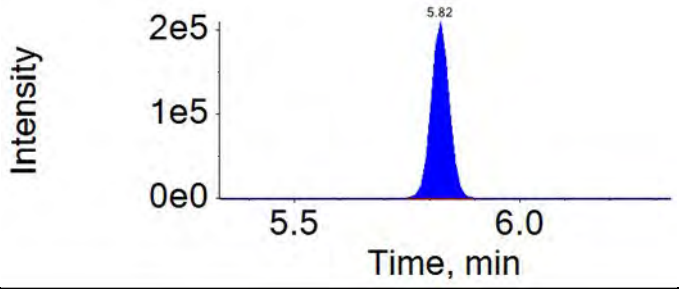


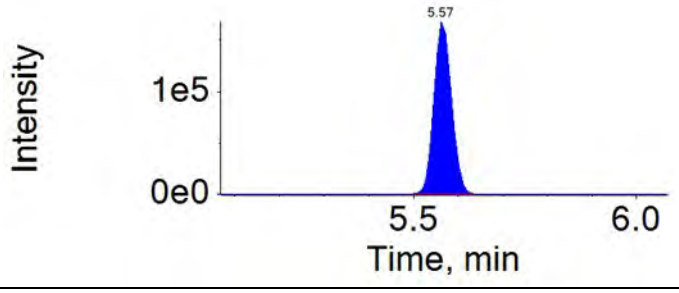
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0



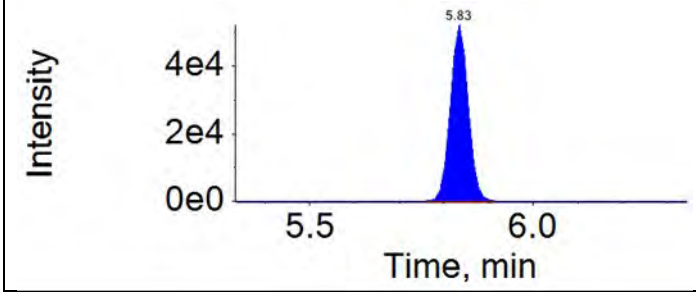


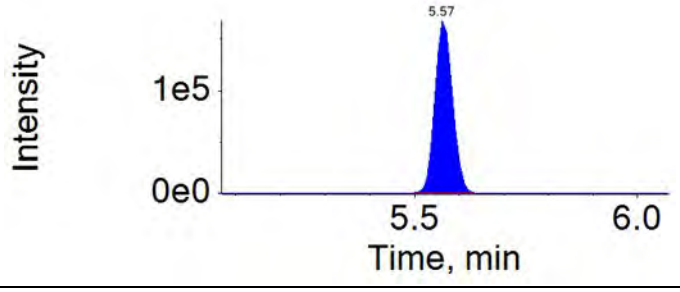
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

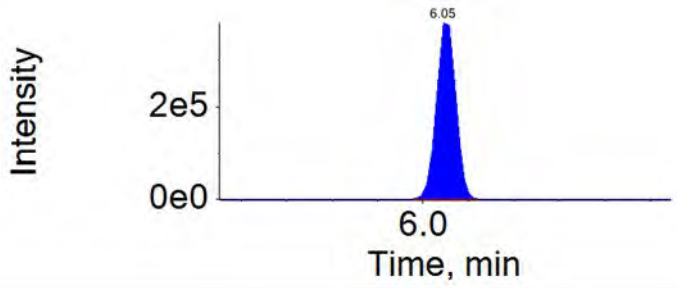
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

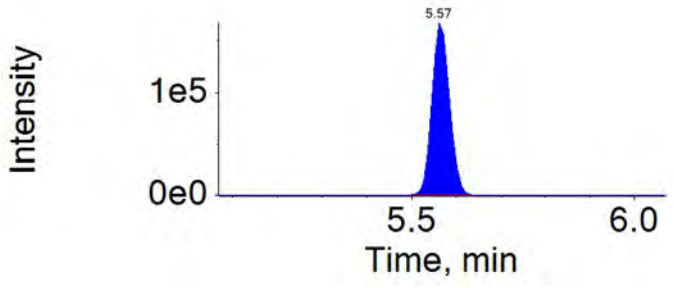
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



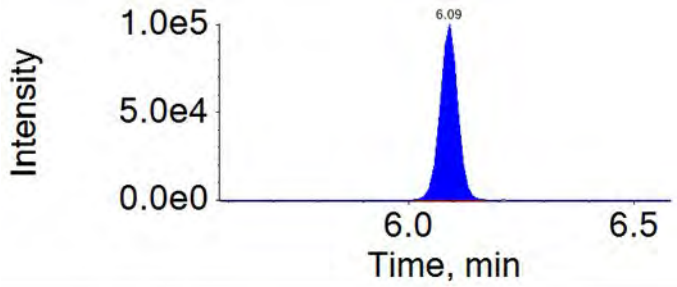


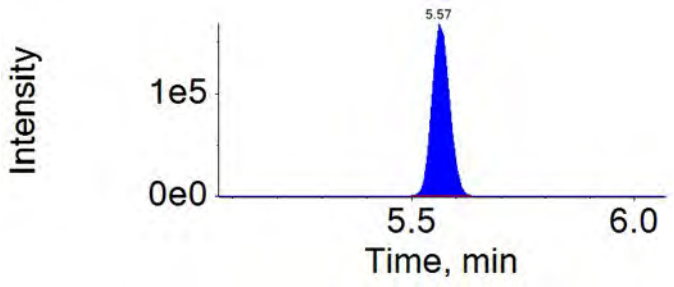
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



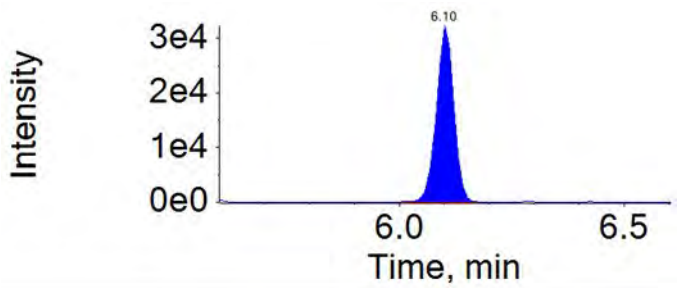


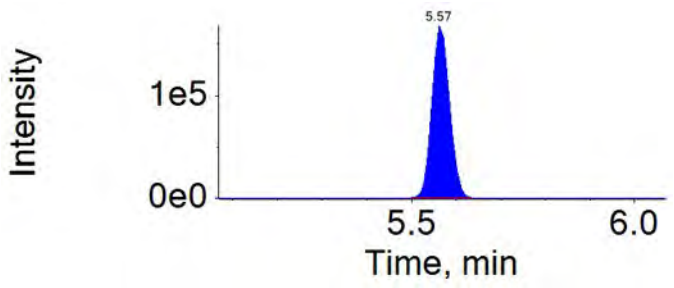
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



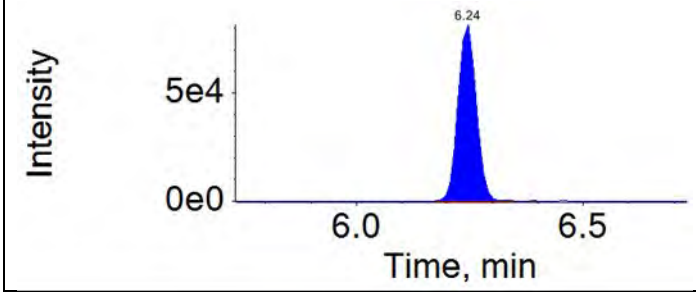


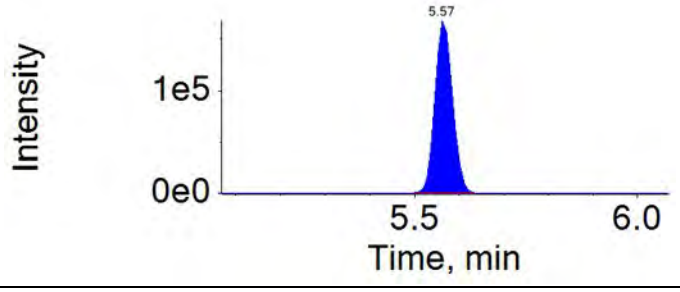
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

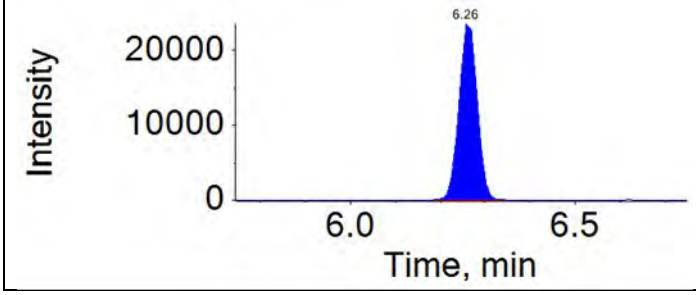
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

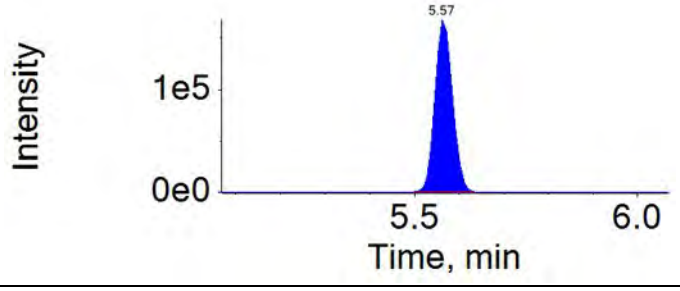
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



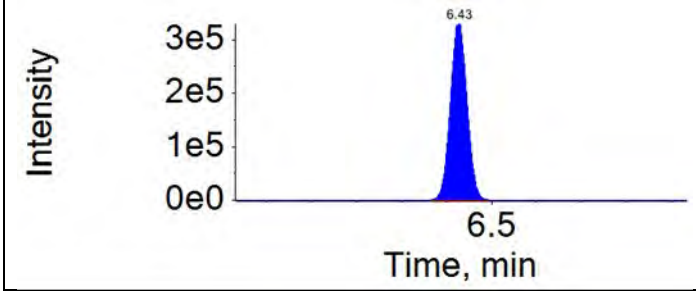


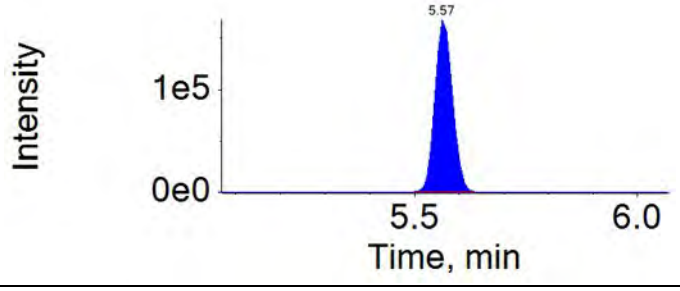
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



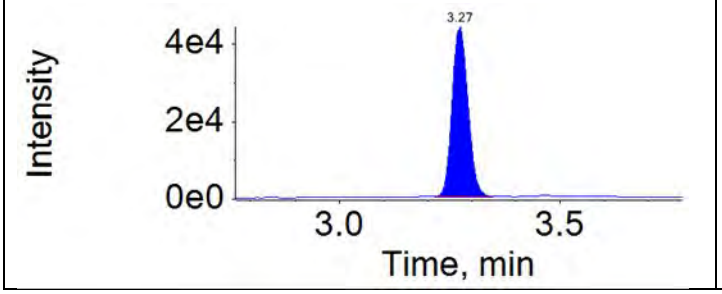


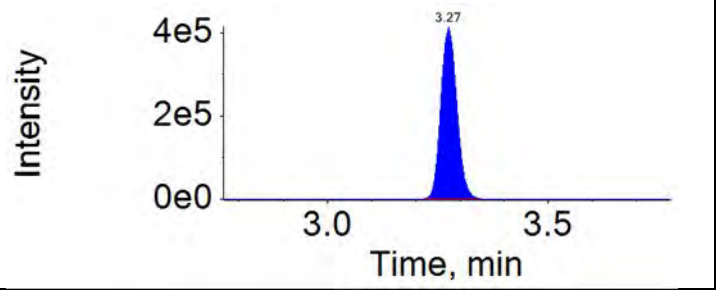
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

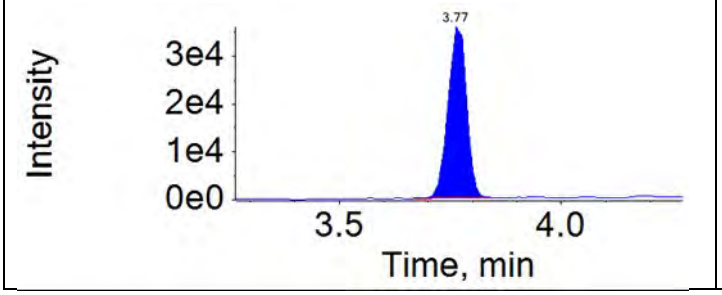
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

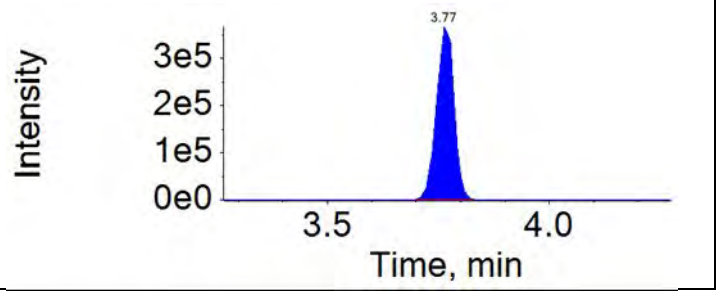
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



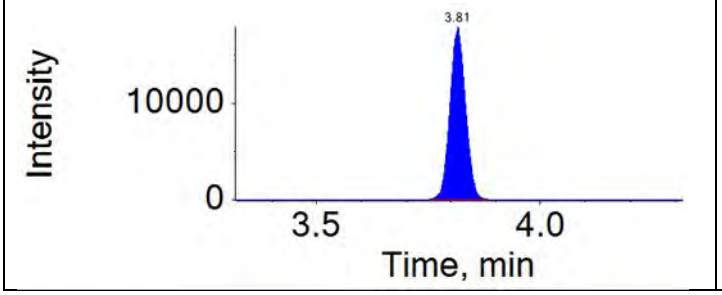


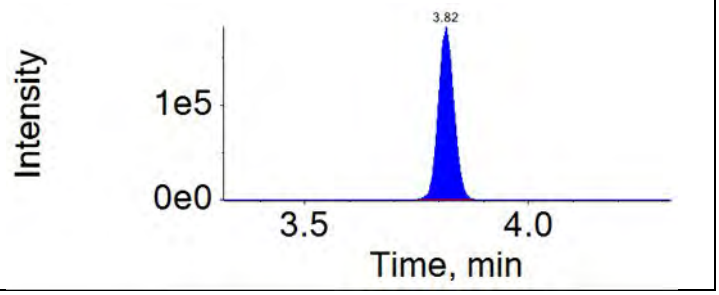
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



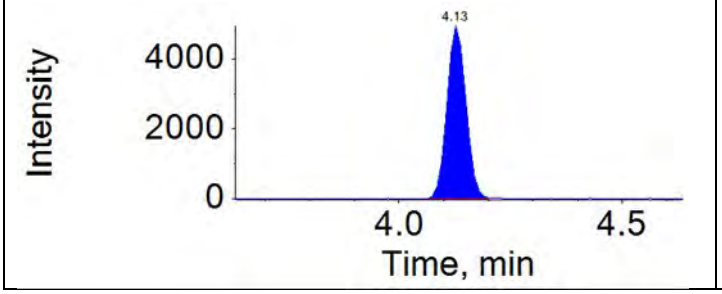


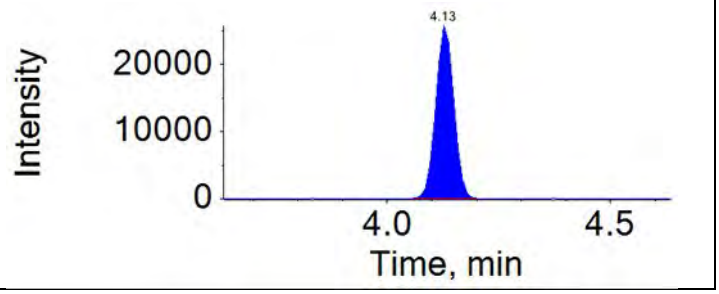
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



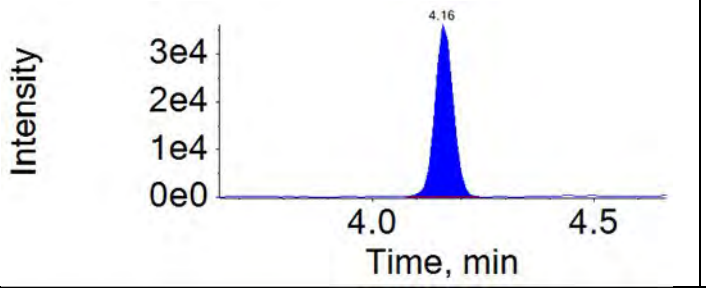


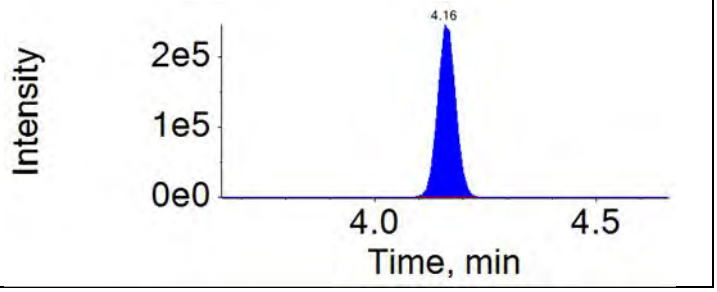
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

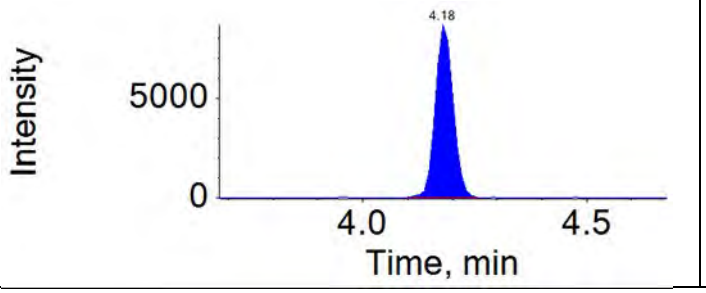
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

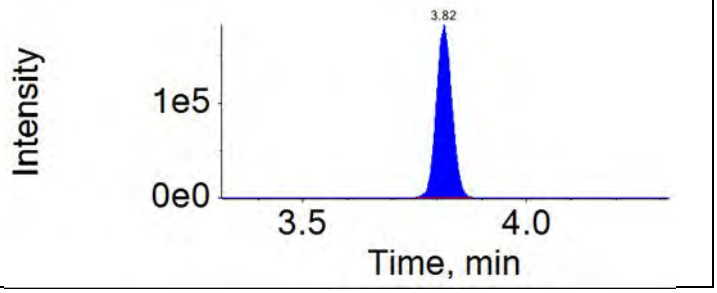
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



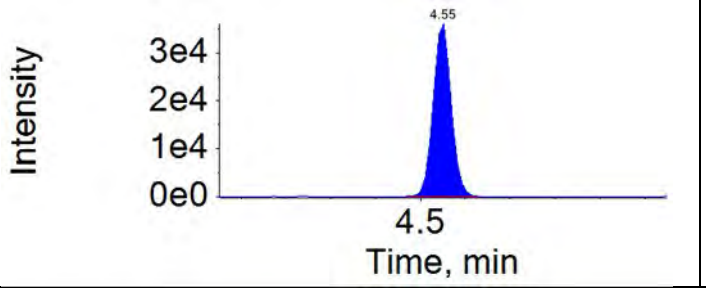


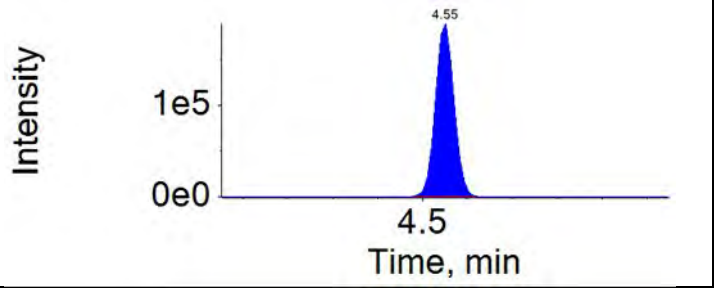
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



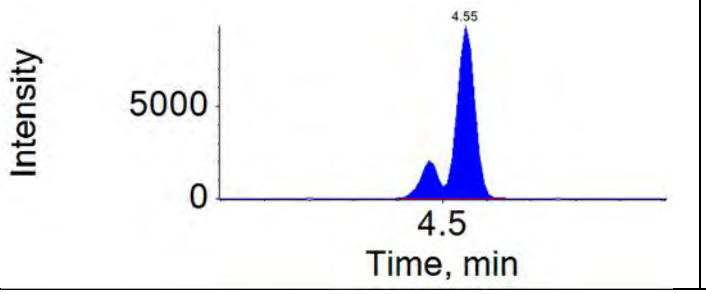


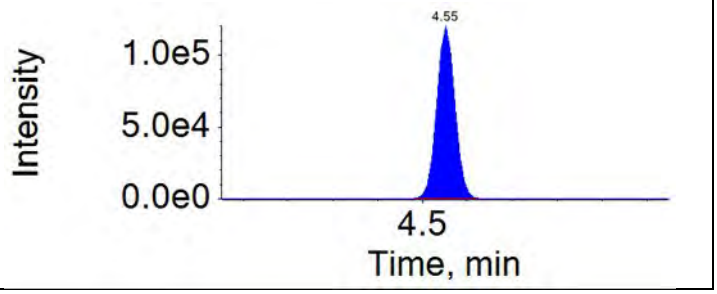
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

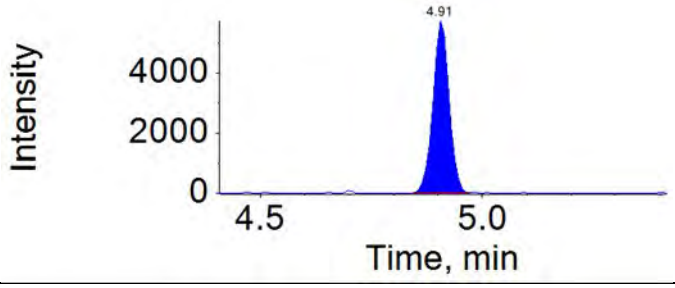
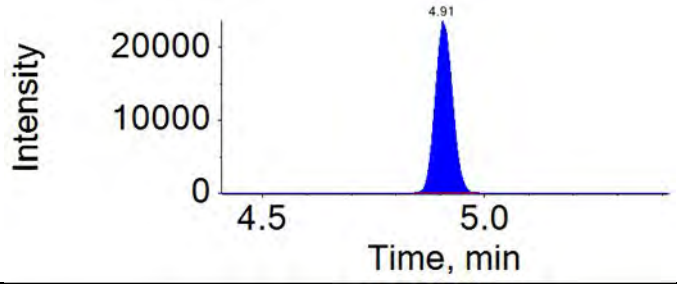


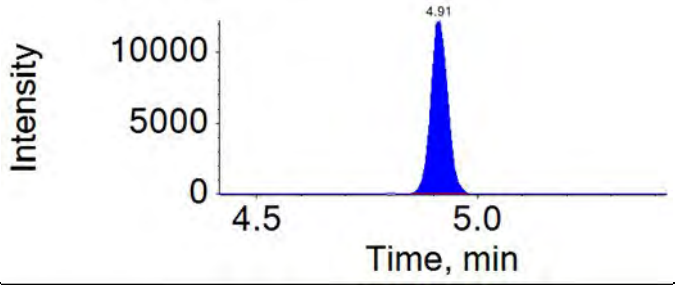
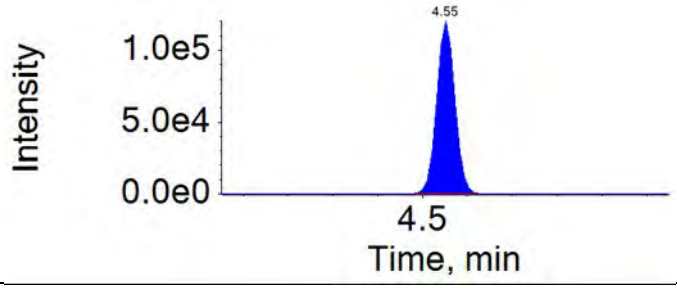


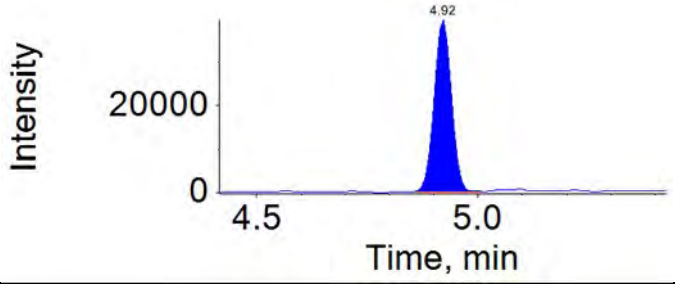
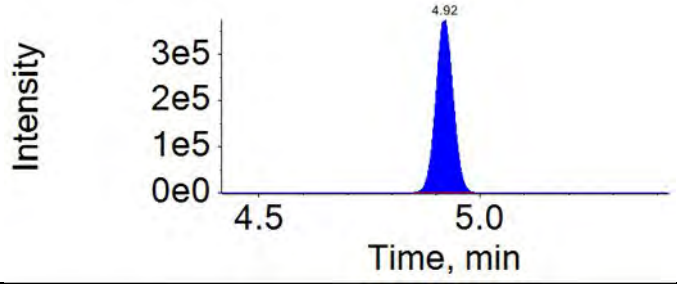
APPROVED
By MCD at 5:00 pm, 11/28/18

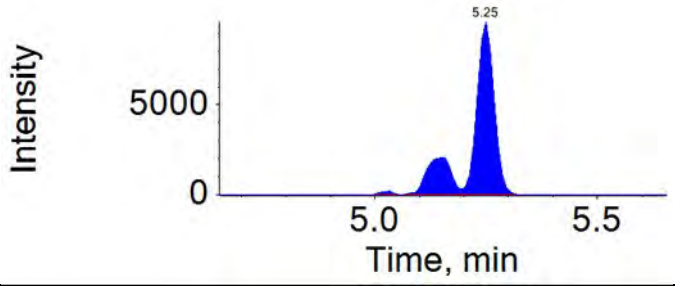
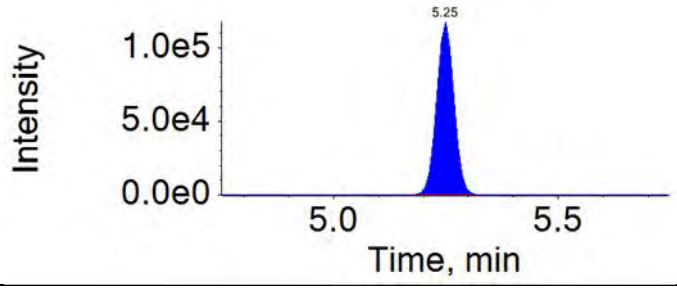
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

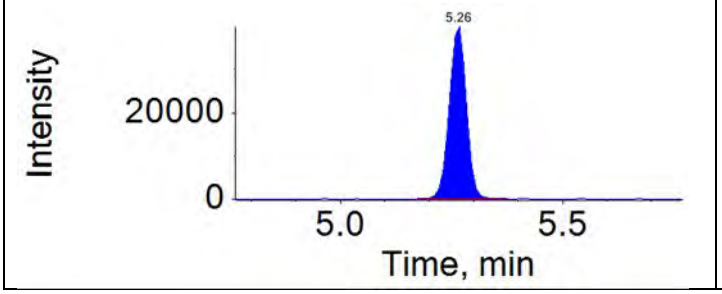
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

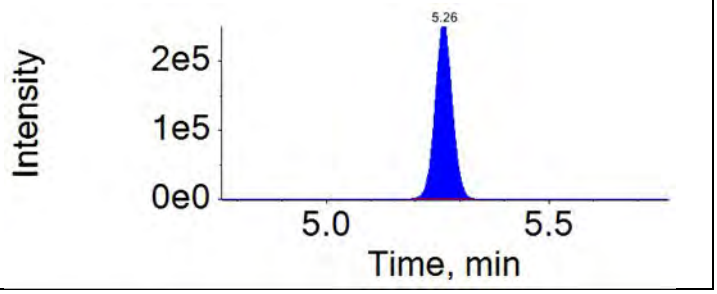
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

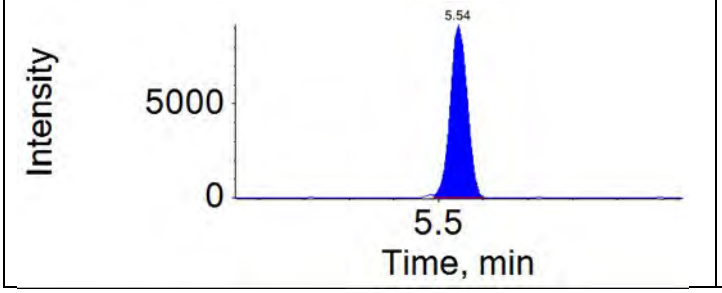
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

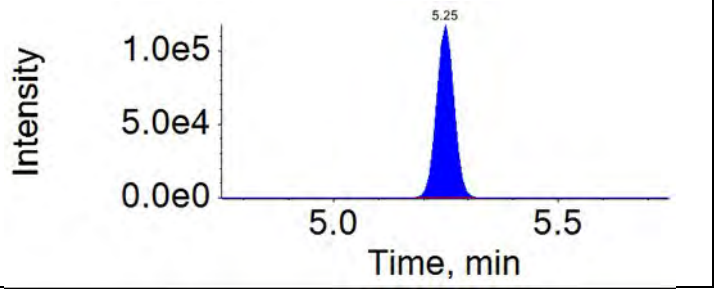
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



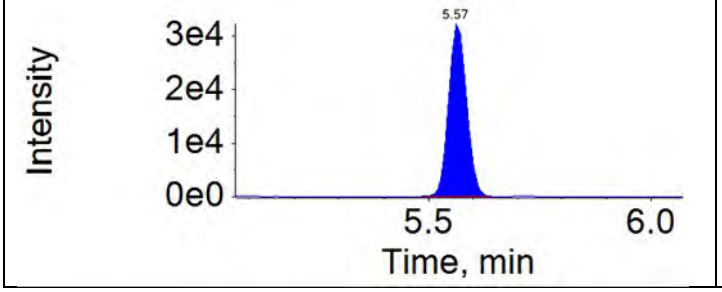


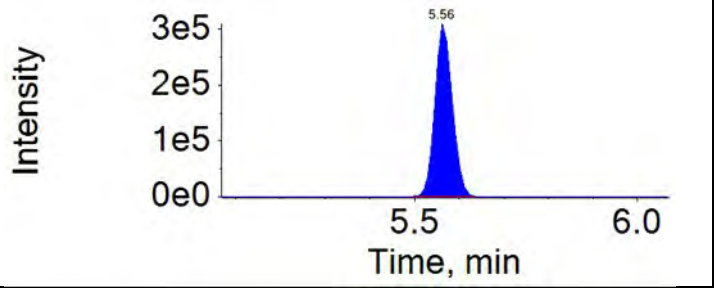
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



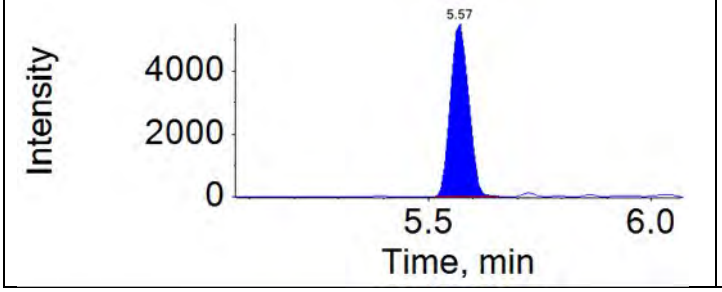


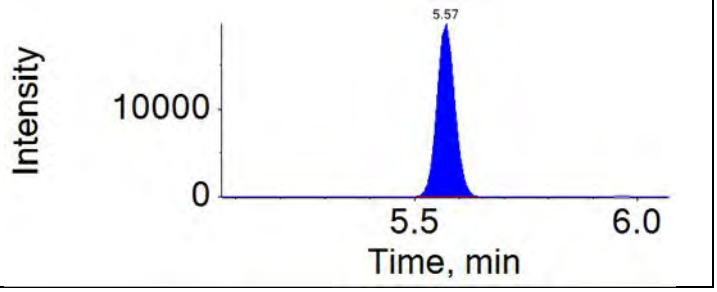
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



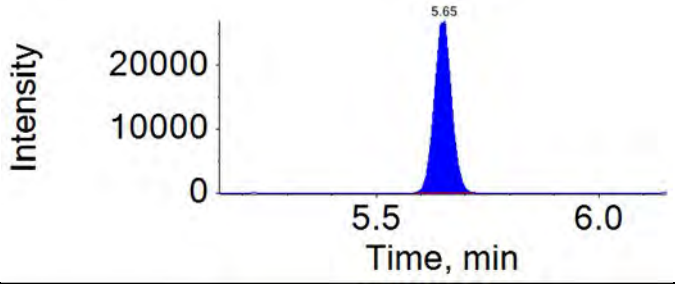


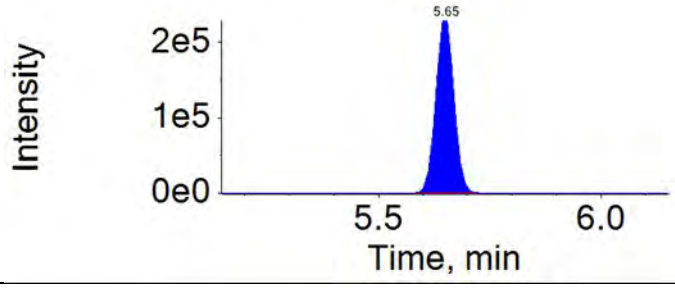
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

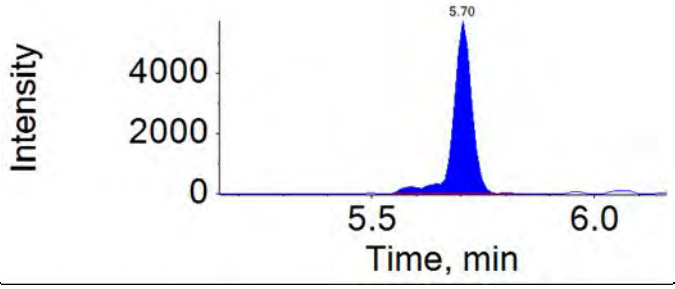
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

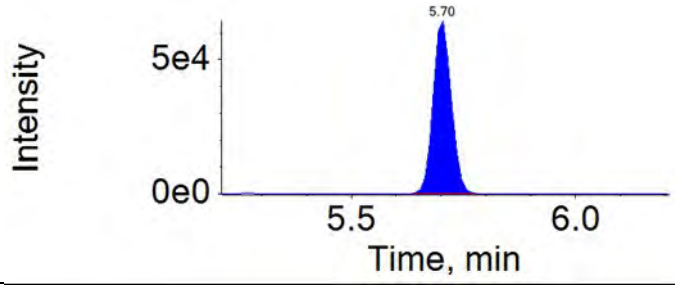
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



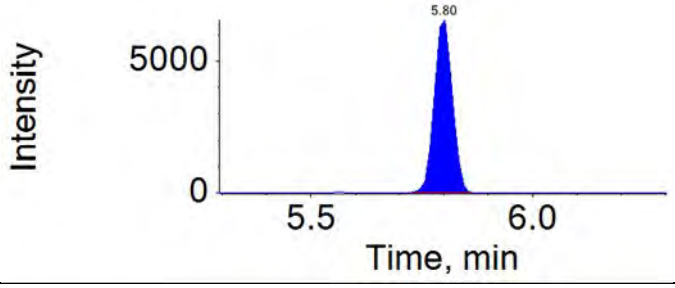


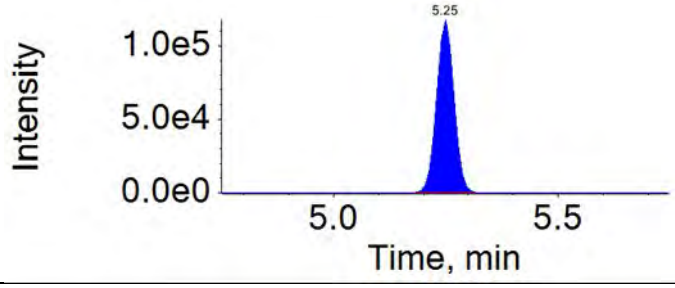
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



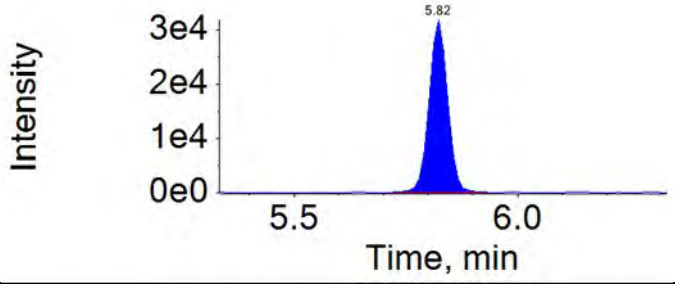


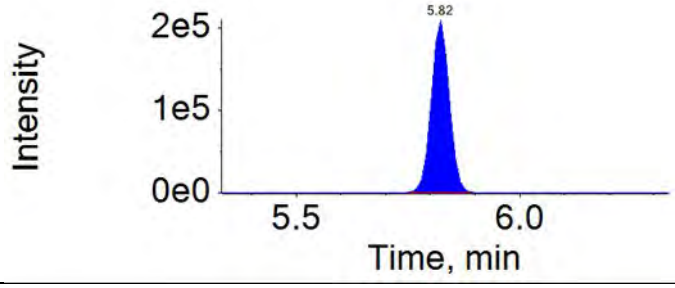
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0

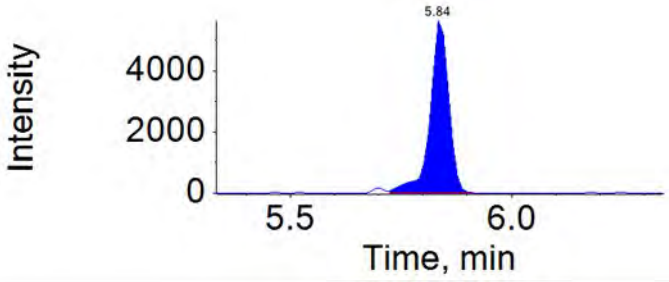
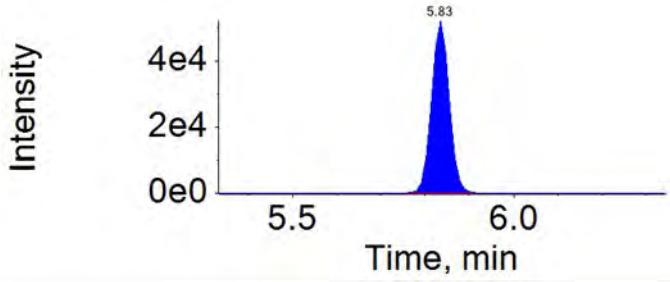


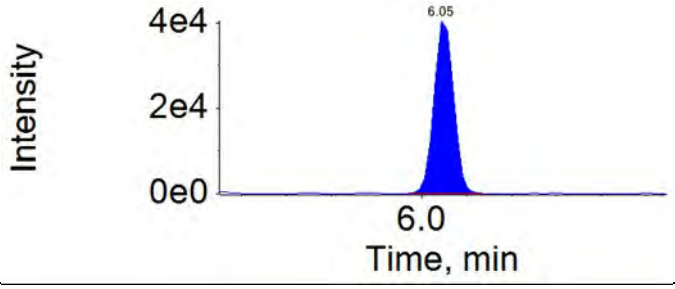
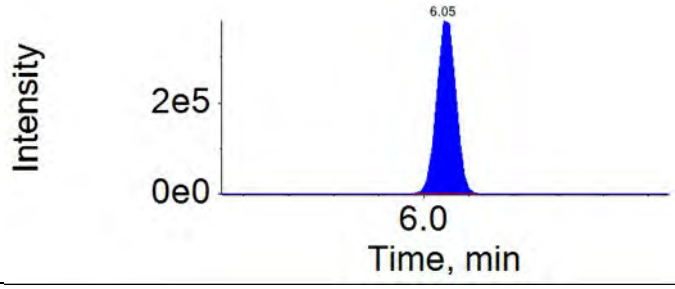


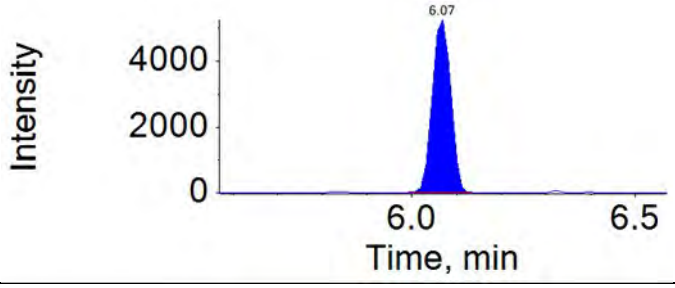
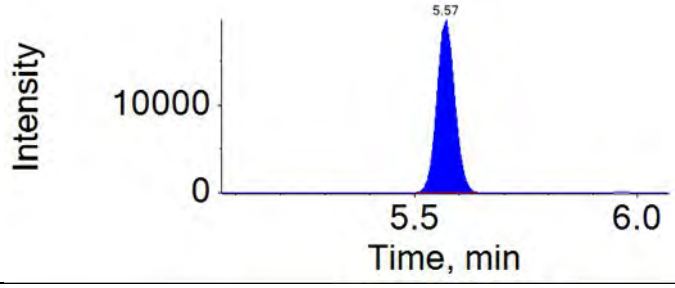
APPROVED
By MCD at 5:00 pm, 11/28/18

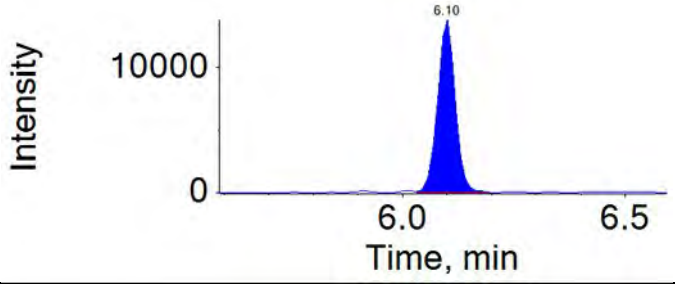
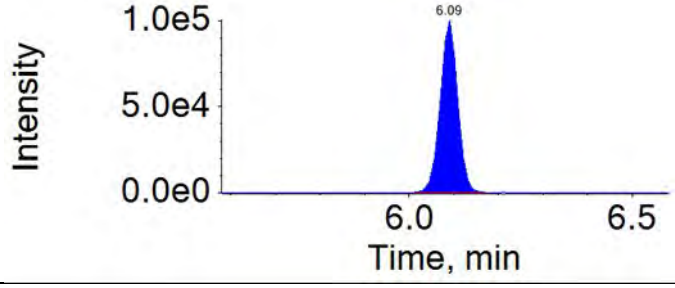
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0
	

Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0
	

Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0
	

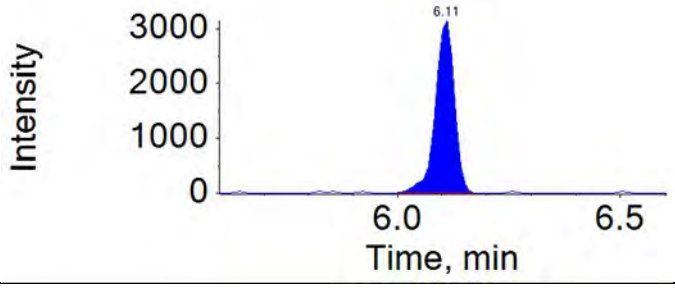
Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0
	

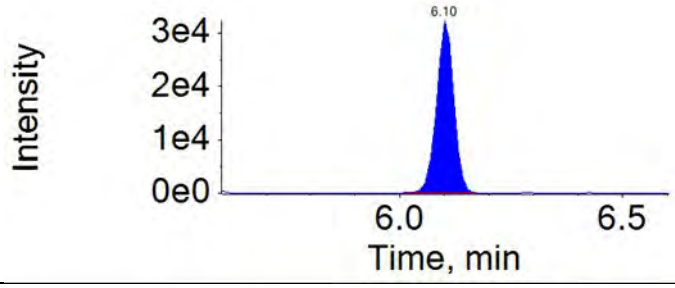
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

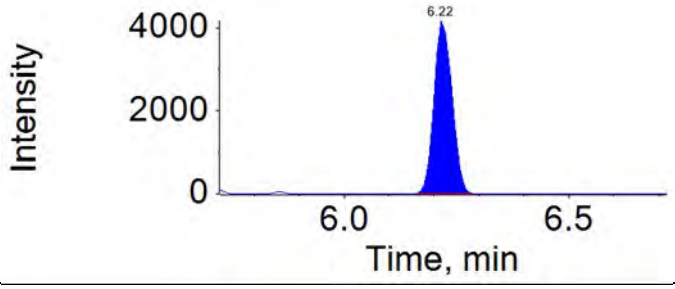
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

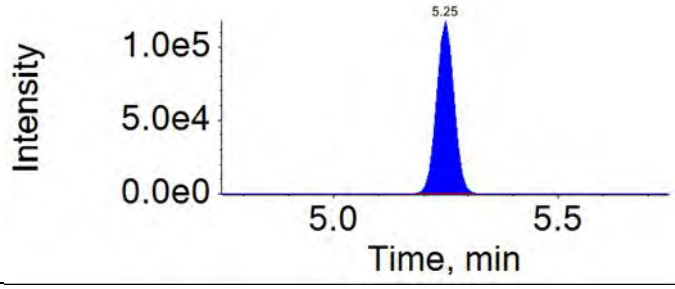
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



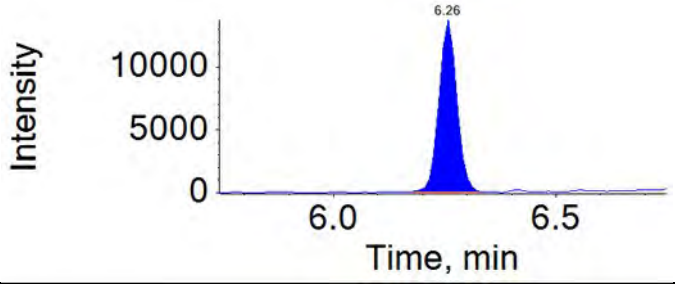


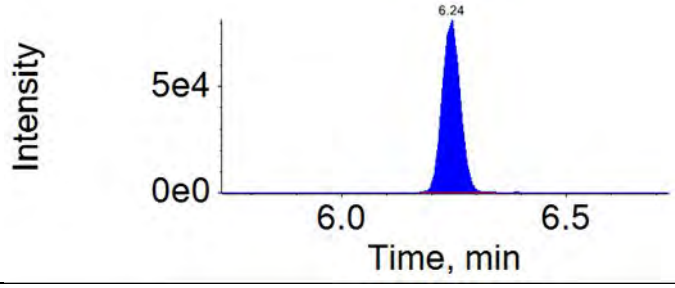
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



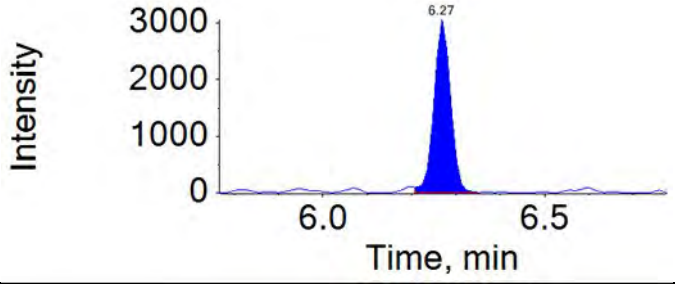


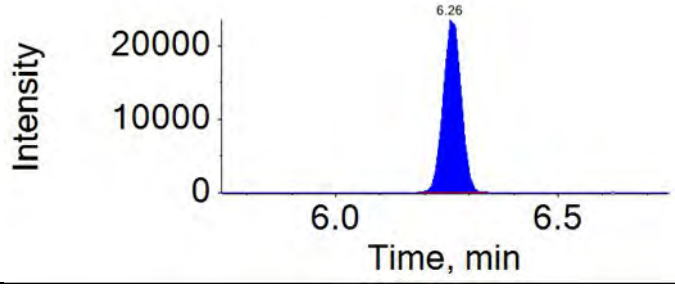
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



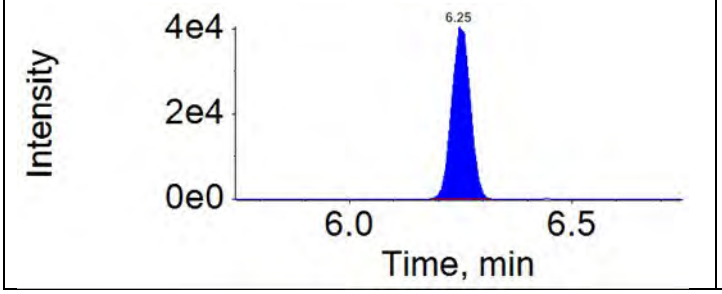


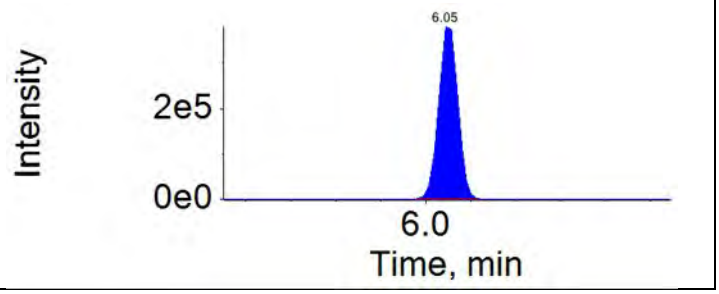
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

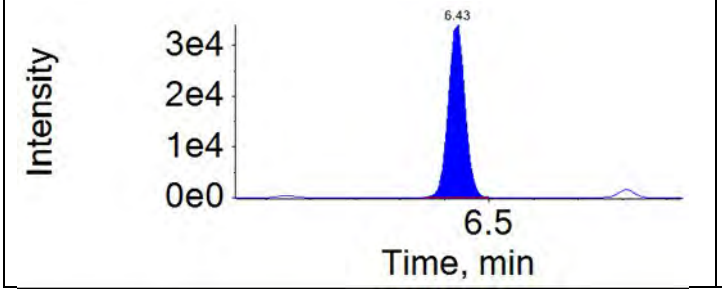
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

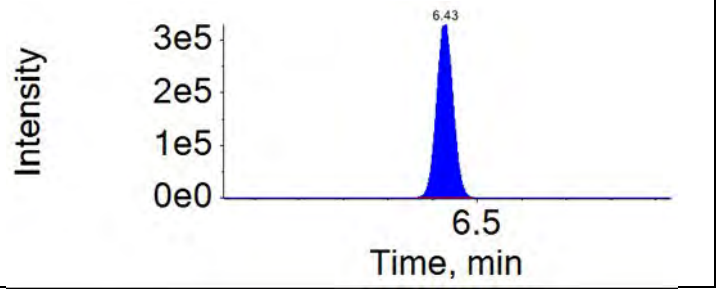
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



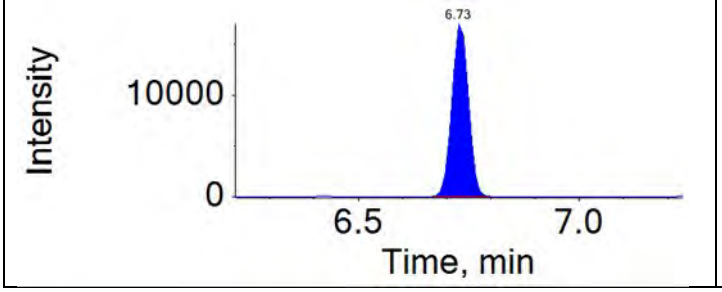


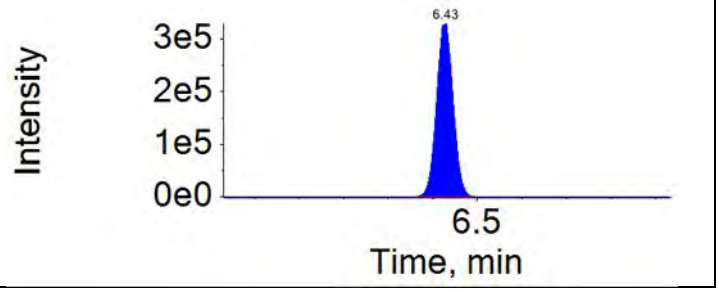
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



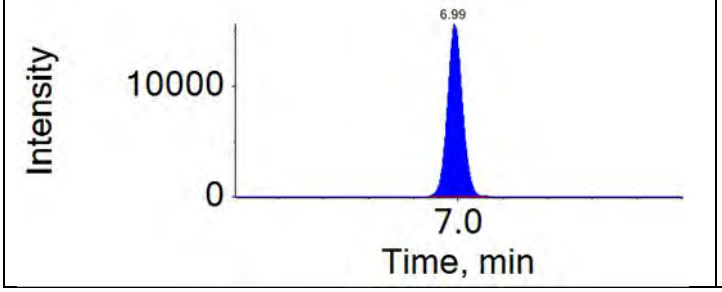


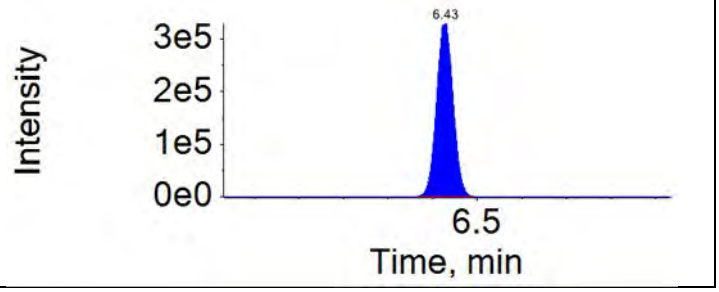
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



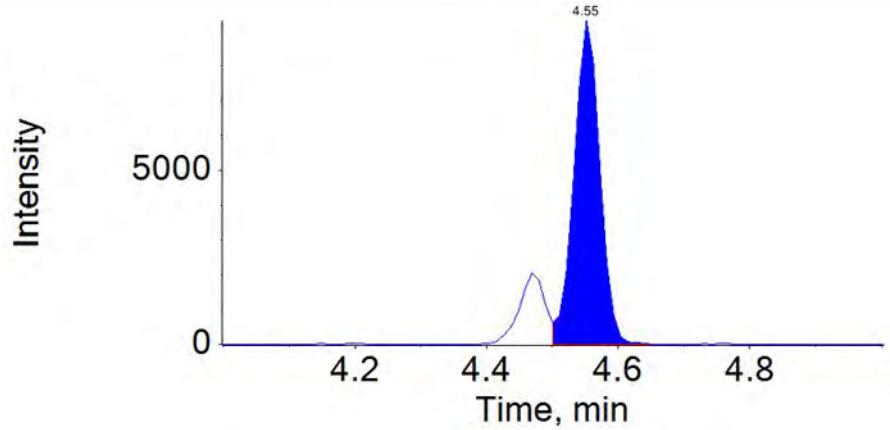


APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

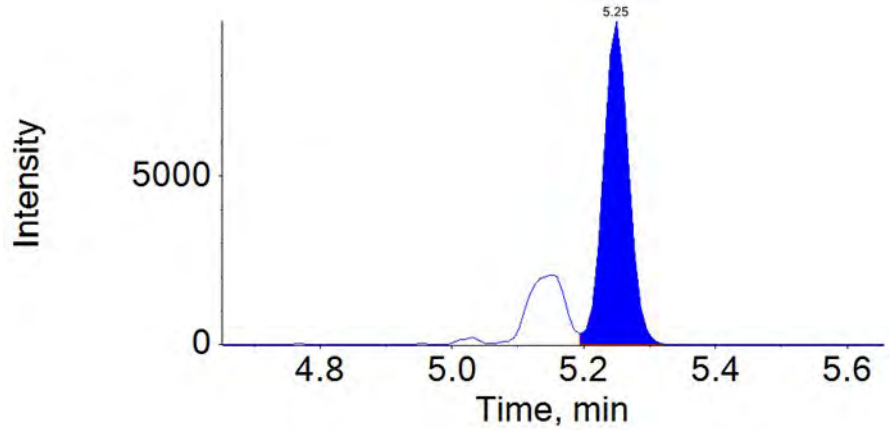
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.55
Peak Area:
25567.97
Mass Range:
399.0 / 80.0
File Name:
18NOV28DCAL-07.wiff
Sample Name:
CAL2



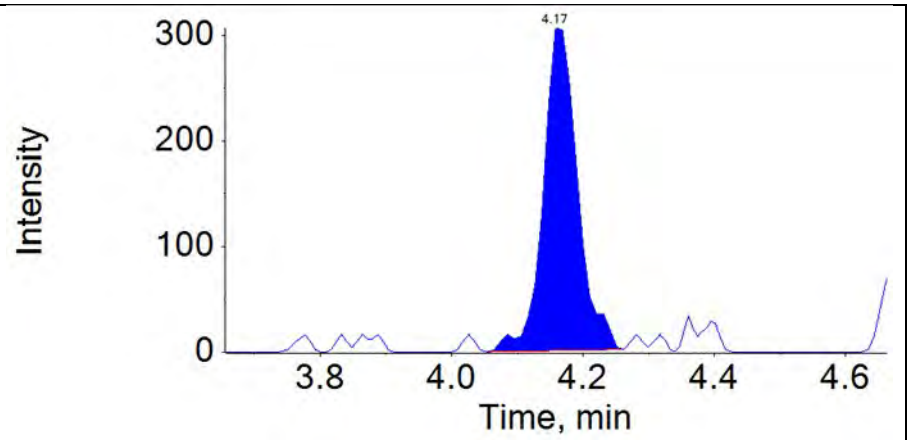
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
25590.10
Mass Range:
499.0 / 80.0
File Name:
18NOV28DCAL-07.wiff
Sample Name:
CAL2



Integration Comment: incorrect integration

Component Name:
PFHxA_2
RT (min.):
4.17
Peak Area:
1118.24
Mass Range:
313.0 / 119.0
File Name:
18NOV28DCAL-07.wiff
Sample Name:
CAL2

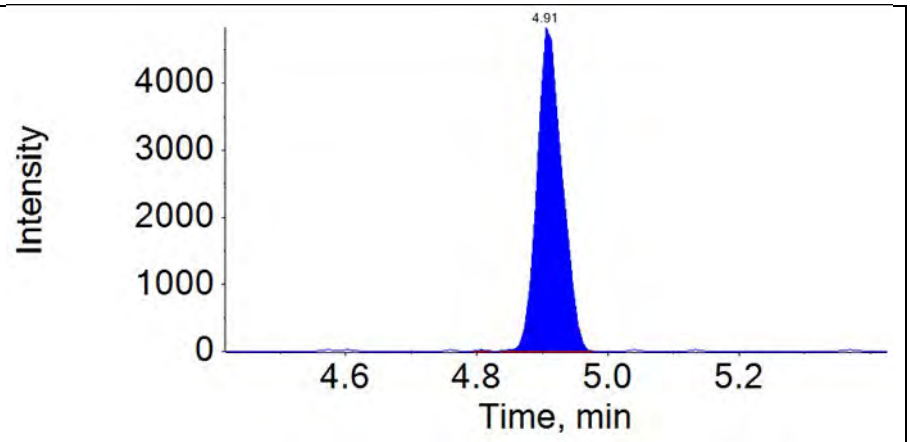


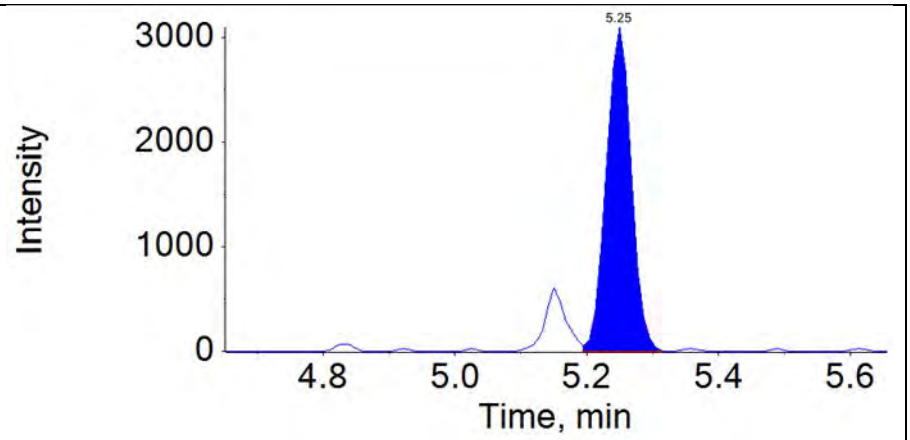
Integration Comment: incorrect integration

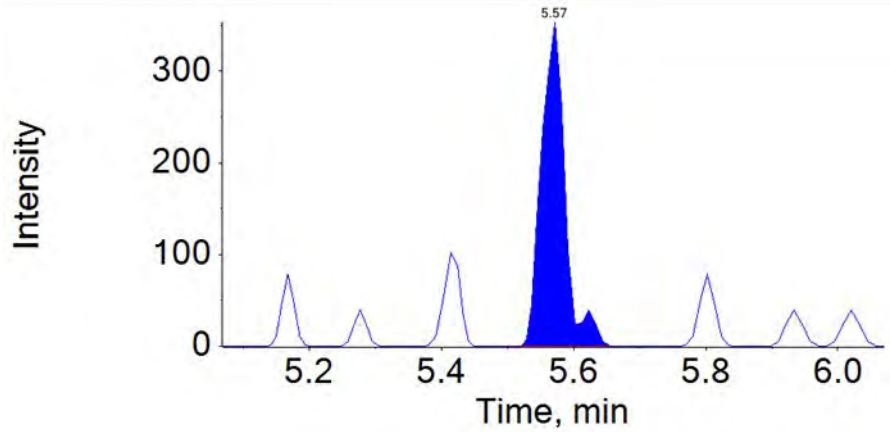
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFHpS_2 **RT (min.):** 4.91 **Peak Area:** 12887.35 **Mass Range:** 449.0 / 99.0 **File Name:** 18NOV28DCAL-07.wiff **Sample Name:** CAL2	 **Integration Comment:** incorrect integration

Component Name: PFOS_2 **RT (min.):** 5.25 **Peak Area:** 8192.52 **Mass Range:** 499.0 / 99.0 **File Name:** 18NOV28DCAL-07.wiff **Sample Name:** CAL2	 **Integration Comment:** incorrect integration

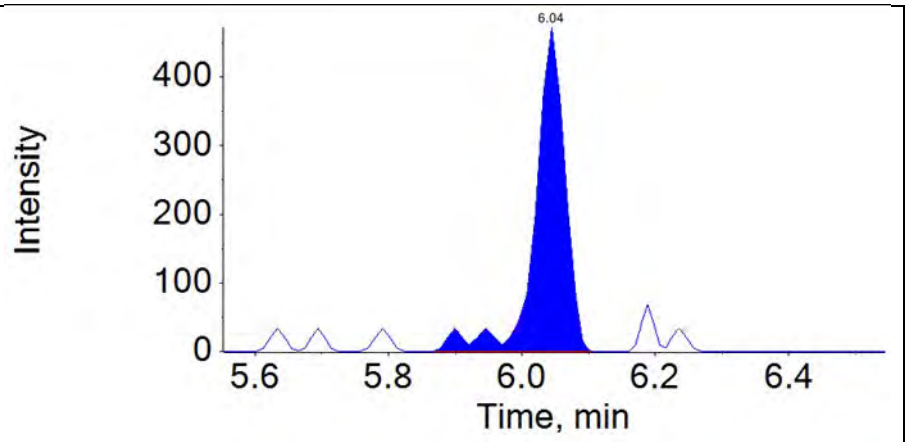
Component Name: PFDA_2 **RT (min.):** 5.57 **Peak Area:** 886.81 **Mass Range:** 513.0 / 169.0 **File Name:** 18NOV28DCAL-07.wiff **Sample Name:** CAL2	 **Integration Comment:** incorrect integration

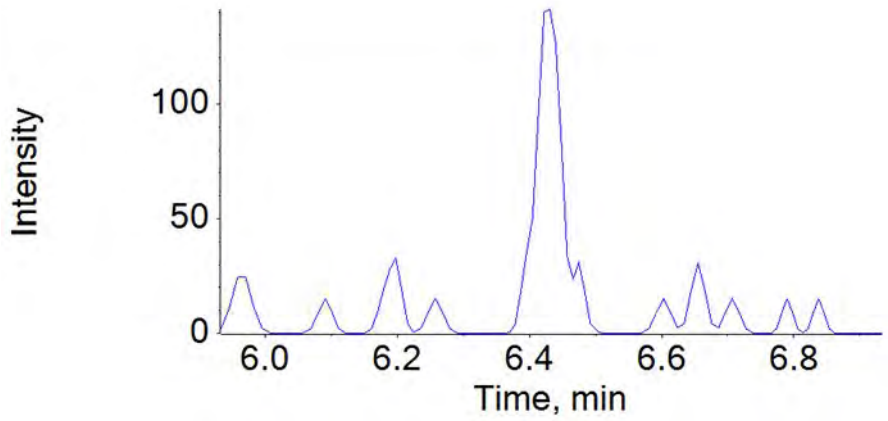
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFDoDA_2 **RT (min.):** 6.04 **Peak Area:** 1485.68 **Mass Range:** 613.0 / 169.0 **File Name:** 18NOV28DCAL-07.wiff **Sample Name:** CAL2	 **Integration Comment:** incorrect integration

Component Name: PFTeDA_2 **RT (min.):** N/A **Peak Area:** N/A **Mass Range:** 713.0 / 169.0 **File Name:** 18NOV28DCAL-07.wiff **Sample Name:** CAL2	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Ion Ratio Report

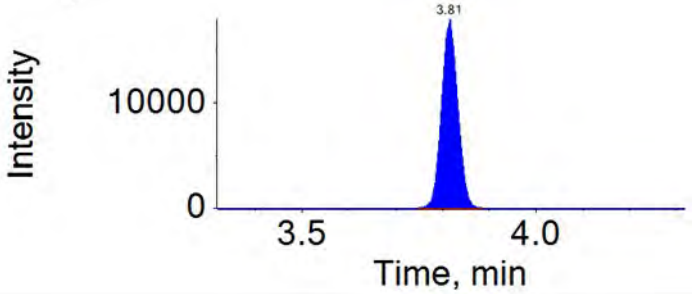
Sample Name: CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-07.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	43237.36	A	0.3655	0.3673			
PFBS_2	3.81	1.00	15879.57	A	0.3655	0.3673	0	50	
4:2-FTS	4.13	1.00	14524.83	A	0.6383	0.6894			
4:2-FTS_2	4.13	1.00	10014.03	A	0.6383	0.6894	8	50	
PFHxA	4.16	1.00	101713.19	A	0.0103	0.0108			
PFHxA_2	4.17	1.00	1097.96	M	0.0103	0.0108	4	50	
PFPeS	4.18	1.10	24007.25	A	0.4976	0.4701			
PFPeS_2	4.18	1.10	11284.85	A	0.4976	0.4701	-6	50	
PFHpA	4.55	1.00	100593.81	A	0.0557	0.0562			
PFHpA_2	4.55	1.00	5648.69	A	0.0557	0.0562	1	50	
PFHxS	4.55	1.00	31104.49	M	0.3693	0.4064			
PFHxS_2	4.55	1.00	12640.83	A	0.3693	0.4064	10	50	
6:2-FTS	4.91	1.00	14479.84	A	0.6625	0.5750			
6:2-FTS_2	4.91	1.00	8326.49	A	0.6625	0.5750	-13	50	
PFHpS	4.91	1.08	32553.66	A	0.3915	0.3950			
PFHpS_2	4.91	1.08	12858.96	M	0.3915	0.3950	1	50	
PFOA	4.92	1.00	106420.83	A	0.0573	0.0580			
PFOA_2	4.92	1.00	6175.90	A	0.0573	0.0580	1	50	
PFOS	5.25	1.00	34203.58	M	0.2960	0.2799			
PFOS_2	5.25	1.00	9573.24	M	0.2960	0.2799	-5	50	
PFNA	5.26	1.00	106720.90	A	0.0201	0.0208			
PFNA_2	5.26	1.00	2222.59	A	0.0201	0.0208	4	50	
PFNS	5.54	1.06	24149.87	A	0.4794	0.4687			
PFNS_2	5.55	1.06	11319.26	A	0.4794	0.4687	-2	50	
PFDA	5.57	1.00	90730.27	A	0.0075	0.0091			
PFDA_2	5.57	1.00	822.55	M	0.0075	0.0091	21	50	
8:2-FTS	5.57	1.00	15550.17	A	0.5380	0.4749			
8:2-FTS_2	5.57	1.00	7384.51	A	0.5380	0.4749	-12	50	
NMeFOSAA	5.70	1.00	16533.06	A	0.2305	0.2819			
NMeFOSAA_2	5.70	1.00	4660.20	A	0.2305	0.2819	22	50	
PFDS	5.80	1.10	18654.75	A	0.5356	0.5747			
PFDS_2	5.80	1.10	10721.43	A	0.5356	0.5747	7	50	
PFUnDA	5.82	1.00	91490.40	A	0.0038	0.0043			
PFUnDA_2	5.83	1.00	389.41	A	0.0038	0.0043	12	50	
NEtFOSAA	5.84	1.00	16643.25	A	0.7356	0.5363			
NEtFOSAA_2	5.84	1.00	8925.35	A	0.7356	0.5363	-27	50	
PFDoDA	6.05	1.00	122586.00	A	0.0130	0.0112			
PFDoDA_2	6.04	1.00	1368.20	M	0.0130	0.0112	-14	50	
10:2-FTS	6.07	1.09	15157.77	A	0.6989	0.5470			
10:2-FTS_2	6.07	1.09	8291.25	A	0.6989	0.5470	-22	50	
PFTrDA	6.25	1.03	117562.28	A	0.0090	0.0079			
PFTrDA_2	6.25	1.03	932.63	A	0.0090	0.0079	-12	50	
PFTeDA	6.43	1.00	88360.25	A	0.0056	0.0048			
PFTeDA_2	6.43	1.00	423.54	M	0.0056	0.0048	-15	50	
PFHxDA	6.73	1.05	44164.63	A	0.0646	0.0656			
PFHxDA_2	6.73	1.05	2895.58	A	0.0646	0.0656	2	50	
PFODA	6.99	1.09	36421.52	A	0.0264	0.0257			
PFODA_2	6.99	1.09	935.28	A	0.0264	0.0257	-3	50	

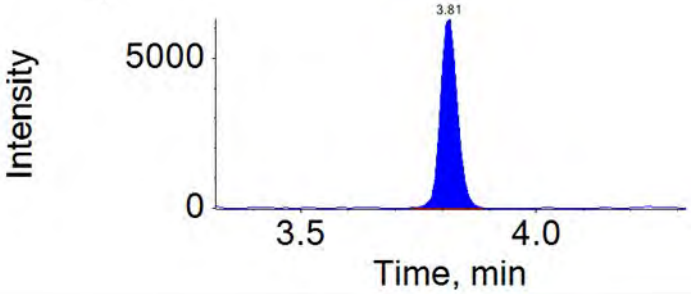
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

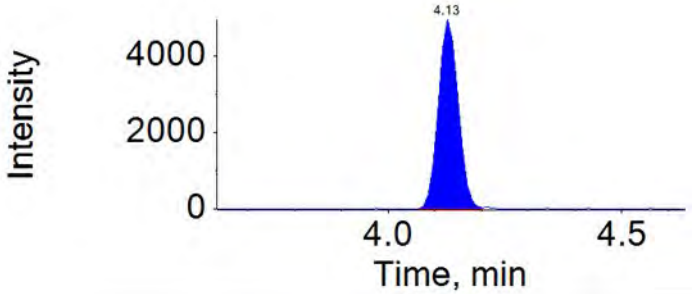
Component: PFBS
Primary Mass: 299.0 / 80.0



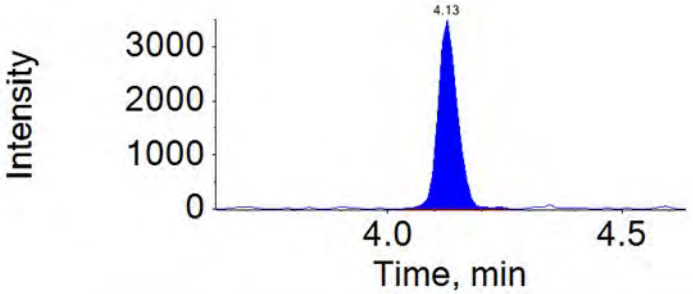
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



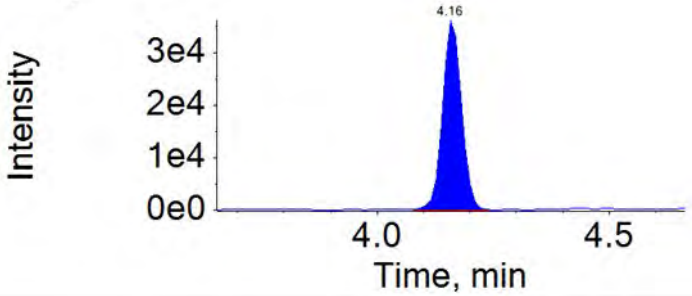
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



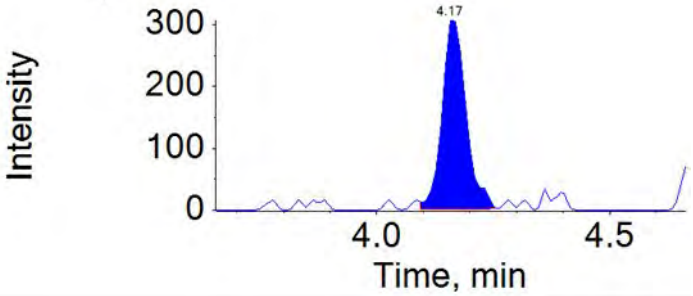
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



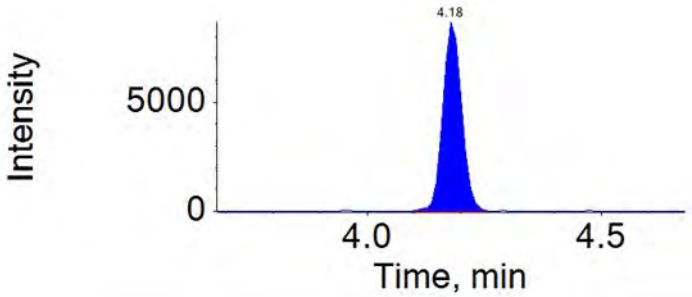
Component: PFHxA
Primary Mass: 313.0 / 269.0



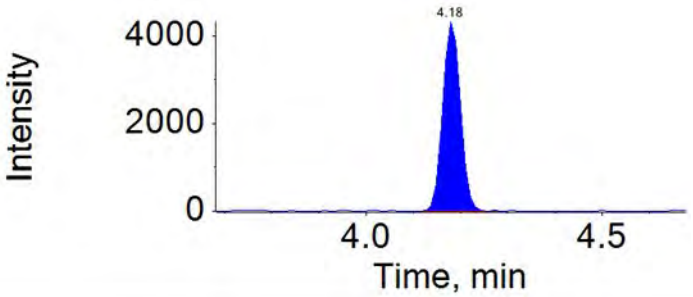
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



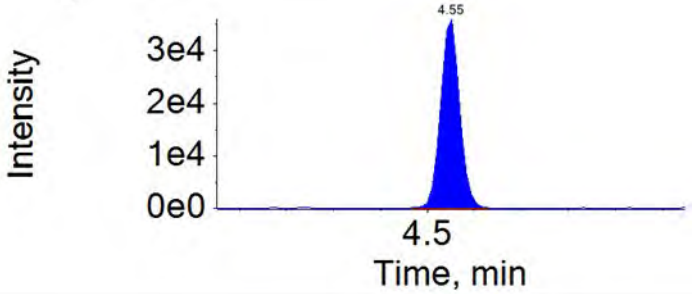
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Secondary Mass: 349.0 / 99.0



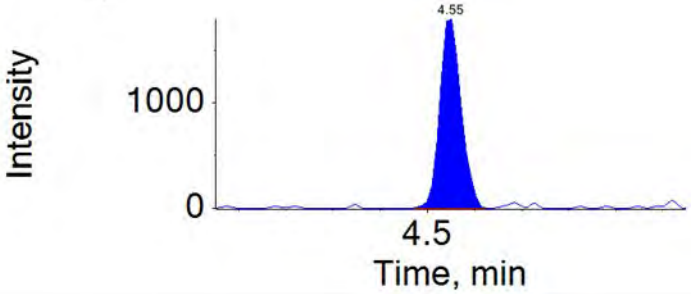
APPROVED
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By HMK at 12:22 pm, 11/29/18

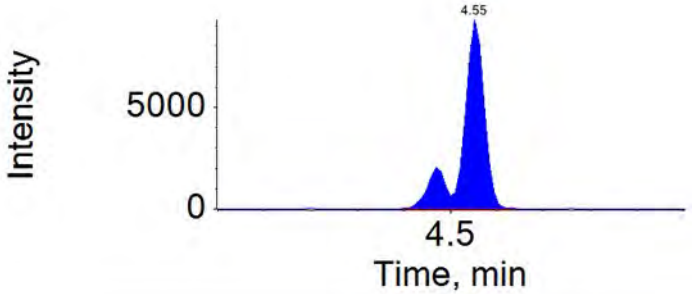
Component: PFHpA
Primary Mass: 363.0 / 319.0



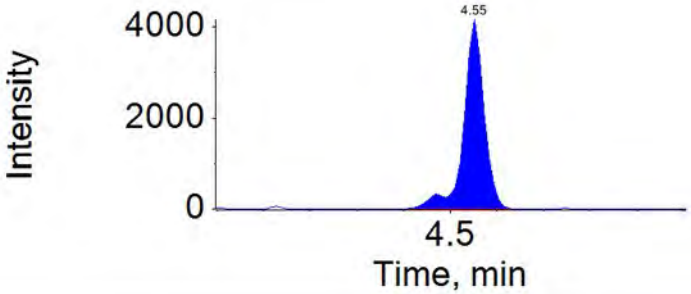
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



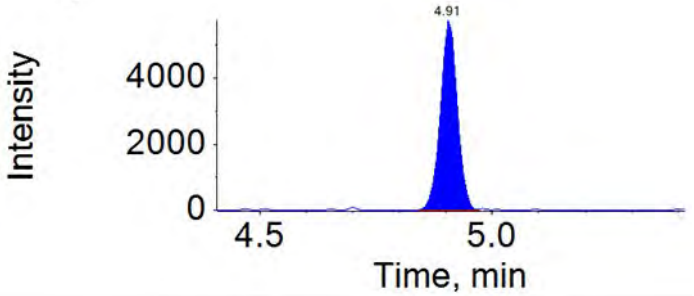
Component: PFHxS
Primary Mass: 399.0 / 80.0



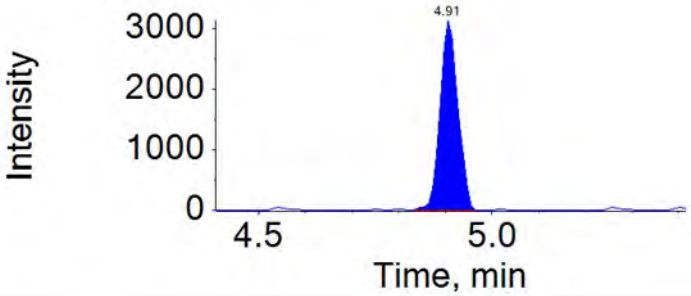
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Secondary Mass: 399.0 / 99.0



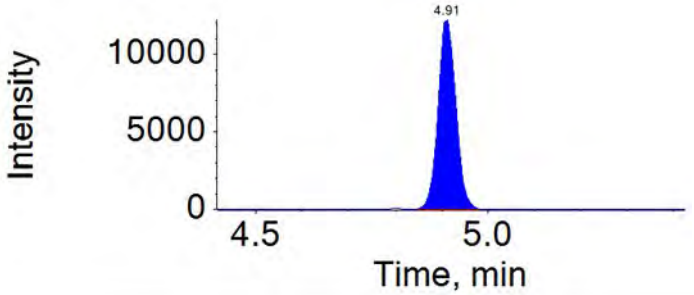
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



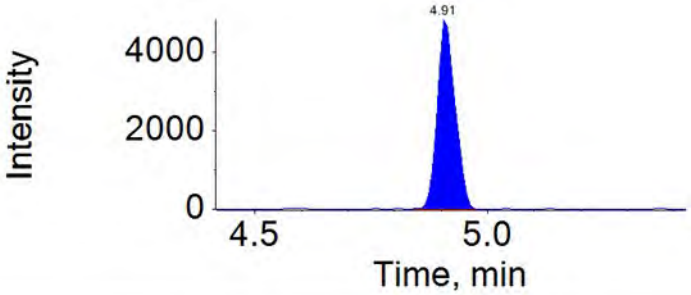
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



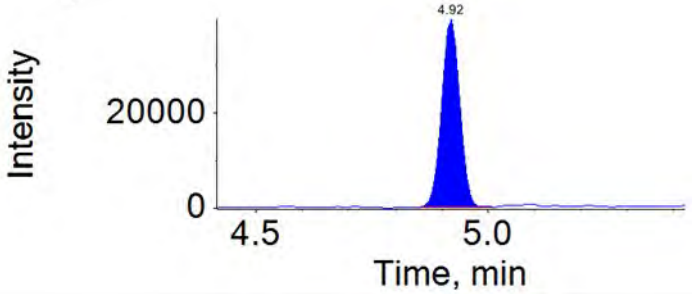
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



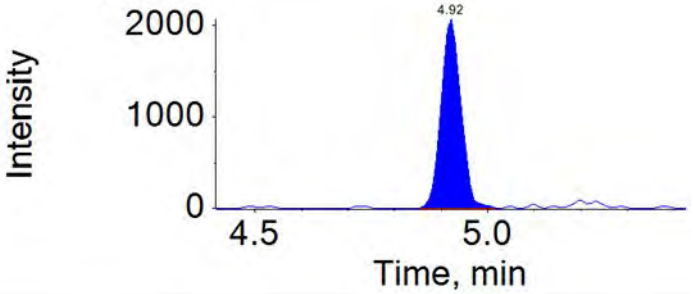
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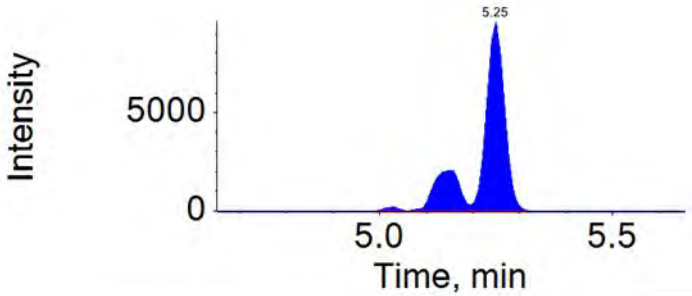
Component: PFOA
Primary Mass: 413.0 / 369.0



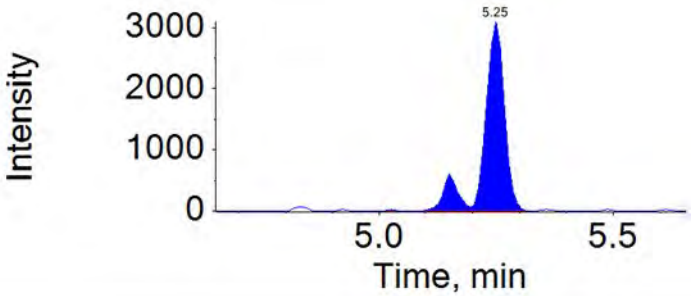
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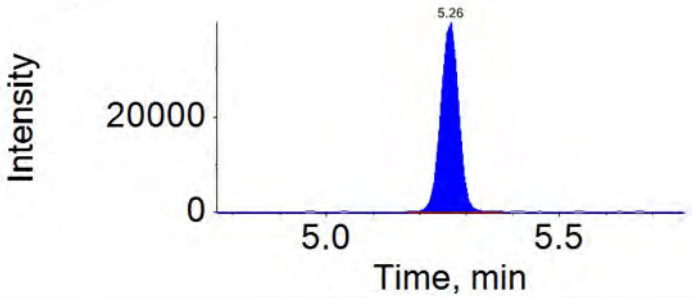
Component: PFOS
Primary Mass: 499.0 / 80.0



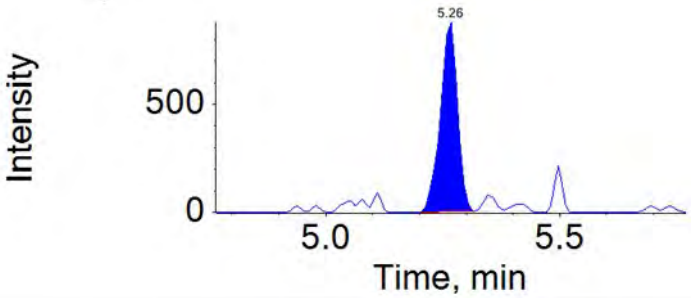
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



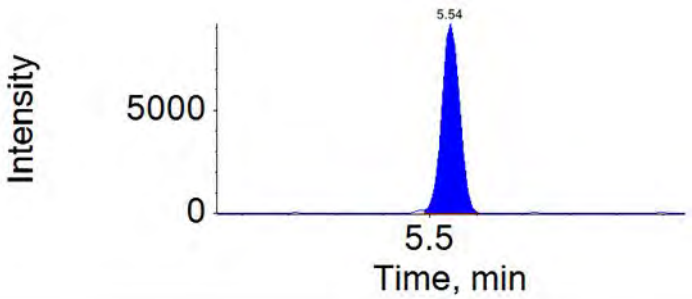
Component: PFNA
Primary Mass: 463.0 / 419.0



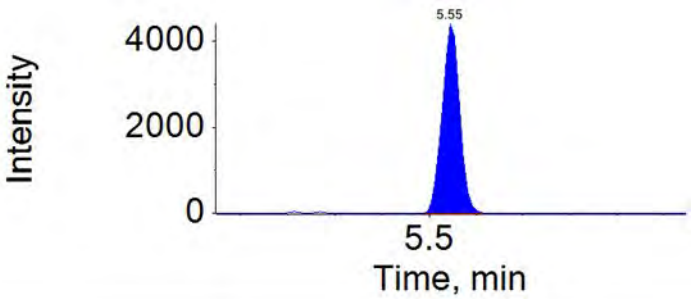
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



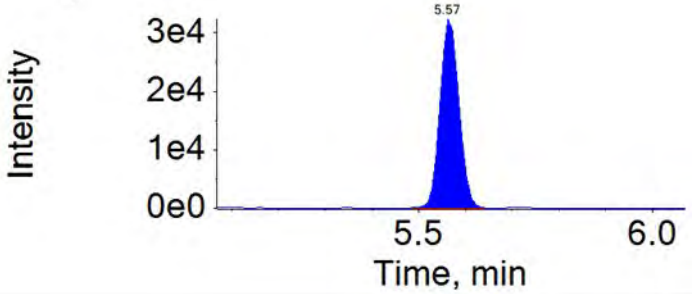
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



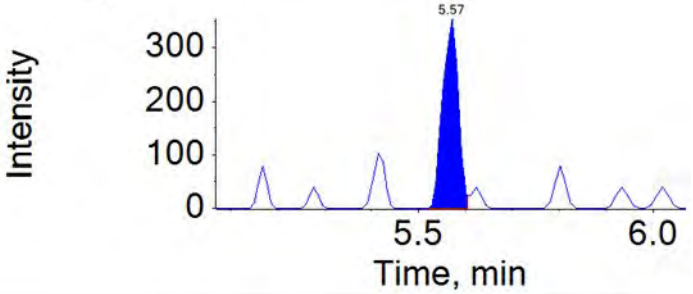
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

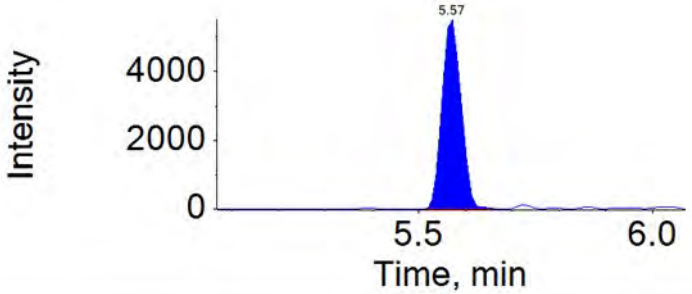
Component: PFDA
Primary Mass: 513.0 / 469.0



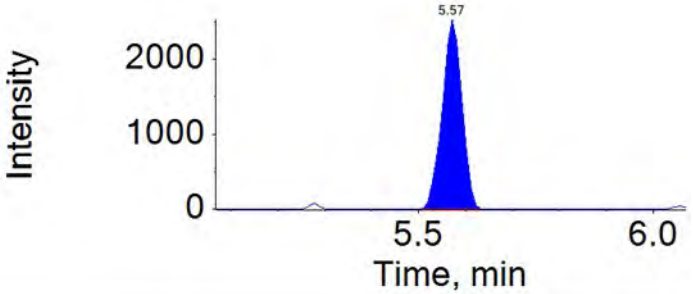
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



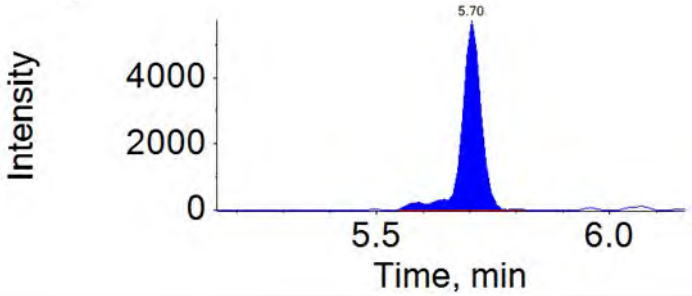
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



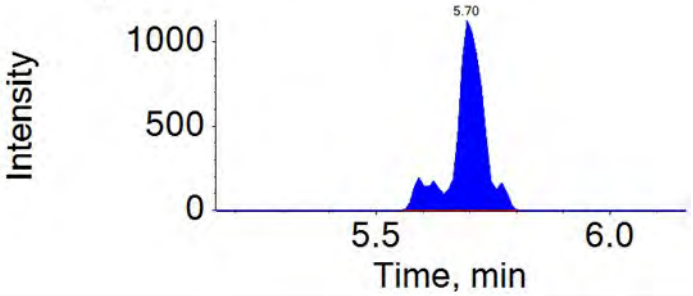
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



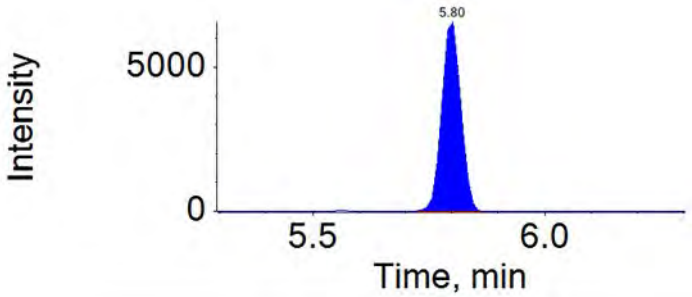
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



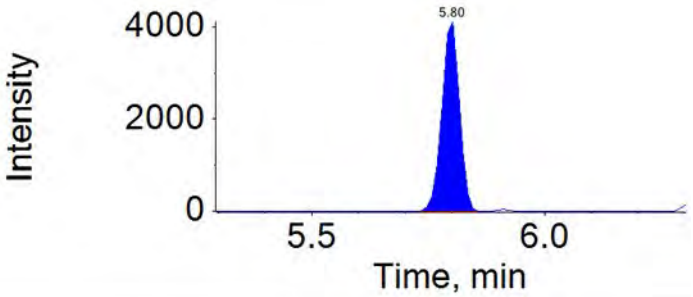
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



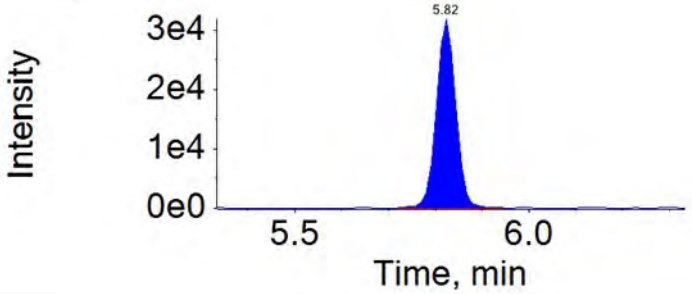
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



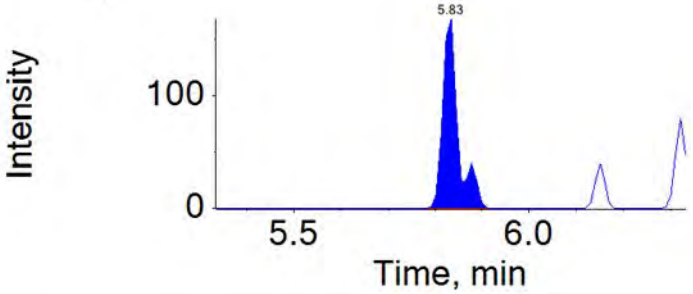
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

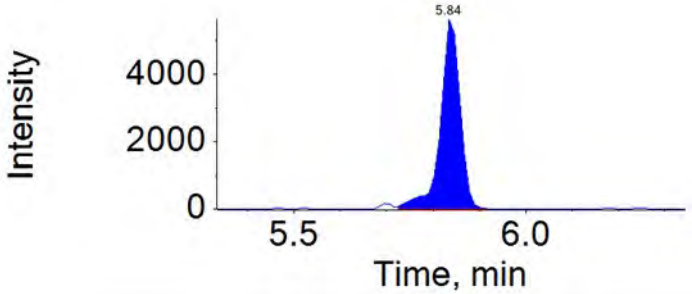
Component: PFUnDA
Primary Mass: 563.0 / 519.0



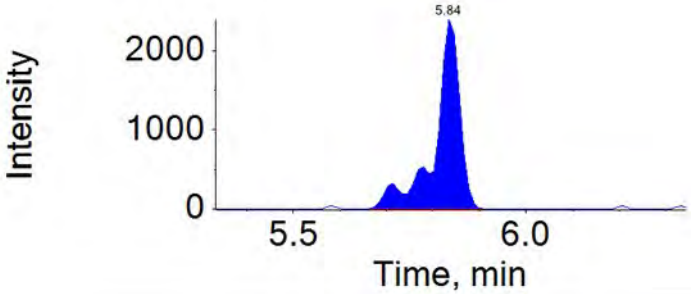
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



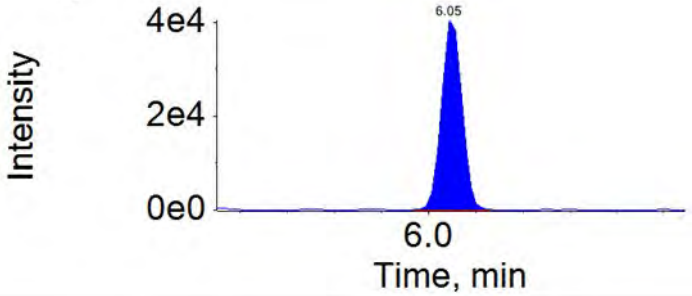
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



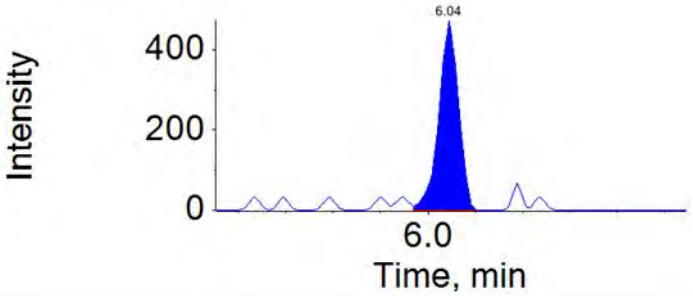
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Secondary Mass: 584.0 / 526.0



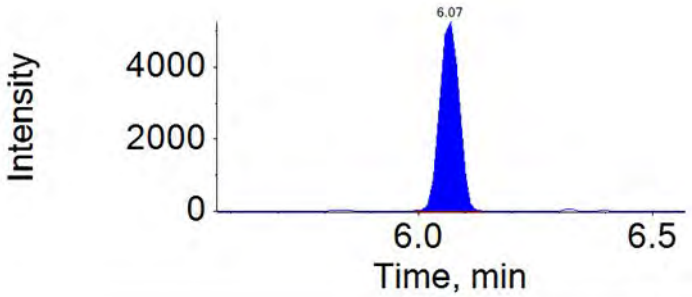
Component: PFDoDA
Primary Mass: 613.0 / 569.0



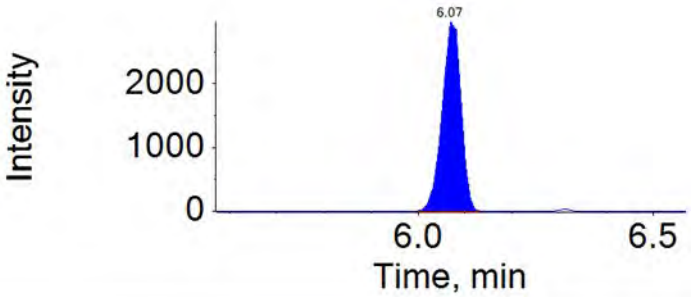
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



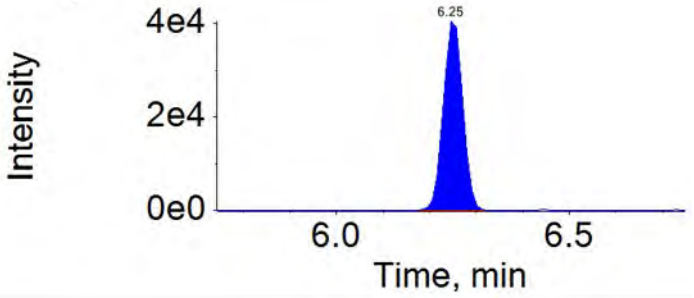
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



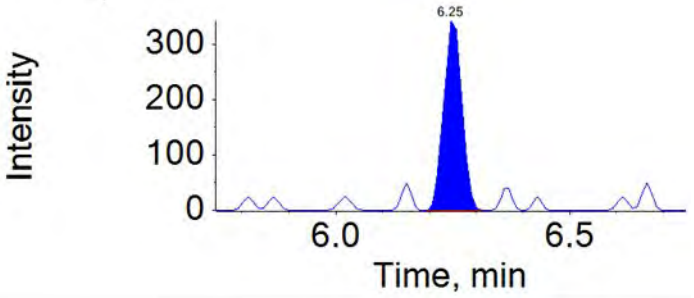
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

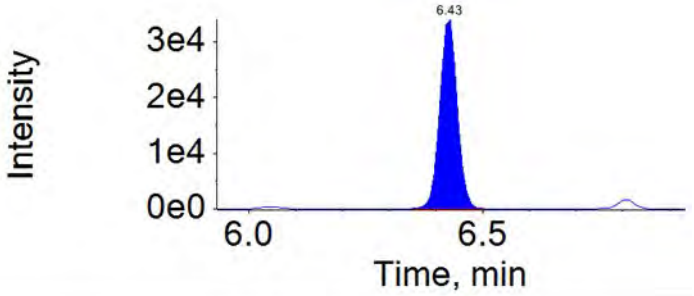
Component: PFTrDA
Primary Mass: 663.0 / 619.0



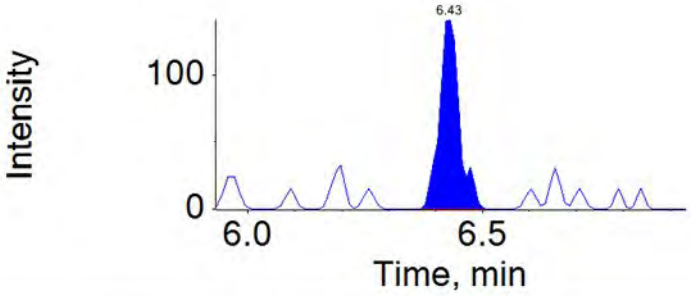
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



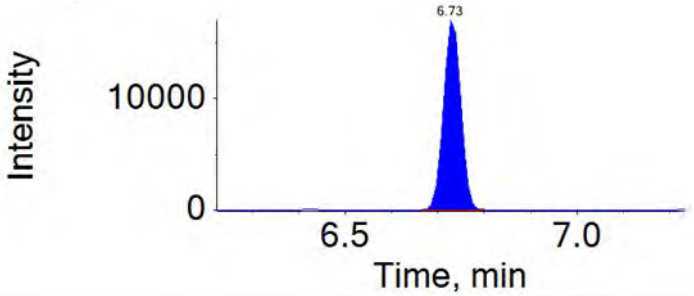
Component: PFTeDA
Primary Mass: 713.0 / 669.0



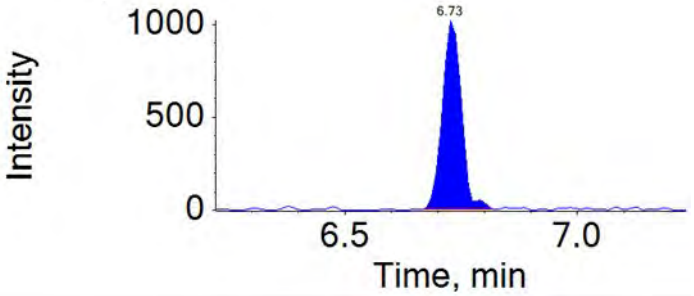
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



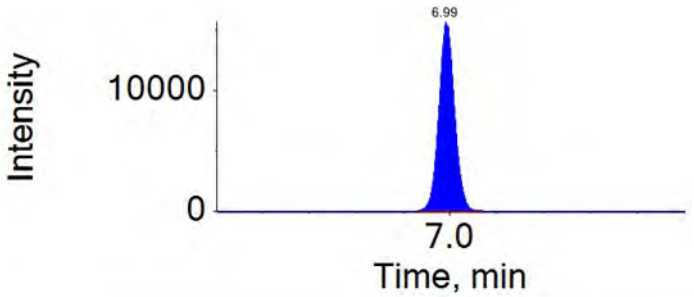
Component: PFHxDA
Primary Mass: 813.0 / 769.0



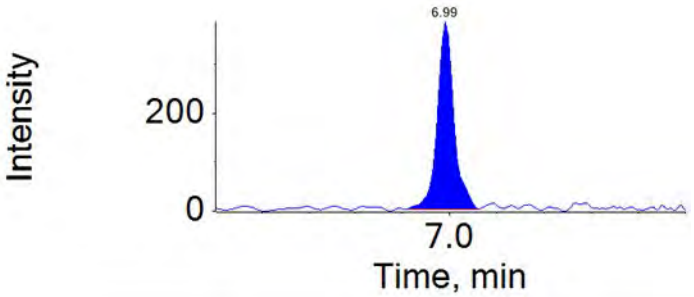
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL3			**Data File:**		18NOV28DCAL-08.wiff
Sample ID:	CALBRN31833B			**Acquis Date:**		2018-11-28T14:00:13
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	5			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV28DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	887248.9	887248.9	0	50	
13C2-PFOA	5.0	498501.6	498501.6	0	50	
13C4-PFOS	4.8	283214.2	283214.2	0	50	
13C2-PFDA	5.0	441790.6	441790.6	0	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	993144.1	13C3-PFBA	887248.9	1.119	5.000	4.994	100	70-130	
E13C5-PFPeA	910953.7	13C3-PFBA	887248.9	1.027	5.000	4.794	96	70-130	
E13C3-PFBS	419929.2	13C3-PFBA	887248.9	0.473	4.650	4.515	97	70-130	
E13C2-4:2-FTS	70629.1	13C2-PFOA	498501.6	0.142	4.670	4.883	105	70-130	
E13C5-PFHxA	717900.1	13C2-PFOA	498501.6	1.440	5.000	5.290	106	70-130	
E13C3-PFHxS	326982.4	13C2-PFOA	498501.6	0.656	4.730	5.141	109	70-130	
E13C4-PFHpA	535993.3	13C2-PFOA	498501.6	1.075	5.000	4.940	99	70-130	
E13C2-6:2-FTS	65518.3	13C2-PFOA	498501.6	0.131	4.750	5.502	116	70-130	
E13C8-PFOA	954678.0	13C2-PFOA	498501.6	1.915	5.000	5.271	105	70-130	
E13C8-PFOS	309913.7	13C4-PFOS	283214.2	1.094	4.780	4.940	103	70-130	
E13C9-PFNA	629954.6	13C4-PFOS	283214.2	2.224	5.000	4.885	98	70-130	
E13C6-PFDA	824072.9	13C2-PFDA	441790.6	1.865	5.000	5.259	105	70-130	
E13C2-8:2-FTS	53847.2	13C2-PFDA	441790.6	0.122	4.790	5.239	109	70-130	
E13C8-PFOSA	631627.9	13C2-PFDA	441790.6	1.430	5.000	5.246	105	70-130	
Ed3-NMeFOSAA	178338.1	13C2-PFDA	441790.6	0.404	5.000	5.125	103	70-130	
E13C7-PFUnDA	592495.7	13C2-PFDA	441790.6	1.341	5.000	5.668	113	70-130	
Ed5-NEtFOSAA	129810.7	13C2-PFDA	441790.6	0.294	5.000	5.235	105	70-130	
E13C2-PFDoDA	1091194.9	13C2-PFDA	441790.6	2.470	5.000	5.189	104	70-130	
Ed7-NMePFOSAE	256577.3	13C2-PFDA	441790.6	0.581	5.000	5.019	100	70-130	
Ed3-NMePFOSA	80294.1	13C2-PFDA	441790.6	0.182	5.000	4.919	98	70-130	
Ed9-NEtPFOSAE	216571.5	13C2-PFDA	441790.6	0.490	5.000	4.970	99	70-130	
Ed5-NEtPFOSA	64623.7	13C2-PFDA	441790.6	0.146	5.000	5.083	102	70-130	
E13C2-PFTeDA	841931.1	13C2-PFDA	441790.6	1.906	5.000	5.273	105	70-130	

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

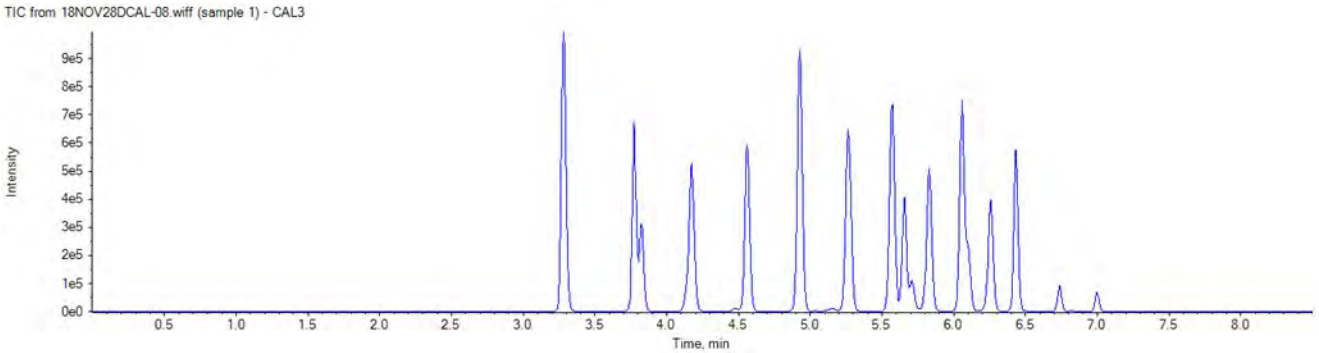
Analyte Quantitation Peak Table

Sample Name: CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-08.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.28	1.000	403055.9		A	13C4-PFBA	3.28	993144.1	0.406	2.225
PFPeA	3.78	1.000	424089.1		A	13C5-PFPeA	3.78	910953.7	0.466	2.284
PFBS	3.82	1.000	168534.1		A	13C3-PFBS	3.82	419929.2	0.401	1.948
4:2-FTS	4.14	1.000	56502.5		A	13C2-4:2-FTS	4.14	70629.1	0.800	2.142
PFHxA	4.17	1.000	395421.4		A	13C5-PFHxA	4.17	717900.1	0.551	2.211
PFPeS	4.19	1.100	89559.7		A	13C3-PFBS	3.82	419929.2	0.213	2.157
PFHpA	4.56	1.000	388626.7		A	13C4-PFHpA	4.56	535993.3	0.725	2.238
PFHxS	4.56	1.000	127889.2		M	13C3-PFHxS	4.56	326982.4	0.391	1.831
6:2-FTS	4.92	1.000	53951.0		A	13C2-6:2-FTS	4.92	65518.3	0.823	2.149
PFHpS	4.92	1.080	129450.9		A	13C3-PFHxS	4.56	326982.4	0.396	1.976
PFOA	4.93	1.000	405879.4		A	13C8-PFOA	4.93	954678.0	0.425	2.197
PFOS	5.26	1.000	139506.6		M	13C8-PFOS	5.26	309913.7	0.450	1.888
PFNA	5.27	1.000	370292.0		A	13C9-PFNA	5.27	629954.6	0.588	2.253
PFNS	5.55	1.060	91471.0		A	13C8-PFOS	5.26	309913.7	0.295	1.864
PFDA	5.57	1.000	343523.0		A	13C6-PFDA	5.57	824072.9	0.417	2.360
8:2-FTS	5.57	1.000	57433.9		A	13C2-8:2-FTS	5.58	53847.2	1.067	2.011
PFOSA	5.66	1.000	265394.0		A	13C8-PFOSA	5.66	631627.9	0.420	2.128
NMeFOSAA	5.71	1.000	62054.8		A	d3-NMeFOSAA	5.71	178338.1	0.348	2.220
PFDS	5.80	1.100	80537.4		A	13C8-PFOS	5.26	309913.7	0.260	2.060
PFUnDA	5.83	1.000	370693.6		A	13C7-PFUnDA	5.83	592495.7	0.626	2.236
NEtFOSAA	5.84	1.000	52769.5		M	d5-NEtFOSAA	5.84	129810.7	0.407	1.980
PFDoDA	6.06	1.000	486489.2		A	13C2-PFDoDA	6.06	1091194.9	0.446	2.442
10:2-FTS	6.07	1.090	58508.2		A	13C2-8:2-FTS	5.58	53847.2	1.087	2.396
NMePFOSAE	6.11	1.000	136518.3		A	d7-NMePFOSAE	6.10	256577.3	0.532	2.239
NMePFOSA	6.11	1.000	33009.7		A	d3-NMePFOSA	6.11	80294.1	0.411	2.179
PFDoS	6.23	1.180	40838.1		A	13C8-PFOS	5.26	309913.7	0.132	1.892
NEtPFOSAE	6.26	1.000	152952.1		A	d9-NEtPFOSAE	6.25	216571.5	0.706	2.540
NEtPFOSA	6.27	1.000	30595.3		A	d5-NEtPFOSA	6.27	64623.7	0.473	2.122
PFTrDA	6.26	1.030	466266.9		A	13C2-PFDoDA	6.06	1091194.9	0.427	2.576
PFTeDA	6.43	1.000	342239.8		A	13C2-PFTeDA	6.43	841931.1	0.406	2.303
PFHxDA	6.74	1.050	173721.0		A	13C2-PFTeDA	6.43	841931.1	0.206	2.359
PFODA	7.00	1.090	139071.5		A	13C2-PFTeDA	6.43	841931.1	0.165	2.201

Total Ion Chromatogram

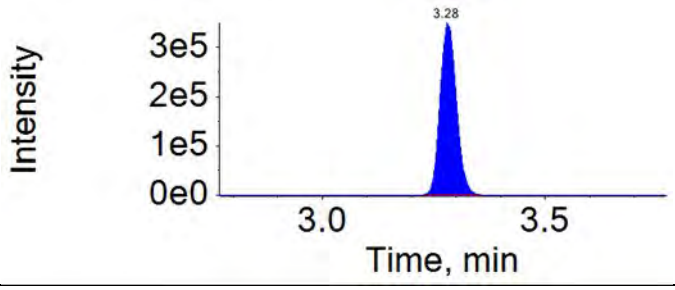


APPROVED
By MCD at 5:00 pm, 11/28/18

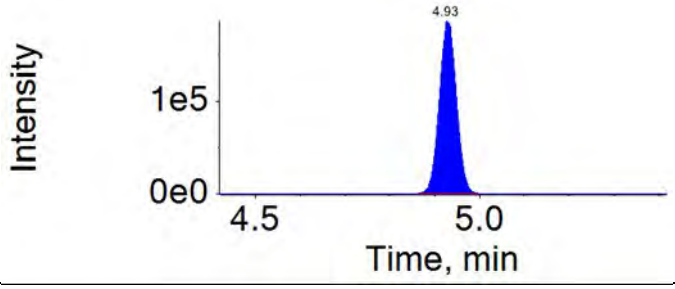
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

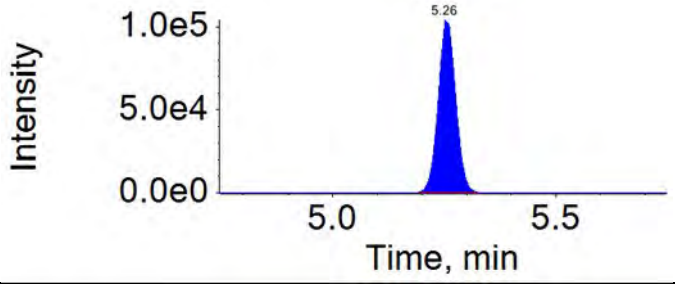
Injection Standard: 13C3-PFBA
216.0 / 172.0



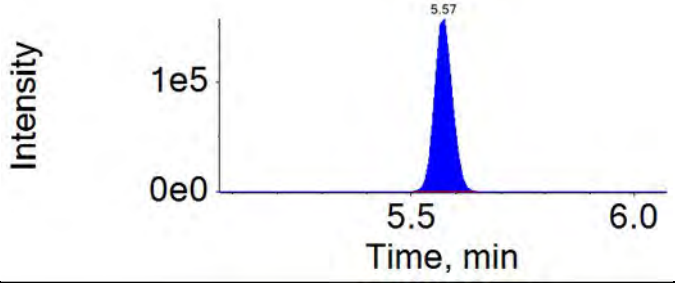
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



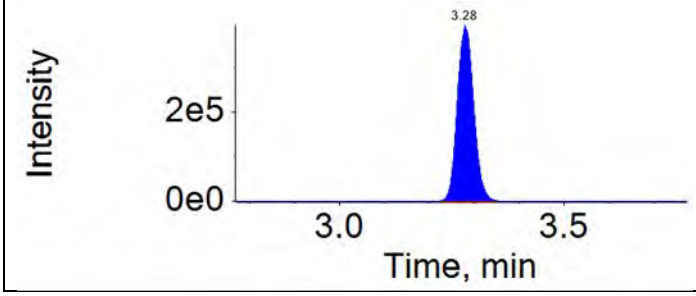
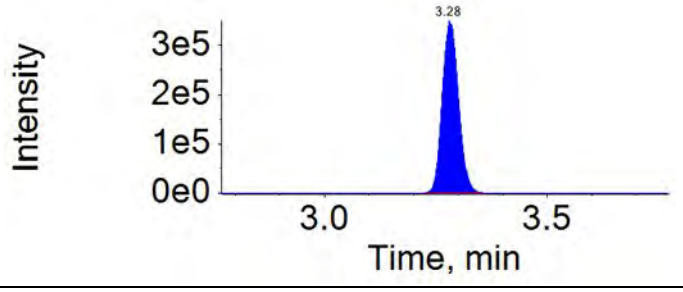
Injection Standard: 13C2-PFDA
515.0 / 470.0

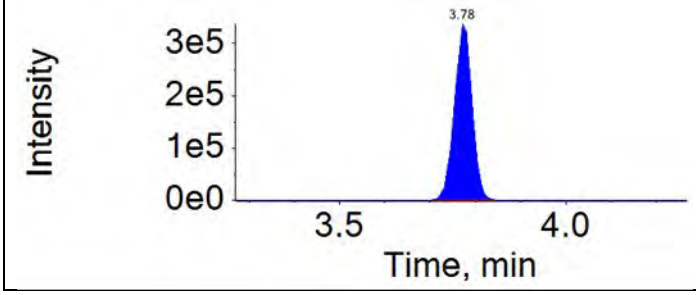
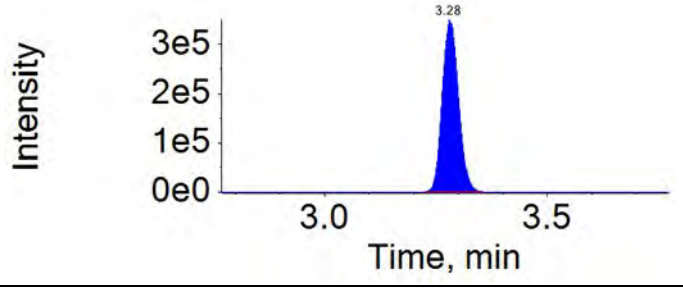


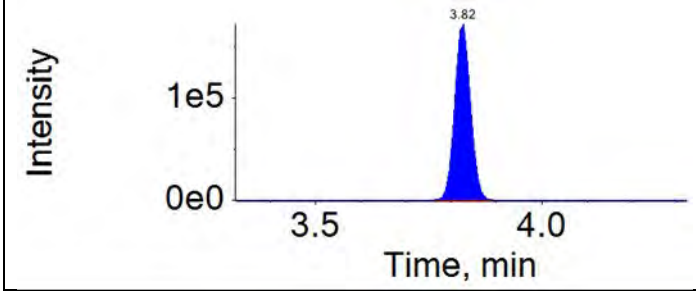
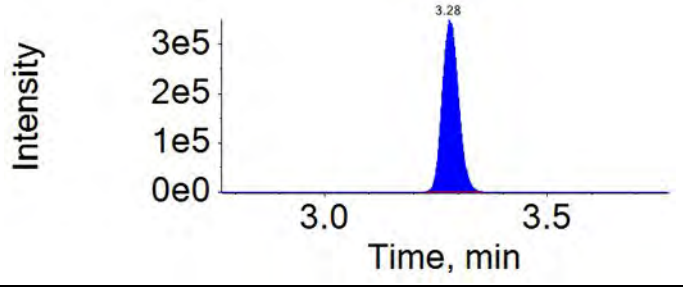
APPROVED
By MCD at 5:00 pm, 11/28/18

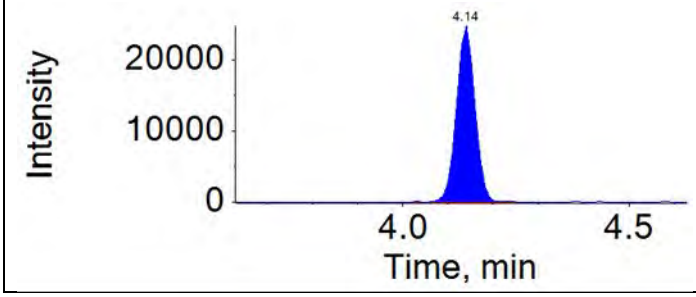
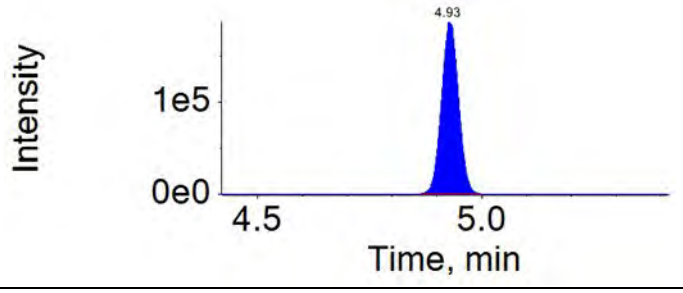
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

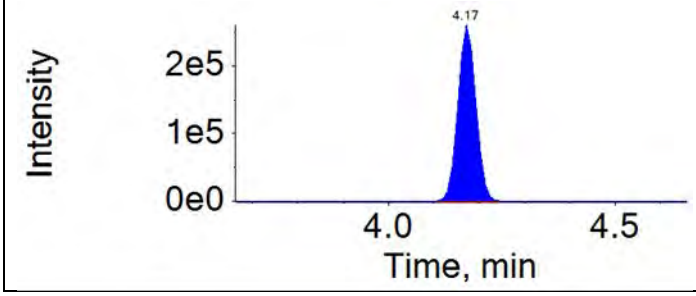
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

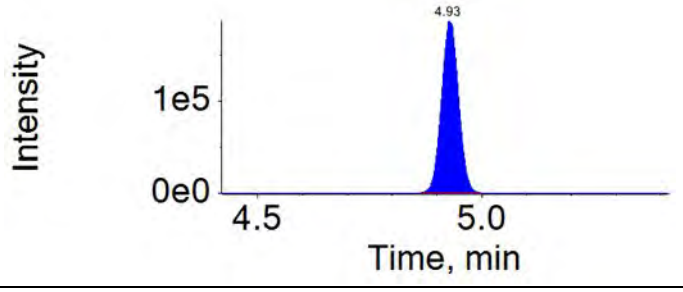
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

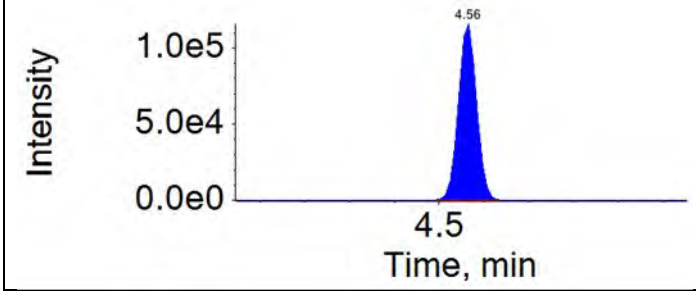
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

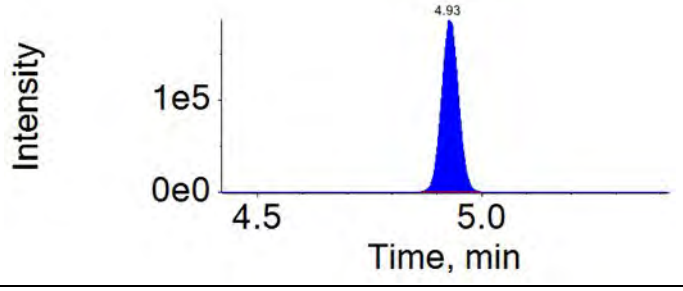
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



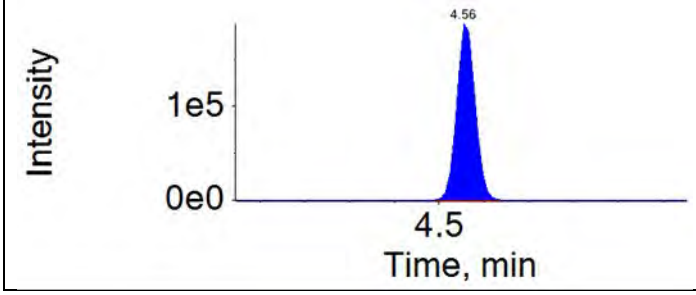


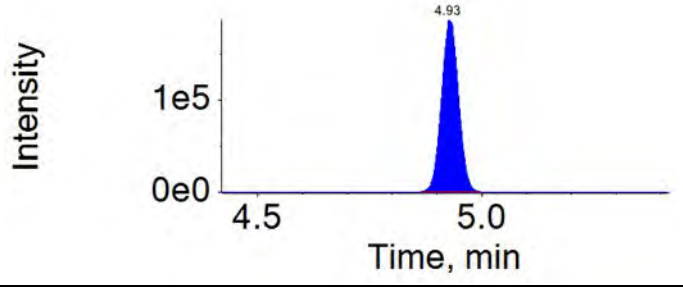
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



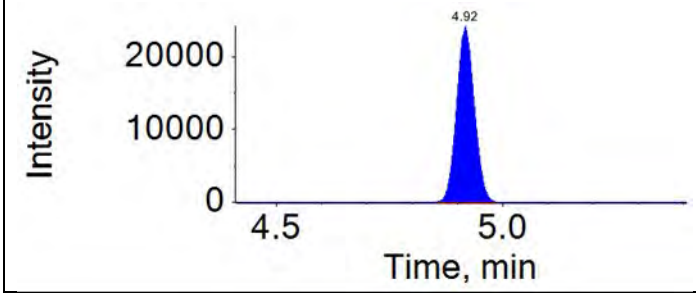


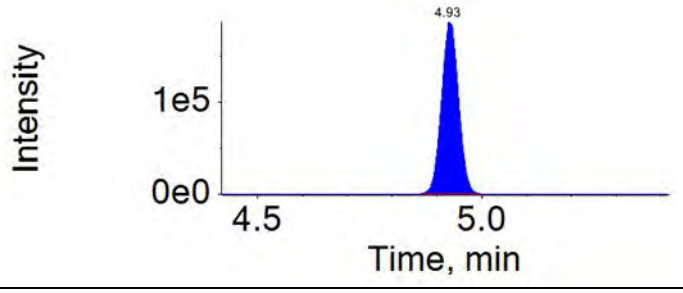
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

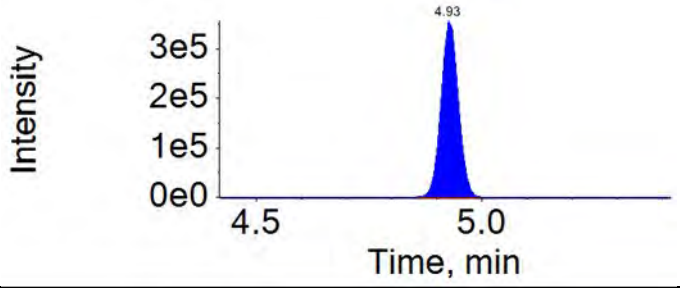
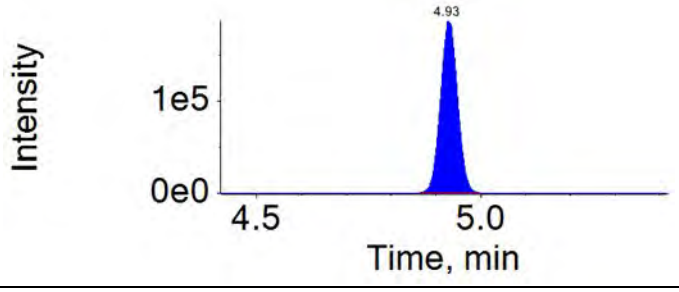


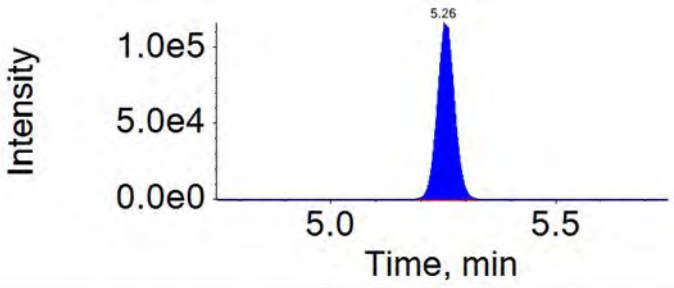
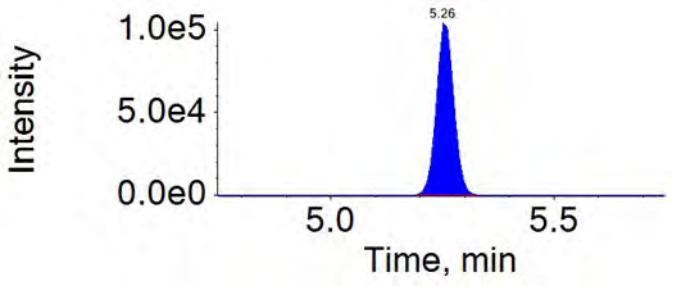


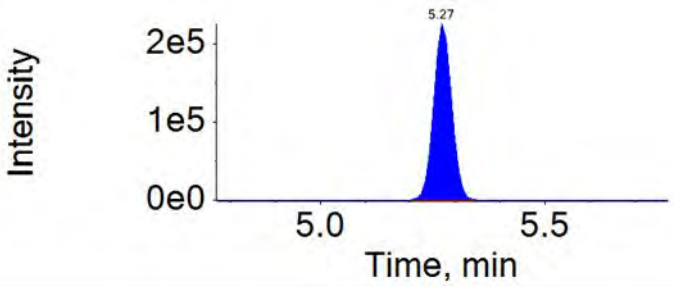
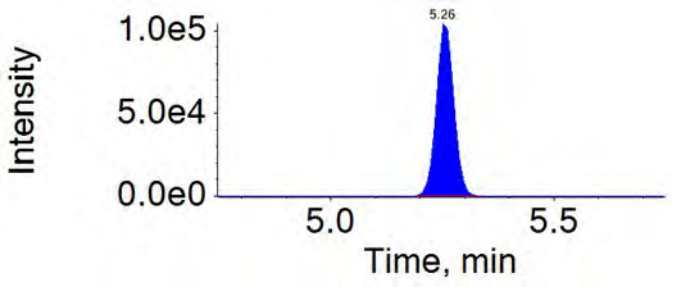
APPROVED
By MCD at 5:00 pm, 11/28/18

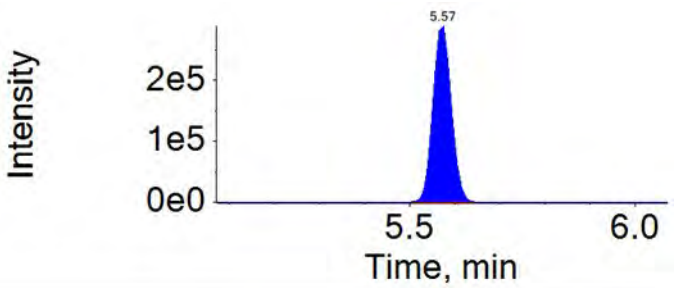
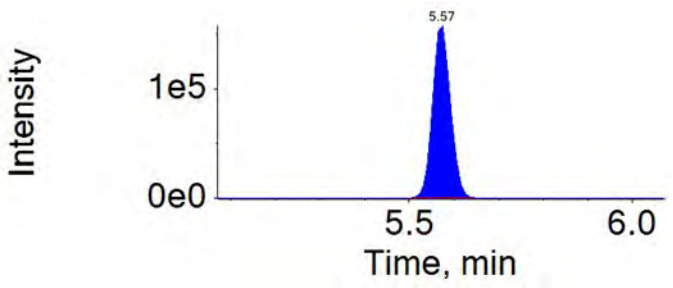
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

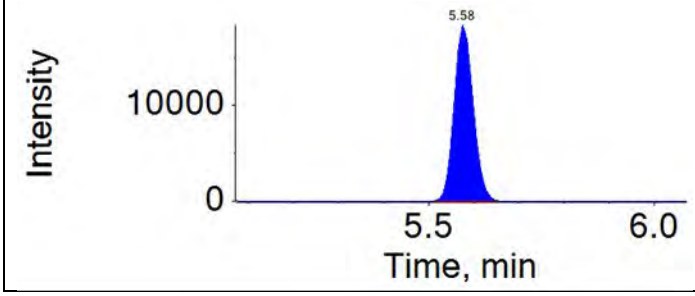
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

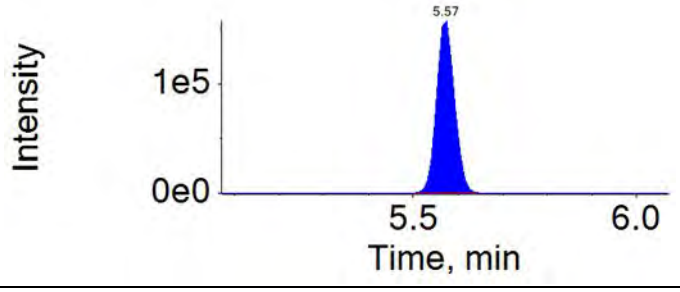
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

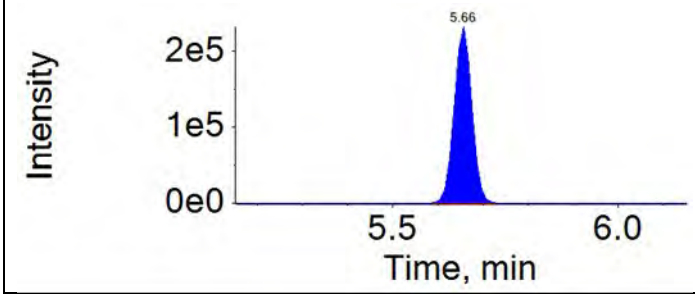
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

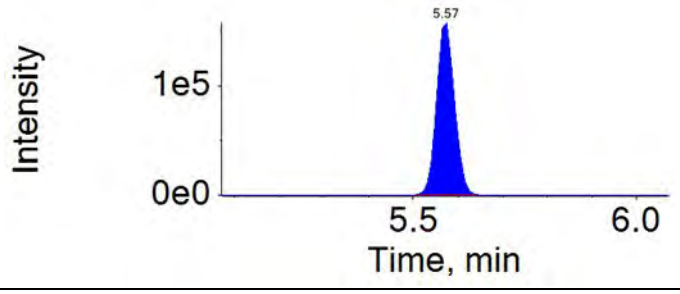
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



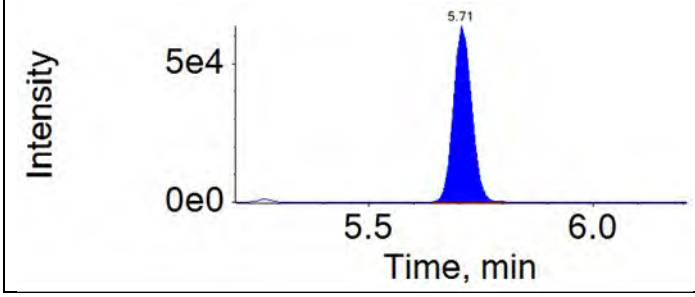


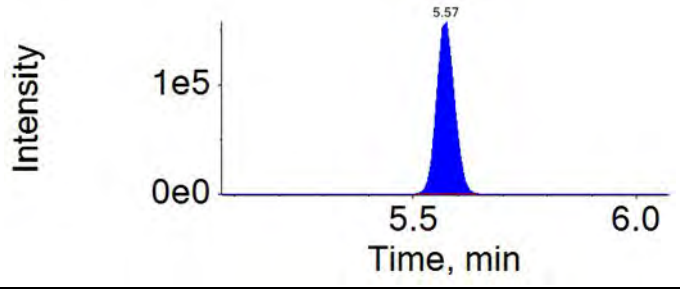
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



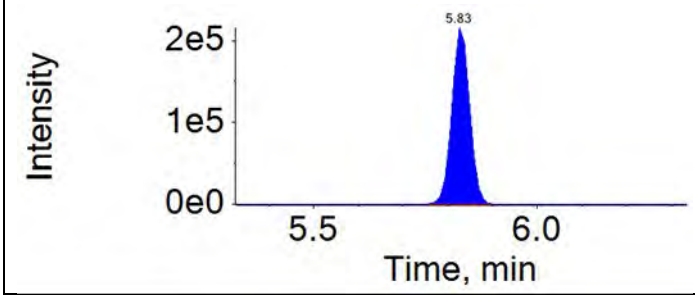


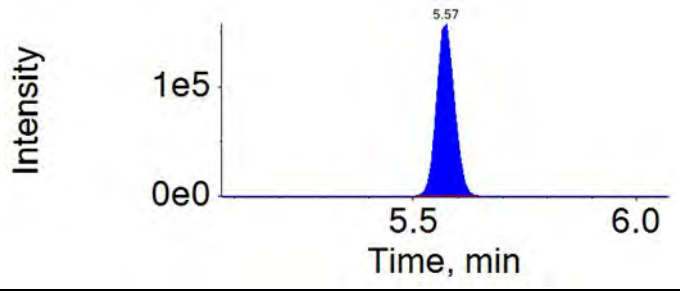
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0



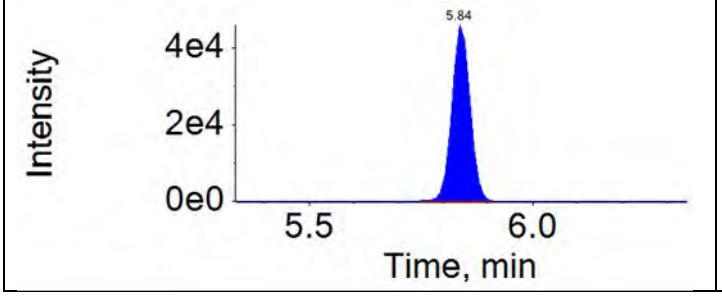


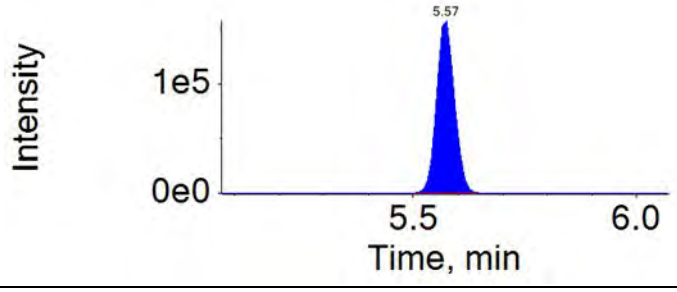
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

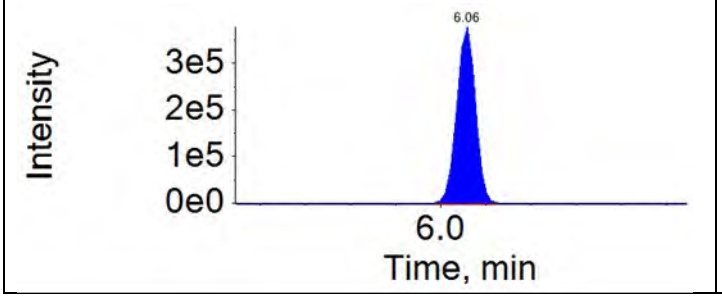
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

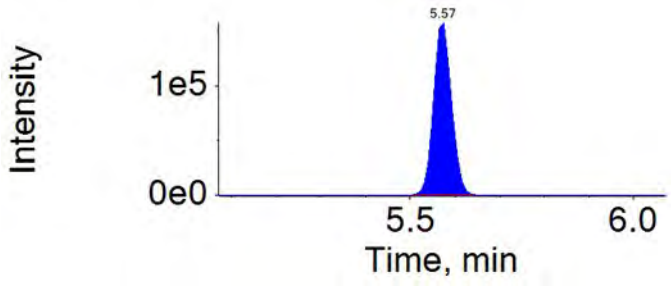
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



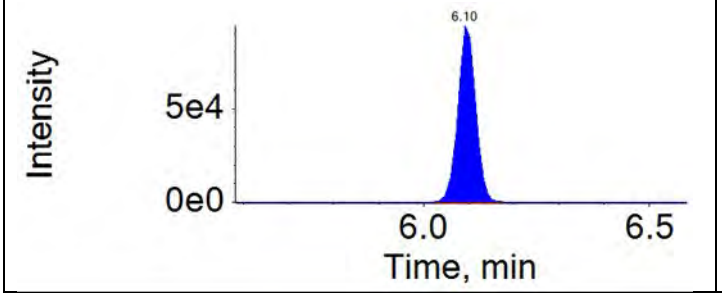


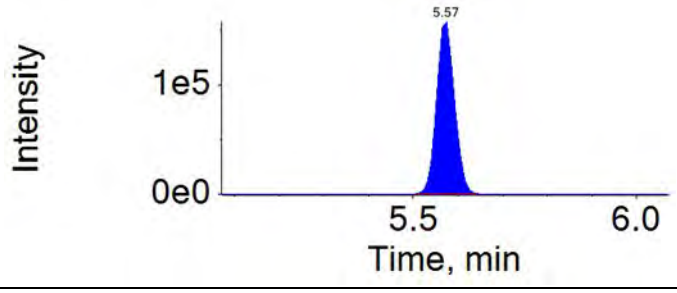
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



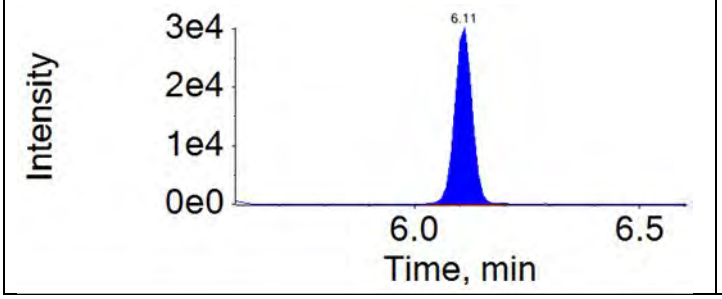


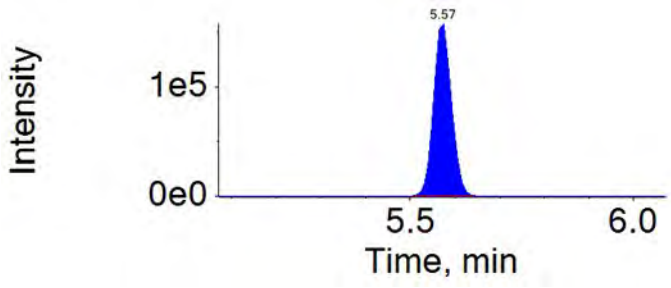
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



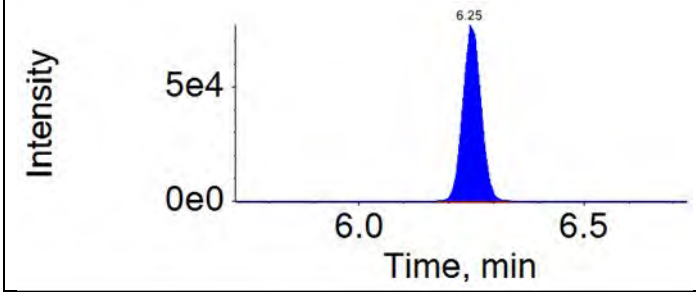


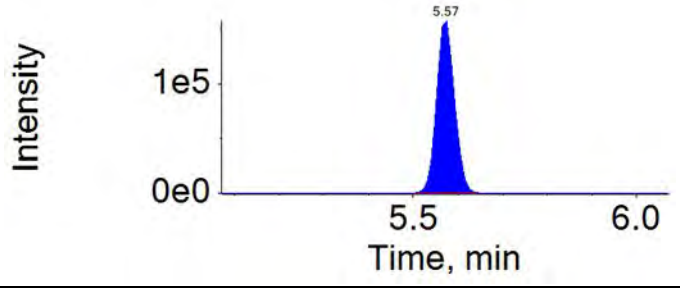
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

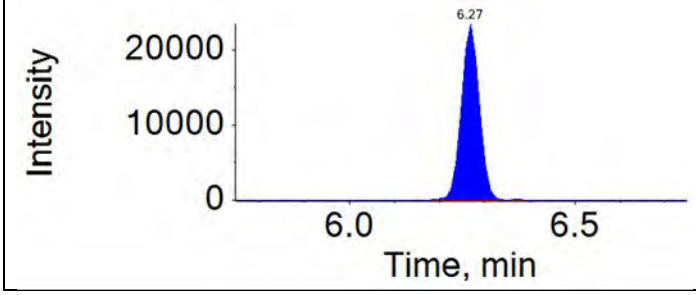
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

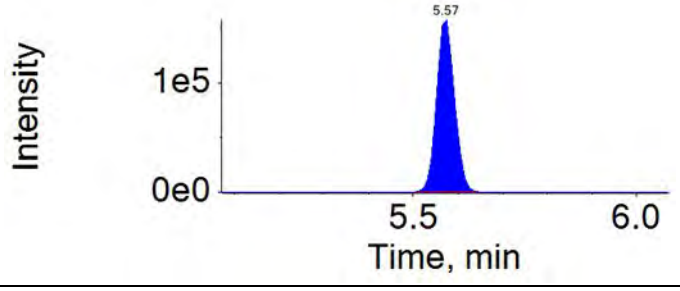
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



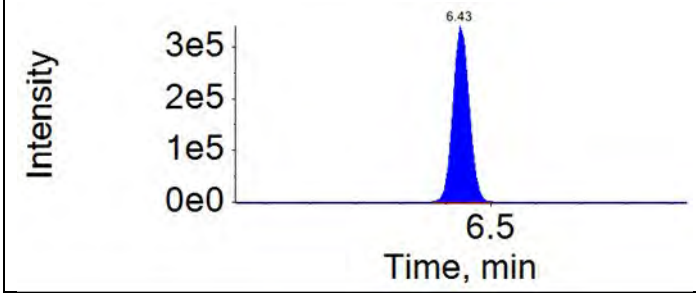


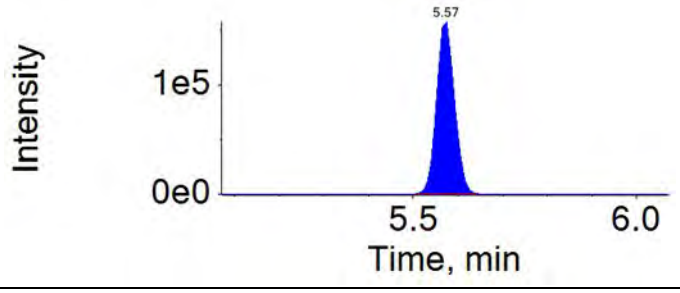
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



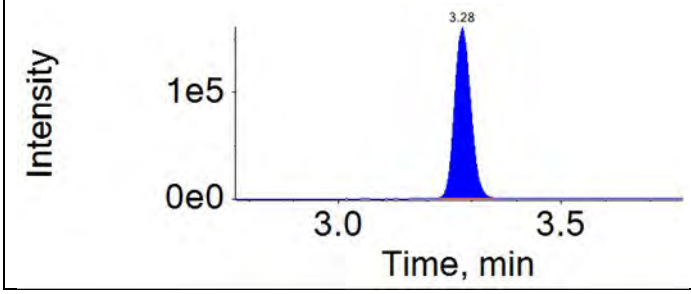


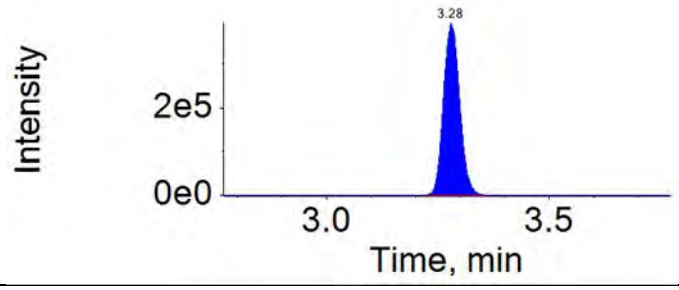
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

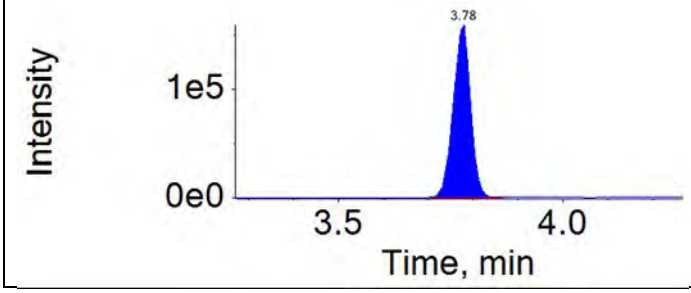
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

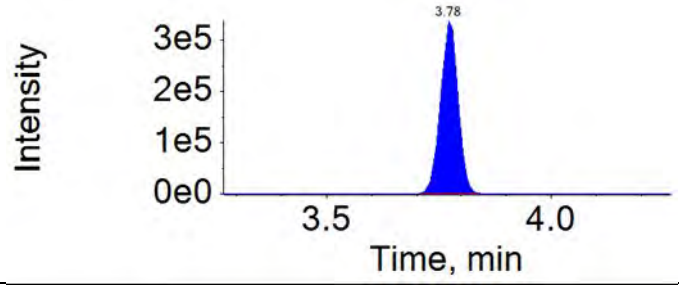
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



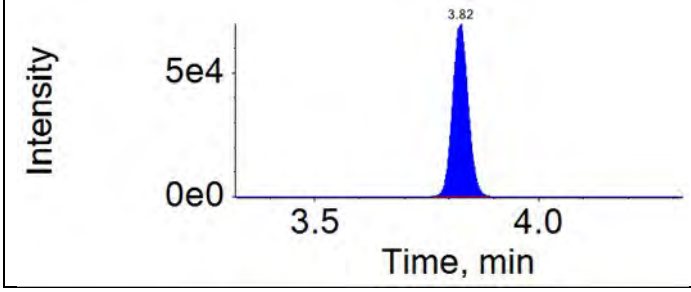


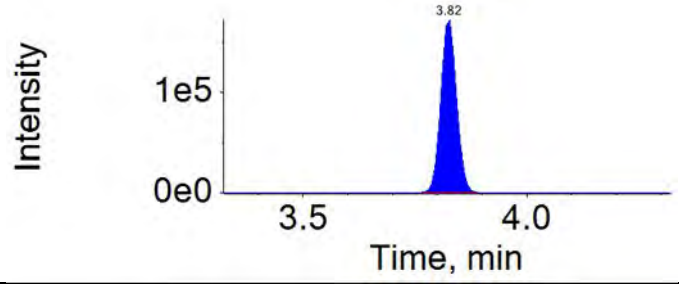
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



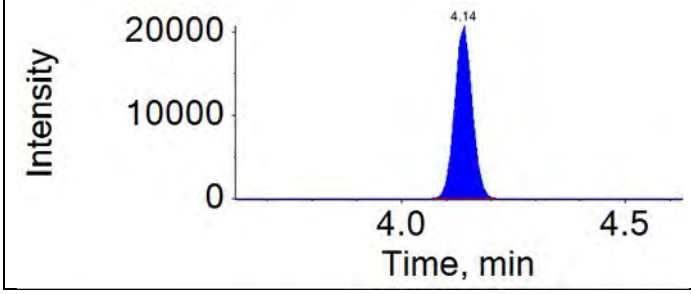


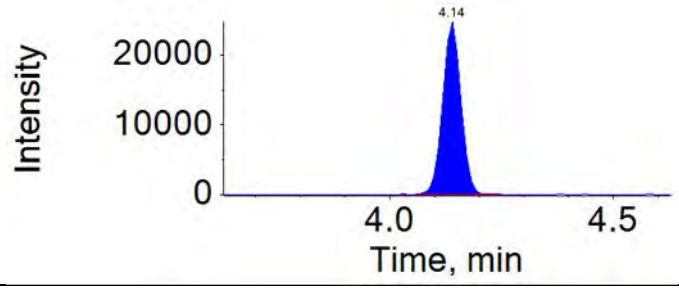
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



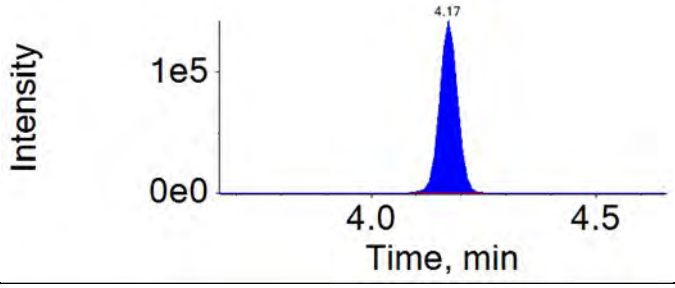


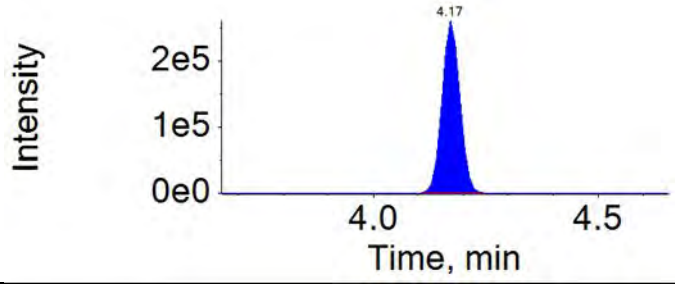
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

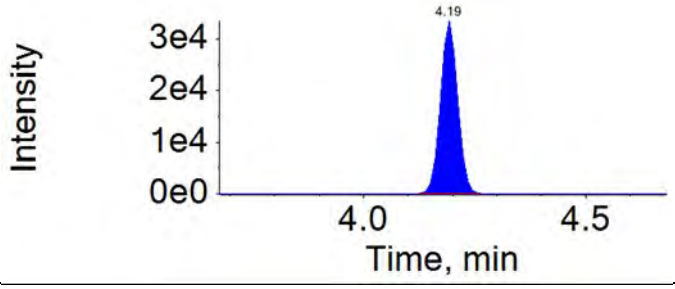
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

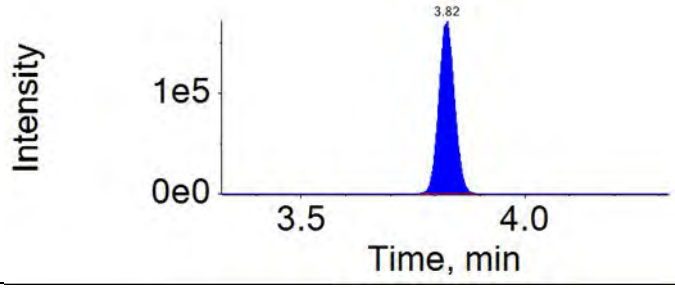
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



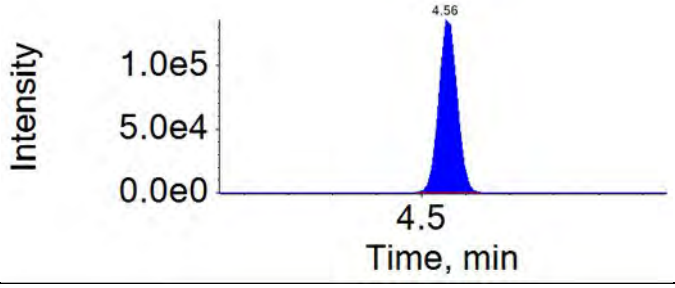


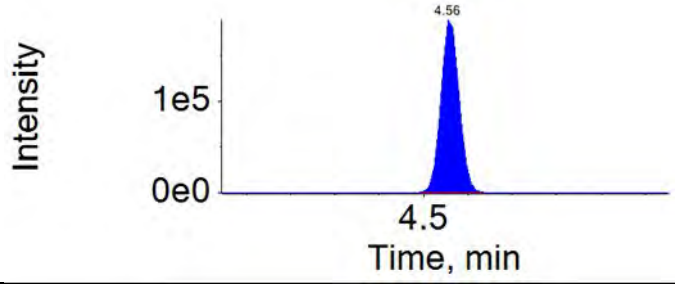
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



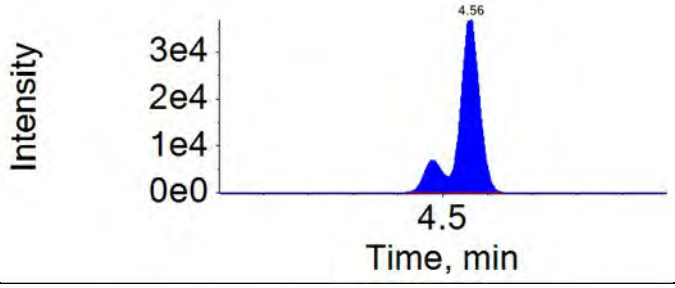


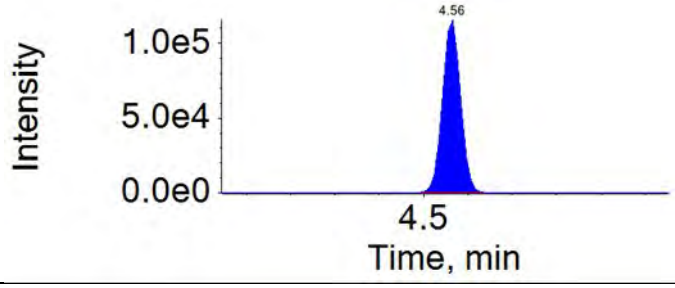
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

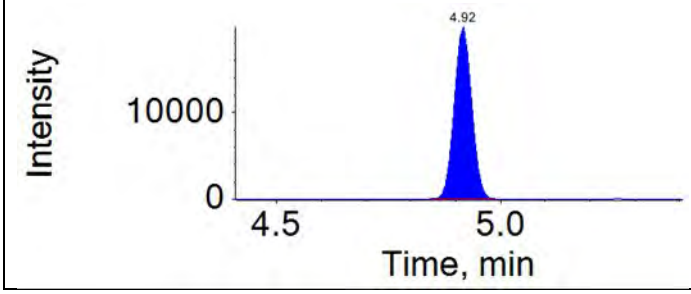
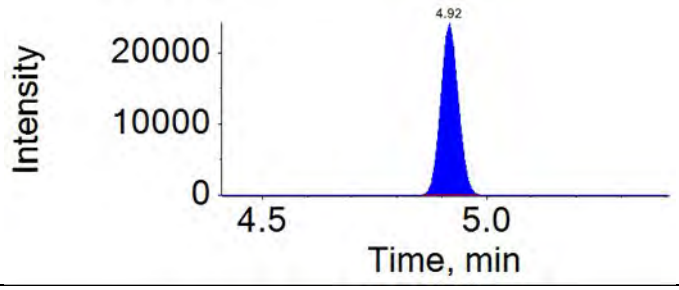


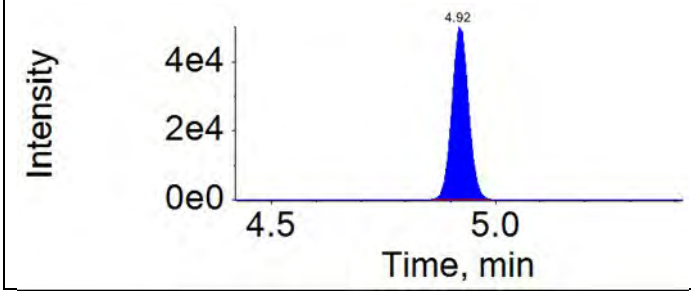
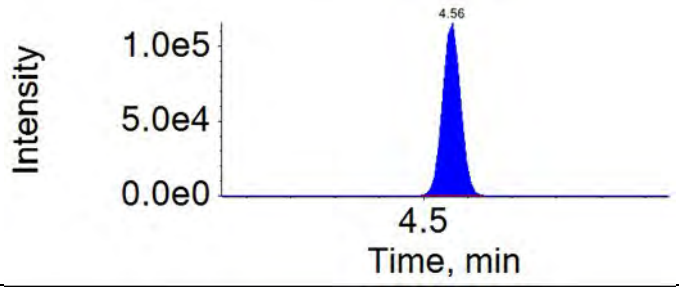


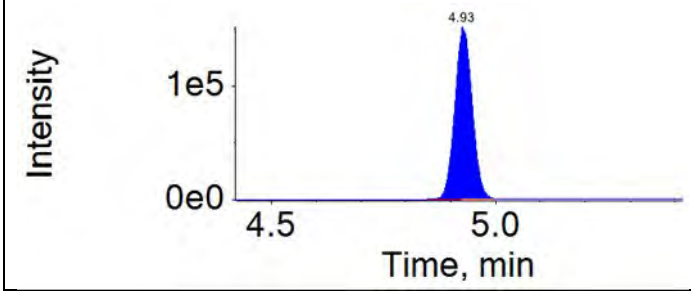
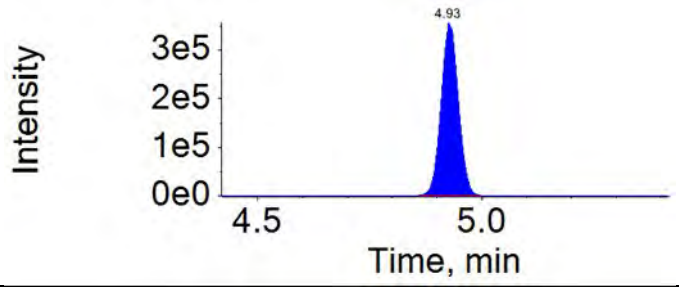
APPROVED
By MCD at 5:00 pm, 11/28/18

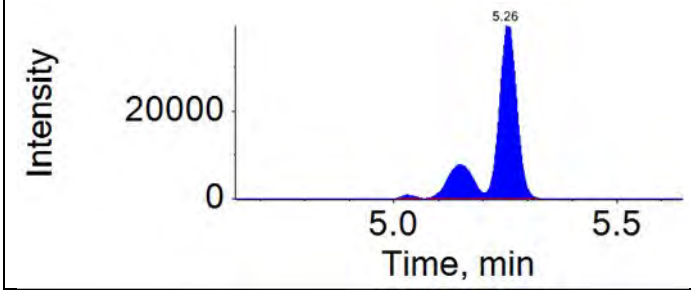
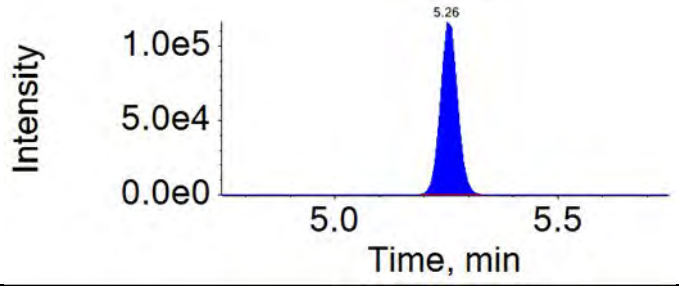
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

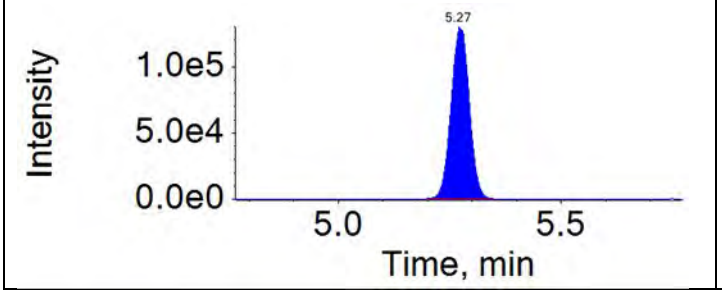
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

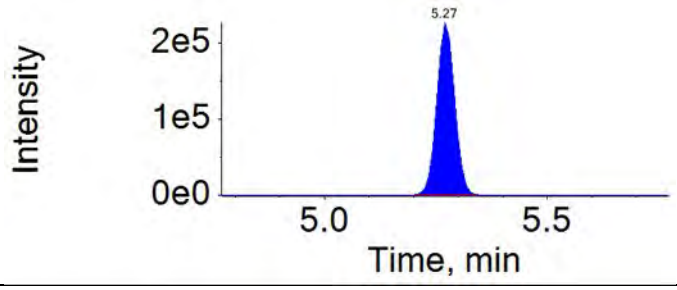
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

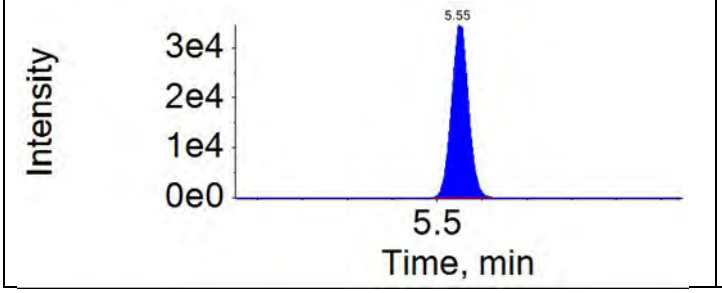
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

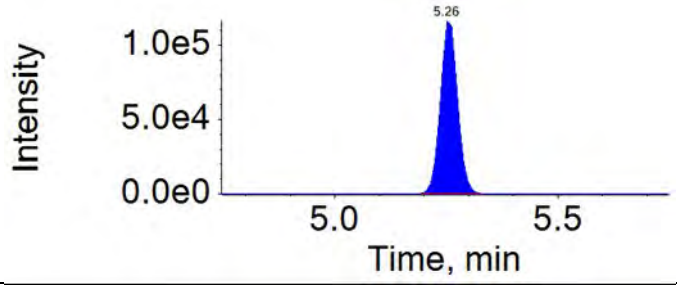
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



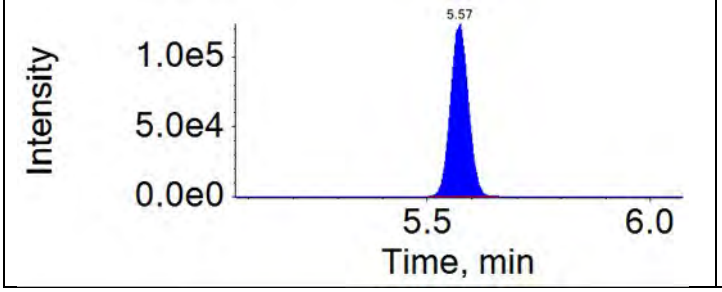


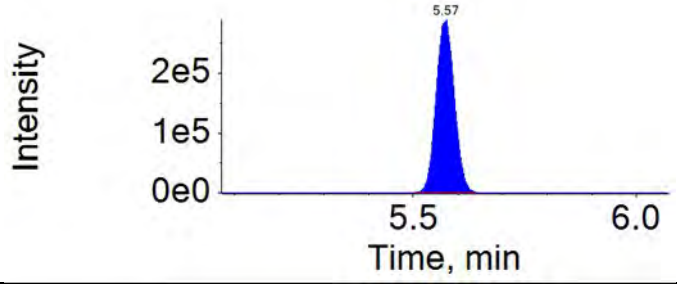
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



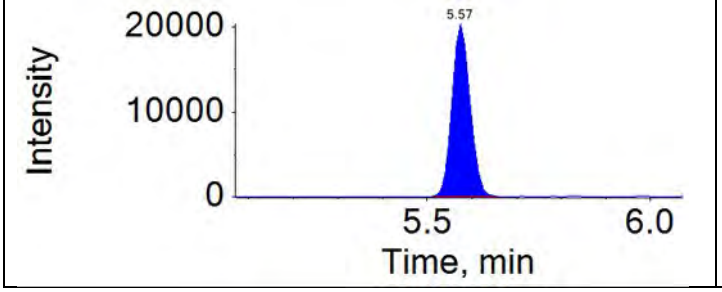


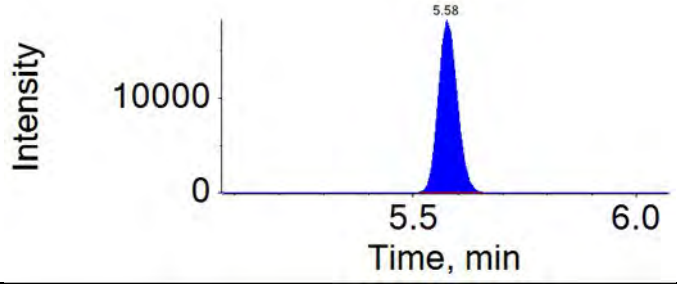
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



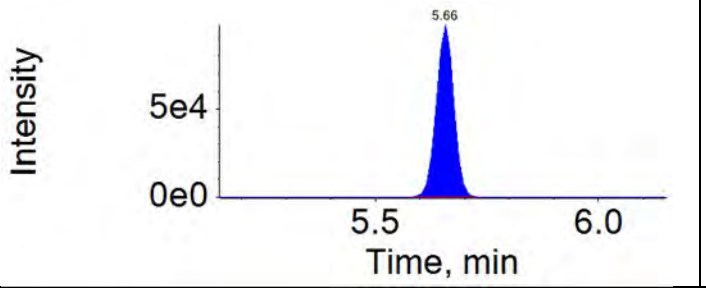


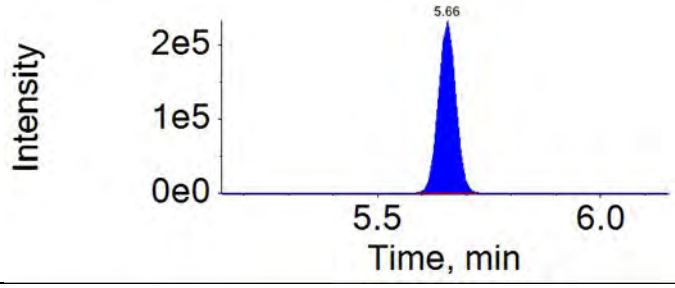
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

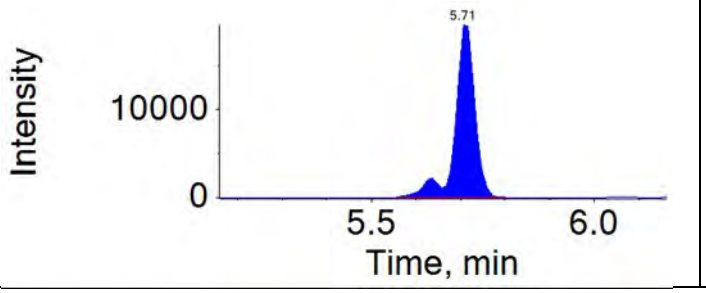
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

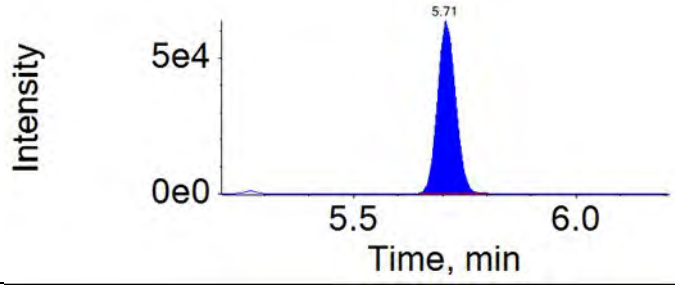
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



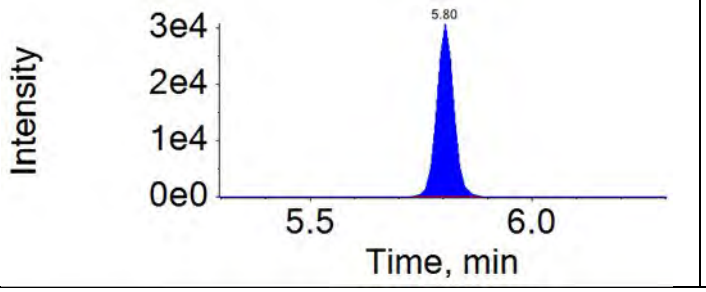


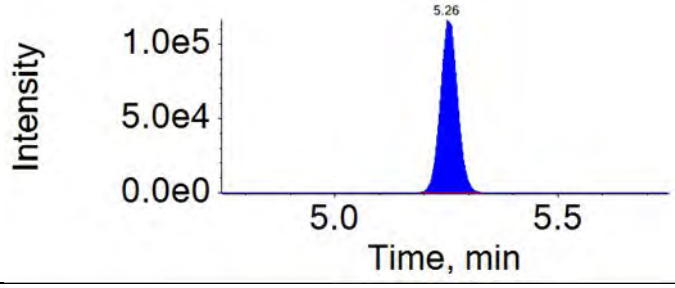
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



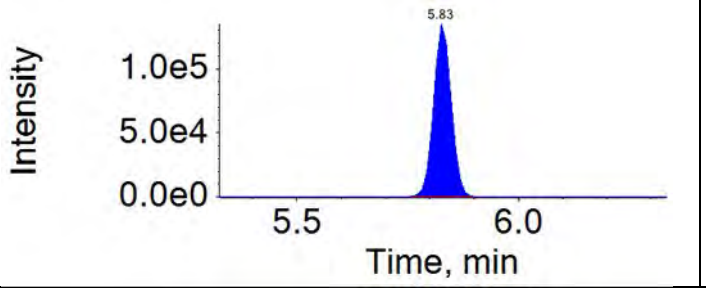


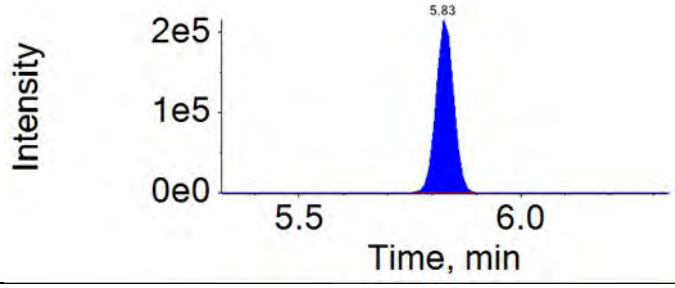
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



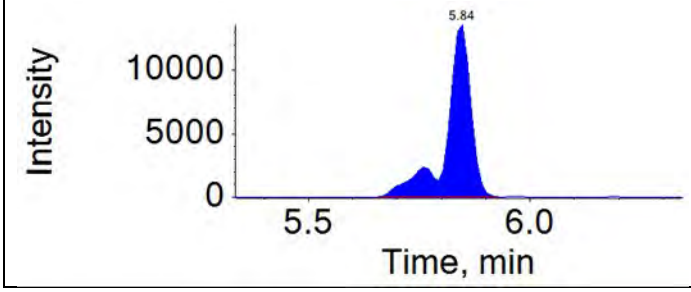


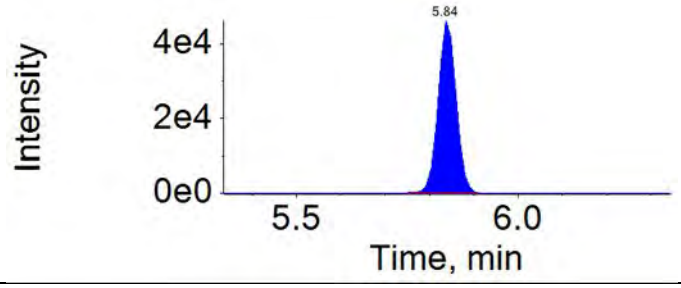
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

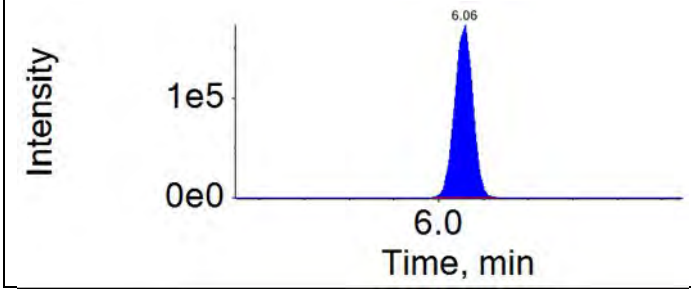
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

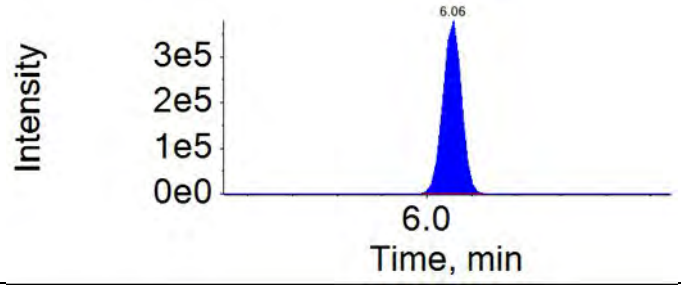
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



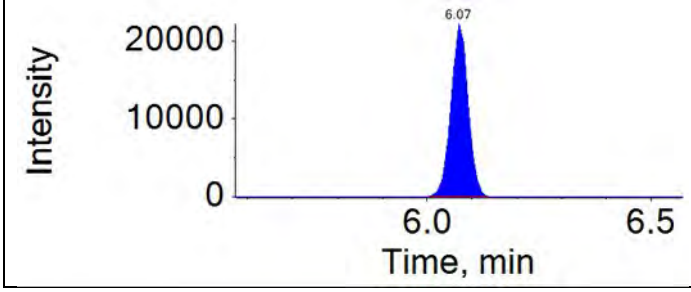


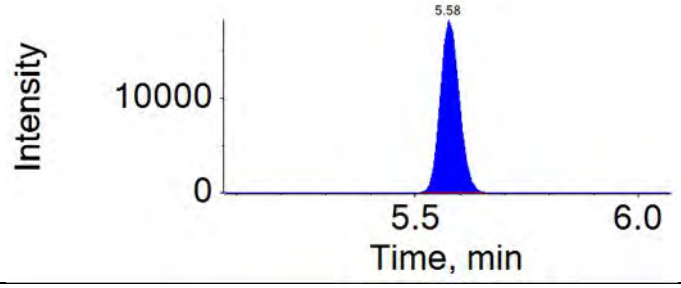
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



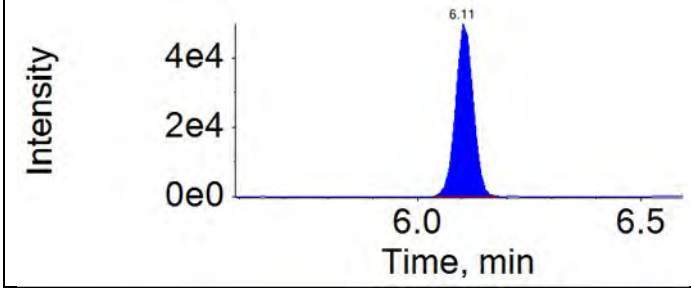


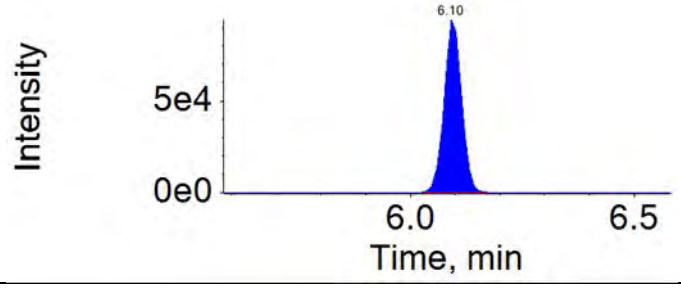
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



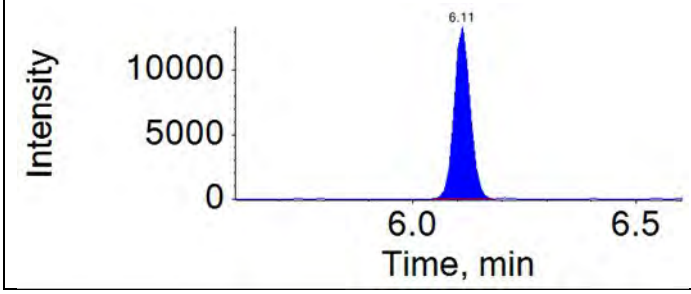


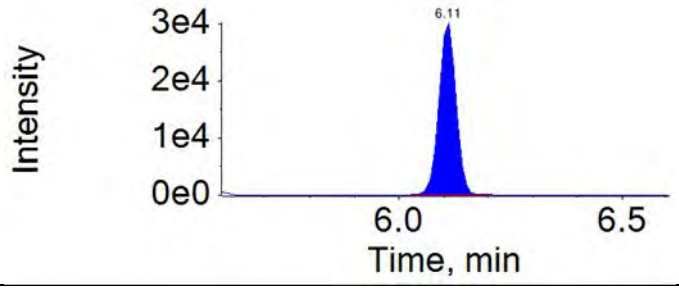
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

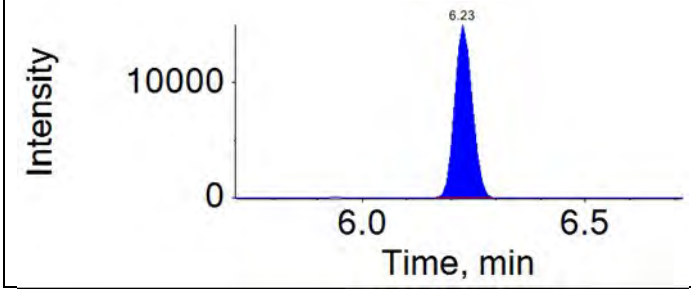
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

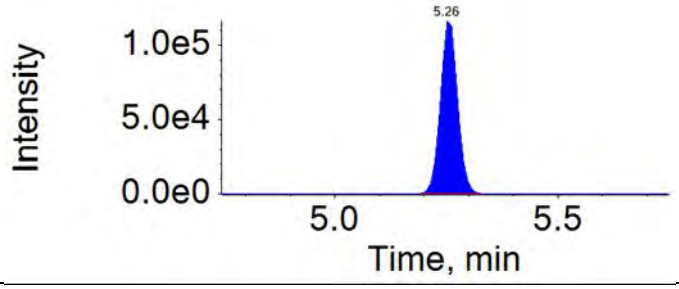
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



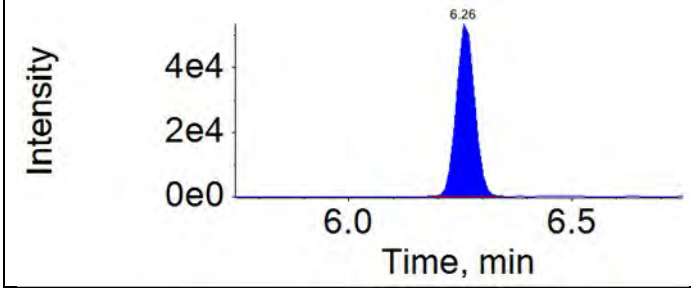


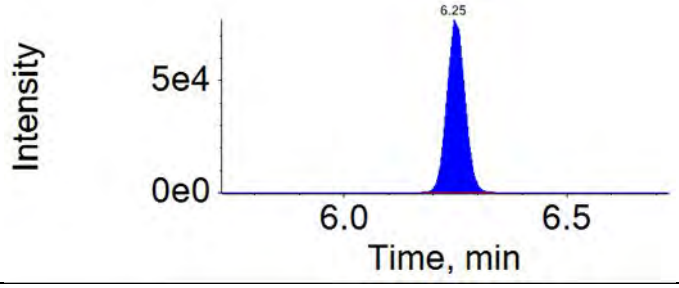
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



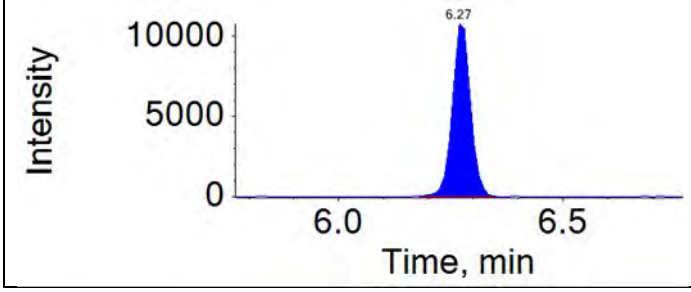


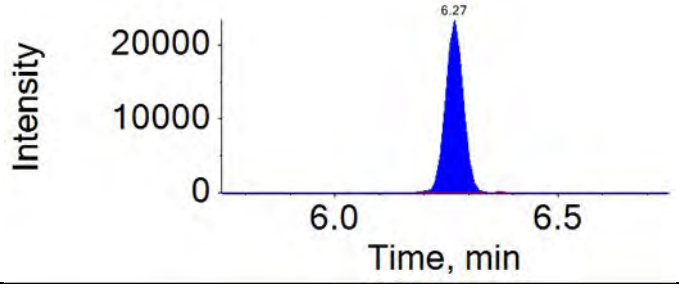
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



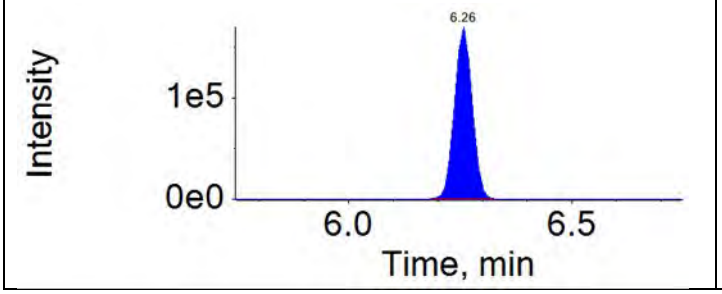


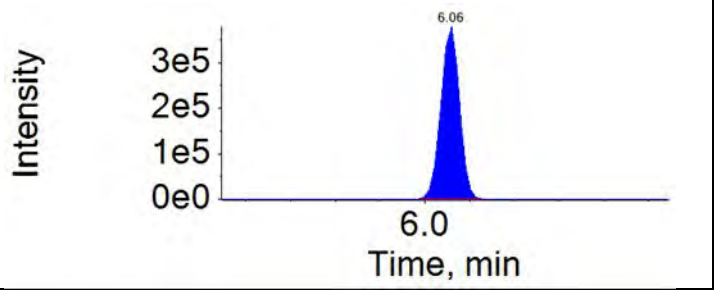
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

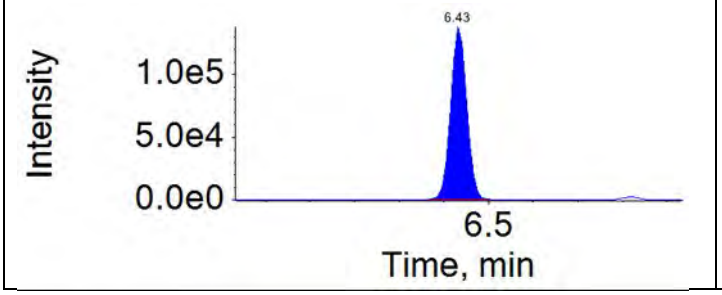
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

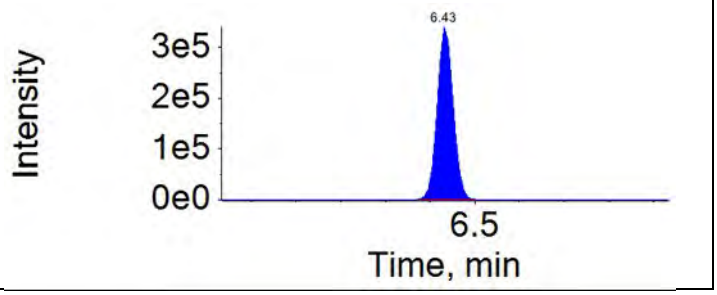
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



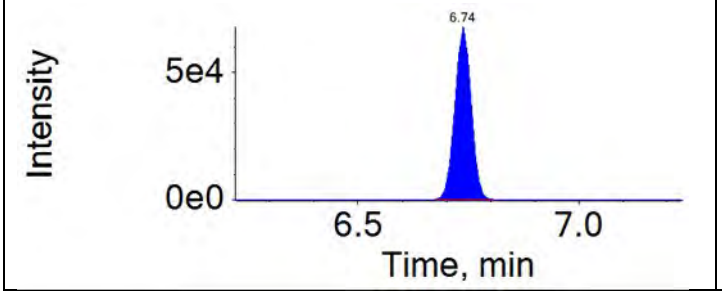


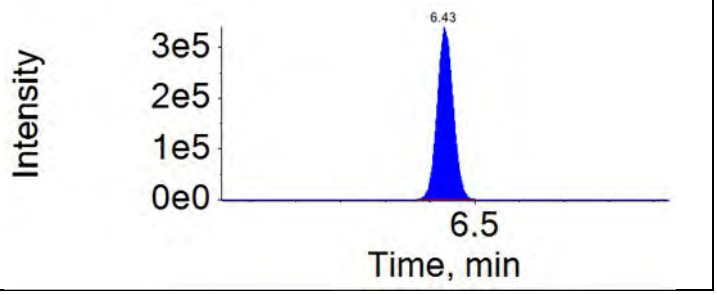
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



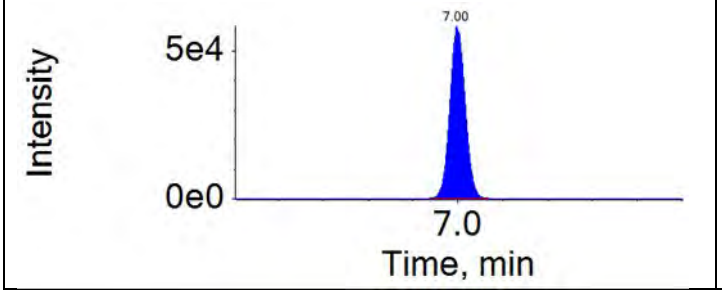


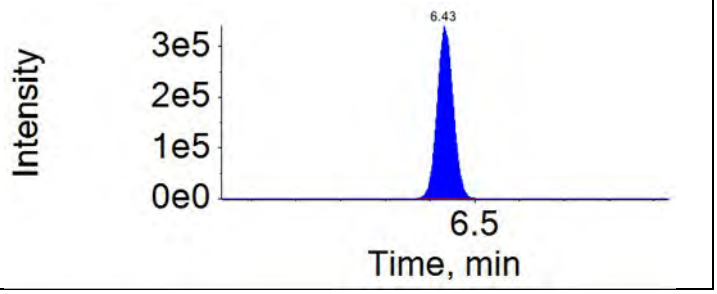
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



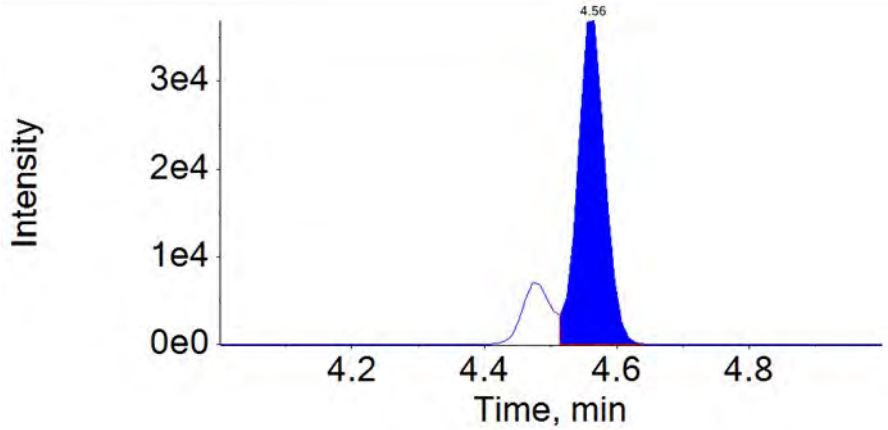


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By MCD at 5:00 pm, 11/28/18

REVIEWED
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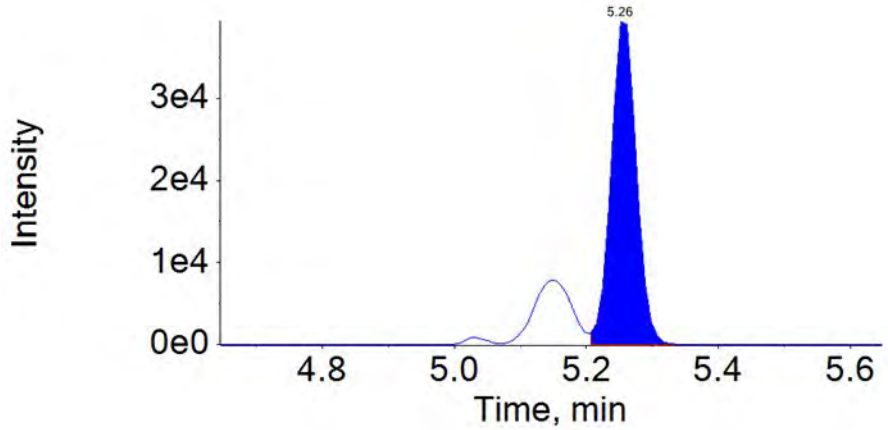
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.56
Peak Area:
106597.62
Mass Range:
399.0 / 80.0
File Name:
18NOV28DCAL-08.wiff
Sample Name:
CAL3



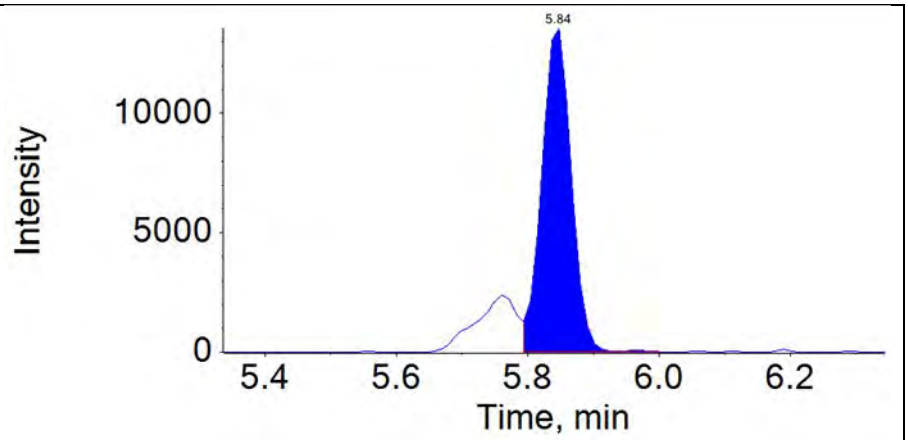
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.26
Peak Area:
105925.26
Mass Range:
499.0 / 80.0
File Name:
18NOV28DCAL-08.wiff
Sample Name:
CAL3



Integration Comment: incorrect integration

Component Name:
NEtFOSAA
RT (min.):
5.84
Peak Area:
42641.99
Mass Range:
584.0 / 419.0
File Name:
18NOV28DCAL-08.wiff
Sample Name:
CAL3



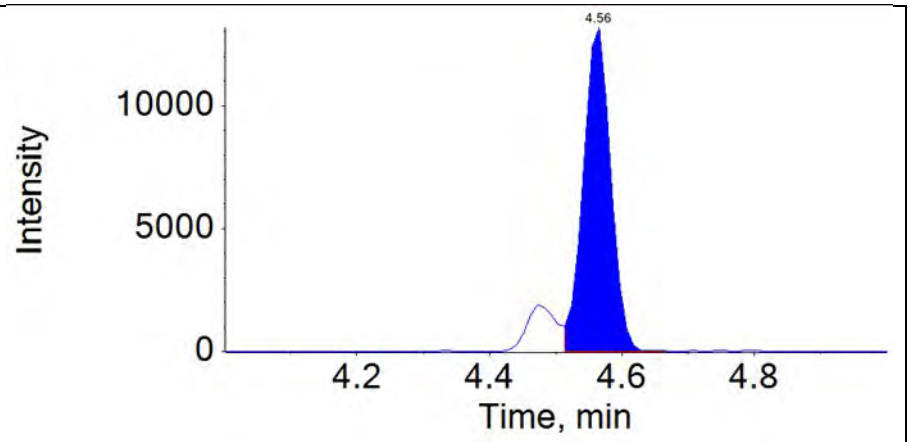
Integration Comment: incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

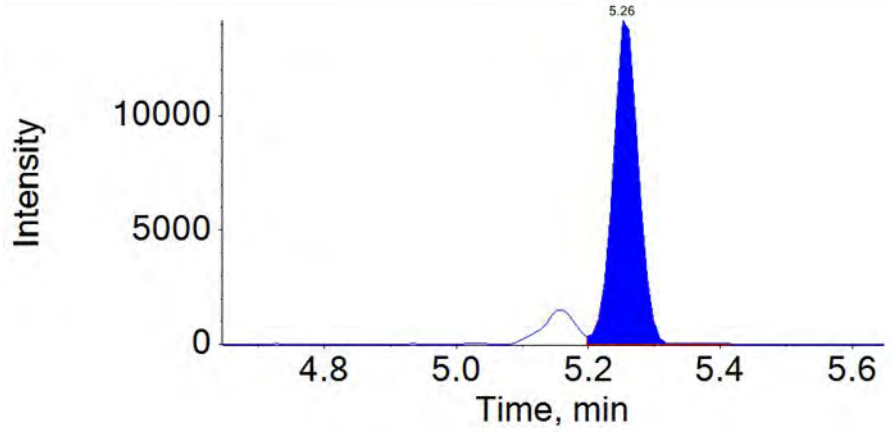
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS_2
RT (min.):
4.56
Peak Area:
37946.39
Mass Range:
399.0 / 99.0
File Name:
18NOV28DCAL-08.wiff
Sample Name:
CAL3



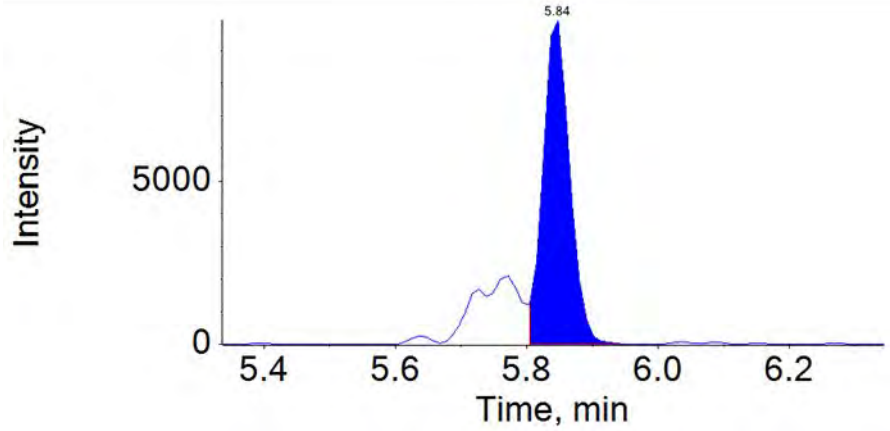
Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.26
Peak Area:
38423.09
Mass Range:
499.0 / 99.0
File Name:
18NOV28DCAL-08.wiff
Sample Name:
CAL3



Integration Comment: incorrect integration

Component Name:
NEtFOSAA_2
RT (min.):
5.84
Peak Area:
27991.83
Mass Range:
584.0 / 526.0
File Name:
18NOV28DCAL-08.wiff
Sample Name:
CAL3



Integration Comment: incorrect integration

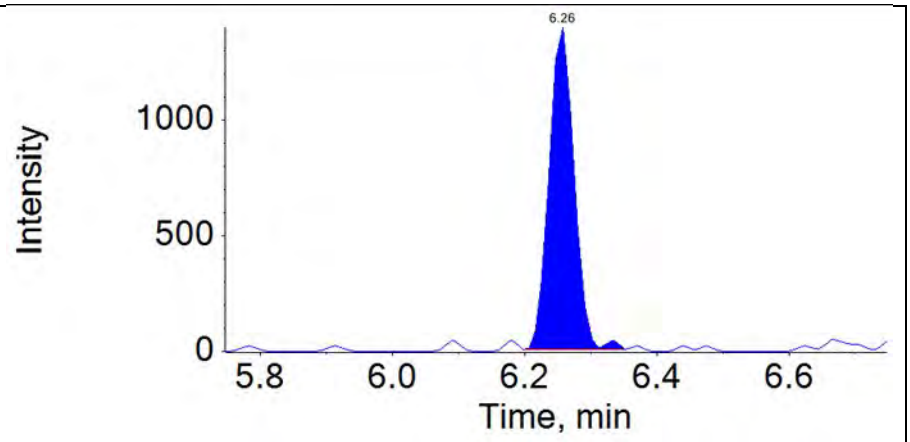
APPROVED
By MCD at 5:00 pm, 11/28/18

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By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

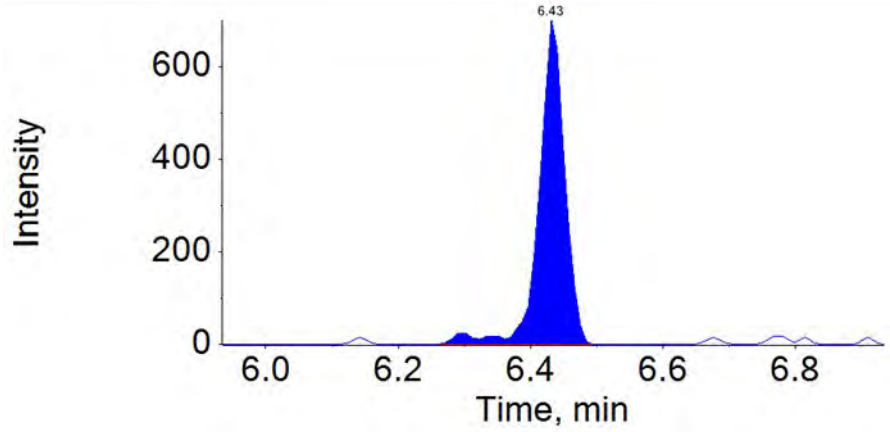
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFTrDA_2
RT (min.):
6.26
Peak Area:
3672.17
Mass Range:
663.0 / 169.0
File Name:
18NOV28DCAL-08.wiff
Sample Name:
CAL3



Integration Comment: incorrect integration

Component Name:
PFTeDA_2
RT (min.):
6.43
Peak Area:
1900.22
Mass Range:
713.0 / 169.0
File Name:
18NOV28DCAL-08.wiff
Sample Name:
CAL3



Integration Comment: incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Ion Ratio Report

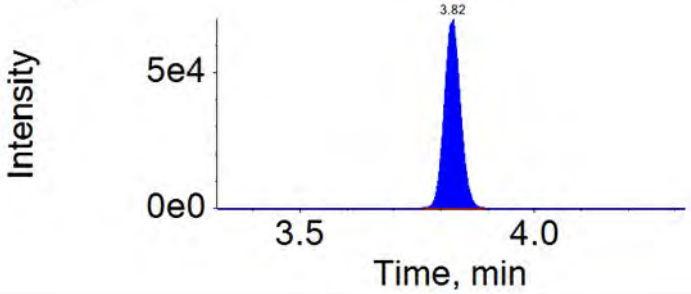
Sample Name: CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-08.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	168534.11	A	0.3655	0.3659			
PFBS_2	3.82	1.00	61662.80	A	0.3655	0.3659	0	50	
4:2-FTS	4.14	1.00	56502.46	A	0.6383	0.6021			
4:2-FTS_2	4.14	1.00	34020.61	A	0.6383	0.6021	-6	50	
PFHxA	4.17	1.00	395421.36	A	0.0103	0.0110			
PFHxA_2	4.18	1.00	4355.12	A	0.0103	0.0110	7	50	
PFPeS	4.19	1.10	89559.66	A	0.4976	0.4878			
PFPeS_2	4.19	1.10	43683.81	A	0.4976	0.4878	-2	50	
PFHpA	4.56	1.00	388626.66	A	0.0557	0.0548			
PFHpA_2	4.56	1.00	21286.44	A	0.0557	0.0548	-2	50	
PFHxS	4.56	1.00	127889.21	M	0.3693	0.3421			
PFHxS_2	4.56	1.00	43748.70	M	0.3693	0.3421	-7	50	
6:2-FTS	4.92	1.00	53951.03	A	0.6625	0.6864			
6:2-FTS_2	4.92	1.00	37034.45	A	0.6625	0.6864	4	50	
PFHpS	4.92	1.08	129450.89	A	0.3915	0.3990			
PFHpS_2	4.92	1.08	51651.50	A	0.3915	0.3990	2	50	
PFOA	4.93	1.00	405879.42	A	0.0573	0.0559			
PFOA_2	4.93	1.00	22683.88	A	0.0573	0.0559	-2	50	
PFOS	5.26	1.00	139506.62	M	0.2960	0.3122			
PFOS_2	5.26	1.00	43549.51	M	0.2960	0.3122	5	50	
PFNA	5.27	1.00	370292.03	A	0.0201	0.0194			
PFNA_2	5.27	1.00	7190.40	A	0.0201	0.0194	-3	50	
PFNS	5.55	1.06	91471.00	A	0.4794	0.4837			
PFNS_2	5.55	1.06	44242.69	A	0.4794	0.4837	1	50	
PFDA	5.57	1.00	343523.00	A	0.0075	0.0062			
PFDA_2	5.58	1.00	2142.58	A	0.0075	0.0062	-17	50	
8:2-FTS	5.57	1.00	57433.88	A	0.5380	0.6364			
8:2-FTS_2	5.57	1.00	36548.28	A	0.5380	0.6364	18	50	
NMeFOSAA	5.71	1.00	62054.84	A	0.2305	0.1960			
NMeFOSAA_2	5.71	1.00	12164.14	A	0.2305	0.1960	-15	50	
PFDS	5.80	1.10	80537.37	A	0.5356	0.4311			
PFDS_2	5.80	1.10	34716.06	A	0.5356	0.4311	-20	50	
PFUnDA	5.83	1.00	370693.61	A	0.0038	0.0032			
PFUnDA_2	5.83	1.00	1171.38	A	0.0038	0.0032	-17	50	
NEtFOSAA	5.84	1.00	52769.46	M	0.7356	0.7268			
NEtFOSAA_2	5.84	1.00	38354.97	M	0.7356	0.7268	-1	50	
PFDoDA	6.06	1.00	486489.15	A	0.0130	0.0107			
PFDoDA_2	6.06	1.00	5227.64	A	0.0130	0.0107	-18	50	
10:2-FTS	6.07	1.09	58508.21	A	0.6989	0.5755			
10:2-FTS_2	6.07	1.09	33673.51	A	0.6989	0.5755	-18	50	
PFTrDA	6.26	1.03	466266.85	A	0.0090	0.0078			
PFTrDA_2	6.26	1.03	3621.63	M	0.0090	0.0078	-14	50	
PFTeDA	6.43	1.00	342239.84	A	0.0056	0.0053			
PFTeDA_2	6.43	1.00	1811.16	M	0.0056	0.0053	-6	50	
PFHxDA	6.74	1.05	173721.02	A	0.0646	0.0595			
PFHxDA_2	6.74	1.05	10340.87	A	0.0646	0.0595	-8	50	
PFODA	7.00	1.09	139071.53	A	0.0264	0.0248			
PFODA_2	7.00	1.09	3451.82	A	0.0264	0.0248	-6	50	

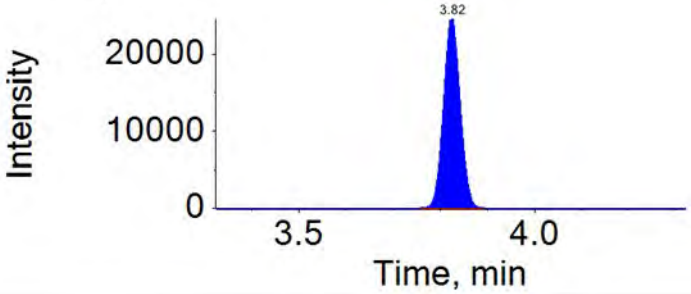
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

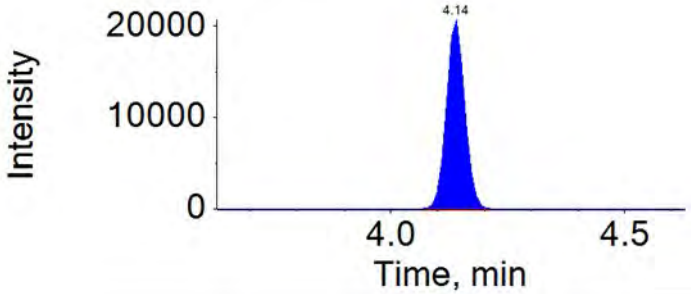
Component: PFBS
Primary Mass: 299.0 / 80.0



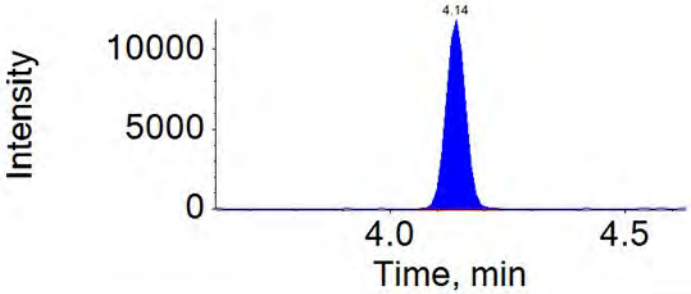
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



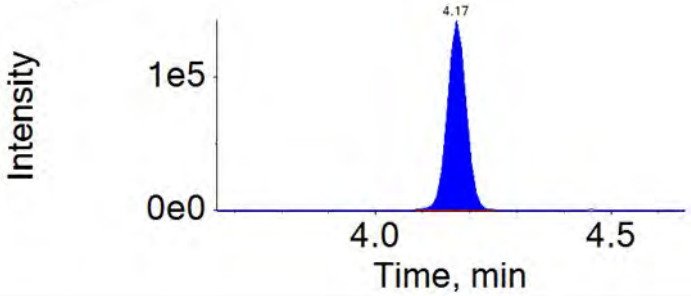
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



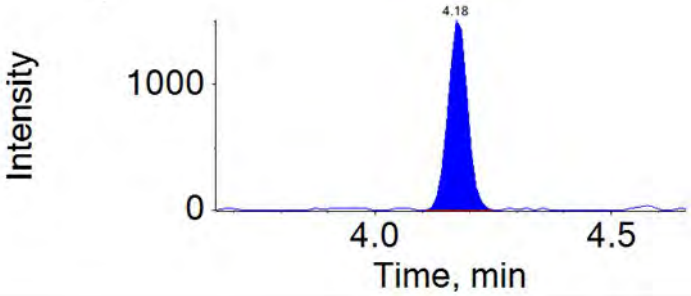
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



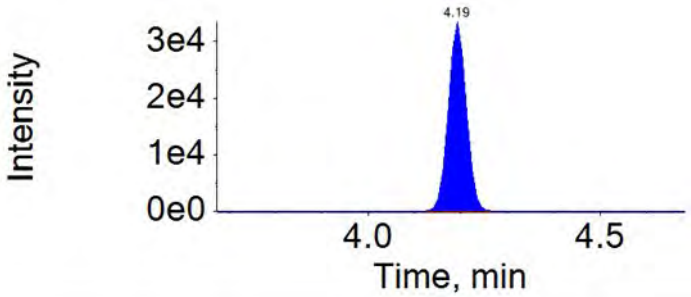
Component: PFHxA
Primary Mass: 313.0 / 269.0



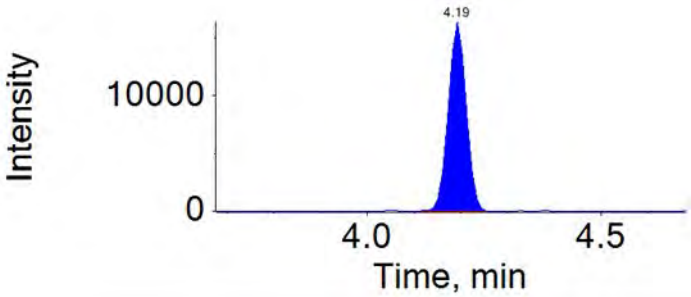
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



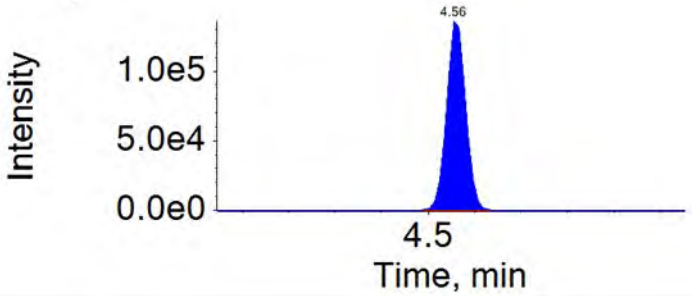
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



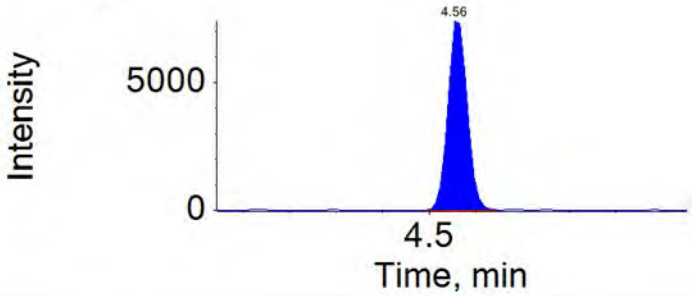
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

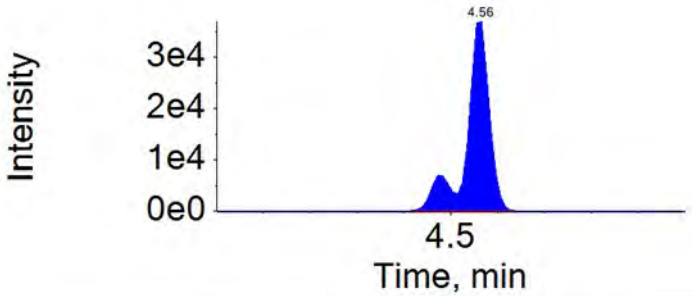
Component: PFHpA
Primary Mass: 363.0 / 319.0



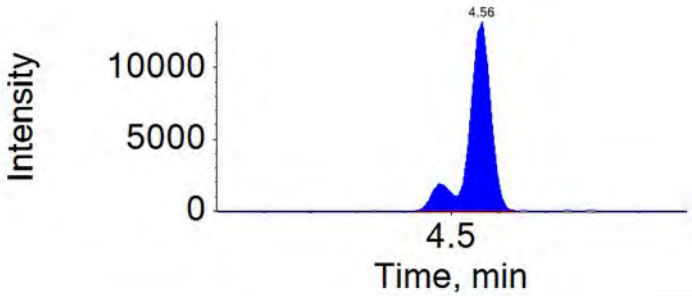
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



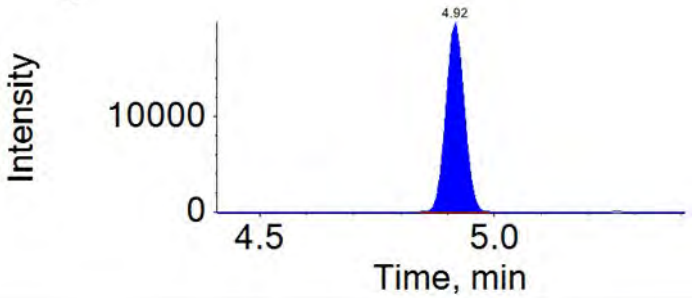
Component: PFHxS
Primary Mass: 399.0 / 80.0



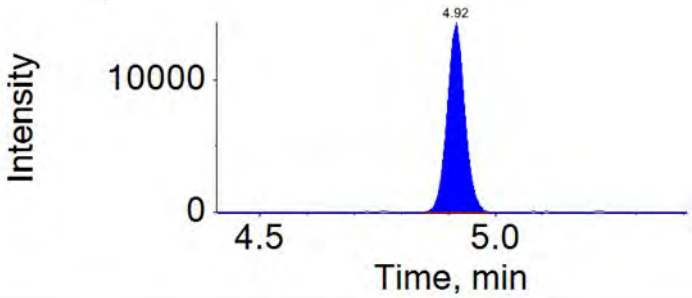
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



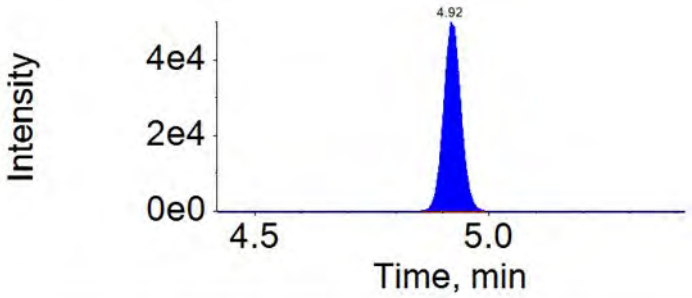
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



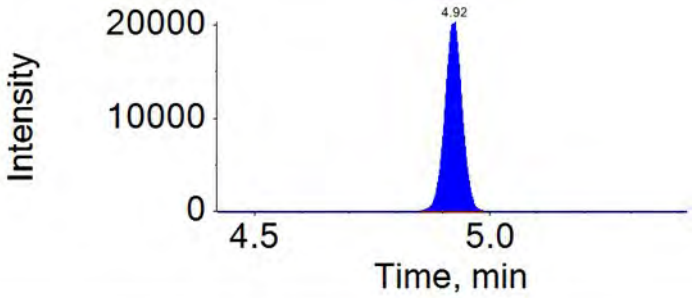
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



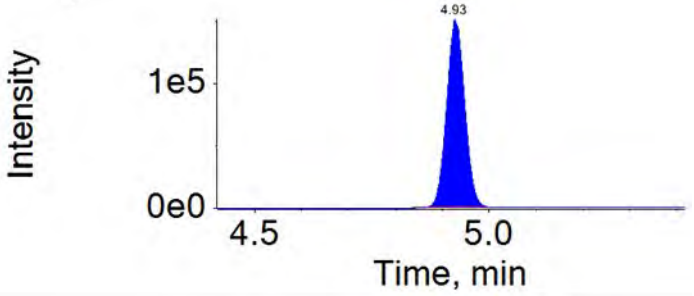
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Secondary Mass: 449.0 / 99.0



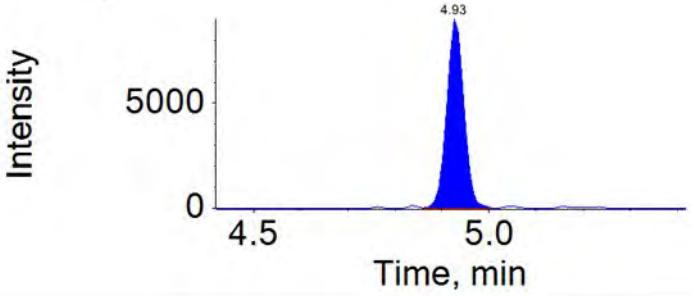
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

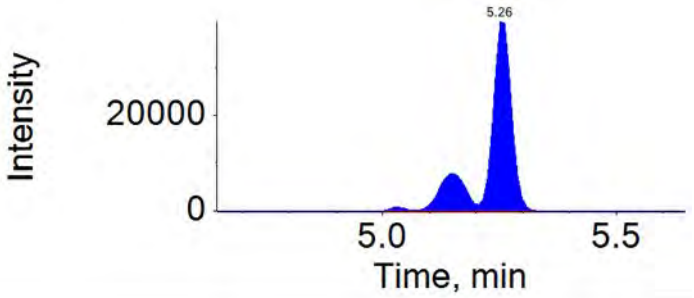
Component: PFOA
Primary Mass: 413.0 / 369.0



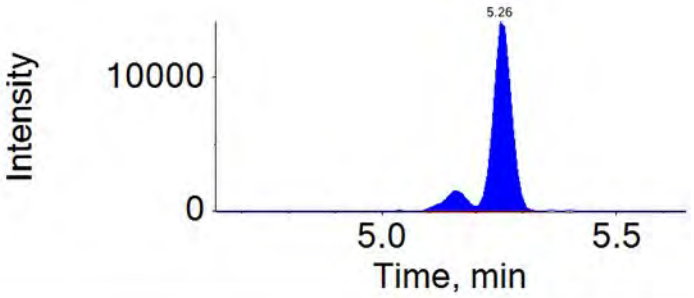
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



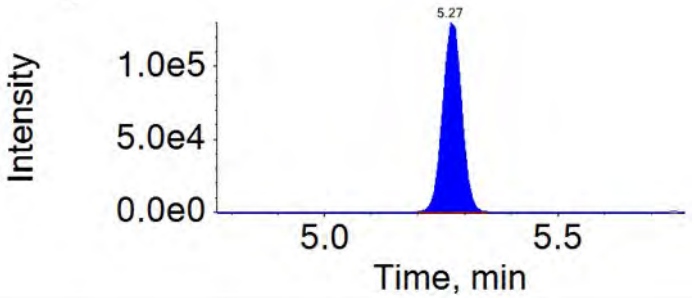
Component: PFOS
Primary Mass: 499.0 / 80.0



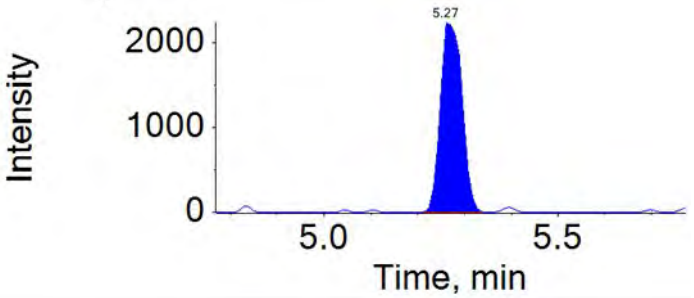
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



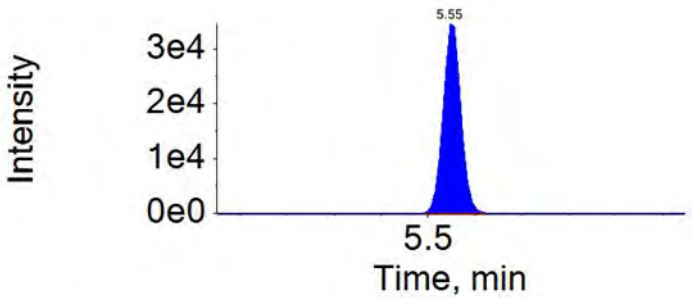
Component: PFNA
Primary Mass: 463.0 / 419.0



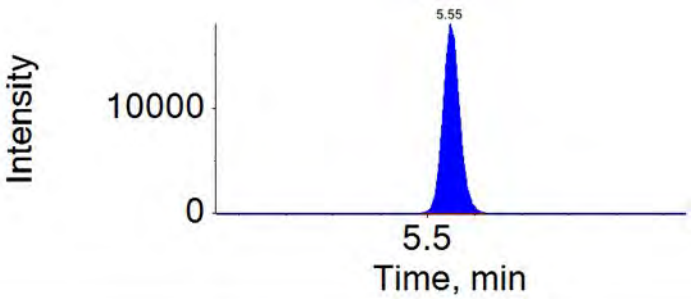
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



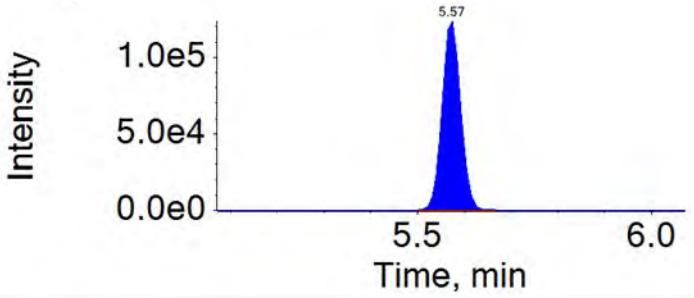
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Secondary Mass: 549.0 / 99.0



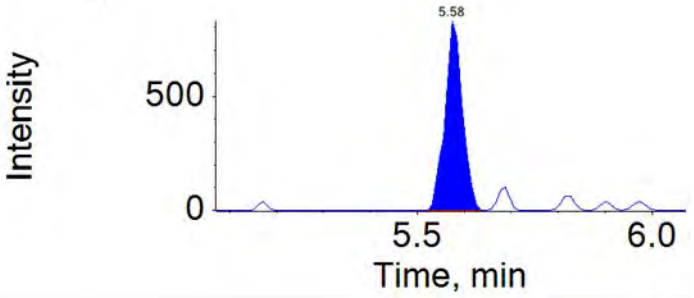
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

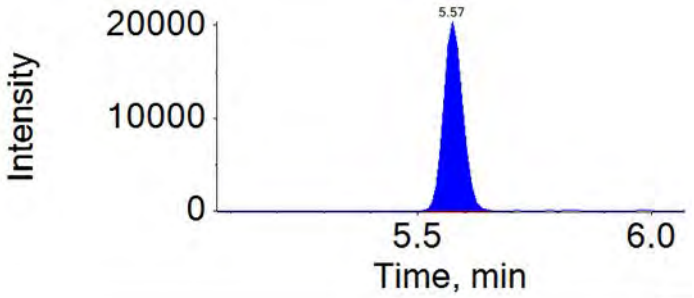
Component: PFDA
Primary Mass: 513.0 / 469.0



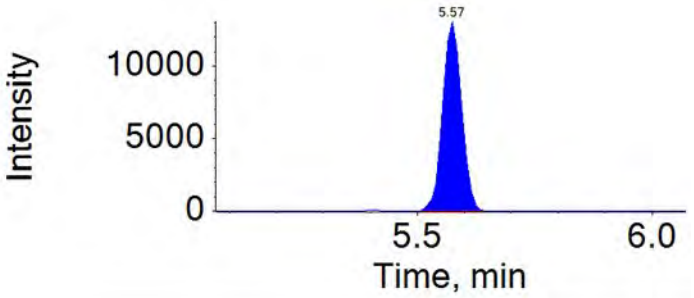
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



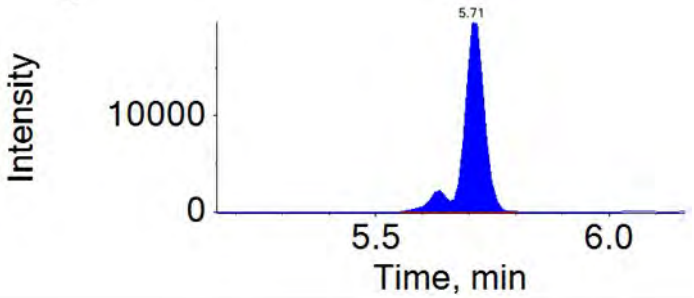
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



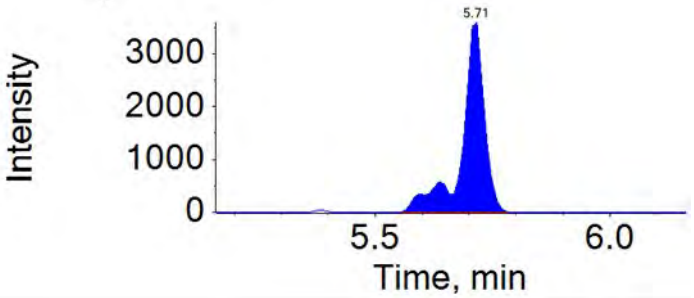
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



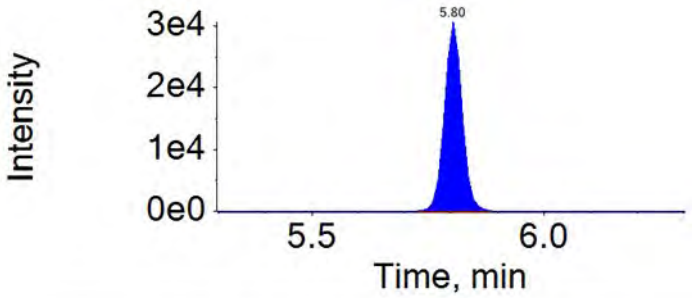
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



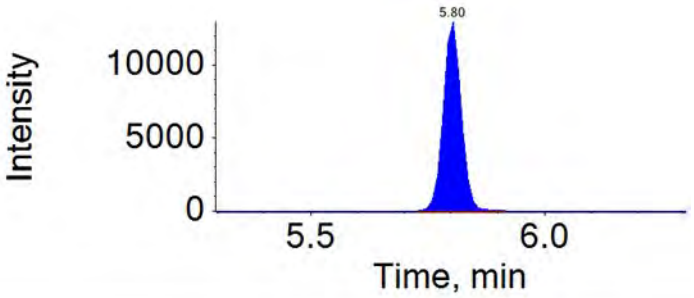
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



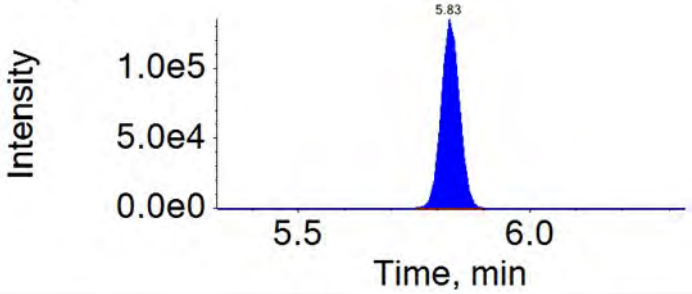
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Secondary Mass: 599.0 / 99.0



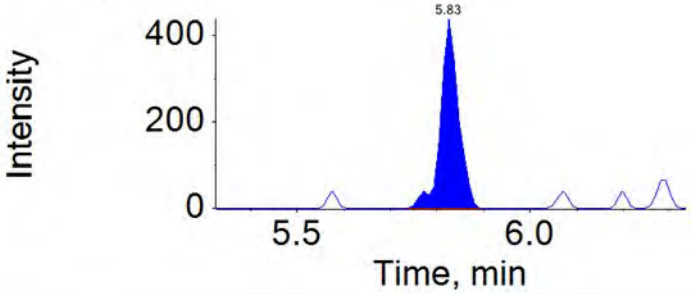
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

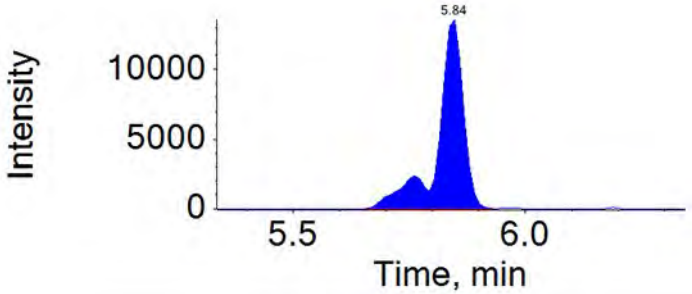
Component: PFUnDA
Primary Mass: 563.0 / 519.0



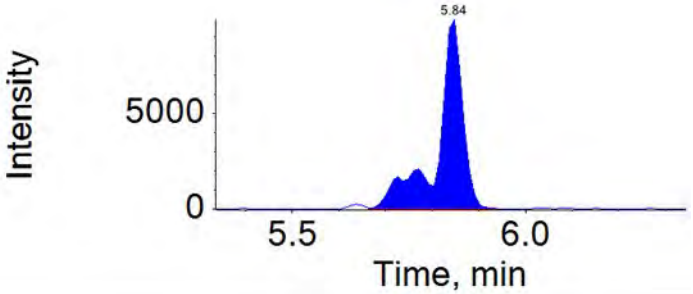
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



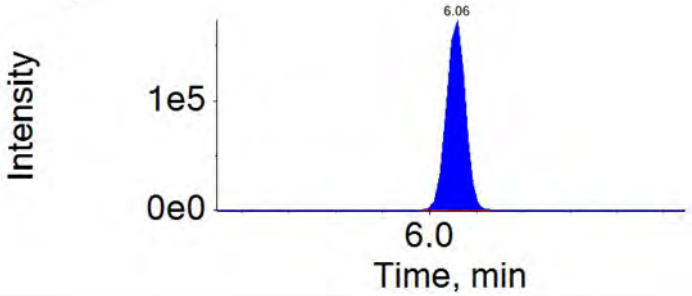
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



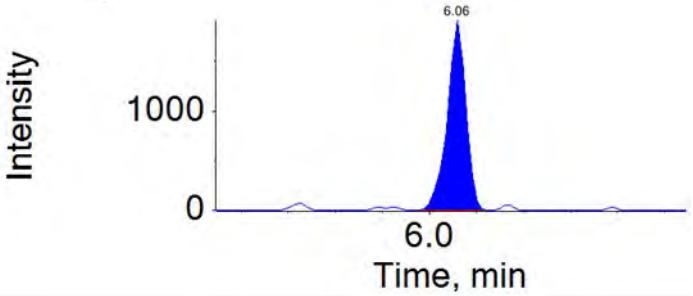
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



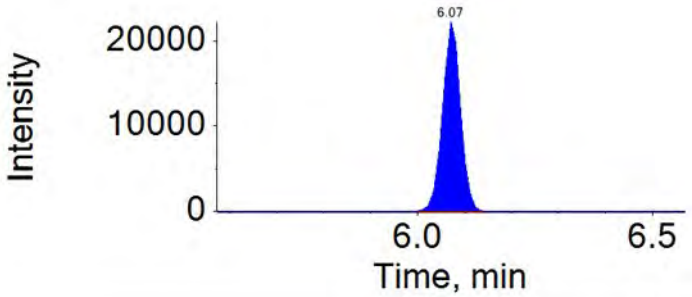
Component: PFDoDA
Primary Mass: 613.0 / 569.0



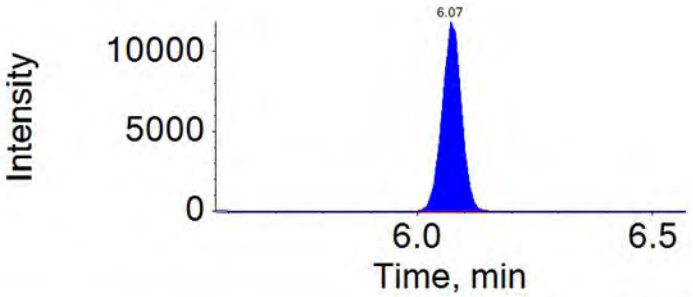
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



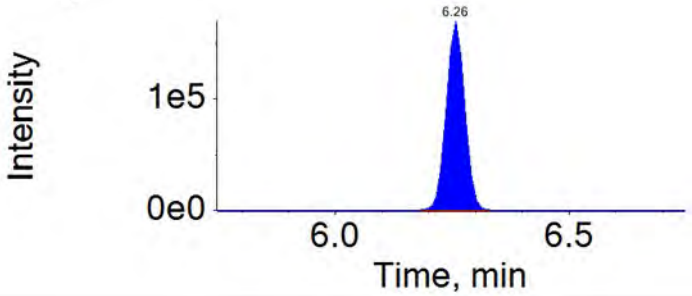
Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



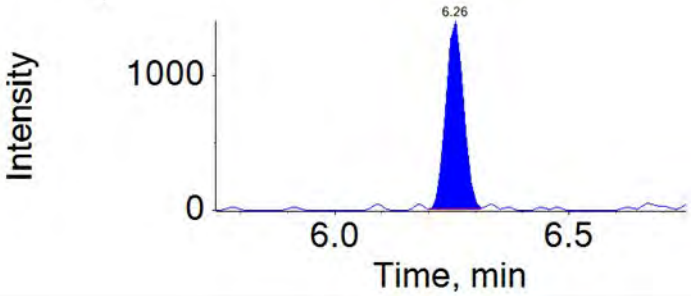
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



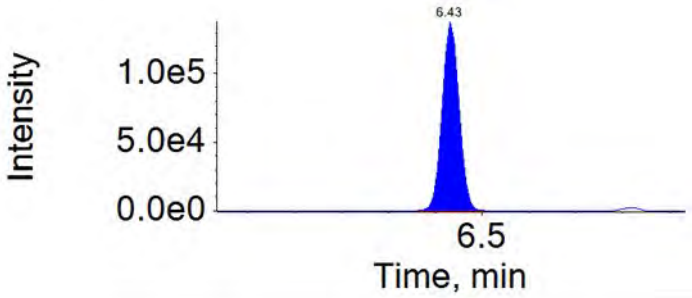
Component: PFTrDA
Primary Mass: 663.0 / 619.0



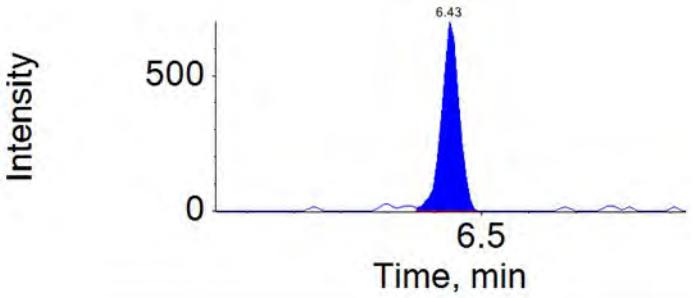
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



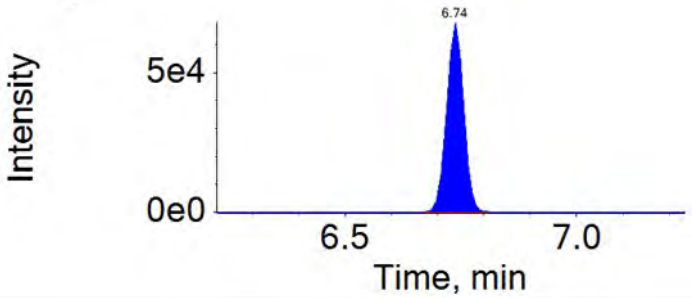
Component: PFTeDA
Primary Mass: 713.0 / 669.0



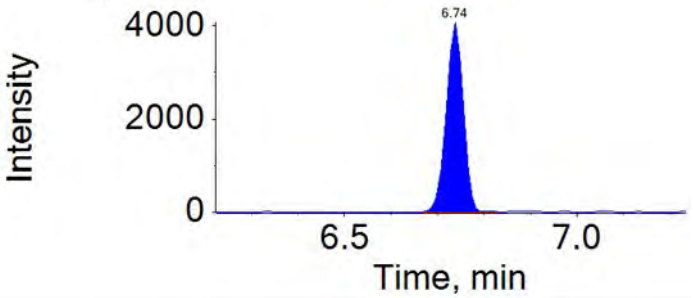
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



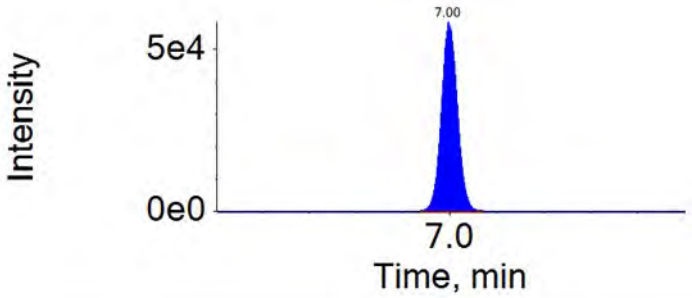
Component: PFHxDA
Primary Mass: 813.0 / 769.0



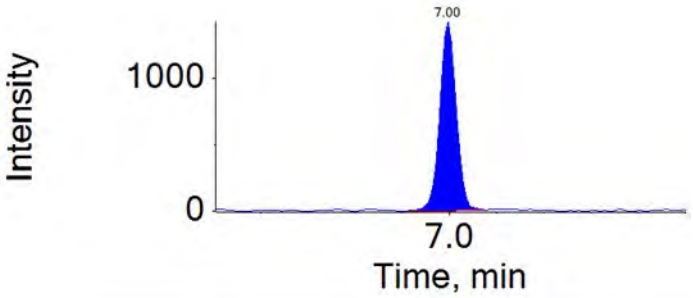
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL4			**Data File:**		18NOV28DCAL-09.wiff
Sample ID:	CALBRN41833B			**Acquis Date:**		2018-11-28T14:09:13
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	6			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV28DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	892443.9	887248.9	1	50	
13C2-PFOA	5.0	528506.8	498501.6	6	50	
13C4-PFOS	4.8	281778.6	283214.2	-1	50	
13C2-PFDA	5.0	489439.8	441790.6	11	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	974000.9	13C3-PFBA	892443.9	1.091	5.000	4.869	97	70-130	
E13C5-PFPeA	915824.6	13C3-PFBA	892443.9	1.026	5.000	4.792	96	70-130	
E13C3-PFBS	424041.3	13C3-PFBA	892443.9	0.475	4.650	4.533	97	70-130	
E13C2-4:2-FTS	67043.7	13C2-PFOA	528506.8	0.127	4.670	4.372	94	70-130	
E13C5-PFHxA	670407.7	13C2-PFOA	528506.8	1.268	5.000	4.659	93	70-130	
E13C3-PFHxS	316393.3	13C2-PFOA	528506.8	0.599	4.730	4.692	99	70-130	
E13C4-PFHpA	563674.0	13C2-PFOA	528506.8	1.067	5.000	4.901	98	70-130	
E13C2-6:2-FTS	56580.1	13C2-PFOA	528506.8	0.107	4.750	4.481	94	70-130	
E13C8-PFOA	918995.3	13C2-PFOA	528506.8	1.739	5.000	4.786	96	70-130	
E13C8-PFOS	296147.5	13C4-PFOS	281778.6	1.051	4.780	4.744	99	70-130	
E13C9-PFNA	648727.0	13C4-PFOS	281778.6	2.302	5.000	5.057	101	70-130	
E13C6-PFDA	841970.5	13C2-PFDA	489439.8	1.720	5.000	4.850	97	70-130	
E13C2-8:2-FTS	52961.9	13C2-PFDA	489439.8	0.108	4.790	4.651	97	70-130	
E13C8-PFOSA	625021.8	13C2-PFDA	489439.8	1.277	5.000	4.686	94	70-130	
Ed3-NMeFOSAA	171204.0	13C2-PFDA	489439.8	0.350	5.000	4.441	89	70-130	
E13C7-PFUnDA	546359.3	13C2-PFDA	489439.8	1.116	5.000	4.718	94	70-130	
Ed5-NEtFOSAA	138500.8	13C2-PFDA	489439.8	0.283	5.000	5.041	101	70-130	
E13C2-PFDoDA	1150927.4	13C2-PFDA	489439.8	2.352	5.000	4.941	99	70-130	
Ed7-NMePFOSAE	263412.8	13C2-PFDA	489439.8	0.538	5.000	4.651	93	70-130	
Ed3-NMePFOSA	83886.6	13C2-PFDA	489439.8	0.171	5.000	4.639	93	70-130	
Ed9-NEtPFOSAE	218635.8	13C2-PFDA	489439.8	0.447	5.000	4.529	91	70-130	
Ed5-NEtPFOSA	66966.4	13C2-PFDA	489439.8	0.137	5.000	4.754	95	70-130	
E13C2-PFTeDA	826670.0	13C2-PFDA	489439.8	1.689	5.000	4.674	93	70-130	

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

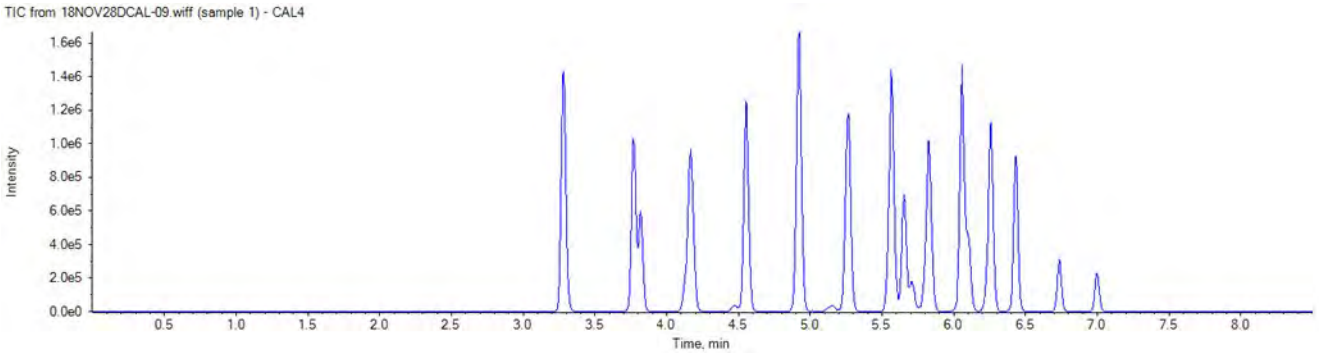
Analyte Quantitation Peak Table

Sample Name: CAL4 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-09.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.28	1.000	1425164.4		A	13C4-PFBA	3.28	974000.9	1.463	8.021
PFPeA	3.77	1.000	1424845.3		A	13C5-PFPeA	3.77	915824.6	1.556	7.634
PFBS	3.82	1.000	590590.3		A	13C3-PFBS	3.82	424041.3	1.393	6.761
4:2-FTS	4.13	1.000	191344.6		A	13C2-4:2-FTS	4.13	67043.7	2.854	7.640
PFHxA	4.16	1.000	1343216.4		A	13C5-PFHxA	4.17	670407.7	2.004	8.042
PFPeS	4.19	1.100	311741.6		A	13C3-PFBS	3.82	424041.3	0.735	7.436
PFHpA	4.55	1.000	1429895.3		A	13C4-PFHpA	4.55	563674.0	2.537	7.829
PFHxS	4.56	1.000	444626.0		M	13C3-PFHxS	4.56	316393.3	1.405	6.580
6:2-FTS	4.91	1.000	185311.5		A	13C2-6:2-FTS	4.91	56580.1	3.275	8.546
PFHpS	4.92	1.080	471580.6		A	13C3-PFHxS	4.56	316393.3	1.490	7.439
PFOA	4.92	1.000	1486960.4		A	13C8-PFOA	4.92	918995.3	1.618	8.361
PFOS	5.25	1.000	481950.0		M	13C8-PFOS	5.25	296147.5	1.627	6.826
PFNA	5.27	1.000	1365056.4		A	13C9-PFNA	5.27	648727.0	2.104	8.064
PFNS	5.55	1.060	369833.4		A	13C8-PFOS	5.25	296147.5	1.249	7.885
PFDA	5.57	1.000	1223810.4		A	13C6-PFDA	5.57	841970.5	1.454	8.227
8:2-FTS	5.57	1.000	203687.7		A	13C2-8:2-FTS	5.57	52961.9	3.846	7.253
PFOSA	5.65	1.000	976434.1		A	13C8-PFOSA	5.65	625021.8	1.562	7.914
NMeFOSAA	5.71	1.000	212775.3		M	d3-NMeFOSAA	5.71	171204.0	1.243	7.928
PFDS	5.80	1.100	283198.5		A	13C8-PFOS	5.25	296147.5	0.956	7.582
PFUnDA	5.83	1.000	1281938.5		A	13C7-PFUnDA	5.83	546359.3	2.346	8.387
NEtFOSAA	5.84	1.000	204048.6		M	d5-NEtFOSAA	5.84	138500.8	1.473	7.175
PFDoDA	6.06	1.000	1650301.1		A	13C2-PFDoDA	6.06	1150927.4	1.434	7.854
10:2-FTS	6.08	1.090	184968.5		A	13C2-8:2-FTS	5.57	52961.9	3.492	7.701
NMePFOSAE	6.11	1.000	498735.8		A	d7-NMePFOSAE	6.10	263412.8	1.893	7.968
NMePFOSA	6.11	1.000	124582.5		A	d3-NMePFOSA	6.11	83886.6	1.485	7.873
PFDoS	6.23	1.190	159682.3		A	13C8-PFOS	5.25	296147.5	0.539	7.744
NEtPFOSAE	6.26	1.000	516882.1		A	d9-NEtPFOSAE	6.25	218635.8	2.364	8.504
NEtPFOSA	6.28	1.000	119152.1		A	d5-NEtPFOSA	6.27	66966.4	1.779	7.975
PFTrDA	6.26	1.030	1622977.7		A	13C2-PFDoDA	6.06	1150927.4	1.410	8.500
PFTeDA	6.43	1.000	1172052.0		A	13C2-PFTeDA	6.43	826670.0	1.418	8.033
PFHxDA	6.74	1.050	601723.8		A	13C2-PFTeDA	6.43	826670.0	0.728	8.321
PFODA	7.00	1.090	494210.7		A	13C2-PFTeDA	6.43	826670.0	0.598	7.964

Total Ion Chromatogram

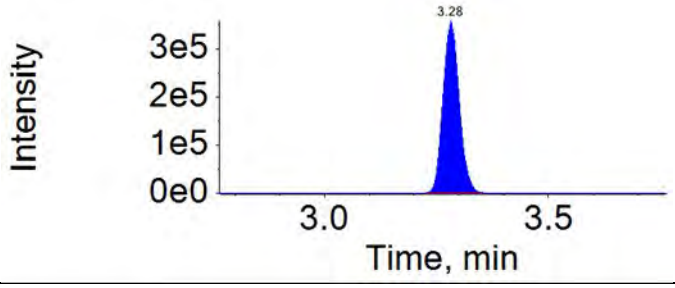


APPROVED
By MCD at 5:00 pm, 11/28/18

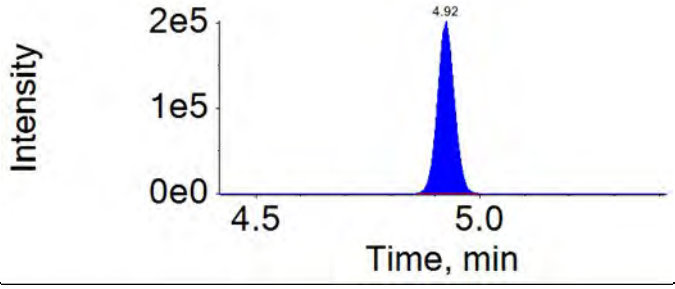
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

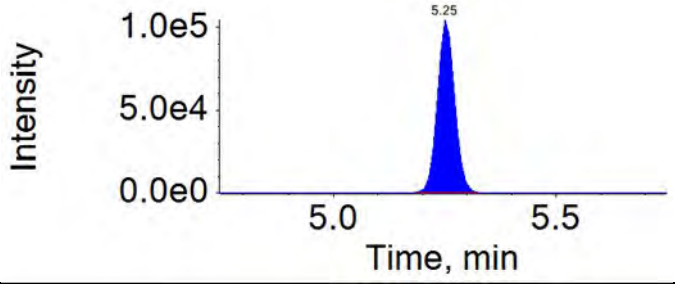
Injection Standard: 13C3-PFBA
216.0 / 172.0



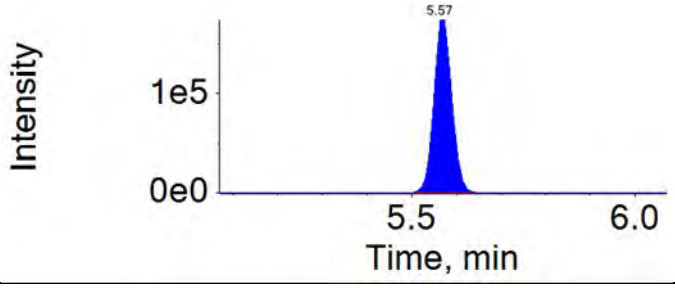
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0

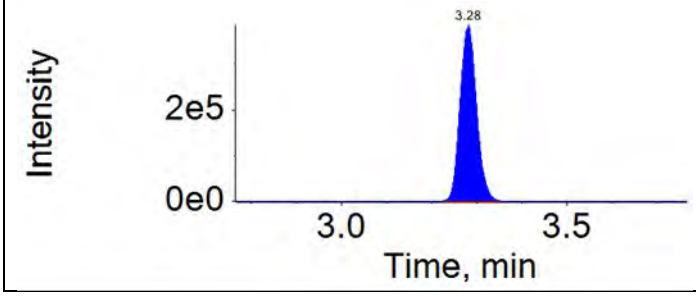


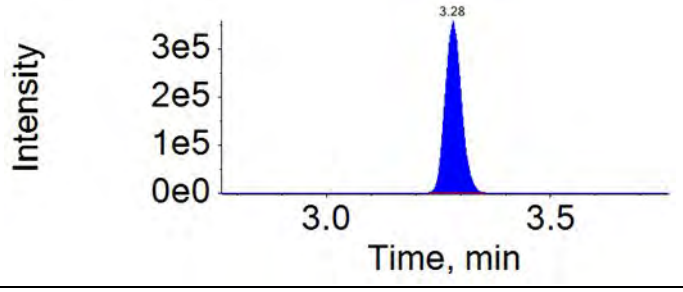
Injection Standard: 13C2-PFDA
515.0 / 470.0



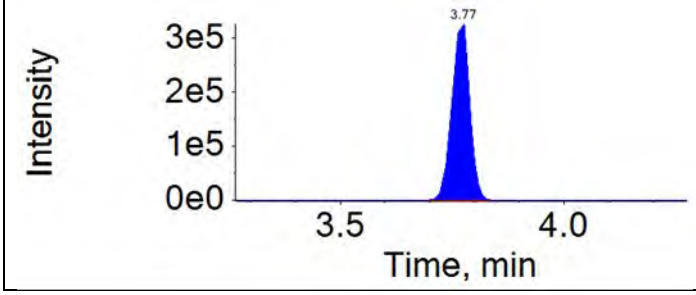
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

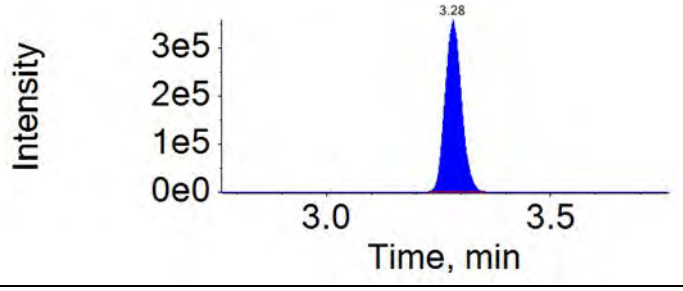
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



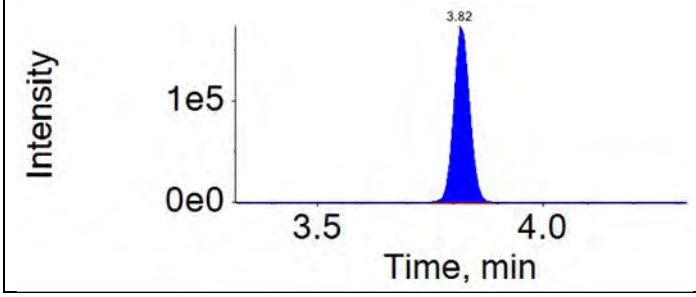


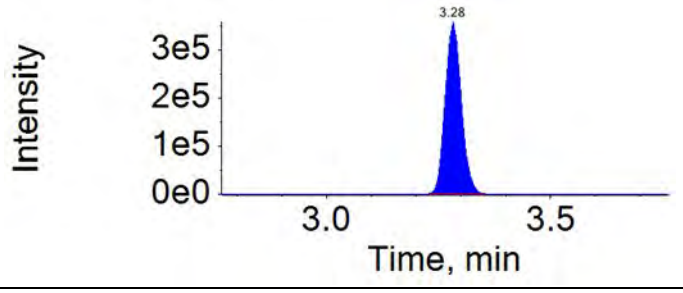
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



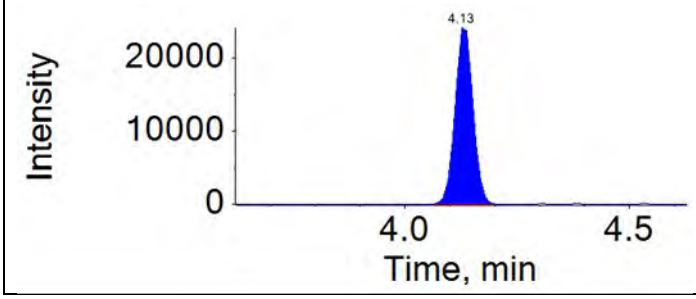


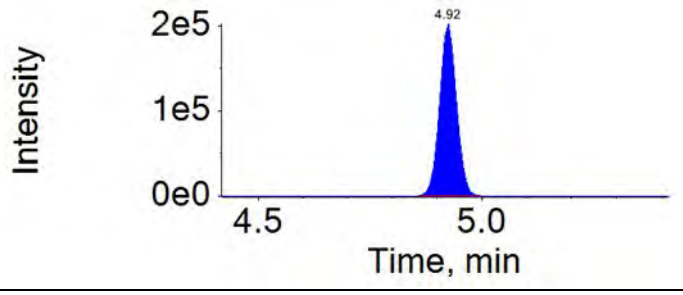
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



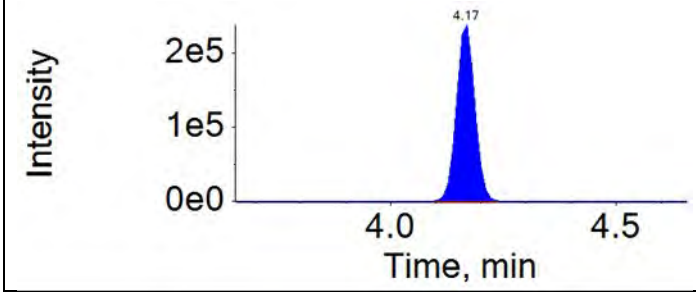


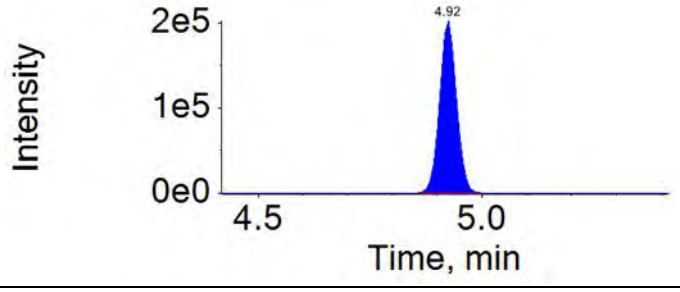
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

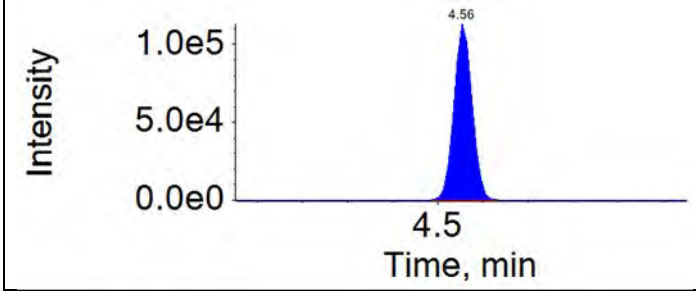
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

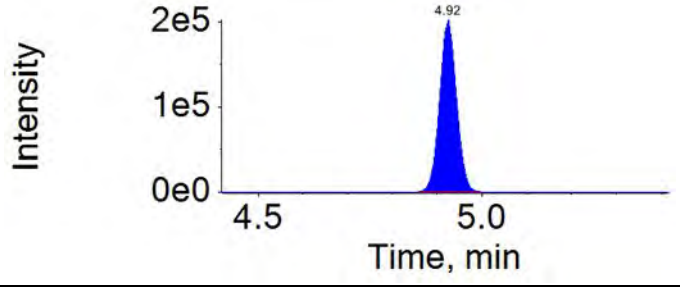
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



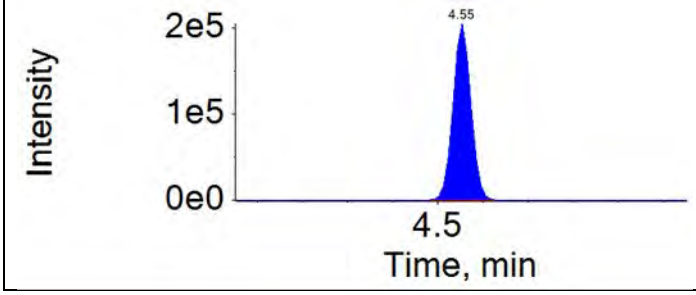


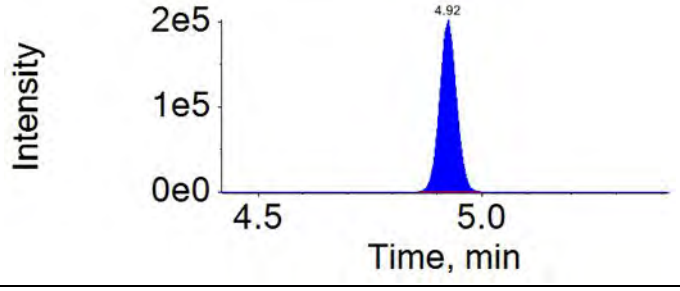
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



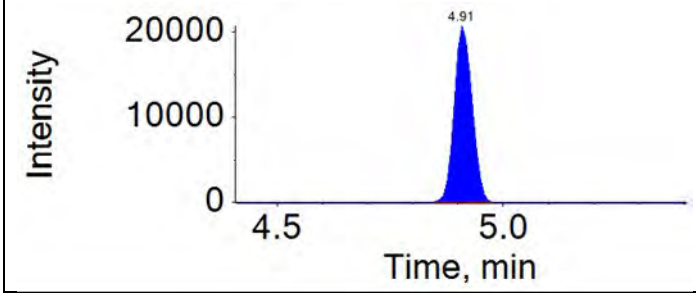


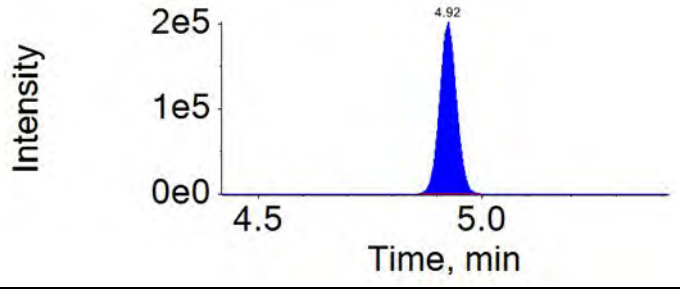
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

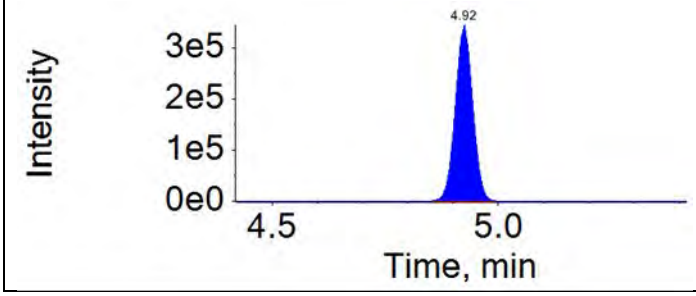
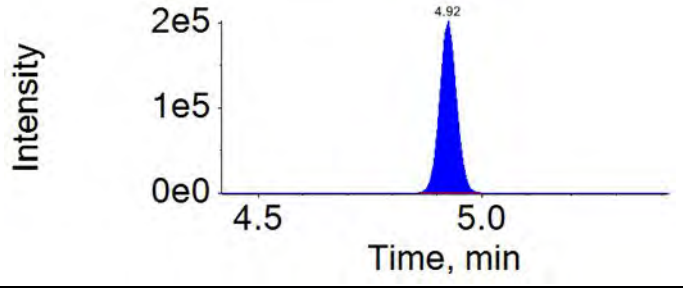


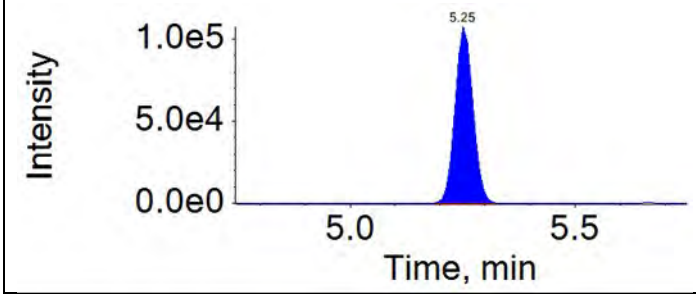
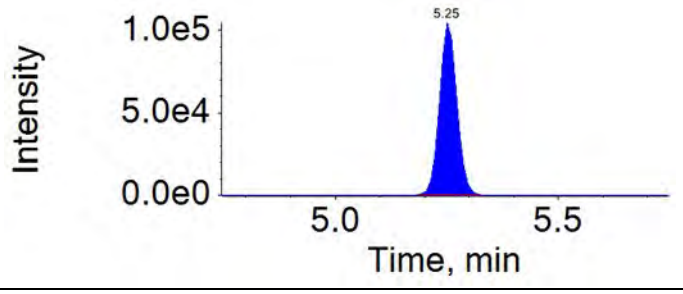


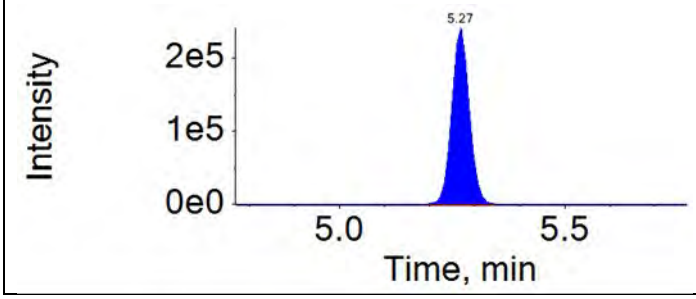
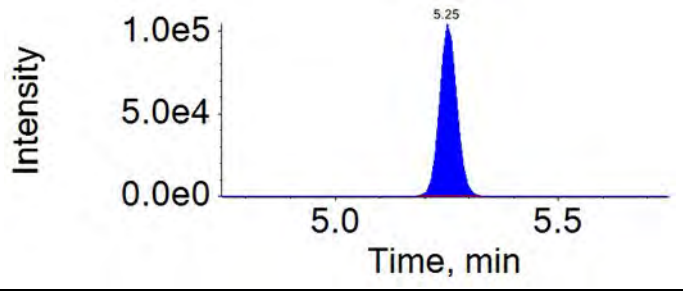
APPROVED
By MCD at 5:00 pm, 11/28/18

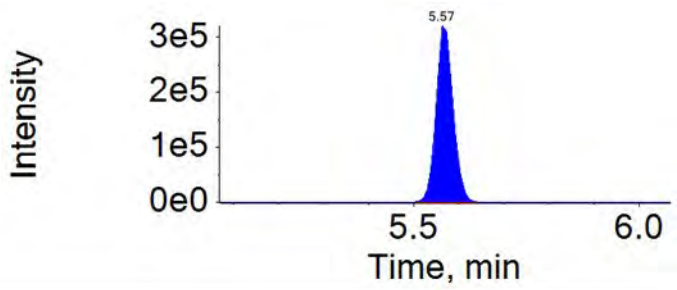
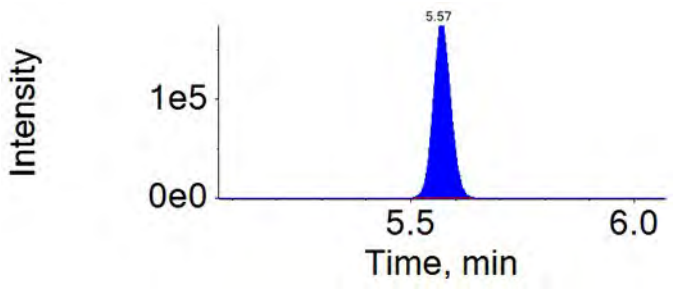
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

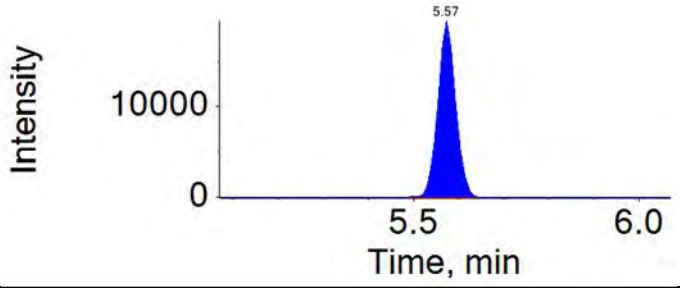
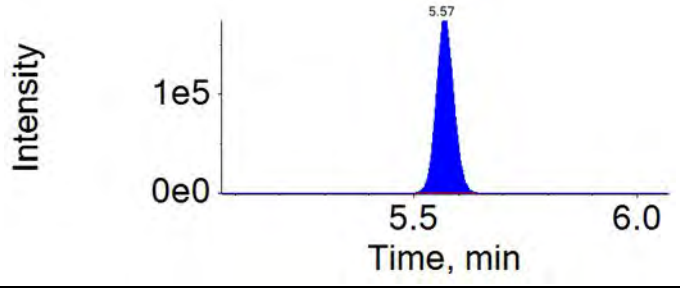
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

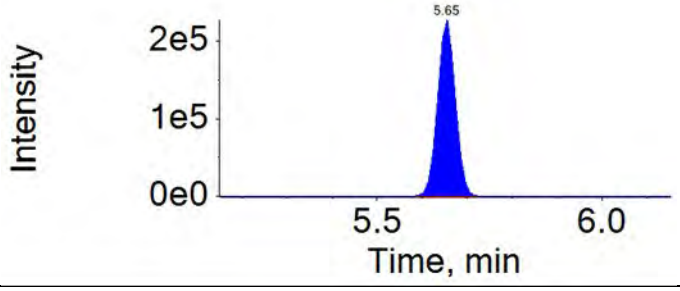
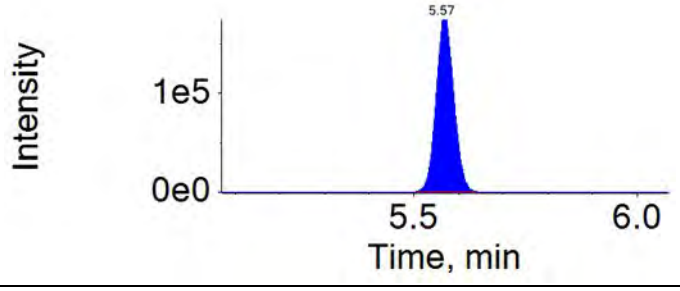
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

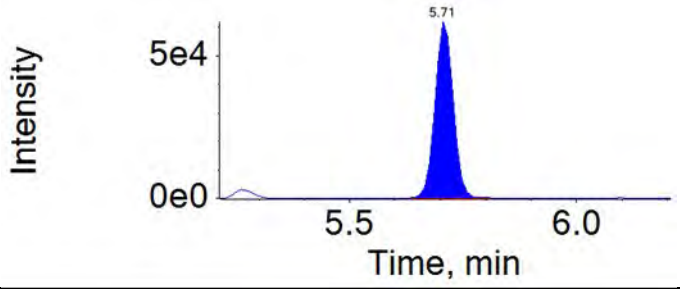
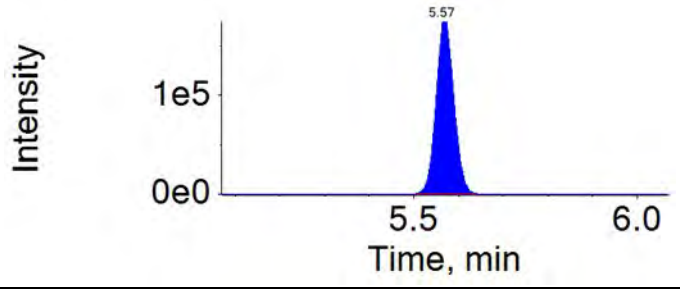
APPROVED
By MCD at 5:00 pm, 11/28/18

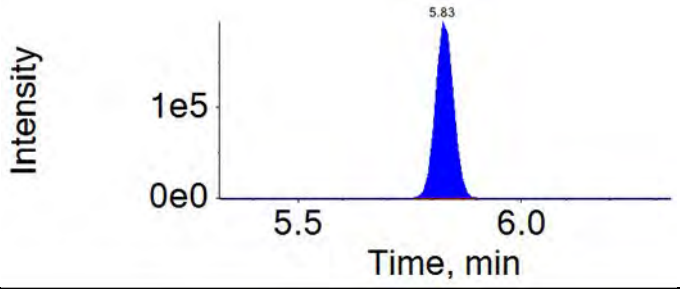
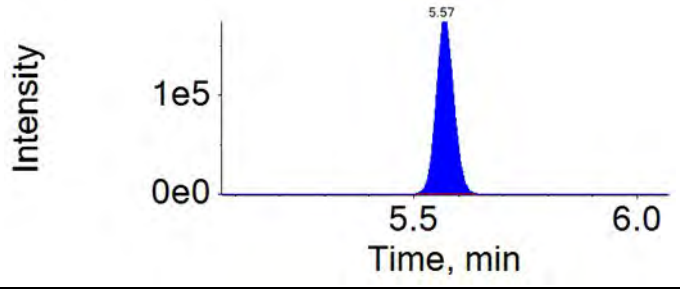
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

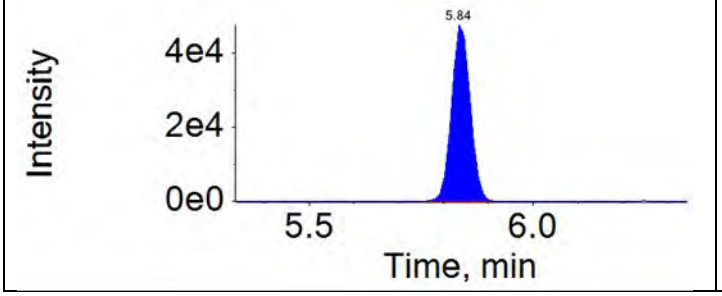
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

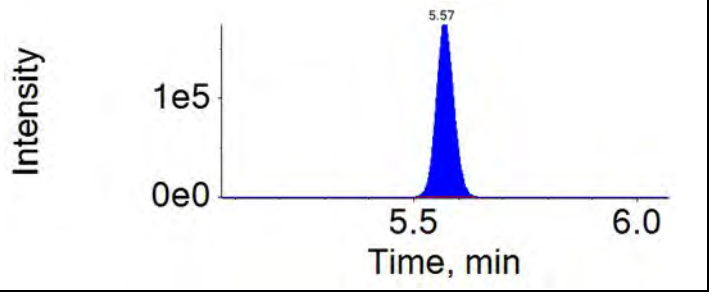
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

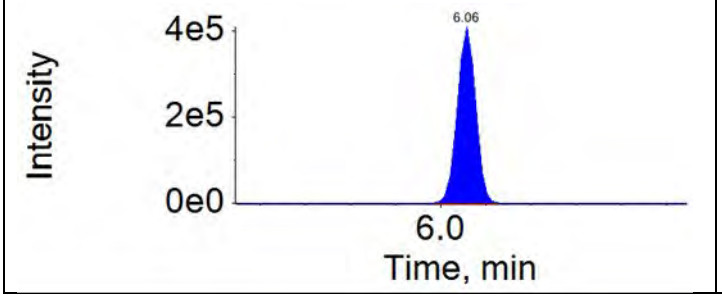
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

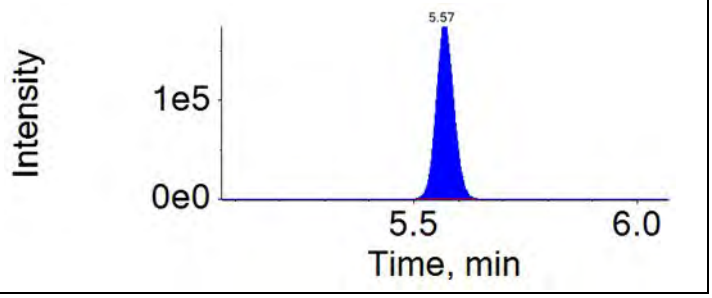
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



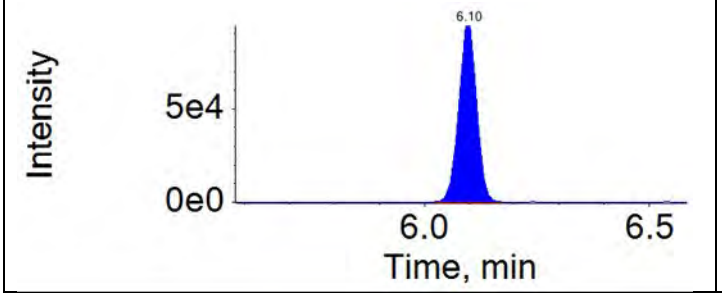


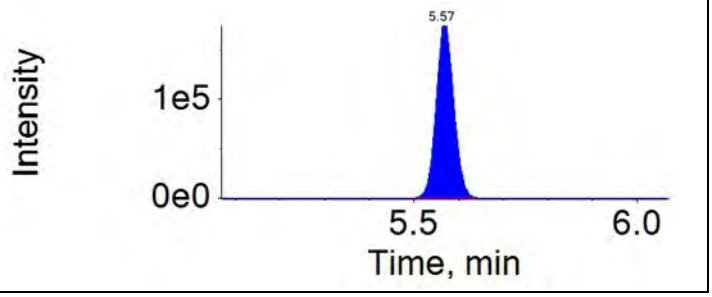
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



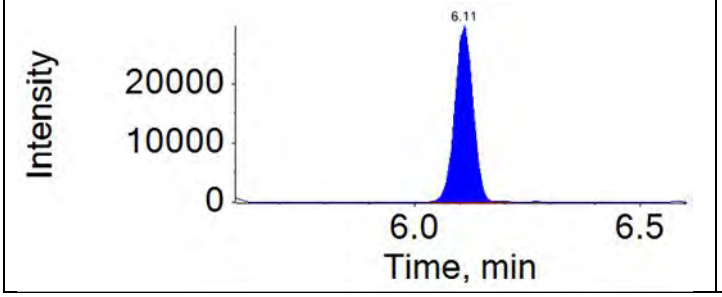


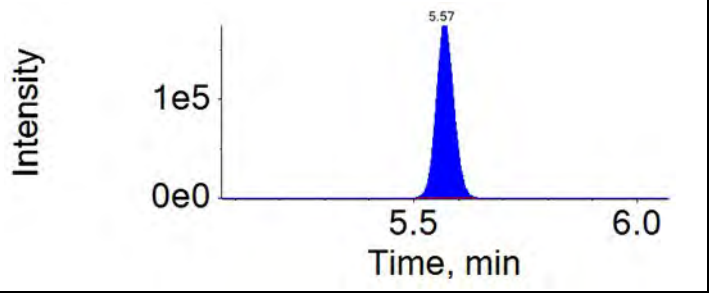
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



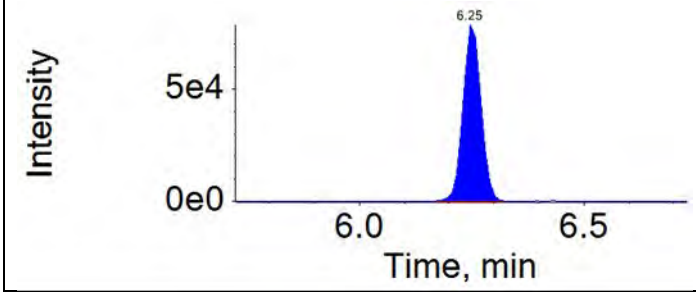


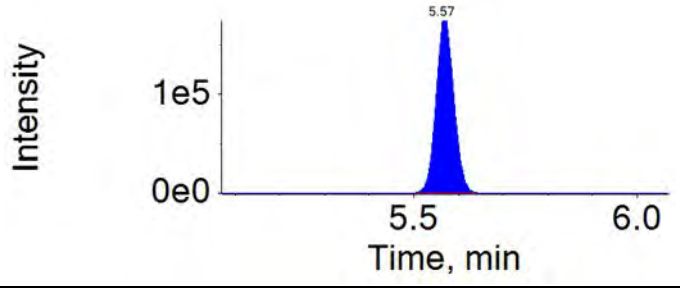
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

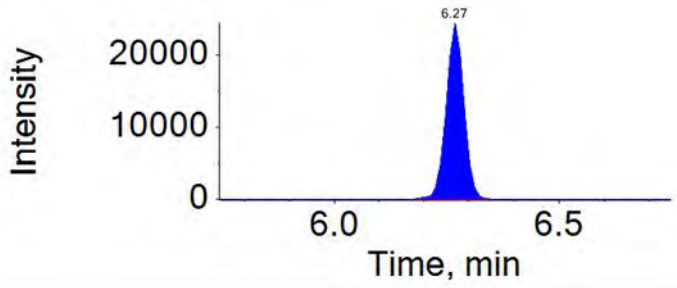
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

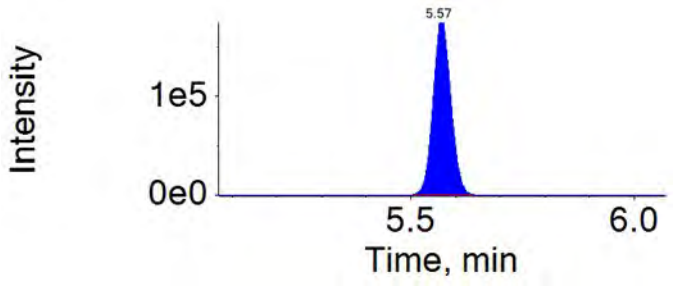
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



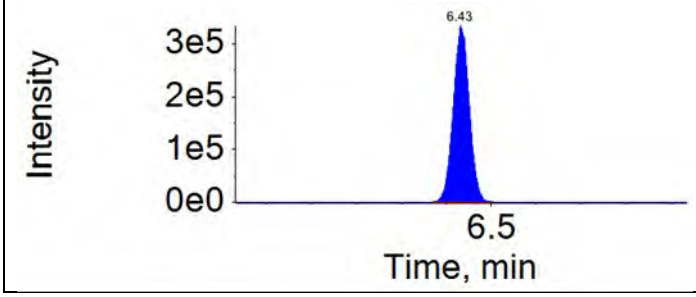


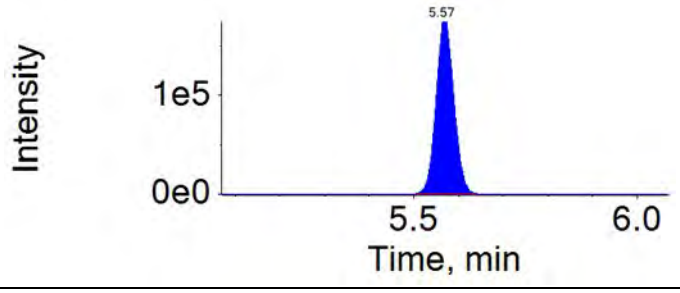
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



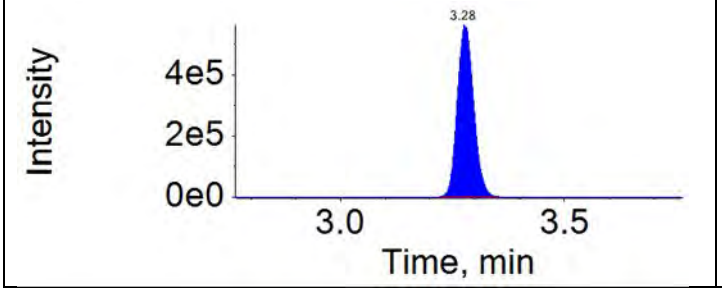


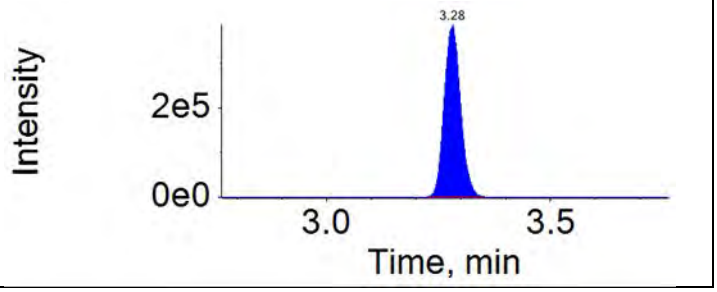
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

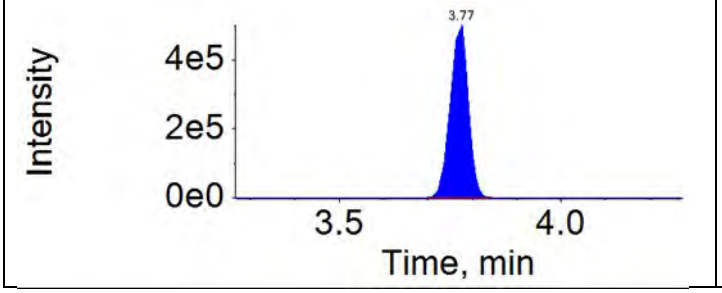
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

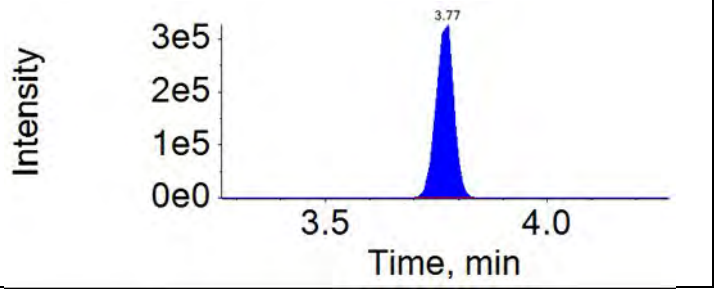
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



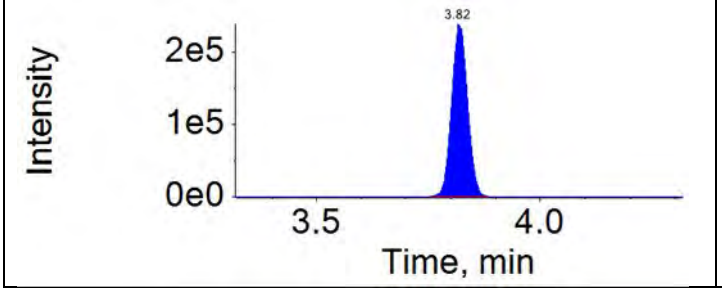


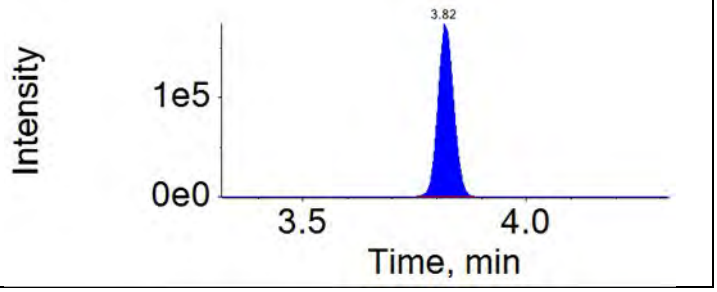
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



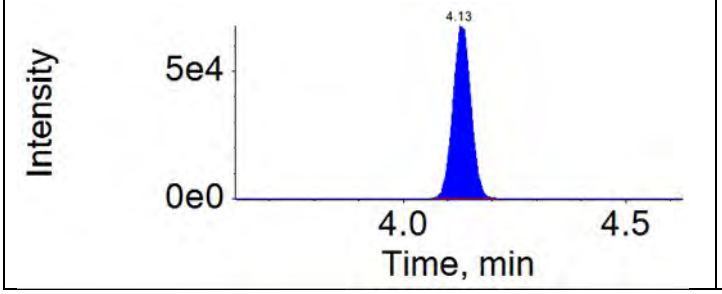


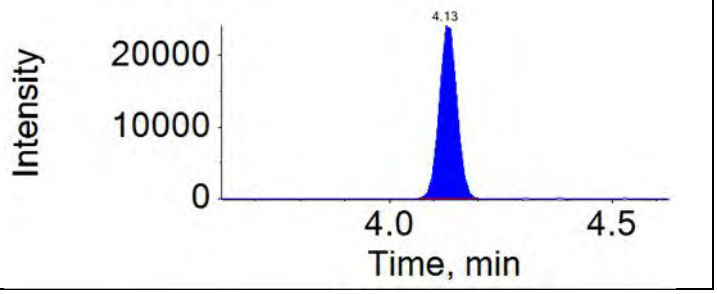
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



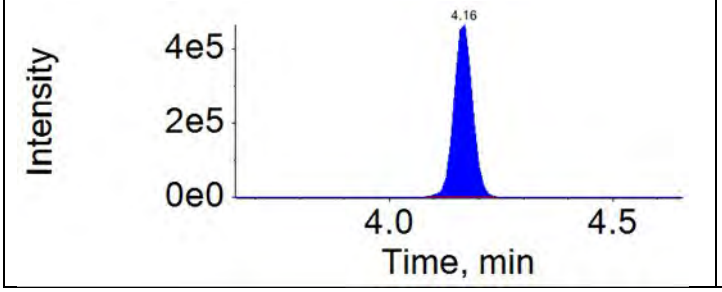


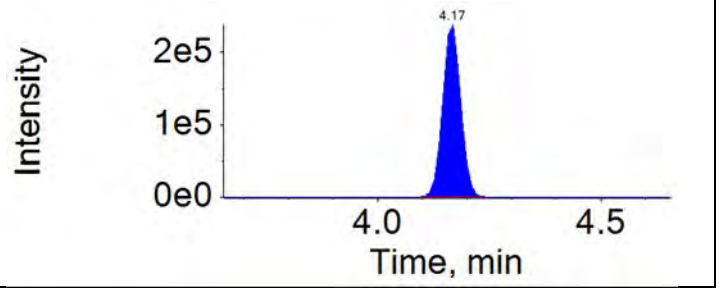
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

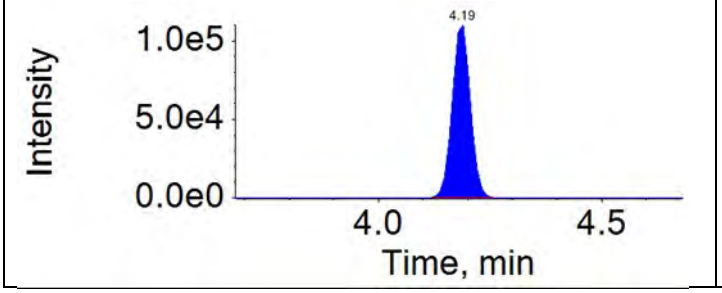
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

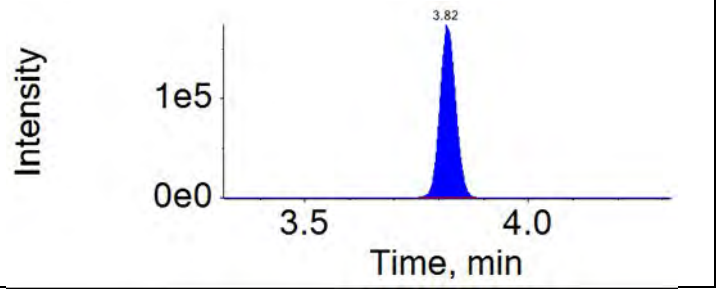
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



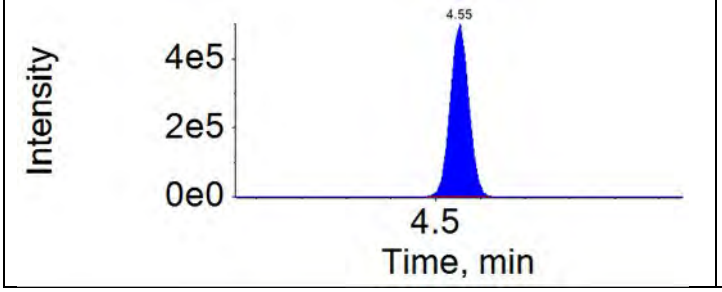


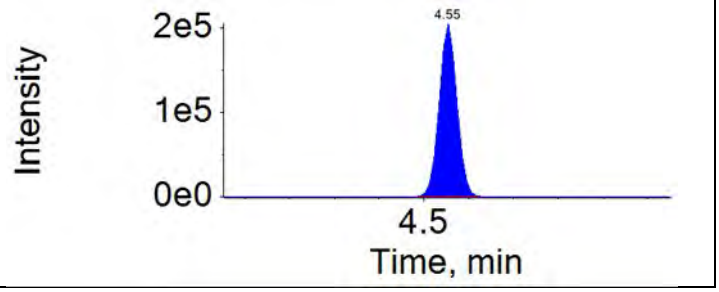
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



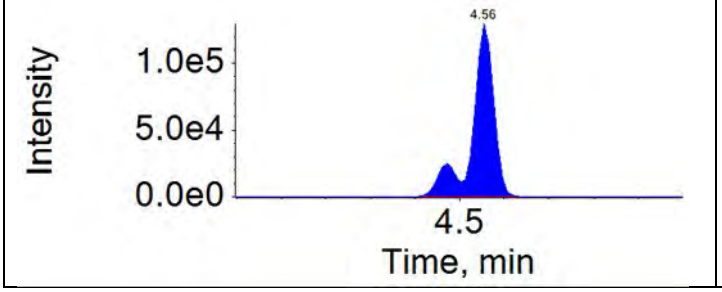


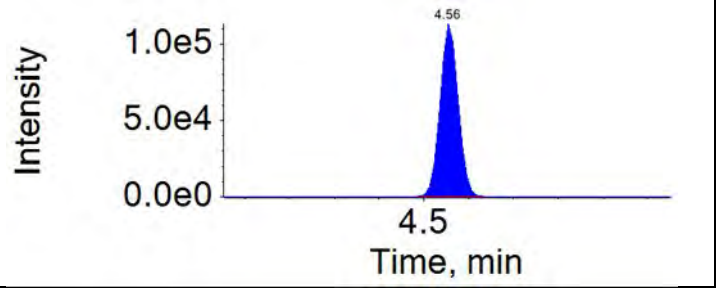
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



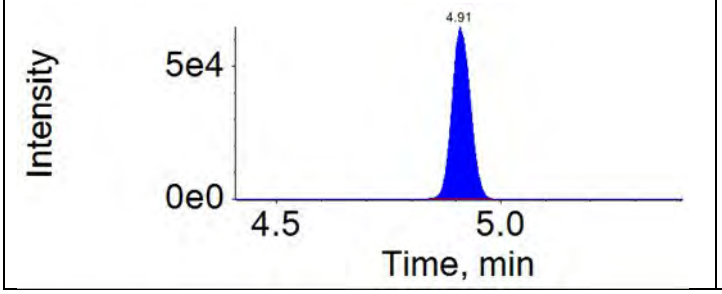


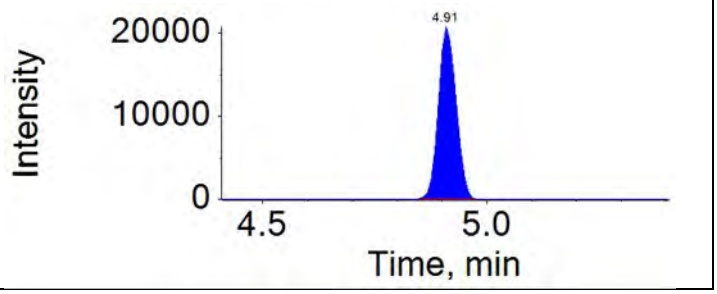
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

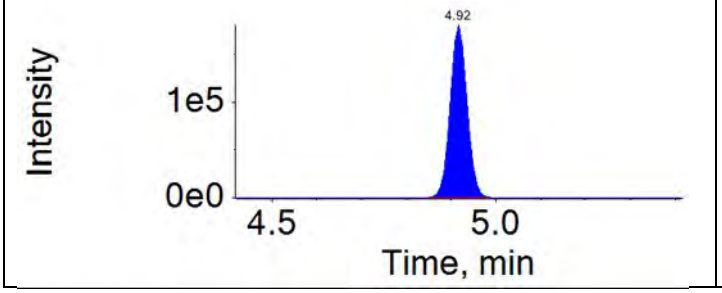
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

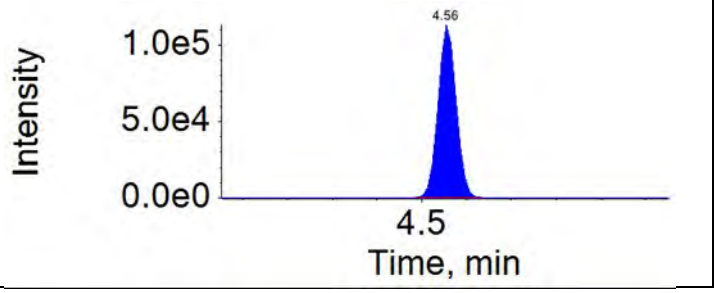
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



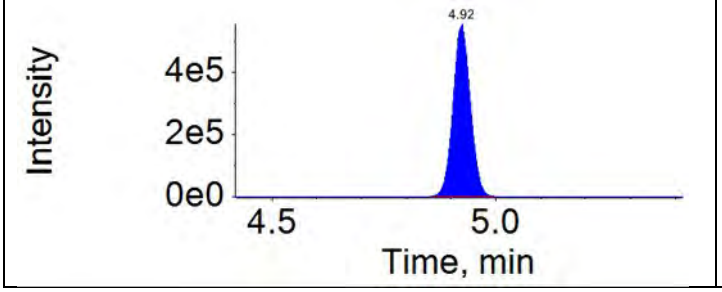


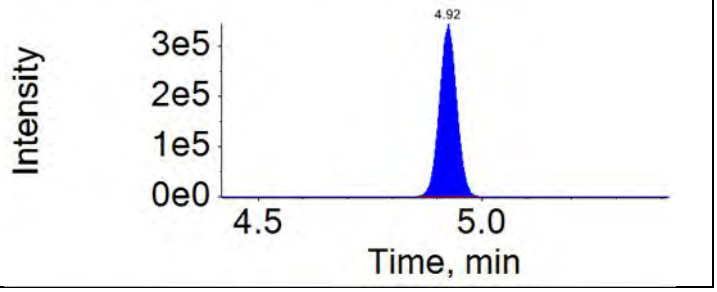
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



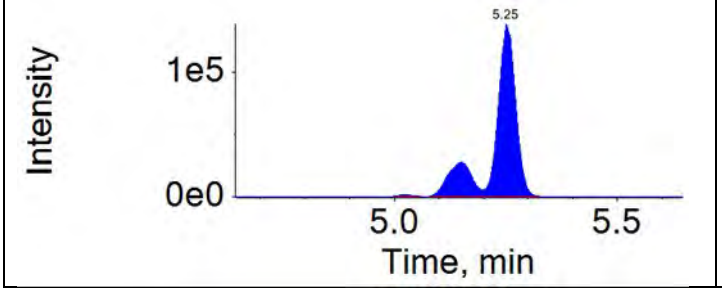


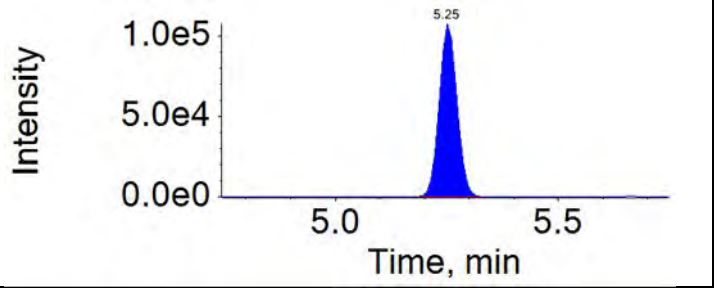
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



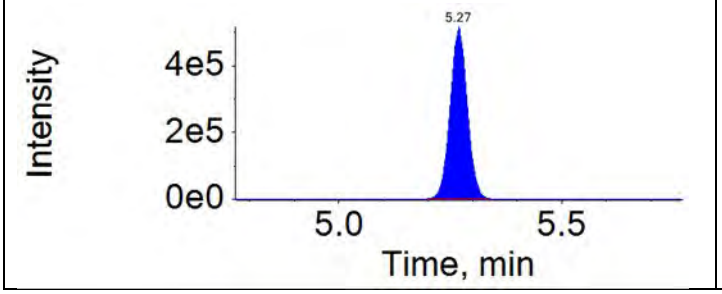


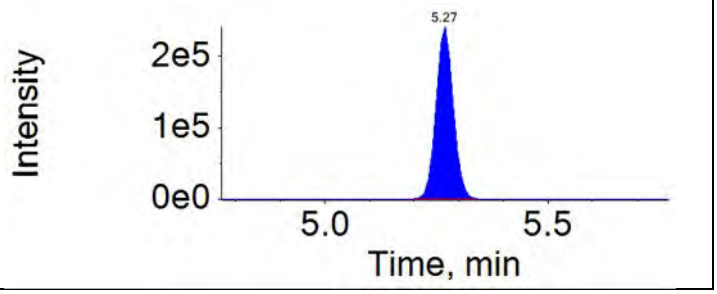
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

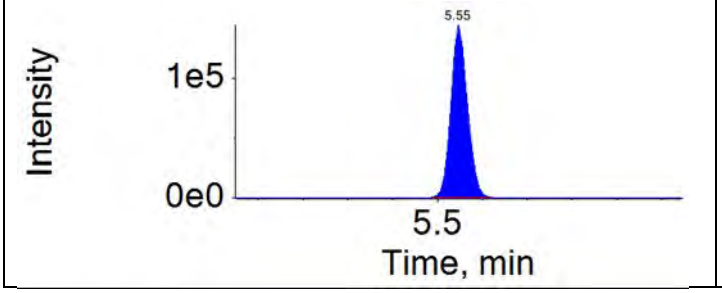
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

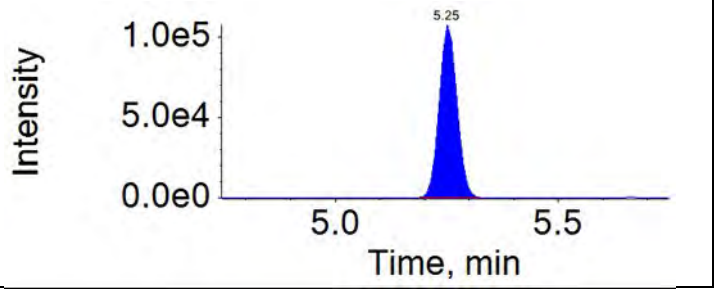
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



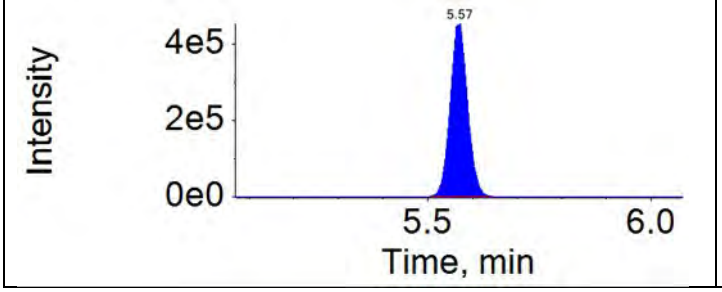


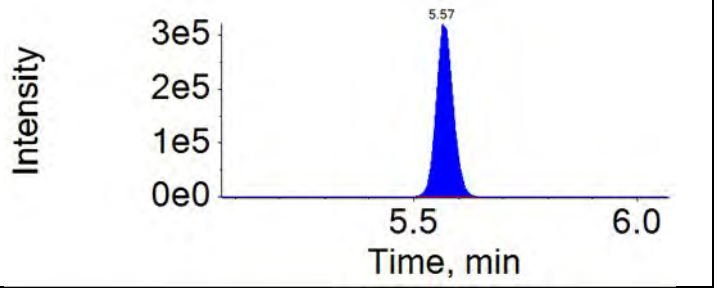
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



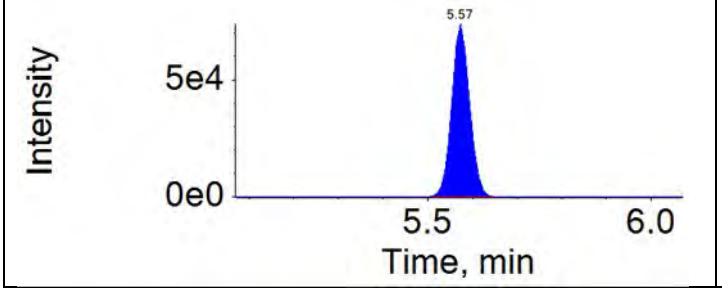


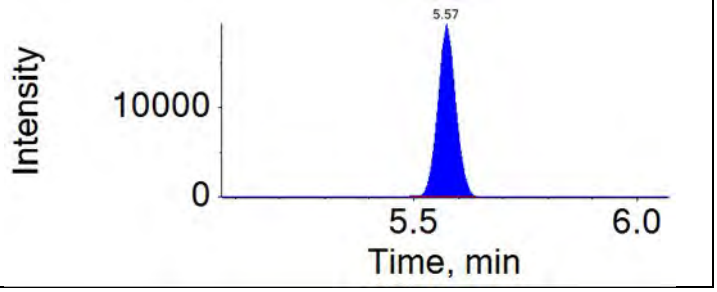
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



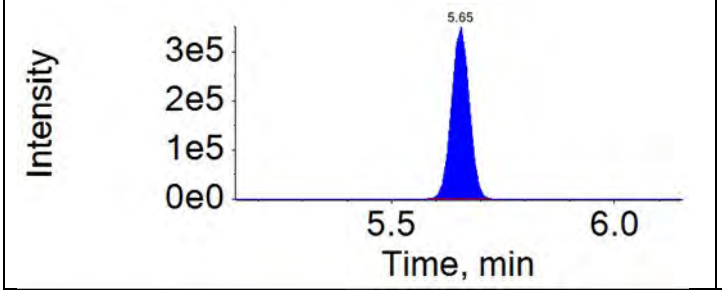


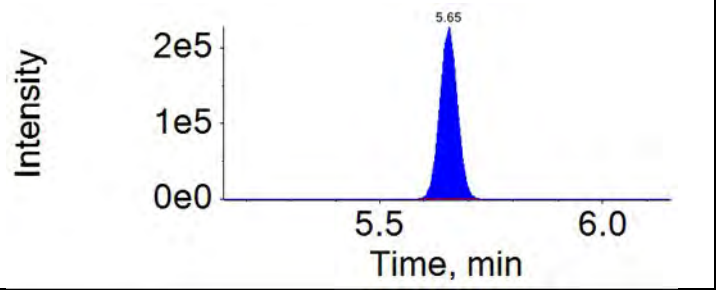
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

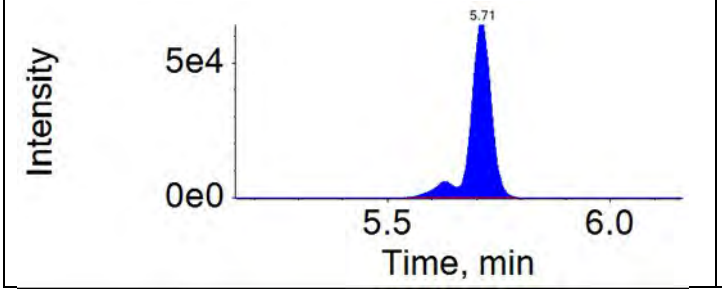
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

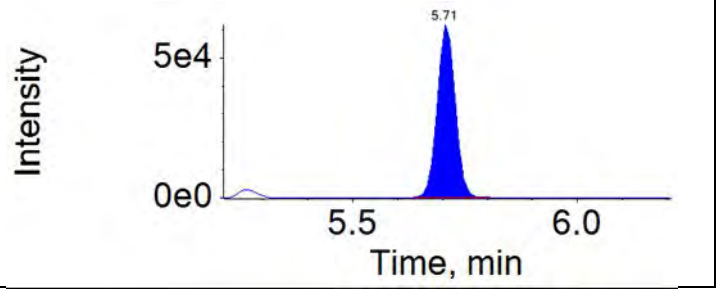
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



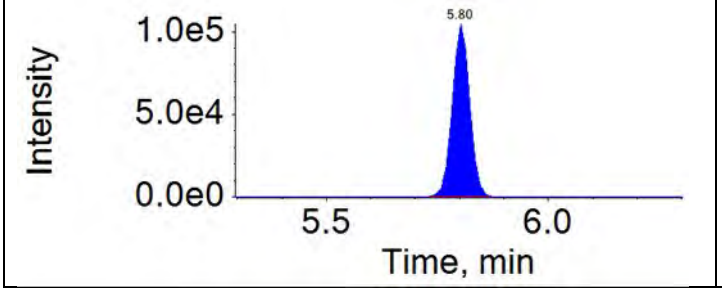


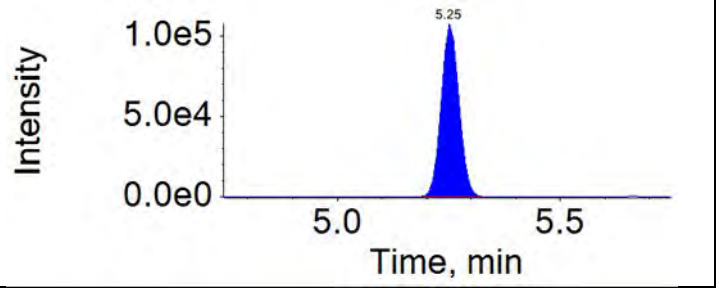
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



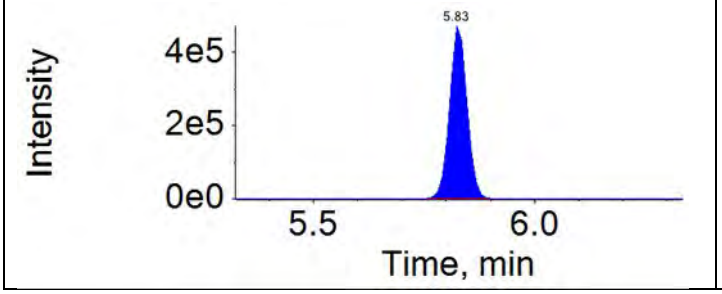


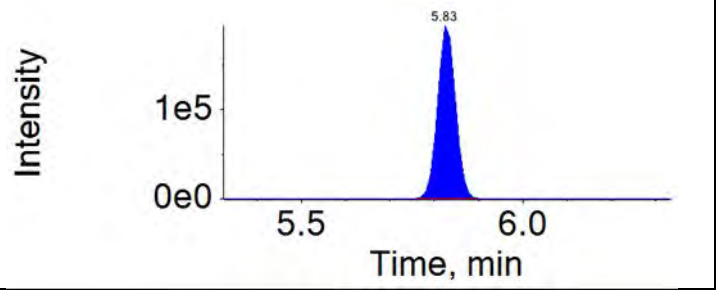
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



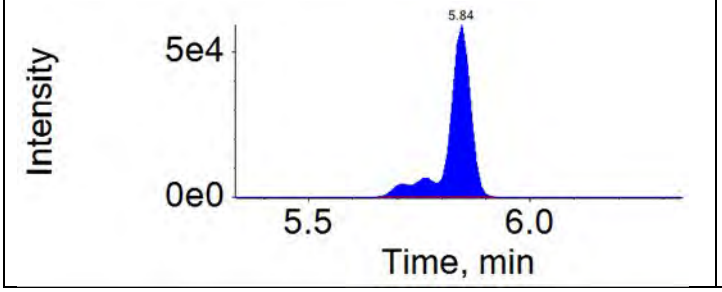


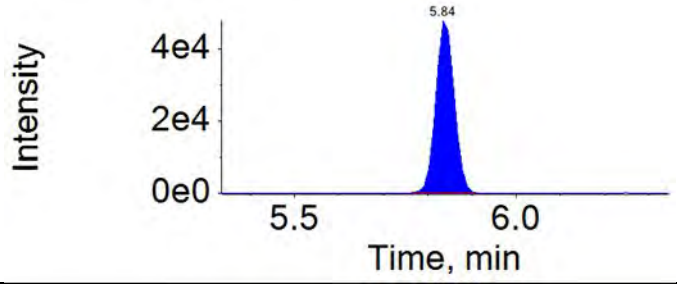
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

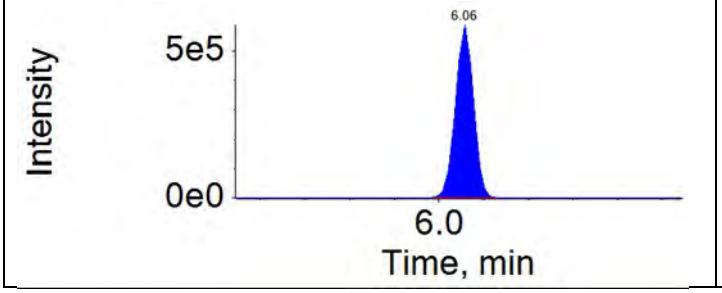
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

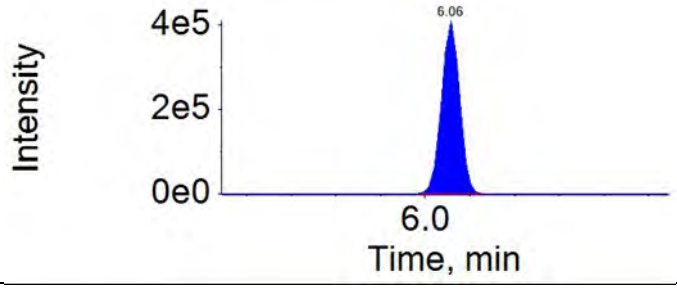
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



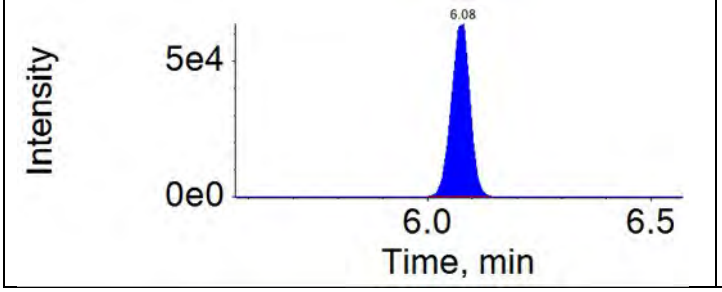


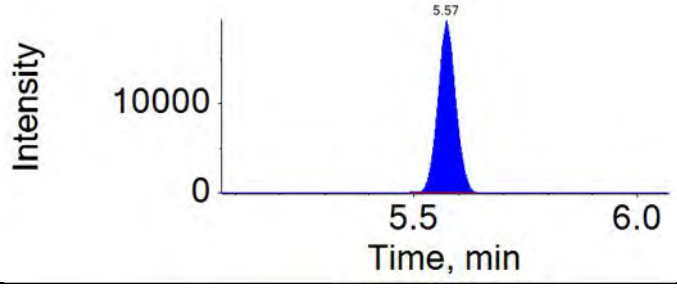
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



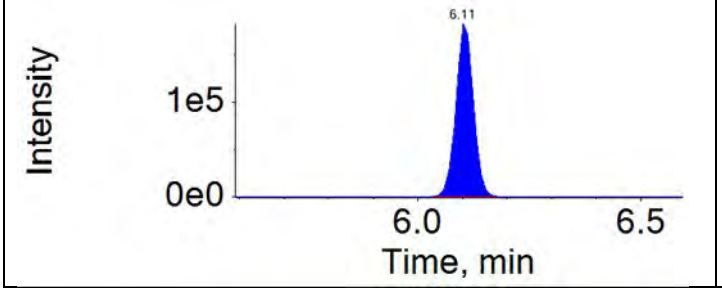


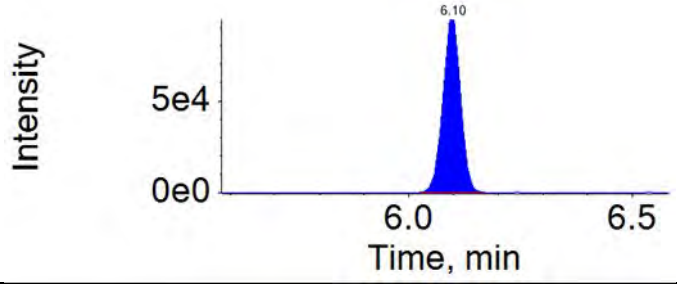
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



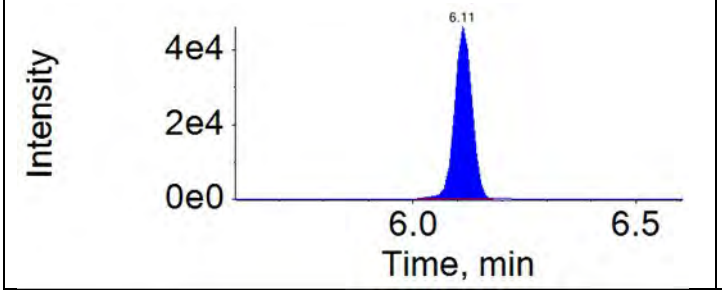


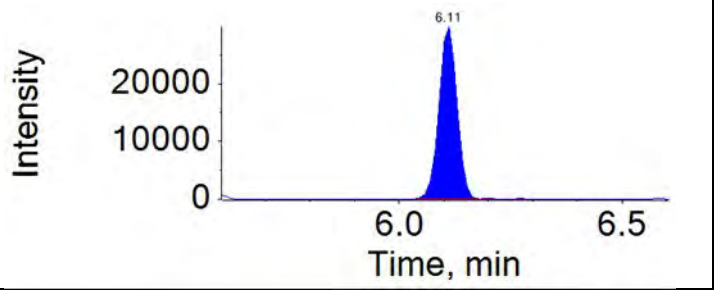
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

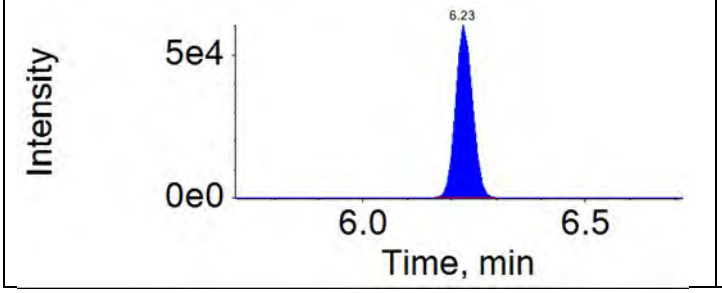
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

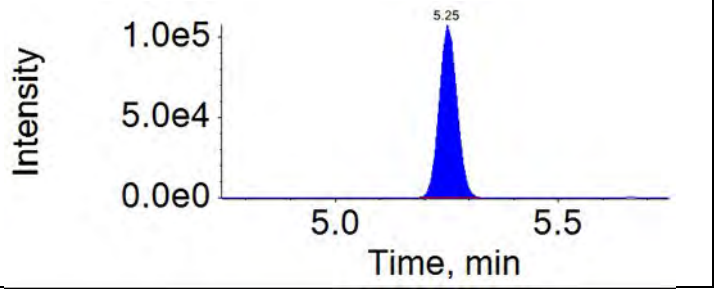
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



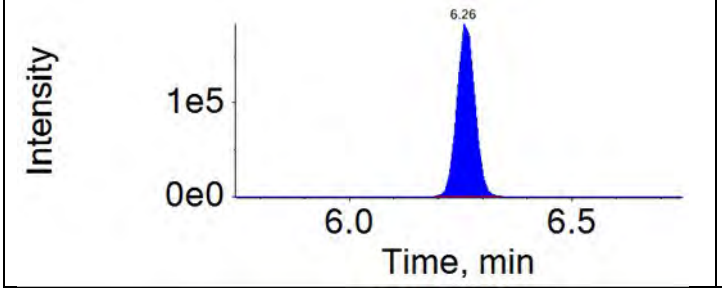


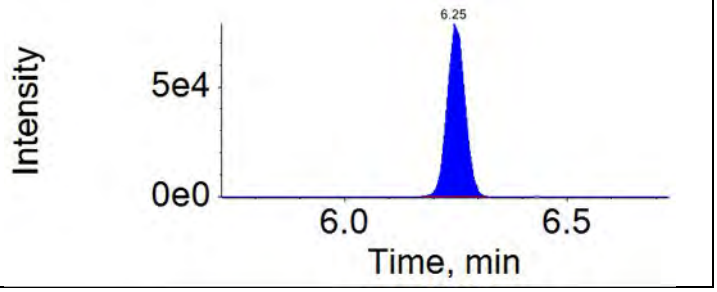
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



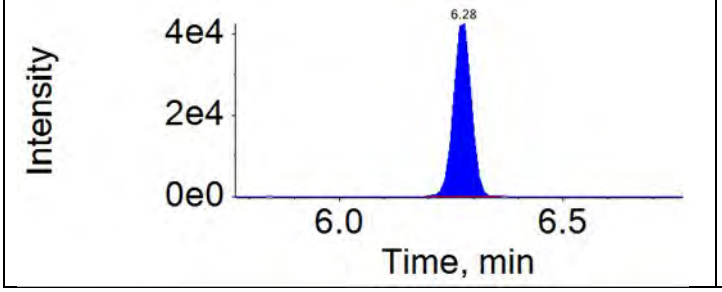


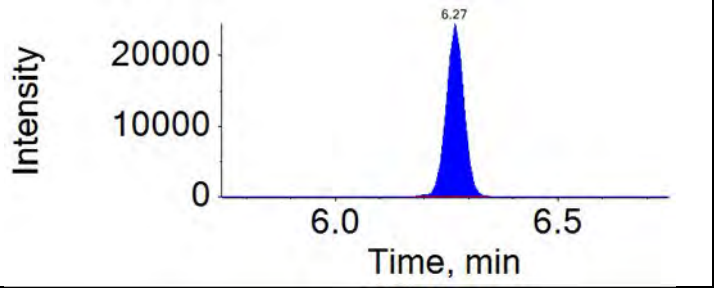
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



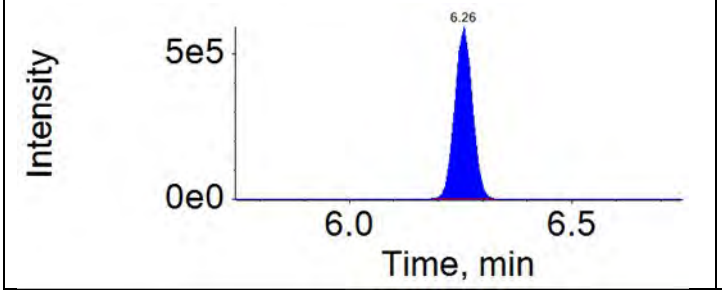


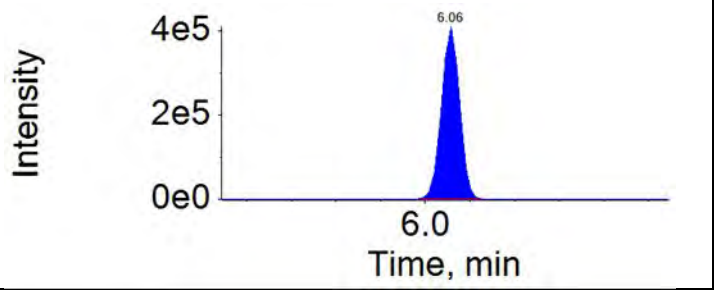
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

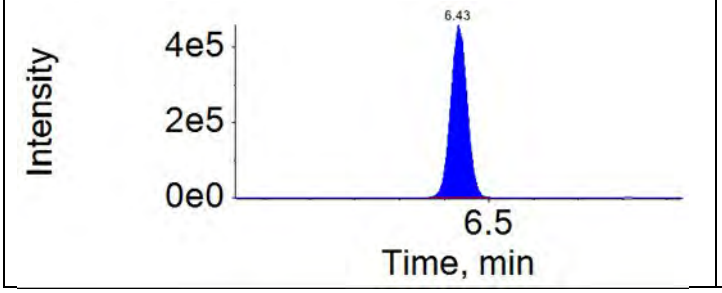
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

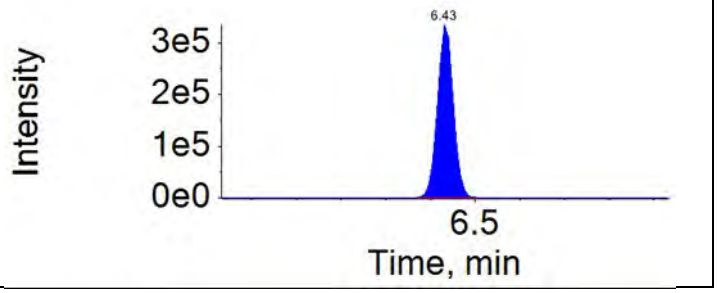
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



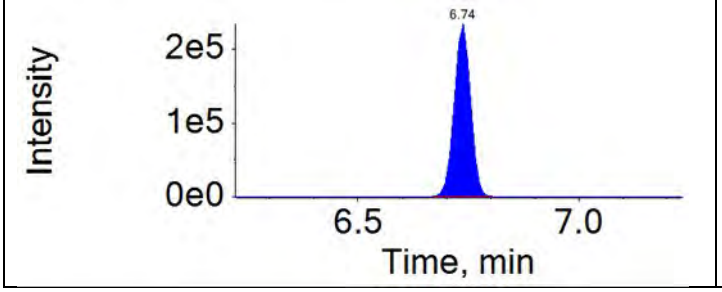


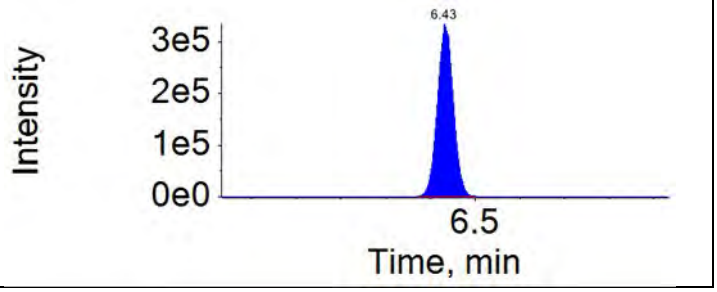
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



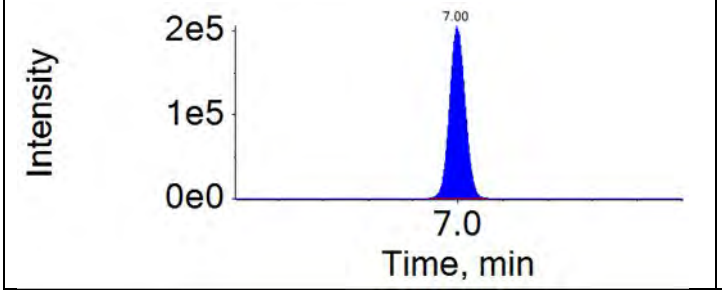


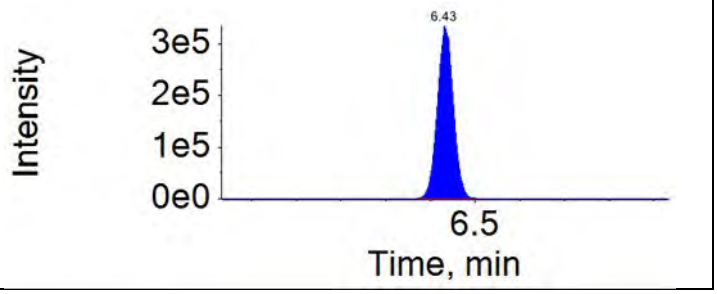
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



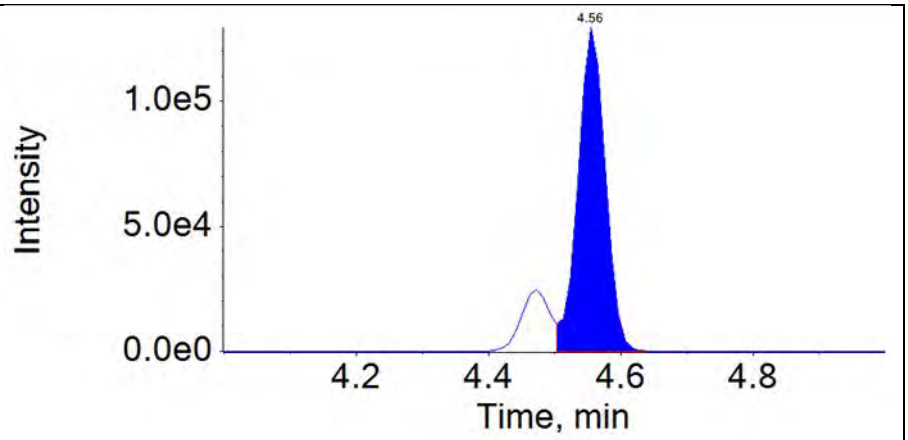


APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

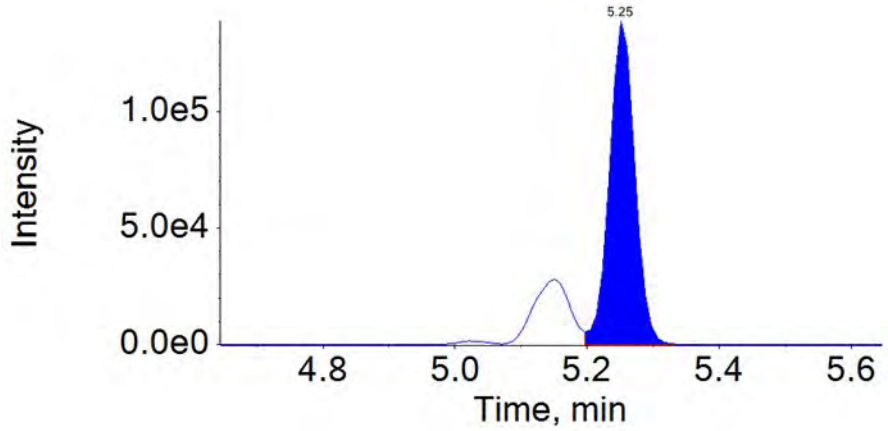
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.56
Peak Area:
371393.69
Mass Range:
399.0 / 80.0
File Name:
18NOV28DCAL-09.wiff
Sample Name:
CAL4



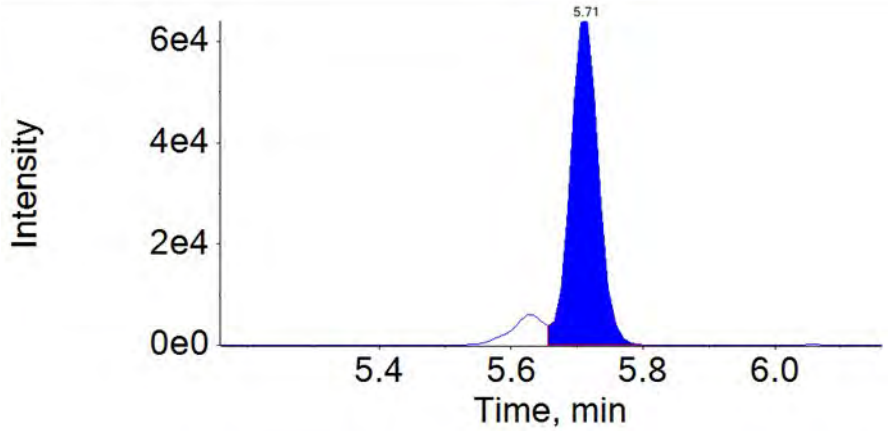
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
370801.21
Mass Range:
499.0 / 80.0
File Name:
18NOV28DCAL-09.wiff
Sample Name:
CAL4



Integration Comment: incorrect integration

Component Name:
NMeFOSAA
RT (min.):
5.71
Peak Area:
191931.92
Mass Range:
570.0 / 419.0
File Name:
18NOV28DCAL-09.wiff
Sample Name:
CAL4



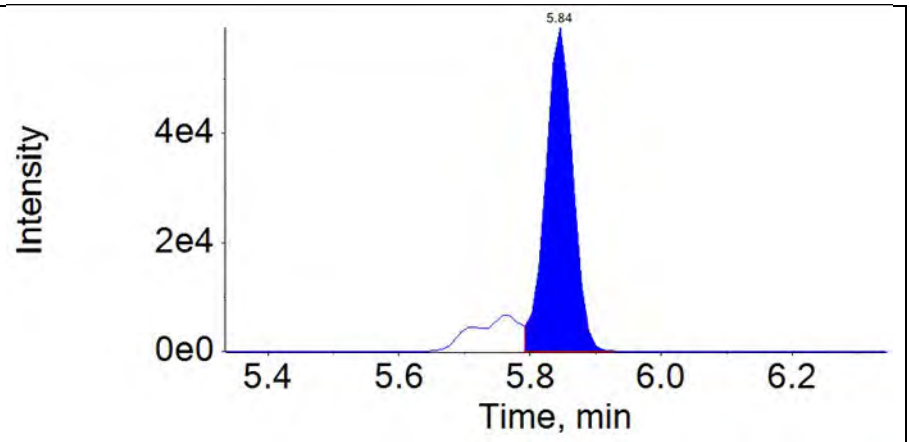
Integration Comment: incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

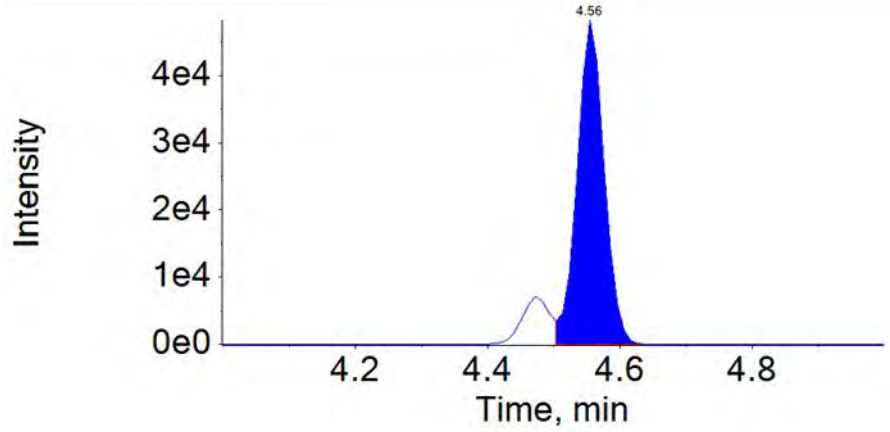
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NEtFOSAA
RT (min.):
5.84
Peak Area:
171264.64
Mass Range:
584.0 / 419.0
File Name:
18NOV28DCAL-09.wiff
Sample Name:
CAL4



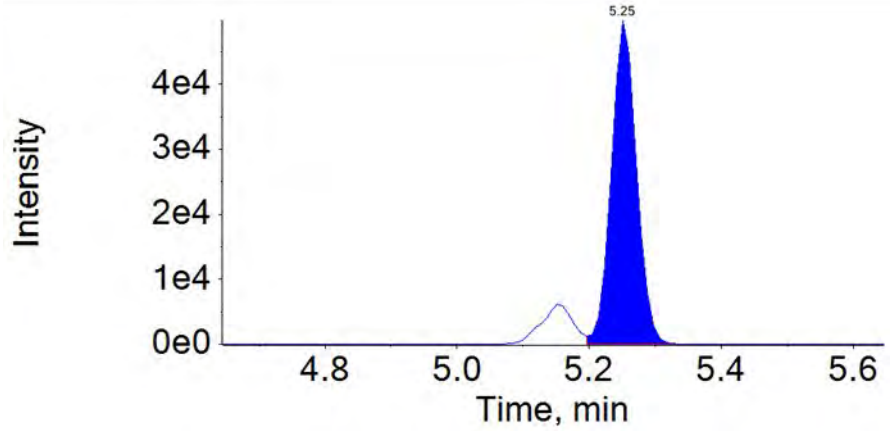
Integration Comment: incorrect integration

Component Name:
PFHxS_2
RT (min.):
4.56
Peak Area:
136580.68
Mass Range:
399.0 / 99.0
File Name:
18NOV28DCAL-09.wiff
Sample Name:
CAL4



Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.25
Peak Area:
131435.94
Mass Range:
499.0 / 99.0
File Name:
18NOV28DCAL-09.wiff
Sample Name:
CAL4



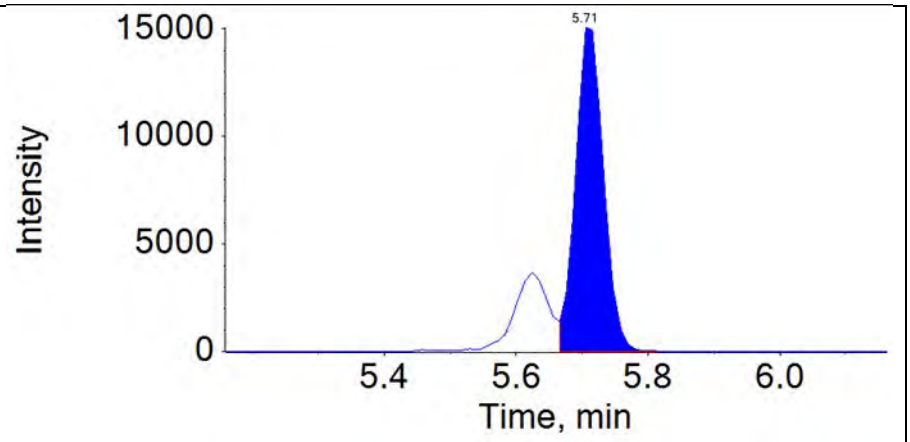
Integration Comment: incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

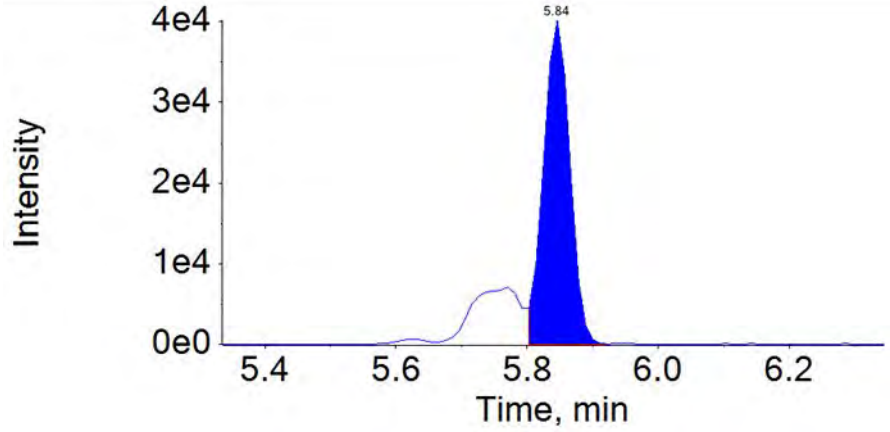
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NMeFOSAA_2
RT (min.):
5.71
Peak Area:
44801.82
Mass Range:
570.0 / 483.0
File Name:
18NOV28DCAL-09.wiff
Sample Name:
CAL4



Integration Comment: incorrect integration

Component Name:
NEtFOSAA_2
RT (min.):
5.84
Peak Area:
112154.28
Mass Range:
584.0 / 526.0
File Name:
18NOV28DCAL-09.wiff
Sample Name:
CAL4



Integration Comment: incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Ion Ratio Report

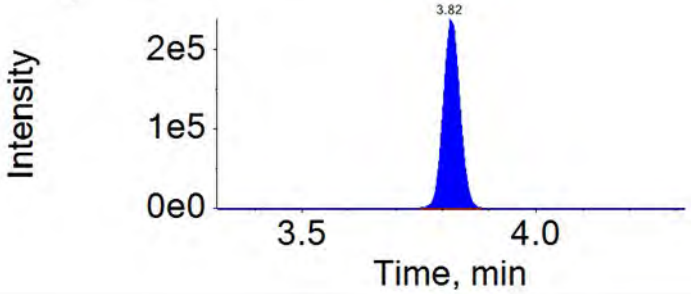
Sample Name: CAL4 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-09.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	590590.25	A	0.3655	0.3782			
PFBS_2	3.82	1.00	223343.90	A	0.3655	0.3782	3	50	
4:2-FTS	4.13	1.00	191344.61	A	0.6383	0.6348			
4:2-FTS_2	4.13	1.00	121465.15	A	0.6383	0.6348	-1	50	
PFHxA	4.16	1.00	1343216.41	A	0.0103	0.0115			
PFHxA_2	4.16	1.00	15497.56	A	0.0103	0.0115	12	50	
PFPeS	4.19	1.10	311741.60	A	0.4976	0.5181			
PFPeS_2	4.18	1.10	161508.14	A	0.4976	0.5181	4	50	
PFHpA	4.55	1.00	1429895.33	A	0.0557	0.0548			
PFHpA_2	4.55	1.00	78335.37	A	0.0557	0.0548	-2	50	
PFHxS	4.56	1.00	444626.01	M	0.3693	0.3529			
PFHxS_2	4.56	1.00	156906.17	M	0.3693	0.3529	-4	50	
6:2-FTS	4.91	1.00	185311.52	A	0.6625	0.6163			
6:2-FTS_2	4.91	1.00	114201.19	A	0.6625	0.6163	-7	50	
PFHpS	4.92	1.08	471580.62	A	0.3915	0.4081			
PFHpS_2	4.92	1.08	192431.36	A	0.3915	0.4081	4	50	
PFOA	4.92	1.00	1486960.43	A	0.0573	0.0582			
PFOA_2	4.92	1.00	86577.54	A	0.0573	0.0582	2	50	
PFOS	5.25	1.00	481949.96	M	0.2960	0.3159			
PFOS_2	5.25	1.00	152242.35	M	0.2960	0.3159	7	50	
PFNA	5.27	1.00	1365056.35	A	0.0201	0.0213			
PFNA_2	5.27	1.00	29087.24	A	0.0201	0.0213	6	50	
PFNS	5.55	1.06	369833.35	A	0.4794	0.4744			
PFNS_2	5.55	1.06	175461.18	A	0.4794	0.4744	-1	50	
PFDA	5.57	1.00	1223810.41	A	0.0075	0.0072			
PFDA_2	5.57	1.00	8850.86	A	0.0075	0.0072	-3	50	
8:2-FTS	5.57	1.00	203687.69	A	0.5380	0.5664			
8:2-FTS_2	5.57	1.00	115365.33	A	0.5380	0.5664	5	50	
NMeFOSAA	5.71	1.00	212775.33	M	0.2305	0.2723			
NMeFOSAA_2	5.71	1.00	57947.55	M	0.2305	0.2723	18	50	
PFDS	5.80	1.10	283198.51	A	0.5356	0.5185			
PFDS_2	5.80	1.10	146842.40	A	0.5356	0.5185	-3	50	
PFUnDA	5.83	1.00	1281938.52	A	0.0038	0.0041			
PFUnDA_2	5.83	1.00	5262.94	A	0.0038	0.0041	8	50	
NEtFOSAA	5.84	1.00	204048.64	M	0.7356	0.7330			
NEtFOSAA_2	5.84	1.00	149571.11	M	0.7356	0.7330	0	50	
PFDoDA	6.06	1.00	1650301.08	A	0.0130	0.0137			
PFDoDA_2	6.06	1.00	22542.02	A	0.0130	0.0137	5	50	
10:2-FTS	6.08	1.09	184968.53	A	0.6989	0.7539			
10:2-FTS_2	6.07	1.09	139452.05	A	0.6989	0.7539	8	50	
PFTrDA	6.26	1.03	1622977.68	A	0.0090	0.0088			
PFTrDA_2	6.26	1.03	14275.05	A	0.0090	0.0088	-2	50	
PFTeDA	6.43	1.00	1172052.04	A	0.0056	0.0065			
PFTeDA_2	6.43	1.00	7656.17	A	0.0056	0.0065	16	50	
PFHxDA	6.74	1.05	601723.77	A	0.0646	0.0614			
PFHxDA_2	6.73	1.05	36942.33	A	0.0646	0.0614	-5	50	
PFODA	7.00	1.09	494210.71	A	0.0264	0.0257			
PFODA_2	7.00	1.09	12722.45	A	0.0264	0.0257	-3	50	

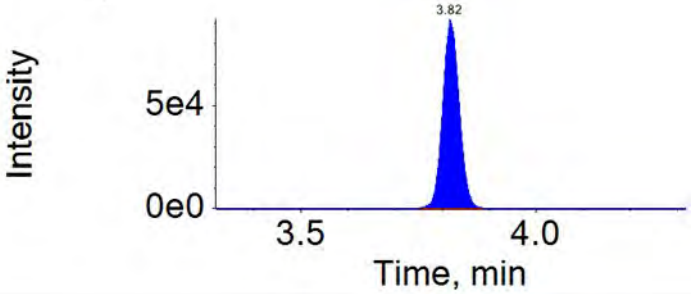
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

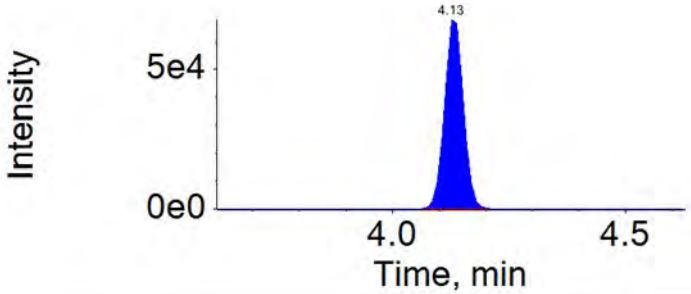
Component: PFBS
Primary Mass: 299.0 / 80.0



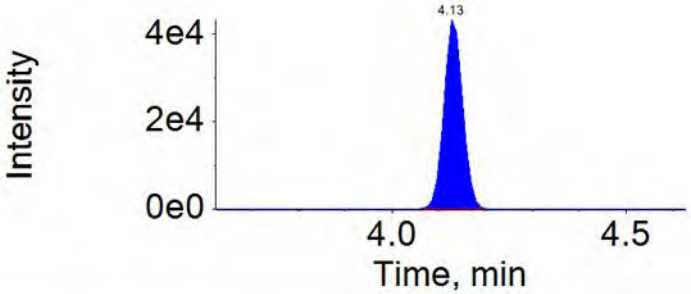
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



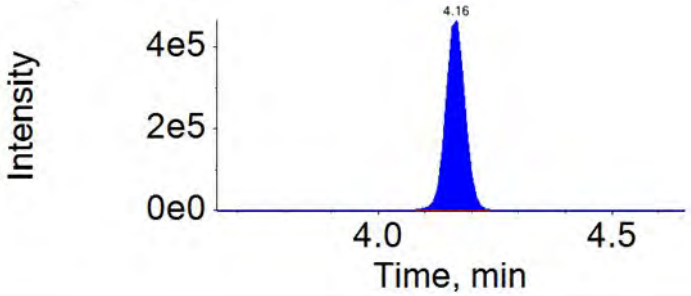
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



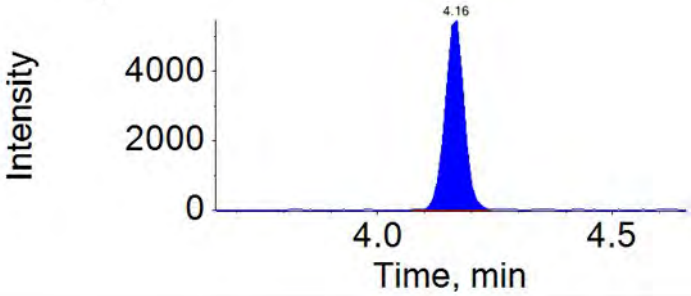
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



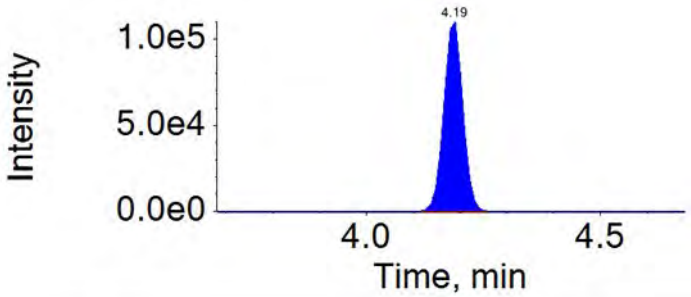
Component: PFHxA
Primary Mass: 313.0 / 269.0



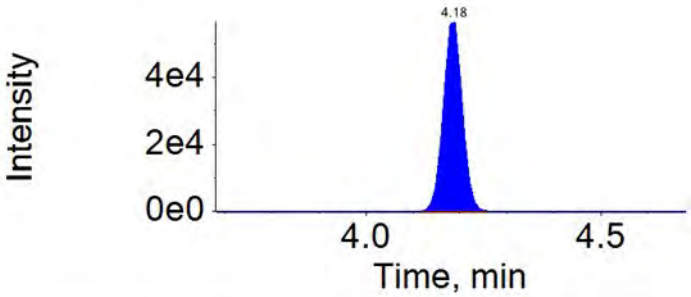
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



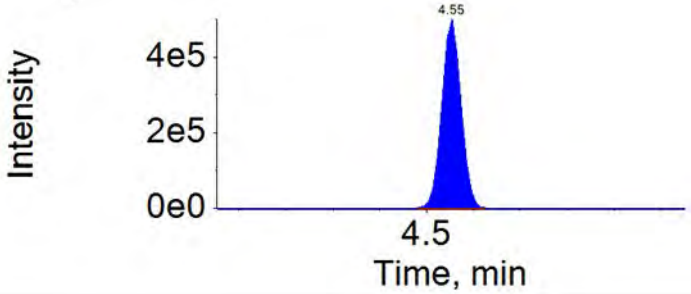
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



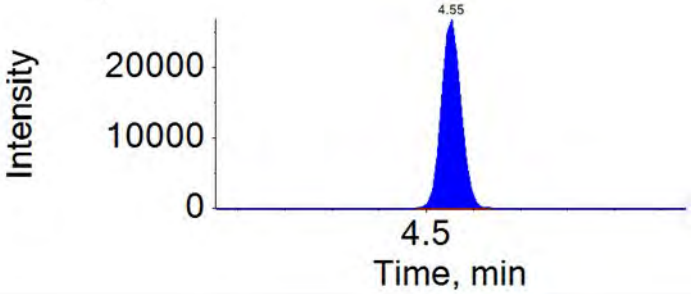
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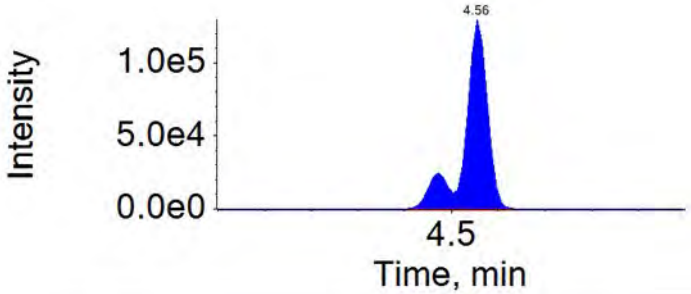
Component: PFHpA
Primary Mass: 363.0 / 319.0



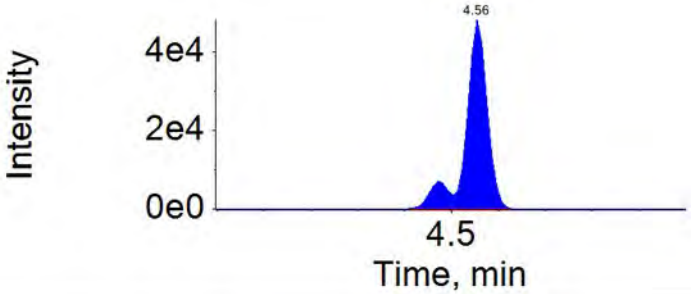
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



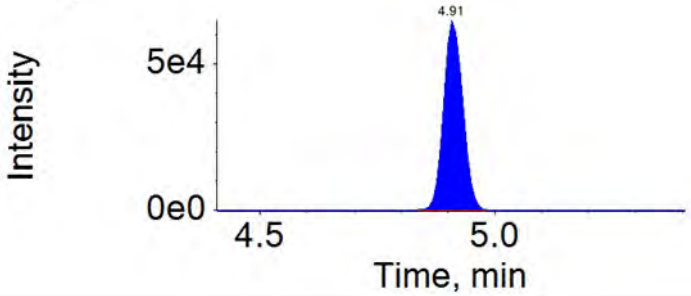
Component: PFHxS
Primary Mass: 399.0 / 80.0



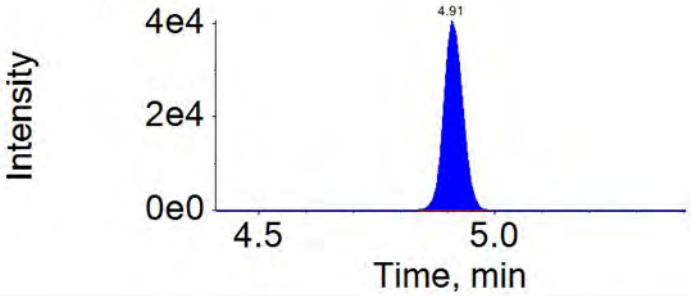
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



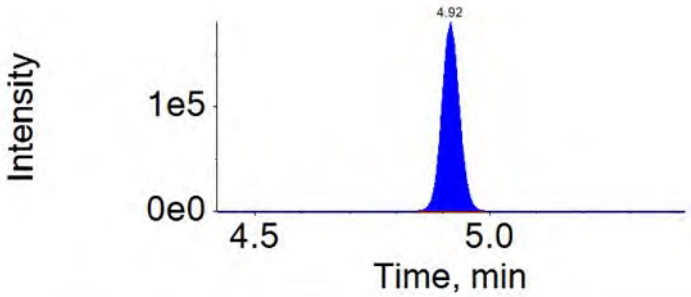
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



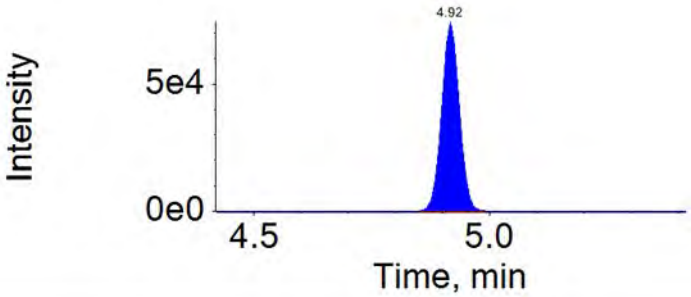
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



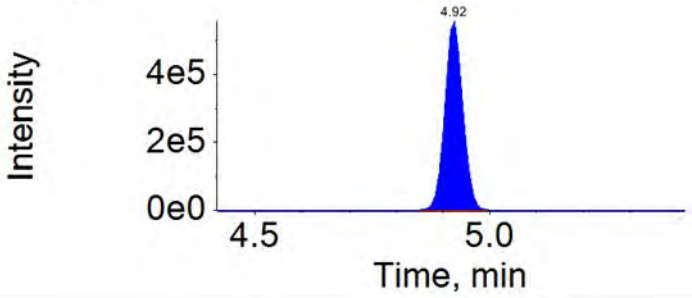
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



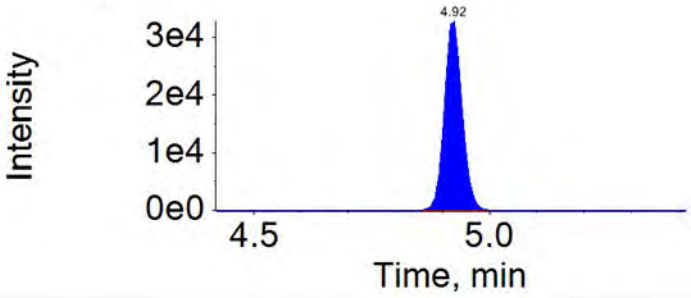
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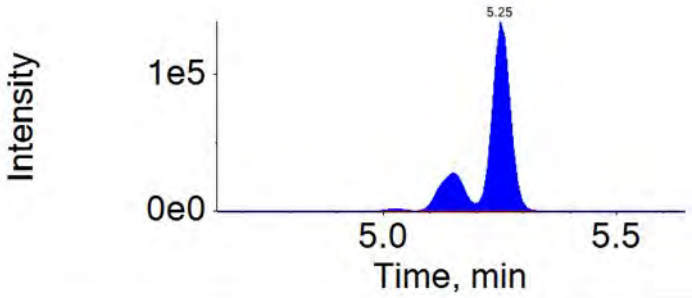
Component: PFOA
Primary Mass: 413.0 / 369.0



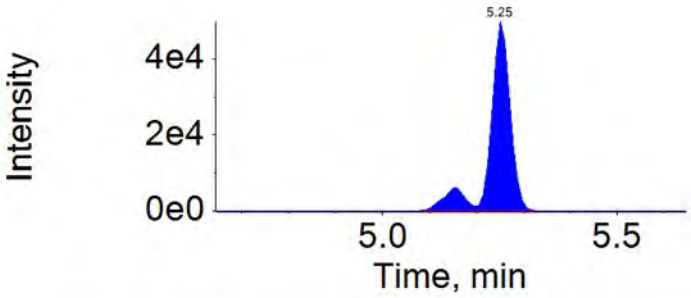
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



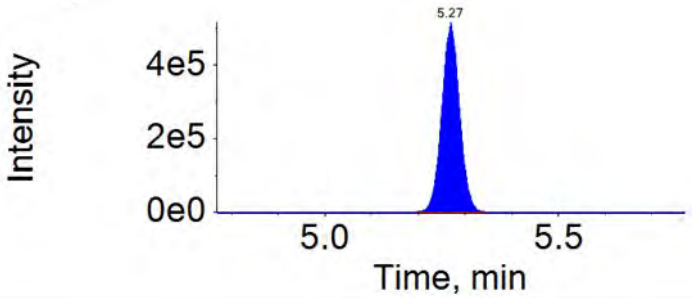
Component: PFOS
Primary Mass: 499.0 / 80.0



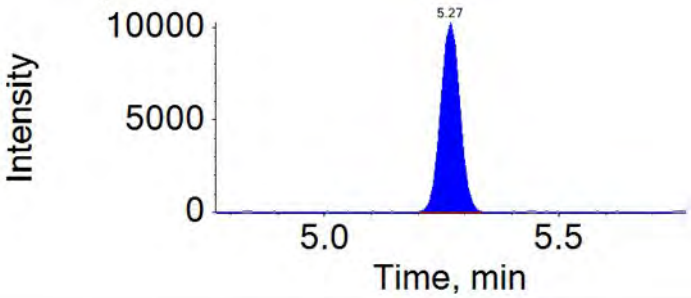
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



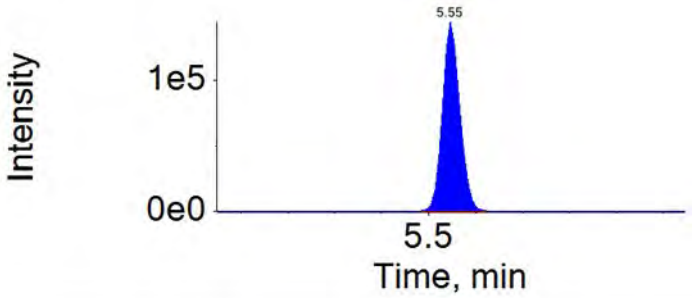
Component: PFNA
Primary Mass: 463.0 / 419.0



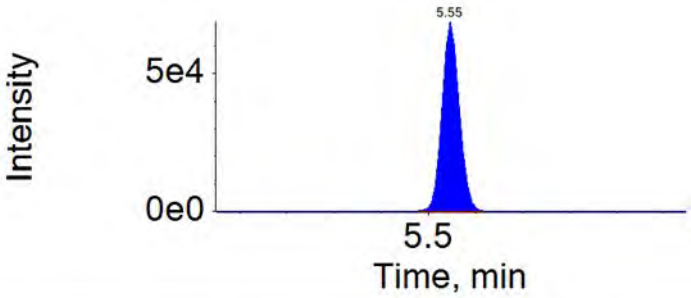
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



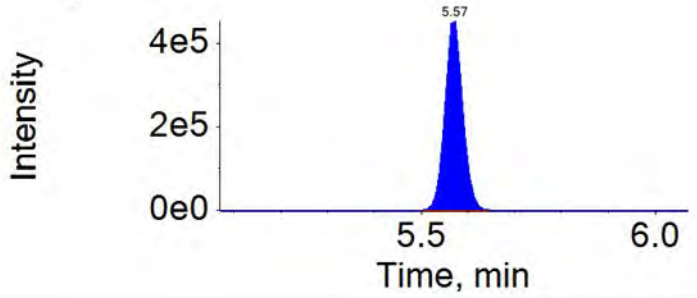
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



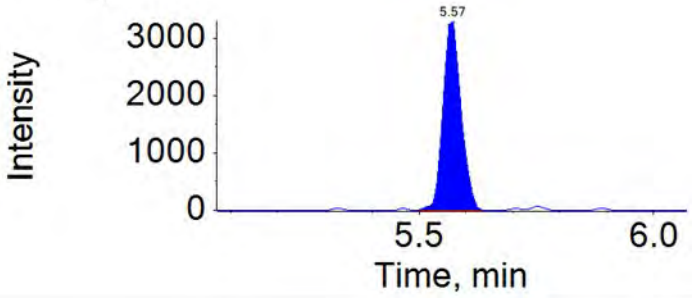
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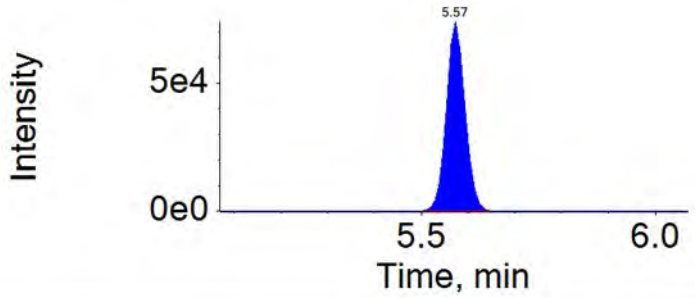
Component: PFDA
Primary Mass: 513.0 / 469.0



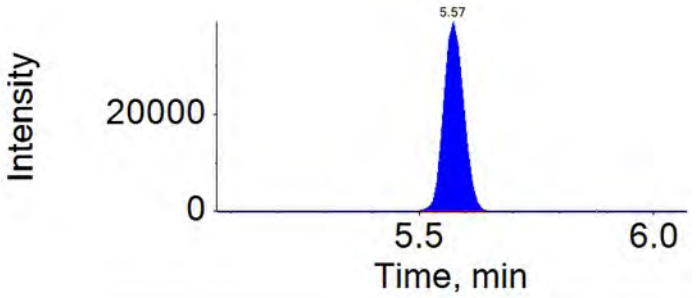
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



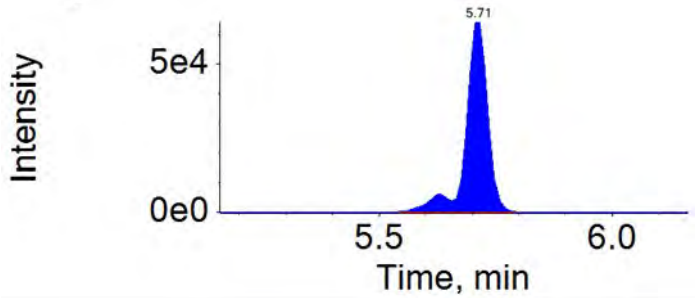
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



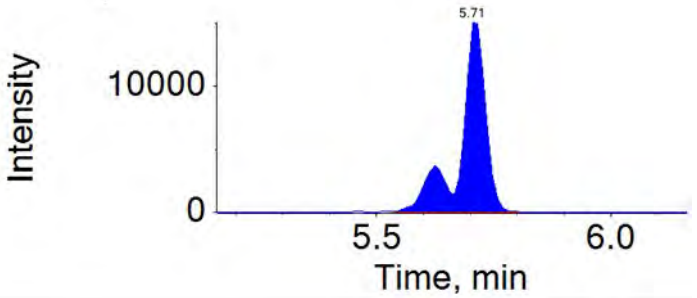
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



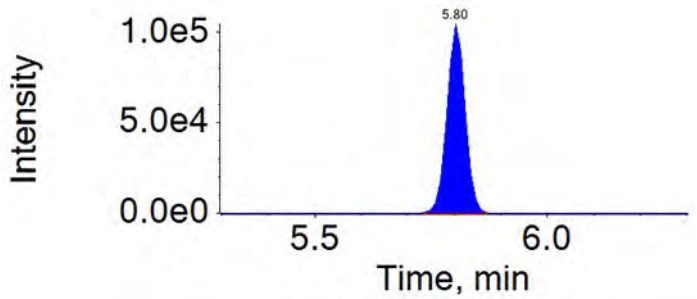
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



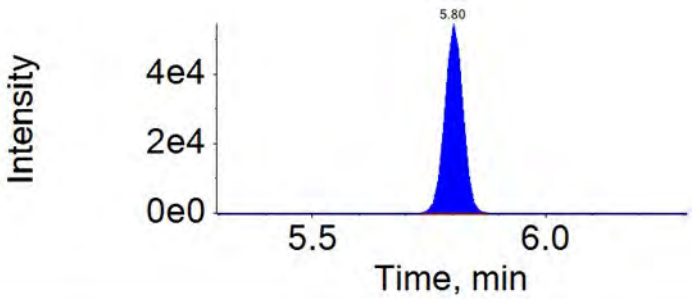
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



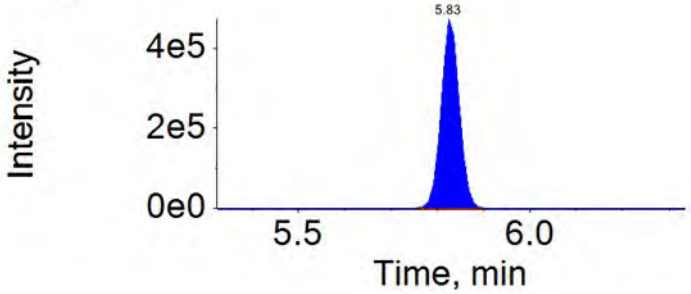
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Secondary Mass: 599.0 / 99.0



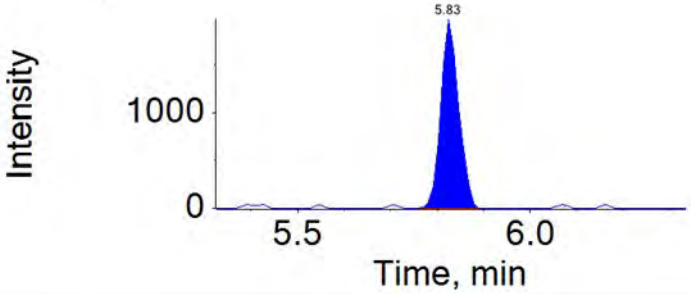
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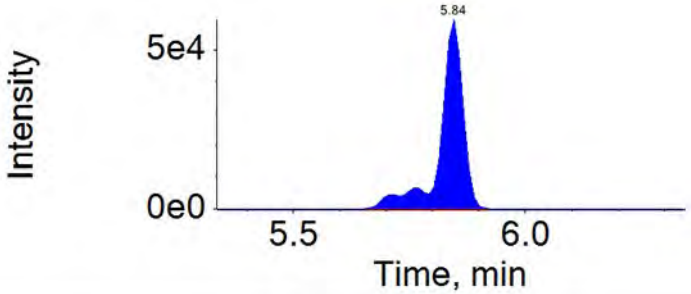
Component: PFUnDA
Primary Mass: 563.0 / 519.0



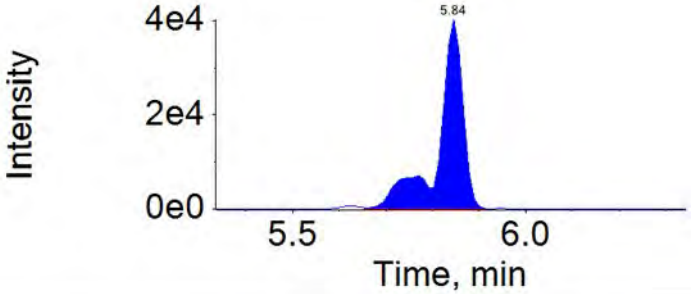
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



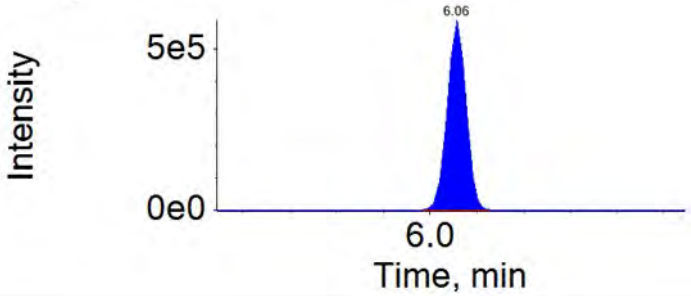
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



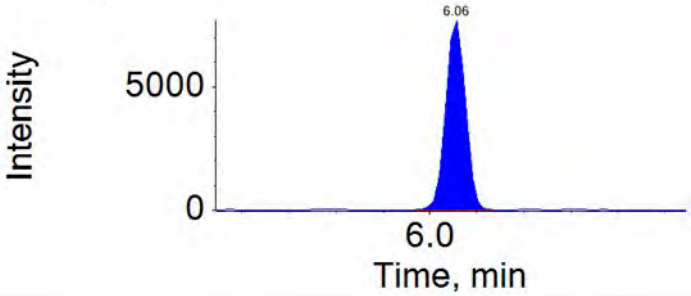
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



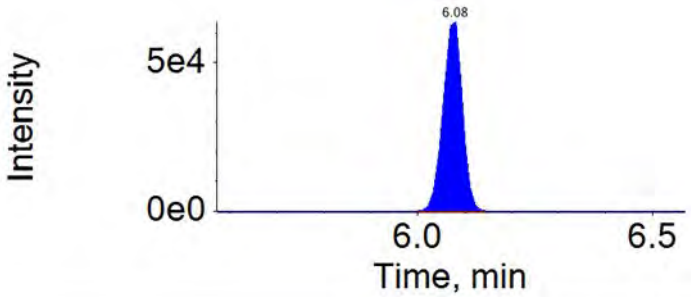
Component: PFDoDA
Primary Mass: 613.0 / 569.0



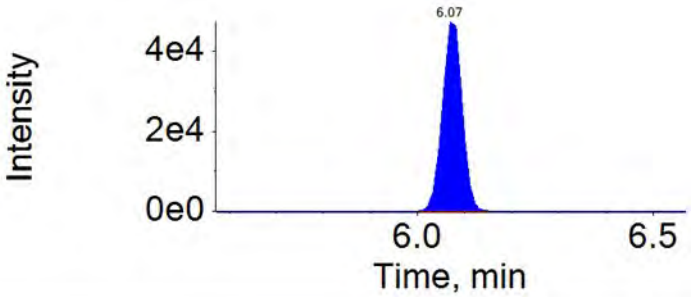
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



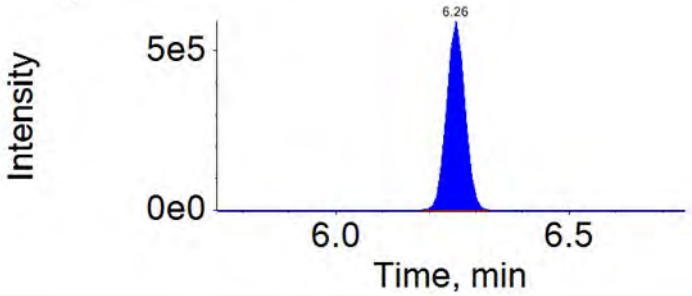
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



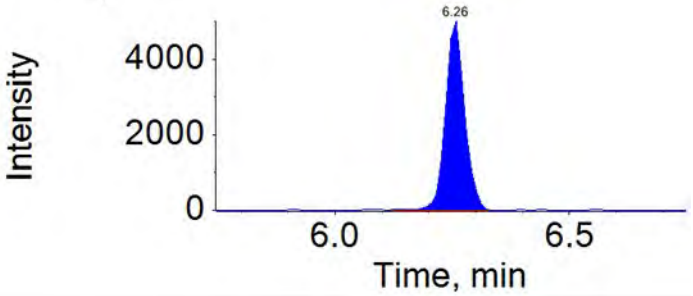
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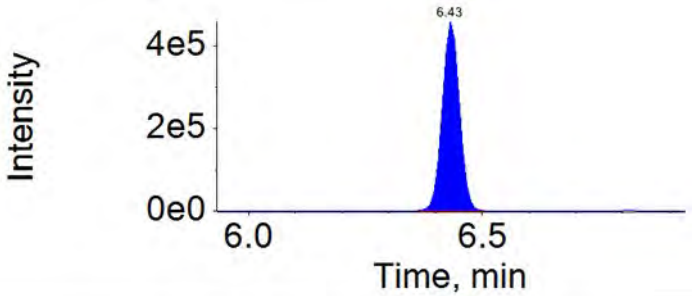
Component: PFTrDA
Primary Mass: 663.0 / 619.0



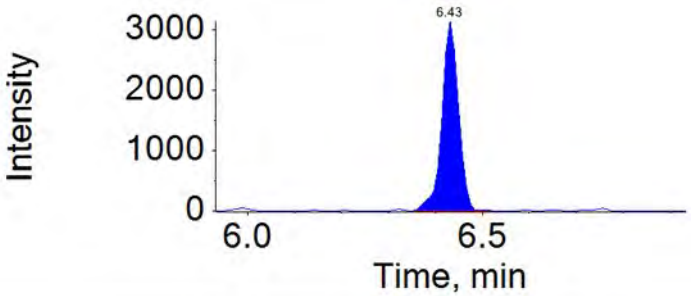
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



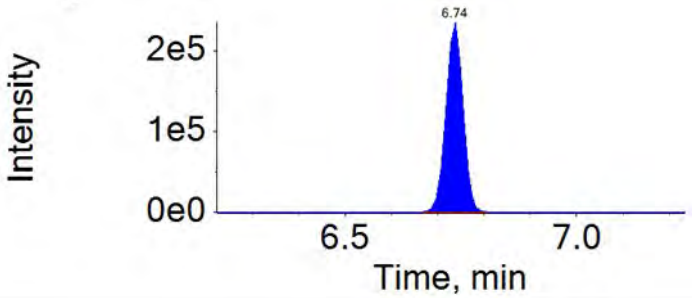
Component: PFTeDA
Primary Mass: 713.0 / 669.0



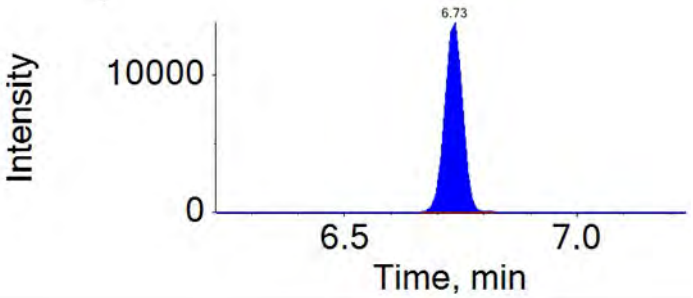
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



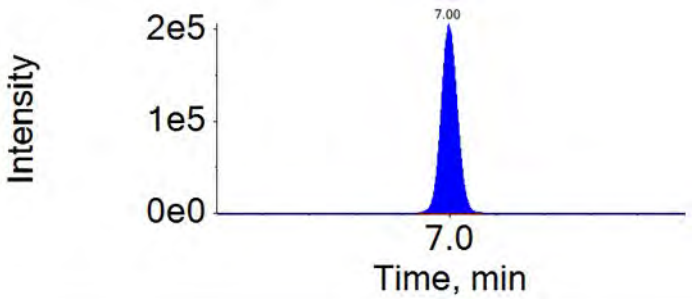
Component: PFHxDA
Primary Mass: 813.0 / 769.0



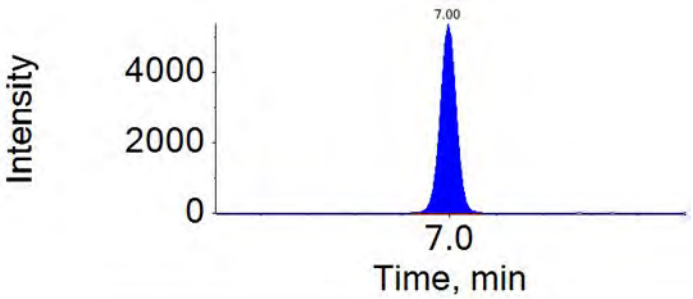
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL5			**Data File:**		18NOV28DCAL-10.wiff
Sample ID:	CALBRN51833B			**Acquis Date:**		2018-11-28T14:18:16
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	7			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV28DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	857159.8	887248.9	-3	50	
13C2-PFOA	5.0	516457.2	498501.6	4	50	
13C4-PFOS	4.8	287732.6	283214.2	2	50	
13C2-PFDA	5.0	460232.7	441790.6	4	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	951695.0	13C3-PFBA	857159.8	1.110	5.000	4.954	99	70-130	
E13C5-PFPeA	900153.4	13C3-PFBA	857159.8	1.050	5.000	4.904	98	70-130	
E13C3-PFBS	424059.2	13C3-PFBA	857159.8	0.495	4.650	4.720	102	70-130	
E13C2-4:2-FTS	67423.0	13C2-PFOA	516457.2	0.131	4.670	4.499	96	70-130	
E13C5-PFHxA	704953.5	13C2-PFOA	516457.2	1.365	5.000	5.014	100	70-130	
E13C3-PFHxS	309184.7	13C2-PFOA	516457.2	0.599	4.730	4.692	99	70-130	
E13C4-PFHpA	556455.9	13C2-PFOA	516457.2	1.077	5.000	4.951	99	70-130	
E13C2-6:2-FTS	58122.8	13C2-PFOA	516457.2	0.113	4.750	4.711	99	70-130	
E13C8-PFOA	911756.1	13C2-PFOA	516457.2	1.765	5.000	4.859	97	70-130	
E13C8-PFOS	299574.5	13C4-PFOS	287732.6	1.041	4.780	4.700	98	70-130	
E13C9-PFNA	630201.5	13C4-PFOS	287732.6	2.190	5.000	4.811	96	70-130	
E13C6-PFDA	833462.2	13C2-PFDA	460232.7	1.811	5.000	5.106	102	70-130	
E13C2-8:2-FTS	46142.4	13C2-PFDA	460232.7	0.100	4.790	4.309	90	70-130	
E13C8-PFOSA	596189.5	13C2-PFDA	460232.7	1.295	5.000	4.753	95	70-130	
Ed3-NMeFOSAA	172574.2	13C2-PFDA	460232.7	0.375	5.000	4.761	95	70-130	
E13C7-PFUnDA	539842.9	13C2-PFDA	460232.7	1.173	5.000	4.957	99	70-130	
Ed5-NEtFOSAA	124785.1	13C2-PFDA	460232.7	0.271	5.000	4.830	97	70-130	
E13C2-PFDoDA	1133027.9	13C2-PFDA	460232.7	2.462	5.000	5.173	103	70-130	
Ed7-NMePFOSAE	247663.8	13C2-PFDA	460232.7	0.538	5.000	4.651	93	70-130	
Ed3-NMePFOSA	83129.0	13C2-PFDA	460232.7	0.181	5.000	4.888	98	70-130	
Ed9-NEtPFOSAE	220689.9	13C2-PFDA	460232.7	0.480	5.000	4.861	97	70-130	
Ed5-NEtPFOSA	66384.7	13C2-PFDA	460232.7	0.144	5.000	5.012	100	70-130	
E13C2-PFTeDA	786107.5	13C2-PFDA	460232.7	1.708	5.000	4.726	95	70-130	

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

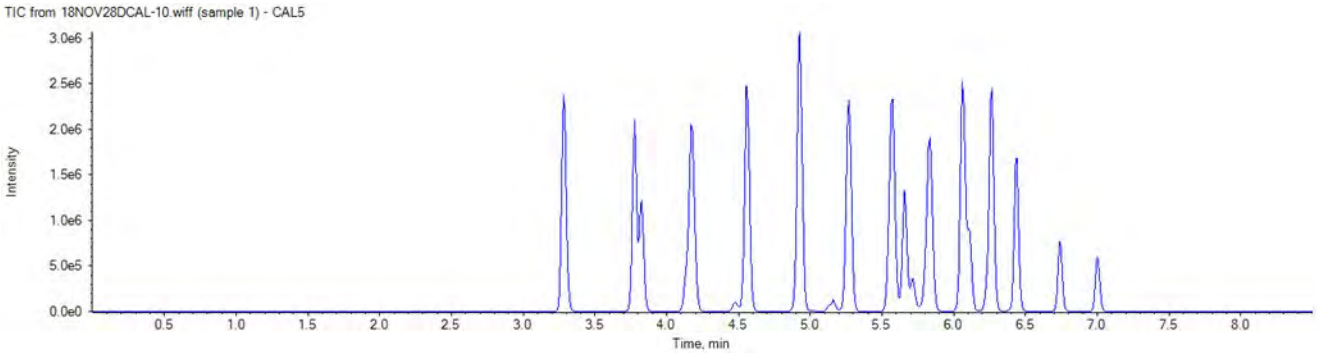
Analyte Quantitation Peak Table

Sample Name: CAL5 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-10.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.28	1.000	3627061.5		A	13C4-PFBA	3.28	951695.0	3.811	20.892
PFPeA	3.78	1.000	3696889.3		A	13C5-PFPeA	3.78	900153.4	4.107	20.152
PFBS	3.82	1.000	1542881.7		A	13C3-PFBS	3.83	424059.2	3.638	17.661
4:2-FTS	4.14	1.000	498650.7		A	13C2-4:2-FTS	4.14	67423.0	7.396	19.798
PFHxA	4.17	1.000	3464657.3		A	13C5-PFHxA	4.17	704953.5	4.915	19.728
PFPeS	4.19	1.100	809728.0		A	13C3-PFBS	3.83	424059.2	1.909	19.314
PFHpA	4.56	1.000	3592806.2		A	13C4-PFHpA	4.56	556455.9	6.457	19.926
PFHxS	4.56	1.000	1191482.7		M	13C3-PFHxS	4.56	309184.7	3.854	18.044
6:2-FTS	4.92	1.000	426727.7		A	13C2-6:2-FTS	4.92	58122.8	7.342	19.156
PFHpS	4.92	1.080	1171216.6		A	13C3-PFHxS	4.56	309184.7	3.788	18.906
PFOA	4.93	1.000	3601538.3		A	13C8-PFOA	4.93	911756.1	3.950	20.411
PFOS	5.26	1.000	1305020.5		M	13C8-PFOS	5.26	299574.5	4.356	18.273
PFNA	5.27	1.000	3536255.1		A	13C9-PFNA	5.27	630201.5	5.611	21.504
PFNS	5.55	1.060	909879.2		A	13C8-PFOS	5.26	299574.5	3.037	19.177
PFDA	5.57	1.000	3072749.0		A	13C6-PFDA	5.57	833462.2	3.687	20.868
8:2-FTS	5.58	1.000	478390.1		A	13C2-8:2-FTS	5.58	46142.4	10.368	19.551
PFOSA	5.66	1.000	2392584.6		A	13C8-PFOSA	5.66	596189.5	4.013	20.329
NMeFOSAA	5.71	1.000	557354.6		M	d3-NMeFOSAA	5.71	172574.2	3.230	20.602
PFDS	5.81	1.100	737231.9		A	13C8-PFOS	5.26	299574.5	2.461	19.512
PFUnDA	5.83	1.000	3163283.8		A	13C7-PFUnDA	5.83	539842.9	5.860	20.945
NEtFOSAA	5.85	1.000	512792.4		M	d5-NEtFOSAA	5.85	124785.1	4.109	20.014
PFDoDA	6.06	1.000	4161895.9		A	13C2-PFDoDA	6.06	1133027.9	3.673	20.121
10:2-FTS	6.08	1.090	480384.1		A	13C2-8:2-FTS	5.58	46142.4	10.411	22.957
NMePFOSAE	6.11	1.000	1240182.1		A	d7-NMePFOSAE	6.10	247663.8	5.008	21.073
NMePFOSA	6.12	1.000	322671.1		A	d3-NMePFOSA	6.11	83129.0	3.882	20.577
PFDoS	6.23	1.190	390444.7		A	13C8-PFOS	5.26	299574.5	1.303	18.718
NEtPFOSAE	6.27	1.000	1338584.5		A	d9-NEtPFOSAE	6.26	220689.9	6.065	21.818
NEtPFOSA	6.28	1.000	293215.8		A	d5-NEtPFOSA	6.27	66384.7	4.417	19.796
PFTrDA	6.26	1.030	3743763.6		A	13C2-PFDoDA	6.06	1133027.9	3.304	19.916
PFTeDA	6.44	1.000	2897106.2		A	13C2-PFTeDA	6.44	786107.5	3.685	20.882
PFHxDA	6.74	1.050	1551331.1		A	13C2-PFTeDA	6.44	786107.5	1.973	22.560
PFODA	7.00	1.090	1272897.4		A	13C2-PFTeDA	6.44	786107.5	1.619	21.571

Total Ion Chromatogram

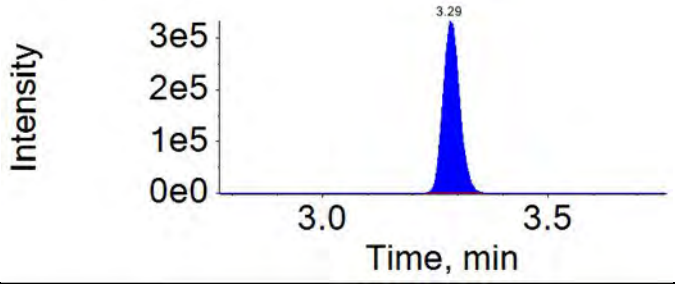


APPROVED
By MCD at 5:00 pm, 11/28/18

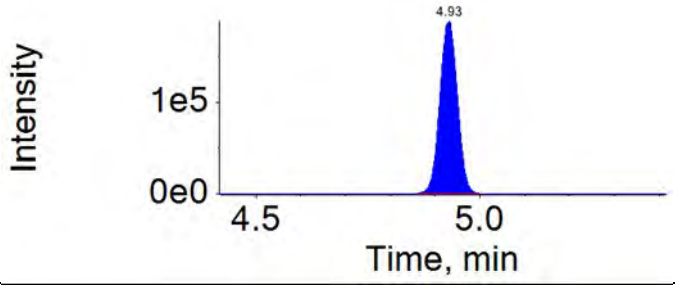
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

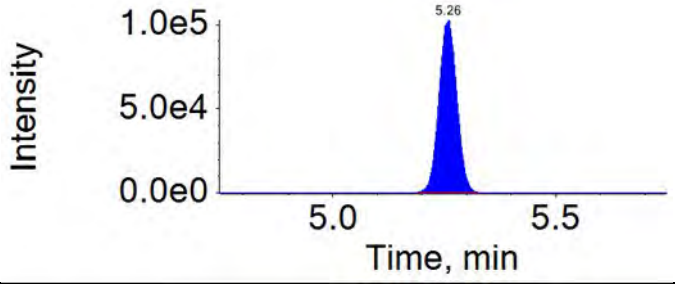
Injection Standard: 13C3-PFBA
216.0 / 172.0



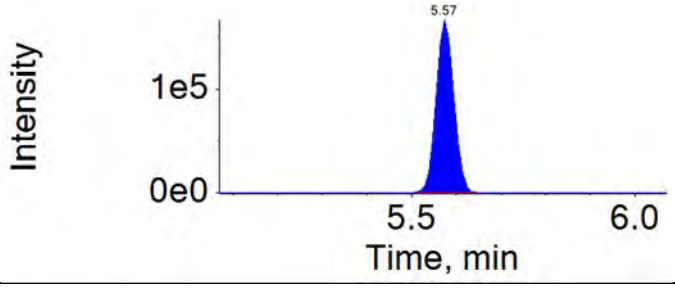
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



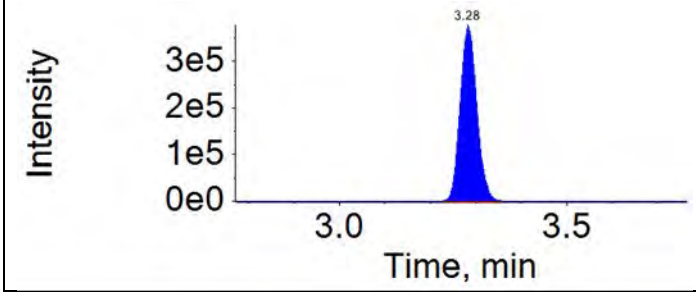
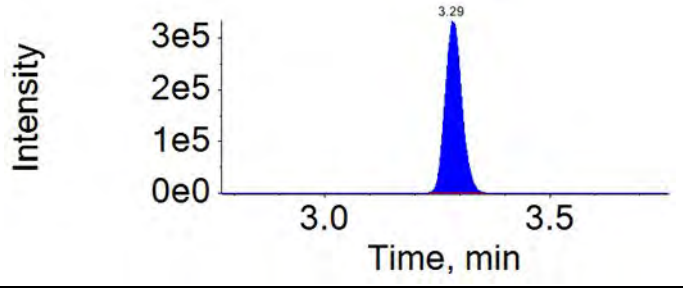
Injection Standard: 13C2-PFDA
515.0 / 470.0

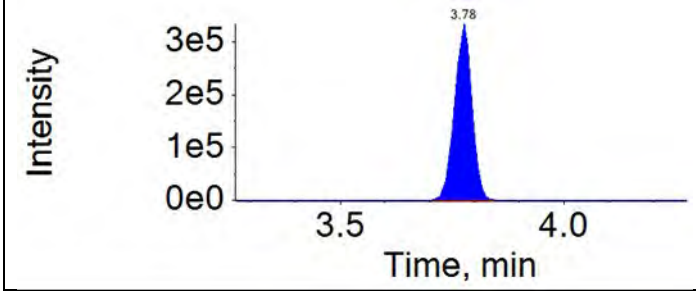
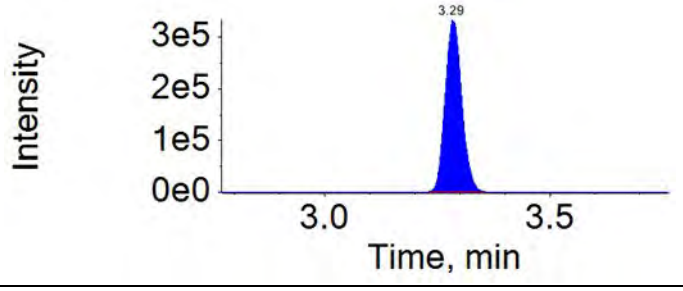


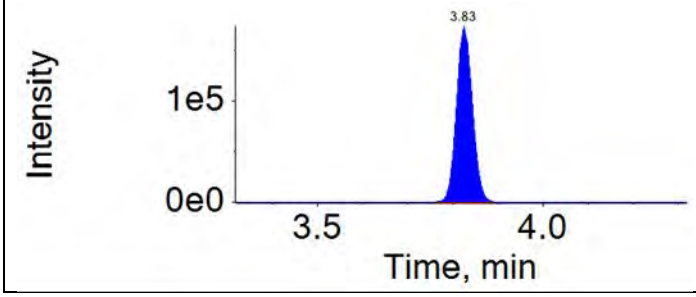
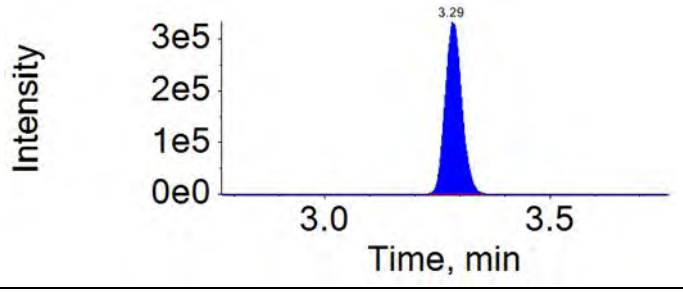
APPROVED
By MCD at 5:00 pm, 11/28/18

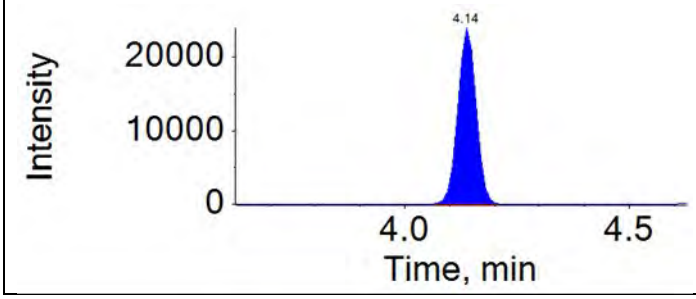
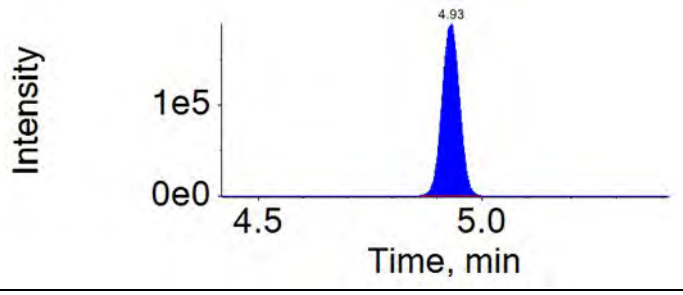
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

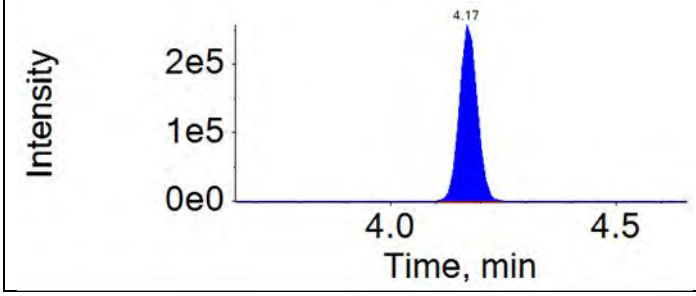
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

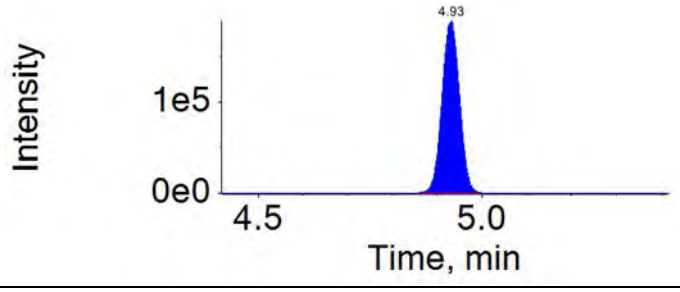
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

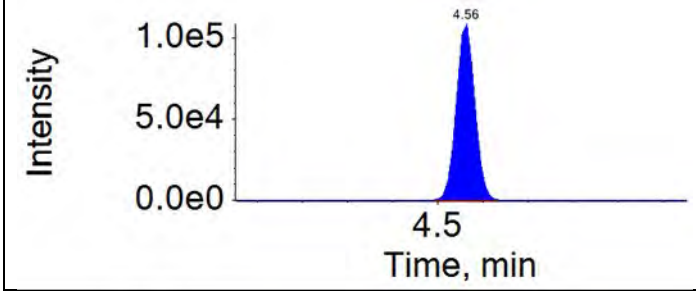
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

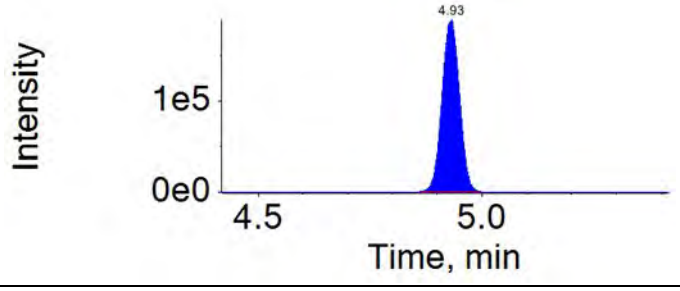
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



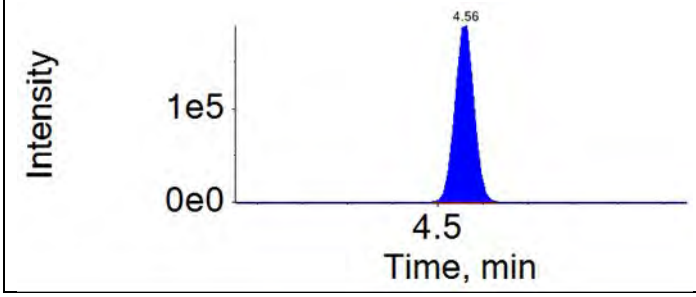


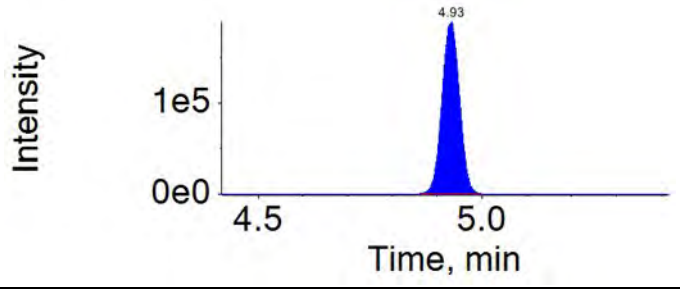
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



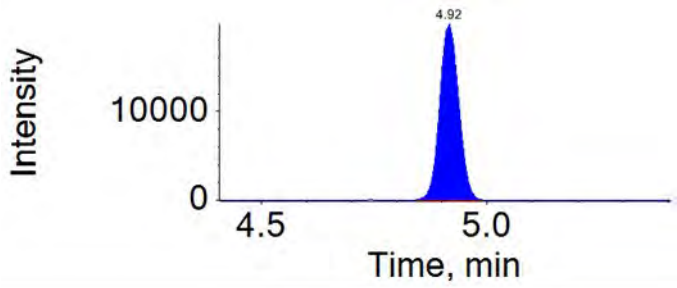


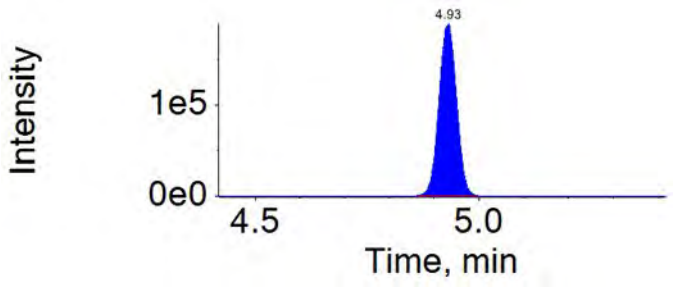
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0



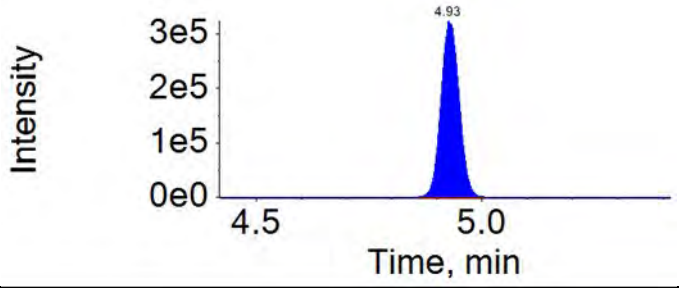


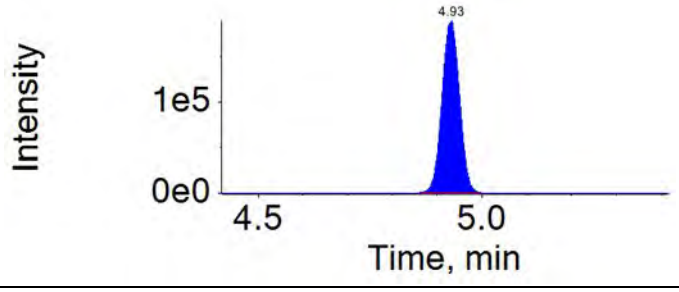
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

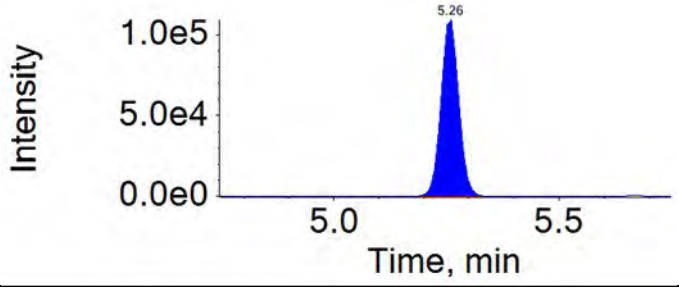
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

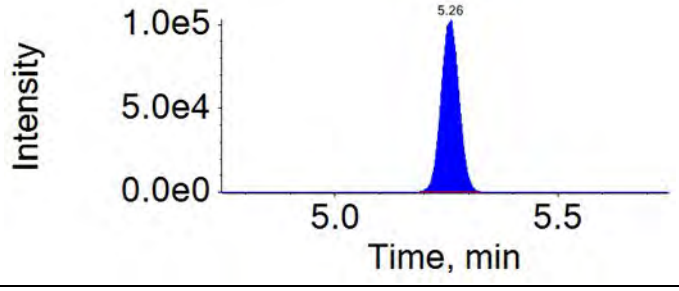
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0



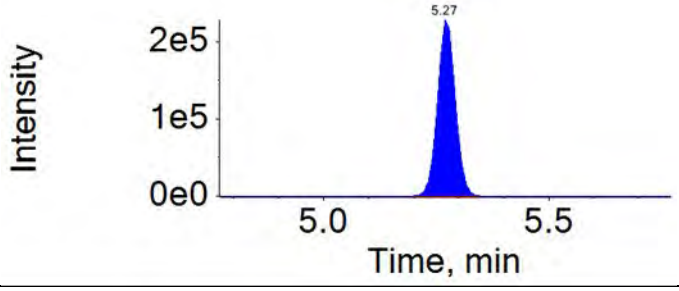


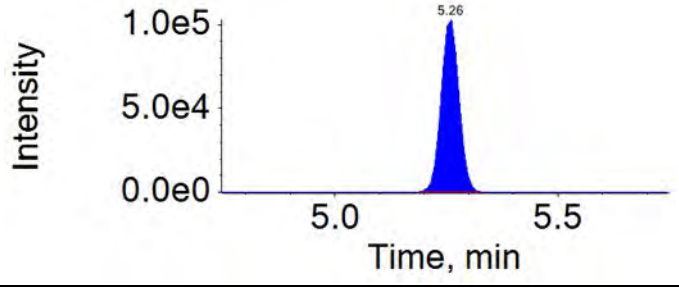
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0



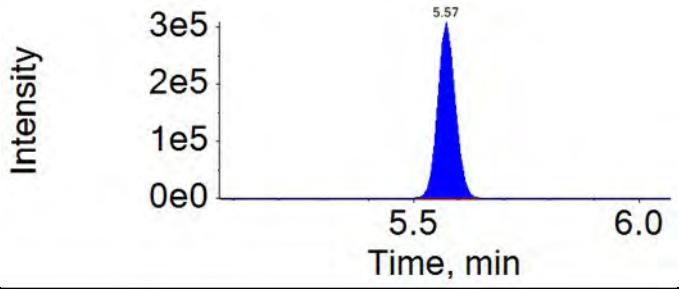


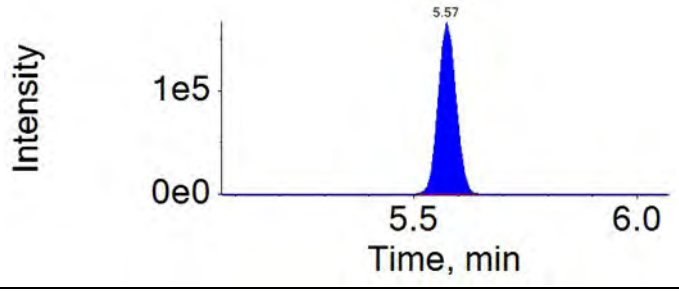
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0





Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0



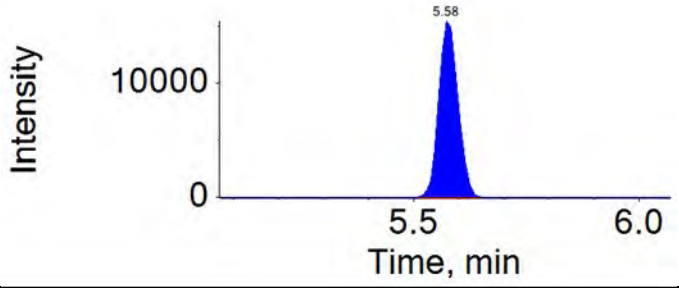


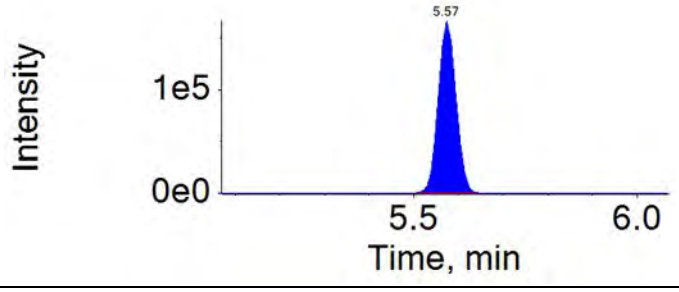
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

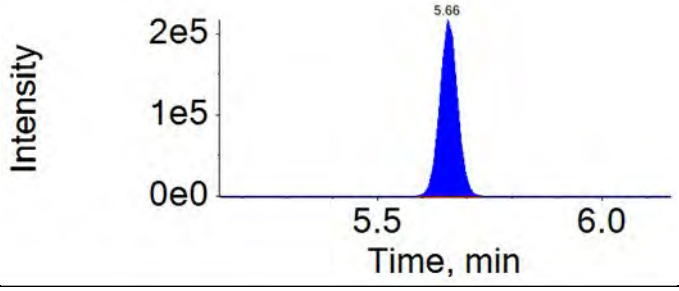
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

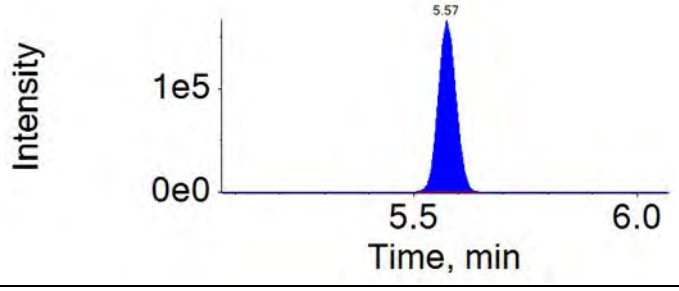
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



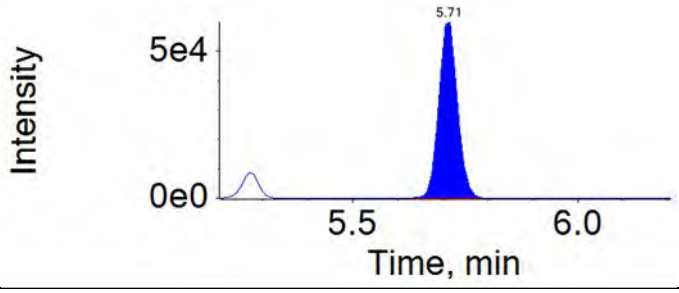


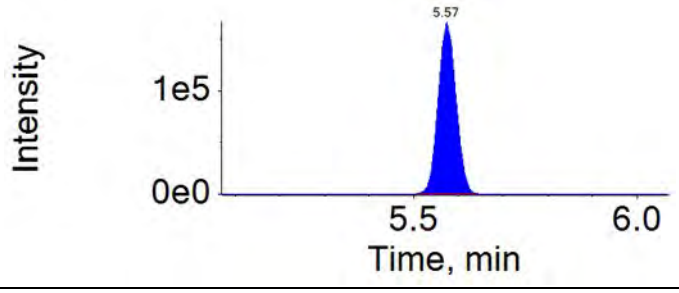
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



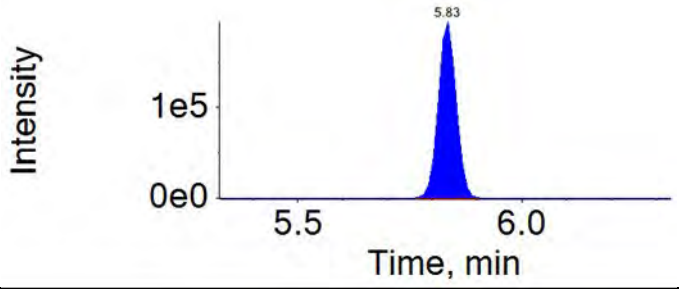


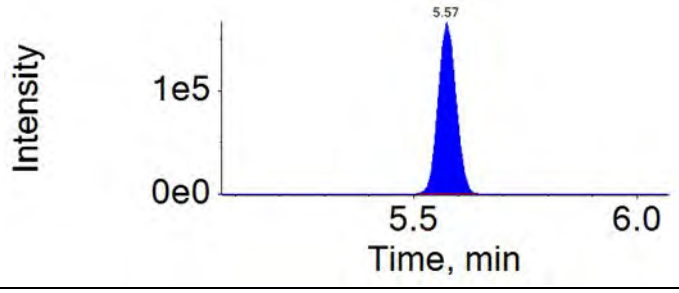
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0



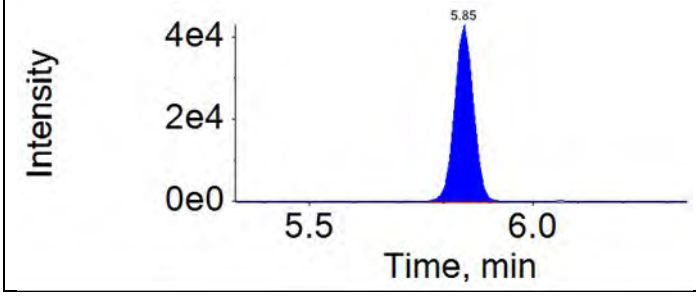


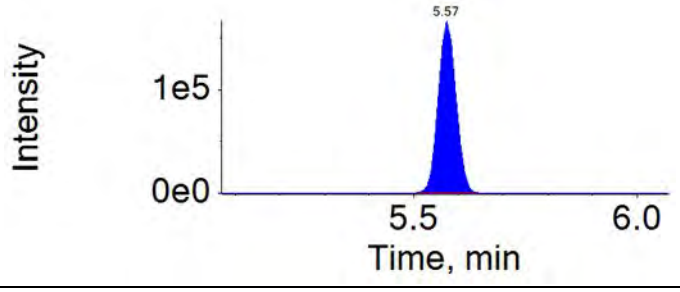
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

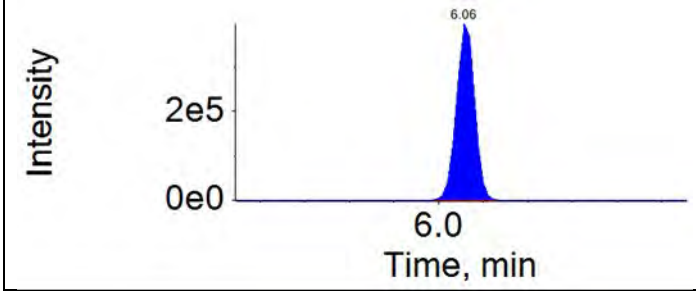
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

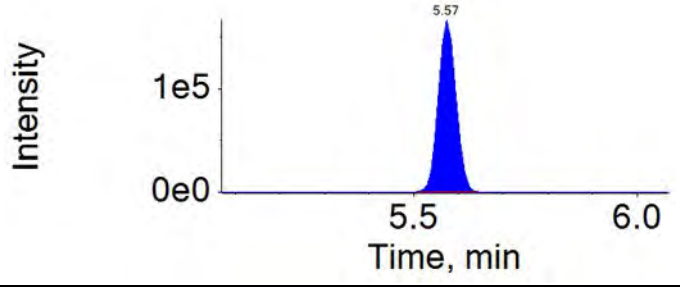
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



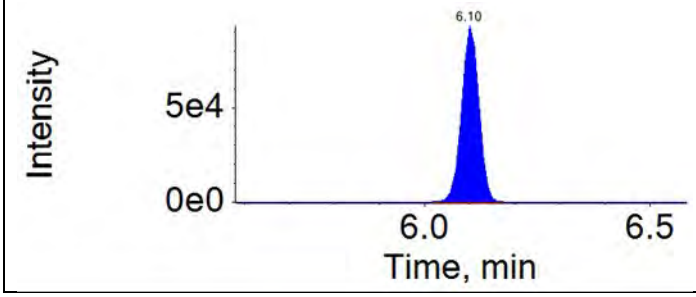


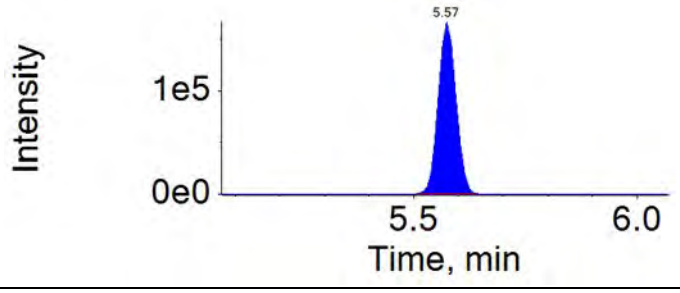
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



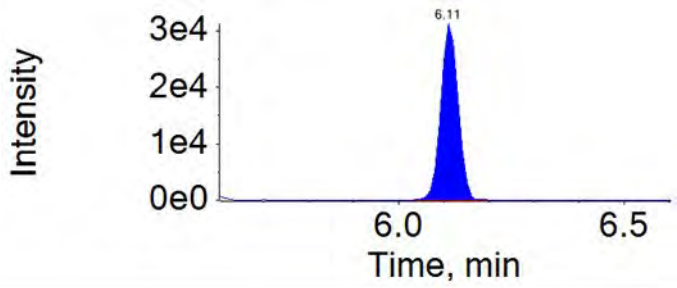


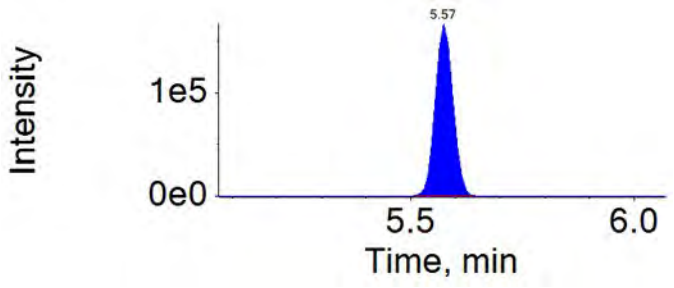
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



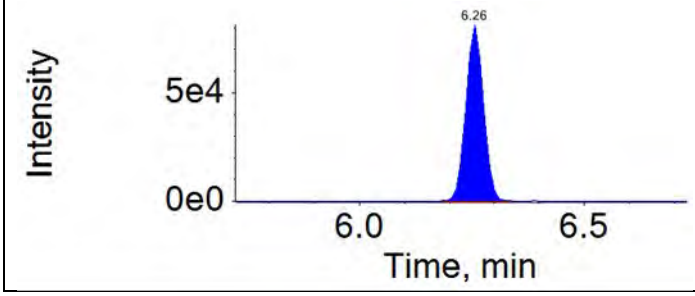


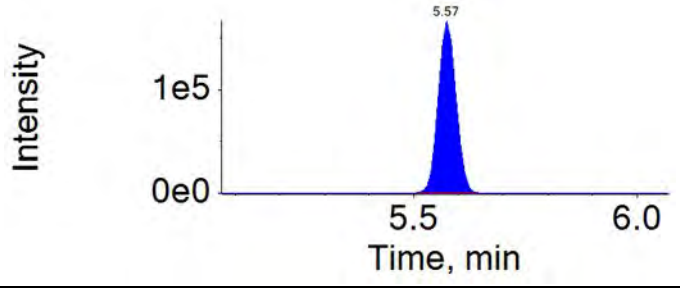
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

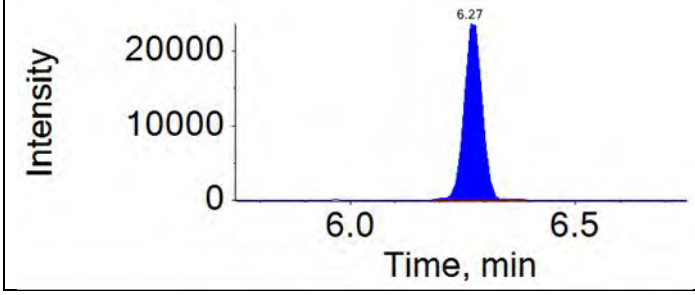
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

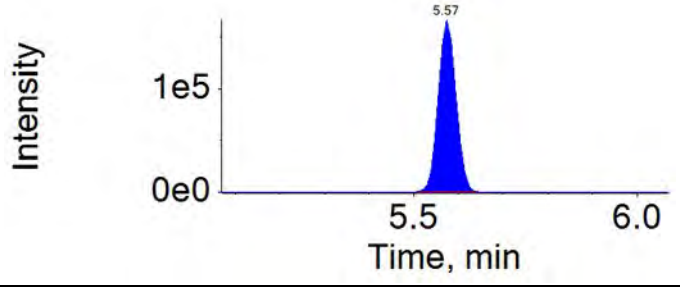
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



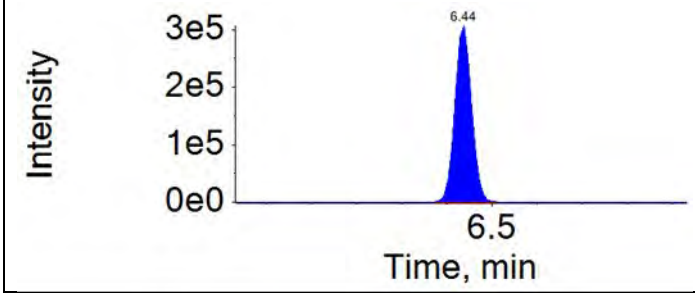


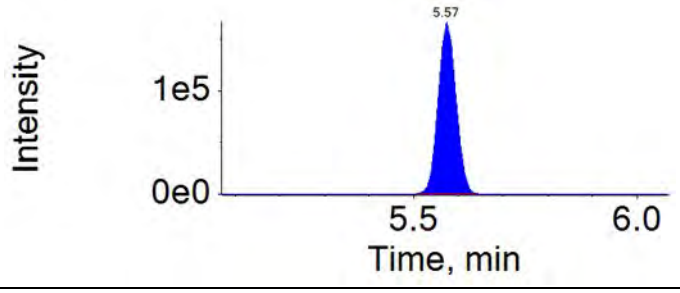
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



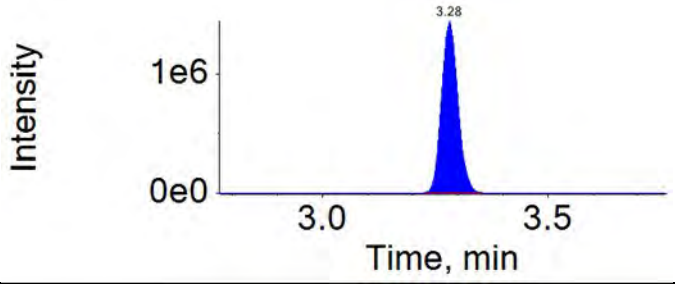


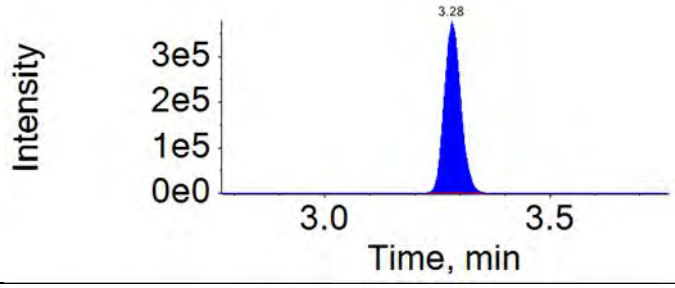
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

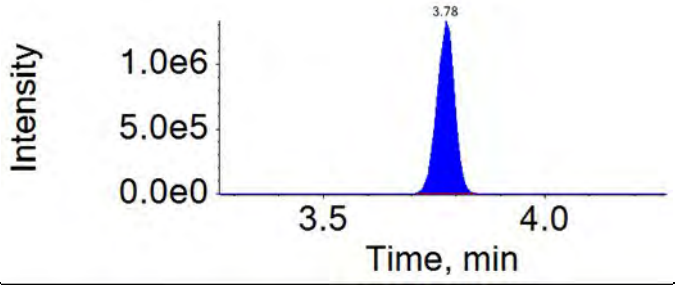
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

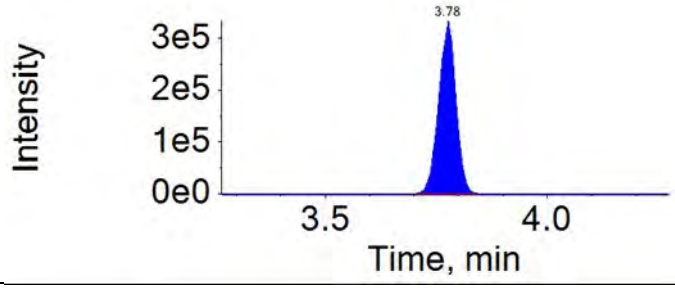
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



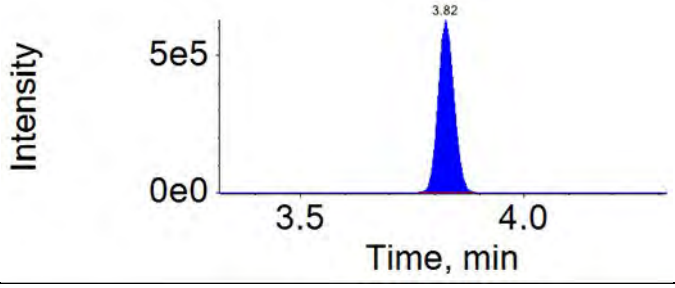


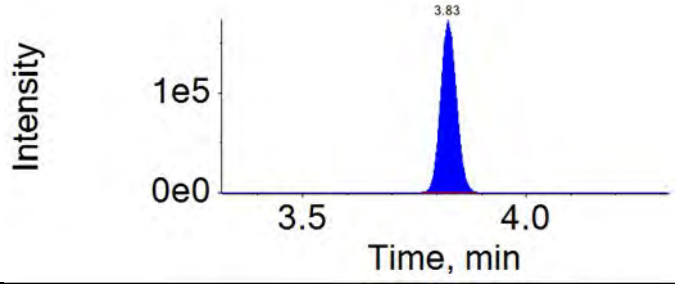
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



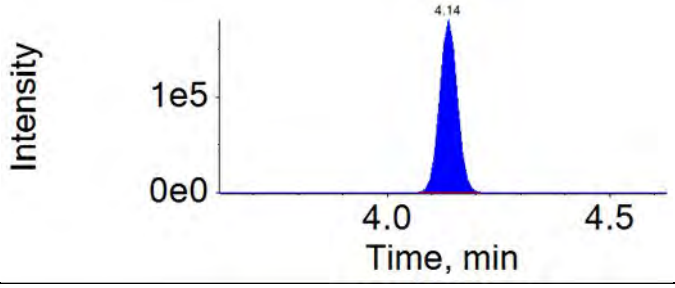


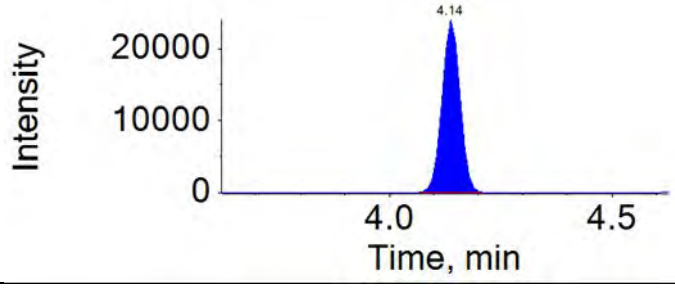
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



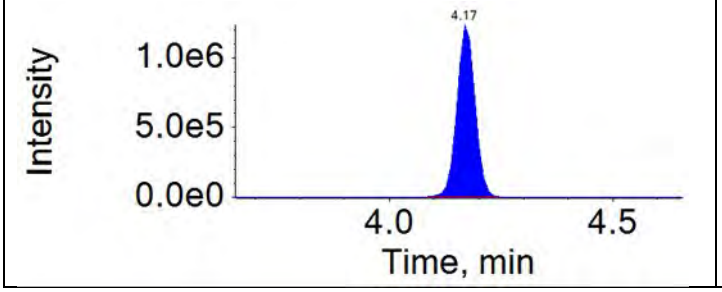


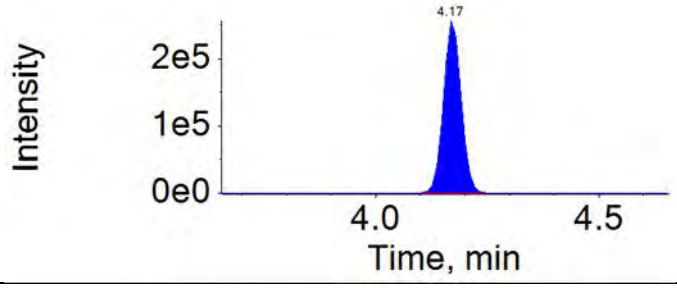
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

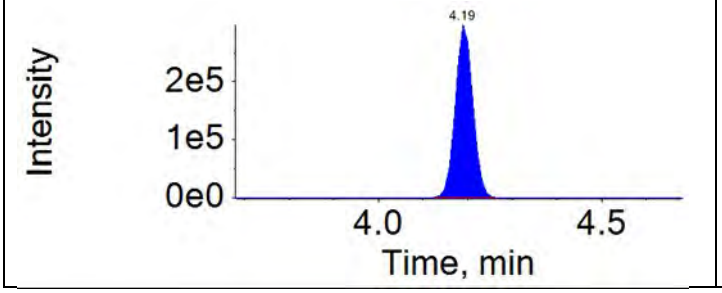
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

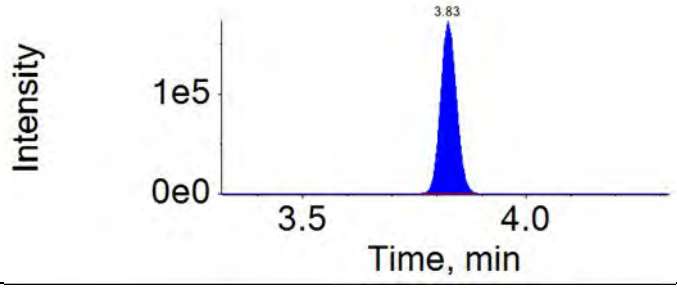
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



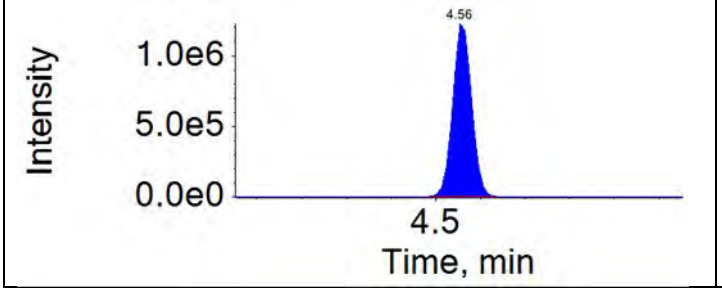


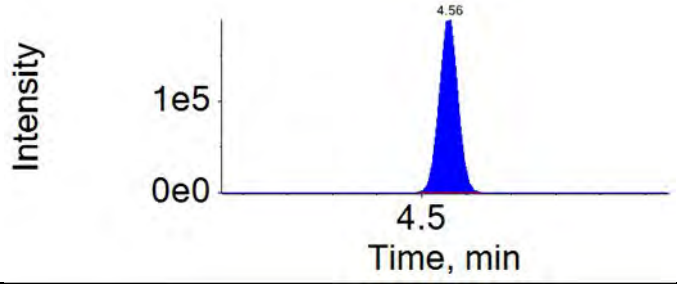
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



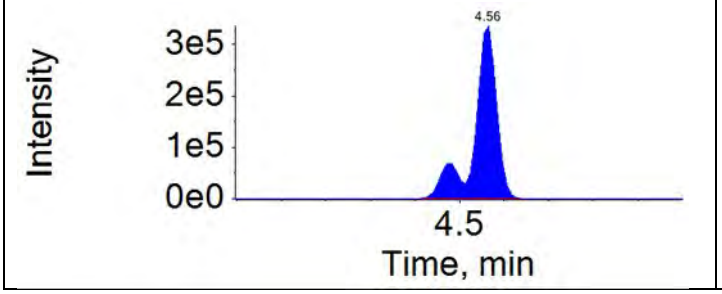


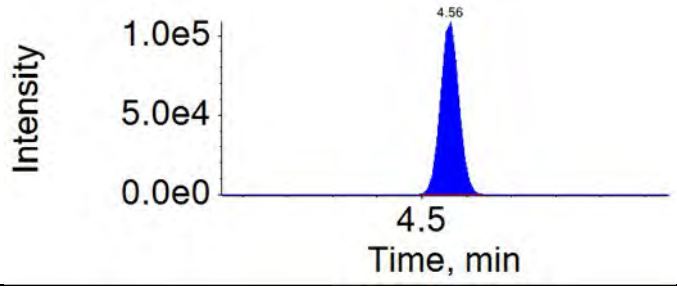
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

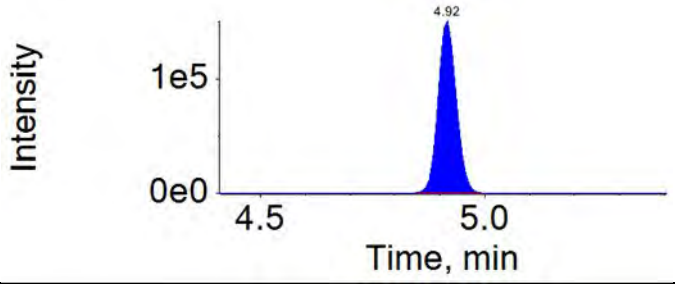
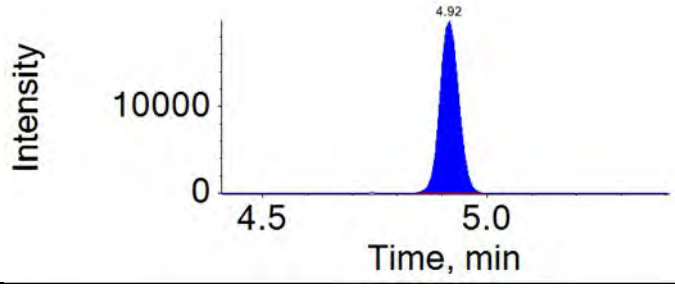


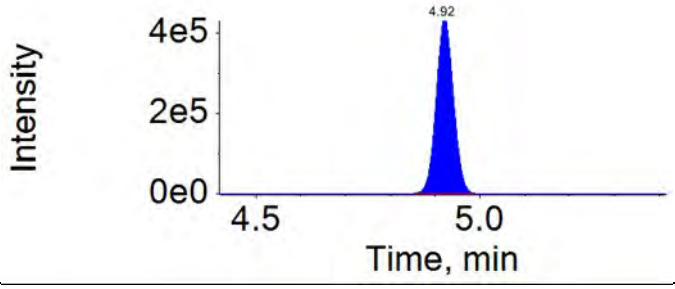
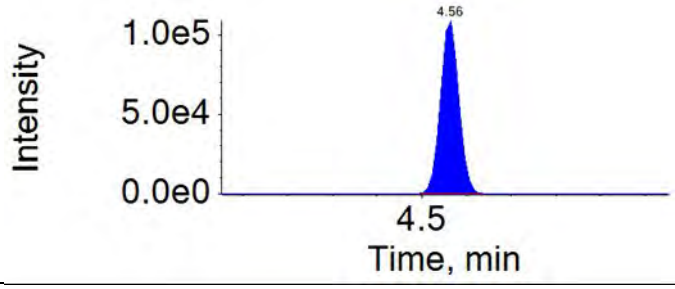


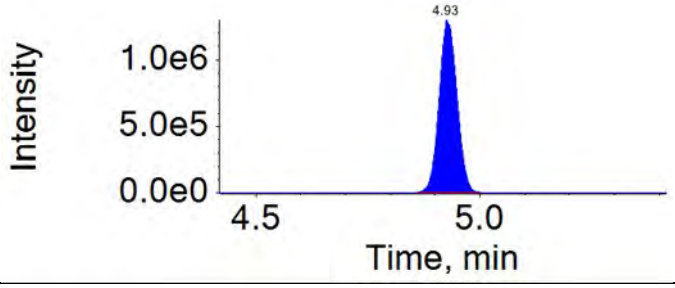
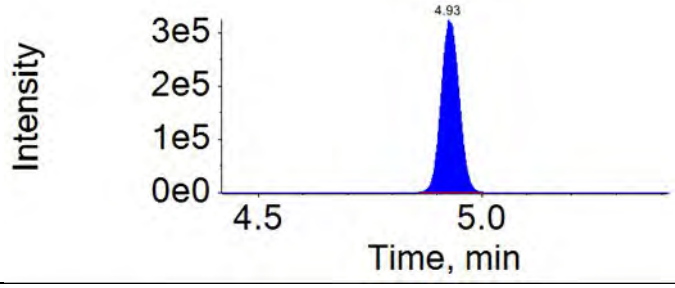
APPROVED
By MCD at 5:00 pm, 11/28/18

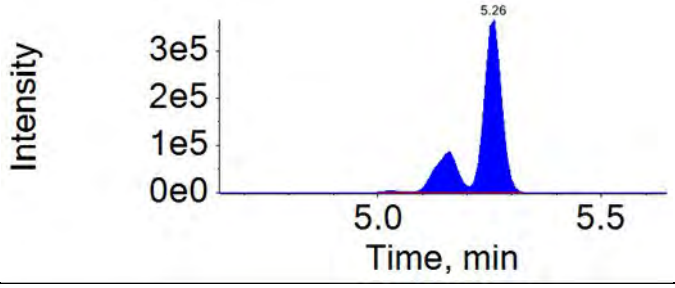
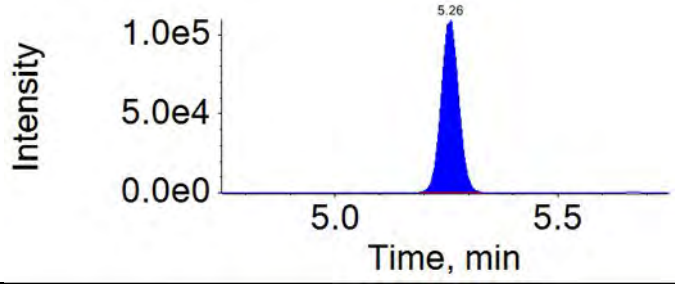
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

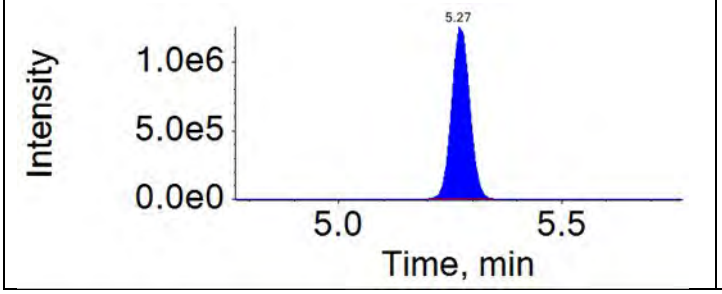
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

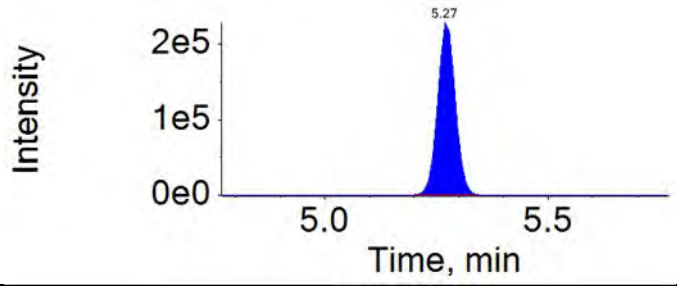
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

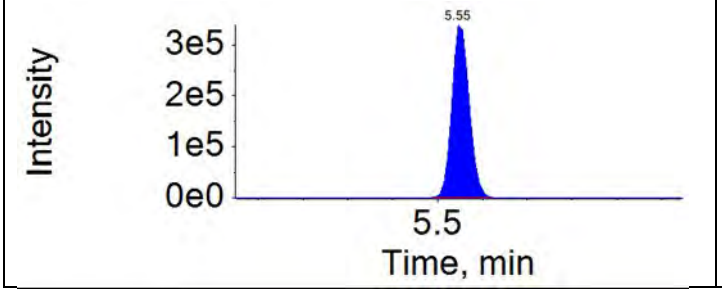
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

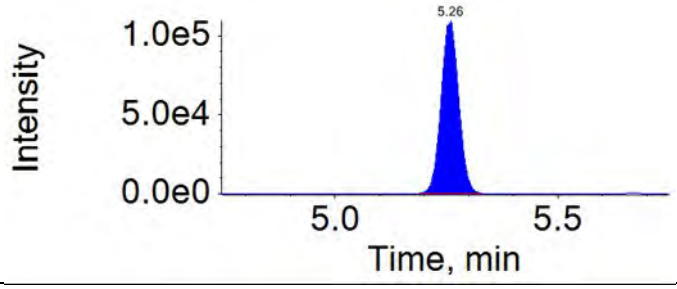
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



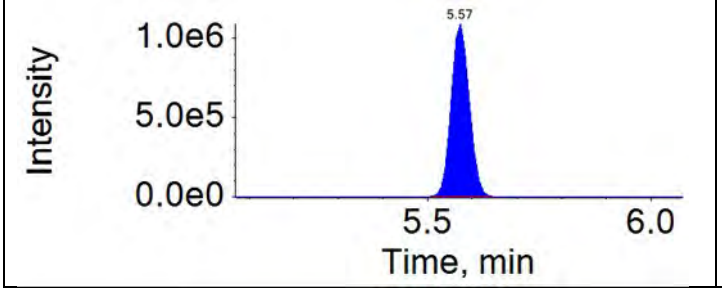


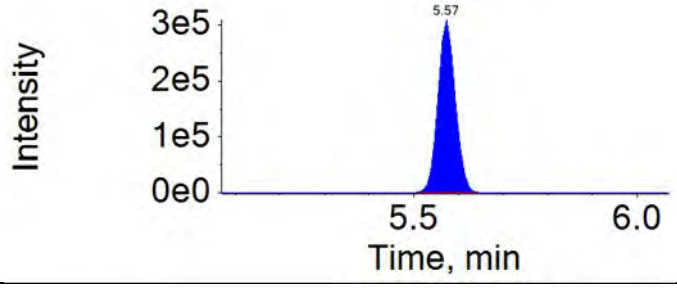
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



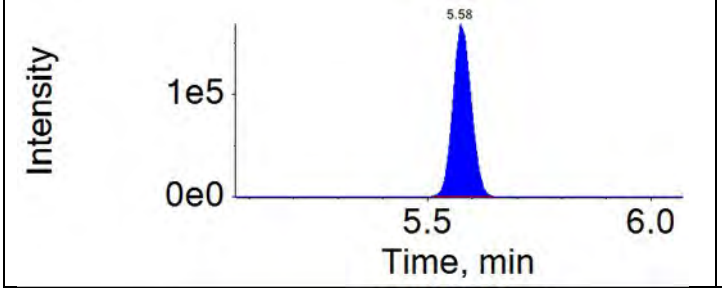


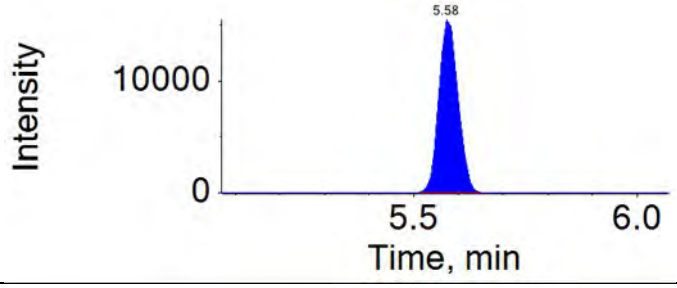
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



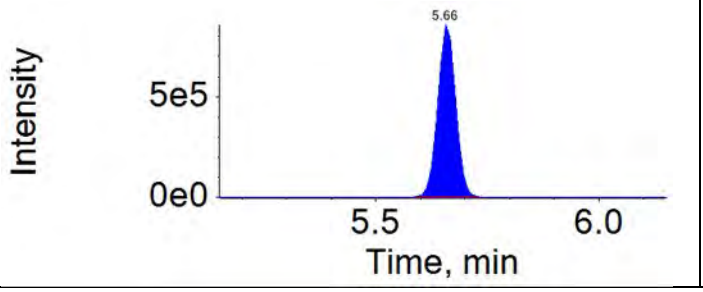


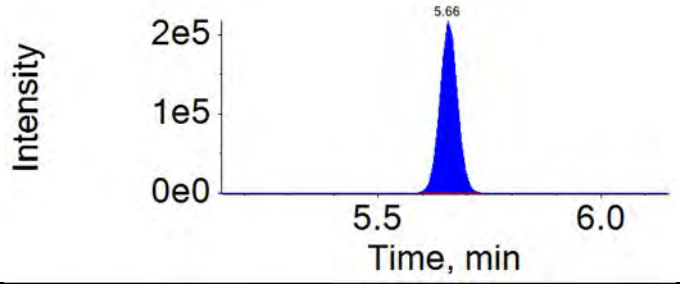
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

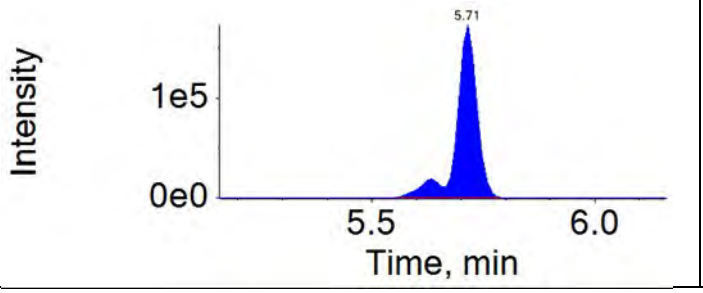
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

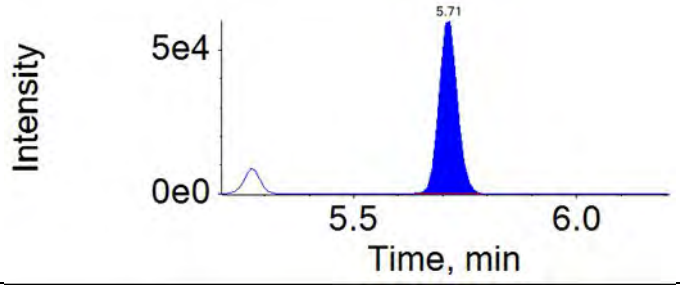
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



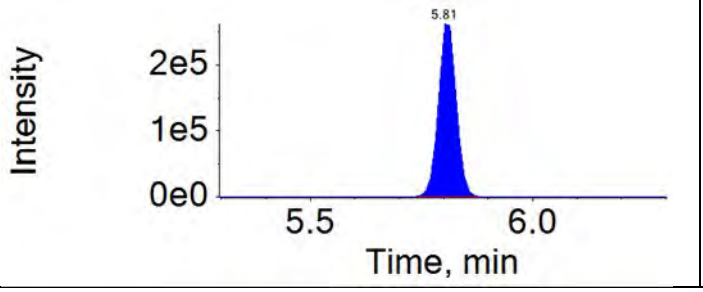


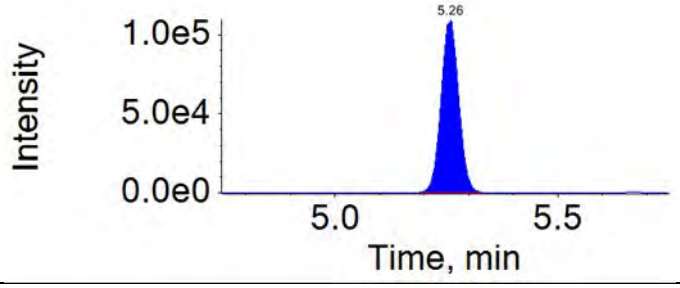
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



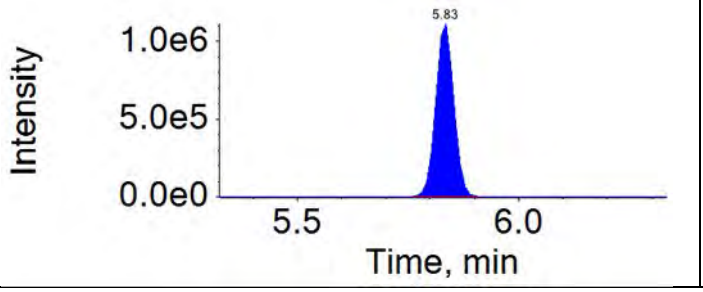


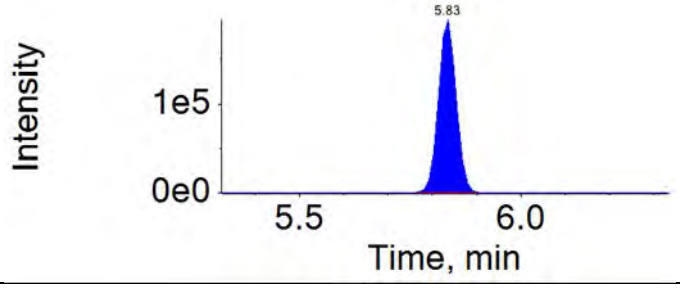
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



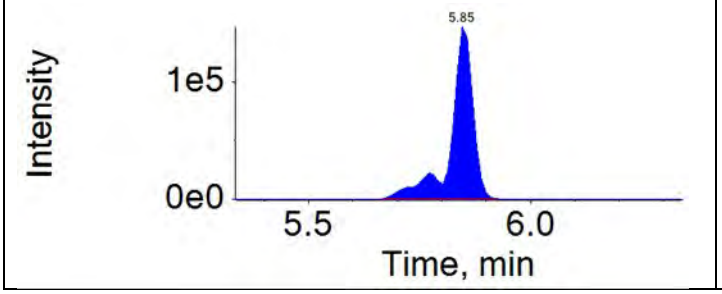


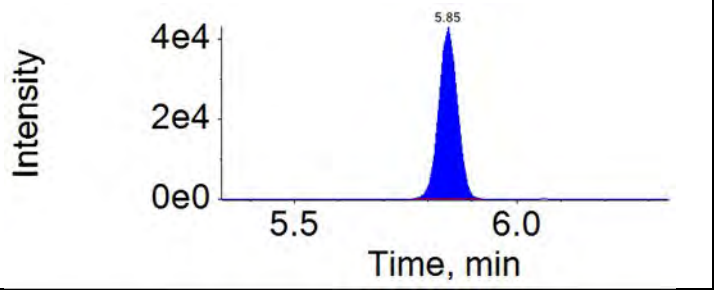
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

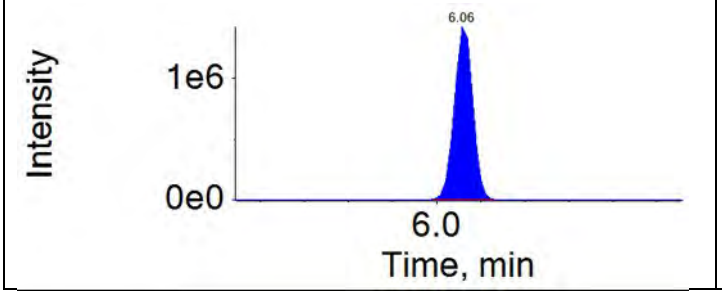
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

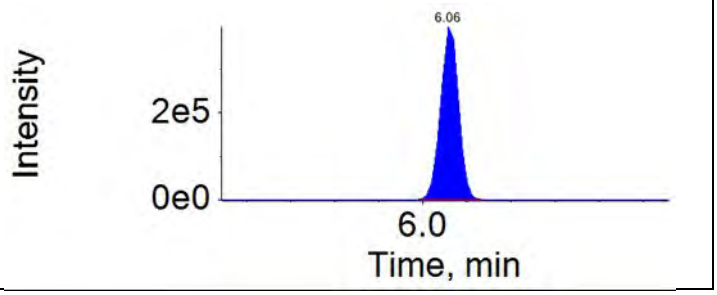
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



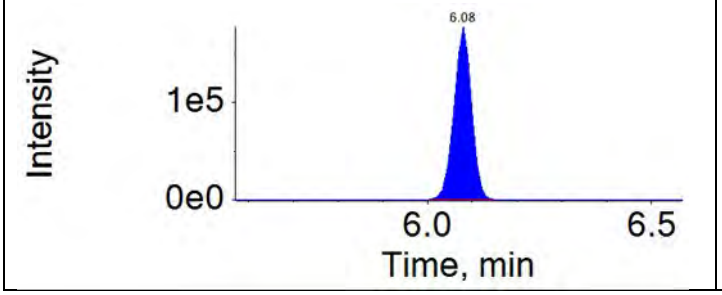


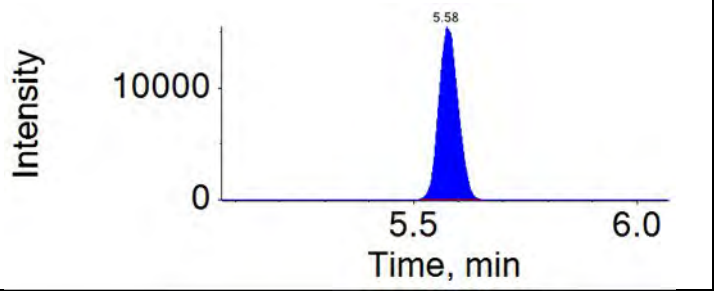
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



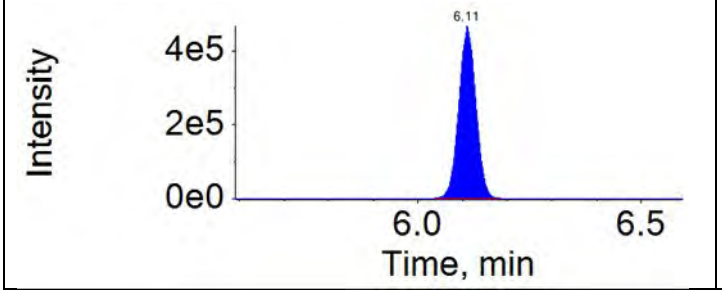


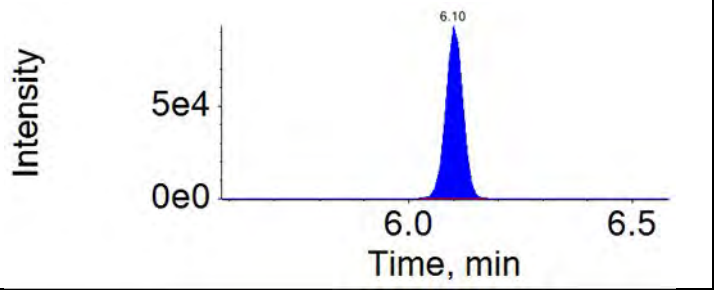
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



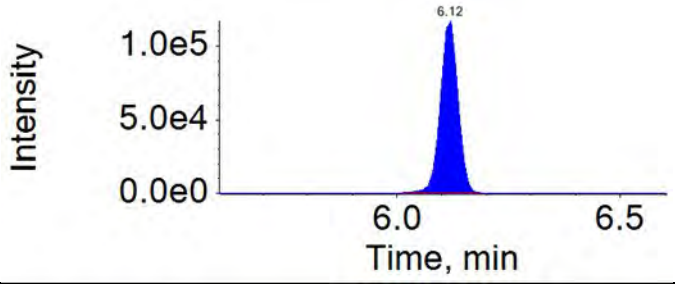


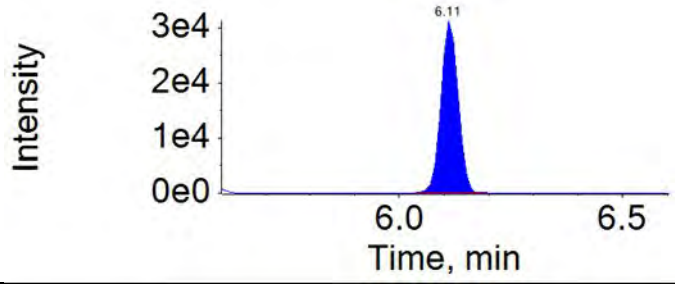
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

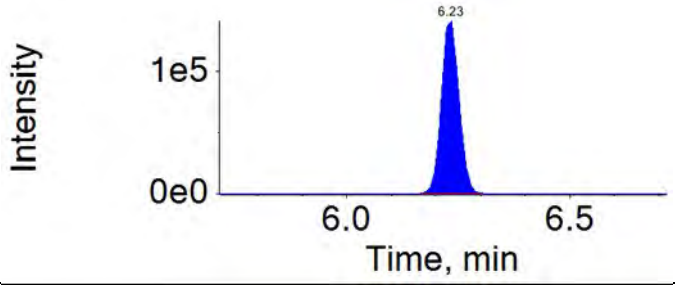
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

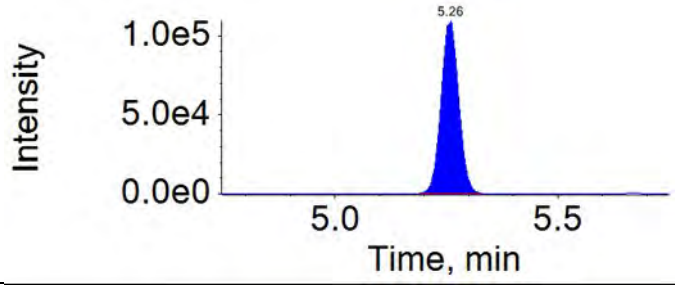
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



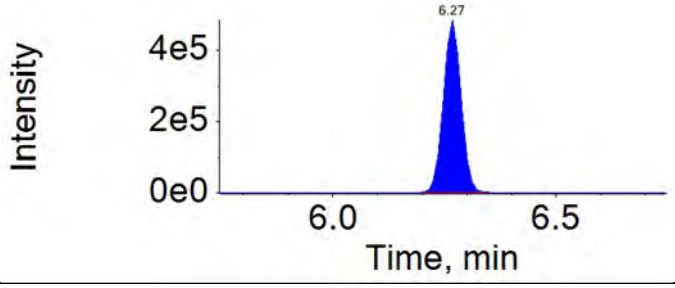


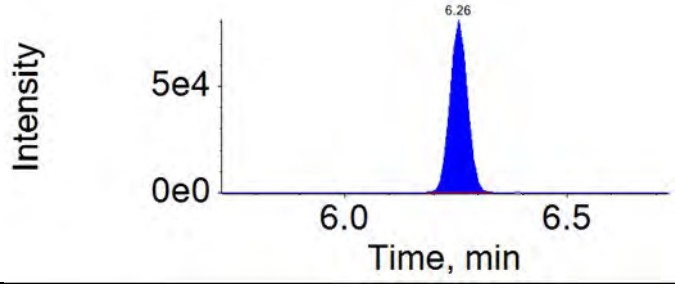
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



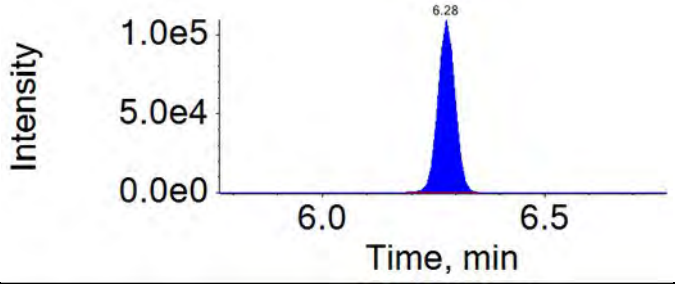


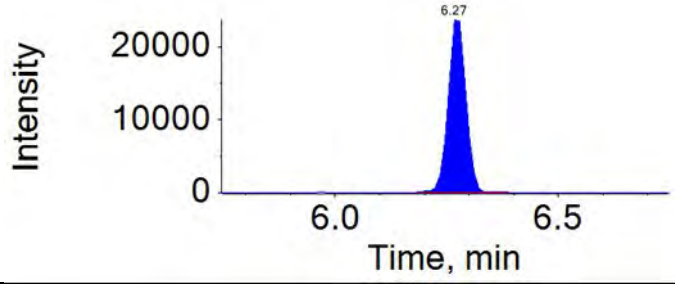
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



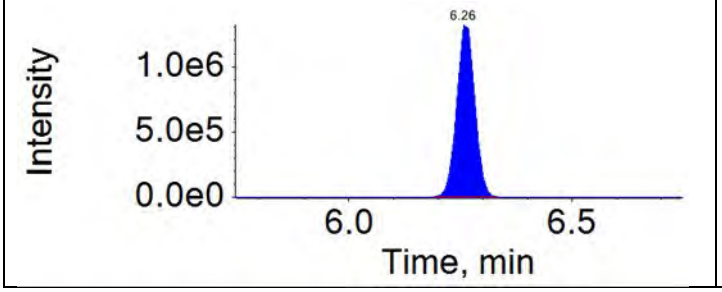


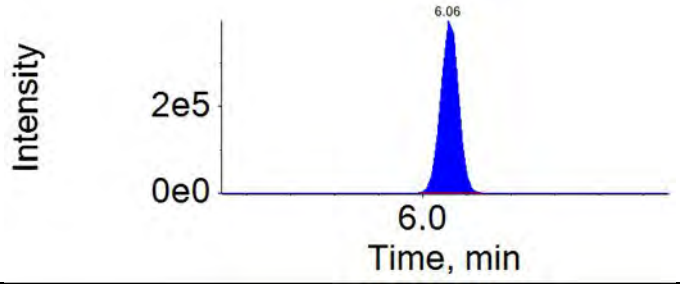
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

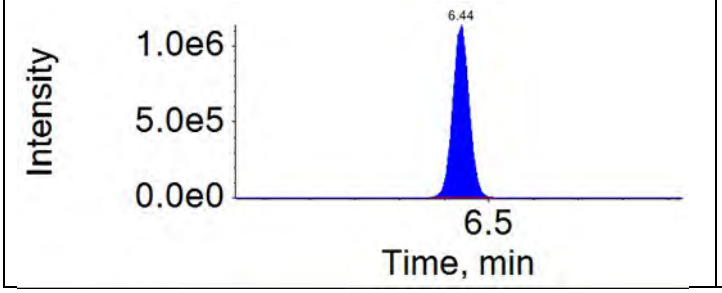
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

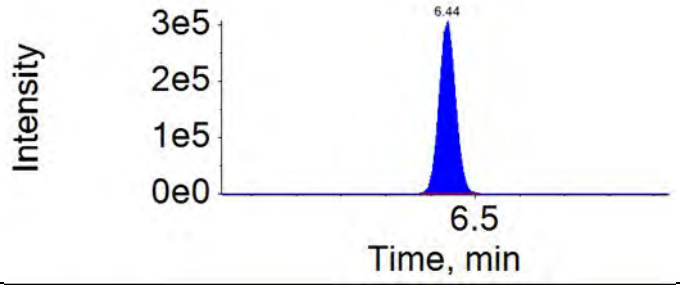
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



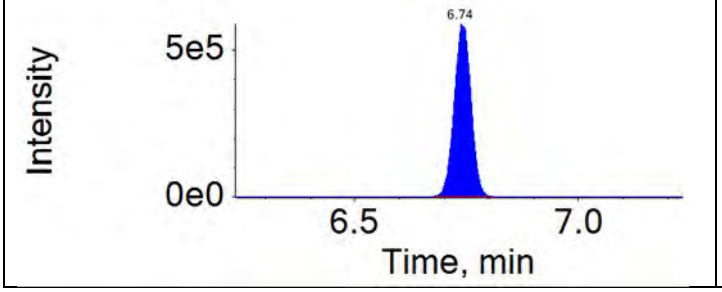


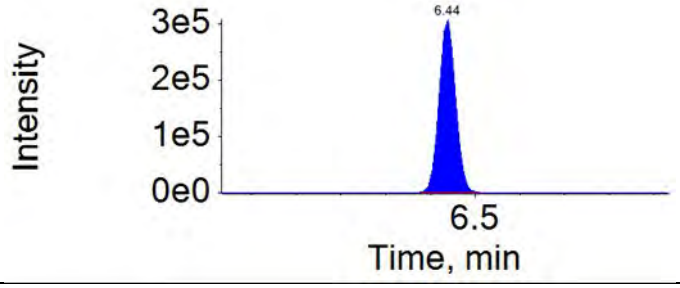
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



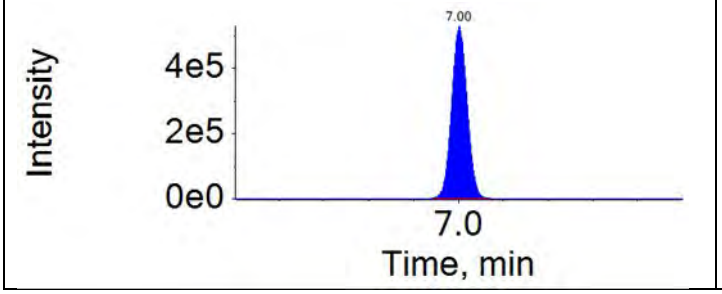


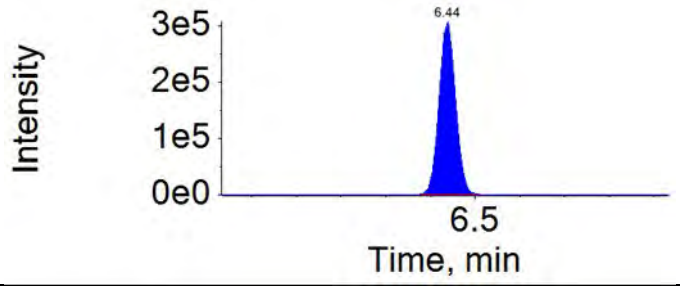
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



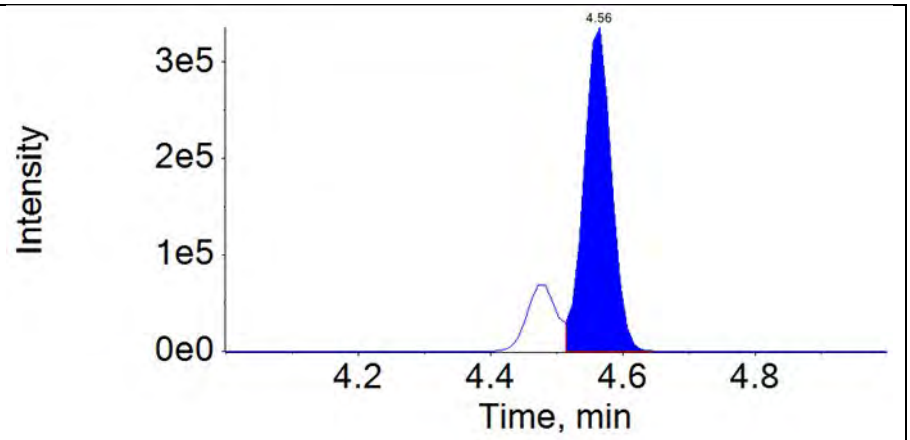


APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

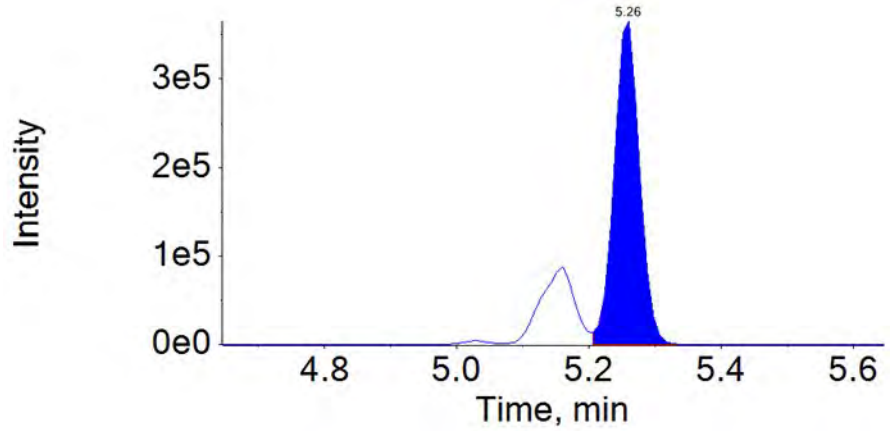
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.56
Peak Area:
976399.82
Mass Range:
399.0 / 80.0
File Name:
18NOV28DCAL-10.wiff
Sample Name:
CAL5



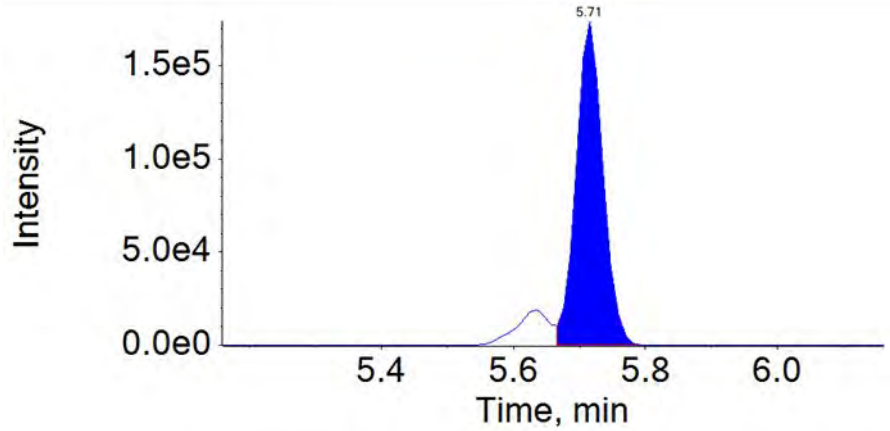
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.26
Peak Area:
977368.32
Mass Range:
499.0 / 80.0
File Name:
18NOV28DCAL-10.wiff
Sample Name:
CAL5



Integration Comment: incorrect integration

Component Name:
NMeFOSAA
RT (min.):
5.71
Peak Area:
489906.15
Mass Range:
570.0 / 419.0
File Name:
18NOV28DCAL-10.wiff
Sample Name:
CAL5



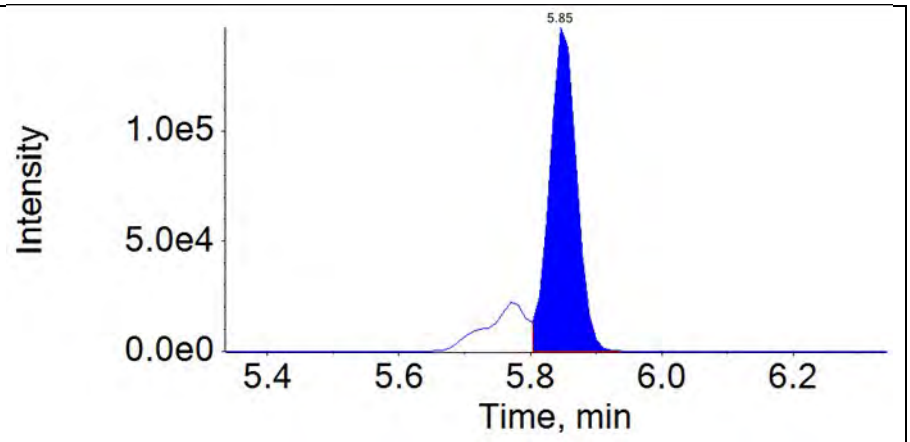
Integration Comment: incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

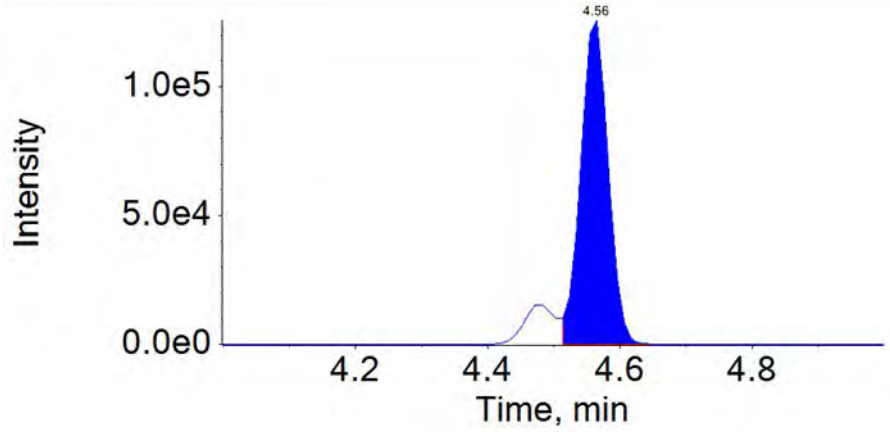
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NEtFOSAA
RT (min.):
5.85
Peak Area:
417736.88
Mass Range:
584.0 / 419.0
File Name:
18NOV28DCAL-10.wiff
Sample Name:
CAL5



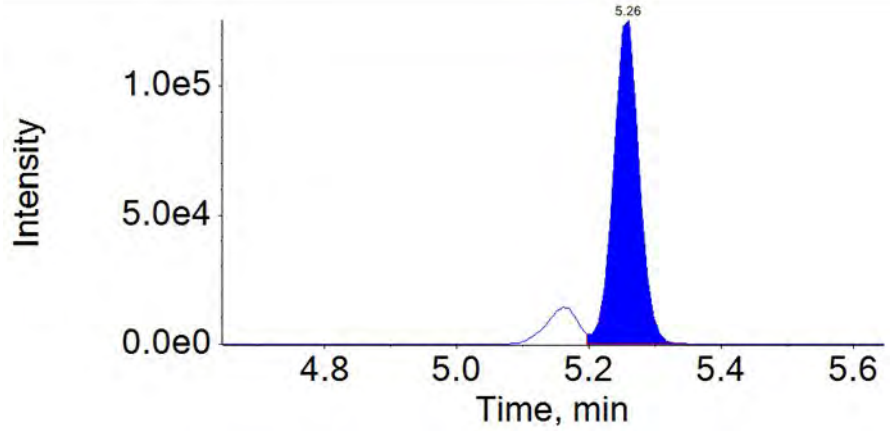
Integration Comment: incorrect integration

Component Name:
PFHxS_2
RT (min.):
4.56
Peak Area:
364661.03
Mass Range:
399.0 / 99.0
File Name:
18NOV28DCAL-10.wiff
Sample Name:
CAL5



Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.26
Peak Area:
341158.00
Mass Range:
499.0 / 99.0
File Name:
18NOV28DCAL-10.wiff
Sample Name:
CAL5



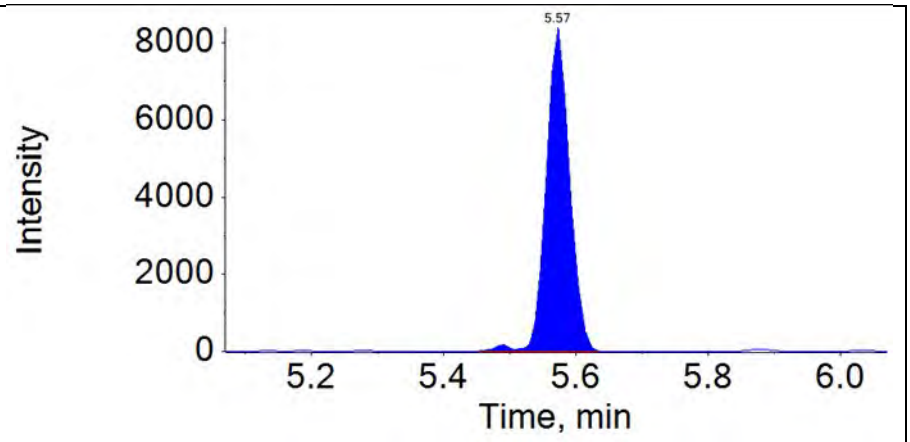
Integration Comment: incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

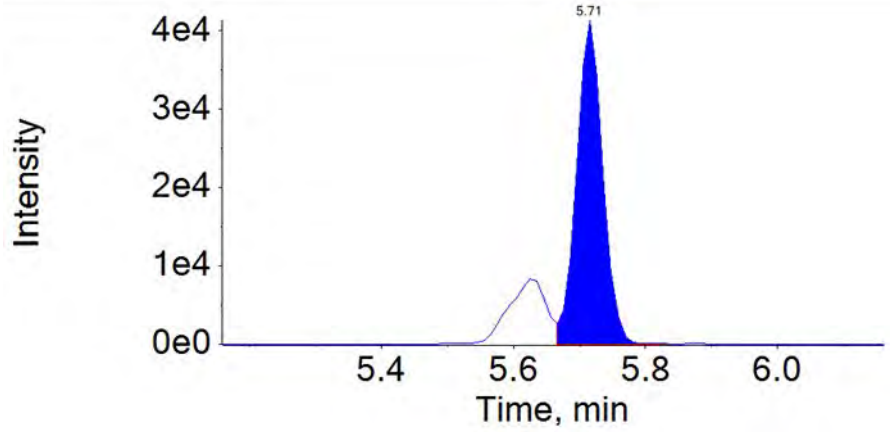
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFDA_2
RT (min.):
5.57
Peak Area:
20732.67
Mass Range:
513.0 / 169.0
File Name:
18NOV28DCAL-10.wiff
Sample Name:
CAL5



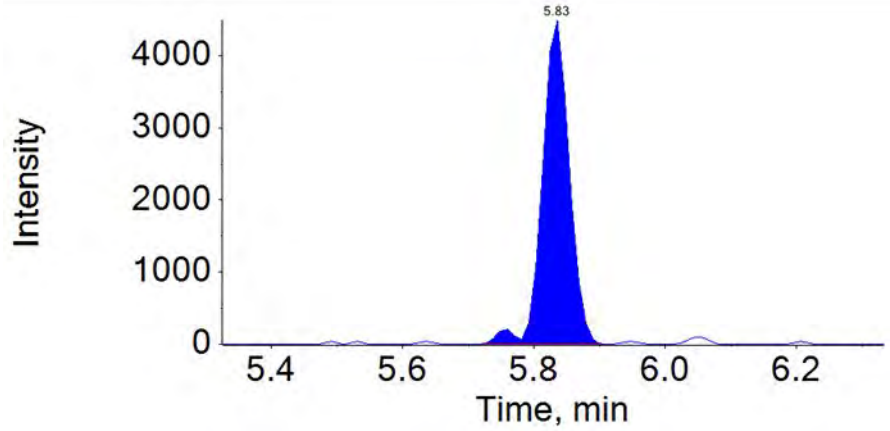
Integration Comment: incorrect integration

Component Name:
NMeFOSAA_2
RT (min.):
5.71
Peak Area:
113720.56
Mass Range:
570.0 / 483.0
File Name:
18NOV28DCAL-10.wiff
Sample Name:
CAL5



Integration Comment: incorrect integration

Component Name:
PFUnDA_2
RT (min.):
5.83
Peak Area:
12880.94
Mass Range:
563.0 / 169.0
File Name:
18NOV28DCAL-10.wiff
Sample Name:
CAL5



Integration Comment: incorrect integration

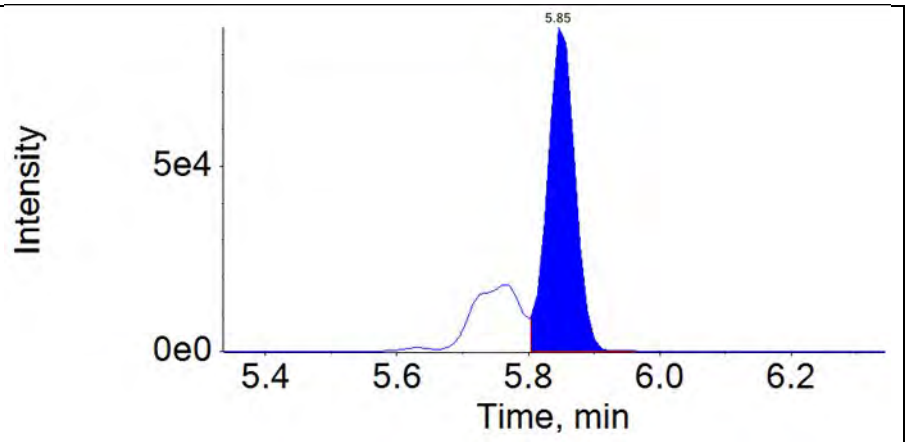
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NEtFOSAA_2
RT (min.):
5.85
Peak Area:
253789.74
Mass Range:
584.0 / 526.0
File Name:
18NOV28DCAL-10.wiff
Sample Name:
CAL5



Integration Comment: incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Ion Ratio Report

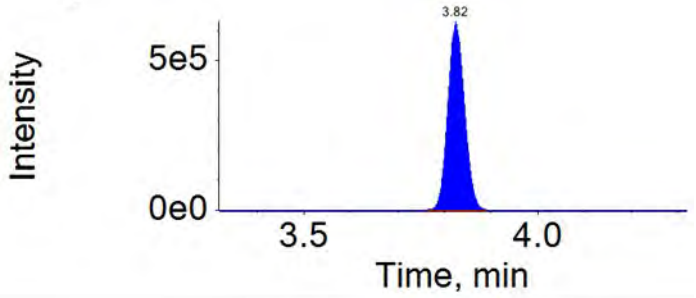
Sample Name: CAL5 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-10.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	1542881.65	A	0.3655	0.3660			
PFBS_2	3.82	1.00	564738.60	A	0.3655	0.3660	0	50	
4:2-FTS	4.14	1.00	498650.67	A	0.6383	0.6282			
4:2-FTS_2	4.14	1.00	313233.41	A	0.6383	0.6282	-2	50	
PFHxA	4.17	1.00	3464657.28	A	0.0103	0.0109			
PFHxA_2	4.17	1.00	37840.59	A	0.0103	0.0109	6	50	
PFPeS	4.19	1.10	809727.98	A	0.4976	0.4890			
PFPeS_2	4.19	1.10	395964.11	A	0.4976	0.4890	-2	50	
PFHpA	4.56	1.00	3592806.18	A	0.0557	0.0523			
PFHpA_2	4.56	1.00	187766.14	A	0.0557	0.0523	-6	50	
PFHxS	4.56	1.00	1191482.72	M	0.3693	0.3492			
PFHxS_2	4.56	1.00	416064.44	M	0.3693	0.3492	-5	50	
6:2-FTS	4.92	1.00	426727.66	A	0.6625	0.6532			
6:2-FTS_2	4.92	1.00	278752.30	A	0.6625	0.6532	-1	50	
PFHpS	4.92	1.08	1171216.60	A	0.3915	0.3965			
PFHpS_2	4.92	1.08	464342.40	A	0.3915	0.3965	1	50	
PFOA	4.93	1.00	3601538.31	A	0.0573	0.0569			
PFOA_2	4.93	1.00	205017.31	A	0.0573	0.0569	-1	50	
PFOS	5.26	1.00	1305020.45	M	0.2960	0.2984			
PFOS_2	5.26	1.00	389398.22	M	0.2960	0.2984	1	50	
PFNA	5.27	1.00	3536255.08	A	0.0201	0.0194			
PFNA_2	5.27	1.00	68777.91	A	0.0201	0.0194	-3	50	
PFNS	5.55	1.06	909879.21	A	0.4794	0.4787			
PFNS_2	5.55	1.06	435583.86	A	0.4794	0.4787	0	50	
PFDA	5.57	1.00	3072749.00	A	0.0075	0.0067			
PFDA_2	5.57	1.00	20445.65	M	0.0075	0.0067	-11	50	
8:2-FTS	5.58	1.00	478390.07	A	0.5380	0.5702			
8:2-FTS_2	5.58	1.00	272796.88	A	0.5380	0.5702	6	50	
NMeFOSAA	5.71	1.00	557354.59	M	0.2305	0.2631			
NMeFOSAA_2	5.71	1.00	146652.83	M	0.2305	0.2631	14	50	
PFDS	5.81	1.10	737231.87	A	0.5356	0.4610			
PFDS_2	5.81	1.10	339890.15	A	0.5356	0.4610	-14	50	
PFUnDA	5.83	1.00	3163283.79	A	0.0038	0.0039			
PFUnDA_2	5.83	1.00	12485.39	M	0.0038	0.0039	4	50	
NEtFOSAA	5.85	1.00	512792.42	M	0.7356	0.6745			
NEtFOSAA_2	5.85	1.00	345864.54	M	0.7356	0.6745	-8	50	
PFDoDA	6.06	1.00	4161895.87	A	0.0130	0.0126			
PFDoDA_2	6.06	1.00	52575.90	A	0.0130	0.0126	-3	50	
10:2-FTS	6.08	1.09	480384.06	A	0.6989	0.7284			
10:2-FTS_2	6.08	1.09	349903.28	A	0.6989	0.7284	4	50	
PFTrDA	6.26	1.03	3743763.62	A	0.0090	0.0080			
PFTrDA_2	6.26	1.03	30122.74	A	0.0090	0.0080	-11	50	
PFTeDA	6.44	1.00	2897106.24	A	0.0056	0.0061			
PFTeDA_2	6.44	1.00	17720.47	A	0.0056	0.0061	9	50	
PFHxDA	6.74	1.05	1551331.12	A	0.0646	0.0623			
PFHxDA_2	6.74	1.05	96698.01	A	0.0646	0.0623	-3	50	
PFODA	7.00	1.09	1272897.40	A	0.0264	0.0256			
PFODA_2	7.00	1.09	32592.46	A	0.0264	0.0256	-3	50	

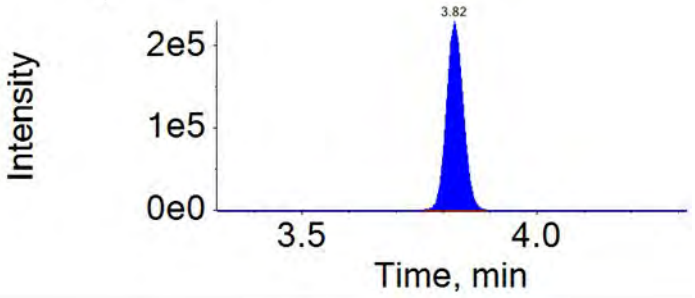
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

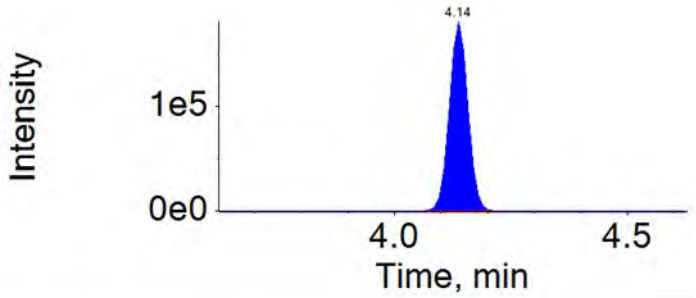
Component: PFBS
Primary Mass: 299.0 / 80.0



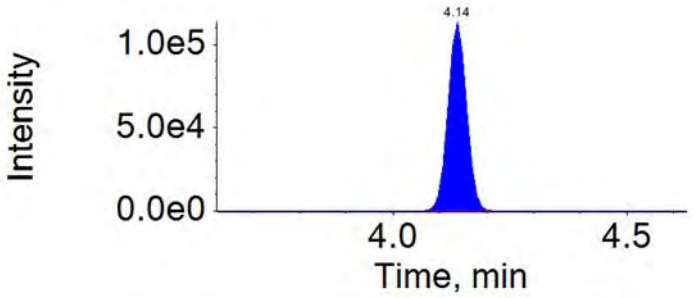
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



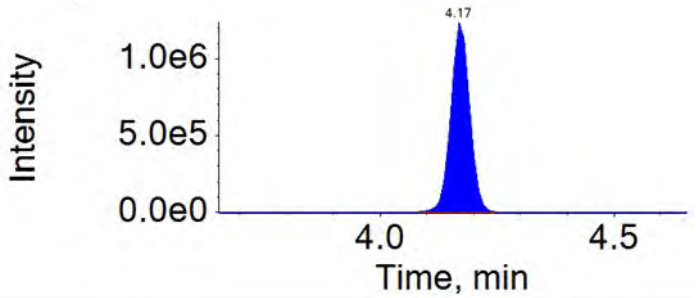
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



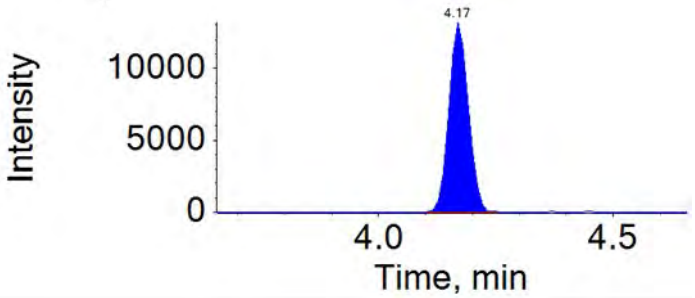
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



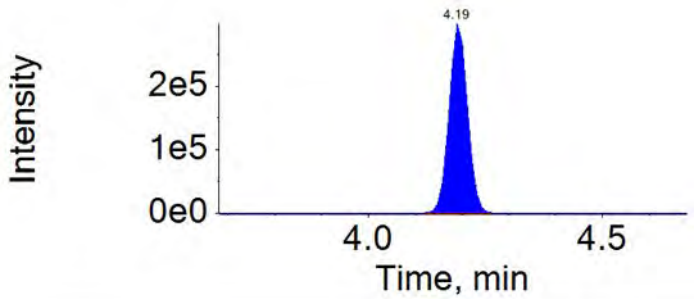
Component: PFHxA
Primary Mass: 313.0 / 269.0



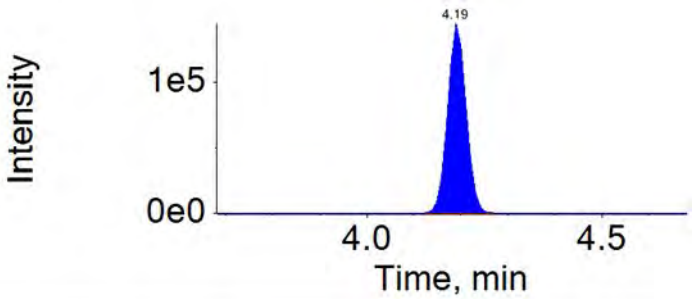
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



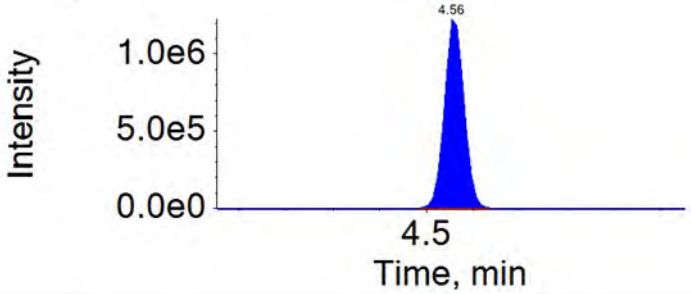
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



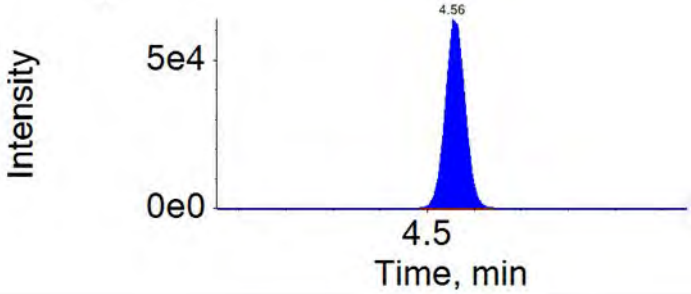
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By MCD at 5:00 pm, 11/28/18

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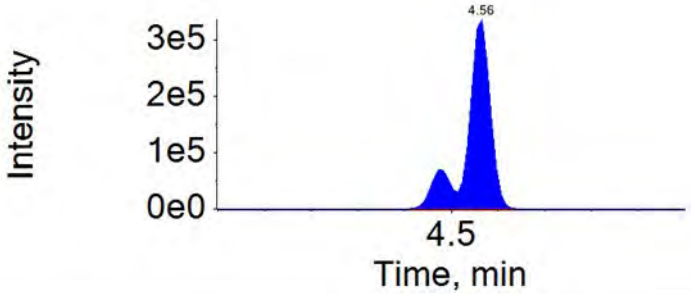
Component: PFHpA
Primary Mass: 363.0 / 319.0



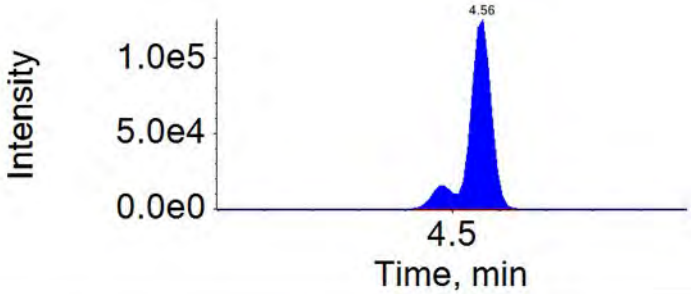
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Secondary Mass: 363.0 / 169.0



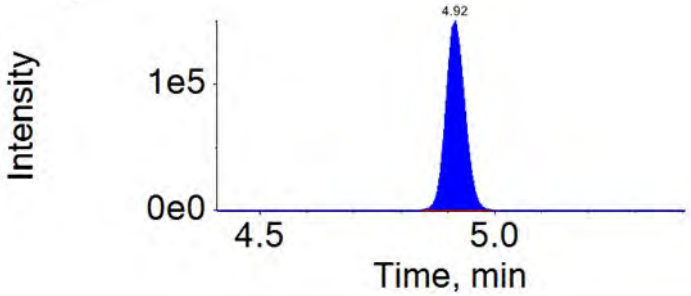
Component: PFHxS
Primary Mass: 399.0 / 80.0



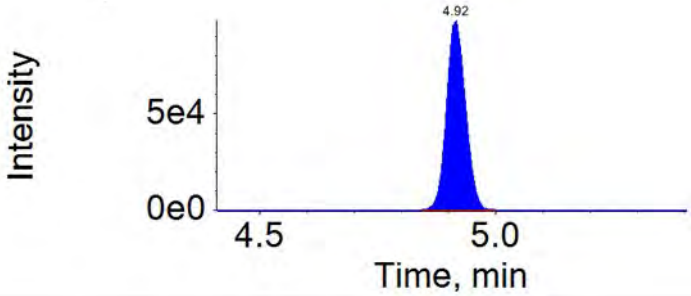
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



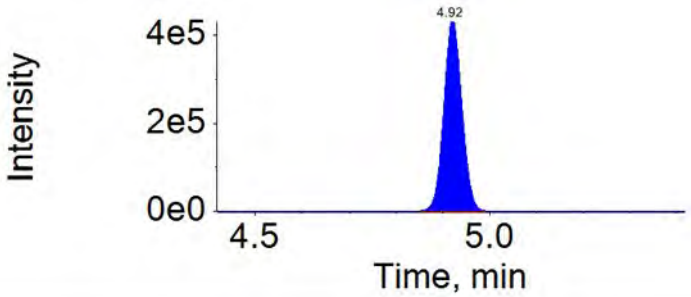
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



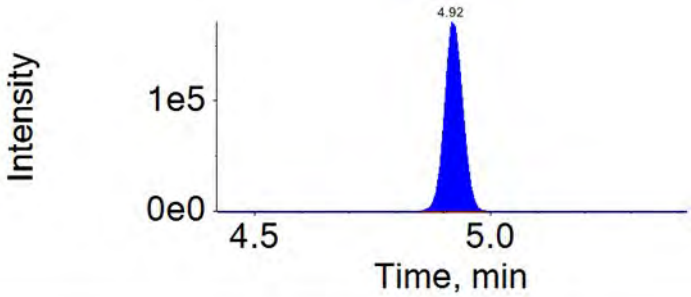
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



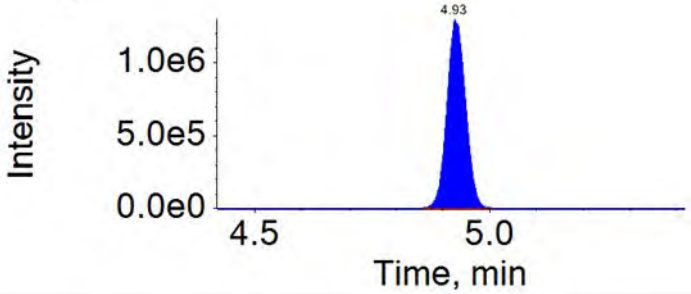
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



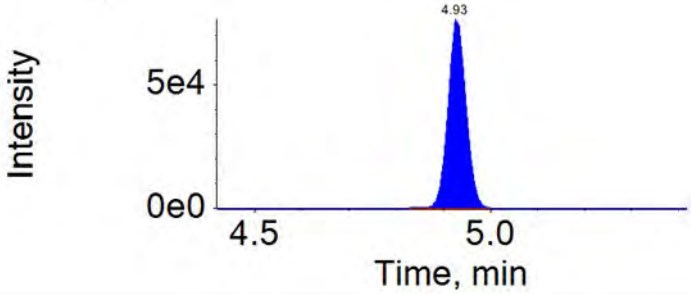
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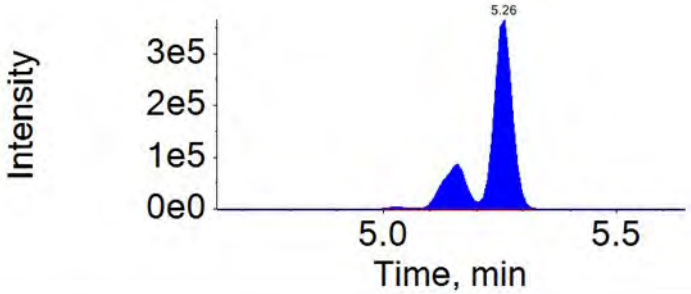
Component: PFOA
Primary Mass: 413.0 / 369.0



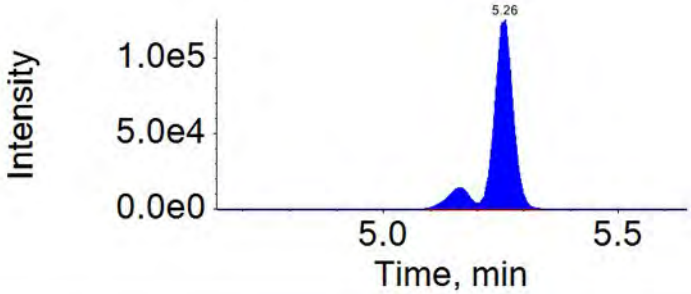
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



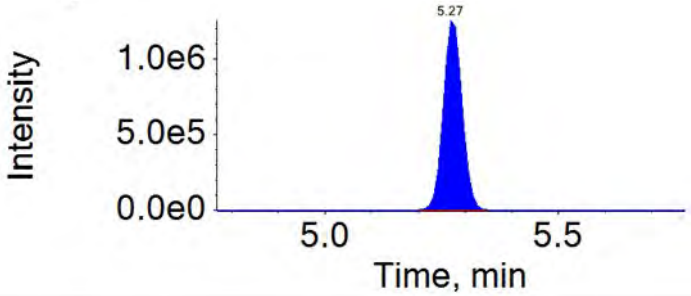
Component: PFOS
Primary Mass: 499.0 / 80.0



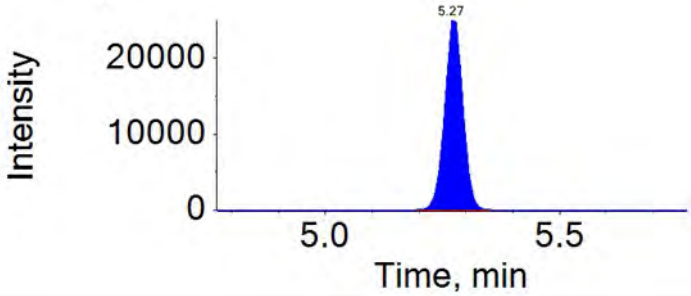
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



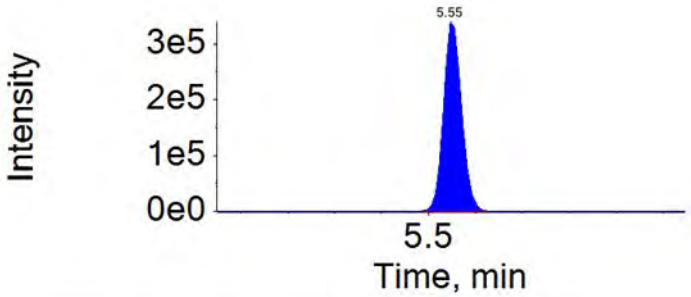
Component: PFNA
Primary Mass: 463.0 / 419.0



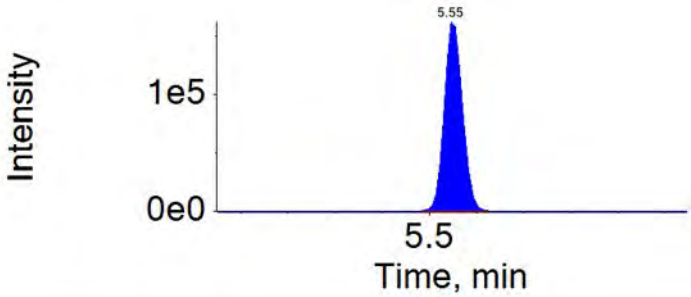
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



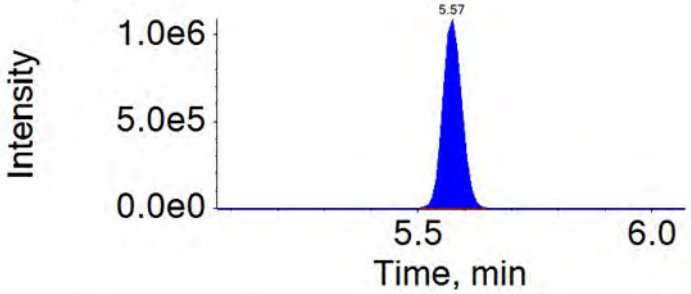
Component: PFNS
Primary Mass: 549.0 / 80.0



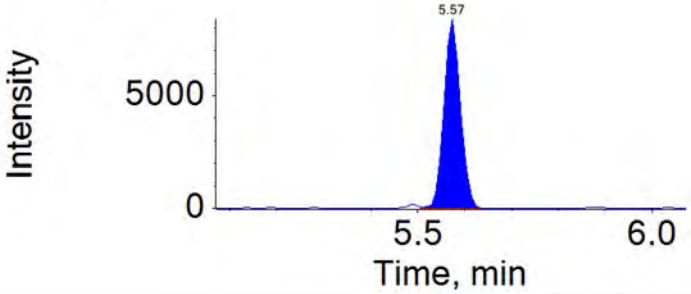
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



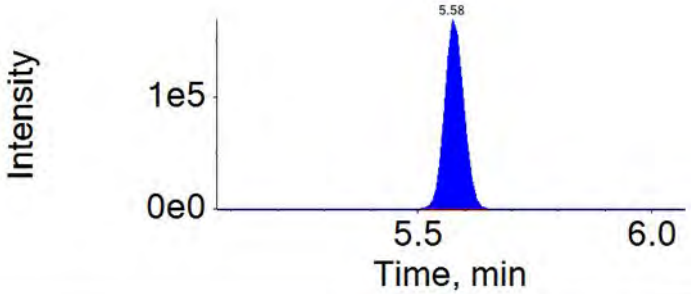
Component: PFDA
Primary Mass: 513.0 / 469.0



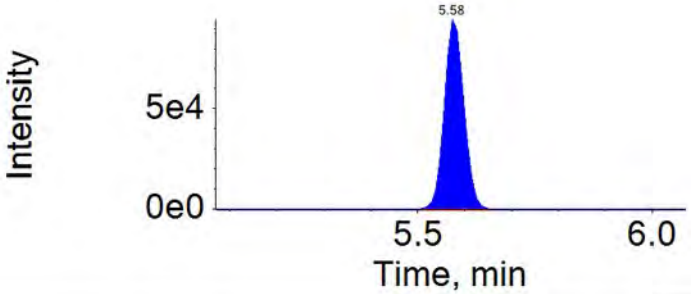
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



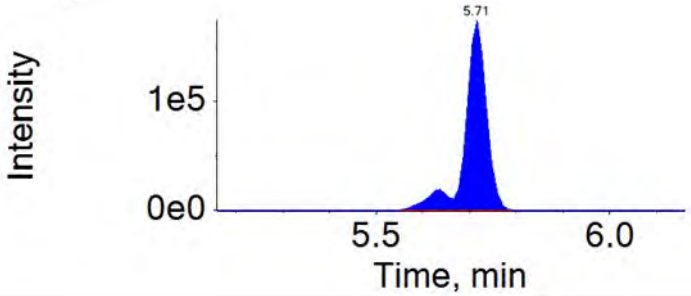
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



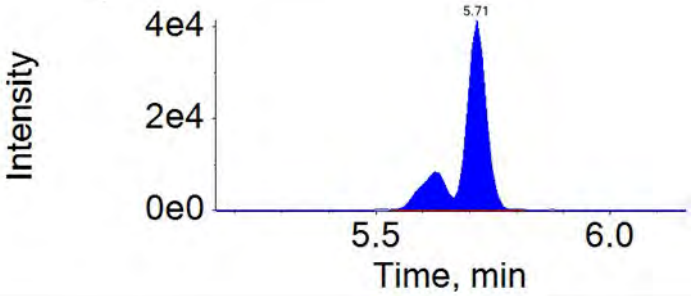
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



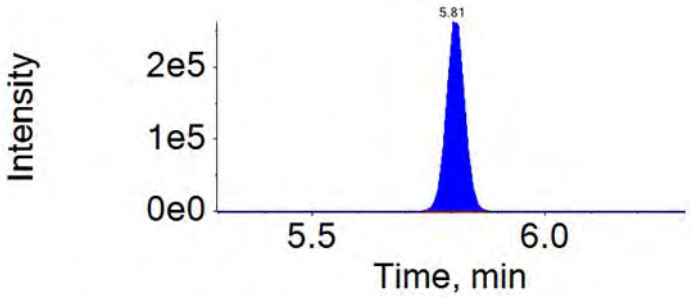
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



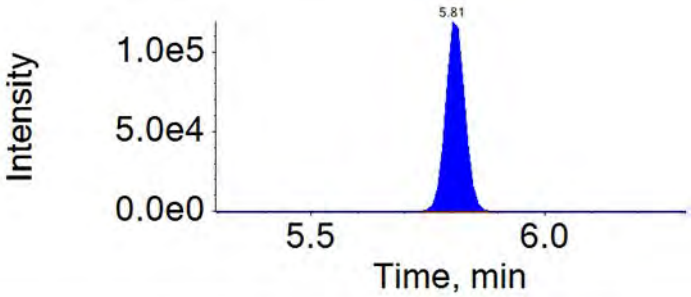
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



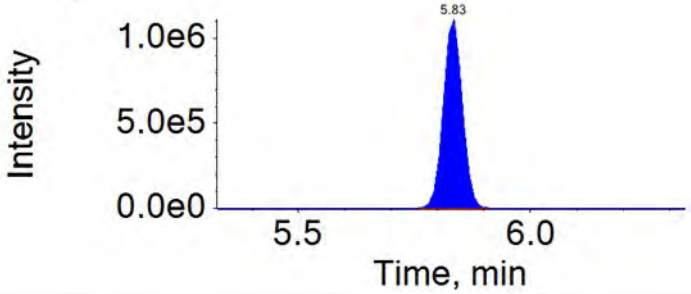
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



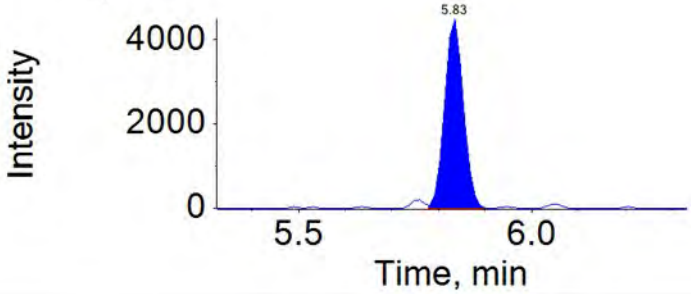
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

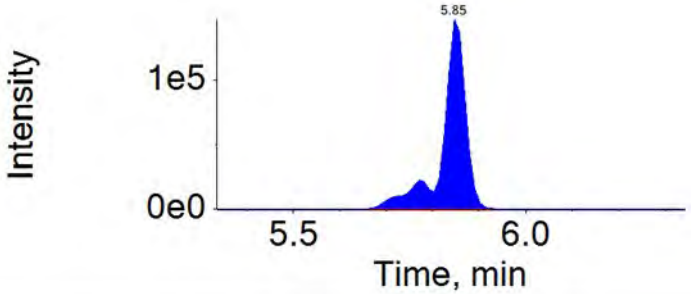
Component: PFUnDA
Primary Mass: 563.0 / 519.0



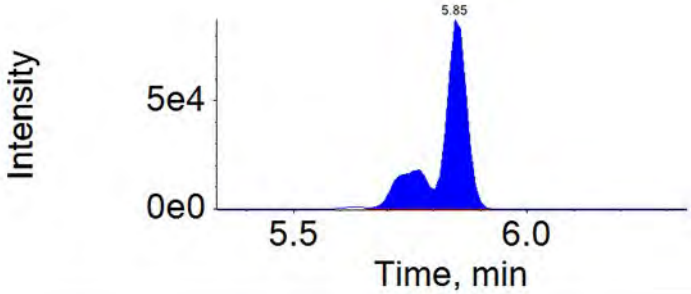
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



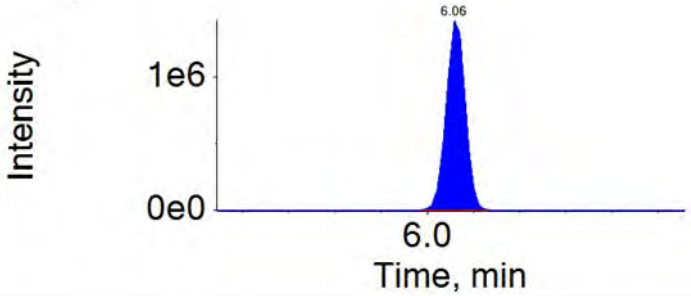
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



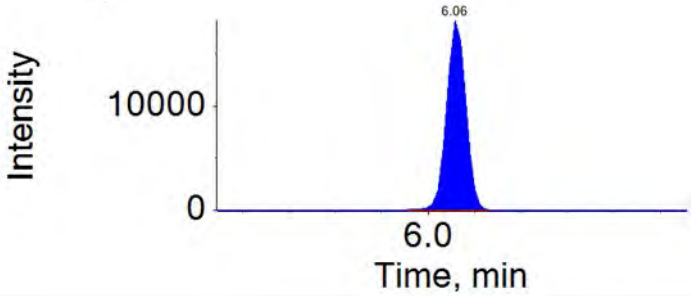
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



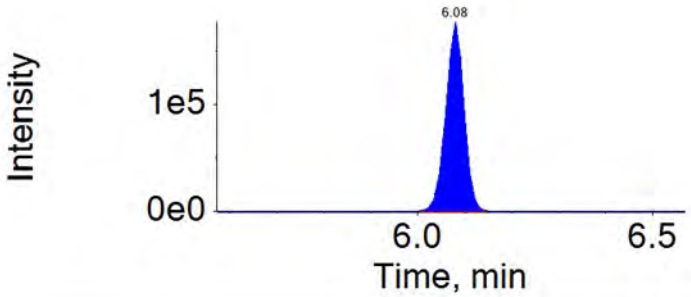
Component: PFDoDA
Primary Mass: 613.0 / 569.0



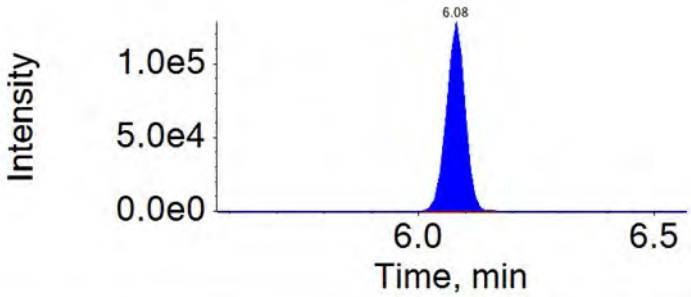
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



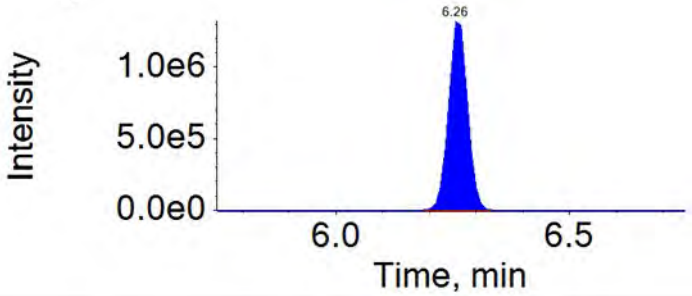
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



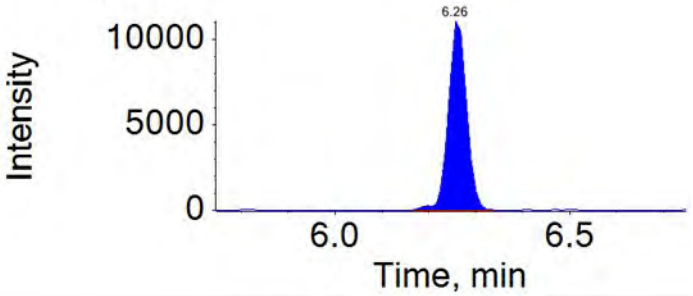
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

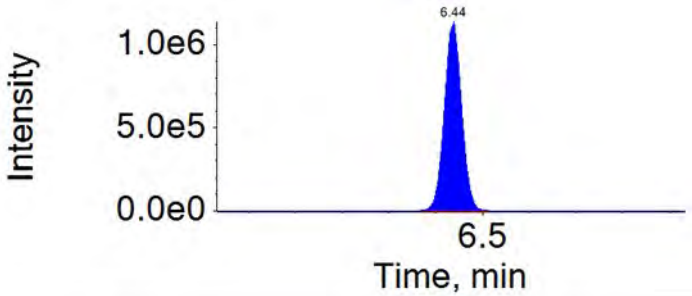
Component: PFTrDA
Primary Mass: 663.0 / 619.0



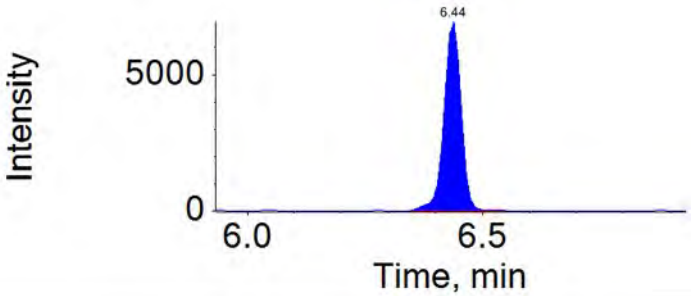
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



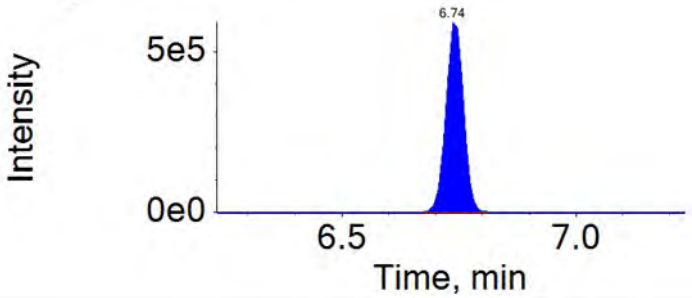
Component: PFTeDA
Primary Mass: 713.0 / 669.0



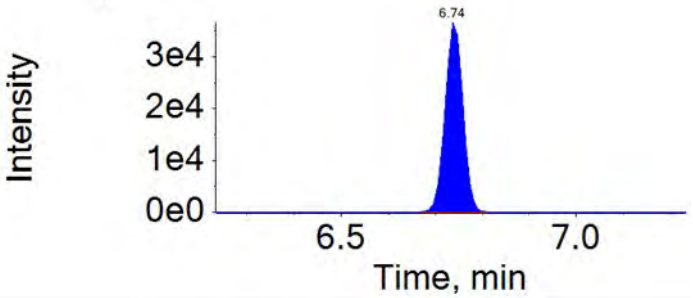
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



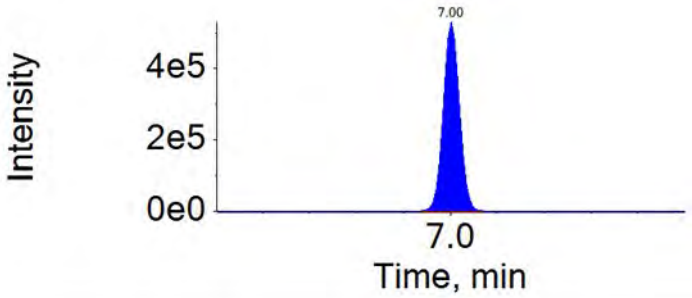
Component: PFHxDA
Primary Mass: 813.0 / 769.0



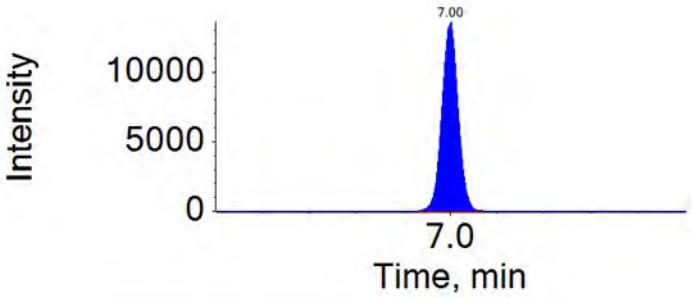
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL6			**Data File:**		18NOV28DCAL-11.wiff
Sample ID:	CALBRN61833B			**Acquis Date:**		2018-11-28T14:27:16
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	8			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV28DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	793955.0	887248.9	-11	50	
13C2-PFOA	5.0	499608.5	498501.6	0	50	
13C4-PFOS	4.8	264408.9	283214.2	-7	50	
13C2-PFDA	5.0	419913.2	441790.6	-5	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	897566.7	13C3-PFBA	793955.0	1.131	5.000	5.044	101	70-130	
E13C5-PFPeA	872922.6	13C3-PFBA	793955.0	1.099	5.000	5.134	103	70-130	
E13C3-PFBS	398441.3	13C3-PFBA	793955.0	0.502	4.650	4.788	103	70-130	
E13C2-4:2-FTS	65255.4	13C2-PFOA	499608.5	0.131	4.670	4.501	96	70-130	
E13C5-PFHxA	675219.8	13C2-PFOA	499608.5	1.351	5.000	4.964	99	70-130	
E13C3-PFHxS	279894.6	13C2-PFOA	499608.5	0.560	4.730	4.391	93	70-130	
E13C4-PFHpA	555281.5	13C2-PFOA	499608.5	1.111	5.000	5.107	102	70-130	
E13C2-6:2-FTS	48807.6	13C2-PFOA	499608.5	0.098	4.750	4.089	86	70-130	
E13C8-PFOA	843522.3	13C2-PFOA	499608.5	1.688	5.000	4.647	93	70-130	
E13C8-PFOS	279204.4	13C4-PFOS	264408.9	1.056	4.780	4.767	100	70-130	
E13C9-PFNA	624202.7	13C4-PFOS	264408.9	2.361	5.000	5.185	104	70-130	
E13C6-PFDA	758832.8	13C2-PFDA	419913.2	1.807	5.000	5.095	102	70-130	
E13C2-8:2-FTS	44487.5	13C2-PFDA	419913.2	0.106	4.790	4.553	95	70-130	
E13C8-PFOSA	565326.0	13C2-PFDA	419913.2	1.346	5.000	4.940	99	70-130	
Ed3-NMeFOSAA	161673.3	13C2-PFDA	419913.2	0.385	5.000	4.888	98	70-130	
E13C7-PFUnDA	474122.1	13C2-PFDA	419913.2	1.129	5.000	4.772	95	70-130	
Ed5-NEtFOSAA	117934.2	13C2-PFDA	419913.2	0.281	5.000	5.004	100	70-130	
E13C2-PFDoDA	980215.4	13C2-PFDA	419913.2	2.334	5.000	4.905	98	70-130	
Ed7-NMePFOSAE	248871.1	13C2-PFDA	419913.2	0.593	5.000	5.122	102	70-130	
Ed3-NMePFOSA	81949.3	13C2-PFDA	419913.2	0.195	5.000	5.282	106	70-130	
Ed9-NEtPFOSAE	222924.1	13C2-PFDA	419913.2	0.531	5.000	5.382	108	70-130	
Ed5-NEtPFOSA	59705.8	13C2-PFDA	419913.2	0.142	5.000	4.941	99	70-130	
E13C2-PFTeDA	789168.4	13C2-PFDA	419913.2	1.879	5.000	5.200	104	70-130	

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

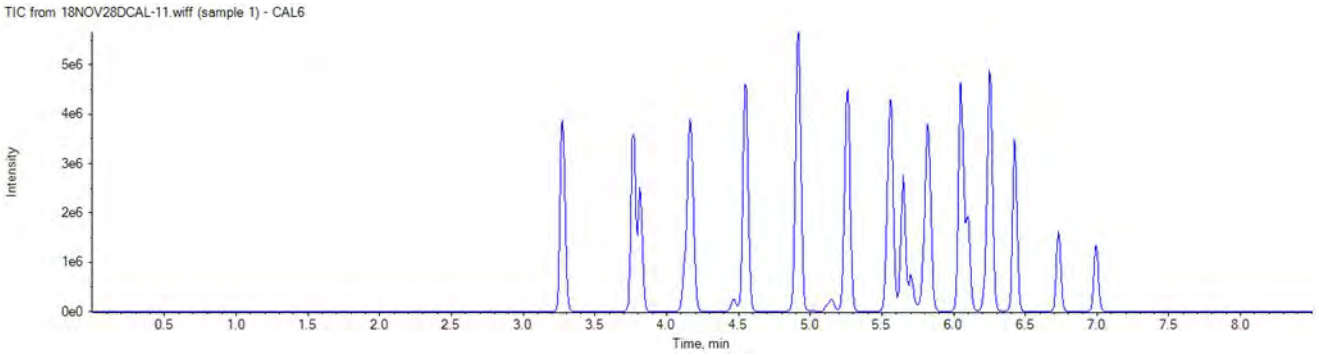
Analyte Quantitation Peak Table

Sample Name: CAL6 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-11.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	7996964.8		A	13C4-PFBA	3.27	897566.7	8.910	48.841
PFPeA	3.77	1.000	7873655.4		A	13C5-PFPeA	3.77	872922.6	9.020	44.258
PFBS	3.82	1.000	3600470.8		A	13C3-PFBS	3.82	398441.3	9.036	43.864
4:2-FTS	4.13	1.000	1148569.2		A	13C2-4:2-FTS	4.13	65255.4	17.601	47.117
PFHxA	4.16	1.000	7468739.1		A	13C5-PFHxA	4.16	675219.8	11.061	44.400
PFPeS	4.18	1.100	1793808.0		A	13C3-PFBS	3.82	398441.3	4.502	45.538
PFHpA	4.55	1.000	7873271.2		A	13C4-PFHpA	4.55	555281.5	14.179	43.759
PFHxS	4.55	1.000	2625950.9		M	13C3-PFHxS	4.55	279894.6	9.382	43.929
6:2-FTS	4.90	1.000	859948.6		A	13C2-6:2-FTS	4.91	48807.6	17.619	45.972
PFHpS	4.91	1.080	2686833.3		A	13C3-PFHxS	4.55	279894.6	9.599	47.909
PFOA	4.92	1.000	8012665.3		A	13C8-PFOA	4.92	843522.3	9.499	49.084
PFOS	5.25	1.000	3026664.5		M	13C8-PFOS	5.25	279204.4	10.840	45.472
PFNA	5.26	1.000	7843086.9		A	13C9-PFNA	5.26	624202.7	12.565	48.151
PFNS	5.54	1.060	2116661.5		A	13C8-PFOS	5.25	279204.4	7.581	47.867
PFDA	5.56	1.000	6551370.5		A	13C6-PFDA	5.56	758832.8	8.633	48.868
8:2-FTS	5.57	1.000	938590.1		A	13C2-8:2-FTS	5.57	44487.5	21.098	39.786
PFOSA	5.65	1.000	5541493.1		A	13C8-PFOSA	5.65	565326.0	9.802	49.655
NMeFOSAA	5.70	1.000	1292829.8		A	d3-NMeFOSAA	5.70	161673.3	7.997	51.010
PFDS	5.80	1.100	1665920.2		A	13C8-PFOS	5.25	279204.4	5.967	47.309
PFUnDA	5.82	1.000	6885622.6		A	13C7-PFUnDA	5.82	474122.1	14.523	51.912
NEtFOSAA	5.84	1.000	1214766.4		M	d5-NEtFOSAA	5.83	117934.2	10.300	50.166
PFDoDA	6.05	1.000	8865844.7		A	13C2-PFDoDA	6.05	980215.4	9.045	49.545
10:2-FTS	6.07	1.090	972346.9		A	13C2-8:2-FTS	5.57	44487.5	21.857	48.197
NMePFOSAE	6.10	1.000	3059430.5		A	d7-NMePFOSAE	6.09	248871.1	12.293	51.733
NMePFOSA	6.11	1.000	768521.6		A	d3-NMePFOSA	6.10	81949.3	9.378	49.716
PFDoS	6.22	1.190	900508.4		A	13C8-PFOS	5.25	279204.4	3.225	46.320
NEtPFOSAE	6.26	1.000	3104174.6		A	d9-NEtPFOSAE	6.24	222924.1	13.925	50.088
NEtPFOSA	6.27	1.000	698744.6		A	d5-NEtPFOSA	6.26	59705.8	11.703	52.452
PFTrDA	6.25	1.030	7958673.4		A	13C2-PFDoDA	6.05	980215.4	8.119	48.938
PFTeDA	6.43	1.000	6793735.3		A	13C2-PFTeDA	6.43	789168.4	8.609	48.777
PFHxDA	6.73	1.050	3402004.5		A	13C2-PFTeDA	6.43	789168.4	4.311	49.281
PFODA	6.99	1.090	2942000.1		A	13C2-PFTeDA	6.43	789168.4	3.728	49.663

Total Ion Chromatogram

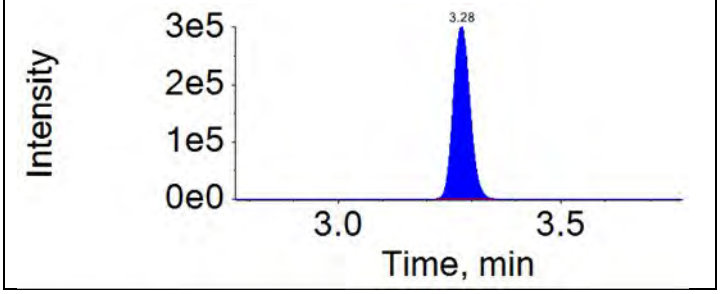


APPROVED
By MCD at 5:00 pm, 11/28/18

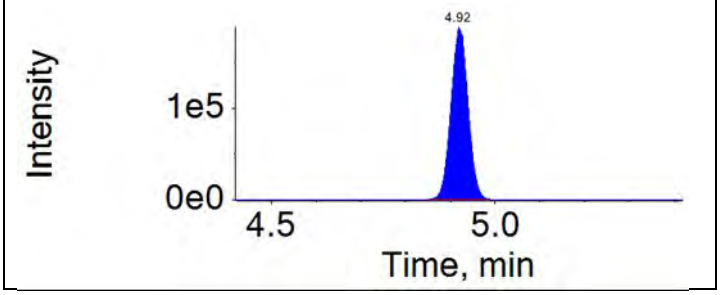
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

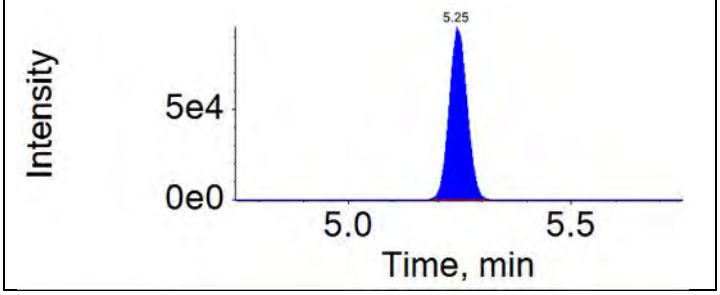
Injection Standard: 13C3-PFBA
216.0 / 172.0



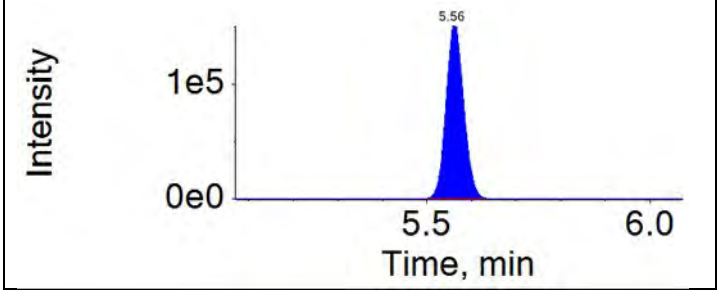
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



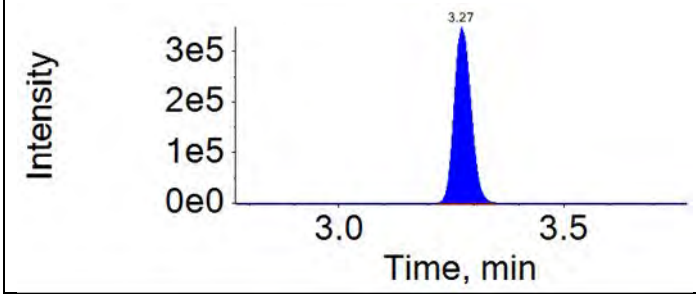
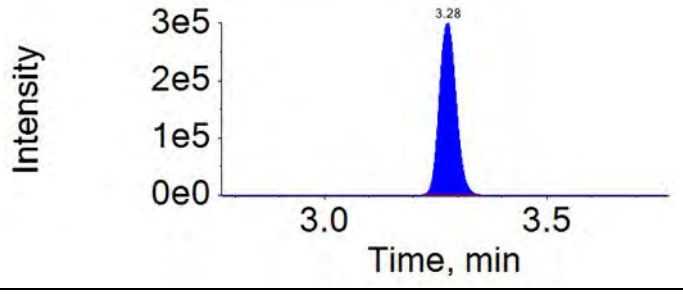
Injection Standard: 13C2-PFDA
515.0 / 470.0

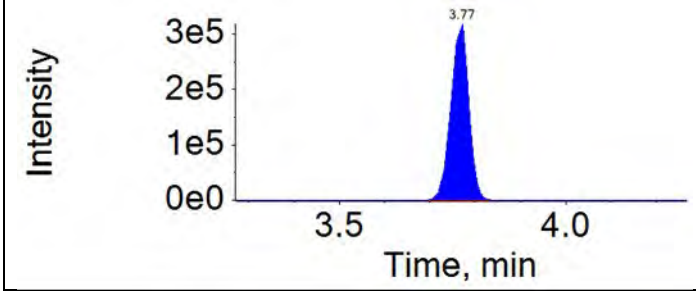
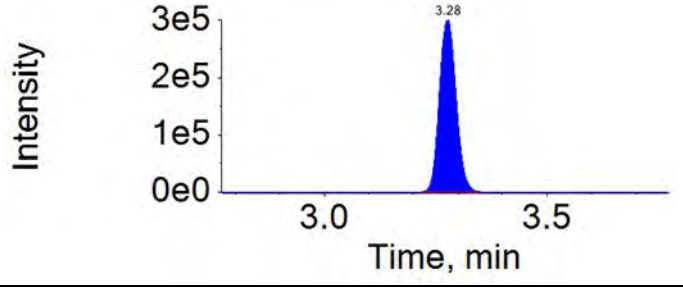


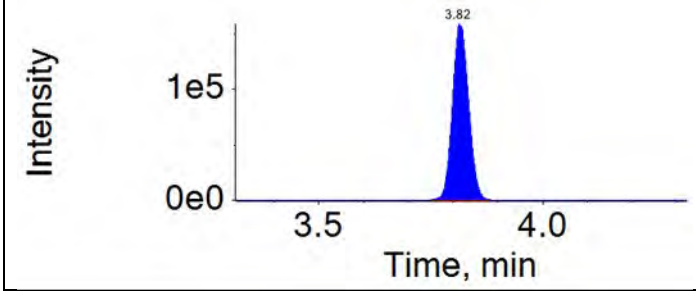
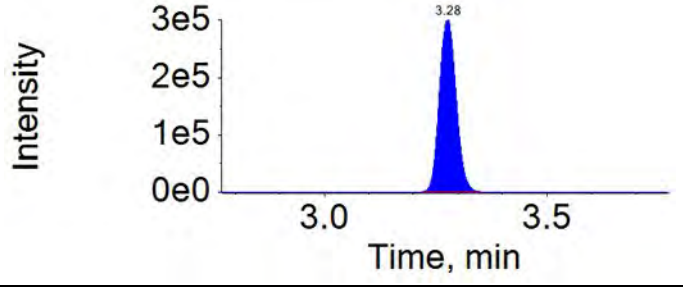
APPROVED
By MCD at 5:00 pm, 11/28/18

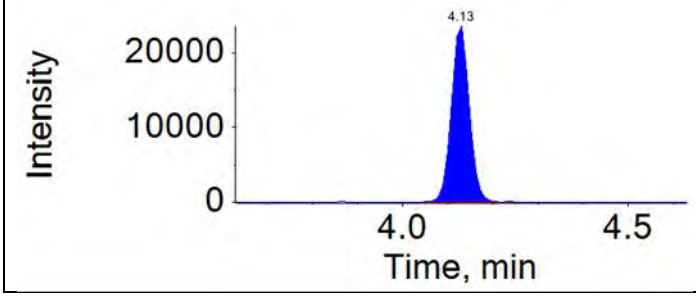
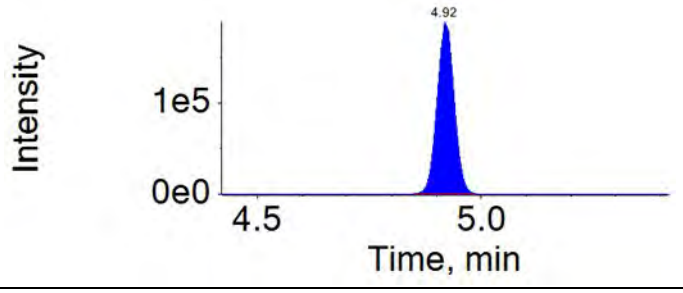
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

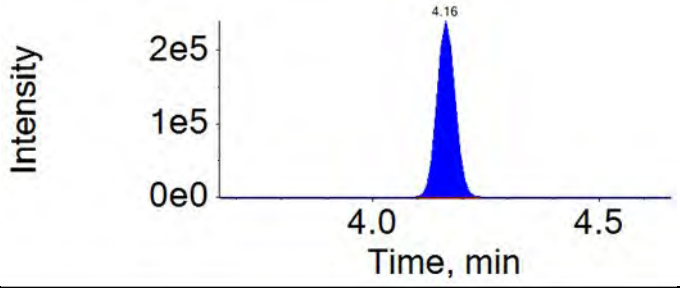
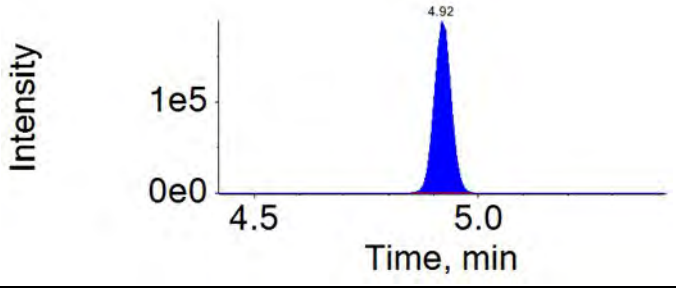
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

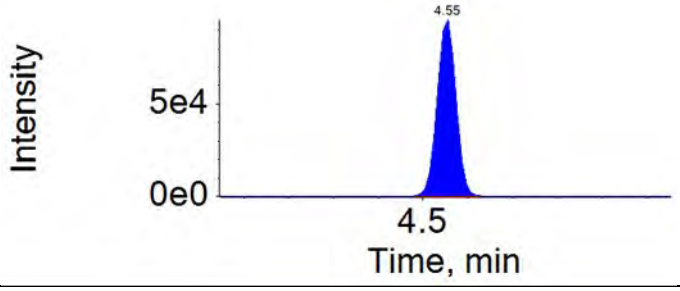
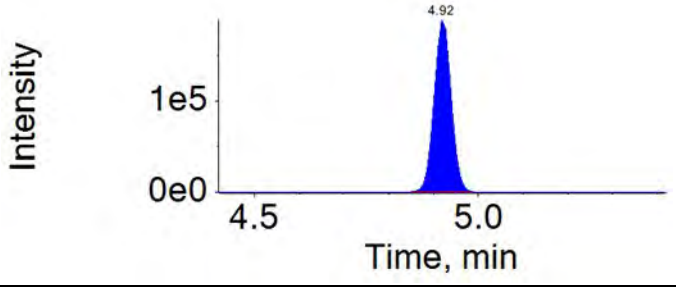
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

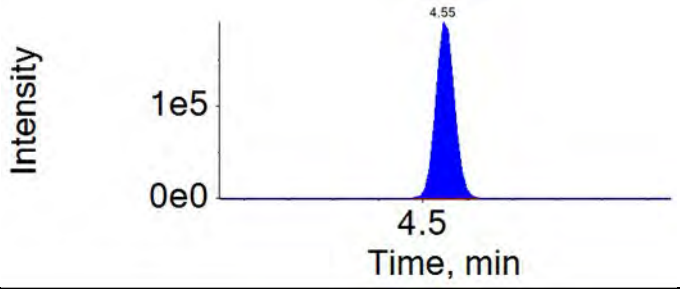
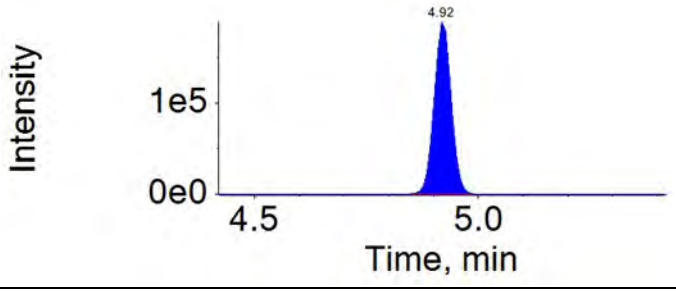
APPROVED
By MCD at 5:00 pm, 11/28/18

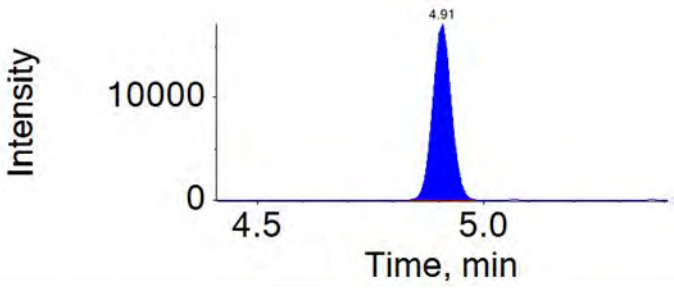
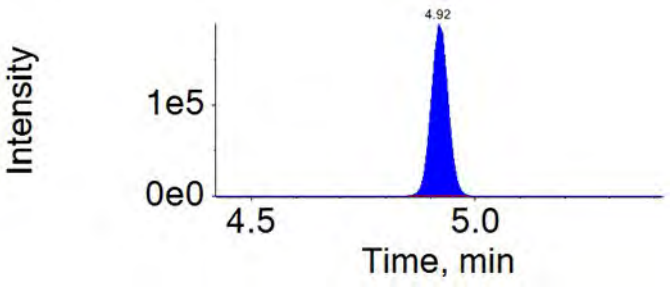
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

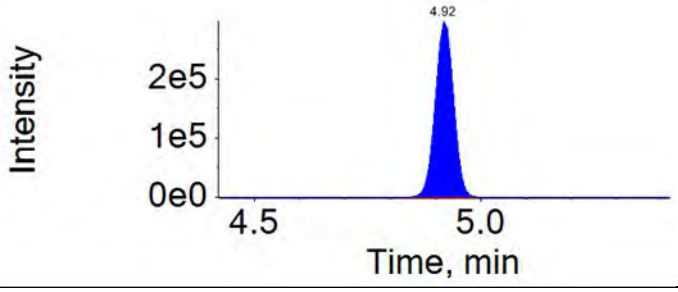
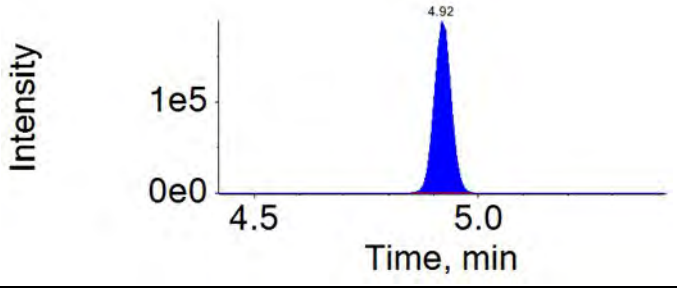
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

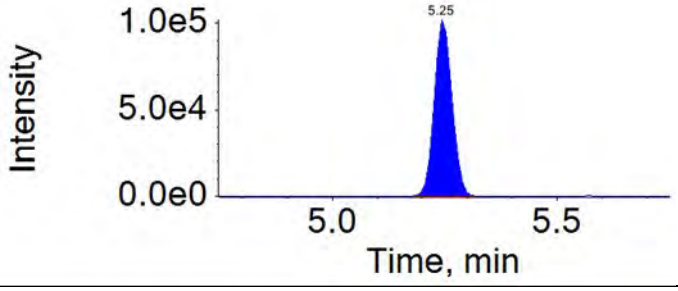
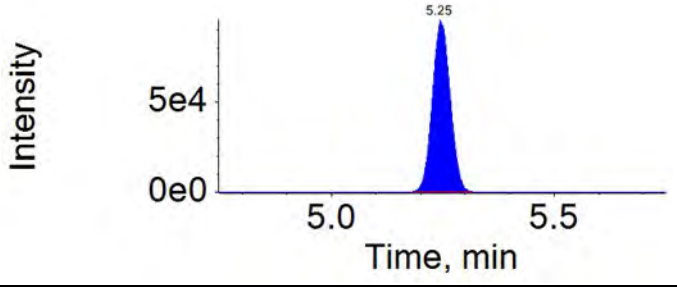
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

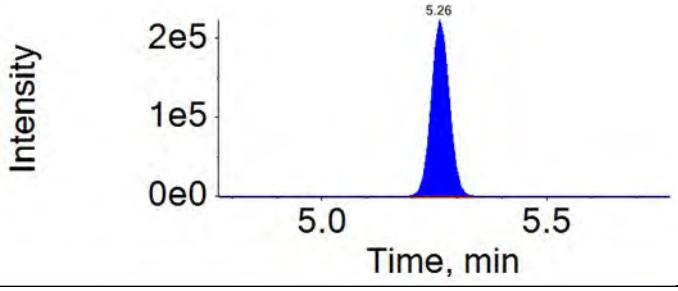
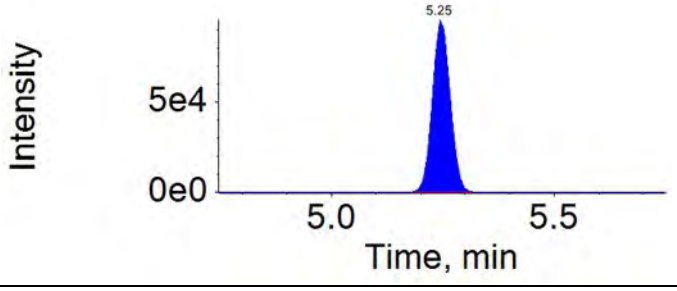
APPROVED
By MCD at 5:00 pm, 11/28/18

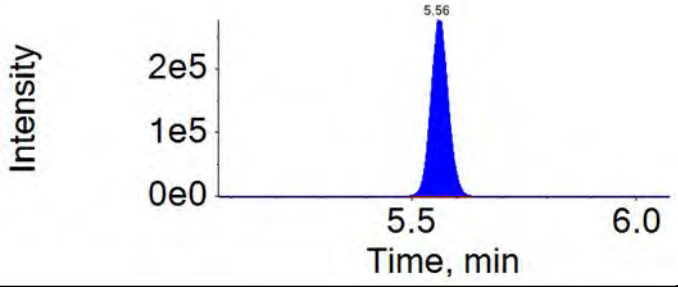
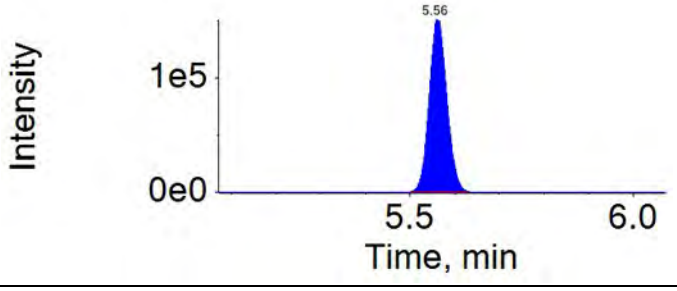
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

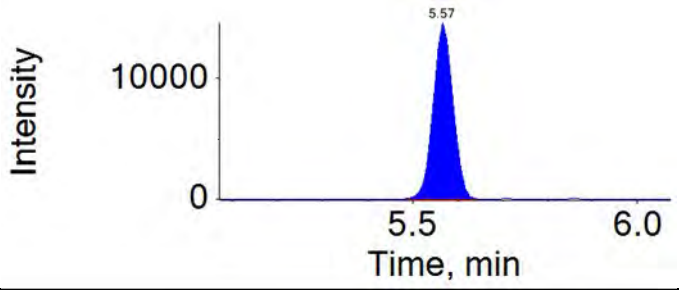
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

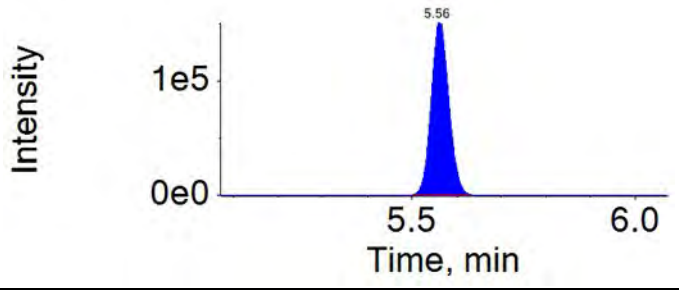
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

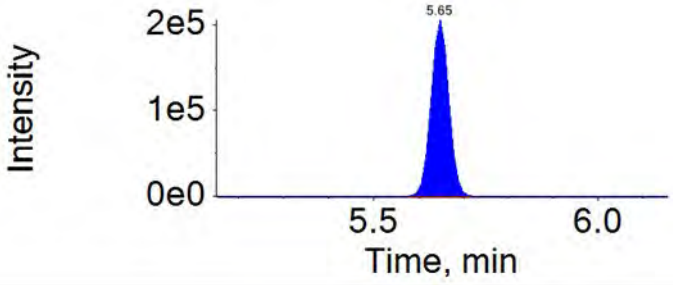
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

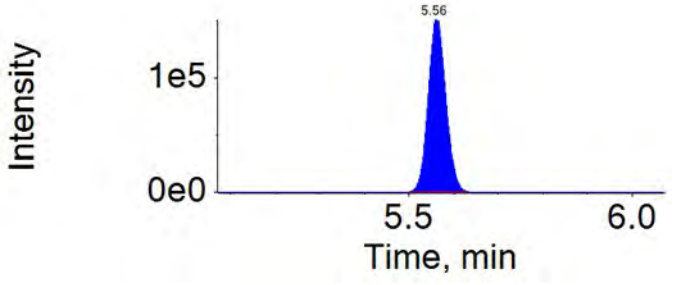
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



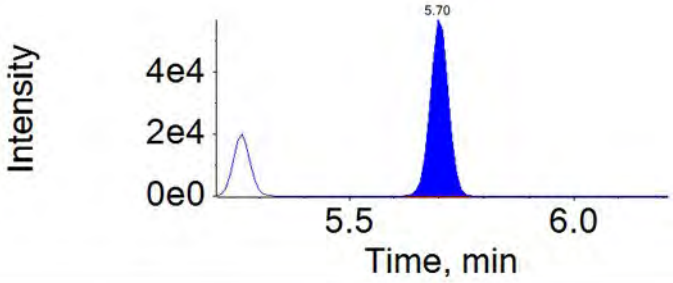


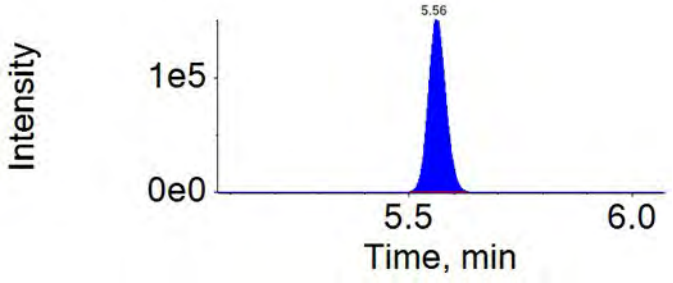
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



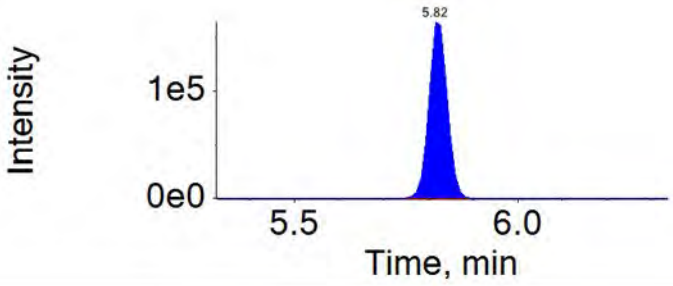


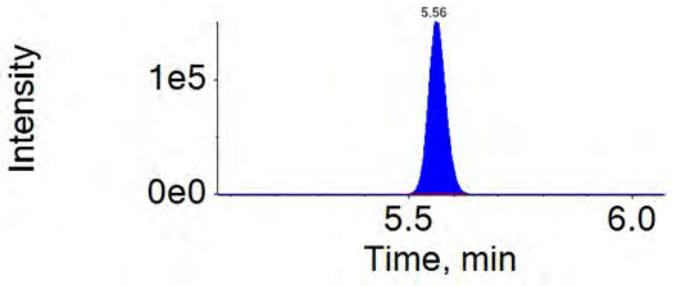
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0



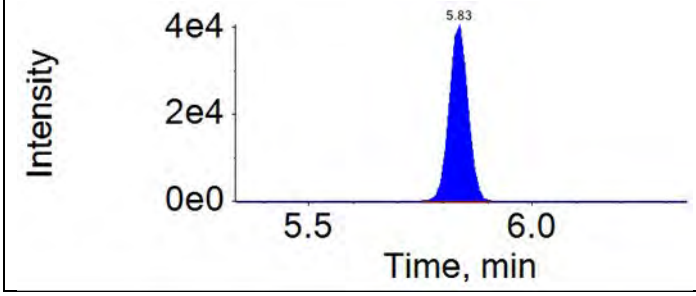


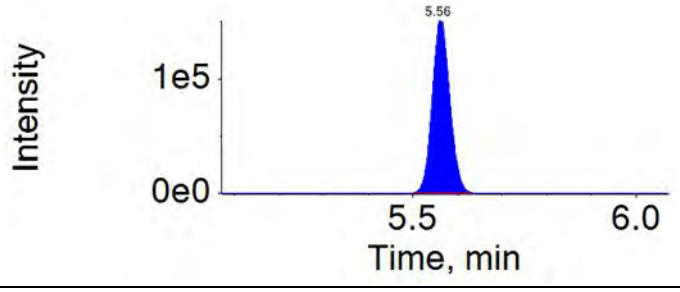
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

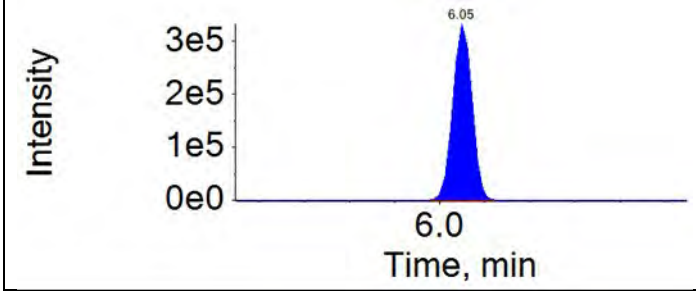
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

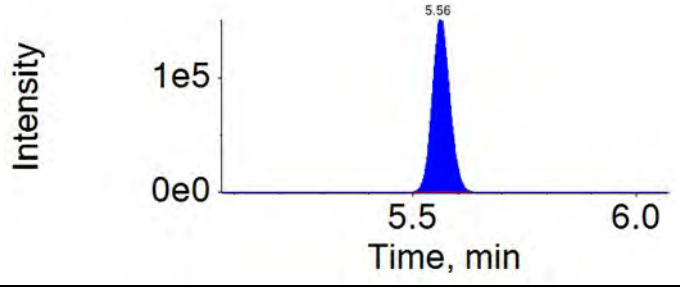
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



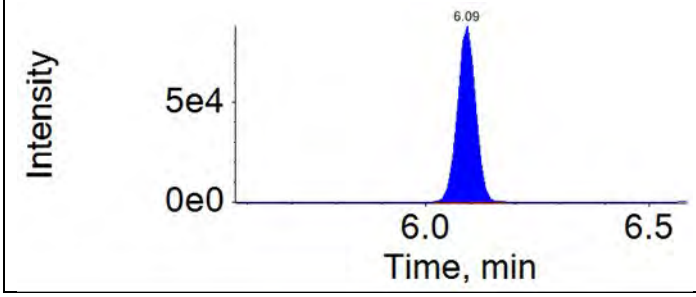


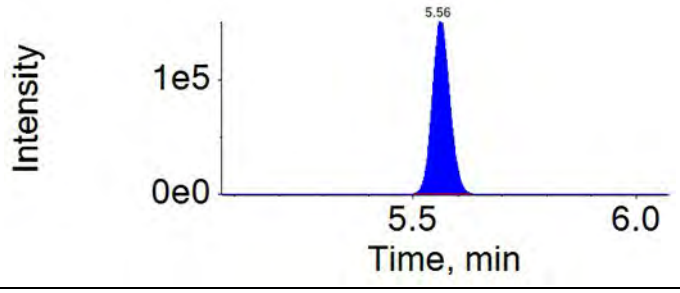
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



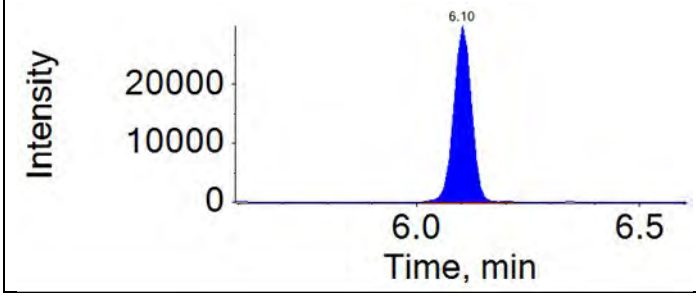


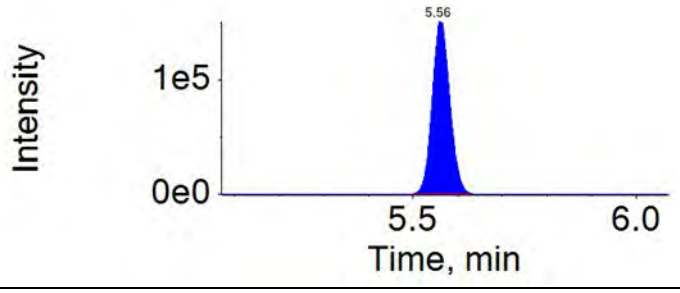
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



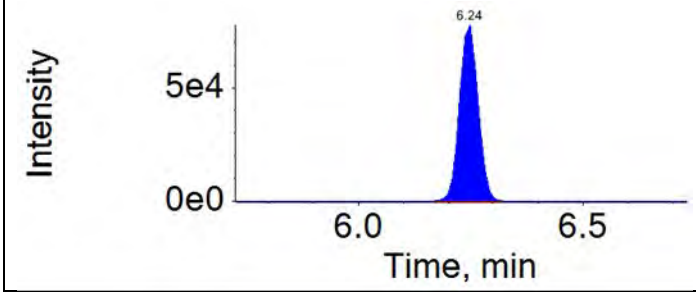


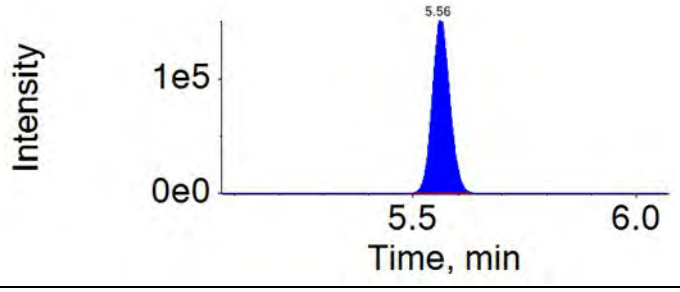
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

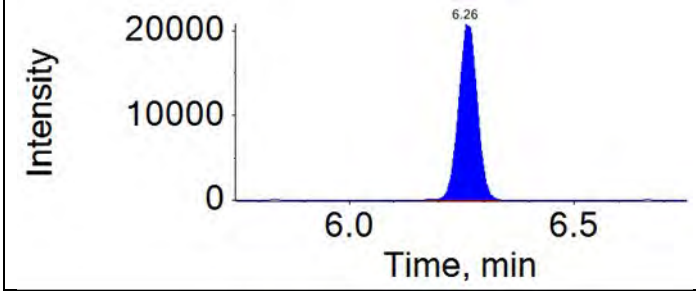
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

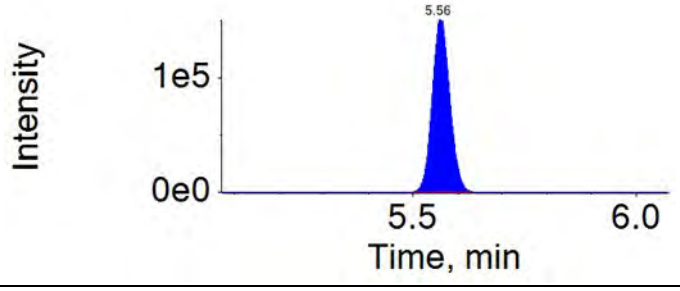
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



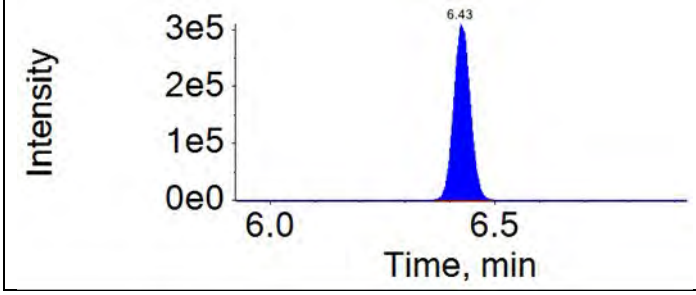


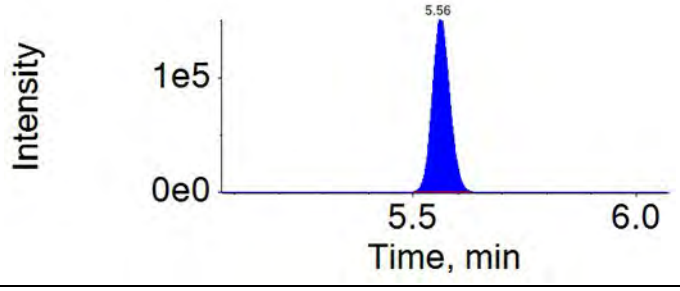
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



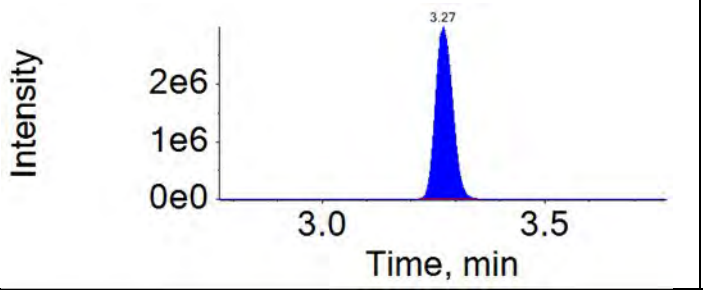


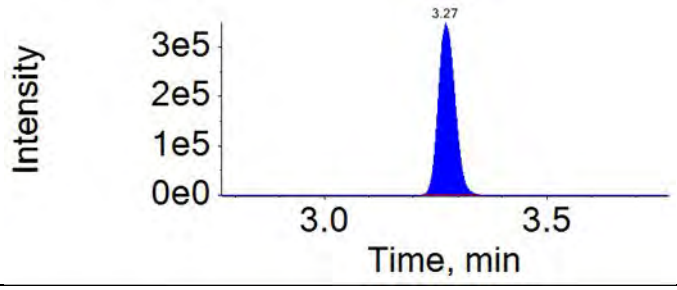
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

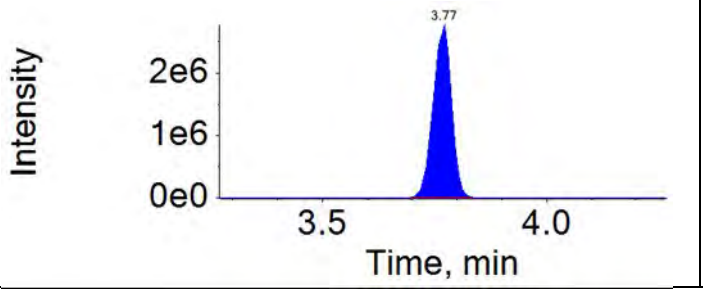
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

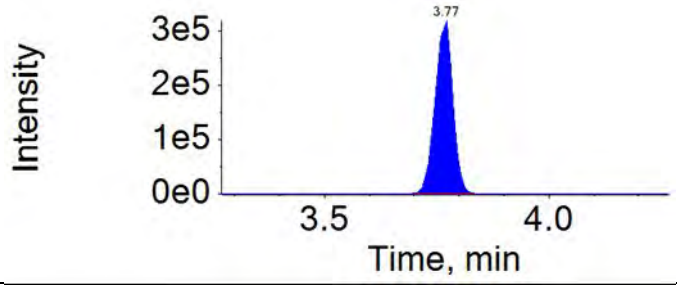
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



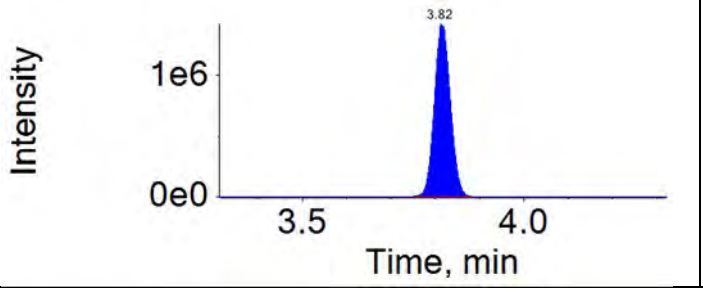


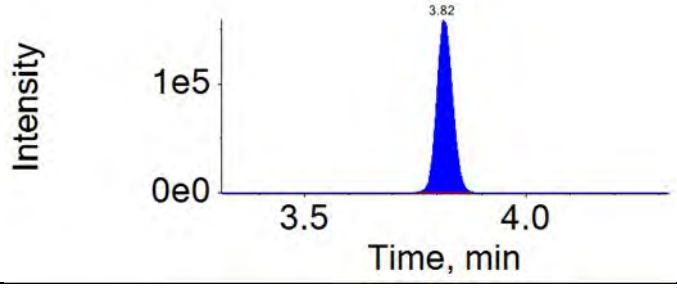
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



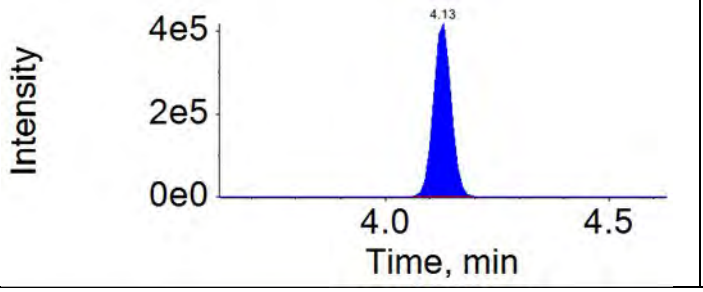


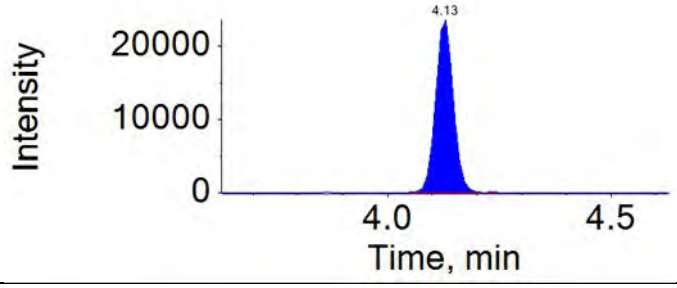
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



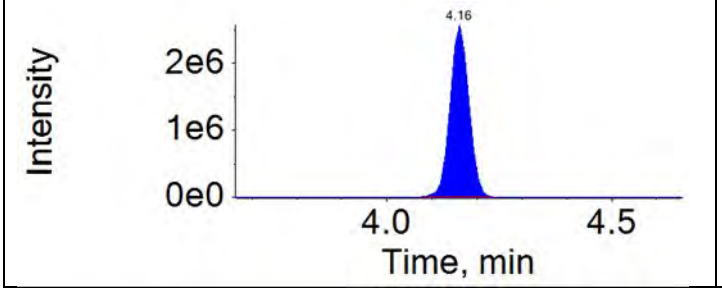


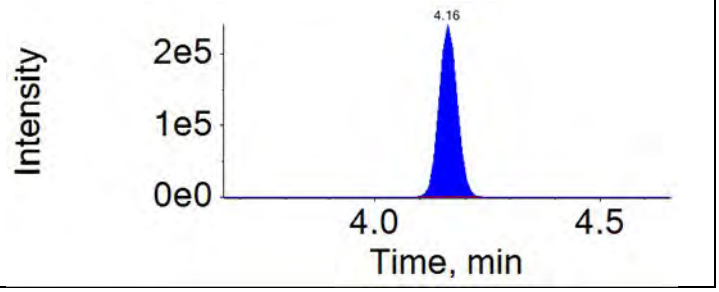
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

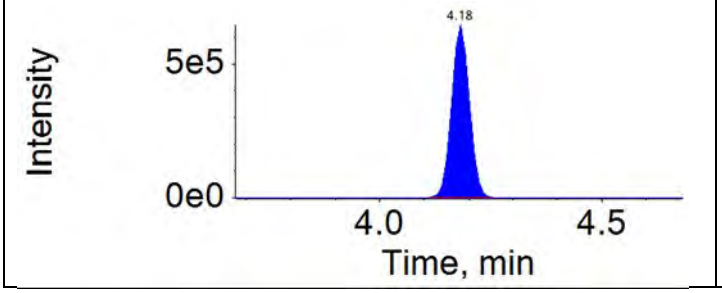
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

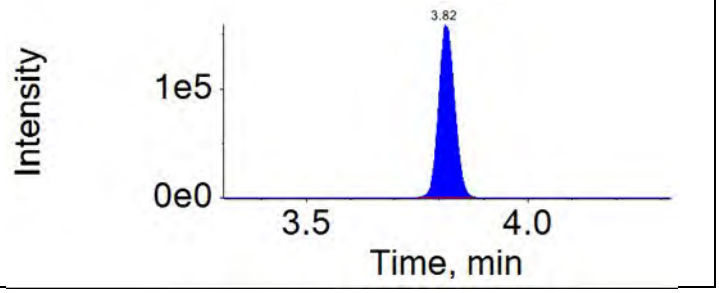
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



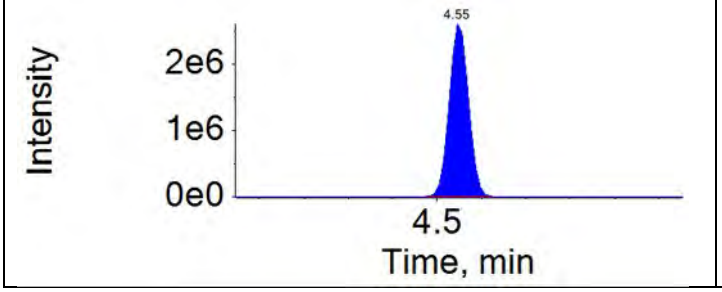


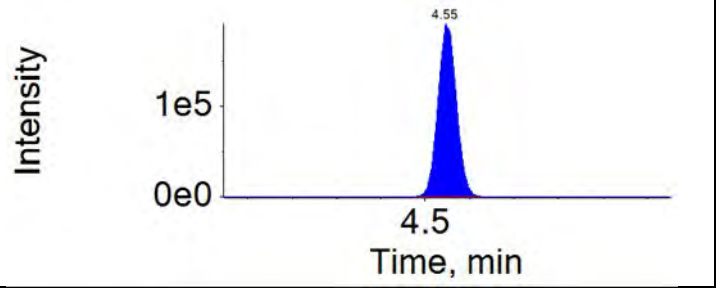
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



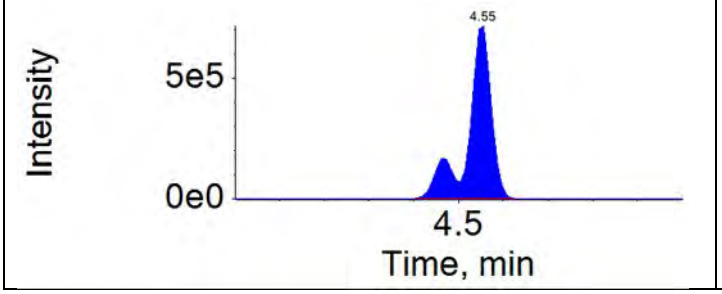


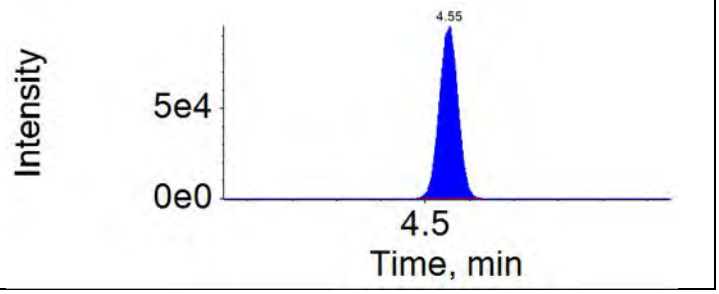
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

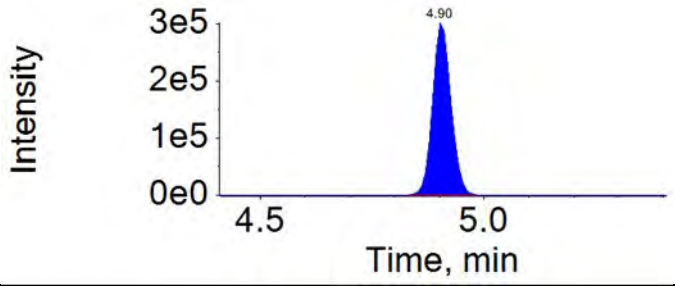
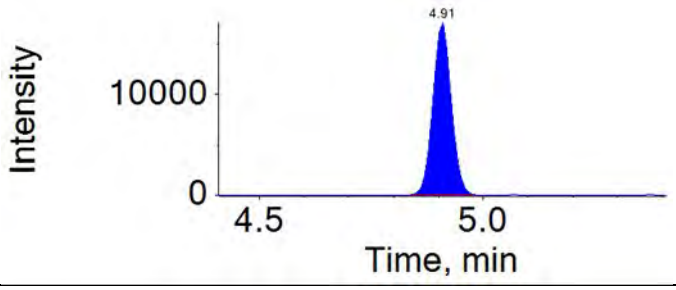


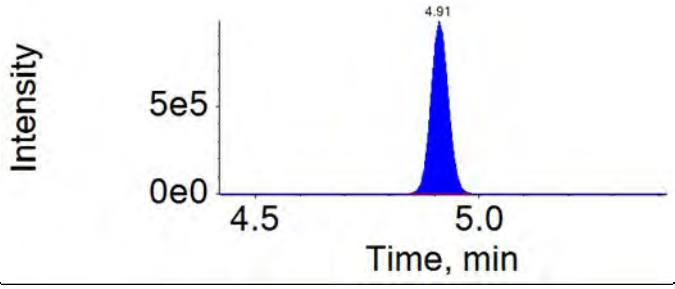
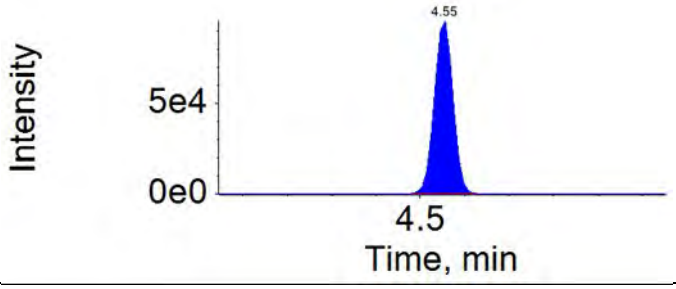


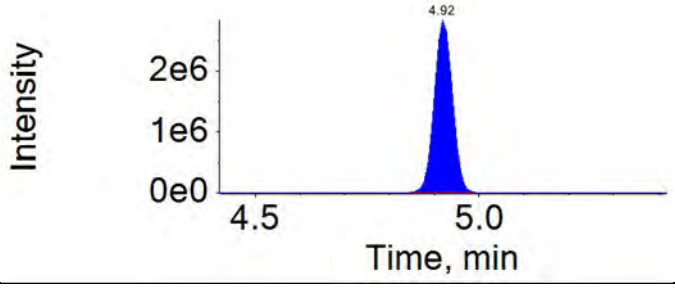
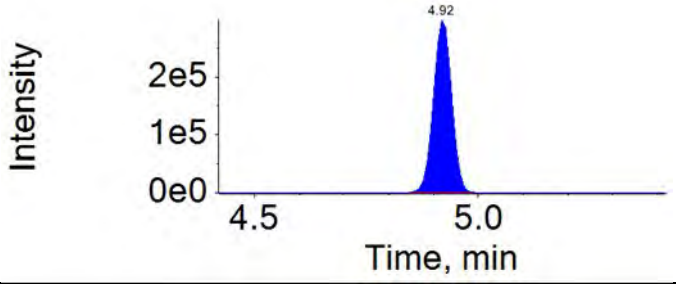
APPROVED
By MCD at 5:00 pm, 11/28/18

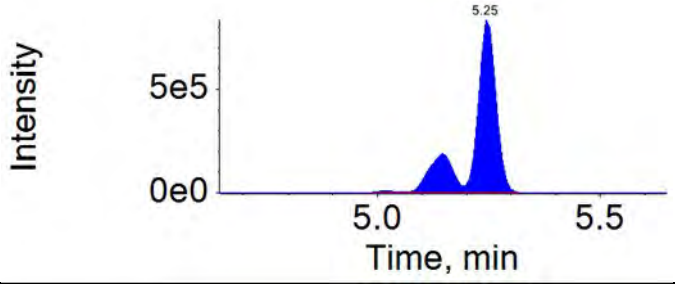
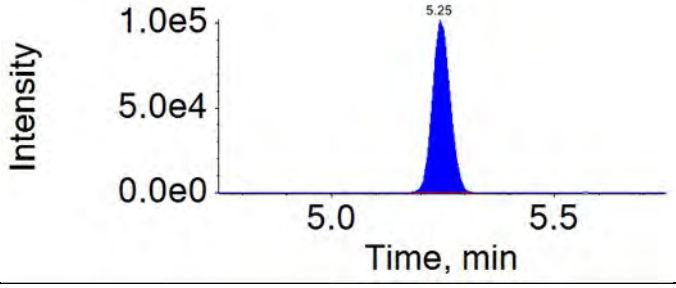
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

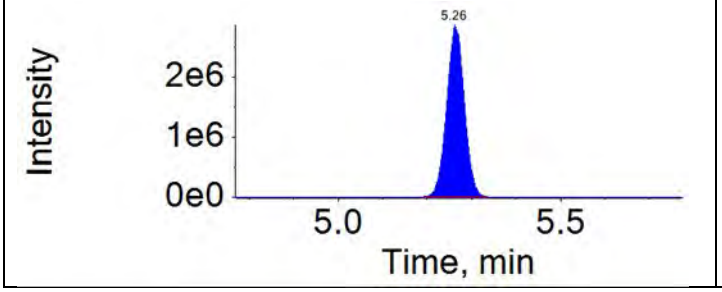
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

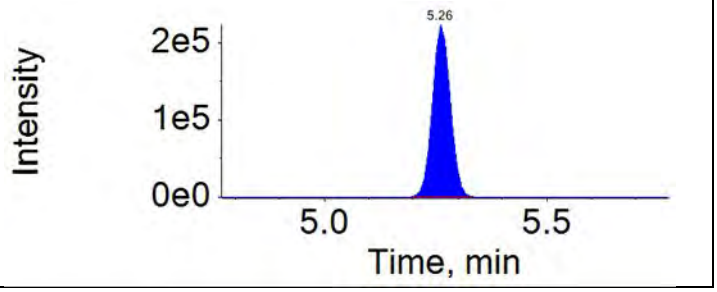
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

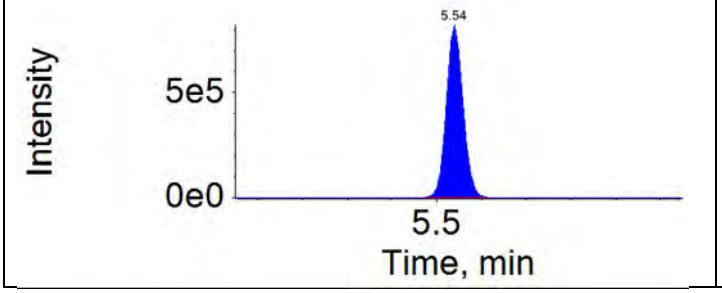
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

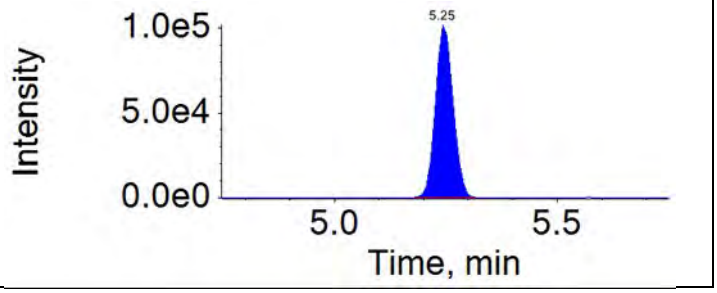
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



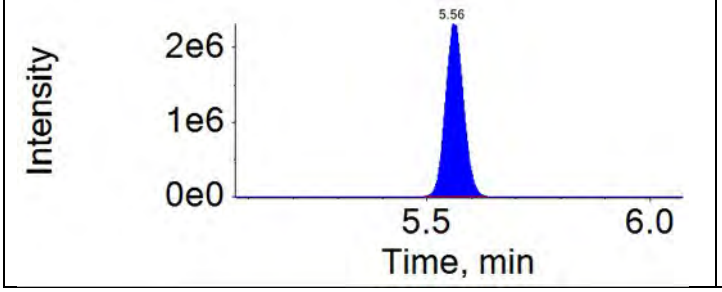


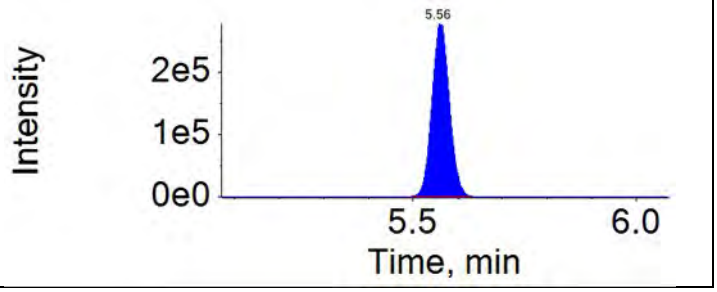
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



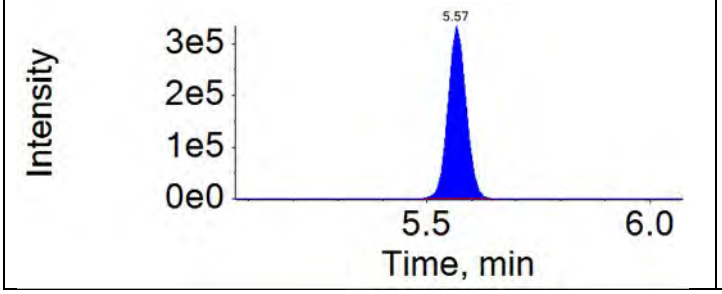


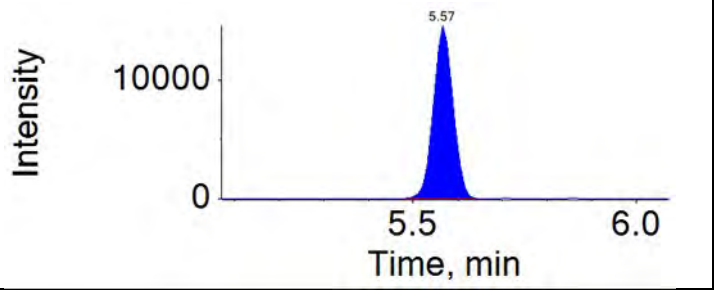
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



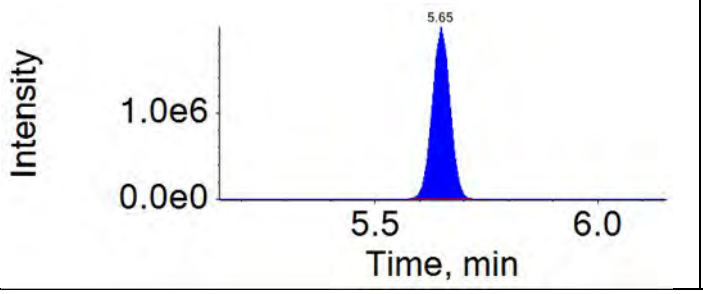


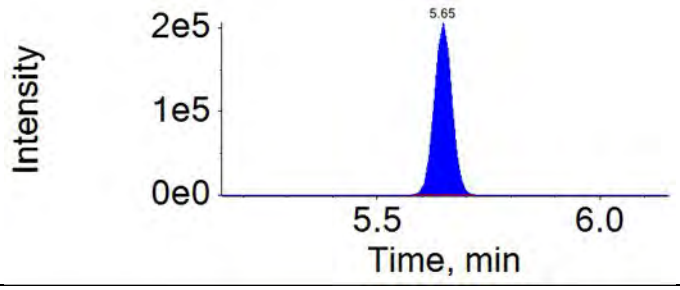
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

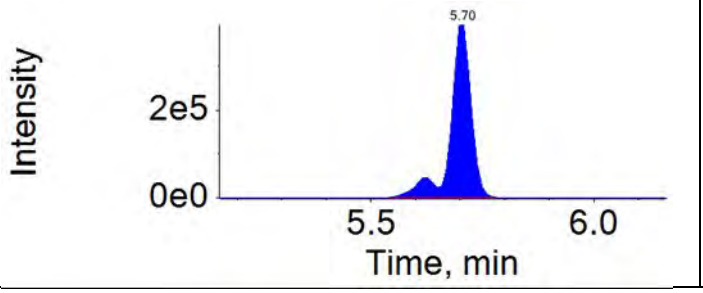
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

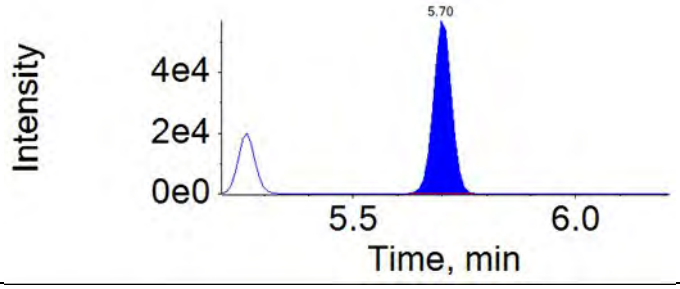
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



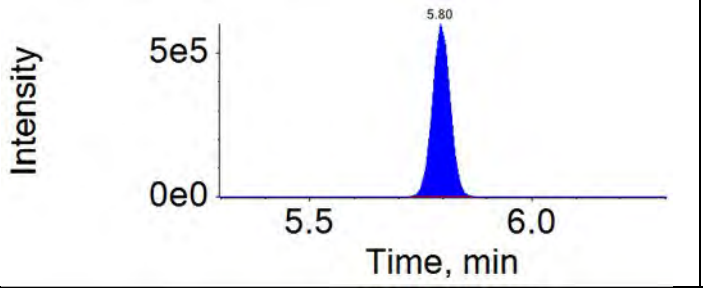


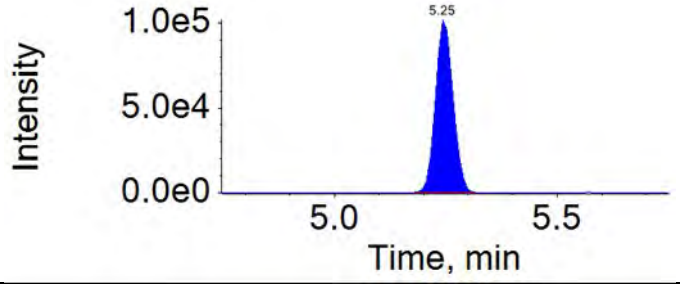
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



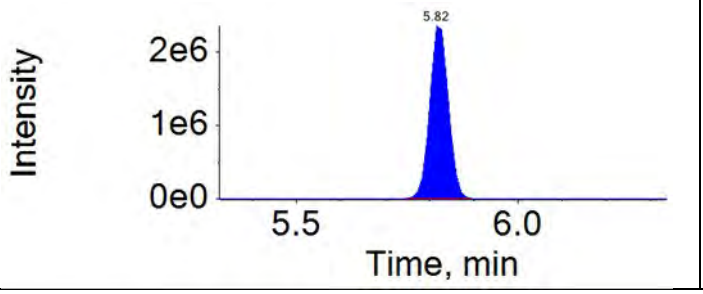


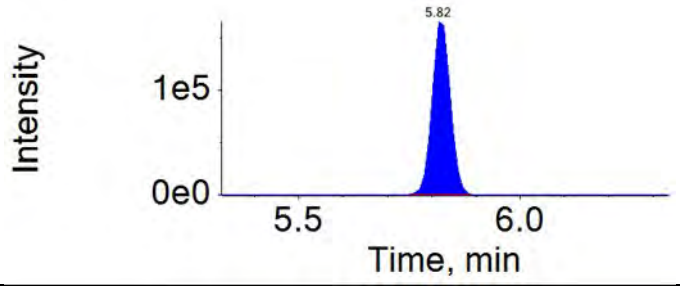
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



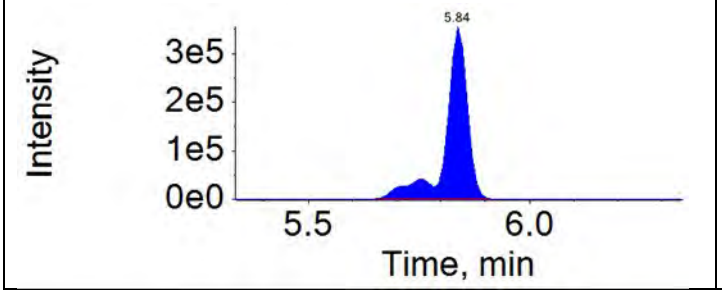


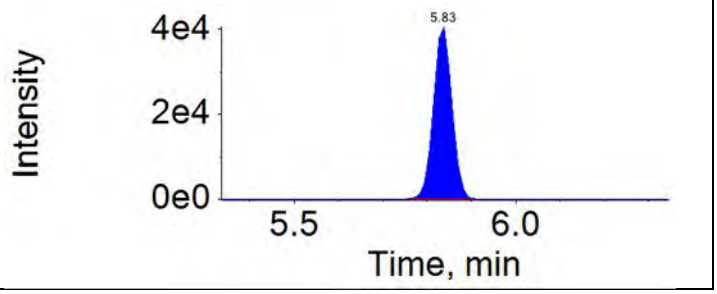
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

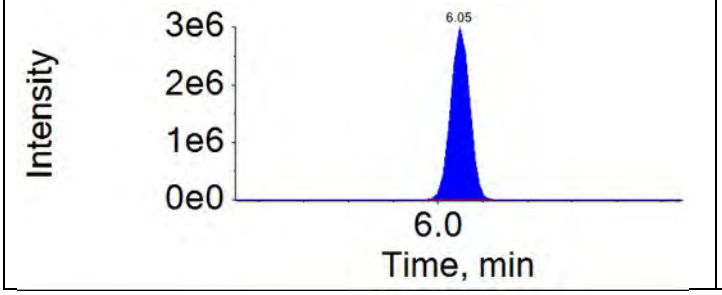
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

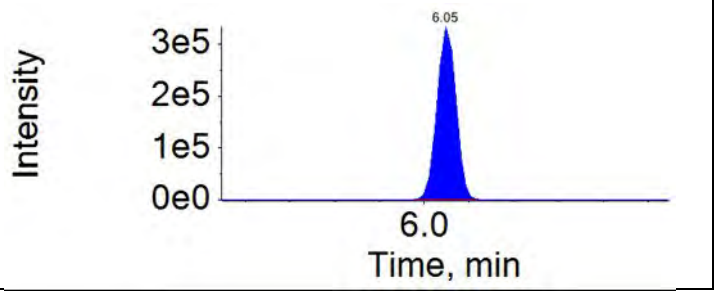
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



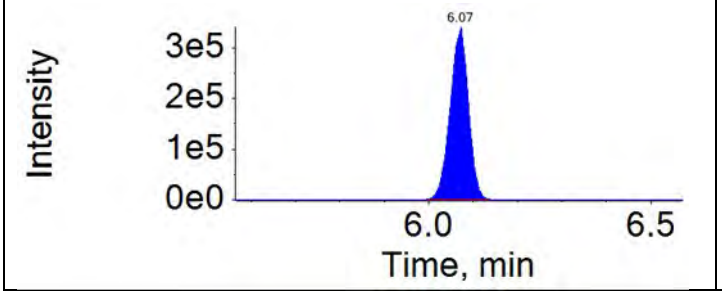


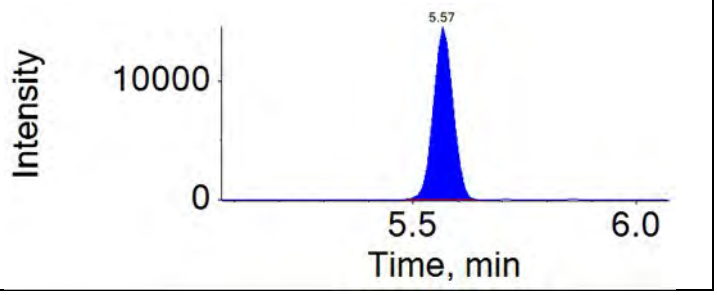
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



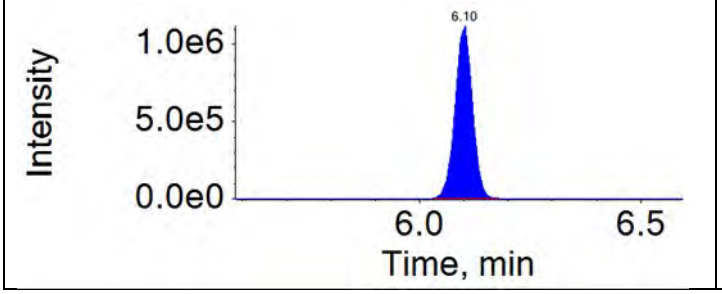


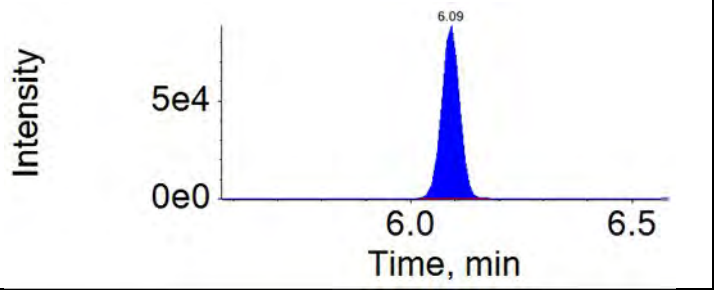
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



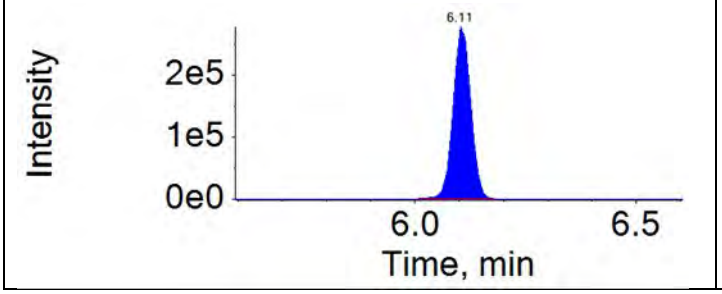


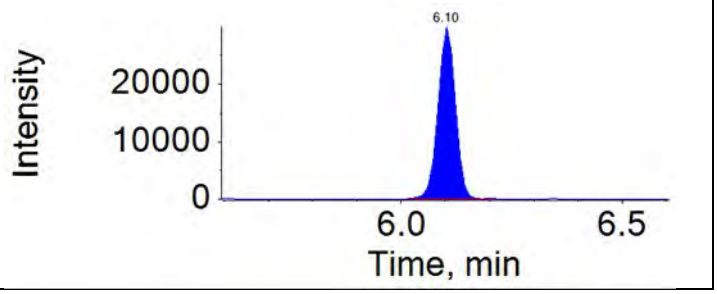
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

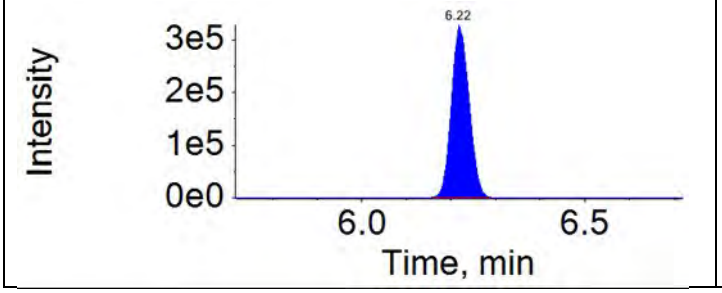
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

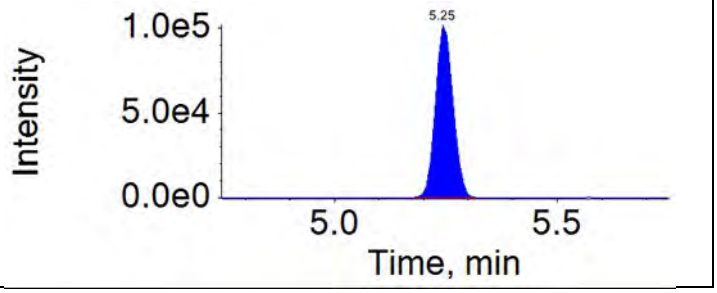
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



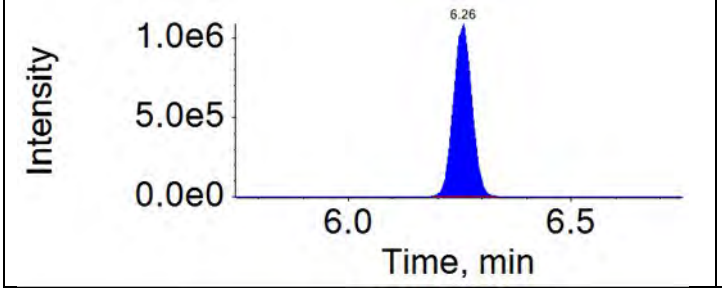


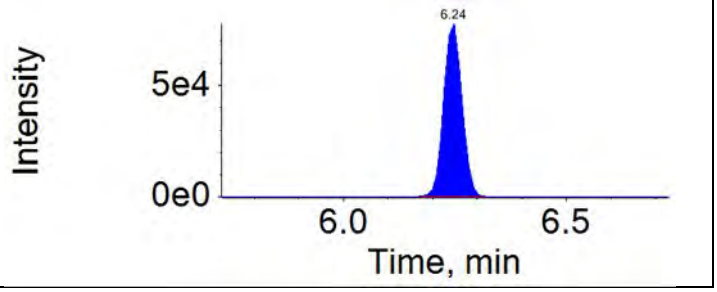
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



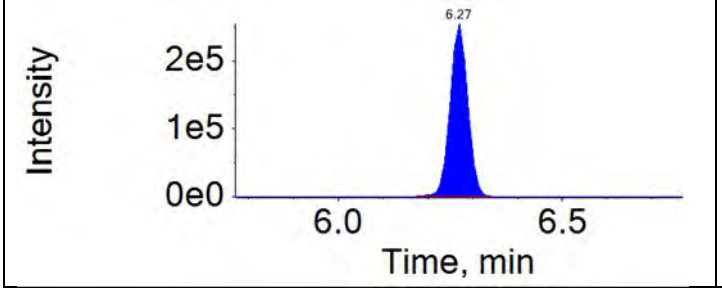


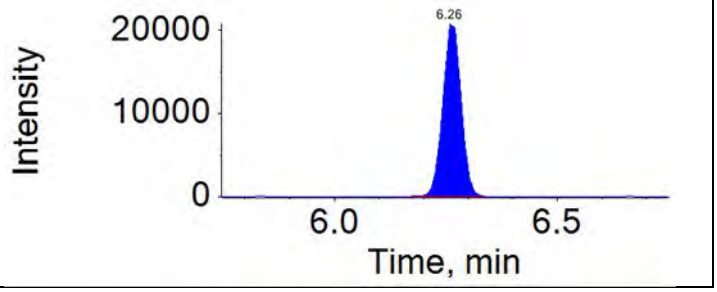
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



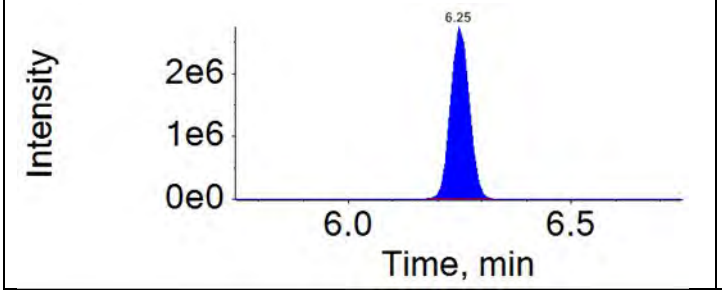


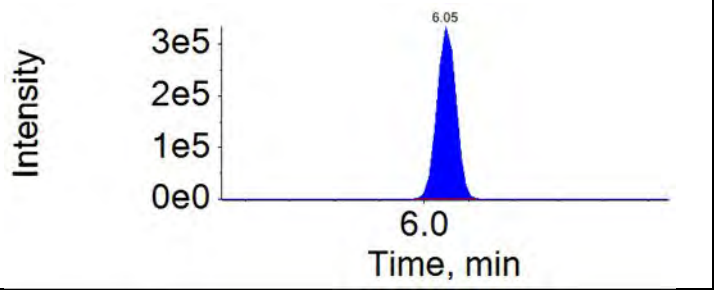
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

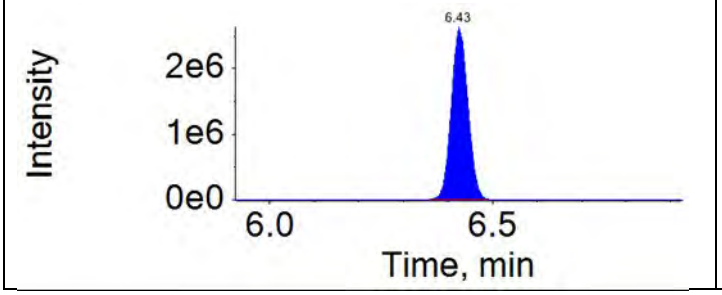
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

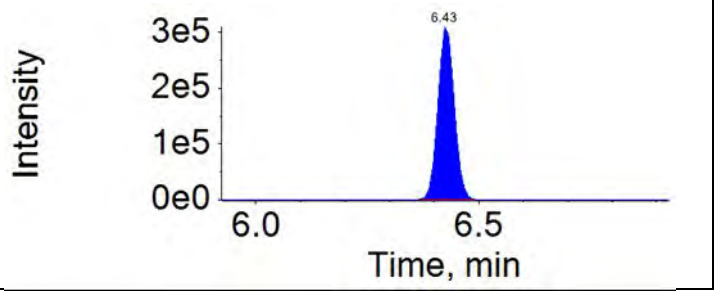
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



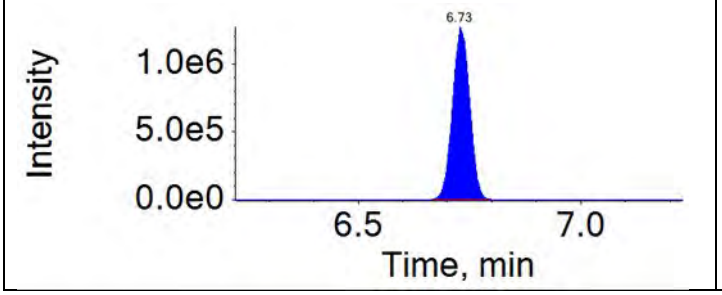


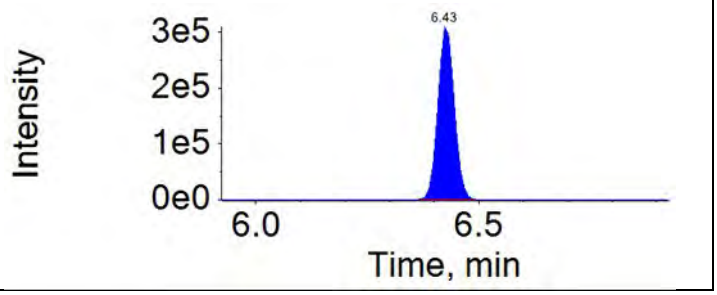
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



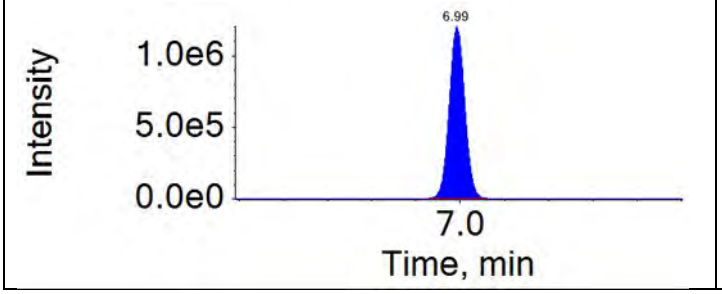


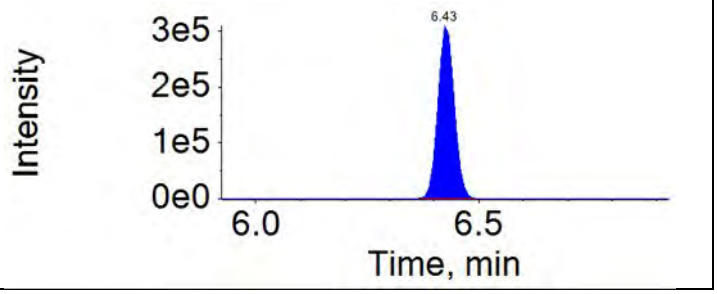
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



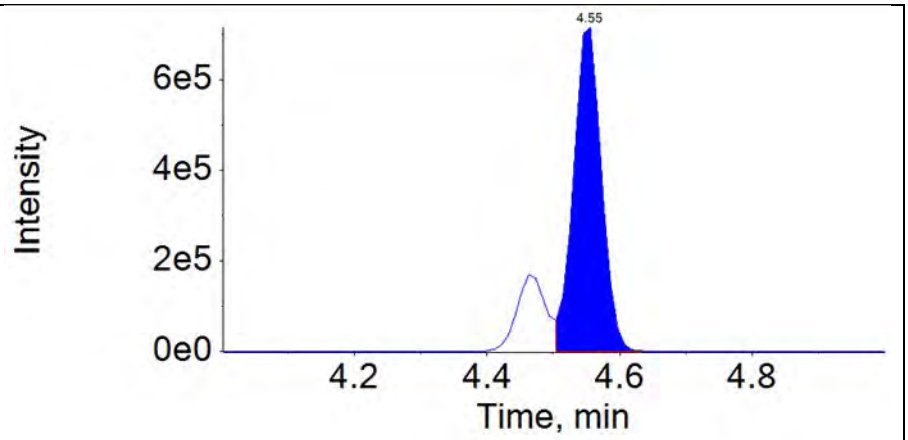


APPROVED
By MCD at 5:00 pm, 11/28/18

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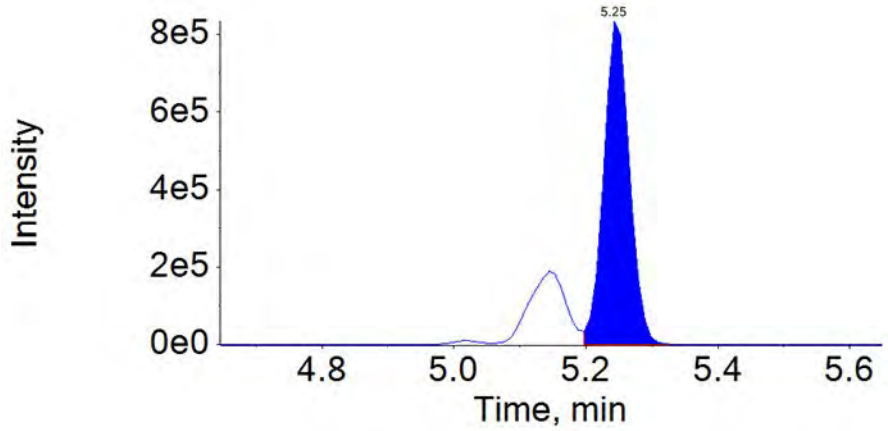
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.55
Peak Area:
2110073.26
Mass Range:
399.0 / 80.0
File Name:
18NOV28DCAL-11.wiff
Sample Name:
CAL6



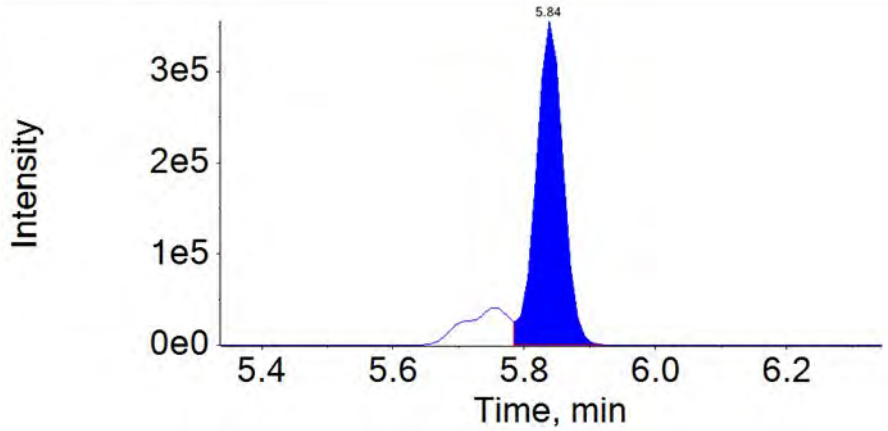
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
2264157.02
Mass Range:
499.0 / 80.0
File Name:
18NOV28DCAL-11.wiff
Sample Name:
CAL6



Integration Comment: incorrect integration

Component Name:
NEtFOSAA
RT (min.):
5.84
Peak Area:
1021470.64
Mass Range:
584.0 / 419.0
File Name:
18NOV28DCAL-11.wiff
Sample Name:
CAL6

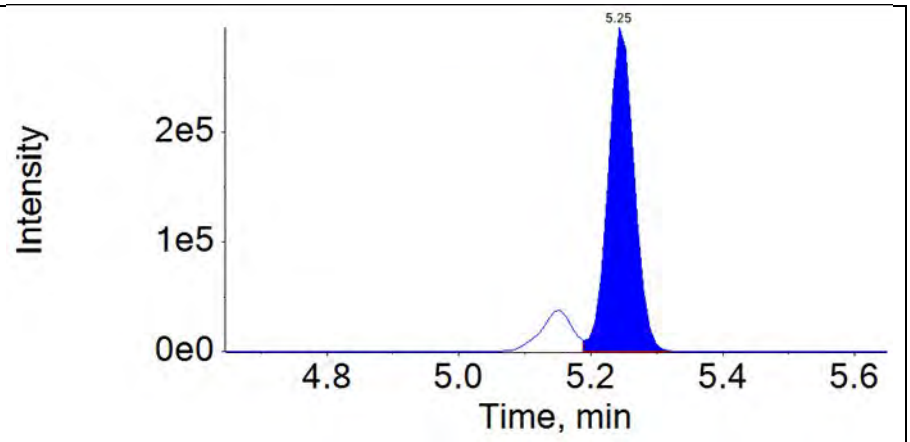


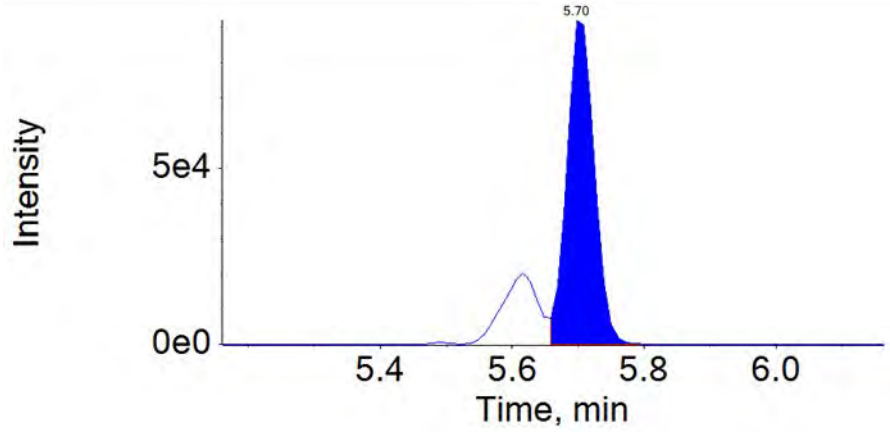
Integration Comment: incorrect integration

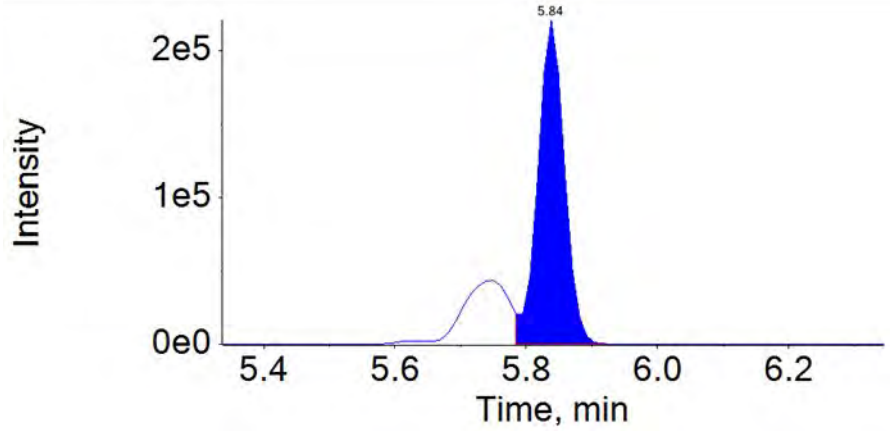
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFOS_2 **RT (min.):** 5.25 **Peak Area:** 810528.26 **Mass Range:** 499.0 / 99.0 **File Name:** 18NOV28DCAL-11.wiff **Sample Name:** CAL6	 **Integration Comment:** incorrect integration

Component Name: NMeFOSAA_2 **RT (min.):** 5.70 **Peak Area:** 267798.15 **Mass Range:** 570.0 / 483.0 **File Name:** 18NOV28DCAL-11.wiff **Sample Name:** CAL6	 **Integration Comment:** incorrect integration

Component Name: NEtFOSAA_2 **RT (min.):** 5.84 **Peak Area:** 625806.77 **Mass Range:** 584.0 / 526.0 **File Name:** 18NOV28DCAL-11.wiff **Sample Name:** CAL6	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

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By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Ion Ratio Report

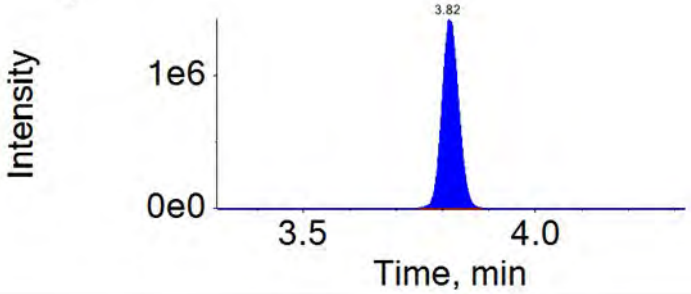
Sample Name: CAL6 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-11.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	3600470.83	A	0.3655	0.3566			
PFBS_2	3.82	1.00	1284104.34	A	0.3655	0.3566	-2	50	
4:2-FTS	4.13	1.00	1148569.18	A	0.6383	0.6279			
4:2-FTS_2	4.13	1.00	721221.12	A	0.6383	0.6279	-2	50	
PFHxA	4.16	1.00	7468739.11	A	0.0103	0.0117			
PFHxA_2	4.16	1.00	87256.25	A	0.0103	0.0117	13	50	
PFPeS	4.18	1.10	1793808.03	A	0.4976	0.5229			
PFPeS_2	4.18	1.10	937895.85	A	0.4976	0.5229	5	50	
PFHpA	4.55	1.00	7873271.20	A	0.0557	0.0567			
PFHpA_2	4.55	1.00	446309.31	A	0.0557	0.0567	2	50	
PFHxS	4.55	1.00	2625950.90	M	0.3693	0.3570			
PFHxS_2	4.55	1.00	937577.08	A	0.3693	0.3570	-3	50	
6:2-FTS	4.90	1.00	859948.62	A	0.6625	0.6492			
6:2-FTS_2	4.90	1.00	558302.88	A	0.6625	0.6492	-2	50	
PFHpS	4.91	1.08	2686833.27	A	0.3915	0.4117			
PFHpS_2	4.91	1.08	1106038.20	A	0.3915	0.4117	5	50	
PFOA	4.92	1.00	8012665.34	A	0.0573	0.0550			
PFOA_2	4.92	1.00	440521.78	A	0.0573	0.0550	-4	50	
PFOS	5.25	1.00	3026664.45	M	0.2960	0.3091			
PFOS_2	5.25	1.00	935561.90	M	0.2960	0.3091	4	50	
PFNA	5.26	1.00	7843086.90	A	0.0201	0.0194			
PFNA_2	5.26	1.00	152065.57	A	0.0201	0.0194	-3	50	
PFNS	5.54	1.06	2116661.52	A	0.4794	0.4605			
PFNS_2	5.54	1.06	974696.88	A	0.4794	0.4605	-4	50	
PFDA	5.56	1.00	6551370.45	A	0.0075	0.0069			
PFDA_2	5.56	1.00	45516.35	A	0.0075	0.0069	-7	50	
8:2-FTS	5.57	1.00	938590.07	A	0.5380	0.5988			
8:2-FTS_2	5.57	1.00	561991.71	A	0.5380	0.5988	11	50	
NMeFOSAA	5.70	1.00	1292829.79	A	0.2305	0.2668			
NMeFOSAA_2	5.70	1.00	344955.19	M	0.2305	0.2668	16	50	
PFDS	5.80	1.10	1665920.17	A	0.5356	0.4889			
PFDS_2	5.80	1.10	814397.56	A	0.5356	0.4889	-9	50	
PFUnDA	5.82	1.00	6885622.64	A	0.0038	0.0040			
PFUnDA_2	5.82	1.00	27237.03	A	0.0038	0.0040	4	50	
NEtFOSAA	5.84	1.00	1214766.38	M	0.7356	0.6821			
NEtFOSAA_2	5.84	1.00	828574.74	M	0.7356	0.6821	-7	50	
PFDoDA	6.05	1.00	8865844.73	A	0.0130	0.0133			
PFDoDA_2	6.05	1.00	118287.14	A	0.0130	0.0133	2	50	
10:2-FTS	6.07	1.09	972346.85	A	0.6989	0.7475			
10:2-FTS_2	6.07	1.09	726827.33	A	0.6989	0.7475	7	50	
PFTrDA	6.25	1.03	7958673.38	A	0.0090	0.0094			
PFTrDA_2	6.25	1.03	74438.34	A	0.0090	0.0094	4	50	
PFTeDA	6.43	1.00	6793735.34	A	0.0056	0.0064			
PFTeDA_2	6.43	1.00	43469.69	A	0.0056	0.0064	14	50	
PFHxDA	6.73	1.05	3402004.45	A	0.0646	0.0655			
PFHxDA_2	6.73	1.05	222711.21	A	0.0646	0.0655	1	50	
PFODA	6.99	1.09	2942000.06	A	0.0264	0.0267			
PFODA_2	6.99	1.09	78596.75	A	0.0264	0.0267	1	50	

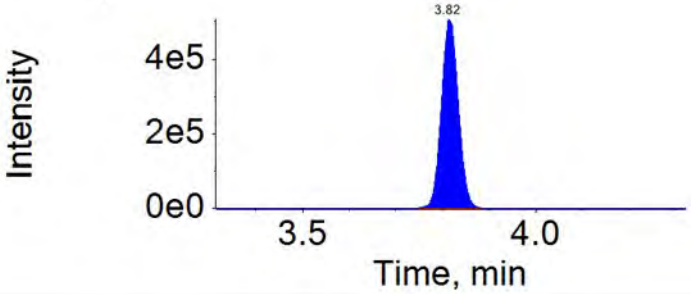
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

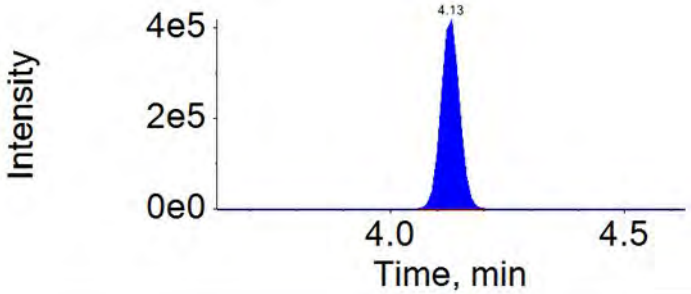
Component: PFBS
Primary Mass: 299.0 / 80.0



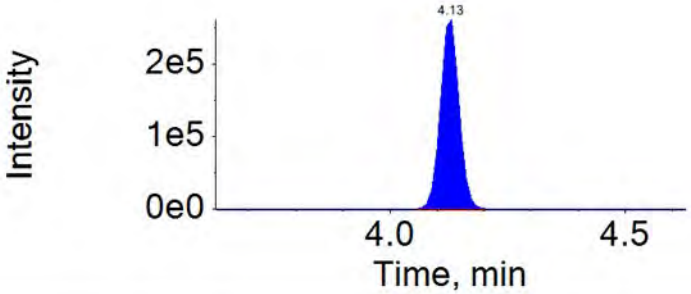
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



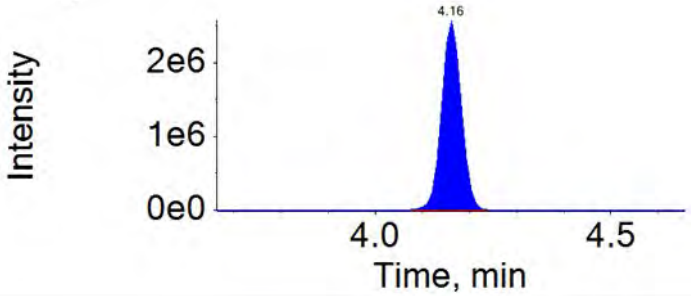
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



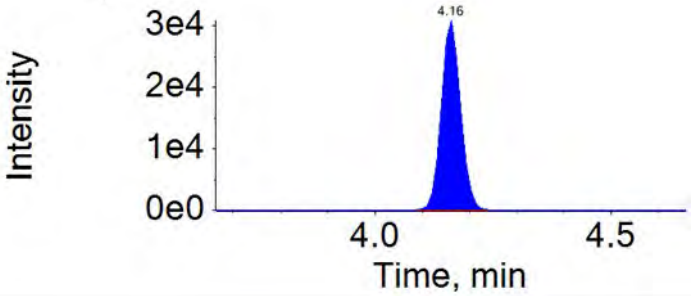
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



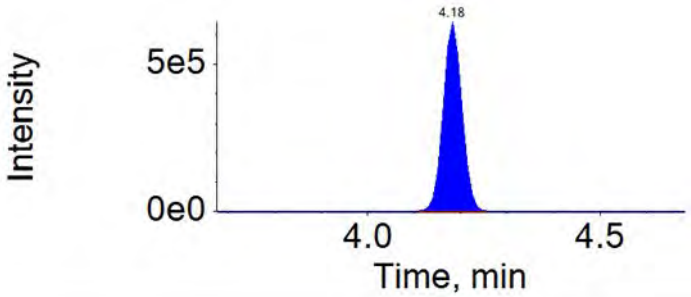
Component: PFHxA
Primary Mass: 313.0 / 269.0



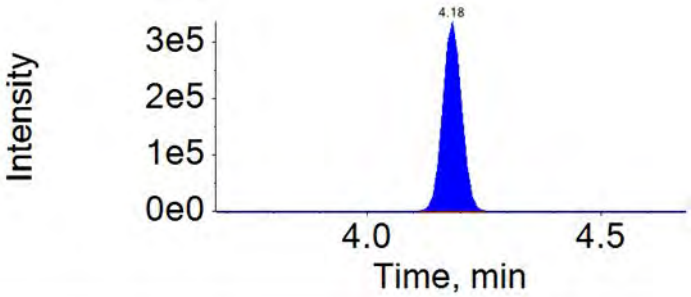
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



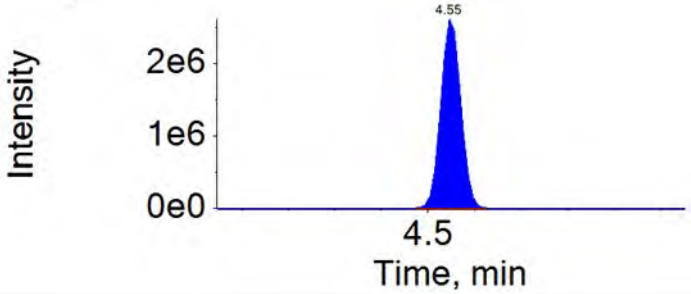
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



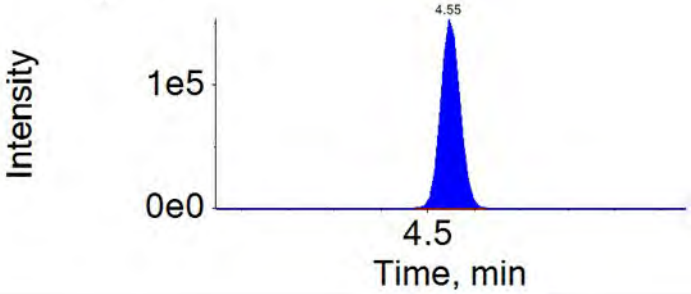
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

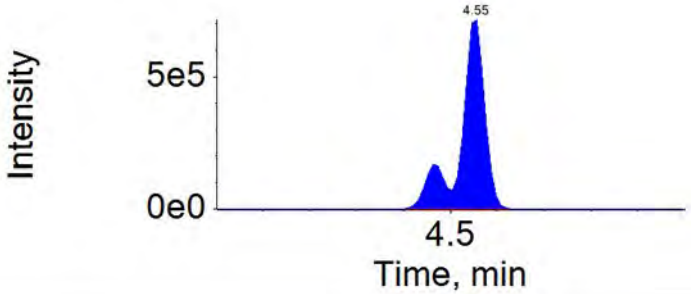
Component: PFHpA
Primary Mass: 363.0 / 319.0



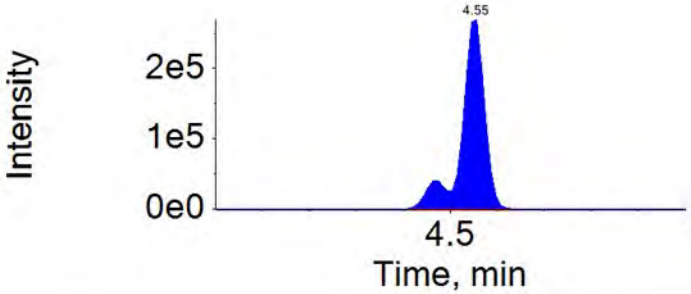
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



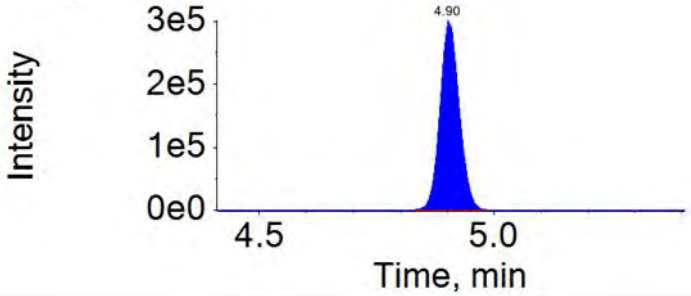
Component: PFHxS
Primary Mass: 399.0 / 80.0



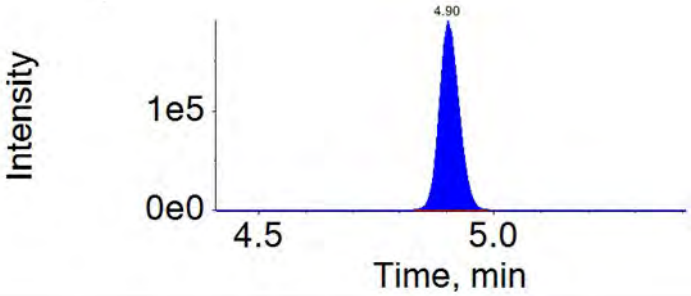
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



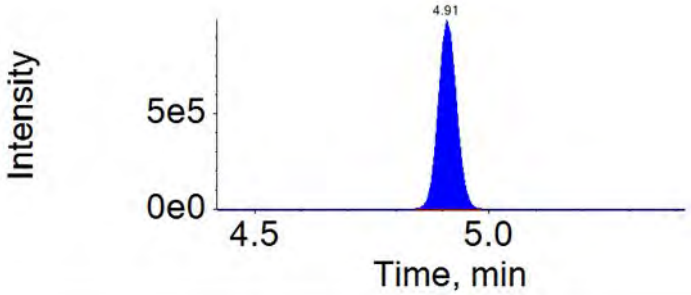
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



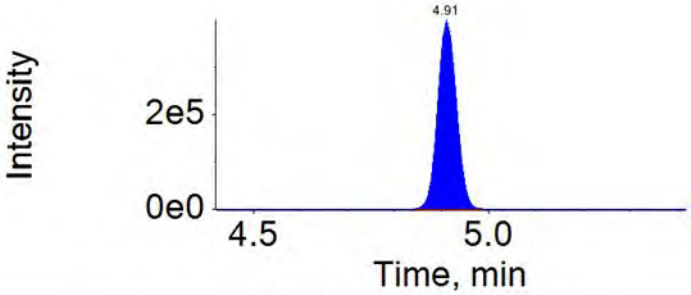
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



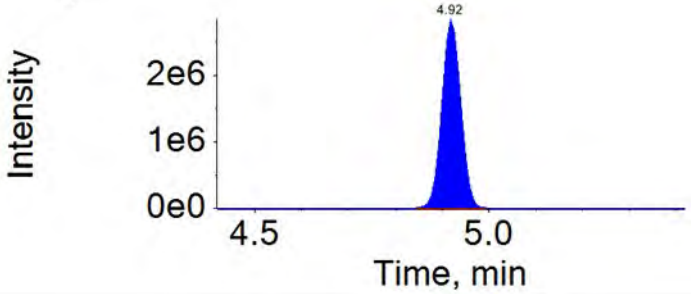
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



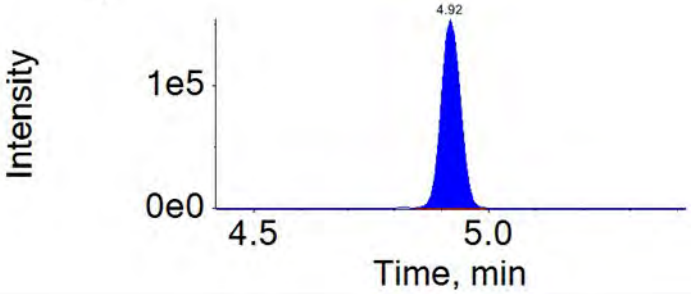
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REVIEWED
By HMK at 12:22 pm, 11/29/18

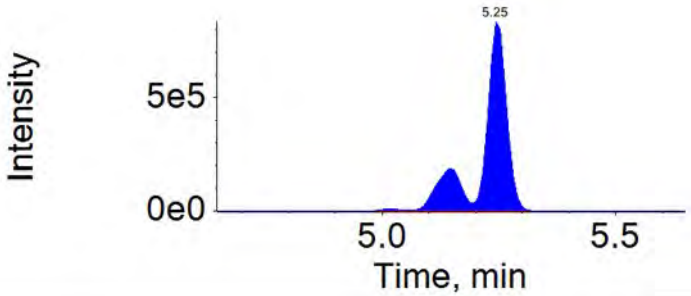
Component: PFOA
Primary Mass: 413.0 / 369.0



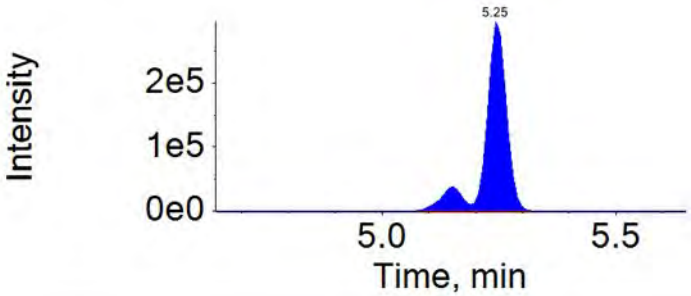
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



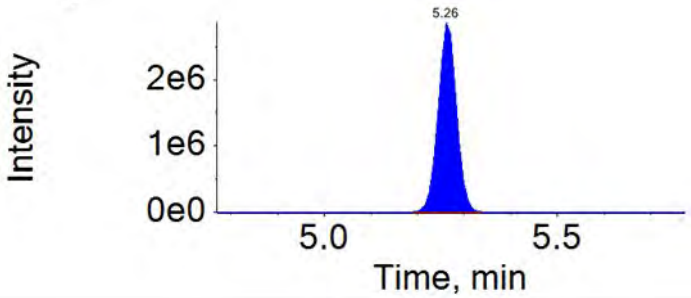
Component: PFOS
Primary Mass: 499.0 / 80.0



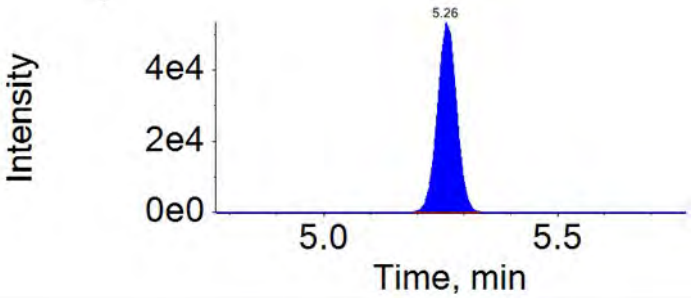
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



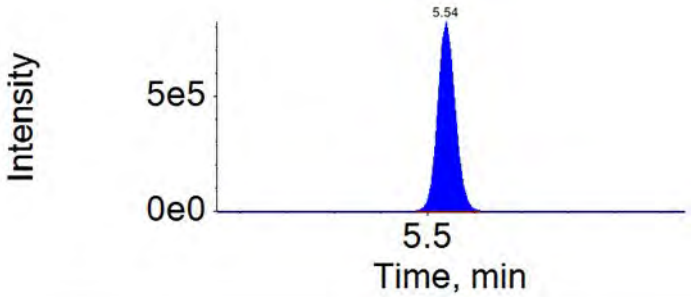
Component: PFNA
Primary Mass: 463.0 / 419.0



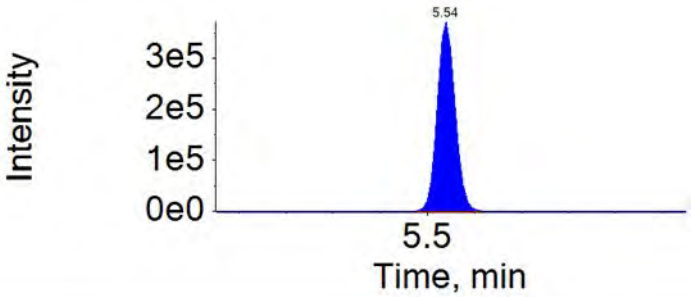
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



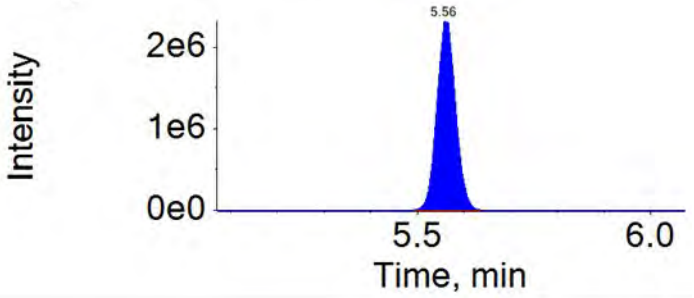
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



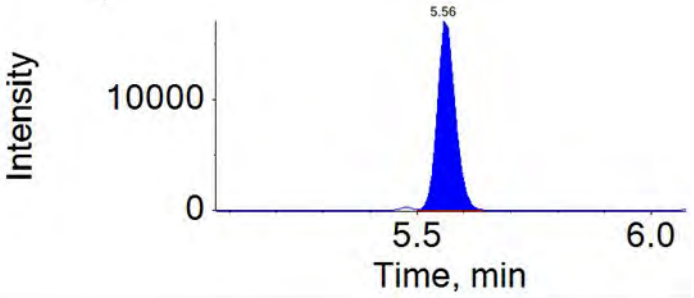
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

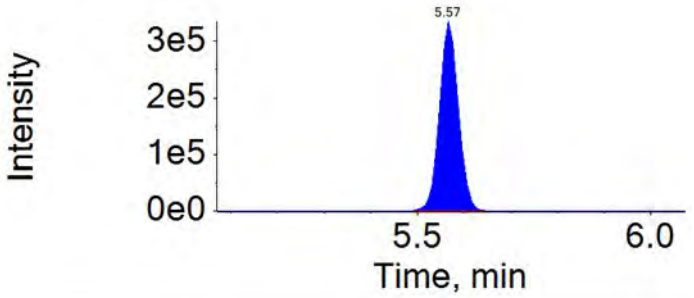
Component: PFDA
Primary Mass: 513.0 / 469.0



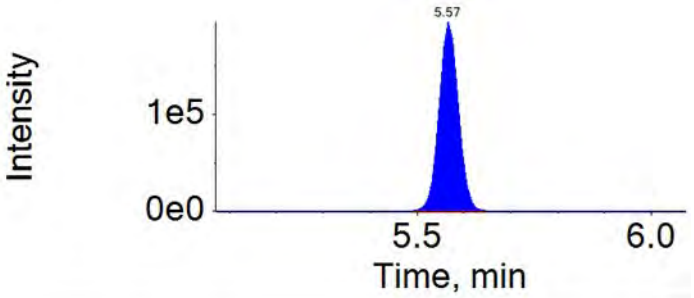
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



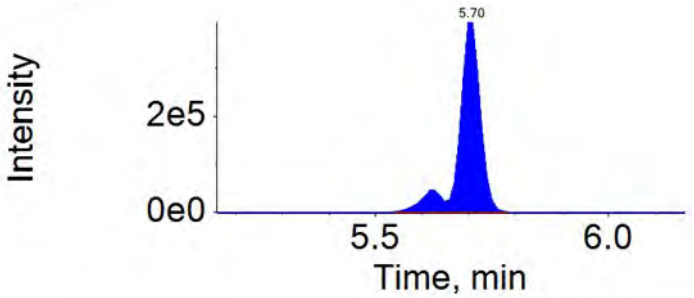
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



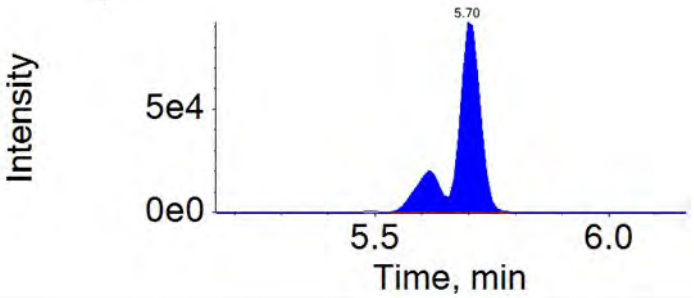
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



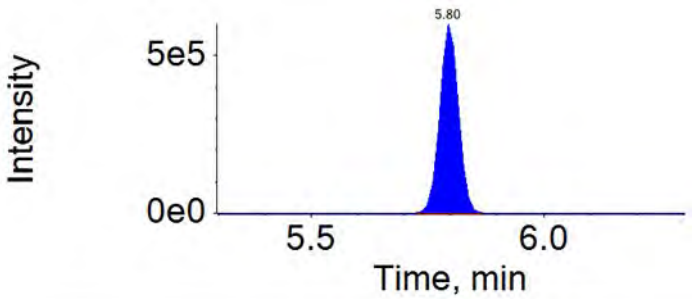
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



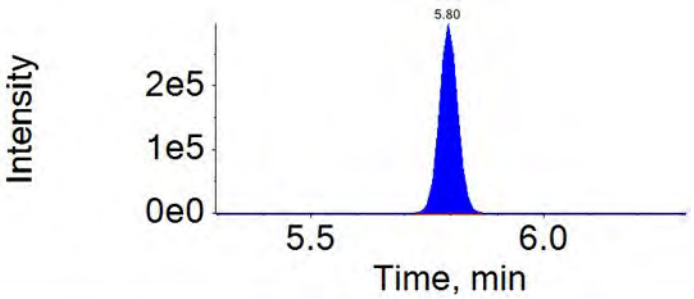
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



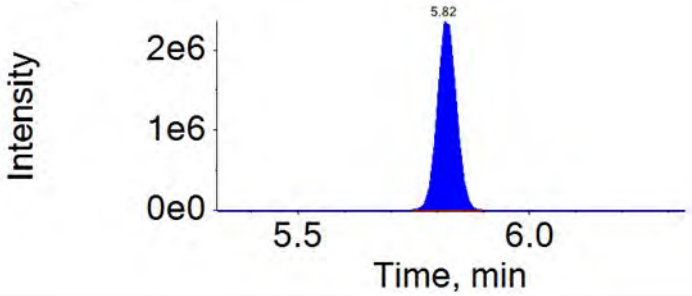
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



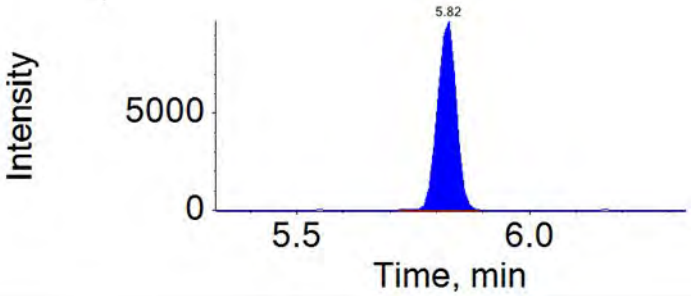
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

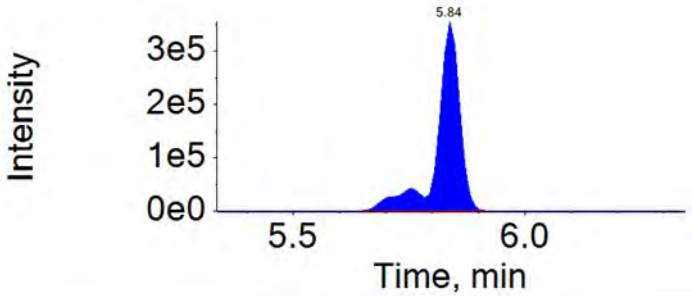
Component: PFUnDA
Primary Mass: 563.0 / 519.0



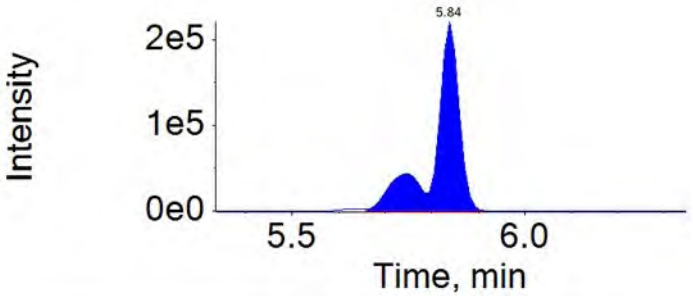
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



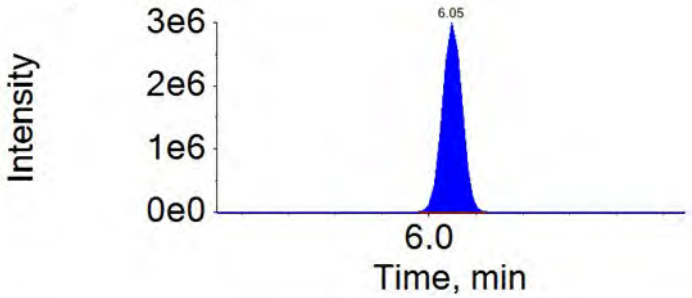
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



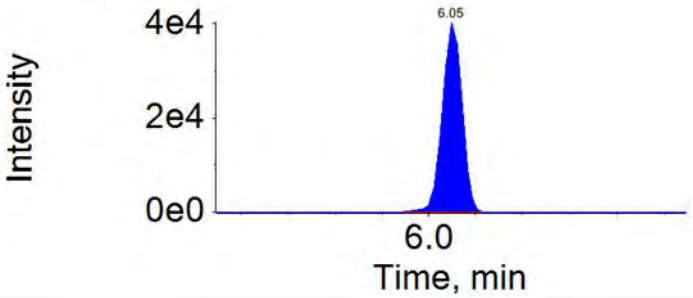
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



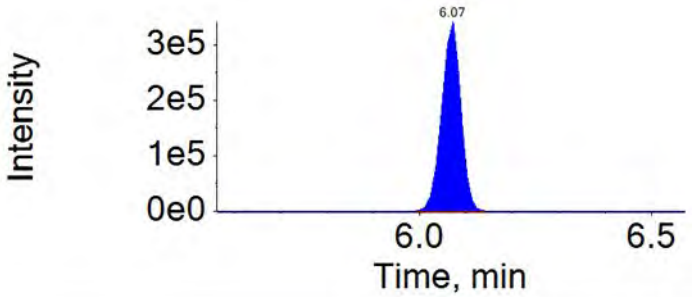
Component: PFDoDA
Primary Mass: 613.0 / 569.0



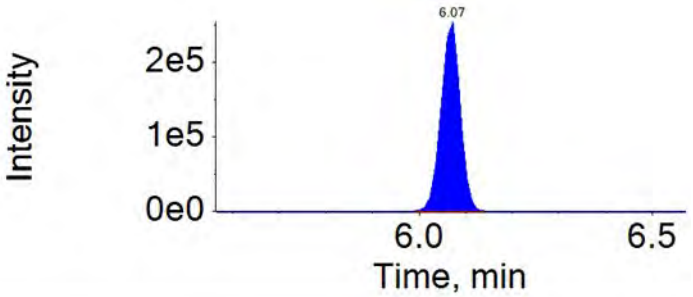
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



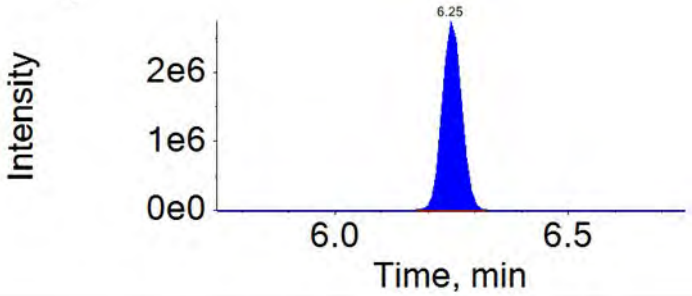
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



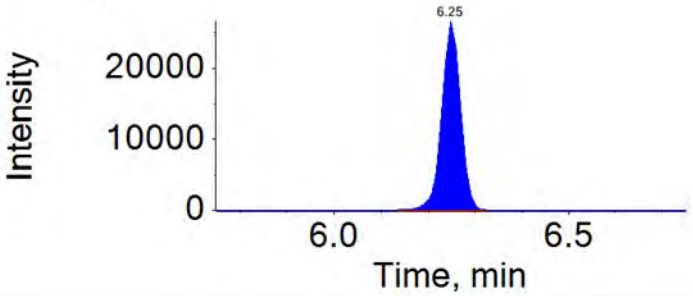
APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

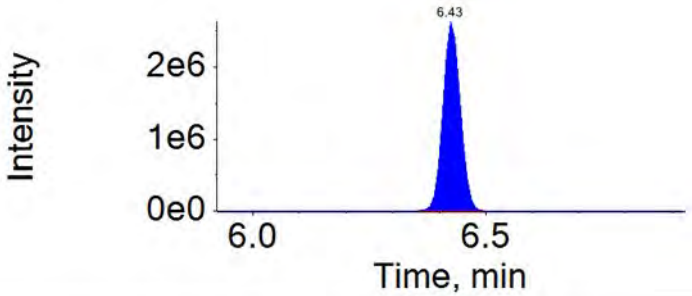
Component: PFTrDA
Primary Mass: 663.0 / 619.0



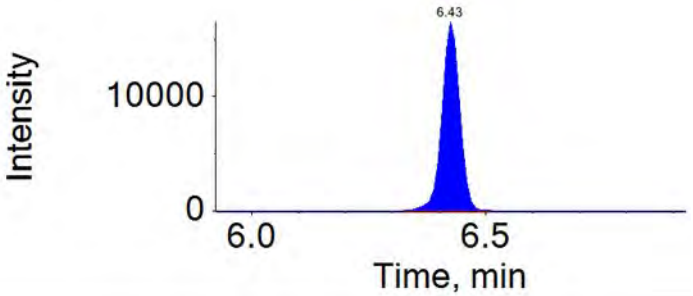
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



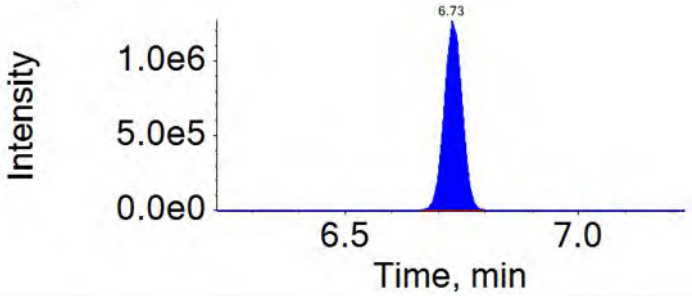
Component: PFTeDA
Primary Mass: 713.0 / 669.0



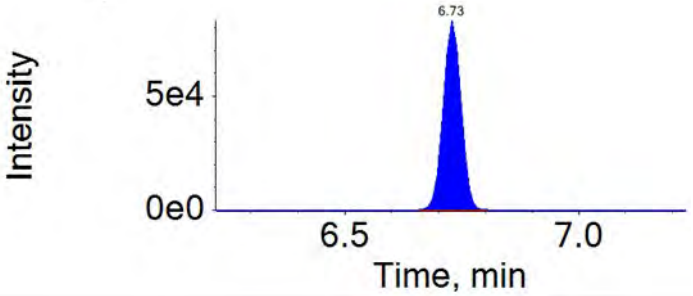
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



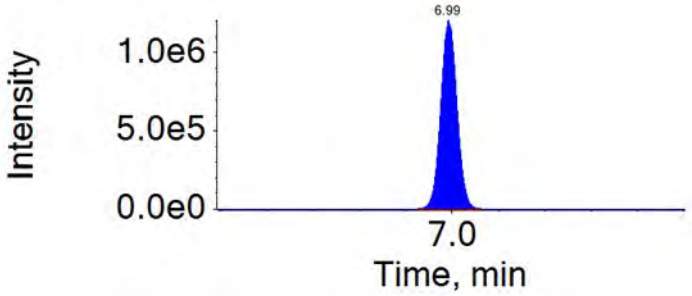
Component: PFHxDA
Primary Mass: 813.0 / 769.0



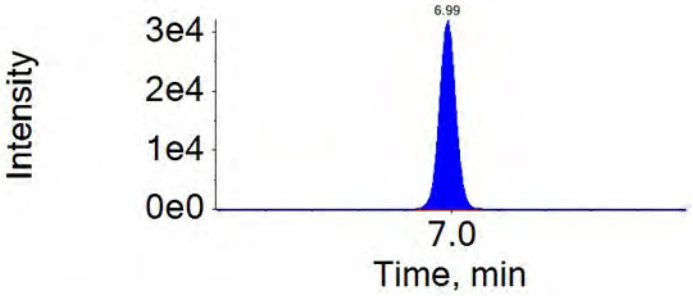
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CAL7			**Data File:**		18NOV28DCAL-12.wiff
Sample ID:	CALBRN71833B			**Acquis Date:**		2018-11-28T14:36:16
Sample Type:	Standard			**Instrument:**		LM27631
Vial Position:	9			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV28DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	717475.7	887248.9	-19	50	
13C2-PFOA	5.0	482796.5	498501.6	-3	50	
13C4-PFOS	4.8	242045.2	283214.2	-15	50	
13C2-PFDA	5.0	405455.0	441790.6	-8	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	803704.8	13C3-PFBA	717475.7	1.120	5.000	4.998	100	70-130	
E13C5-PFPeA	781113.8	13C3-PFBA	717475.7	1.089	5.000	5.084	102	70-130	
E13C3-PFBS	352994.8	13C3-PFBA	717475.7	0.492	4.650	4.694	101	70-130	
E13C2-4:2-FTS	62236.8	13C2-PFOA	482796.5	0.129	4.670	4.442	95	70-130	
E13C5-PFHxA	625449.8	13C2-PFOA	482796.5	1.295	5.000	4.758	95	70-130	
E13C3-PFHxS	239327.4	13C2-PFOA	482796.5	0.496	4.730	3.885	82	70-130	
E13C4-PFHpA	544866.9	13C2-PFOA	482796.5	1.129	5.000	5.186	104	70-130	
E13C2-6:2-FTS	43678.3	13C2-PFOA	482796.5	0.090	4.750	3.787	80	70-130	
E13C8-PFOA	745616.3	13C2-PFOA	482796.5	1.544	5.000	4.251	85	70-130	
E13C8-PFOS	250004.2	13C4-PFOS	242045.2	1.033	4.780	4.663	98	70-130	
E13C9-PFNA	562206.9	13C4-PFOS	242045.2	2.323	5.000	5.102	102	70-130	
E13C6-PFDA	645932.5	13C2-PFDA	405455.0	1.593	5.000	4.492	90	70-130	
E13C2-8:2-FTS	41093.1	13C2-PFDA	405455.0	0.101	4.790	4.356	91	70-130	
E13C8-PFOSA	555500.5	13C2-PFDA	405455.0	1.370	5.000	5.027	101	70-130	
Ed3-NMeFOSAA	156760.9	13C2-PFDA	405455.0	0.387	5.000	4.909	98	70-130	
E13C7-PFUnDA	416723.9	13C2-PFDA	405455.0	1.028	5.000	4.344	87	70-130	
Ed5-NEtFOSAA	102891.6	13C2-PFDA	405455.0	0.254	5.000	4.521	90	70-130	
E13C2-PFDoDA	852235.6	13C2-PFDA	405455.0	2.102	5.000	4.416	88	70-130	
Ed7-NMePFOSAE	250467.6	13C2-PFDA	405455.0	0.618	5.000	5.339	107	70-130	
Ed3-NMePFOSA	79780.2	13C2-PFDA	405455.0	0.197	5.000	5.325	107	70-130	
Ed9-NEtPFOSAE	216042.0	13C2-PFDA	405455.0	0.533	5.000	5.402	108	70-130	
Ed5-NEtPFOSA	59209.1	13C2-PFDA	405455.0	0.146	5.000	5.074	101	70-130	
E13C2-PFTeDA	717297.7	13C2-PFDA	405455.0	1.769	5.000	4.895	98	70-130	

APPROVED
By MCD at 5:00 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

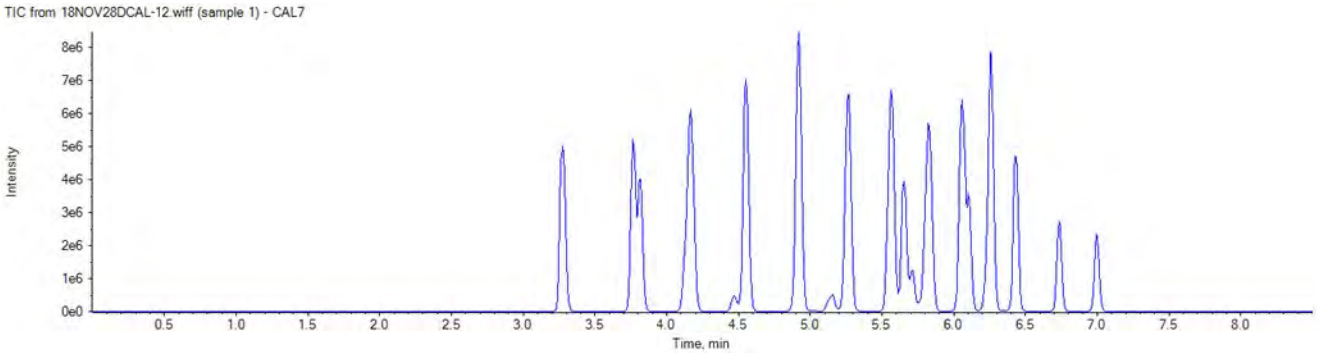
Analyte Quantitation Peak Table

Sample Name: CAL7 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-12.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	12734942.7		A	13C4-PFBA	3.27	803704.8	15.845	86.862
PFPeA	3.77	1.000	12611040.3		A	13C5-PFPeA	3.77	781113.8	16.145	79.219
PFBS	3.82	1.000	6468971.4		A	13C3-PFBS	3.82	352994.8	18.326	88.956
4:2-FTS	4.13	1.000	2126148.2		A	13C2-4:2-FTS	4.13	62236.8	34.162	91.451
PFHxA	4.16	1.000	12530843.0		A	13C5-PFHxA	4.16	625449.8	20.035	80.421
PFPeS	4.18	1.100	3295381.6		A	13C3-PFBS	3.82	352994.8	9.335	94.429
PFHpA	4.55	1.000	12619701.7		A	13C4-PFHpA	4.55	544866.9	23.161	71.480
PFHxS	4.55	1.000	4797026.8		M	13C3-PFHxS	4.56	239327.4	20.044	93.850
6:2-FTS	4.91	1.000	1464447.0		A	13C2-6:2-FTS	4.91	43678.3	33.528	87.481
PFHpS	4.91	1.080	4562639.6		A	13C3-PFHxS	4.56	239327.4	19.064	95.147
PFOA	4.92	1.000	12900182.7		A	13C8-PFOA	4.92	745616.3	17.301	89.401
PFOS	5.25	1.000	5620329.0		M	13C8-PFOS	5.25	250004.2	22.481	94.301
PFNA	5.27	1.000	12939629.1		A	13C9-PFNA	5.27	562206.9	23.016	88.201
PFNS	5.54	1.060	3804945.2		A	13C8-PFOS	5.25	250004.2	15.220	96.096
PFDA	5.57	1.000	11371047.0		A	13C6-PFDA	5.57	645932.5	17.604	99.643
8:2-FTS	5.57	1.000	1620286.0		A	13C2-8:2-FTS	5.57	41093.1	39.430	74.355
PFOSA	5.65	1.000	9792009.5		A	13C8-PFOSA	5.65	555500.5	17.627	89.294
NMeFOSAA	5.71	1.000	2414874.8		M	d3-NMeFOSAA	5.71	156760.9	15.405	98.267
PFDS	5.80	1.110	3061543.5		A	13C8-PFOS	5.25	250004.2	12.246	97.096
PFUnDA	5.83	1.000	11254483.8		A	13C7-PFUnDA	5.83	416723.9	27.007	96.536
NEtFOSAA	5.85	1.000	2127663.4		A	d5-NEtFOSAA	5.84	102891.6	20.679	100.712
PFDoDA	6.06	1.000	14195839.1		A	13C2-PFDoDA	6.06	852235.6	16.657	91.243
10:2-FTS	6.08	1.090	1718827.3		A	13C2-8:2-FTS	5.57	41093.1	41.828	92.235
NMePFOSAE	6.11	1.000	5772837.2		A	d7-NMePFOSAE	6.10	250467.6	23.048	96.993
NMePFOSA	6.11	1.000	1500056.3		A	d3-NMePFOSA	6.11	79780.2	18.802	99.677
PFDoS	6.22	1.190	1735049.5		A	13C8-PFOS	5.25	250004.2	6.940	99.670
NEtPFOSAE	6.26	1.000	5826370.7		A	d9-NEtPFOSAE	6.25	216042.0	26.969	97.008
NEtPFOSA	6.27	1.000	1290814.8		A	d5-NEtPFOSA	6.27	59209.1	21.801	97.709
PFTrDA	6.26	1.030	12329126.1		A	13C2-PFDoDA	6.06	852235.6	14.467	87.197
PFTeDA	6.43	1.000	11258874.1		A	13C2-PFTeDA	6.43	717297.7	15.696	88.936
PFHxDA	6.73	1.050	6113985.2		A	13C2-PFTeDA	6.43	717297.7	8.524	97.440
PFODA	7.00	1.090	5309889.9		A	13C2-PFTeDA	6.43	717297.7	7.403	98.616

Total Ion Chromatogram

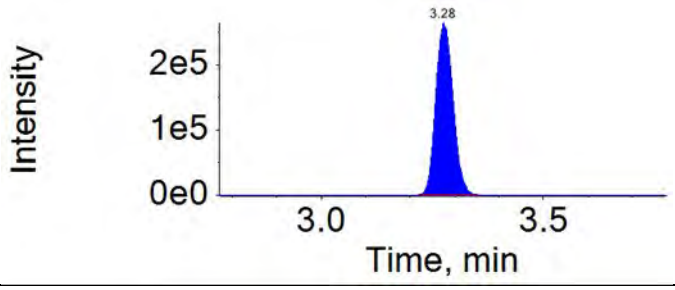


APPROVED
By MCD at 5:00 pm, 11/28/18

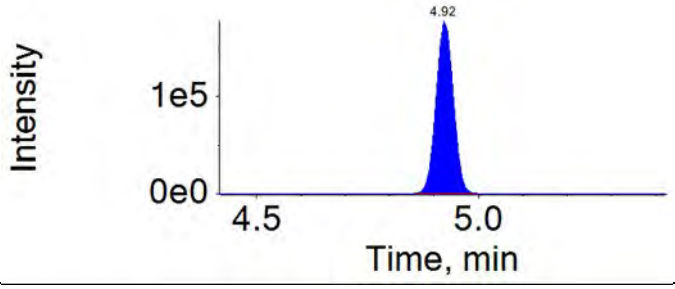
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

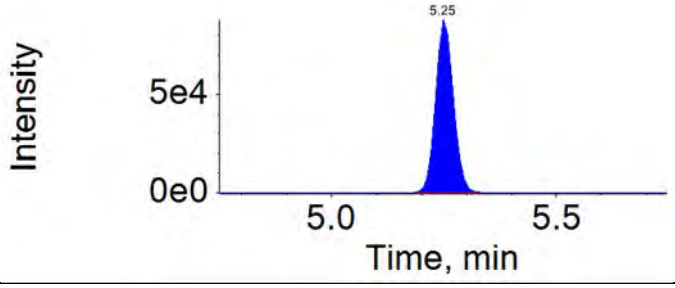
Injection Standard: 13C3-PFBA
216.0 / 172.0



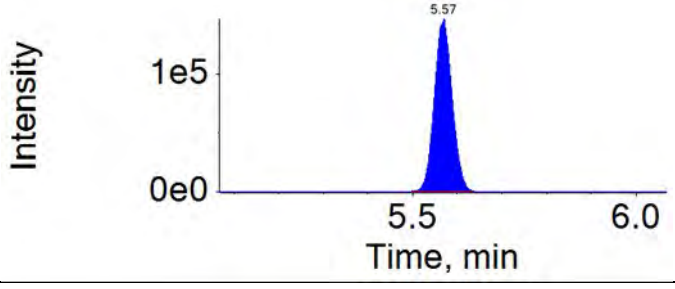
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

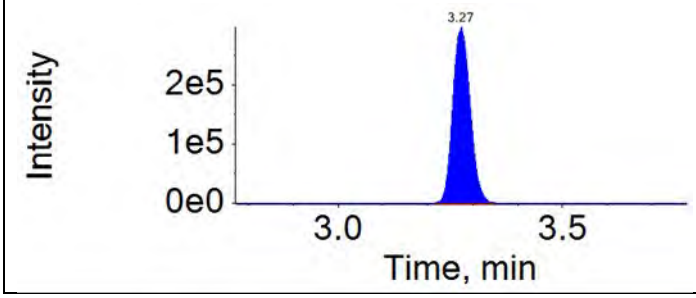


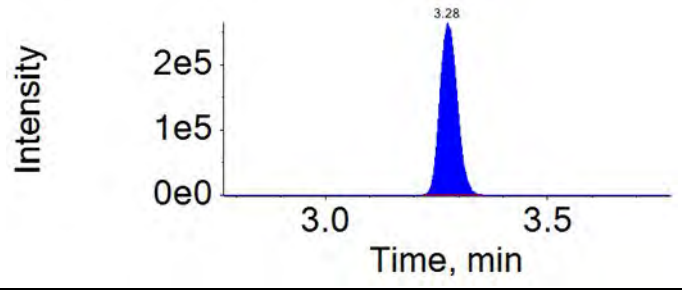
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

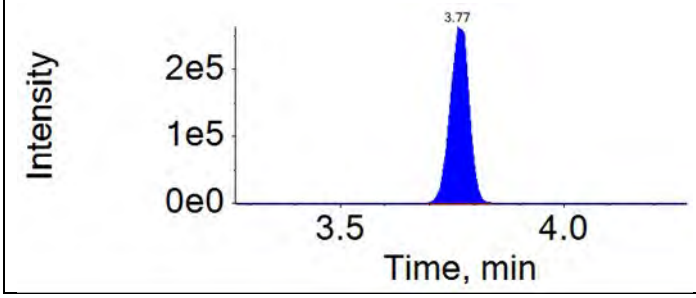
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

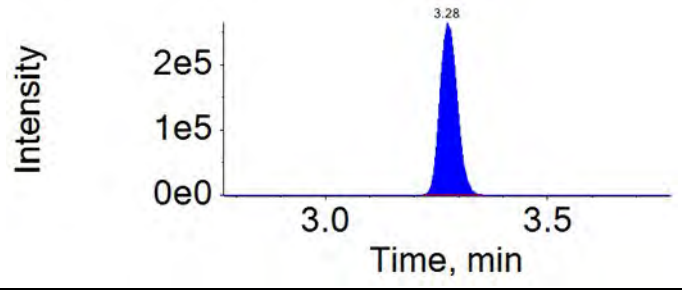
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



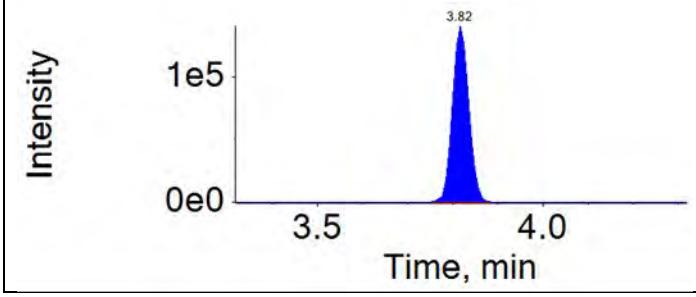


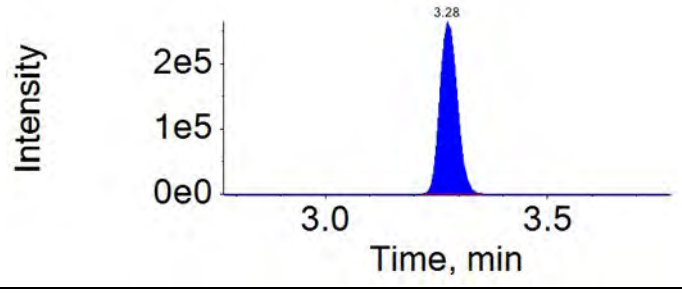
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



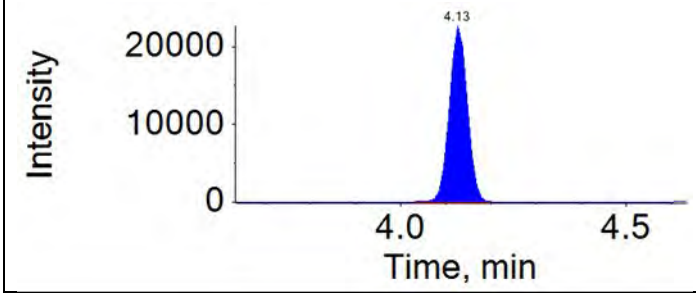


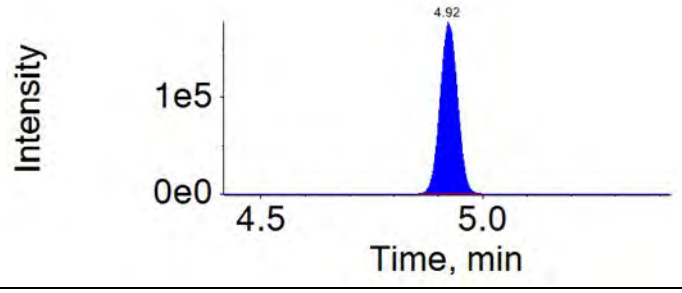
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



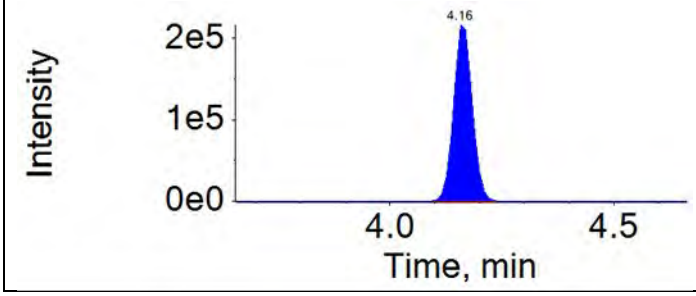


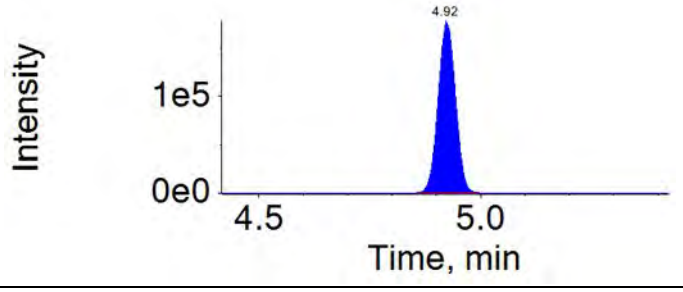
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

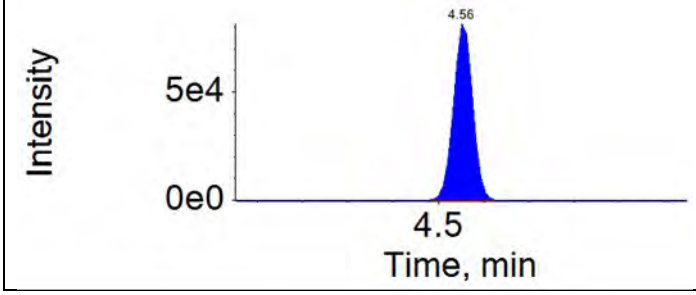
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

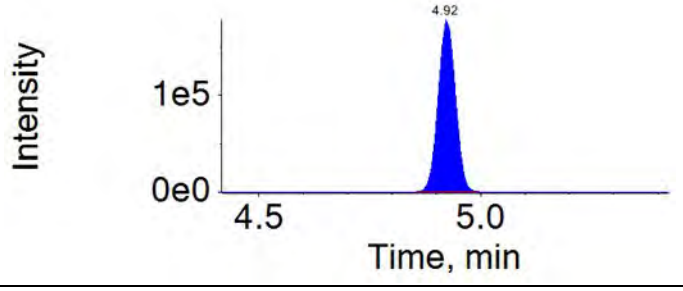
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



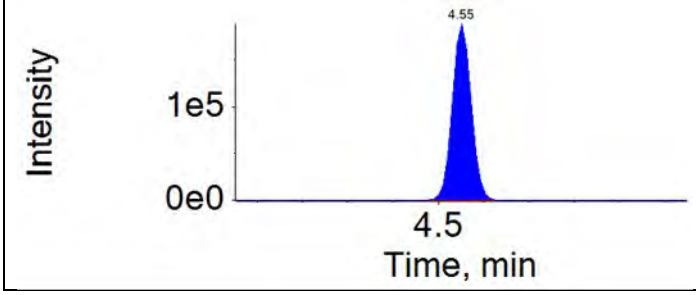


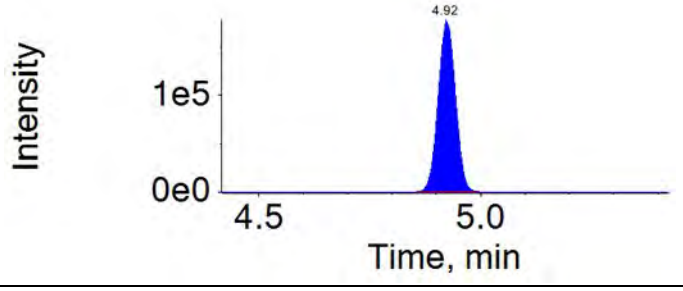
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



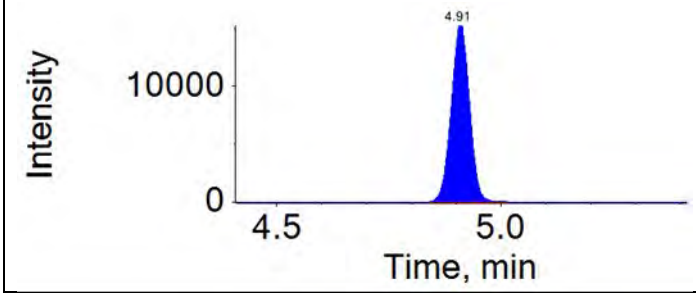


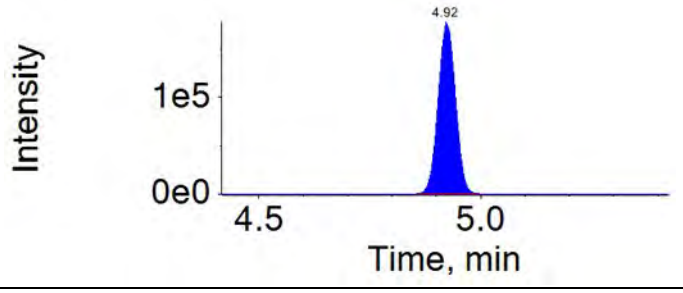
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

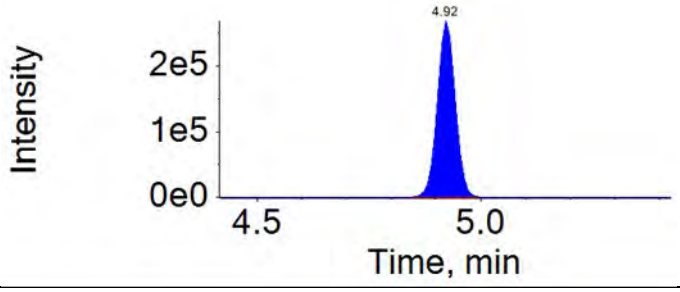
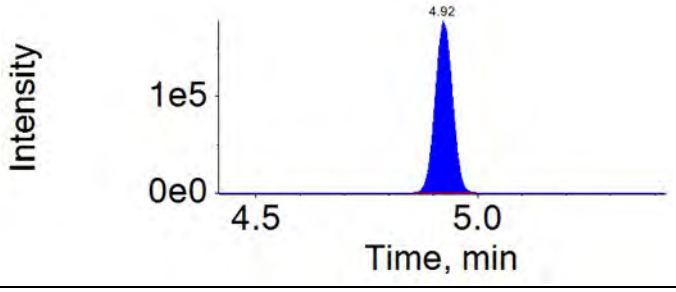


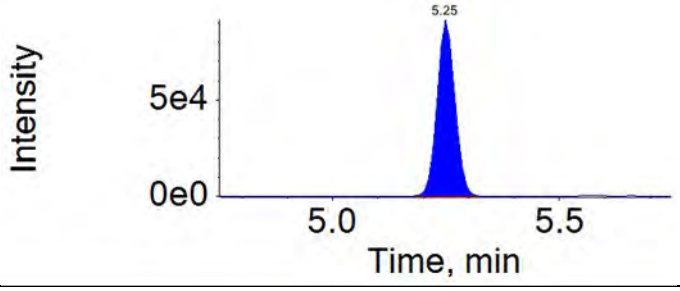
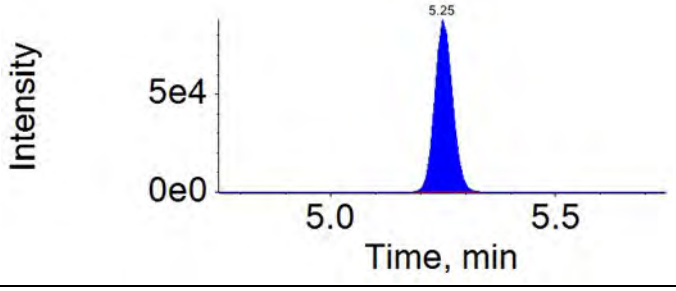


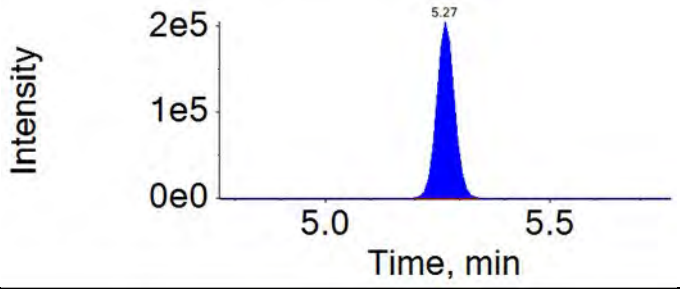
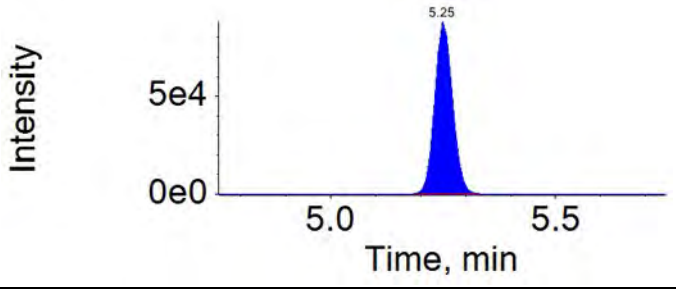
APPROVED
By MCD at 5:01 pm, 11/28/18

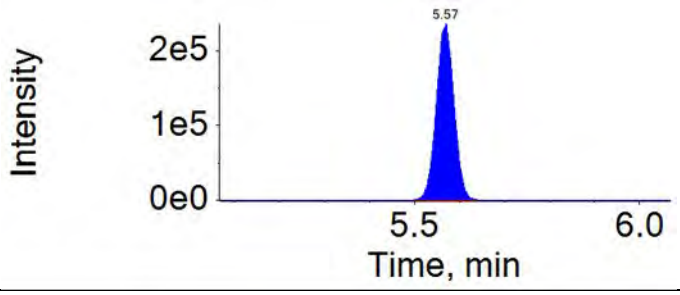
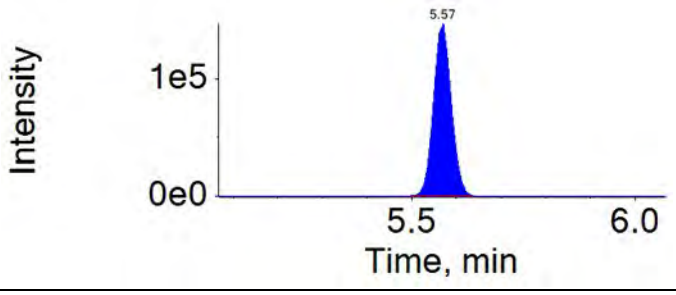
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

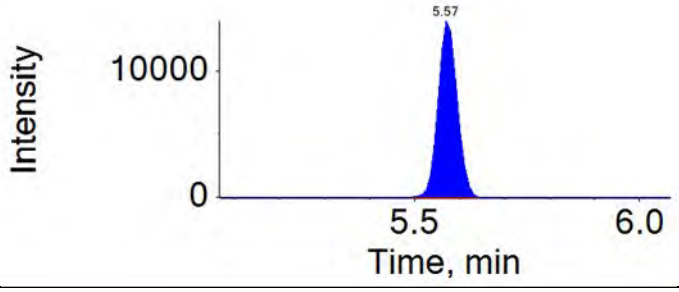
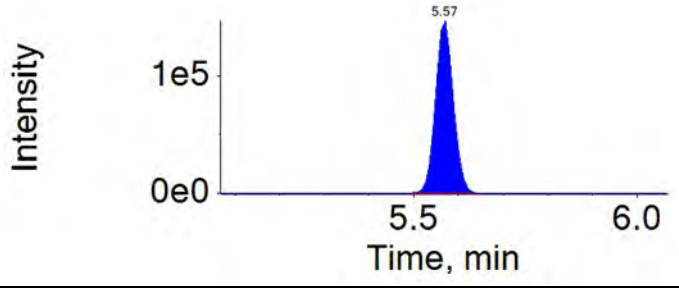
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

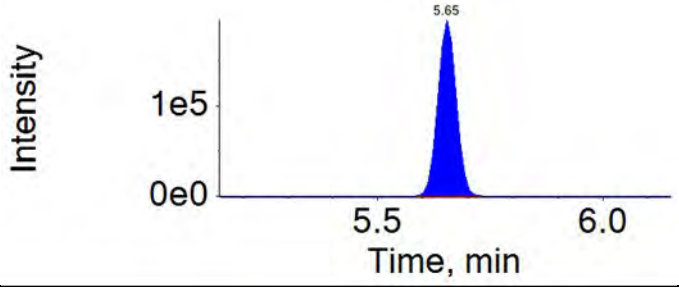
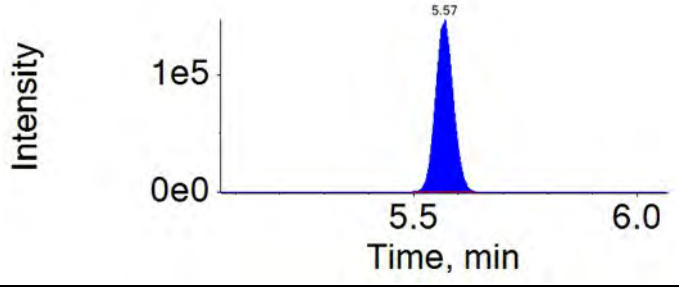
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

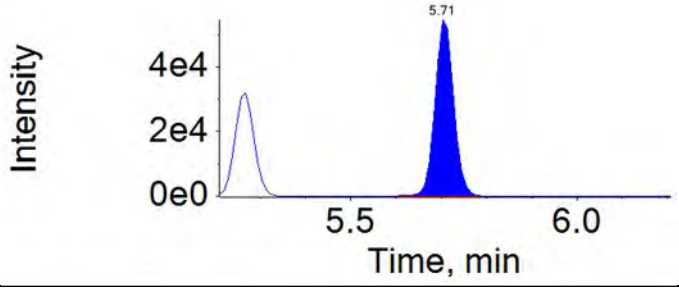
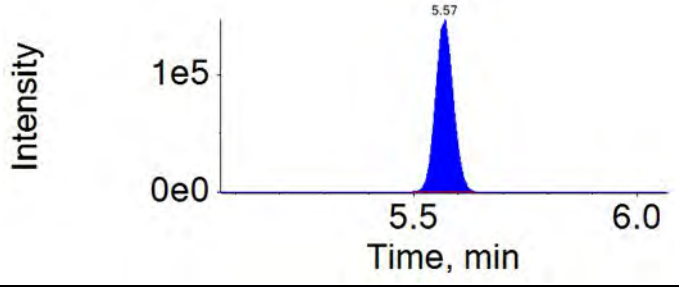
APPROVED
By MCD at 5:01 pm, 11/28/18

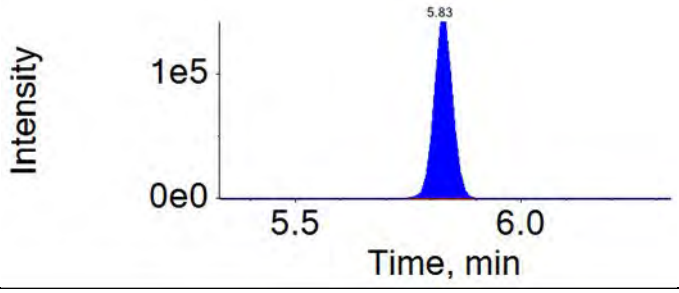
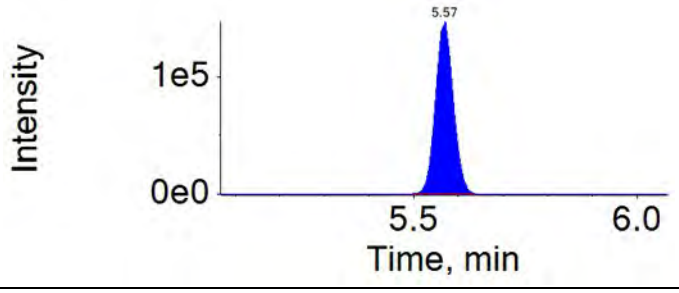
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

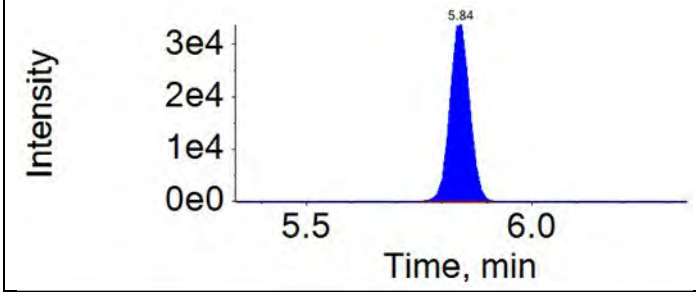
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

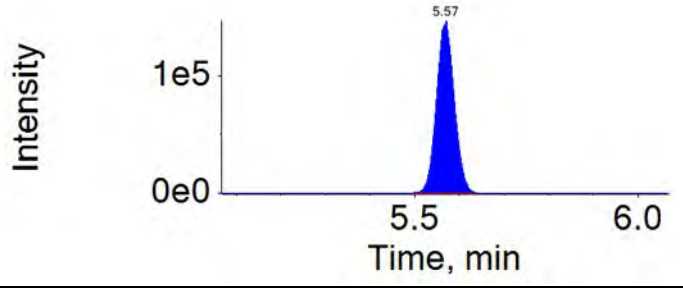
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

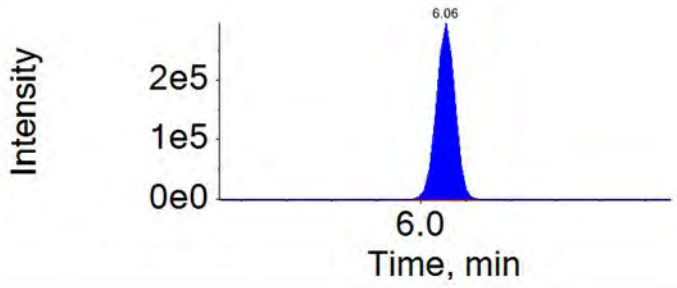
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

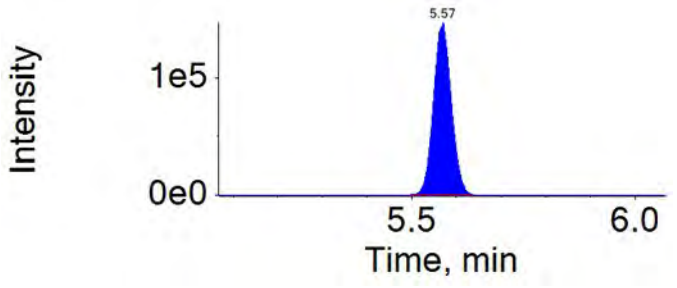
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



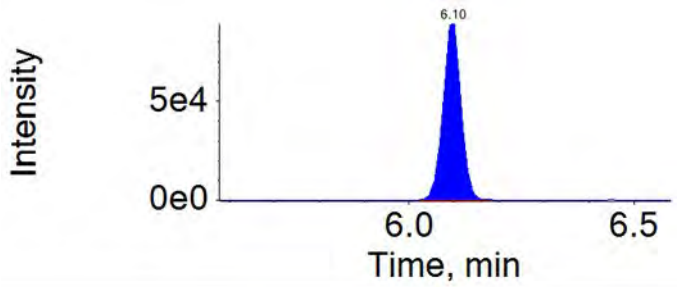


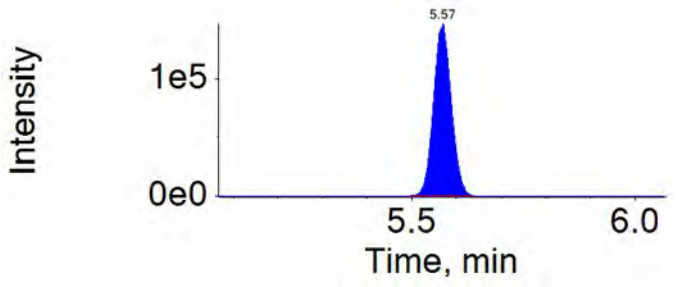
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



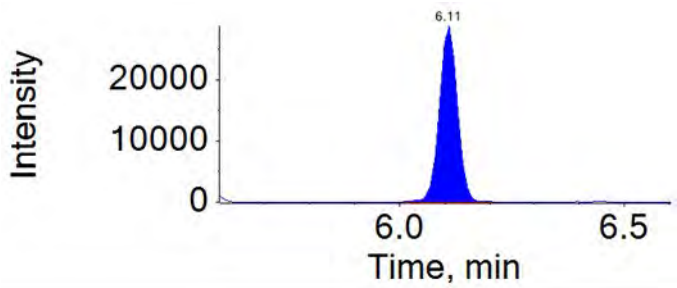


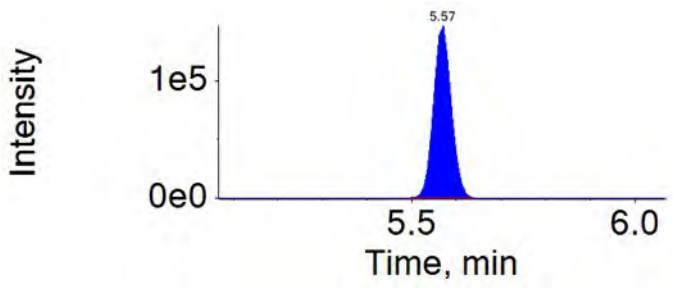
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



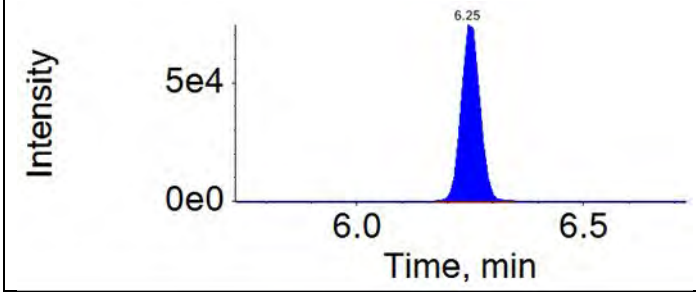


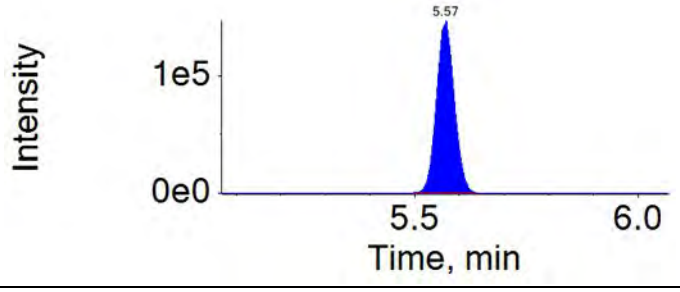
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

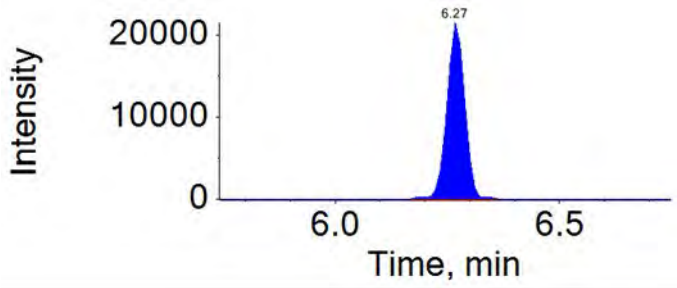
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

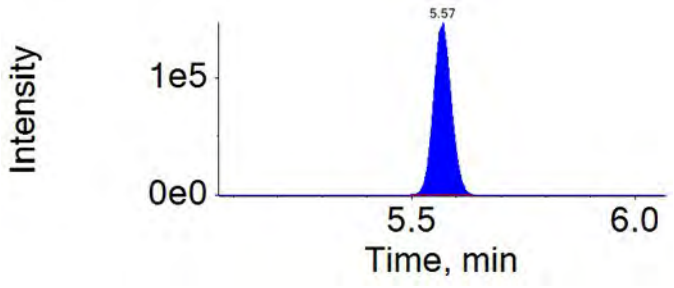
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



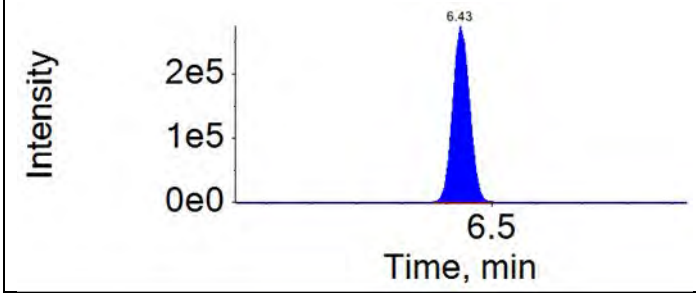


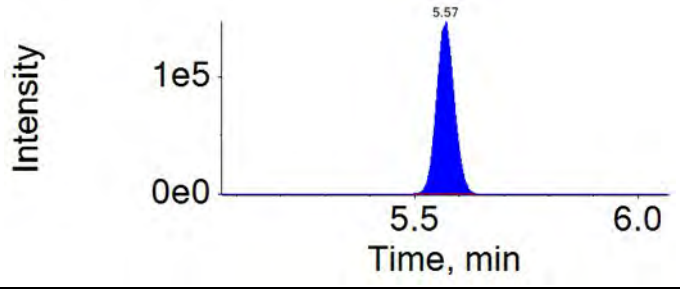
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



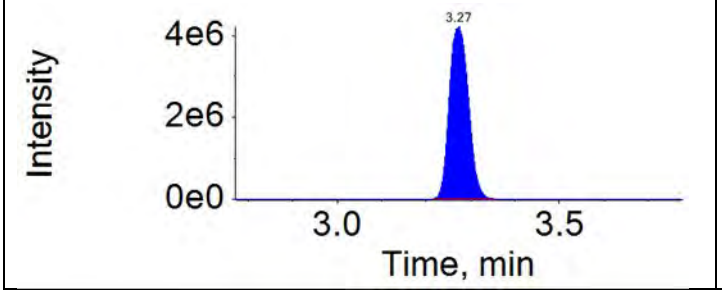


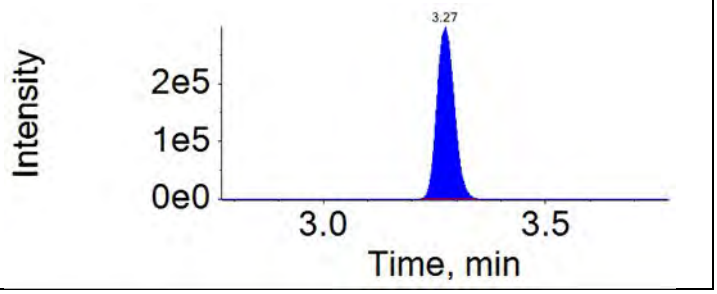
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

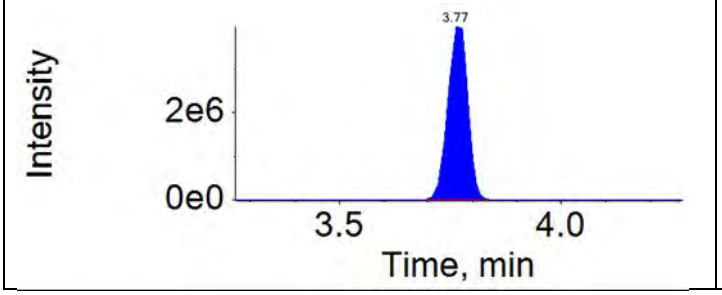
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

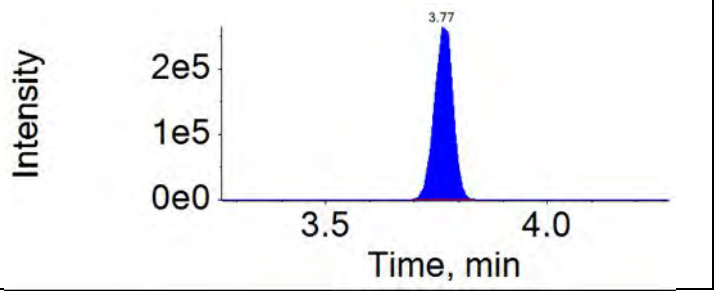
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



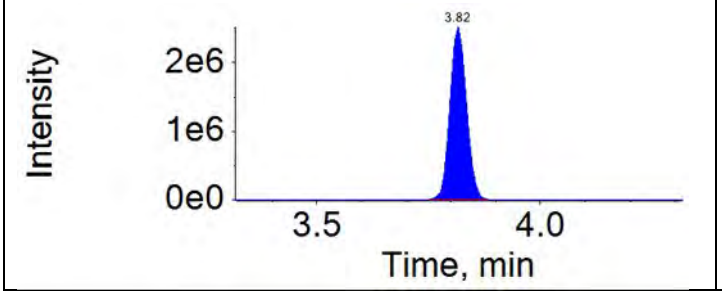


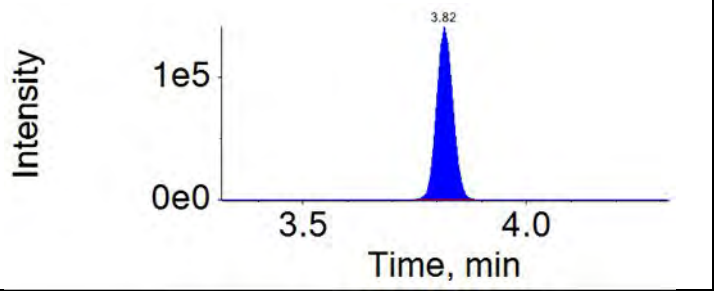
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



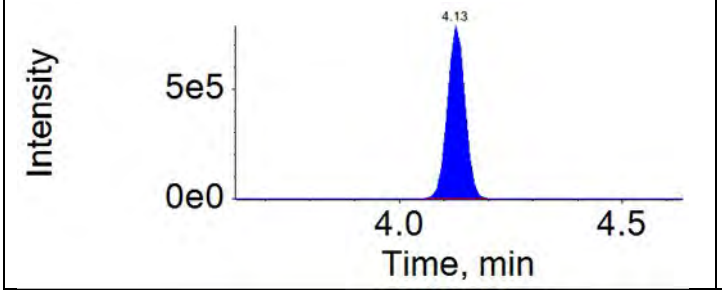


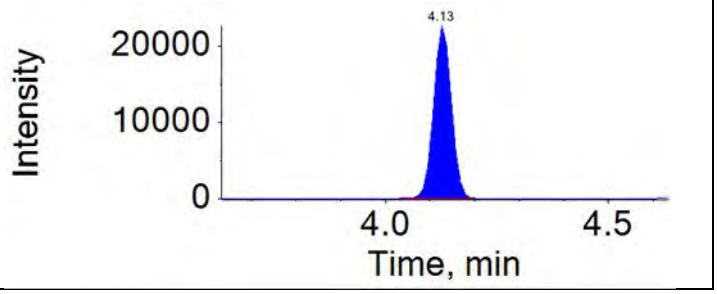
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



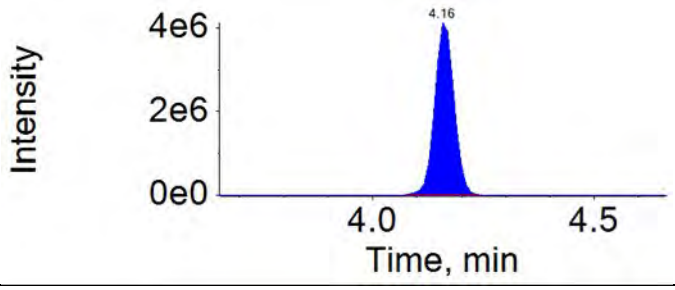


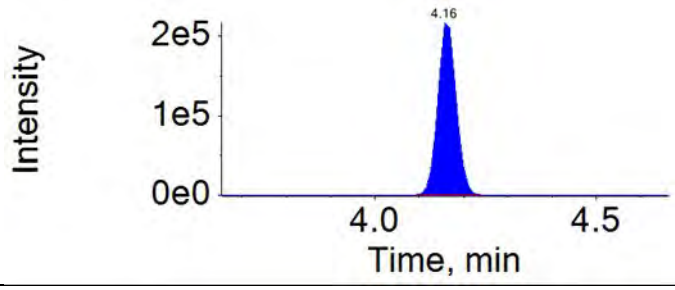
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

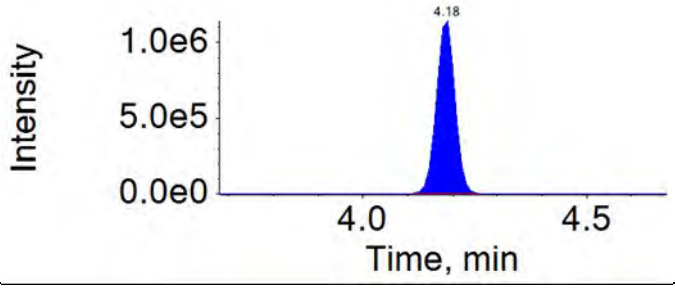
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

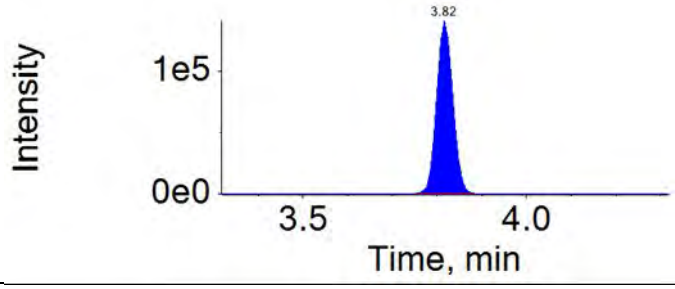
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



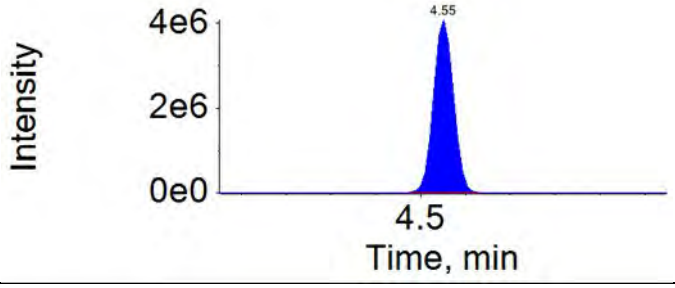


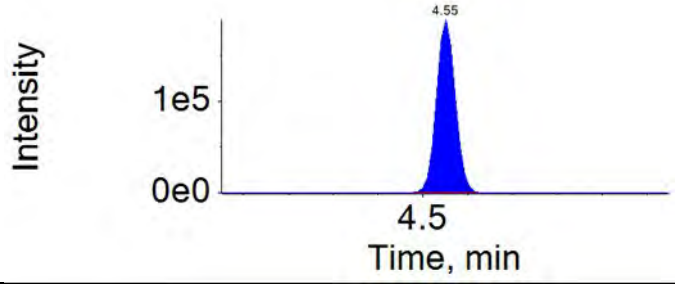
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



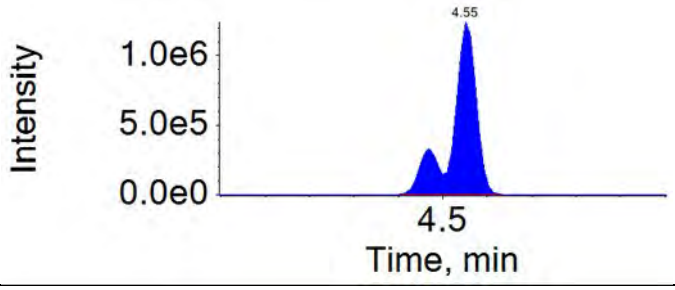


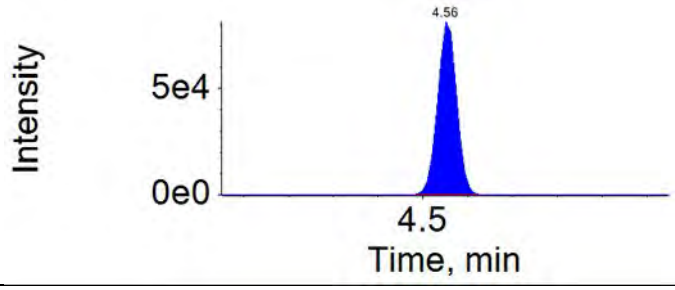
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



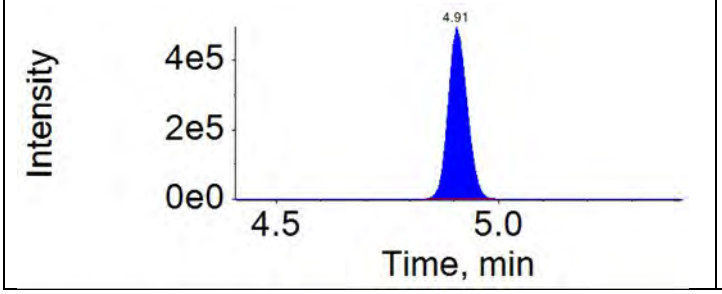


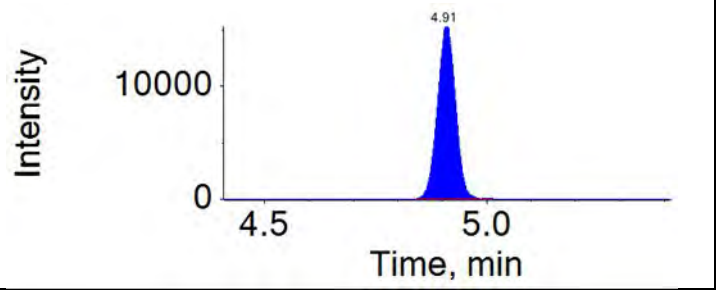
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

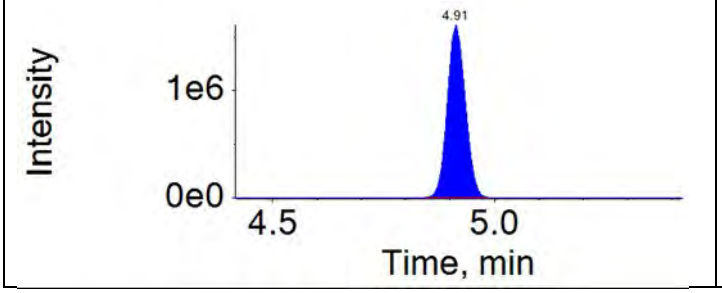
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

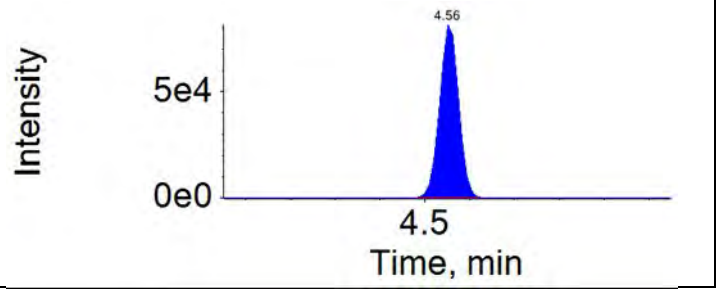
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



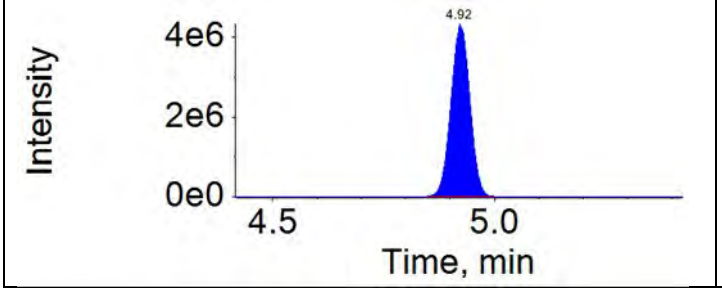


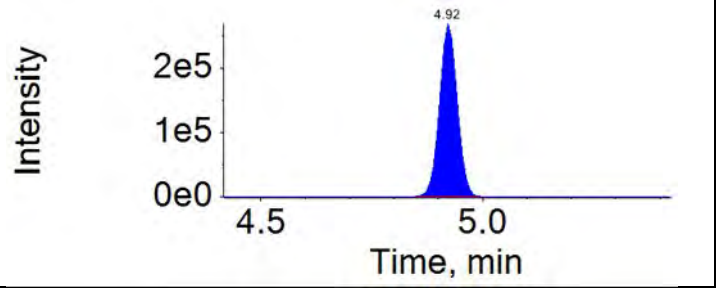
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



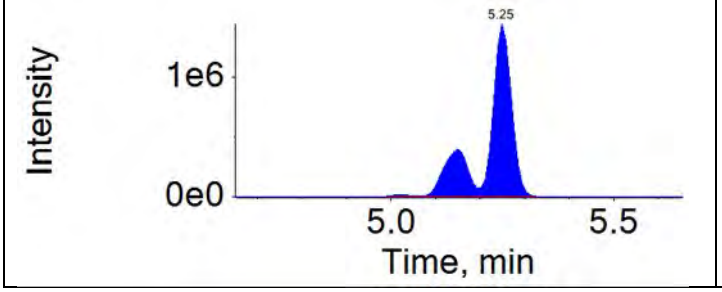


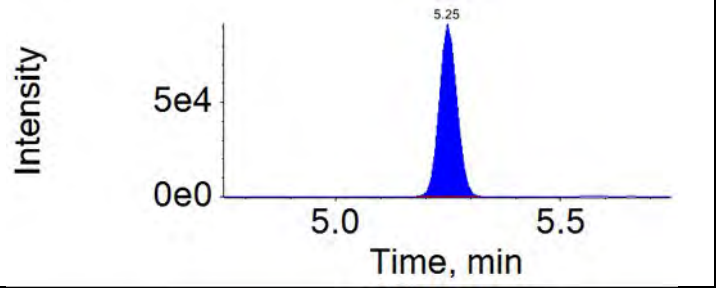
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



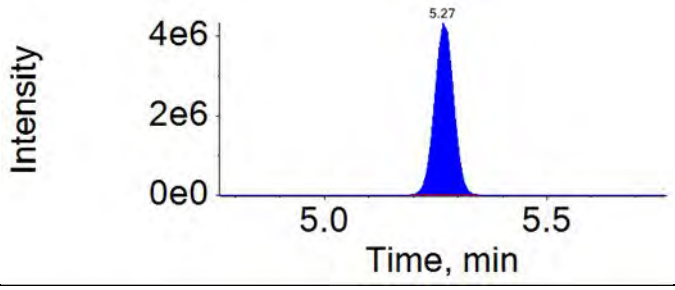


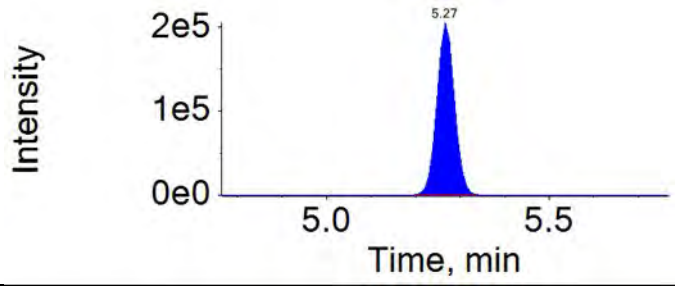
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

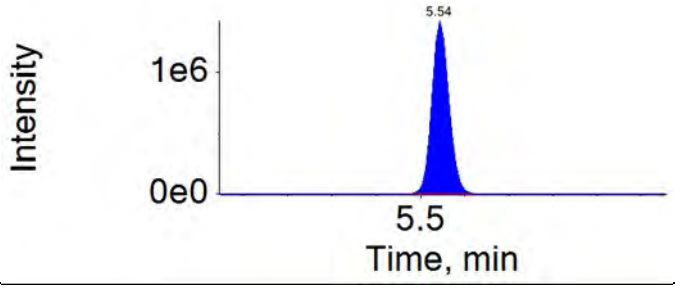
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

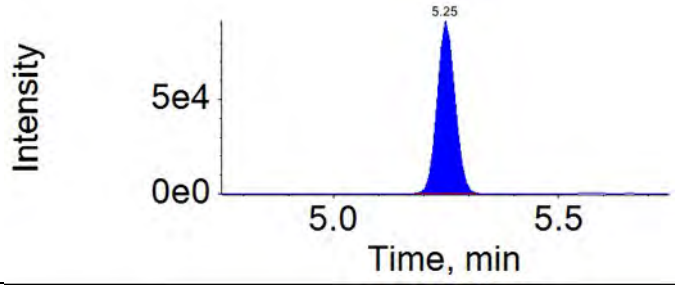
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



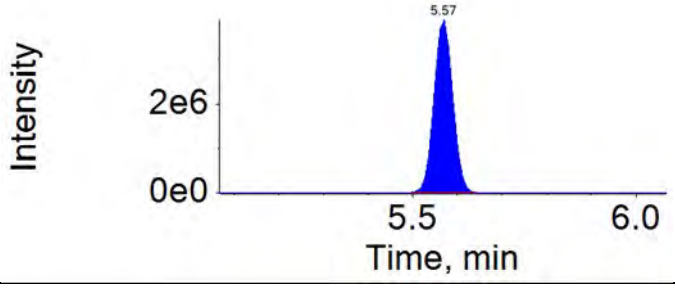


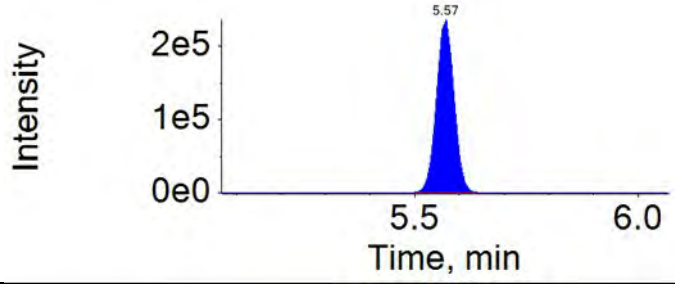
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



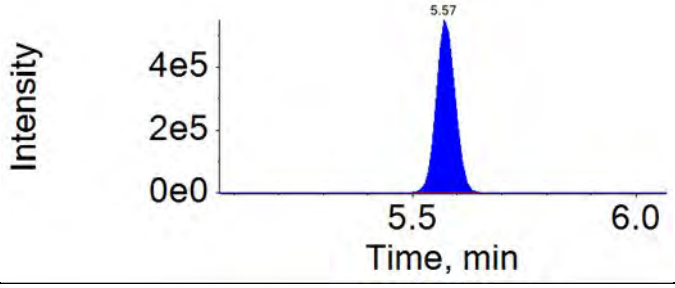


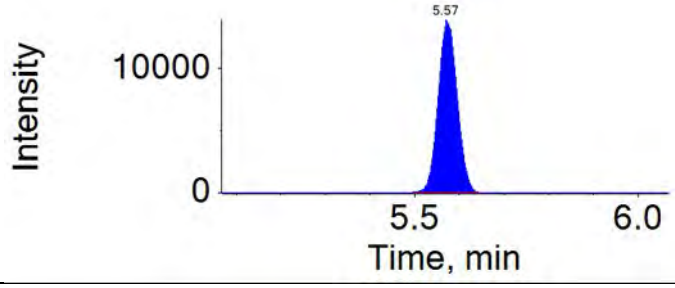
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



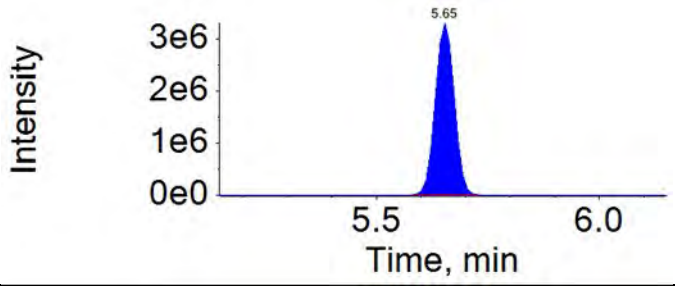


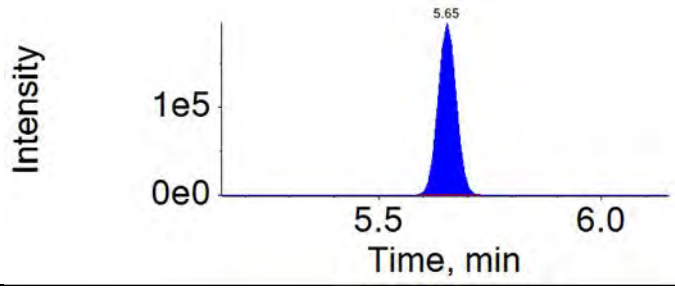
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

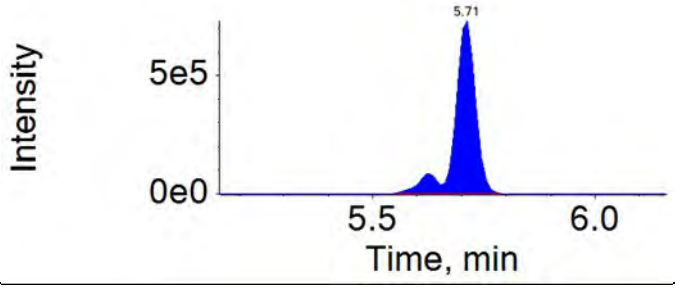
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

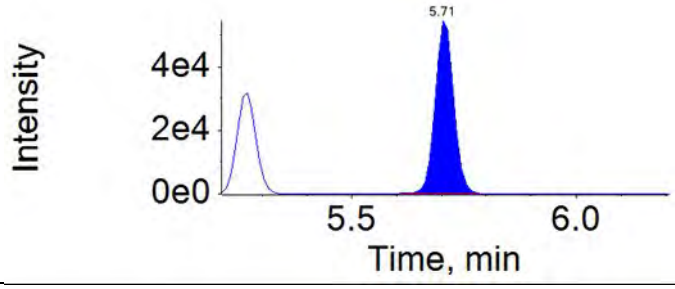
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



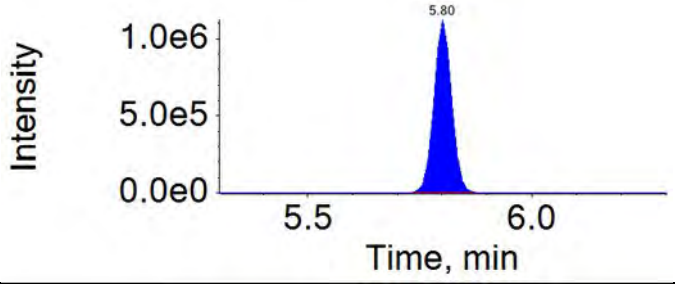


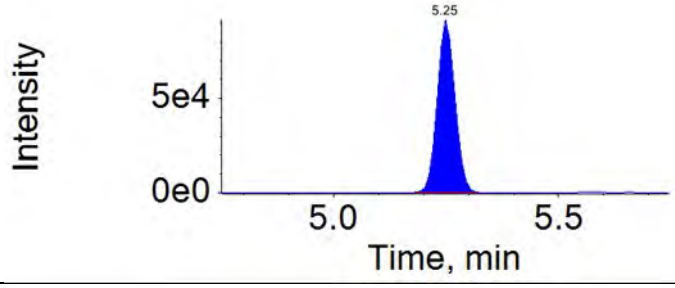
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



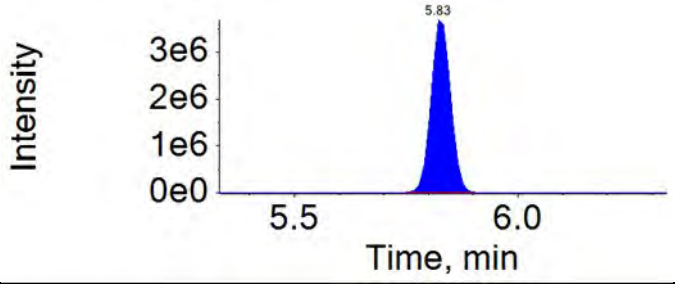


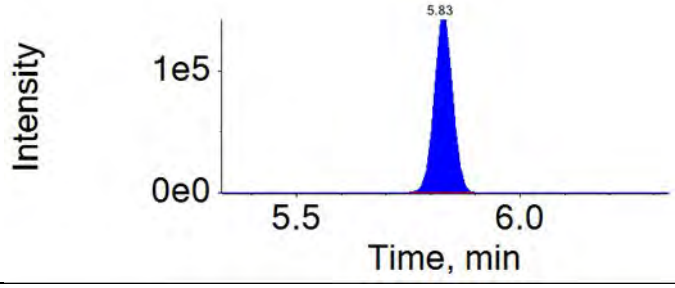
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



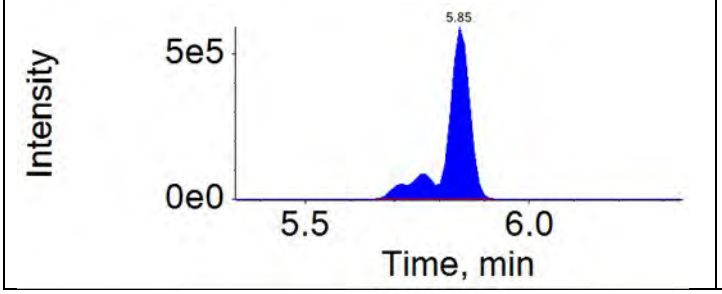


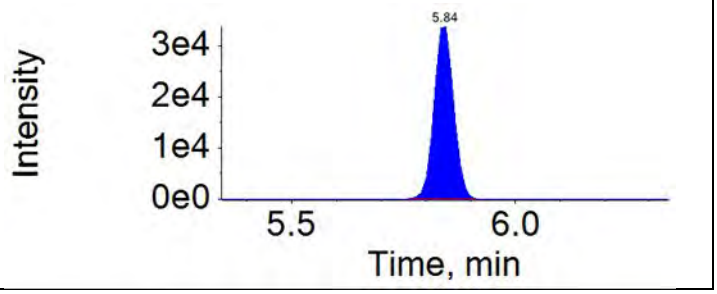
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

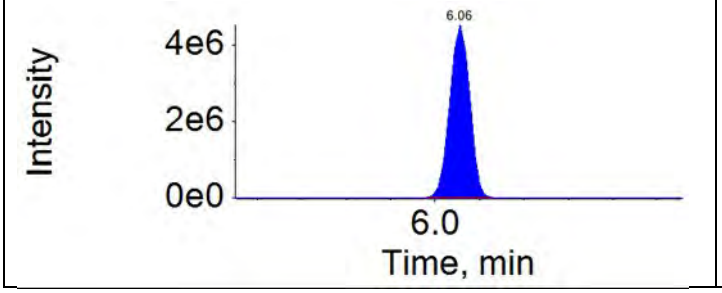
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

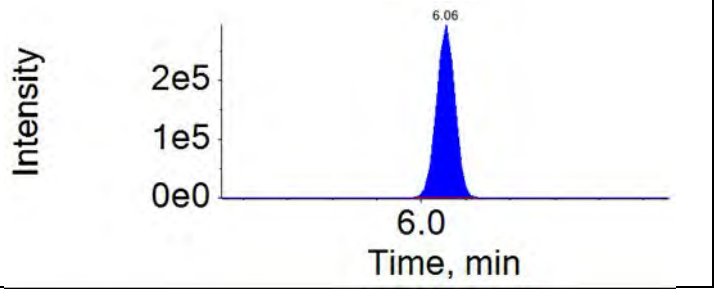
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



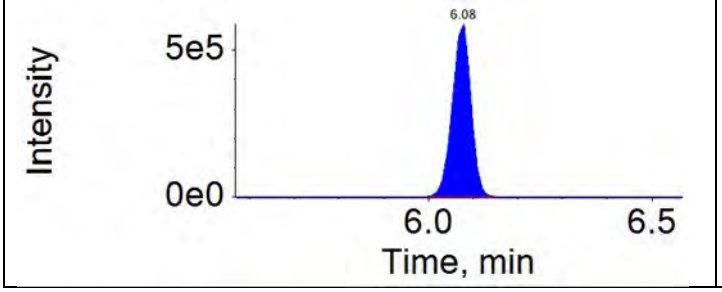


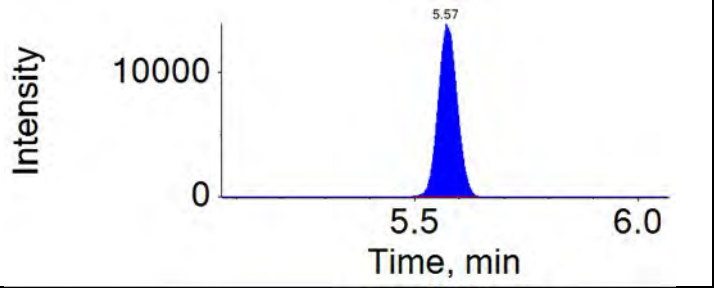
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



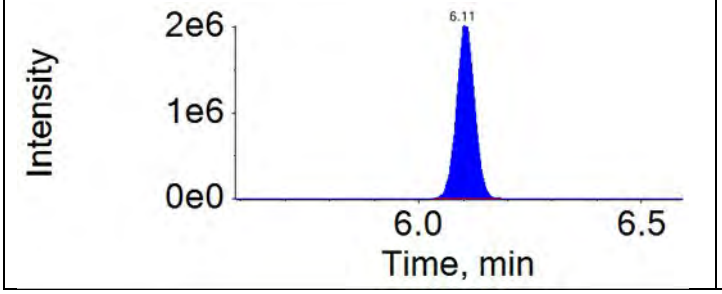


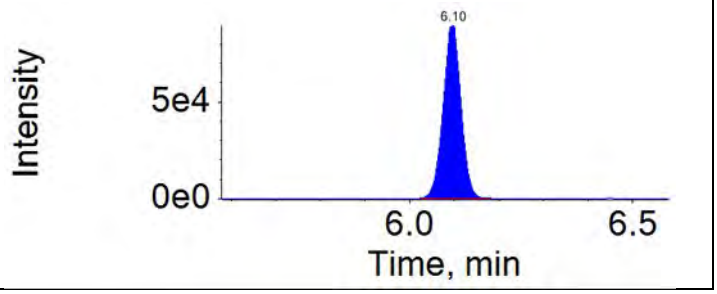
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



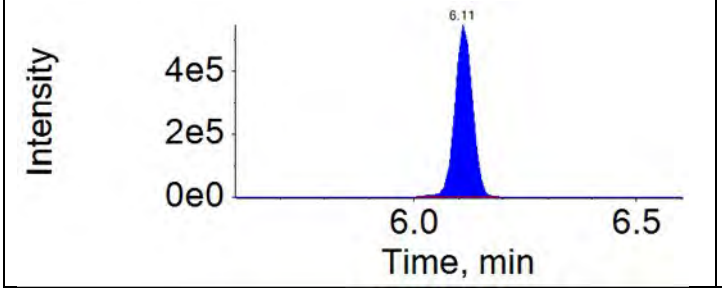


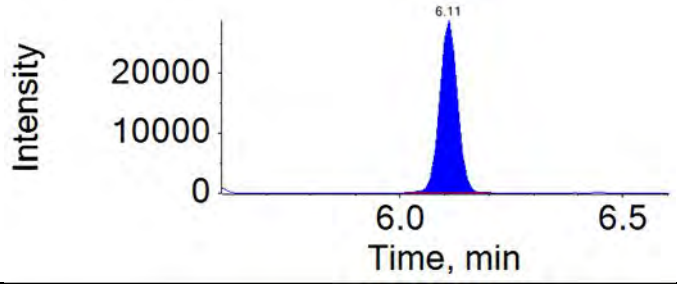
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

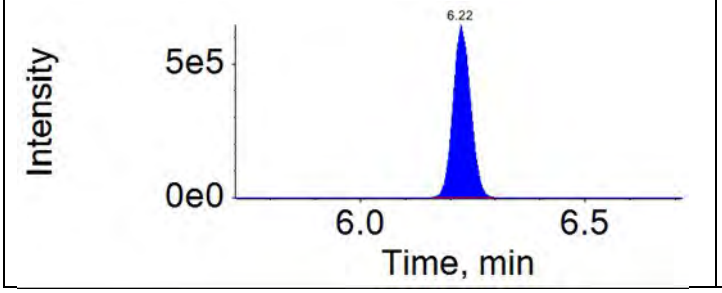
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

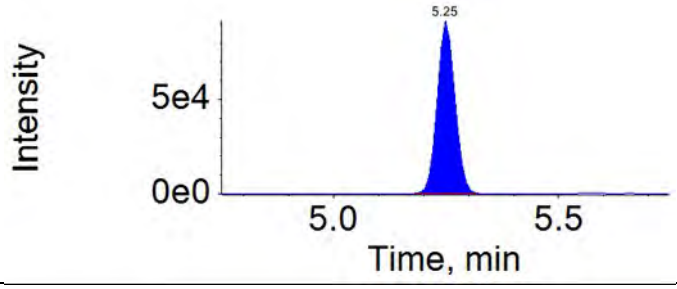
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



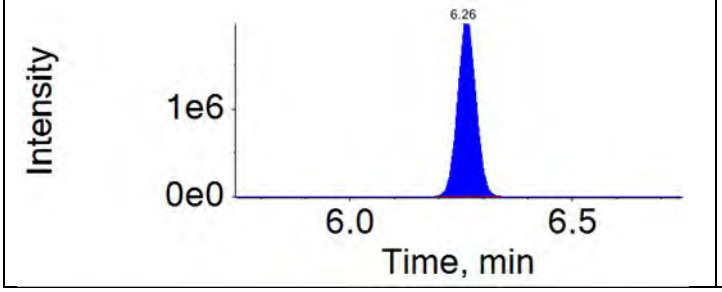


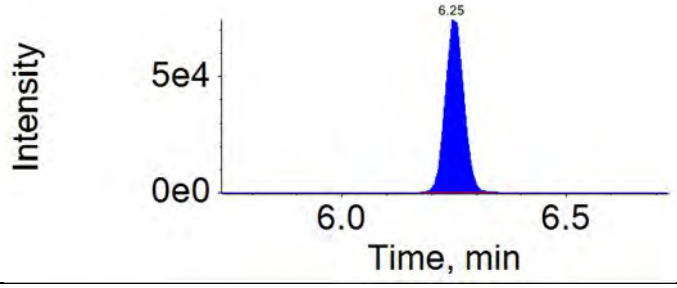
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



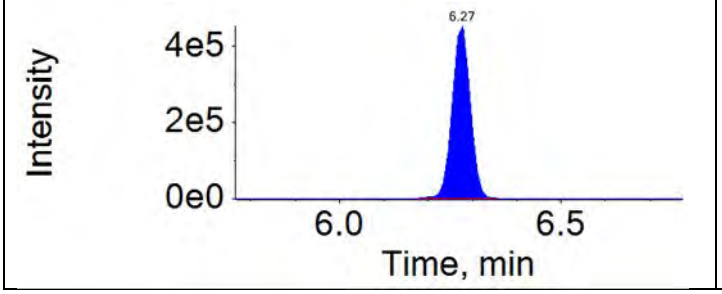


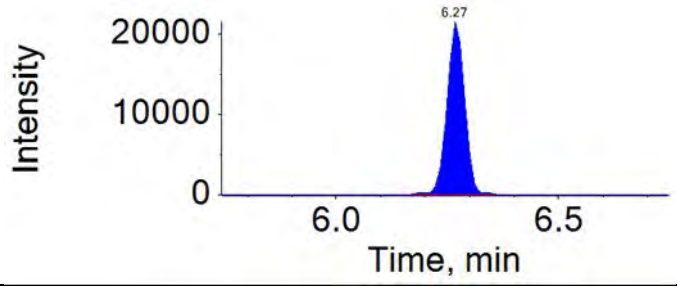
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

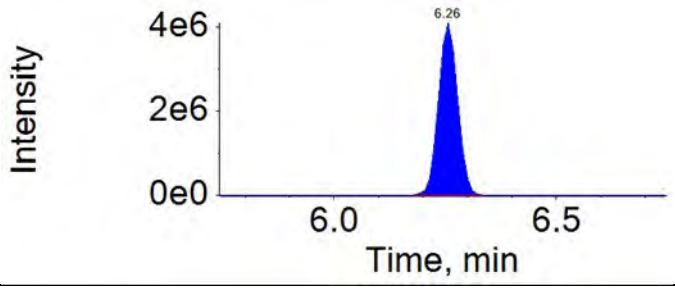
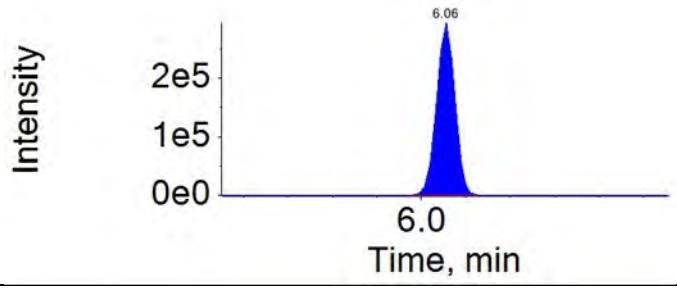


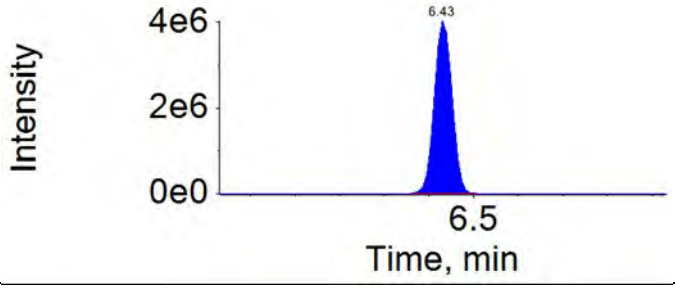
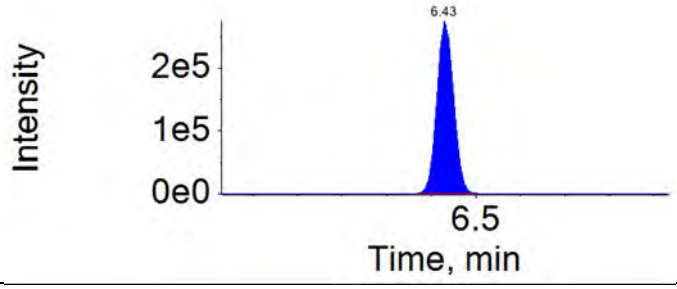


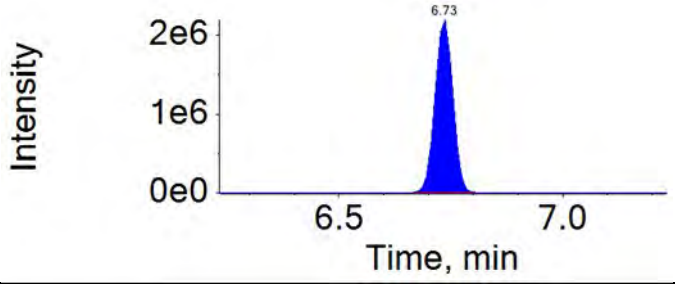
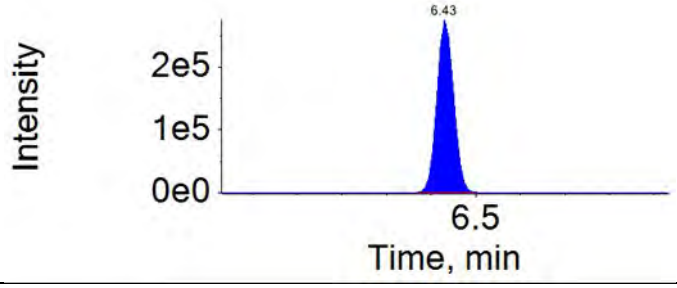
APPROVED
By MCD at 5:01 pm, 11/28/18

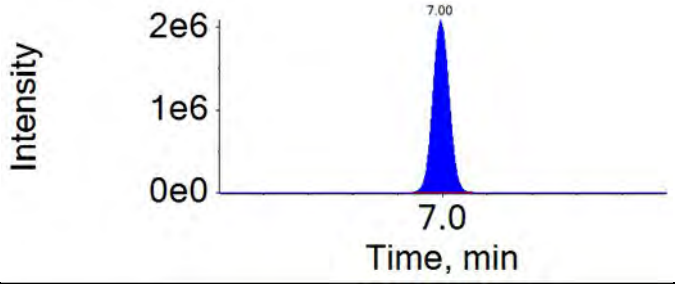
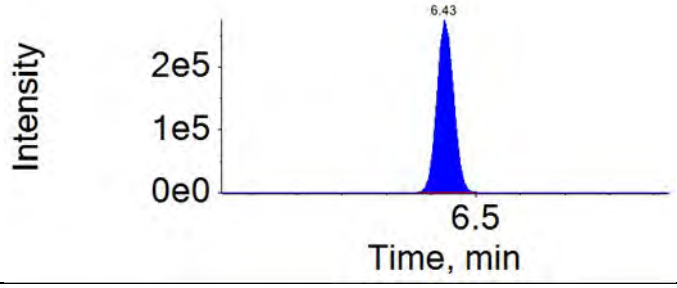
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

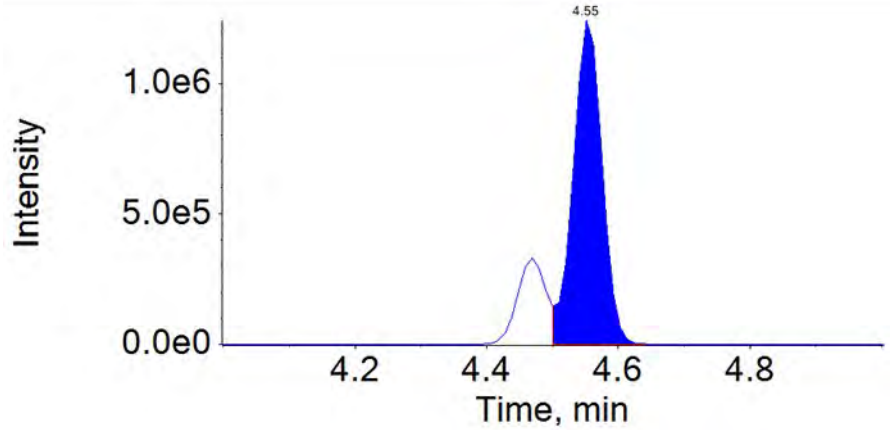
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

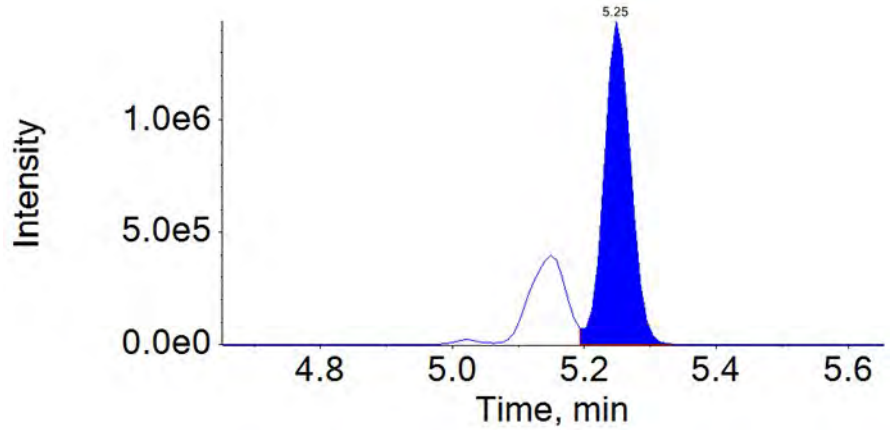
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

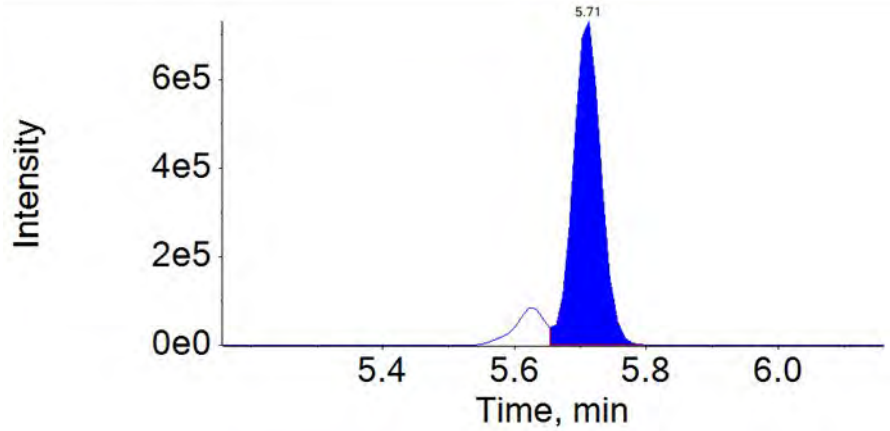
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFHxS **RT (min.):** 4.55 **Peak Area:** 3819927.07 **Mass Range:** 399.0 / 80.0 **File Name:** 18NOV28DCAL-12.wiff **Sample Name:** CAL7	 **Integration Comment:** incorrect integration

Component Name: PFOS **RT (min.):** 5.25 **Peak Area:** 4044104.57 **Mass Range:** 499.0 / 80.0 **File Name:** 18NOV28DCAL-12.wiff **Sample Name:** CAL7	 **Integration Comment:** incorrect integration

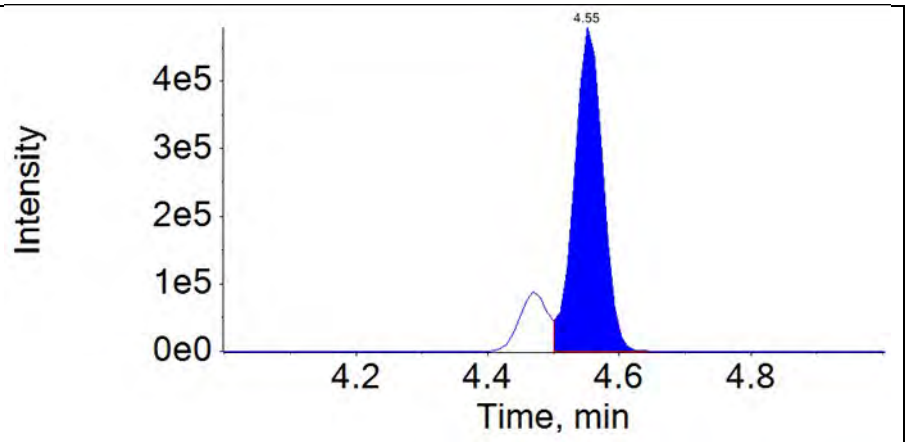
Component Name: NMeFOSAA **RT (min.):** 5.71 **Peak Area:** 2148433.90 **Mass Range:** 570.0 / 419.0 **File Name:** 18NOV28DCAL-12.wiff **Sample Name:** CAL7	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

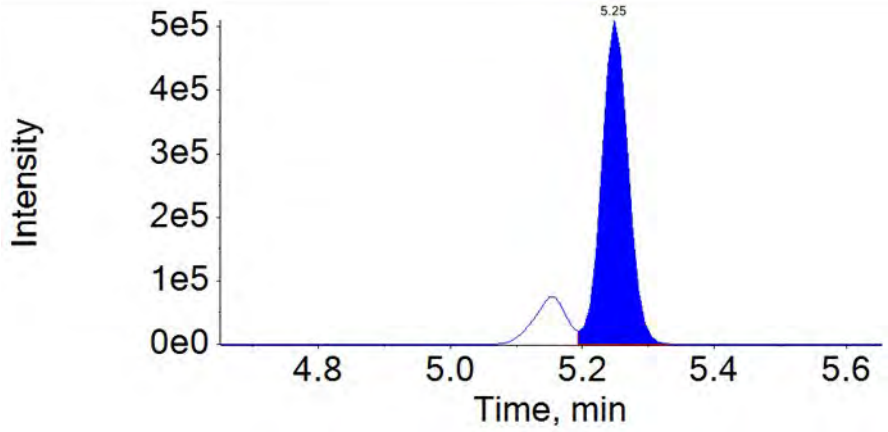
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS_2
RT (min.):
4.55
Peak Area:
1444685.25
Mass Range:
399.0 / 99.0
File Name:
18NOV28DCAL-12.wiff
Sample Name:
CAL7



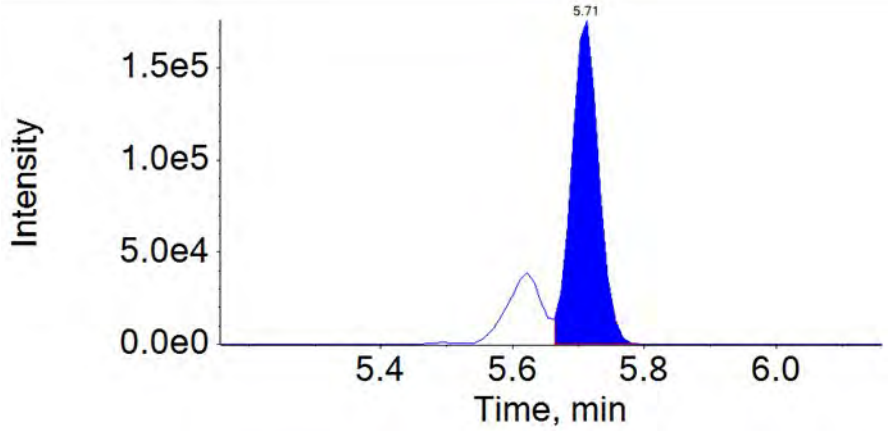
Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.25
Peak Area:
1428771.10
Mass Range:
499.0 / 99.0
File Name:
18NOV28DCAL-12.wiff
Sample Name:
CAL7



Integration Comment: incorrect integration

Component Name:
NMeFOSAA_2
RT (min.):
5.71
Peak Area:
503982.25
Mass Range:
570.0 / 483.0
File Name:
18NOV28DCAL-12.wiff
Sample Name:
CAL7



Integration Comment: incorrect integration

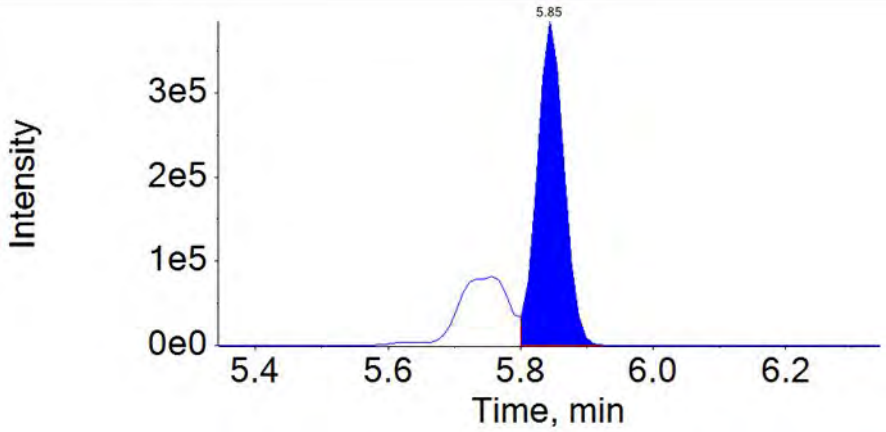
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NEtFOSAA_2
RT (min.):
5.85
Peak Area:
1078966.66
Mass Range:
584.0 / 526.0
File Name:
18NOV28DCAL-12.wiff
Sample Name:
CAL7



Integration Comment: incorrect integration

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Ion Ratio Report

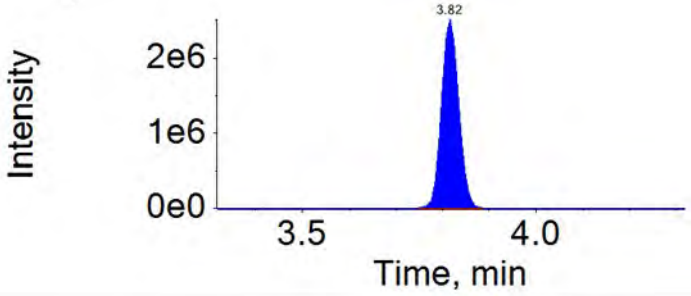
Sample Name: CAL7 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-12.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	6468971.36	A	0.3655	0.3712			
PFBS_2	3.82	1.00	2401069.30	A	0.3655	0.3712	2	50	
4:2-FTS	4.13	1.00	2126148.19	A	0.6383	0.6227			
4:2-FTS_2	4.13	1.00	1323869.93	A	0.6383	0.6227	-2	50	
PFHxA	4.16	1.00	12530842.98	A	0.0103	0.0129			
PFHxA_2	4.16	1.00	161470.85	A	0.0103	0.0129	25	50	
PFPeS	4.18	1.10	3295381.64	A	0.4976	0.5155			
PFPeS_2	4.18	1.10	1698903.95	A	0.4976	0.5155	4	50	
PFHpA	4.55	1.00	12619701.65	A	0.0557	0.0605			
PFHpA_2	4.55	1.00	763765.05	A	0.0557	0.0605	9	50	
PFHxS	4.55	1.00	4797026.75	M	0.3693	0.3544			
PFHxS_2	4.55	1.00	1700170.72	M	0.3693	0.3544	-4	50	
6:2-FTS	4.91	1.00	1464447.02	A	0.6625	0.6198			
6:2-FTS_2	4.91	1.00	907687.80	A	0.6625	0.6198	-6	50	
PFHpS	4.91	1.08	4562639.61	A	0.3915	0.4054			
PFHpS_2	4.91	1.08	1849493.91	A	0.3915	0.4054	4	50	
PFOA	4.92	1.00	12900182.71	A	0.0573	0.0647			
PFOA_2	4.92	1.00	835020.05	A	0.0573	0.0647	13	50	
PFOS	5.25	1.00	5620328.96	M	0.2960	0.3007			
PFOS_2	5.25	1.00	1690188.73	M	0.2960	0.3007	2	50	
PFNA	5.27	1.00	12939629.11	A	0.0201	0.0225			
PFNA_2	5.27	1.00	291130.29	A	0.0201	0.0225	12	50	
PFNS	5.54	1.06	3804945.18	A	0.4794	0.4635			
PFNS_2	5.54	1.06	1763659.34	A	0.4794	0.4635	-3	50	
PFDA	5.57	1.00	11371046.97	A	0.0075	0.0075			
PFDA_2	5.57	1.00	85605.85	A	0.0075	0.0075	1	50	
8:2-FTS	5.57	1.00	1620286.00	A	0.5380	0.5778			
8:2-FTS_2	5.57	1.00	936181.88	A	0.5380	0.5778	7	50	
NMeFOSAA	5.71	1.00	2414874.82	M	0.2305	0.2675			
NMeFOSAA_2	5.71	1.00	645922.89	M	0.2305	0.2675	16	50	
PFDS	5.80	1.11	3061543.49	A	0.5356	0.4828			
PFDS_2	5.80	1.11	1477981.79	A	0.5356	0.4828	-10	50	
PFUnDA	5.83	1.00	11254483.78	A	0.0038	0.0041			
PFUnDA_2	5.83	1.00	46090.29	A	0.0038	0.0041	8	50	
NEtFOSAA	5.85	1.00	2127663.38	A	0.7356	0.7070			
NEtFOSAA_2	5.85	1.00	1504160.93	M	0.7356	0.7070	-4	50	
PFDoDA	6.06	1.00	14195839.12	A	0.0130	0.0161			
PFDoDA_2	6.05	1.00	228700.97	A	0.0130	0.0161	24	50	
10:2-FTS	6.08	1.09	1718827.31	A	0.6989	0.7147			
10:2-FTS_2	6.08	1.09	1228426.74	A	0.6989	0.7147	2	50	
PFTrDA	6.26	1.03	12329126.07	A	0.0090	0.0102			
PFTrDA_2	6.26	1.03	125163.76	A	0.0090	0.0102	13	50	
PFTeDA	6.43	1.00	11258874.06	A	0.0056	0.0072			
PFTeDA_2	6.43	1.00	81360.66	A	0.0056	0.0072	29	50	
PFHxDA	6.73	1.05	6113985.15	A	0.0646	0.0666			
PFHxDA_2	6.73	1.05	406918.04	A	0.0646	0.0666	3	50	
PFODA	7.00	1.09	5309889.90	A	0.0264	0.0282			
PFODA_2	6.99	1.09	149760.81	A	0.0264	0.0282	7	50	

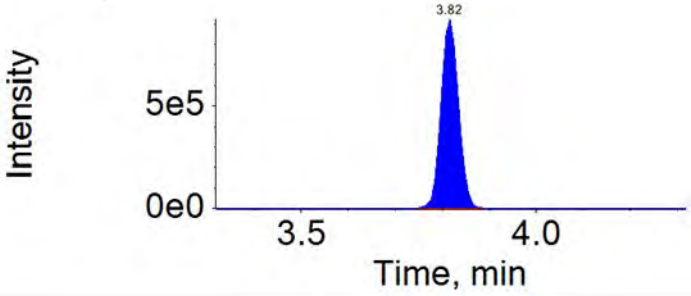
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

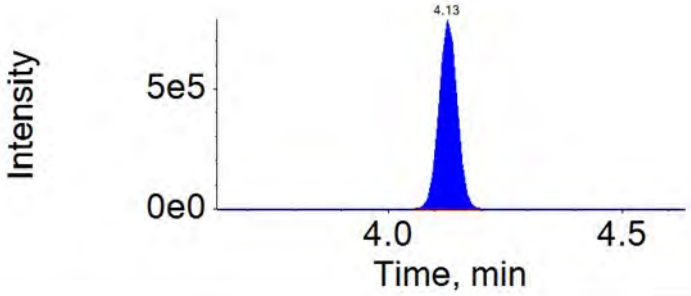
Component: PFBS
Primary Mass: 299.0 / 80.0



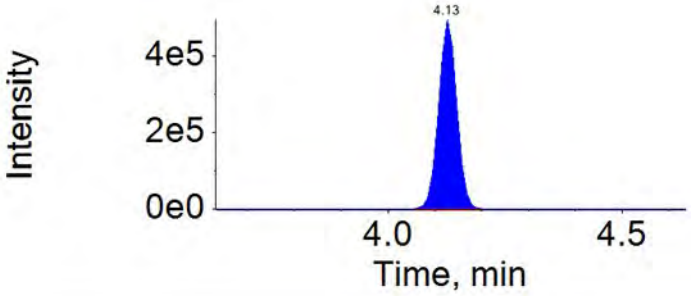
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



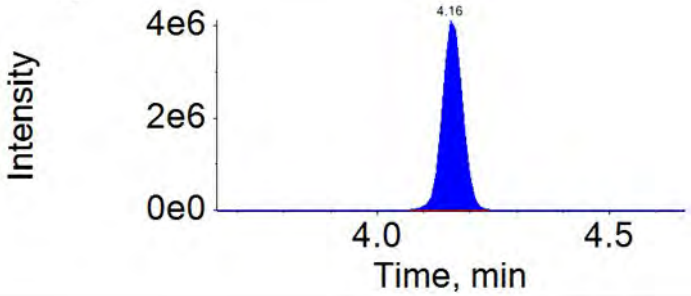
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



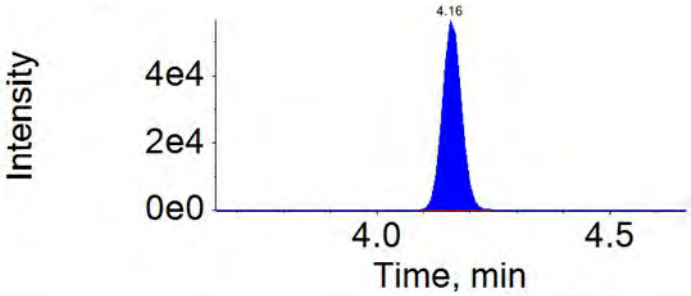
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



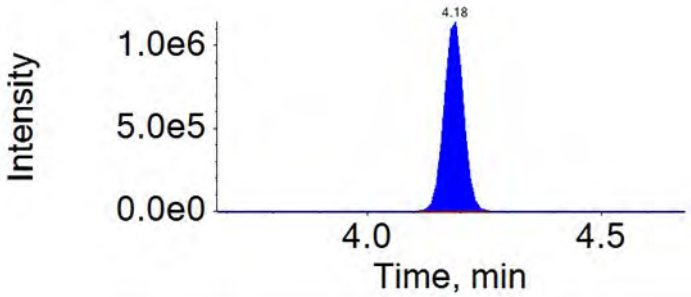
Component: PFHxA
Primary Mass: 313.0 / 269.0



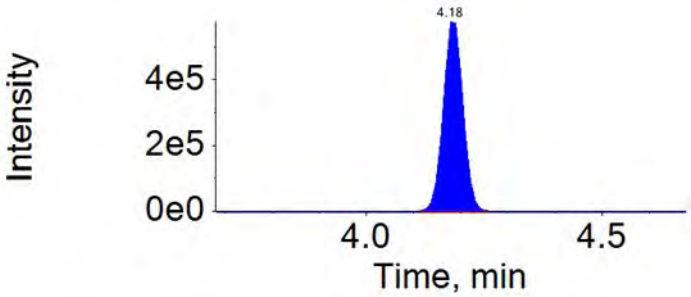
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



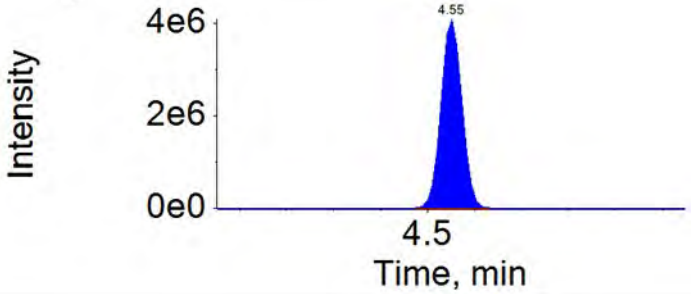
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



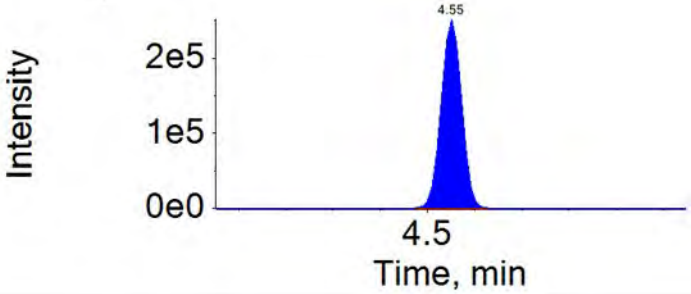
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

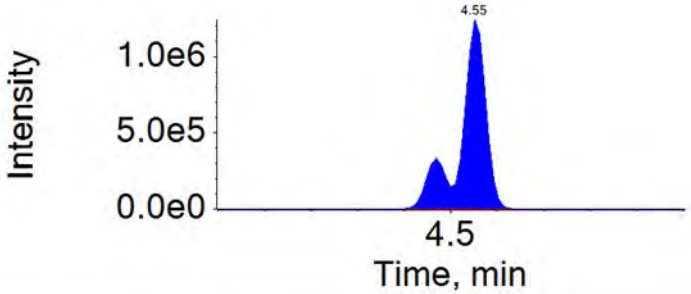
Component: PFHpA
Primary Mass: 363.0 / 319.0



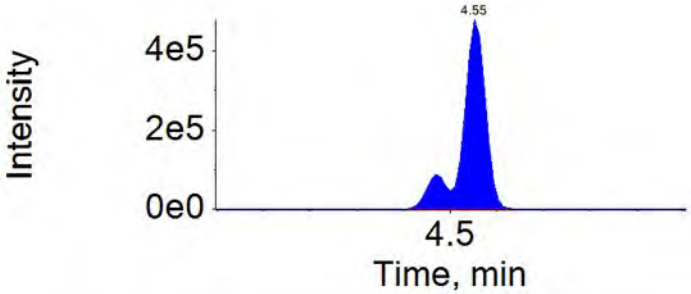
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



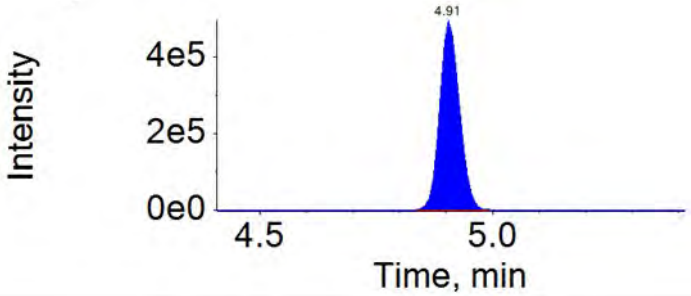
Component: PFHxS
Primary Mass: 399.0 / 80.0



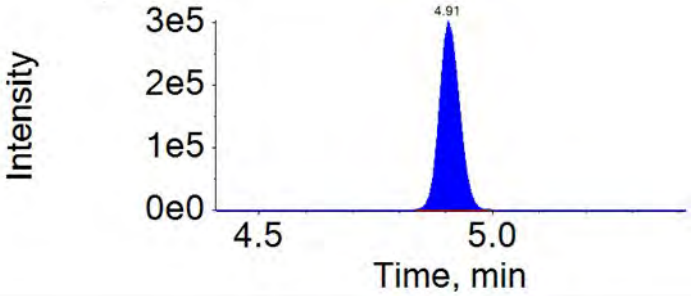
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



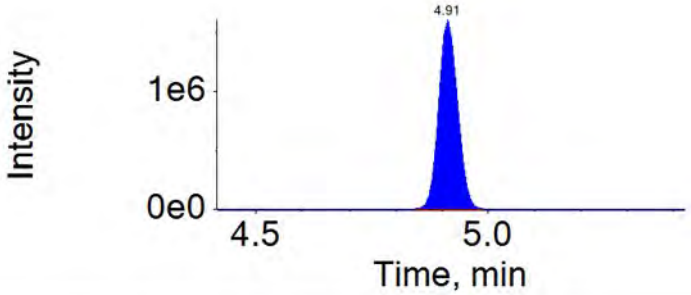
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



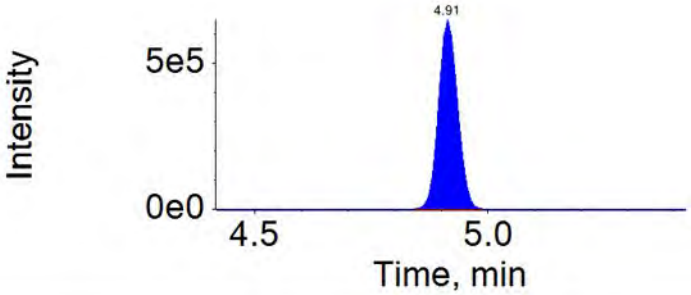
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



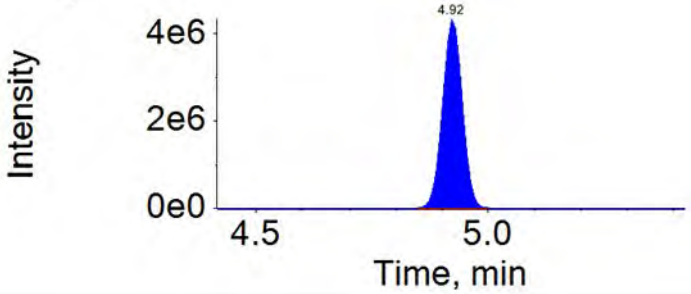
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



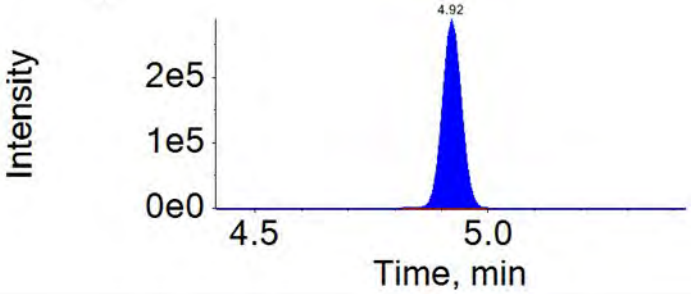
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

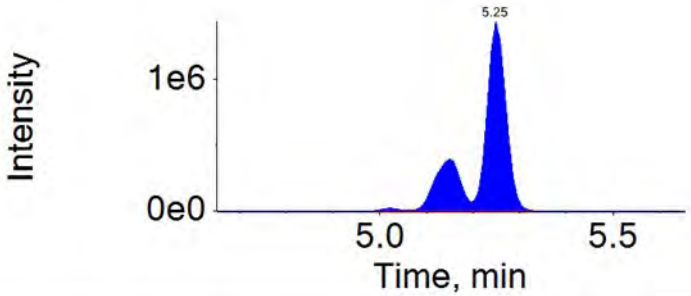
Component: PFOA
Primary Mass: 413.0 / 369.0



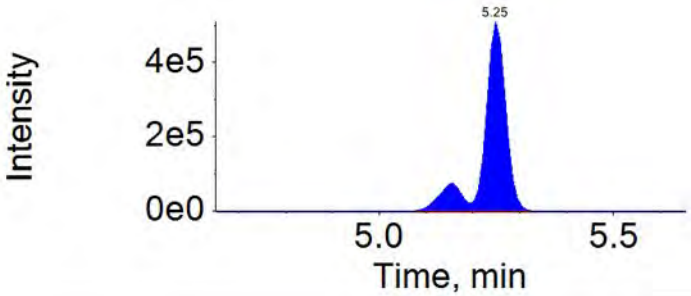
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



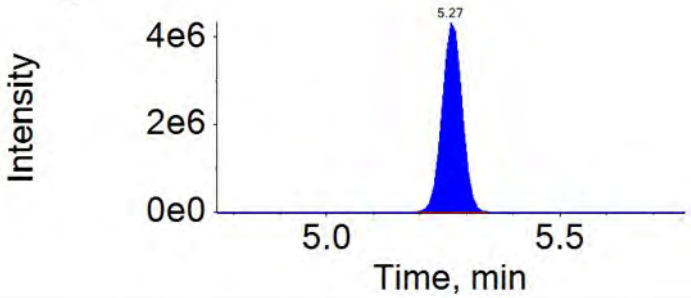
Component: PFOS
Primary Mass: 499.0 / 80.0



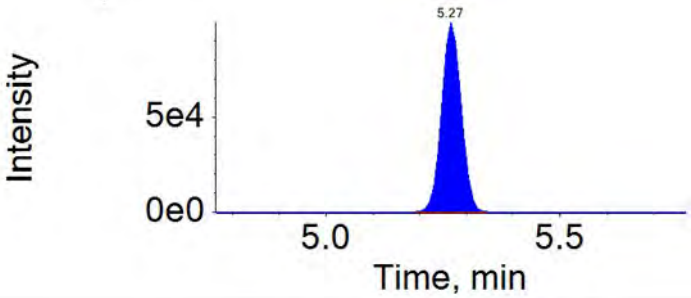
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



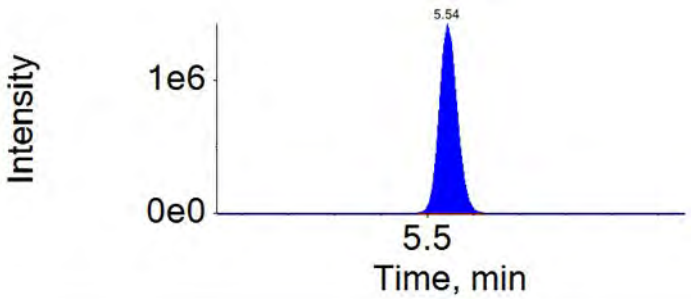
Component: PFNA
Primary Mass: 463.0 / 419.0



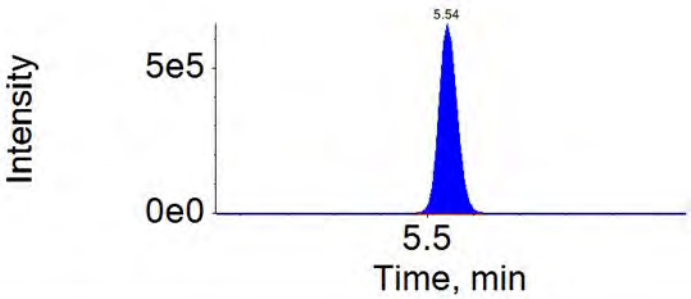
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



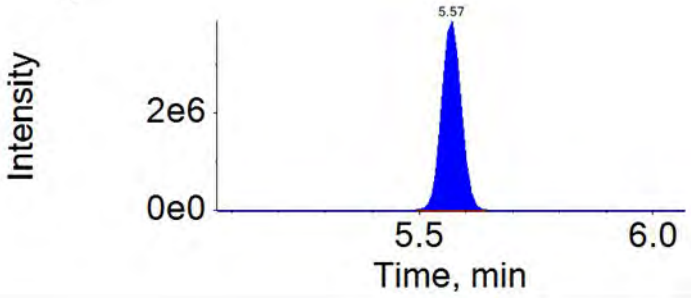
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



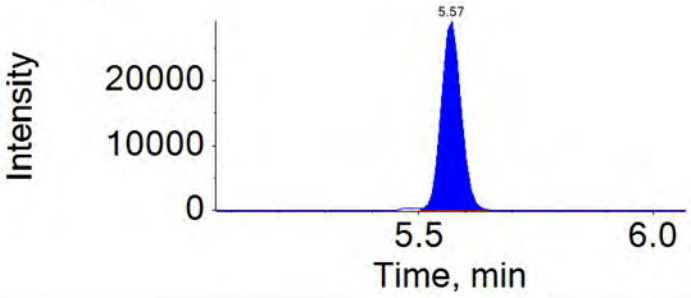
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

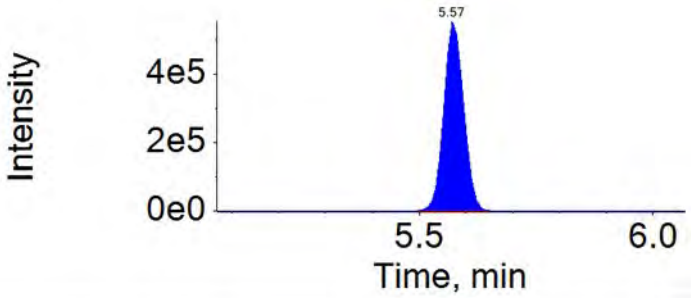
Component: PFDA
Primary Mass: 513.0 / 469.0



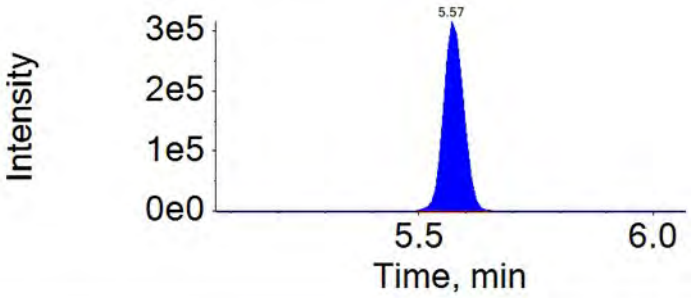
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



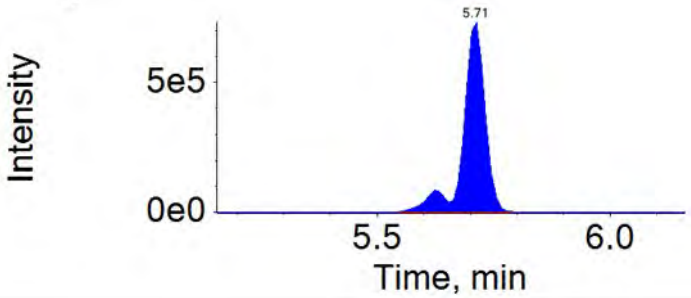
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



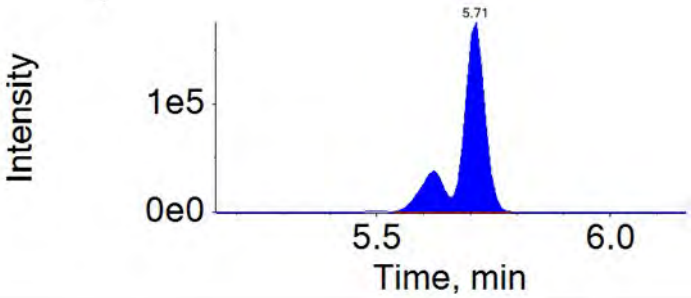
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



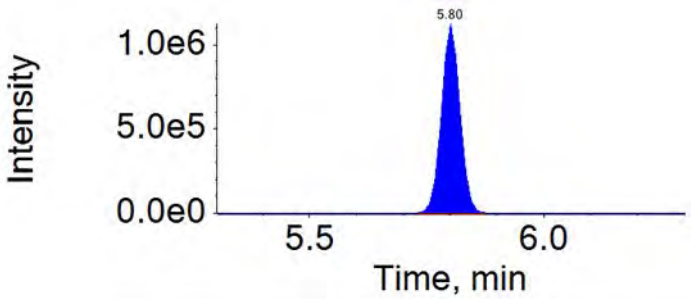
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



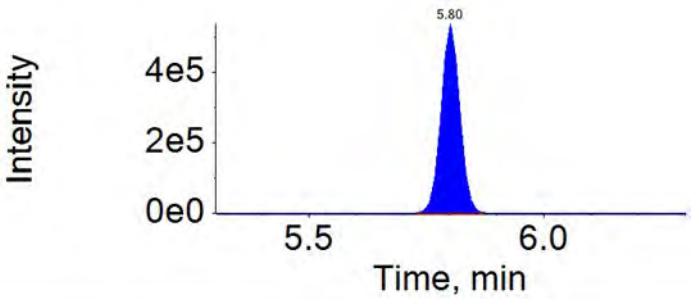
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



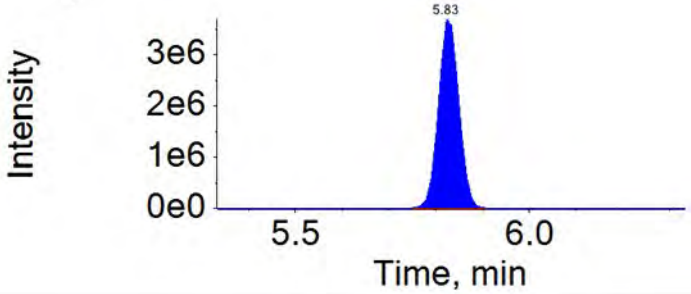
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Secondary Mass: 599.0 / 99.0



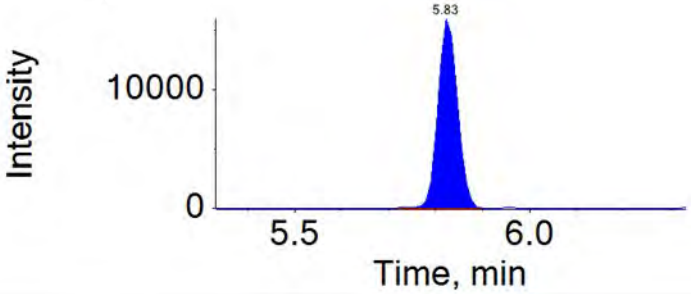
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

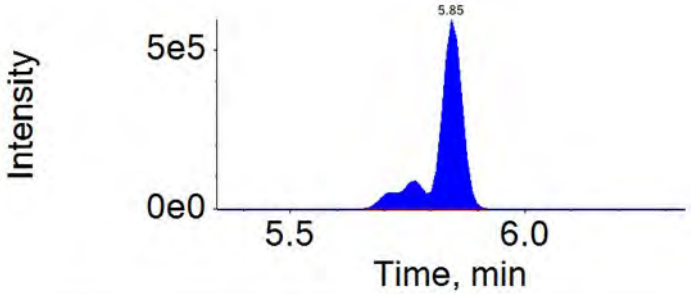
Component: PFUnDA
Primary Mass: 563.0 / 519.0



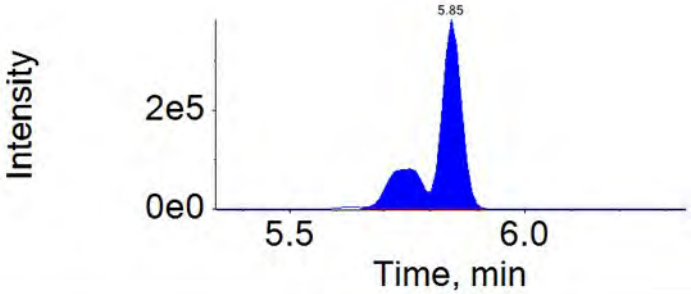
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Secondary Mass: 563.0 / 169.0



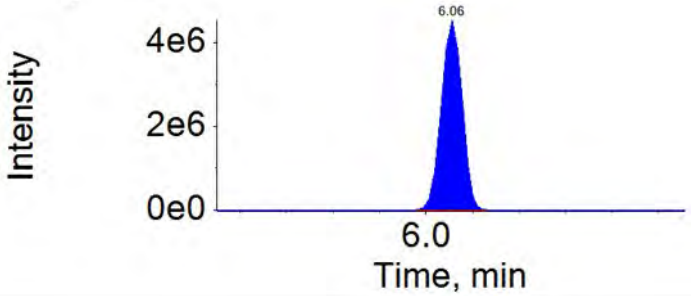
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



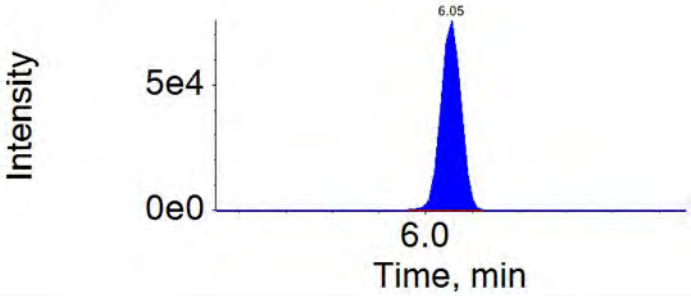
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



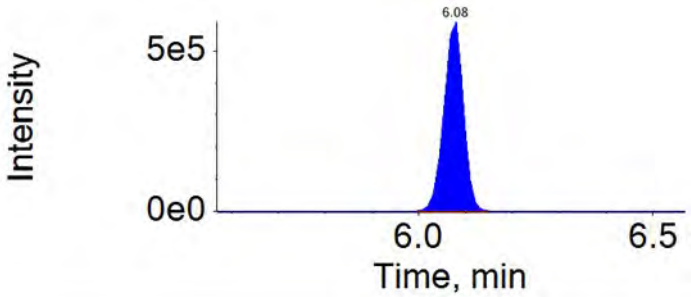
Component: PFDoDA
Primary Mass: 613.0 / 569.0



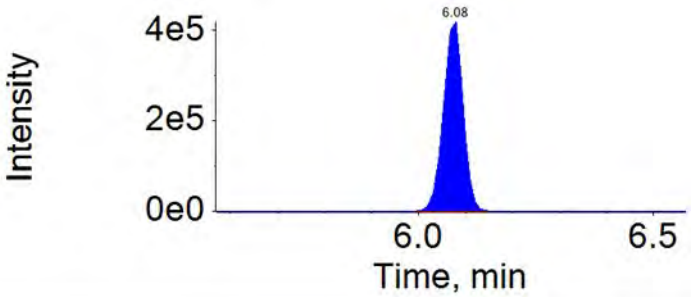
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



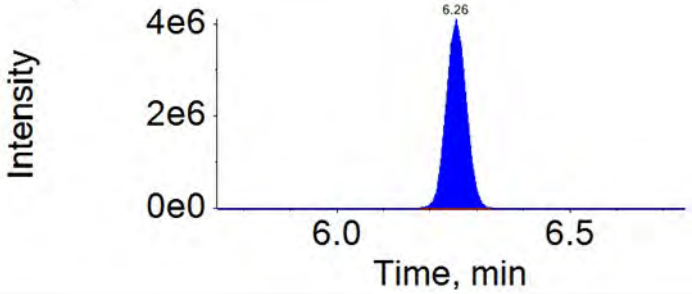
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



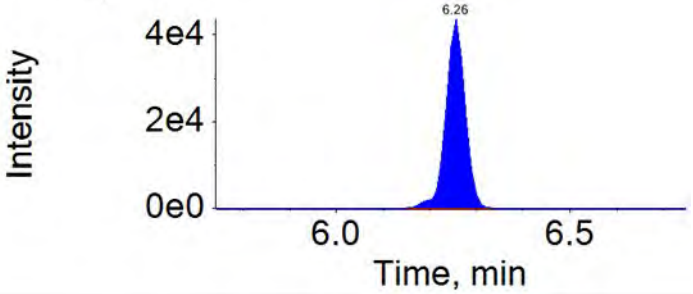
APPROVED
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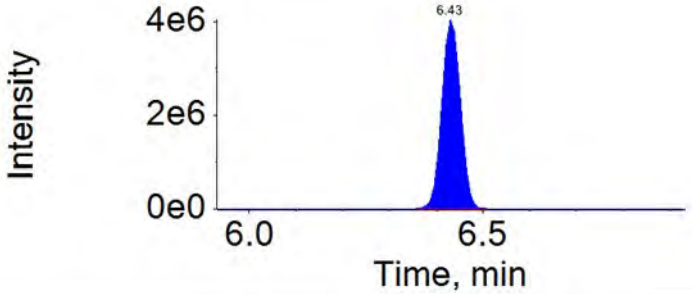
Component: PFTrDA
Primary Mass: 663.0 / 619.0



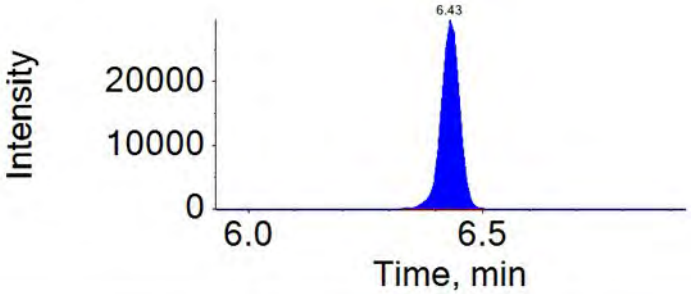
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



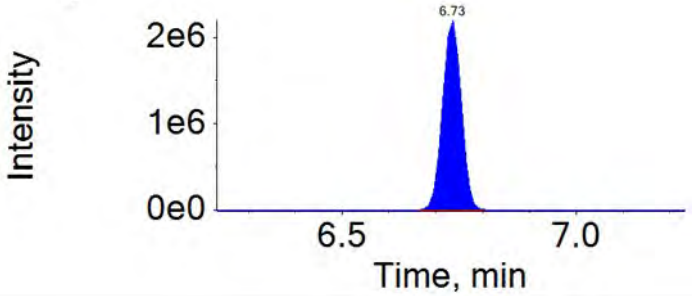
Component: PFTeDA
Primary Mass: 713.0 / 669.0



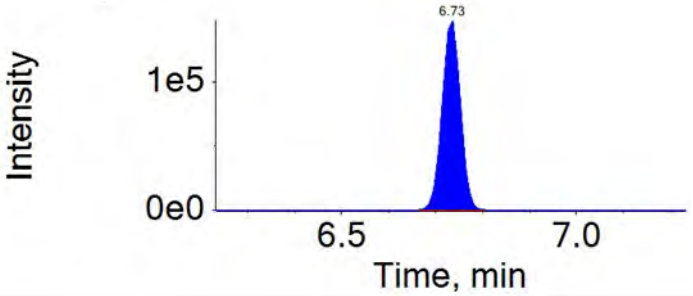
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



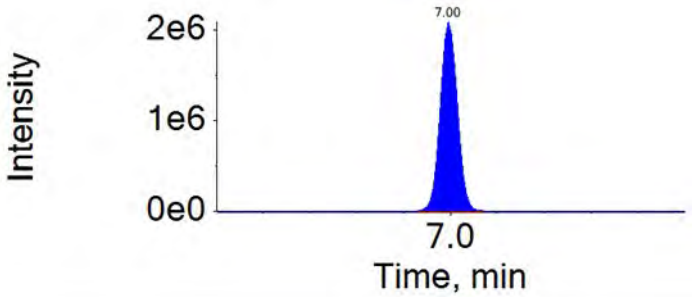
Component: PFHxDA
Primary Mass: 813.0 / 769.0



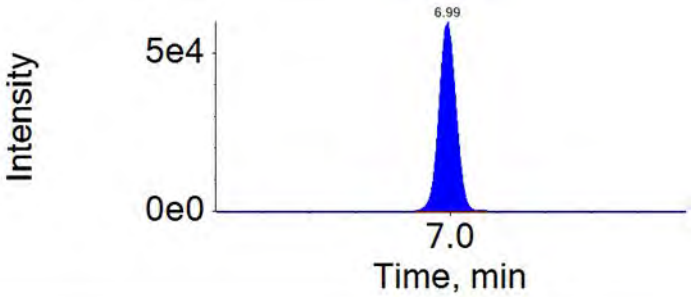
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	Instrument Blank			**Data File:**		18NOV28DCAL-13.wiff
Sample ID:	methanol			**Acquis Date:**		11/28/2018 2:45:19 PM
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	1			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV28DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	1143174.3	887248.9	29	50	
13C2-PFOA	5.0	661239.2	498501.6	33	50	
13C4-PFOS	4.8	389955.6	283214.2	38	50	
13C2-PFDA	5.0	588197.1	441790.6	33	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	1266298.2	13C3-PFBA	1143174.3	1.108	5.000	4.942	99	70-130	
E13C5-PFPeA	1221656.2	13C3-PFBA	1143174.3	1.069	5.000	4.990	100	70-130	
E13C3-PFBS	546183.1	13C3-PFBA	1143174.3	0.478	4.650	4.558	98	70-130	
E13C2-4:2-FTS	92907.1	13C2-PFOA	661239.2	0.141	4.670	4.842	104	70-130	
E13C5-PFHxA	881698.8	13C2-PFOA	661239.2	1.333	5.000	4.898	98	70-130	
E13C3-PFHxS	397088.3	13C2-PFOA	661239.2	0.601	4.730	4.707	100	70-130	
E13C4-PFHpA	684654.8	13C2-PFOA	661239.2	1.035	5.000	4.758	95	70-130	
E13C2-6:2-FTS	90195.6	13C2-PFOA	661239.2	0.136	4.750	5.710	120	70-130	
E13C8-PFOA	1243060.3	13C2-PFOA	661239.2	1.880	5.000	5.174	103	70-130	
E13C8-PFOS	389085.3	13C4-PFOS	389955.6	0.998	4.780	4.504	94	70-130	
E13C9-PFNA	823058.9	13C4-PFOS	389955.6	2.111	5.000	4.636	93	70-130	
E13C6-PFDA	1069720.1	13C2-PFDA	588197.1	1.819	5.000	5.128	103	70-130	
E13C2-8:2-FTS	97960.5	13C2-PFDA	588197.1	0.167	4.790	7.158	149	70-130	OOS
E13C8-PFOSA	873157.2	13C2-PFDA	588197.1	1.484	5.000	5.447	109	70-130	
Ed3-NMeFOSAA	242996.3	13C2-PFDA	588197.1	0.413	5.000	5.245	105	70-130	
E13C7-PFUnDA	700966.1	13C2-PFDA	588197.1	1.192	5.000	5.037	101	70-130	
Ed5-NEtFOSAA	159876.3	13C2-PFDA	588197.1	0.272	5.000	4.842	97	70-130	
E13C2-PFDoDA	1371772.4	13C2-PFDA	588197.1	2.332	5.000	4.900	98	70-130	
Ed7-NMePFOSAE	354362.2	13C2-PFDA	588197.1	0.602	5.000	5.207	104	70-130	
Ed3-NMePFOSA	104834.4	13C2-PFDA	588197.1	0.178	5.000	4.824	96	70-130	
Ed9-NEtPFOSAE	319017.0	13C2-PFDA	588197.1	0.542	5.000	5.499	110	70-130	
Ed5-NEtPFOSA	85061.1	13C2-PFDA	588197.1	0.145	5.000	5.025	100	70-130	
E13C2-PFTeDA	1062806.7	13C2-PFDA	588197.1	1.807	5.000	5.000	100	70-130	

APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

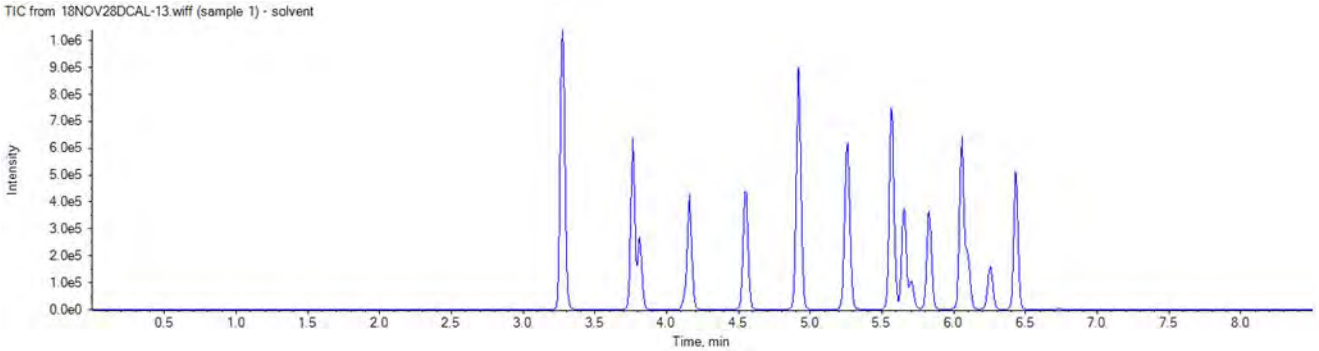
Analyte Quantitation Peak Table

Sample Name: Instrument Blank **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-13.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	N/A	N/A	N/A		A	13C4-PFBA	3.27	1266298.2	N/A	
PFPeA	N/A	N/A	N/A		A	13C5-PFPeA	3.76	1221656.2	N/A	
PFBS	N/A	N/A	N/A		A	13C3-PFBS	3.81	546183.1	N/A	
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.13	92907.1	N/A	
PFHxA	N/A	N/A	N/A		A	13C5-PFHxA	4.16	881698.8	N/A	
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.81	546183.1	N/A	
PFHpA	N/A	N/A	N/A		A	13C4-PFHpA	4.55	684654.8	N/A	
PFHxS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	397088.3	N/A	
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.91	90195.6	N/A	
PFHpS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	397088.3	N/A	
PFOA	N/A	N/A	N/A		A	13C8-PFOA	4.92	1243060.3	N/A	
PFOS	N/A	N/A	N/A		A	13C8-PFOS	5.25	389085.3	N/A	
PFNA	N/A	N/A	N/A		A	13C9-PFNA	5.27	823058.9	N/A	
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.25	389085.3	N/A	
PFDA	N/A	N/A	N/A		A	13C6-PFDA	5.57	1069720.1	N/A	
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.57	97960.5	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.65	873157.2	N/A	
NMeFOSAA	N/A	N/A	N/A		A	d3-NMeFOSAA	5.71	242996.3	N/A	
PFDS	N/A	N/A	N/A		A	13C8-PFOS	5.25	389085.3	N/A	
PFUnDA	N/A	N/A	N/A		A	13C7-PFUnDA	5.83	700966.1	N/A	
NEtFOSAA	N/A	N/A	N/A		A	d5-NEtFOSAA	5.84	159876.3	N/A	
PFDoDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.06	1371772.4	N/A	
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.57	97960.5	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.10	354362.2	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.11	104834.4	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.25	389085.3	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.25	319017.0	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.27	85061.1	N/A	
PFTrDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.06	1371772.4	N/A	
PFTeDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	1062806.7	N/A	
PFHxDA	6.74	1.050	6327.1		A	13C2-PFTeDA	6.43	1062806.7	0.006	0.068
PFODA	7.00	1.090	3886.6		A	13C2-PFTeDA	6.43	1062806.7	0.004	0.049

Total Ion Chromatogram

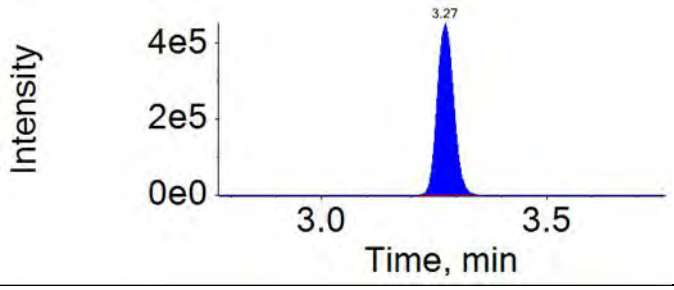


APPROVED
By JPT at 1:11 pm, 11/29/18

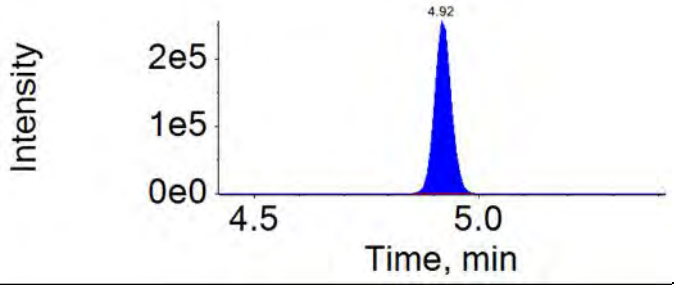
REVIEWED
By HMK at 1:17 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

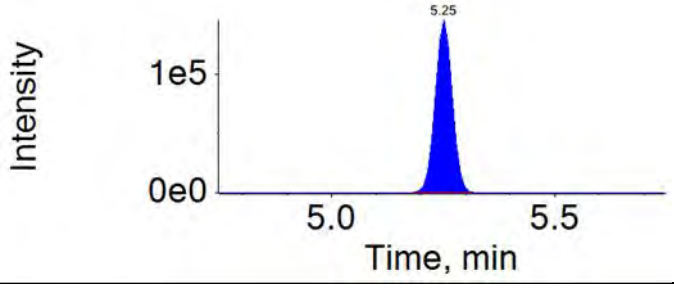
Injection Standard: 13C3-PFBA
216.0 / 172.0



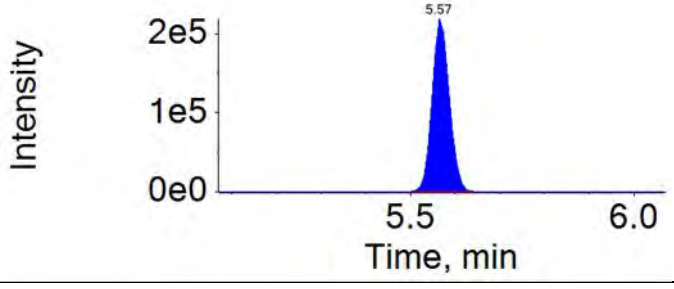
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0

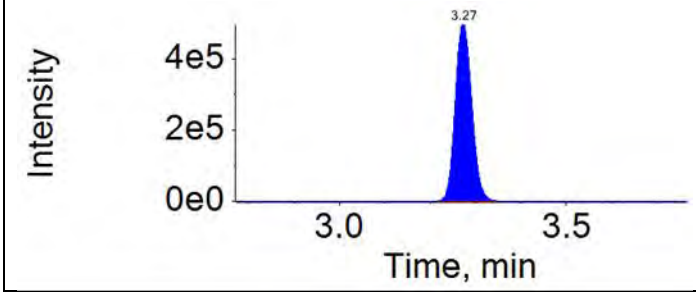


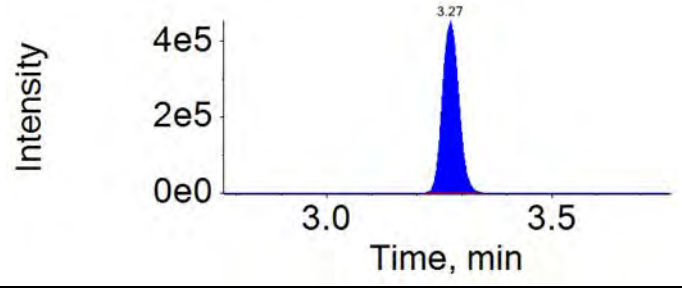
Injection Standard: 13C2-PFDA
515.0 / 470.0



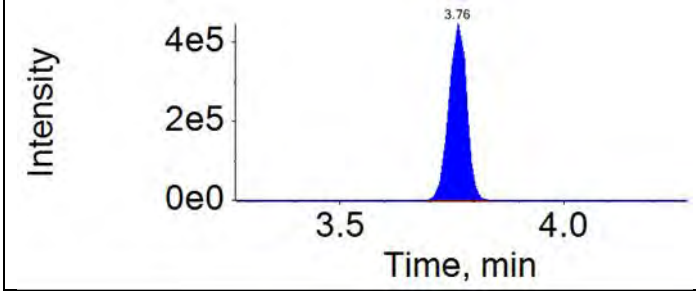
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

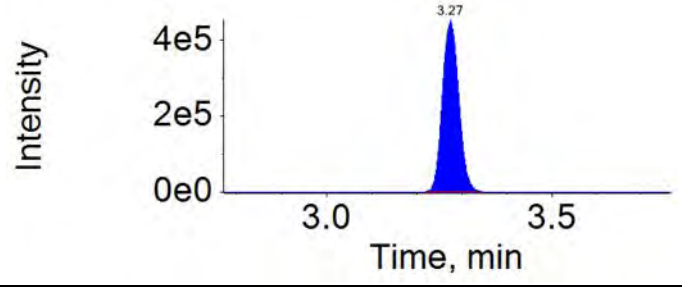
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



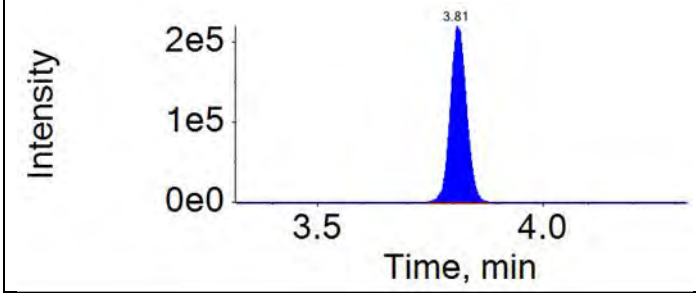


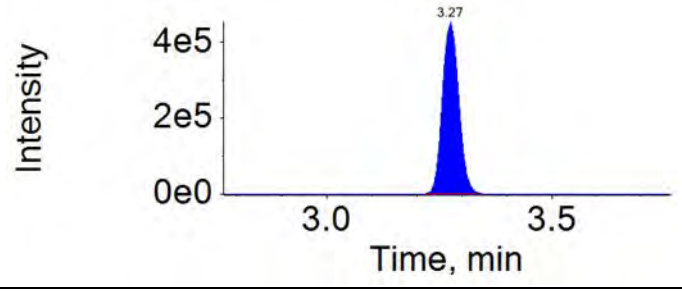
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



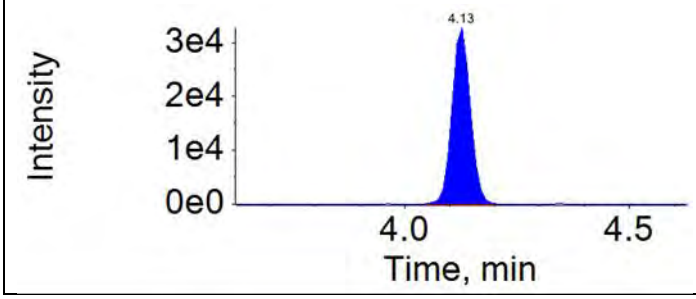


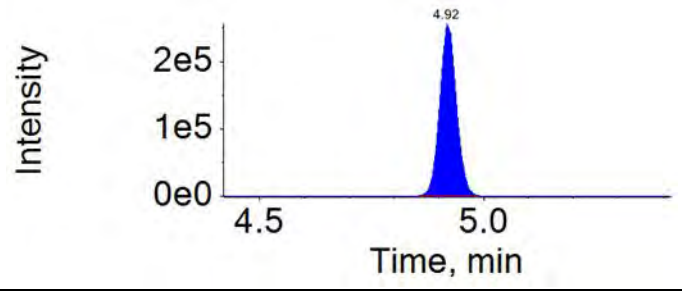
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





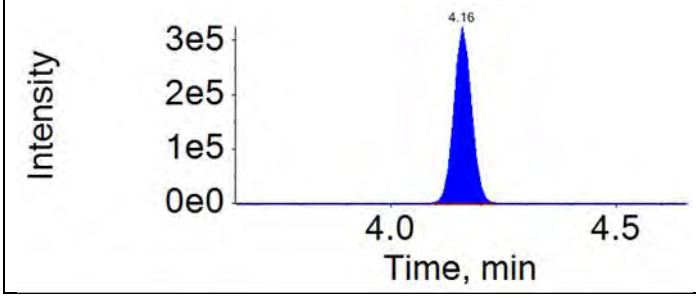
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

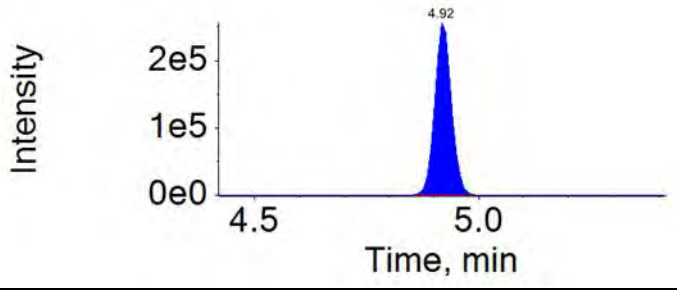




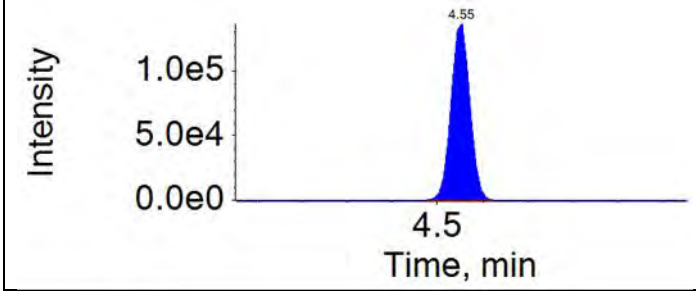
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

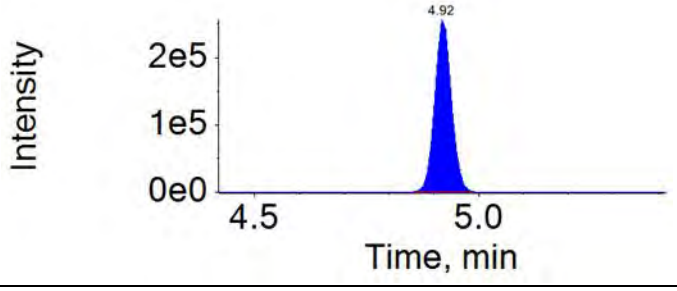
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



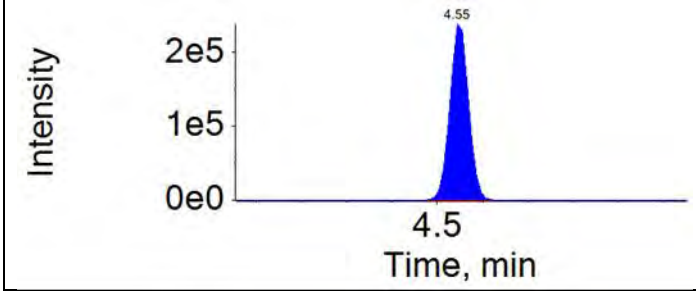


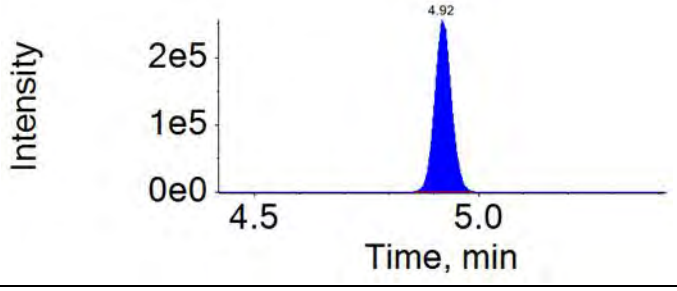
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



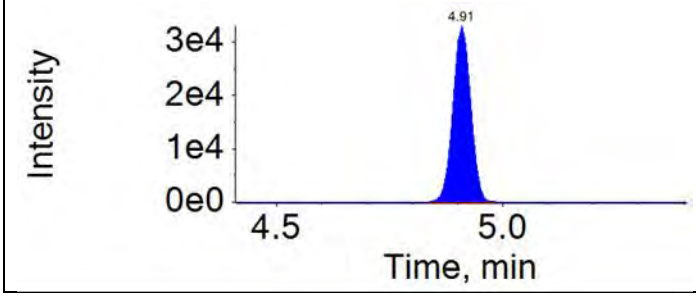


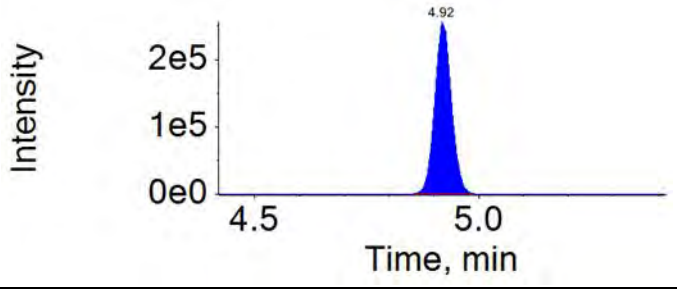
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0



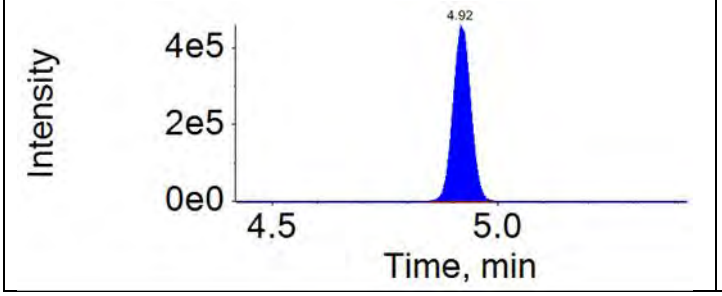


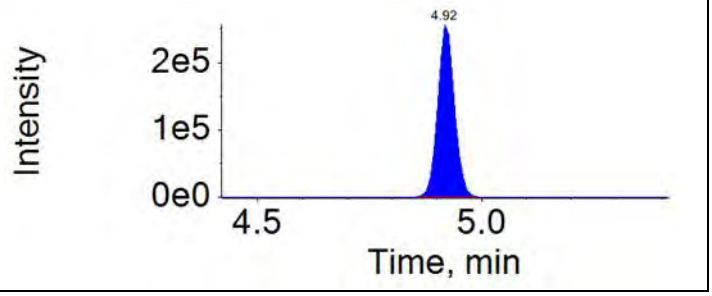
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

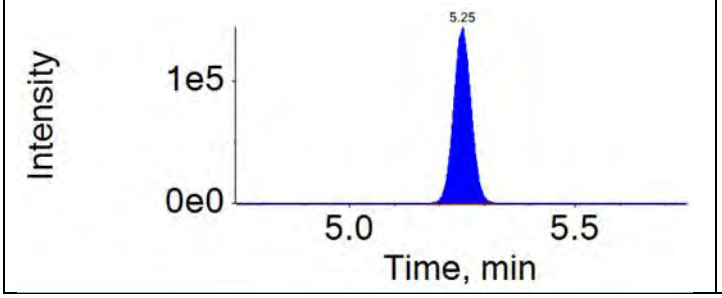
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

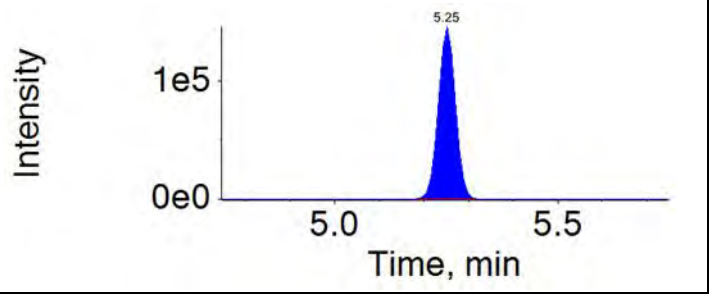
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0



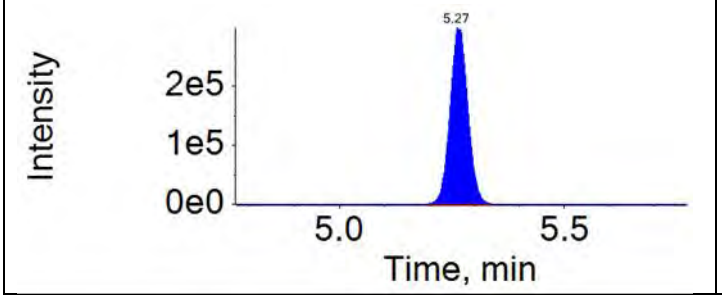


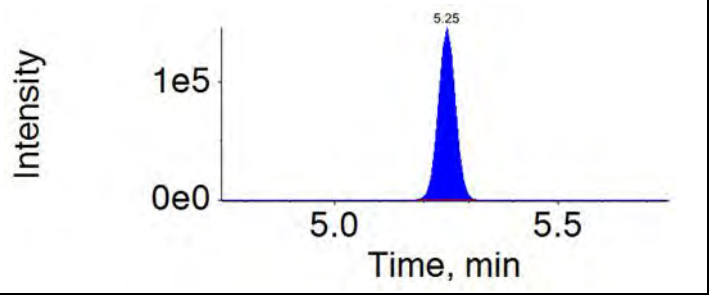
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0



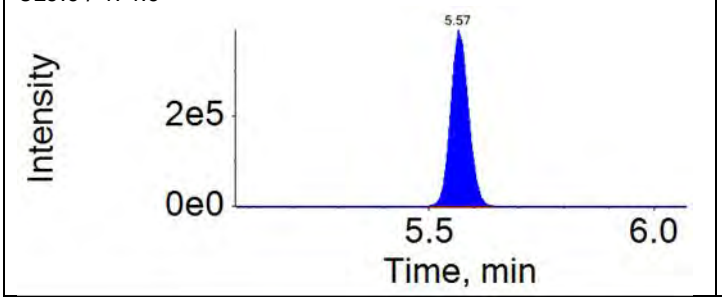


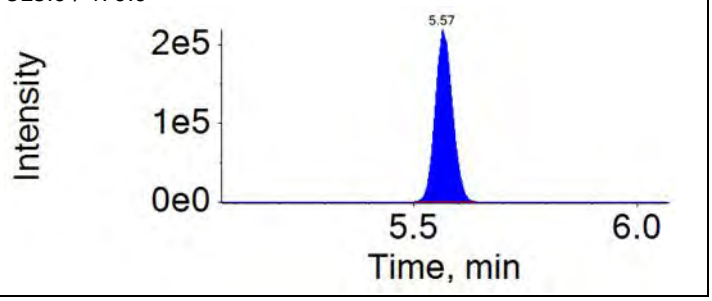
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0





Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0



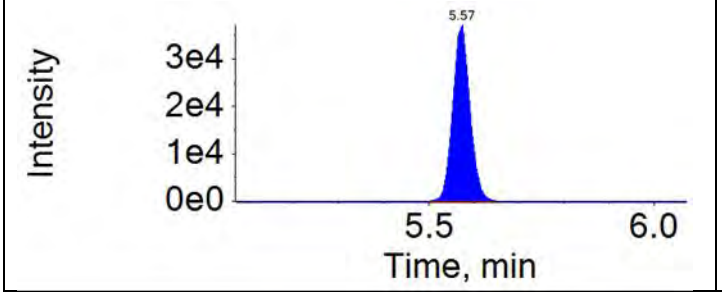


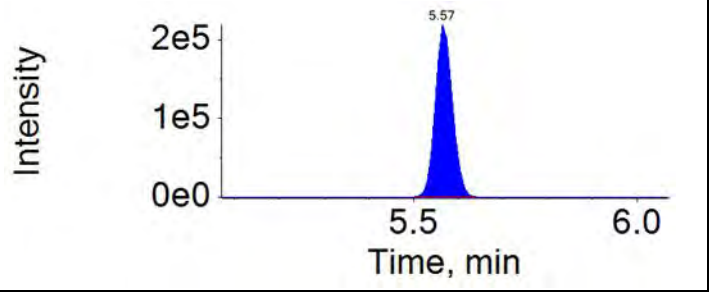
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

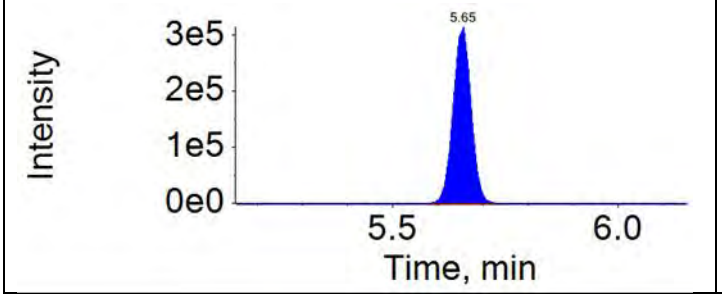
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

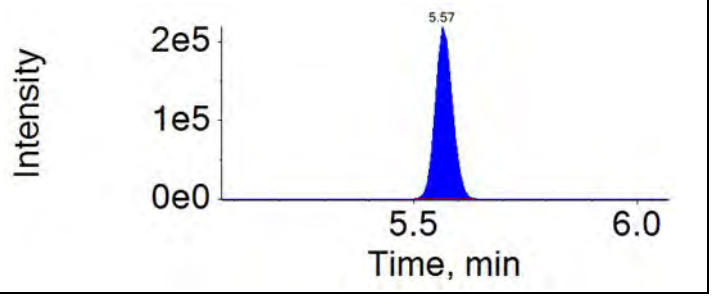
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



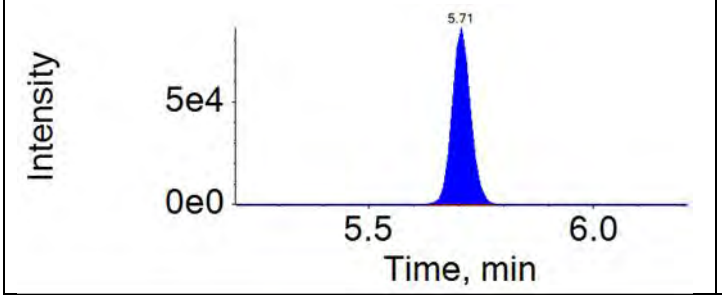


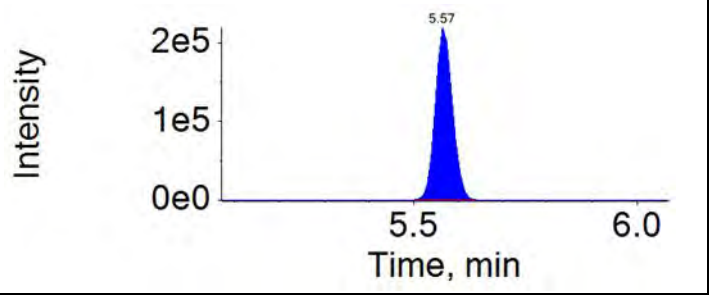
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



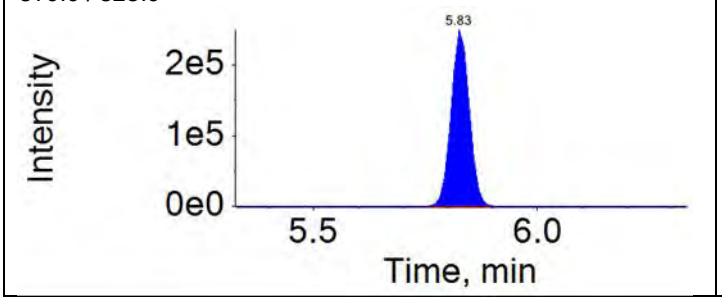


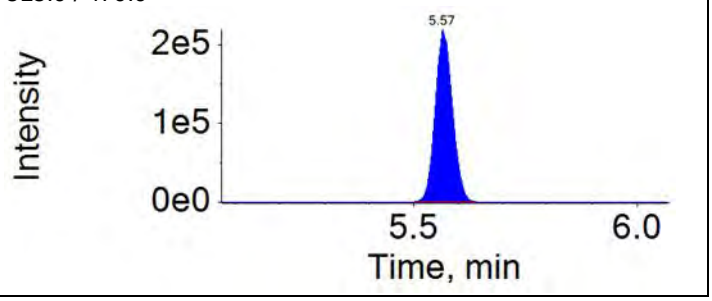
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0



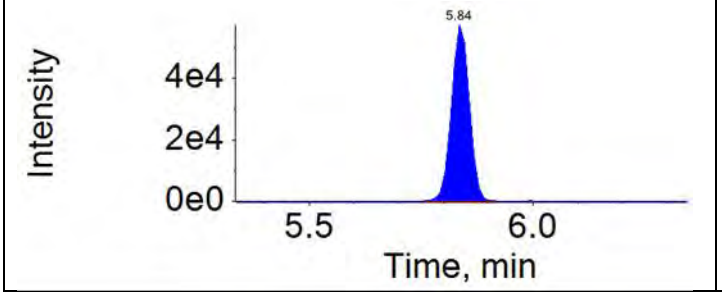


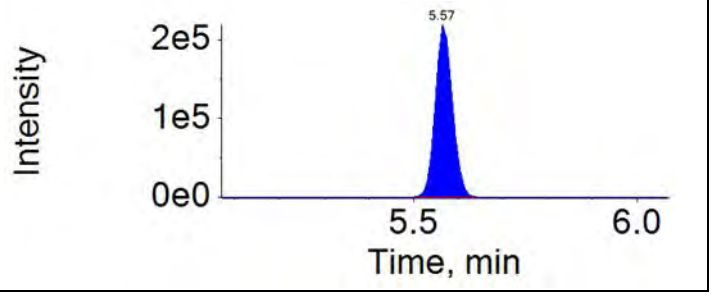
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

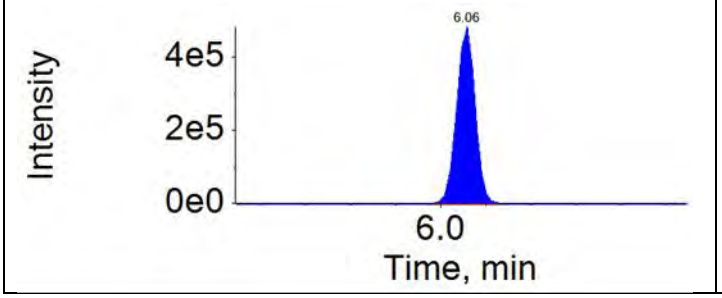
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

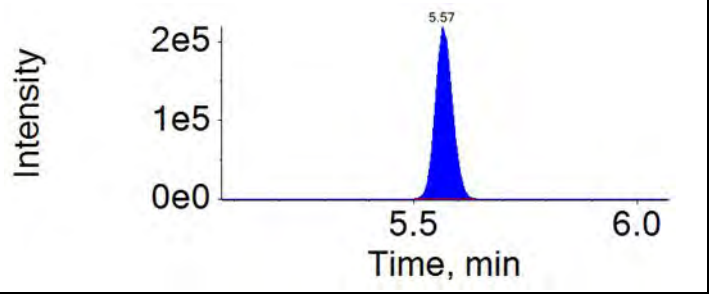
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



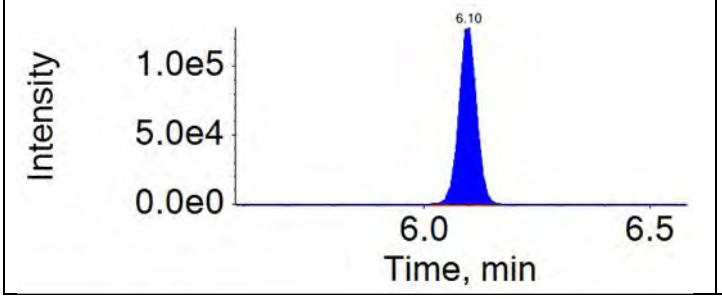


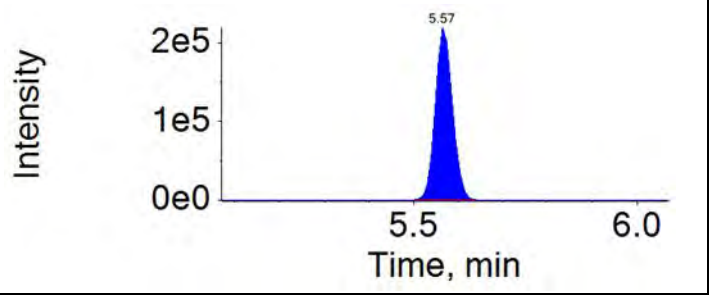
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



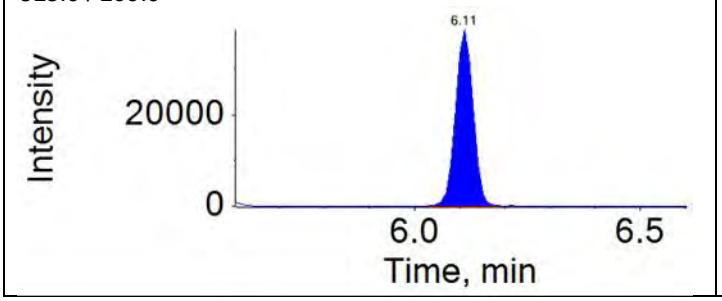


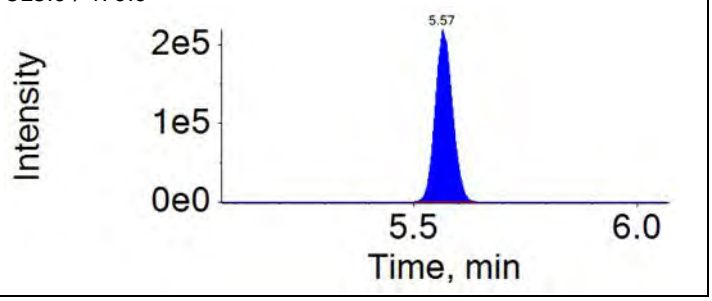
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



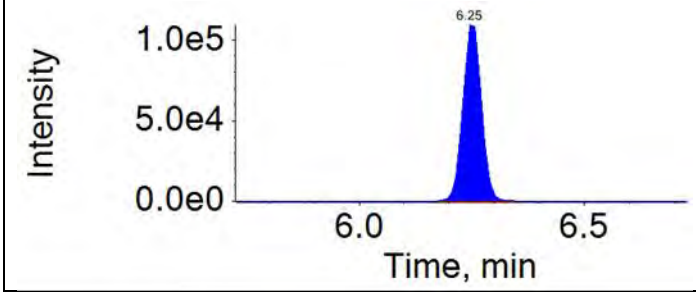


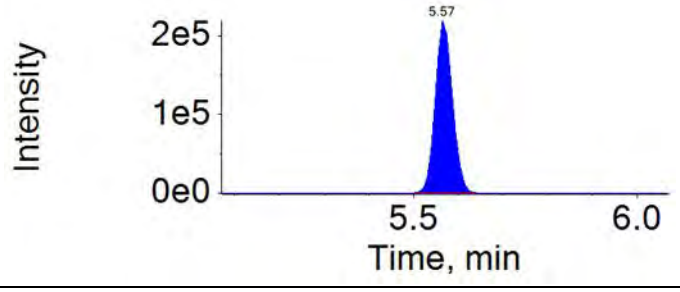
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

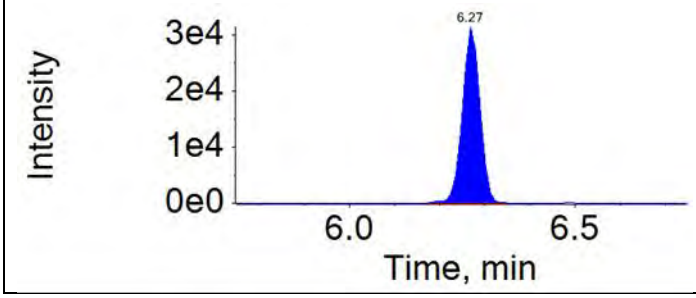
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

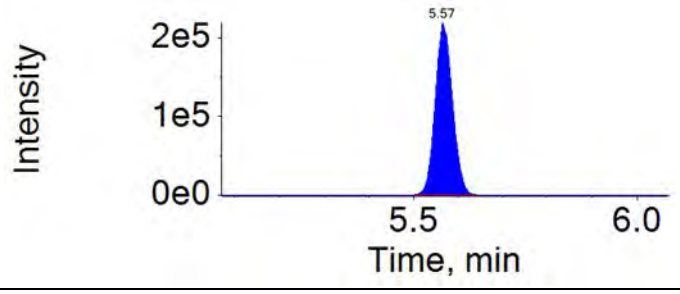
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



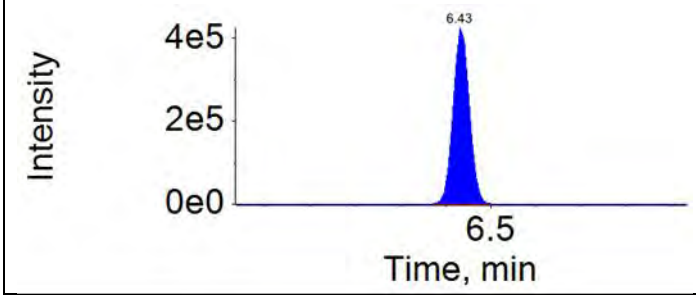


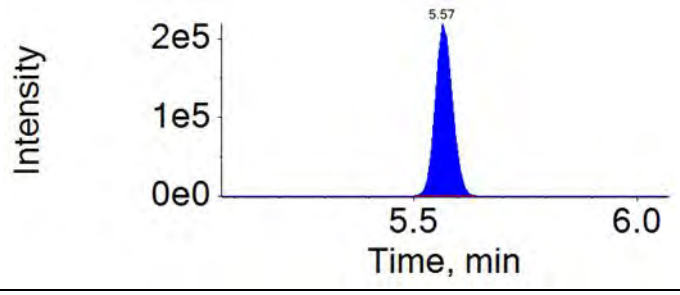
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



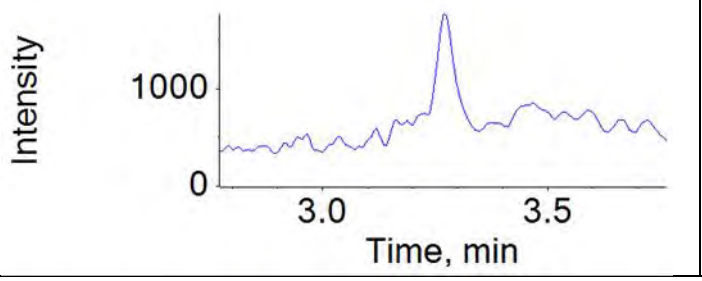


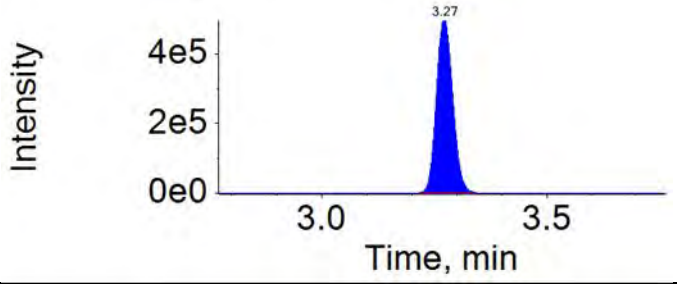
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

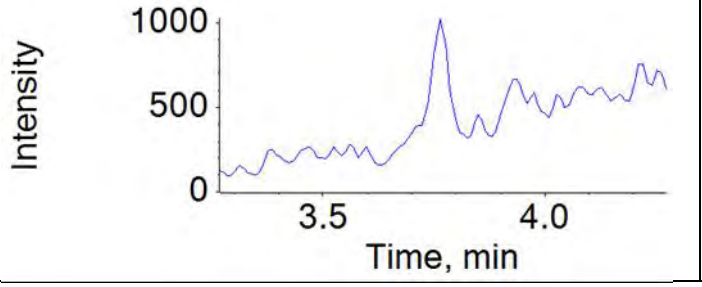
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

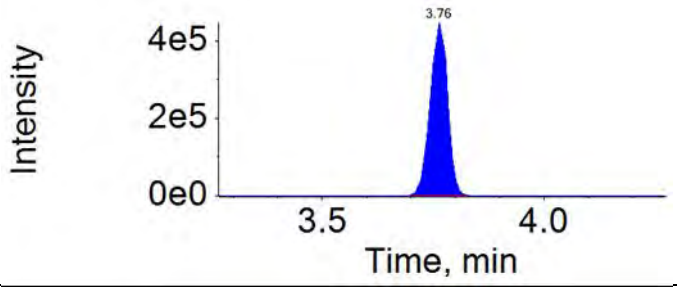
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



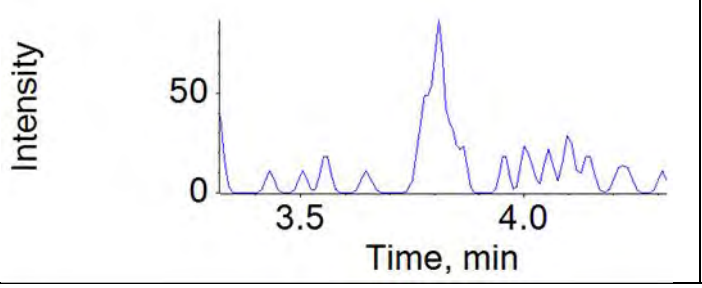


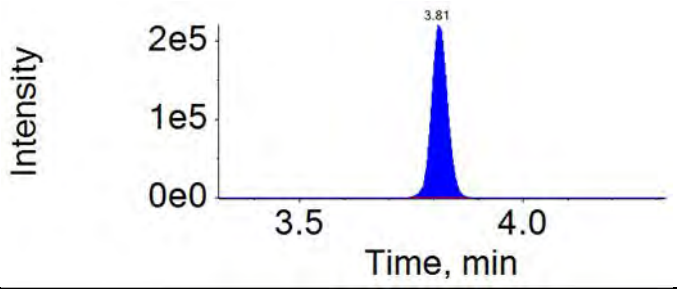
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



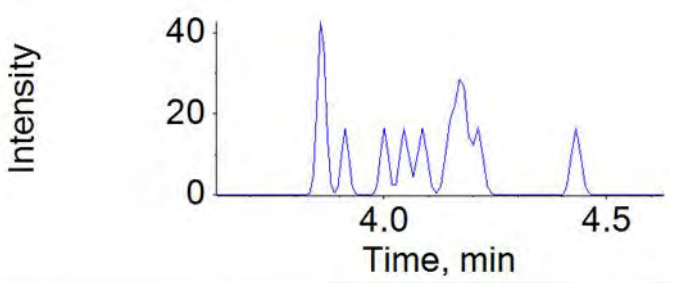


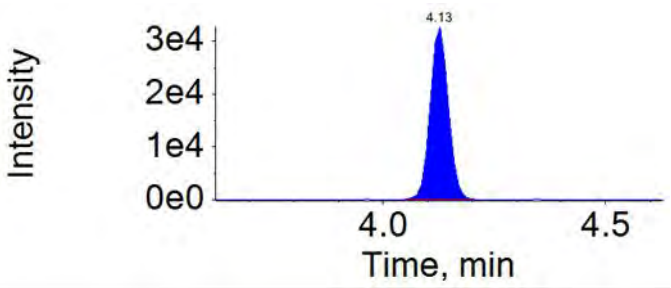
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



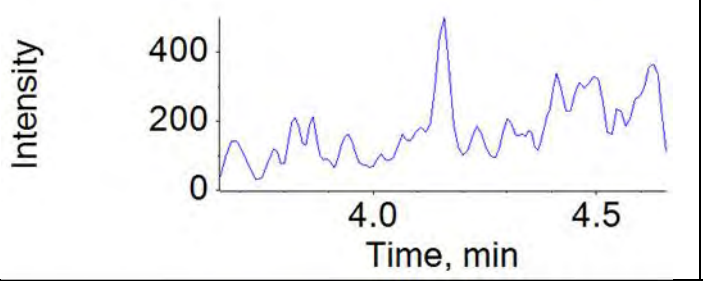


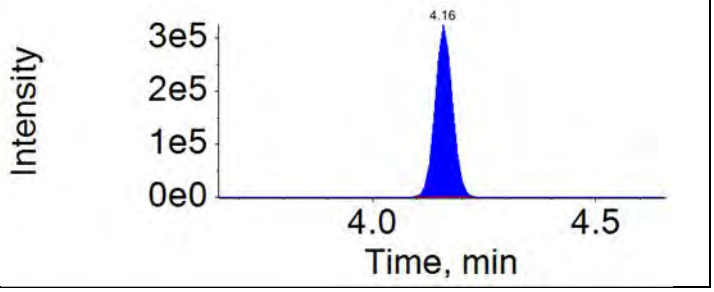
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

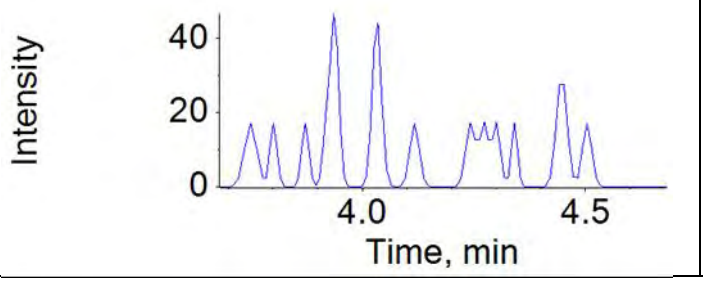
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

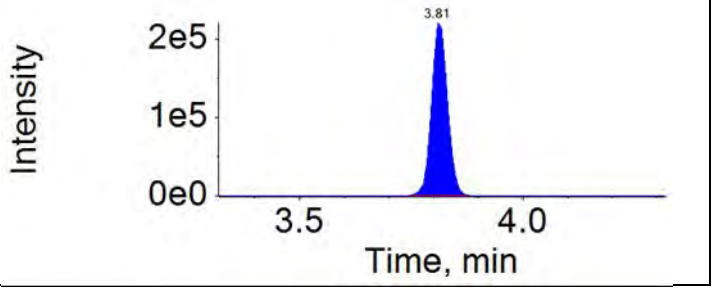
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



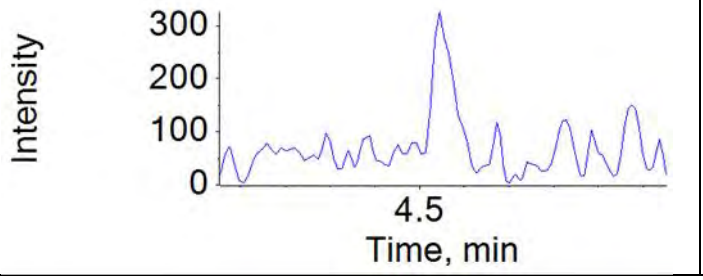


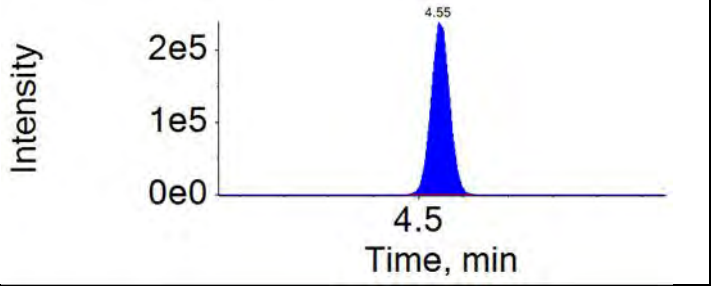
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



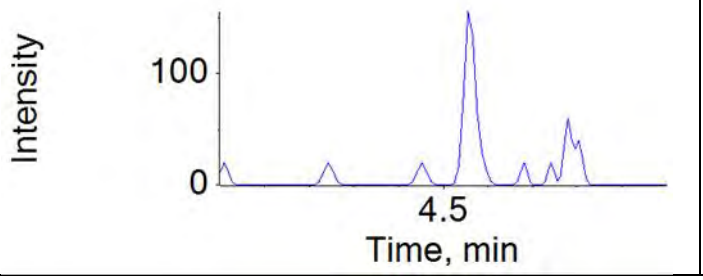


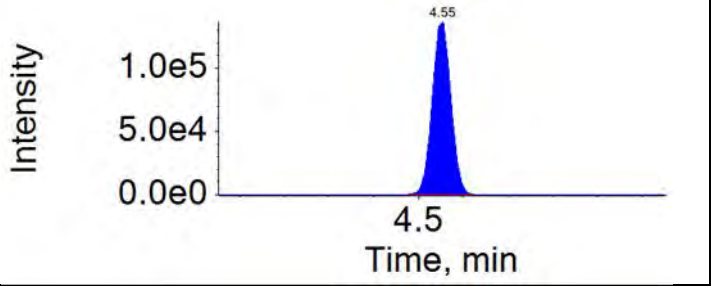
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



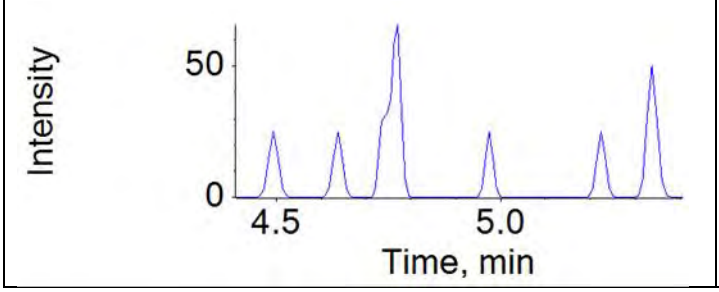


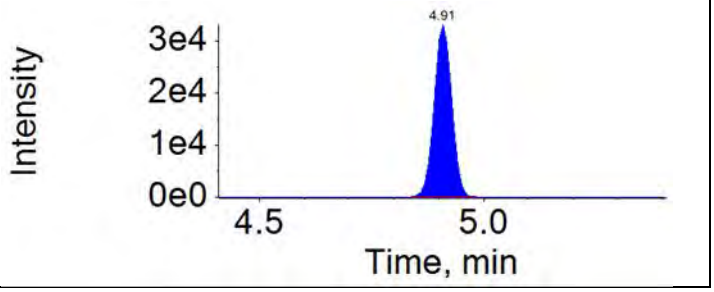
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

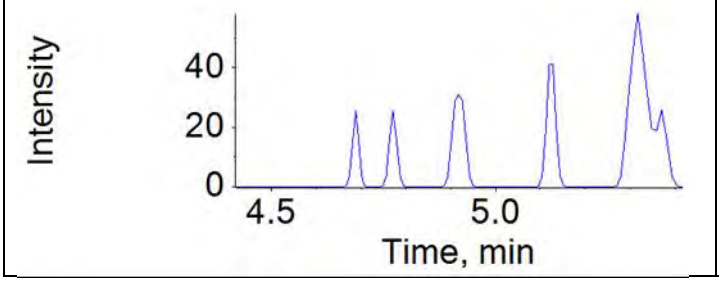
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

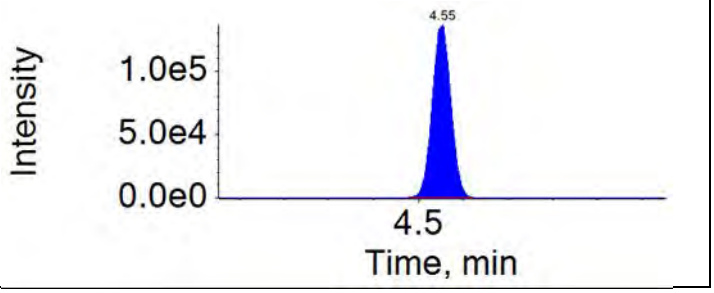
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



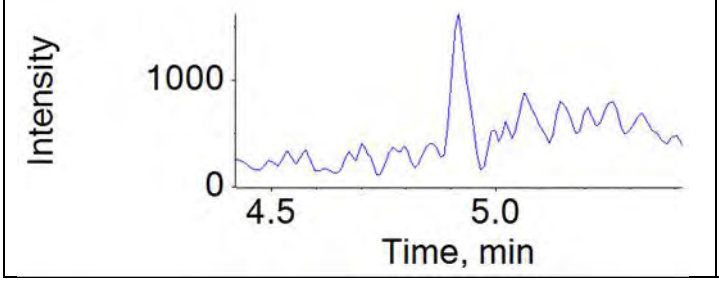


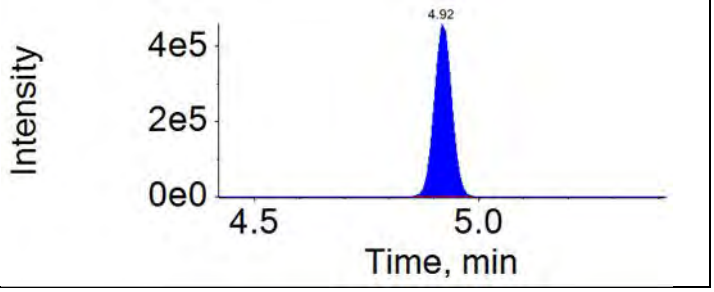
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



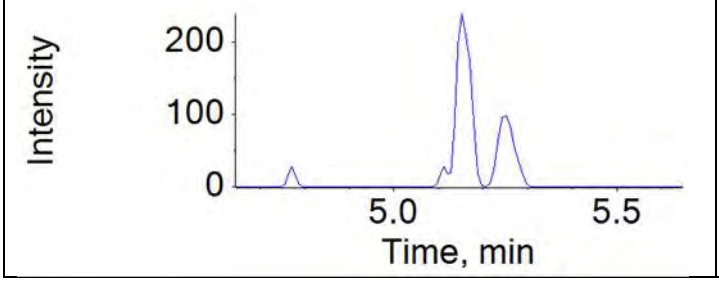


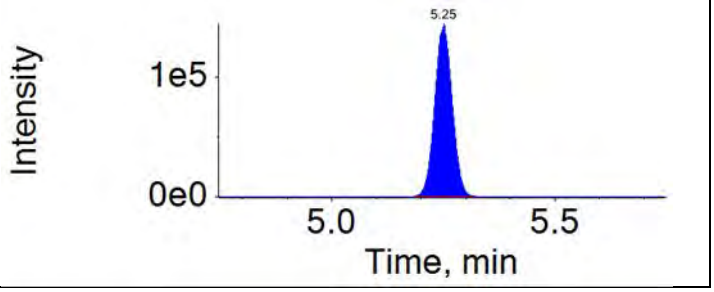
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



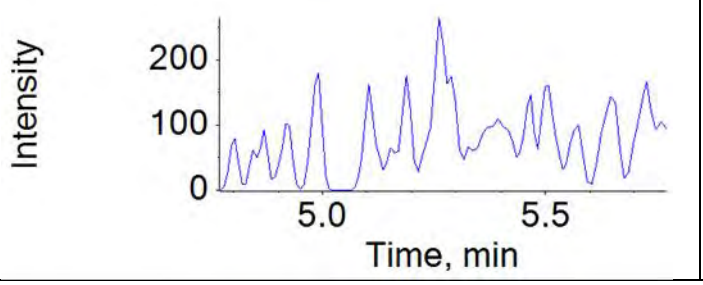


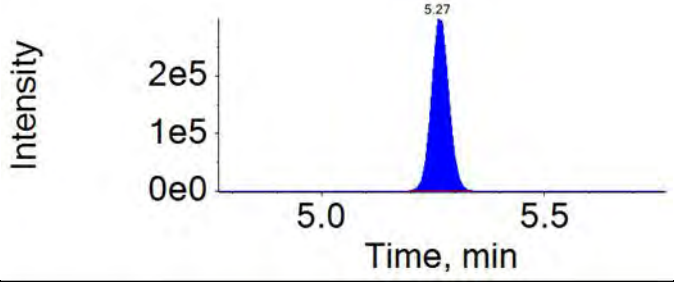
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

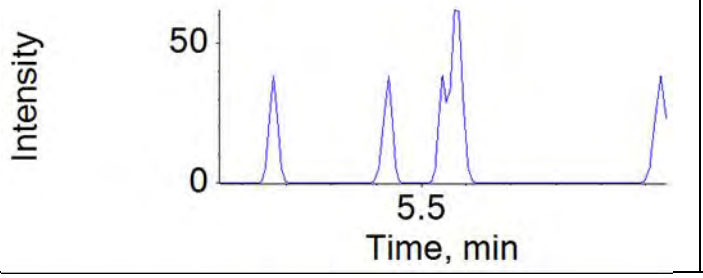
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

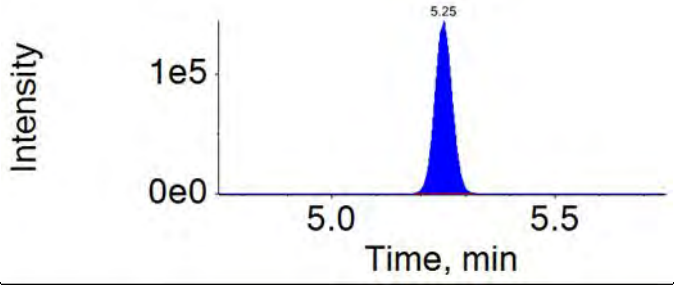
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



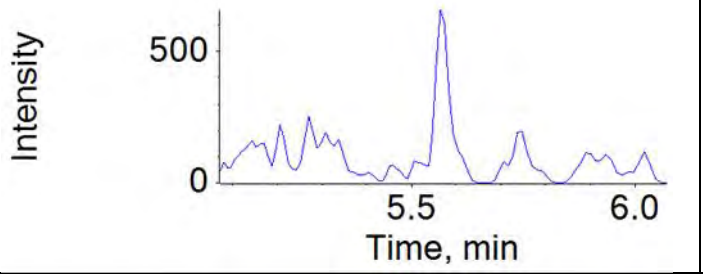


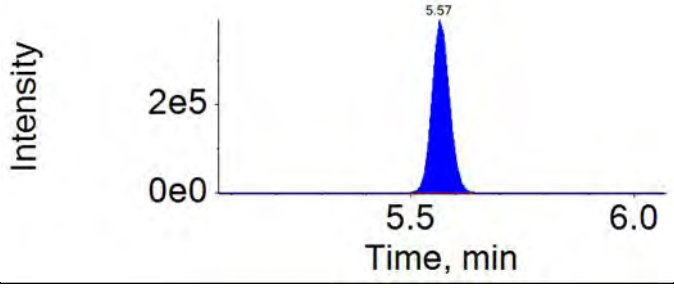
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



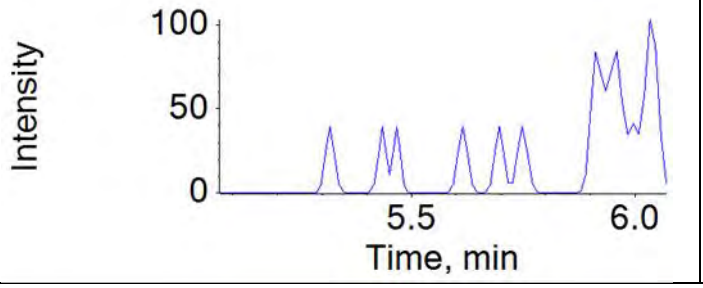


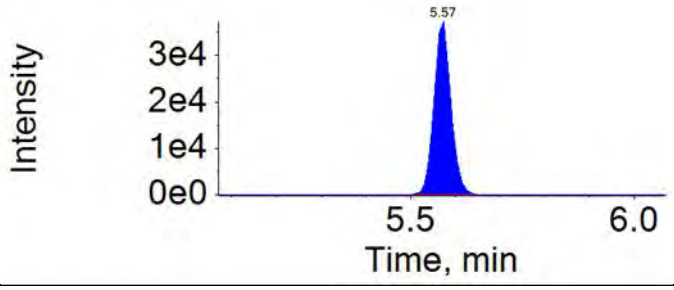
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



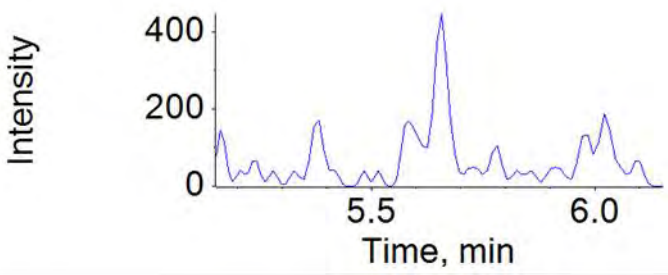


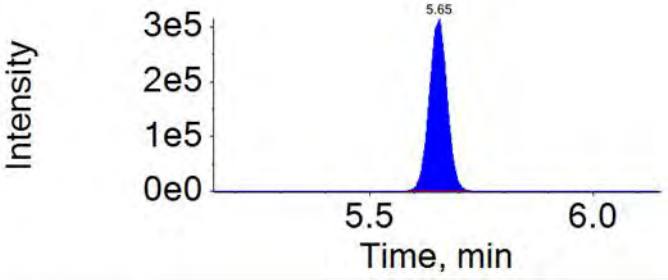
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

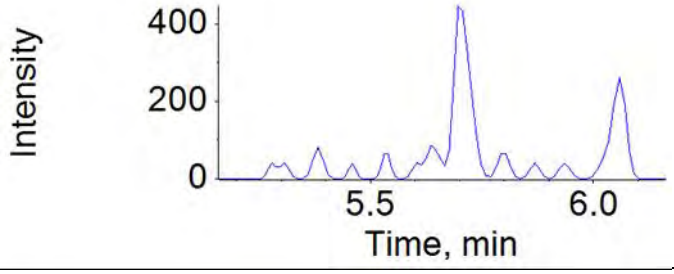
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

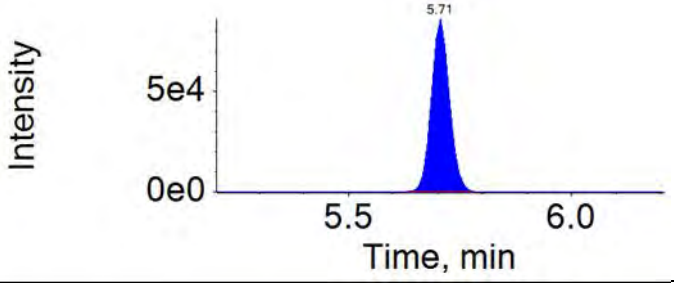
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



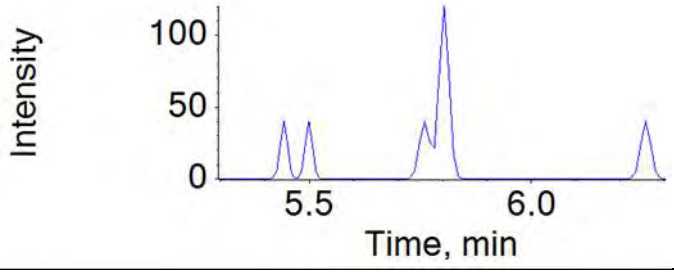


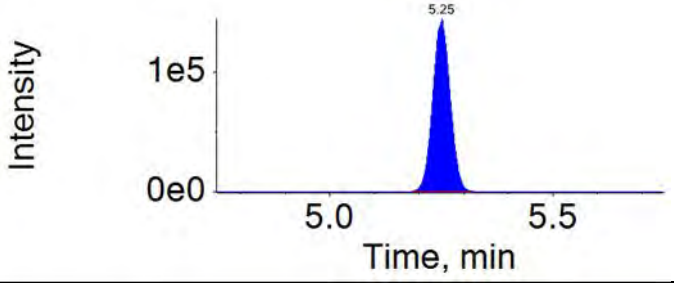
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



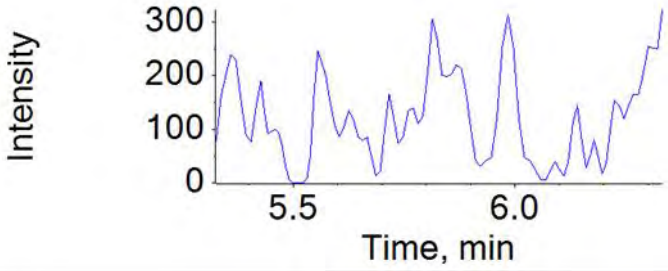


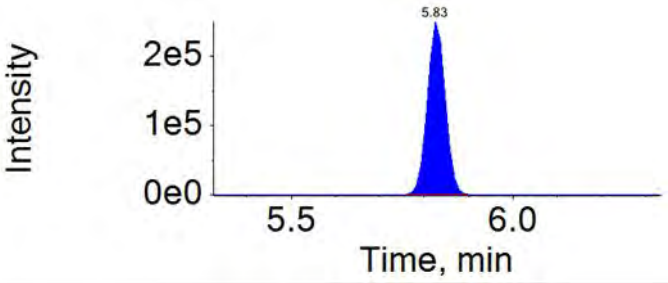
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



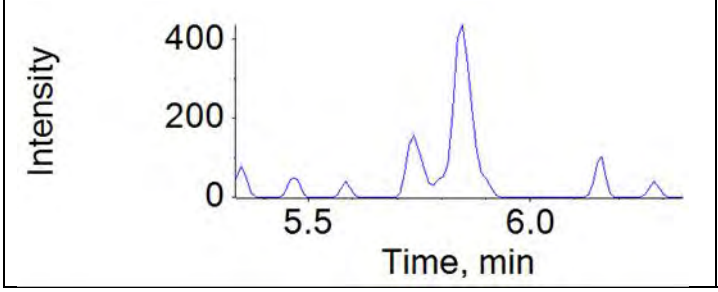


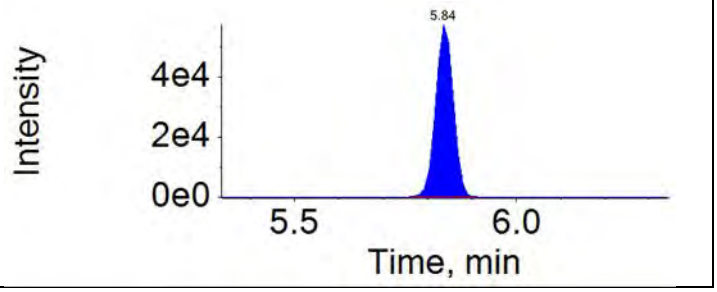
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

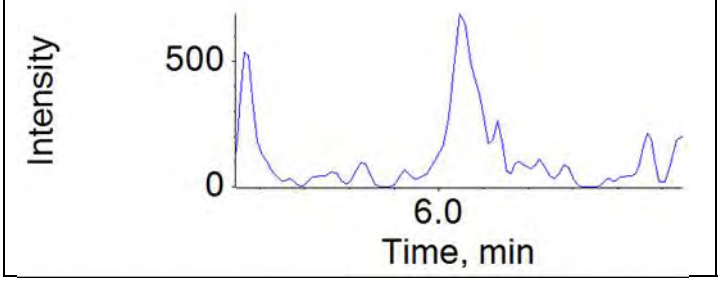
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

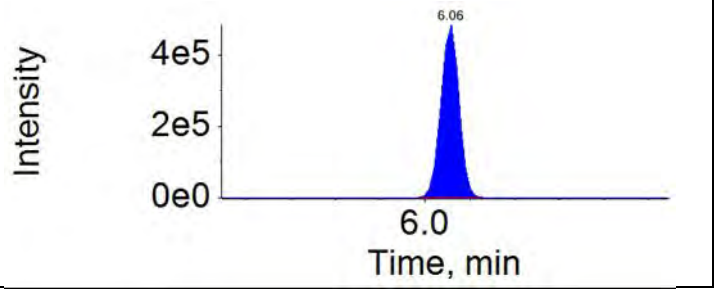
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



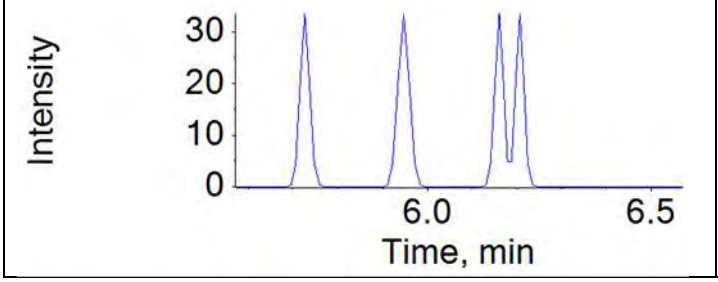


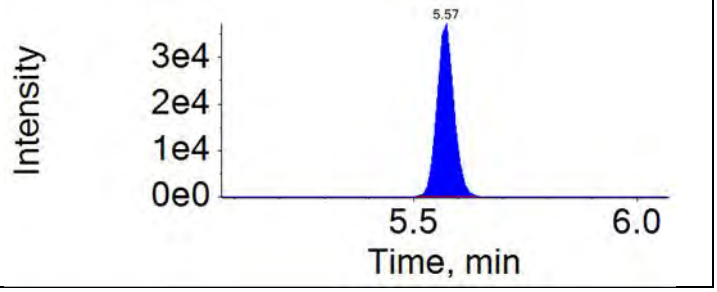
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



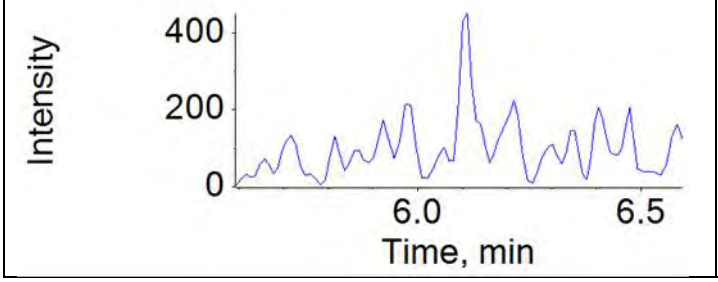


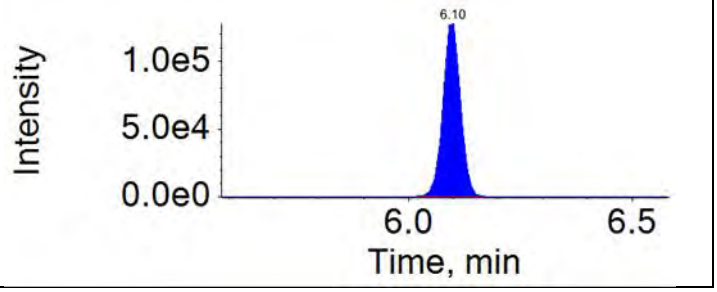
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



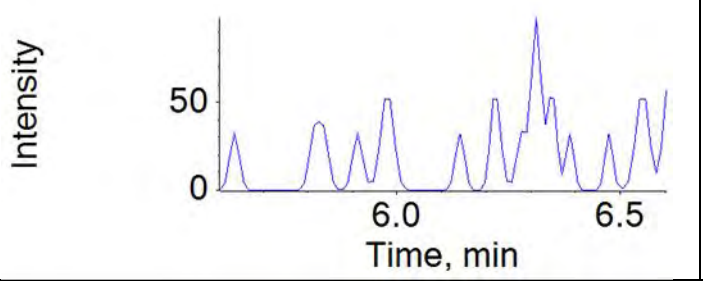


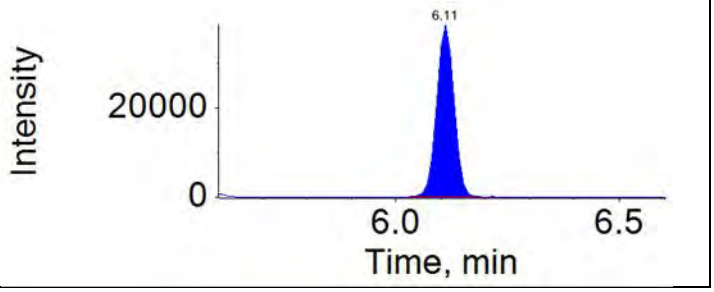
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

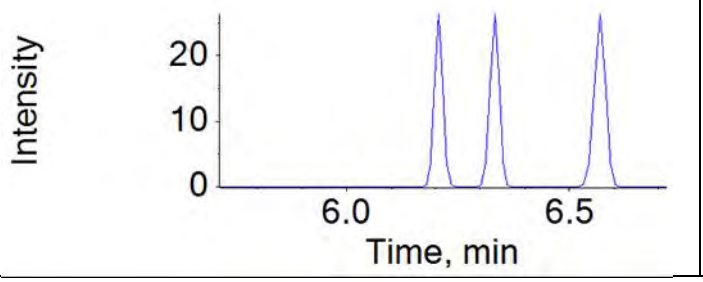
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

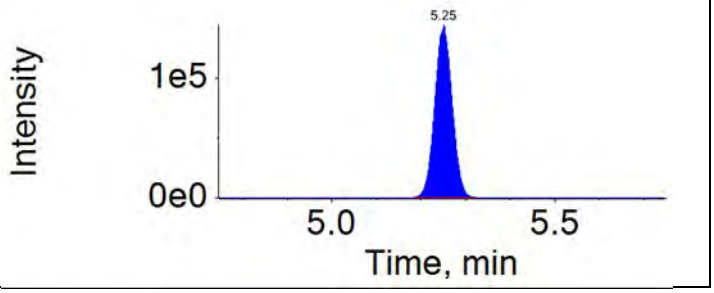
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



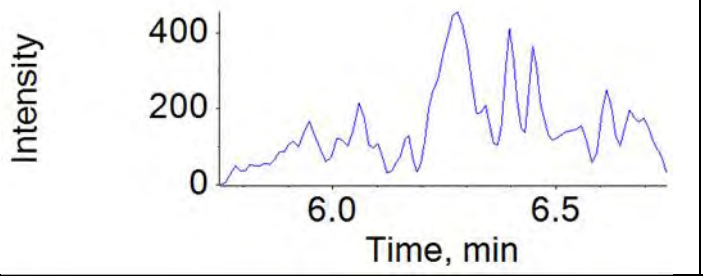


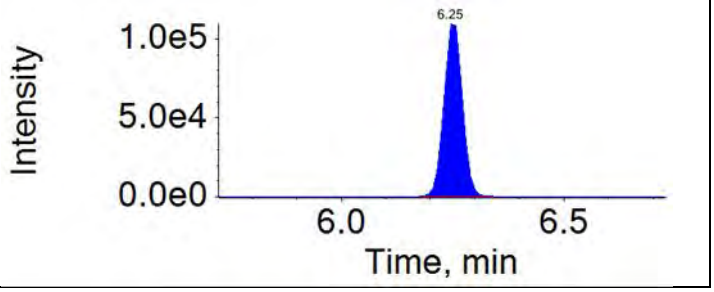
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



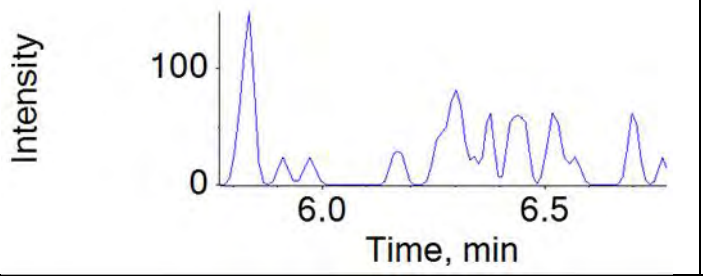


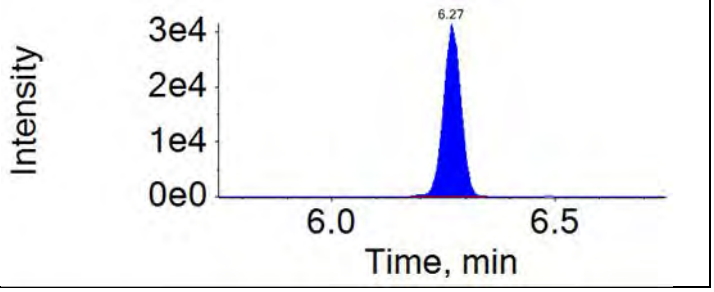
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





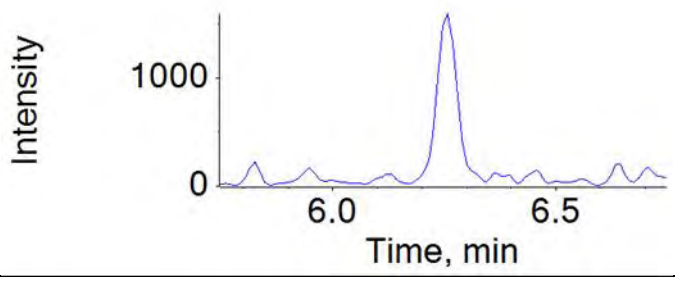
Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

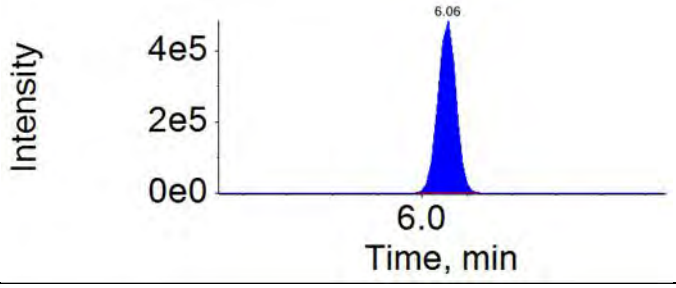




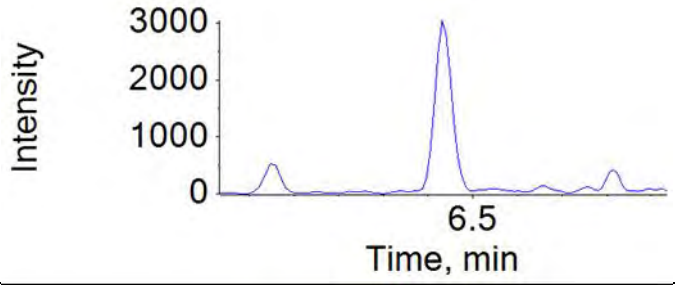
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/29/2018 1:05:58 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

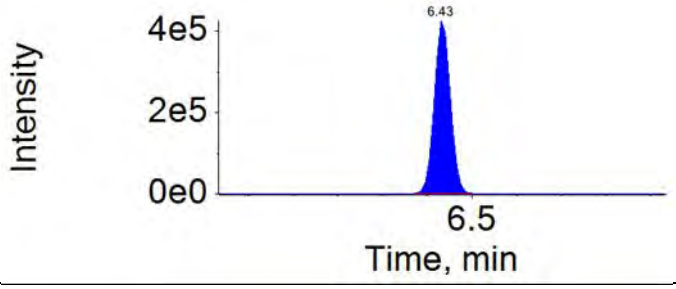
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



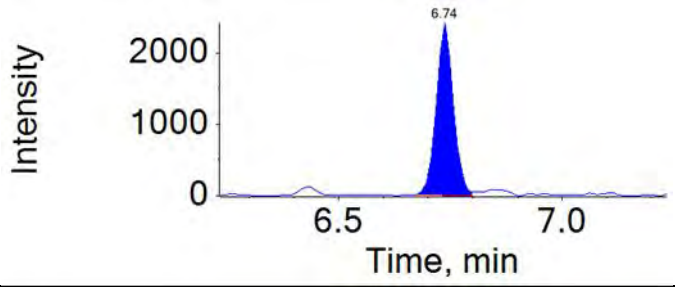


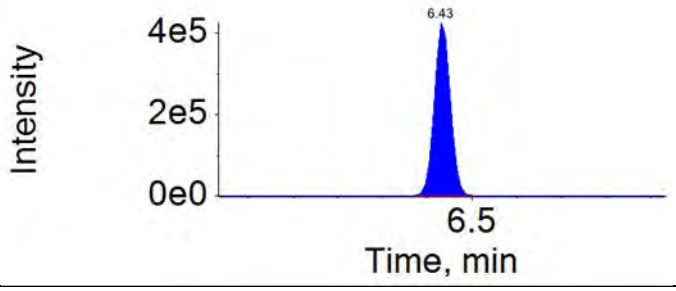
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



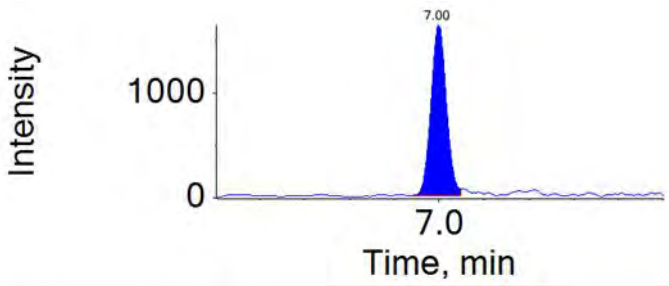


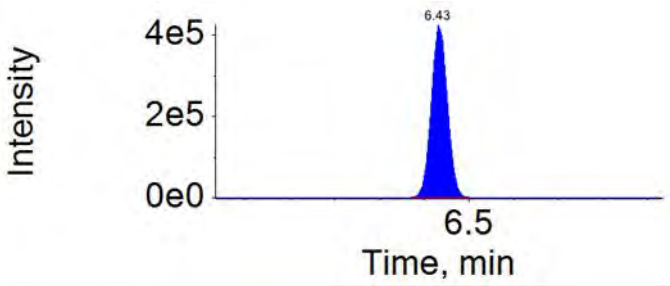
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



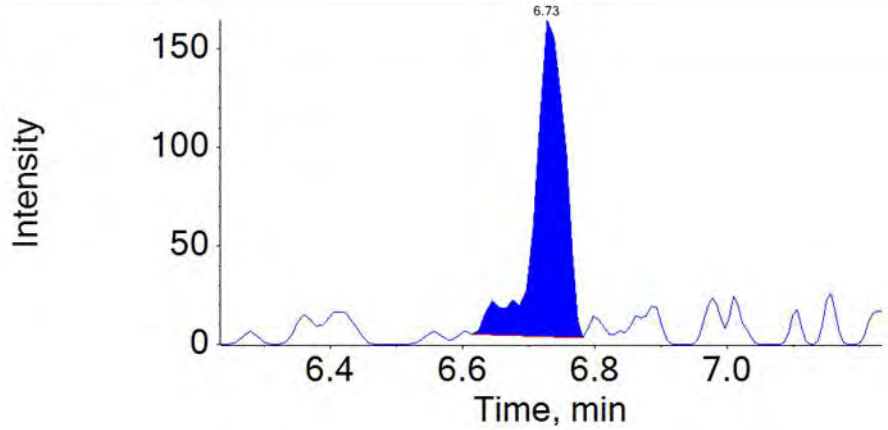


APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

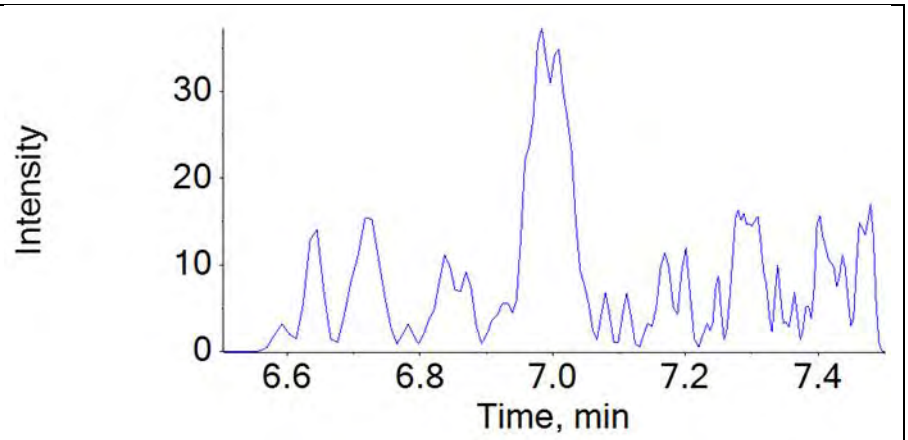
Results Table Name: 18NOV28DCAL
Results Table Date: 11/29/2018 1:05:58 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxDA_2
RT (min.):
6.73
Peak Area:
511.31
Mass Range:
813.0 / 169.0
File Name:
18NOV28DCAL-13.wiff
Sample Name:
Instrument Blank



Integration Comment: incorrect integration

Component Name:
PFODA_2
RT (min.):
N/A
Peak Area:
N/A
Mass Range:
913.0 / 169.0
File Name:
18NOV28DCAL-13.wiff
Sample Name:
Instrument Blank



Integration Comment: incorrect integration

APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/29/2018 1:05:58 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

Ion Ratio Report

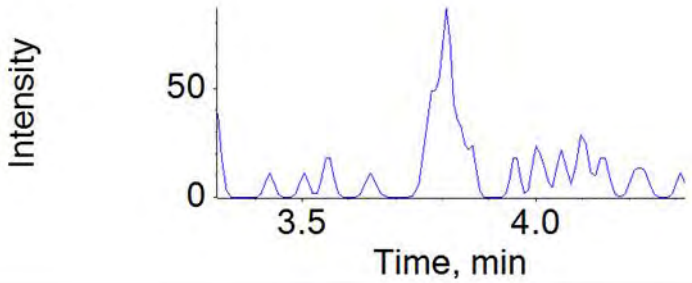
Sample Name: Instrument Blank **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-13.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	N/A	N/A	N/A	A	N/A	N/A			
PFBS_2	N/A	N/A	N/A	A	N/A	N/A		50	
4:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
4:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxA	N/A	N/A	N/A	A	N/A	N/A			
PFHxA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFPeS	N/A	N/A	N/A	A	N/A	N/A			
PFPeS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpA	N/A	N/A	N/A	A	N/A	N/A			
PFHpA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxS	N/A	N/A	N/A	A	N/A	N/A			
PFHxS_2	N/A	N/A	N/A	A	N/A	N/A		50	
6:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
6:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpS	N/A	N/A	N/A	A	N/A	N/A			
PFHpS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOA	N/A	N/A	N/A	A	N/A	N/A			
PFOA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOS	N/A	N/A	N/A	A	N/A	N/A			
PFOS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNA	N/A	N/A	N/A	A	N/A	N/A			
PFNA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNS	N/A	N/A	N/A	A	N/A	N/A			
PFNS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDA	N/A	N/A	N/A	A	N/A	N/A			
PFDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
8:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
8:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
NMeFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NMeFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDS	N/A	N/A	N/A	A	N/A	N/A			
PFDS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFUnDA	N/A	N/A	N/A	A	N/A	N/A			
PFUnDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
NEtFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NEtFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDoDA	N/A	N/A	N/A	A	N/A	N/A			
PFDoDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
10:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
10:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTrDA	N/A	N/A	N/A	A	N/A	N/A			
PFTrDA_2	6.25	1.03	266.70	A	N/A	N/A		50	
PFTeDA	N/A	N/A	N/A	A	N/A	N/A			
PFTeDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxDA	6.74	1.05	6327.14	A	N/A	1.0000			
PFHxDA_2	6.73	1.05	465.21	M	N/A	0.0735	13	50	
PFODA	7.00	1.09	3886.61	A	N/A	1.0000			
PFODA_2	6.99	1.09	153.16	M	N/A	0.0394	47	50	

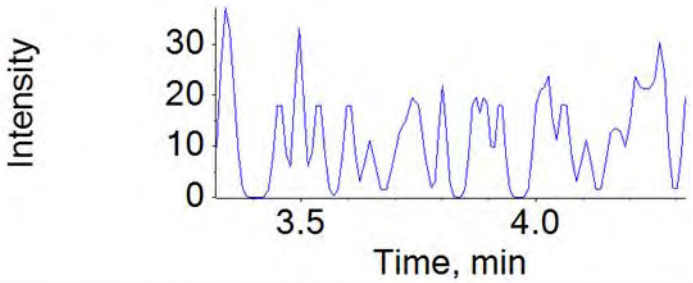
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

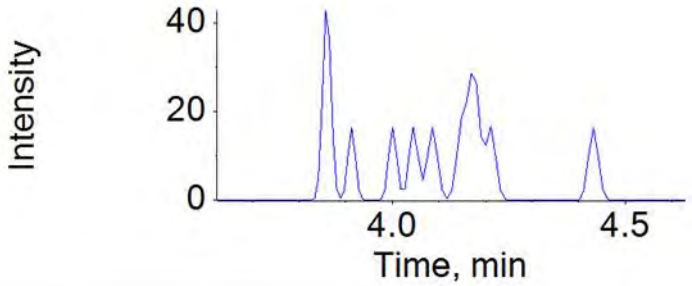
Component: PFBS
Primary Mass: 299.0 / 80.0



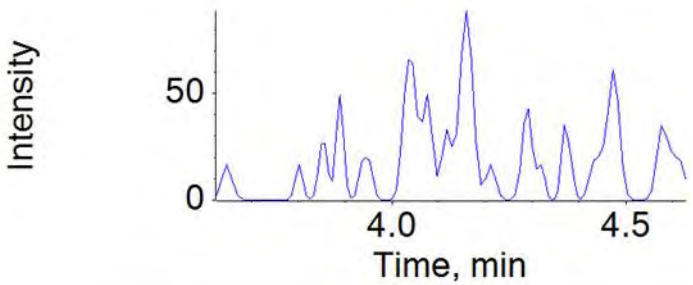
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



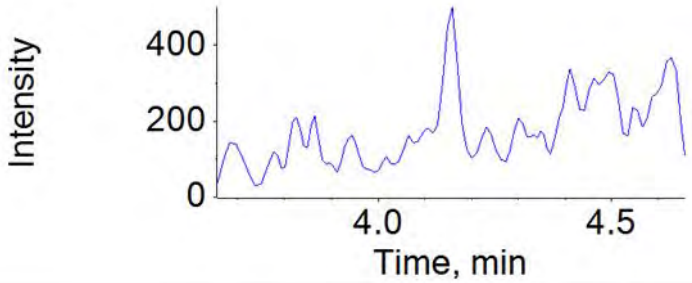
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



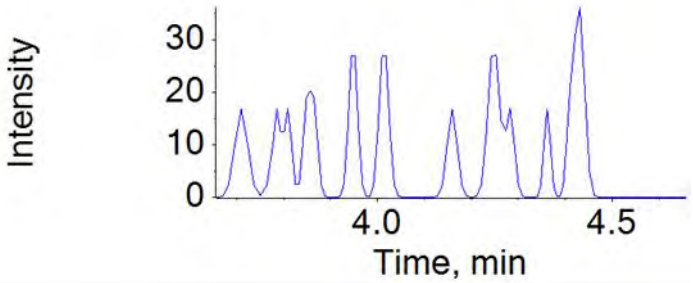
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



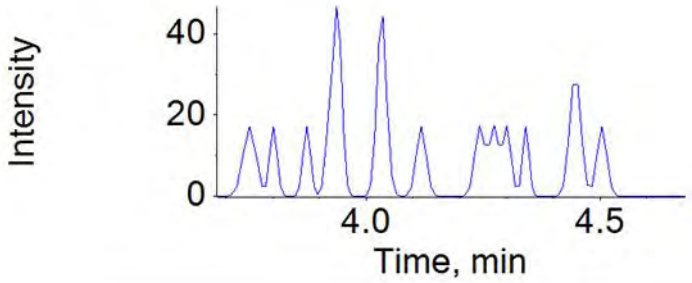
Component: PFHxA
Primary Mass: 313.0 / 269.0



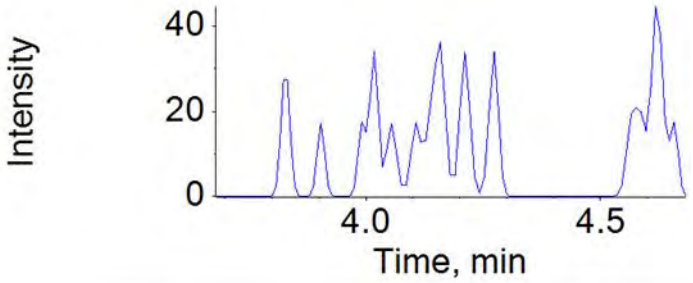
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



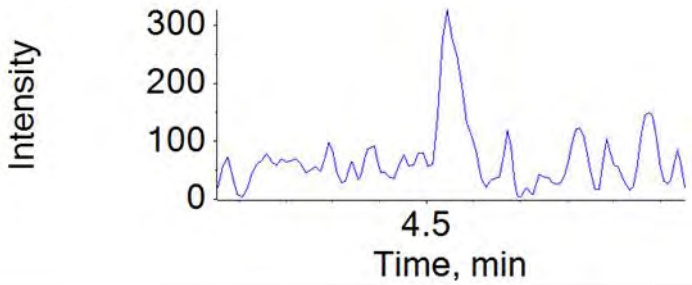
Component: PFPeS
Primary Mass: 349.0 / 80.0



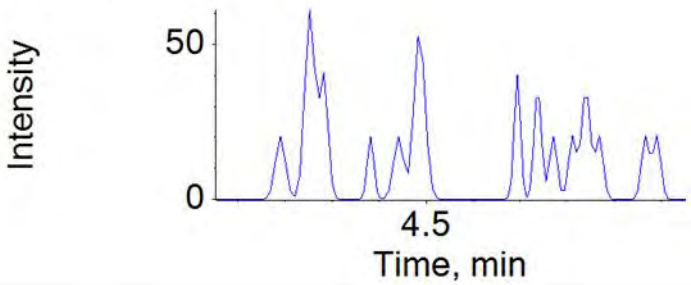
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Secondary Mass: 349.0 / 99.0



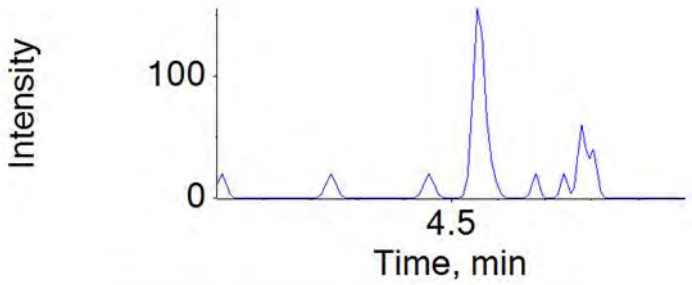
Component: PFHpA
Primary Mass: 363.0 / 319.0



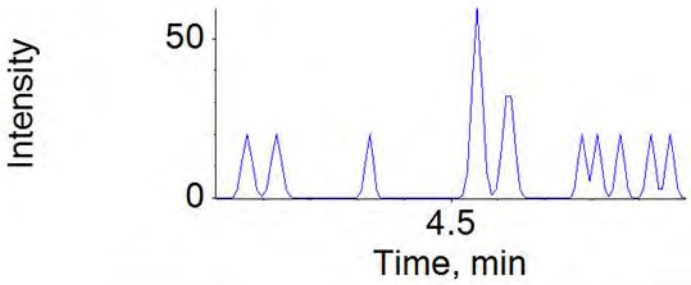
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



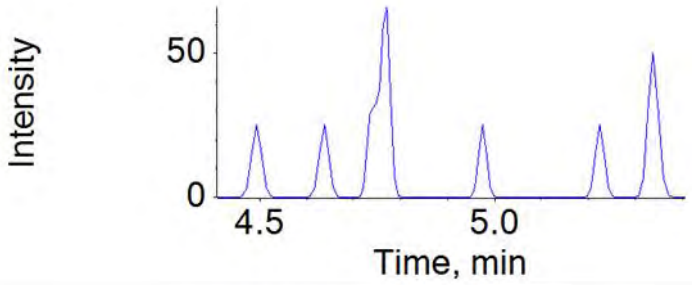
Component: PFHxS
Primary Mass: 399.0 / 80.0



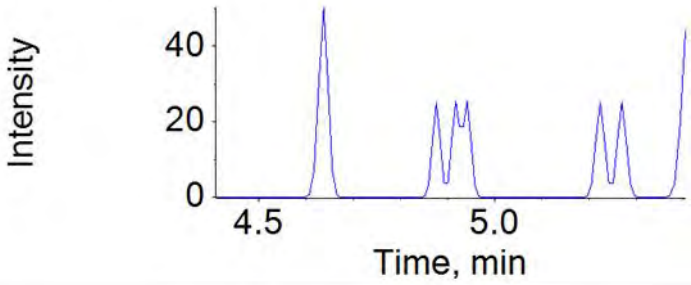
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Secondary Mass: 399.0 / 99.0



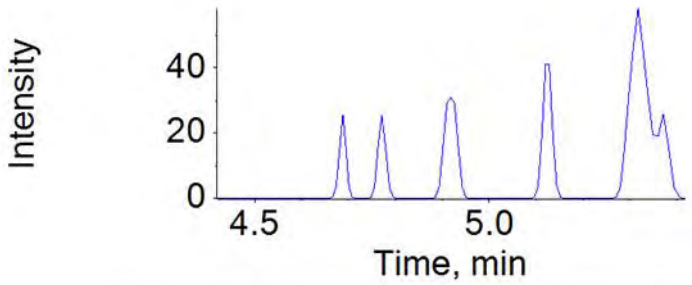
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



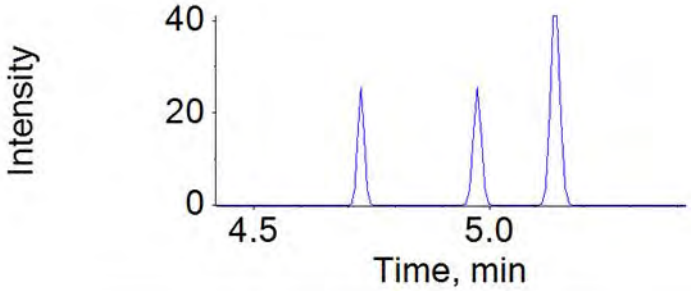
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



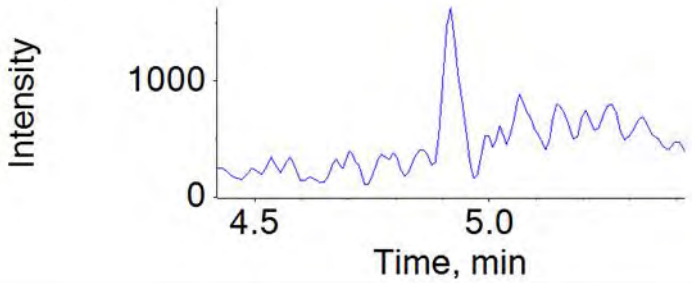
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



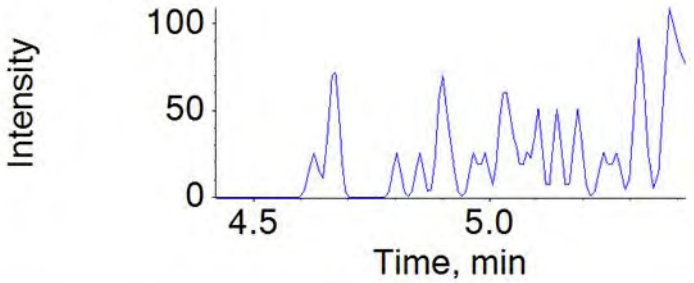
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

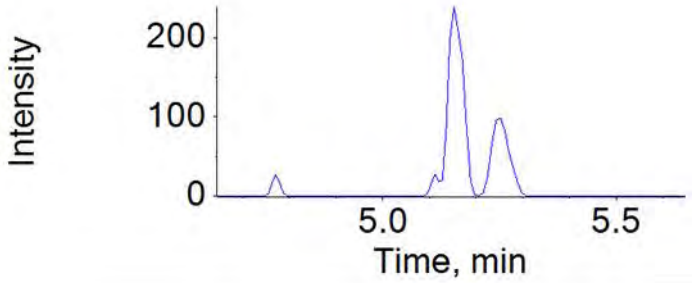
Component: PFOA
Primary Mass: 413.0 / 369.0



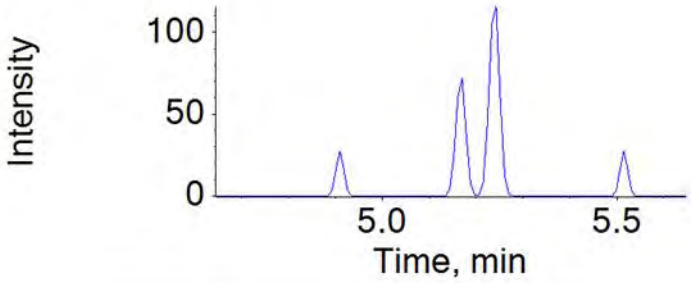
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



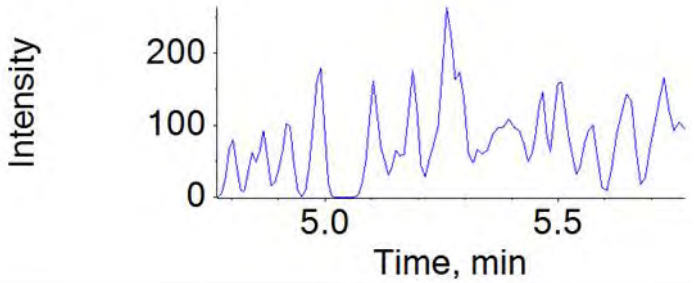
Component: PFOS
Primary Mass: 499.0 / 80.0



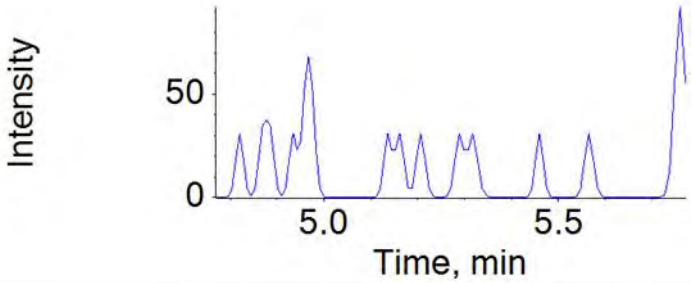
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



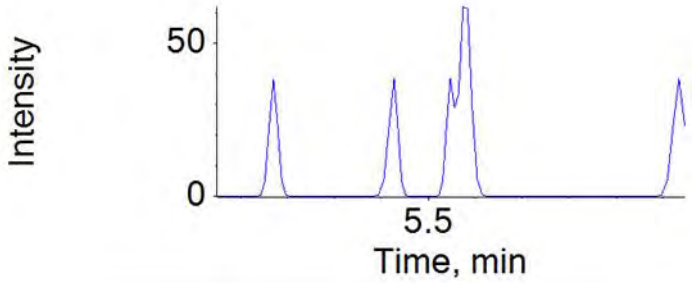
Component: PFNA
Primary Mass: 463.0 / 419.0



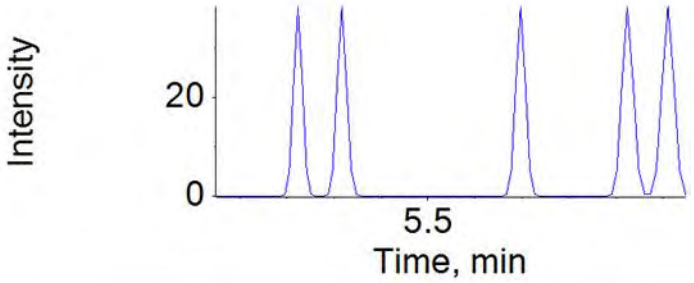
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



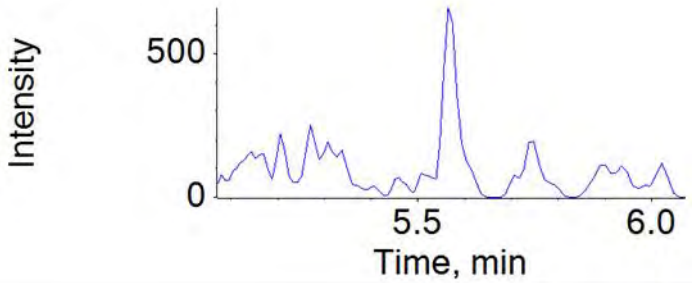
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



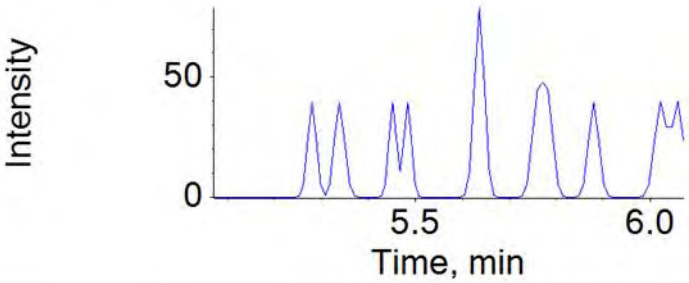
APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

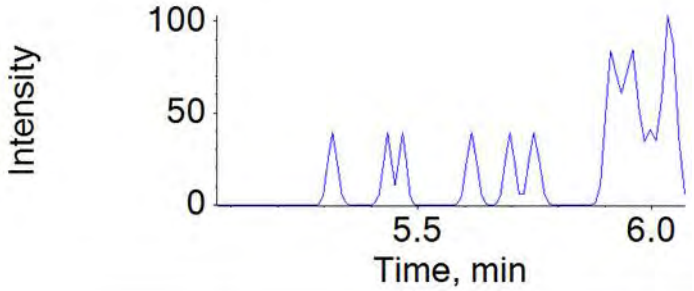
Component: PFDA
Primary Mass: 513.0 / 469.0



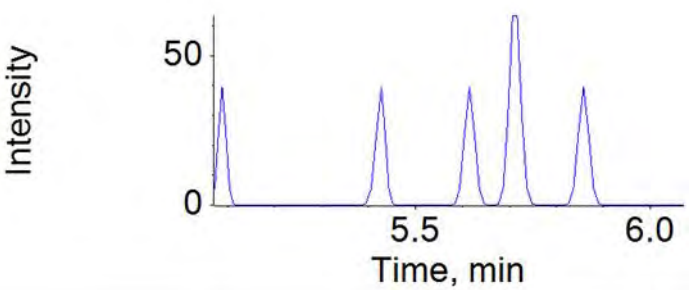
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



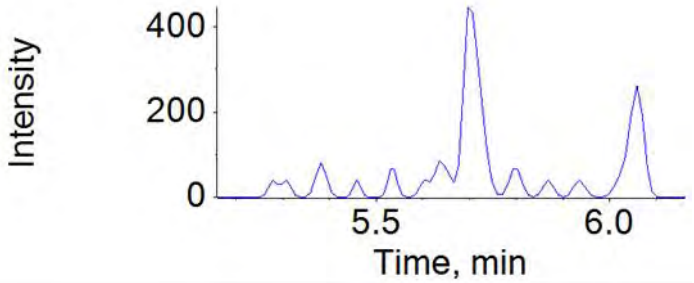
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



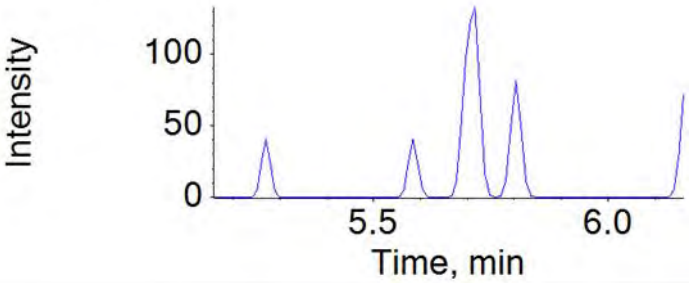
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



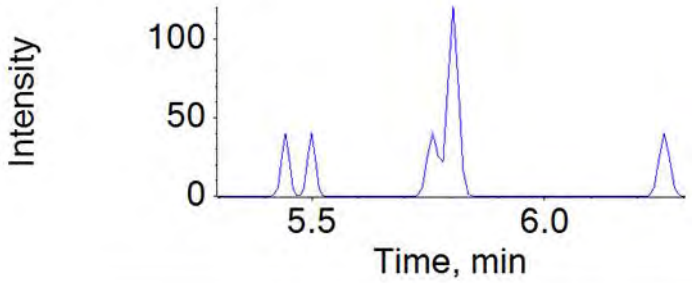
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



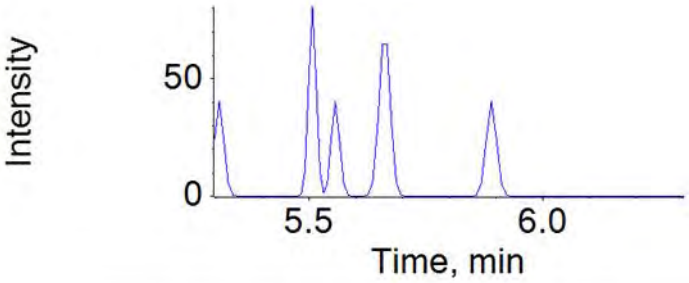
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



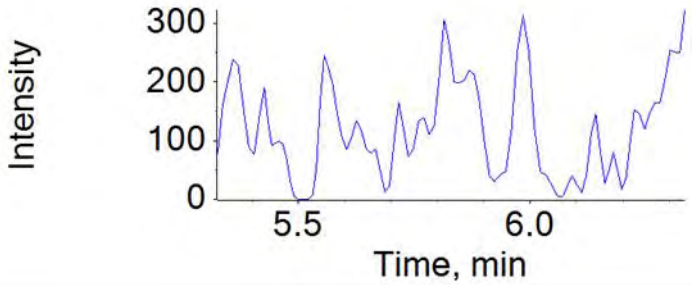
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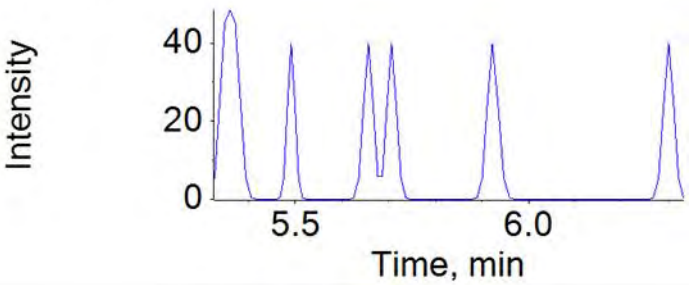
APPROVED
By JPT at 1:11 pm, 11/29/18

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By HMK at 1:17 pm, 11/29/18

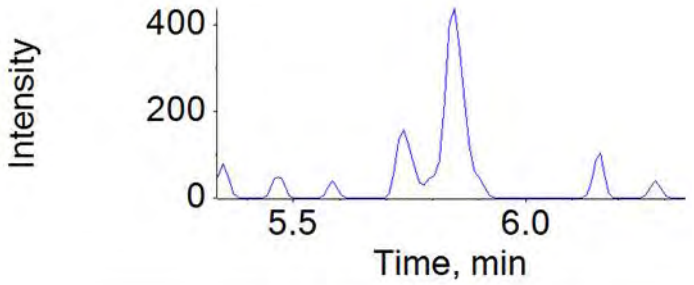
Component: PFUnDA
Primary Mass: 563.0 / 519.0



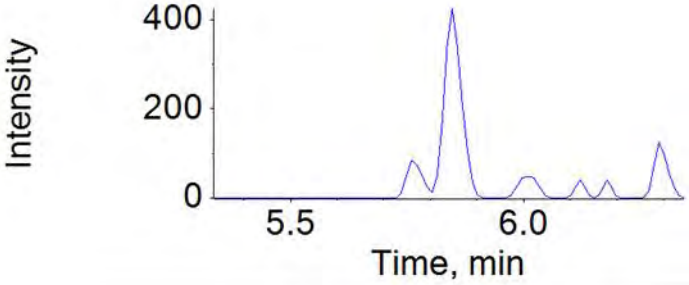
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



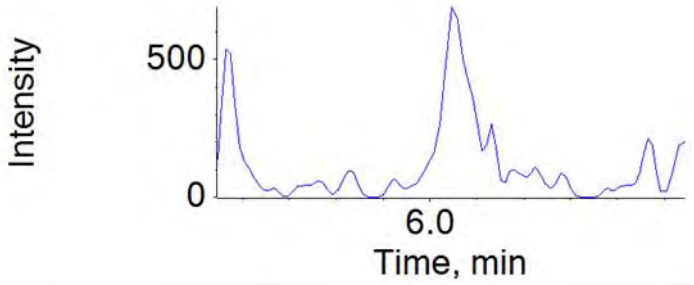
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



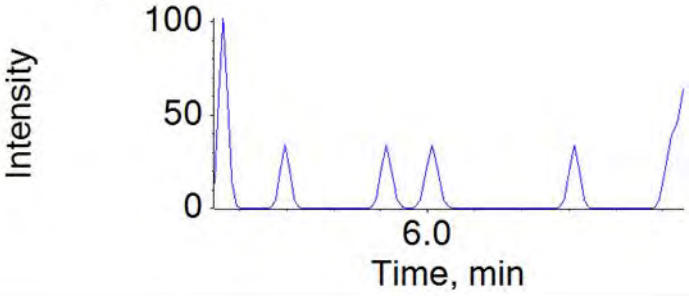
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



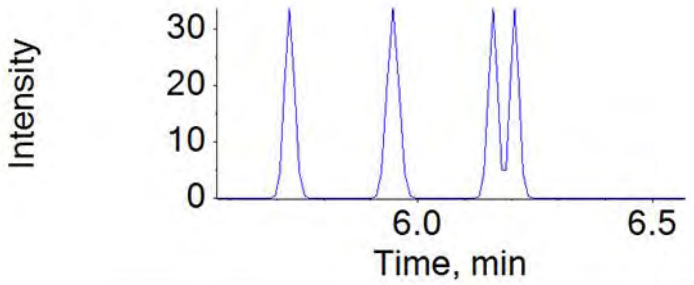
Component: PFDoDA
Primary Mass: 613.0 / 569.0



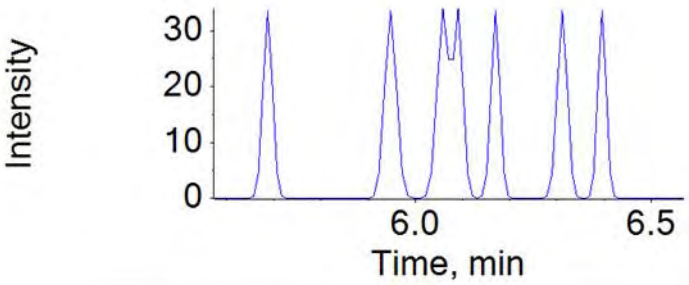
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



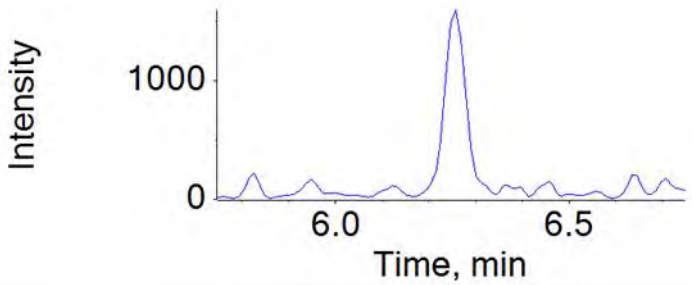
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



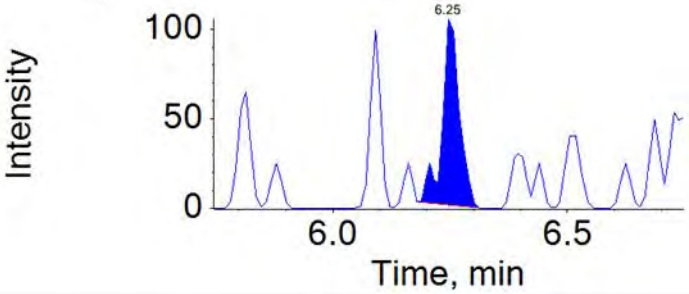
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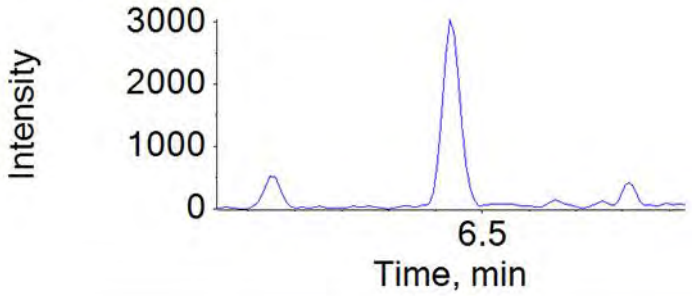
Component: PFTrDA
Primary Mass: 663.0 / 619.0



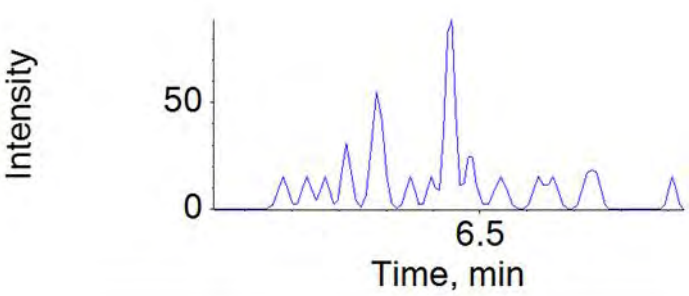
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



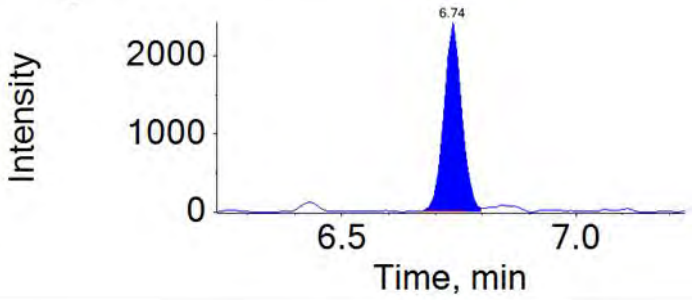
Component: PFTeDA
Primary Mass: 713.0 / 669.0



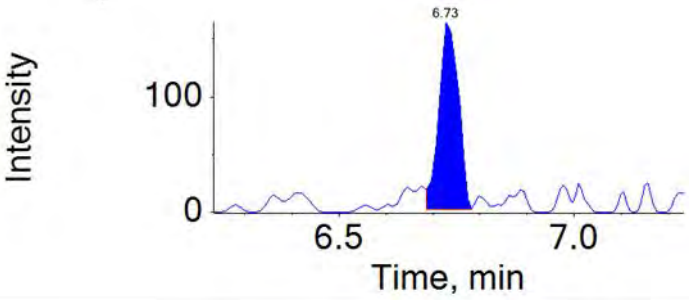
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



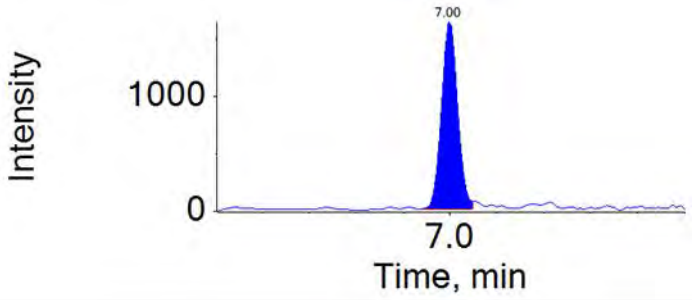
Component: PFHxDA
Primary Mass: 813.0 / 769.0



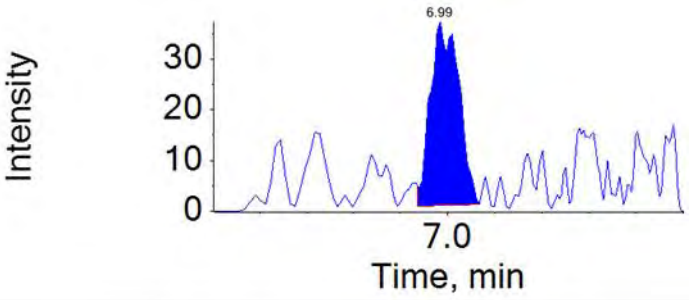
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By JPT at 1:11 pm, 11/29/18

REVIEWED
By HMK at 1:17 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	MDL			**Data File:**		18NOV28DCAL-05.wiff
Sample ID:	MDLMODX1833F			**Acquis Date:**		2018-11-28T13:33:07
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	2			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV28DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	1202955.4	887248.9	36	50	
13C2-PFOA	5.0	664292.2	498501.6	33	50	
13C4-PFOS	4.8	375981.9	283214.2	33	50	
13C2-PFDA	5.0	580456.5	441790.6	31	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	1367472.9	13C3-PFBA	1202955.4	1.137	5.000	5.072	101	70-130	
E13C5-PFPeA	1239583.2	13C3-PFBA	1202955.4	1.030	5.000	4.812	96	70-130	
E13C3-PFBS	565097.8	13C3-PFBA	1202955.4	0.470	4.650	4.482	96	70-130	
E13C2-4:2-FTS	91419.7	13C2-PFOA	664292.2	0.138	4.670	4.743	102	70-130	
E13C5-PFHxA	909464.7	13C2-PFOA	664292.2	1.369	5.000	5.029	101	70-130	
E13C3-PFHxS	412697.5	13C2-PFOA	664292.2	0.621	4.730	4.869	103	70-130	
E13C4-PFHpA	736898.5	13C2-PFOA	664292.2	1.109	5.000	5.097	102	70-130	
E13C2-6:2-FTS	78325.6	13C2-PFOA	664292.2	0.118	4.750	4.936	104	70-130	
E13C8-PFOA	1322963.7	13C2-PFOA	664292.2	1.992	5.000	5.482	110	70-130	
E13C8-PFOS	393817.9	13C4-PFOS	375981.9	1.047	4.780	4.728	99	70-130	
E13C9-PFNA	850571.5	13C4-PFOS	375981.9	2.262	5.000	4.969	99	70-130	
E13C6-PFDA	1044197.2	13C2-PFDA	580456.5	1.799	5.000	5.072	101	70-130	
E13C2-8:2-FTS	65872.4	13C2-PFDA	580456.5	0.113	4.790	4.877	102	70-130	
E13C8-PFOSA	757176.1	13C2-PFDA	580456.5	1.304	5.000	4.786	96	70-130	
Ed3-NMeFOSAA	233869.6	13C2-PFDA	580456.5	0.403	5.000	5.116	102	70-130	
E13C7-PFUnDA	717824.6	13C2-PFDA	580456.5	1.237	5.000	5.227	105	70-130	
Ed5-NEtFOSAA	174037.9	13C2-PFDA	580456.5	0.300	5.000	5.342	107	70-130	
E13C2-PFDoDA	1443367.4	13C2-PFDA	580456.5	2.487	5.000	5.225	104	70-130	
Ed7-NMePFOSAE	318648.0	13C2-PFDA	580456.5	0.549	5.000	4.744	95	70-130	
Ed3-NMePFOSA	103103.2	13C2-PFDA	580456.5	0.178	5.000	4.807	96	70-130	
Ed9-NEtPFOSAE	276598.5	13C2-PFDA	580456.5	0.477	5.000	4.831	97	70-130	
Ed5-NEtPFOSA	84232.4	13C2-PFDA	580456.5	0.145	5.000	5.042	101	70-130	
E13C2-PFTeDA	1044681.2	13C2-PFDA	580456.5	1.800	5.000	4.980	100	70-130	

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

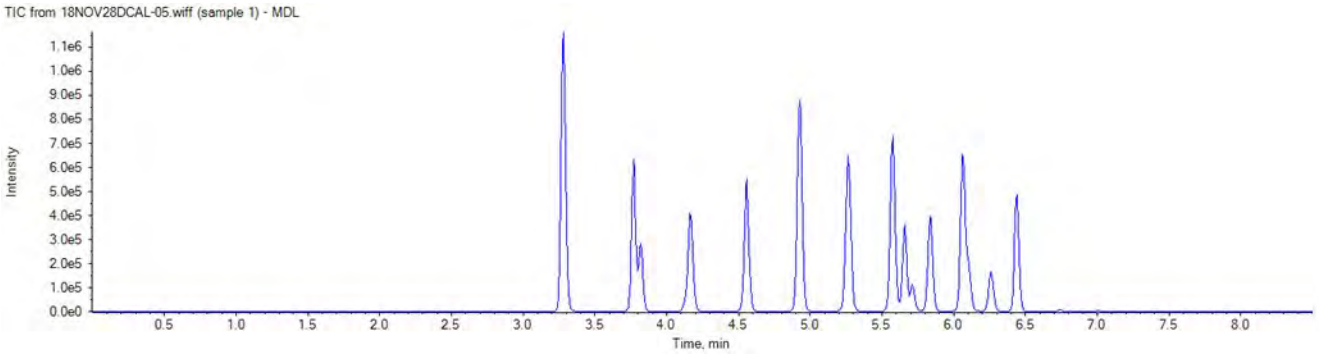
Analyte Quantitation Peak Table

Sample Name: MDL **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-05.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.28	1.000	44840.3		A	13C4-PFBA	3.28	1367472.9	0.033	0.180
PFPeA	3.77	1.000	35372.3		A	13C5-PFPeA	3.77	1239583.2	0.029	0.140
PFBS	3.82	1.000	12605.1		A	13C3-PFBS	3.82	565097.8	0.022	0.108
4:2-FTS	4.13	1.000	2928.7		A	13C2-4:2-FTS	4.13	91419.7	0.032	0.086
PFHxA	4.17	1.000	32436.1		A	13C5-PFHxA	4.17	909464.7	0.036	0.143
PFPeS	4.19	1.100	5200.8		A	13C3-PFBS	3.82	565097.8	0.009	0.093
PFHpA	4.56	1.000	34134.5		A	13C4-PFHpA	4.56	736898.5	0.046	0.143
PFHxS	4.56	1.000	11072.6		A	13C3-PFHxS	4.56	412697.5	0.027	0.126
6:2-FTS	4.91	1.000	4195.7		A	13C2-6:2-FTS	4.91	78325.6	0.054	0.140
PFHpS	4.92	1.080	10674.9		A	13C3-PFHxS	4.56	412697.5	0.026	0.129
PFOA	4.93	1.000	35831.5		A	13C8-PFOA	4.93	1322963.7	0.027	0.140
PFOS	5.25	1.000	10490.3		A	13C8-PFOS	5.26	393817.9	0.027	0.112
PFNA	5.27	1.000	29535.3		A	13C9-PFNA	5.27	850571.5	0.035	0.133
PFNS	5.55	1.060	5896.9		A	13C8-PFOS	5.26	393817.9	0.015	0.095
PFDA	5.58	1.000	28044.3		A	13C6-PFDA	5.57	1044197.2	0.027	0.152
8:2-FTS	5.58	1.000	3464.6		A	13C2-8:2-FTS	5.58	65872.4	0.053	0.099
PFOSA	5.66	1.000	18214.8		A	13C8-PFOSA	5.66	757176.1	0.024	0.122
NMeFOSAA	5.71	1.000	6753.7		A	d3-NMeFOSAA	5.71	233869.6	0.029	0.184
PFDS	5.81	1.100	7418.0		A	13C8-PFOS	5.26	393817.9	0.019	0.149
PFUnDA	5.83	1.000	27644.3		A	13C7-PFUnDA	5.83	717824.6	0.039	0.138
NEtFOSAA	5.85	1.000	5734.3		M	d5-NEtFOSAA	5.84	174037.9	0.033	0.160
PFDoDA	6.06	1.000	38884.2		A	13C2-PFDoDA	6.06	1443367.4	0.027	0.148
10:2-FTS	6.08	1.090	3761.8		A	13C2-8:2-FTS	5.58	65872.4	0.057	0.126
NMePFOSAE	6.11	1.000	9196.7		A	d7-NMePFOSAE	6.10	318648.0	0.029	0.121
NMePFOSA	6.11	1.000	2590.4		A	d3-NMePFOSA	6.11	103103.2	0.025	0.133
PFDoS	6.24	1.190	2522.1		A	13C8-PFOS	5.26	393817.9	0.006	0.092
NEtPFOSAE	6.27	1.000	9043.7		A	d9-NEtPFOSAE	6.26	276598.5	0.033	0.118
NEtPFOSA	6.29	1.000	1641.5		A	d5-NEtPFOSA	6.27	84232.4	0.019	0.087
PFTrDA	6.26	1.030	35013.3		A	13C2-PFDoDA	6.06	1443367.4	0.024	0.146
PFTeDA	6.44	1.000	27817.6		A	13C2-PFTeDA	6.44	1044681.2	0.027	0.151
PFHxDA	6.74	1.050	13033.4		A	13C2-PFTeDA	6.44	1044681.2	0.012	0.143
PFODA	7.00	1.090	8671.1		A	13C2-PFTeDA	6.44	1044681.2	0.008	0.111

Total Ion Chromatogram

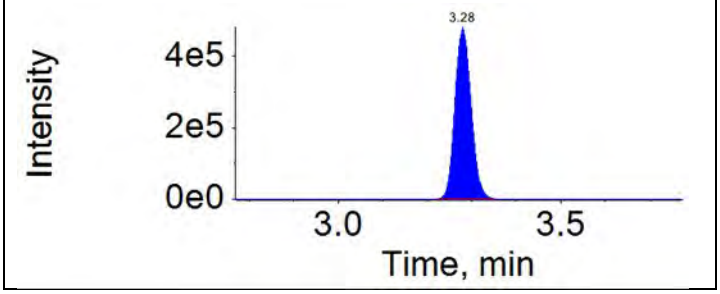


APPROVED
By MCD at 5:01 pm, 11/28/18

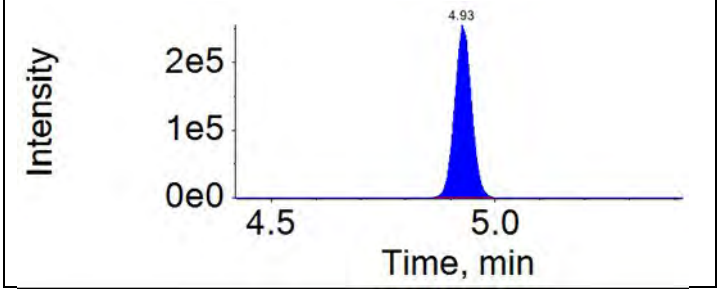
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

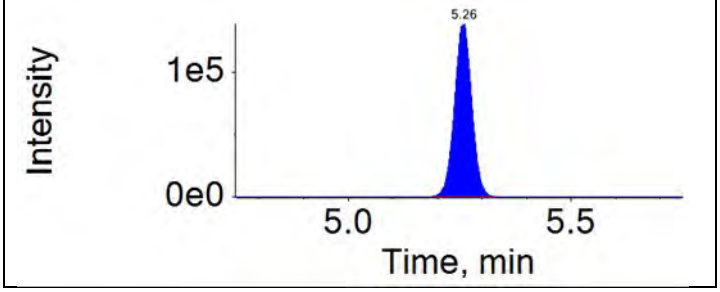
Injection Standard: 13C3-PFBA
216.0 / 172.0



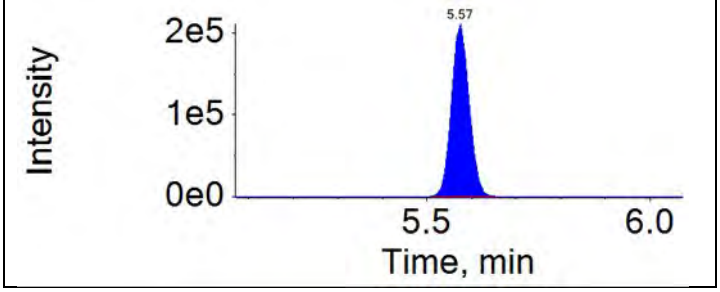
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

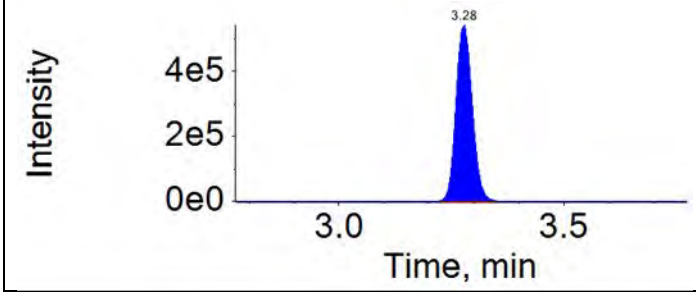


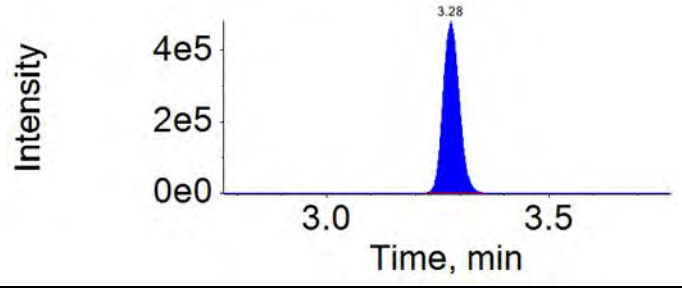
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

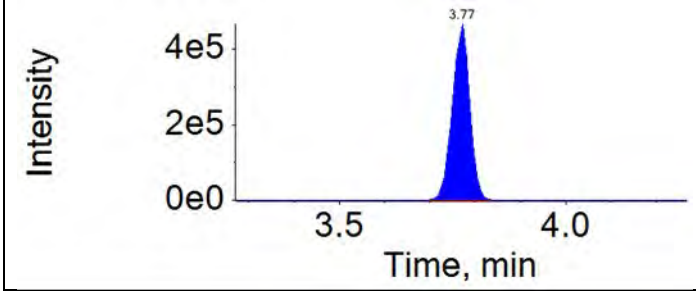
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

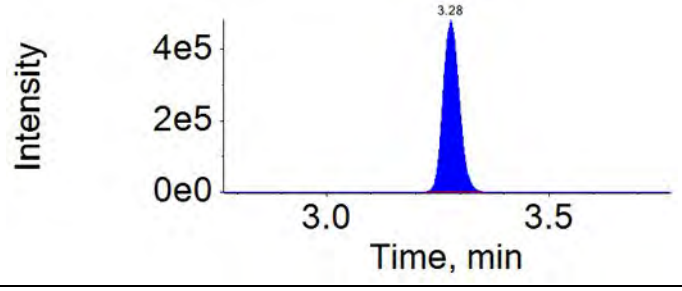
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



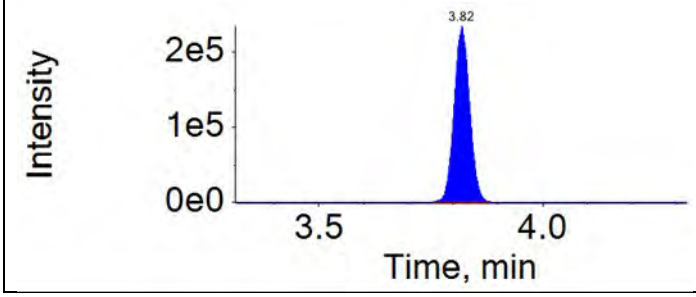


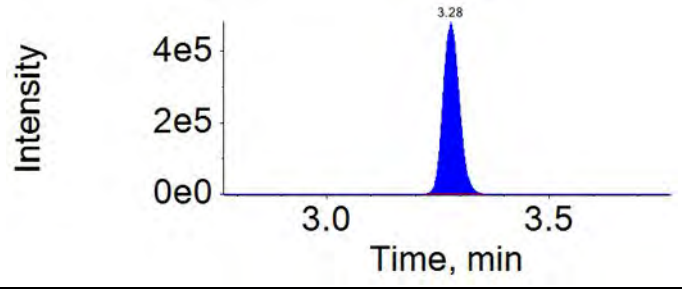
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



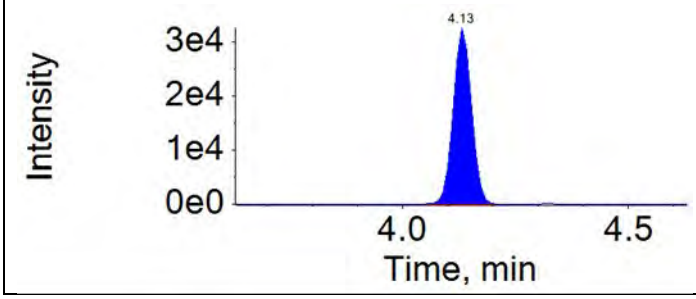


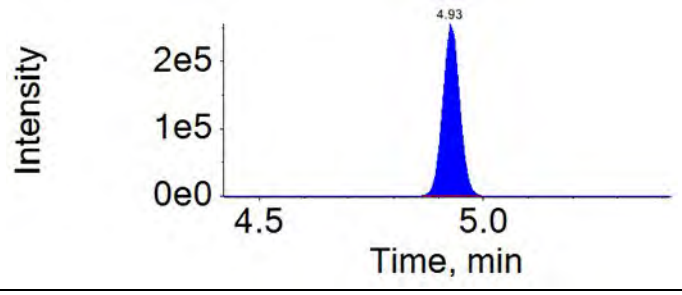
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



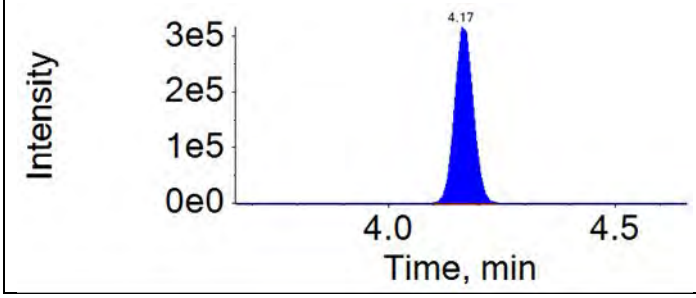


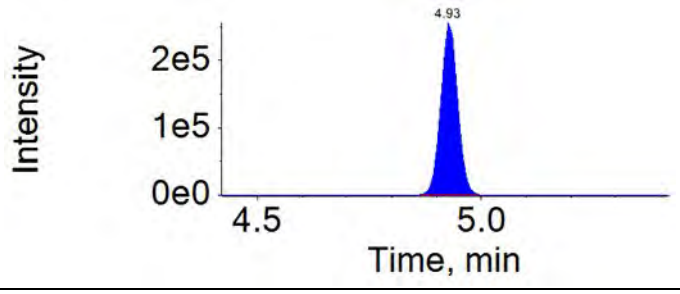
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

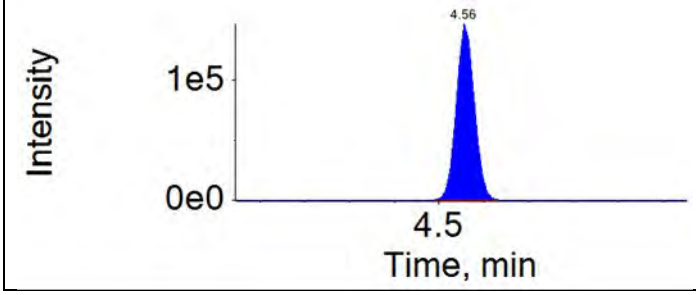
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

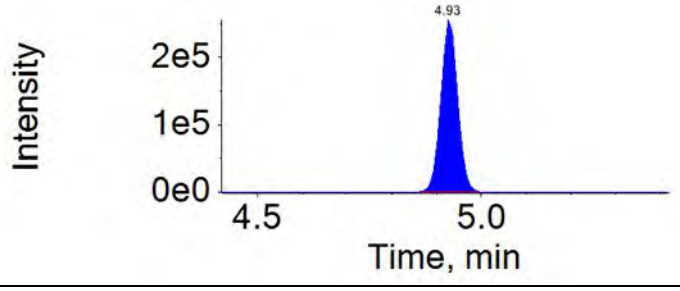
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



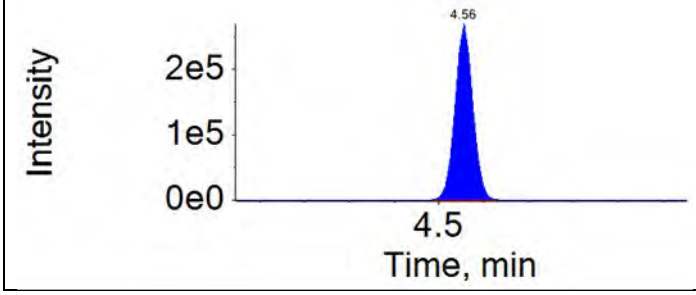


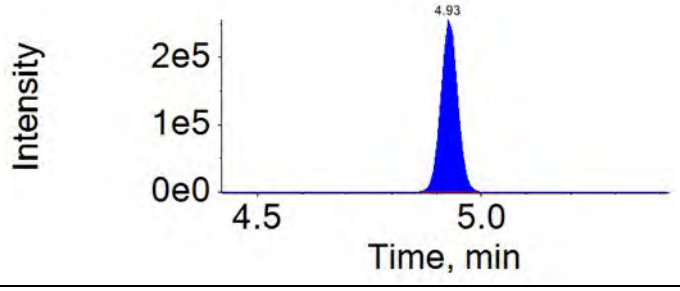
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



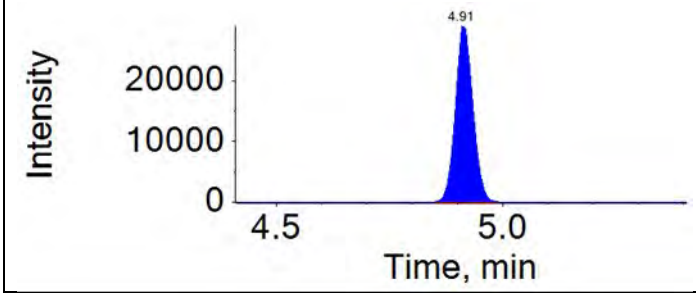


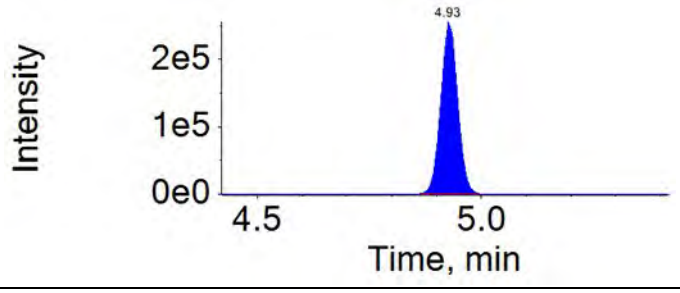
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

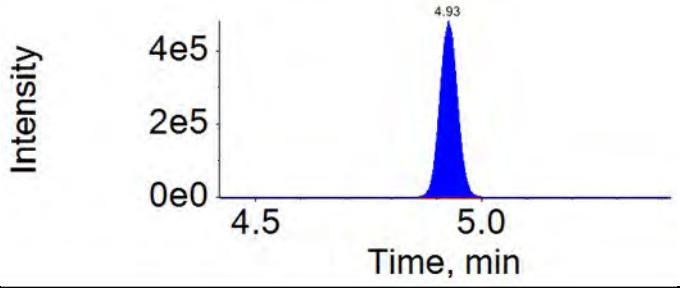
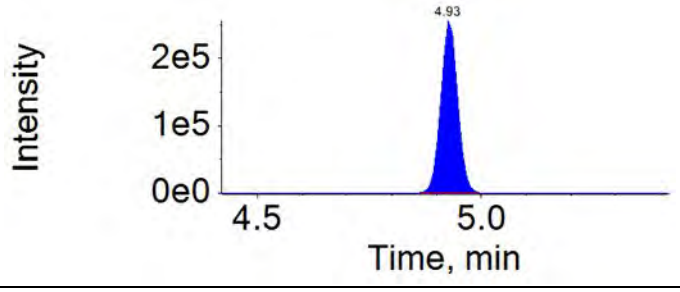


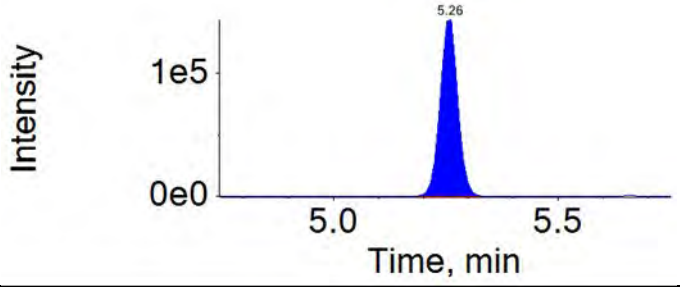
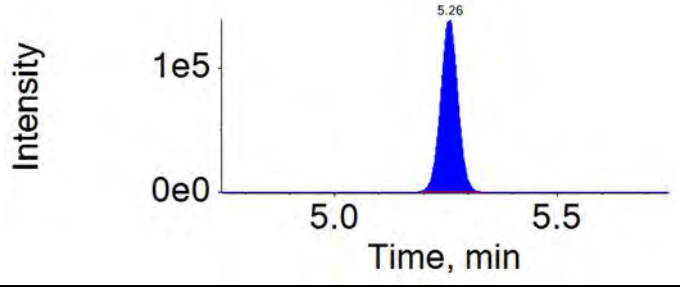


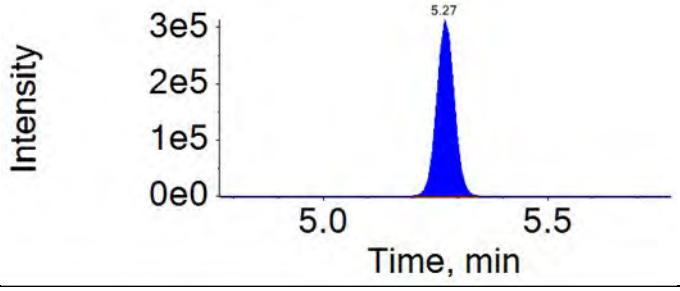
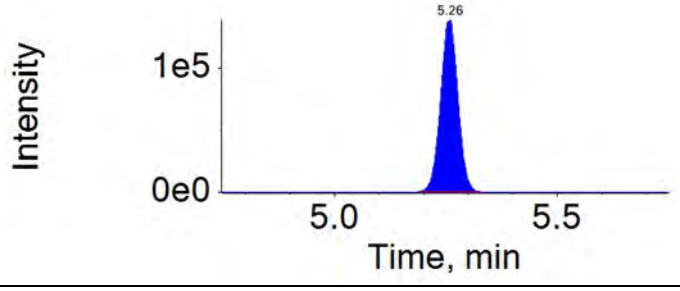
APPROVED
By MCD at 5:01 pm, 11/28/18

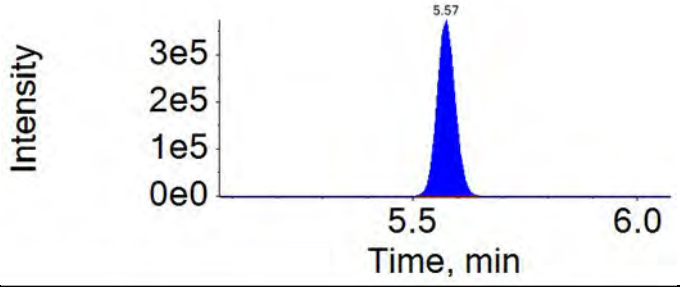
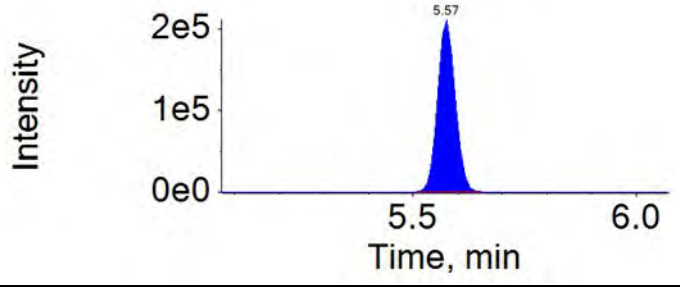
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

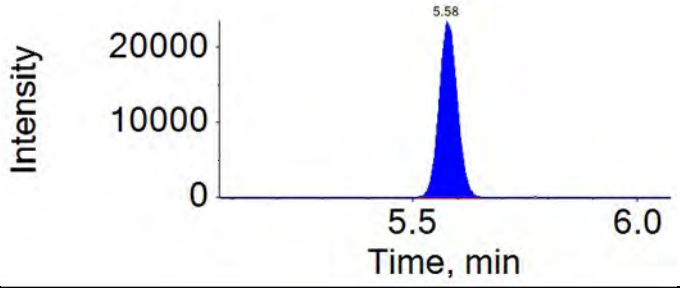
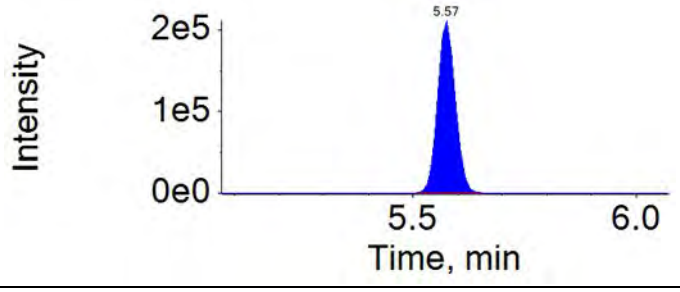
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

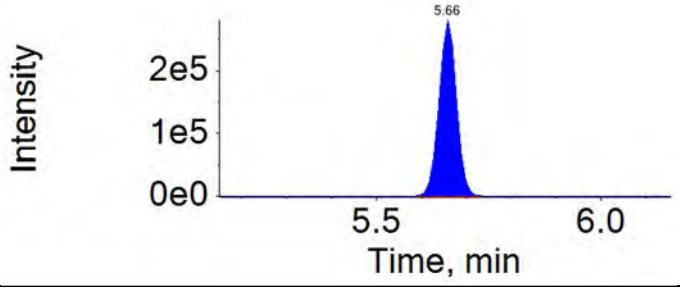
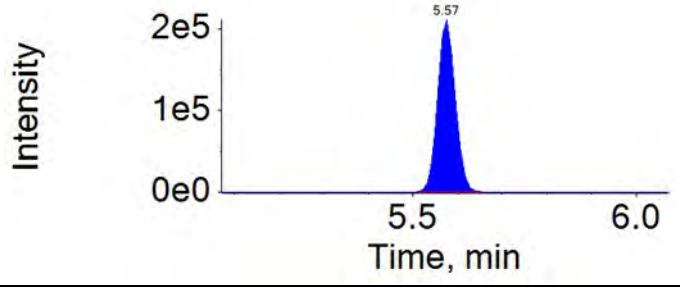
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

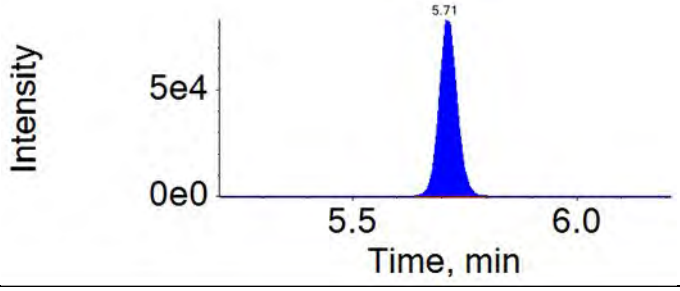
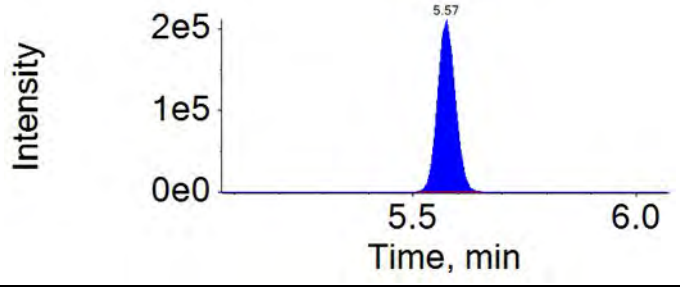
APPROVED
By MCD at 5:01 pm, 11/28/18

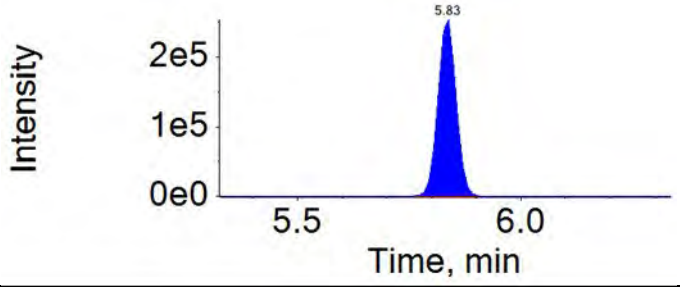
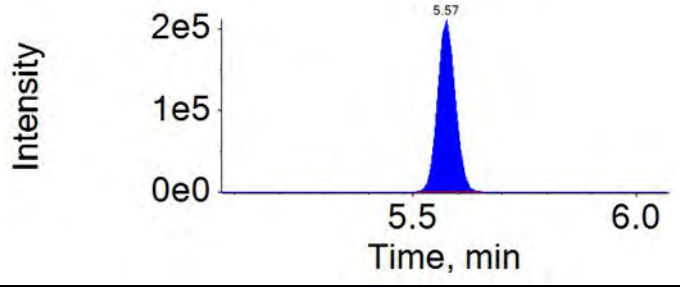
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

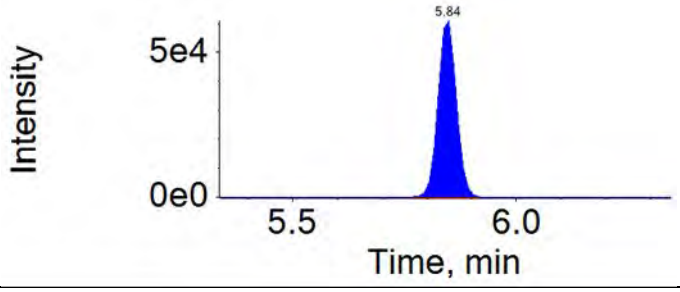
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

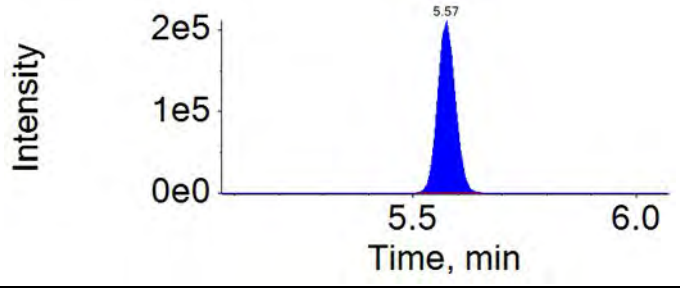
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

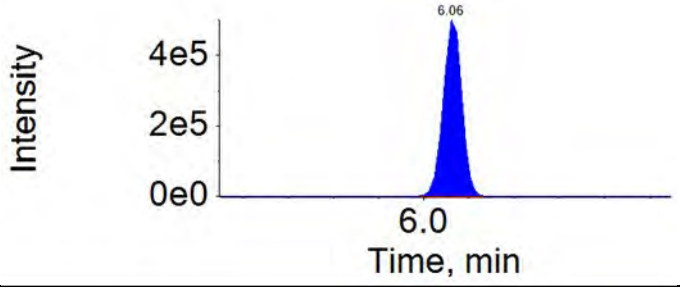
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

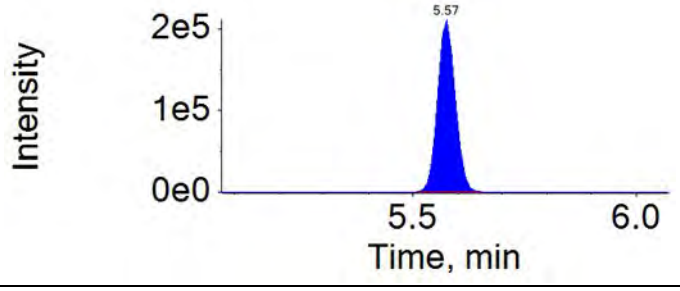
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



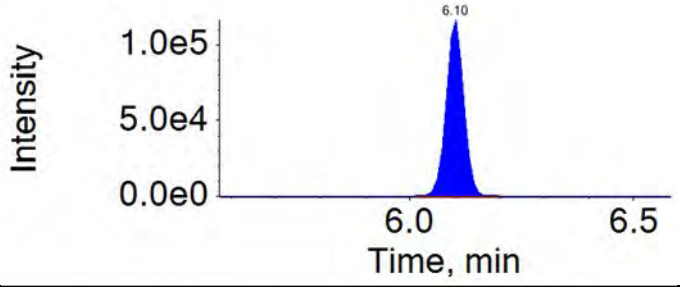


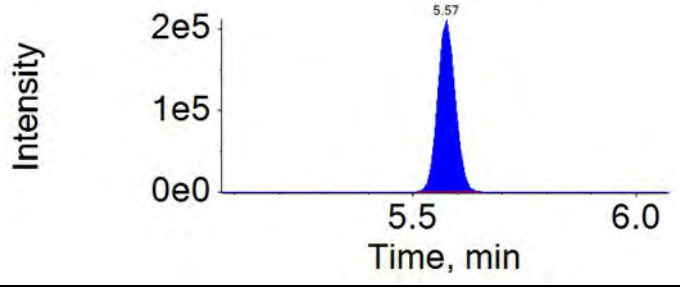
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



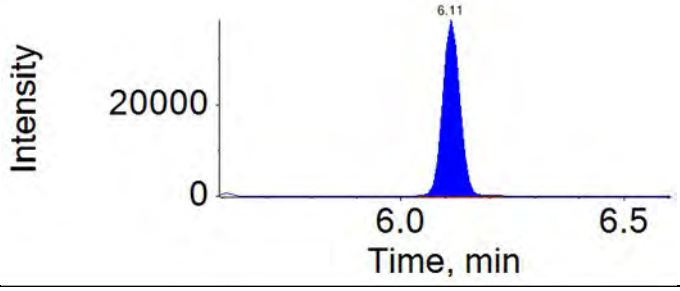


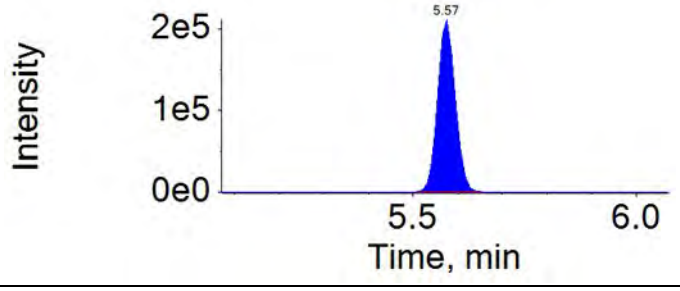
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



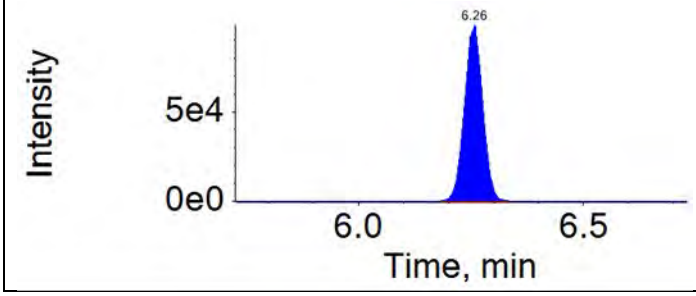


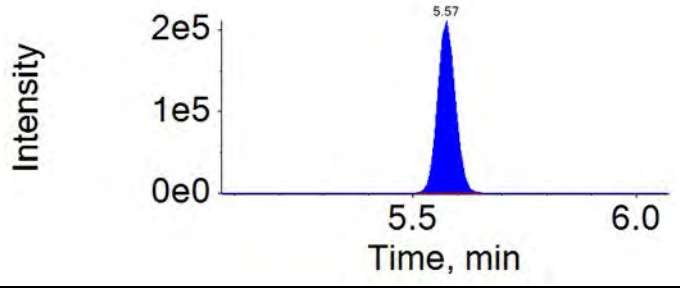
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

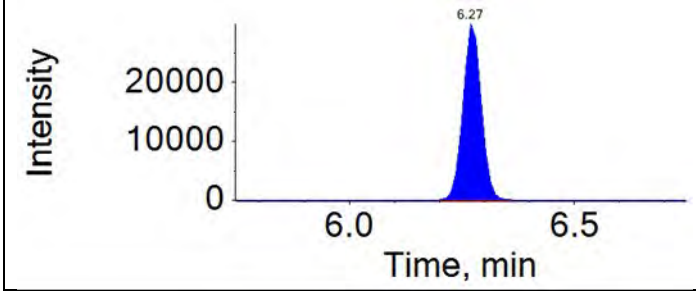
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

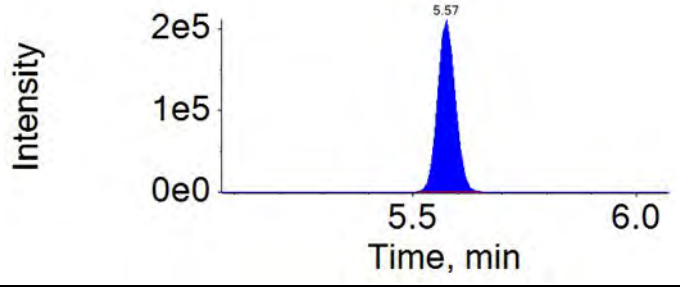
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



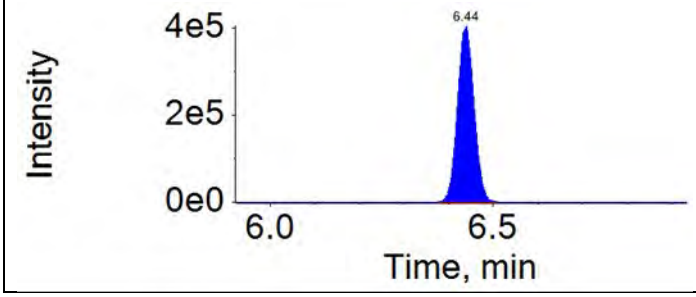


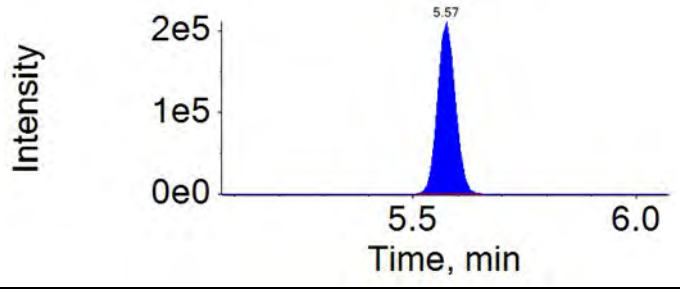
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



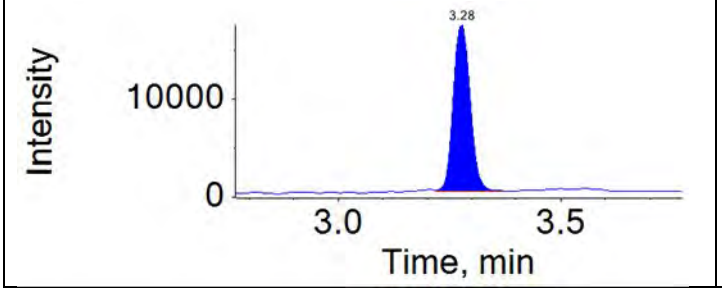


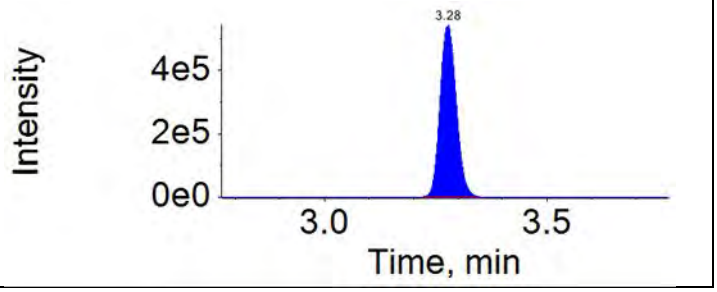
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

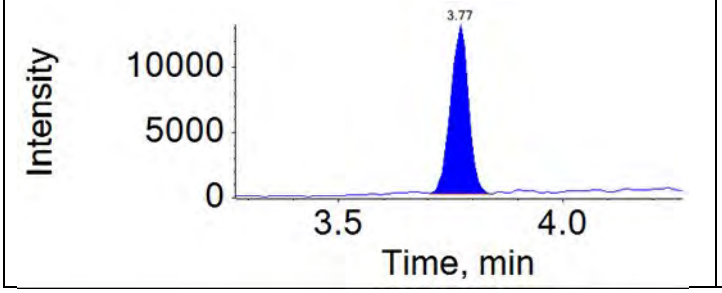
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

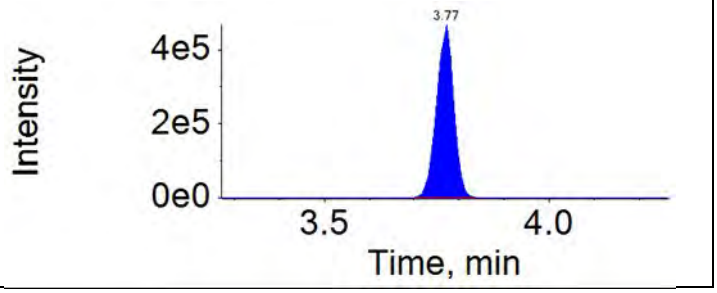
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



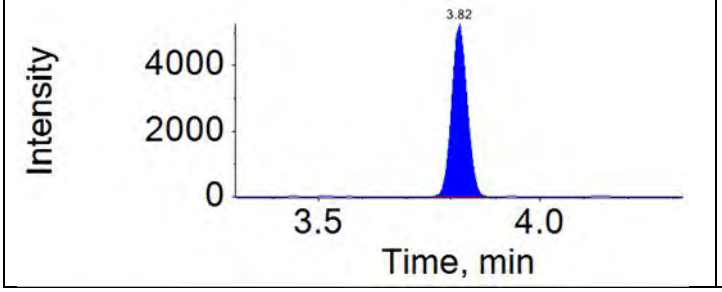


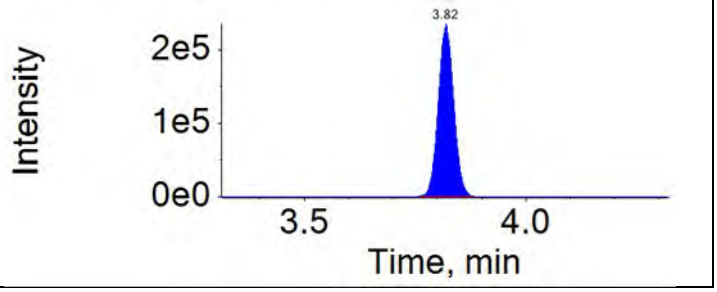
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



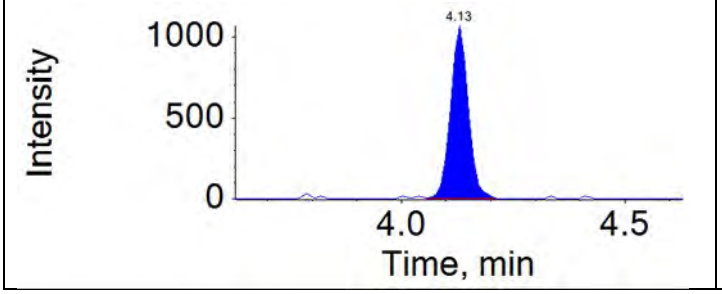


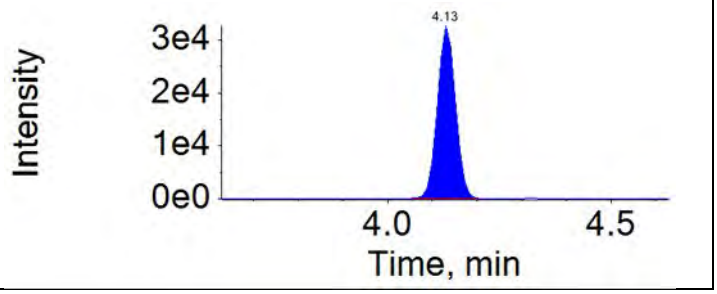
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



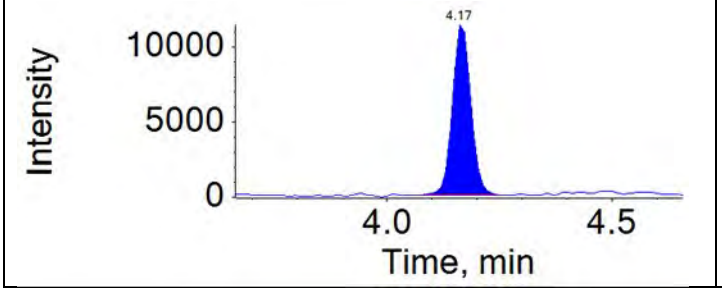


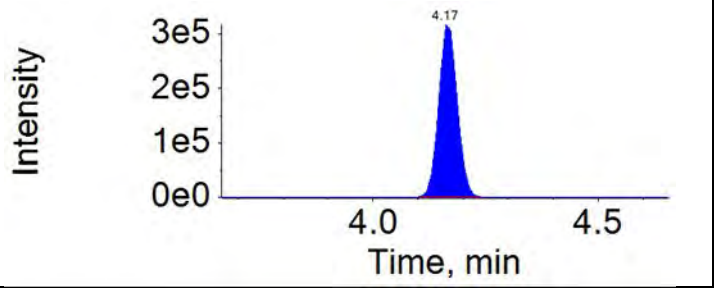
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

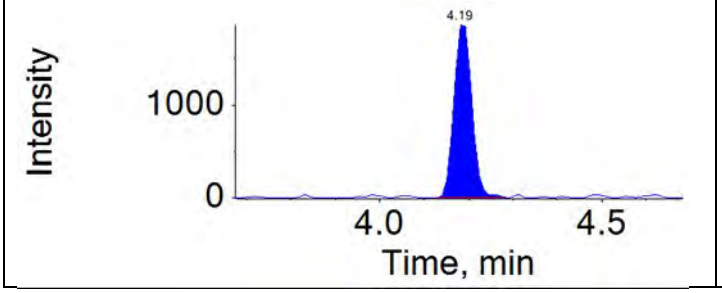
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

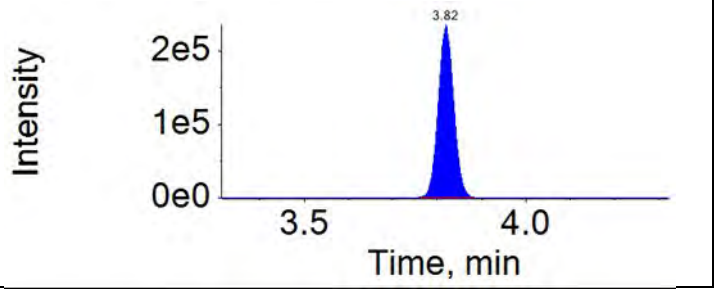
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



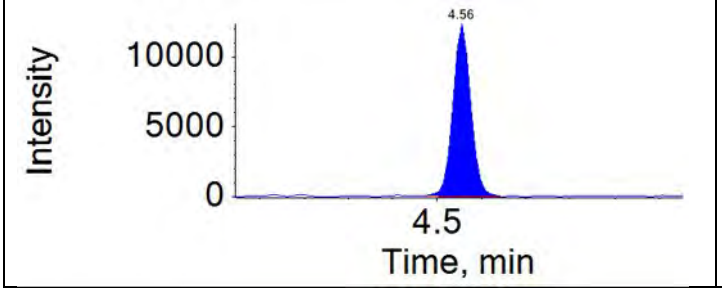


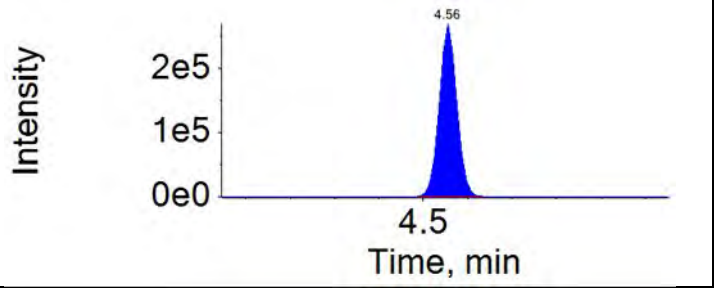
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



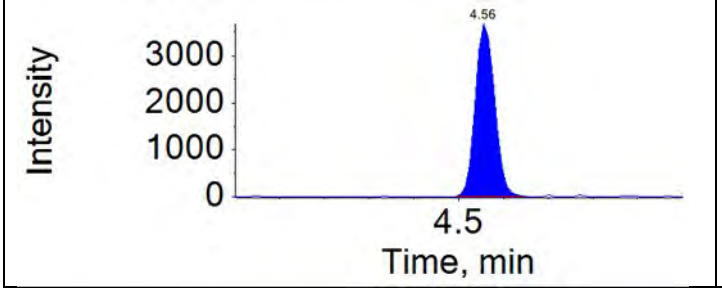


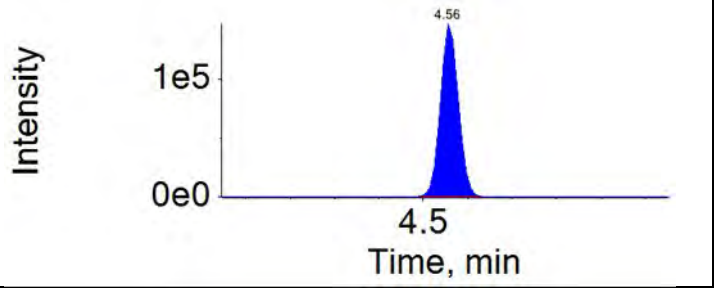
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



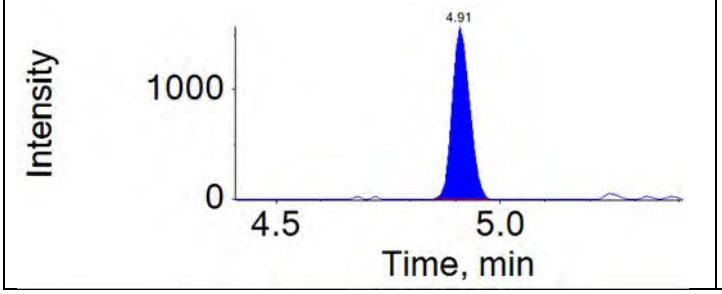


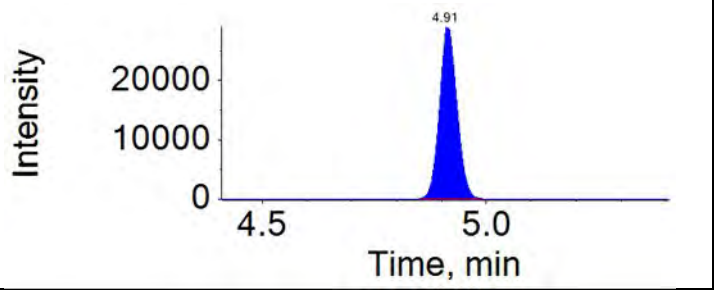
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

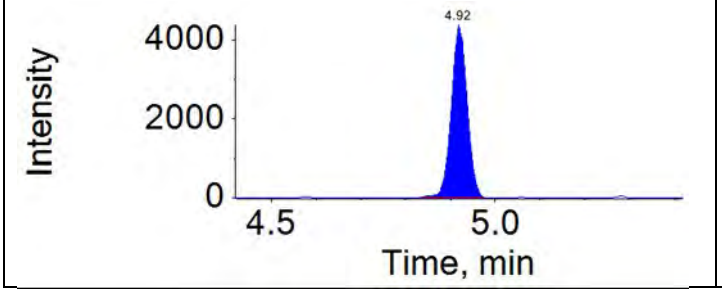
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

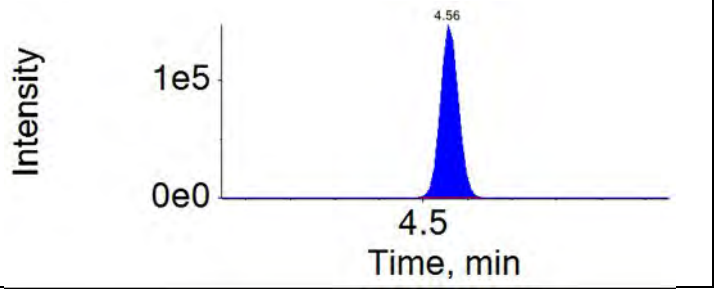
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



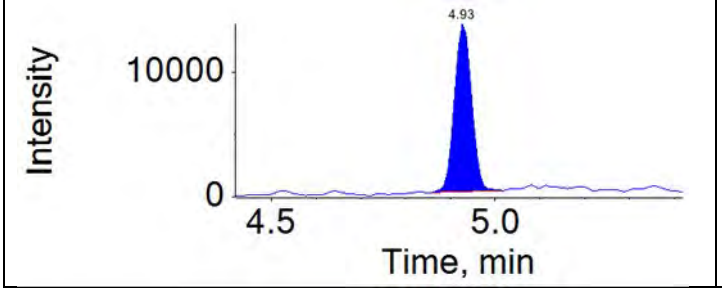


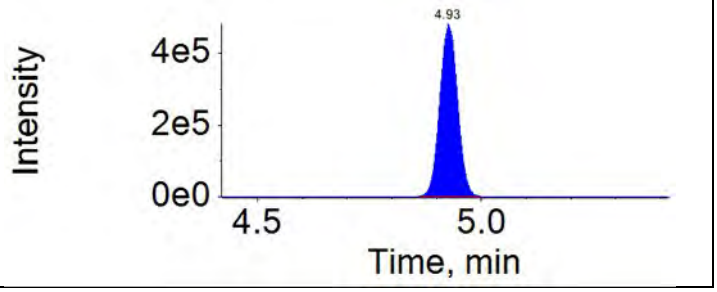
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



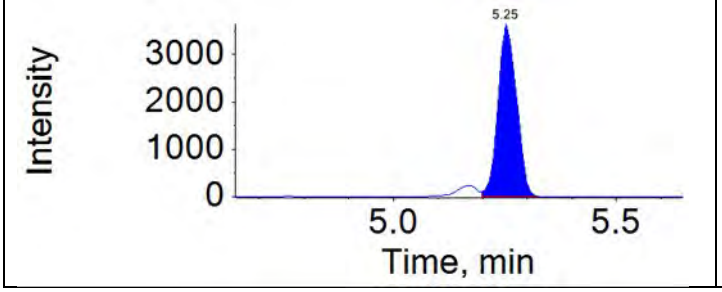


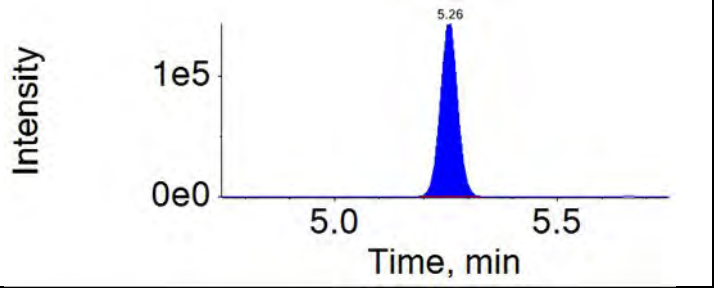
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



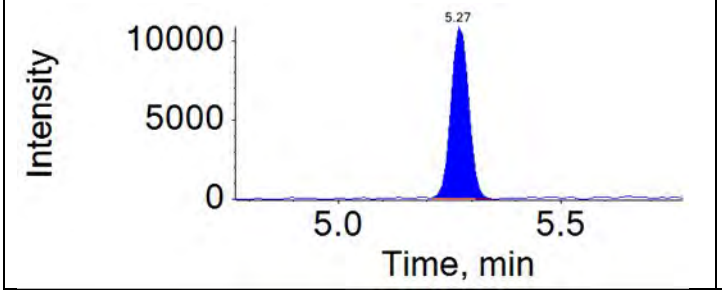


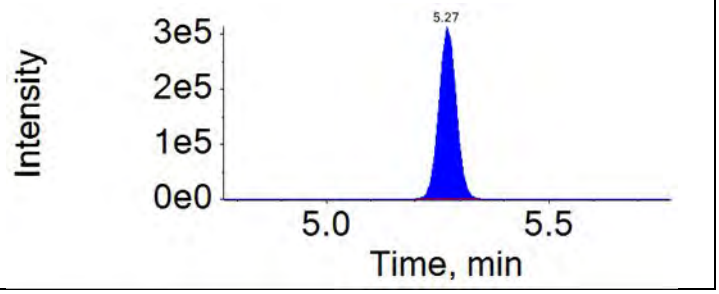
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

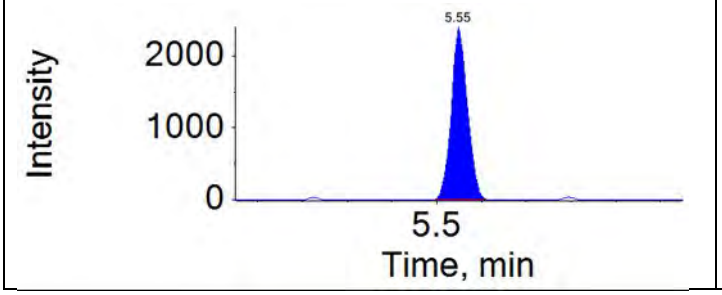
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

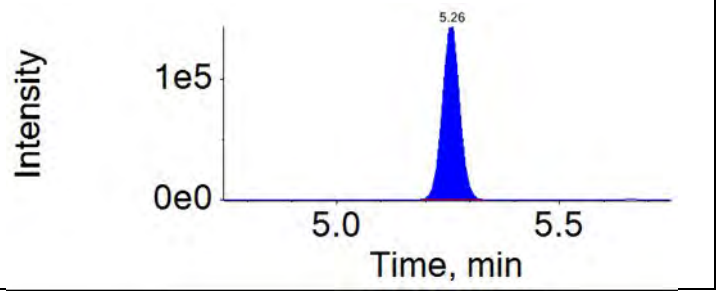
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



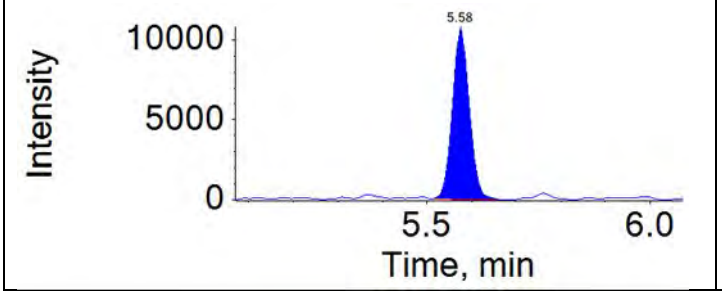


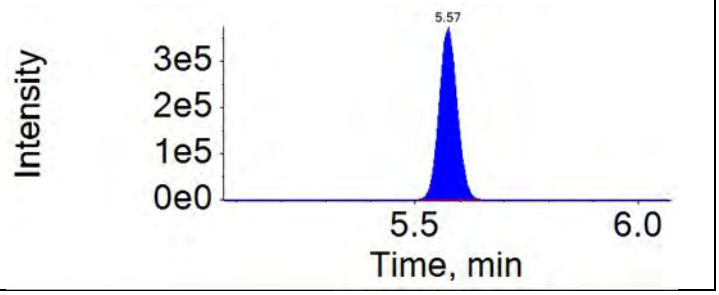
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



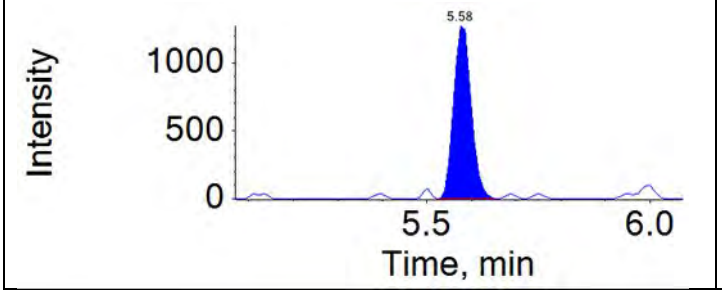


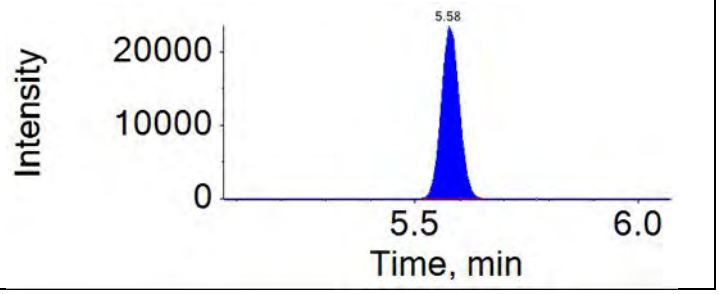
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



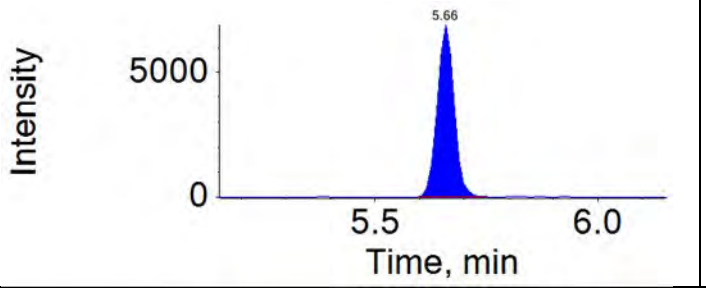


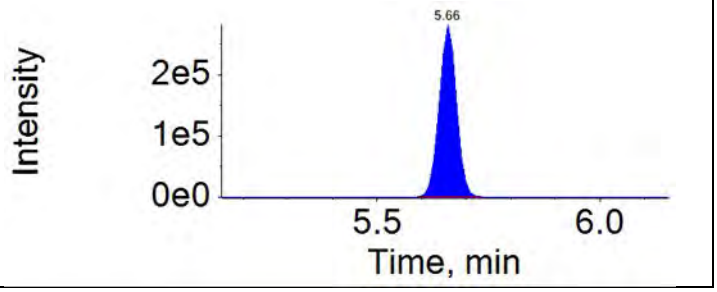
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

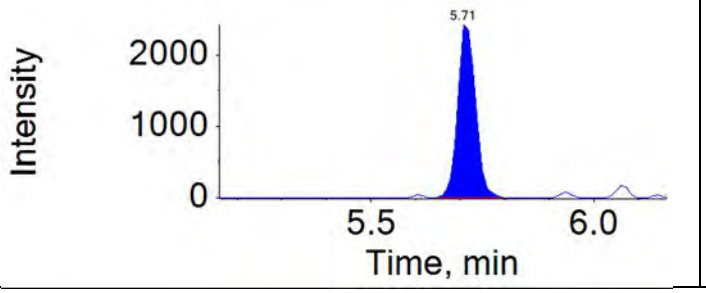
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

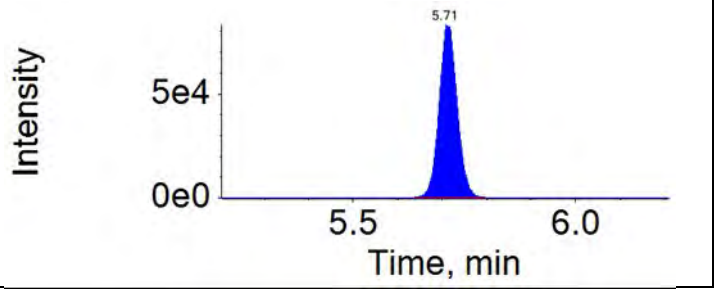
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



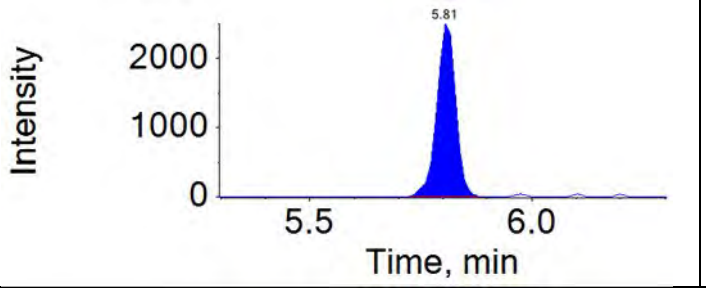


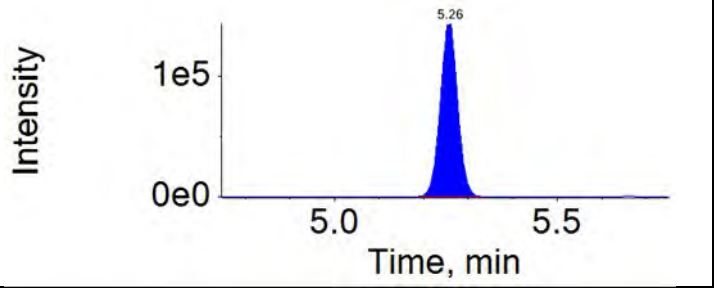
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



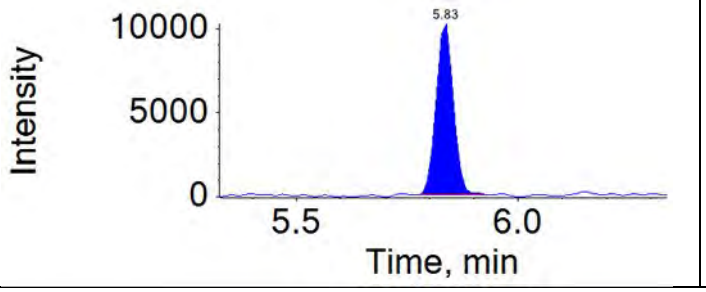


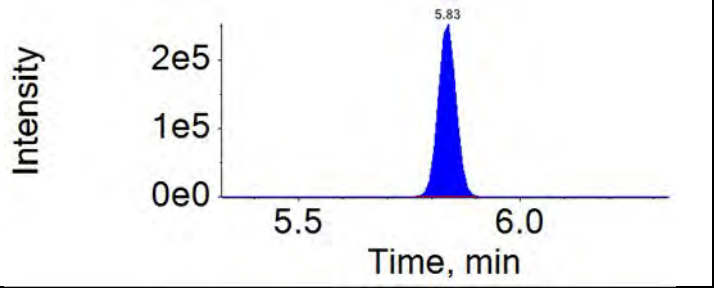
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



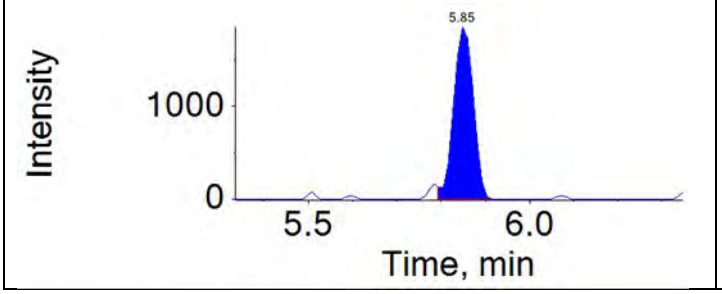


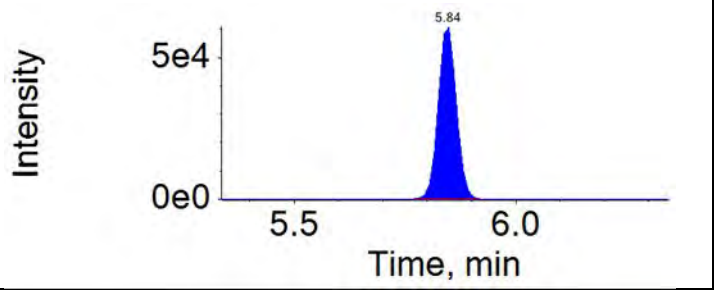
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

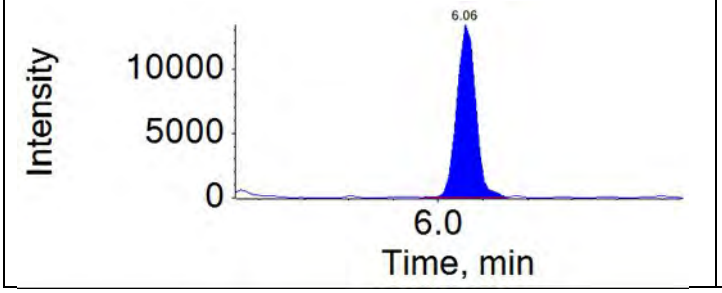
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

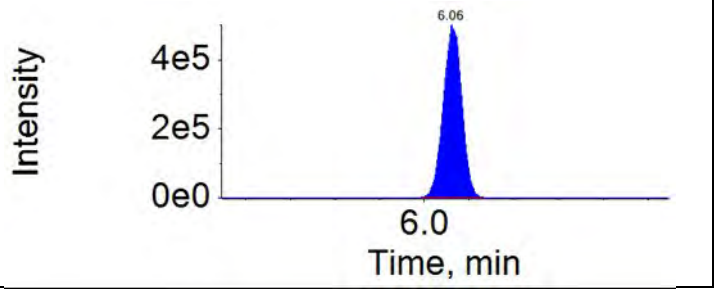
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



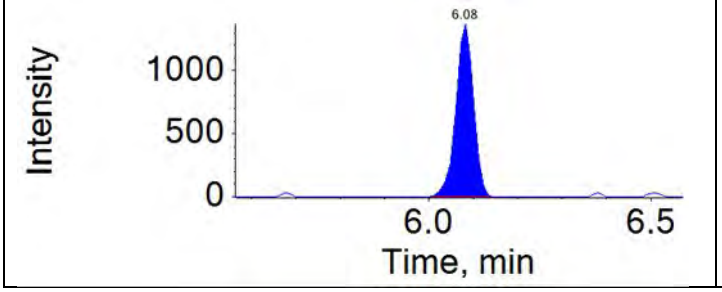


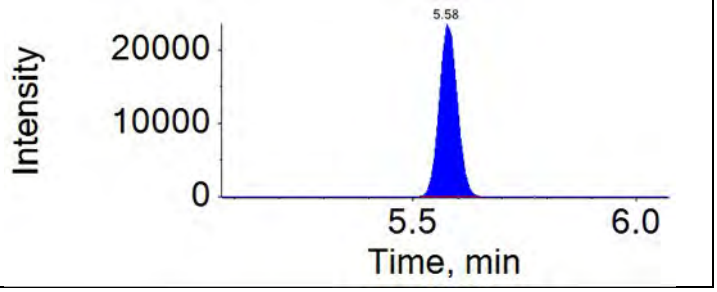
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



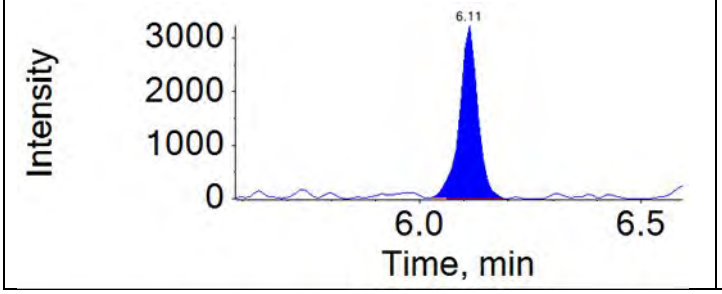


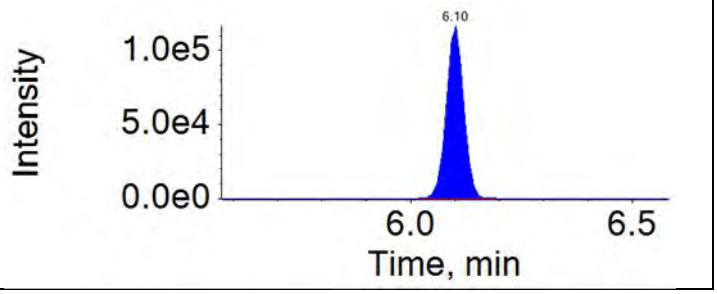
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



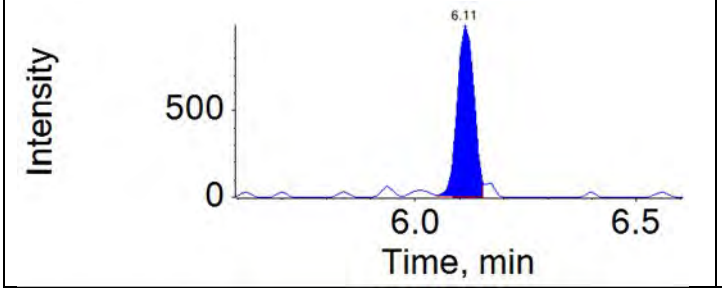


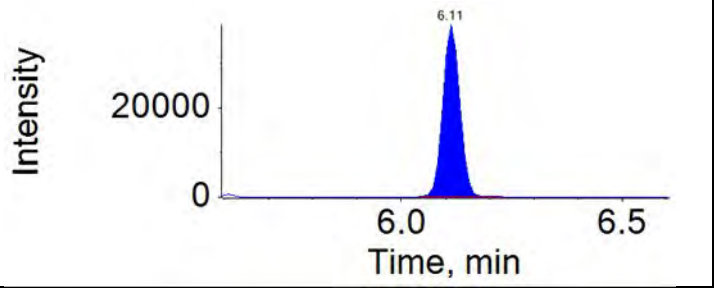
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

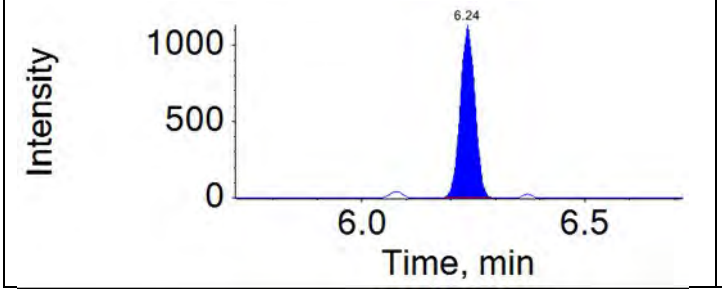
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

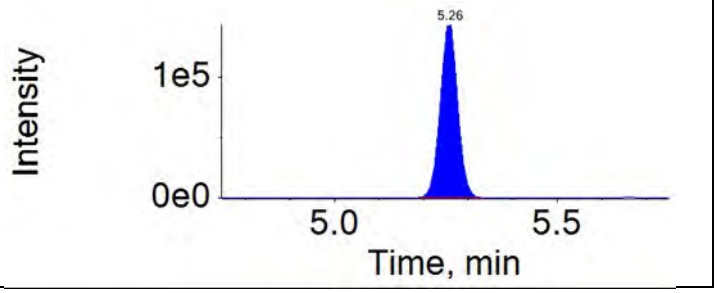
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



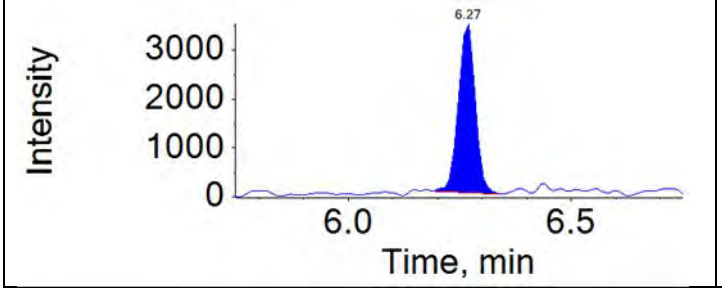


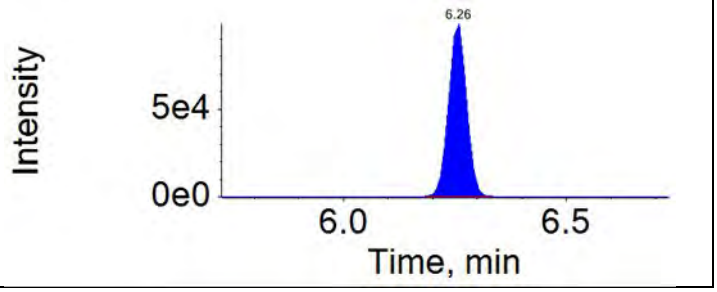
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



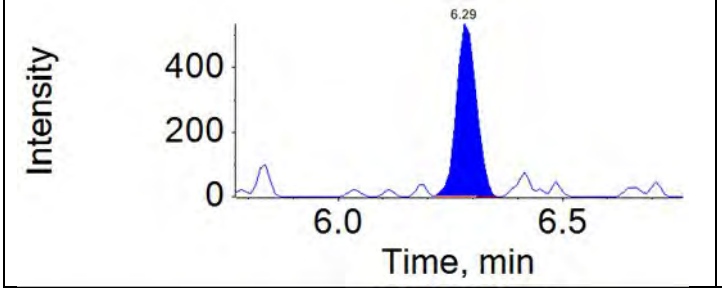


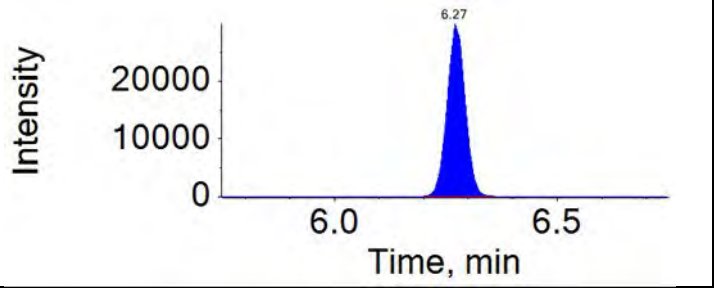
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

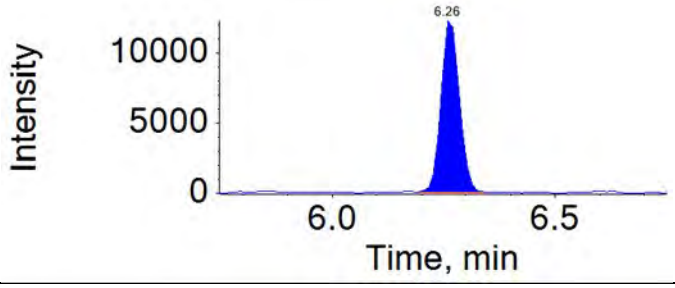
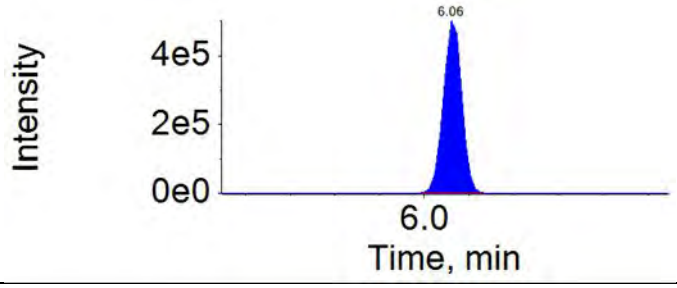


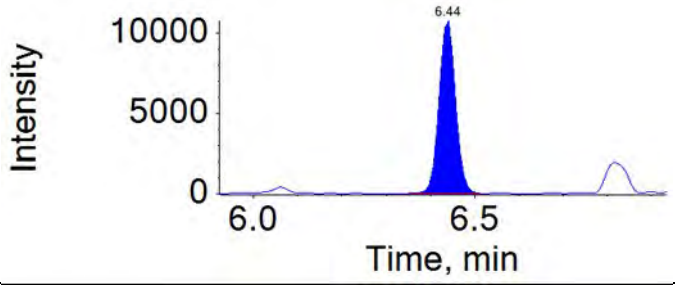
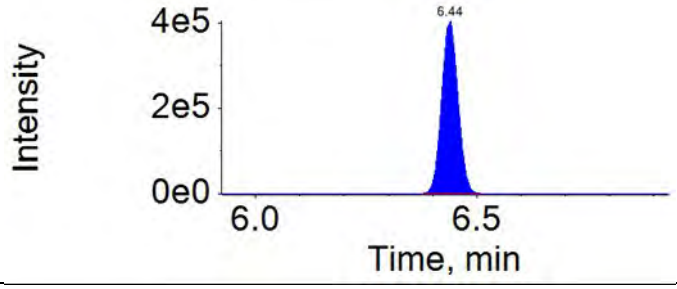


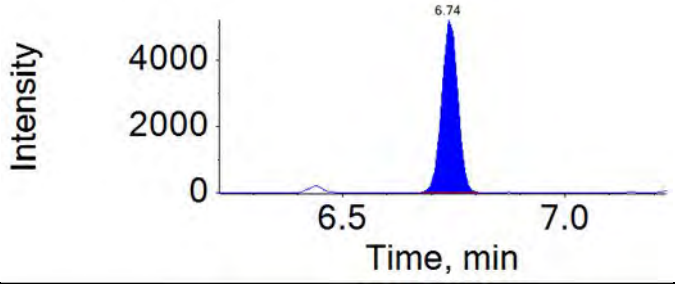
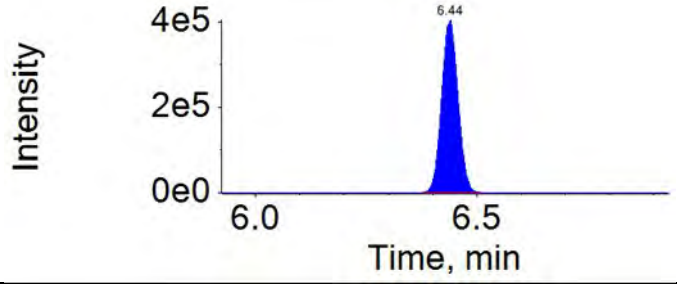
APPROVED
By MCD at 5:01 pm, 11/28/18

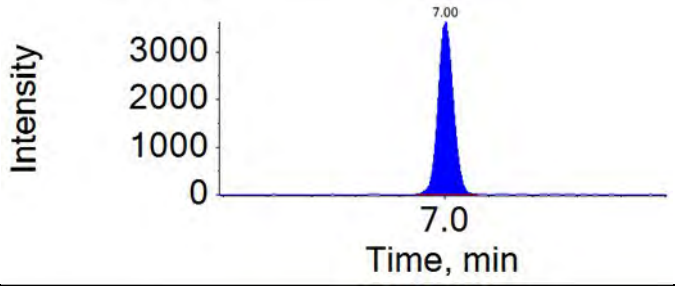
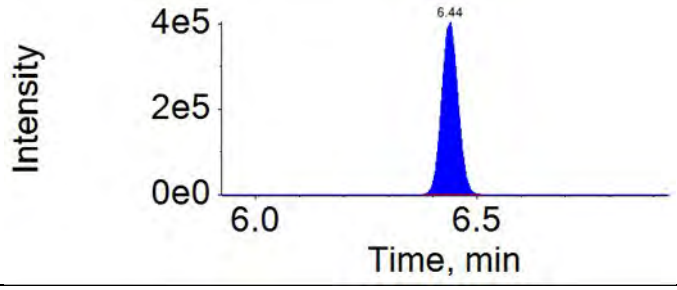
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

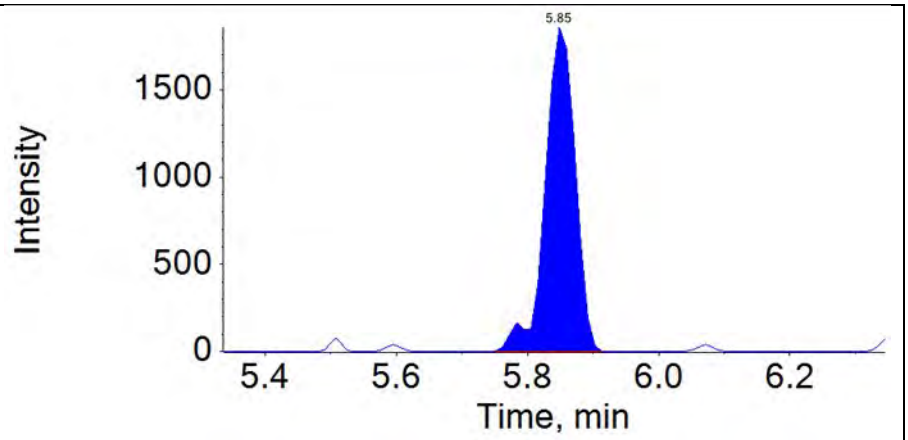
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

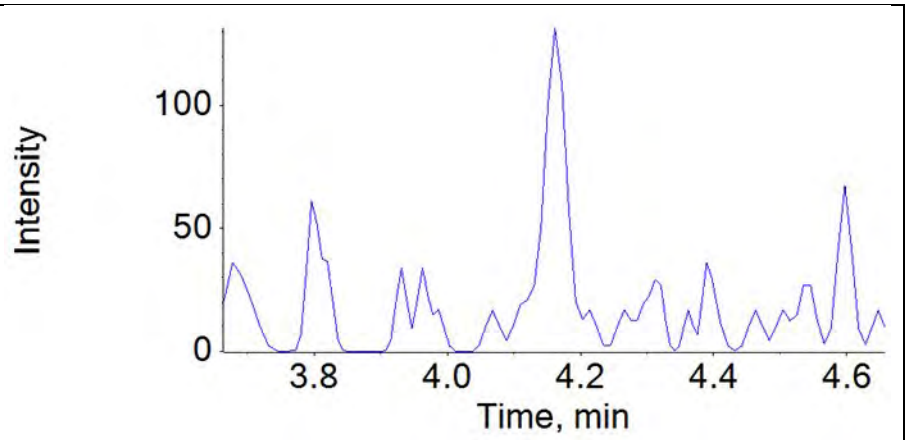
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NEtFOSAA
RT (min.):
5.85
Peak Area:
5953.37
Mass Range:
584.0 / 419.0
File Name:
18NOV28DCAL-05.wiff
Sample Name:
MDL



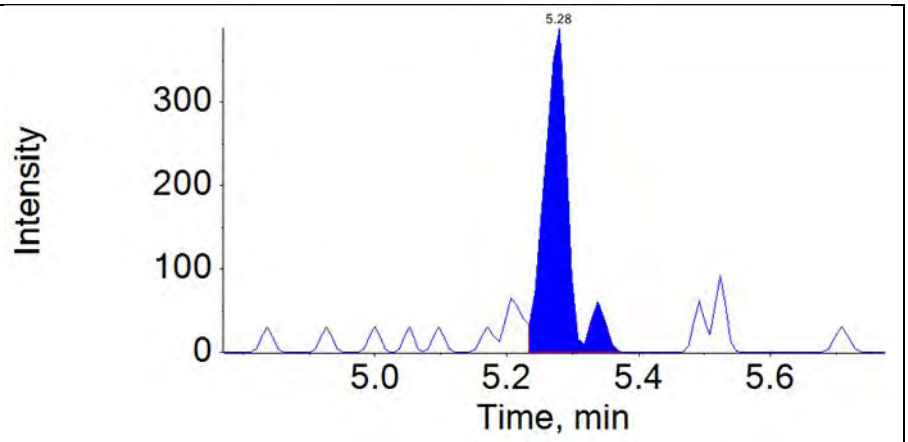
Integration Comment: incorrect integration

Component Name:
PFHxA_2
RT (min.):
N/A
Peak Area:
N/A
Mass Range:
313.0 / 119.0
File Name:
18NOV28DCAL-05.wiff
Sample Name:
MDL



Integration Comment: incorrect integration

Component Name:
PFNA_2
RT (min.):
5.28
Peak Area:
991.88
Mass Range:
463.0 / 169.0
File Name:
18NOV28DCAL-05.wiff
Sample Name:
MDL



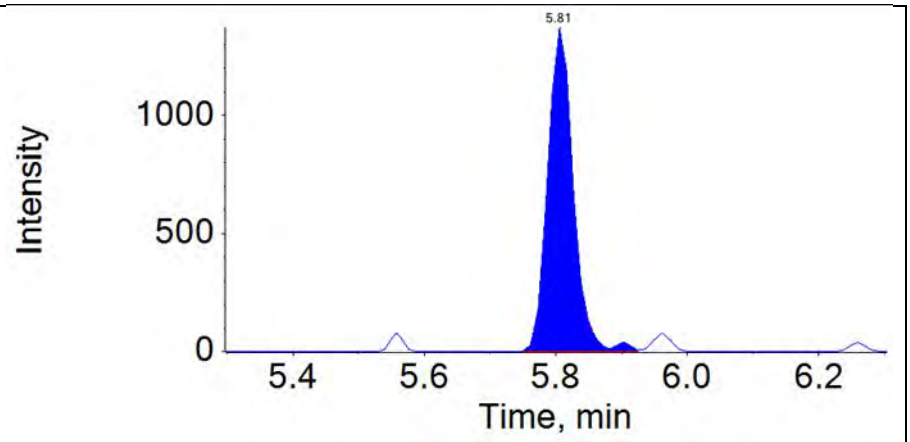
Integration Comment: incorrect integration

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

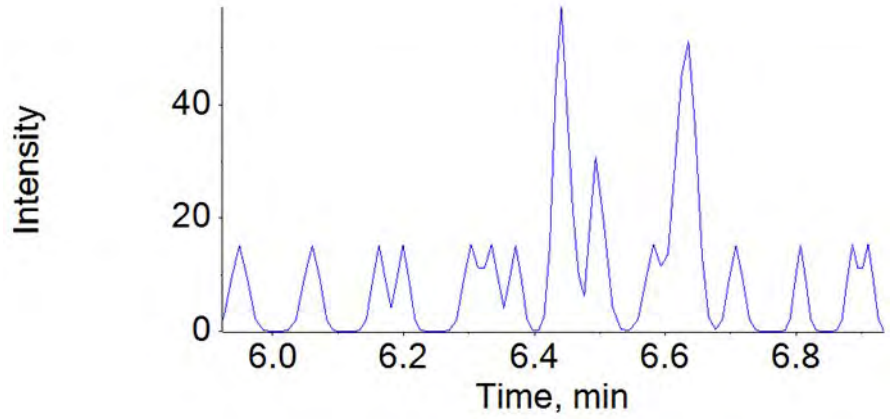
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFDS_2
RT (min.):
5.81
Peak Area:
3733.02
Mass Range:
599.0 / 99.0
File Name:
18NOV28DCAL-05.wiff
Sample Name:
MDL



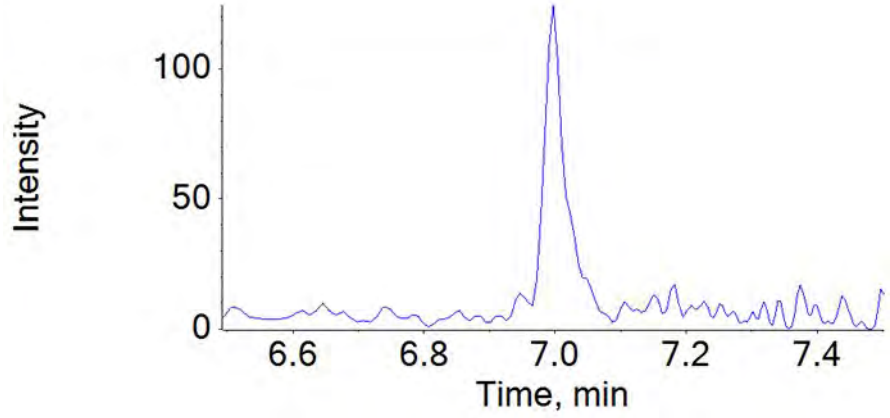
Integration Comment: incorrect integration

Component Name:
PFTeDA_2
RT (min.):
N/A
Peak Area:
N/A
Mass Range:
713.0 / 169.0
File Name:
18NOV28DCAL-05.wiff
Sample Name:
MDL



Integration Comment: incorrect integration

Component Name:
PFODA_2
RT (min.):
N/A
Peak Area:
N/A
Mass Range:
913.0 / 169.0
File Name:
18NOV28DCAL-05.wiff
Sample Name:
MDL



Integration Comment: incorrect integration

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Ion Ratio Report

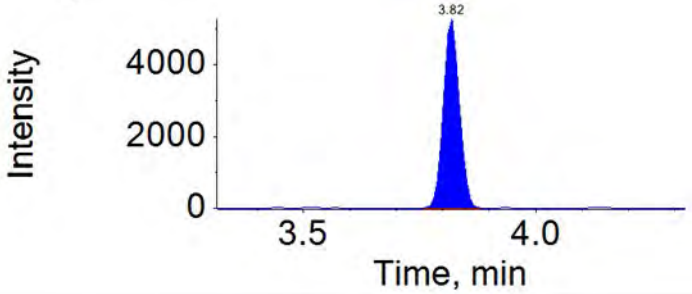
Sample Name: MDL **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-05.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	12605.11	A	0.3655	0.3999			
PFBS_2	3.82	1.00	5040.50	A	0.3655	0.3999	9	50	
4:2-FTS	4.13	1.00	2928.74	A	0.6383	0.8346			
4:2-FTS_2	4.14	1.00	2444.20	A	0.6383	0.8346	31	50	
PFHxA	4.17	1.00	32436.10	A	0.0103	0.0108			
PFHxA_2	4.16	1.00	351.77	M	0.0103	0.0108	5	50	
PFPeS	4.19	1.10	5200.81	A	0.4976	0.5489			
PFPeS_2	4.18	1.10	2854.76	A	0.4976	0.5489	10	50	
PFHpA	4.56	1.00	34134.49	A	0.0557	0.0423			
PFHpA_2	4.56	1.00	1443.47	A	0.0557	0.0423	-24	50	
PFHxS	4.56	1.00	11072.62	A	0.3693	0.3363			
PFHxS_2	4.56	1.00	3723.62	A	0.3693	0.3363	-9	50	
6:2-FTS	4.91	1.00	4195.71	A	0.6625	0.7204			
6:2-FTS_2	4.92	1.00	3022.50	A	0.6625	0.7204	9	50	
PFHpS	4.92	1.08	10674.87	A	0.3915	0.3919			
PFHpS_2	4.92	1.08	4183.13	A	0.3915	0.3919	0	50	
PFOA	4.93	1.00	35831.52	A	0.0573	0.0601			
PFOA_2	4.93	1.00	2154.33	A	0.0573	0.0601	5	50	
PFOS	5.25	1.00	10490.26	A	0.2960	0.3261			
PFOS_2	5.26	1.00	3420.70	A	0.2960	0.3261	10	50	
PFNA	5.27	1.00	29535.31	A	0.0201	0.0303			
PFNA_2	5.28	1.00	895.63	M	0.0201	0.0303	51	50	OOS
PFNS	5.55	1.06	5896.87	A	0.4794	0.3569			
PFNS_2	5.55	1.06	2104.41	A	0.4794	0.3569	-26	50	
PFDA	5.58	1.00	28044.30	A	0.0075	0.0083			
PFDA_2	5.59	1.00	233.51	A	0.0075	0.0083	11	50	
8:2-FTS	5.58	1.00	3464.55	A	0.5380	0.6552			
8:2-FTS_2	5.58	1.00	2270.14	A	0.5380	0.6552	22	50	
NMeFOSAA	5.71	1.00	6753.67	A	0.2305	0.2846			
NMeFOSAA_2	5.71	1.00	1921.86	A	0.2305	0.2846	23	50	
PFDS	5.81	1.10	7418.03	A	0.5356	0.4947			
PFDS_2	5.81	1.10	3669.44	M	0.5356	0.4947	-8	50	
PFUnDA	5.83	1.00	27644.34	A	0.0038	0.0094			
PFUnDA_2	5.84	1.00	259.49	A	0.0038	0.0094	147	50	OOS
NEtFOSAA	5.85	1.00	5734.33	M	0.7356	0.4625			
NEtFOSAA_2	5.85	1.00	2652.07	A	0.7356	0.4625	-37	50	
PFDoDA	6.06	1.00	38884.24	A	0.0130	0.0152			
PFDoDA_2	6.06	1.00	589.76	A	0.0130	0.0152	16	50	
10:2-FTS	6.08	1.09	3761.82	A	0.6989	0.6514			
10:2-FTS_2	6.08	1.09	2450.53	A	0.6989	0.6514	-7	50	
PFTrDA	6.26	1.03	35013.33	A	0.0090	0.0082			
PFTrDA_2	6.26	1.03	286.20	A	0.0090	0.0082	-9	50	
PFTeDA	6.44	1.00	27817.63	A	0.0056	0.0036			
PFTeDA_2	6.44	1.00	100.27	M	0.0056	0.0036	-36	50	
PFHxDA	6.74	1.05	13033.35	A	0.0646	0.0669			
PFHxDA_2	6.74	1.05	872.25	A	0.0646	0.0669	4	50	
PFODA	7.00	1.09	8671.11	A	0.0264	0.0329			
PFODA_2	7.00	1.09	285.12	M	0.0264	0.0329	24	50	

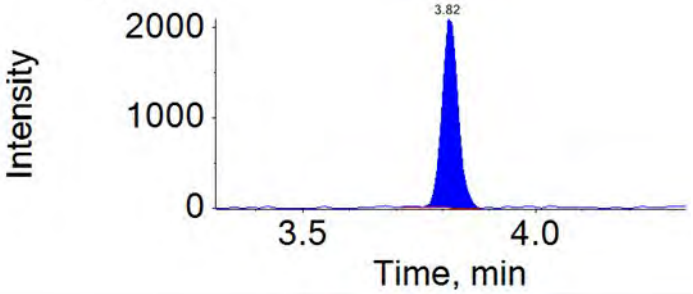
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

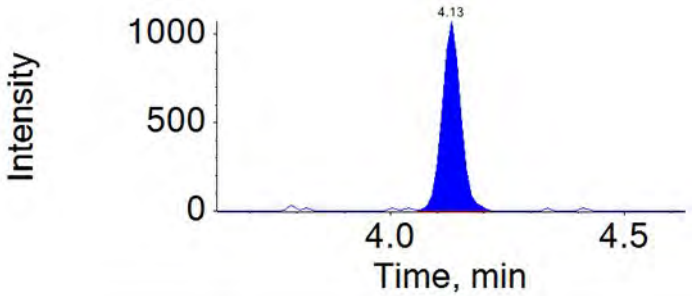
Component: PFBS
Primary Mass: 299.0 / 80.0



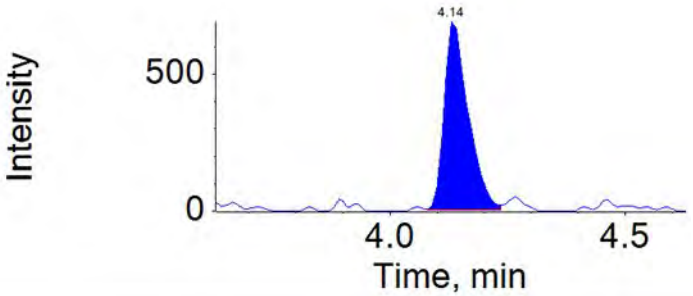
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



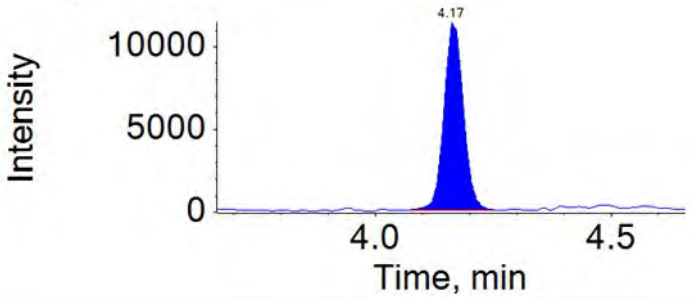
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



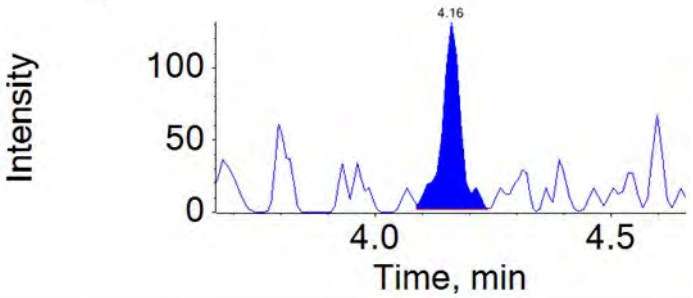
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



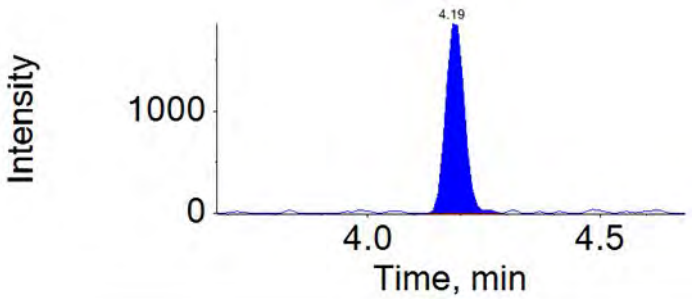
Component: PFHxA
Primary Mass: 313.0 / 269.0



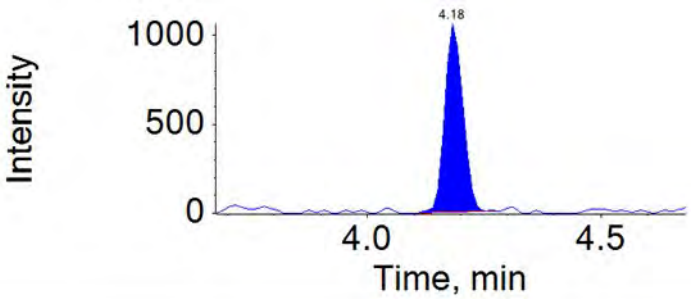
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



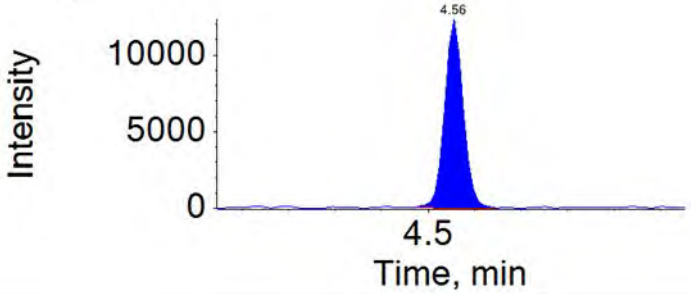
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



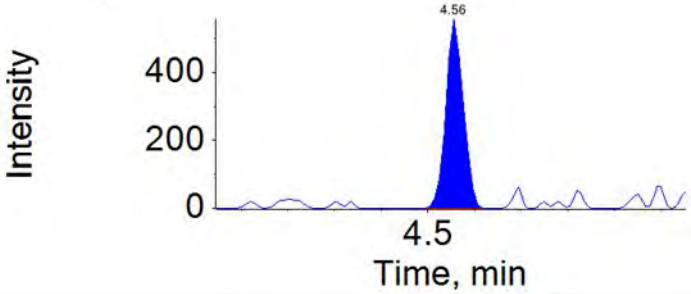
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

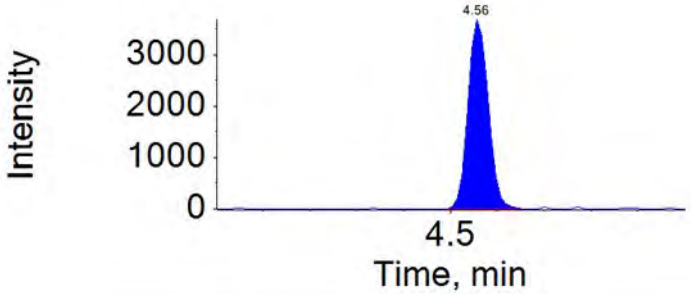
Component: PFHpA
Primary Mass: 363.0 / 319.0



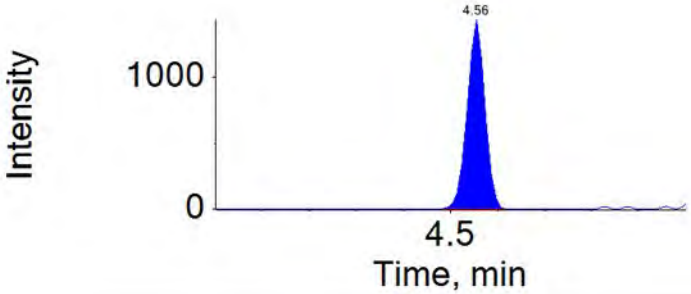
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



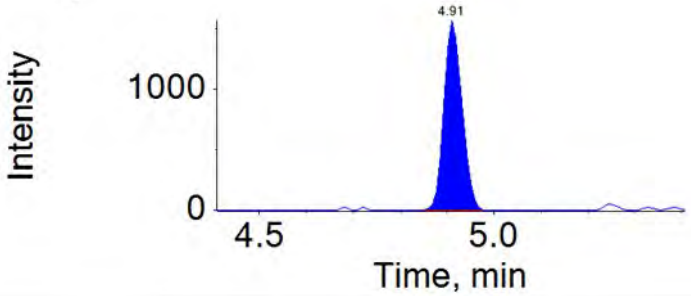
Component: PFHxS
Primary Mass: 399.0 / 80.0



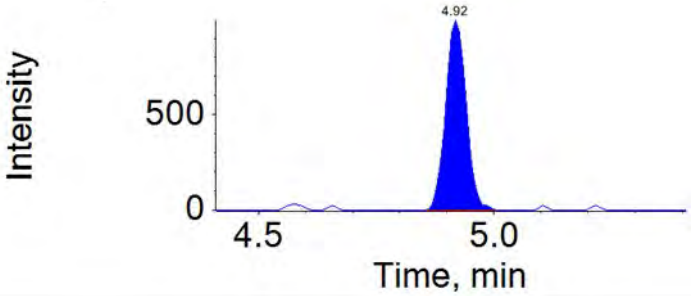
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



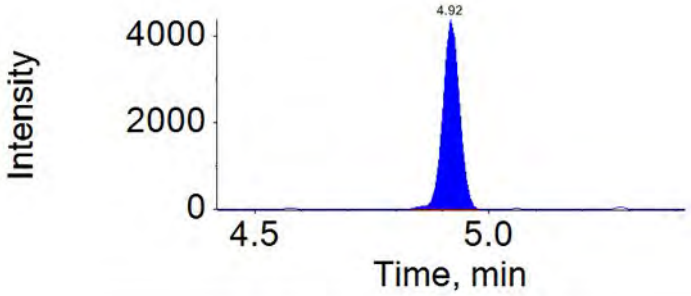
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



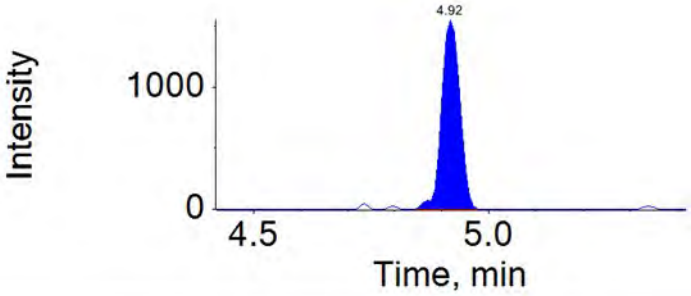
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



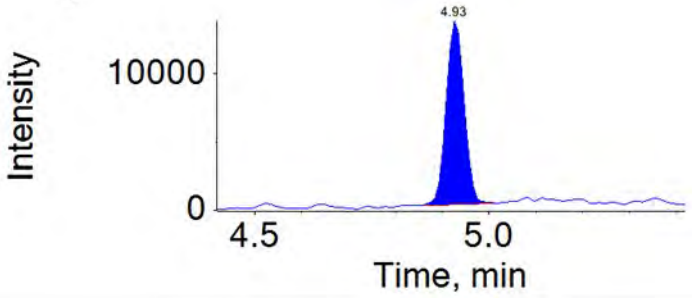
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



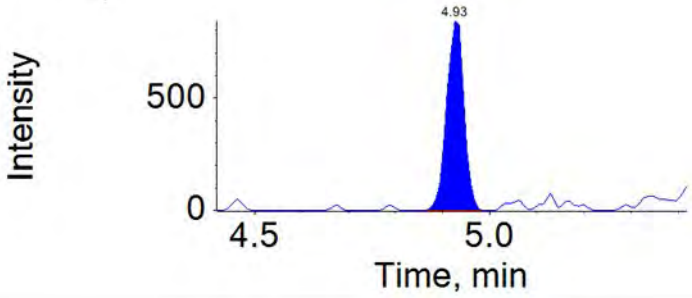
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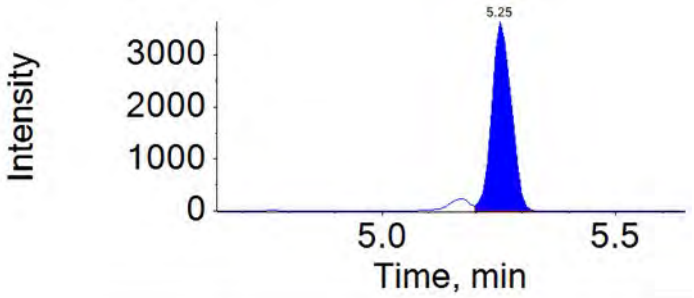
Component: PFOA
Primary Mass: 413.0 / 369.0



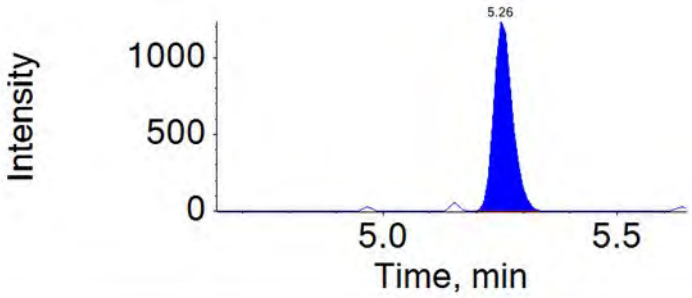
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



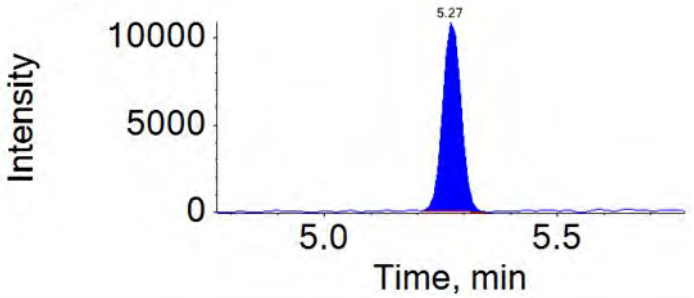
Component: PFOS
Primary Mass: 499.0 / 80.0



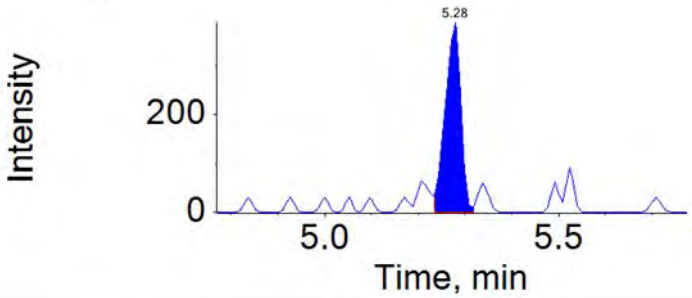
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



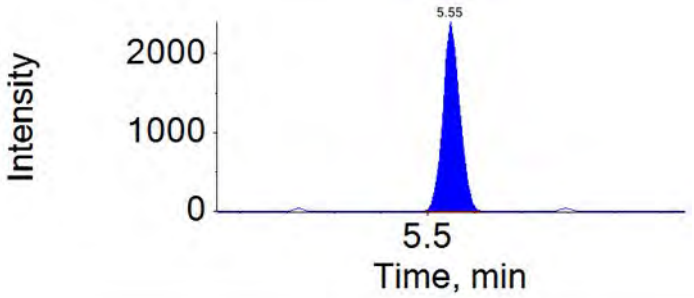
Component: PFNA
Primary Mass: 463.0 / 419.0



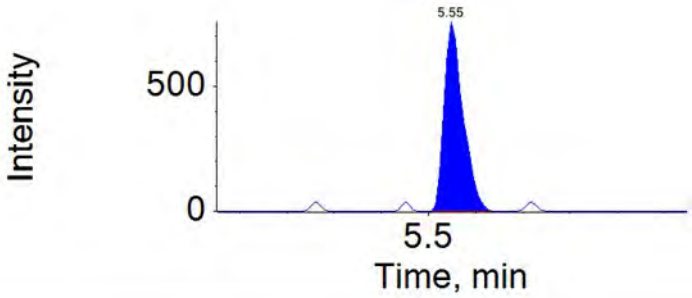
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



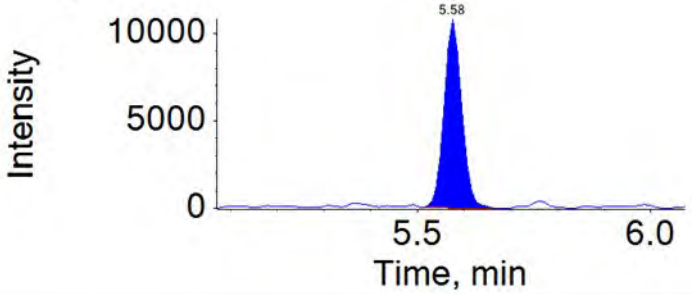
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



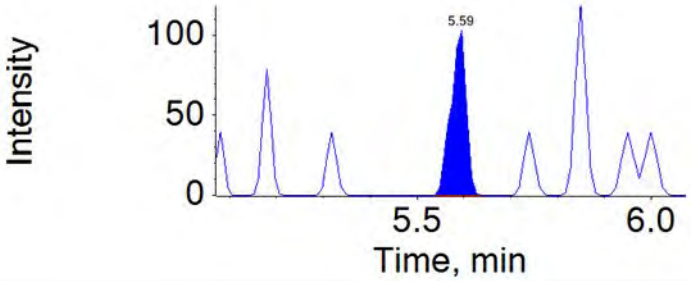
APPROVED
By MCD at 5:01 pm, 11/28/18

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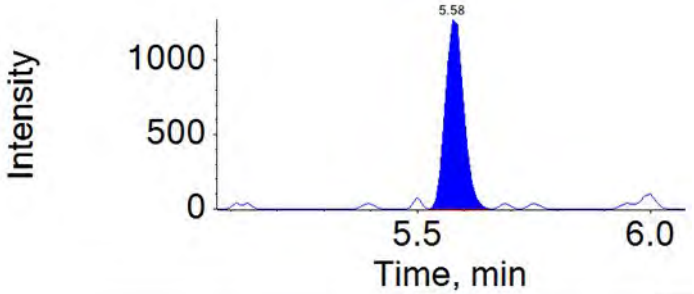
Component: PFDA
Primary Mass: 513.0 / 469.0



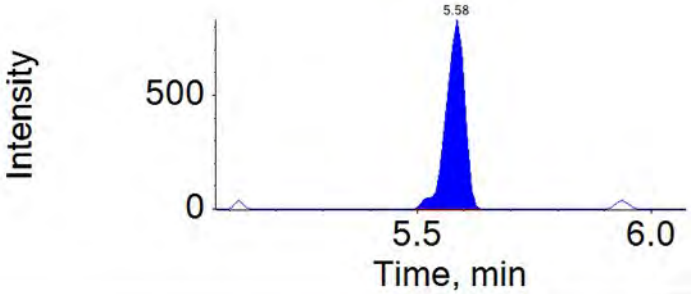
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



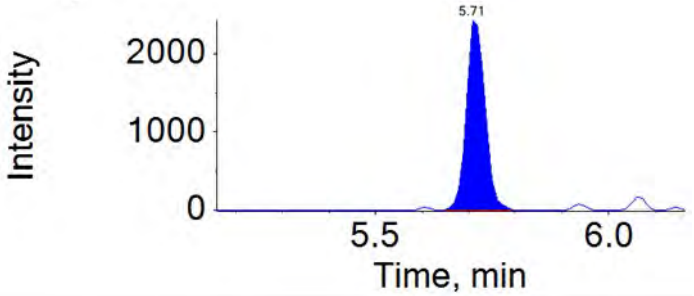
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



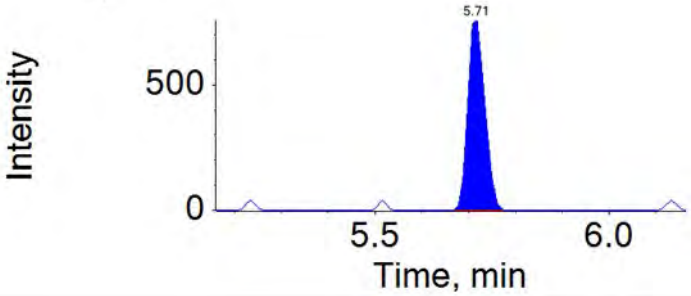
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



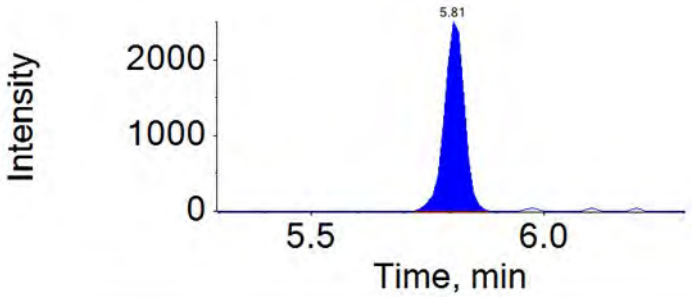
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



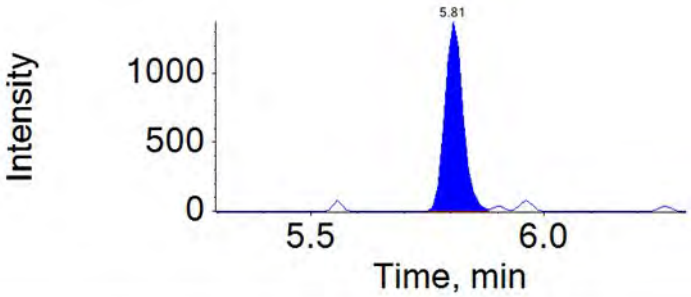
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



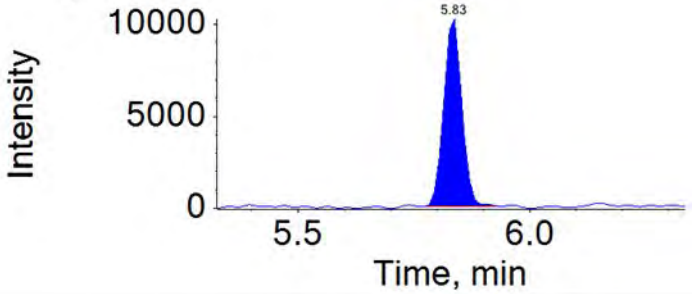
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



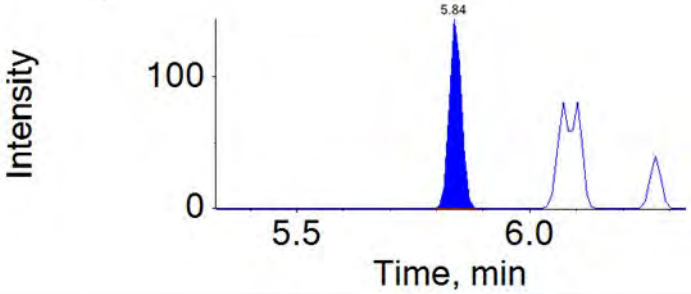
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

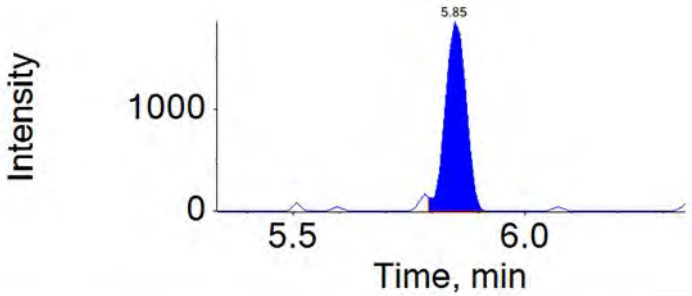
Component: PFUnDA
Primary Mass: 563.0 / 519.0



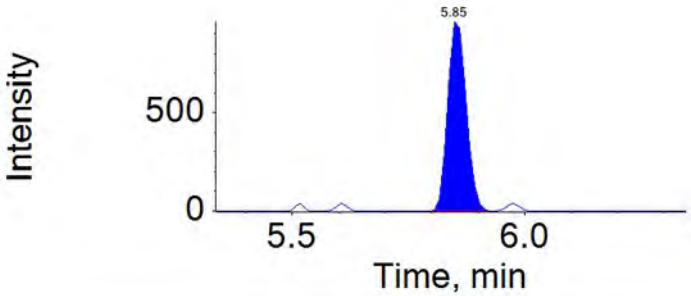
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



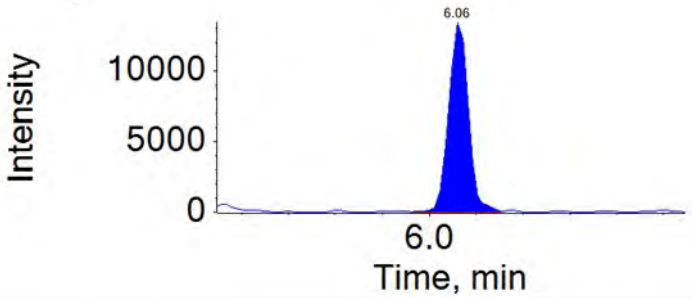
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



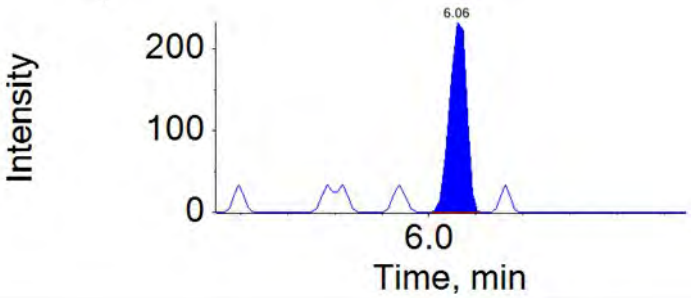
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



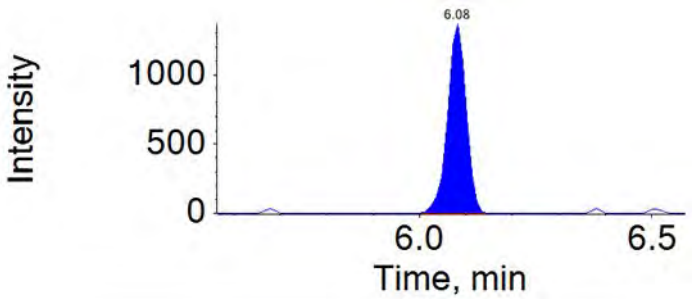
Component: PFDoDA
Primary Mass: 613.0 / 569.0



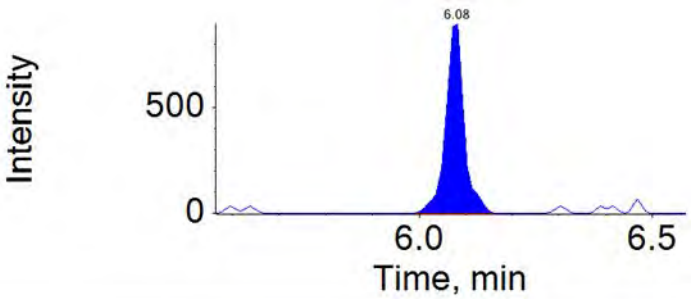
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



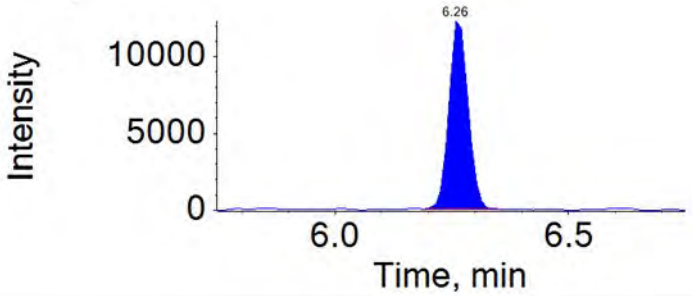
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



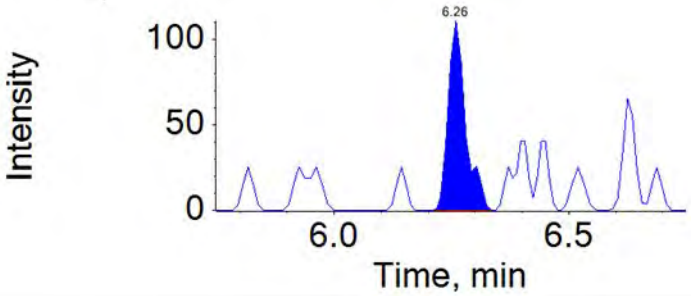
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

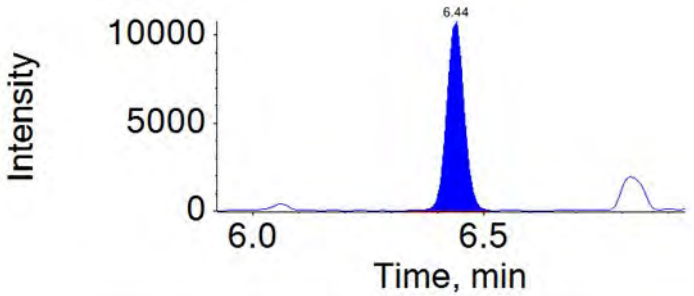
Component: PFTrDA
Primary Mass: 663.0 / 619.0



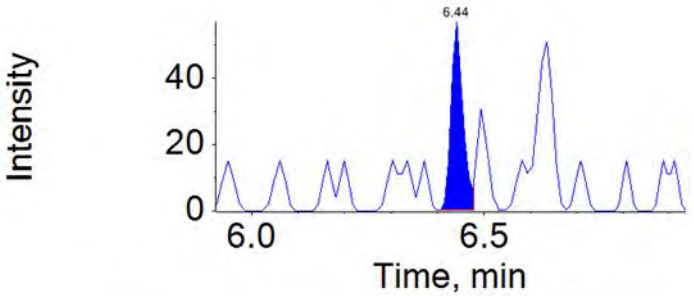
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



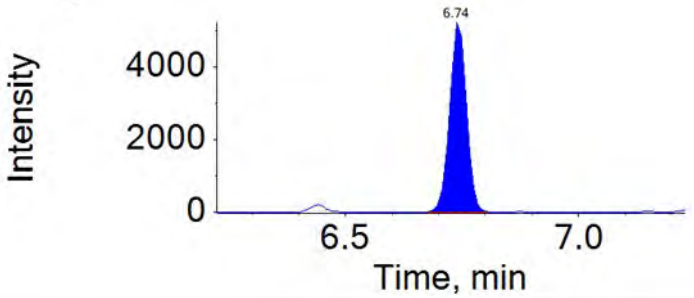
Component: PFTeDA
Primary Mass: 713.0 / 669.0



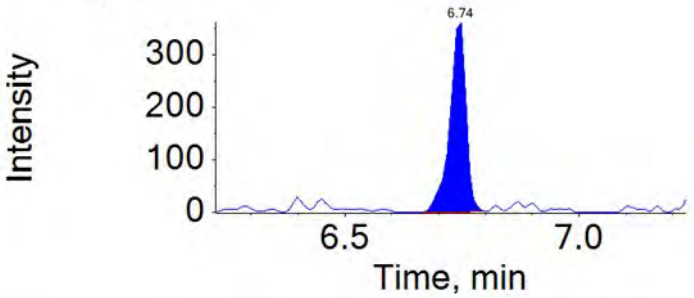
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



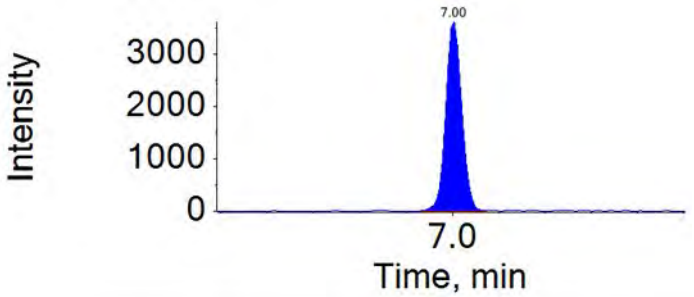
Component: PFHxDA
Primary Mass: 813.0 / 769.0



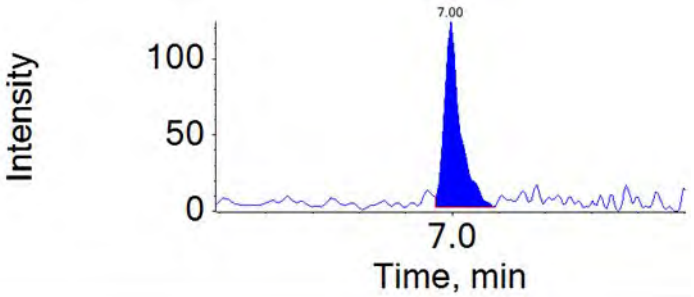
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	ICV			**Data File:**		18NOV28DCAL-14.wiff
Sample ID:	ICVMODX1833G			**Acquis Date:**		2018-11-28T14:54:22
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	10			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV28DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	909586.4	887248.9	3	50	
13C2-PFOA	5.0	531347.1	498501.6	7	50	
13C4-PFOS	4.8	296756.3	283214.2	5	50	
13C2-PFDA	5.0	468972.3	441790.6	6	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	992615.8	13C3-PFBA	909586.4	1.091	5.000	4.869	97	70-130	
E13C5-PFPeA	975580.9	13C3-PFBA	909586.4	1.073	5.000	5.008	100	70-130	
E13C3-PFBS	446011.0	13C3-PFBA	909586.4	0.490	4.650	4.678	101	70-130	
E13C2-4:2-FTS	68184.3	13C2-PFOA	531347.1	0.128	4.670	4.422	95	70-130	
E13C5-PFHxA	699371.3	13C2-PFOA	531347.1	1.316	5.000	4.834	97	70-130	
E13C3-PFHxS	317109.0	13C2-PFOA	531347.1	0.597	4.730	4.678	99	70-130	
E13C4-PFHpA	556403.1	13C2-PFOA	531347.1	1.047	5.000	4.812	96	70-130	
E13C2-6:2-FTS	63350.5	13C2-PFOA	531347.1	0.119	4.750	4.991	105	70-130	
E13C8-PFOA	1001731.4	13C2-PFOA	531347.1	1.885	5.000	5.189	104	70-130	
E13C8-PFOS	316117.1	13C4-PFOS	296756.3	1.065	4.780	4.809	101	70-130	
E13C9-PFNA	647064.1	13C4-PFOS	296756.3	2.180	5.000	4.789	96	70-130	
E13C6-PFDA	857032.9	13C2-PFDA	468972.3	1.827	5.000	5.153	103	70-130	
E13C2-8:2-FTS	51912.9	13C2-PFDA	468972.3	0.111	4.790	4.758	99	70-130	
E13C8-PFOSA	637370.7	13C2-PFDA	468972.3	1.359	5.000	4.987	100	70-130	
Ed3-NMeFOSAA	183040.0	13C2-PFDA	468972.3	0.390	5.000	4.956	99	70-130	
E13C7-PFUnDA	559327.4	13C2-PFDA	468972.3	1.193	5.000	5.041	101	70-130	
Ed5-NEtFOSAA	140840.0	13C2-PFDA	468972.3	0.300	5.000	5.350	107	70-130	
E13C2-PFDoDA	1134142.1	13C2-PFDA	468972.3	2.418	5.000	5.081	102	70-130	
Ed7-NMePFOSAE	262732.2	13C2-PFDA	468972.3	0.560	5.000	4.842	97	70-130	
Ed3-NMePFOSA	81059.5	13C2-PFDA	468972.3	0.173	5.000	4.678	94	70-130	
Ed9-NEtPFOSAE	227167.7	13C2-PFDA	468972.3	0.484	5.000	4.911	98	70-130	
Ed5-NEtPFOSA	67297.9	13C2-PFDA	468972.3	0.144	5.000	4.986	100	70-130	
E13C2-PFTeDA	820071.7	13C2-PFDA	468972.3	1.749	5.000	4.839	97	70-130	

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

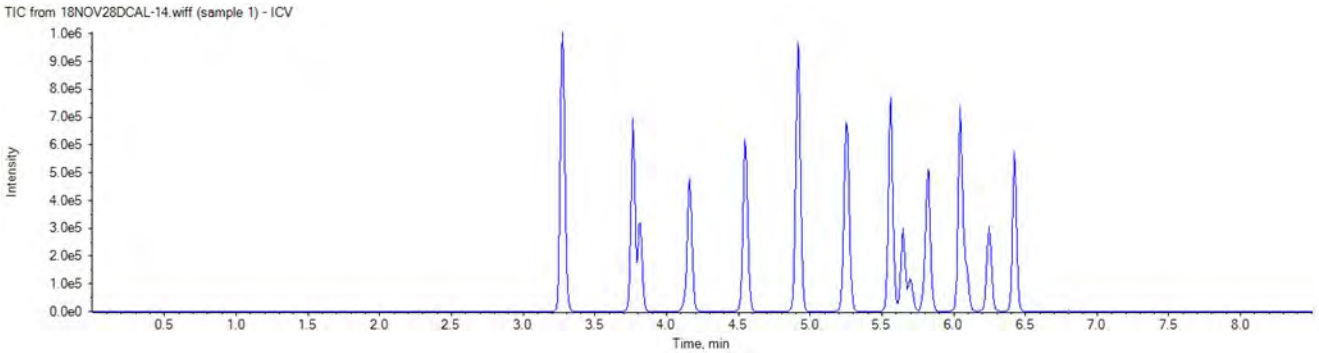
Analyte Quantitation Peak Table

Sample Name: ICV **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-14.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	387187.0		A	13C4-PFBA	3.27	992615.8	0.390	2.138
PFPeA	3.77	1.000	377961.6		A	13C5-PFPeA	3.77	975580.9	0.387	1.901
PFBS	3.81	1.000	159425.0		A	13C3-PFBS	3.82	446011.0	0.357	1.735
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.13	68184.3	N/A	
PFHxA	4.16	1.000	369137.1		A	13C5-PFHxA	4.16	699371.3	0.528	2.119
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.82	446011.0	N/A	
PFHpA	4.55	1.000	373590.8		A	13C4-PFHpA	4.55	556403.1	0.671	2.072
PFHxS	4.55	1.000	125085.3		A	13C3-PFHxS	4.55	317109.0	0.394	1.847
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.90	63350.5	N/A	
PFHpS	4.91	1.080	131043.1		A	13C3-PFHxS	4.55	317109.0	0.413	2.062
PFOA	4.92	1.000	404358.9		A	13C8-PFOA	4.92	1001731.4	0.404	2.086
PFOS	5.25	1.000	122334.6		A	13C8-PFOS	5.25	316117.1	0.387	1.623
PFNA	5.26	1.000	351872.0		A	13C9-PFNA	5.26	647064.1	0.544	2.084
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.25	316117.1	N/A	
PFDA	5.56	1.000	325191.9		A	13C6-PFDA	5.56	857032.9	0.379	2.148
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.57	51912.9	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.65	637370.7	N/A	
NMeFOSAA	5.70	1.000	74168.8		A	d3-NMeFOSAA	5.70	183040.0	0.405	2.585
PFDS	5.79	1.100	72374.3		A	13C8-PFOS	5.25	316117.1	0.229	1.815
PFUnDA	5.82	1.000	354099.8		A	13C7-PFUnDA	5.82	559327.4	0.633	2.263
NEtFOSAA	5.83	1.000	57368.0		A	d5-NEtFOSAA	5.83	140840.0	0.407	1.984
PFDoDA	6.05	1.000	427818.9		A	13C2-PFDoDA	6.05	1134142.1	0.377	2.066
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.57	51912.9	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.09	262732.2	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.10	81059.5	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.25	316117.1	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.24	227167.7	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.26	67297.9	N/A	
PFTrDA	6.25	1.030	416758.4		A	13C2-PFDoDA	6.05	1134142.1	0.367	2.215
PFTeDA	6.42	1.000	312632.1		A	13C2-PFTeDA	6.42	820071.7	0.381	2.160
PFHxDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	820071.7	N/A	
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	820071.7	N/A	

Total Ion Chromatogram

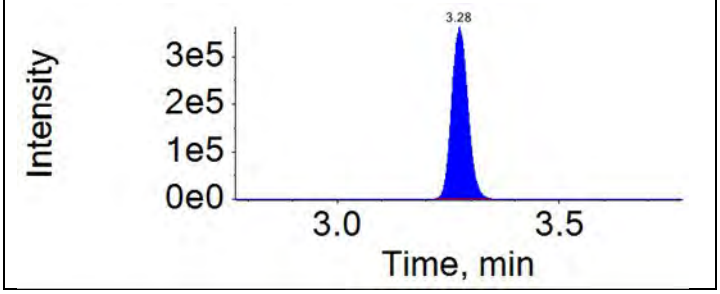


APPROVED
By MCD at 5:01 pm, 11/28/18

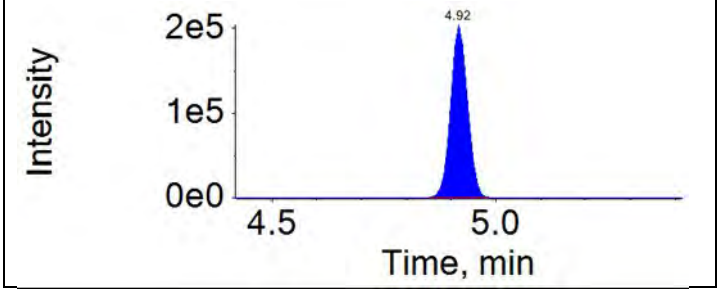
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

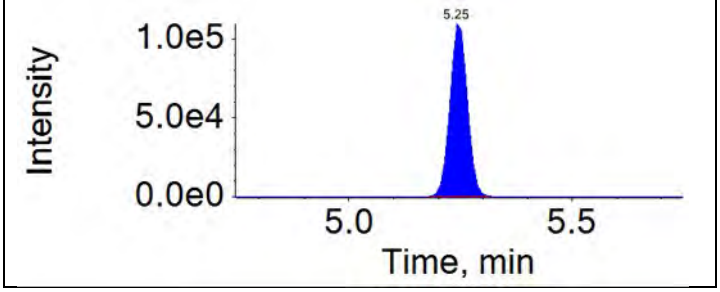
Injection Standard: 13C3-PFBA
216.0 / 172.0



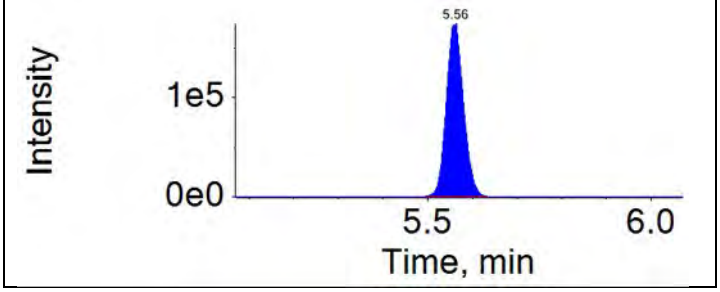
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0

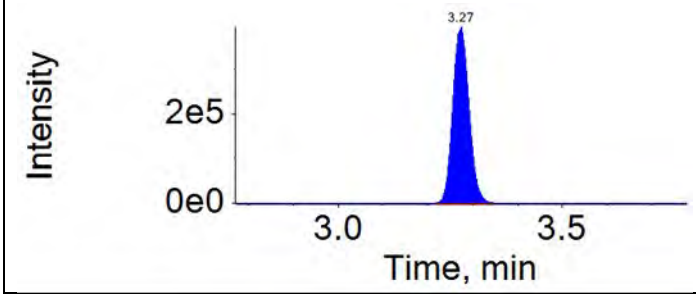


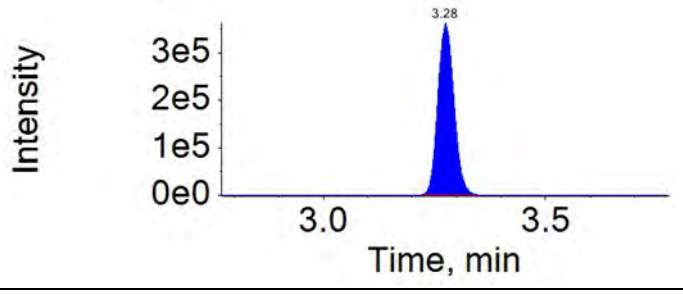
Injection Standard: 13C2-PFDA
515.0 / 470.0



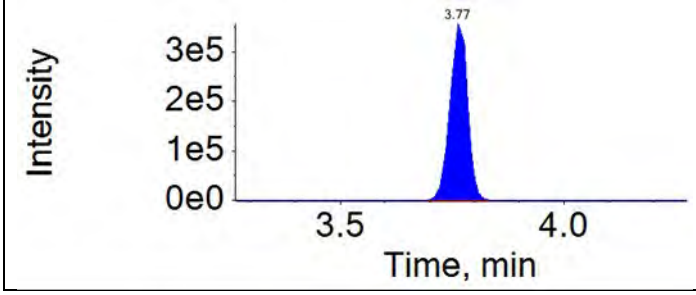
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

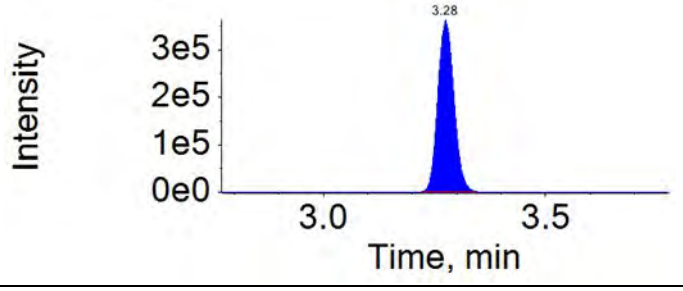
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



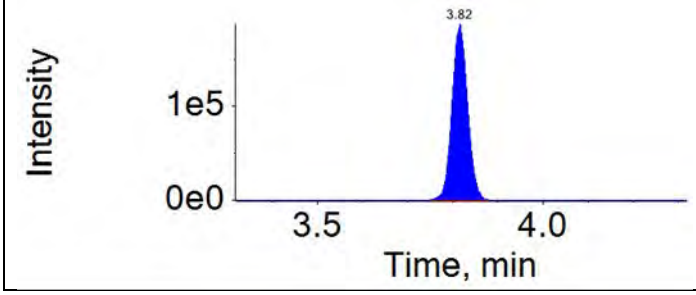


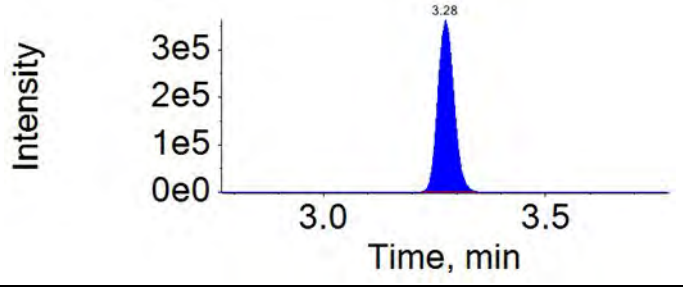
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



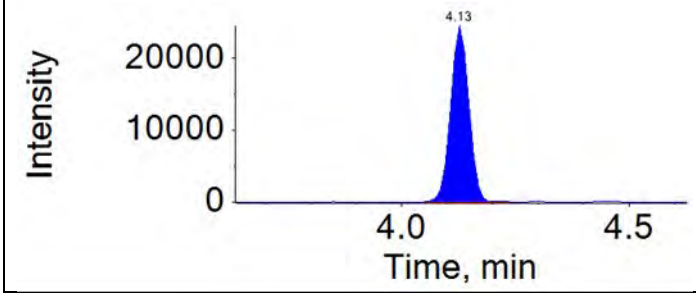


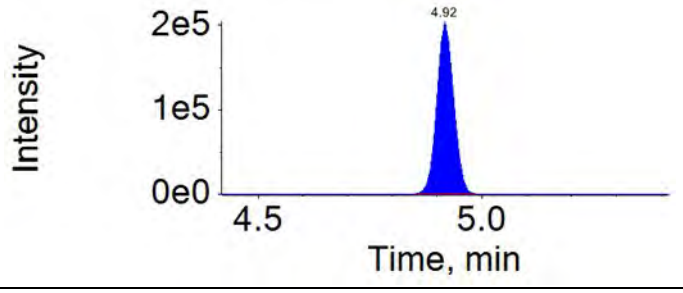
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



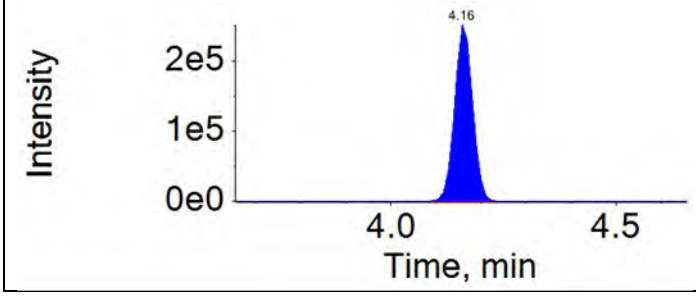


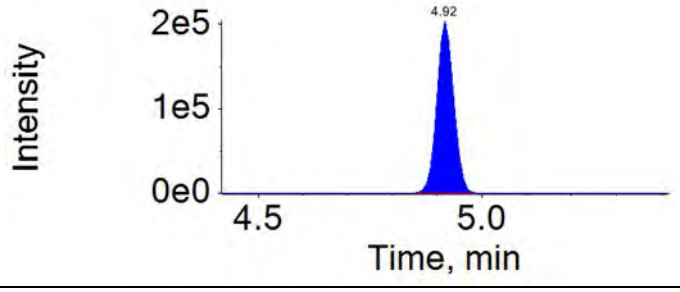
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

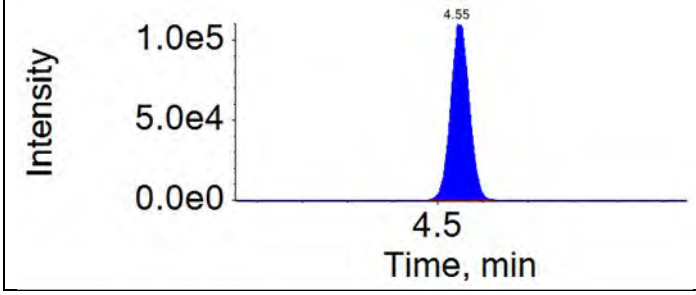
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

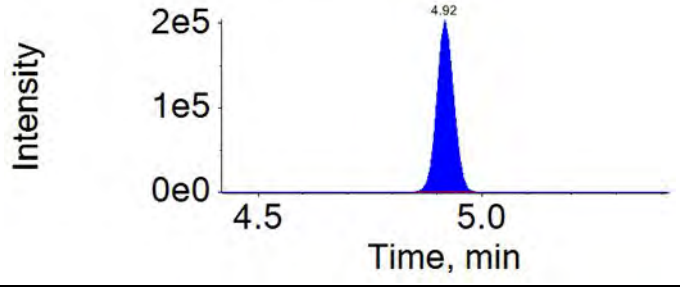
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



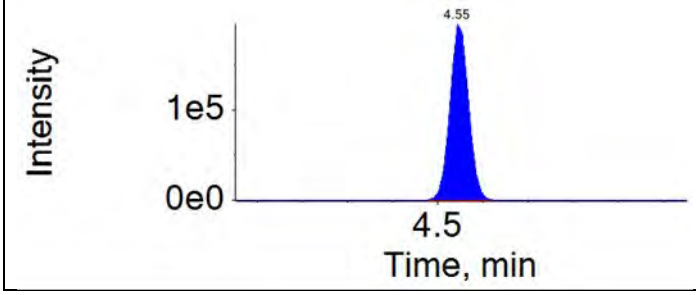


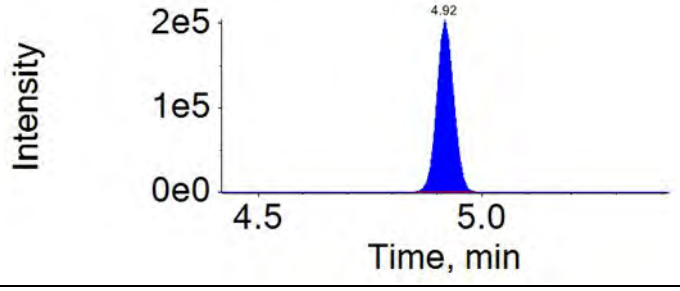
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



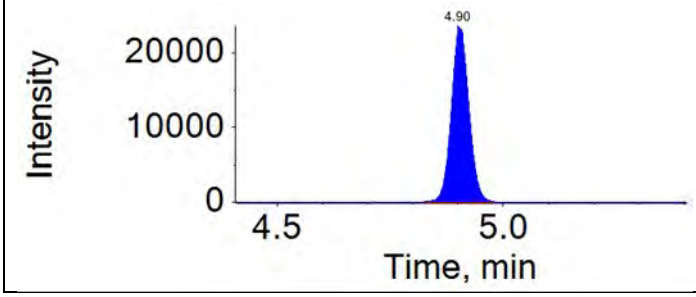


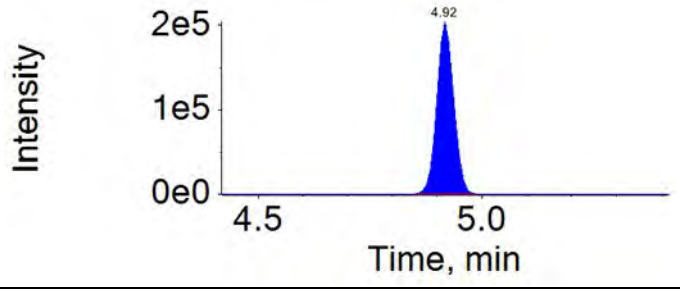
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0



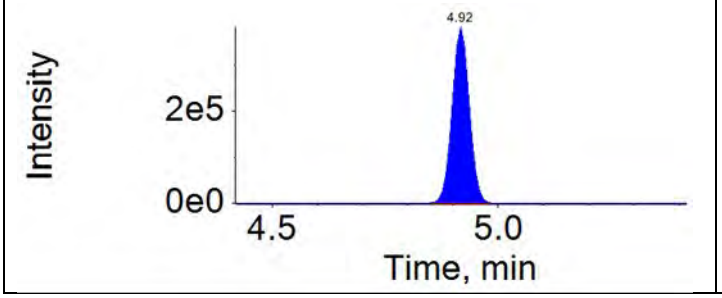


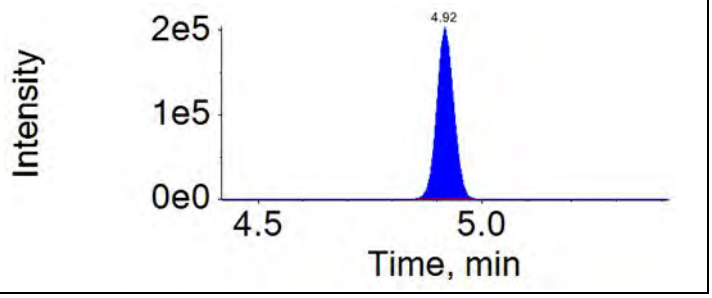
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

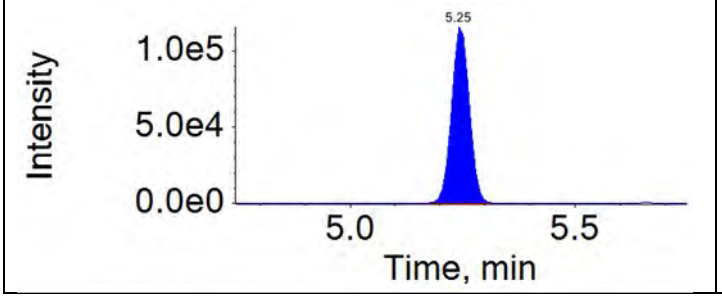
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

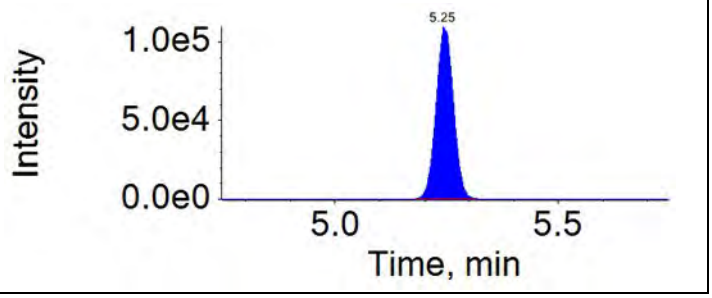
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0



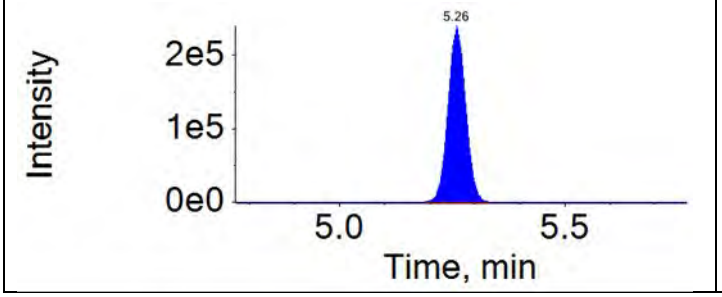


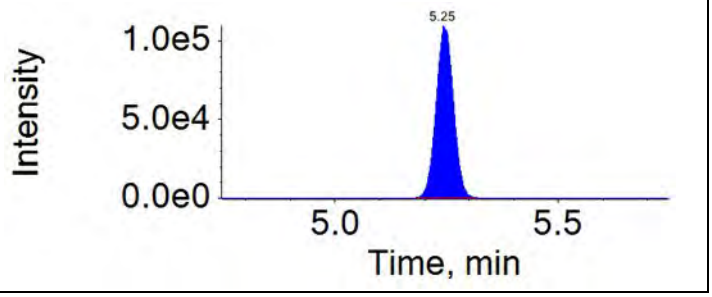
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0



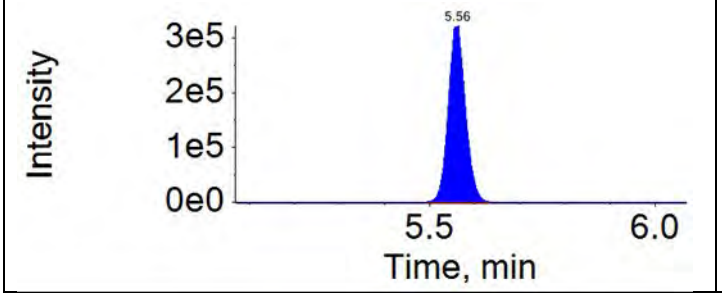


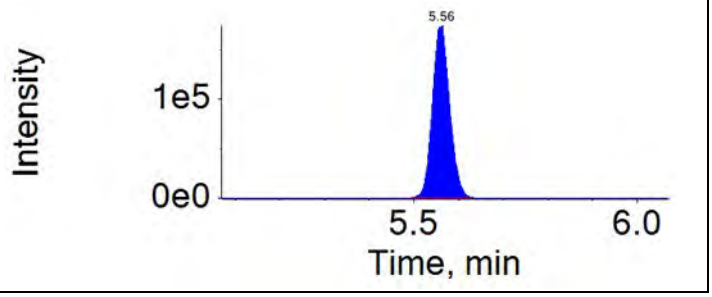
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0





Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0



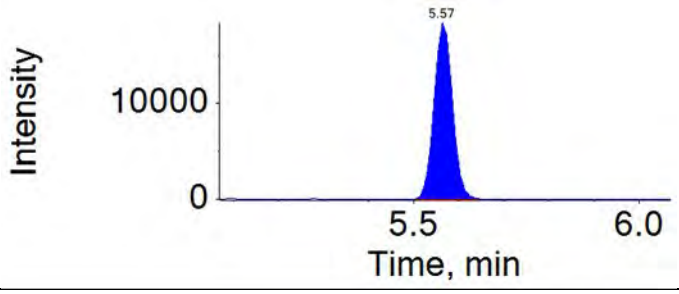


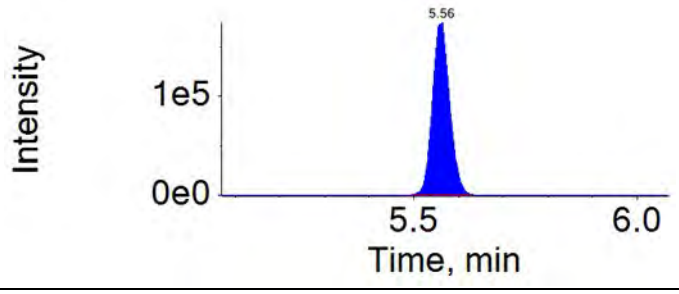
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

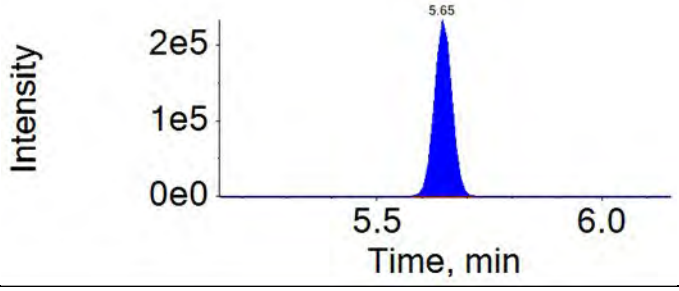
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

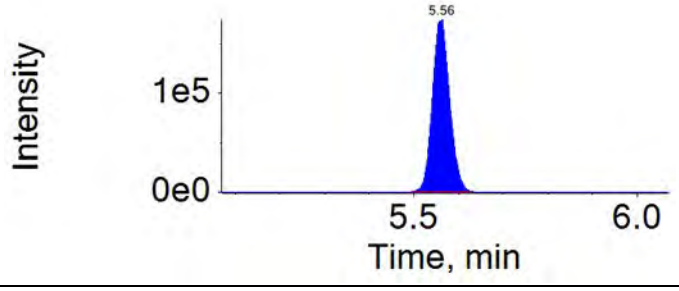
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



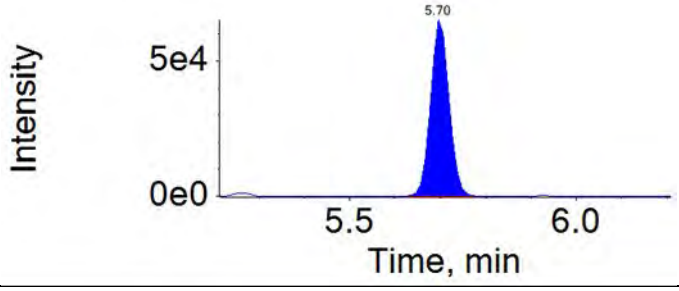


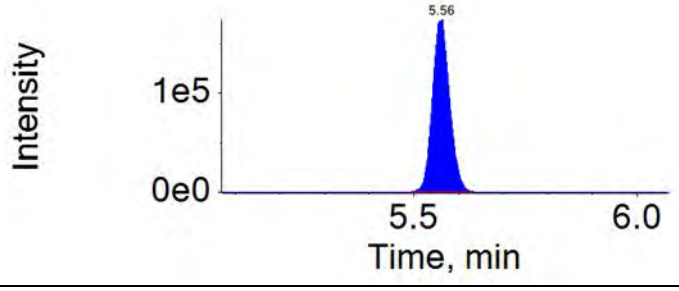
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



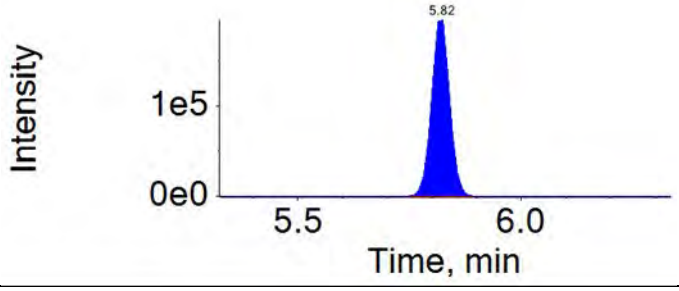


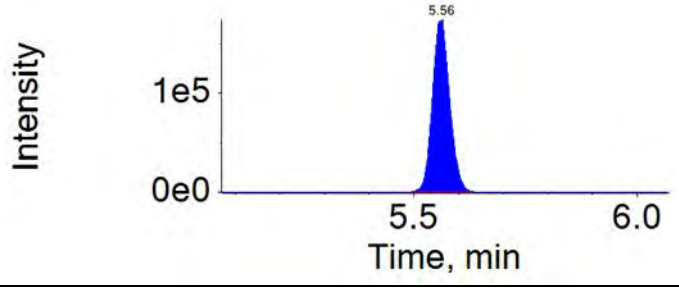
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0



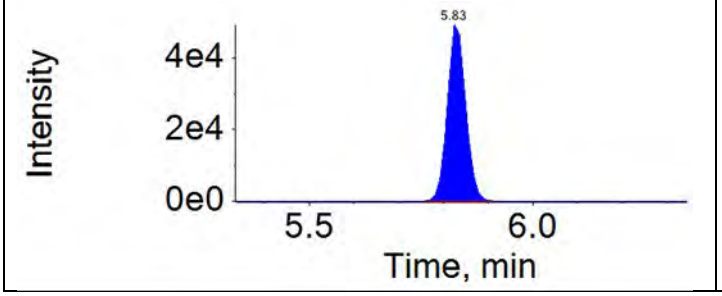


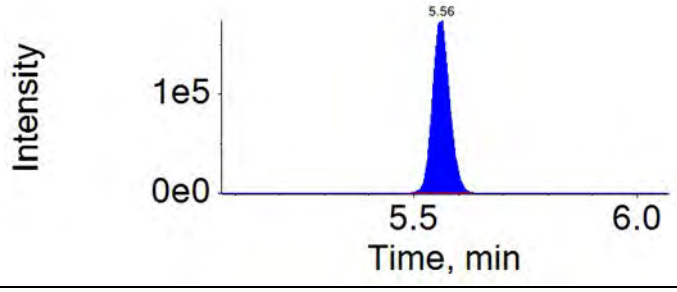
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

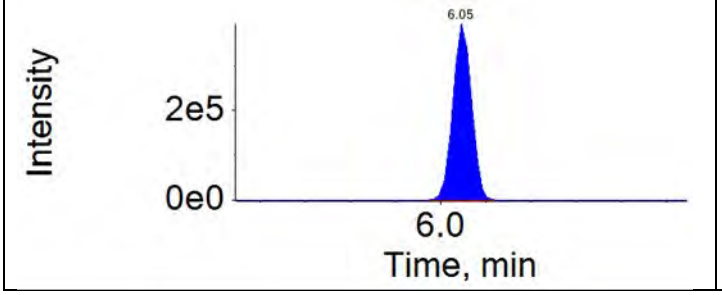
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

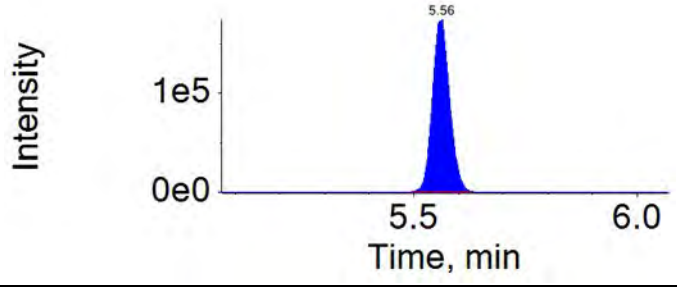
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



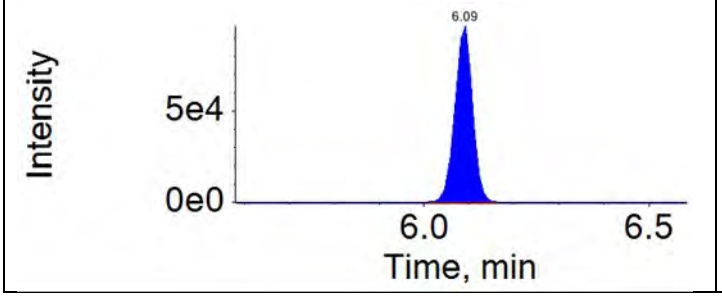


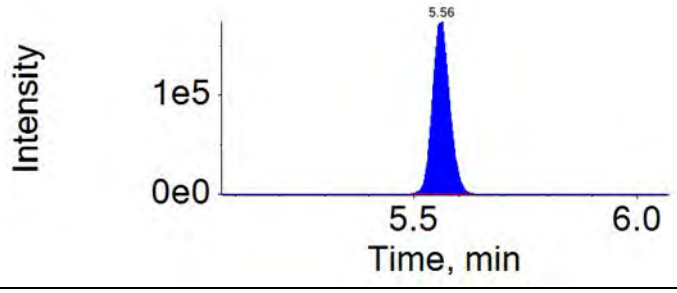
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



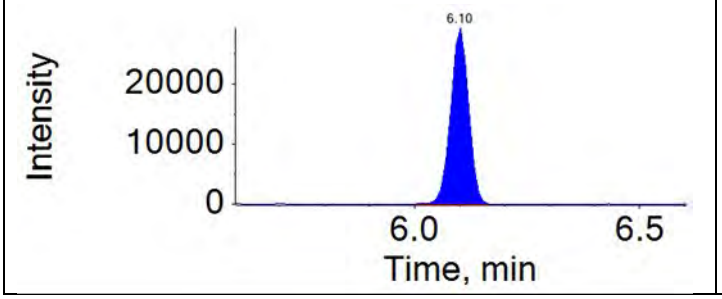


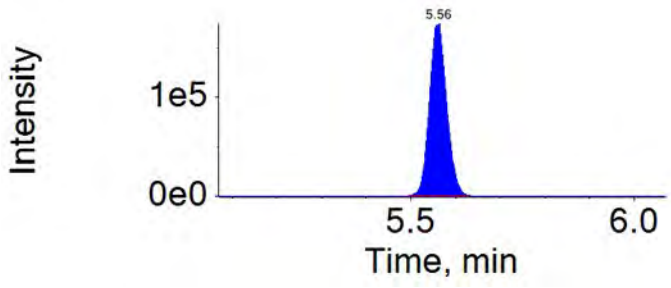
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



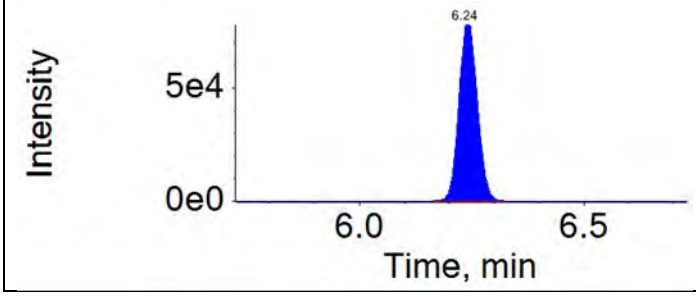


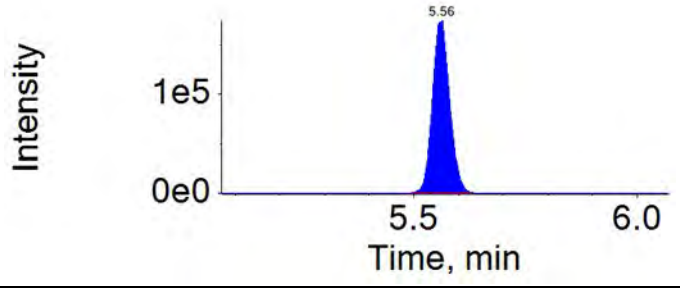
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

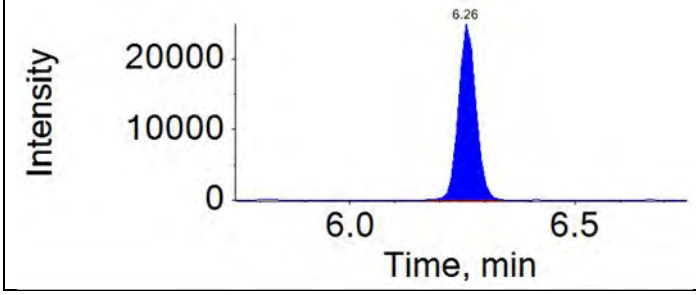
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

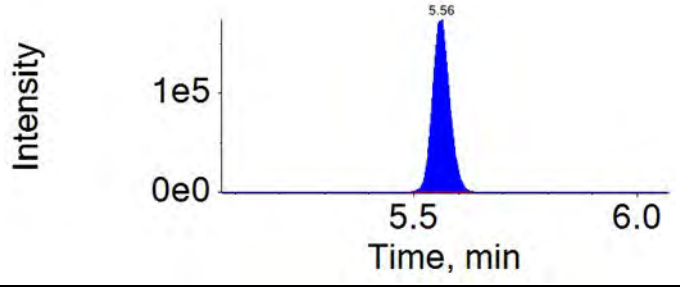
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



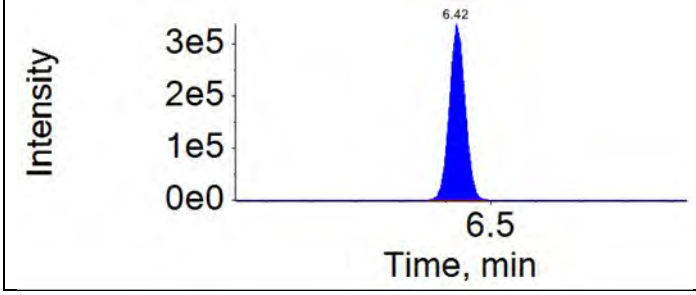


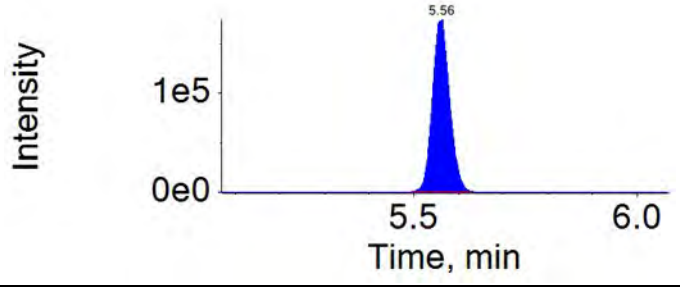
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



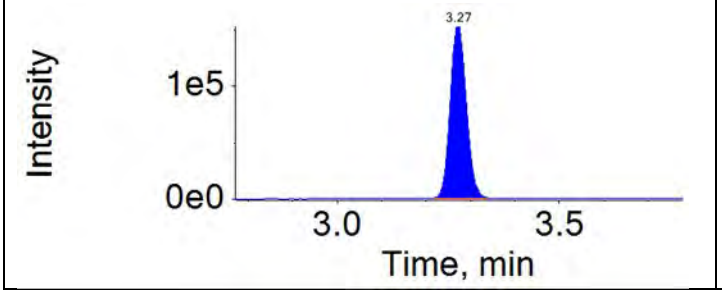


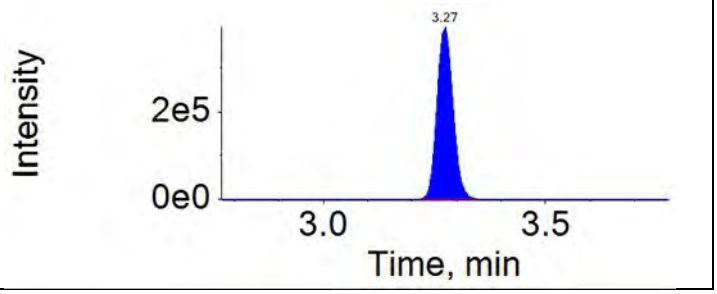
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

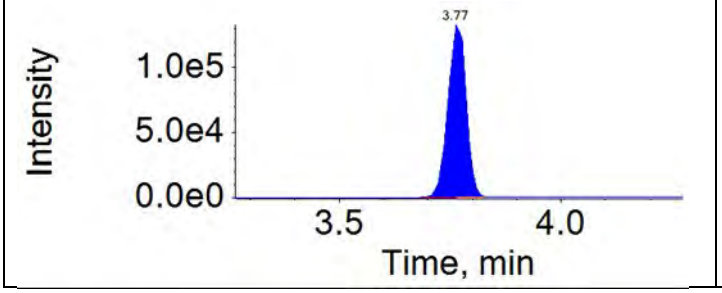
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

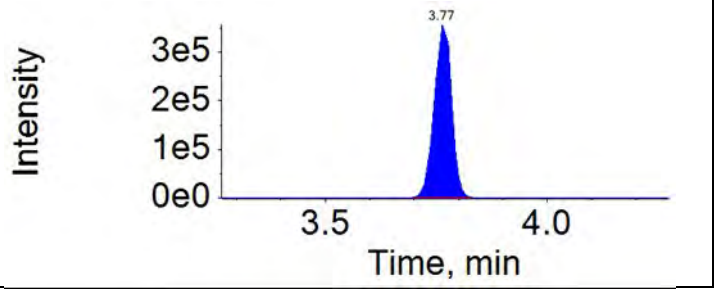
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



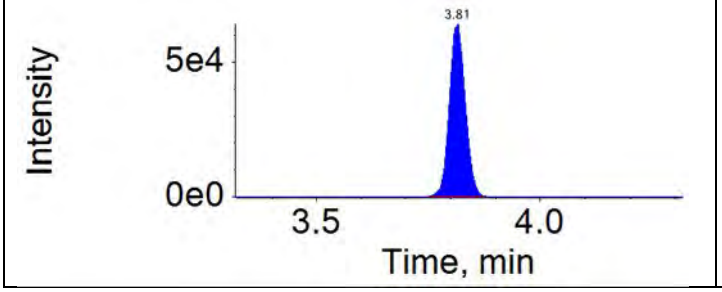


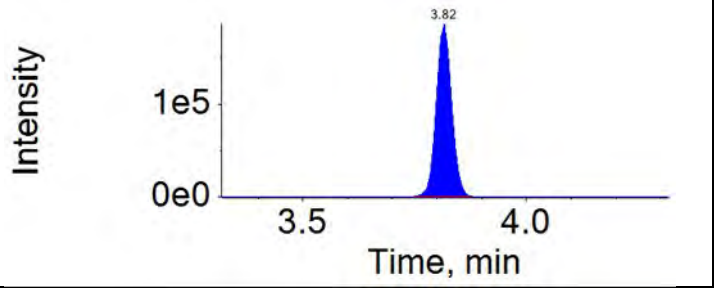
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



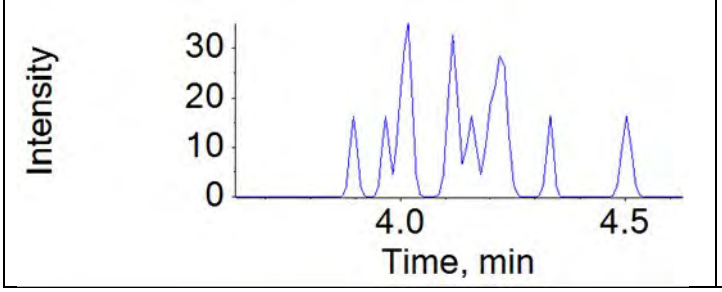


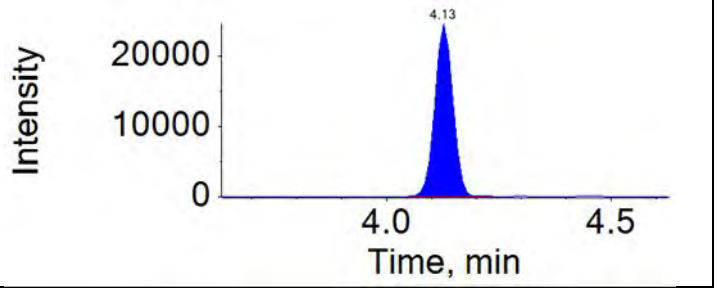
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



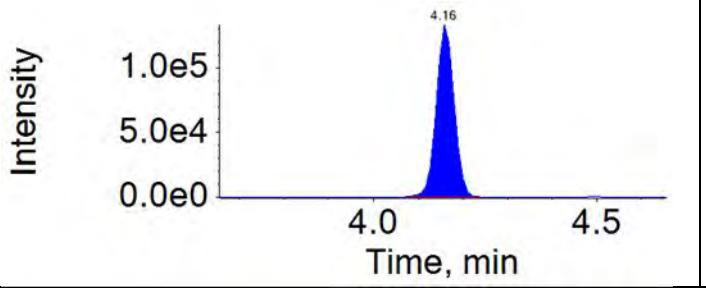


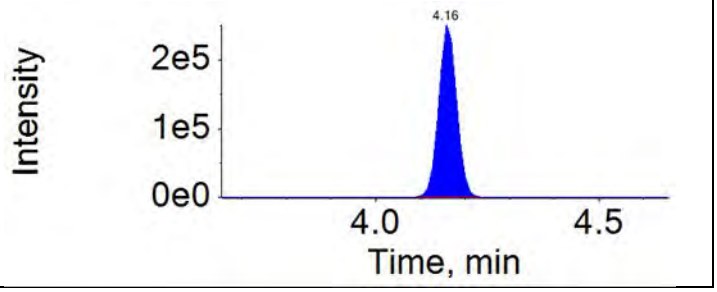
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

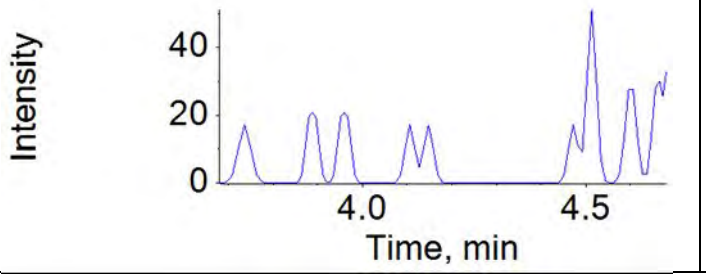
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

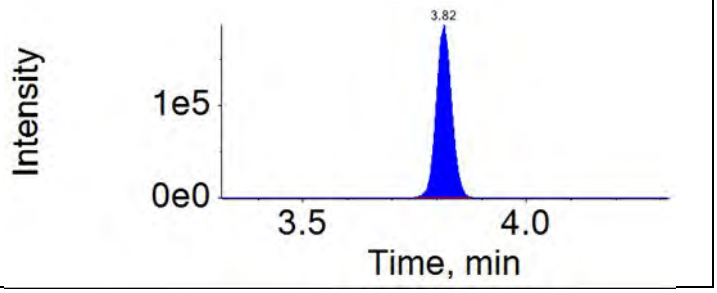
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



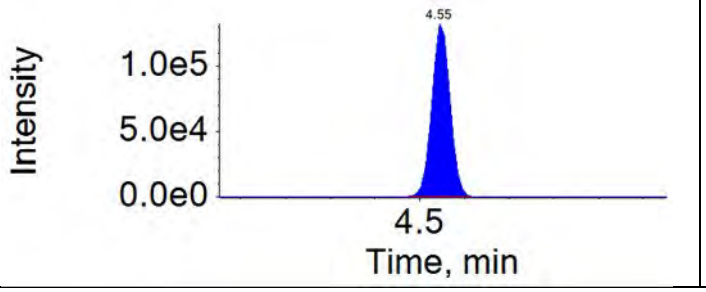


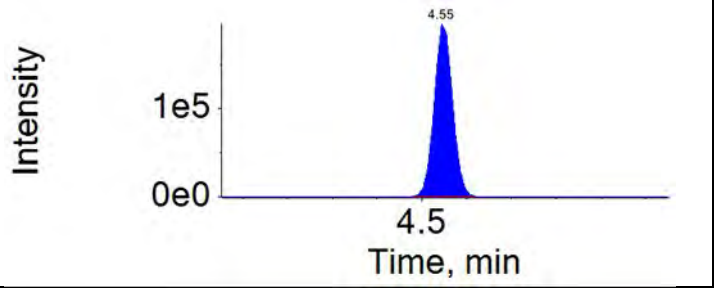
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



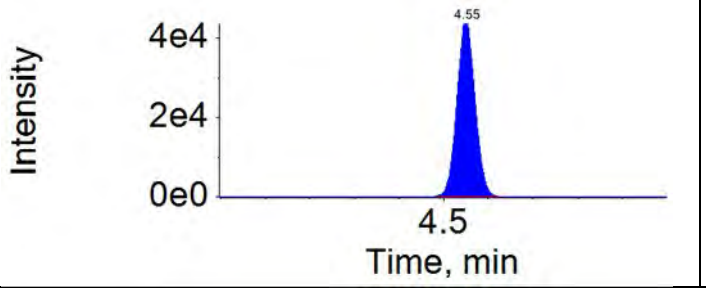


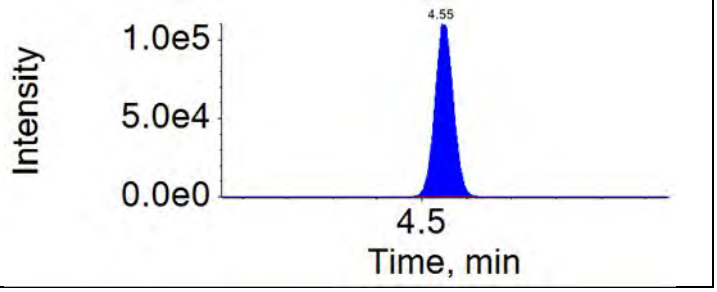
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

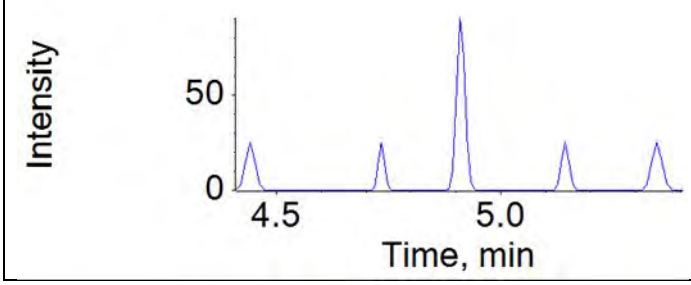
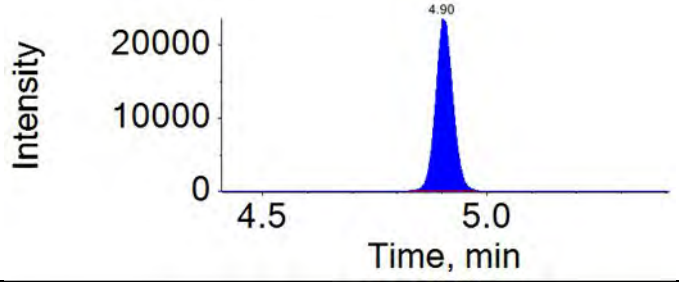


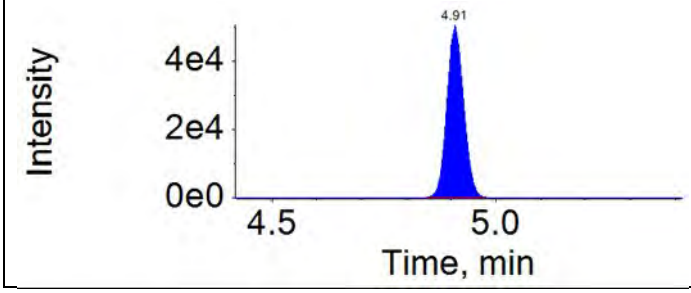
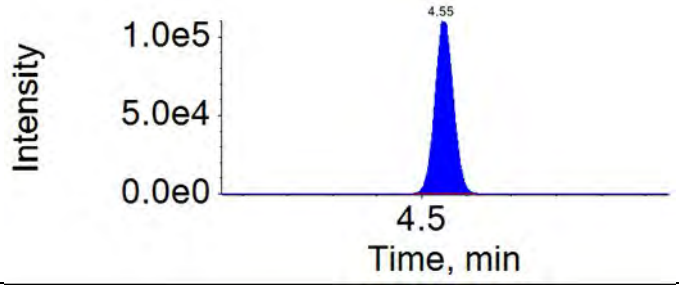


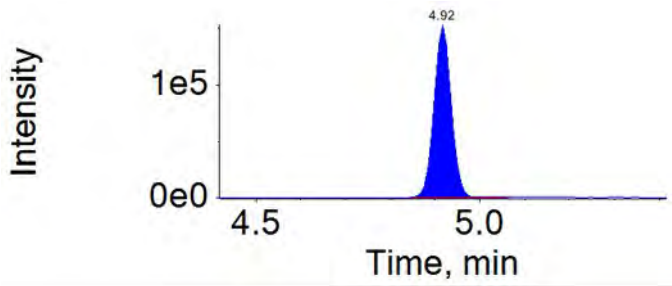
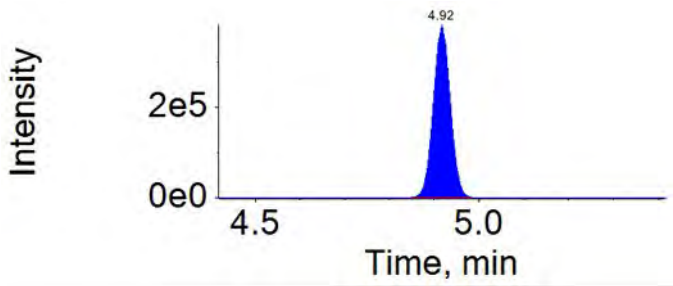
APPROVED
By MCD at 5:01 pm, 11/28/18

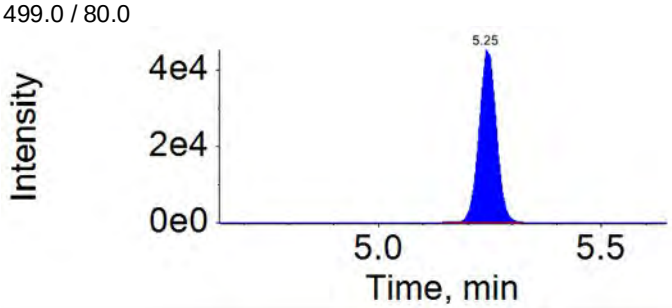
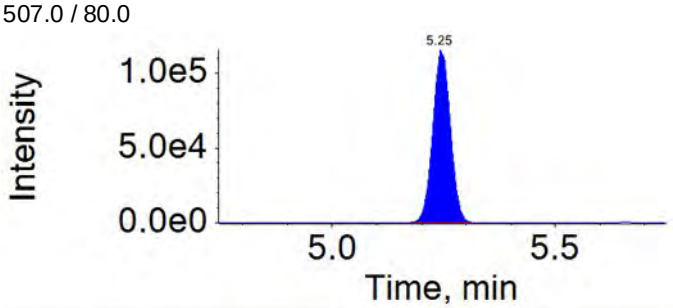
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

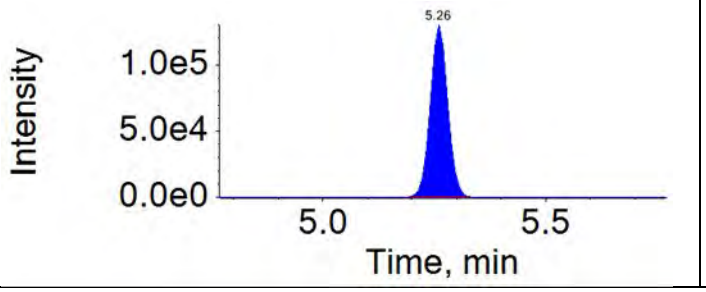
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

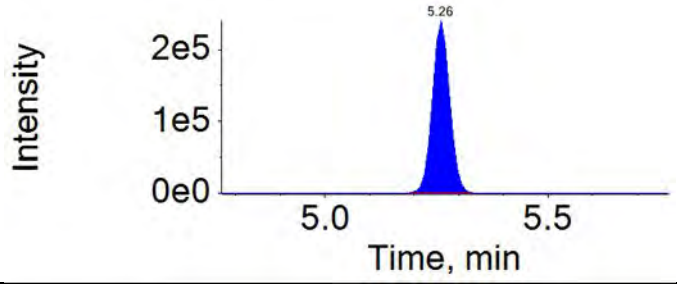
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

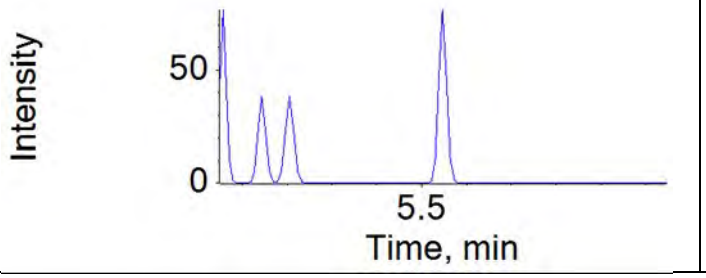
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

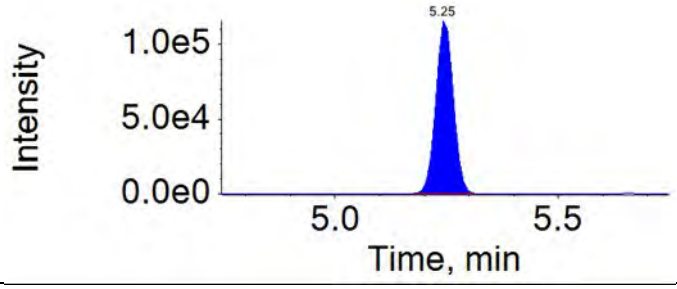
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



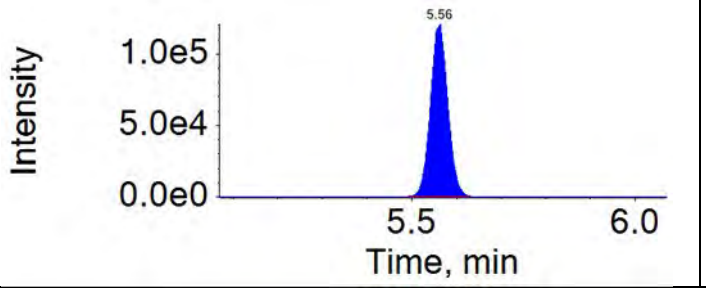


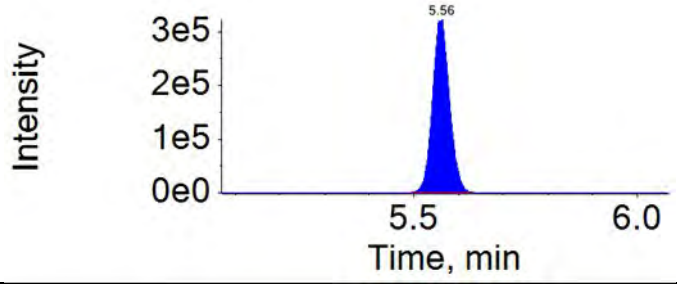
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



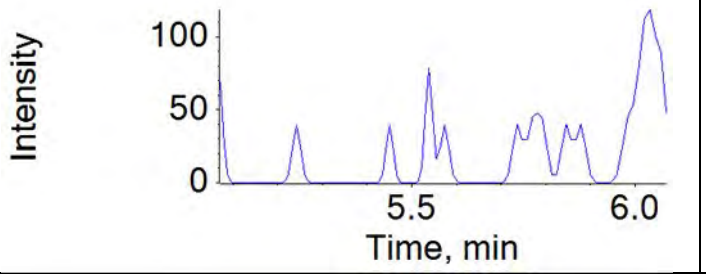


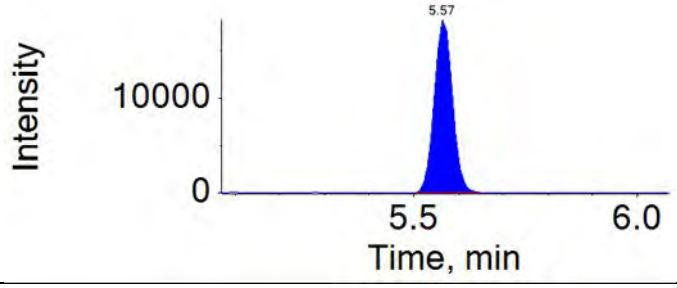
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



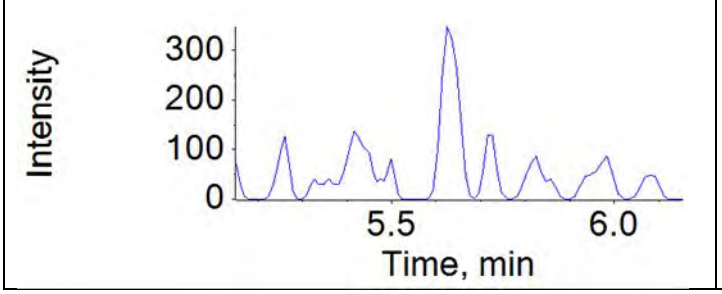


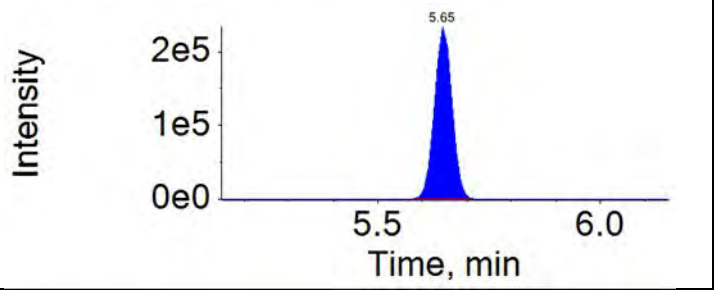
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

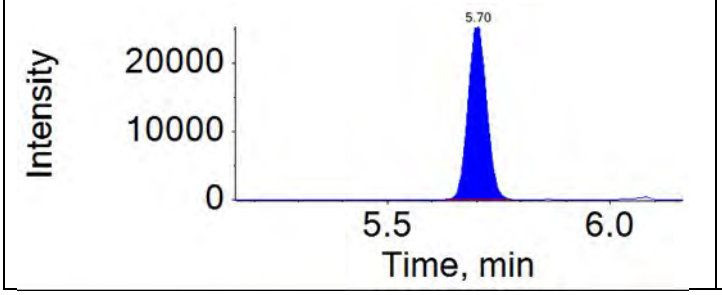
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

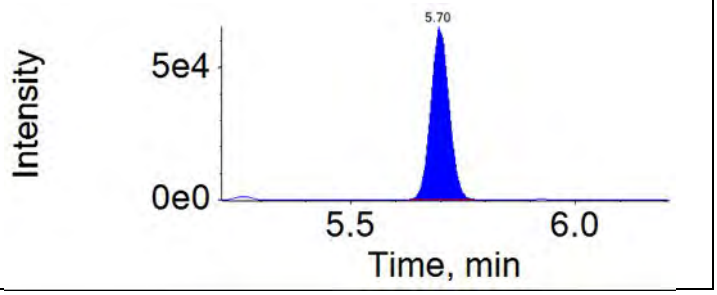
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



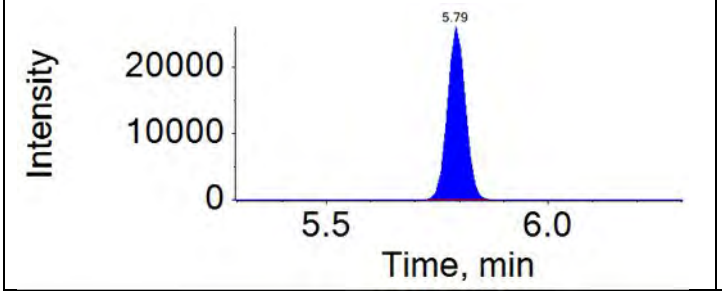


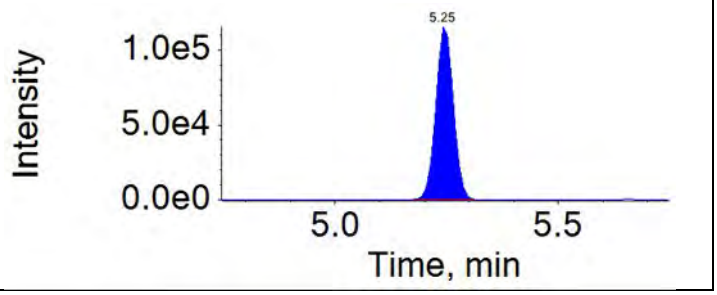
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



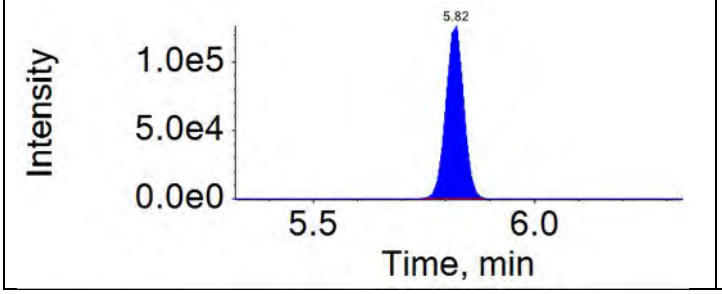


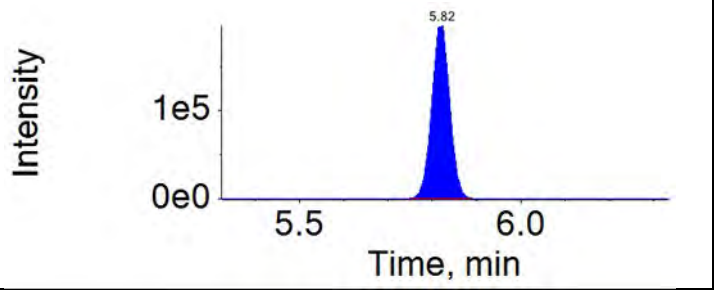
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



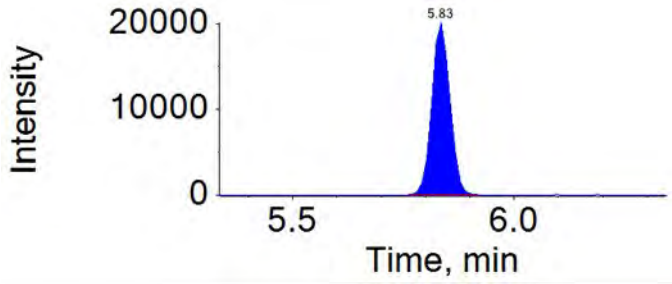


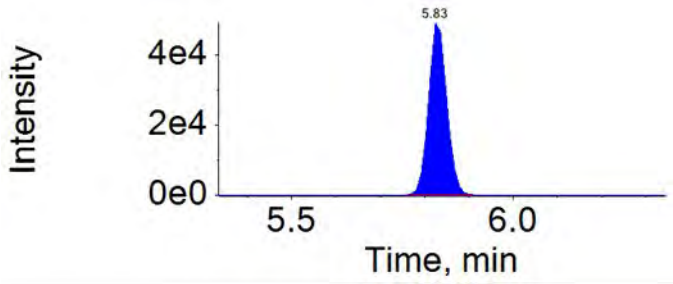
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

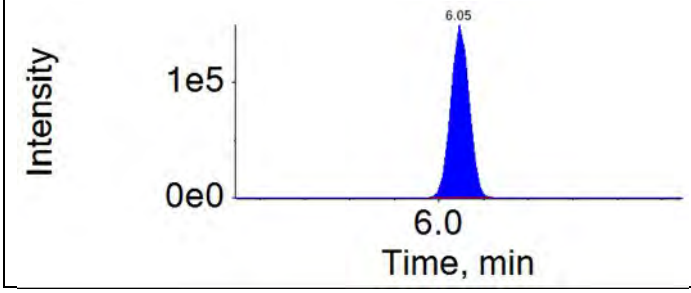
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

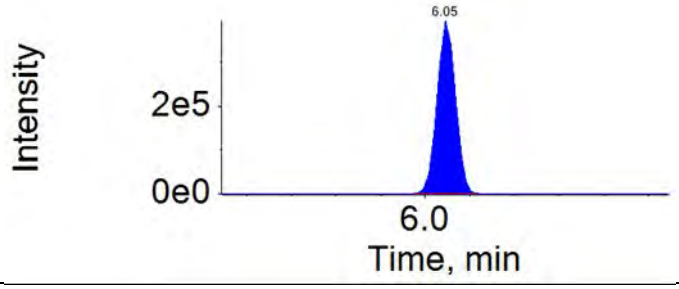
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



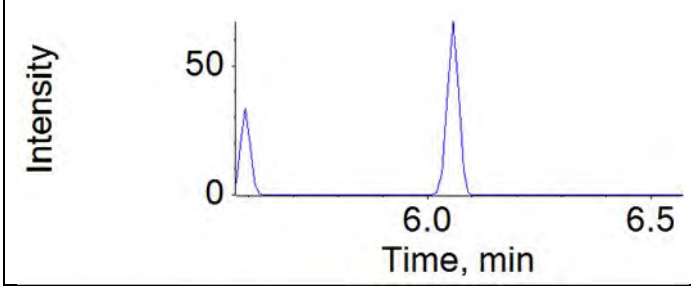


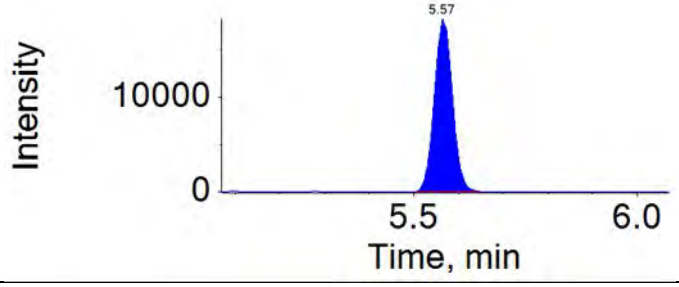
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



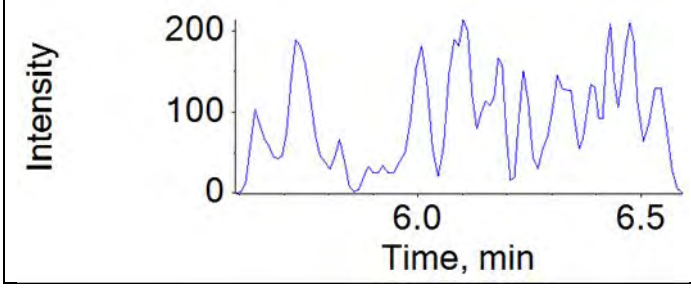


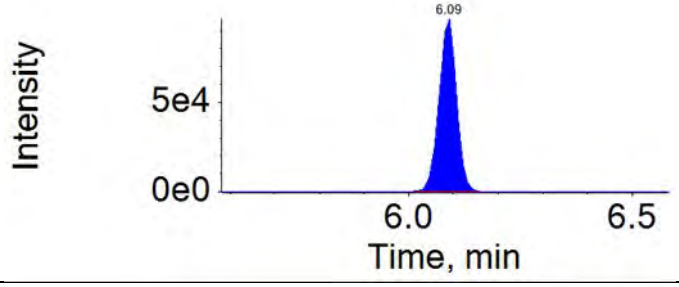
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



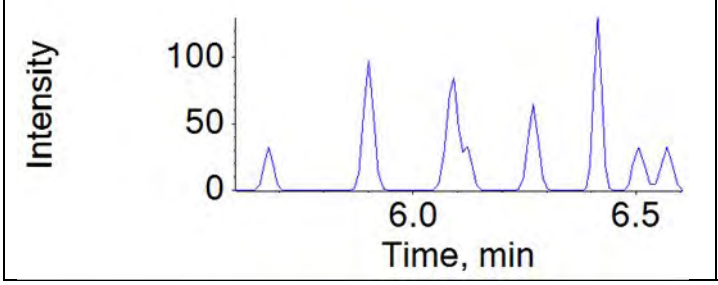


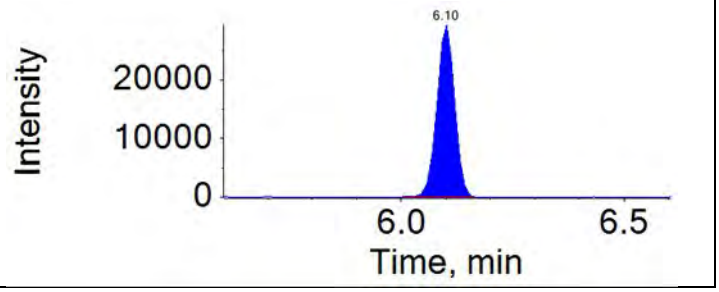
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

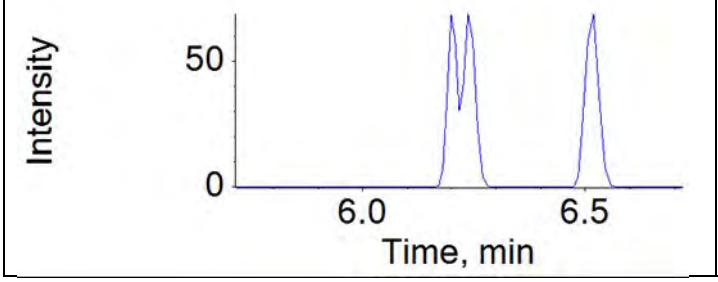
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

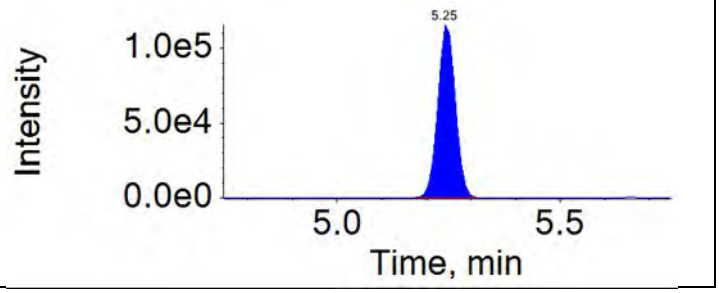
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



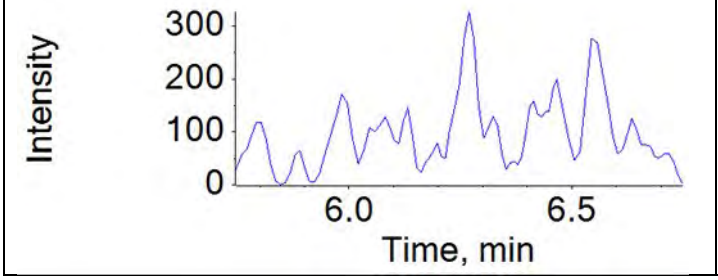


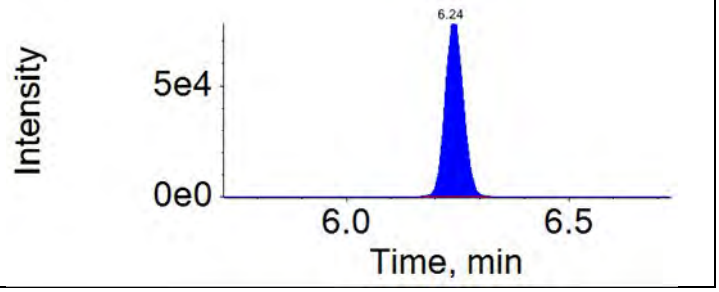
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



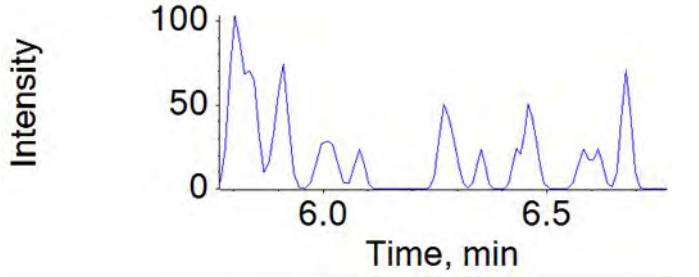


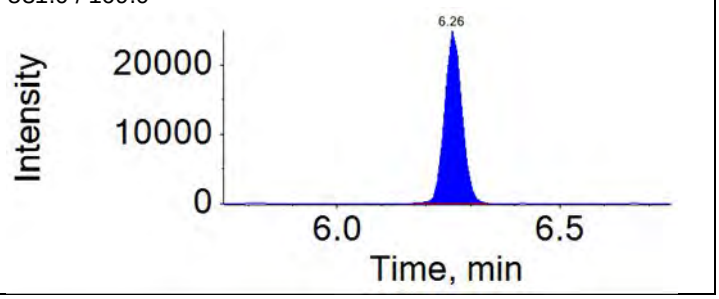
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



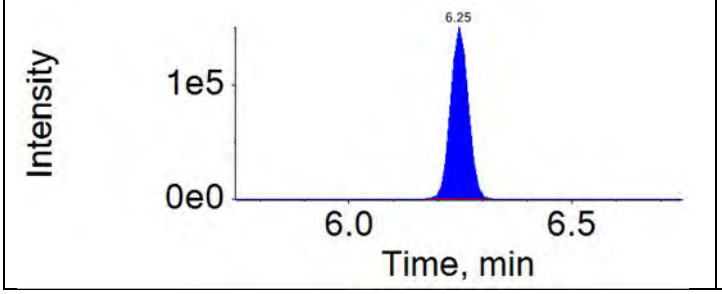


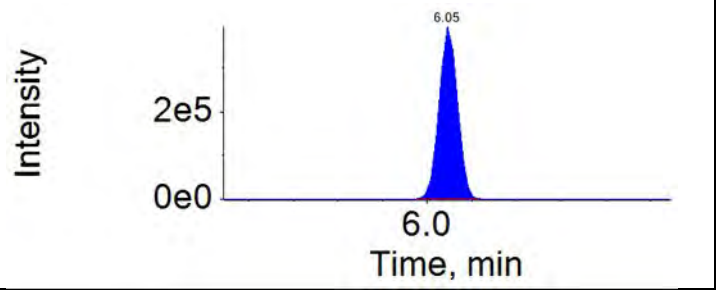
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

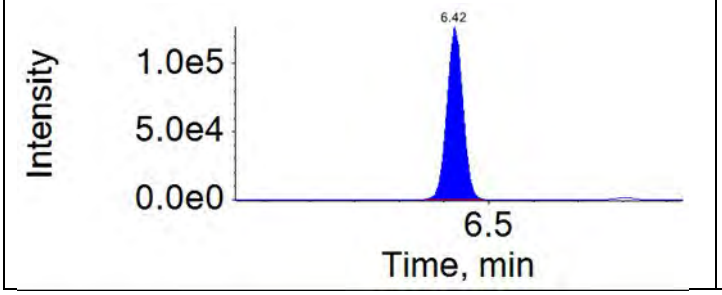
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

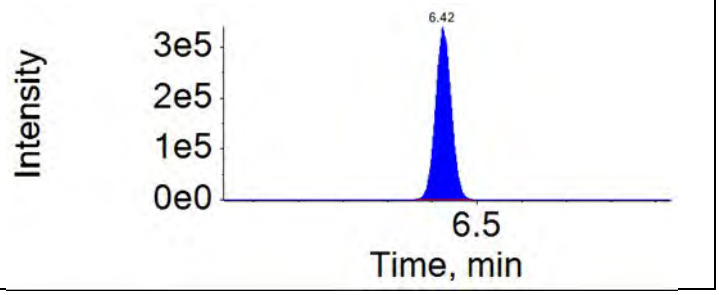
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



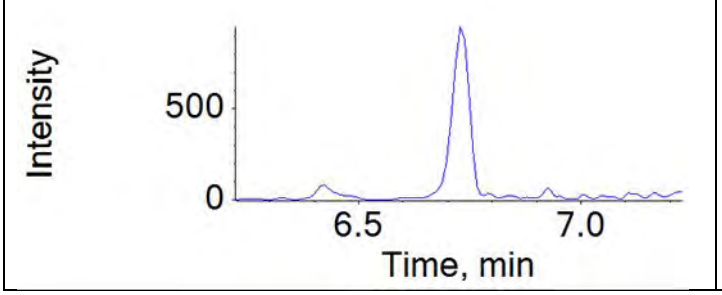


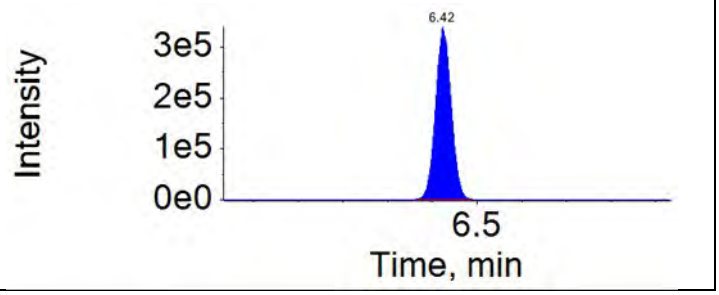
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



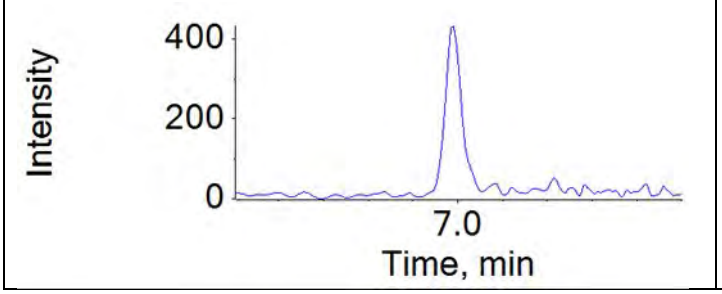


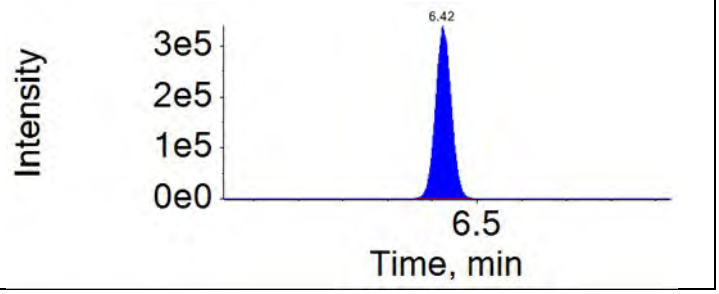
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



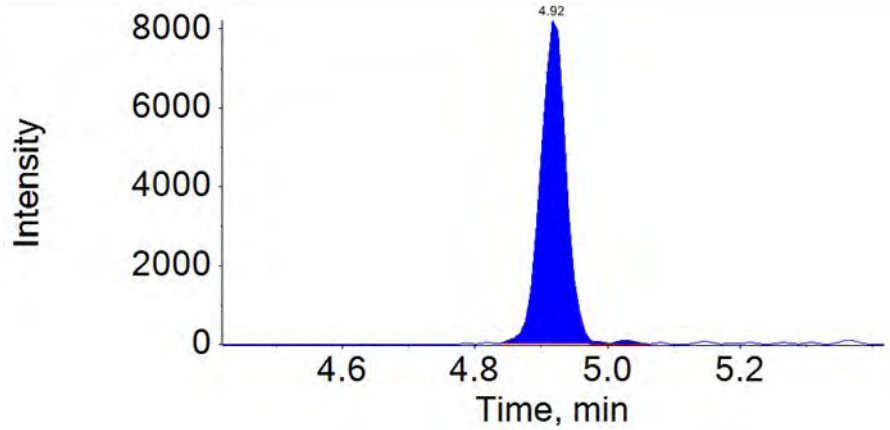


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By HMK at 12:22 pm, 11/29/18

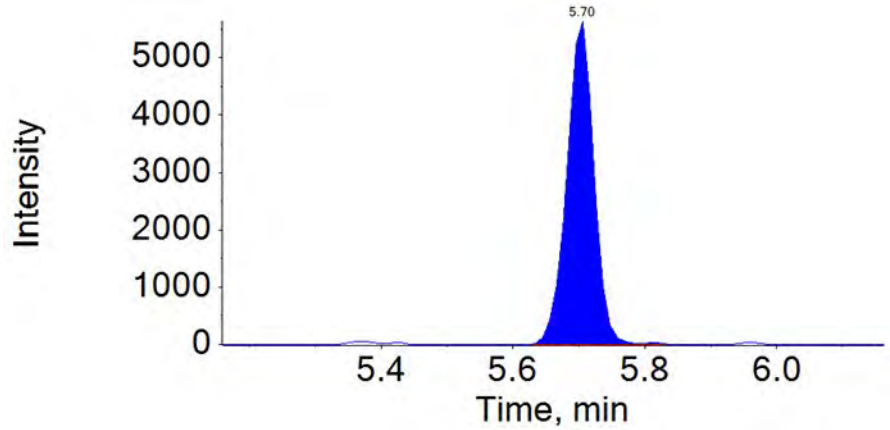
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFOA_2
RT (min.):
4.92
Peak Area:
22382.92
Mass Range:
413.0 / 169.0
File Name:
18NOV28DCAL-14.wiff
Sample Name:
ICV



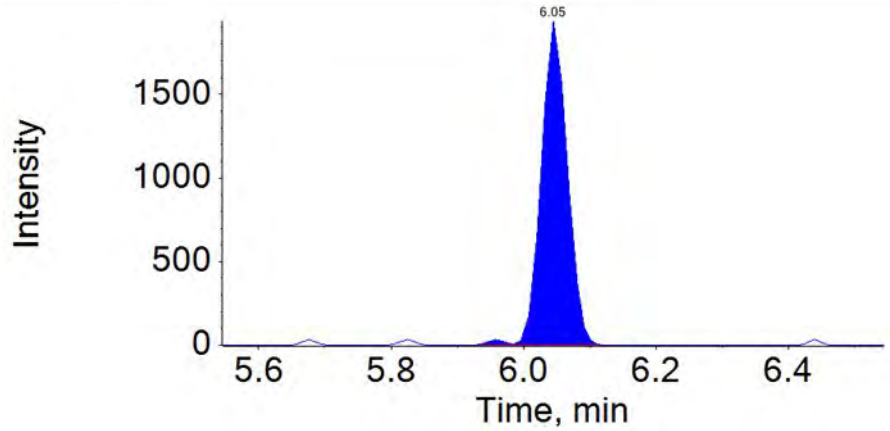
Integration Comment: incorrect integration

Component Name:
NMeFOSAA_2
RT (min.):
5.70
Peak Area:
16150.62
Mass Range:
570.0 / 483.0
File Name:
18NOV28DCAL-14.wiff
Sample Name:
ICV



Integration Comment: incorrect integration

Component Name:
PFDoDA_2
RT (min.):
6.05
Peak Area:
5326.50
Mass Range:
613.0 / 169.0
File Name:
18NOV28DCAL-14.wiff
Sample Name:
ICV



Integration Comment: incorrect integration

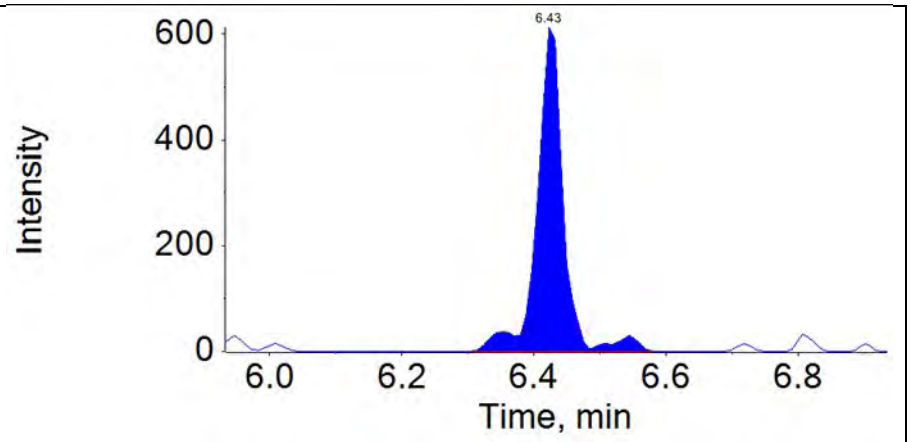
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFTeDA_2
RT (min.):
6.43
Peak Area:
1717.33
Mass Range:
713.0 / 169.0
File Name:
18NOV28DCAL-14.wiff
Sample Name:
ICV



Integration Comment: incorrect integration

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Ion Ratio Report

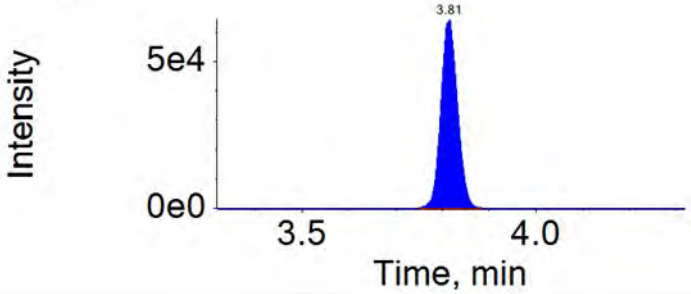
Sample Name: ICV **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-14.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	159425.00	A	0.3655	0.3680			
PFBS_2	3.81	1.00	58661.72	A	0.3655	0.3680	1	50	
4:2-FTS	N/A	N/A	N/A	A	0.6383	N/A			
4:2-FTS_2	N/A	N/A	N/A	A	0.6383	N/A		50	
PFHxA	4.16	1.00	369137.13	A	0.0103	0.0099			
PFHxA_2	4.16	1.00	3663.34	A	0.0103	0.0099	-4	50	
PFPeS	N/A	N/A	N/A	A	0.4976	N/A			
PFPeS_2	N/A	N/A	N/A	A	0.4976	N/A		50	
PFHpA	4.55	1.00	373590.76	A	0.0557	0.0494			
PFHpA_2	4.55	1.00	18441.26	A	0.0557	0.0494	-11	50	
PFHxS	4.55	1.00	125085.30	A	0.3693	0.3301			
PFHxS_2	4.55	1.00	41284.52	A	0.3693	0.3301	-11	50	
6:2-FTS	N/A	N/A	N/A	A	0.6625	N/A			
6:2-FTS_2	N/A	N/A	N/A	A	0.6625	N/A		50	
PFHpS	4.91	1.08	131043.06	A	0.3915	0.4021			
PFHpS_2	4.91	1.08	52690.55	A	0.3915	0.4021	3	50	
PFOA	4.92	1.00	404358.94	A	0.0573	0.0549			
PFOA_2	4.92	1.00	22197.92	M	0.0573	0.0549	-4	50	
PFOS	5.25	1.00	122334.56	A	0.2960	0.3345			
PFOS_2	5.24	1.00	40919.91	A	0.2960	0.3345	13	50	
PFNA	5.26	1.00	351872.00	A	0.0201	0.0188			
PFNA_2	5.26	1.00	6604.00	A	0.0201	0.0188	-7	50	
PFNS	N/A	N/A	N/A	A	0.4794	N/A			
PFNS_2	N/A	N/A	N/A	A	0.4794	N/A		50	
PFDA	5.56	1.00	325191.94	A	0.0075	0.0060			
PFDA_2	5.56	1.00	1956.43	A	0.0075	0.0060	-20	50	
8:2-FTS	N/A	N/A	N/A	A	0.5380	N/A			
8:2-FTS_2	N/A	N/A	N/A	A	0.5380	N/A		50	
NMeFOSAA	5.70	1.00	74168.76	A	0.2305	0.2169			
NMeFOSAA_2	5.70	1.00	16085.31	M	0.2305	0.2169	-6	50	
PFDS	5.79	1.10	72374.27	A	0.5356	0.5380			
PFDS_2	5.79	1.10	38937.76	A	0.5356	0.5380	0	50	
PFUnDA	5.82	1.00	354099.76	A	0.0038	0.0057			
PFUnDA_2	5.82	1.00	2015.46	A	0.0038	0.0057	50	50	
NEtFOSAA	5.83	1.00	57367.95	A	0.7356	0.5930			
NEtFOSAA_2	5.83	1.00	34017.14	A	0.7356	0.5930	-19	50	
PFDoDA	6.05	1.00	427818.87	A	0.0130	0.0123			
PFDoDA_2	6.05	1.00	5265.10	M	0.0130	0.0123	-6	50	
10:2-FTS	N/A	N/A	N/A	A	0.6989	N/A			
10:2-FTS_2	N/A	N/A	N/A	A	0.6989	N/A		50	
PFTrDA	6.25	1.03	416758.36	A	0.0090	0.0086			
PFTrDA_2	6.25	1.03	3581.21	A	0.0090	0.0086	-5	50	
PFTeDA	6.42	1.00	312632.12	A	0.0056	0.0049			
PFTeDA_2	6.43	1.00	1543.65	M	0.0056	0.0049	-12	50	
PFHxDA	N/A	N/A	N/A	A	0.0646	N/A			
PFHxDA_2	N/A	N/A	N/A	A	0.0646	N/A		50	
PFODA	N/A	N/A	N/A	A	0.0264	N/A			
PFODA_2	N/A	N/A	N/A	A	0.0264	N/A		50	

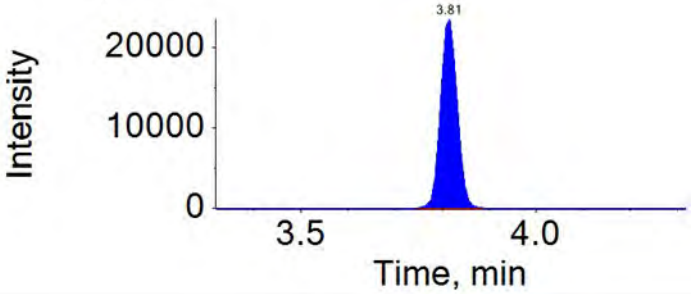
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

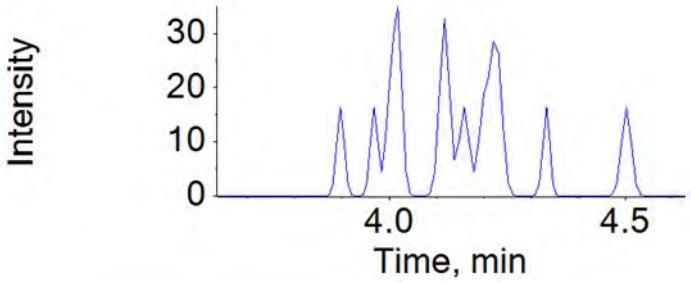
Component: PFBS
Primary Mass: 299.0 / 80.0



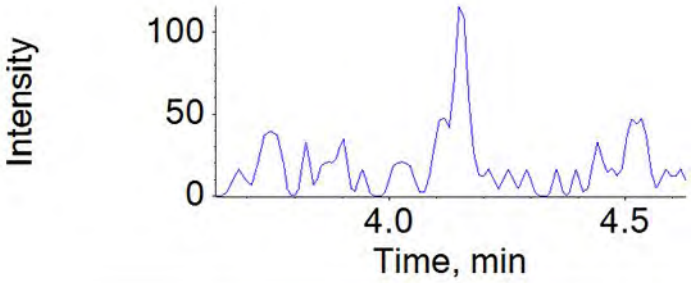
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



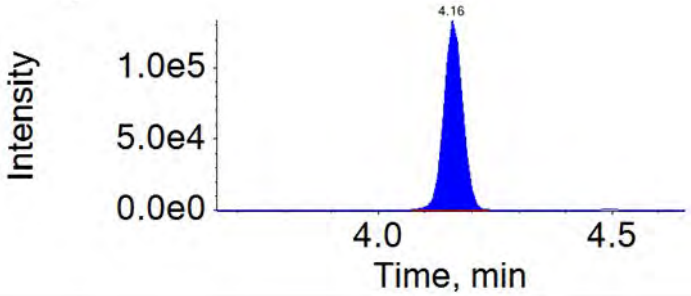
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



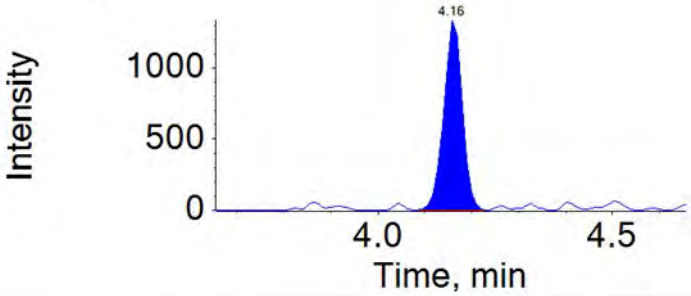
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



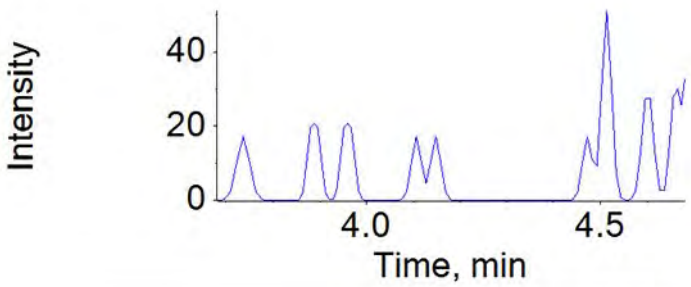
Component: PFHxA
Primary Mass: 313.0 / 269.0



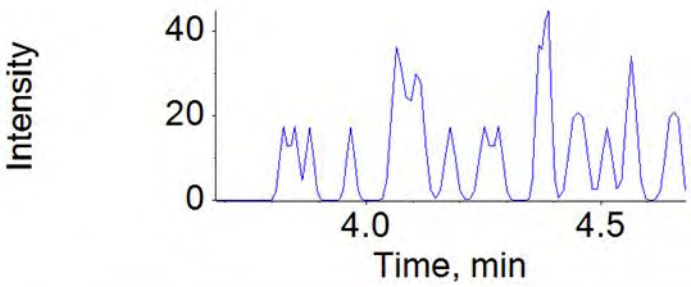
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



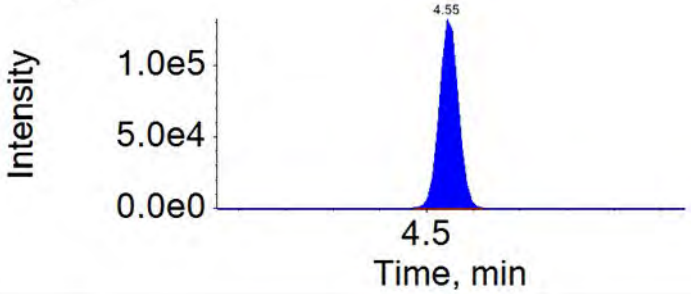
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



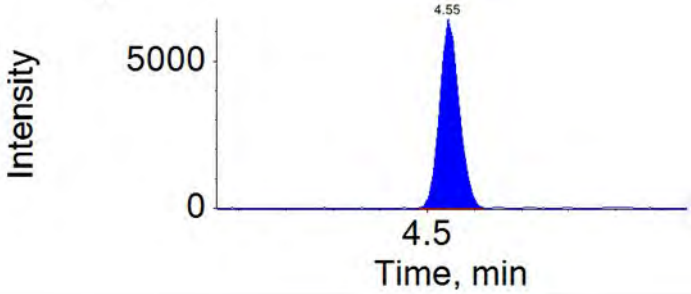
APPROVED
By MCD at 5:01 pm, 11/28/18

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By HMK at 12:22 pm, 11/29/18

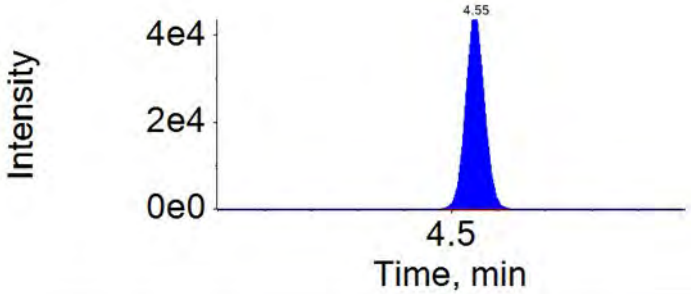
Component: PFHpA
Primary Mass: 363.0 / 319.0



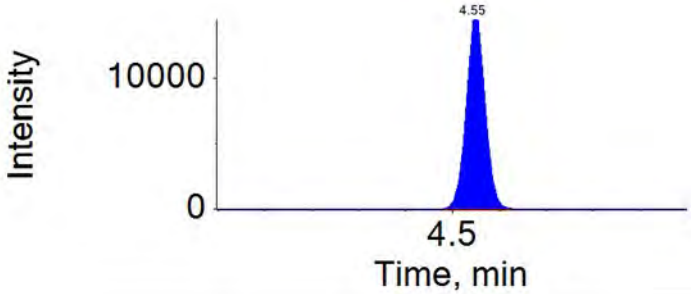
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



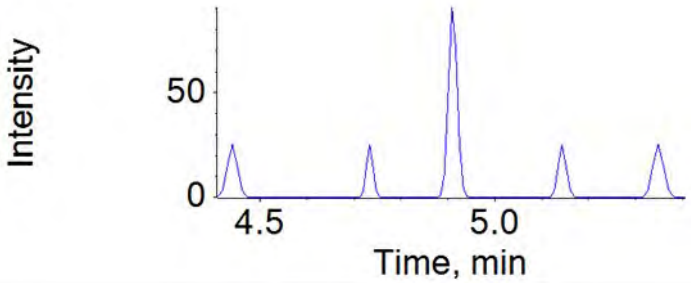
Component: PFHxS
Primary Mass: 399.0 / 80.0



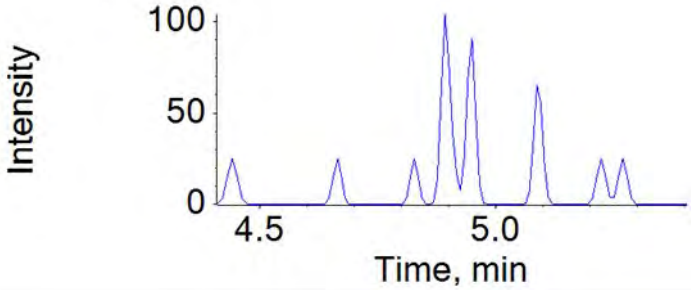
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



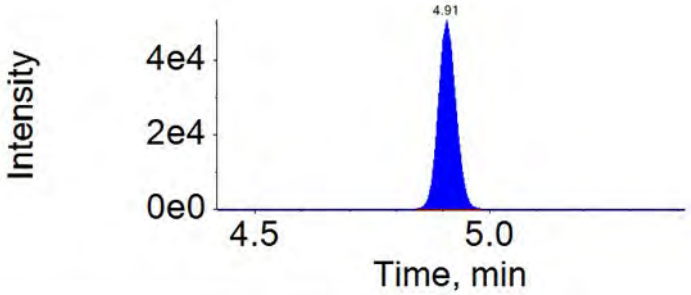
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



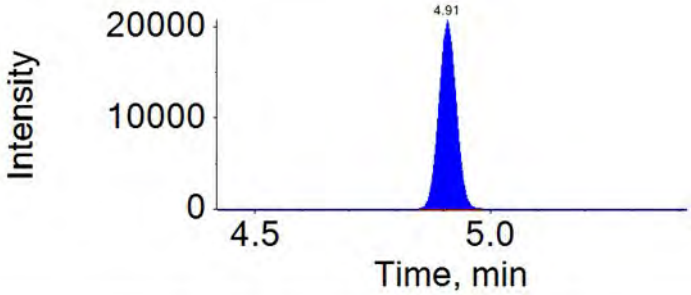
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



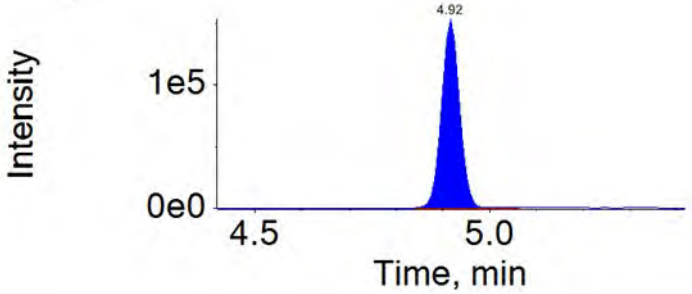
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



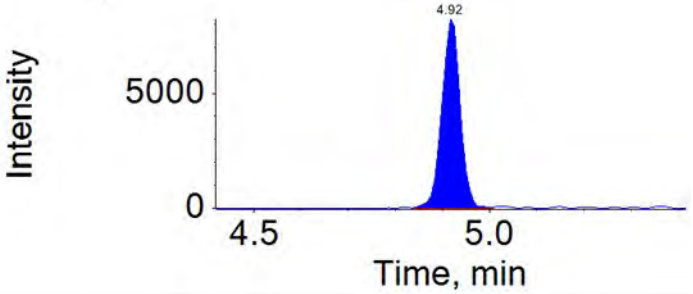
APPROVED
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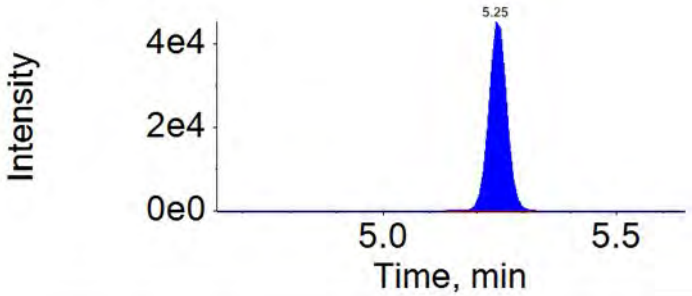
Component: PFOA
Primary Mass: 413.0 / 369.0



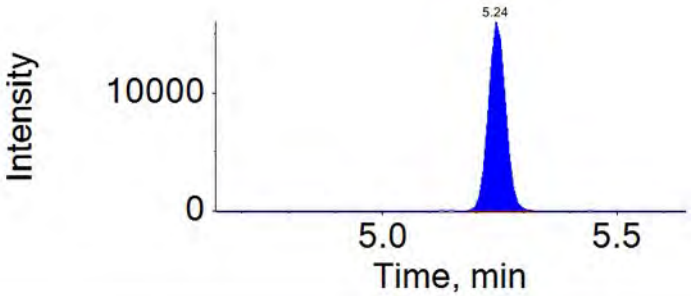
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



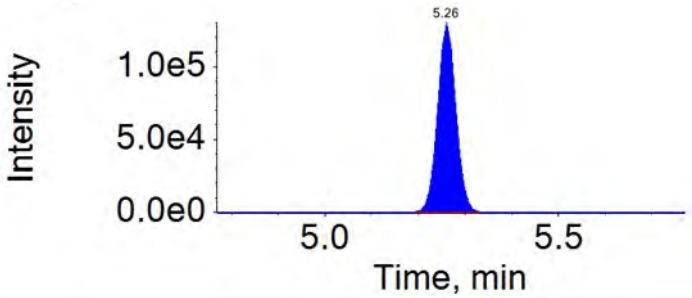
Component: PFOS
Primary Mass: 499.0 / 80.0



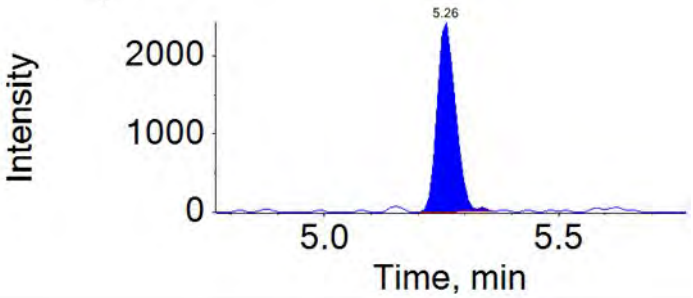
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



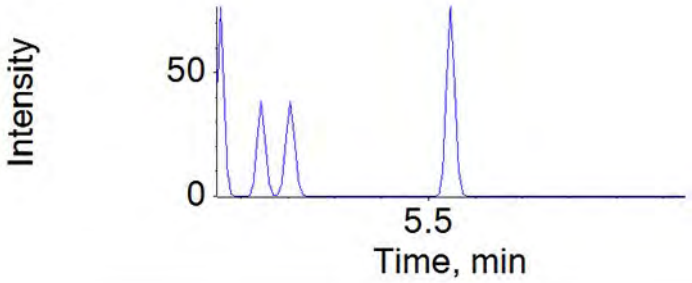
Component: PFNA
Primary Mass: 463.0 / 419.0



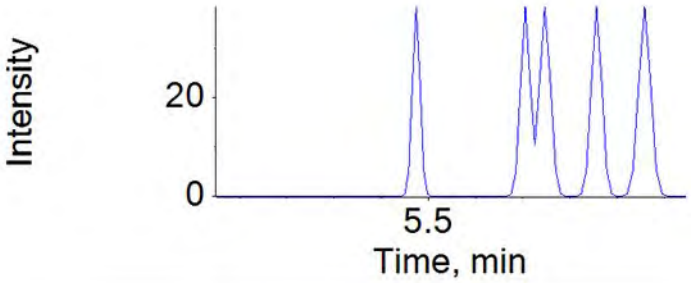
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



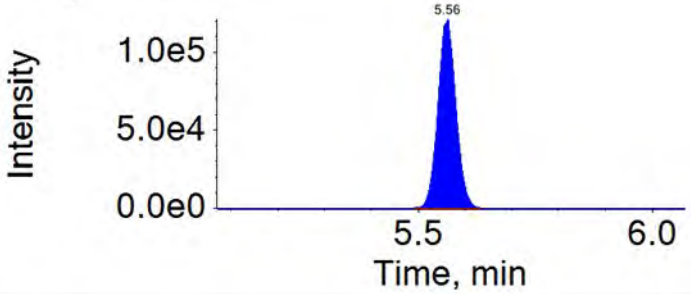
Component: PFNS
Primary Mass: 549.0 / 80.0



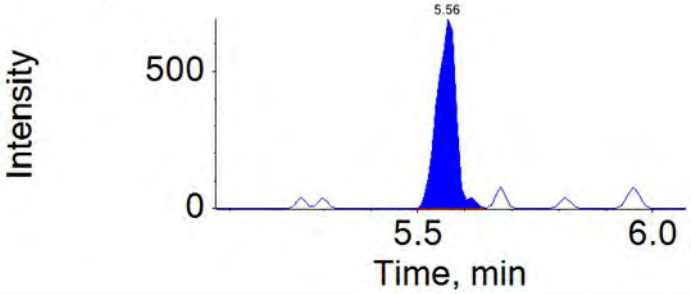
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



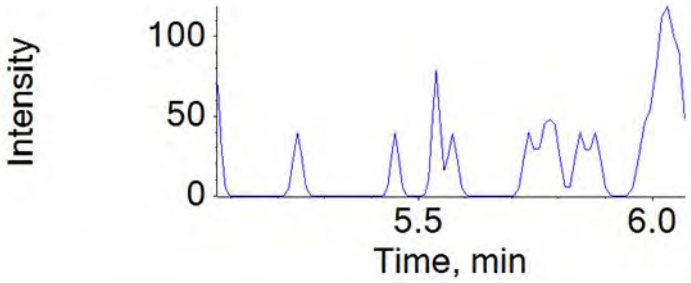
Component: PFDA
Primary Mass: 513.0 / 469.0



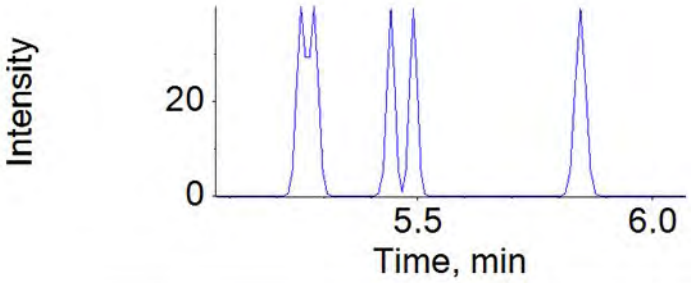
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



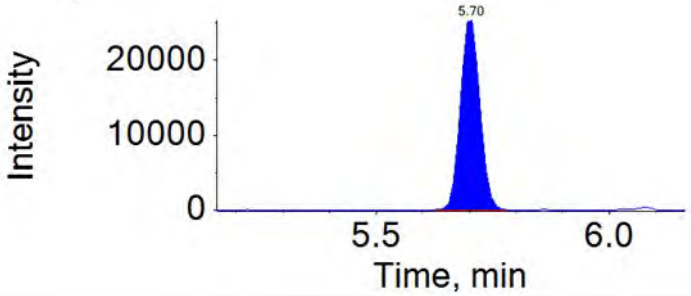
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



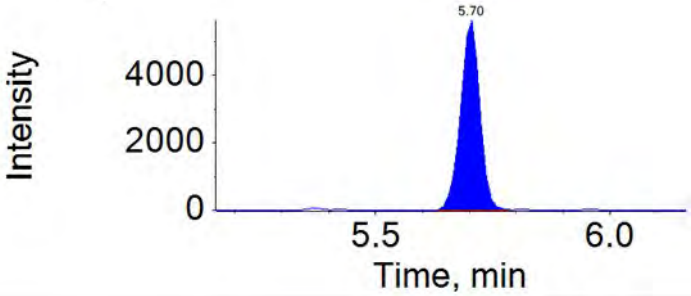
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



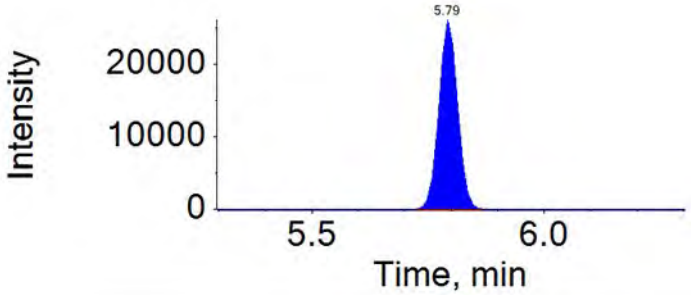
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



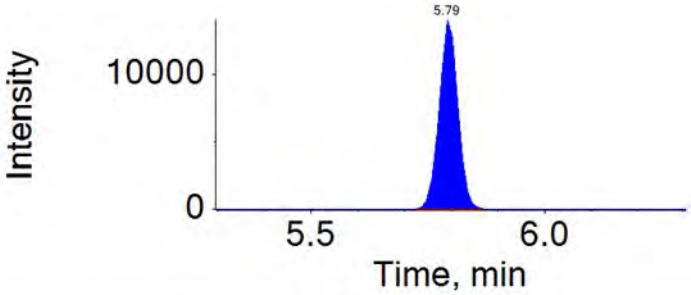
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



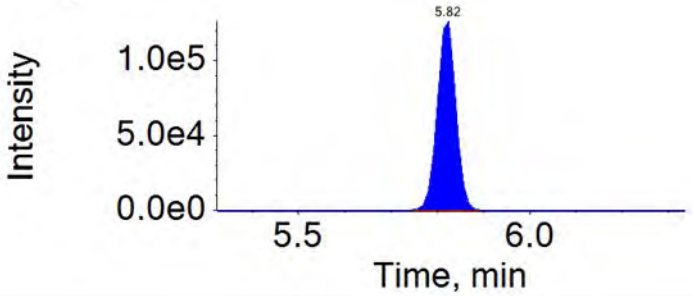
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



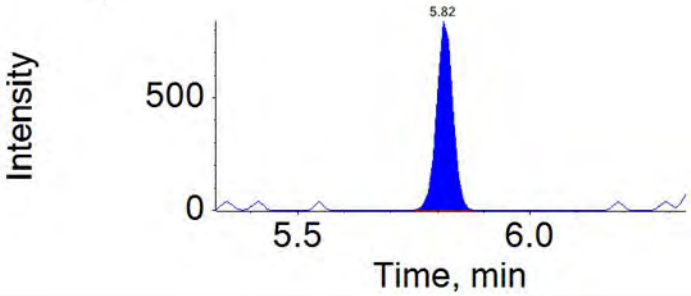
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

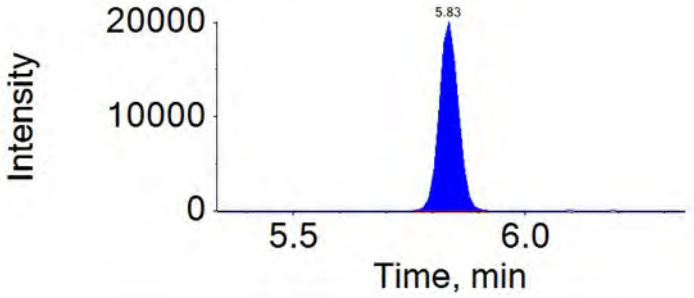
Component: PFUnDA
Primary Mass: 563.0 / 519.0



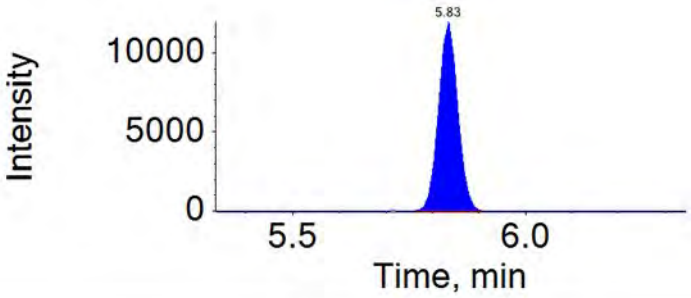
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



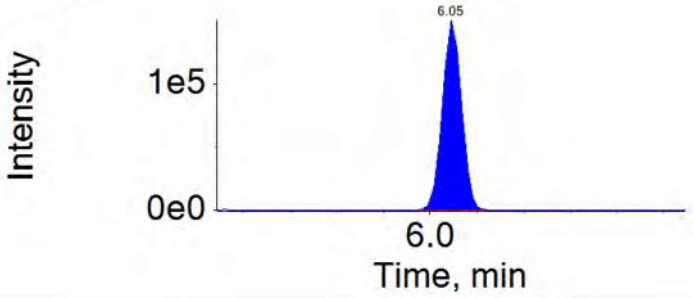
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



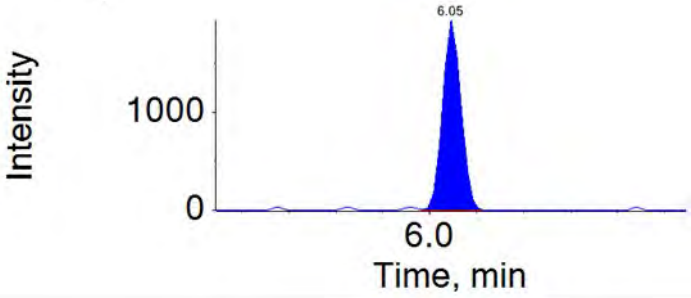
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



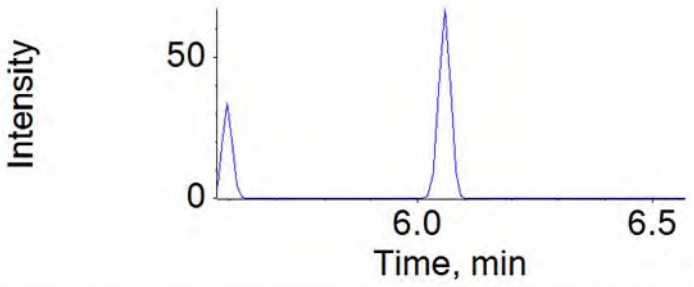
Component: PFDoDA
Primary Mass: 613.0 / 569.0



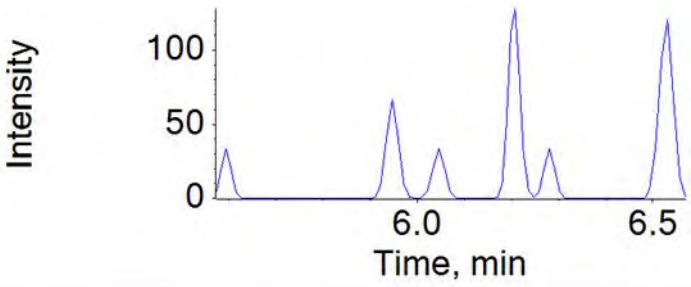
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



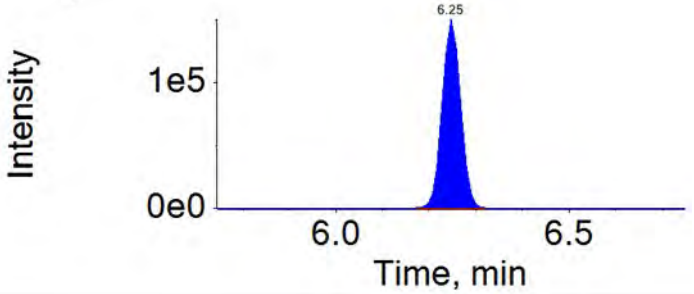
Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



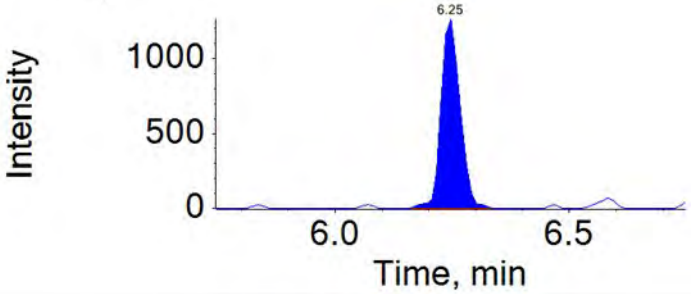
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



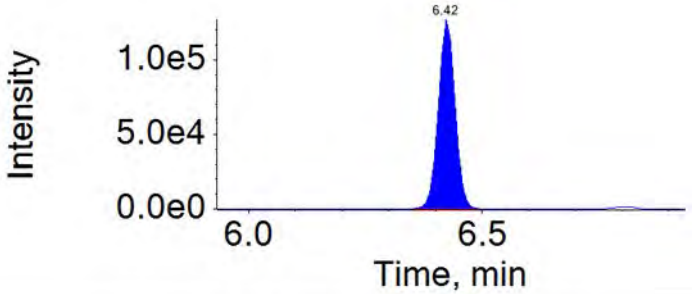
Component: PFTrDA
Primary Mass: 663.0 / 619.0



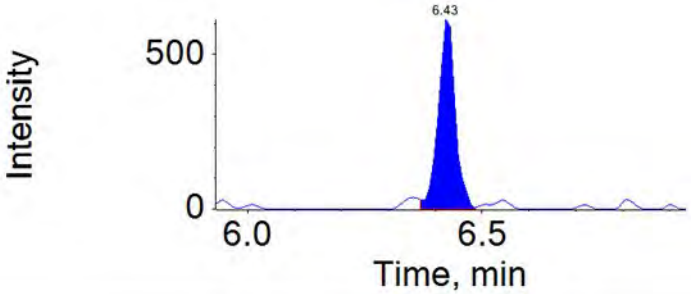
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



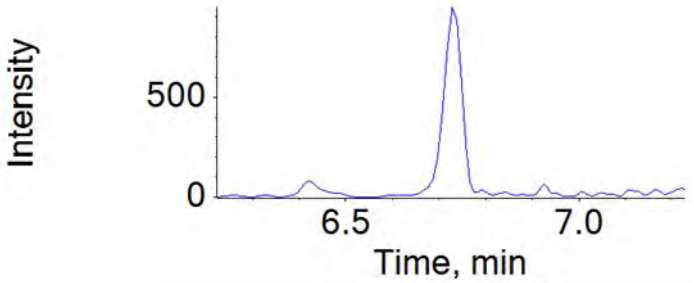
Component: PFTeDA
Primary Mass: 713.0 / 669.0



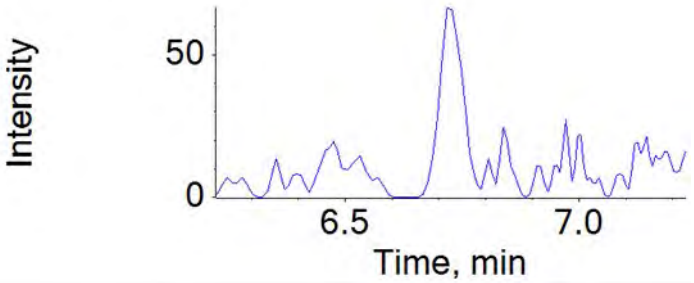
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



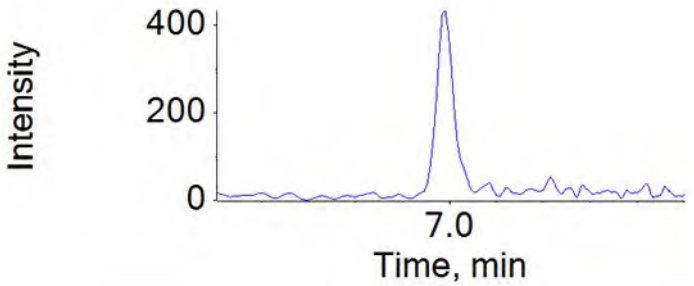
Component: PFHxDA
Primary Mass: 813.0 / 769.0



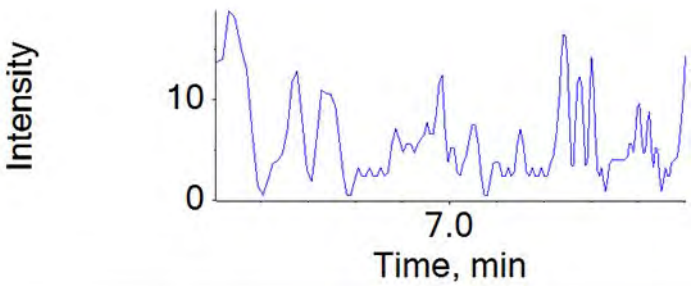
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	L+B CAL3			**Data File:**		18NOV28DCAL-15.wiff
Sample ID:	LBMODX1833D			**Acquis Date:**		2018-11-28T15:03:22
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	11			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV28DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	930482.9	887248.9	5	50	
13C2-PFOA	5.0	516348.2	498501.6	4	50	
13C4-PFOS	4.8	310677.0	283214.2	10	50	
13C2-PFDA	5.0	460288.7	441790.6	4	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	996867.5	13C3-PFBA	930482.9	1.071	5.000	4.780	96	70-130	
E13C5-PFPeA	927870.7	13C3-PFBA	930482.9	0.997	5.000	4.656	93	70-130	
E13C3-PFBS	427409.8	13C3-PFBA	930482.9	0.459	4.650	4.382	94	70-130	
E13C2-4:2-FTS	73743.1	13C2-PFOA	516348.2	0.143	4.670	4.922	105	70-130	
E13C5-PFHxA	699105.0	13C2-PFOA	516348.2	1.354	5.000	4.973	99	70-130	
E13C3-PFHxS	324075.2	13C2-PFOA	516348.2	0.628	4.730	4.919	104	70-130	
E13C4-PFHpA	547668.0	13C2-PFOA	516348.2	1.061	5.000	4.874	97	70-130	
E13C2-6:2-FTS	63429.0	13C2-PFOA	516348.2	0.123	4.750	5.142	108	70-130	
E13C8-PFOA	997292.2	13C2-PFOA	516348.2	1.931	5.000	5.316	106	70-130	
E13C8-PFOS	308064.9	13C4-PFOS	310677.0	0.992	4.780	4.476	94	70-130	
E13C9-PFNA	770381.1	13C4-PFOS	310677.0	2.480	5.000	5.446	109	70-130	
E13C6-PFDA	853597.3	13C2-PFDA	460288.7	1.854	5.000	5.229	105	70-130	
E13C2-8:2-FTS	52606.6	13C2-PFDA	460288.7	0.114	4.790	4.912	103	70-130	
E13C8-PFOSA	636488.8	13C2-PFDA	460288.7	1.383	5.000	5.074	101	70-130	
Ed3-NMeFOSAA	186039.9	13C2-PFDA	460288.7	0.404	5.000	5.132	103	70-130	
E13C7-PFUnDA	573935.8	13C2-PFDA	460288.7	1.247	5.000	5.270	105	70-130	
Ed5-NEtFOSAA	145277.9	13C2-PFDA	460288.7	0.316	5.000	5.623	112	70-130	
E13C2-PFDoDA	1114419.1	13C2-PFDA	460288.7	2.421	5.000	5.087	102	70-130	
Ed7-NMePFOSAE	278546.0	13C2-PFDA	460288.7	0.605	5.000	5.230	105	70-130	
Ed3-NMePFOSA	90664.8	13C2-PFDA	460288.7	0.197	5.000	5.331	107	70-130	
Ed9-NEtPFOSAE	233109.2	13C2-PFDA	460288.7	0.506	5.000	5.134	103	70-130	
Ed5-NEtPFOSA	69689.3	13C2-PFDA	460288.7	0.151	5.000	5.261	105	70-130	
E13C2-PFTeDA	859635.9	13C2-PFDA	460288.7	1.868	5.000	5.168	103	70-130	

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

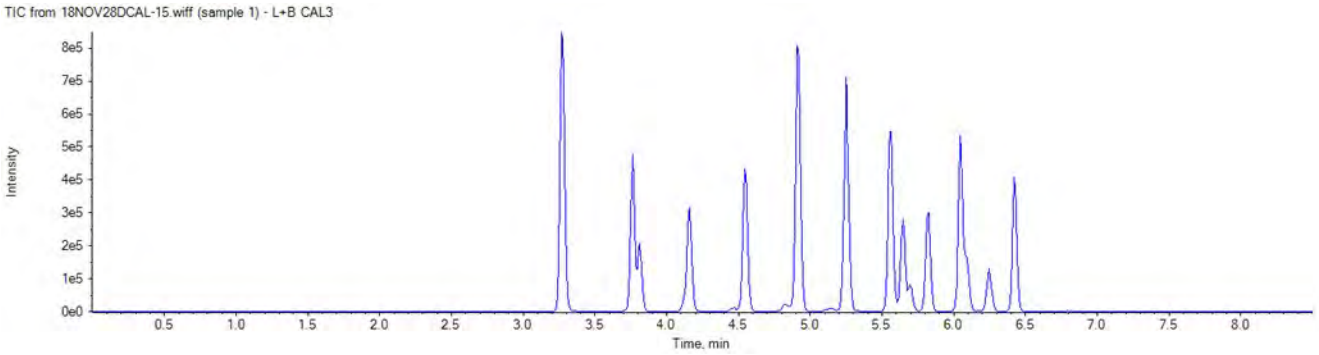
Analyte Quantitation Peak Table

Sample Name: L+B CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-15.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	N/A	N/A	N/A		A	13C4-PFBA	3.27	996867.5	N/A	
PFPeA	N/A	N/A	N/A		A	13C5-PFPeA	3.76	927870.7	N/A	
PFBS	N/A	N/A	N/A		A	13C3-PFBS	3.81	427409.8	N/A	
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.12	73743.1	N/A	
PFHxA	N/A	N/A	N/A		A	13C5-PFHxA	4.16	699105.0	N/A	
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.81	427409.8	N/A	
PFHpA	N/A	N/A	N/A		A	13C4-PFHpA	4.55	547668.0	N/A	
PFHxS	4.55	1.000	130205.7		M	13C3-PFHxS	4.55	324075.2	0.402	1.881
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.90	63429.0	N/A	
PFHpS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	324075.2	N/A	
PFOA	4.92	1.000	363985.2		M	13C8-PFOA	4.91	997292.2	0.365	1.886
PFOS	5.25	1.000	124397.3		M	13C8-PFOS	5.24	308064.9	0.404	1.694
PFNA	N/A	N/A	N/A		A	13C9-PFNA	5.26	770381.1	N/A	
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.24	308064.9	N/A	
PFDA	N/A	N/A	N/A		A	13C6-PFDA	5.56	853597.3	N/A	
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.56	52606.6	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.65	636488.8	N/A	
NMeFOSAA	N/A	N/A	N/A		A	d3-NMeFOSAA	5.70	186039.9	N/A	
PFDS	N/A	N/A	N/A		A	13C8-PFOS	5.24	308064.9	N/A	
PFUnDA	N/A	N/A	N/A		A	13C7-PFUnDA	5.82	573935.8	N/A	
NEtFOSAA	N/A	N/A	N/A		A	d5-NEtFOSAA	5.83	145277.9	N/A	
PFDoDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	1114419.1	N/A	
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.56	52606.6	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.09	278546.0	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.10	90664.8	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.24	308064.9	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.24	233109.2	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.26	69689.3	N/A	
PFTrDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	1114419.1	N/A	
PFTeDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	859635.9	N/A	
PFHxDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	859635.9	N/A	
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	859635.9	N/A	

Total Ion Chromatogram

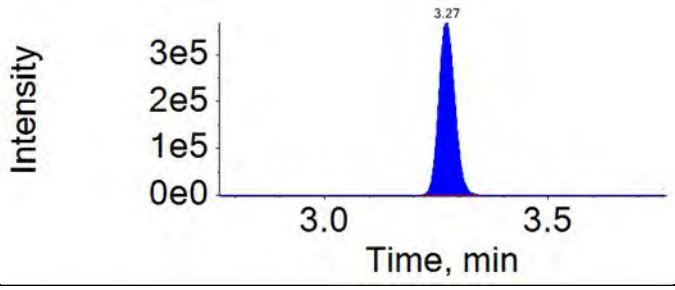


APPROVED
By MCD at 5:01 pm, 11/28/18

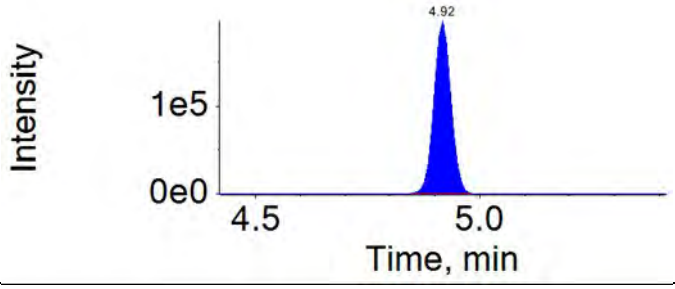
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

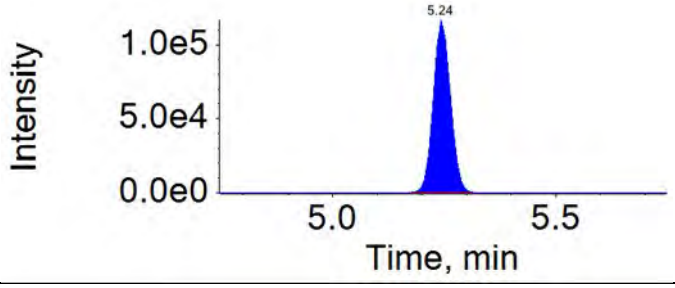
Injection Standard: 13C3-PFBA
216.0 / 172.0



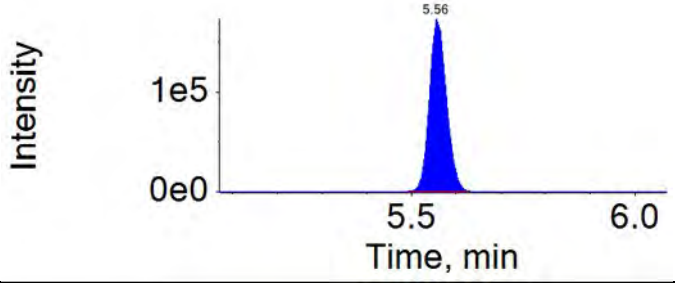
Injection Standard: 13C2-PFOA
415.0 / 370.0



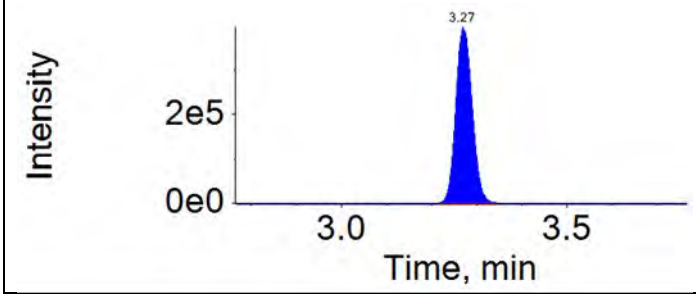
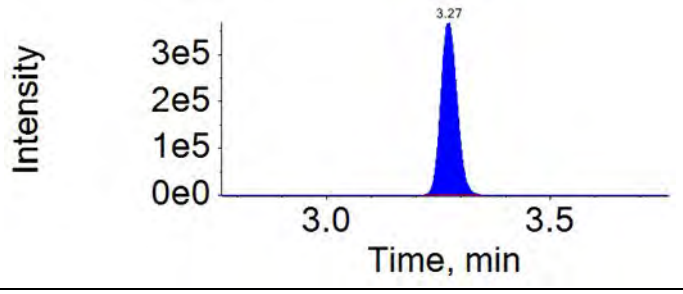
Injection Standard: 13C4-PFOS
503.0 / 80.0

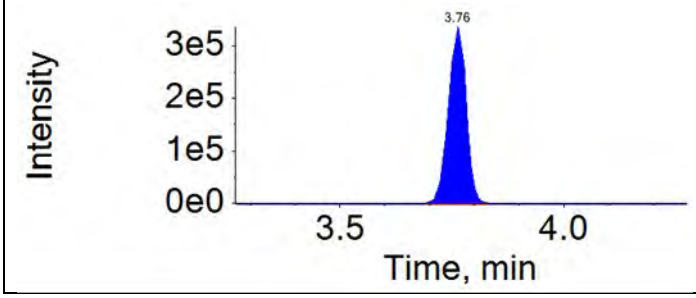
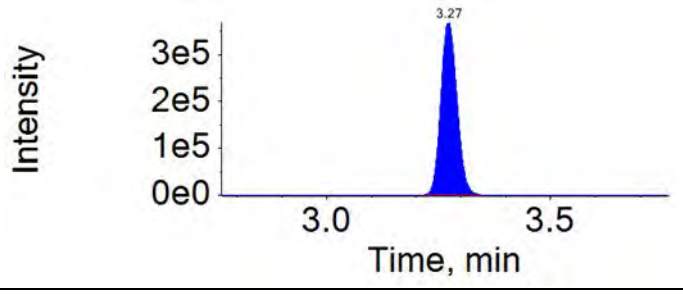


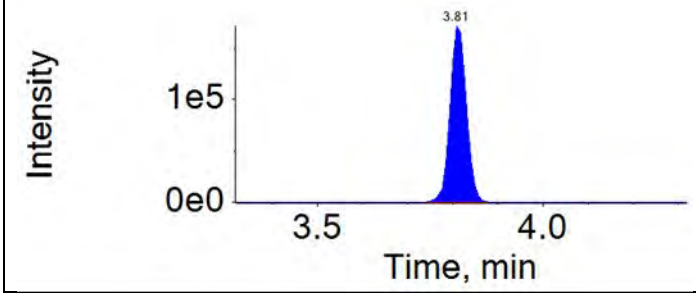
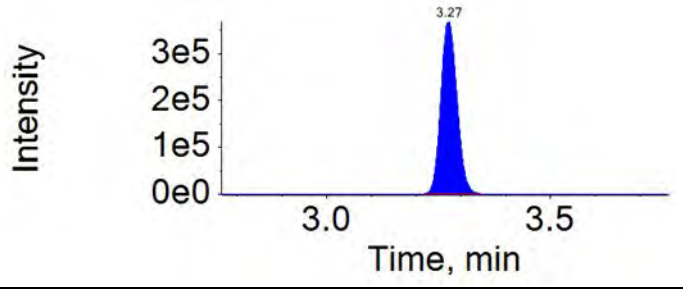
Injection Standard: 13C2-PFDA
515.0 / 470.0

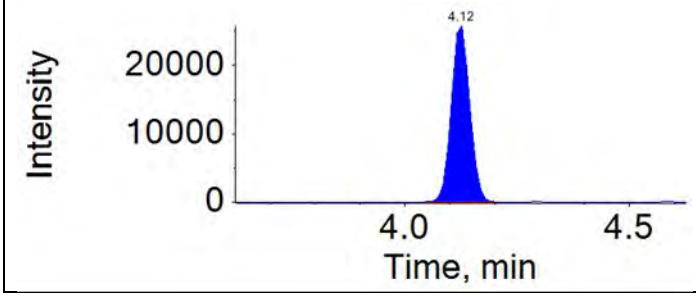
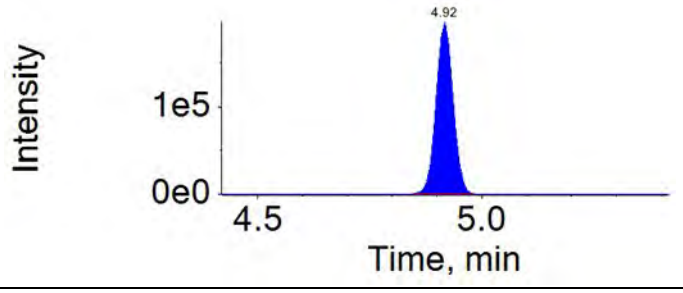


ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

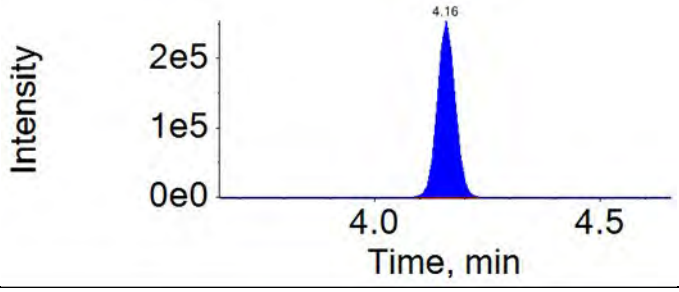
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

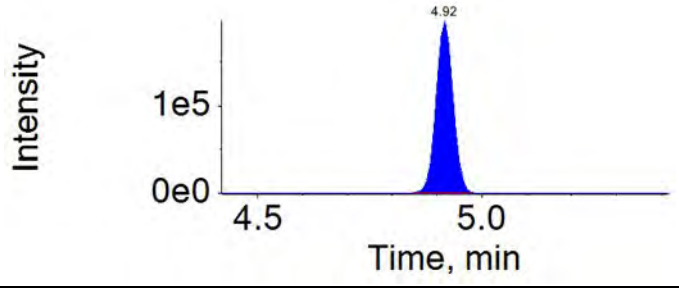
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

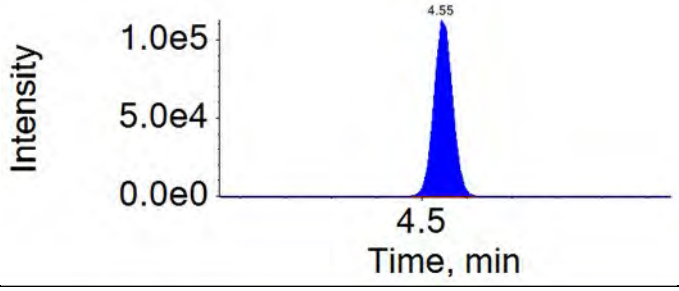
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

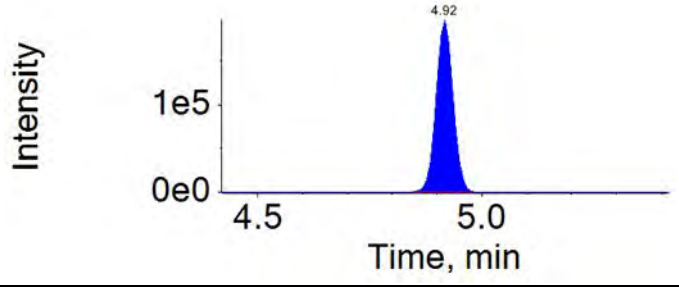
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



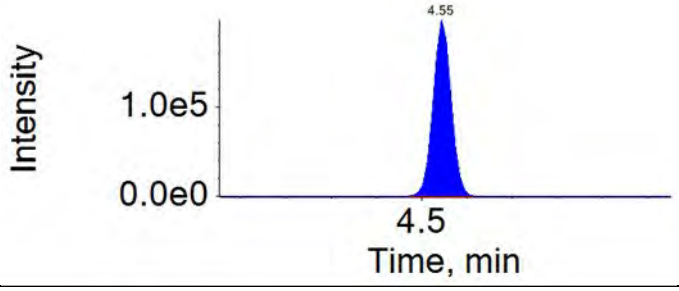


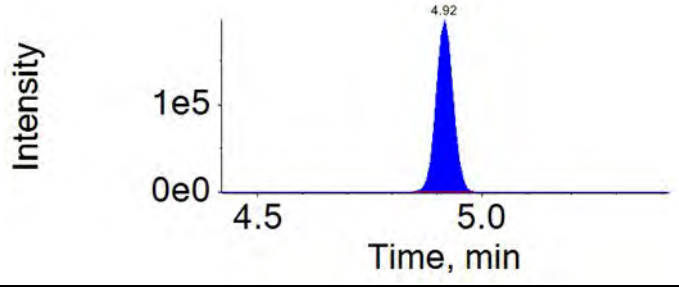
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



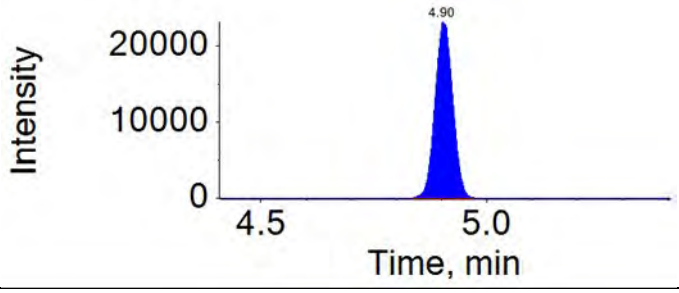


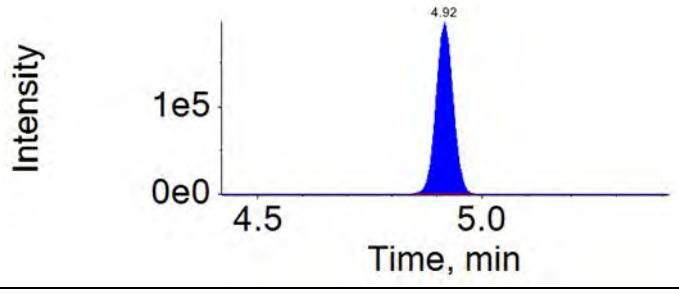
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

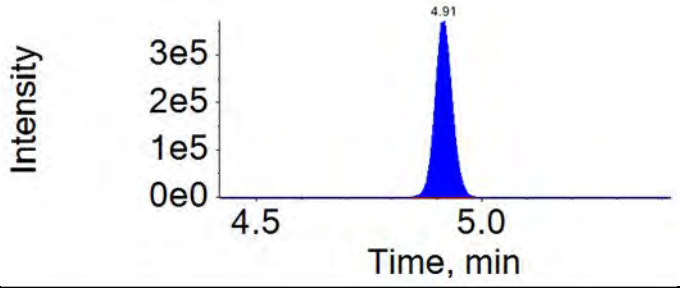
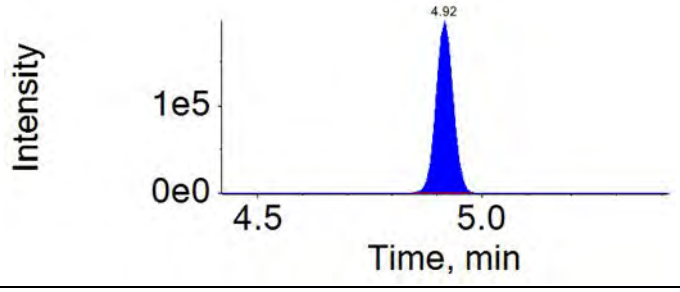


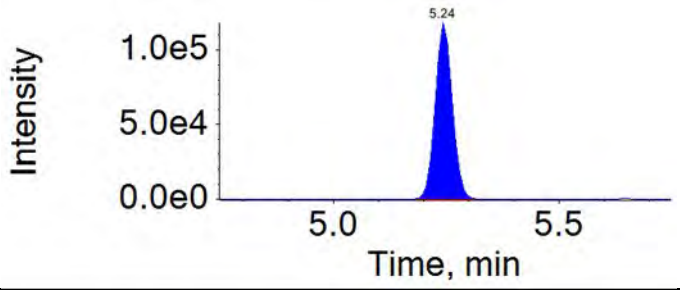
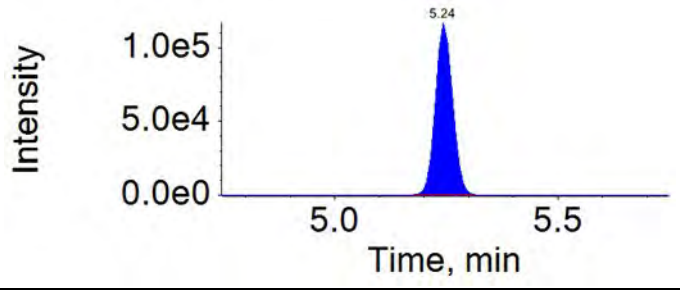


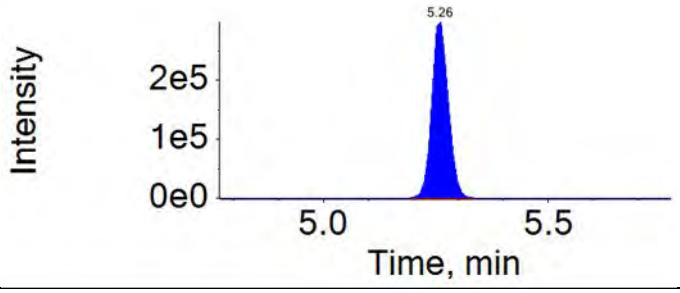
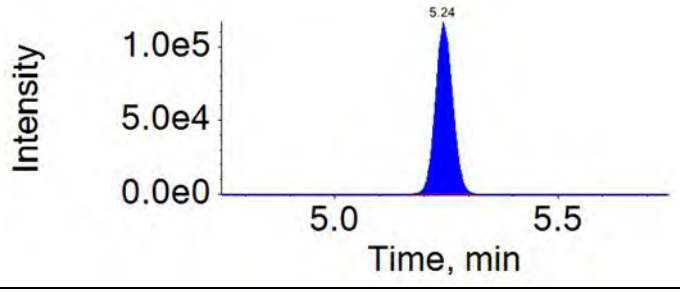
APPROVED
By MCD at 5:01 pm, 11/28/18

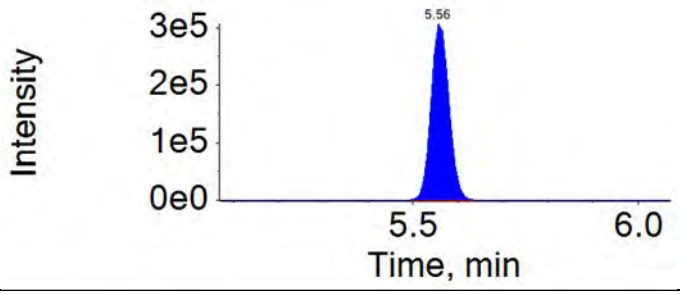
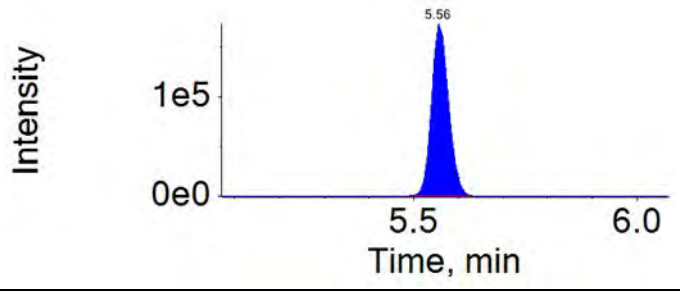
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

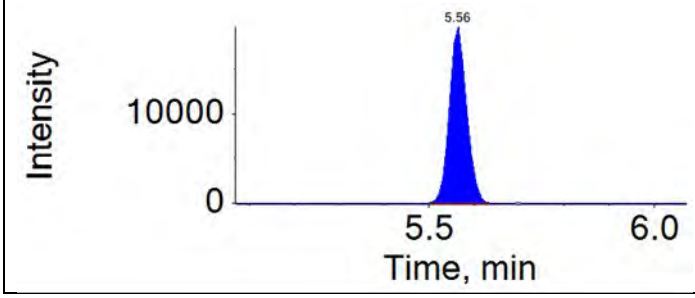
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

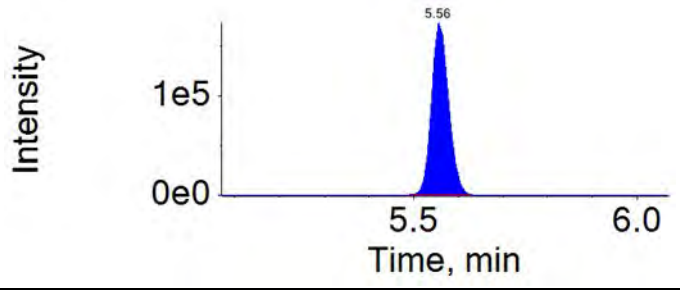
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

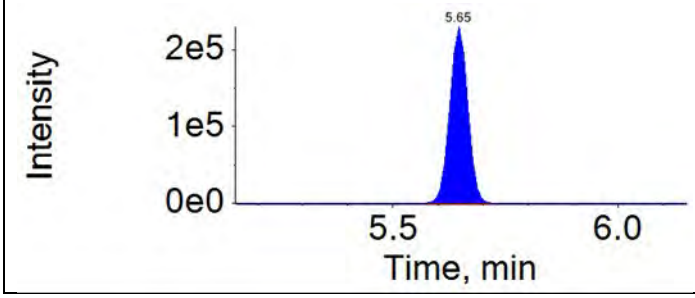
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

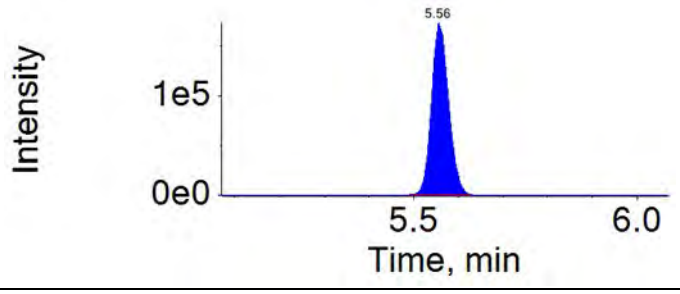
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



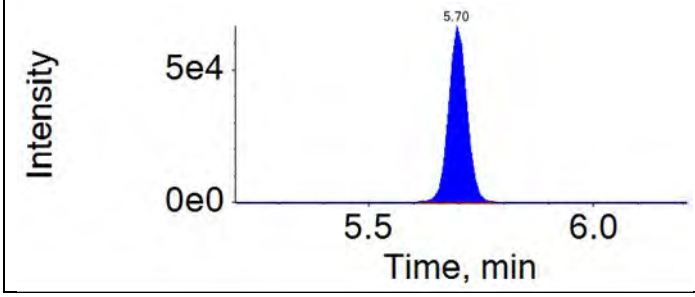


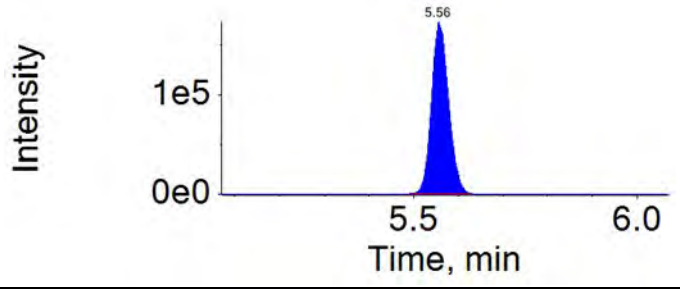
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



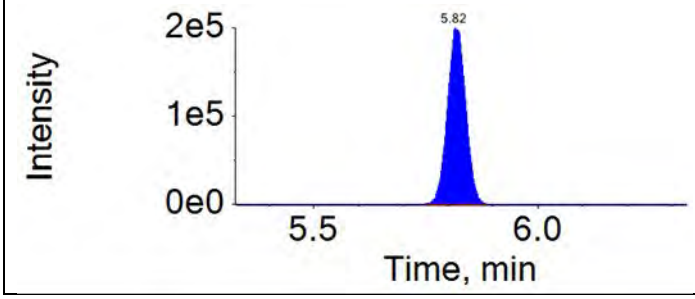


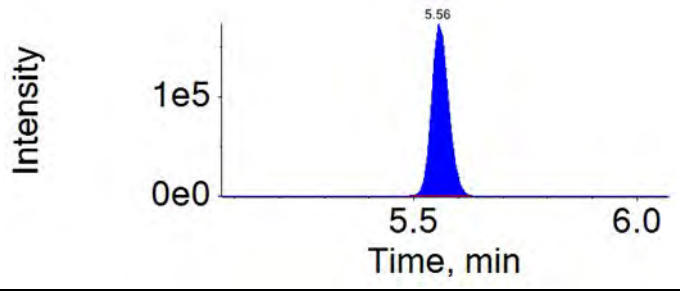
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0



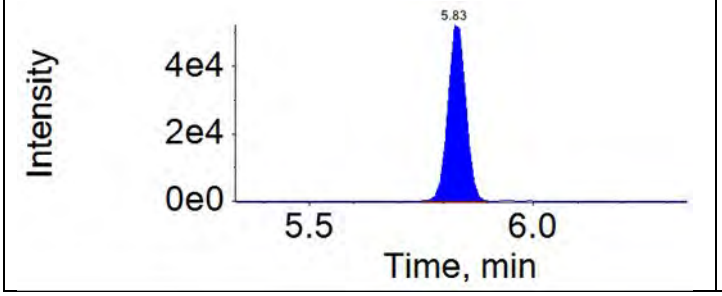


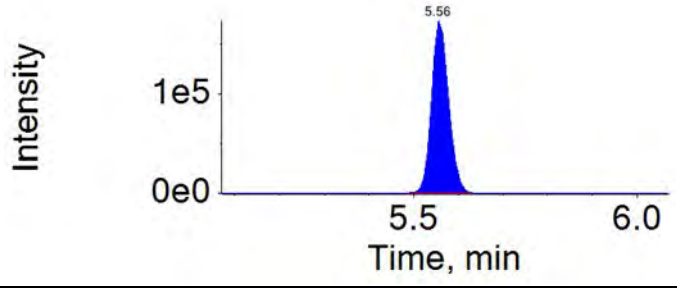
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

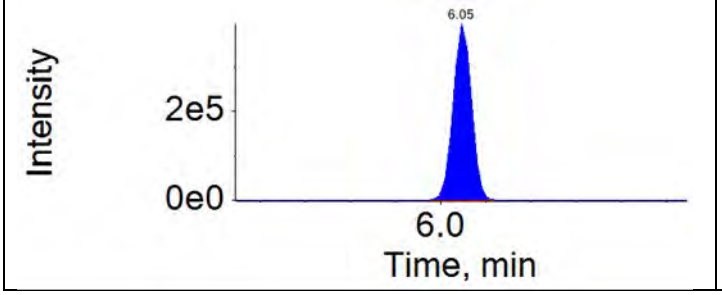
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

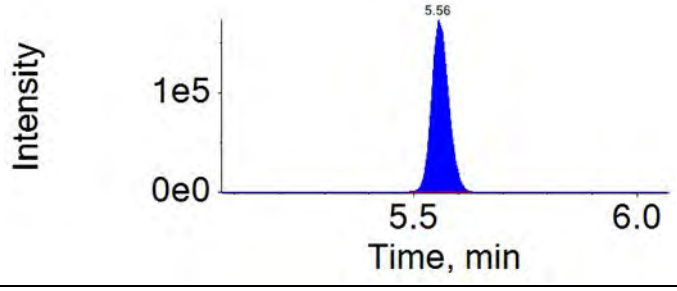
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



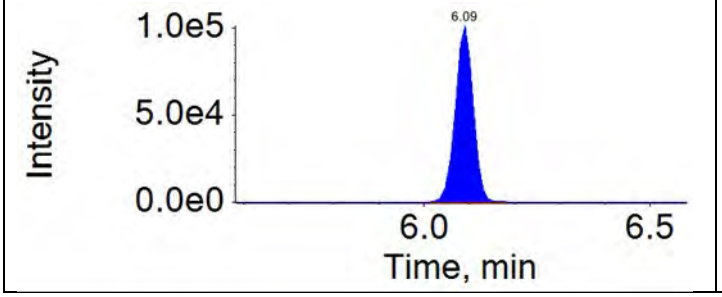


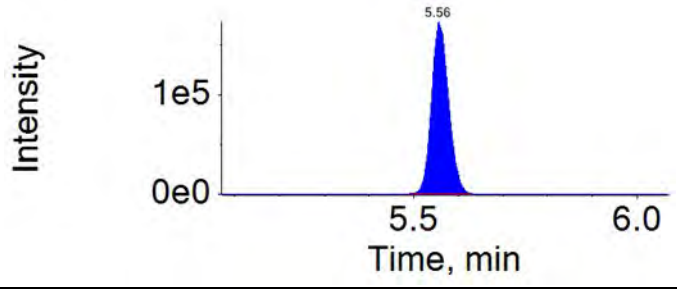
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



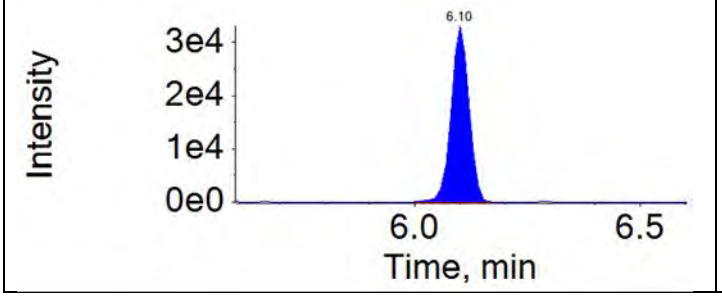


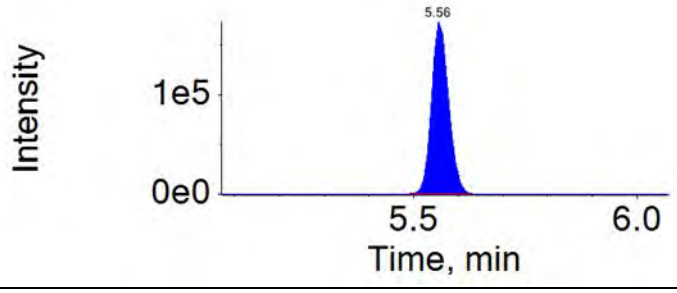
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



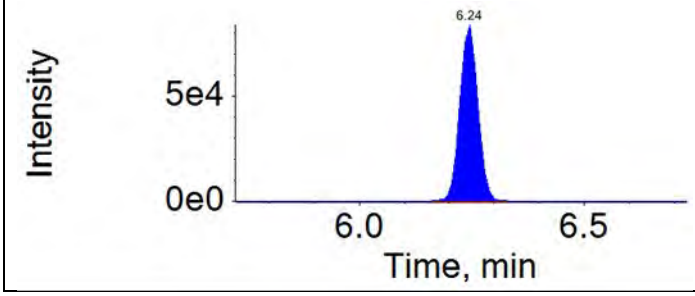


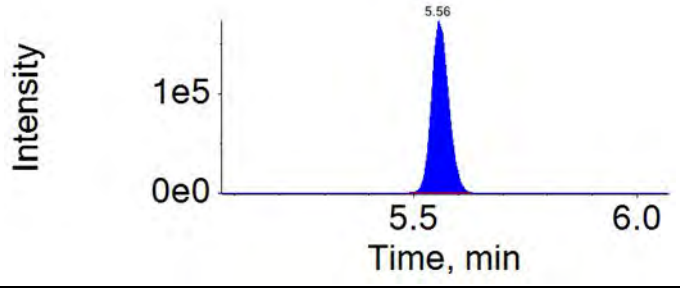
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

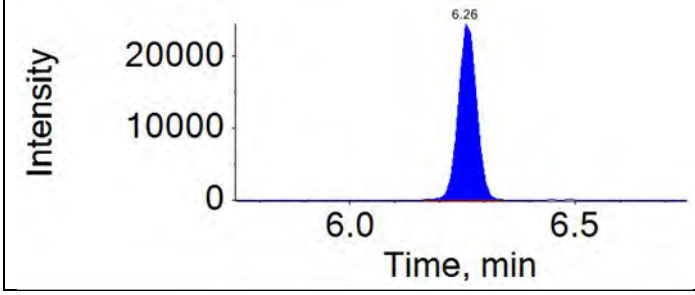
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

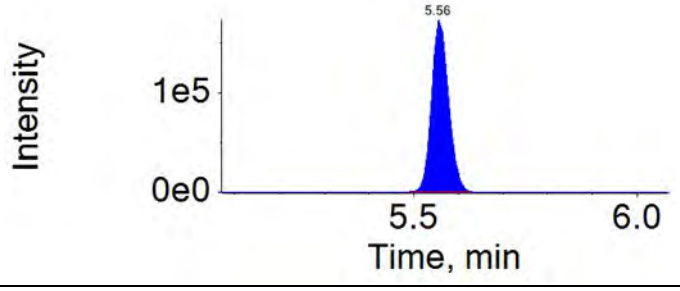
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



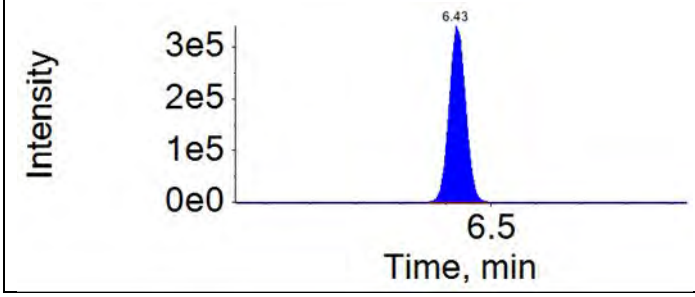


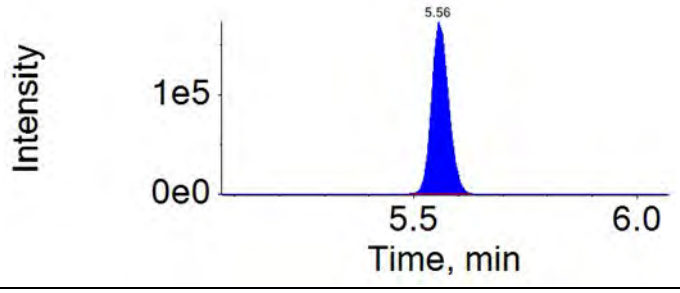
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



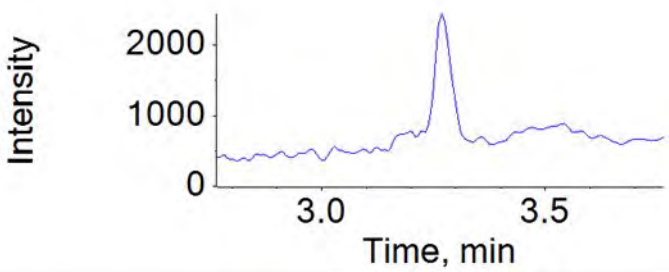


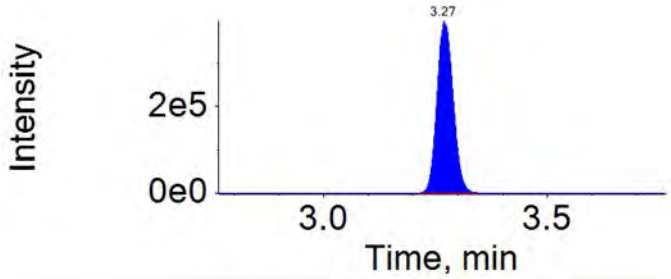
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

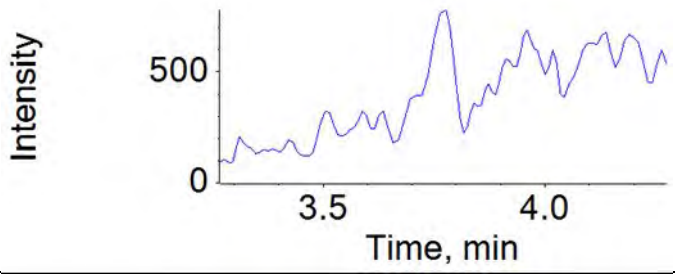
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

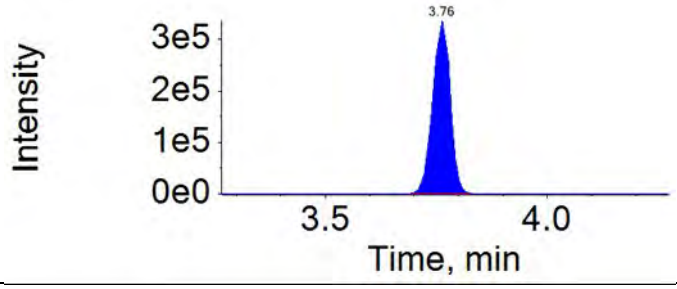
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



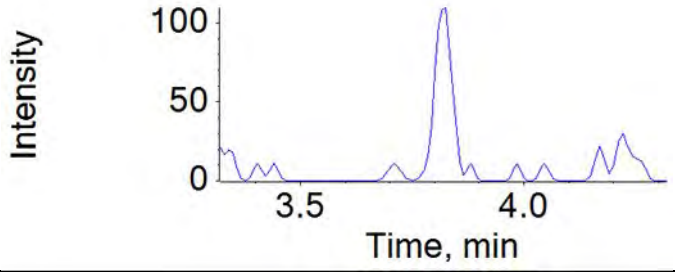


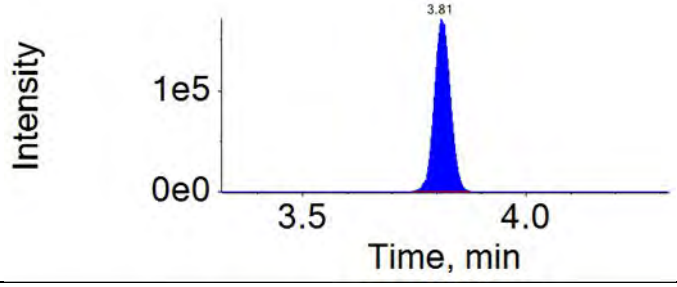
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



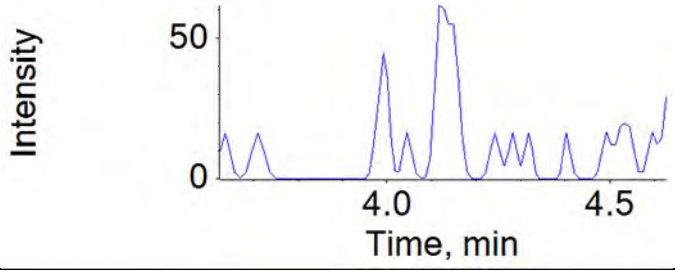


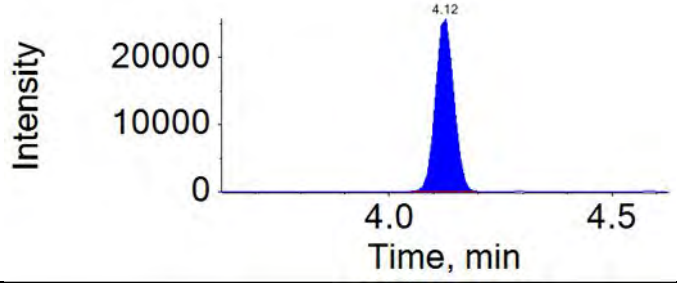
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



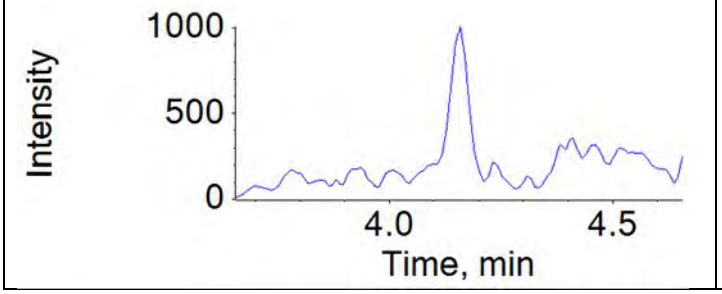


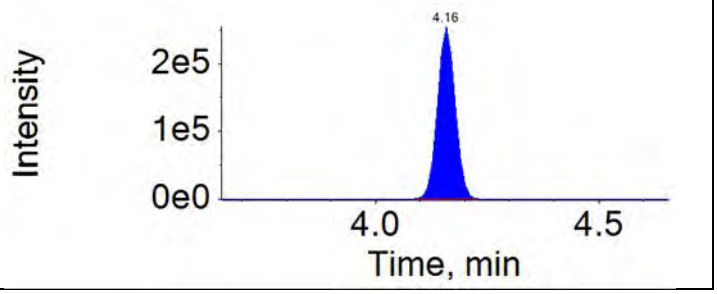
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

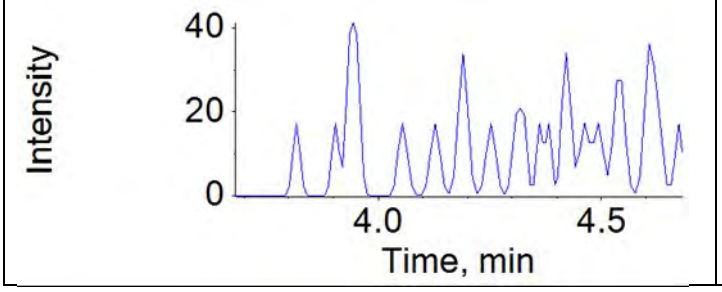
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

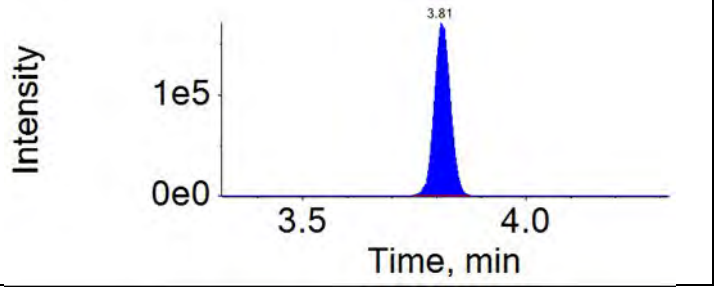
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



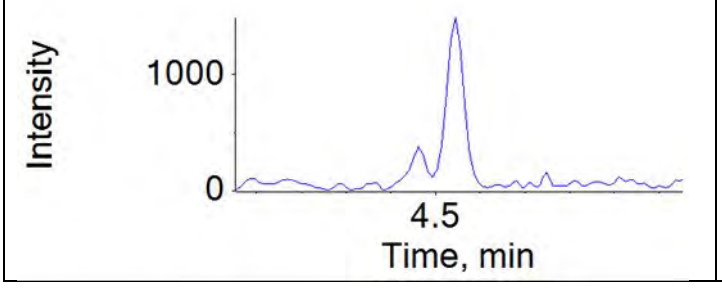


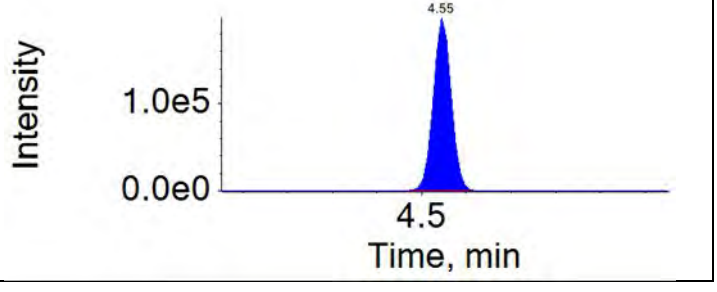
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



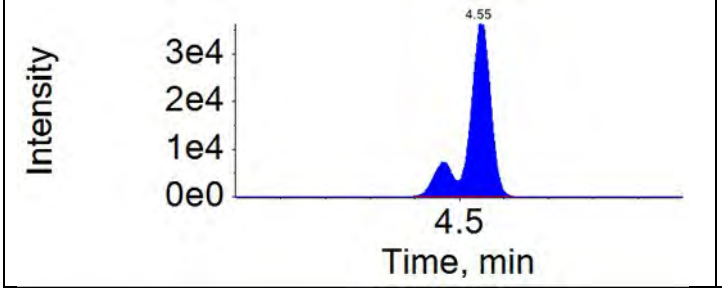


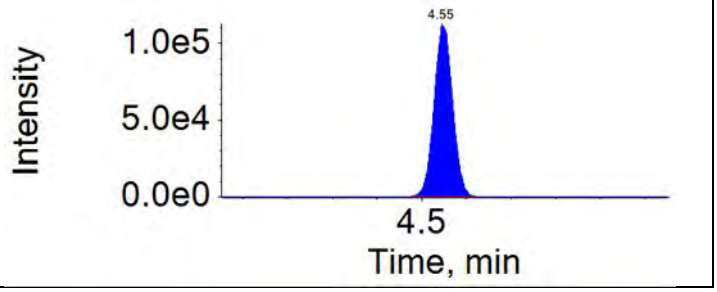
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



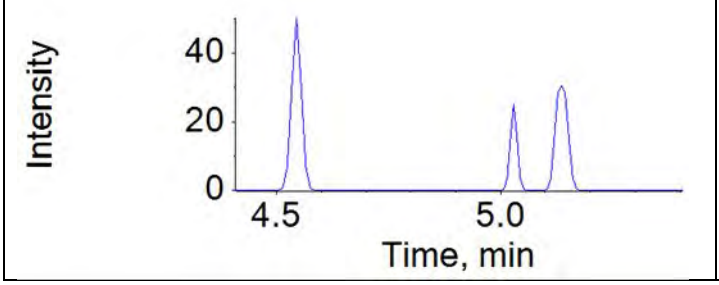


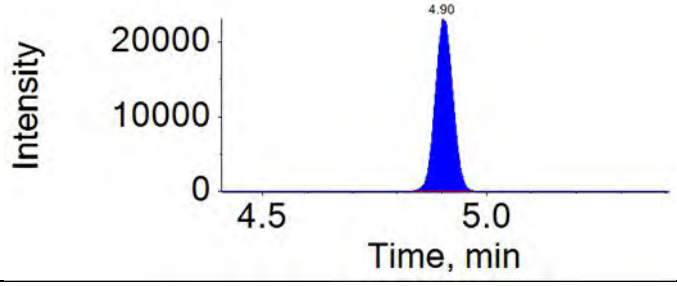
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

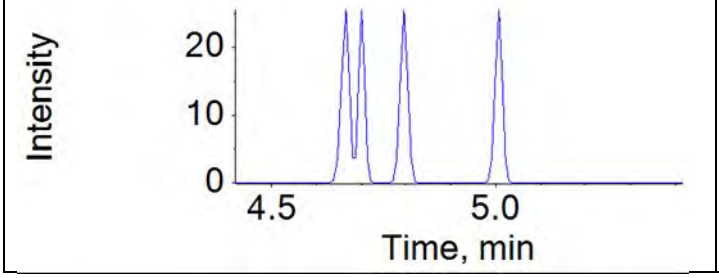
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

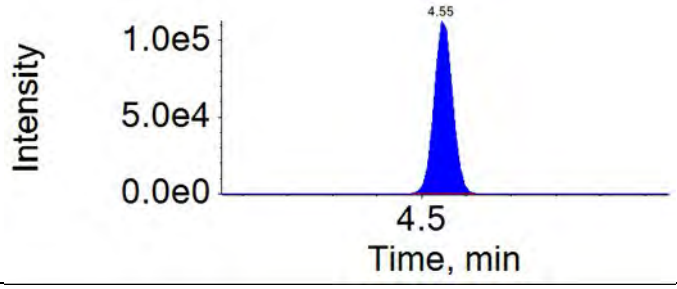
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



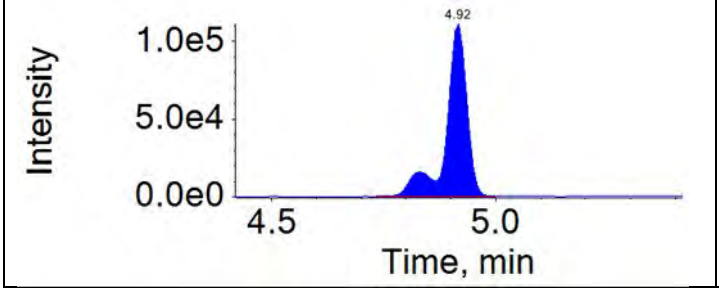


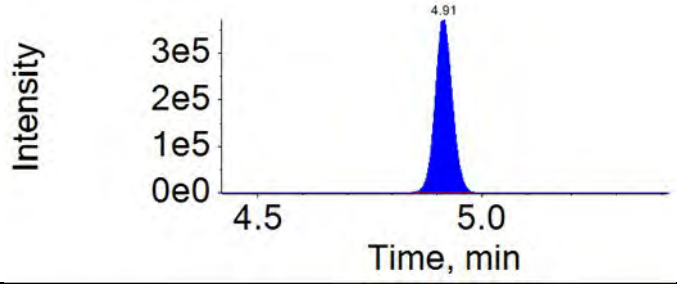
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



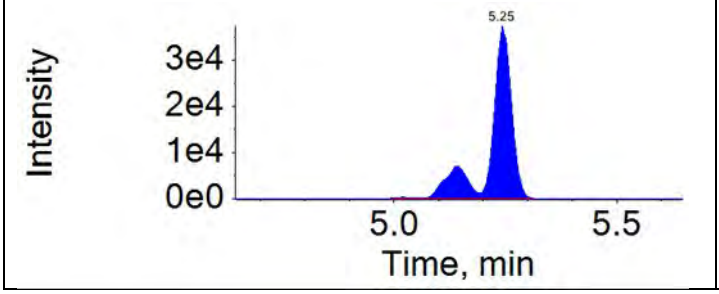


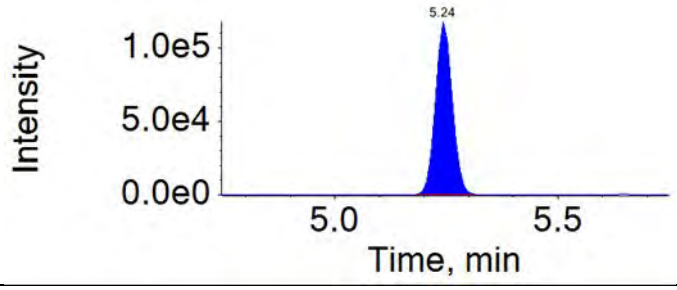
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



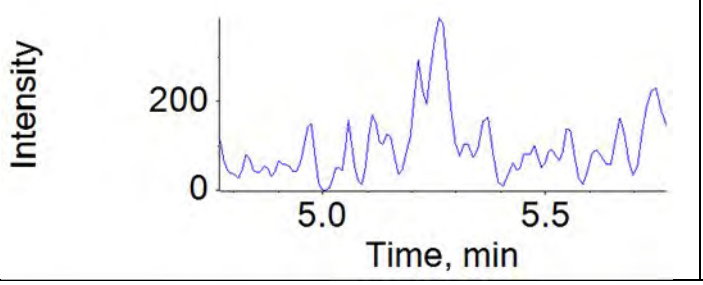


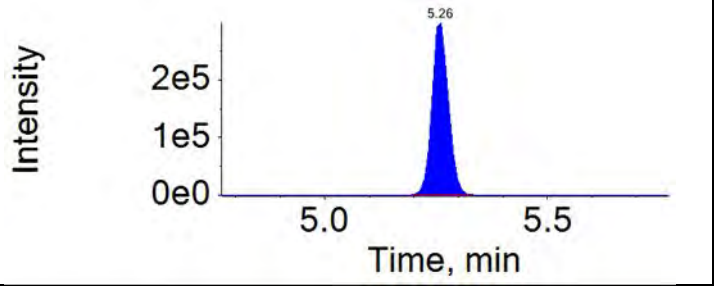
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

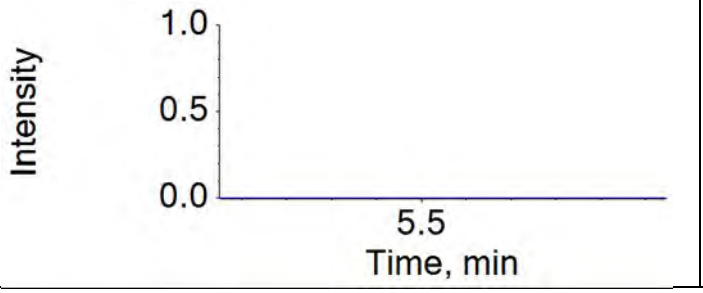
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

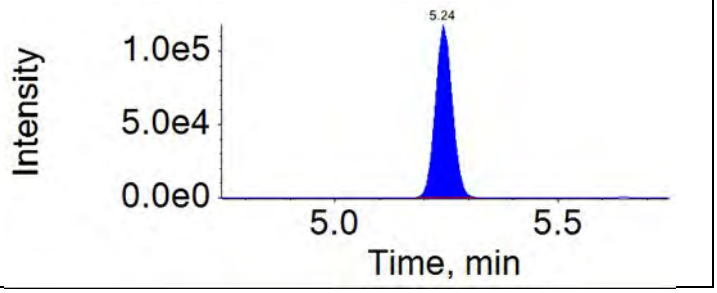
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



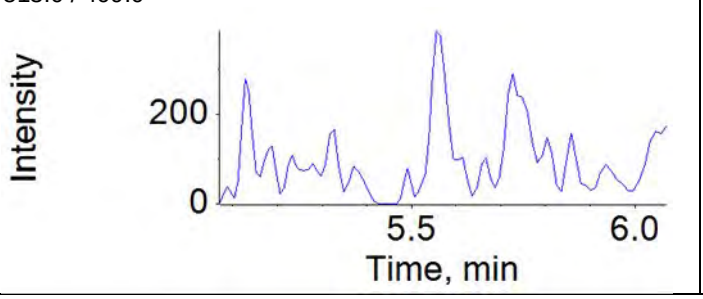


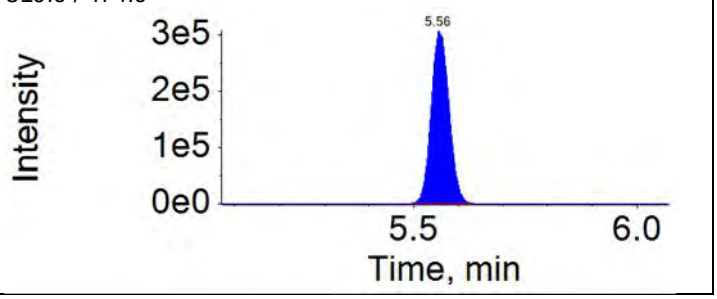
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



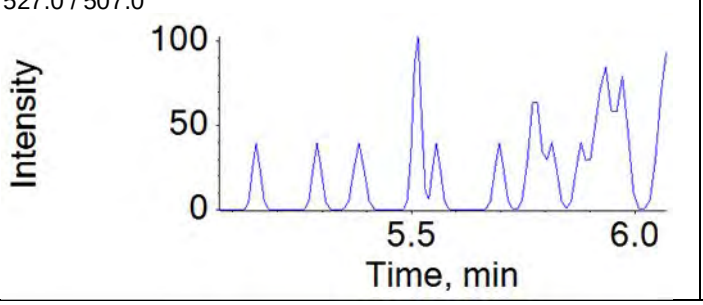


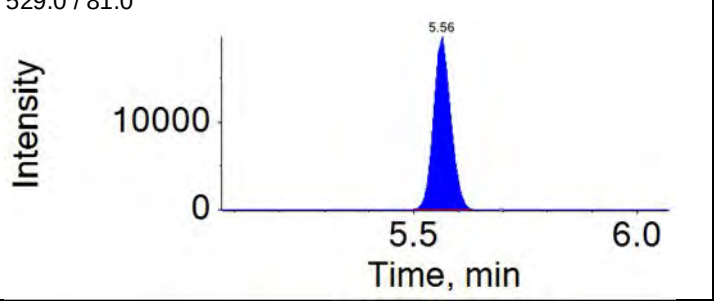
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



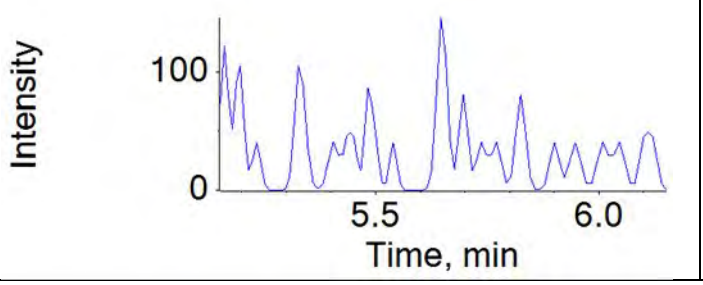


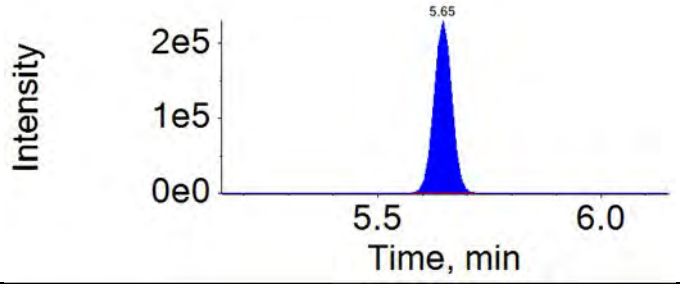
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

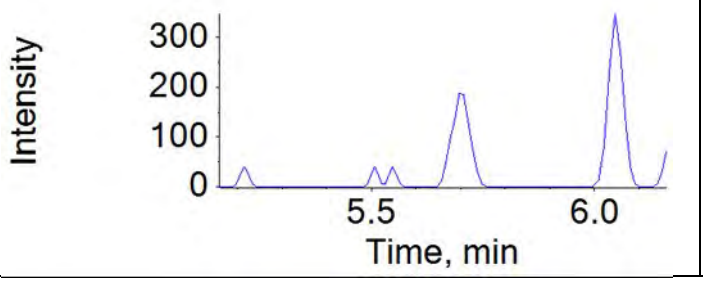
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

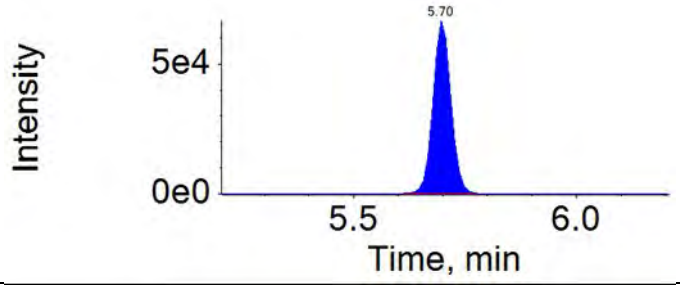
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



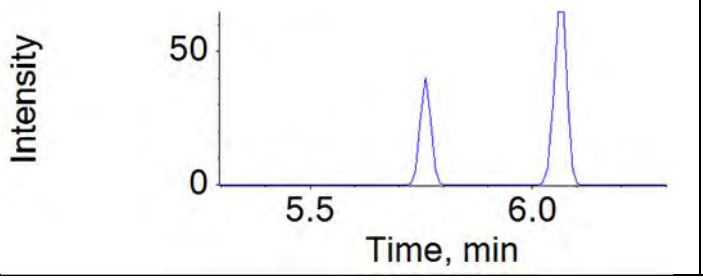


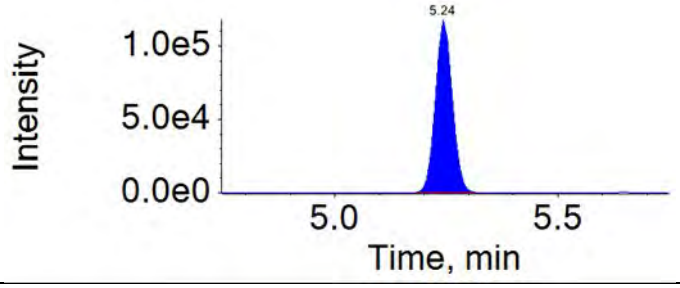
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



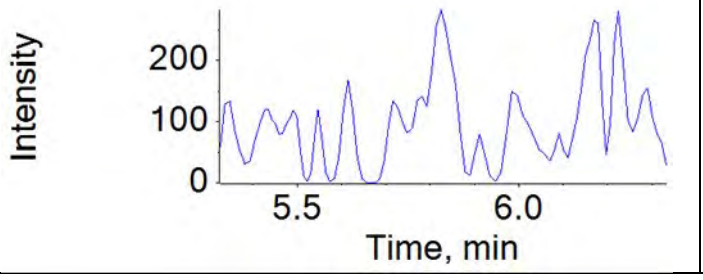


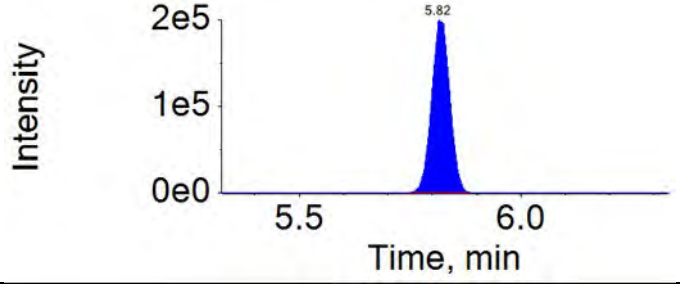
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



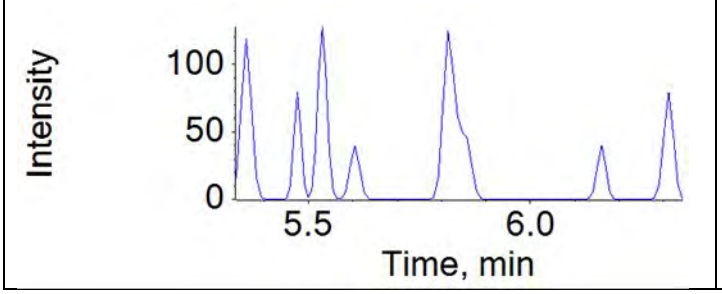


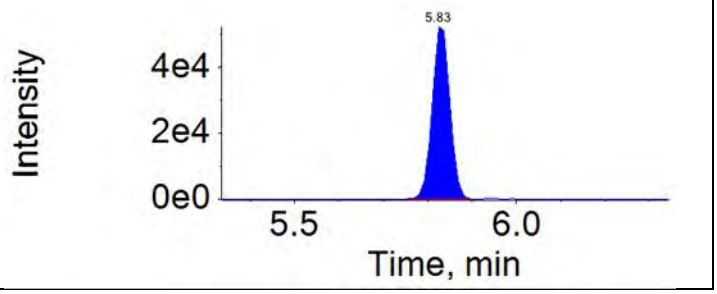
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

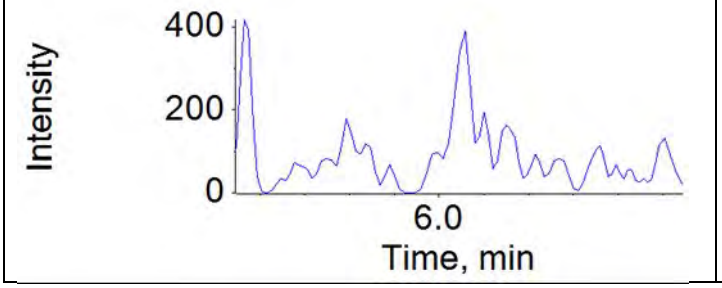
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

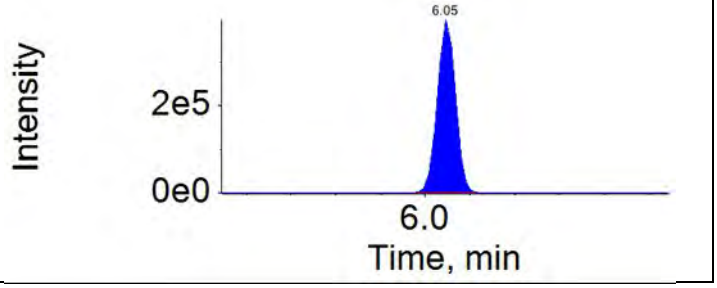
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



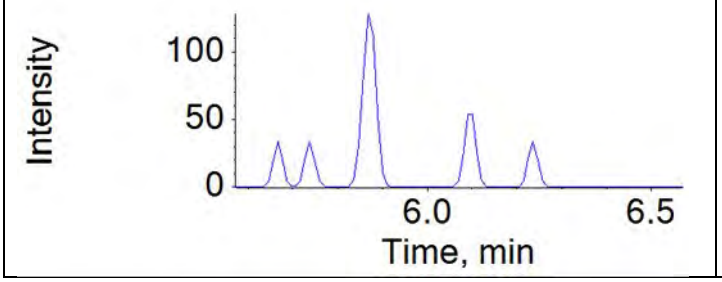


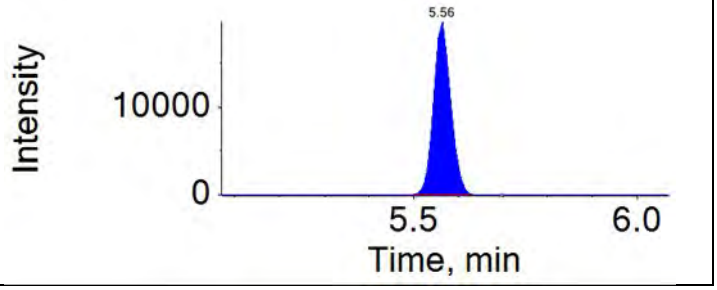
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



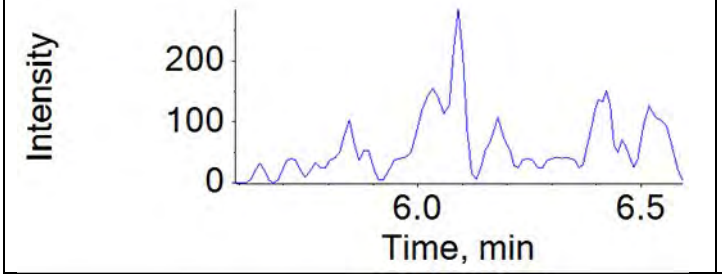


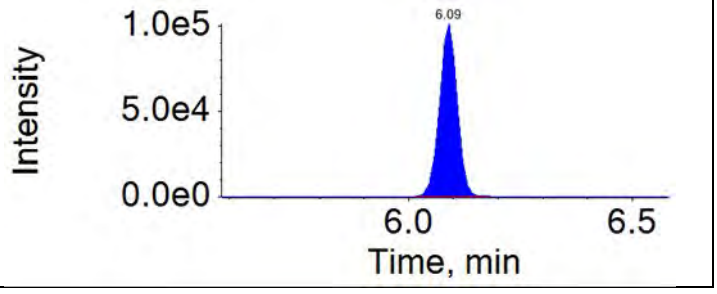
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



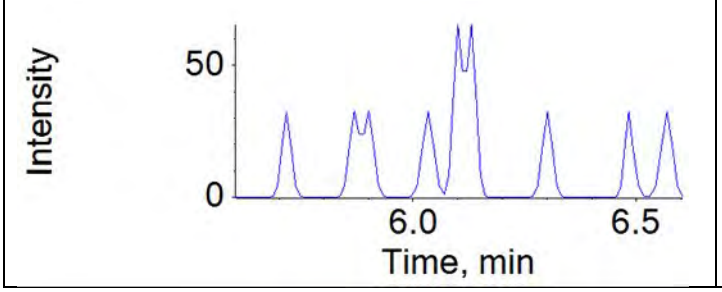


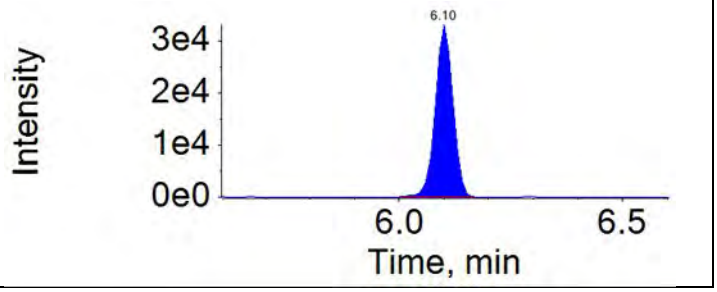
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

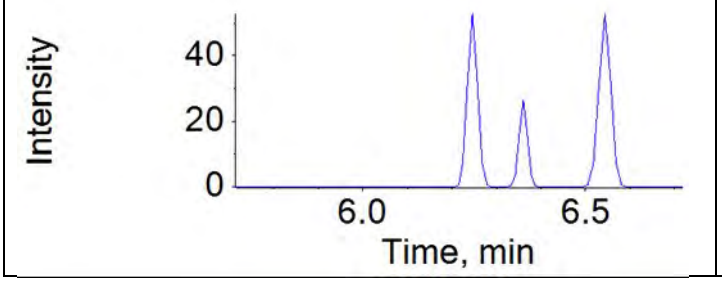
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

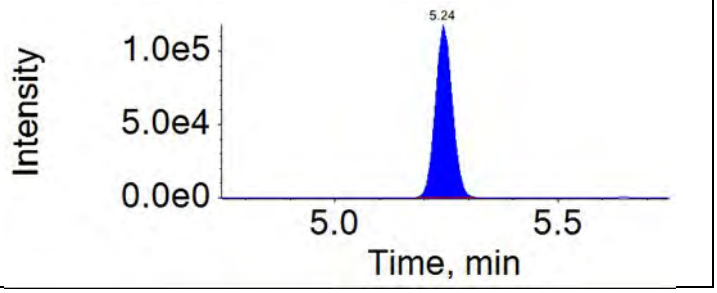
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



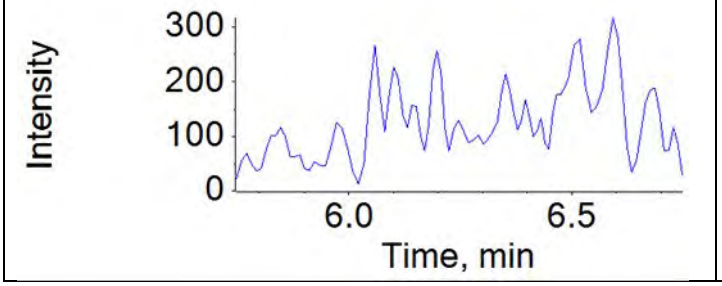


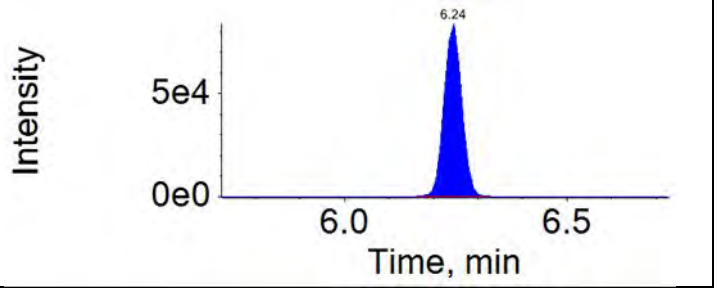
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



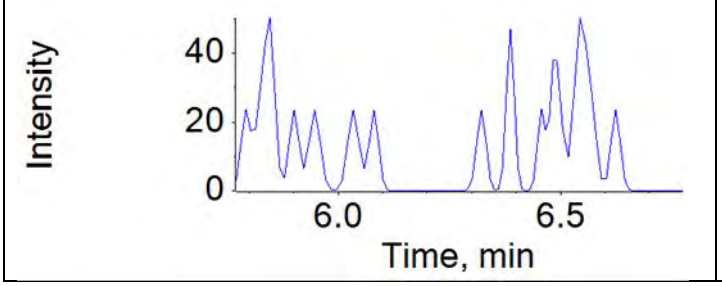


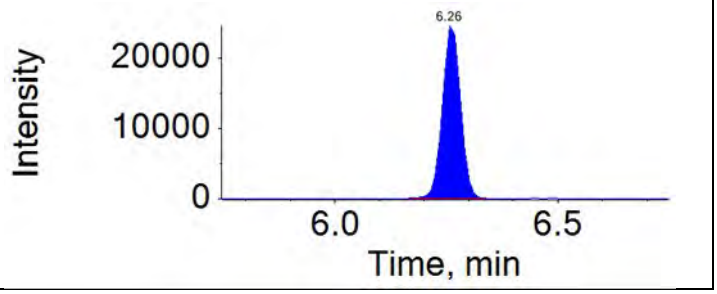
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



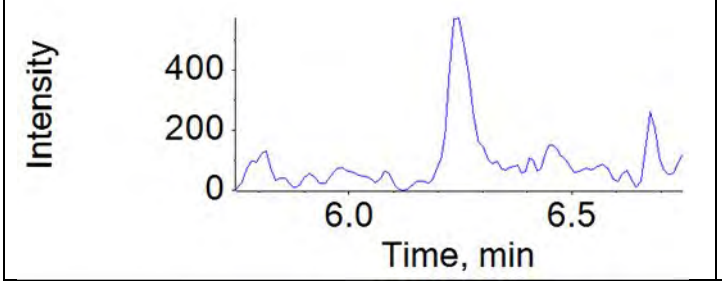


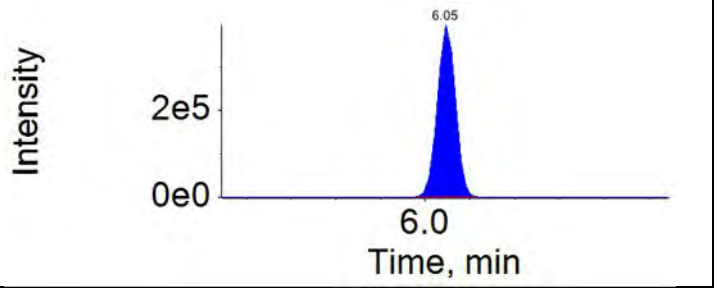
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

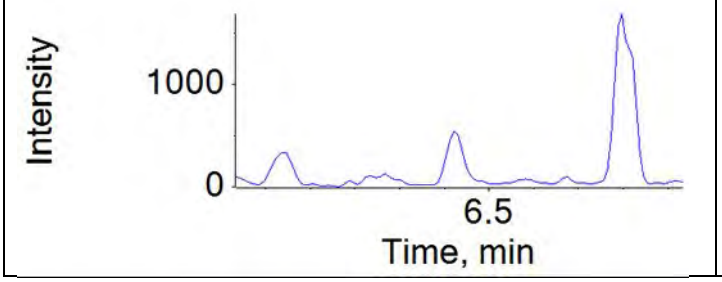
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

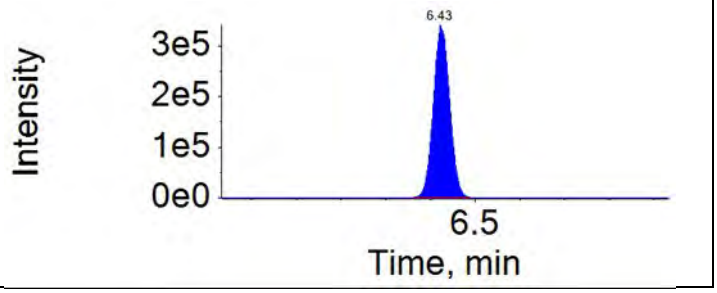
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



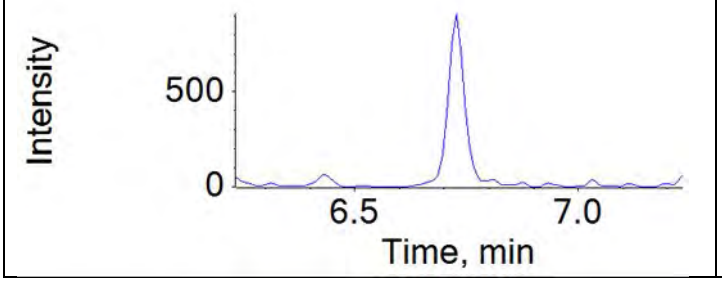


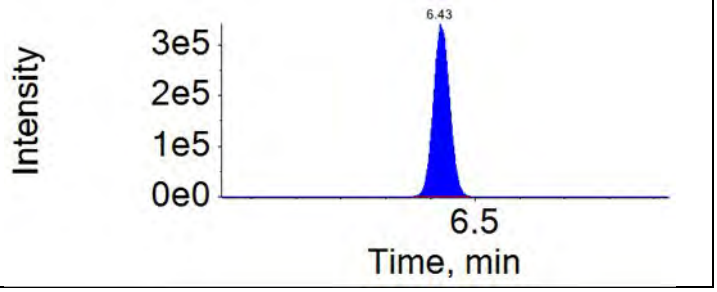
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



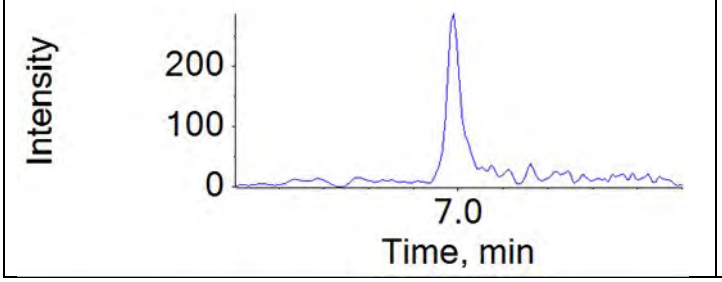


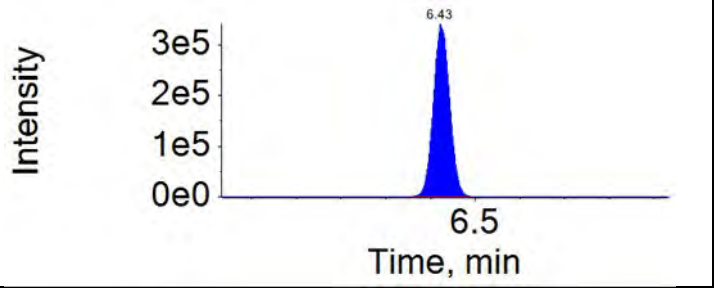
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



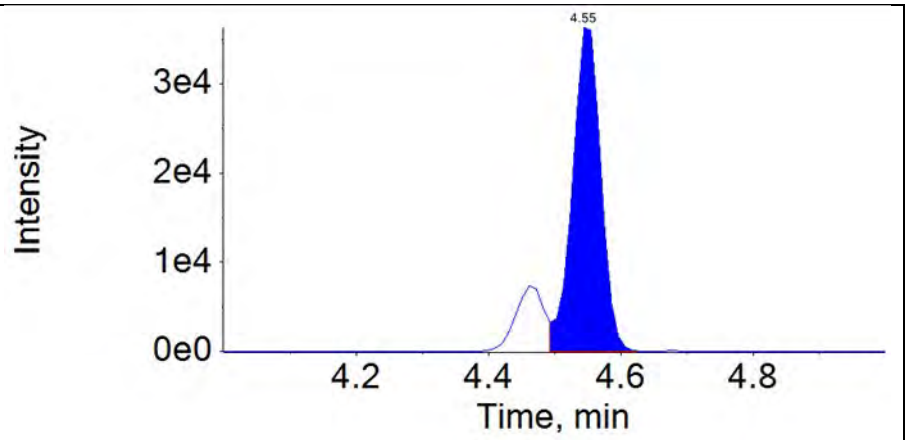


APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

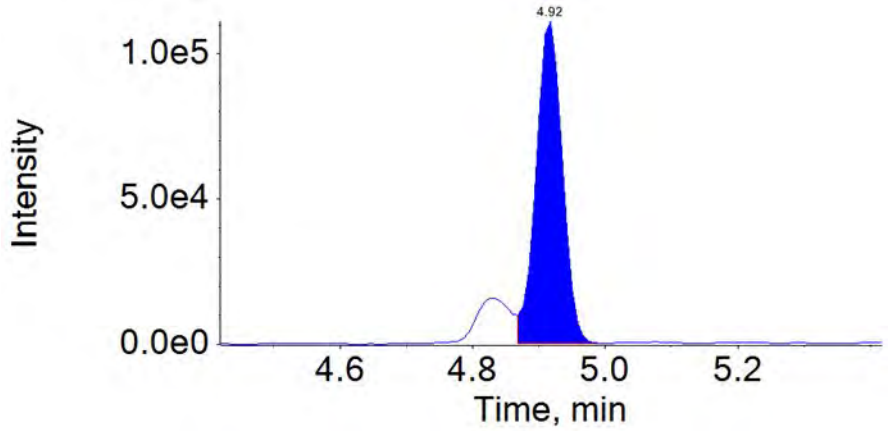
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.55
Peak Area:
108728.54
Mass Range:
399.0 / 80.0
File Name:
18NOV28DCAL-15.wiff
Sample Name:
L+B CAL3



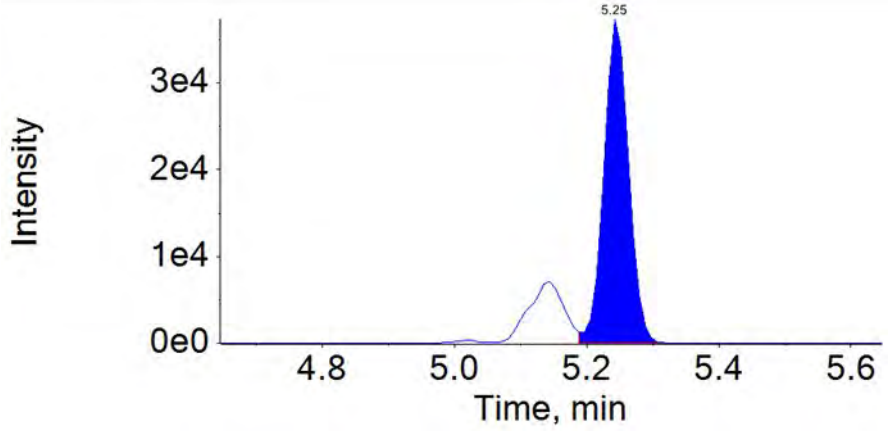
Integration Comment: incorrect integration

Component Name:
PFOA
RT (min.):
4.92
Peak Area:
305201.60
Mass Range:
413.0 / 369.0
File Name:
18NOV28DCAL-15.wiff
Sample Name:
L+B CAL3



Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
97091.30
Mass Range:
499.0 / 80.0
File Name:
18NOV28DCAL-15.wiff
Sample Name:
L+B CAL3



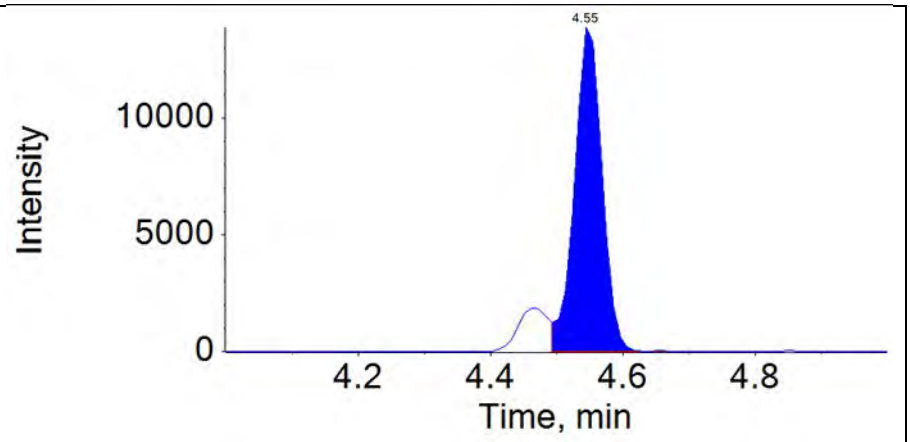
Integration Comment: incorrect integration

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

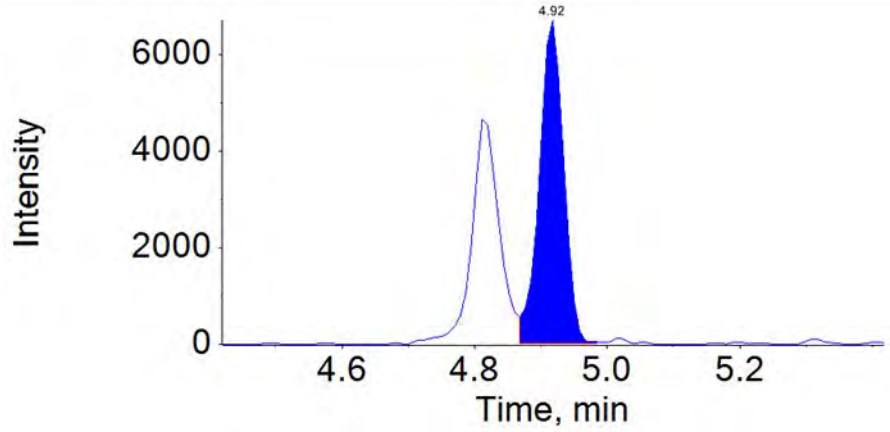
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS_2
RT (min.):
4.55
Peak Area:
40449.59
Mass Range:
399.0 / 99.0
File Name:
18NOV28DCAL-15.wiff
Sample Name:
L+B CAL3



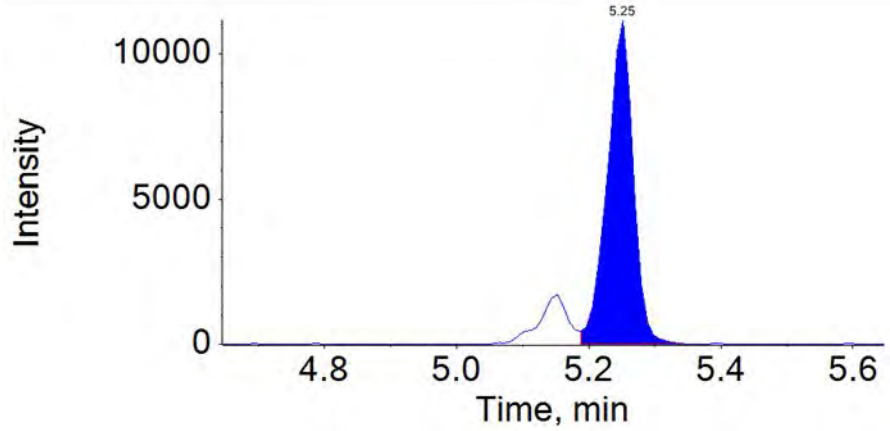
Integration Comment: incorrect integration

Component Name:
PFOA_2
RT (min.):
4.92
Peak Area:
17021.00
Mass Range:
413.0 / 169.0
File Name:
18NOV28DCAL-15.wiff
Sample Name:
L+B CAL3



Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.25
Peak Area:
30448.32
Mass Range:
499.0 / 99.0
File Name:
18NOV28DCAL-15.wiff
Sample Name:
L+B CAL3



Integration Comment: incorrect integration

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

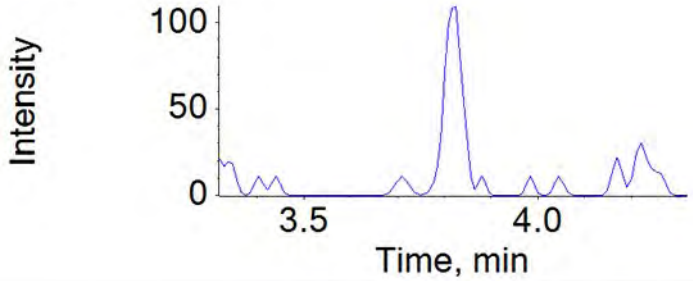
Sample Name: L+B CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-15.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	N/A	N/A	N/A	A	0.3655	N/A			
PFBS_2	N/A	N/A	N/A	A	0.3655	N/A		50	
4:2-FTS	N/A	N/A	N/A	A	0.6383	N/A			
4:2-FTS_2	N/A	N/A	N/A	A	0.6383	N/A		50	
PFHxA	N/A	N/A	N/A	A	0.0103	N/A			
PFHxA_2	N/A	N/A	N/A	A	0.0103	N/A		50	
PFPeS	N/A	N/A	N/A	A	0.4976	N/A			
PFPeS_2	N/A	N/A	N/A	A	0.4976	N/A		50	
PFHpA	N/A	N/A	N/A	A	0.0557	N/A			
PFHpA_2	N/A	N/A	N/A	A	0.0557	N/A		50	
PFHxS	4.55	1.00	130205.74	M	0.3693	0.3547			
PFHxS_2	4.55	1.00	46180.22	M	0.3693	0.3547	-4	50	
6:2-FTS	N/A	N/A	N/A	A	0.6625	N/A			
6:2-FTS_2	N/A	N/A	N/A	A	0.6625	N/A		50	
PFHpS	N/A	N/A	N/A	A	0.3915	N/A			
PFHpS_2	N/A	N/A	N/A	A	0.3915	N/A		50	
PFOA	4.92	1.00	363985.16	M	0.0573	0.0845			
PFOA_2	4.89	1.00	30759.31	M	0.0573	0.0845	48	50	
PFOS	5.25	1.00	124397.26	M	0.2960	0.2871			
PFOS_2	5.25	1.00	35708.41	M	0.2960	0.2871	-3	50	
PFNA	N/A	N/A	N/A	A	0.0201	N/A			
PFNA_2	N/A	N/A	N/A	A	0.0201	N/A		50	
PFNS	N/A	N/A	N/A	A	0.4794	N/A			
PFNS_2	N/A	N/A	N/A	A	0.4794	N/A		50	
PFDA	N/A	N/A	N/A	A	0.0075	N/A			
PFDA_2	N/A	N/A	N/A	A	0.0075	N/A		50	
8:2-FTS	N/A	N/A	N/A	A	0.5380	N/A			
8:2-FTS_2	N/A	N/A	N/A	A	0.5380	N/A		50	
NMeFOSAA	N/A	N/A	N/A	A	0.2305	N/A			
NMeFOSAA_2	N/A	N/A	N/A	A	0.2305	N/A		50	
PFDS	N/A	N/A	N/A	A	0.5356	N/A			
PFDS_2	N/A	N/A	N/A	A	0.5356	N/A		50	
PFUnDA	N/A	N/A	N/A	A	0.0038	N/A			
PFUnDA_2	N/A	N/A	N/A	A	0.0038	N/A		50	
NEtFOSAA	N/A	N/A	N/A	A	0.7356	N/A			
NEtFOSAA_2	N/A	N/A	N/A	A	0.7356	N/A		50	
PFDoDA	N/A	N/A	N/A	A	0.0130	N/A			
PFDoDA_2	N/A	N/A	N/A	A	0.0130	N/A		50	
10:2-FTS	N/A	N/A	N/A	A	0.6989	N/A			
10:2-FTS_2	N/A	N/A	N/A	A	0.6989	N/A		50	
PFTrDA	N/A	N/A	N/A	A	0.0090	N/A			
PFTrDA_2	N/A	N/A	N/A	A	0.0090	N/A		50	
PFTeDA	N/A	N/A	N/A	A	0.0056	N/A			
PFTeDA_2	N/A	N/A	N/A	A	0.0056	N/A		50	
PFHxDA	N/A	N/A	N/A	A	0.0646	N/A			
PFHxDA_2	N/A	N/A	N/A	A	0.0646	N/A		50	
PFODA	N/A	N/A	N/A	A	0.0264	N/A			
PFODA_2	N/A	N/A	N/A	A	0.0264	N/A		50	

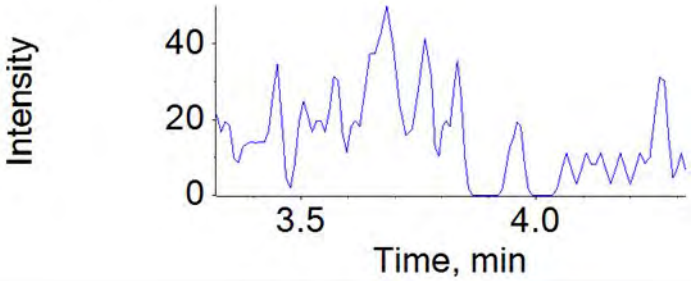
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

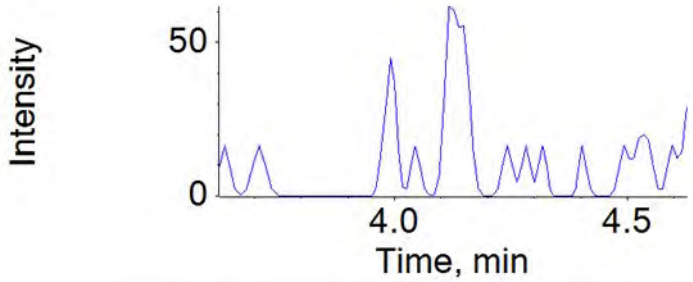
Component: PFBS
Primary Mass: 299.0 / 80.0



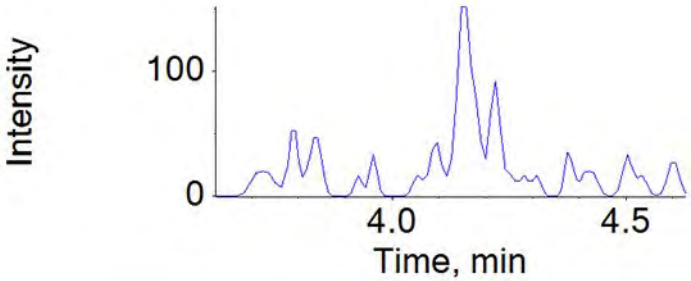
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



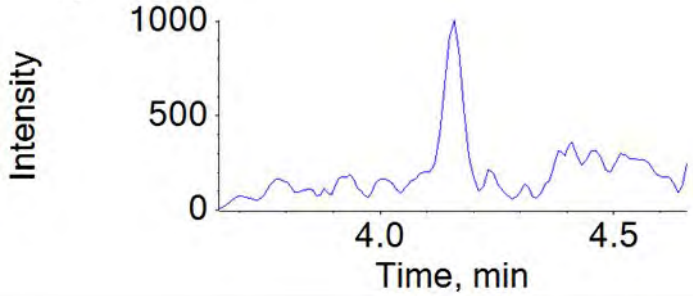
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



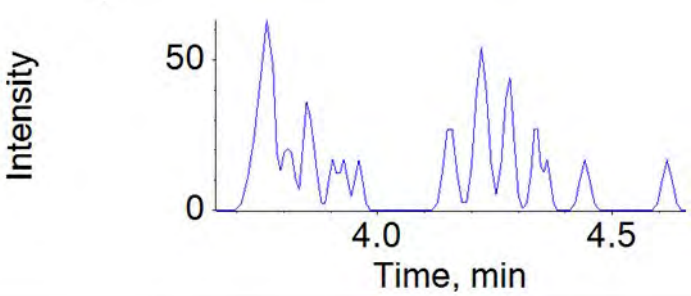
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



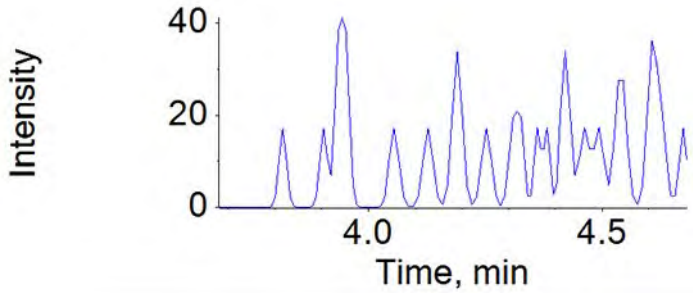
Component: PFHxA
Primary Mass: 313.0 / 269.0



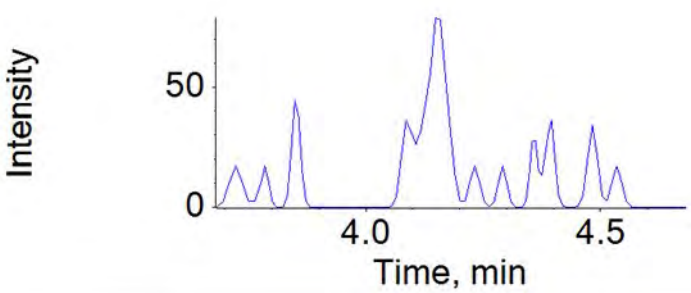
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



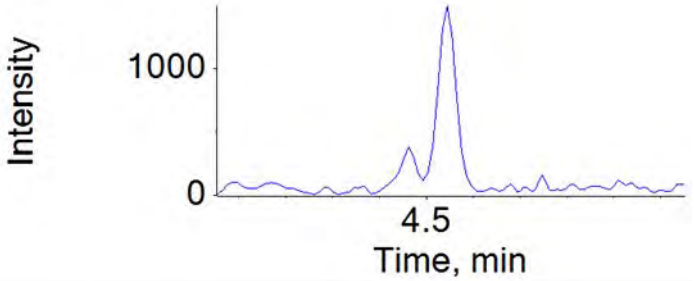
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



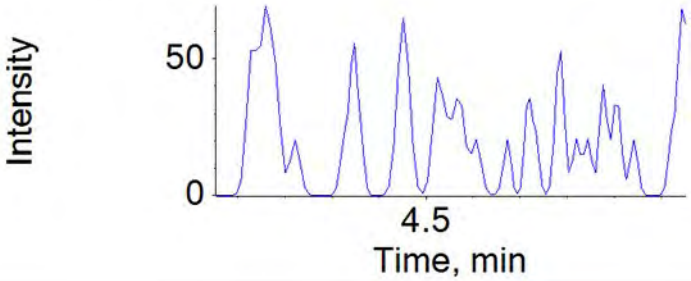
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

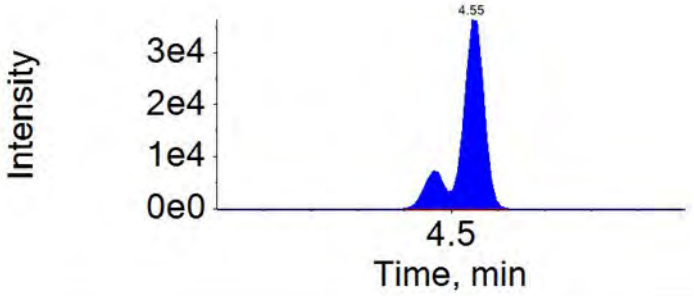
Component: PFHpA
Primary Mass: 363.0 / 319.0



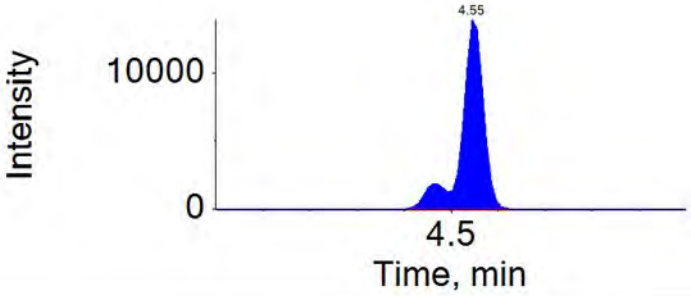
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



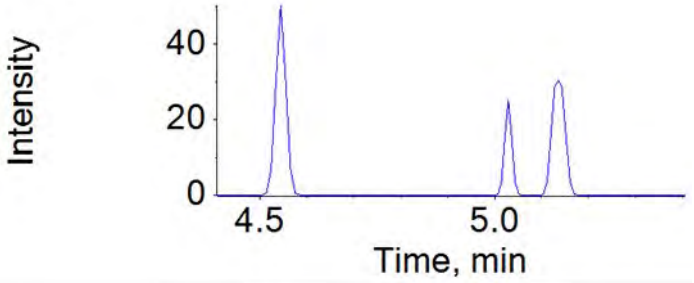
Component: PFHxS
Primary Mass: 399.0 / 80.0



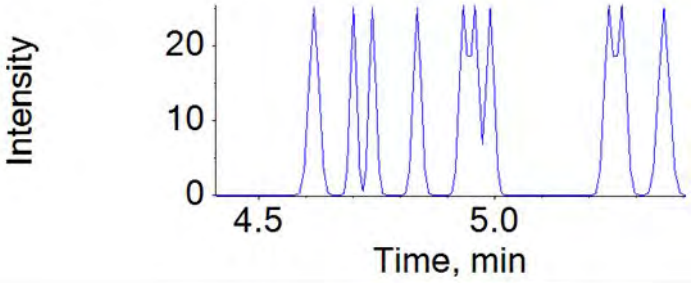
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



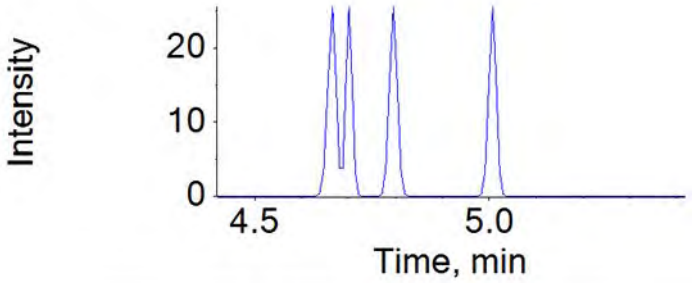
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



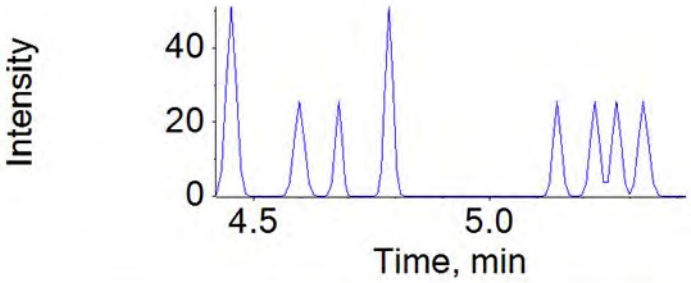
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



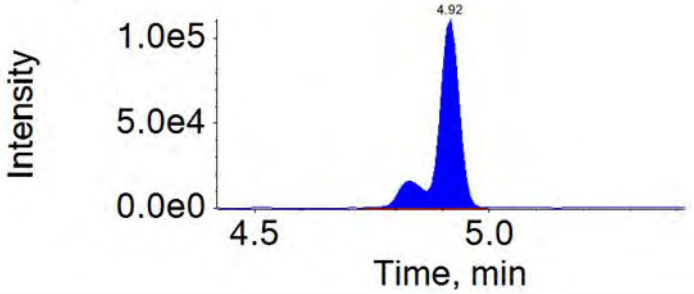
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



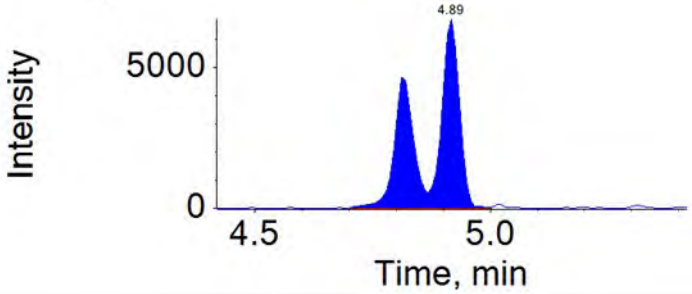
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

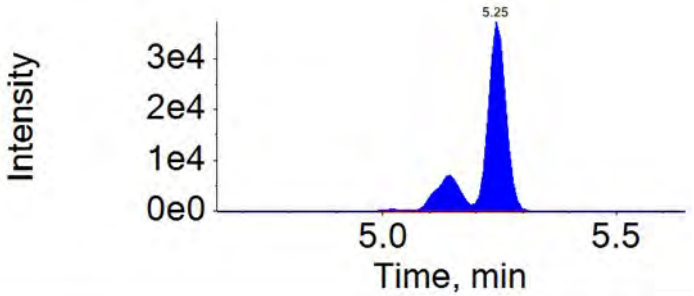
Component: PFOA
Primary Mass: 413.0 / 369.0



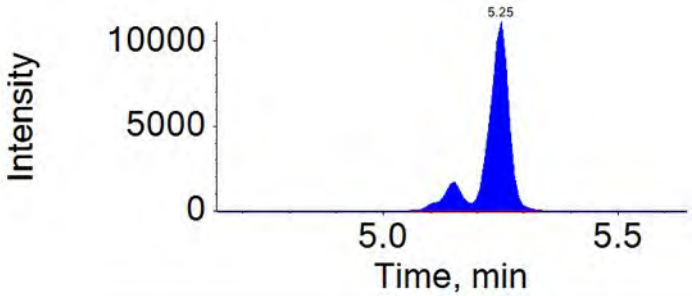
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



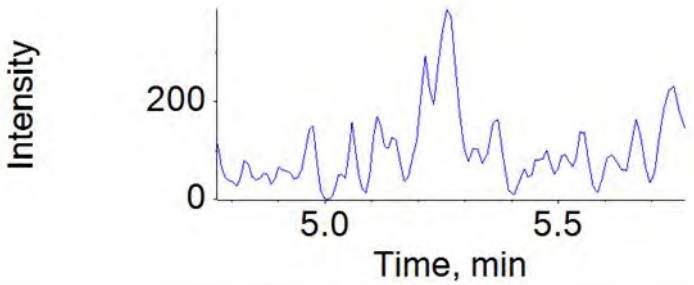
Component: PFOS
Primary Mass: 499.0 / 80.0



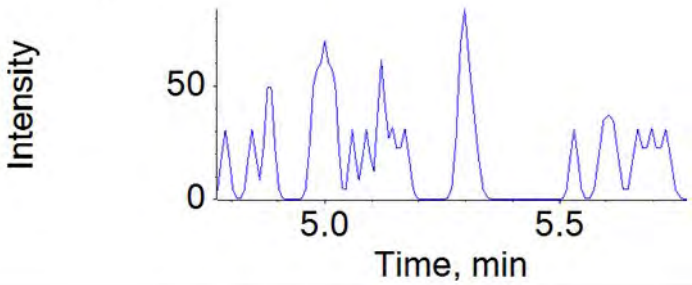
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



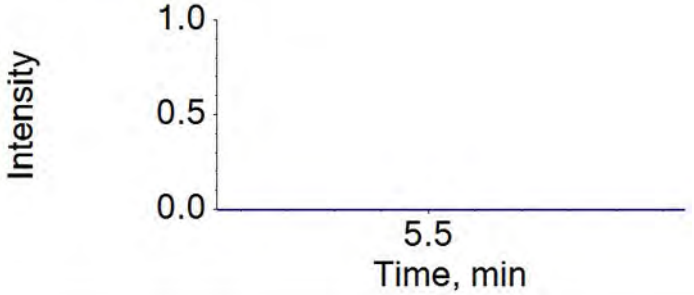
Component: PFNA
Primary Mass: 463.0 / 419.0



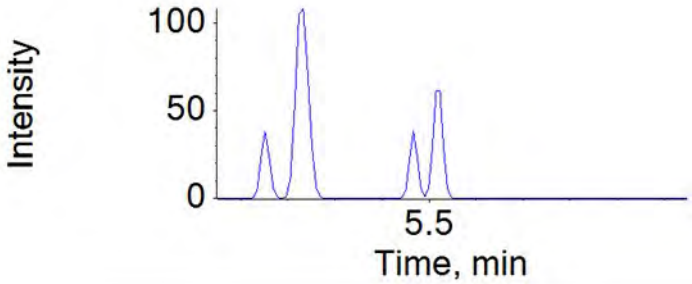
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



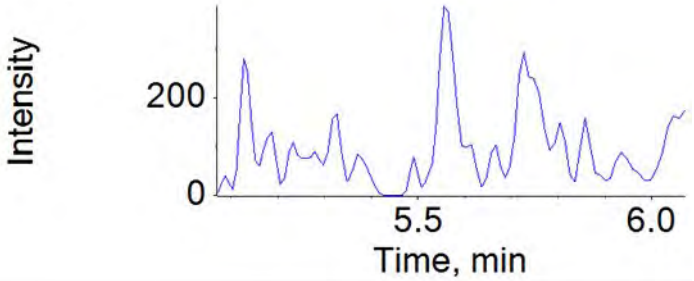
Component: PFNS
Primary Mass: 549.0 / 80.0



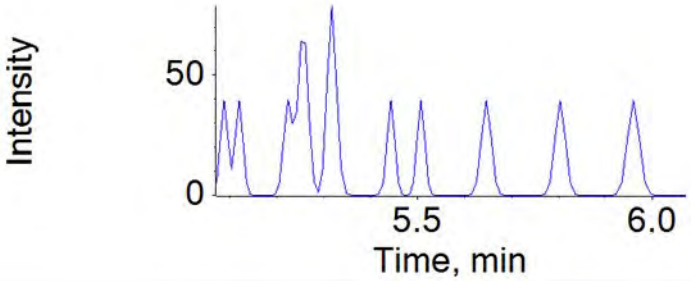
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



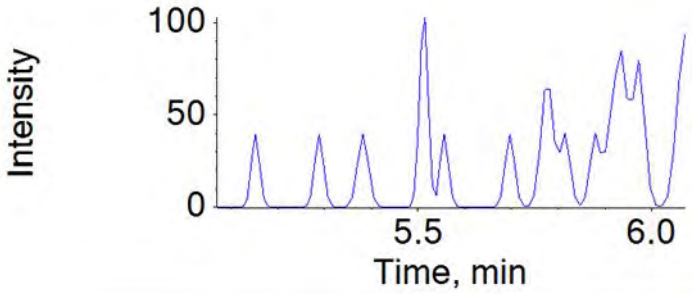
Component: PFDA
Primary Mass: 513.0 / 469.0



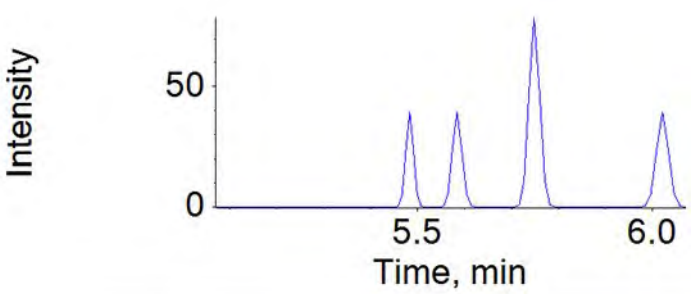
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



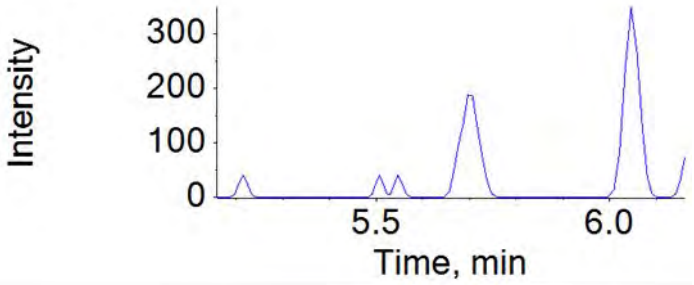
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



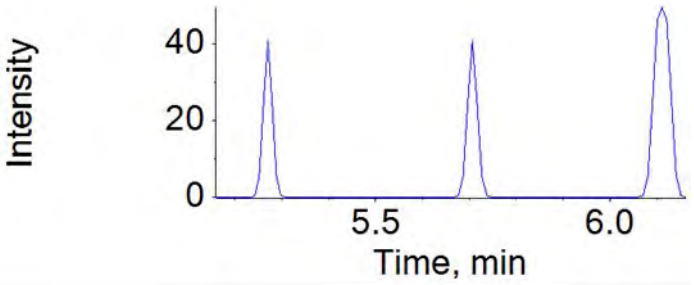
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



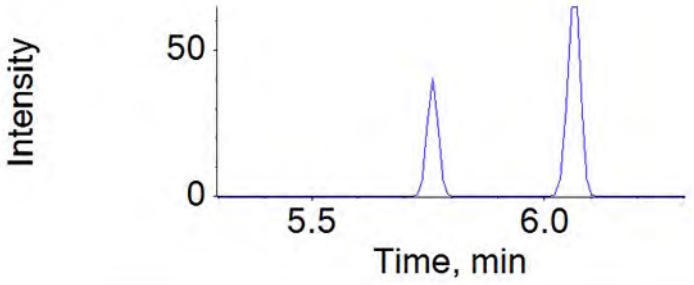
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



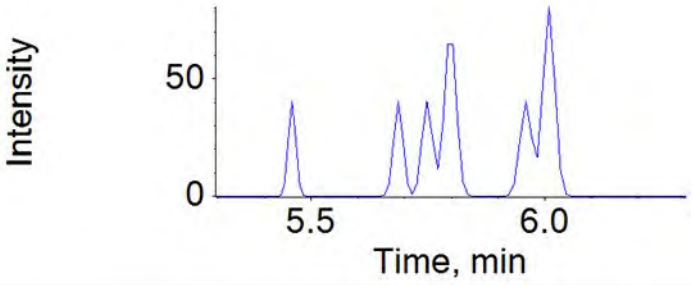
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



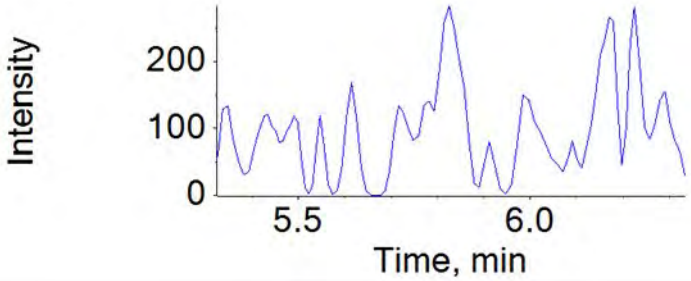
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



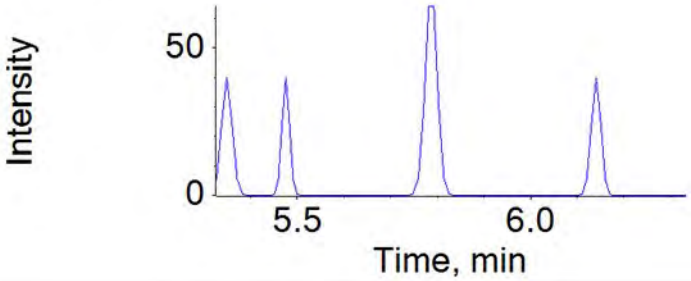
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

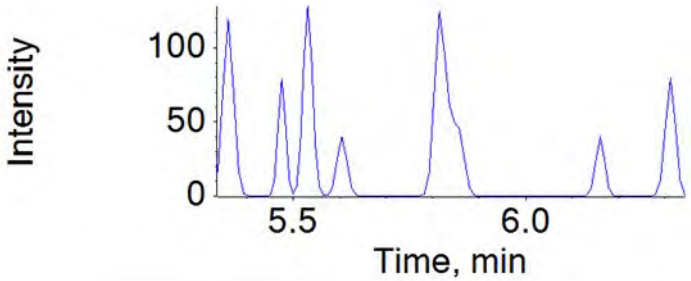
Component: PFUnDA
Primary Mass: 563.0 / 519.0



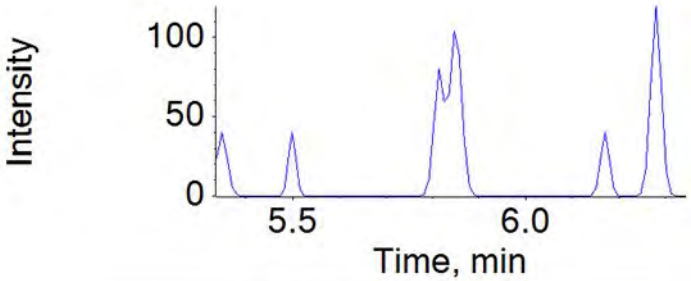
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



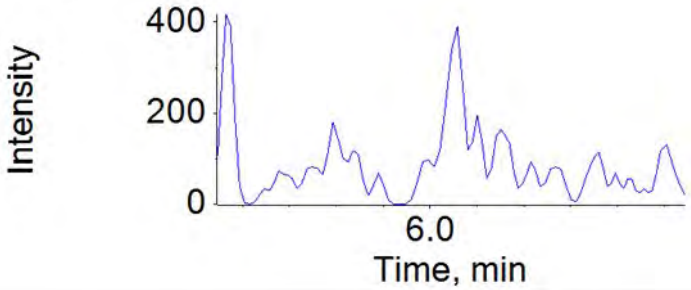
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



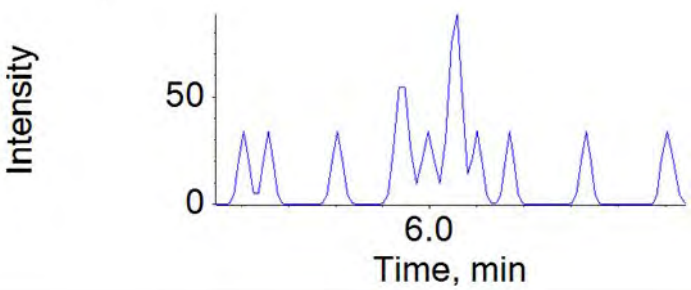
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



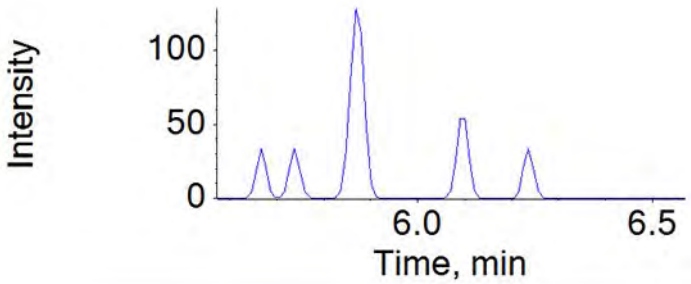
Component: PFDoDA
Primary Mass: 613.0 / 569.0



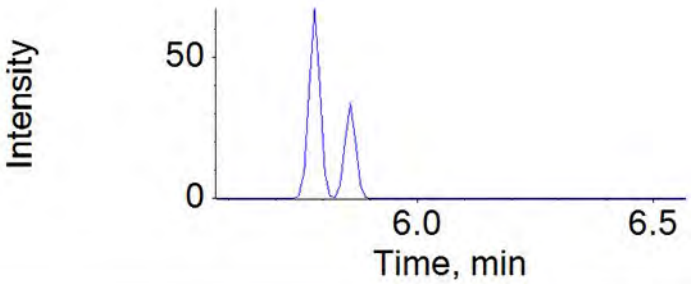
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



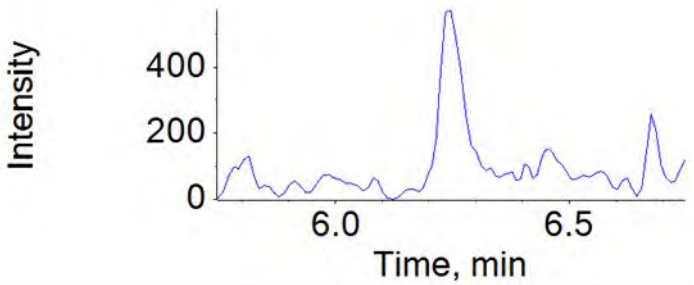
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



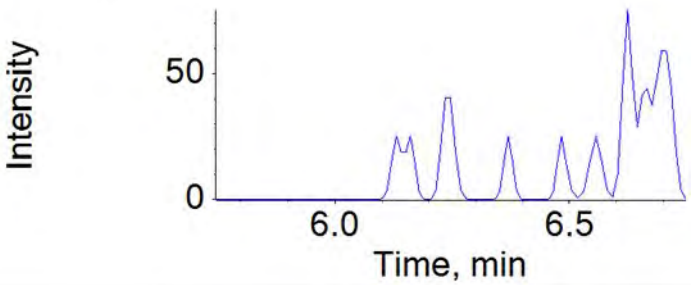
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

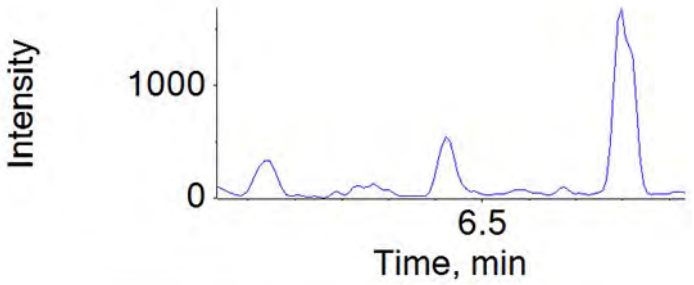
Component: PFTrDA
Primary Mass: 663.0 / 619.0



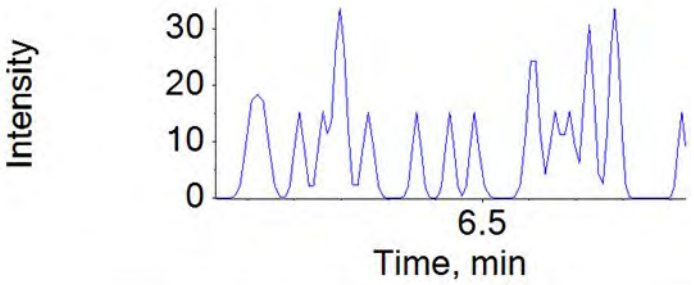
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



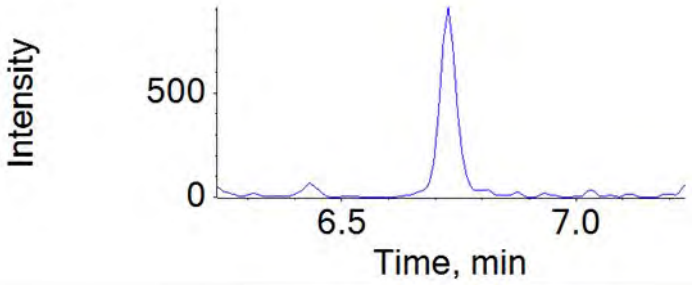
Component: PFTeDA
Primary Mass: 713.0 / 669.0



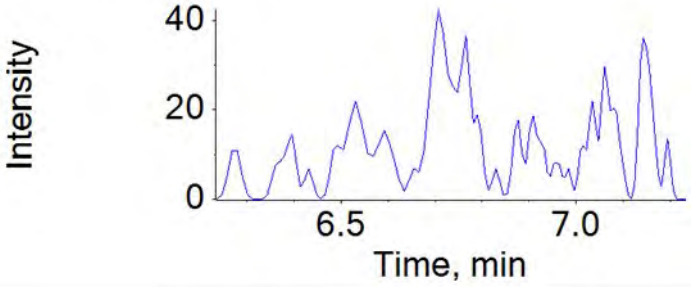
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



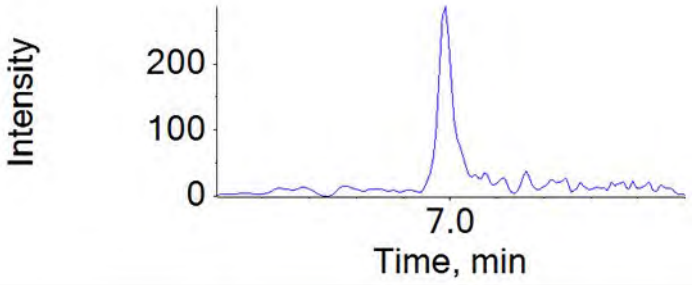
Component: PFHxDA
Primary Mass: 813.0 / 769.0



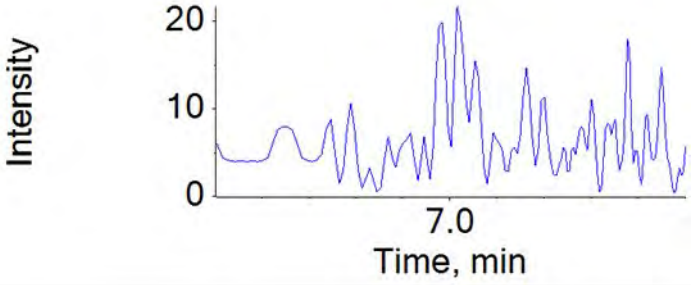
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



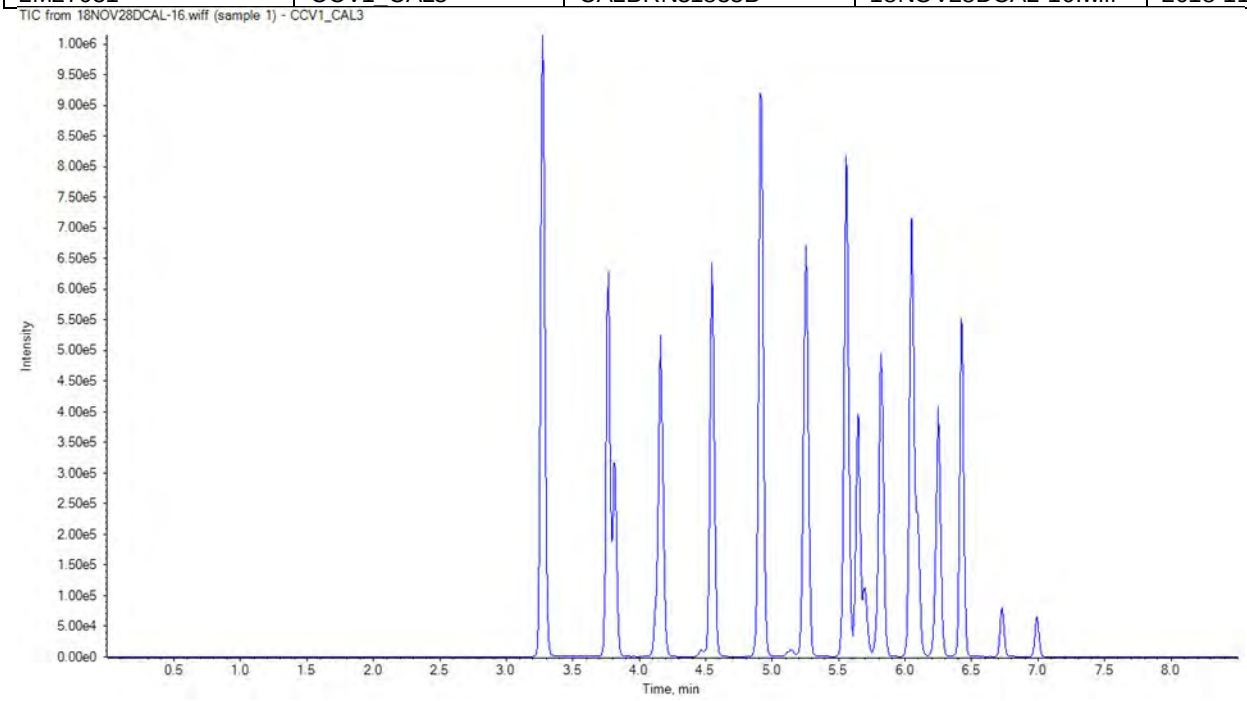
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV1_CAL3	CALBRN31833B	18NOV28DCAL-16.wiff	2018-11-28T15:12:25



Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	892121.8	887248.9	1	50	
13C2-PFOA	5.0	497344.6	498501.6	0	50	
13C4-PFOS	4.8	284800.9	283214.2	1	50	
13C2-PFDA	5.0	454750.4	441790.6	3	50	

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV1_CAL3	CALBRN31833B	18NOV28DCAL-16.wiff	2018-11-28T15:12:25

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	414227.9	10	13C4-PFBA	991560.8	5.0	0.418	3.27	1.000	2.000	2.290	15	30	
PFPeA	406639.4	11	13C5-PFPeA	929799.0	5.0	0.437	3.77	1.000	2.000	2.146	7	30	
PFBS	166250.1	10	13C3-PFBS	423837.8	4.7	0.392	3.82	1.000	1.770	1.904	8	30	
4:2-FTS	56074.3	12	13C2-4:2-FTS	71502.2	4.7	0.784	4.13	1.000	1.870	2.099	12	30	
PFHxA	390006.3	12	13C5-PFHxA	673646.8	5.0	0.579	4.16	1.000	2.000	2.324	16	30	
PFPeS	88012.7	11	13C3-PFBS	423837.8	4.7	0.208	4.18	1.100	1.880	2.100	12	30	
PFHpA	393155.9	12	13C4-PFHpA	569502.8	5.0	0.690	4.55	1.000	2.000	2.131	7	30	
PFHxS	124485.3	18	13C3-PFHxS	316482.8	4.7	0.393	4.55	1.000	1.820	1.842	1	30	
6:2-FTS	55151.1	11	13C2-6:2-FTS	61242.4	4.8	0.901	4.90	1.000	1.900	2.350	24	30	
PFHpS	131029.4	11	13C3-PFHxS	316482.8	4.7	0.414	4.91	1.080	1.900	2.066	9	30	
PFOA	408992.7	11	13C8-PFOA	983417.9	5.0	0.416	4.92	1.000	2.000	2.149	7	30	
PFOS	137181.4	22	13C8-PFOS	303782.8	4.8	0.452	5.24	1.000	1.850	1.894	2	30	
PFNA	376585.8	11	13C9-PFNA	609889.2	5.0	0.617	5.26	1.000	2.000	2.366	18	30	
PFNS	94448.6	11	13C8-PFOS	303782.8	4.8	0.311	5.54	1.060	1.920	1.963	2	30	
PFDA	356261.0	11	13C6-PFDA	847665.4	5.0	0.420	5.56	1.000	2.000	2.379	19	30	
8:2-FTS	52676.1	12	13C2-8:2-FTS	53005.7	4.8	0.994	5.56	1.000	1.920	1.874	-2	30	
PFOSA	260574.1	12	13C8-PFOSA	629466.4	5.0	0.414	5.65	1.000	2.000	2.097	5	30	
NMeFOSAA	60912.6	18	d3-NMeFOSAA	187136.0	5.0	0.325	5.70	1.000	2.000	2.076	4	30	
PFDS	79486.5	12	13C8-PFOS	303782.8	4.8	0.262	5.79	1.100	1.930	2.075	7	30	
PFUnDA	368116.8	11	13C7-PFUnDA	549493.3	5.0	0.670	5.82	1.000	2.000	2.395	20	30	
NEtFOSAA	56175.4	22	d5-NEtFOSAA	144117.8	5.0	0.390	5.83	1.000	2.000	1.898	-5	30	
PFDoDA	480438.7	11	13C2-PFDoDA	1057435.2	5.0	0.454	6.05	1.000	2.000	2.489	24	30	
10:2-FTS	53244.1	12	13C2-8:2-FTS	53005.7	4.8	1.004	6.06	1.090	1.930	2.215	15	30	
NMePFOSAE	131874.4	12	d7-NMePFOSAE	263888.3	5.0	0.500	6.10	1.000	2.000	2.103	5	30	
NMePFOSA	35042.2	11	d3-NMePFOSA	87880.7	5.0	0.399	6.11	1.000	2.000	2.114	6	30	
PFDoS	41532.8	11	13C8-PFOS	303782.8	4.8	0.137	6.22	1.190	1.940	1.963	1	30	
NEtPFOSAE	145278.6	11	d9-NEtPFOSAE	227340.4	5.0	0.639	6.26	1.000	2.000	2.299	15	30	
NEtPFOSA	31416.5	11	d5-NEtPFOSA	63430.0	5.0	0.495	6.27	1.000	2.000	2.220	11	30	
PFTrDA	453601.4	11	13C2-PFDoDA	1057435.2	5.0	0.429	6.25	1.030	2.000	2.586	29	30	
PFTeDA	333159.1	11	13C2-PFTeDA	823659.2	5.0	0.404	6.43	1.000	2.000	2.292	15	30	
PFHxDA	160272.7	11	13C2-PFTeDA	823659.2	5.0	0.195	6.73	1.050	2.000	2.224	11	30	
PFODA	137372.8	10	13C2-PFTeDA	823659.2	5.0	0.167	6.99	1.090	2.000	2.222	11	30	

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL
QMethod Name: 18AUG20QM
Result Table: 18NOV28DCAL 11/28/2018 4:47:11 PM
Acquisition Method: 18AUG13_3uL.dam

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV1_CAL3			**Data File:**		18NOV28DCAL-16.wiff
Sample ID:	CALBRN31833B			**Acquis Date:**		2018-11-28T15:12:25
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	5			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV28DCAL
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	892121.8	887248.9	1	50	
13C2-PFOA	5.0	497344.6	498501.6	0	50	
13C4-PFOS	4.8	284800.9	283214.2	1	50	
13C2-PFDA	5.0	454750.4	441790.6	3	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	991560.8	13C3-PFBA	892121.8	1.111	5.000	4.959	99	70-130	
E13C5-PFPeA	929799.0	13C3-PFBA	892121.8	1.042	5.000	4.867	97	70-130	
E13C3-PFBS	423837.8	13C3-PFBA	892121.8	0.475	4.650	4.533	97	70-130	
E13C2-4:2-FTS	71502.2	13C2-PFOA	497344.6	0.144	4.670	4.955	106	70-130	
E13C5-PFHxA	673646.8	13C2-PFOA	497344.6	1.354	5.000	4.975	100	70-130	
E13C3-PFHxS	316482.8	13C2-PFOA	497344.6	0.636	4.730	4.988	105	70-130	
E13C4-PFHpA	569502.8	13C2-PFOA	497344.6	1.145	5.000	5.262	105	70-130	
E13C2-6:2-FTS	61242.4	13C2-PFOA	497344.6	0.123	4.750	5.155	109	70-130	
E13C8-PFOA	983417.9	13C2-PFOA	497344.6	1.977	5.000	5.443	109	70-130	
E13C8-PFOS	303782.8	13C4-PFOS	284800.9	1.067	4.780	4.815	101	70-130	
E13C9-PFNA	609889.2	13C4-PFOS	284800.9	2.141	5.000	4.703	94	70-130	
E13C6-PFDA	847665.4	13C2-PFDA	454750.4	1.864	5.000	5.256	105	70-130	
E13C2-8:2-FTS	53005.7	13C2-PFDA	454750.4	0.117	4.790	5.010	105	70-130	
E13C8-PFOSA	629466.4	13C2-PFDA	454750.4	1.384	5.000	5.079	102	70-130	
Ed3-NMeFOSAA	187136.0	13C2-PFDA	454750.4	0.412	5.000	5.225	104	70-130	
E13C7-PFUnDA	549493.3	13C2-PFDA	454750.4	1.208	5.000	5.107	102	70-130	
Ed5-NEtFOSAA	144117.8	13C2-PFDA	454750.4	0.317	5.000	5.646	113	70-130	
E13C2-PFDoDA	1057435.2	13C2-PFDA	454750.4	2.325	5.000	4.886	98	70-130	
Ed7-NMePFOSAE	263888.3	13C2-PFDA	454750.4	0.580	5.000	5.015	100	70-130	
Ed3-NMePFOSA	87880.7	13C2-PFDA	454750.4	0.193	5.000	5.230	105	70-130	
Ed9-NEtPFOSAE	227340.4	13C2-PFDA	454750.4	0.500	5.000	5.068	101	70-130	
Ed5-NEtPFOSA	63430.0	13C2-PFDA	454750.4	0.139	5.000	4.847	97	70-130	
E13C2-PFTeDA	823659.2	13C2-PFDA	454750.4	1.811	5.000	5.012	100	70-130	

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

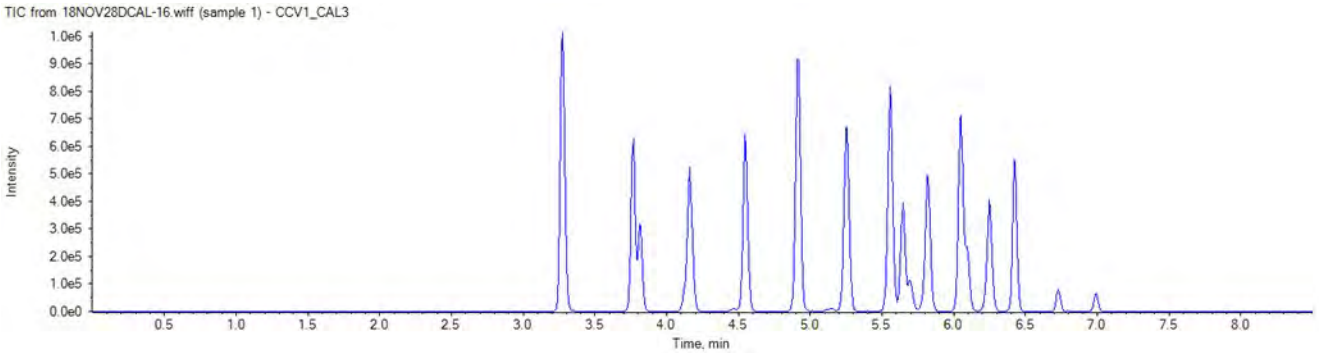
Analyte Quantitation Peak Table

Sample Name: CCV1_CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-16.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	414227.9		A	13C4-PFBA	3.27	991560.8	0.418	2.290
PFPeA	3.77	1.000	406639.4		A	13C5-PFPeA	3.77	929799.0	0.437	2.146
PFBS	3.82	1.000	166250.1		A	13C3-PFBS	3.82	423837.8	0.392	1.904
4:2-FTS	4.13	1.000	56074.3		A	13C2-4:2-FTS	4.13	71502.2	0.784	2.099
PFHxA	4.16	1.000	390006.3		A	13C5-PFHxA	4.16	673646.8	0.579	2.324
PFPeS	4.18	1.100	88012.7		A	13C3-PFBS	3.82	423837.8	0.208	2.100
PFHpA	4.55	1.000	393155.9		A	13C4-PFHpA	4.55	569502.8	0.690	2.131
PFHxS	4.55	1.000	124485.3		M	13C3-PFHxS	4.55	316482.8	0.393	1.842
6:2-FTS	4.90	1.000	55151.1		A	13C2-6:2-FTS	4.91	61242.4	0.901	2.350
PFHpS	4.91	1.080	131029.4		A	13C3-PFHxS	4.55	316482.8	0.414	2.066
PFOA	4.92	1.000	408992.7		A	13C8-PFOA	4.92	983417.9	0.416	2.149
PFOS	5.24	1.000	137181.4		M	13C8-PFOS	5.24	303782.8	0.452	1.894
PFNA	5.26	1.000	376585.8		A	13C9-PFNA	5.26	609889.2	0.617	2.366
PFNS	5.54	1.060	94448.6		A	13C8-PFOS	5.24	303782.8	0.311	1.963
PFDA	5.56	1.000	356261.0		A	13C6-PFDA	5.56	847665.4	0.420	2.379
8:2-FTS	5.56	1.000	52676.1		A	13C2-8:2-FTS	5.56	53005.7	0.994	1.874
PFOSA	5.65	1.000	260574.1		A	13C8-PFOSA	5.65	629466.4	0.414	2.097
NMeFOSAA	5.70	1.000	60912.6		M	d3-NMeFOSAA	5.70	187136.0	0.325	2.076
PFDS	5.79	1.100	79486.5		A	13C8-PFOS	5.24	303782.8	0.262	2.075
PFUnDA	5.82	1.000	368116.8		A	13C7-PFUnDA	5.82	549493.3	0.670	2.395
NEtFOSAA	5.83	1.000	56175.4		M	d5-NEtFOSAA	5.83	144117.8	0.390	1.898
PFDoDA	6.05	1.000	480438.7		A	13C2-PFDoDA	6.05	1057435.2	0.454	2.489
10:2-FTS	6.06	1.090	53244.1		A	13C2-8:2-FTS	5.56	53005.7	1.004	2.215
NMePFOSAE	6.10	1.000	131874.4		A	d7-NMePFOSAE	6.09	263888.3	0.500	2.103
NMePFOSA	6.11	1.000	35042.2		A	d3-NMePFOSA	6.10	87880.7	0.399	2.114
PFDoS	6.22	1.190	41532.8		A	13C8-PFOS	5.24	303782.8	0.137	1.963
NEtPFOSAE	6.26	1.000	145278.6		A	d9-NEtPFOSAE	6.24	227340.4	0.639	2.299
NEtPFOSA	6.27	1.000	31416.5		A	d5-NEtPFOSA	6.26	63430.0	0.495	2.220
PFTrDA	6.25	1.030	453601.4		A	13C2-PFDoDA	6.05	1057435.2	0.429	2.586
PFTeDA	6.43	1.000	333159.1		A	13C2-PFTeDA	6.43	823659.2	0.404	2.292
PFHxDA	6.73	1.050	160272.7		A	13C2-PFTeDA	6.43	823659.2	0.195	2.224
PFODA	6.99	1.090	137372.8		A	13C2-PFTeDA	6.43	823659.2	0.167	2.222

Total Ion Chromatogram

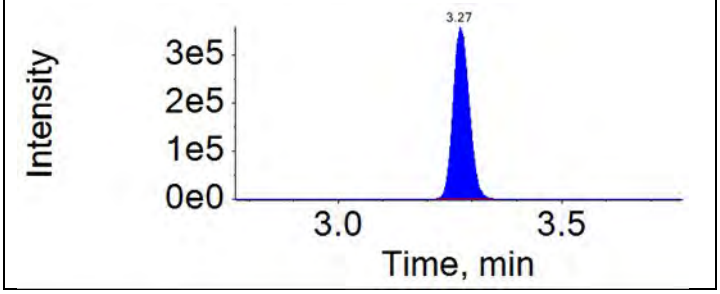


APPROVED
By MCD at 5:01 pm, 11/28/18

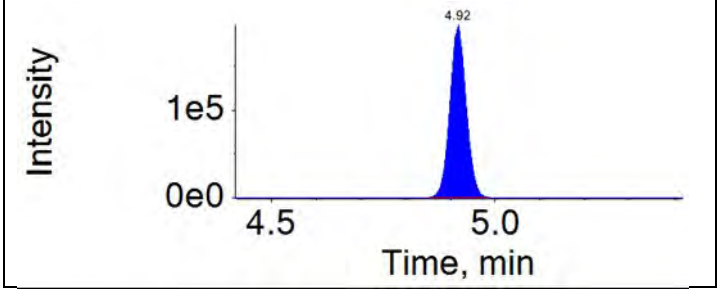
REVIEWED
By HMK at 12:22 pm, 11/29/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

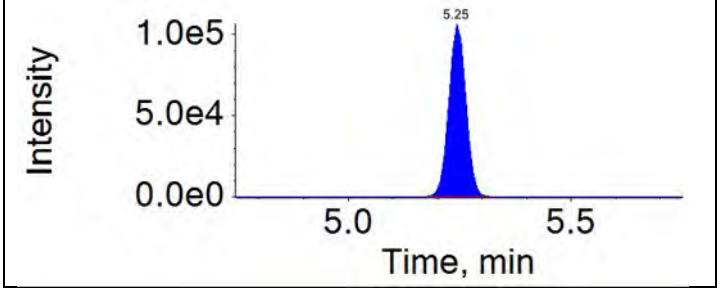
Injection Standard: 13C3-PFBA
216.0 / 172.0



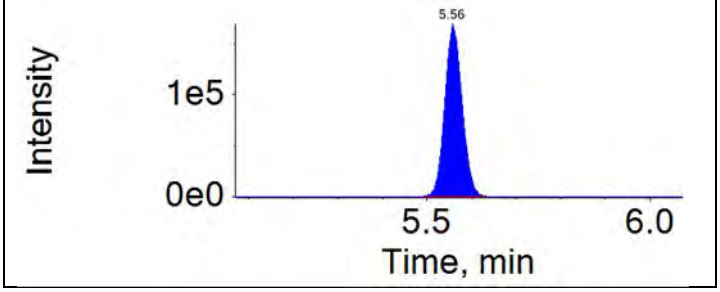
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

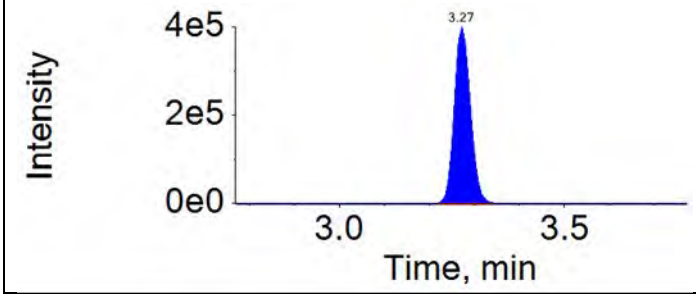


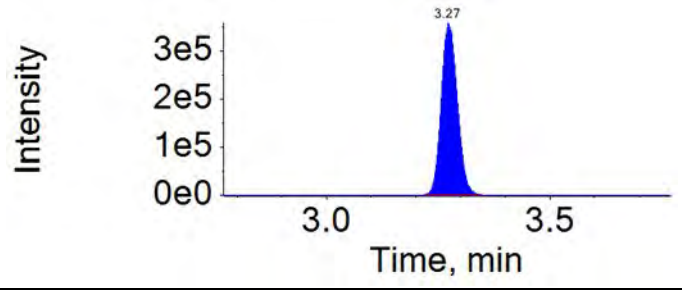
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

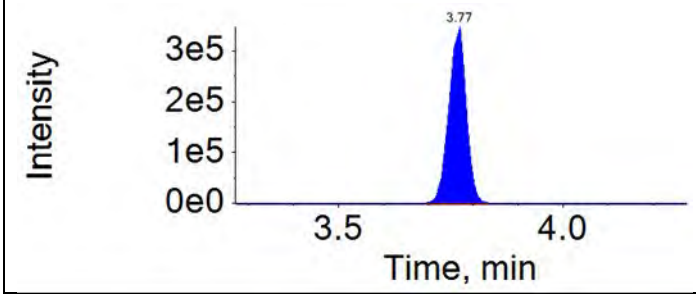
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

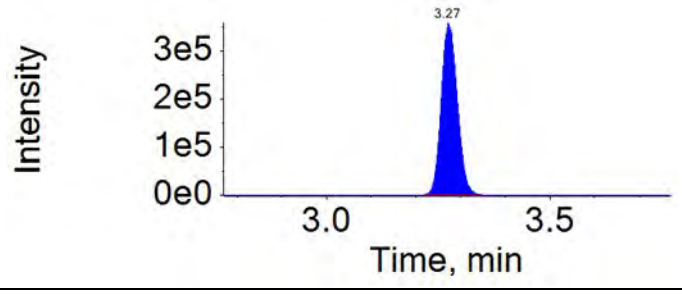
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



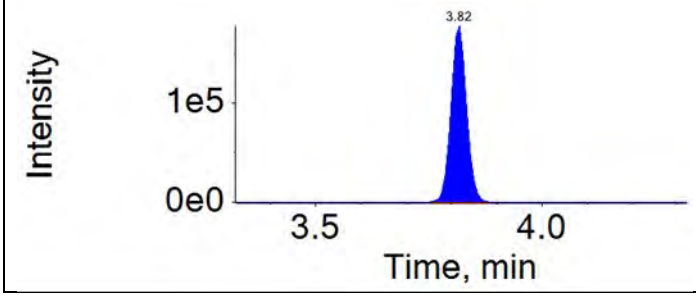


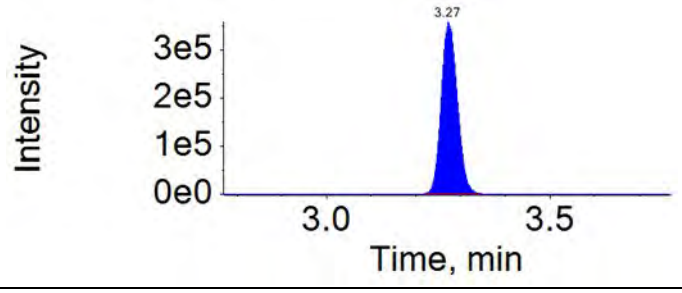
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



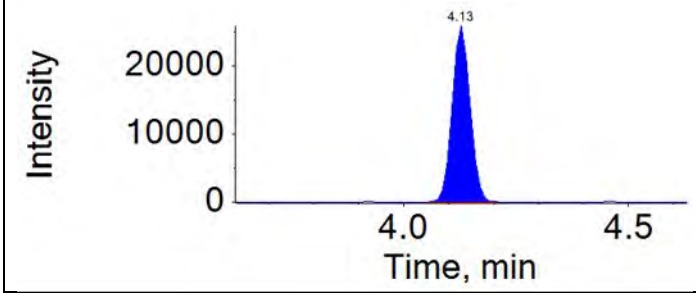


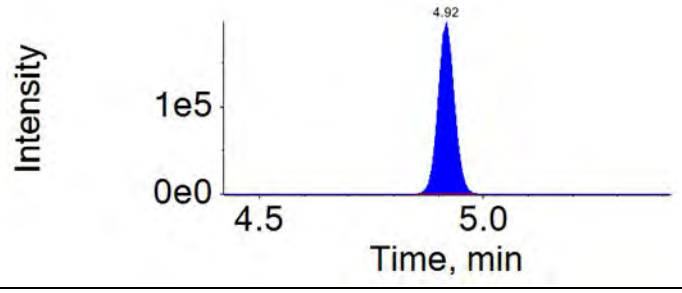
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





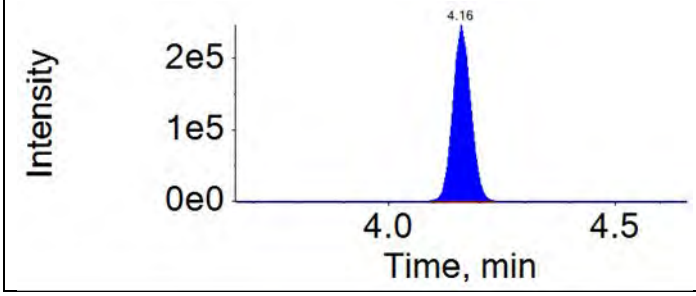
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

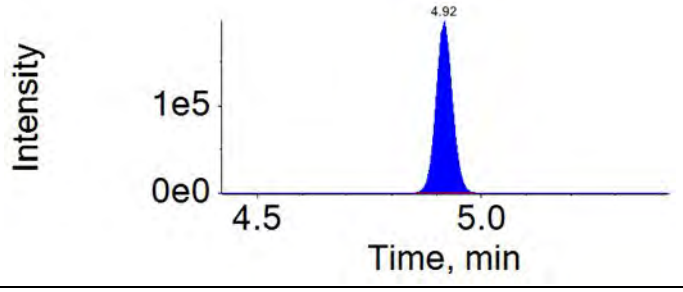




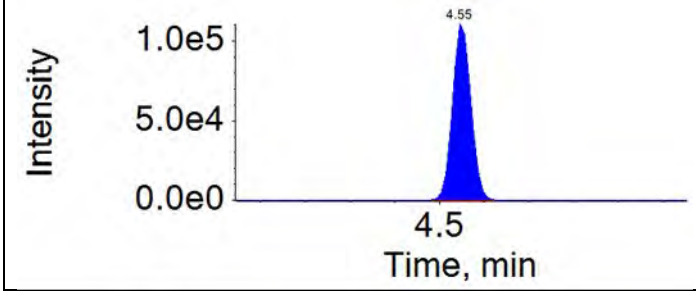
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

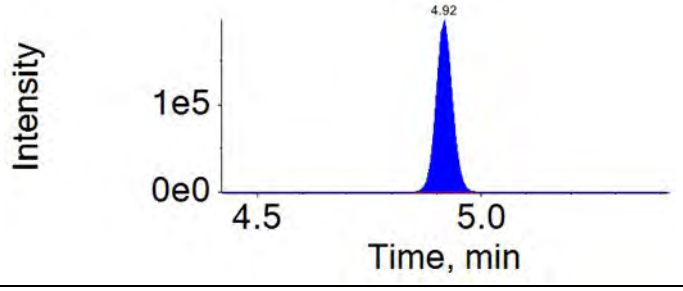
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



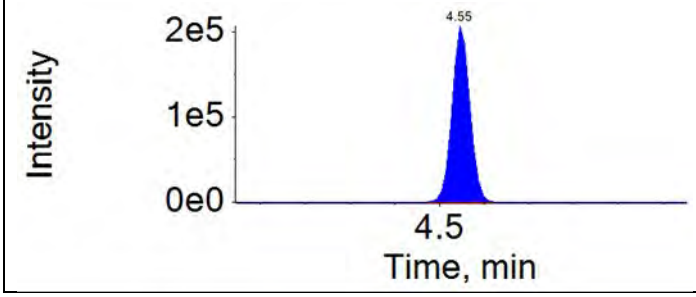


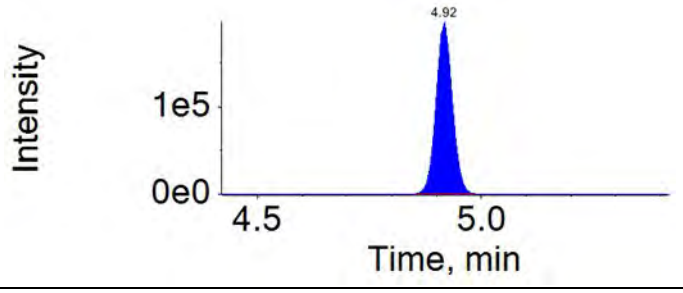
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



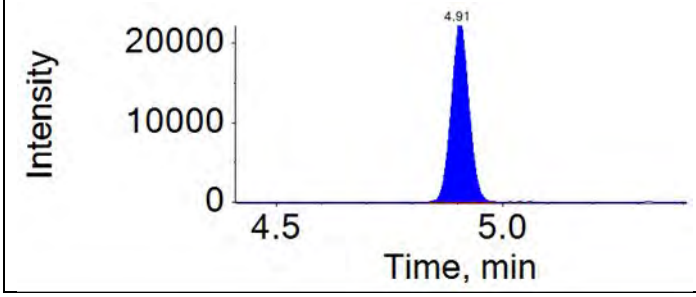


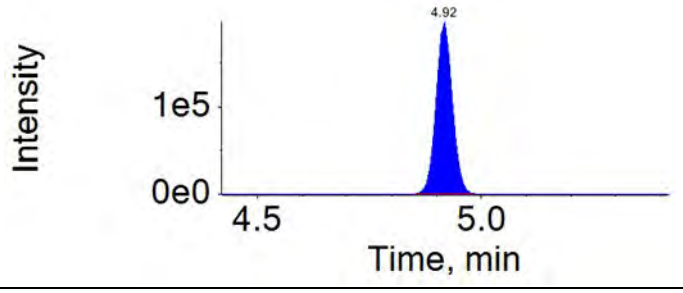
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0



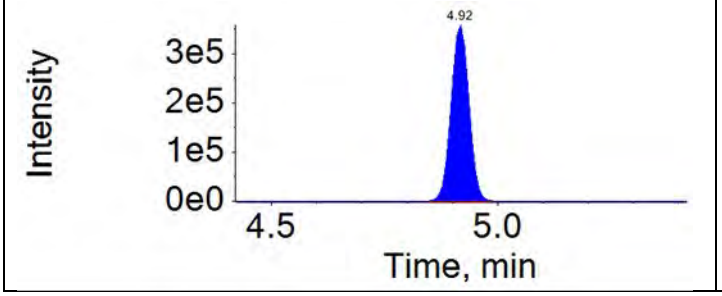


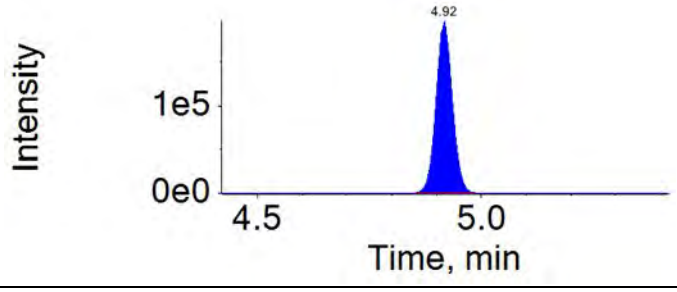
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

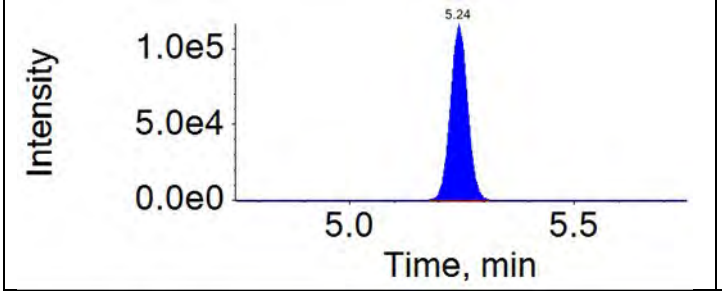
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

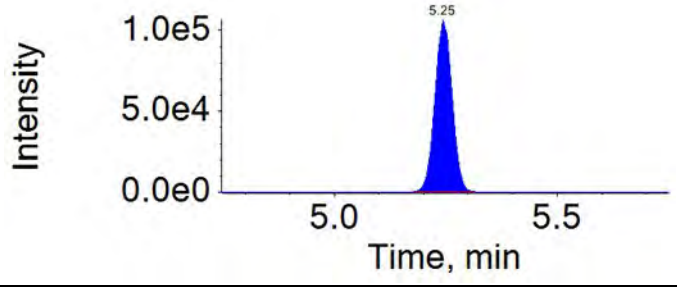
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0



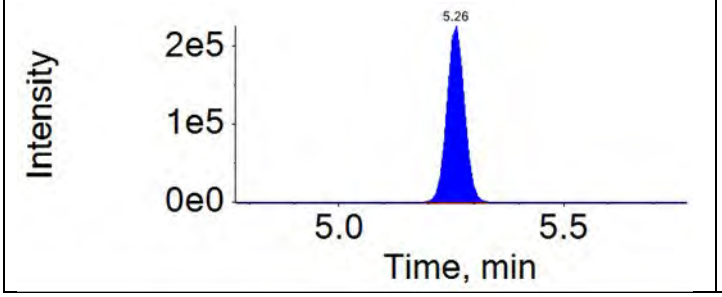


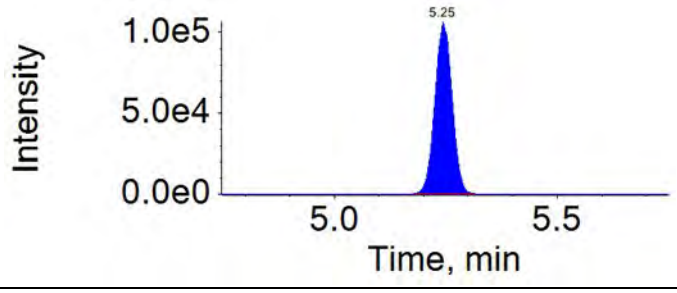
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0



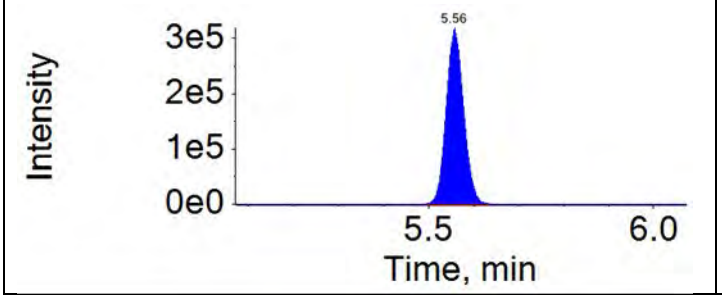


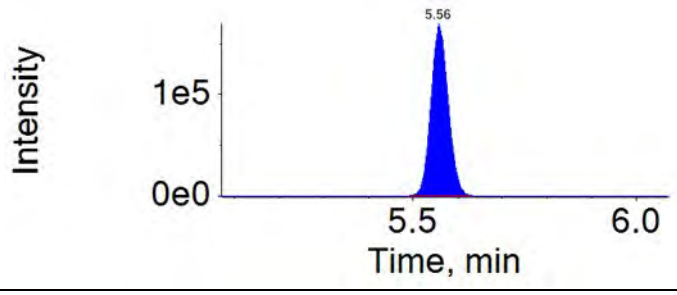
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0





Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0



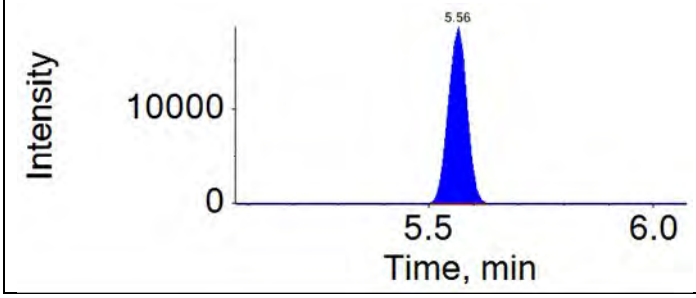


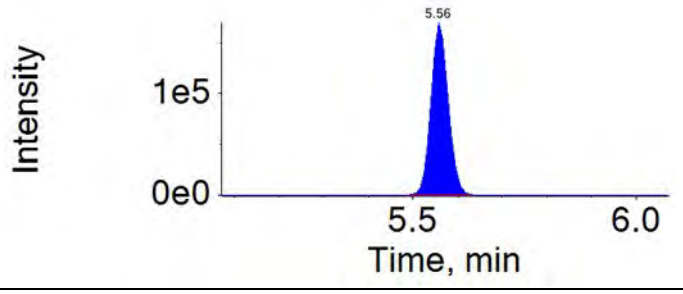
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

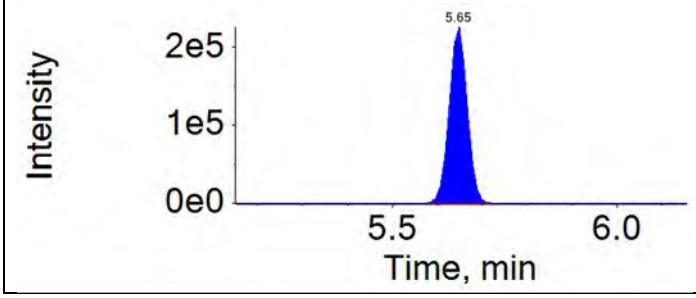
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

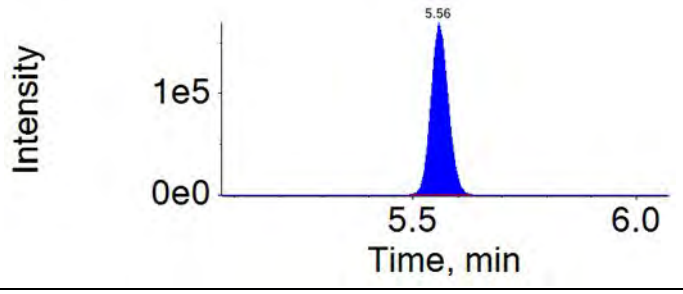
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



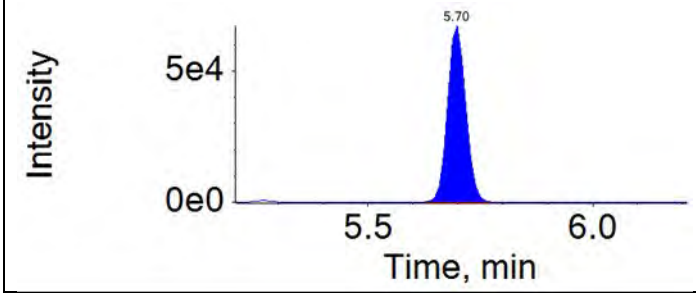


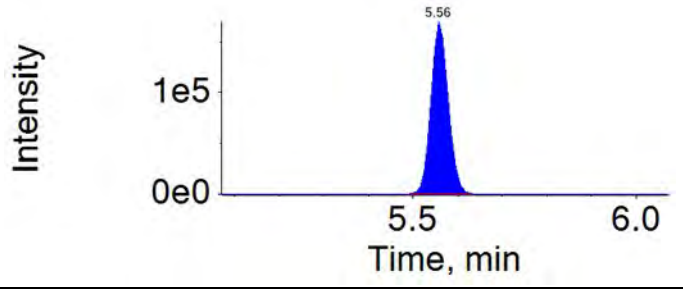
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



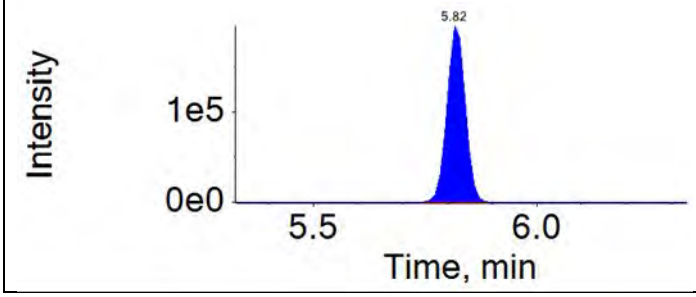


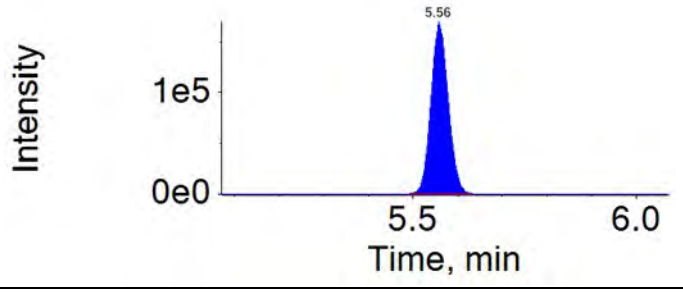
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0



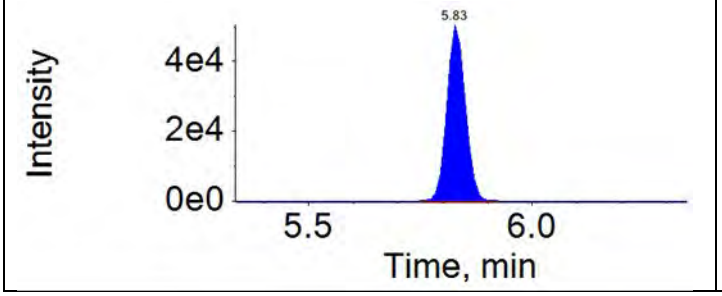


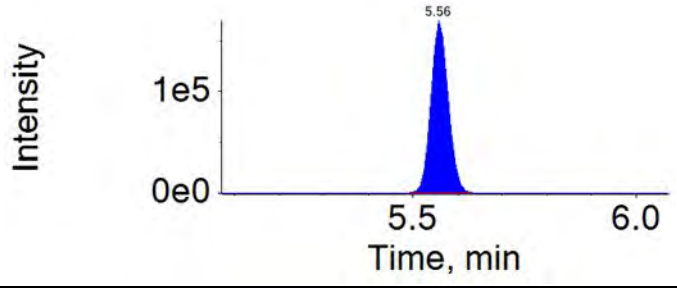
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

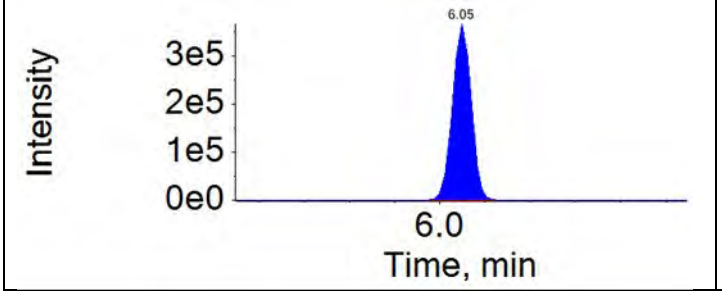
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

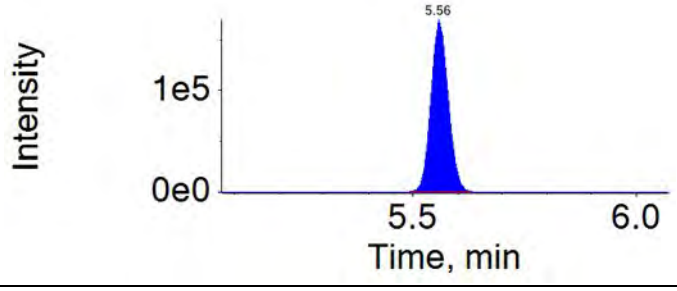
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



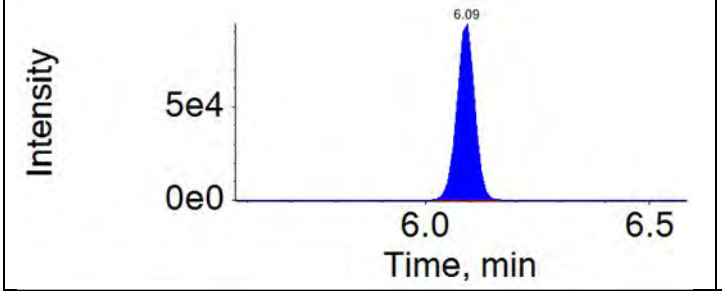


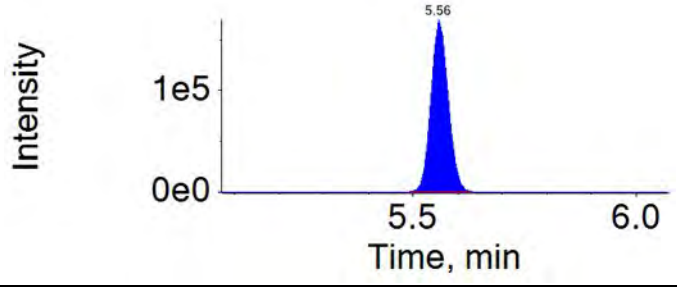
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



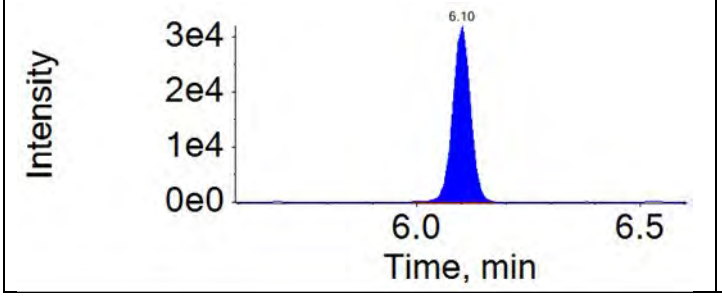


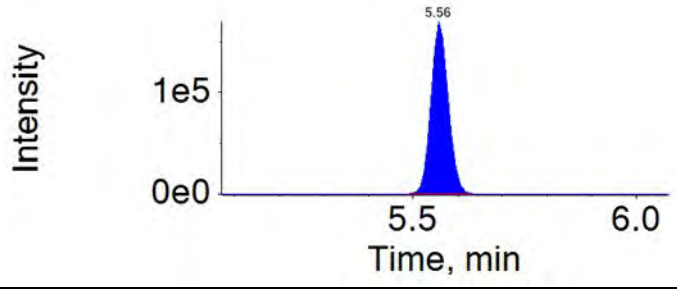
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



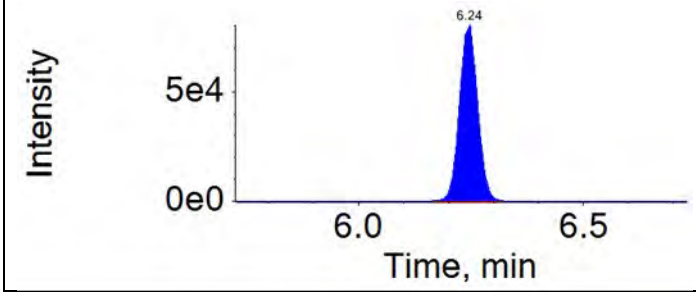


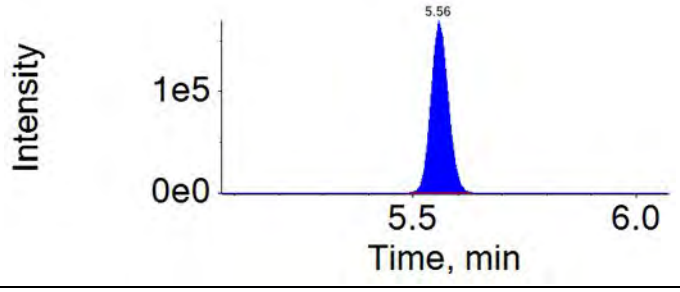
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

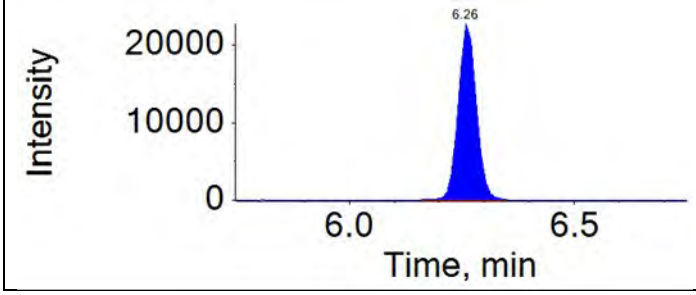
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

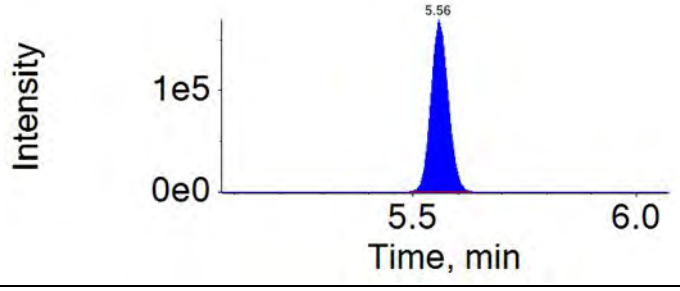
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



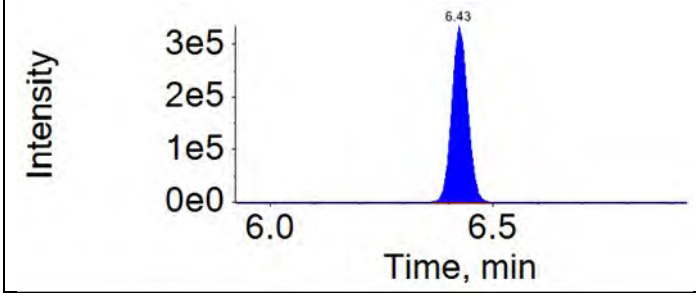


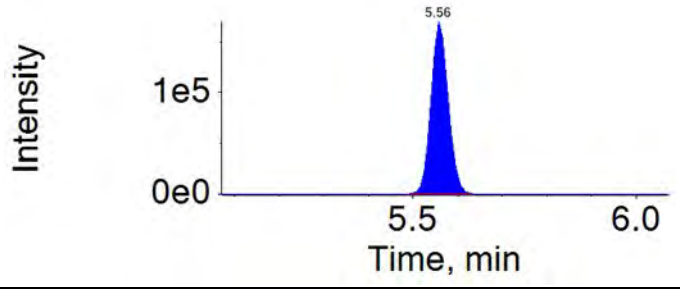
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



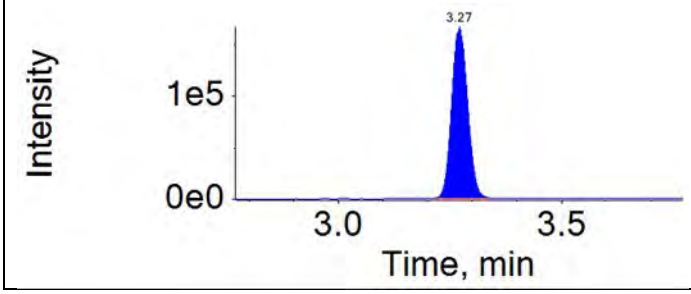


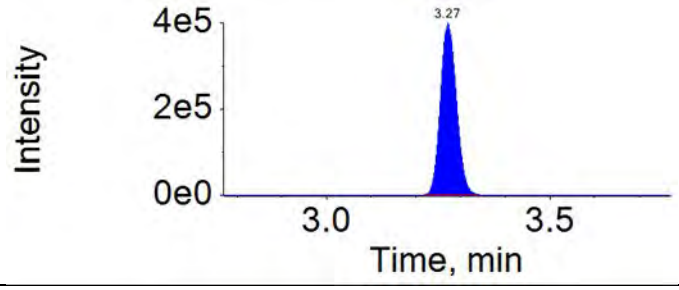
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By MCD at 5:01 pm, 11/28/18

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By HMK at 12:22 pm, 11/29/18

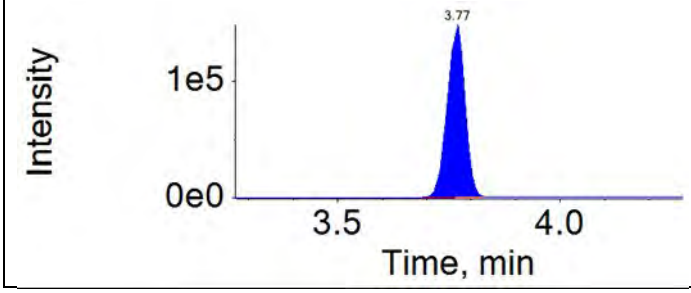
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

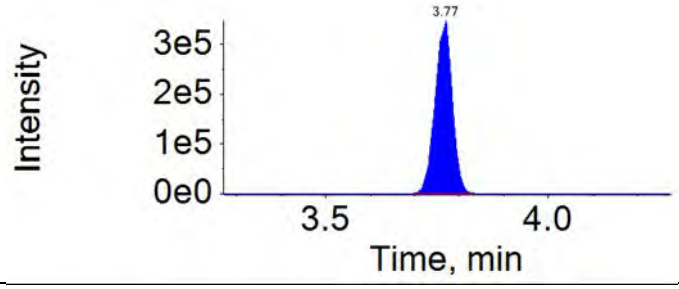
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



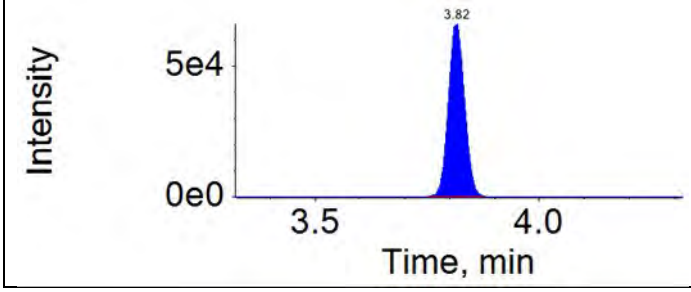


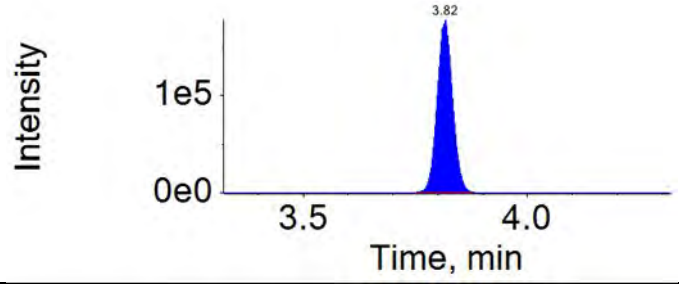
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



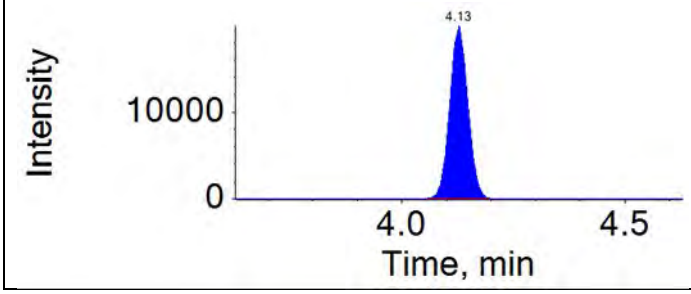


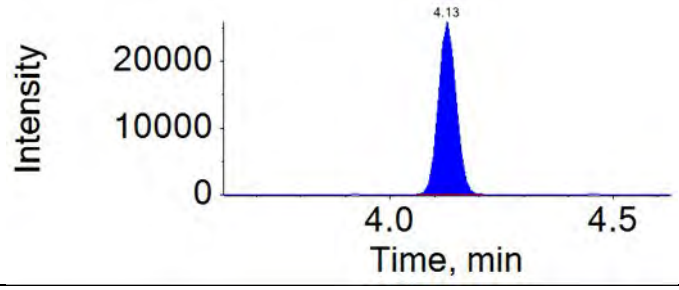
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



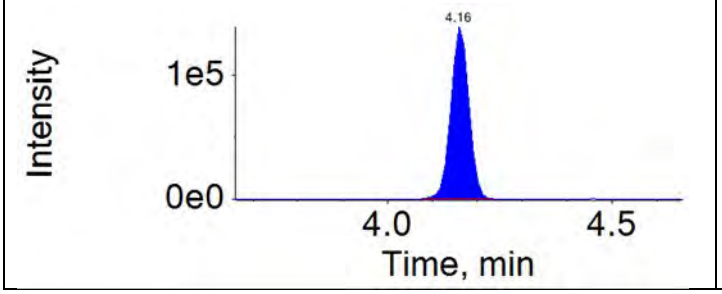


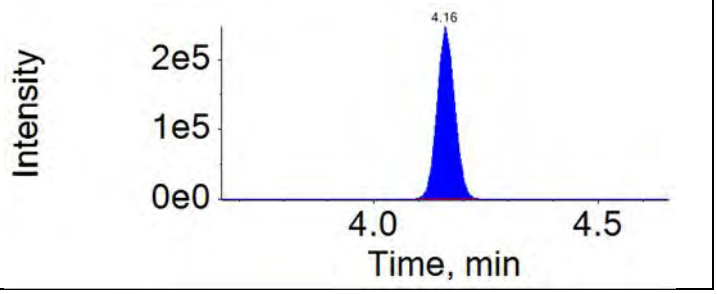
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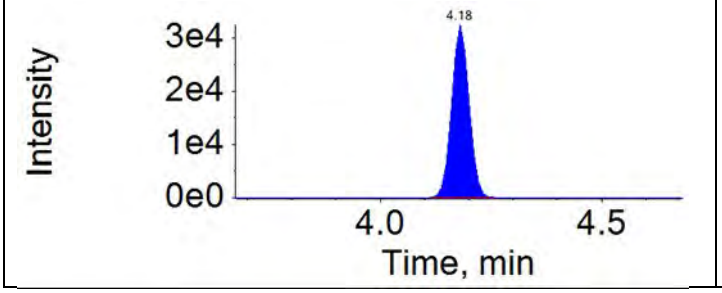
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

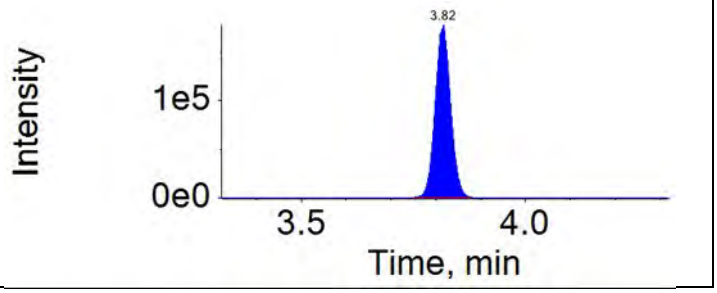
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



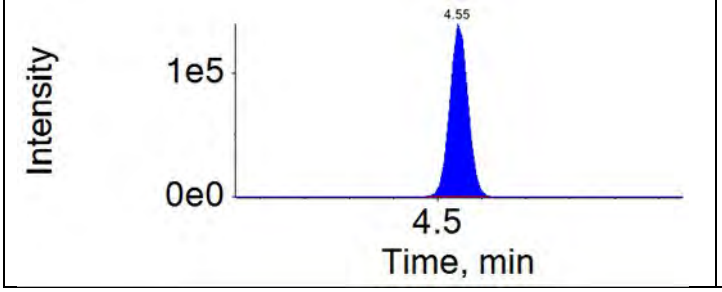


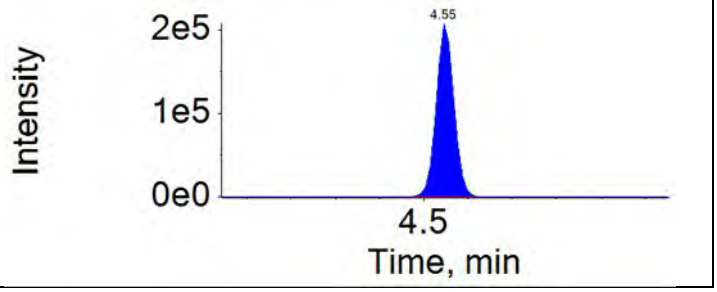
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



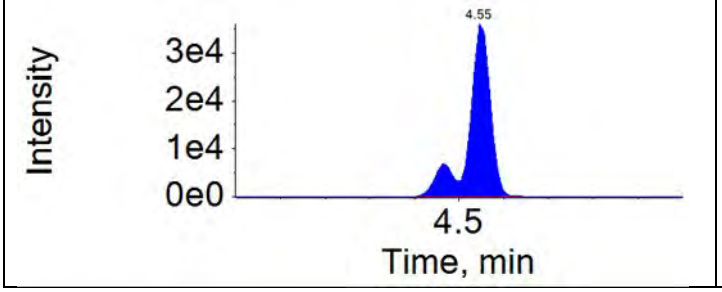


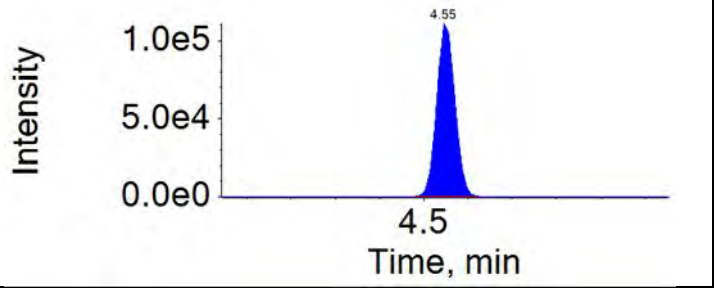
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



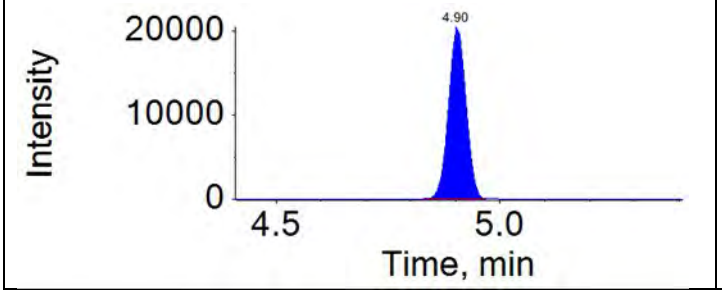


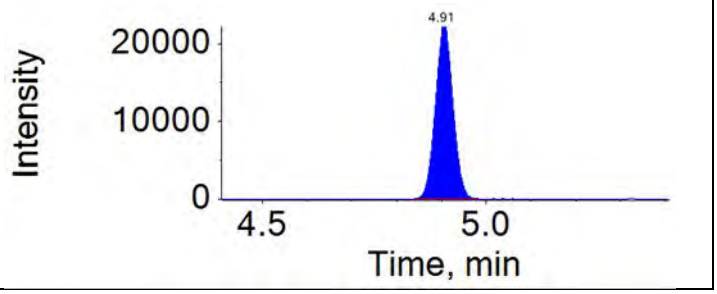
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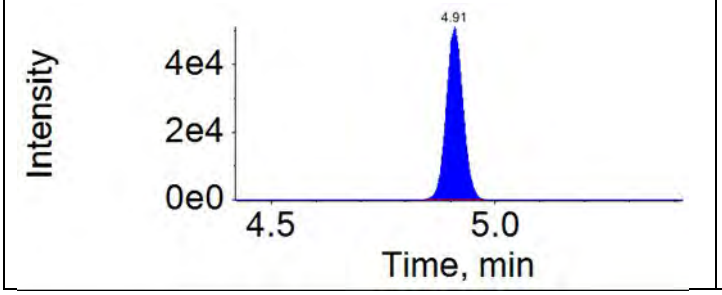
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

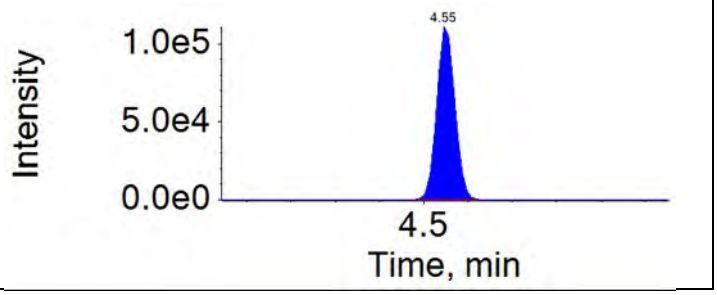
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



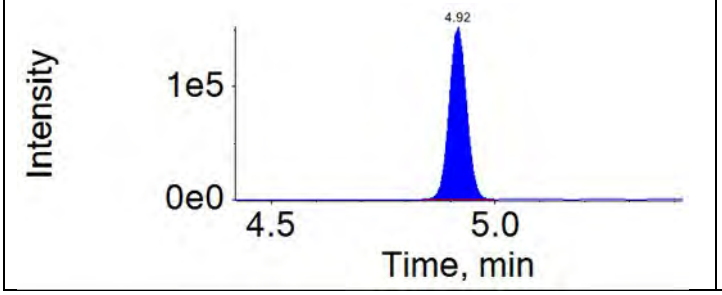


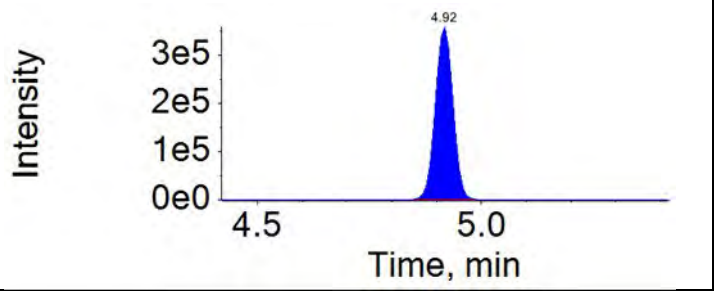
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



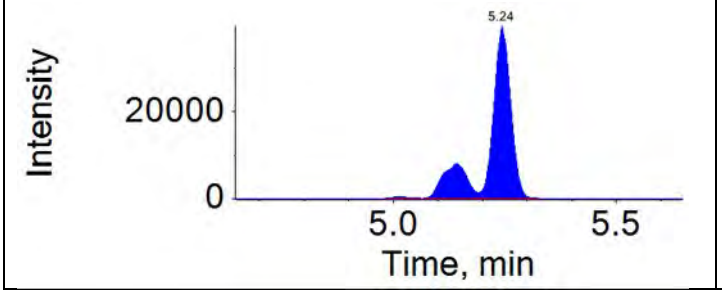


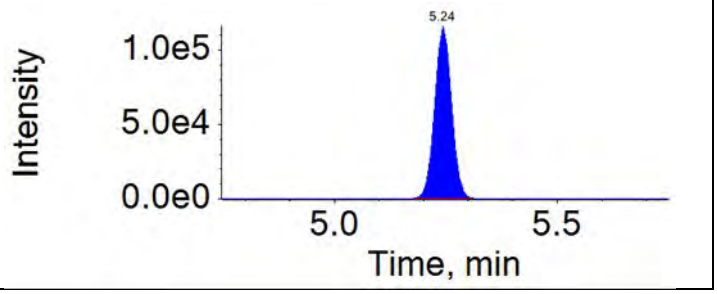
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



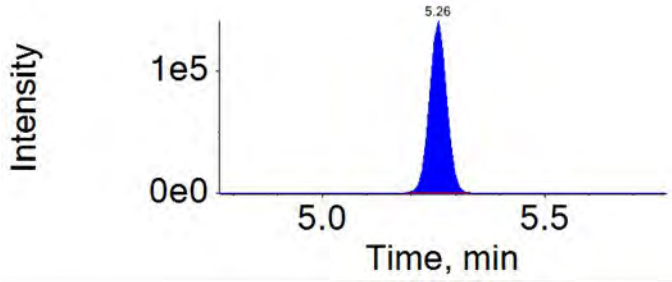


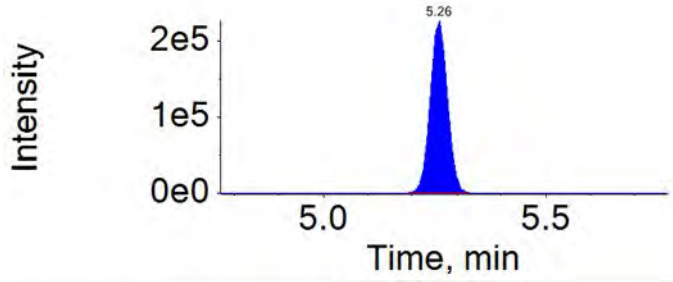
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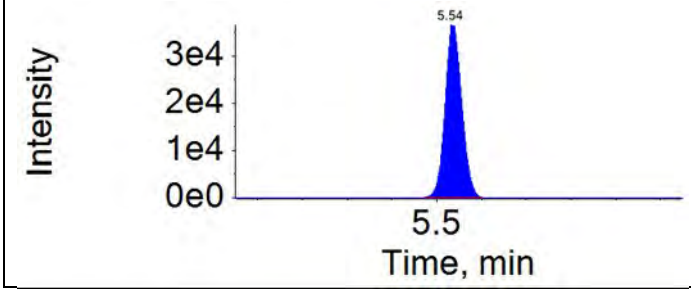
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

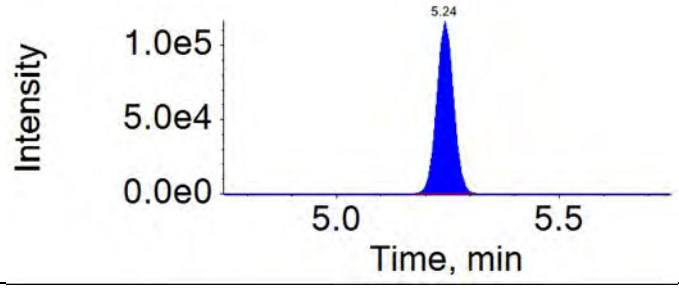
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



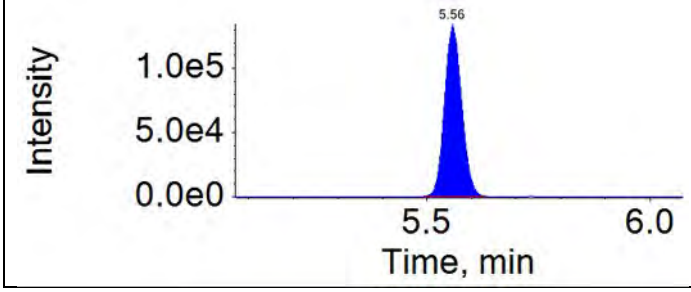


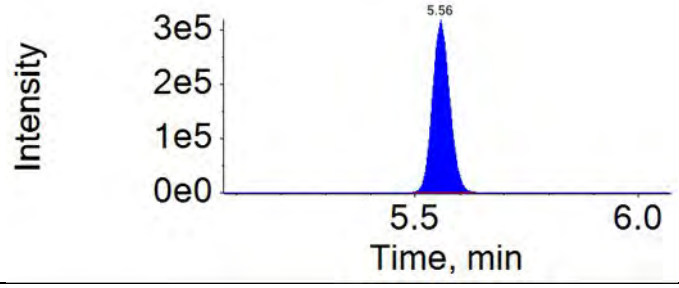
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



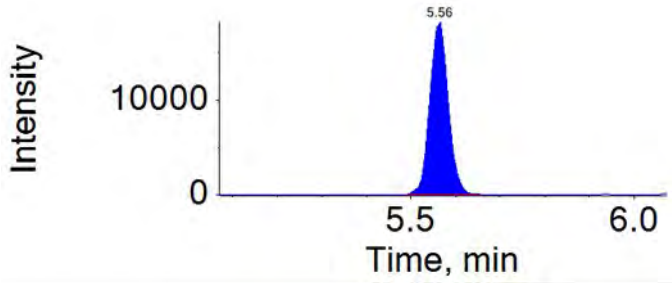


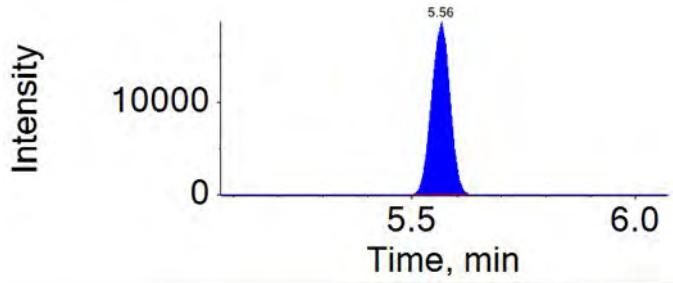
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



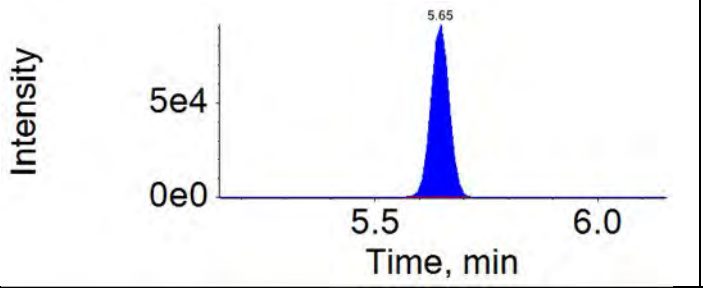


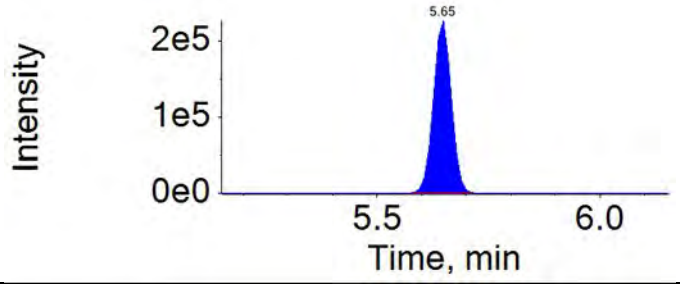
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

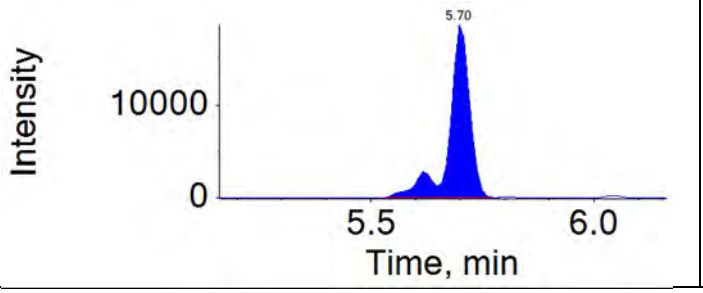
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

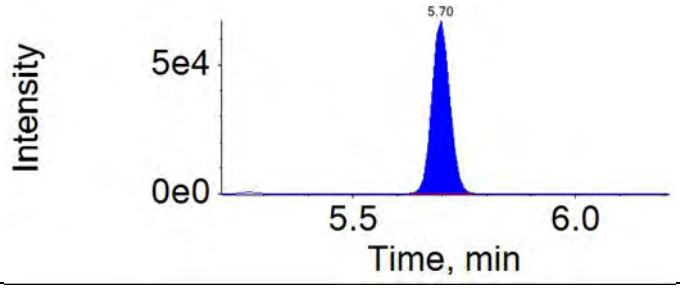
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



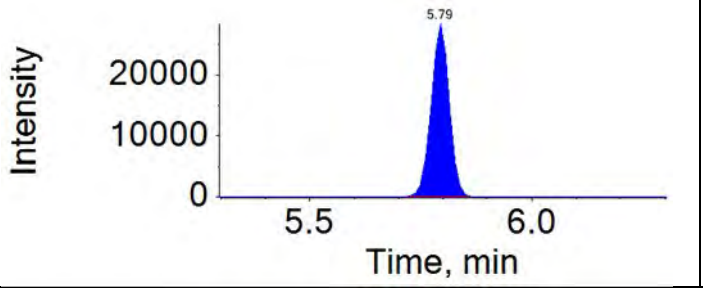


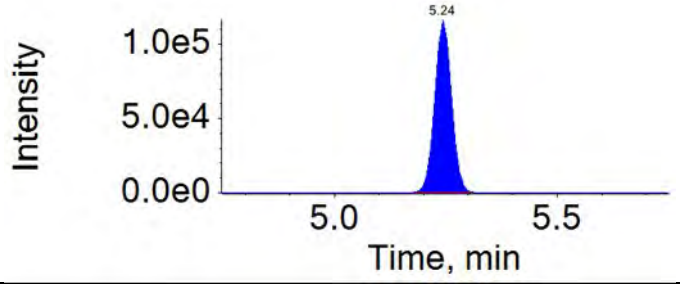
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



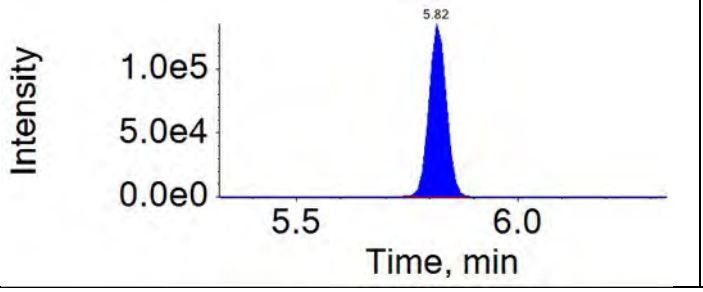


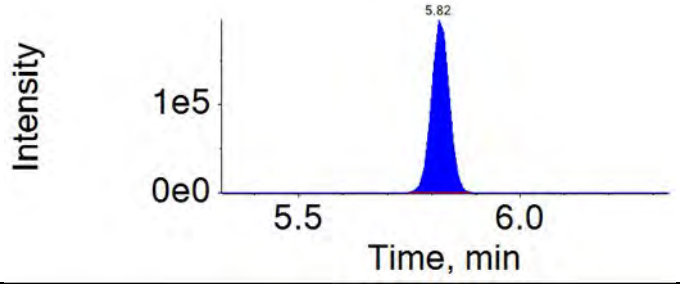
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



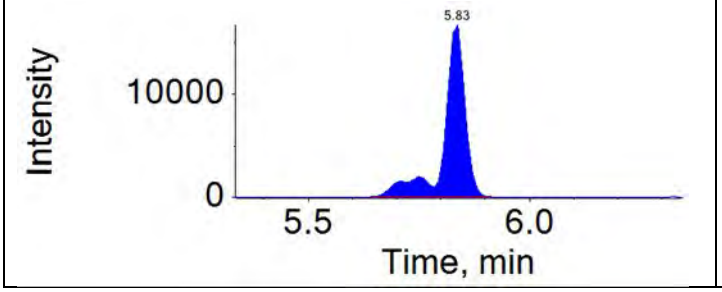


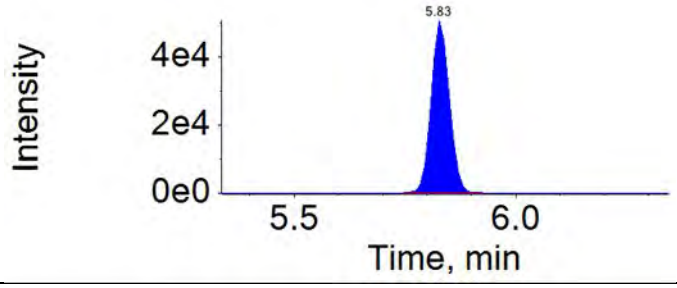
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

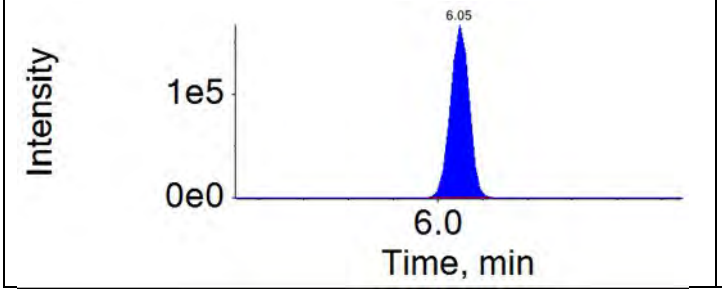
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

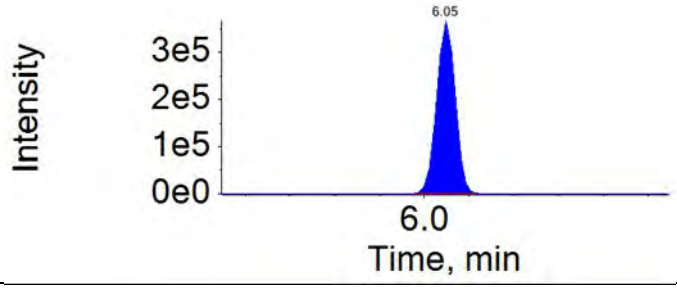
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



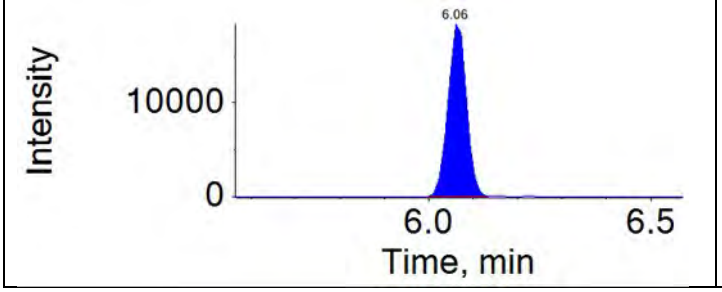


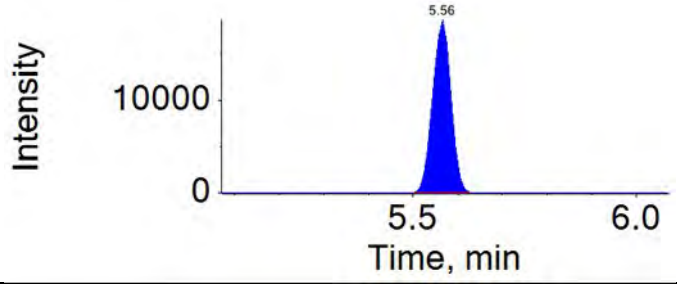
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



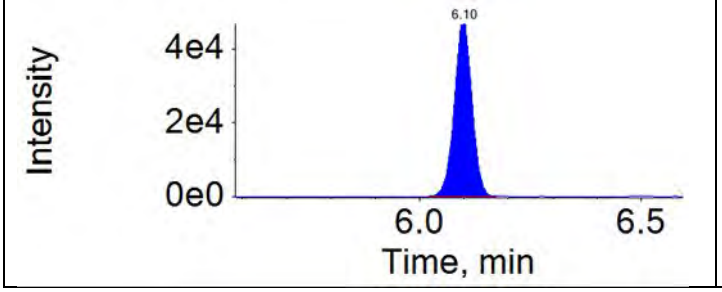


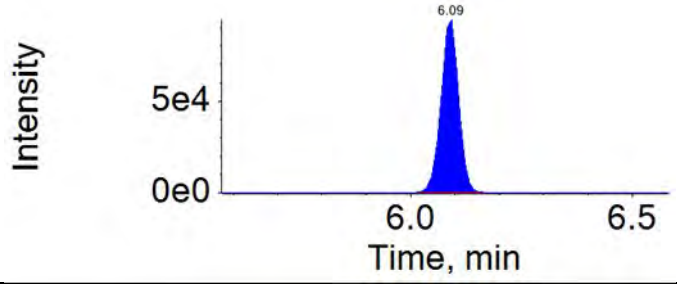
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



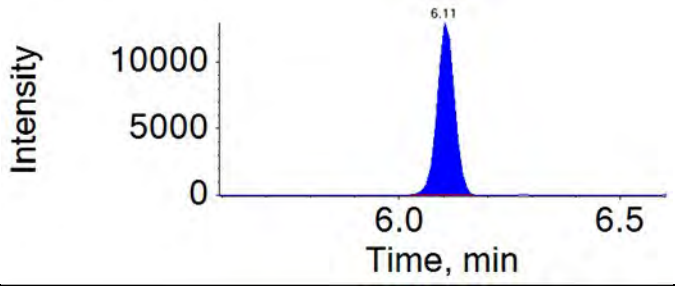


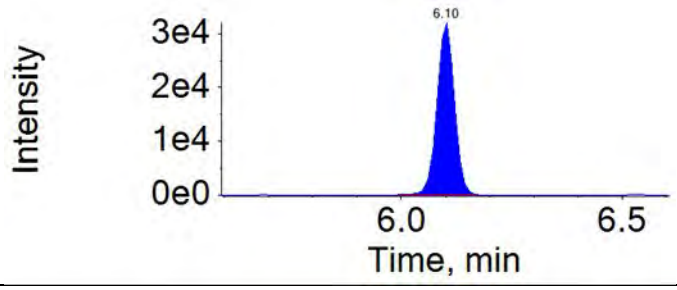
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

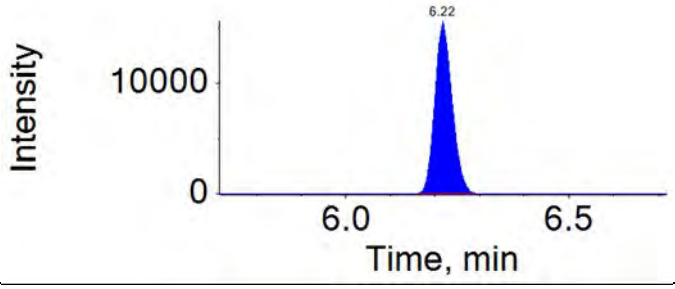
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

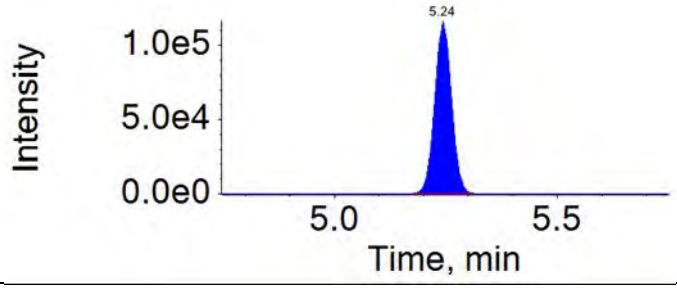
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



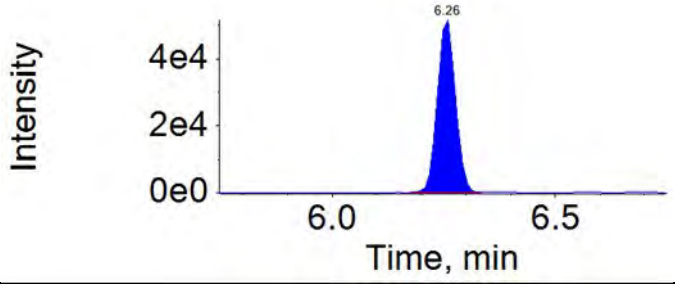


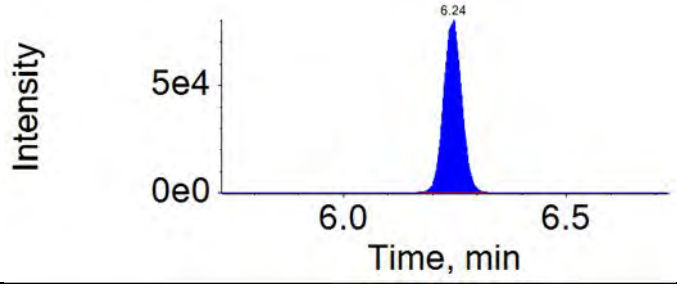
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



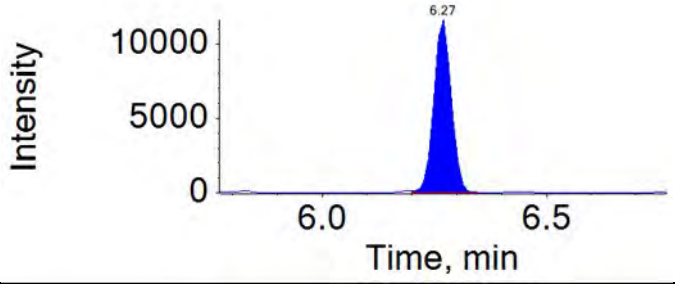


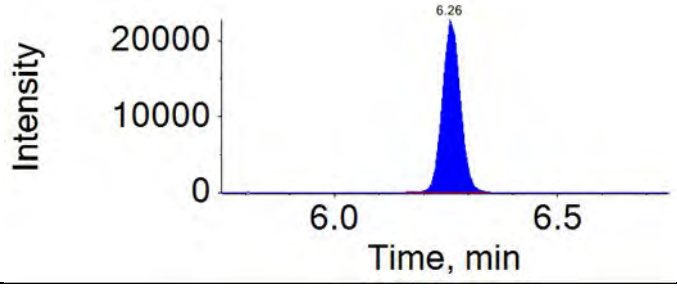
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



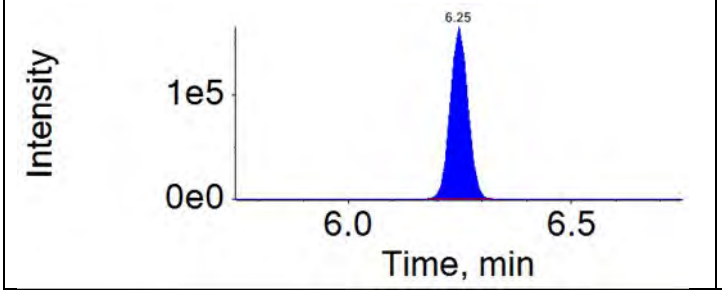


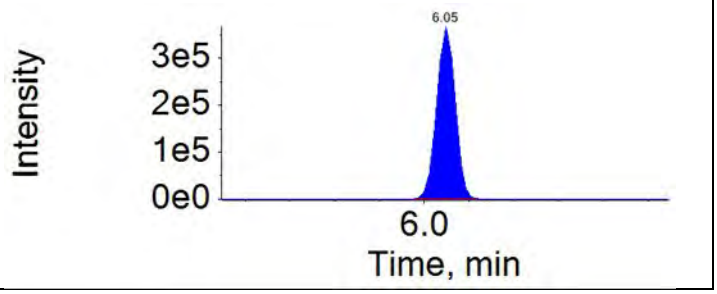
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

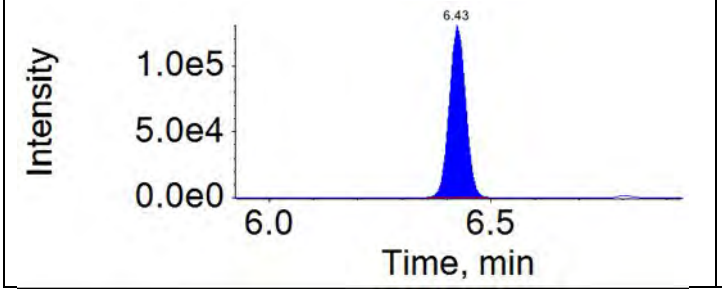
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV28DCAL 11/28/2018 4:47:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

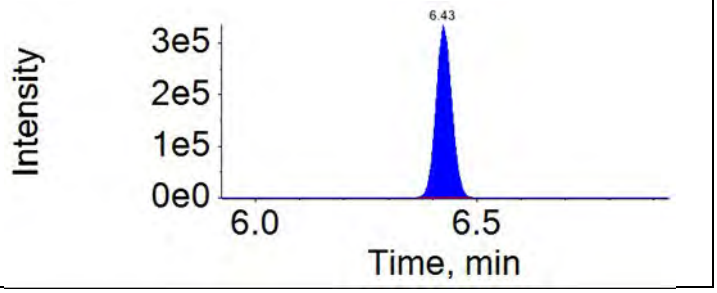
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



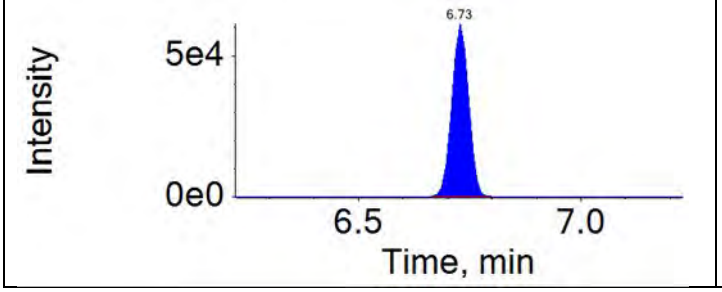


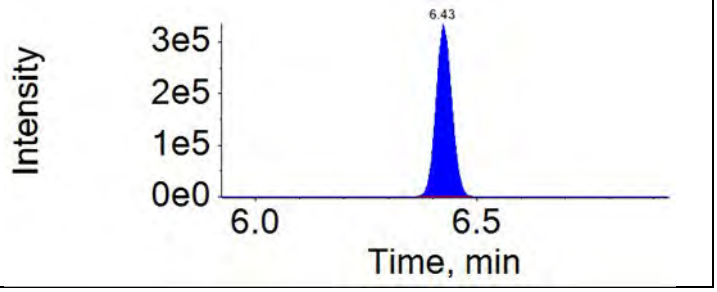
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



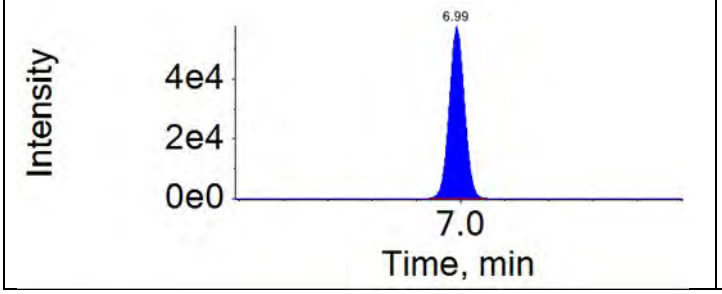


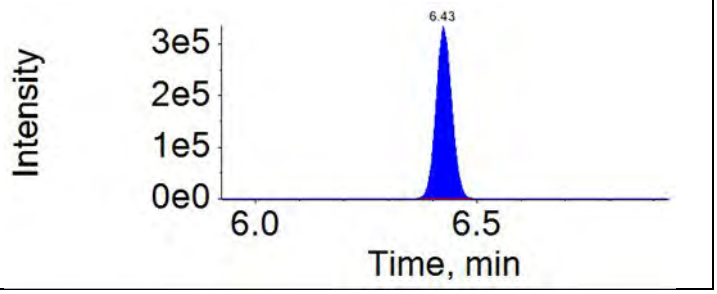
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0



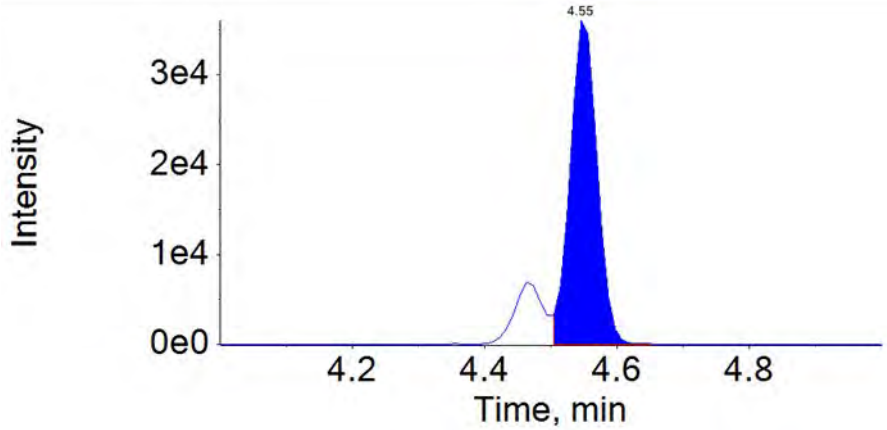


APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

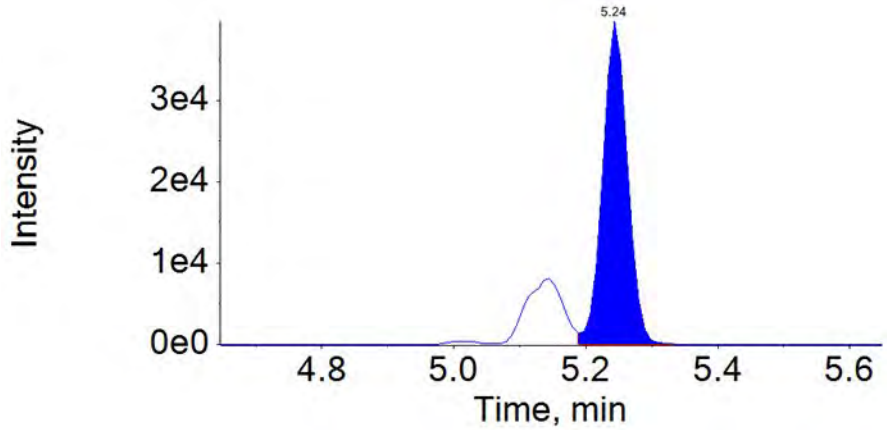
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.55
Peak Area:
103015.29
Mass Range:
399.0 / 80.0
File Name:
18NOV28DCAL-16.wiff
Sample Name:
CCV1_CAL3



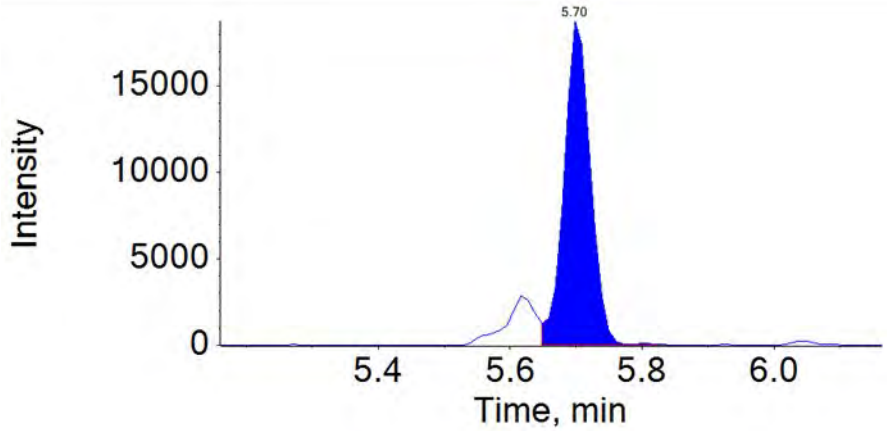
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
103980.06
Mass Range:
499.0 / 80.0
File Name:
18NOV28DCAL-16.wiff
Sample Name:
CCV1_CAL3



Integration Comment: incorrect integration

Component Name:
NMeFOSAA
RT (min.):
5.70
Peak Area:
52224.93
Mass Range:
570.0 / 419.0
File Name:
18NOV28DCAL-16.wiff
Sample Name:
CCV1_CAL3



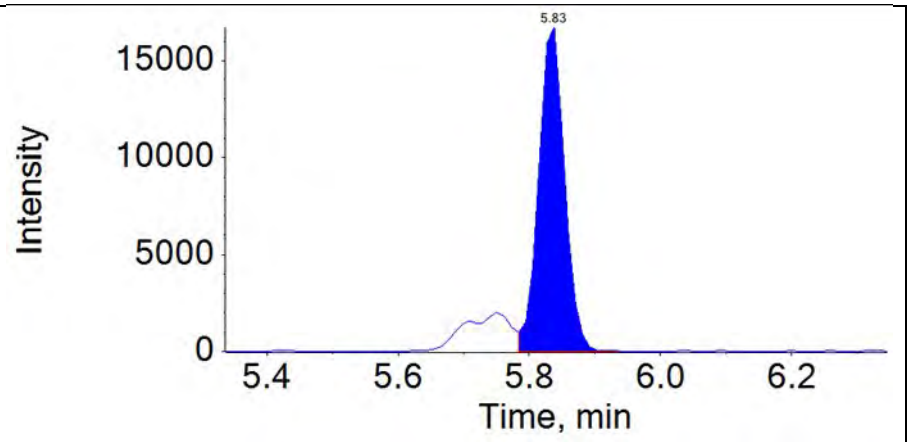
Integration Comment: incorrect integration

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

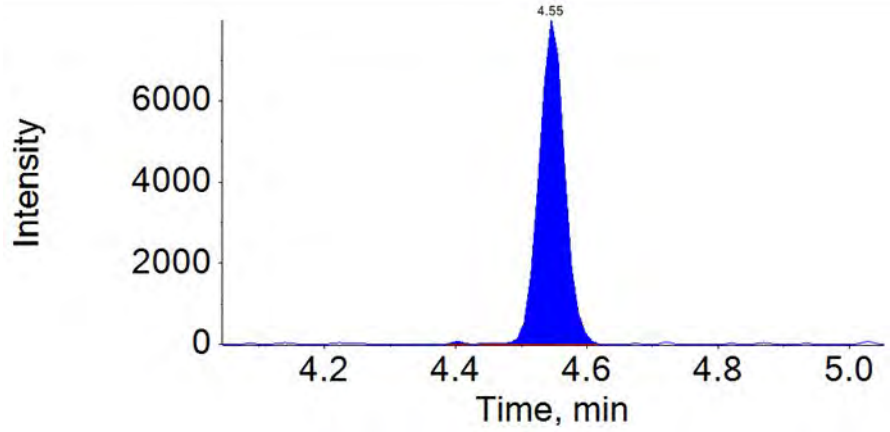
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
NEtFOSAA
RT (min.):
5.83
Peak Area:
46203.64
Mass Range:
584.0 / 419.0
File Name:
18NOV28DCAL-16.wiff
Sample Name:
CCV1_CAL3



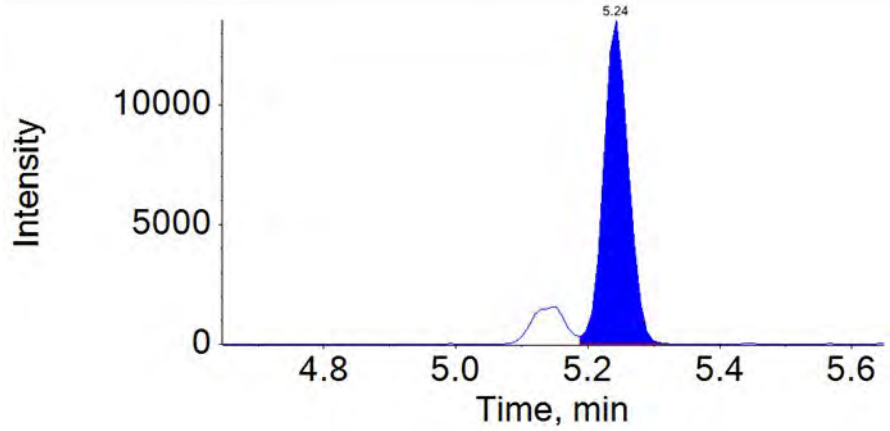
Integration Comment: incorrect integration

Component Name:
PFHpA_2
RT (min.):
4.55
Peak Area:
21948.97
Mass Range:
363.0 / 169.0
File Name:
18NOV28DCAL-16.wiff
Sample Name:
CCV1_CAL3



Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.24
Peak Area:
35538.74
Mass Range:
499.0 / 99.0
File Name:
18NOV28DCAL-16.wiff
Sample Name:
CCV1_CAL3



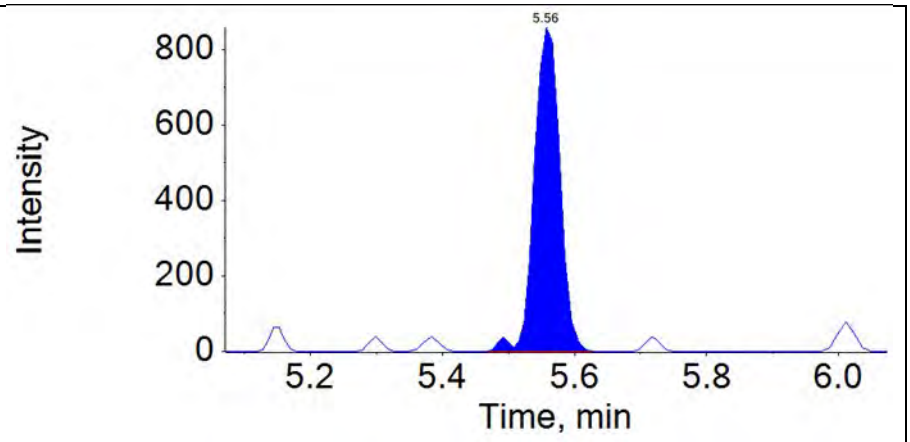
Integration Comment: incorrect integration

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

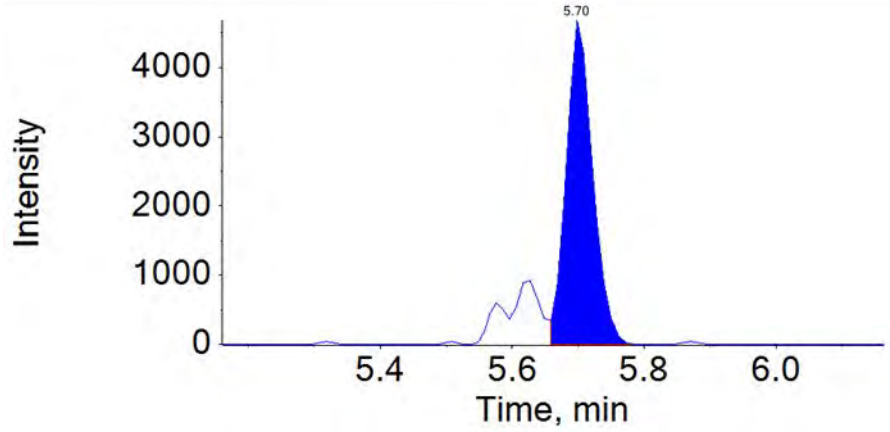
Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFDA_2
RT (min.):
5.56
Peak Area:
2325.21
Mass Range:
513.0 / 169.0
File Name:
18NOV28DCAL-16.wiff
Sample Name:
CCV1_CAL3



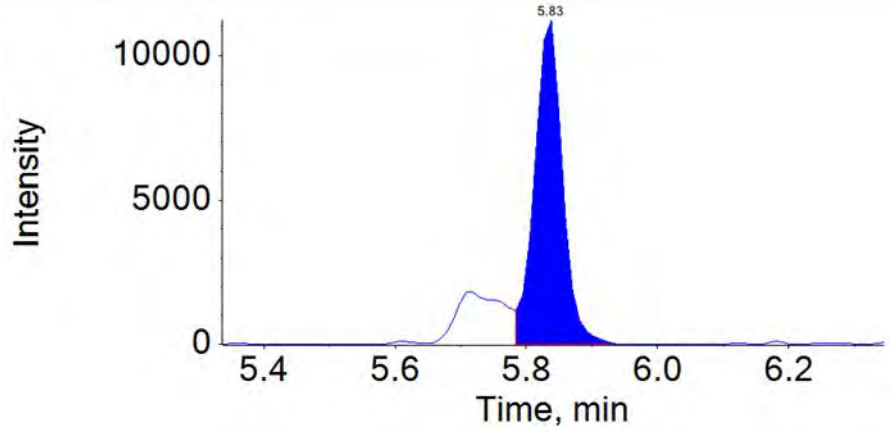
Integration Comment: incorrect integration

Component Name:
NMeFOSAA_2
RT (min.):
5.70
Peak Area:
13049.28
Mass Range:
570.0 / 483.0
File Name:
18NOV28DCAL-16.wiff
Sample Name:
CCV1_CAL3



Integration Comment: incorrect integration

Component Name:
NEtFOSAA_2
RT (min.):
5.83
Peak Area:
33290.95
Mass Range:
584.0 / 526.0
File Name:
18NOV28DCAL-16.wiff
Sample Name:
CCV1_CAL3



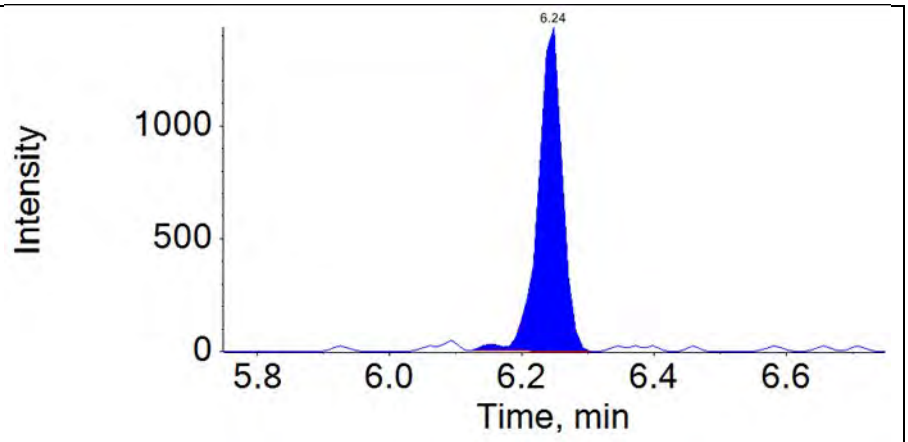
Integration Comment: incorrect integration

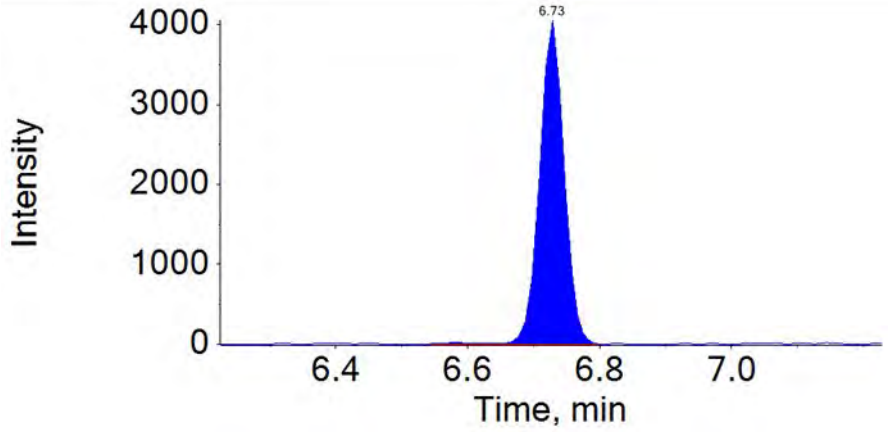
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFTrDA_2 **RT (min.):** 6.24 **Peak Area:** 3652.89 **Mass Range:** 663.0 / 169.0 **File Name:** 18NOV28DCAL-16.wiff **Sample Name:** CCV1_CAL3	 **Integration Comment:** incorrect integration

Component Name: PFHxDA_2 **RT (min.):** 6.73 **Peak Area:** 10506.81 **Mass Range:** 813.0 / 169.0 **File Name:** 18NOV28DCAL-16.wiff **Sample Name:** CCV1_CAL3	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Results Table Name: 18NOV28DCAL
Results Table Date: 11/28/2018 4:52:53 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

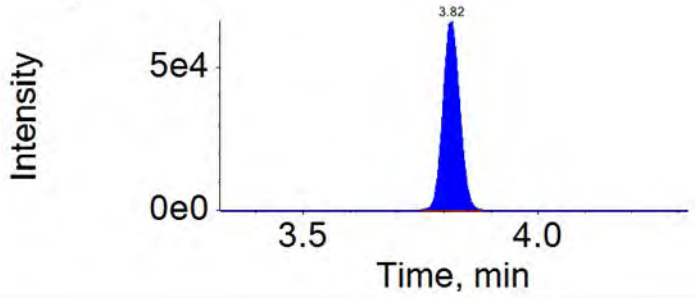
Sample Name: CCV1_CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV28DCAL-16.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	166250.13	A	0.3655	0.3695			
PFBS_2	3.81	1.00	61434.35	A	0.3655	0.3695	1	50	
4:2-FTS	4.13	1.00	56074.30	A	0.6383	0.6136			
4:2-FTS_2	4.13	1.00	34408.16	A	0.6383	0.6136	-4	50	
PFHxA	4.16	1.00	390006.26	A	0.0103	0.0099			
PFHxA_2	4.16	1.00	3854.81	A	0.0103	0.0099	-4	50	
PFPeS	4.18	1.10	88012.70	A	0.4976	0.4974			
PFPeS_2	4.18	1.10	43775.32	A	0.4976	0.4974	0	50	
PFHpA	4.55	1.00	393155.85	A	0.0557	0.0555			
PFHpA_2	4.55	1.00	21824.16	M	0.0557	0.0555	0	50	
PFHxS	4.55	1.00	124485.31	M	0.3693	0.3510			
PFHxS_2	4.55	1.00	43693.97	A	0.3693	0.3510	-5	50	
6:2-FTS	4.90	1.00	55151.09	A	0.6625	0.6544			
6:2-FTS_2	4.91	1.00	36092.41	A	0.6625	0.6544	-1	50	
PFHpS	4.91	1.08	131029.41	A	0.3915	0.4044			
PFHpS_2	4.91	1.08	52990.65	A	0.3915	0.4044	3	50	
PFOA	4.92	1.00	408992.65	A	0.0573	0.0570			
PFOA_2	4.92	1.00	23307.23	A	0.0573	0.0570	-1	50	
PFOS	5.24	1.00	137181.43	M	0.2960	0.3006			
PFOS_2	5.24	1.00	41235.40	M	0.2960	0.3006	2	50	
PFNA	5.26	1.00	376585.83	A	0.0201	0.0177			
PFNA_2	5.26	1.00	6676.44	A	0.0201	0.0177	-12	50	
PFNS	5.54	1.06	94448.57	A	0.4794	0.4627			
PFNS_2	5.54	1.06	43699.58	A	0.4794	0.4627	-3	50	
PFDA	5.56	1.00	356261.03	A	0.0075	0.0064			
PFDA_2	5.56	1.00	2278.50	M	0.0075	0.0064	-15	50	
8:2-FTS	5.56	1.00	52676.08	A	0.5380	0.6399			
8:2-FTS_2	5.56	1.00	33705.68	A	0.5380	0.6399	19	50	
NMeFOSAA	5.70	1.00	60912.55	M	0.2305	0.2716			
NMeFOSAA_2	5.70	1.00	16546.59	M	0.2305	0.2716	18	50	
PFDS	5.79	1.10	79486.48	A	0.5356	0.5145			
PFDS_2	5.79	1.10	40894.63	A	0.5356	0.5145	-4	50	
PFUnDA	5.82	1.00	368116.78	A	0.0038	0.0042			
PFUnDA_2	5.81	1.00	1560.66	A	0.0038	0.0042	11	50	
NEtFOSAA	5.83	1.00	56175.38	M	0.7356	0.7568			
NEtFOSAA_2	5.83	1.00	42516.13	M	0.7356	0.7568	3	50	
PFDoDA	6.05	1.00	480438.66	A	0.0130	0.0114			
PFDoDA_2	6.05	1.00	5496.89	A	0.0130	0.0114	-12	50	
10:2-FTS	6.06	1.09	53244.09	A	0.6989	0.8103			
10:2-FTS_2	6.06	1.09	43141.45	A	0.6989	0.8103	16	50	
PFTrDA	6.25	1.03	453601.44	A	0.0090	0.0080			
PFTrDA_2	6.24	1.03	3606.85	M	0.0090	0.0080	-12	50	
PFTeDA	6.43	1.00	333159.05	A	0.0056	0.0056			
PFTeDA_2	6.43	1.00	1878.34	A	0.0056	0.0056	1	50	
PFHxDA	6.73	1.05	160272.72	A	0.0646	0.0649			
PFHxDA_2	6.73	1.05	10399.04	M	0.0646	0.0649	0	50	
PFODA	6.99	1.09	137372.78	A	0.0264	0.0264			
PFODA_2	6.99	1.09	3621.96	A	0.0264	0.0264	0	50	

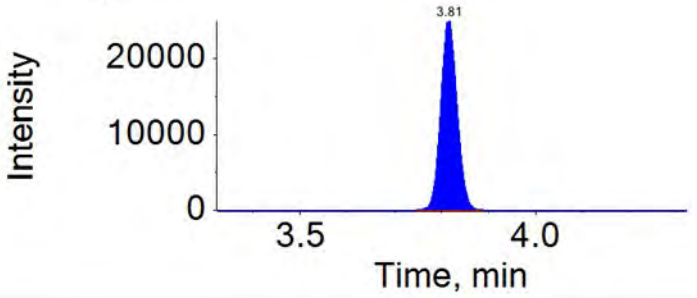
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

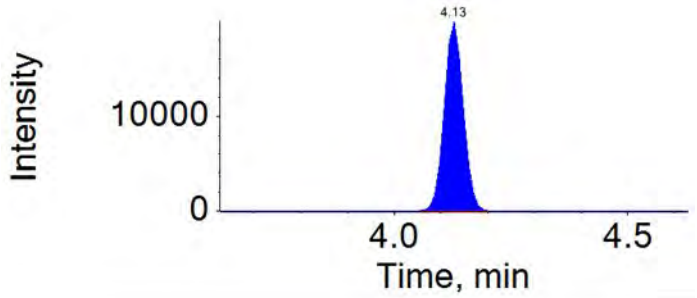
Component: PFBS
Primary Mass: 299.0 / 80.0



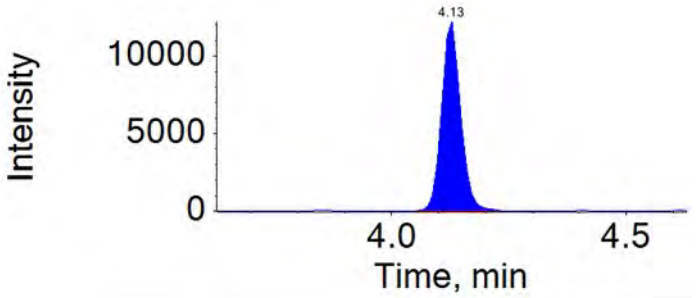
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



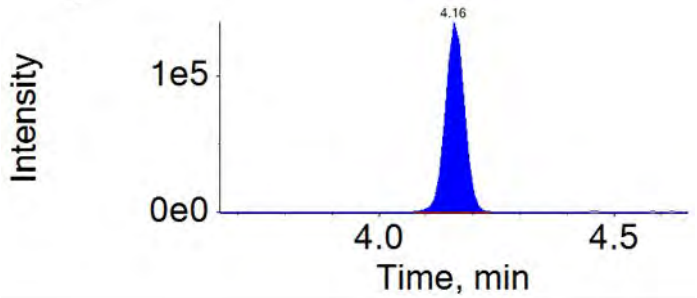
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



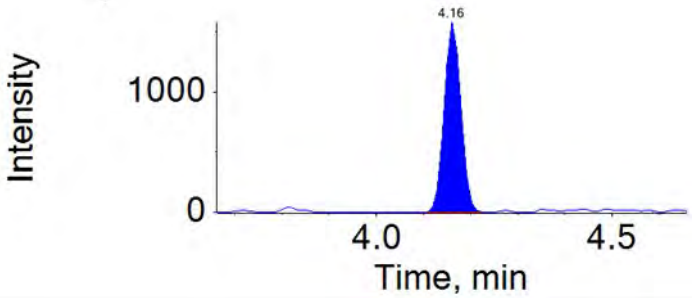
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



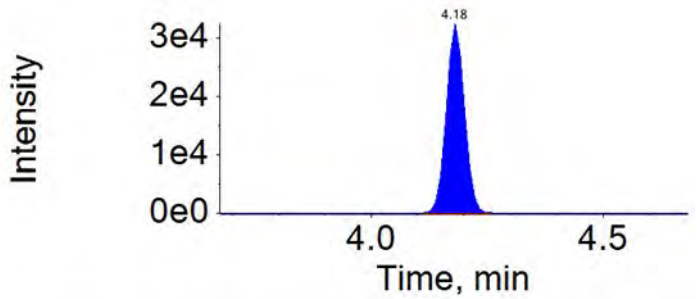
Component: PFHxA
Primary Mass: 313.0 / 269.0



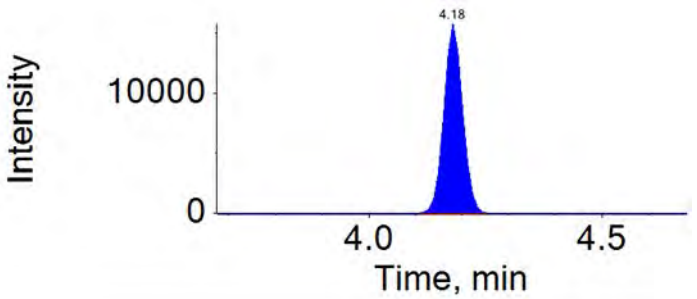
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



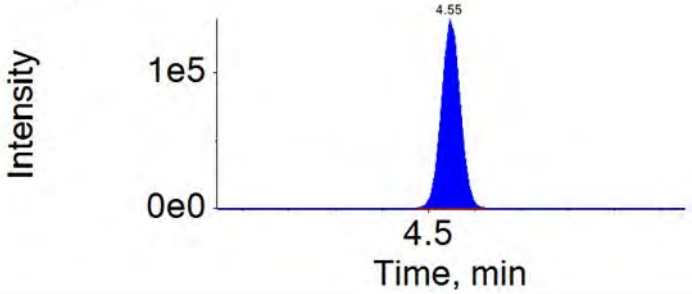
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



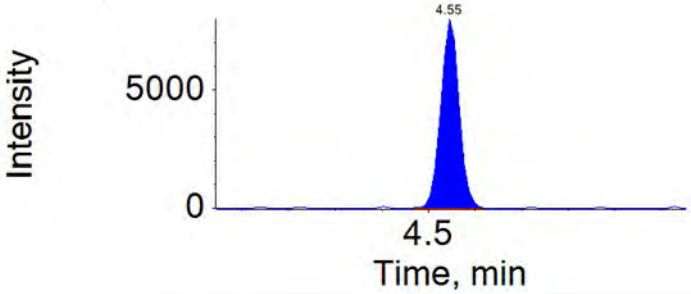
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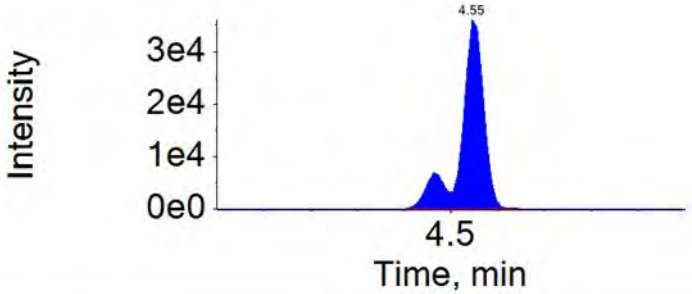
Component: PFHpA
Primary Mass: 363.0 / 319.0



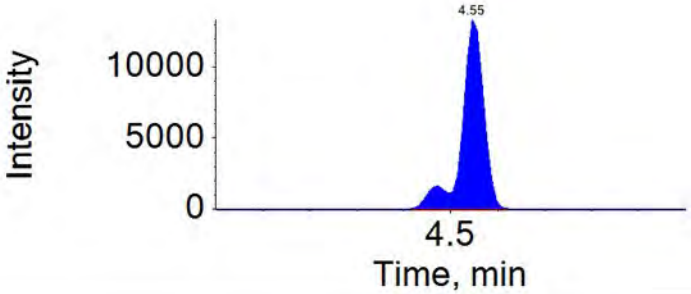
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



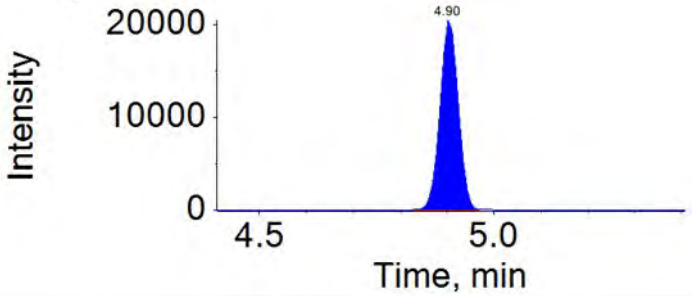
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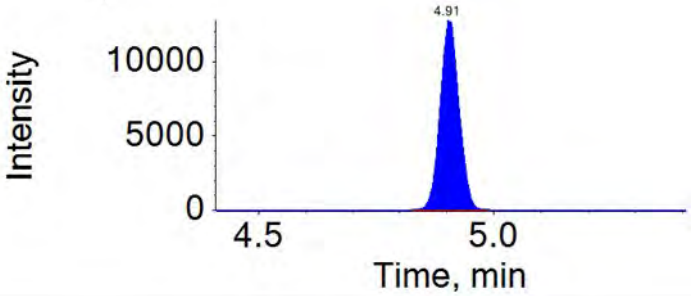
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Secondary Mass: 399.0 / 99.0



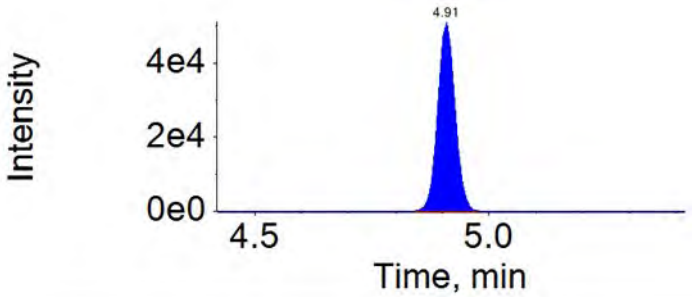
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



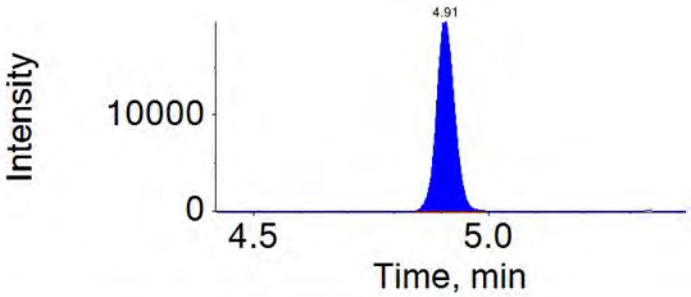
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Secondary Mass: 427.0 / 81.0



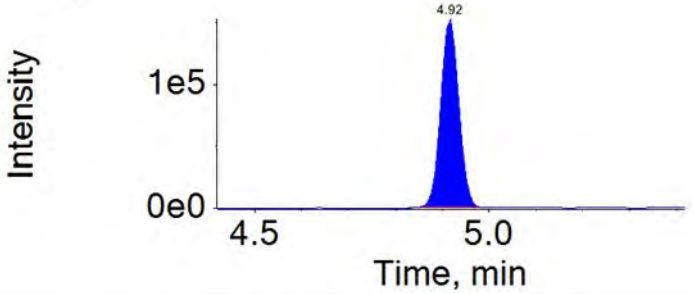
Component: PFHpS
Primary Mass: 449.0 / 80.0



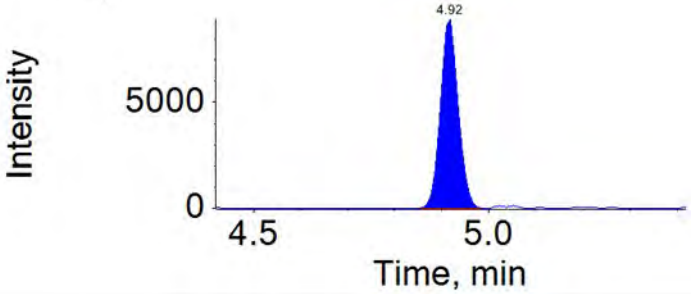
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Secondary Mass: 449.0 / 99.0



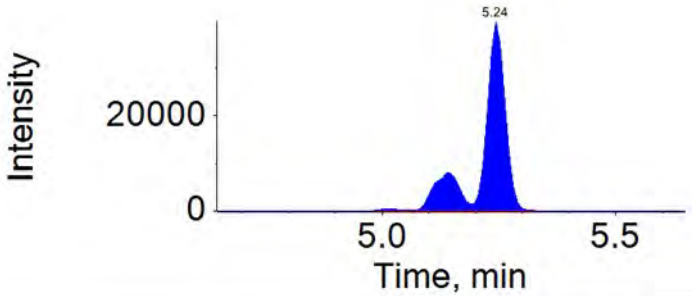
Component: PFOA
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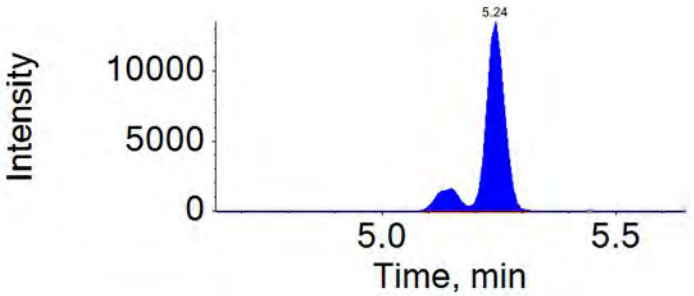
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Secondary Mass: 413.0 / 169.0



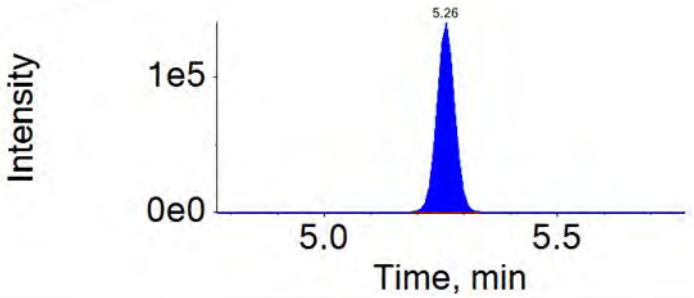
Component: PFOS
Primary Mass: 499.0 / 80.0



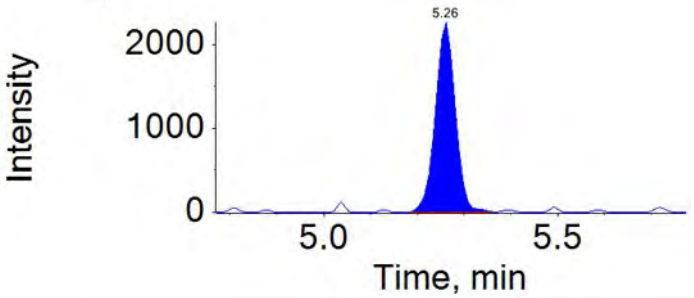
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



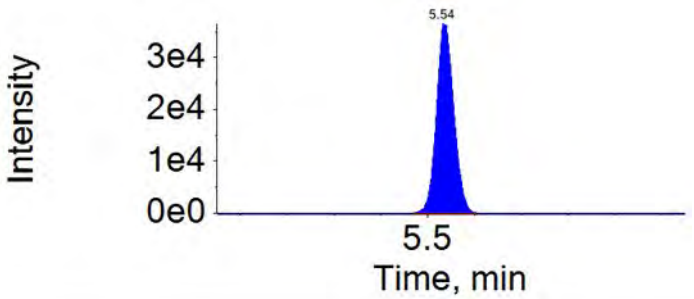
Component: PFNA
Primary Mass: 463.0 / 419.0



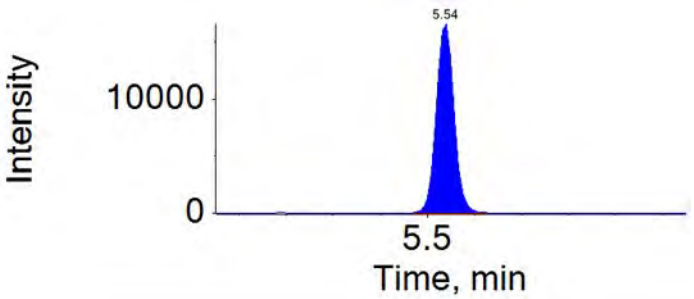
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Secondary Mass: 463.0 / 169.0



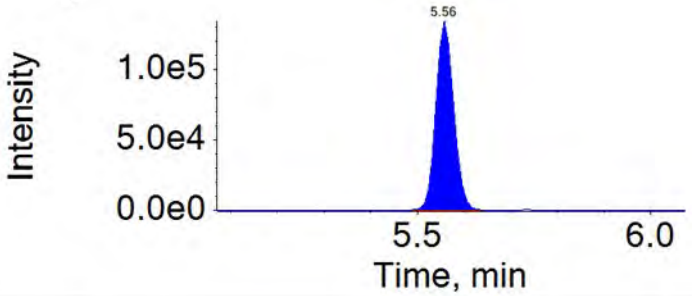
Component: PFNS
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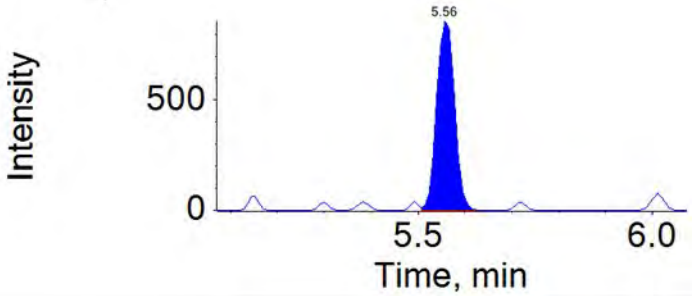
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Secondary Mass: 549.0 / 99.0



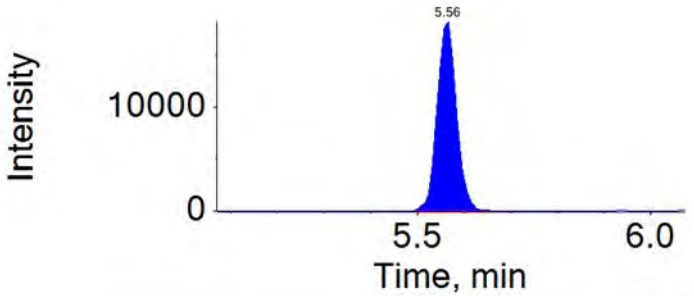
Component: PFDA
Primary Mass: 513.0 / 469.0



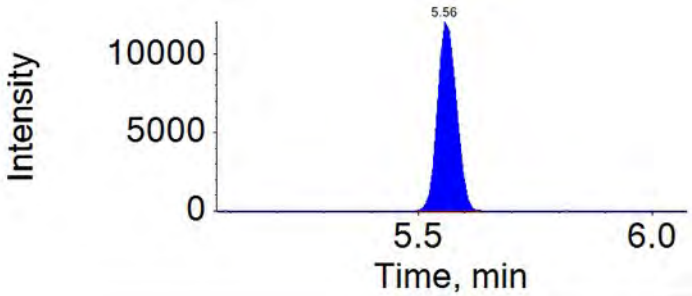
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Secondary Mass: 513.0 / 169.0



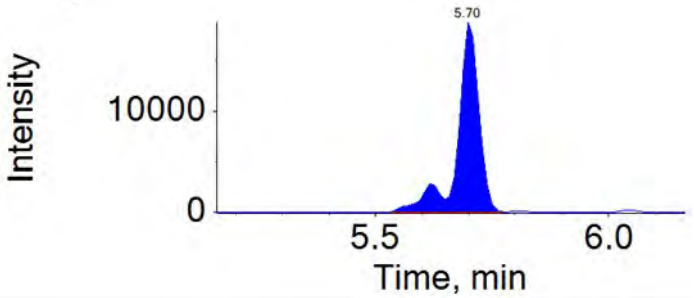
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



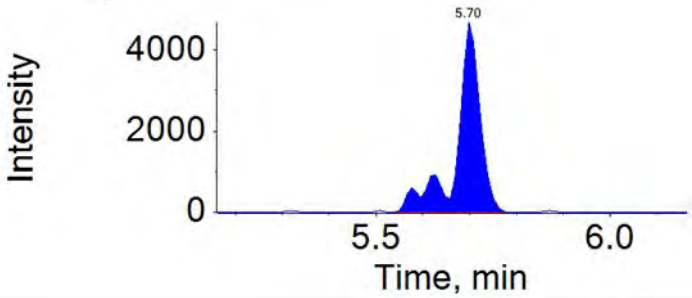
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



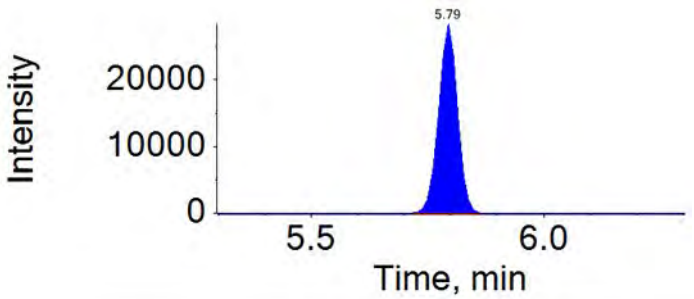
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



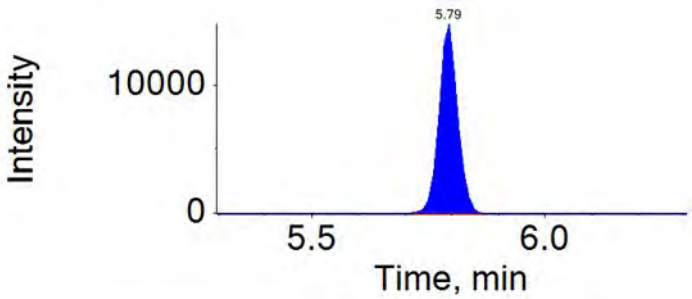
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



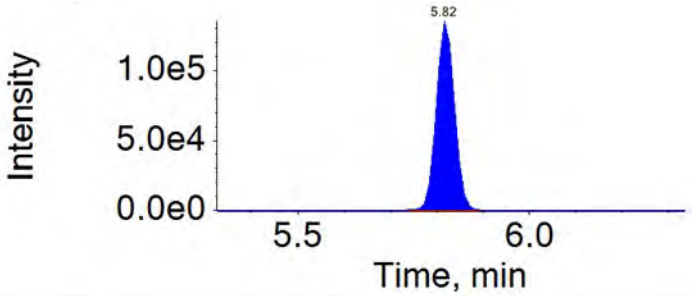
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



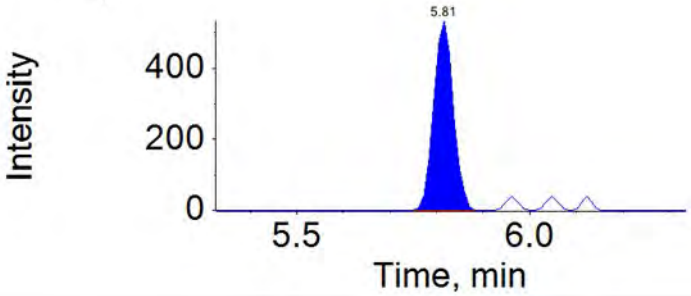
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

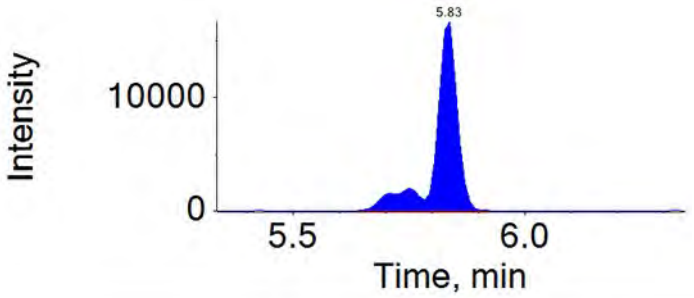
Component: PFUnDA
Primary Mass: 563.0 / 519.0



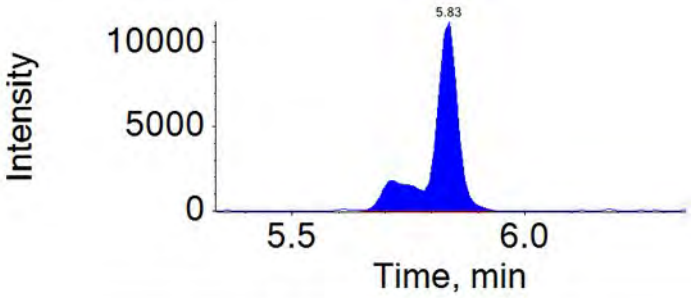
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



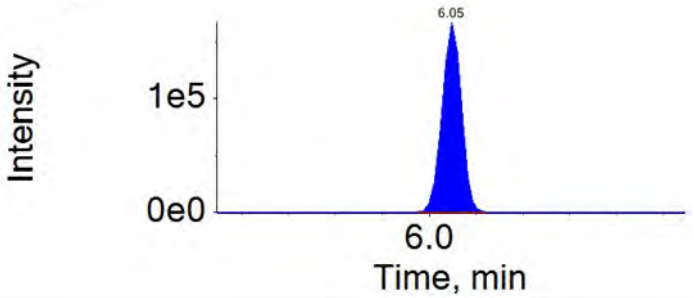
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



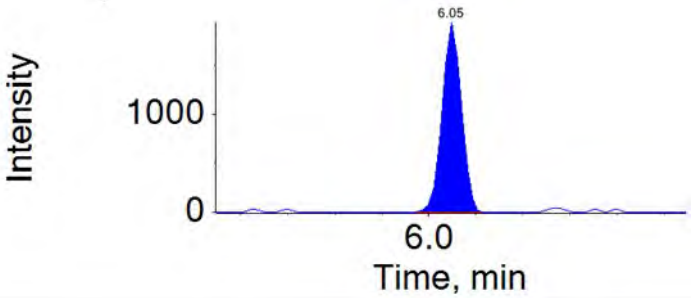
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



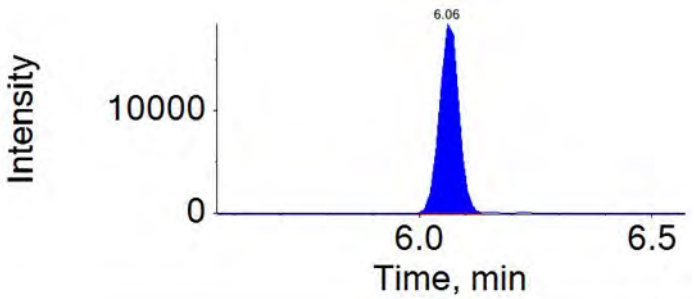
Component: PFDoDA
Primary Mass: 613.0 / 569.0



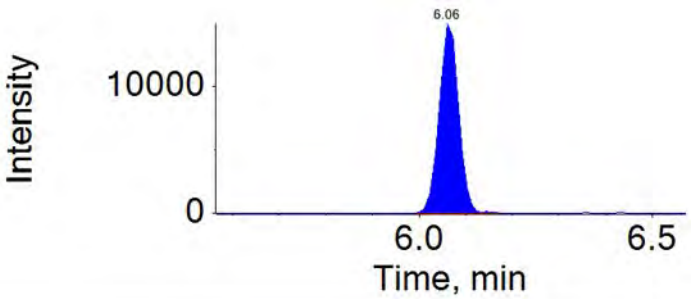
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



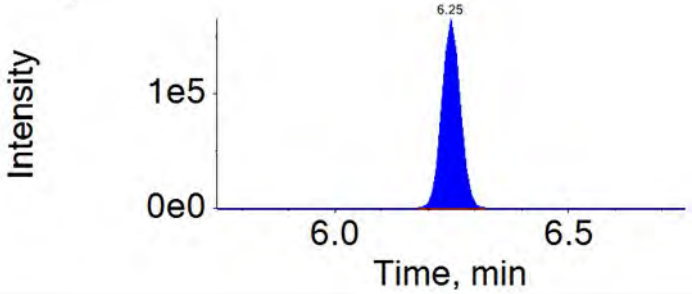
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



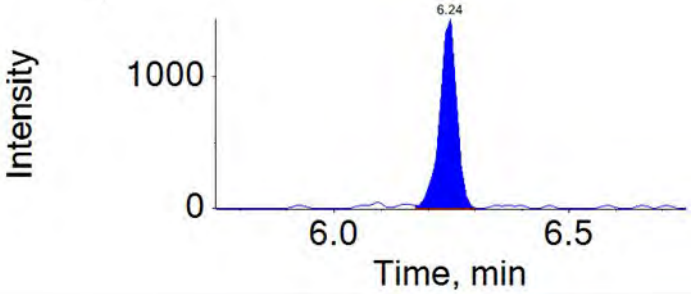
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

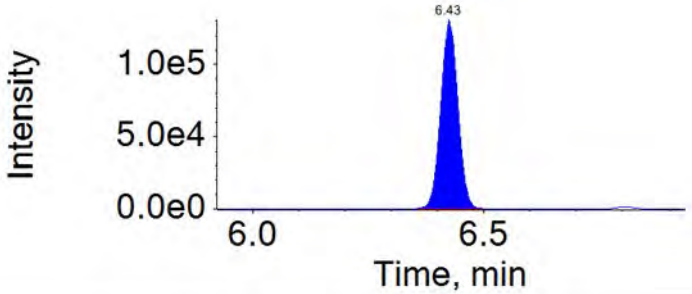
Component: PFTrDA
Primary Mass: 663.0 / 619.0



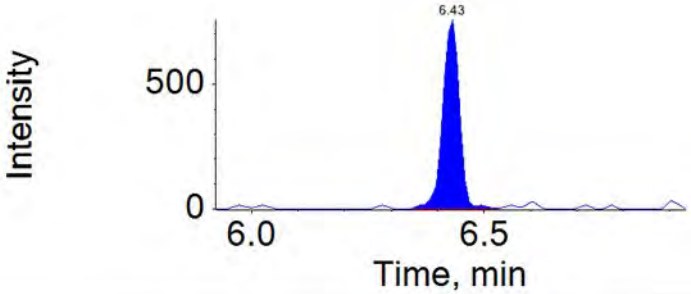
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



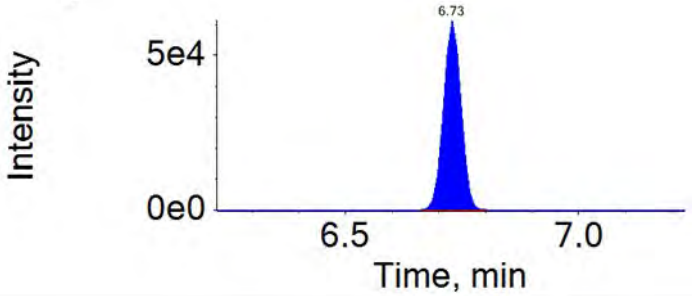
Component: PFTeDA
Primary Mass: 713.0 / 669.0



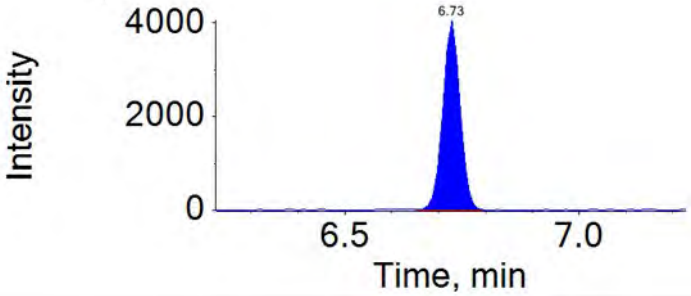
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



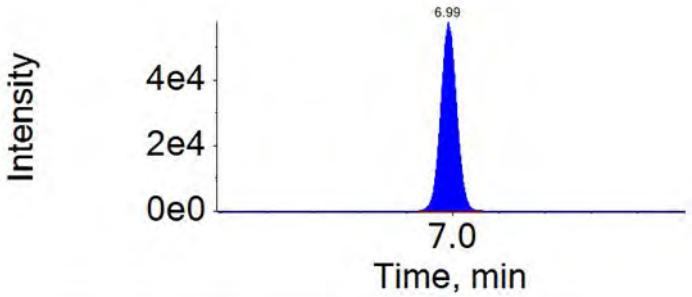
Component: PFHxDA
Primary Mass: 813.0 / 769.0



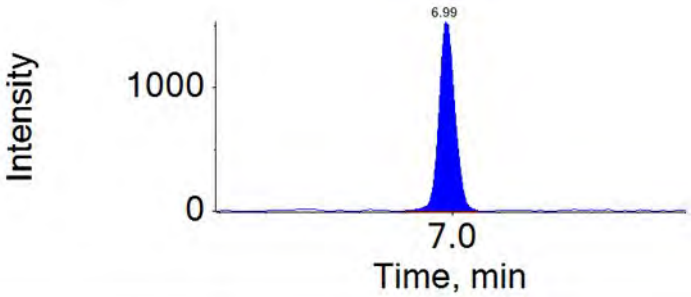
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



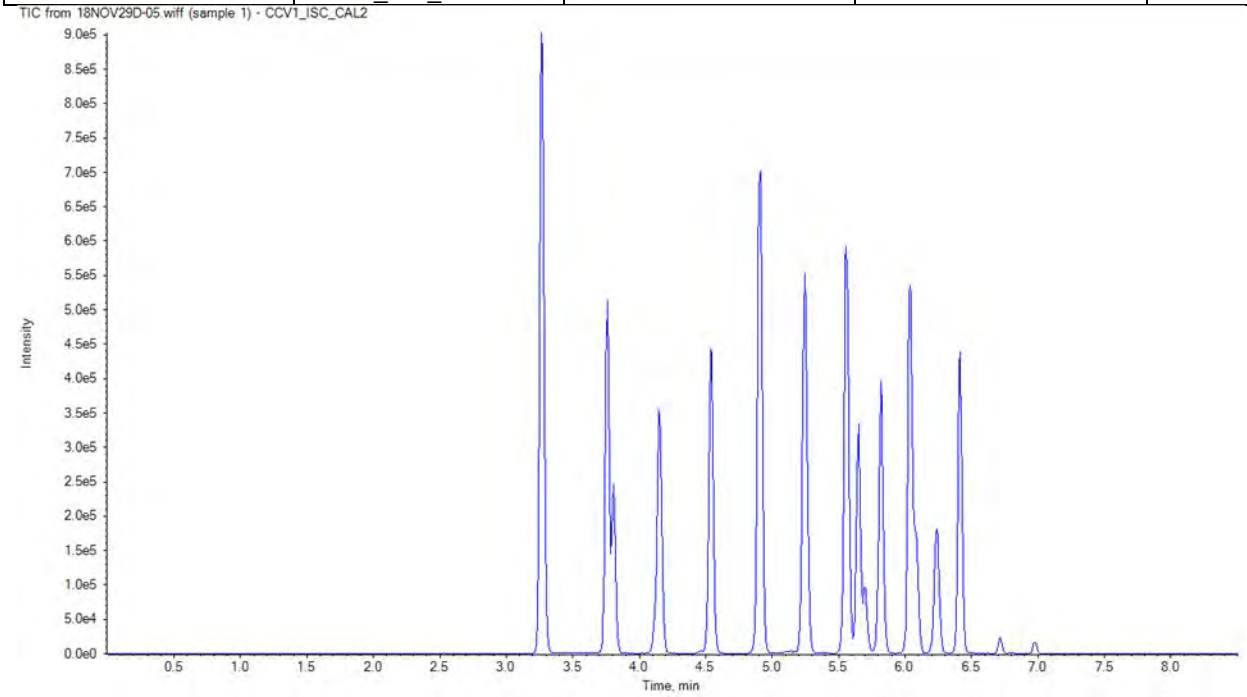
APPROVED
By MCD at 5:01 pm, 11/28/18

REVIEWED
By HMK at 12:22 pm, 11/29/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:56:19 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV1_ISC_CAL2	CALBRN21833C	18NOV29D-05.wiff	2018-11-29T10:33:38



Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	906425.4	887248.9	2	50	
13C2-PFOA	5.0	495984.0	498501.6	-1	50	
13C4-PFOS	4.8	296261.8	283214.2	5	50	
13C2-PFDA	5.0	451203.0	441790.6	2	50	

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:56:19 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV1_ISC_CAL2	CALBRN21833C	18NOV29D-05.wiff	2018-11-29T10:33:38

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	110816.1	10	13C4-PFBA	1032944.8	5.0	0.107	3.26	1.000	0.600	0.588	-2	30	
PFPeA	102438.9	11	13C5-PFPeA	975653.2	5.0	0.105	3.76	1.000	0.600	0.515	-14	30	
PFBS	43167.2	11	13C3-PFBS	442664.0	4.7	0.098	3.81	1.000	0.531	0.473	-11	30	
4:2-FTS	12514.2	11	13C2-4:2-FTS	69056.9	4.7	0.181	4.12	1.000	0.560	0.485	-13	30	
PFHxA	100978.6	11	13C5-PFHxA	694772.3	5.0	0.145	4.15	1.000	0.600	0.583	-3	30	
PFPeS	24883.7	11	13C3-PFBS	442664.0	4.7	0.056	4.17	1.100	0.563	0.569	1	30	
PFHpA	99917.2	12	13C4-PFHpA	548364.3	5.0	0.182	4.54	1.000	0.600	0.562	-6	30	
PFHxS	34610.4	18	13C3-PFHxS	337158.7	4.7	0.103	4.54	1.000	0.547	0.481	-12	30	
6:2-FTS	14994.7	10	13C2-6:2-FTS	61226.3	4.8	0.245	4.90	1.000	0.569	0.639	12	30	
PFHpS	32932.0	11	13C3-PFHxS	337158.7	4.7	0.098	4.90	1.080	0.571	0.487	-15	30	
PFOA	107677.1	11	13C8-PFOA	1050891.3	5.0	0.102	4.91	1.000	0.600	0.529	-12	30	
PFOS	39254.5	21	13C8-PFOS	325457.1	4.8	0.121	5.24	1.000	0.555	0.506	-9	30	
PFNA	93355.4	12	13C9-PFNA	645112.4	5.0	0.145	5.25	1.000	0.600	0.555	-8	30	
PFNS	23416.1	11	13C8-PFOS	325457.1	4.8	0.072	5.54	1.060	0.576	0.454	-21	30	
PFDA	83849.1	11	13C6-PFDA	824275.9	5.0	0.102	5.56	1.000	0.600	0.576	-4	30	
8:2-FTS	15129.8	10	13C2-8:2-FTS	56119.6	4.8	0.270	5.56	1.000	0.575	0.508	-12	30	
PFOSA	69416.0	11	13C8-PFOSA	658157.0	5.0	0.105	5.65	1.000	0.600	0.534	-11	30	
NMeFOSAA	16285.3	17	d3-NMeFOSAA	192349.4	5.0	0.085	5.70	1.000	0.600	0.540	-10	30	
PFDS	22930.4	11	13C8-PFOS	325457.1	4.8	0.070	5.79	1.110	0.578	0.559	-3	30	
PFUnDA	94649.2	11	13C7-PFUnDA	586091.6	5.0	0.161	5.82	1.000	0.600	0.577	-4	30	
NEtFOSAA	15976.2	22	d5-NEtFOSAA	148667.1	5.0	0.107	5.83	1.000	0.600	0.523	-13	30	
PFDoDA	124243.3	12	13C2-PFDoDA	1129756.8	5.0	0.110	6.04	1.000	0.600	0.602	0	30	
10:2-FTS	14919.7	12	13C2-8:2-FTS	56119.6	4.8	0.266	6.05	1.090	0.578	0.586	1	30	
NMePFOSAE	36174.1	11	d7-NMePFOSAE	257961.3	5.0	0.140	6.09	1.000	0.600	0.590	-2	30	
NMePFOSA	8301.9	12	d3-NMePFOSA	85320.8	5.0	0.097	6.10	1.000	0.600	0.516	-14	30	
PFDoS	11172.3	11	13C8-PFOS	325457.1	4.8	0.034	6.20	1.180	0.581	0.493	-15	30	
NEtPFOSAE	36969.5	11	d9-NEtPFOSAE	229198.1	5.0	0.161	6.25	1.000	0.600	0.580	-3	30	
NEtPFOSA	7677.3	12	d5-NEtPFOSA	69372.1	5.0	0.111	6.26	1.000	0.600	0.496	-17	30	
PFTrDA	122778.8	11	13C2-PFDoDA	1129756.8	5.0	0.109	6.23	1.030	0.600	0.655	9	30	
PFTeDA	89123.1	10	13C2-PFTeDA	840112.8	5.0	0.106	6.41	1.000	0.600	0.601	0	30	
PFHxDA	45160.5	11	13C2-PFTeDA	840112.8	5.0	0.054	6.71	1.050	0.600	0.615	2	30	
PFODA	35571.7	10	13C2-PFTeDA	840112.8	5.0	0.042	6.98	1.090	0.600	0.564	-6	30	

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:56:19 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV1_ISC_CAL2			**Data File:**		18NOV29D-05.wiff
Sample ID:	CALBRN21833C			**Acquis Date:**		2018-11-29T10:33:38
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	4			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV29DCCV1-5
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV28DCAL-08

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	906425.4	887248.9	2	50	
13C2-PFOA	5.0	495984.0	498501.6	-1	50	
13C4-PFOS	4.8	296261.8	283214.2	5	50	
13C2-PFDA	5.0	451203.0	441790.6	2	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	1032944.8	13C3-PFBA	906425.4	1.140	5.000	5.084	102	70-130	
E13C5-PFPeA	975653.2	13C3-PFBA	906425.4	1.076	5.000	5.026	101	70-130	
E13C3-PFBS	442664.0	13C3-PFBA	906425.4	0.488	4.650	4.659	100	70-130	
E13C2-4:2-FTS	69056.9	13C2-PFOA	495984.0	0.139	4.670	4.798	103	70-130	
E13C5-PFHxA	694772.3	13C2-PFOA	495984.0	1.401	5.000	5.145	103	70-130	
E13C3-PFHxS	337158.7	13C2-PFOA	495984.0	0.680	4.730	5.328	113	70-130	
E13C4-PFHpA	548364.3	13C2-PFOA	495984.0	1.106	5.000	5.080	102	70-130	
E13C2-6:2-FTS	61226.3	13C2-PFOA	495984.0	0.123	4.750	5.167	109	70-130	
E13C8-PFOA	1050891.3	13C2-PFOA	495984.0	2.119	5.000	5.832	117	70-130	
E13C8-PFOS	325457.1	13C4-PFOS	296261.8	1.099	4.780	4.959	104	70-130	
E13C9-PFNA	645112.4	13C4-PFOS	296261.8	2.178	5.000	4.783	96	70-130	
E13C6-PFDA	824275.9	13C2-PFDA	451203.0	1.827	5.000	5.151	103	70-130	
E13C2-8:2-FTS	56119.6	13C2-PFDA	451203.0	0.124	4.790	5.346	112	70-130	
E13C8-PFOSA	658157.0	13C2-PFDA	451203.0	1.459	5.000	5.352	107	70-130	
Ed3-NMeFOSAA	192349.4	13C2-PFDA	451203.0	0.426	5.000	5.413	108	70-130	
E13C7-PFUnDA	586091.6	13C2-PFDA	451203.0	1.299	5.000	5.490	110	70-130	
Ed5-NEtFOSAA	148667.1	13C2-PFDA	451203.0	0.329	5.000	5.870	117	70-130	
E13C2-PFDoDA	1129756.8	13C2-PFDA	451203.0	2.504	5.000	5.261	105	70-130	
Ed7-NMePFOSAE	257961.3	13C2-PFDA	451203.0	0.572	5.000	4.941	99	70-130	
Ed3-NMePFOSA	85320.8	13C2-PFDA	451203.0	0.189	5.000	5.118	102	70-130	
Ed9-NEtPFOSAE	229198.1	13C2-PFDA	451203.0	0.508	5.000	5.150	103	70-130	
Ed5-NEtPFOSA	69372.1	13C2-PFDA	451203.0	0.154	5.000	5.342	107	70-130	
E13C2-PFTeDA	840112.8	13C2-PFDA	451203.0	1.862	5.000	5.152	103	70-130	

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

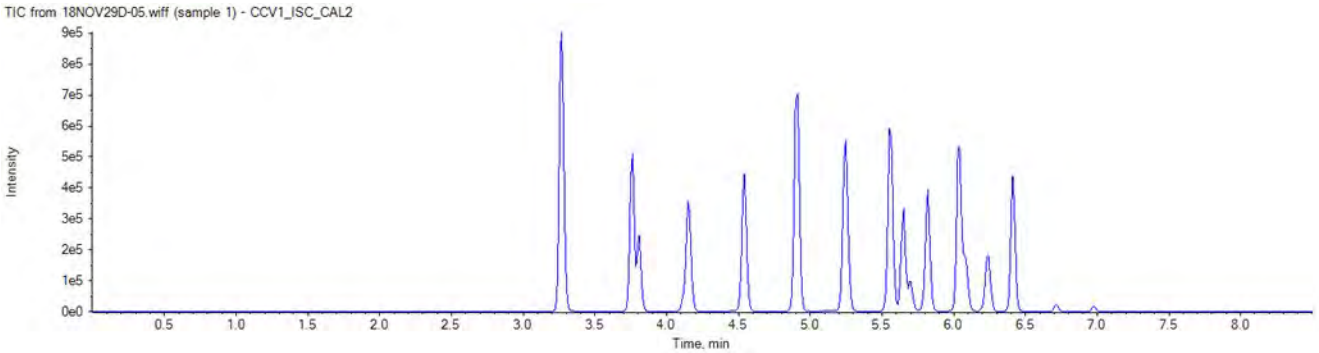
Analyte Quantitation Peak Table

Sample Name: CCV1_ISC_CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV29D-05.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	110816.1		A	13C4-PFBA	3.27	1032944.8	0.107	0.588
PFPeA	3.76	1.000	102438.9		A	13C5-PFPeA	3.76	975653.2	0.105	0.515
PFBS	3.81	1.000	43167.2		A	13C3-PFBS	3.81	442664.0	0.098	0.473
4:2-FTS	4.12	1.000	12514.2		A	13C2-4:2-FTS	4.12	69056.9	0.181	0.485
PFHxA	4.15	1.000	100978.6		A	13C5-PFHxA	4.15	694772.3	0.145	0.583
PFPeS	4.17	1.100	24883.7		A	13C3-PFBS	3.81	442664.0	0.056	0.569
PFHpA	4.54	1.000	99917.2		A	13C4-PFHpA	4.54	548364.3	0.182	0.562
PFHxS	4.54	1.000	34610.4		M	13C3-PFHxS	4.54	337158.7	0.103	0.481
6:2-FTS	4.90	1.000	14994.7		A	13C2-6:2-FTS	4.90	61226.3	0.245	0.639
PFHpS	4.90	1.080	32932.0		A	13C3-PFHxS	4.54	337158.7	0.098	0.487
PFOA	4.91	1.000	107677.1		A	13C8-PFOA	4.91	1050891.3	0.102	0.529
PFOS	5.24	1.000	39254.5		M	13C8-PFOS	5.24	325457.1	0.121	0.506
PFNA	5.25	1.000	93355.4		A	13C9-PFNA	5.25	645112.4	0.145	0.555
PFNS	5.54	1.060	23416.1		A	13C8-PFOS	5.24	325457.1	0.072	0.454
PFDA	5.56	1.000	83849.1		A	13C6-PFDA	5.56	824275.9	0.102	0.576
8:2-FTS	5.56	1.000	15129.8		A	13C2-8:2-FTS	5.56	56119.6	0.270	0.508
PFOSA	5.65	1.000	69416.0		A	13C8-PFOSA	5.65	658157.0	0.105	0.534
NMeFOSAA	5.70	1.000	16285.3		M	d3-NMeFOSAA	5.70	192349.4	0.085	0.540
PFDS	5.79	1.110	22930.4		A	13C8-PFOS	5.24	325457.1	0.070	0.559
PFUnDA	5.82	1.000	94649.2		A	13C7-PFUnDA	5.82	586091.6	0.161	0.577
NEtFOSAA	5.83	1.000	15976.2		M	d5-NEtFOSAA	5.83	148667.1	0.107	0.523
PFDoDA	6.04	1.000	124243.3		A	13C2-PFDoDA	6.04	1129756.8	0.110	0.602
10:2-FTS	6.05	1.090	14919.7		A	13C2-8:2-FTS	5.56	56119.6	0.266	0.586
NMePFOSAE	6.09	1.000	36174.1		A	d7-NMePFOSAE	6.08	257961.3	0.140	0.590
NMePFOSA	6.10	1.000	8301.9		A	d3-NMePFOSA	6.09	85320.8	0.097	0.516
PFDoS	6.20	1.180	11172.3		A	13C8-PFOS	5.24	325457.1	0.034	0.493
NEtPFOSAE	6.25	1.000	36969.5		A	d9-NEtPFOSAE	6.23	229198.1	0.161	0.580
NEtPFOSA	6.26	1.000	7677.3		A	d5-NEtPFOSA	6.25	69372.1	0.111	0.496
PFTrDA	6.23	1.030	122778.8		A	13C2-PFDoDA	6.04	1129756.8	0.109	0.655
PFTeDA	6.41	1.000	89123.1		A	13C2-PFTeDA	6.41	840112.8	0.106	0.601
PFHxDA	6.71	1.050	45160.5		A	13C2-PFTeDA	6.41	840112.8	0.054	0.615
PFODA	6.98	1.090	35571.7		A	13C2-PFTeDA	6.41	840112.8	0.042	0.564

Total Ion Chromatogram

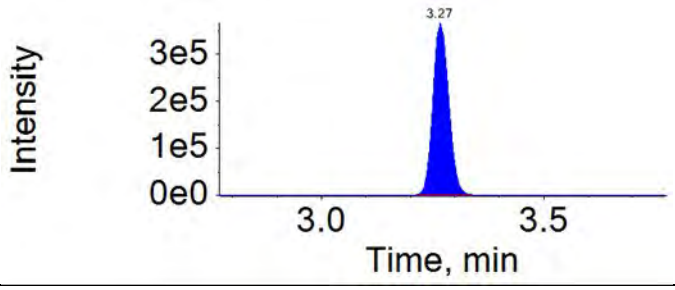


APPROVED
By MCD at 8:06 pm, 11/29/18

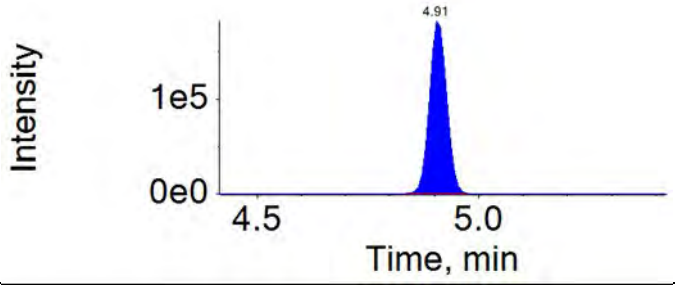
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

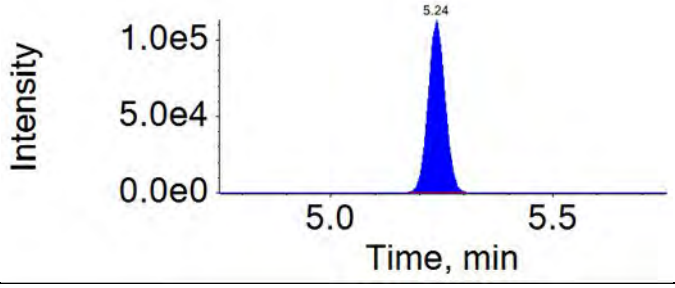
Injection Standard: 13C3-PFBA
216.0 / 172.0



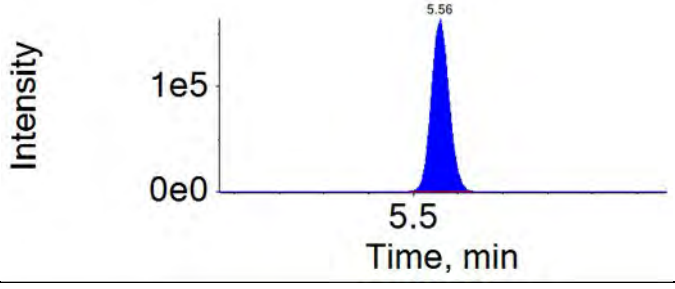
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



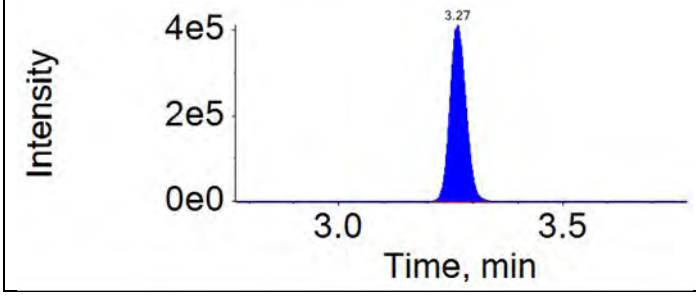
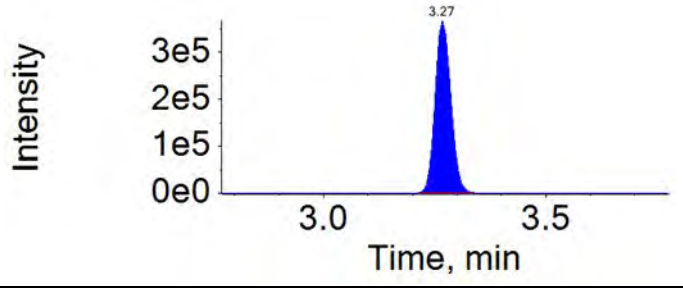
Injection Standard: 13C2-PFDA
515.0 / 470.0

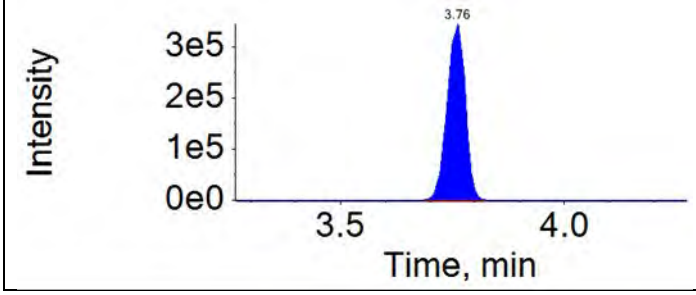
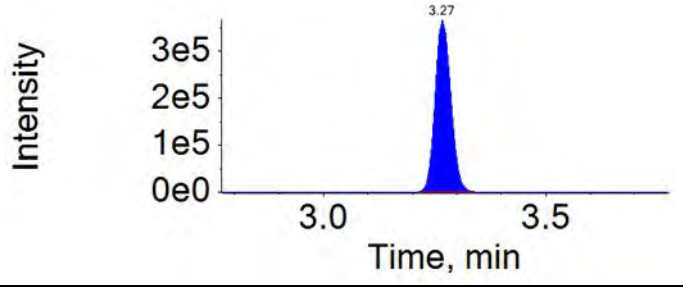


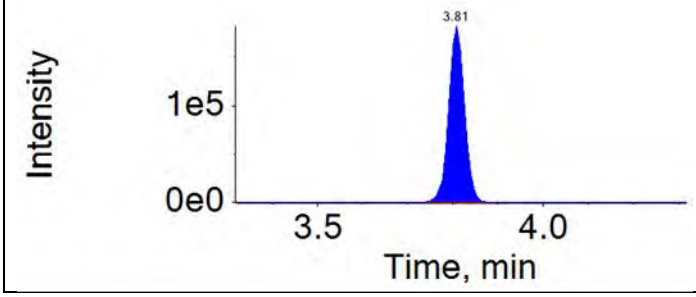
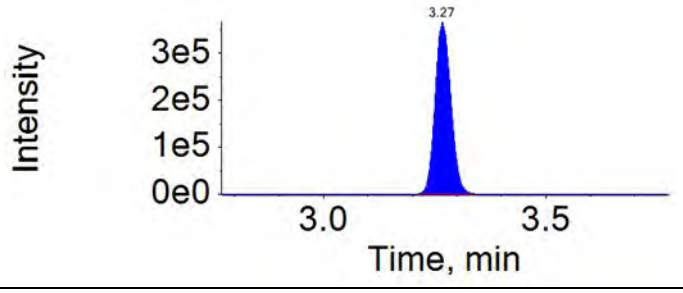
APPROVED
By MCD at 8:06 pm, 11/29/18

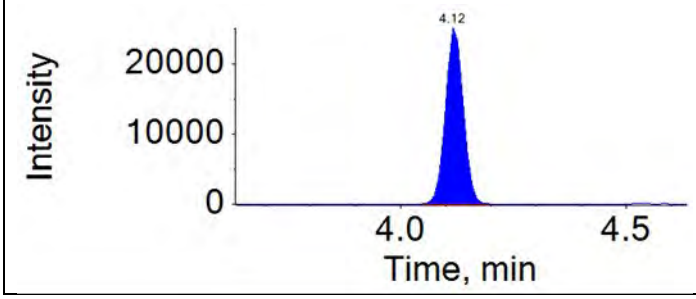
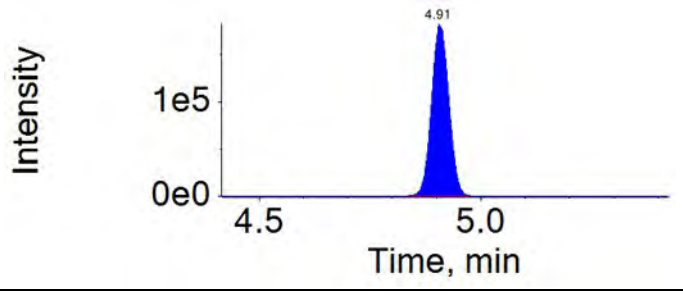
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

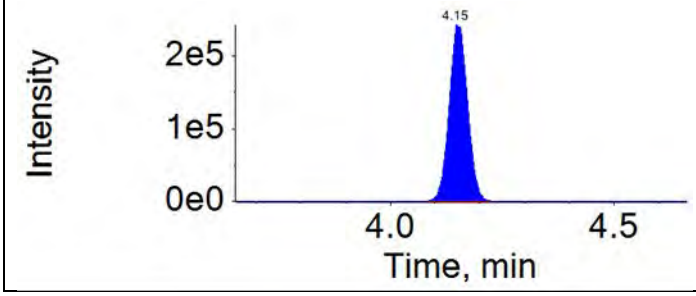
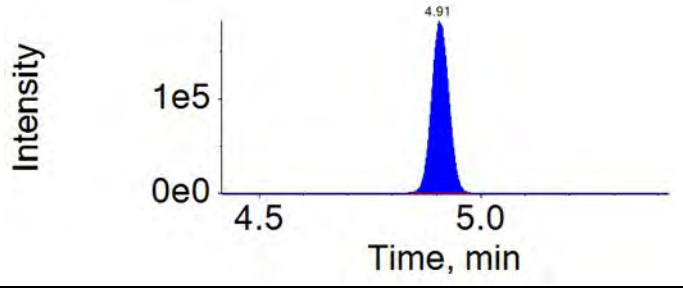
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

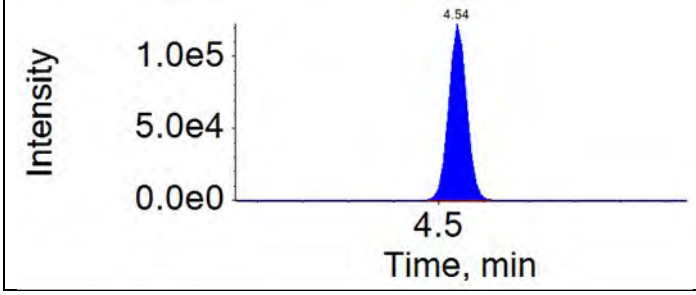
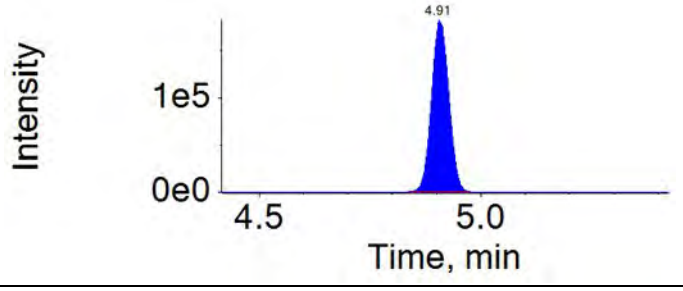
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

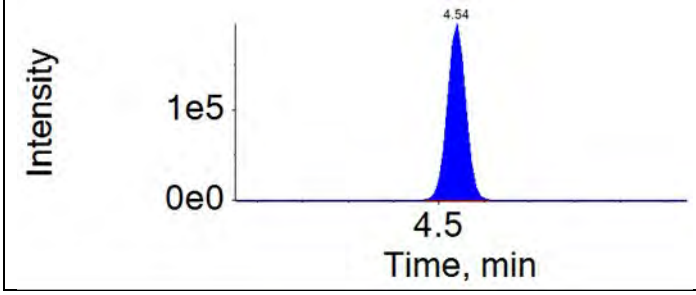
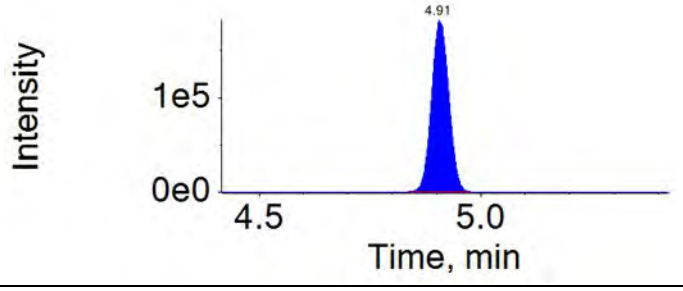
APPROVED
By MCD at 8:06 pm, 11/29/18

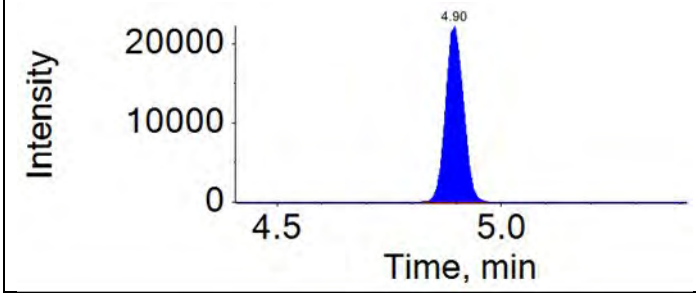
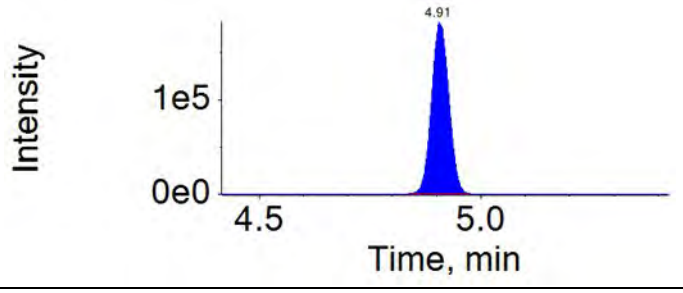
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

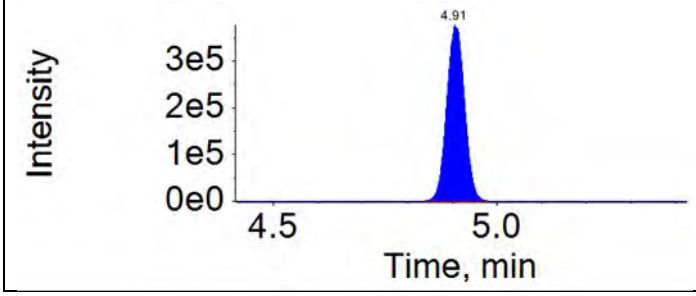
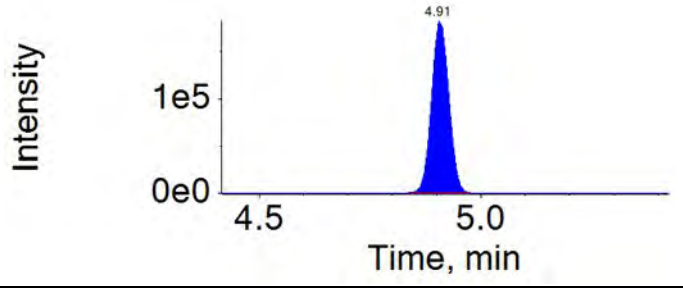
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

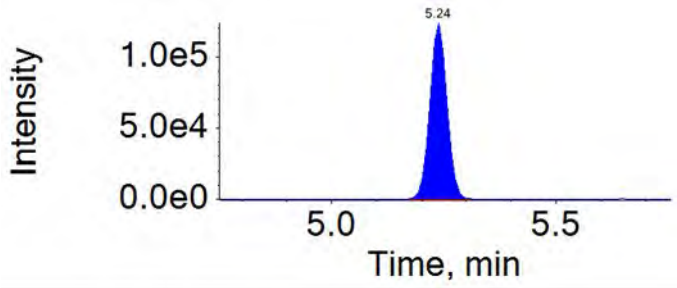
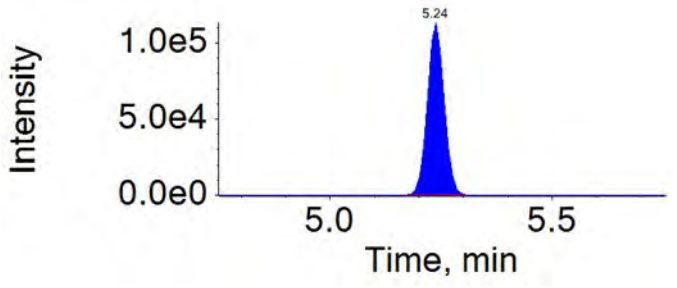
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

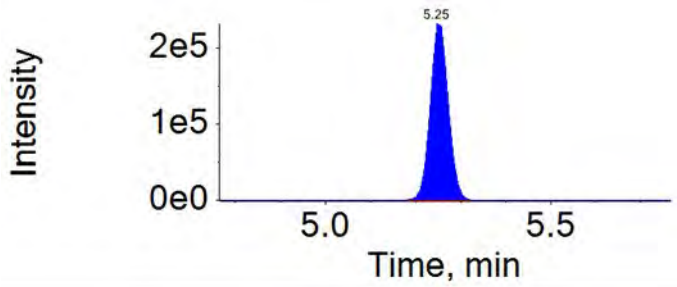
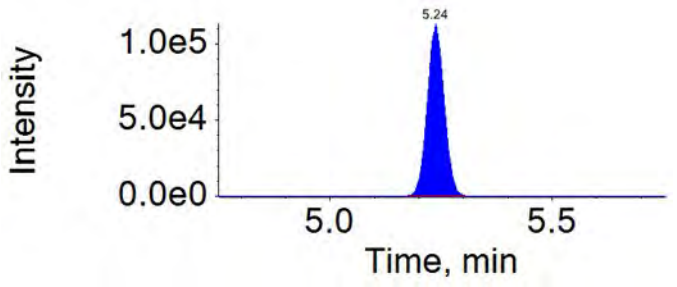
APPROVED
By MCD at 8:06 pm, 11/29/18

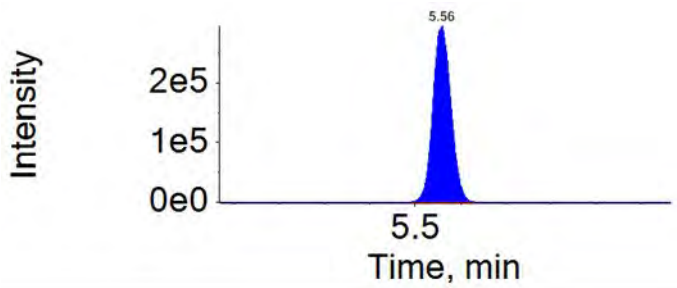
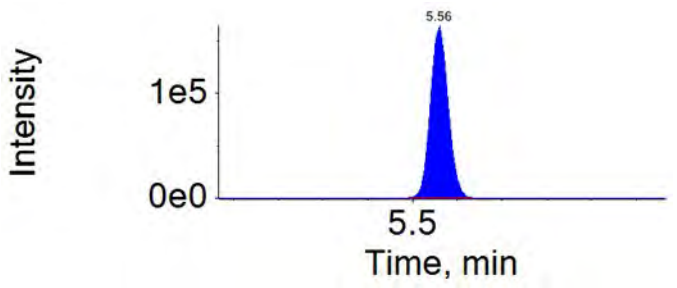
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

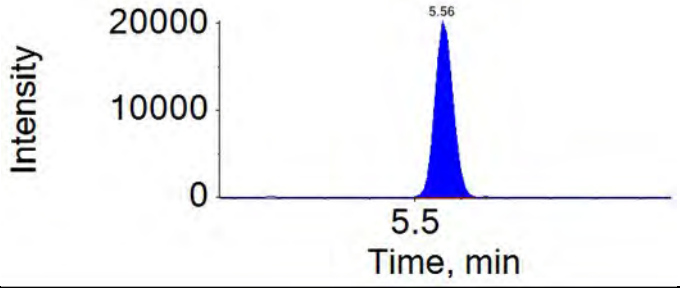
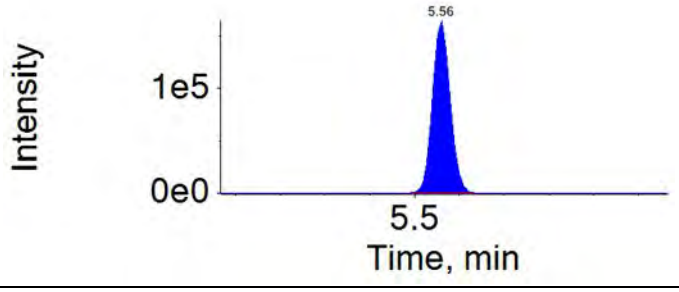
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

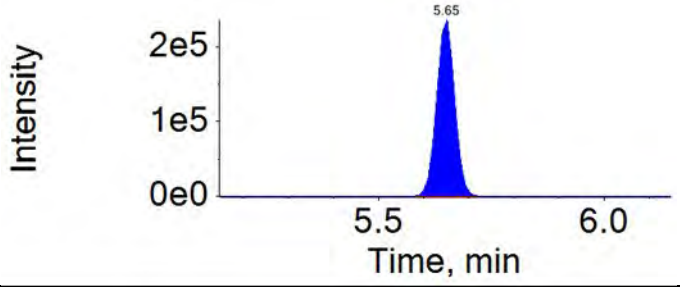
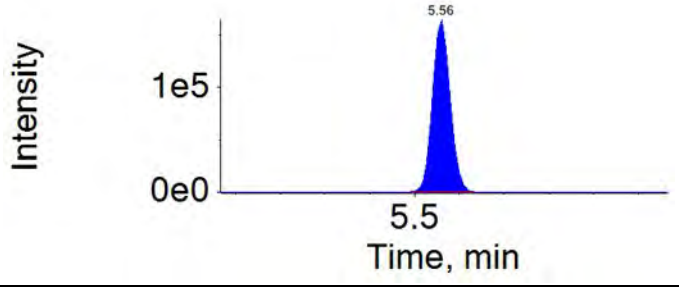
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

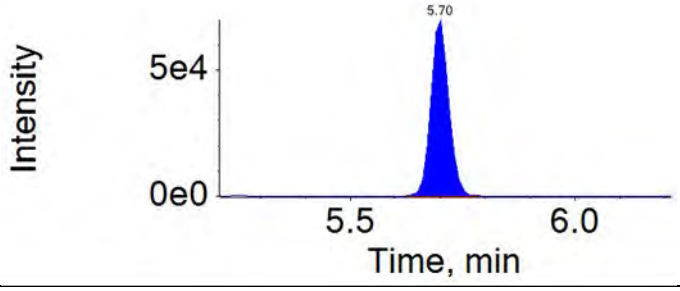
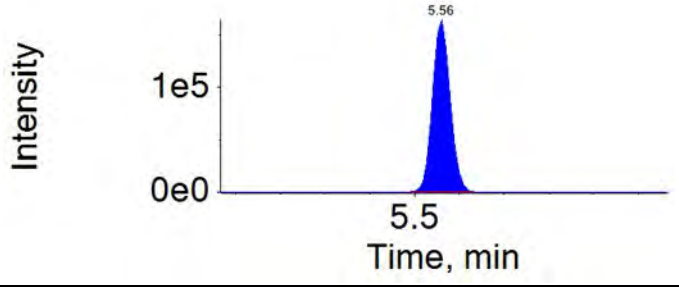
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

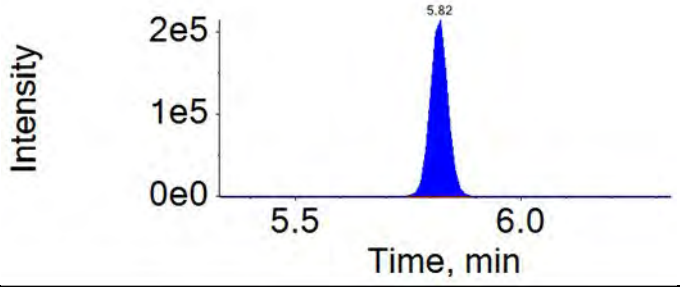
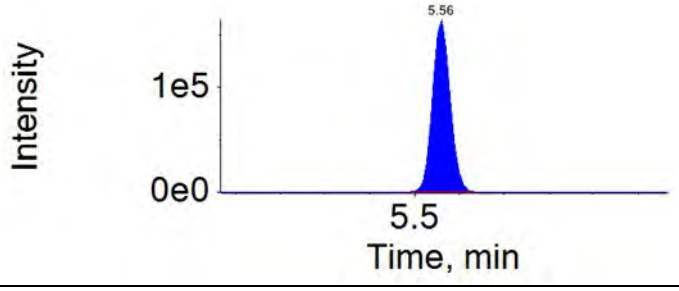
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

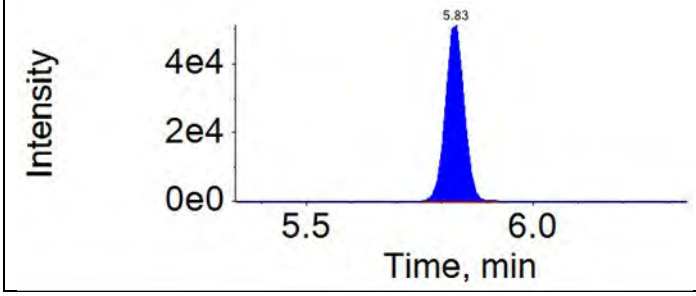
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

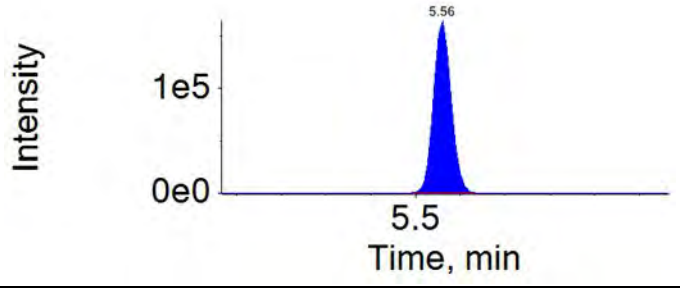
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

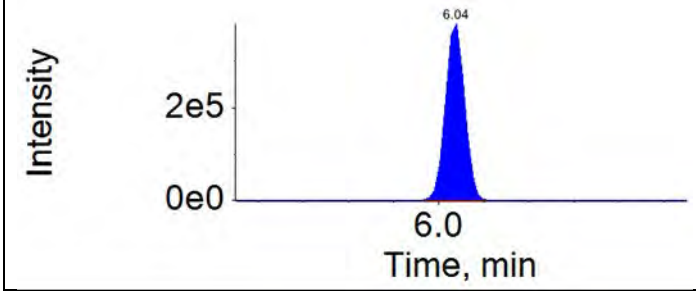
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

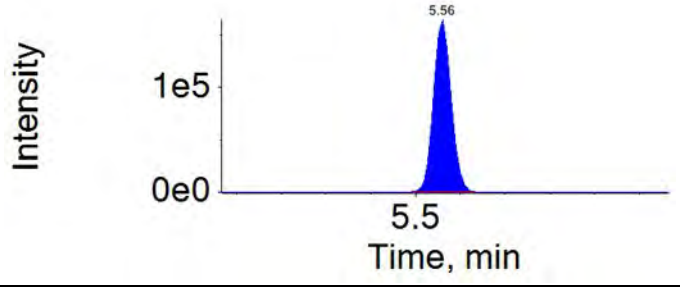
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



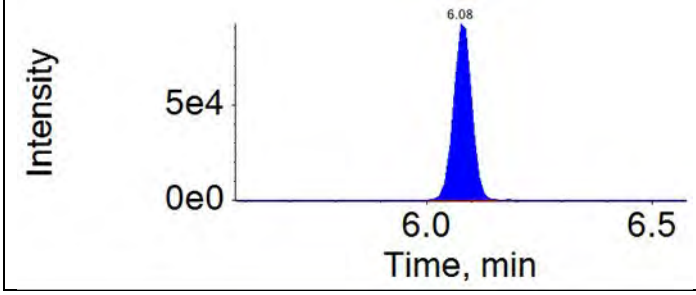


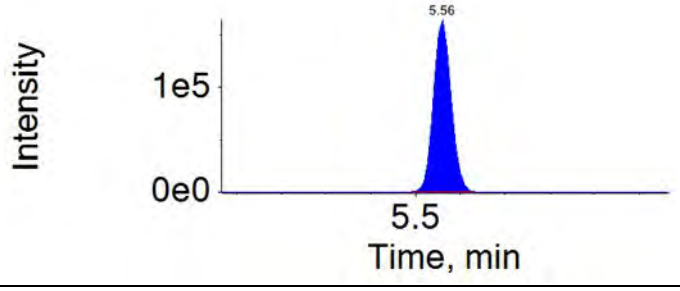
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



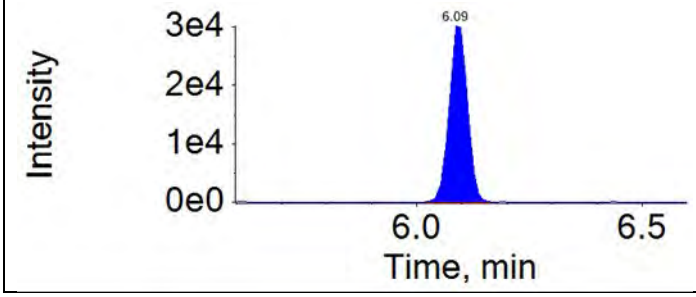


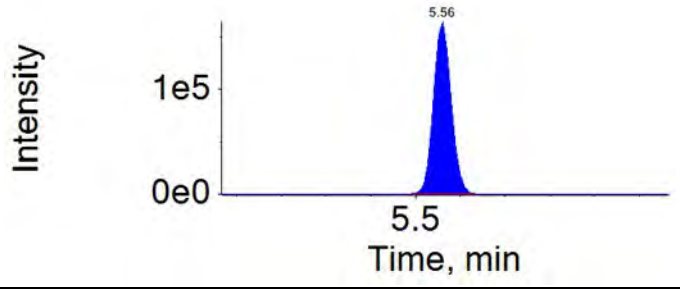
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



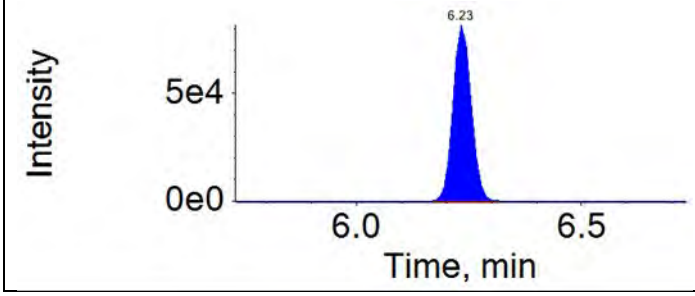


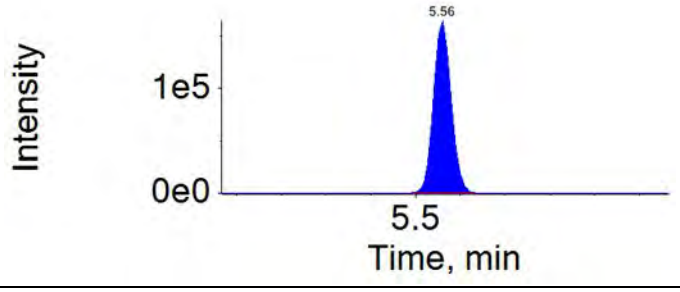
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

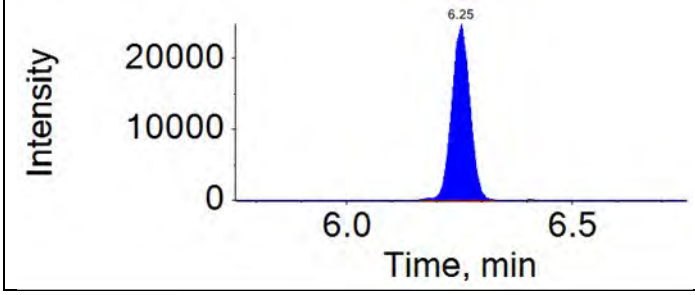
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

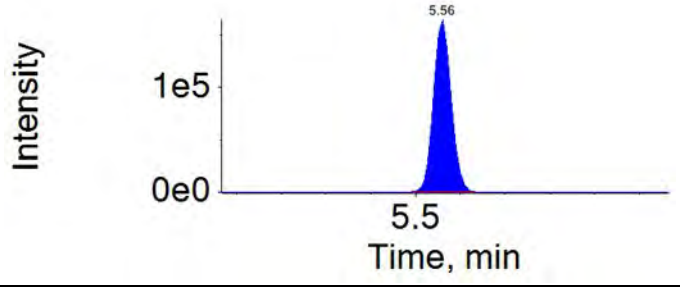
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



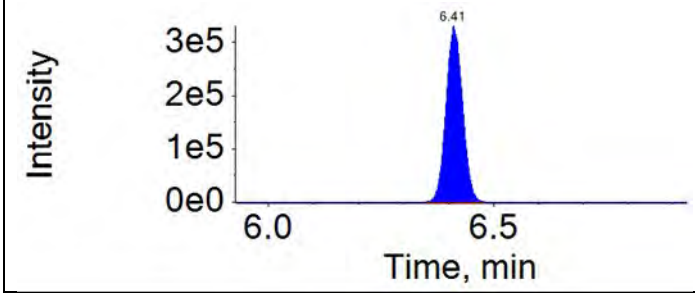


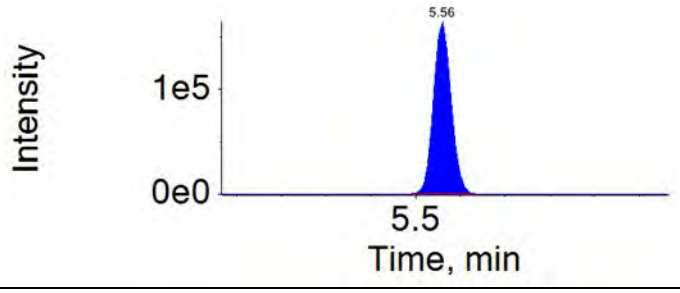
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



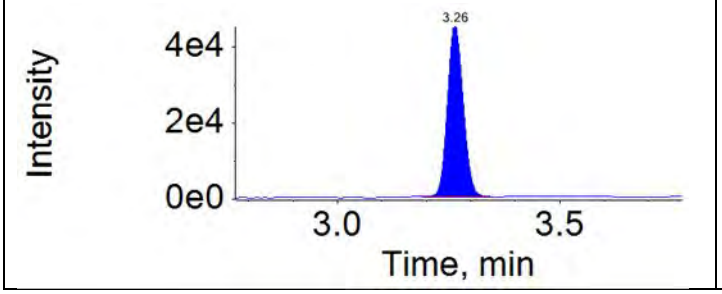


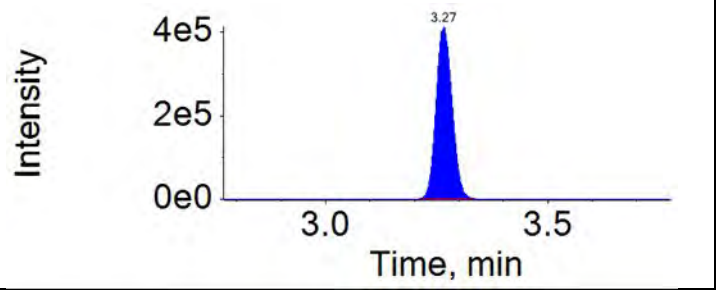
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

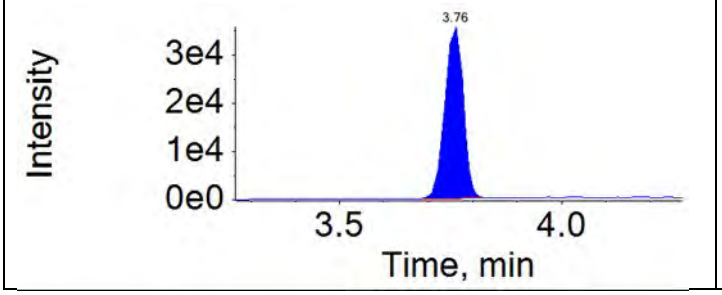
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

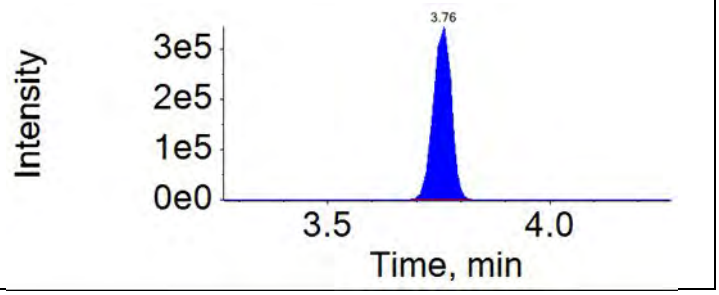
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



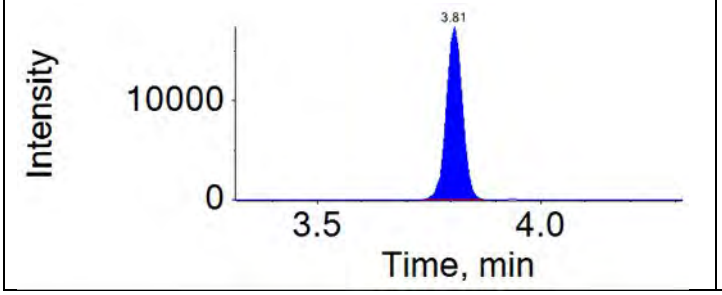


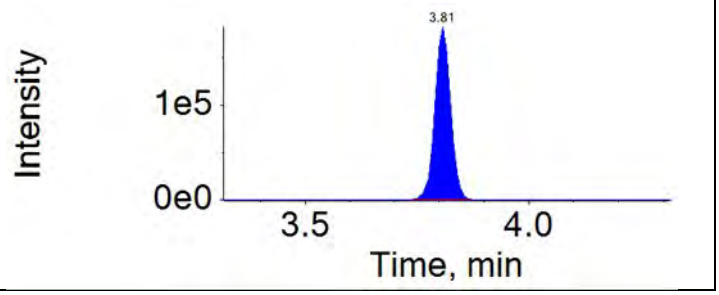
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



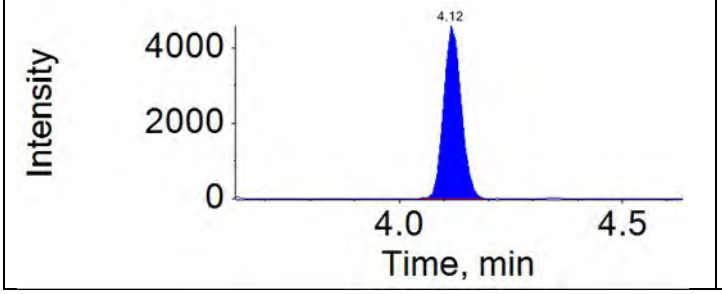


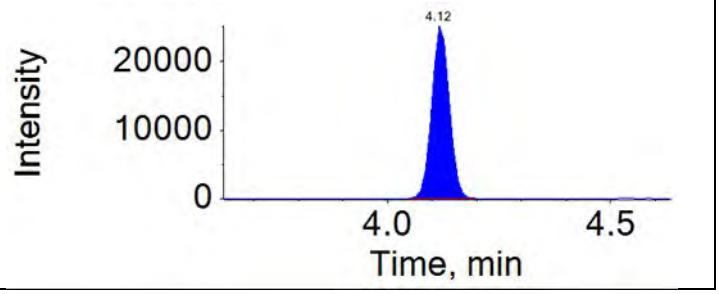
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



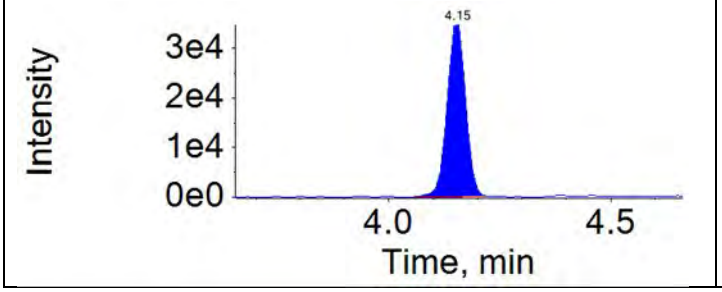


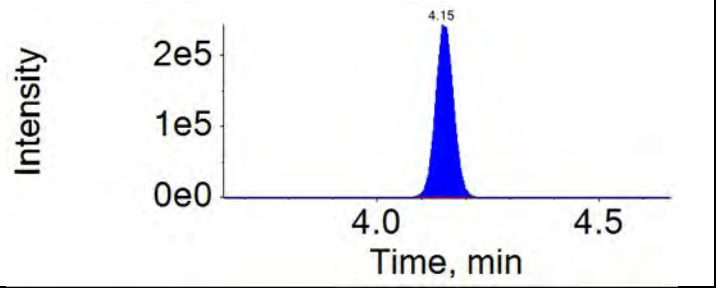
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

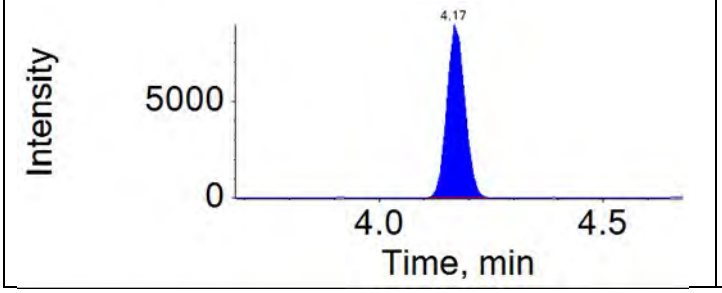
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

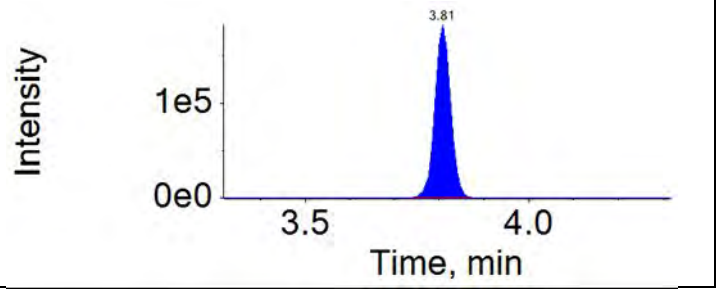
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



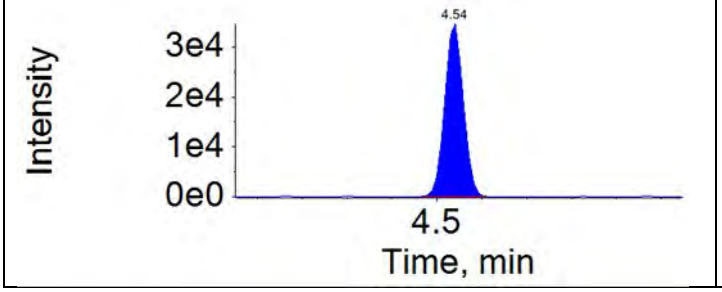


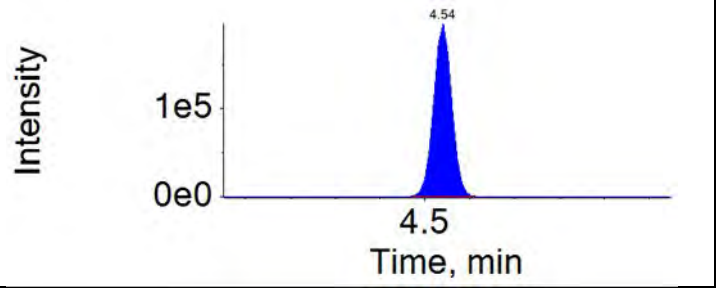
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



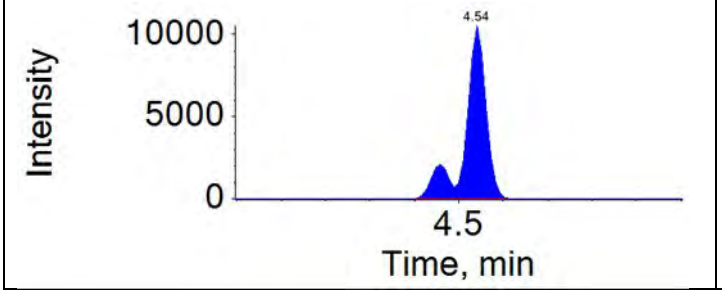


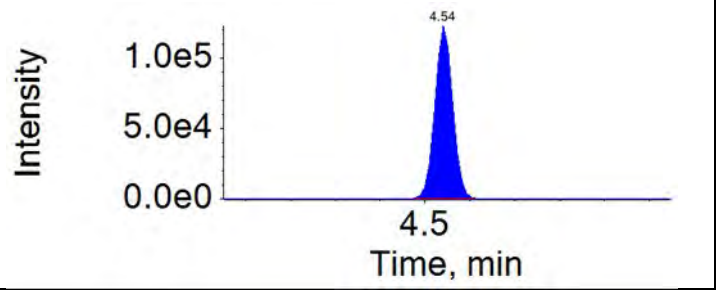
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



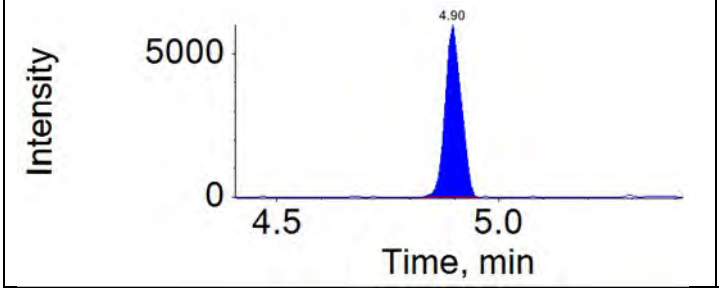


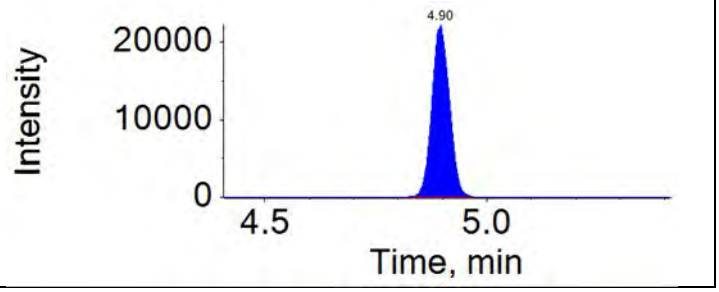
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

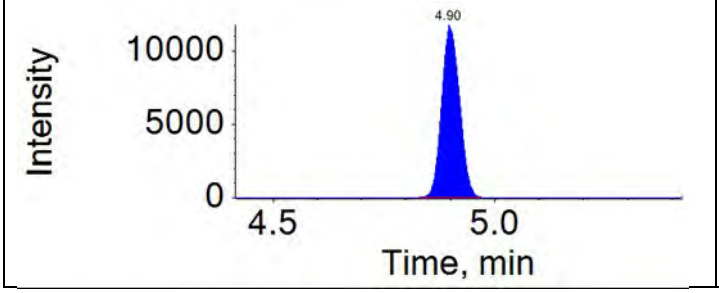
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

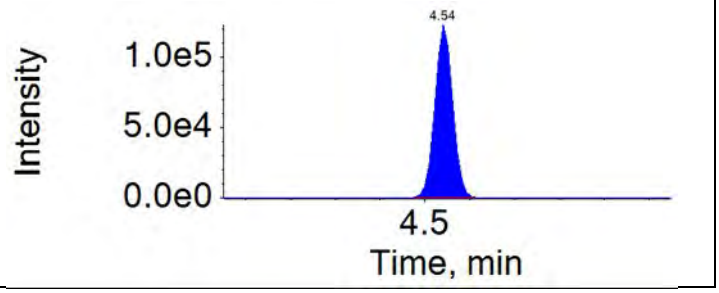
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



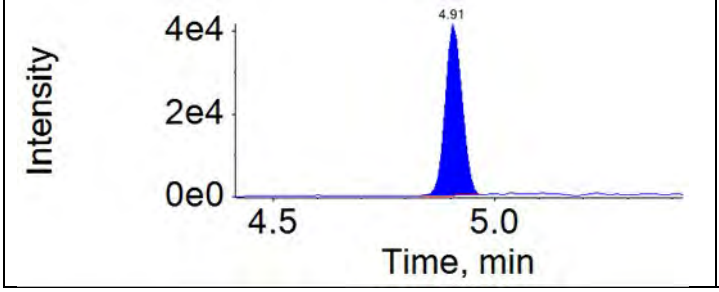


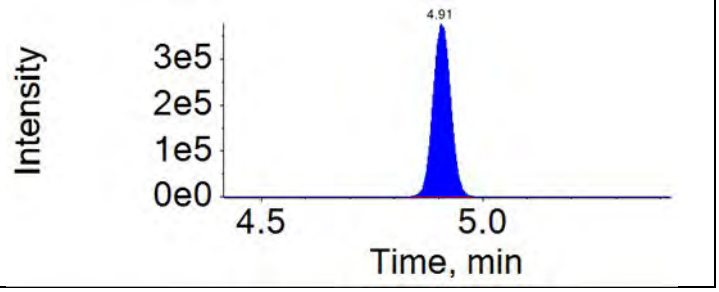
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



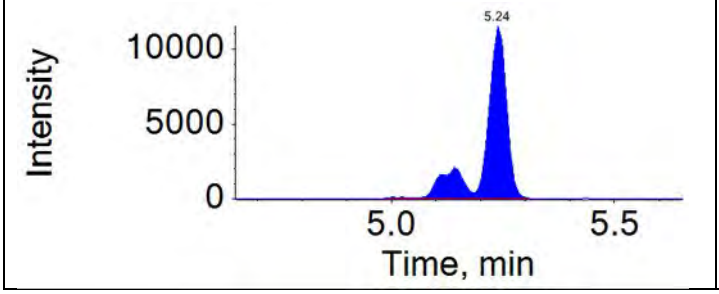


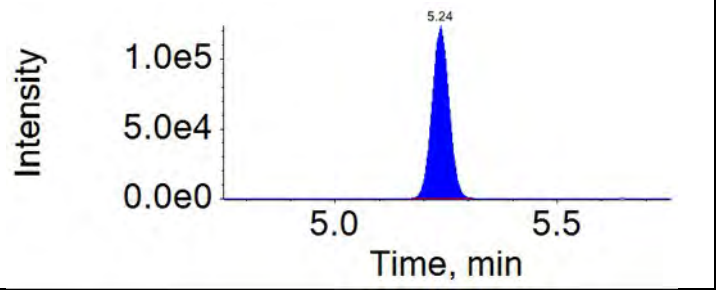
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



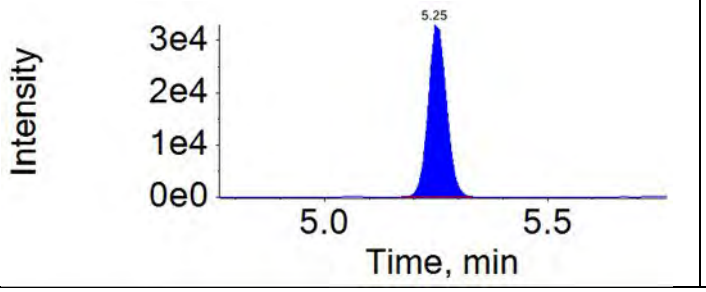


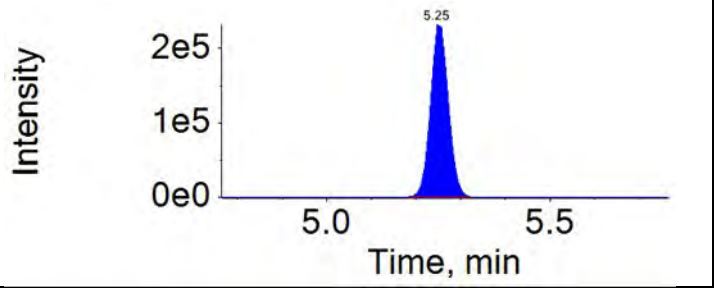
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

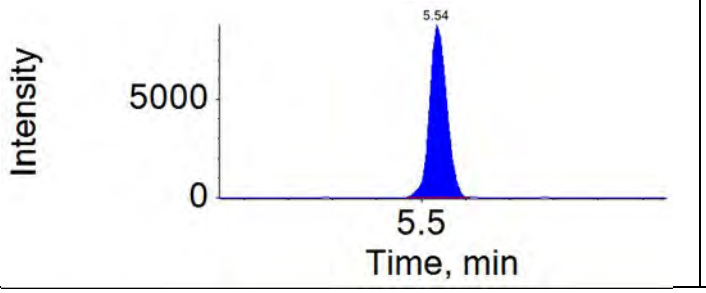
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

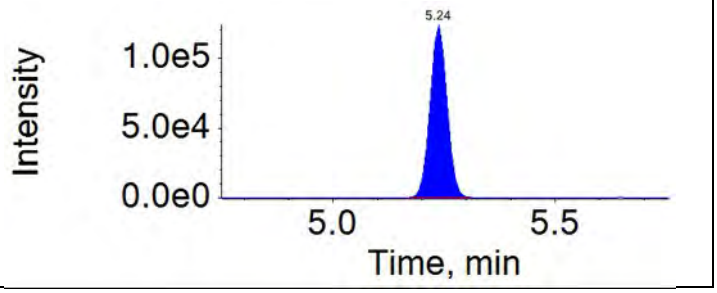
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



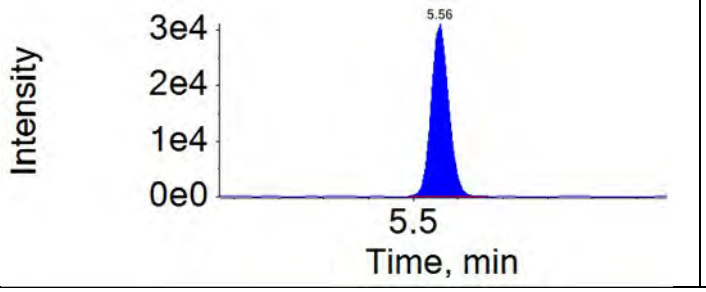


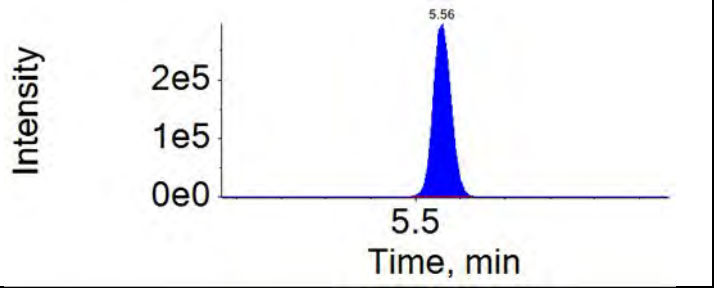
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



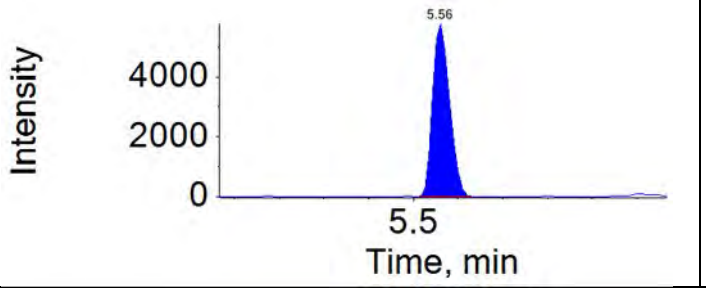


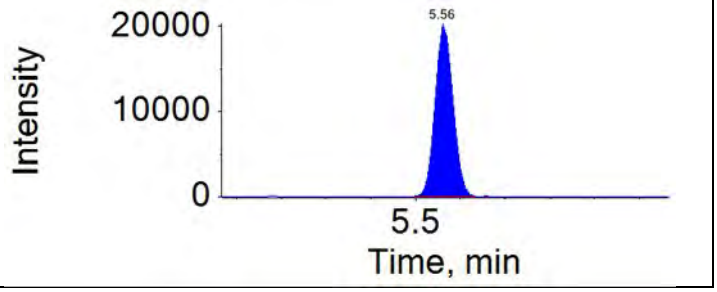
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0

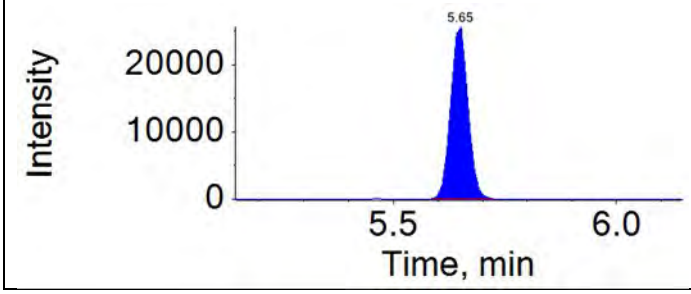
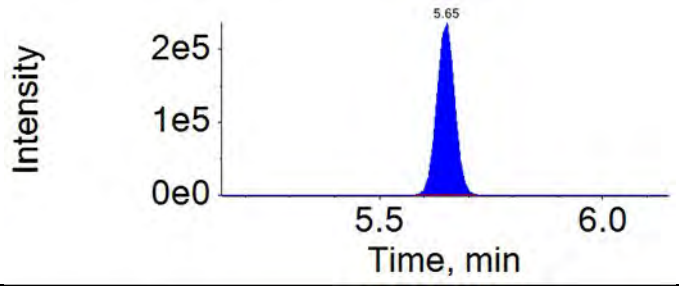


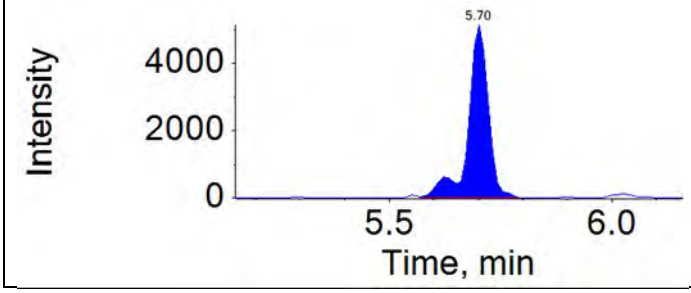
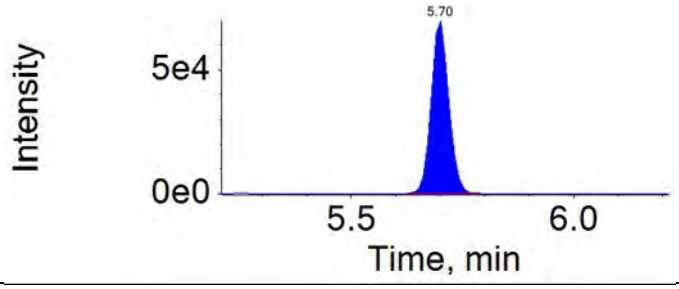


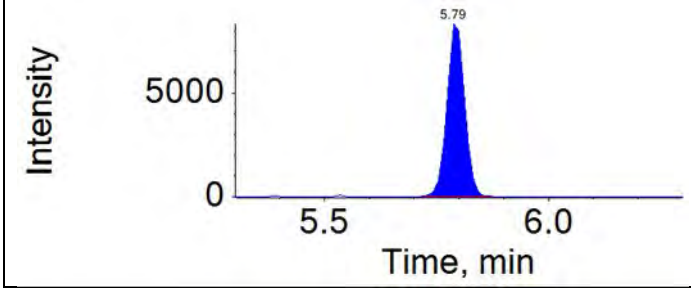
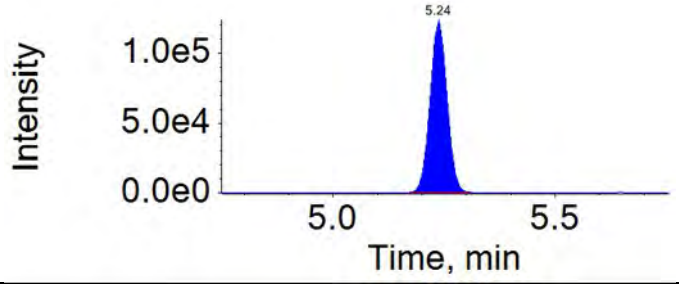
APPROVED
By MCD at 8:06 pm, 11/29/18

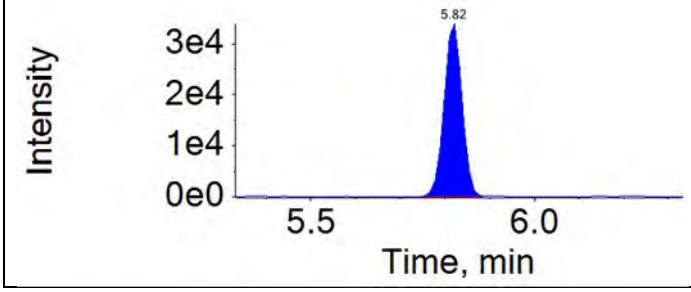
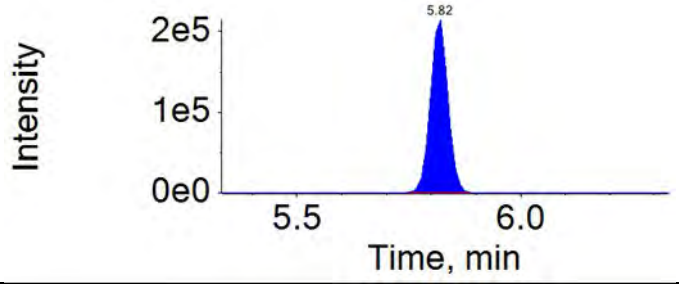
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0
	

Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0
	

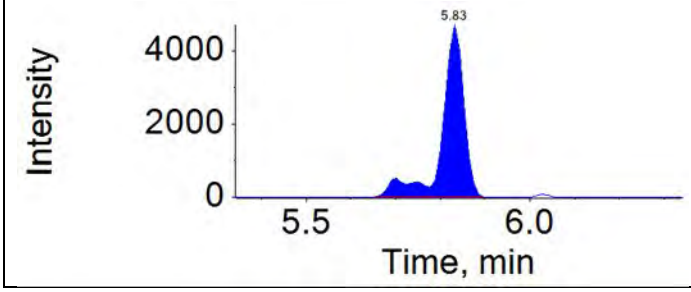
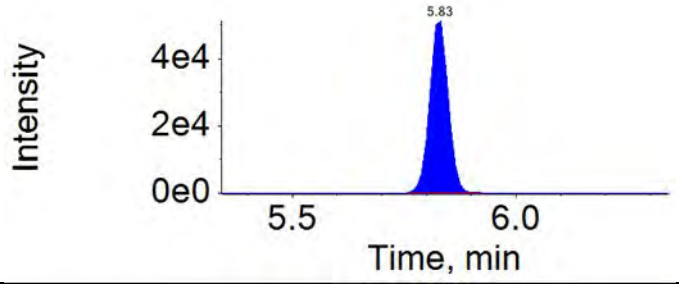
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0
	

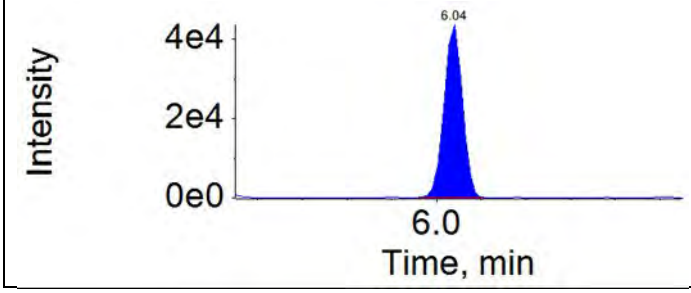
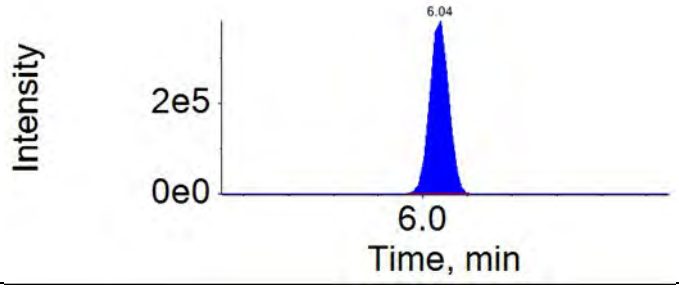
Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0
	

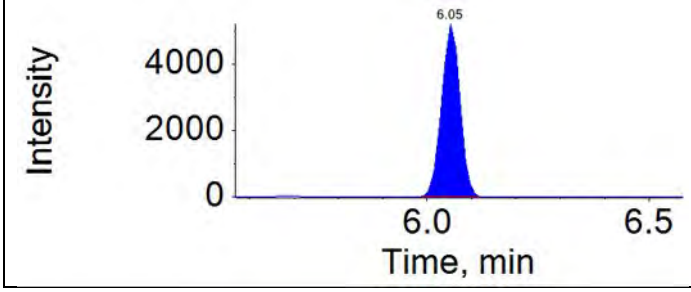
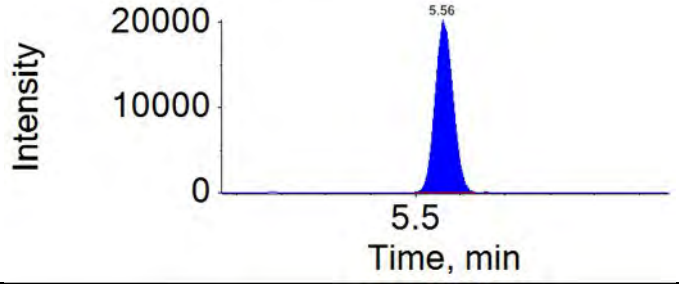
APPROVED
By MCD at 8:06 pm, 11/29/18

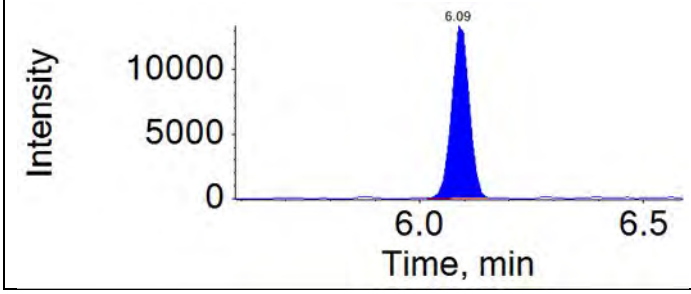
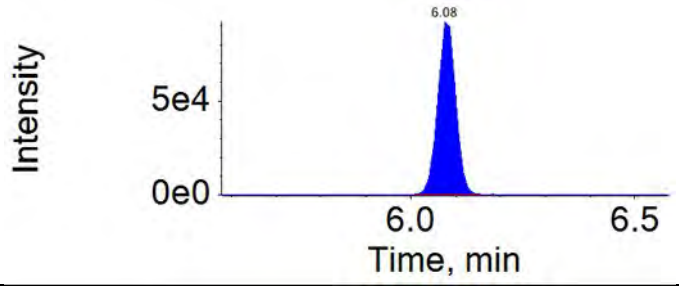
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0
	

Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0
	

Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0
	

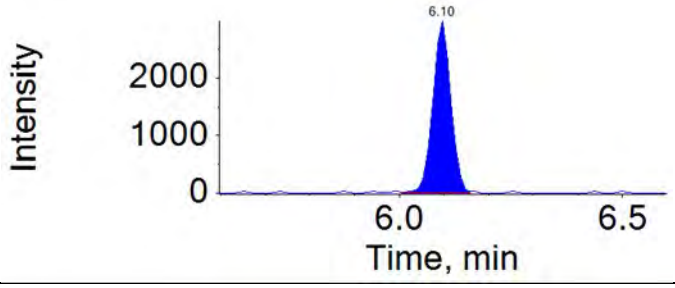
Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0
	

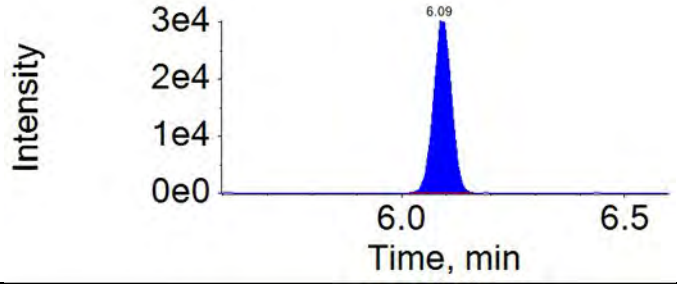
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

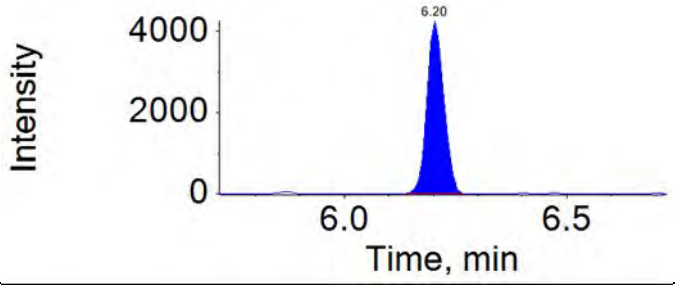
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

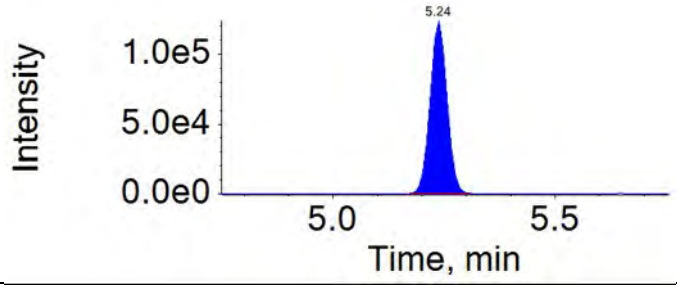
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



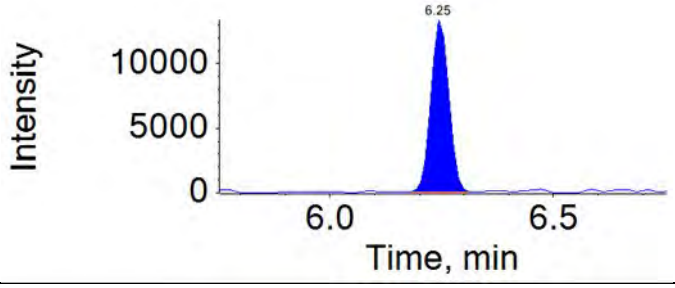


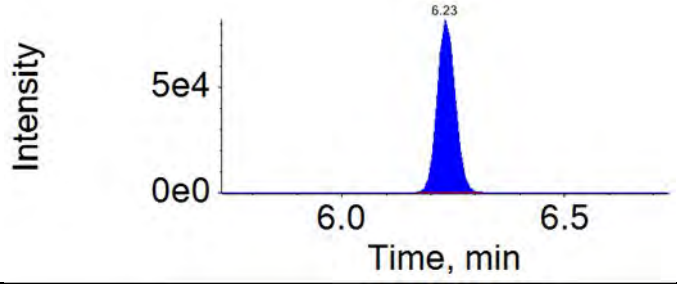
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



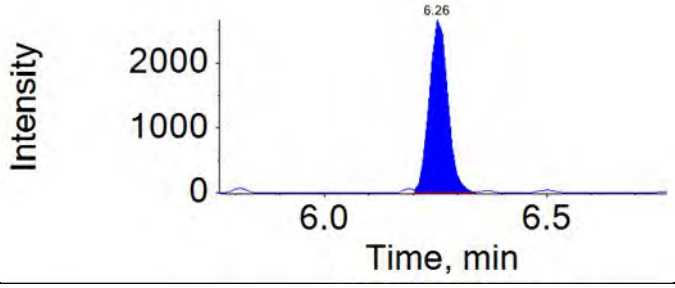


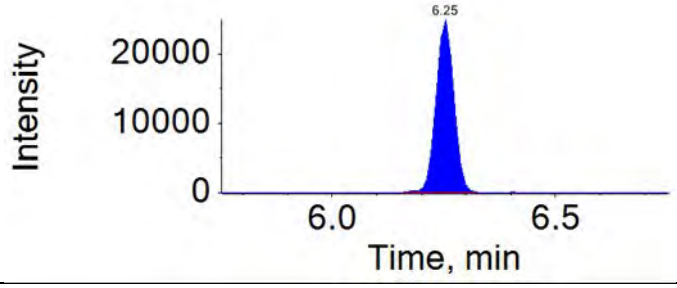
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

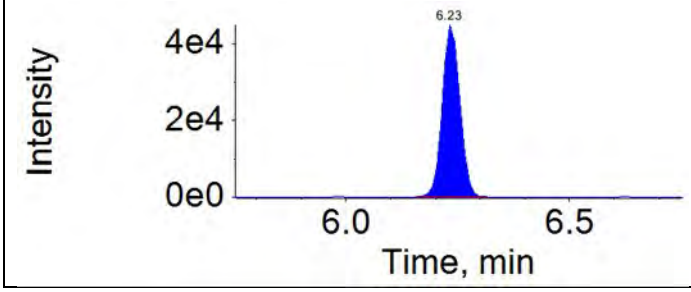
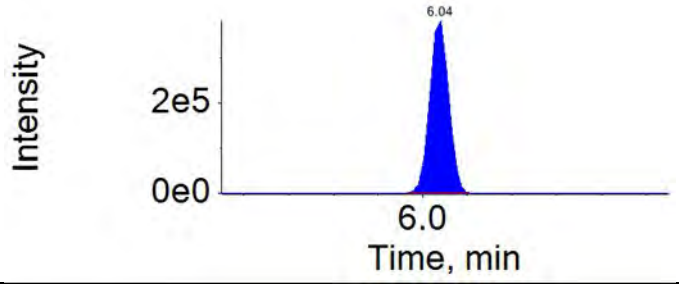


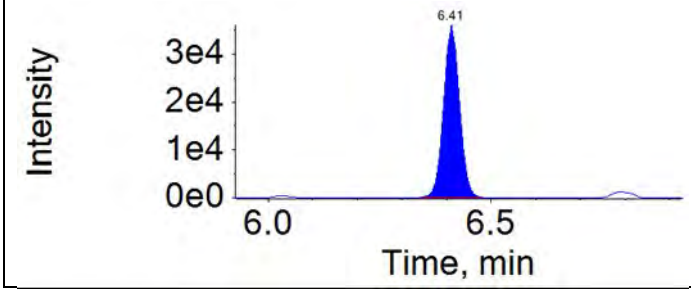
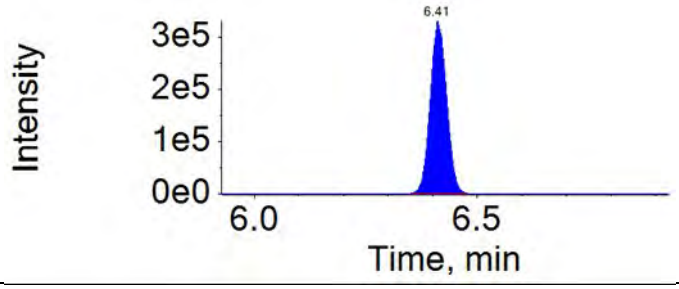


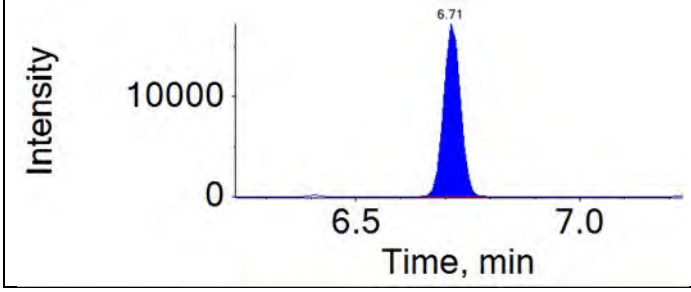
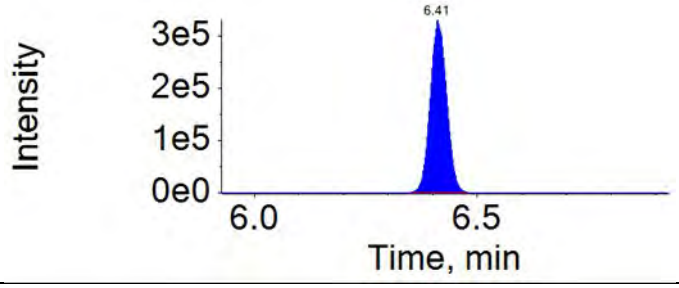
APPROVED
By MCD at 8:06 pm, 11/29/18

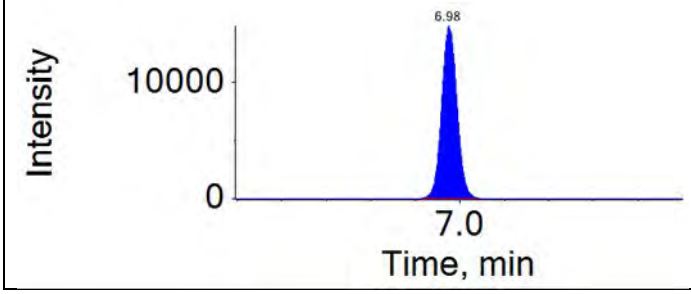
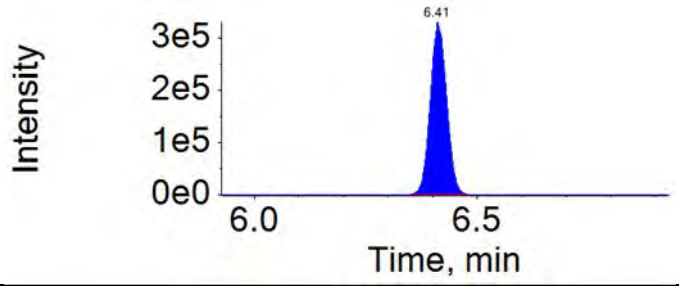
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

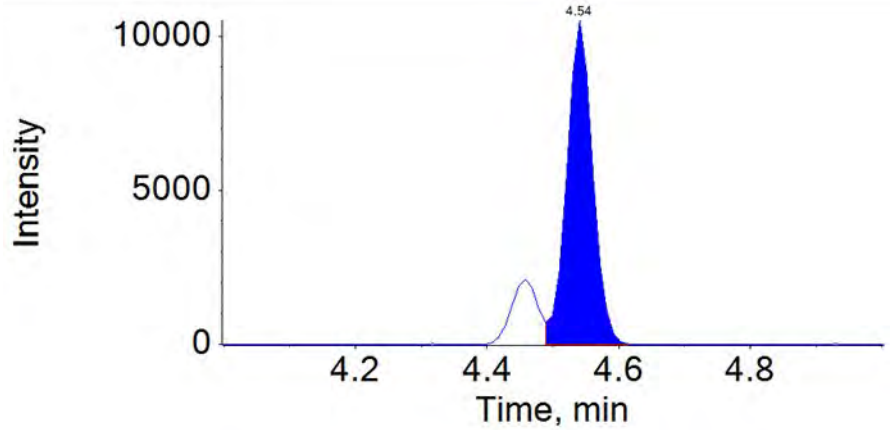
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

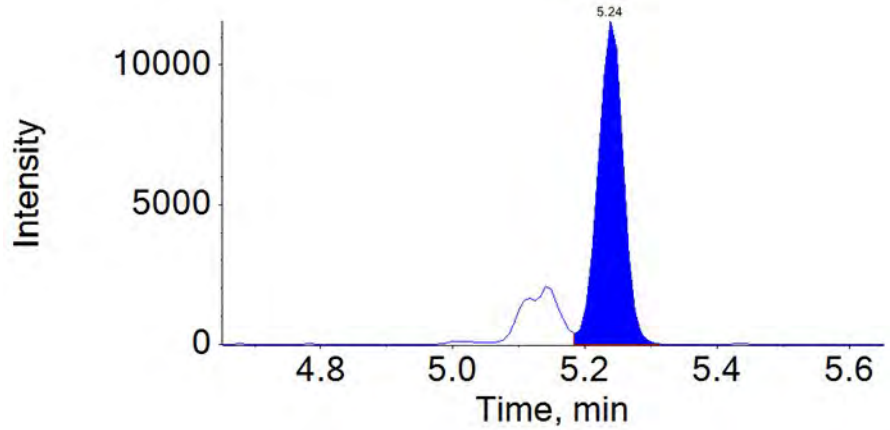
Results Table Name: 18NOV29DCCV1-5
Results Table Date: 11/29/2018 7:58:55 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.54
Peak Area:
28783.5
Mass Range:
399.0 / 80.0
File Name:
18NOV29D-05.wiff
Sample Name:
CCV1_ISC_CAL2



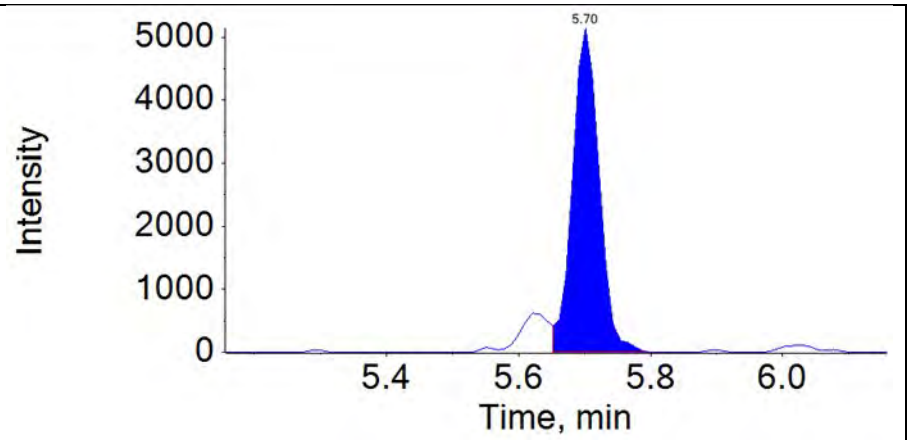
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
30774.9
Mass Range:
499.0 / 80.0
File Name:
18NOV29D-05.wiff
Sample Name:
CCV1_ISC_CAL2



Integration Comment: incorrect integration

Component Name:
NMeFOSAA
RT (min.):
5.70
Peak Area:
14468.0
Mass Range:
570.0 / 419.0
File Name:
18NOV29D-05.wiff
Sample Name:
CCV1_ISC_CAL2

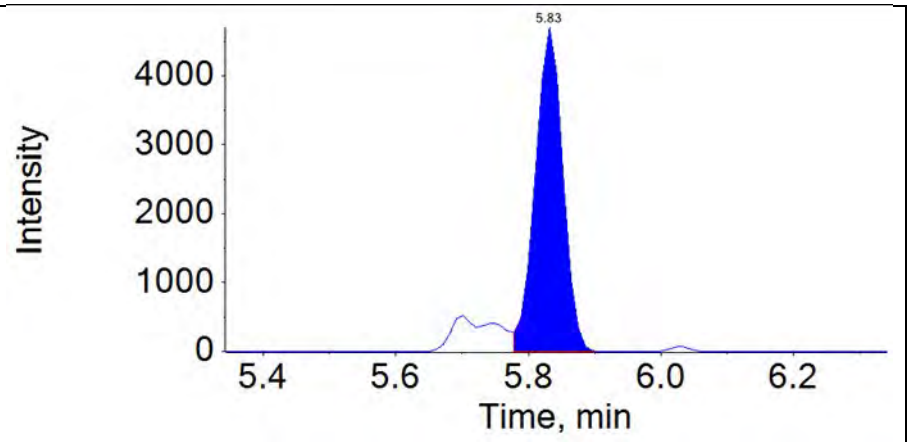


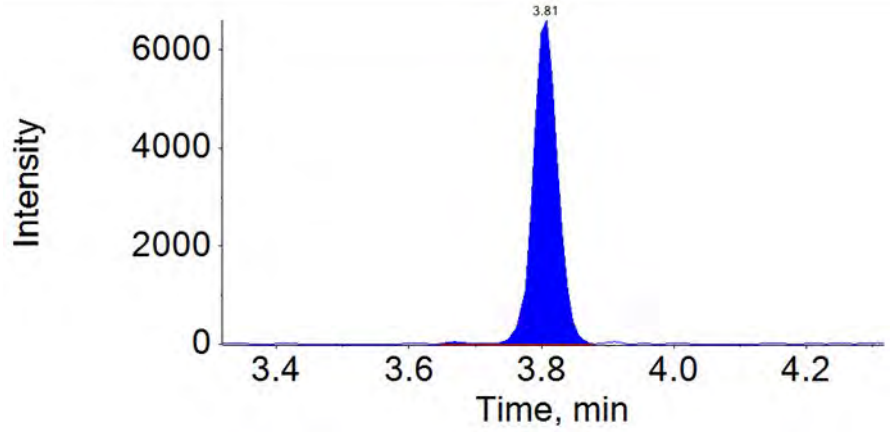
Integration Comment: incorrect integration

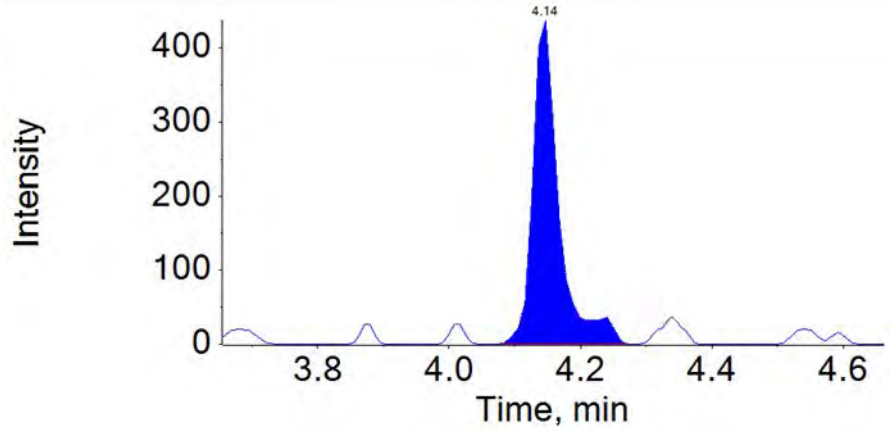
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Results Table Name: 18NOV29DCCV1-5
Results Table Date: 11/29/2018 7:58:55 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: NEtFOSAA **RT (min.):** 5.83 **Peak Area:** 13564.4 **Mass Range:** 584.0 / 419.0 **File Name:** 18NOV29D-05.wiff **Sample Name:** CCV1_ISC_CAL2	 **Integration Comment:** incorrect integration

Component Name: PFBS_2 **RT (min.):** 3.81 **Peak Area:** 17159.7 **Mass Range:** 299.0 / 99.0 **File Name:** 18NOV29D-05.wiff **Sample Name:** CCV1_ISC_CAL2	 **Integration Comment:** incorrect integration

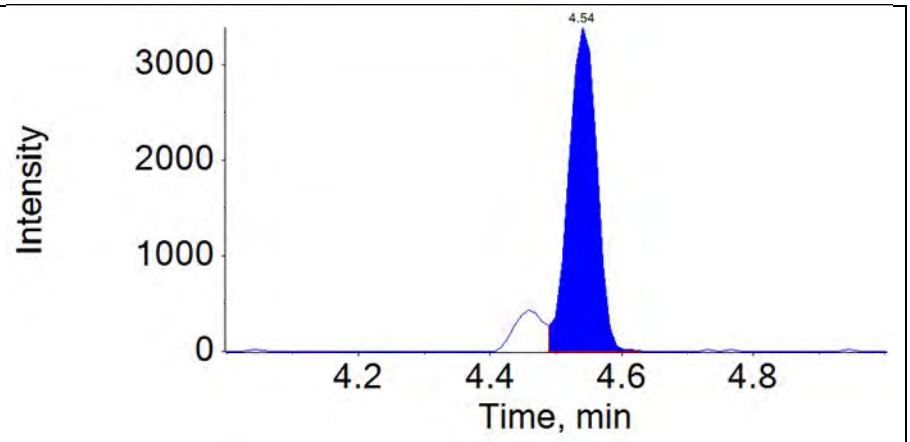
Component Name: PFHxA_2 **RT (min.):** 4.14 **Peak Area:** 1214.8 **Mass Range:** 313.0 / 119.0 **File Name:** 18NOV29D-05.wiff **Sample Name:** CCV1_ISC_CAL2	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

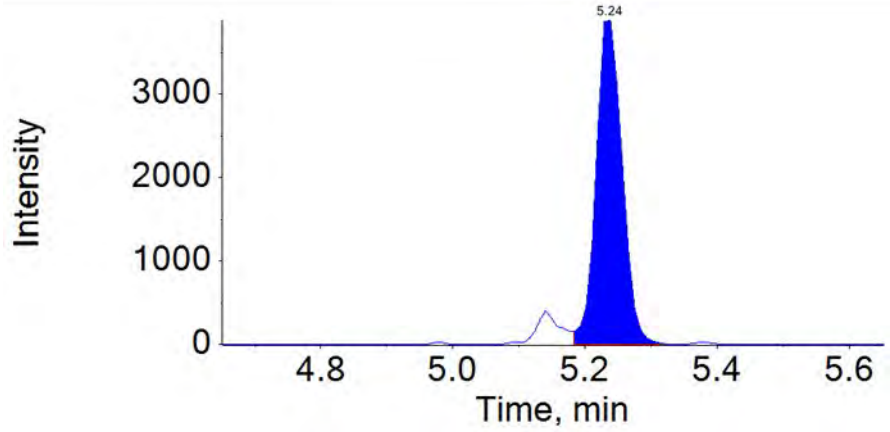
Results Table Name: 18NOV29DCCV1-5
Results Table Date: 11/29/2018 7:58:55 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS_2
RT (min.):
4.54
Peak Area:
10090.1
Mass Range:
399.0 / 99.0
File Name:
18NOV29D-05.wiff
Sample Name:
CCV1_ISC_CAL2



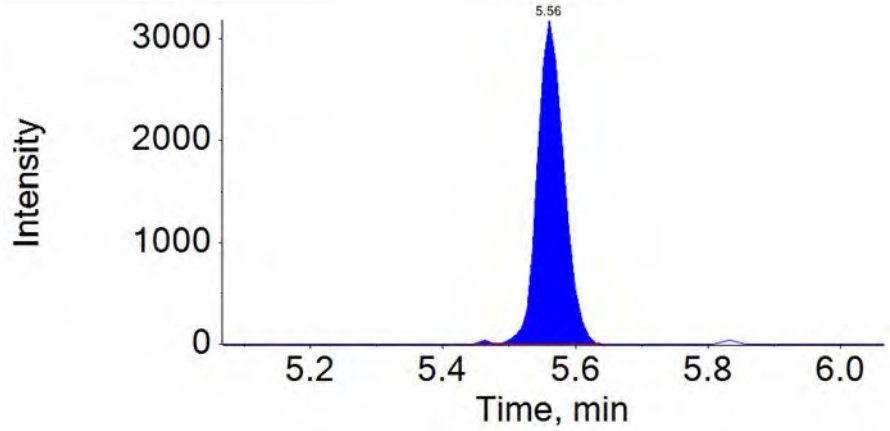
Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.24
Peak Area:
10719.2
Mass Range:
499.0 / 99.0
File Name:
18NOV29D-05.wiff
Sample Name:
CCV1_ISC_CAL2



Integration Comment: incorrect integration

Component Name:
8:2-FTS_2
RT (min.):
5.56
Peak Area:
8908.1
Mass Range:
527.0 / 81.0
File Name:
18NOV29D-05.wiff
Sample Name:
CCV1_ISC_CAL2

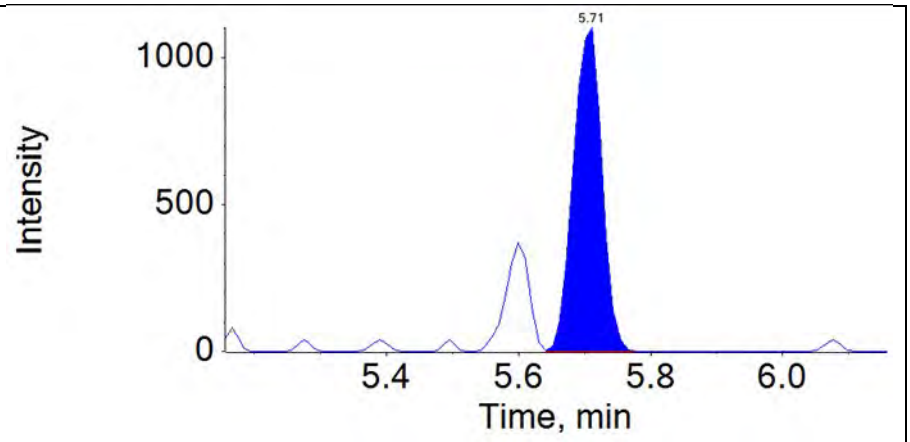


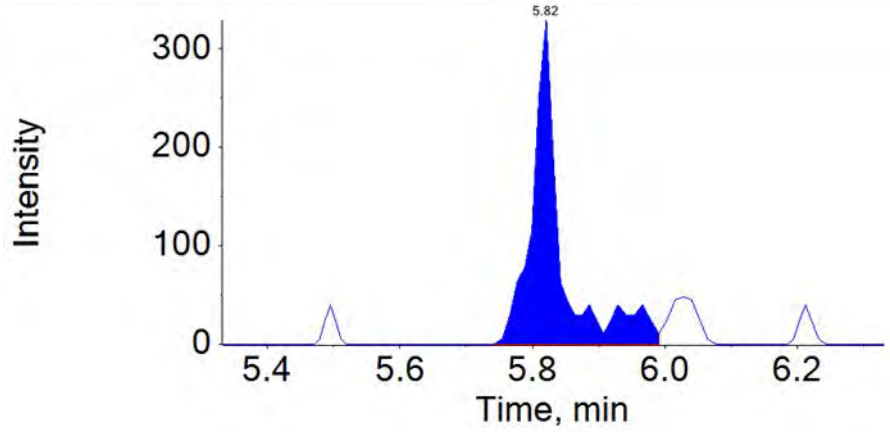
Integration Comment: incorrect integration

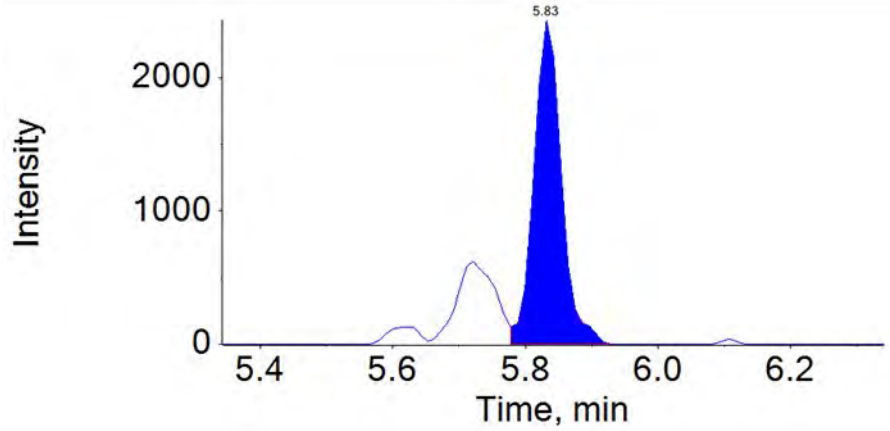
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Results Table Name: 18NOV29DCCV1-5
Results Table Date: 11/29/2018 7:58:55 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: NMeFOSAA_2 **RT (min.):** 5.71 **Peak Area:** 3325.7 **Mass Range:** 570.0 / 483.0 **File Name:** 18NOV29D-05.wiff **Sample Name:** CCV1_ISC_CAL2	 **Integration Comment:** incorrect integration

Component Name: PFUnDA_2 **RT (min.):** 5.82 **Peak Area:** 991.3 **Mass Range:** 563.0 / 169.0 **File Name:** 18NOV29D-05.wiff **Sample Name:** CCV1_ISC_CAL2	 **Integration Comment:** incorrect integration

Component Name: NEtFOSAA_2 **RT (min.):** 5.83 **Peak Area:** 7057.3 **Mass Range:** 584.0 / 526.0 **File Name:** 18NOV29D-05.wiff **Sample Name:** CCV1_ISC_CAL2	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Results Table Name: 18NOV29DCCV1-5
Results Table Date: 11/29/2018 7:58:55 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Ion Ratio Report

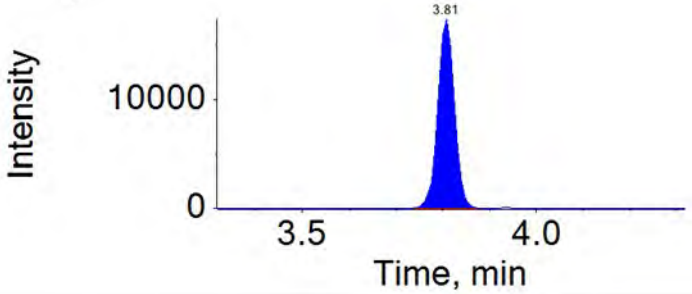
Sample Name: CCV1_ISC_CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV29D-05.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	43167.2	A	N/A	0.3951			
PFBS_2	3.81	1.00	17055.1	M	N/A	0.3951	8	50	
4:2-FTS	4.12	1.00	12514.2	A	N/A	0.6079			
4:2-FTS_2	4.12	1.00	7607.9	A	N/A	0.6079	-5	50	
PFHxA	4.15	1.00	100978.6	A	N/A	0.0112			
PFHxA_2	4.14	1.00	1134.2	M	N/A	0.0112	9	50	
PFPeS	4.17	1.10	24883.7	A	N/A	0.4838			
PFPeS_2	4.17	1.10	12039.0	A	N/A	0.4838	-3	50	
PFHpA	4.54	1.00	99917.2	A	N/A	0.0612			
PFHpA_2	4.54	1.00	6111.0	A	N/A	0.0612	10	50	
PFHxS	4.54	1.00	34610.4	M	N/A	0.3297			
PFHxS_2	4.54	1.00	11410.8	M	N/A	0.3297	-11	50	
6:2-FTS	4.90	1.00	14994.7	A	N/A	0.5391			
6:2-FTS_2	4.89	1.00	8084.1	A	N/A	0.5391	-19	50	
PFHpS	4.90	1.08	32932.0	A	N/A	0.4237			
PFHpS_2	4.90	1.08	13952.3	A	N/A	0.4237	8	50	
PFOA	4.91	1.00	107677.1	A	N/A	0.0617			
PFOA_2	4.91	1.00	6647.5	A	N/A	0.0617	8	50	
PFOS	5.24	1.00	39254.5	M	N/A	0.2989			
PFOS_2	5.24	1.00	11733.5	M	N/A	0.2989	1	50	
PFNA	5.25	1.00	93355.4	A	N/A	0.0139			
PFNA_2	5.25	1.00	1298.8	A	N/A	0.0139	-31	50	
PFNS	5.54	1.06	23416.1	A	N/A	0.5500			
PFNS_2	5.54	1.06	12879.8	A	N/A	0.5500	15	50	
PFDA	5.56	1.00	83849.1	A	N/A	0.0057			
PFDA_2	5.57	1.00	480.8	A	N/A	0.0057	-23	50	
8:2-FTS	5.56	1.00	15129.8	A	N/A	0.5856			
8:2-FTS_2	5.56	1.00	8859.9	M	N/A	0.5856	9	50	
NMeFOSAA	5.70	1.00	16285.3	M	N/A	0.2608			
NMeFOSAA_2	5.71	1.00	4247.6	M	N/A	0.2608	13	50	
PFDS	5.79	1.11	22930.4	A	N/A	0.3845			
PFDS_2	5.79	1.11	8816.6	A	N/A	0.3845	-28	50	
PFUnDA	5.82	1.00	94649.2	A	N/A	0.0084			
PFUnDA_2	5.82	1.00	791.7	M	N/A	0.0084	120	50	OOS
NEtFOSAA	5.83	1.00	15976.2	M	N/A	0.6268			
NEtFOSAA_2	5.83	1.00	10013.4	M	N/A	0.6268	-15	50	
PFDoDA	6.04	1.00	124243.3	A	N/A	0.0095			
PFDoDA_2	6.04	1.00	1178.3	A	N/A	0.0095	-27	50	
10:2-FTS	6.05	1.09	14919.7	A	N/A	0.6728			
10:2-FTS_2	6.05	1.09	10038.3	A	N/A	0.6728	-4	50	
PFTrDA	6.23	1.03	122778.8	A	N/A	0.0057			
PFTrDA_2	6.24	1.03	698.1	A	N/A	0.0057	-37	50	
PFTeDA	6.41	1.00	89123.1	A	N/A	0.0041			
PFTeDA_2	6.42	1.00	367.7	A	N/A	0.0041	-26	50	
PFHxDA	6.71	1.05	45160.5	A	N/A	0.0596			
PFHxDA_2	6.71	1.05	2692.3	A	N/A	0.0596	-8	50	
PFODA	6.98	1.09	35571.7	A	N/A	0.0222			
PFODA_2	6.97	1.09	790.0	A	N/A	0.0222	-16	50	

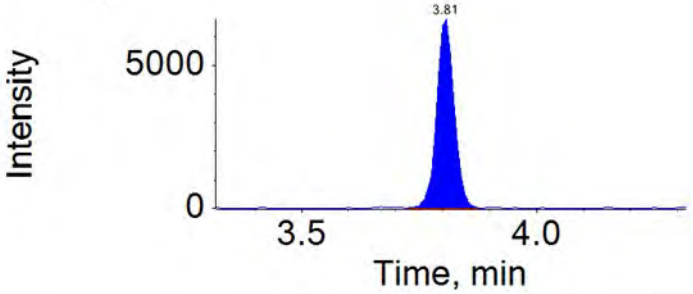
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

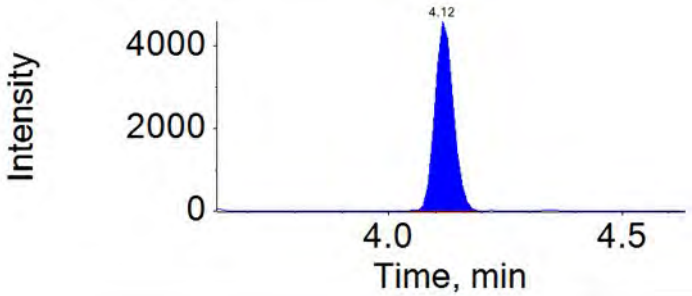
Component: PFBS
Primary Mass: 299.0 / 80.0



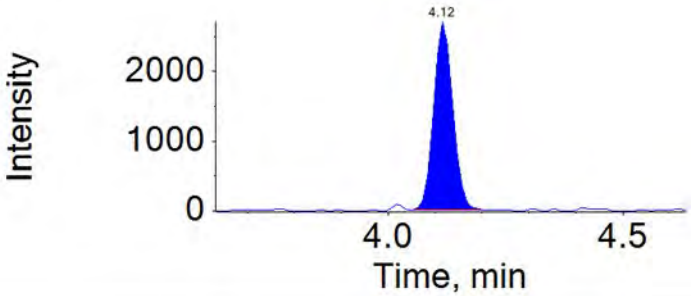
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



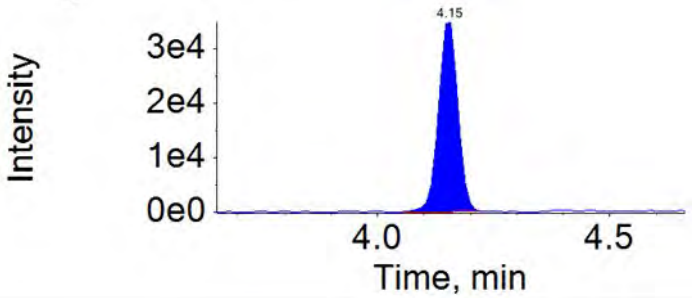
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



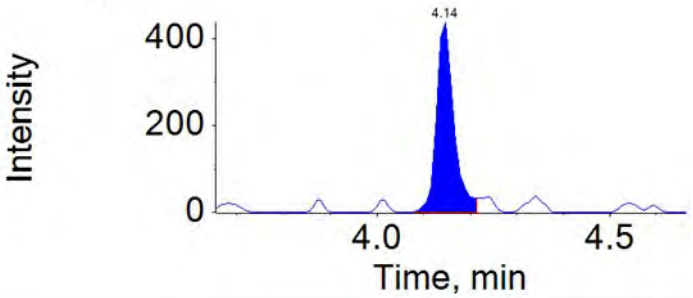
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



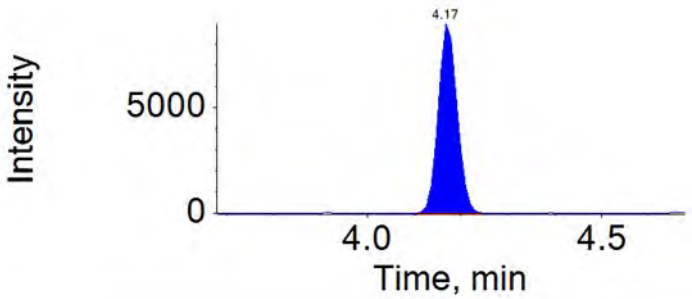
Component: PFHxA
Primary Mass: 313.0 / 269.0



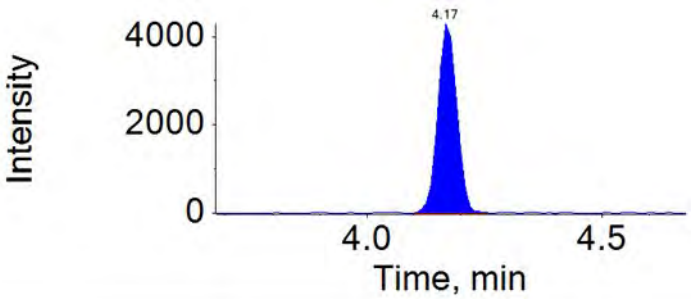
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



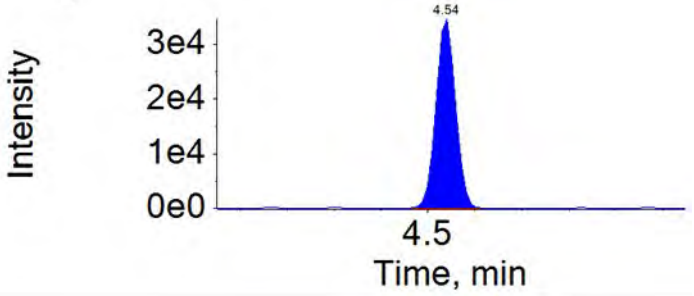
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



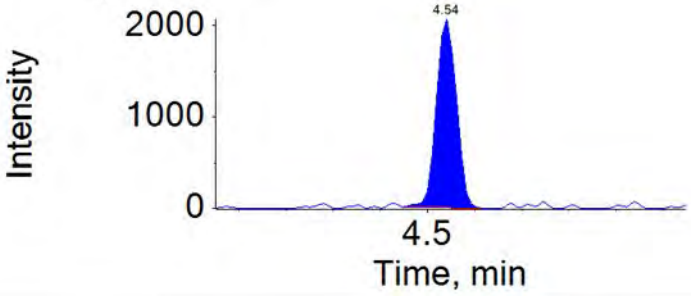
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By MCD at 8:06 pm, 11/29/18

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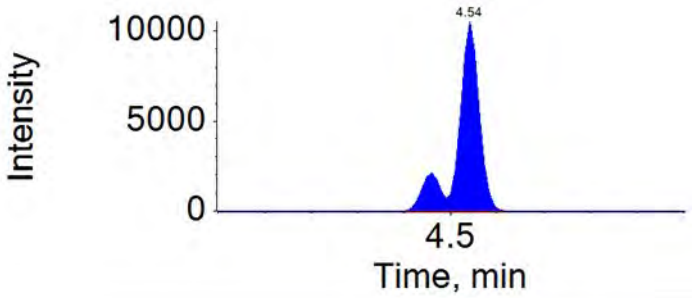
Component: PFHpA
Primary Mass: 363.0 / 319.0



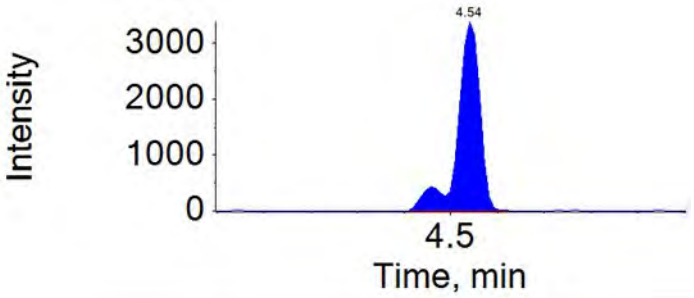
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



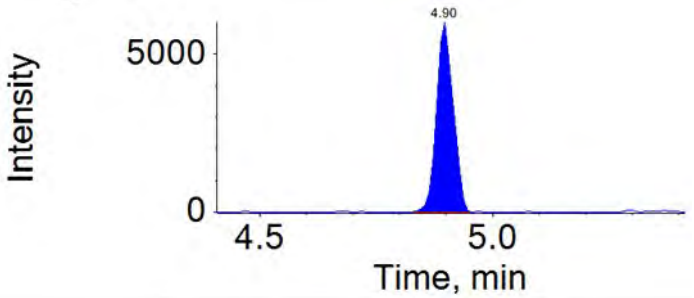
Component: PFHxS
Primary Mass: 399.0 / 80.0



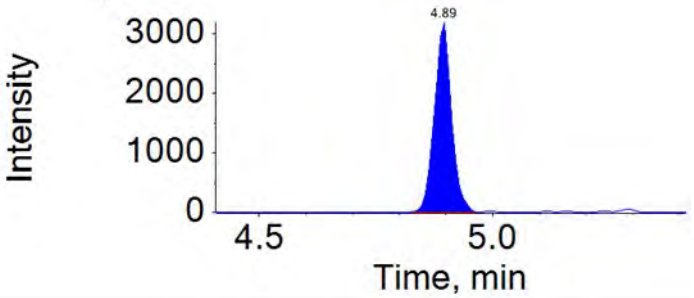
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



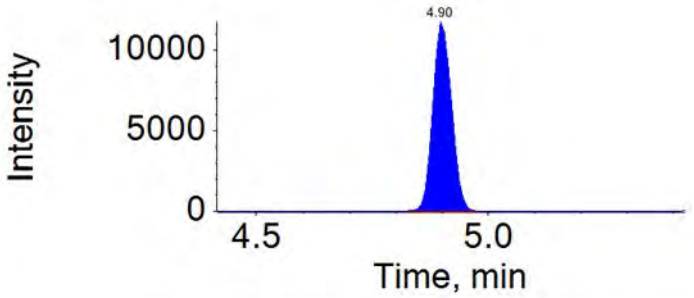
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



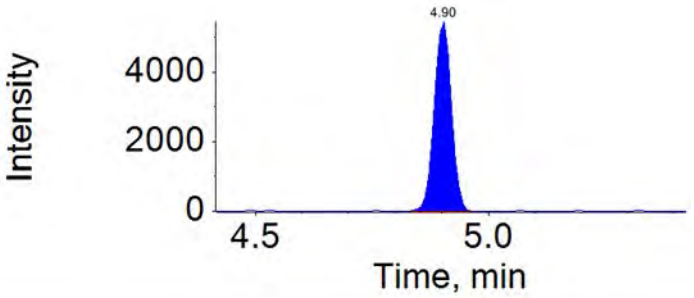
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



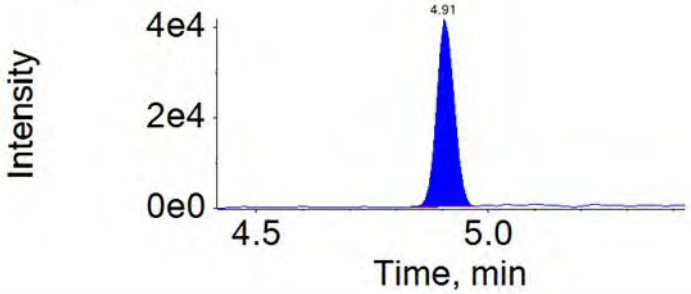
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



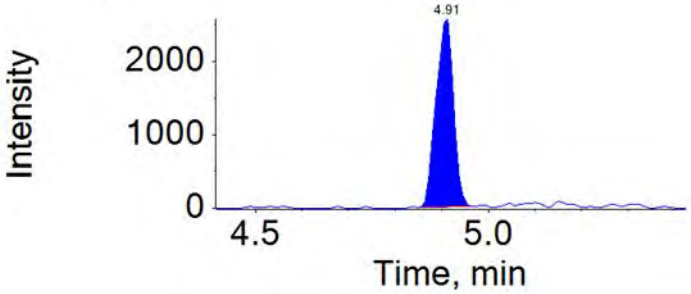
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REVIEWED
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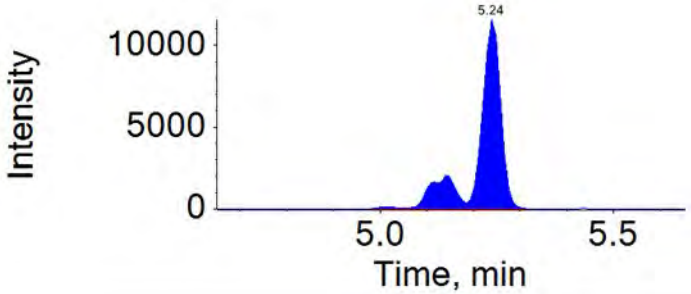
Component: PFOA
Primary Mass: 413.0 / 369.0



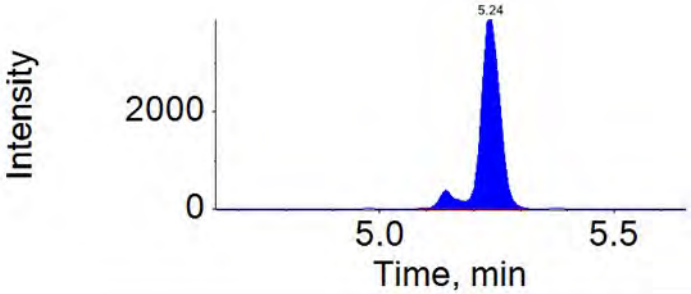
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



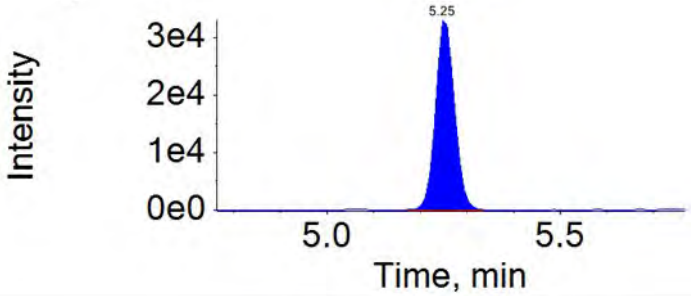
Component: PFOS
Primary Mass: 499.0 / 80.0



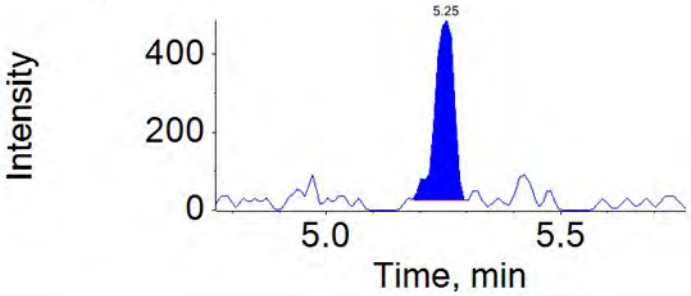
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



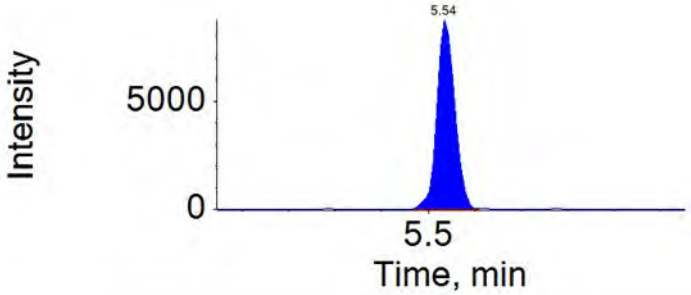
Component: PFNA
Primary Mass: 463.0 / 419.0



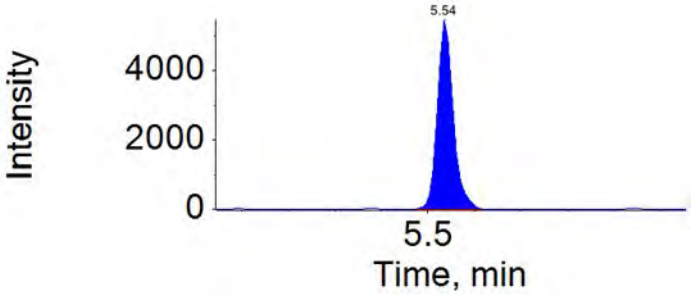
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



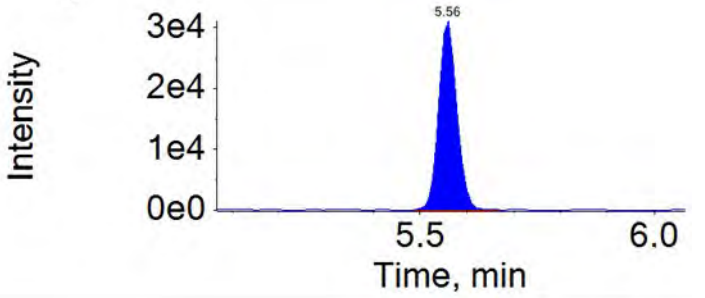
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



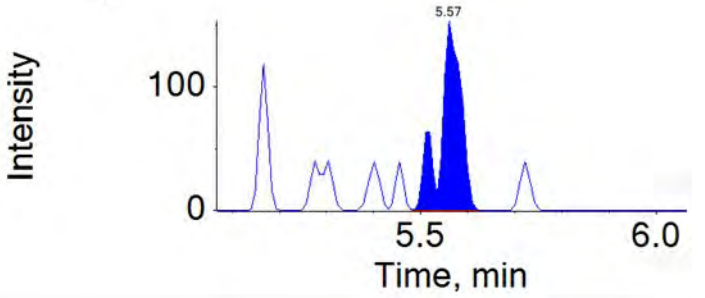
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By HMK at 9:40 am, 12/5/18

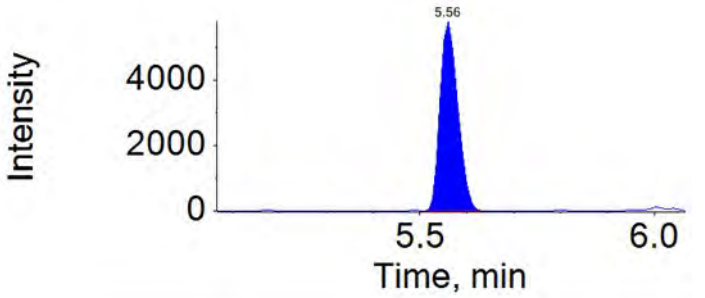
Component: PFDA
Primary Mass: 513.0 / 469.0



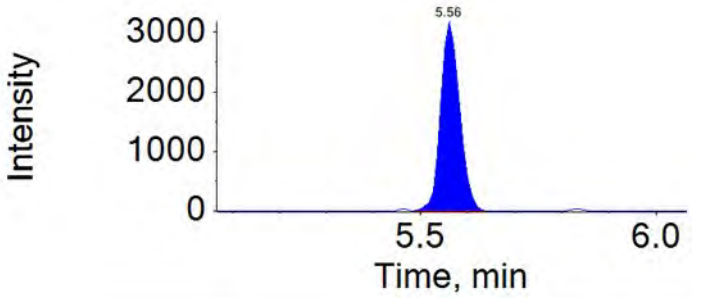
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



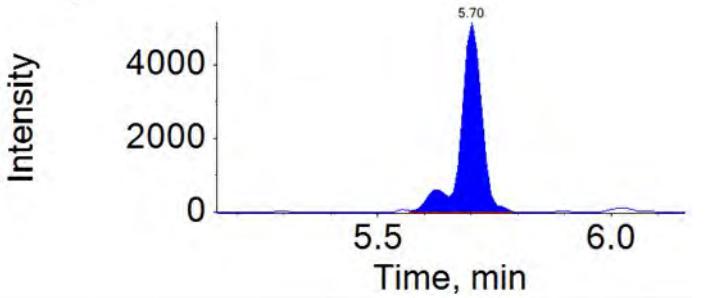
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



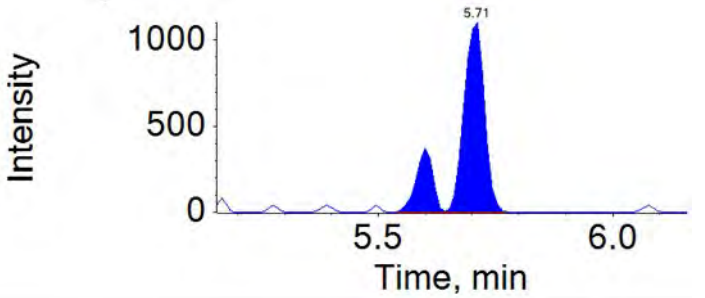
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



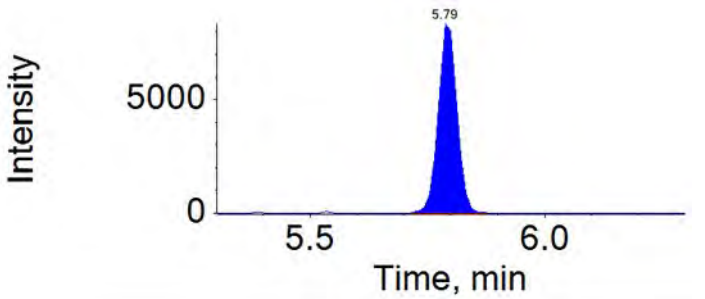
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



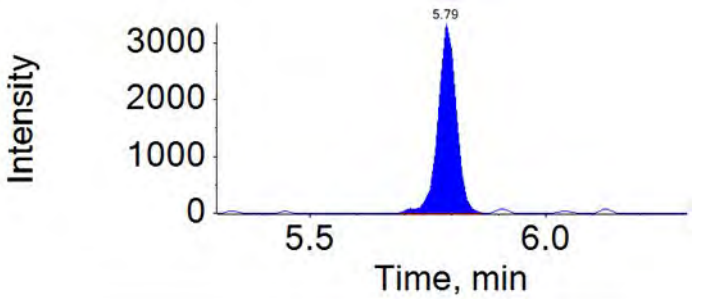
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



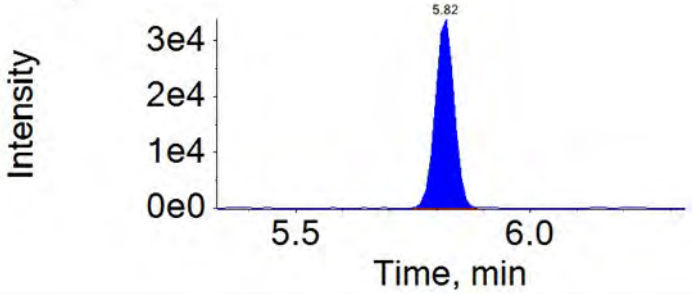
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



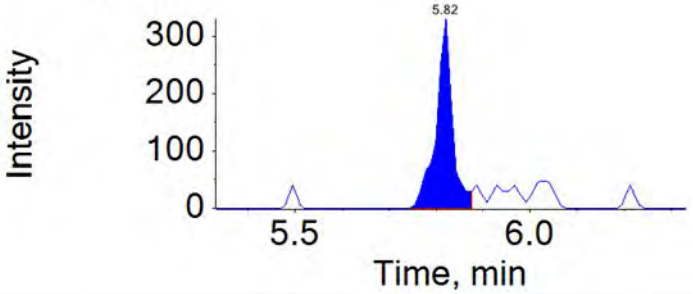
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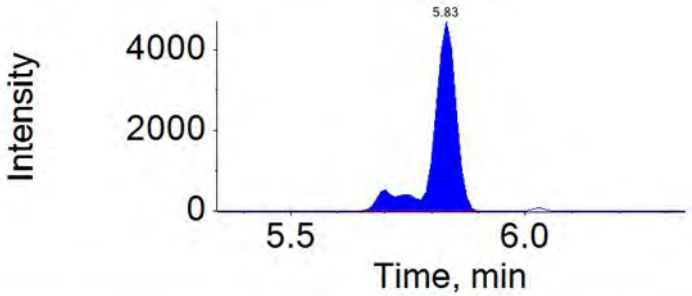
Component: PFUnDA
Primary Mass: 563.0 / 519.0



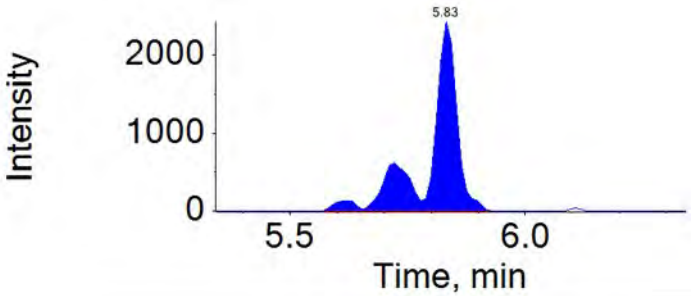
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



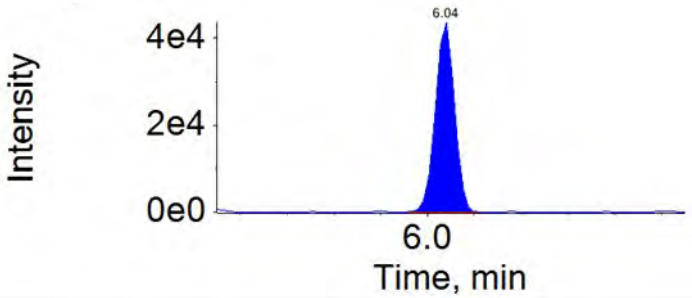
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



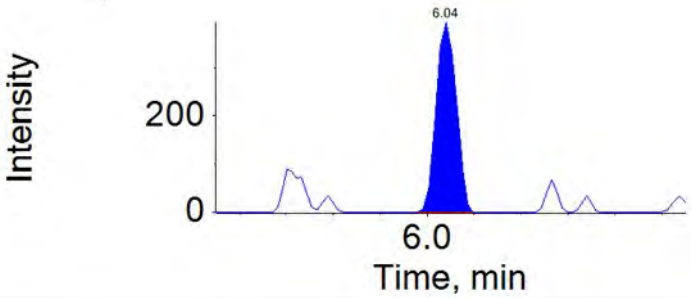
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



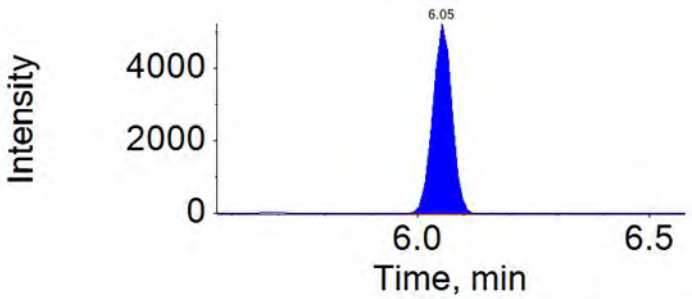
Component: PFDoDA
Primary Mass: 613.0 / 569.0



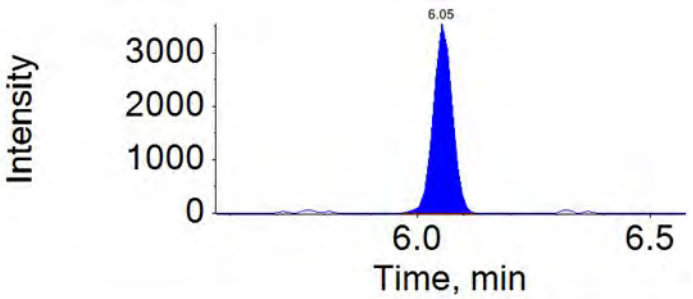
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



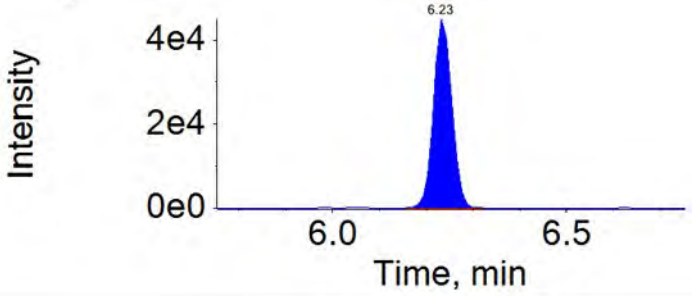
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



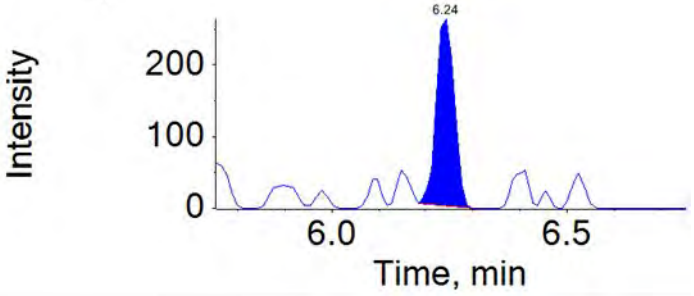
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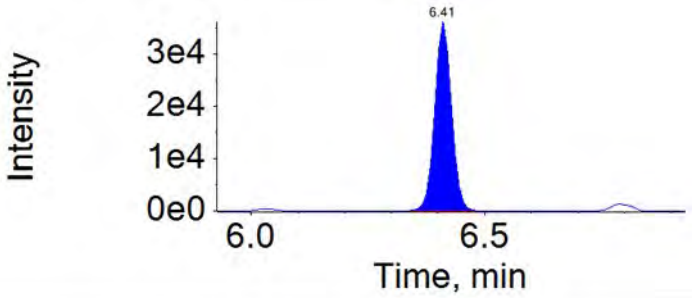
Component: PFTrDA
Primary Mass: 663.0 / 619.0



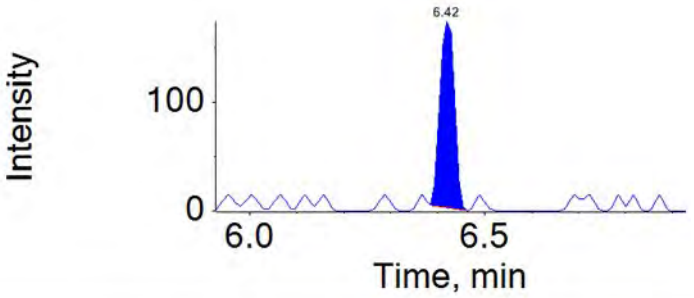
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



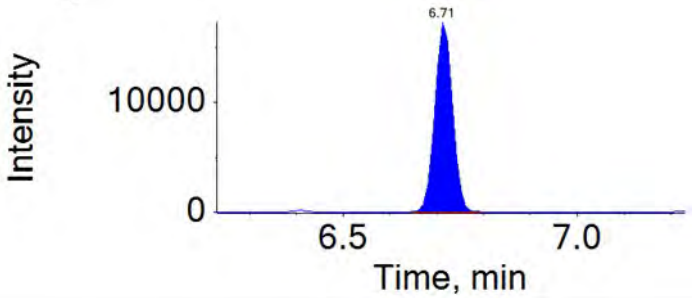
Component: PFTeDA
Primary Mass: 713.0 / 669.0



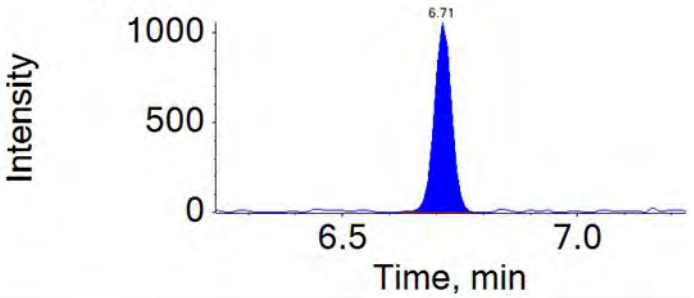
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



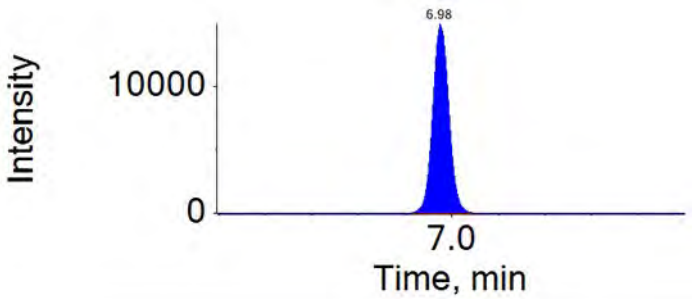
Component: PFHxDA
Primary Mass: 813.0 / 769.0



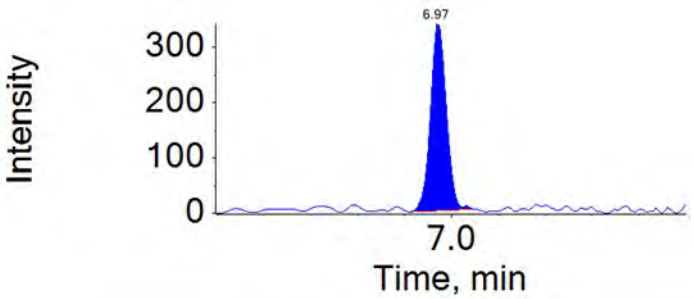
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	Instrument Blank			**Data File:**		18NOV29D-06.wiff
Sample ID:	methanol+labels			**Acquis Date:**		2018-11-29T10:42:38
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	1			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV29DCCV1-5
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV29D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	1062005.8	906425.4	17	50	
13C2-PFOA	5.0	590090.2	495984.0	19	50	
13C4-PFOS	4.8	349343.8	296261.8	18	50	
13C2-PFDA	5.0	572455.9	451203.0	27	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	1132653.7	13C3-PFBA	1062005.8	1.067	5.000	4.758	95	70-130	
E13C5-PFPeA	1128083.1	13C3-PFBA	1062005.8	1.062	5.000	4.960	99	70-130	
E13C3-PFBS	476370.7	13C3-PFBA	1062005.8	0.449	4.650	4.279	92	70-130	
E13C2-4:2-FTS	78954.9	13C2-PFOA	590090.2	0.134	4.670	4.611	99	70-130	
E13C5-PFHxA	755459.8	13C2-PFOA	590090.2	1.280	5.000	4.702	94	70-130	
E13C3-PFHxS	367272.1	13C2-PFOA	590090.2	0.622	4.730	4.878	103	70-130	
E13C4-PFHpA	595459.5	13C2-PFOA	590090.2	1.009	5.000	4.637	93	70-130	
E13C2-6:2-FTS	74720.2	13C2-PFOA	590090.2	0.127	4.750	5.301	112	70-130	
E13C8-PFOA	1117311.6	13C2-PFOA	590090.2	1.893	5.000	5.212	104	70-130	
E13C8-PFOS	362141.8	13C4-PFOS	349343.8	1.037	4.780	4.680	98	70-130	
E13C9-PFNA	736579.7	13C4-PFOS	349343.8	2.108	5.000	4.631	93	70-130	
E13C6-PFDA	971727.0	13C2-PFDA	572455.9	1.697	5.000	4.786	96	70-130	
E13C2-8:2-FTS	64213.8	13C2-PFDA	572455.9	0.112	4.790	4.821	101	70-130	
E13C8-PFOSA	703815.0	13C2-PFDA	572455.9	1.229	5.000	4.511	90	70-130	
Ed3-NMeFOSAA	270439.1	13C2-PFDA	572455.9	0.472	5.000	5.998	120	70-130	
E13C7-PFUnDA	658462.5	13C2-PFDA	572455.9	1.150	5.000	4.861	97	70-130	
Ed5-NEtFOSAA	166412.1	13C2-PFDA	572455.9	0.291	5.000	5.179	104	70-130	
E13C2-PFDoDA	1273913.7	13C2-PFDA	572455.9	2.225	5.000	4.676	94	70-130	
Ed7-NMePFOSAE	305138.6	13C2-PFDA	572455.9	0.533	5.000	4.607	92	70-130	
Ed3-NMePFOSA	98756.0	13C2-PFDA	572455.9	0.173	5.000	4.669	93	70-130	
Ed9-NEtPFOSAE	275015.1	13C2-PFDA	572455.9	0.480	5.000	4.871	97	70-130	
Ed5-NEtPFOSA	83472.3	13C2-PFDA	572455.9	0.146	5.000	5.067	101	70-130	
E13C2-PFTeDA	926470.4	13C2-PFDA	572455.9	1.618	5.000	4.478	90	70-130	

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

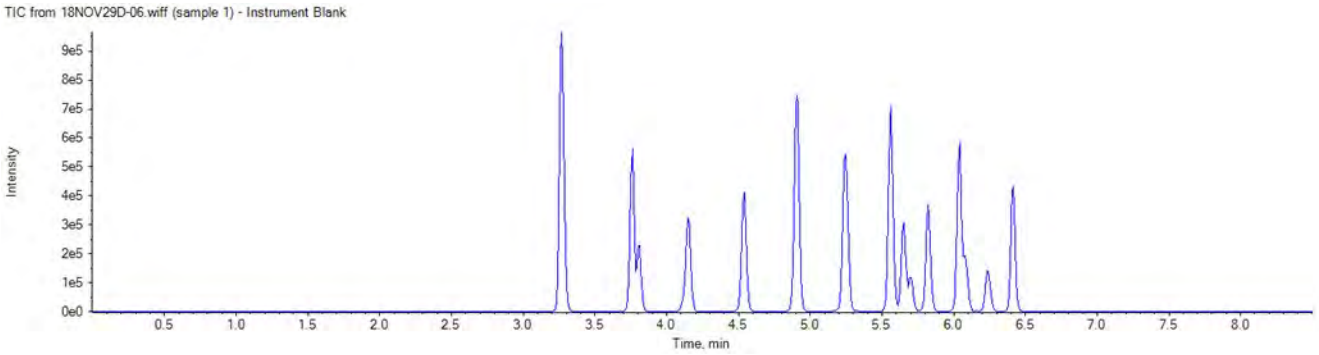
Analyte Quantitation Peak Table

Sample Name: Instrument Blank **Instrument Name:** LM27631 **File Name:** 18NOV29D-06.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	N/A	N/A	N/A		A	13C4-PFBA	3.27	1132653.7	N/A	
PFPeA	N/A	N/A	N/A		A	13C5-PFPeA	3.76	1128083.1	N/A	
PFBS	N/A	N/A	N/A		A	13C3-PFBS	3.81	476370.7	N/A	
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.12	78954.9	N/A	
PFHxA	N/A	N/A	N/A		A	13C5-PFHxA	4.15	755459.8	N/A	
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.81	476370.7	N/A	
PFHpA	N/A	N/A	N/A		A	13C4-PFHpA	4.54	595459.5	N/A	
PFHxS	N/A	N/A	N/A		A	13C3-PFHxS	4.54	367272.1	N/A	
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.90	74720.2	N/A	
PFHpS	N/A	N/A	N/A		A	13C3-PFHxS	4.54	367272.1	N/A	
PFOA	N/A	N/A	N/A		A	13C8-PFOA	4.91	1117311.6	N/A	
PFOS	N/A	N/A	N/A		A	13C8-PFOS	5.24	362141.8	N/A	
PFNA	N/A	N/A	N/A		A	13C9-PFNA	5.25	736579.7	N/A	
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.24	362141.8	N/A	
PFDA	N/A	N/A	N/A		A	13C6-PFDA	5.56	971727.0	N/A	
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.57	64213.8	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.65	703815.0	N/A	
NMeFOSAA	N/A	N/A	N/A		A	d3-NMeFOSAA	5.70	270439.1	N/A	
PFDS	N/A	N/A	N/A		A	13C8-PFOS	5.24	362141.8	N/A	
PFUnDA	N/A	N/A	N/A		A	13C7-PFUnDA	5.82	658462.5	N/A	
NEtFOSAA	N/A	N/A	N/A		A	d5-NEtFOSAA	5.83	166412.1	N/A	
PFDoDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.04	1273913.7	N/A	
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.57	64213.8	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.08	305138.6	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.09	98756.0	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.24	362141.8	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.23	275015.1	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.25	83472.3	N/A	
PFTrDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.04	1273913.7	N/A	
PFTeDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.41	926470.4	N/A	
PFHxDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.41	926470.4	N/A	
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.41	926470.4	N/A	

Total Ion Chromatogram

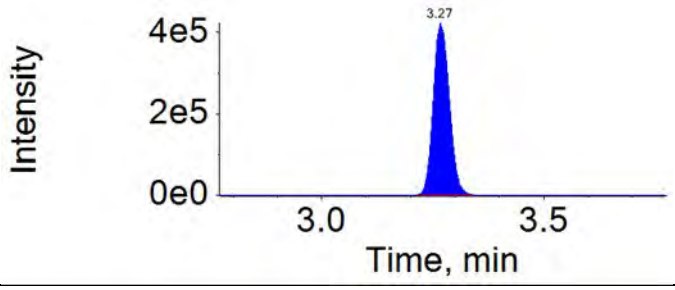


APPROVED
By MCD at 8:06 pm, 11/29/18

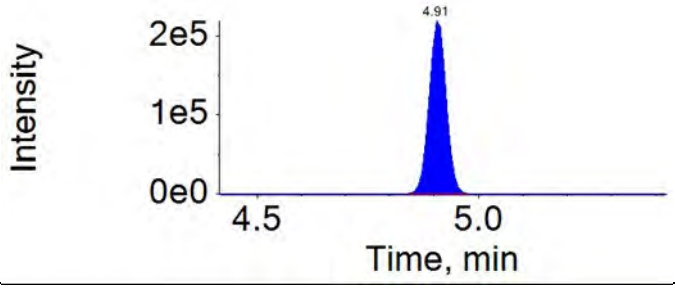
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

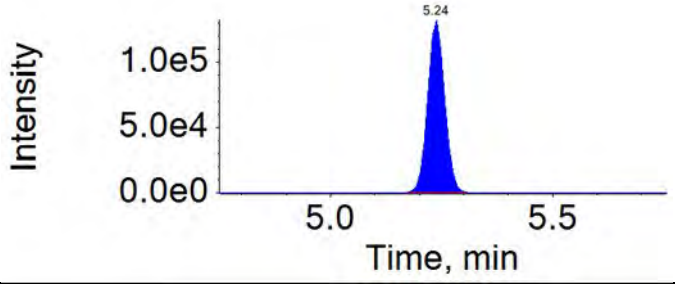
Injection Standard: 13C3-PFBA
216.0 / 172.0



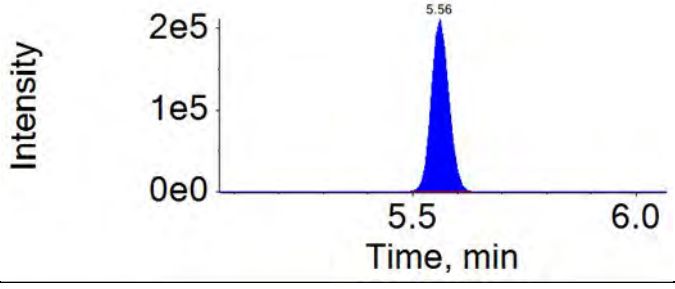
Injection Standard: 13C2-PFOA
415.0 / 370.0



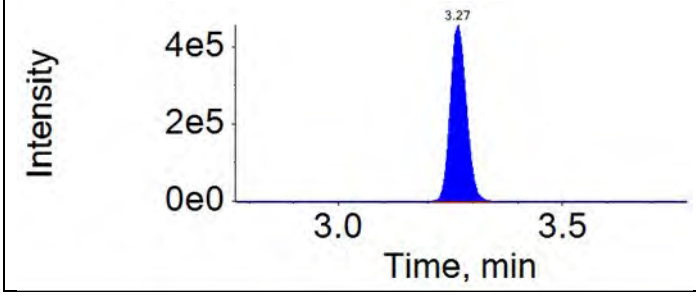
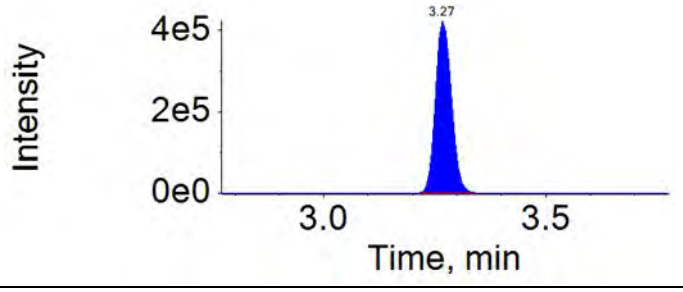
Injection Standard: 13C4-PFOS
503.0 / 80.0

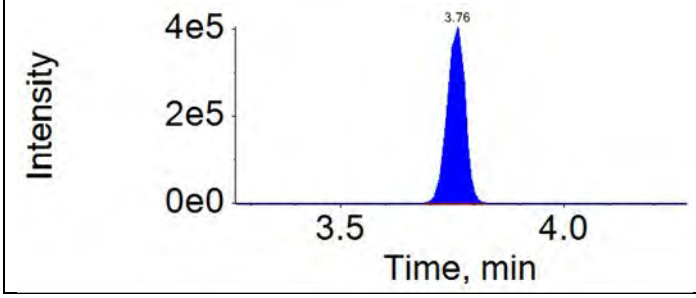
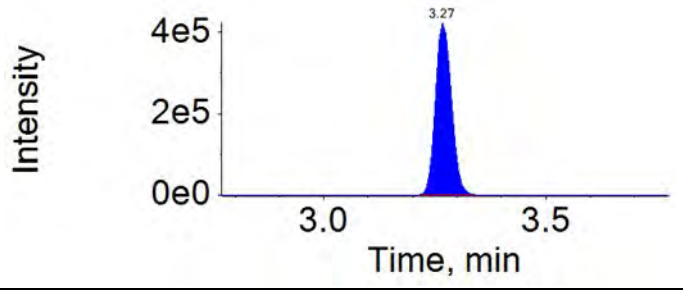


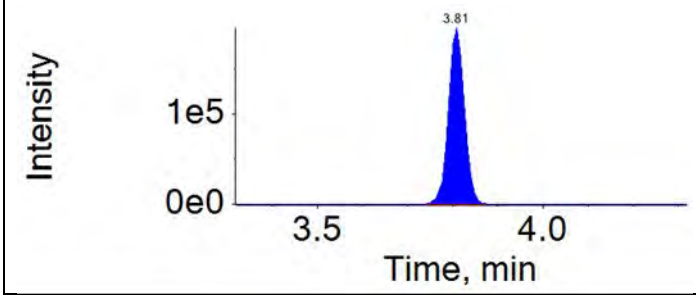
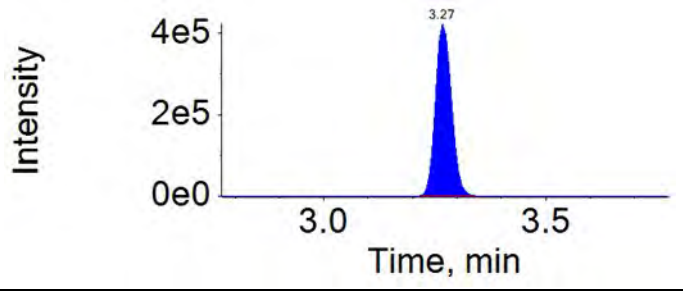
Injection Standard: 13C2-PFDA
515.0 / 470.0

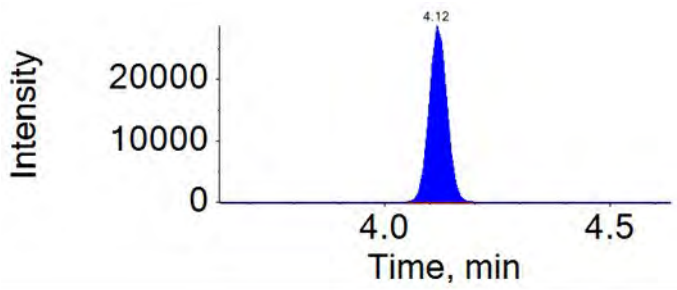
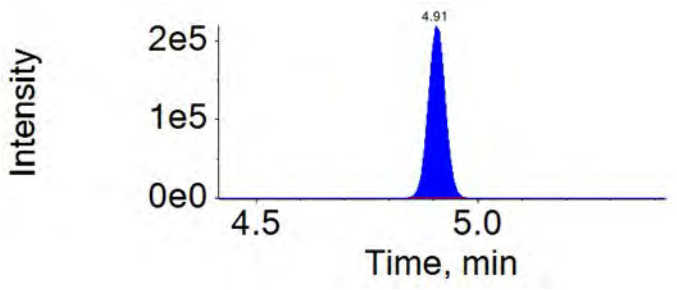


ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

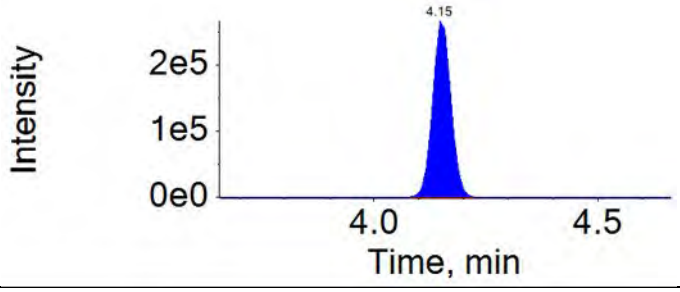
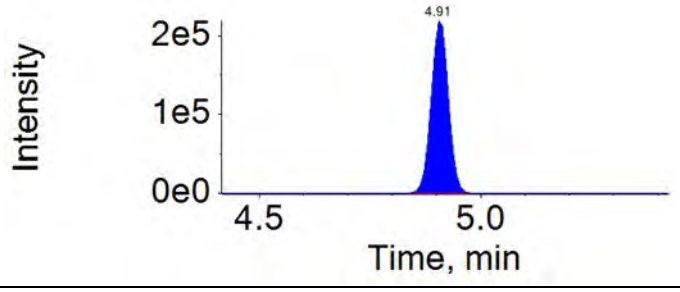
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

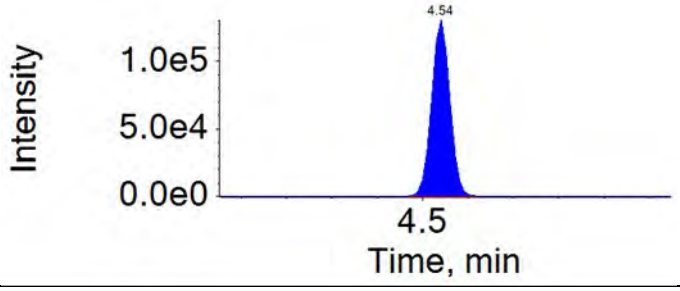
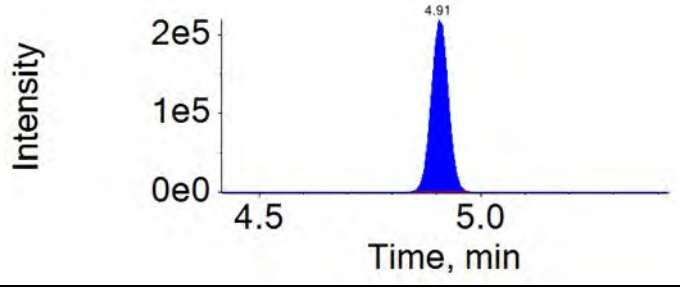
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

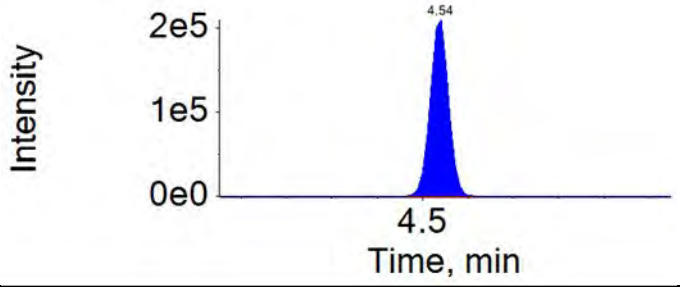
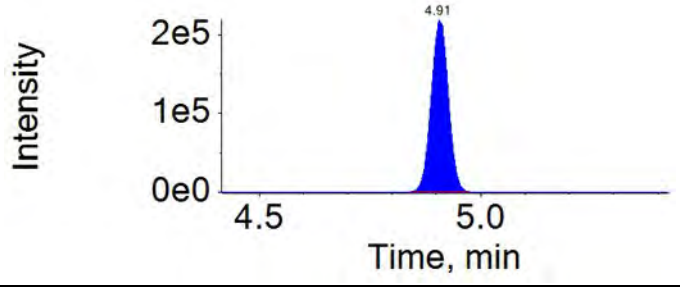
APPROVED
By MCD at 8:06 pm, 11/29/18

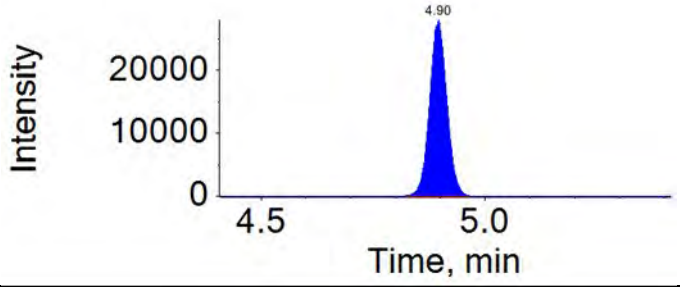
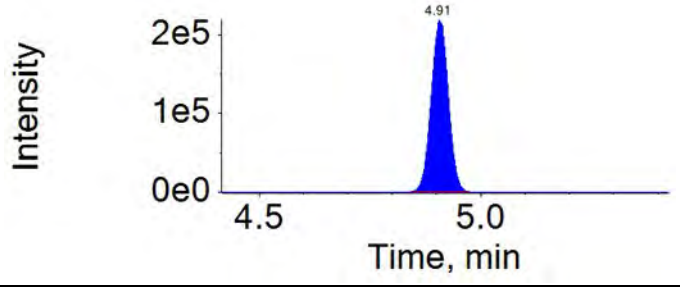
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

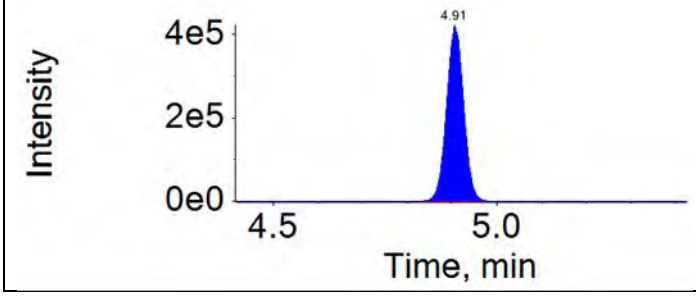
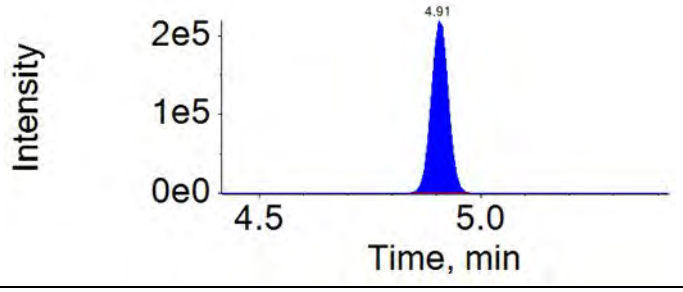
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

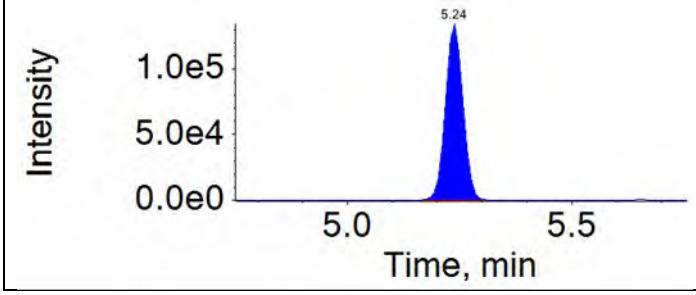
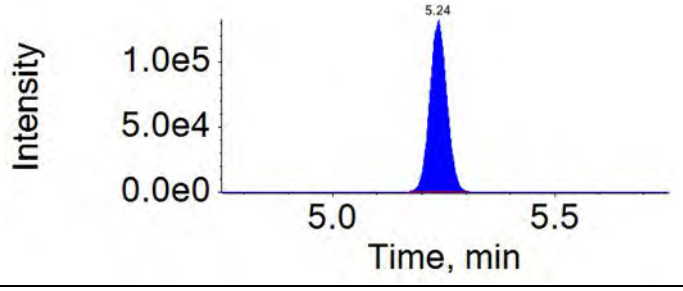
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

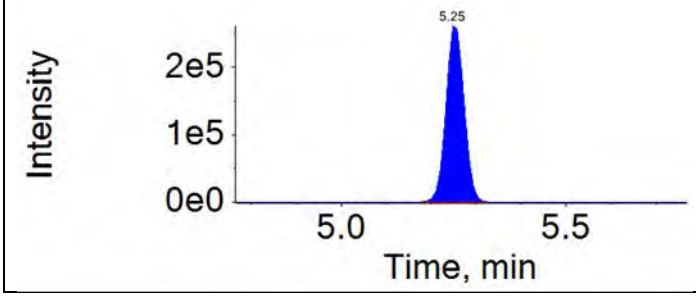
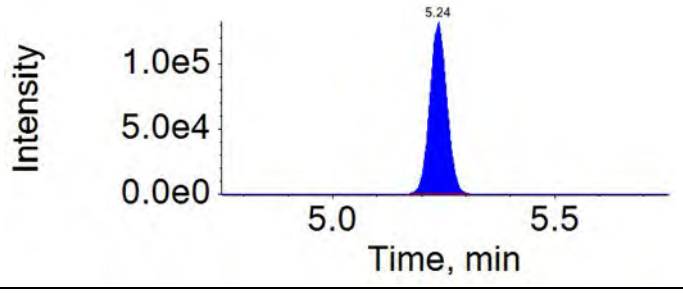
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

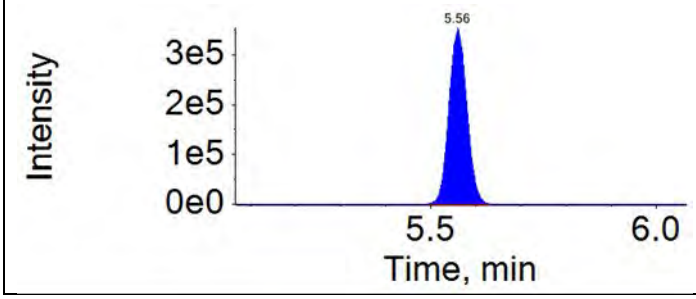
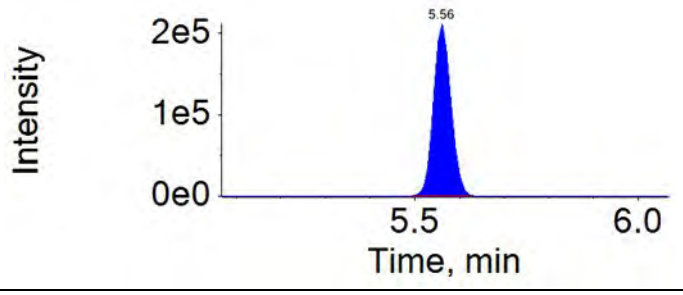
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

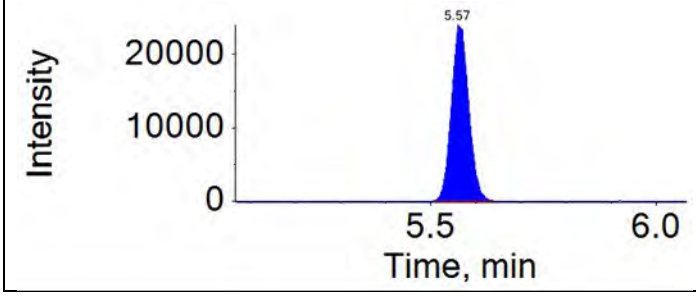
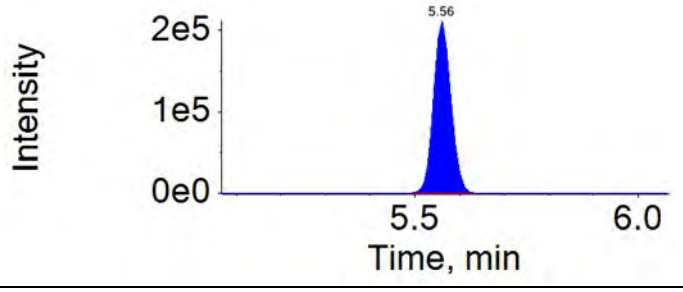
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

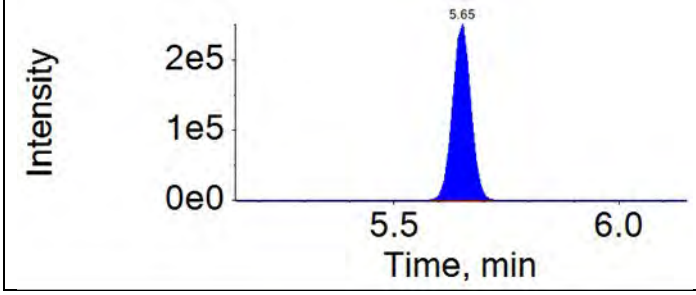
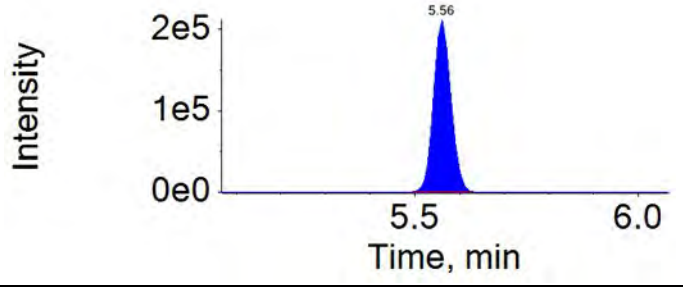
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

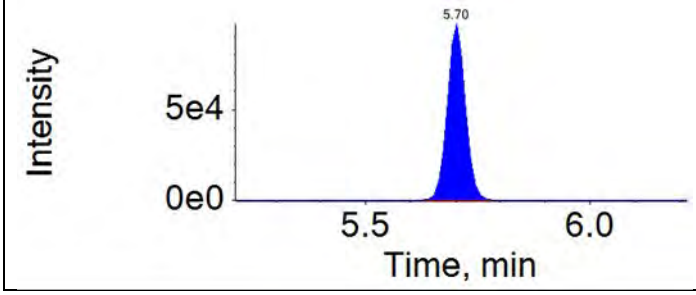
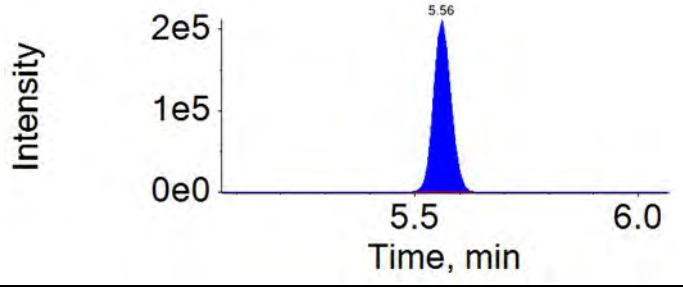
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

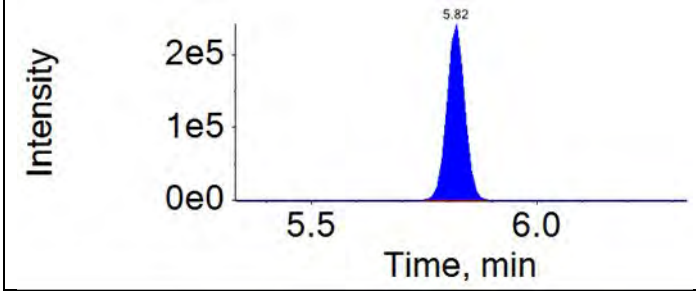
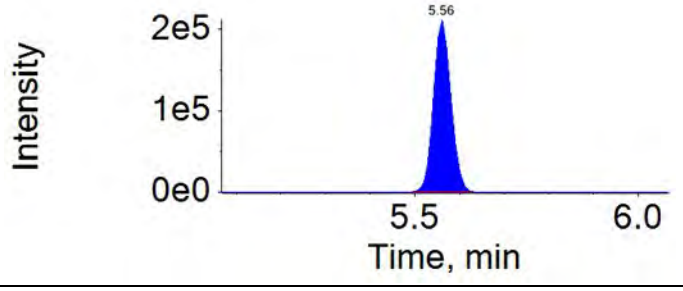
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

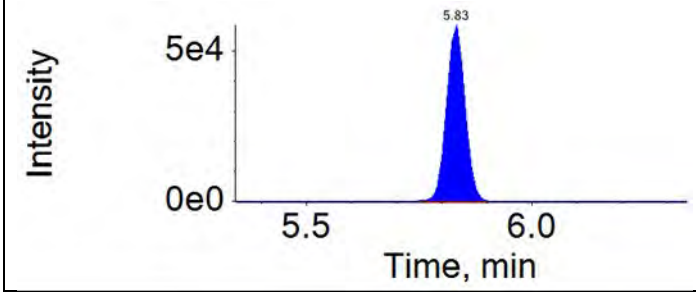
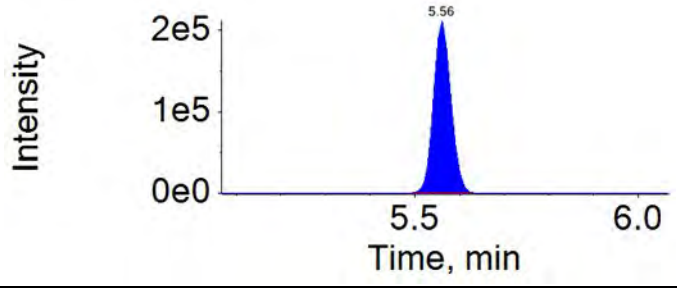
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

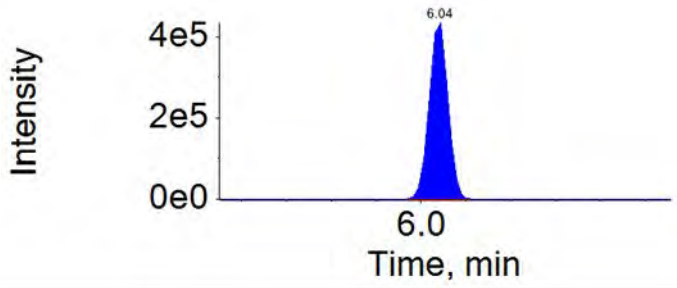
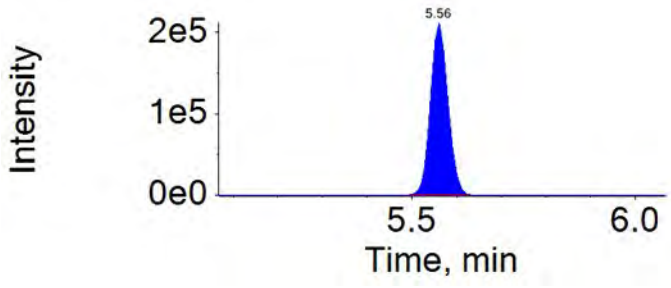
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

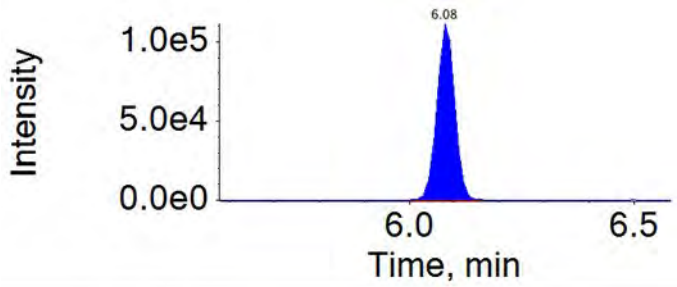
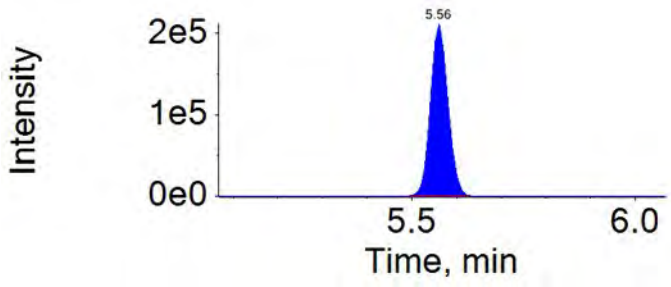
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

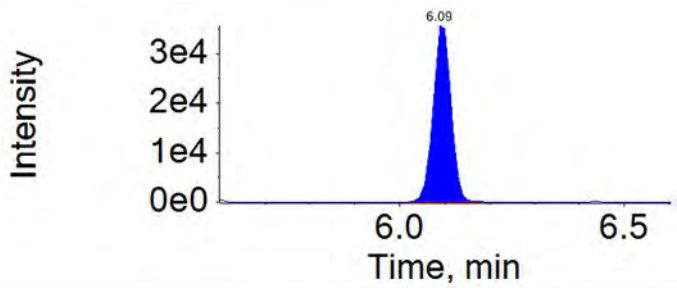
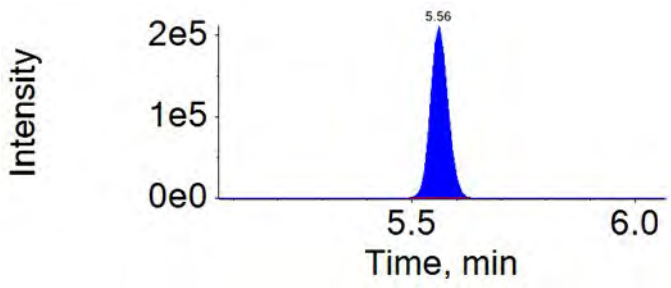
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

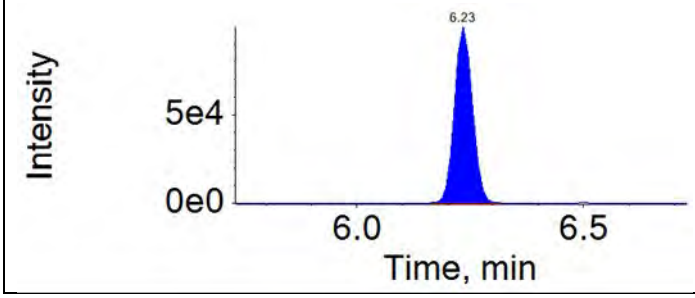
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

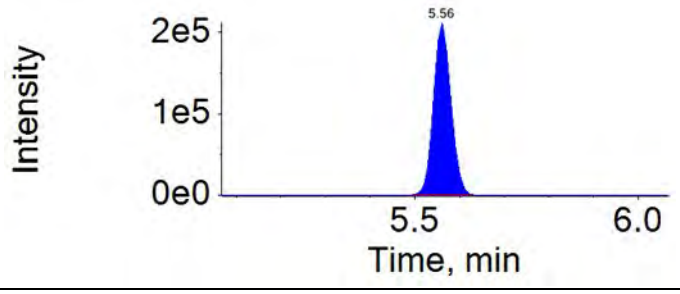
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

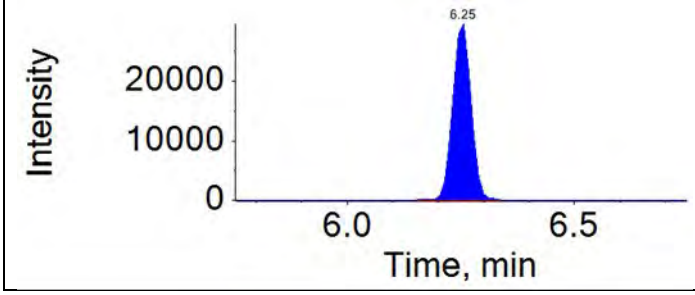
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

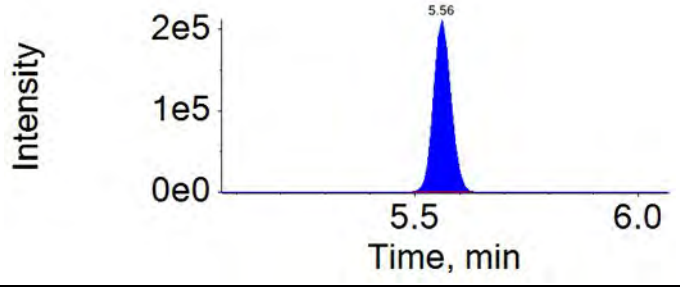
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



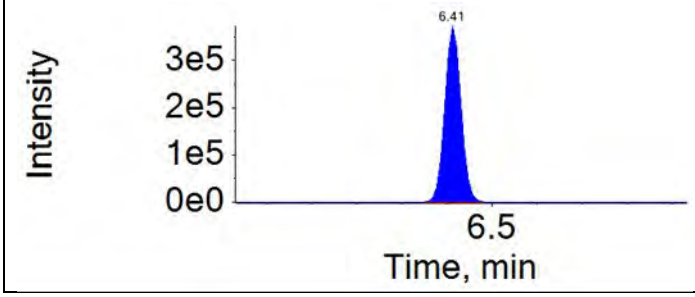


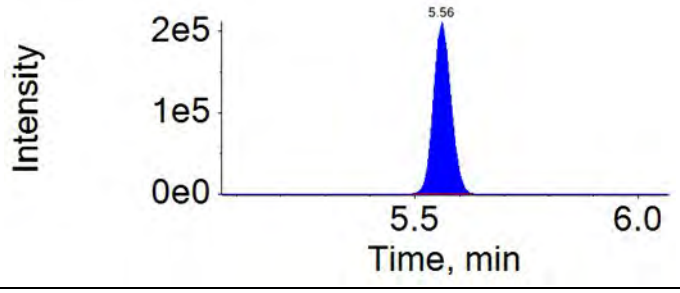
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



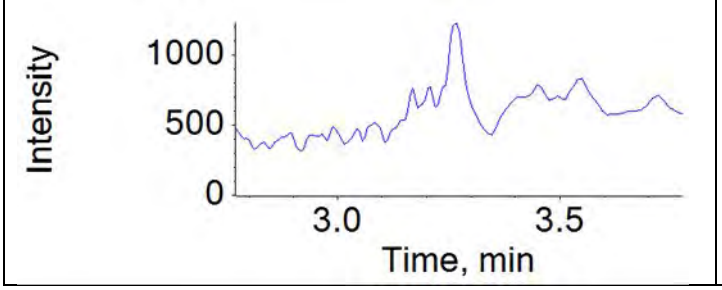


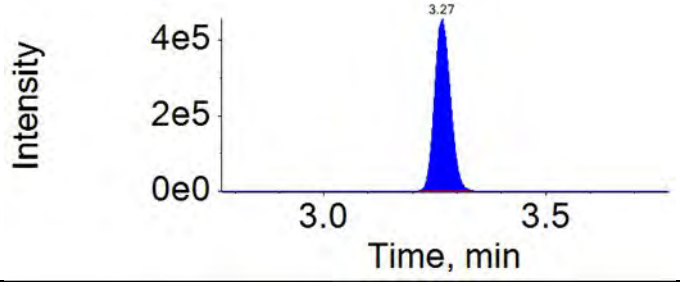
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

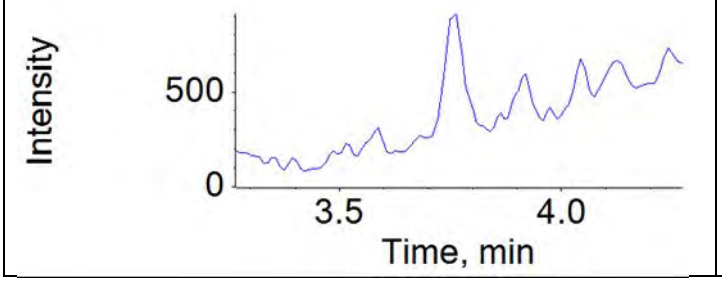
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

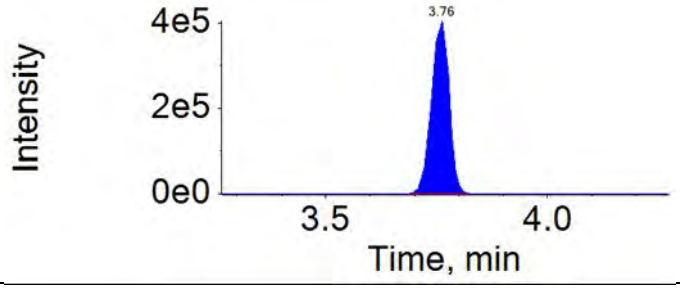
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



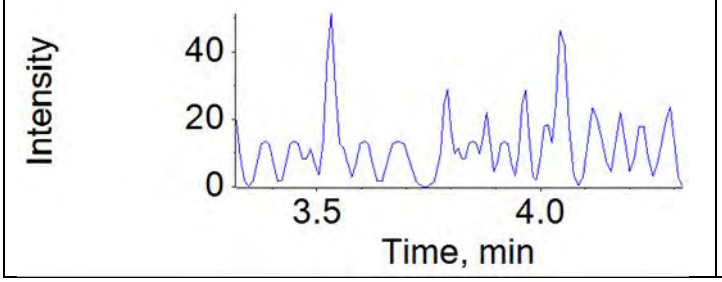


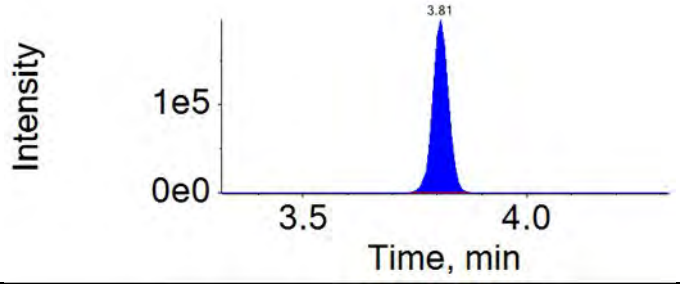
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



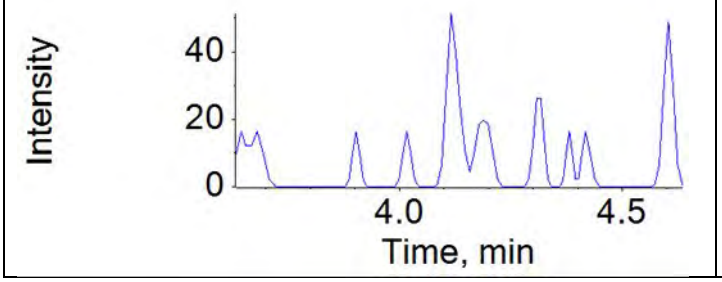


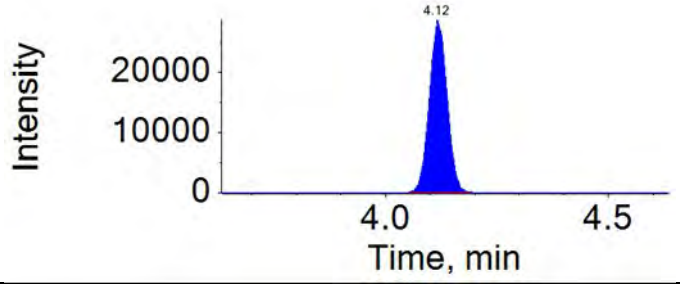
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



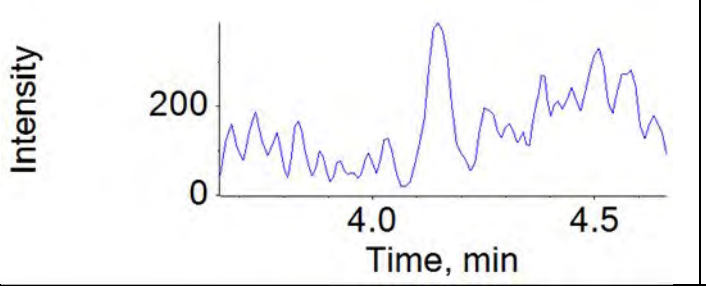


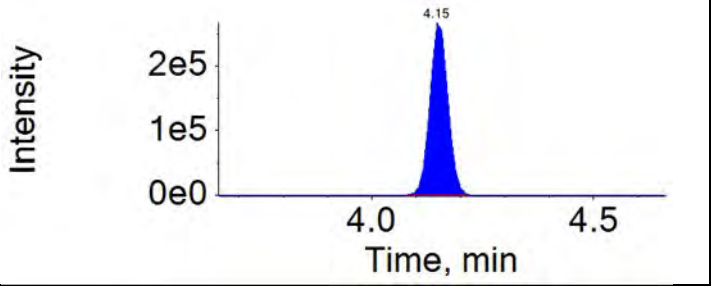
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

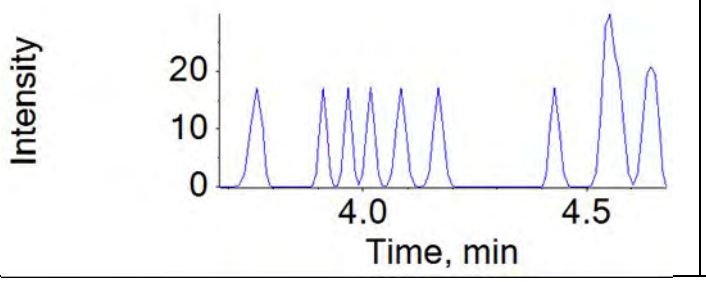
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

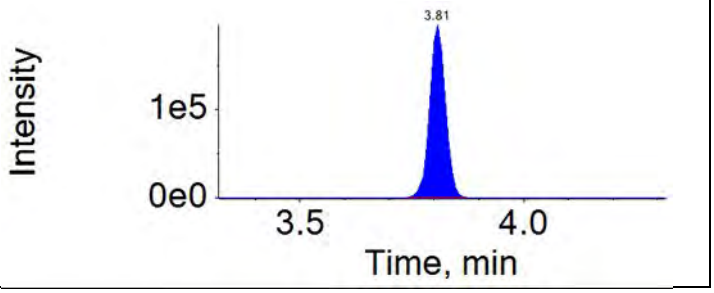
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



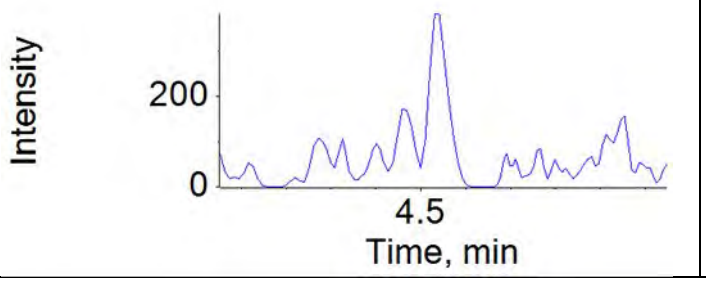


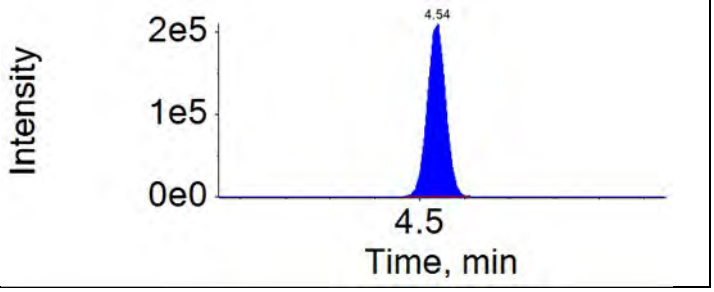
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



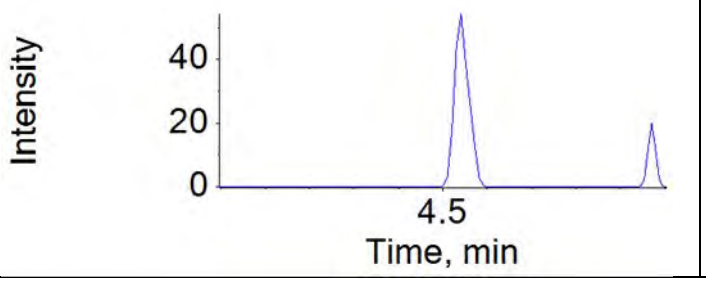


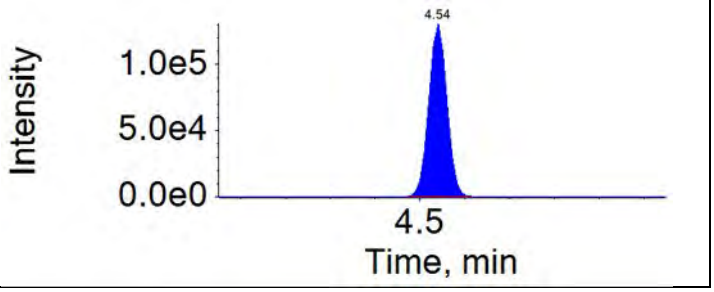
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



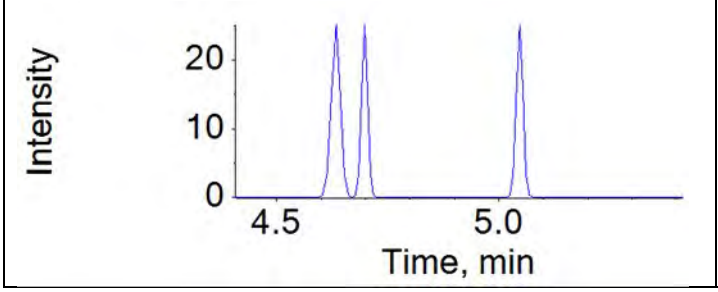


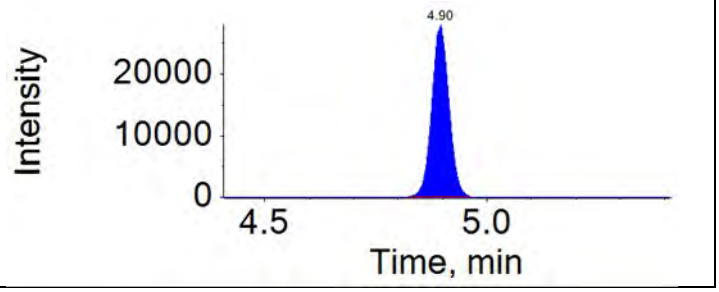
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

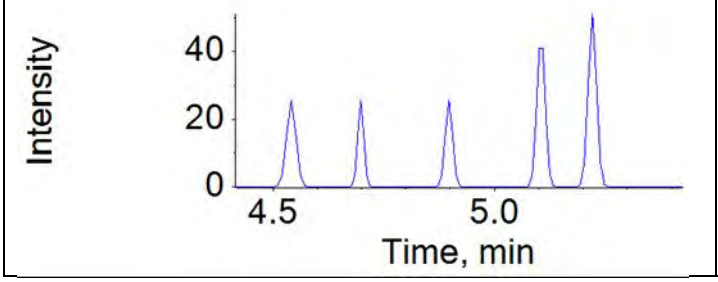
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

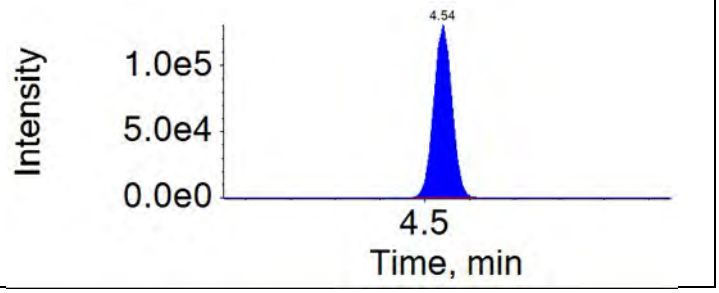
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



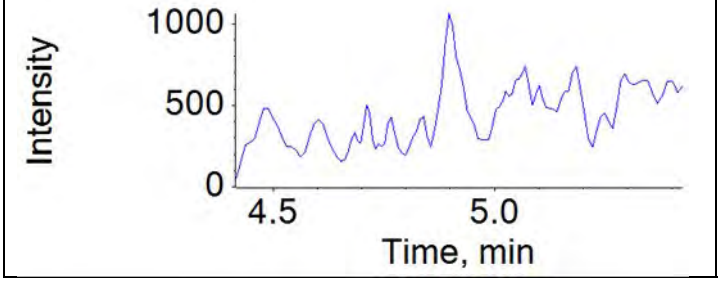


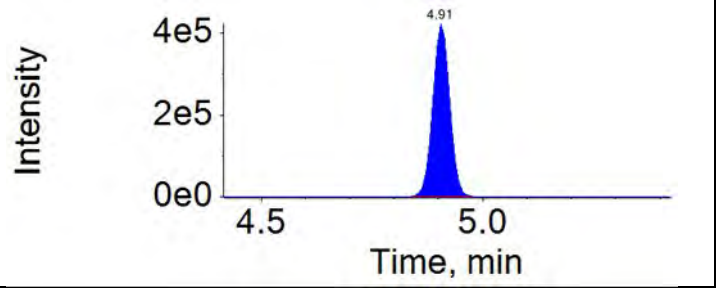
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



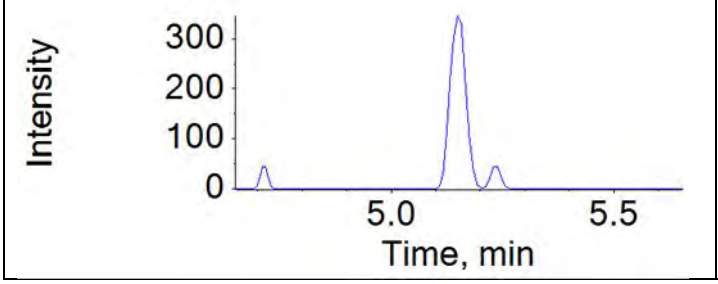


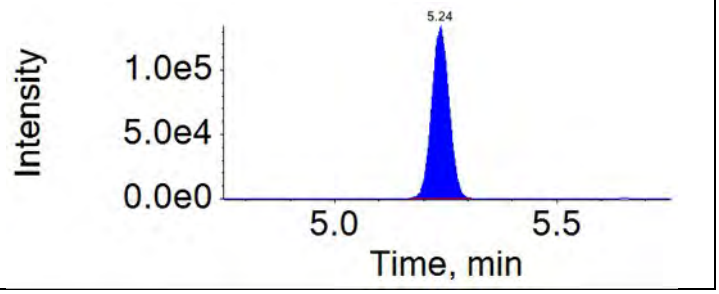
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



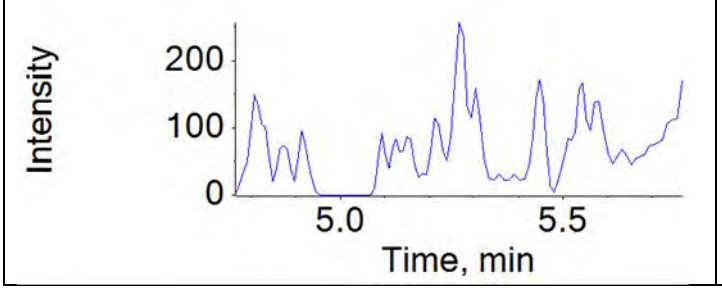


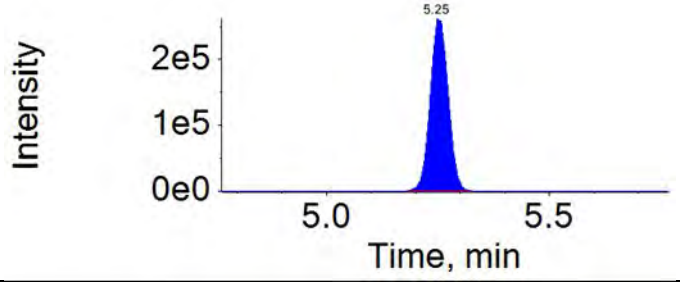
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

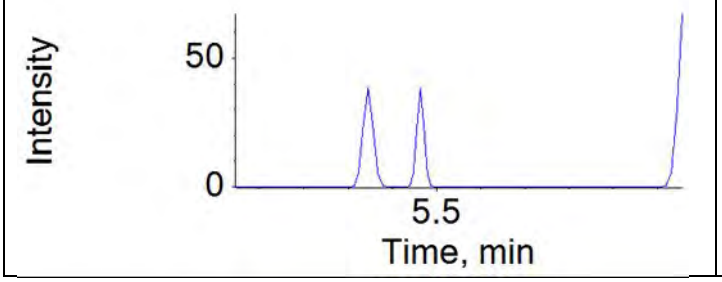
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

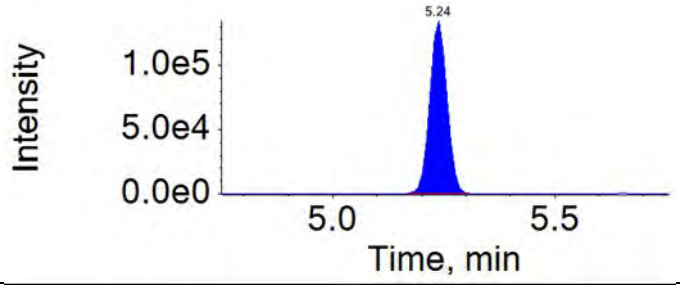
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



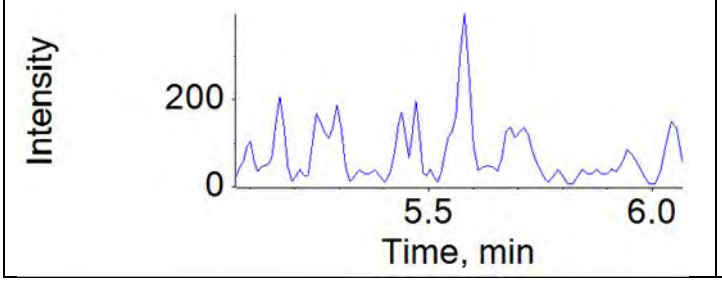


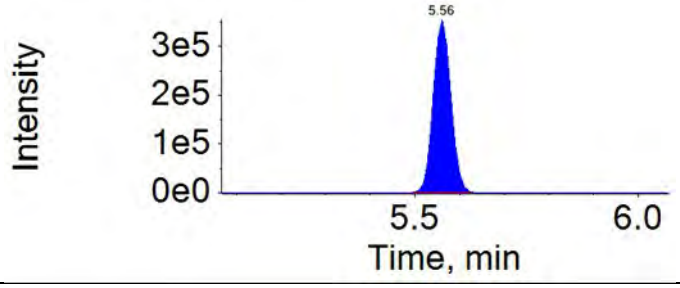
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



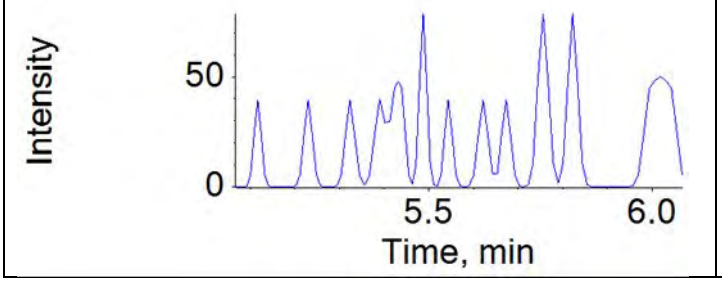


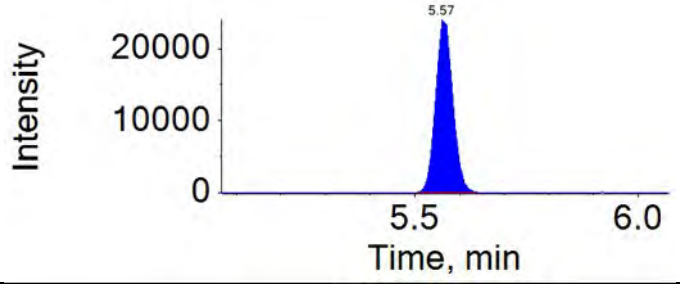
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



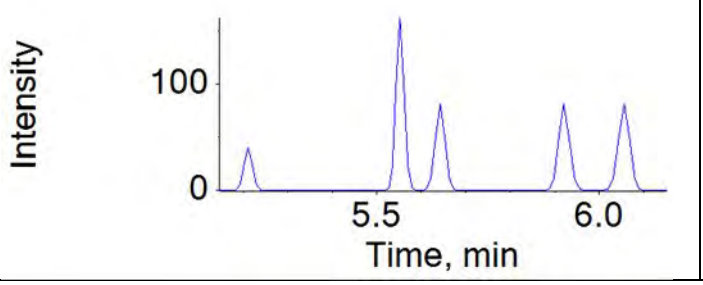


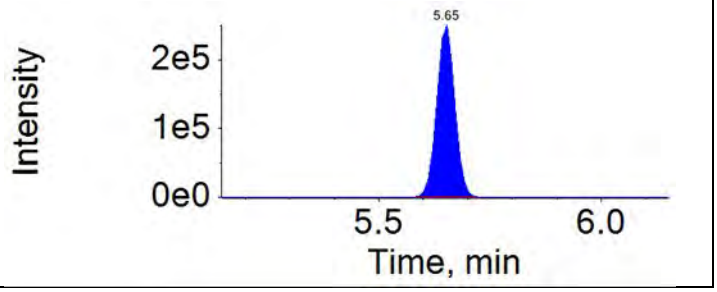
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

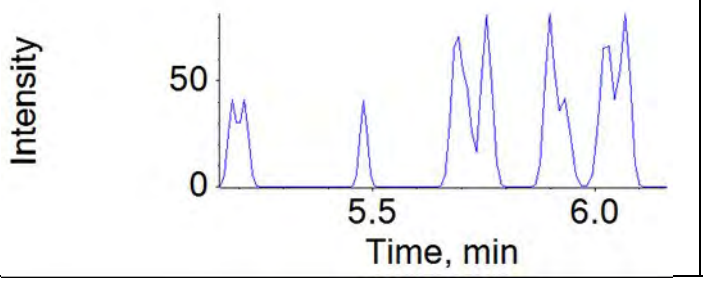
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

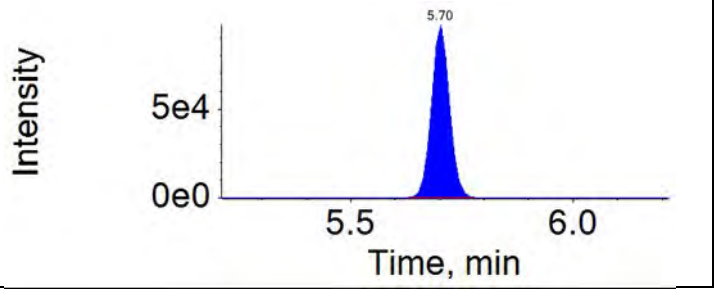
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



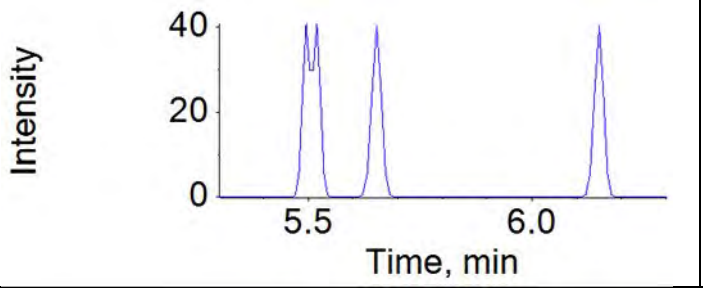


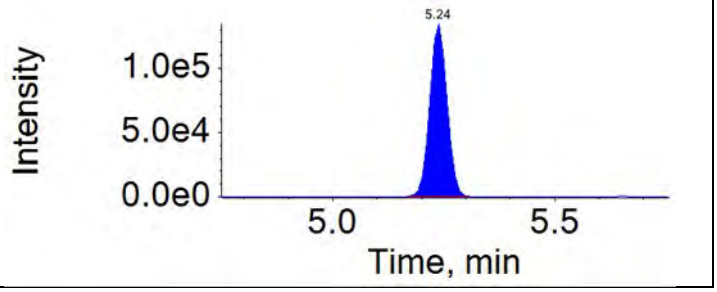
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



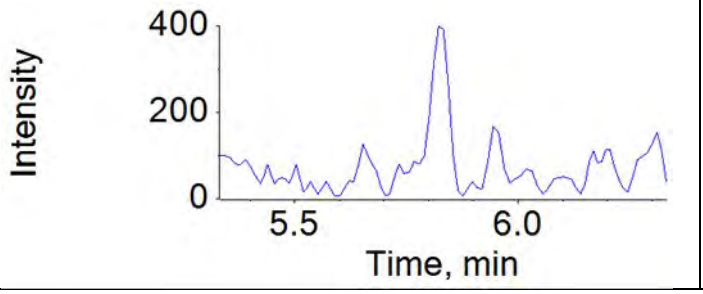


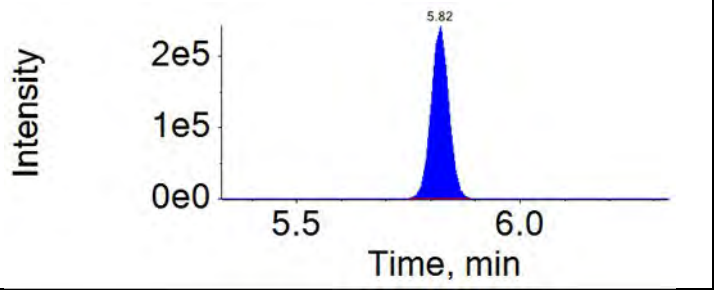
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



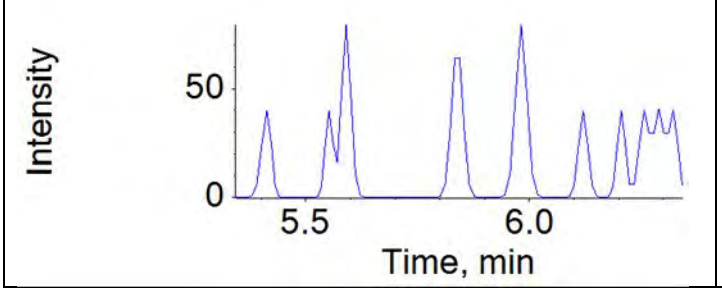


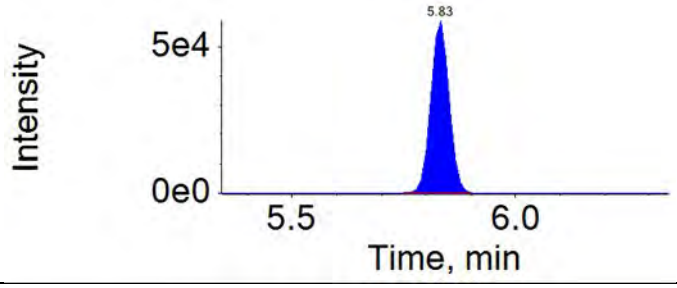
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

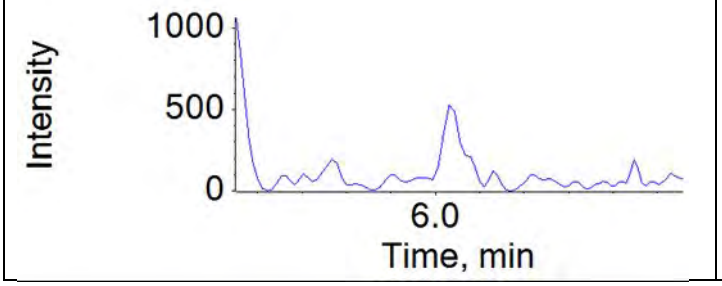
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

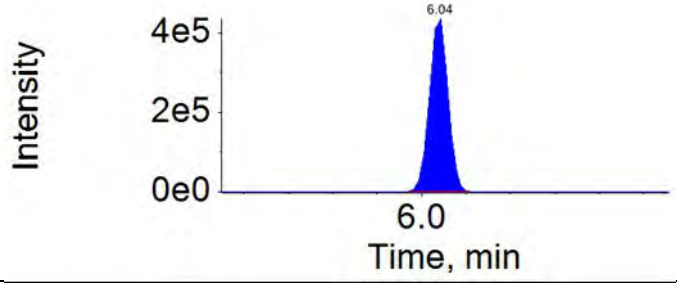
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



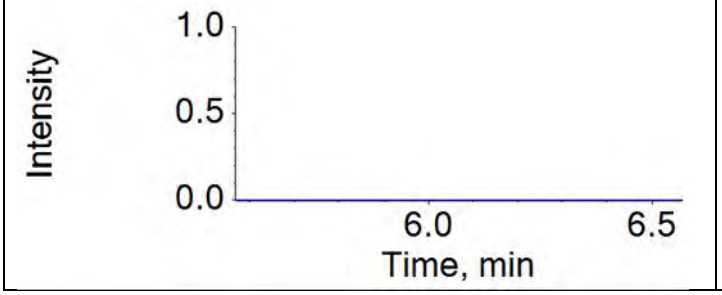


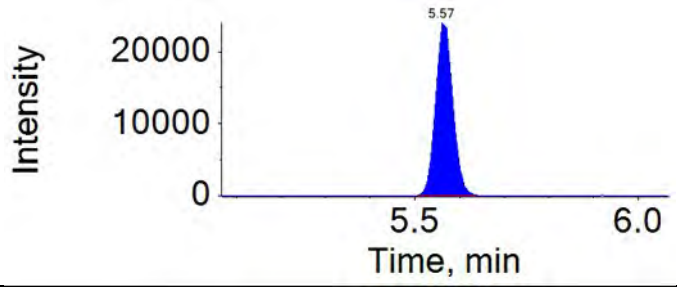
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



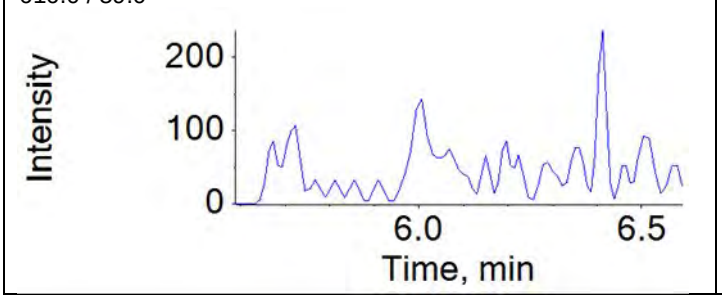


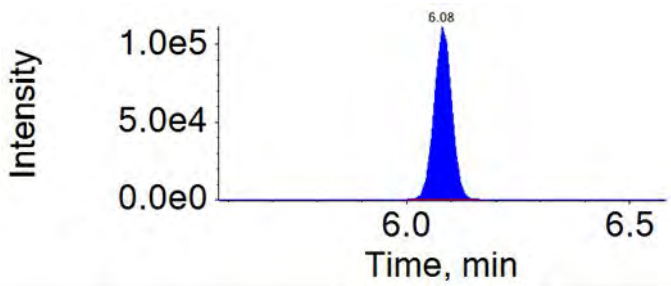
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



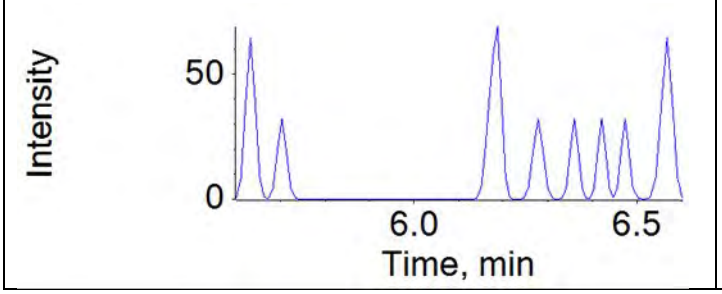


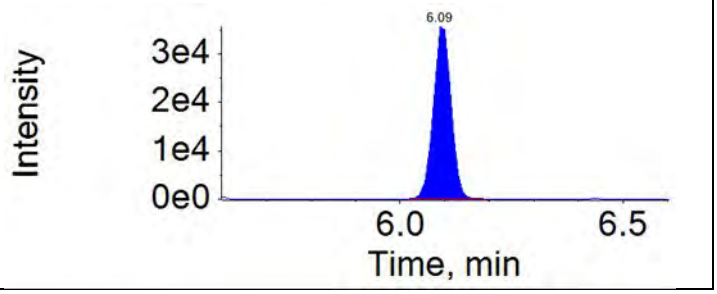
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

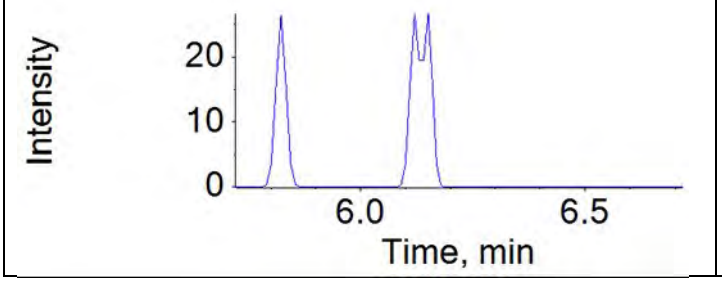
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

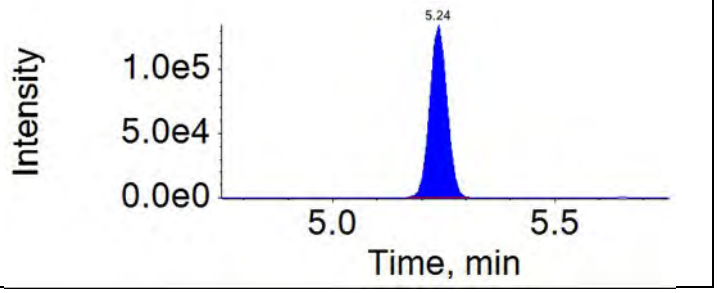
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



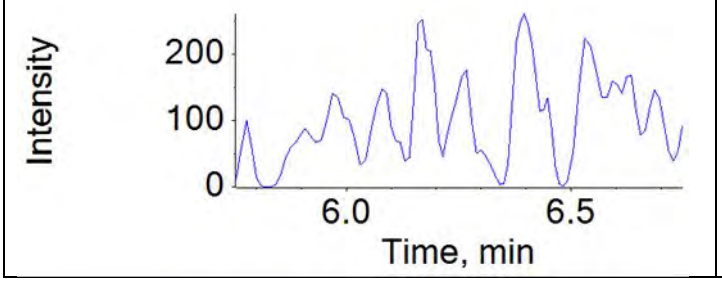


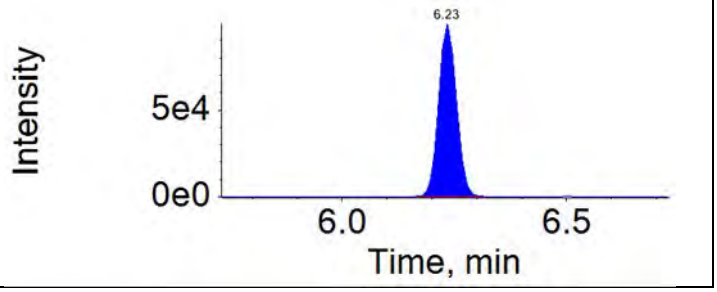
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



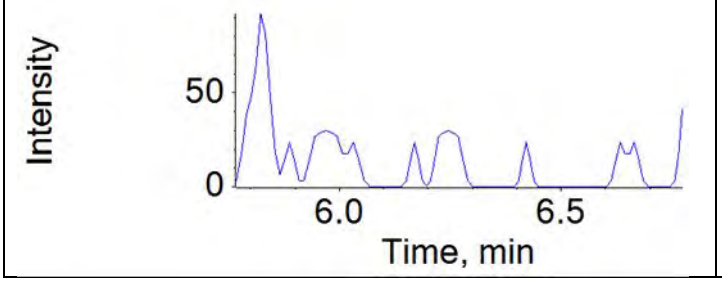


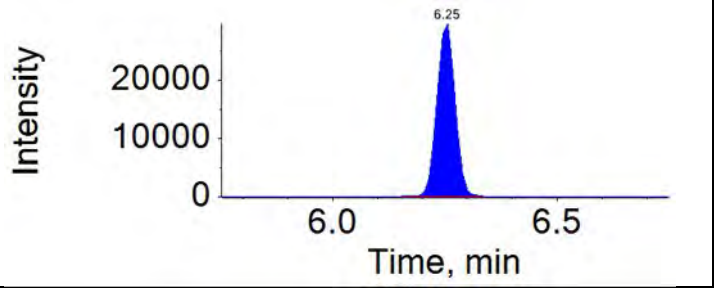
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



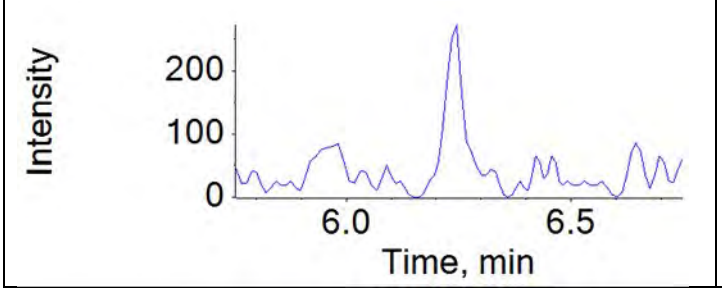


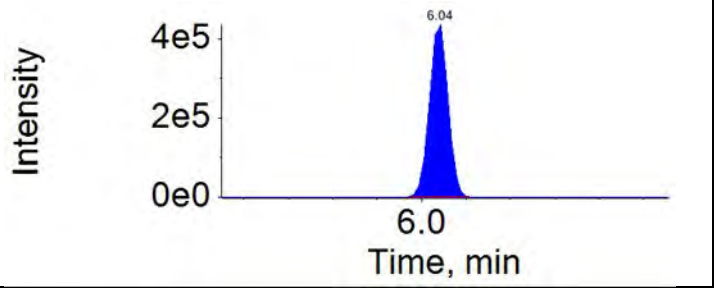
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

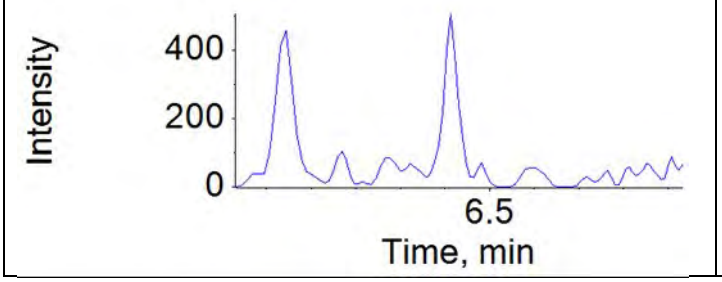
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

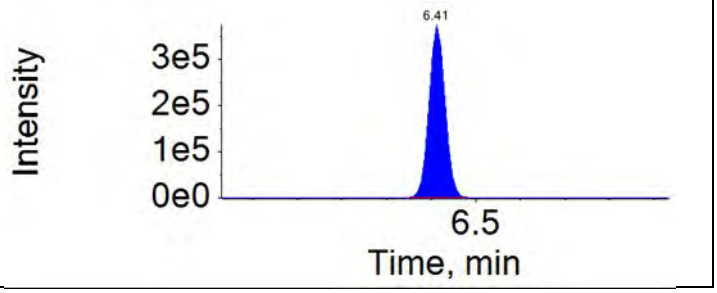
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



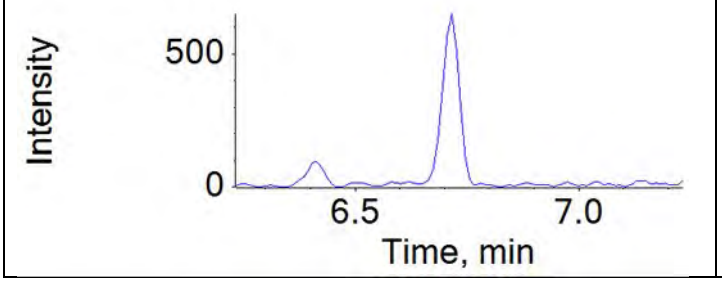


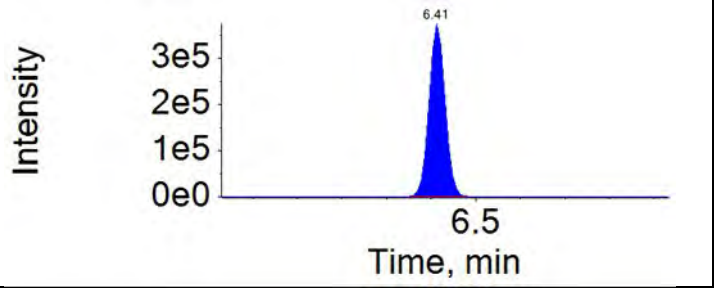
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



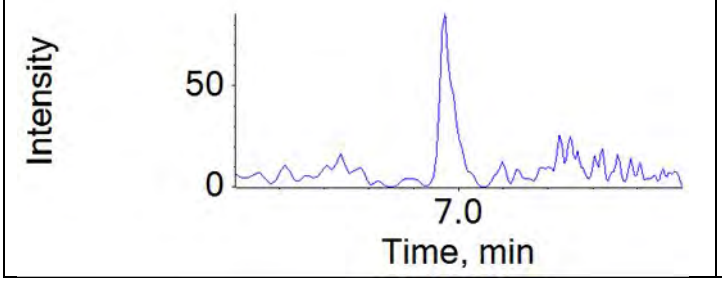


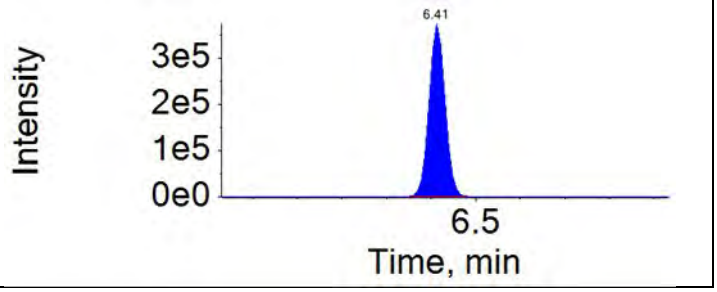
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0





APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Ion Ratio Report

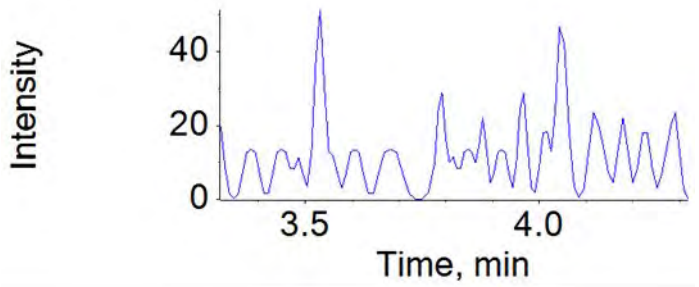
Sample Name: Instrument Blank **Instrument Name:** LM27631 **File Name:** 18NOV29D-06.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	N/A	N/A	N/A	A	N/A	N/A			
PFBS_2	N/A	N/A	N/A	A	N/A	N/A		50	
4:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
4:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxA	N/A	N/A	N/A	A	N/A	N/A			
PFHxA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFPeS	N/A	N/A	N/A	A	N/A	N/A			
PFPeS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpA	N/A	N/A	N/A	A	N/A	N/A			
PFHpA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxS	N/A	N/A	N/A	A	N/A	N/A			
PFHxS_2	N/A	N/A	N/A	A	N/A	N/A		50	
6:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
6:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpS	N/A	N/A	N/A	A	N/A	N/A			
PFHpS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOA	N/A	N/A	N/A	A	N/A	N/A			
PFOA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOS	N/A	N/A	N/A	A	N/A	N/A			
PFOS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNA	N/A	N/A	N/A	A	N/A	N/A			
PFNA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNS	N/A	N/A	N/A	A	N/A	N/A			
PFNS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDA	N/A	N/A	N/A	A	N/A	N/A			
PFDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
8:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
8:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
NMeFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NMeFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDS	N/A	N/A	N/A	A	N/A	N/A			
PFDS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFUnDA	N/A	N/A	N/A	A	N/A	N/A			
PFUnDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
NEtFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NEtFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDoDA	N/A	N/A	N/A	A	N/A	N/A			
PFDoDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
10:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
10:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTrDA	N/A	N/A	N/A	A	N/A	N/A			
PFTrDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTeDA	N/A	N/A	N/A	A	N/A	N/A			
PFTeDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxDA	N/A	N/A	N/A	A	N/A	N/A			
PFHxDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFODA	N/A	N/A	N/A	A	N/A	N/A			
PFODA_2	N/A	N/A	N/A	A	N/A	N/A		50	

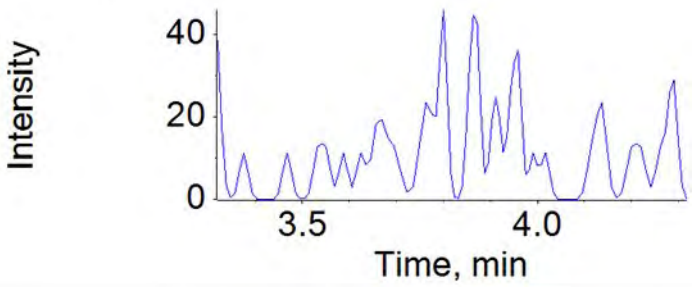
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

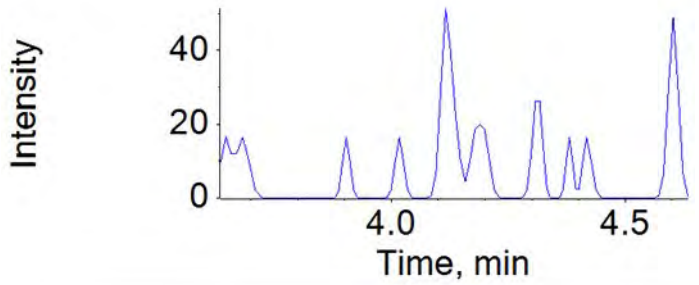
Component: PFBS
Primary Mass: 299.0 / 80.0



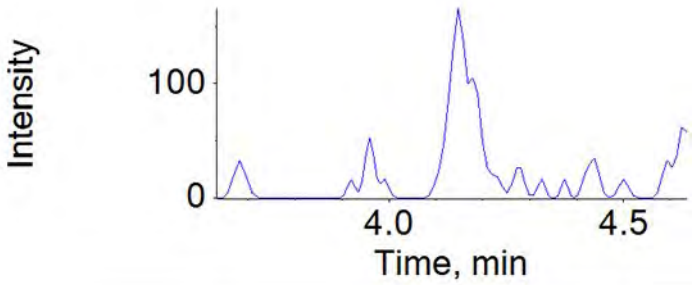
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



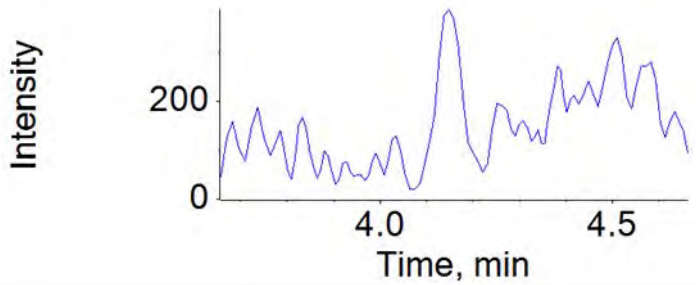
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



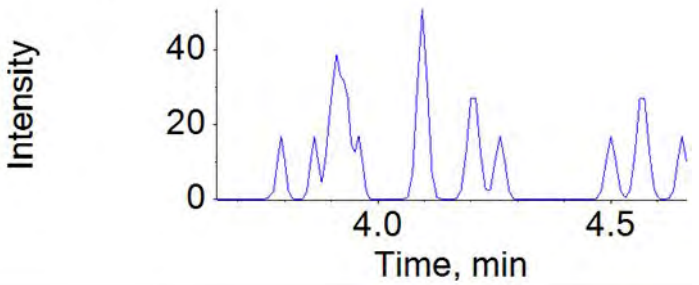
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



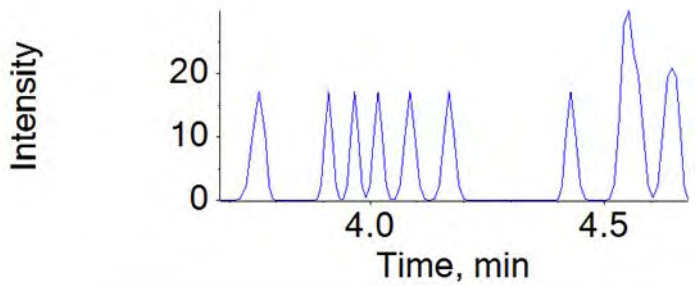
Component: PFHxA
Primary Mass: 313.0 / 269.0



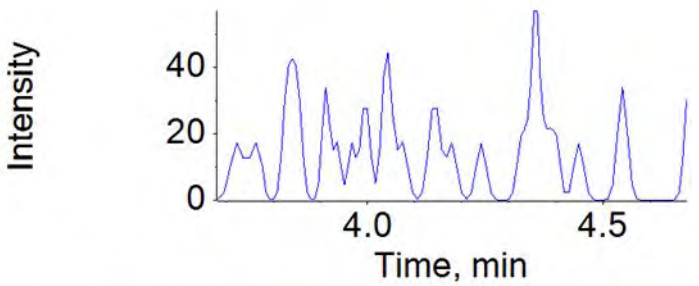
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



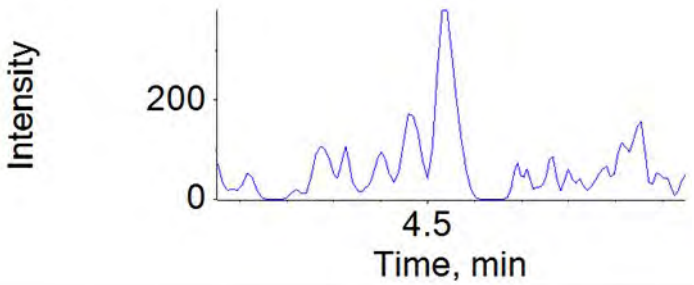
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



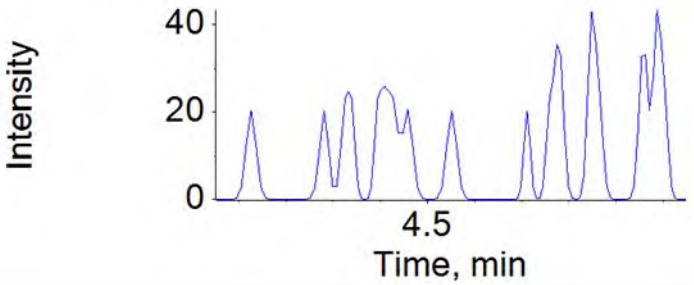
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

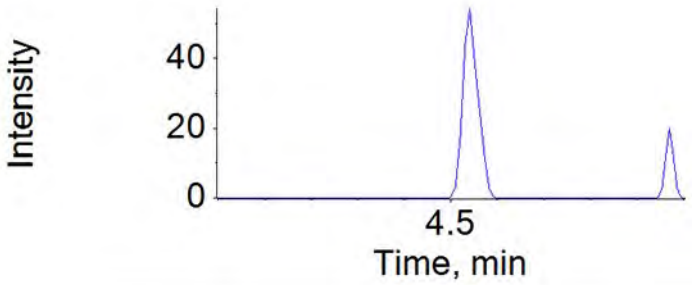
Component: PFHpA
Primary Mass: 363.0 / 319.0



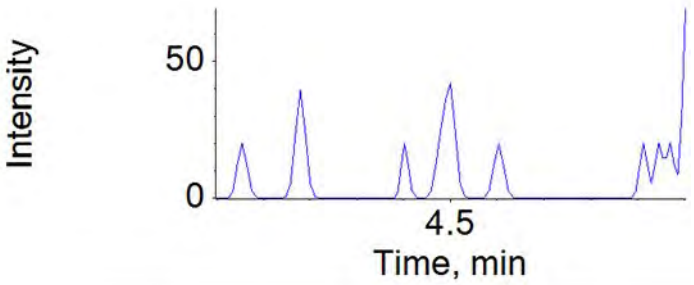
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



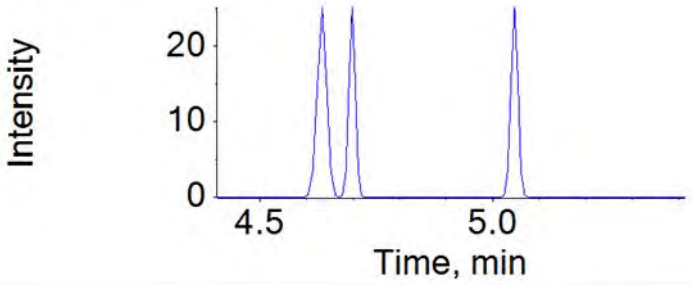
Component: PFHxS
Primary Mass: 399.0 / 80.0



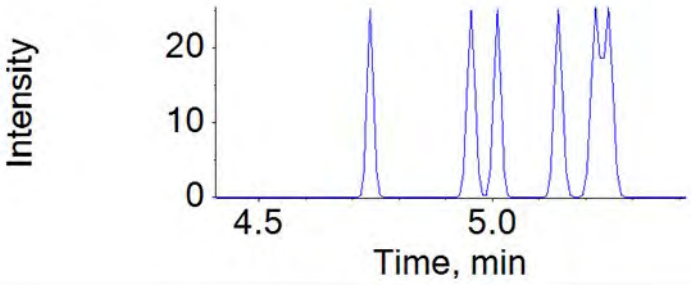
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



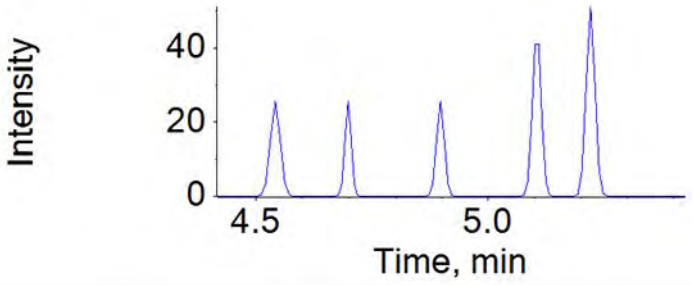
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



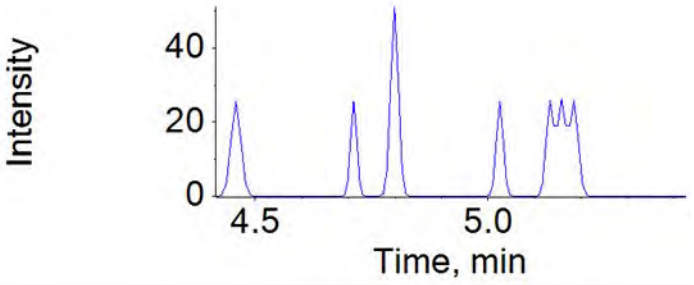
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



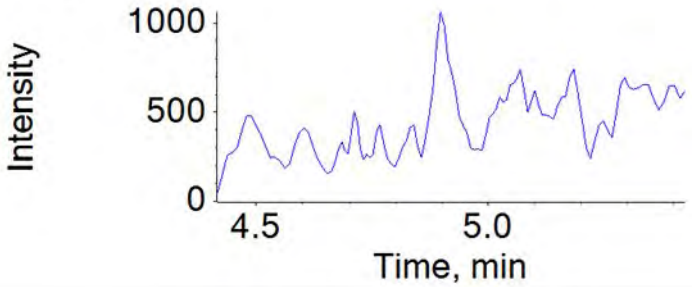
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



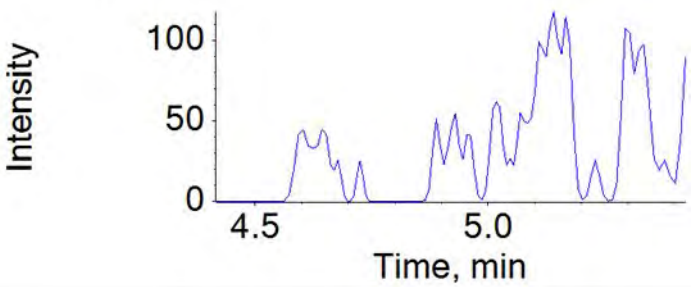
APPROVED
By MCD at 8:06 pm, 11/29/18

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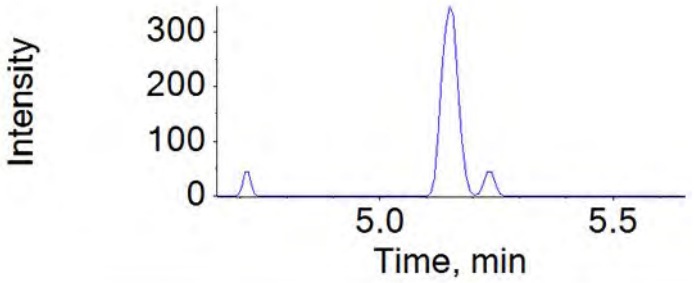
Component: PFOA
Primary Mass: 413.0 / 369.0



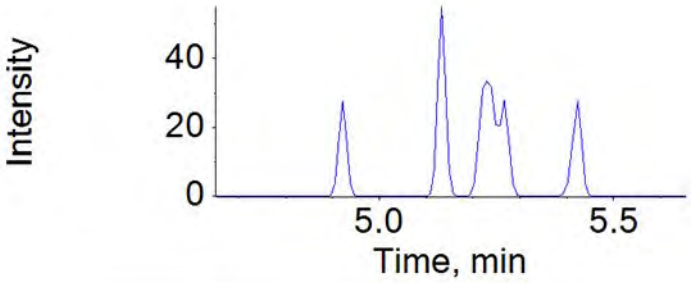
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



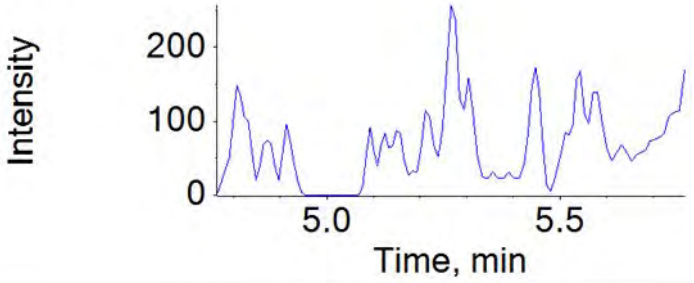
Component: PFOS
Primary Mass: 499.0 / 80.0



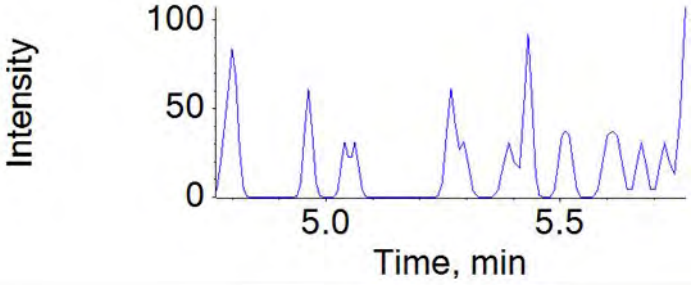
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



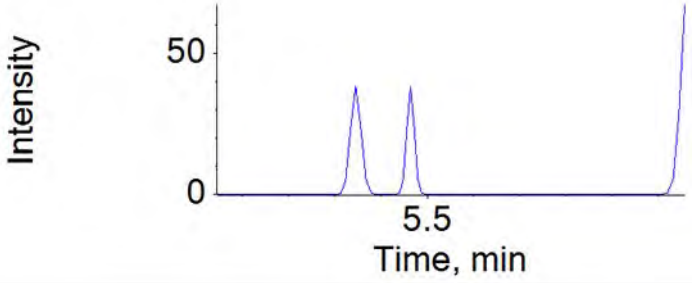
Component: PFNA
Primary Mass: 463.0 / 419.0



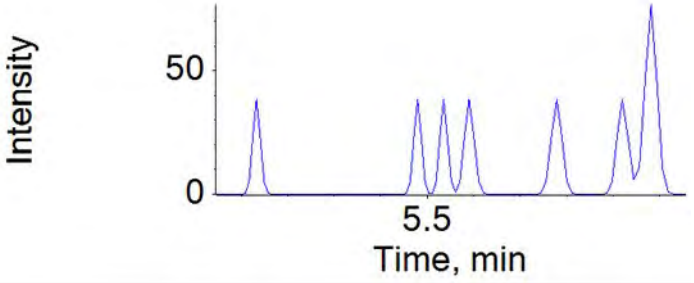
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



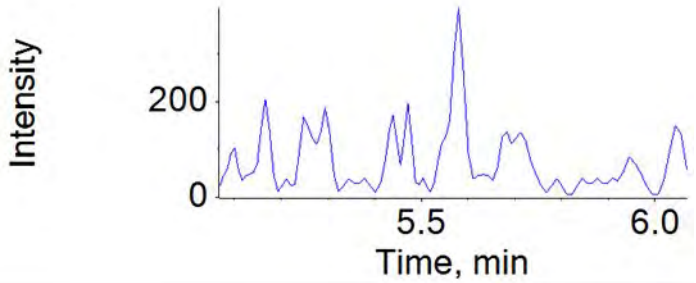
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



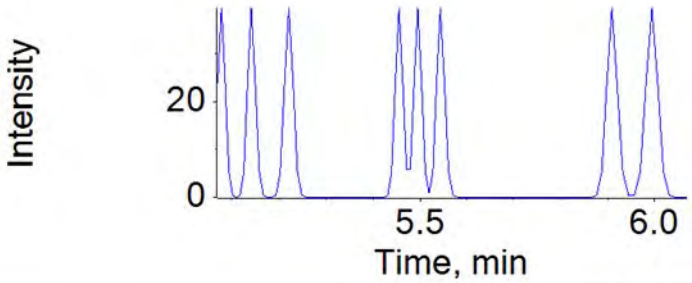
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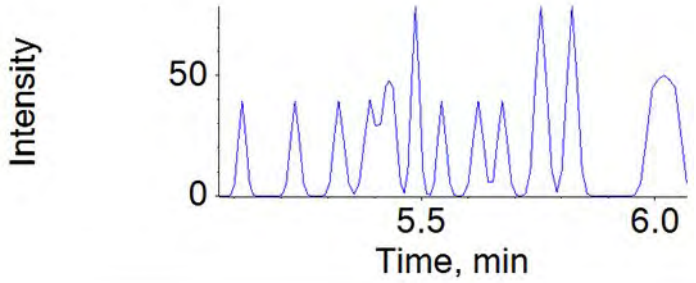
Component: PFDA
Primary Mass: 513.0 / 469.0



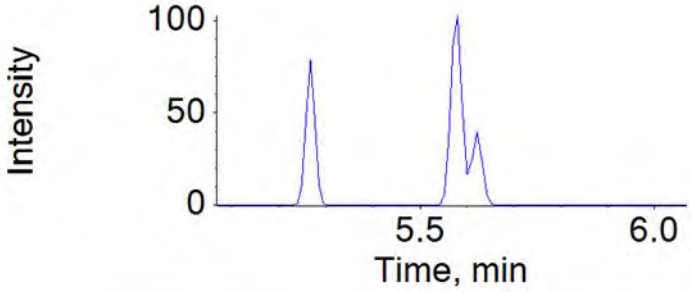
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



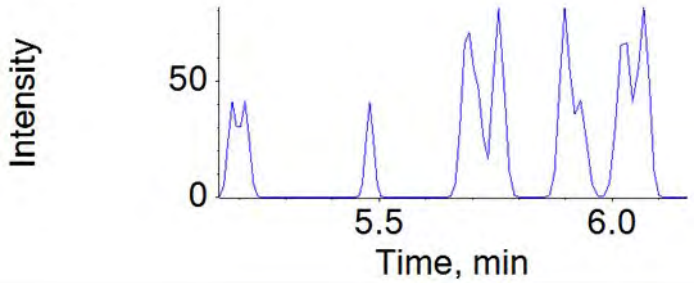
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



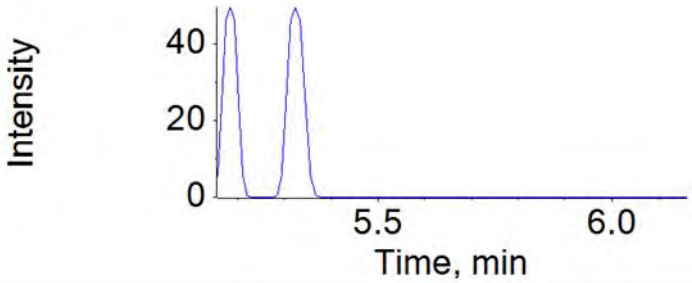
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



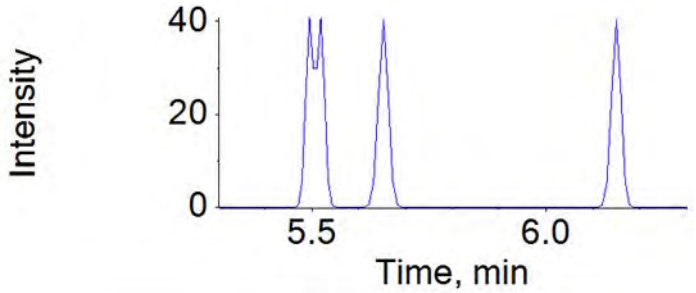
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



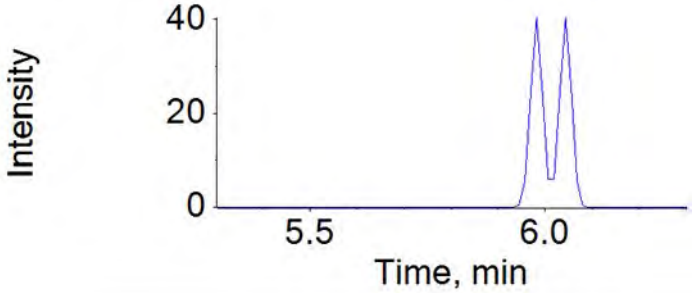
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



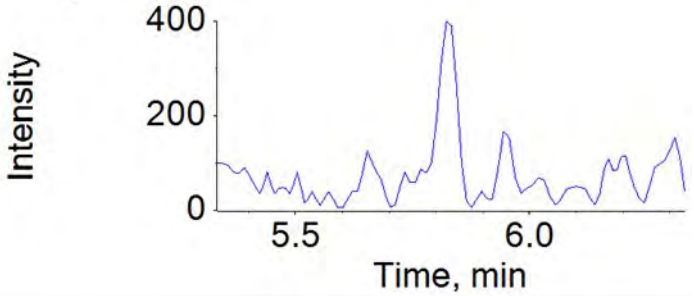
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Secondary Mass: 599.0 / 99.0



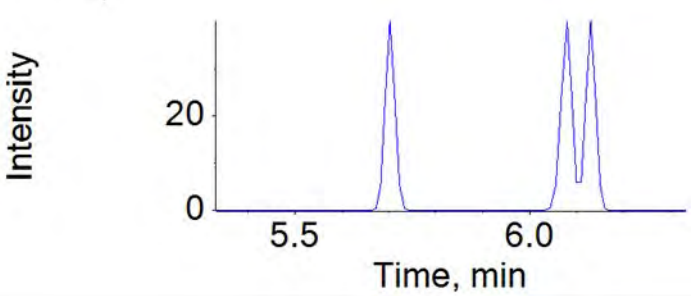
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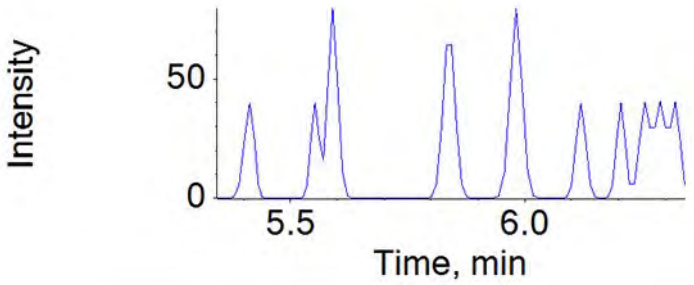
Component: PFUnDA
Primary Mass: 563.0 / 519.0



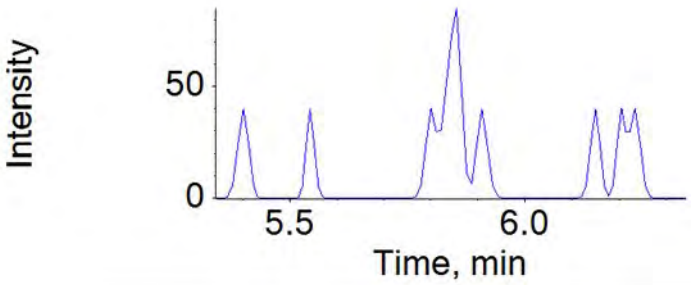
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



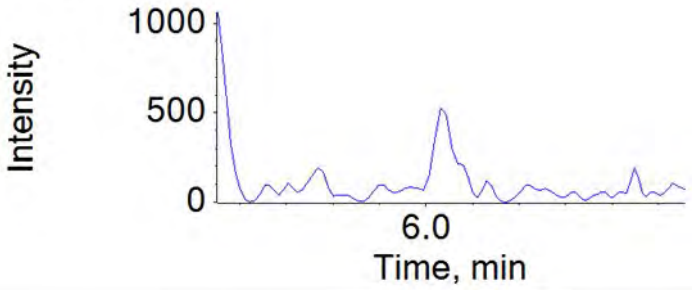
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



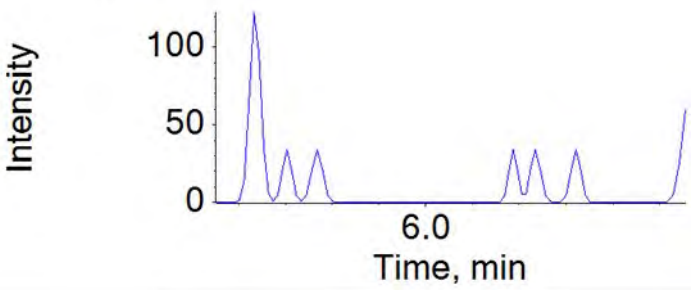
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



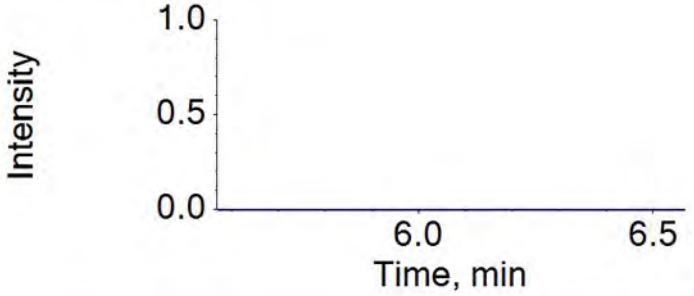
Component: PFDoDA
Primary Mass: 613.0 / 569.0



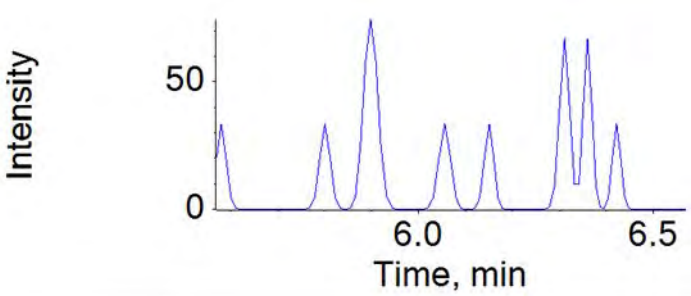
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



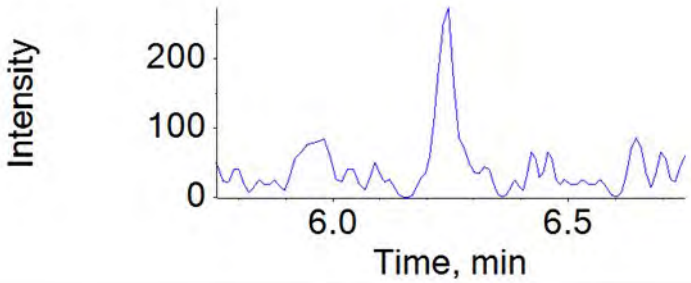
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



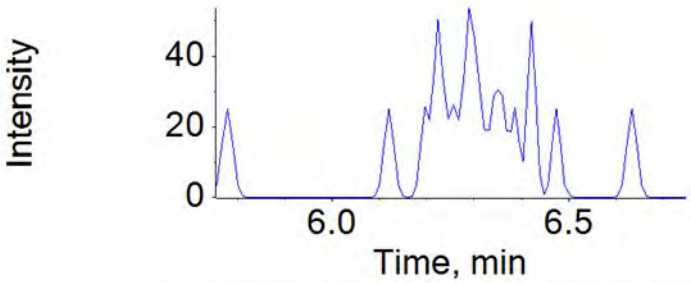
APPROVED
By MCD at 8:06 pm, 11/29/18

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By HMK at 9:40 am, 12/5/18

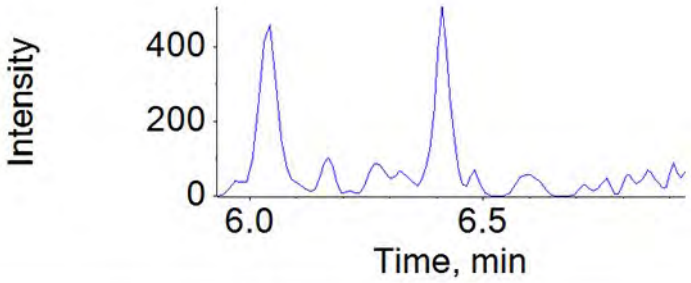
Component: PFTrDA
Primary Mass: 663.0 / 619.0



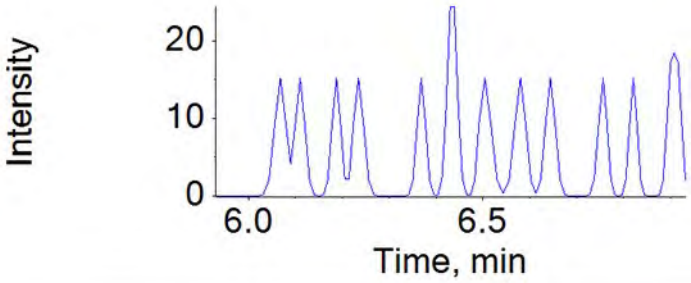
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



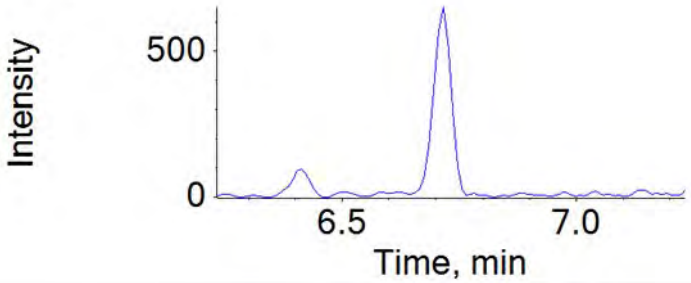
Component: PFTeDA
Primary Mass: 713.0 / 669.0



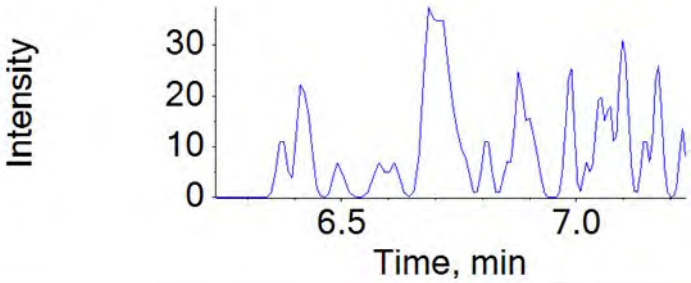
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



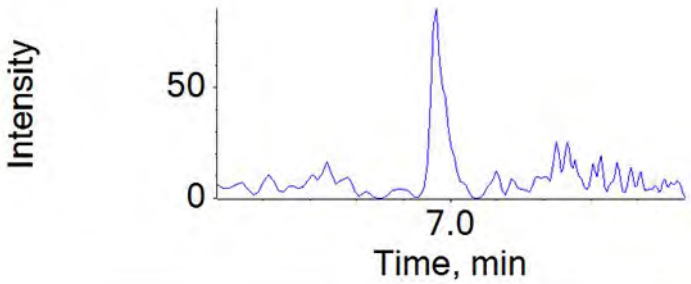
Component: PFHxDA
Primary Mass: 813.0 / 769.0



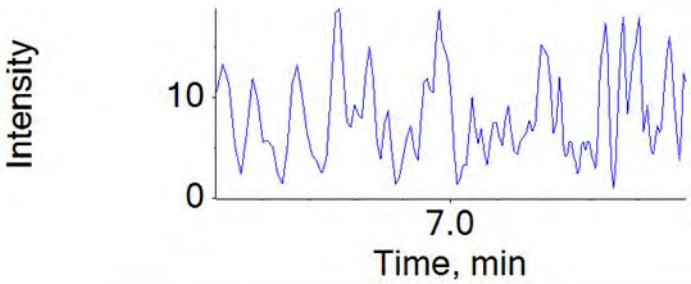
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



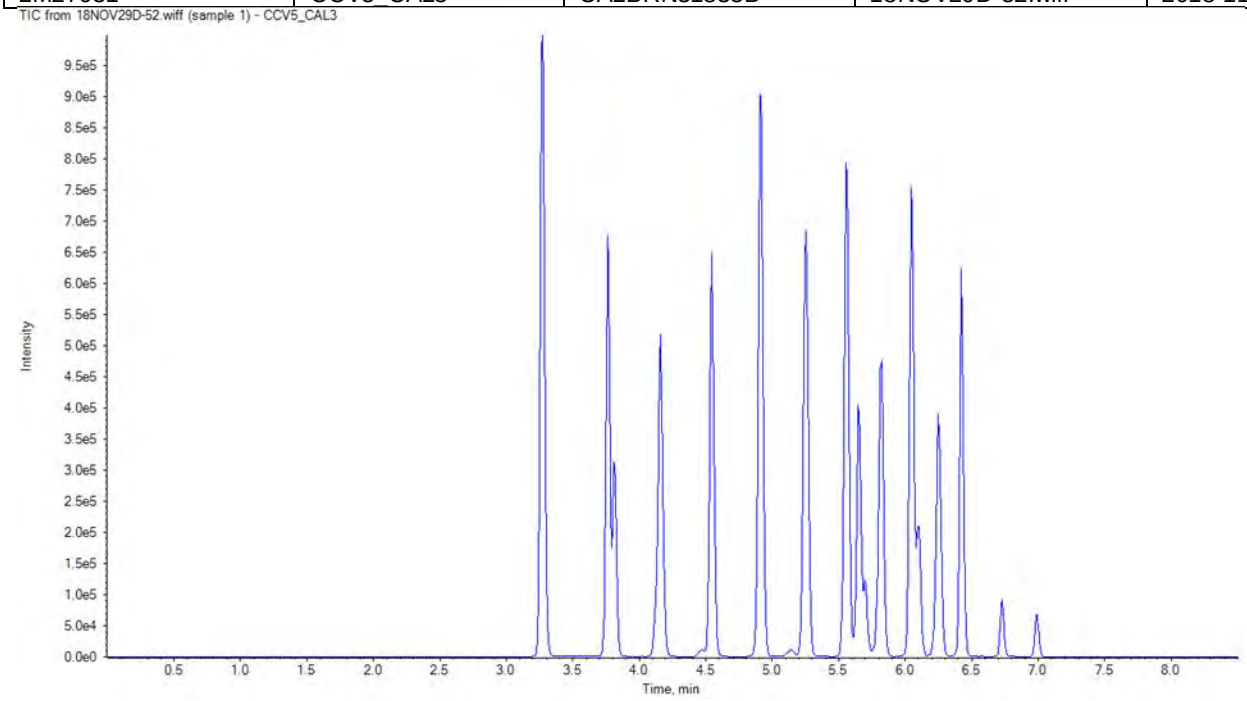
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:56:19 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV5_CAL3	CALBRN31833B	18NOV29D-52.wiff	2018-11-29T17:37:36



Injection Standard Area Reference File: 18NOV29D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	888103.1	906425.4	-2	50	
13C2-PFOA	5.0	482099.7	495984.0	-3	50	
13C4-PFOS	4.8	299552.8	296261.8	1	50	
13C2-PFDA	5.0	454503.3	451203.0	1	50	

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:56:19 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV5_CAL3	CALBRN31833B	18NOV29D-52.wiff	2018-11-29T17:37:36

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	410376.9	10	13C4-PFBA	1003538.1	5.0	0.409	3.27	1.000	2.000	2.242	12	30	
PFPeA	400188.5	11	13C5-PFPeA	935080.6	5.0	0.428	3.77	1.000	2.000	2.100	5	30	
PFBS	172355.2	10	13C3-PFBS	424594.0	4.7	0.406	3.81	1.000	1.770	1.970	11	30	
4:2-FTS	52632.4	12	13C2-4:2-FTS	66022.9	4.7	0.797	4.12	1.000	1.870	2.134	14	30	
PFHxA	392712.5	11	13C5-PFHxA	665817.1	5.0	0.590	4.16	1.000	2.000	2.368	18	30	
PFPeS	89389.0	11	13C3-PFBS	424594.0	4.7	0.211	4.18	1.100	1.880	2.129	13	30	
PFHpA	396806.2	11	13C4-PFHpA	547436.1	5.0	0.725	4.54	1.000	2.000	2.237	12	30	
PFHxS	127006.9	19	13C3-PFHxS	327068.8	4.7	0.388	4.55	1.000	1.820	1.818	0	30	
6:2-FTS	51799.6	11	13C2-6:2-FTS	58432.7	4.8	0.886	4.90	1.000	1.900	2.313	22	30	
PFHpS	129025.9	11	13C3-PFHxS	327068.8	4.7	0.394	4.91	1.080	1.900	1.969	4	30	
PFOA	407078.9	11	13C8-PFOA	958420.1	5.0	0.425	4.91	1.000	2.000	2.195	10	30	
PFOS	138995.5	21	13C8-PFOS	336404.9	4.8	0.413	5.24	1.000	1.850	1.733	-6	30	
PFNA	382168.0	11	13C9-PFNA	639090.1	5.0	0.598	5.26	1.000	2.000	2.292	15	30	
PFNS	98297.2	11	13C8-PFOS	336404.9	4.8	0.292	5.54	1.060	1.920	1.845	-4	30	
PFDA	343068.9	11	13C6-PFDA	857518.7	5.0	0.400	5.56	1.000	2.000	2.265	13	30	
8:2-FTS	54309.5	11	13C2-8:2-FTS	55836.5	4.8	0.973	5.56	1.000	1.920	1.834	-4	30	
PFOSA	268924.0	12	13C8-PFOSA	644731.6	5.0	0.417	5.65	1.000	2.000	2.113	6	30	
NMeFOSAA	64182.7	18	d3-NMeFOSAA	182307.0	5.0	0.352	5.70	1.000	2.000	2.246	12	30	
PFDS	79891.7	12	13C8-PFOS	336404.9	4.8	0.237	5.79	1.100	1.930	1.883	-2	30	
PFUnDA	355883.8	11	13C7-PFUnDA	567707.2	5.0	0.627	5.82	1.000	2.000	2.241	12	30	
NEtFOSAA	64211.1	22	d5-NEtFOSAA	138062.3	5.0	0.465	5.83	1.000	2.000	2.265	13	30	
PFDoDA	467324.6	12	13C2-PFDoDA	1144067.1	5.0	0.408	6.05	1.000	2.000	2.238	12	30	
10:2-FTS	54230.7	12	13C2-8:2-FTS	55836.5	4.8	0.971	6.07	1.090	1.930	2.142	11	30	
NMePFOSAE	136711.2	11	d7-NMePFOSAE	257051.1	5.0	0.532	6.10	1.000	2.000	2.238	12	30	
NMePFOSA	35299.2	11	d3-NMePFOSA	82258.4	5.0	0.429	6.11	1.000	2.000	2.275	14	30	
PFDoS	43145.4	11	13C8-PFOS	336404.9	4.8	0.128	6.22	1.190	1.940	1.842	-5	30	
NEtPFOSAE	152658.0	11	d9-NEtPFOSAE	225911.1	5.0	0.676	6.26	1.000	2.000	2.431	22	30	
NEtPFOSA	32593.5	11	d5-NEtPFOSA	68497.7	5.0	0.476	6.27	1.000	2.000	2.133	7	30	
PFTrDA	477187.4	11	13C2-PFDoDA	1144067.1	5.0	0.417	6.25	1.030	2.000	2.514	26	30	
PFTeDA	345082.9	10	13C2-PFTeDA	853856.6	5.0	0.404	6.42	1.000	2.000	2.290	14	30	
PFHxDA	172538.3	11	13C2-PFTeDA	853856.6	5.0	0.202	6.73	1.050	2.000	2.310	16	30	
PFODA	141132.9	10	13C2-PFTeDA	853856.6	5.0	0.165	6.99	1.090	2.000	2.202	10	30	

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL
QMethod Name: 18AUG20QM
Result Table: 18NOV29DCCV1-5 11/29/2018 7:56:19 PM
Acquisition Method: 18AUG13_3uL.dam

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV5_CAL3			**Data File:**		18NOV29D-52.wiff
Sample ID:	CALBRN31833B			**Acquis Date:**		2018-11-29T17:37:36
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	5			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV29DCCV1-5
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV29D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	888103.1	906425.4	-2	50	
13C2-PFOA	5.0	482099.7	495984.0	-3	50	
13C4-PFOS	4.8	299552.8	296261.8	1	50	
13C2-PFDA	5.0	454503.3	451203.0	1	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	1003538.1	13C3-PFBA	888103.1	1.130	5.000	5.041	101	70-130	
E13C5-PFPeA	935080.6	13C3-PFBA	888103.1	1.053	5.000	4.917	98	70-130	
E13C3-PFBS	424594.0	13C3-PFBA	888103.1	0.478	4.650	4.561	98	70-130	
E13C2-4:2-FTS	66022.9	13C2-PFOA	482099.7	0.137	4.670	4.720	101	70-130	
E13C5-PFHxA	665817.1	13C2-PFOA	482099.7	1.381	5.000	5.073	101	70-130	
E13C3-PFHxS	327068.8	13C2-PFOA	482099.7	0.678	4.730	5.317	112	70-130	
E13C4-PFHpA	547436.1	13C2-PFOA	482099.7	1.136	5.000	5.218	104	70-130	
E13C2-6:2-FTS	58432.7	13C2-PFOA	482099.7	0.121	4.750	5.074	107	70-130	
E13C8-PFOA	958420.1	13C2-PFOA	482099.7	1.988	5.000	5.472	109	70-130	
E13C8-PFOS	336404.9	13C4-PFOS	299552.8	1.123	4.780	5.070	106	70-130	
E13C9-PFNA	639090.1	13C4-PFOS	299552.8	2.133	5.000	4.686	94	70-130	
E13C6-PFDA	857518.7	13C2-PFDA	454503.3	1.887	5.000	5.320	106	70-130	
E13C2-8:2-FTS	55836.5	13C2-PFDA	454503.3	0.123	4.790	5.280	110	70-130	
E13C8-PFOSA	644731.6	13C2-PFDA	454503.3	1.419	5.000	5.205	104	70-130	
Ed3-NMeFOSAA	182307.0	13C2-PFDA	454503.3	0.401	5.000	5.093	102	70-130	
E13C7-PFUnDA	567707.2	13C2-PFDA	454503.3	1.249	5.000	5.279	106	70-130	
Ed5-NEtFOSAA	138062.3	13C2-PFDA	454503.3	0.304	5.000	5.412	108	70-130	
E13C2-PFDoDA	1144067.1	13C2-PFDA	454503.3	2.517	5.000	5.289	106	70-130	
Ed7-NMePFOSAE	257051.1	13C2-PFDA	454503.3	0.566	5.000	4.888	98	70-130	
Ed3-NMePFOSA	82258.4	13C2-PFDA	454503.3	0.181	5.000	4.898	98	70-130	
Ed9-NEtPFOSAE	225911.1	13C2-PFDA	454503.3	0.497	5.000	5.039	101	70-130	
Ed5-NEtPFOSA	68497.7	13C2-PFDA	454503.3	0.151	5.000	5.237	105	70-130	
E13C2-PFTeDA	853856.6	13C2-PFDA	454503.3	1.879	5.000	5.198	104	70-130	

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

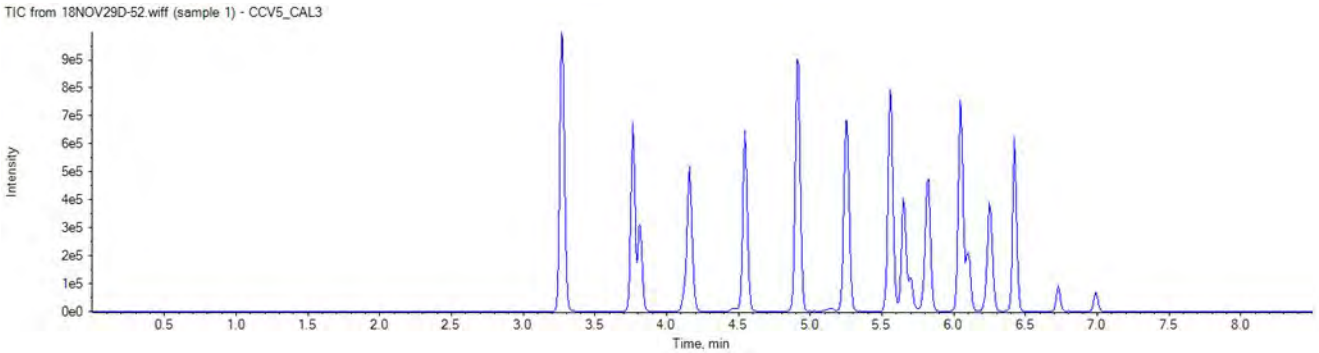
Analyte Quantitation Peak Table

Sample Name: CCV5_CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV29D-52.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	410376.9		A	13C4-PFBA	3.27	1003538.1	0.409	2.242
PFPeA	3.77	1.000	400188.5		A	13C5-PFPeA	3.76	935080.6	0.428	2.100
PFBS	3.81	1.000	172355.2		A	13C3-PFBS	3.81	424594.0	0.406	1.970
4:2-FTS	4.12	1.000	52632.4		A	13C2-4:2-FTS	4.13	66022.9	0.797	2.134
PFHxA	4.16	1.000	392712.5		A	13C5-PFHxA	4.16	665817.1	0.590	2.368
PFPeS	4.18	1.100	89389.0		A	13C3-PFBS	3.81	424594.0	0.211	2.129
PFHpA	4.54	1.000	396806.2		A	13C4-PFHpA	4.54	547436.1	0.725	2.237
PFHxS	4.55	1.000	127006.9		M	13C3-PFHxS	4.55	327068.8	0.388	1.818
6:2-FTS	4.90	1.000	51799.6		A	13C2-6:2-FTS	4.90	58432.7	0.886	2.313
PFHpS	4.91	1.080	129025.9		A	13C3-PFHxS	4.55	327068.8	0.394	1.969
PFOA	4.91	1.000	407078.9		A	13C8-PFOA	4.91	958420.1	0.425	2.195
PFOS	5.24	1.000	138995.5		M	13C8-PFOS	5.24	336404.9	0.413	1.733
PFNA	5.26	1.000	382168.0		A	13C9-PFNA	5.26	639090.1	0.598	2.292
PFNS	5.54	1.060	98297.2		A	13C8-PFOS	5.24	336404.9	0.292	1.845
PFDA	5.56	1.000	343068.9		A	13C6-PFDA	5.56	857518.7	0.400	2.265
8:2-FTS	5.56	1.000	54309.5		A	13C2-8:2-FTS	5.56	55836.5	0.973	1.834
PFOSA	5.65	1.000	268924.0		A	13C8-PFOSA	5.65	644731.6	0.417	2.113
NMeFOSAA	5.70	1.000	64182.7		A	d3-NMeFOSAA	5.70	182307.0	0.352	2.246
PFDS	5.79	1.100	79891.7		A	13C8-PFOS	5.24	336404.9	0.237	1.883
PFUnDA	5.82	1.000	355883.8		A	13C7-PFUnDA	5.82	567707.2	0.627	2.241
NEtFOSAA	5.83	1.000	64211.1		M	d5-NEtFOSAA	5.83	138062.3	0.465	2.265
PFDoDA	6.05	1.000	467324.6		A	13C2-PFDoDA	6.05	1144067.1	0.408	2.238
10:2-FTS	6.07	1.090	54230.7		A	13C2-8:2-FTS	5.56	55836.5	0.971	2.142
NMePFOSAE	6.10	1.000	136711.2		A	d7-NMePFOSAE	6.10	257051.1	0.532	2.238
NMePFOSA	6.11	1.000	35299.2		A	d3-NMePFOSA	6.11	82258.4	0.429	2.275
PFDoS	6.22	1.190	43145.4		A	13C8-PFOS	5.24	336404.9	0.128	1.842
NEtPFOSAE	6.26	1.000	152658.0		A	d9-NEtPFOSAE	6.25	225911.1	0.676	2.431
NEtPFOSA	6.27	1.000	32593.5		A	d5-NEtPFOSA	6.27	68497.7	0.476	2.133
PFTrDA	6.25	1.030	477187.4		A	13C2-PFDoDA	6.05	1144067.1	0.417	2.514
PFTeDA	6.42	1.000	345082.9		A	13C2-PFTeDA	6.42	853856.6	0.404	2.290
PFHxDA	6.73	1.050	172538.3		A	13C2-PFTeDA	6.42	853856.6	0.202	2.310
PFODA	6.99	1.090	141132.9		A	13C2-PFTeDA	6.42	853856.6	0.165	2.202

Total Ion Chromatogram

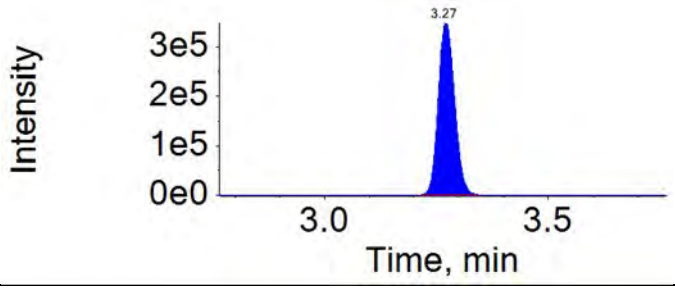


APPROVED
By MCD at 8:06 pm, 11/29/18

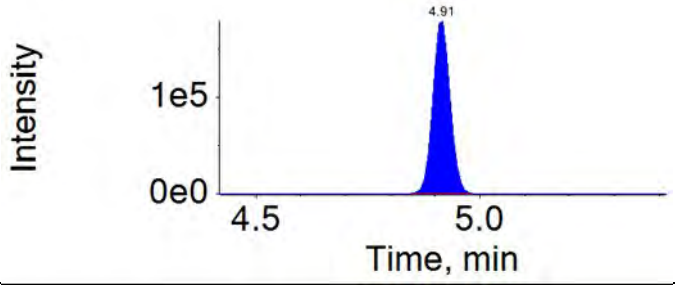
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

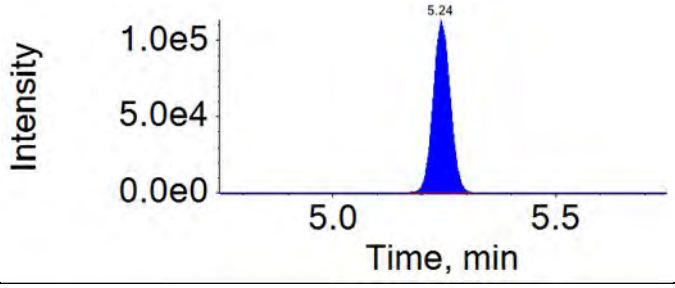
Injection Standard: 13C3-PFBA
216.0 / 172.0



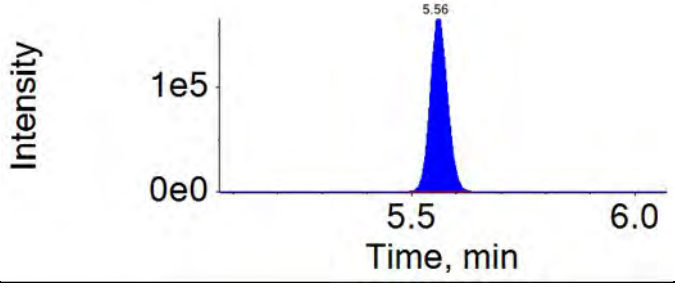
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0

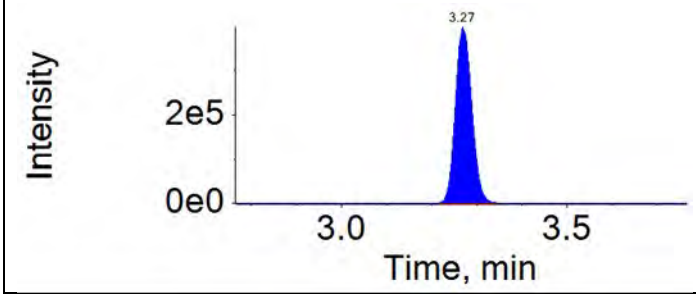


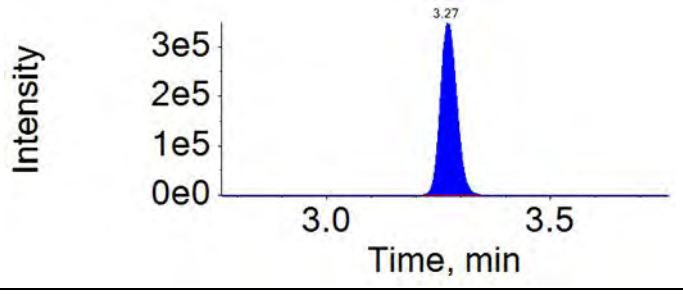
Injection Standard: 13C2-PFDA
515.0 / 470.0



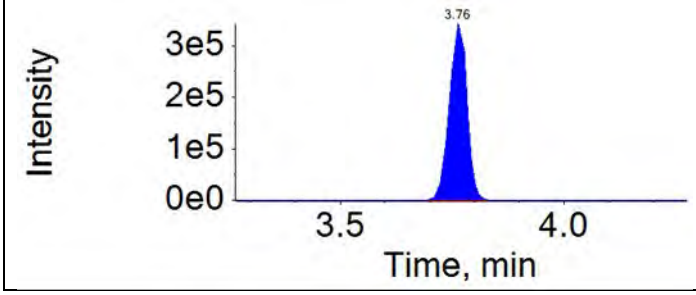
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

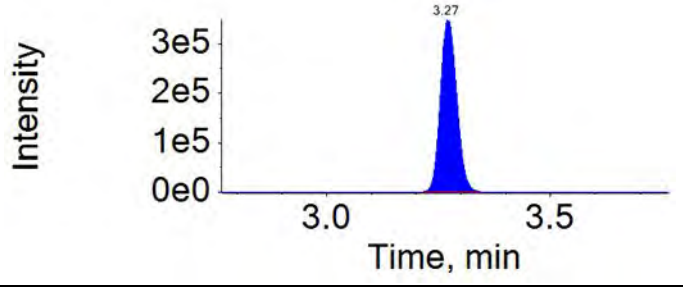
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



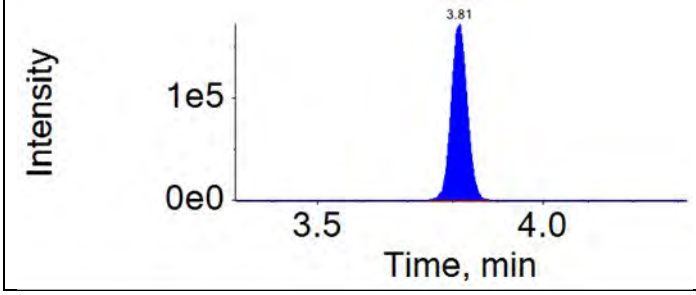


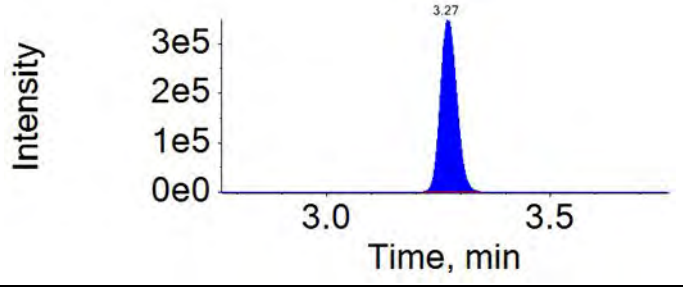
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



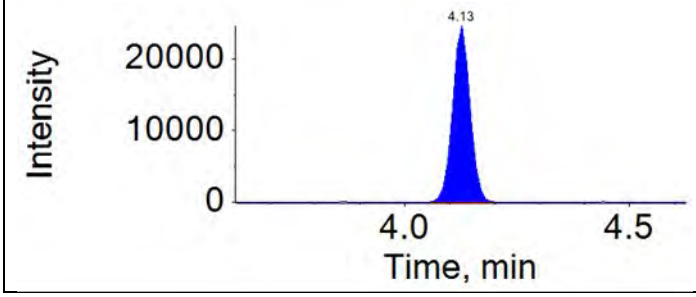


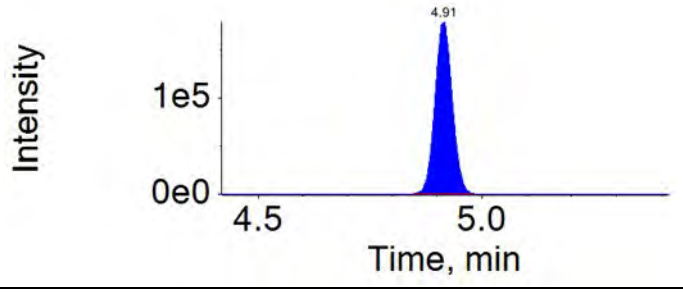
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



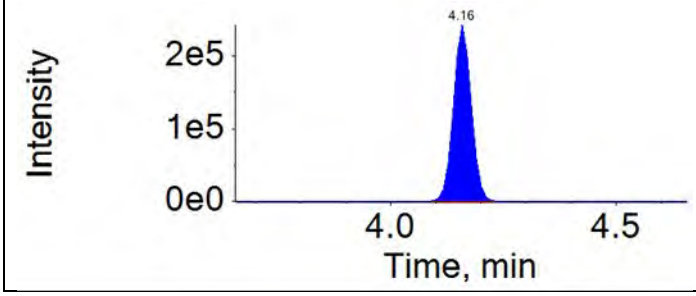


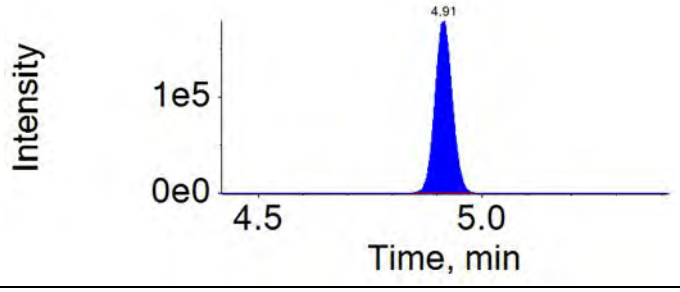
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

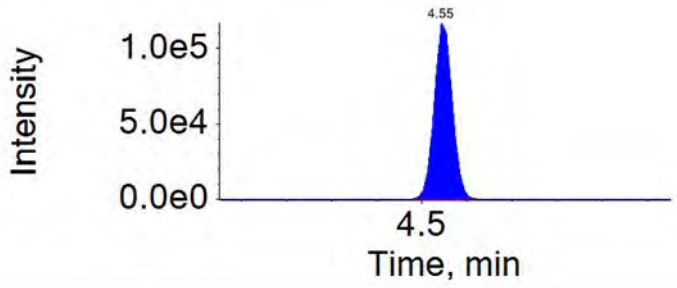
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

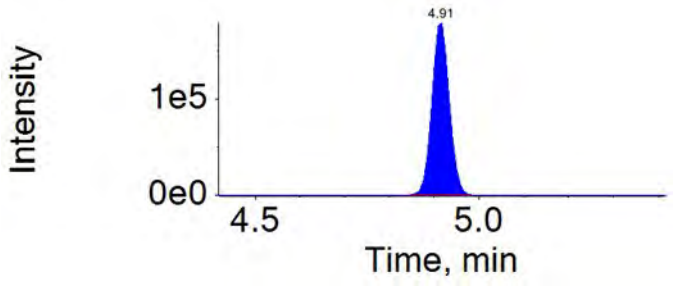
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



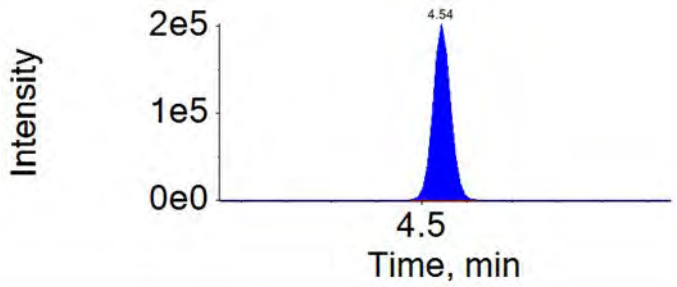


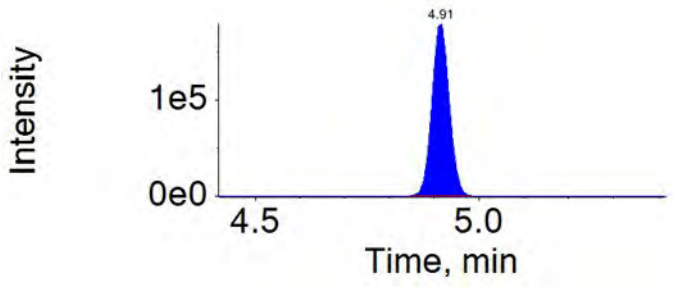
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



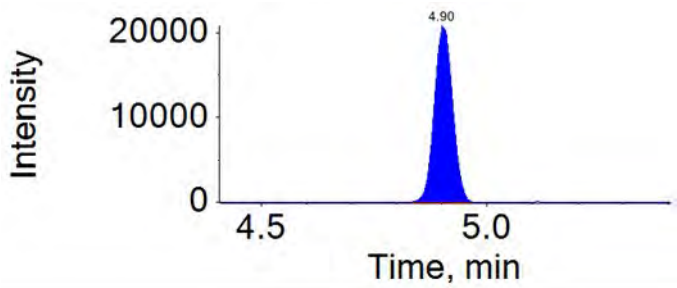


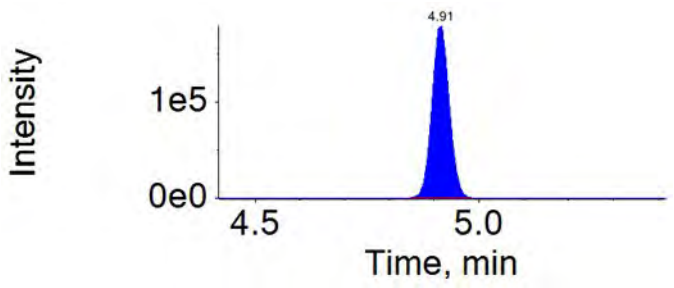
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

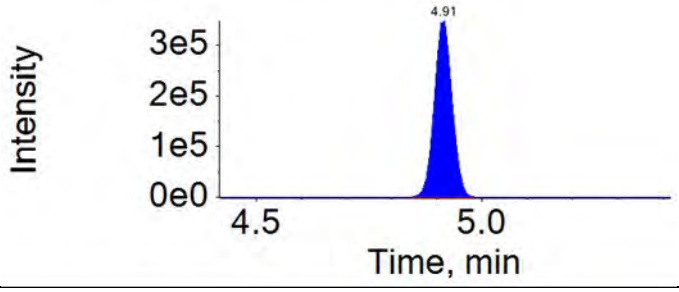
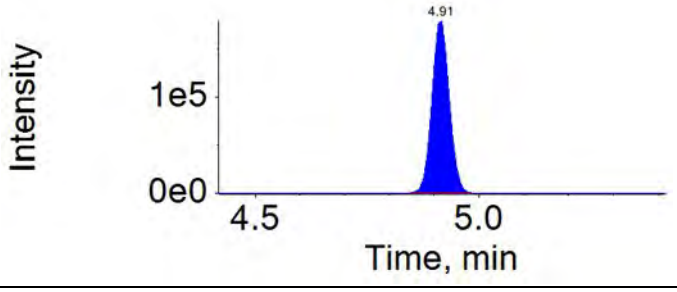


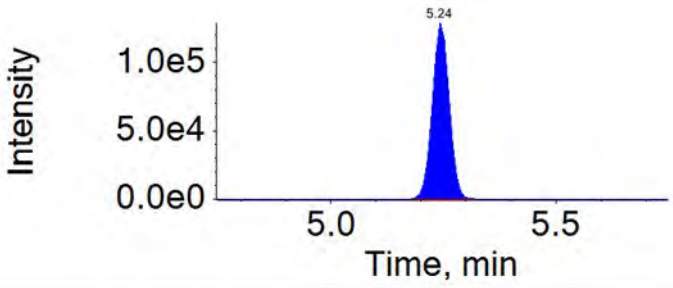
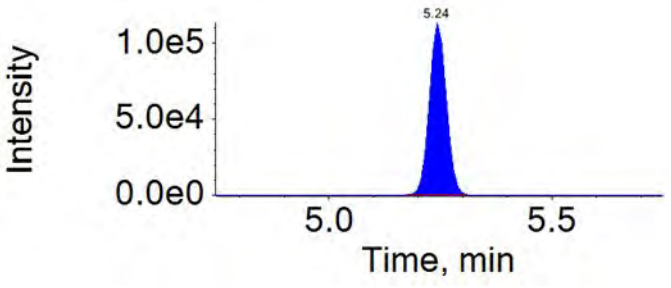


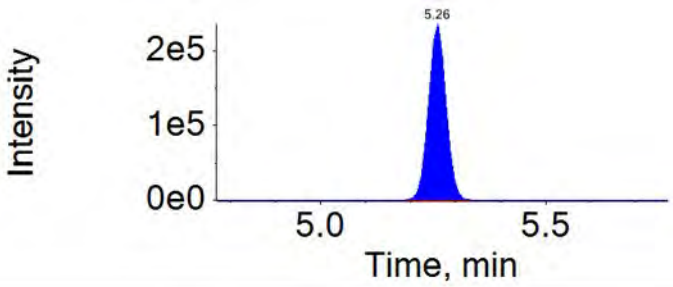
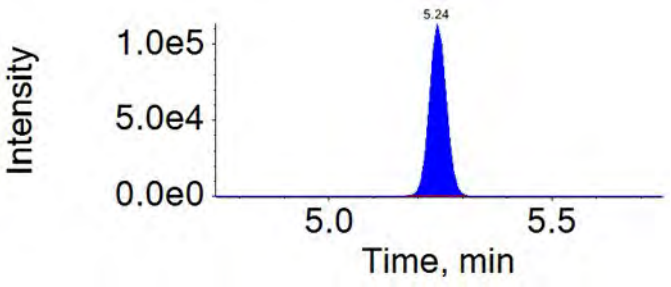
APPROVED
By MCD at 8:06 pm, 11/29/18

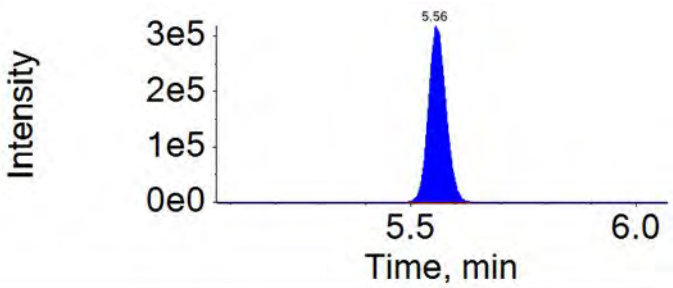
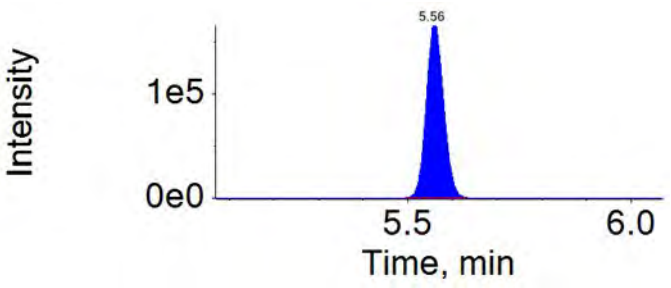
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

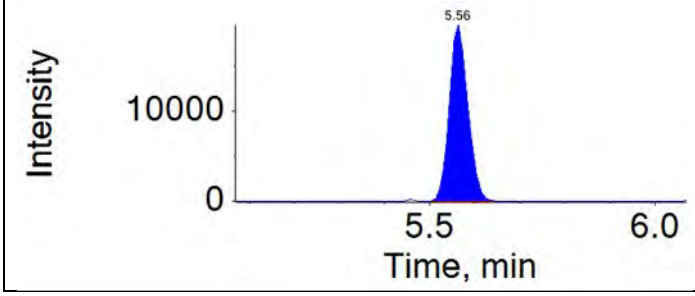
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

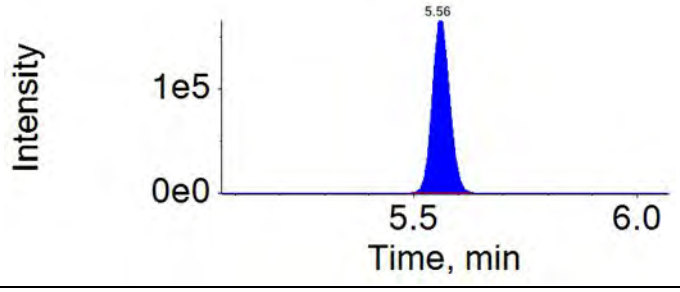
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

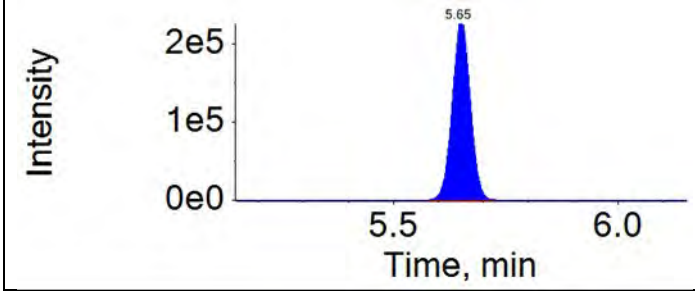
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

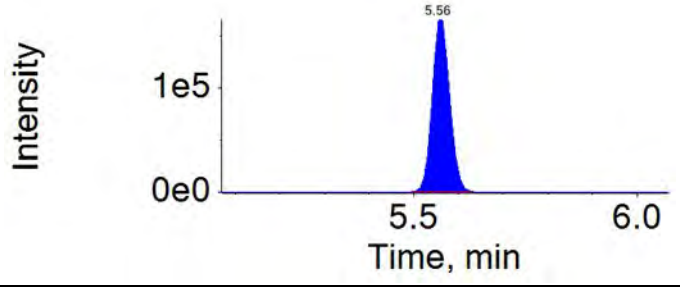
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



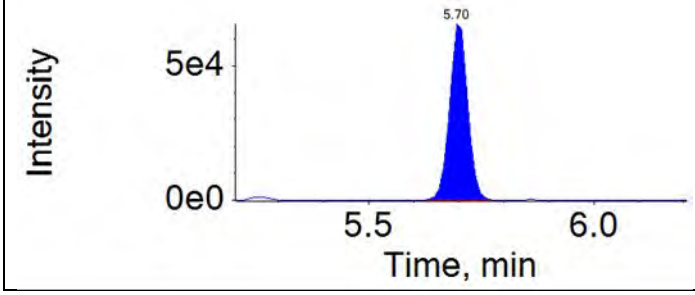


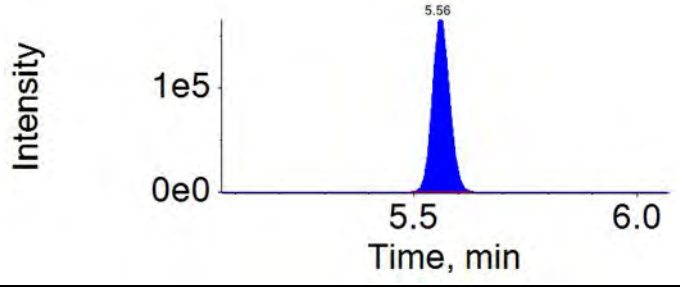
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



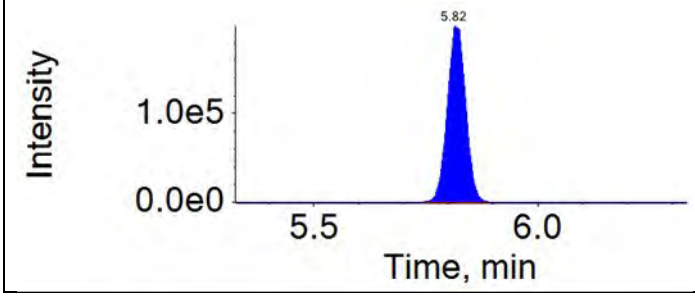


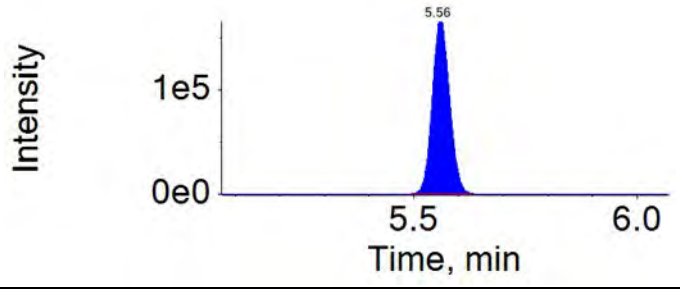
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





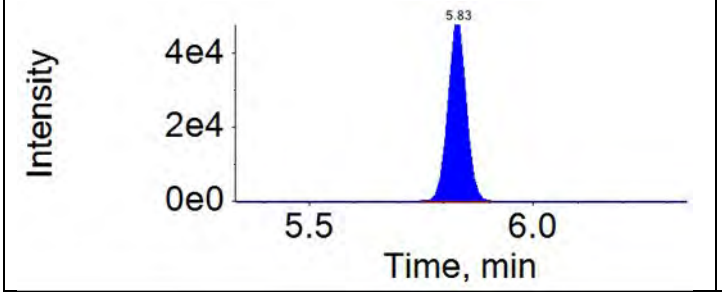
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0

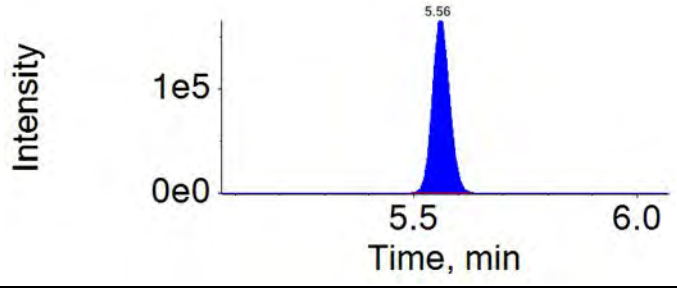




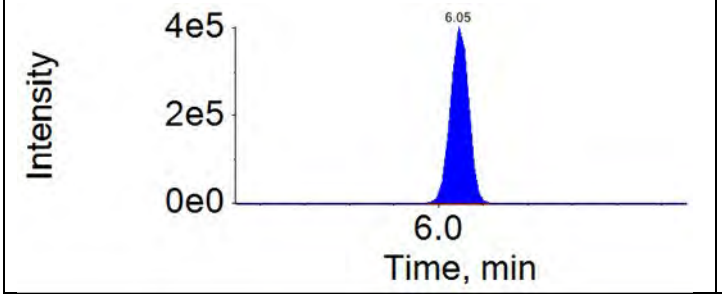
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

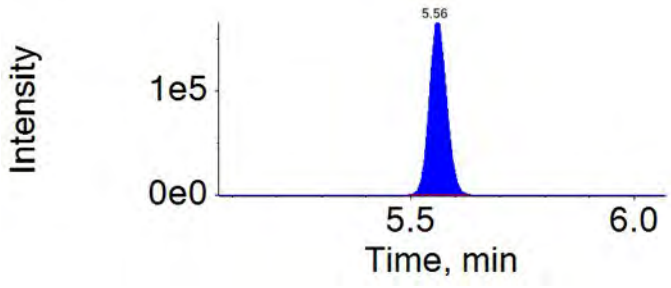
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



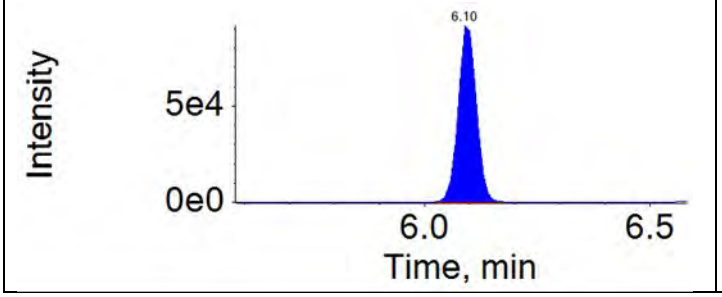


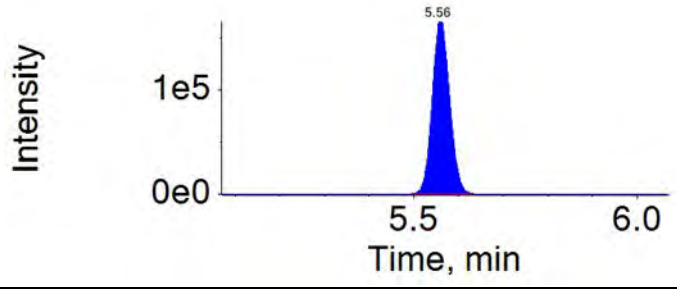
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



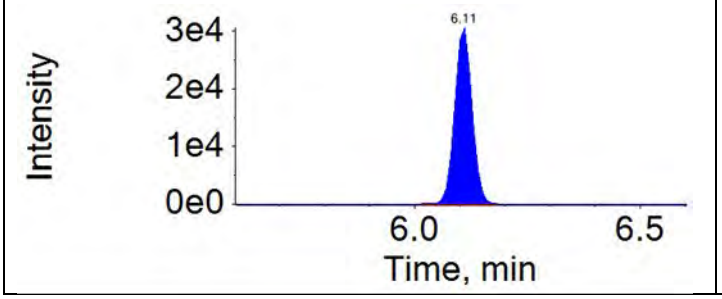


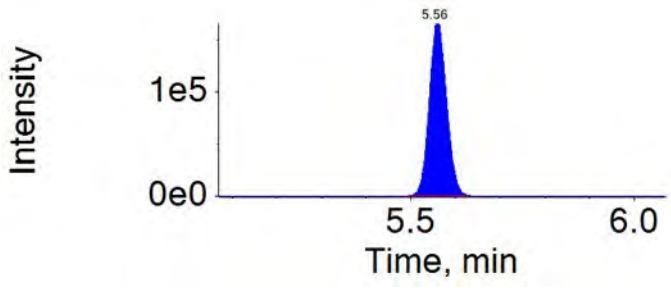
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



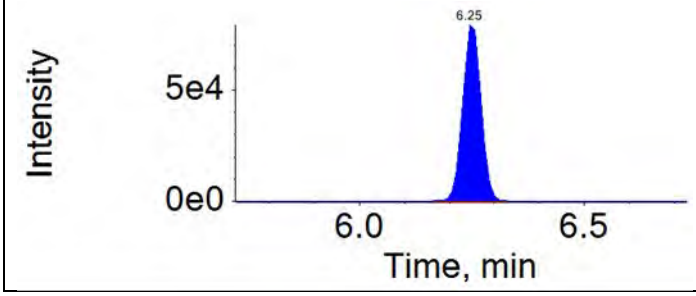


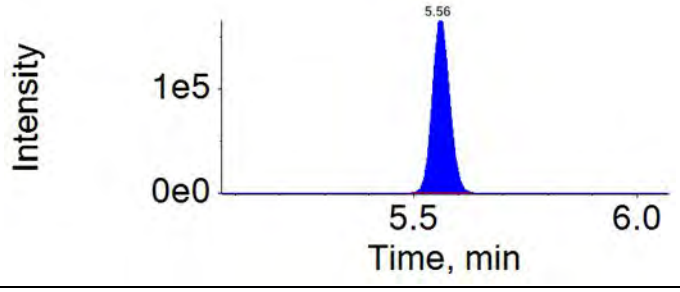
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

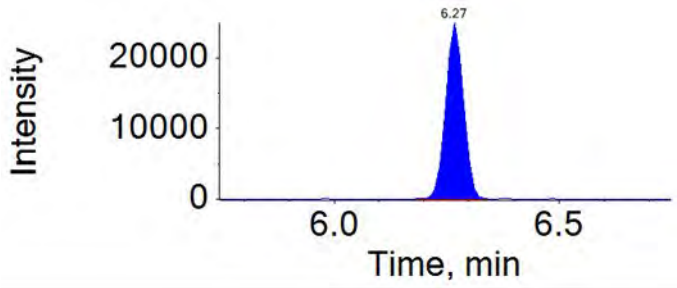
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

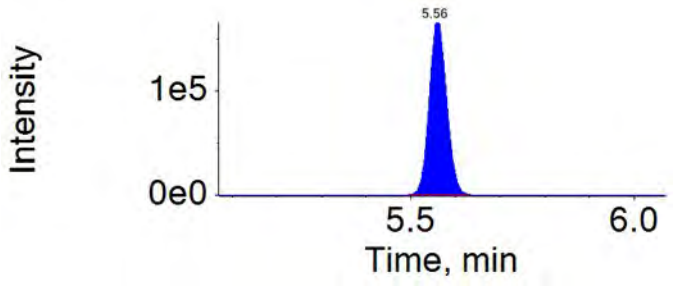
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



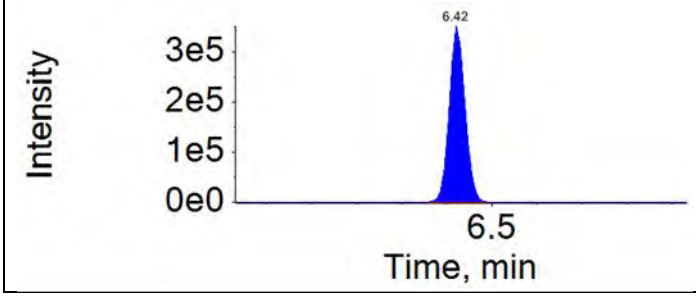


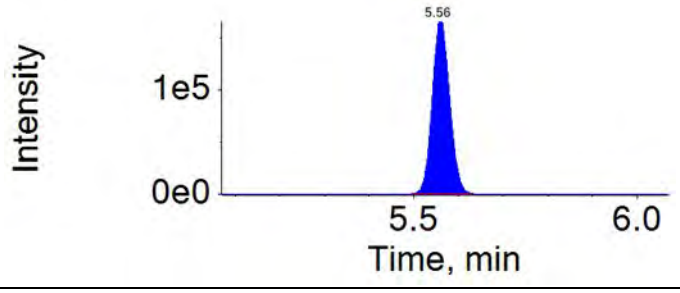
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



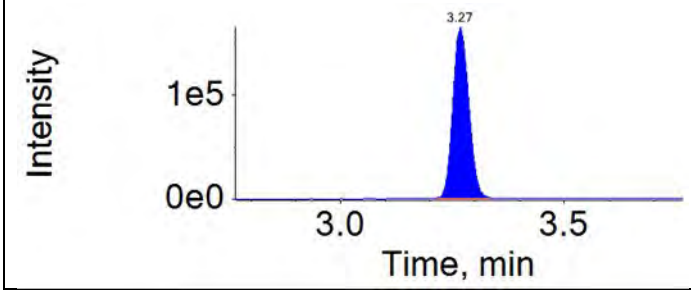


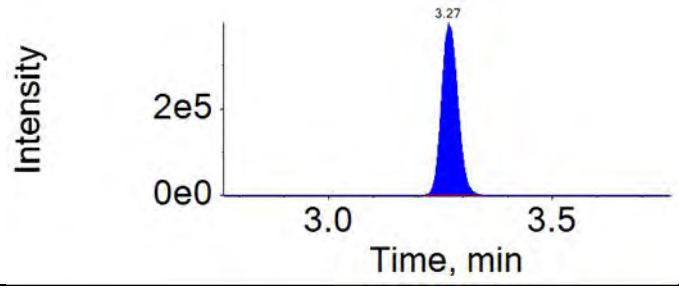
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

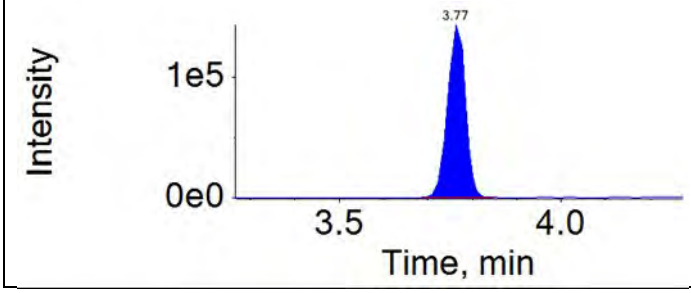
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

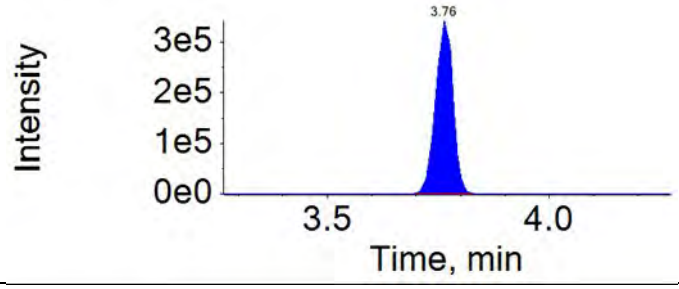
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



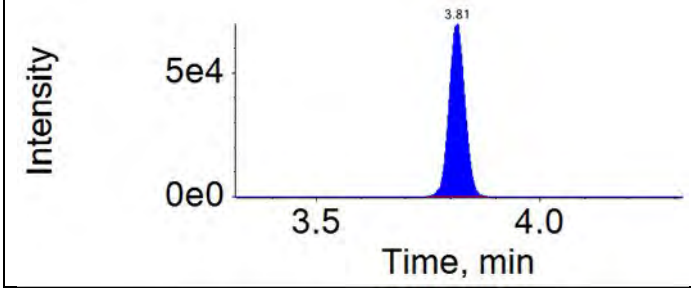


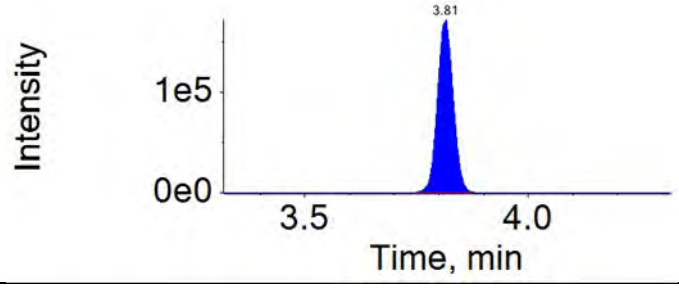
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



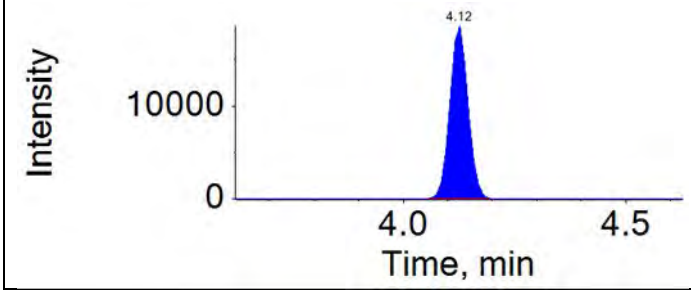


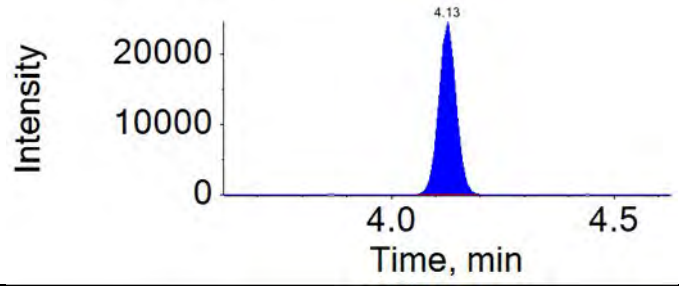
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



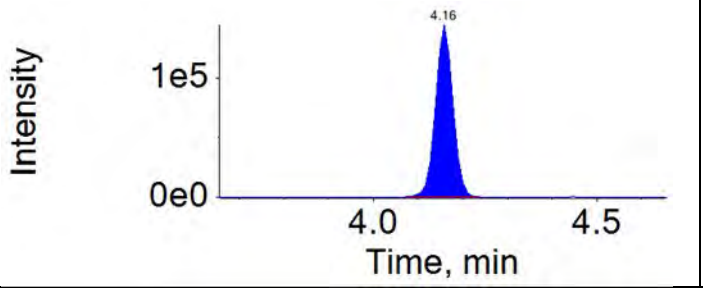


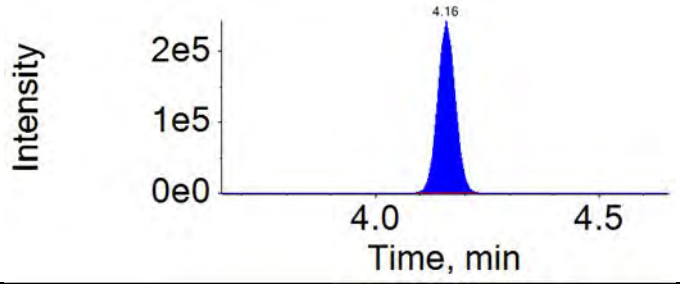
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

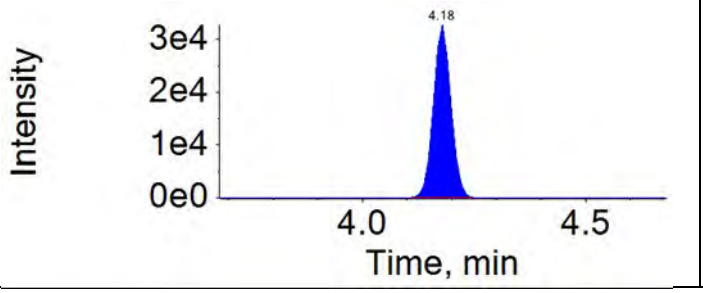
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

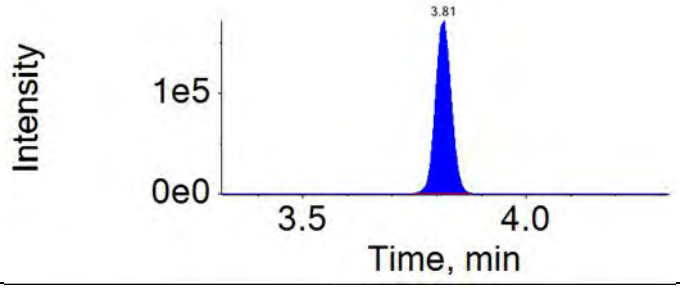
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



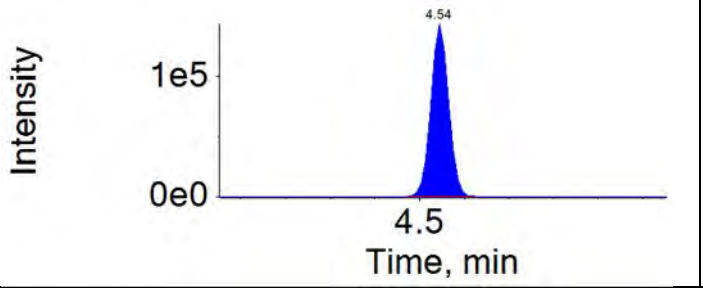


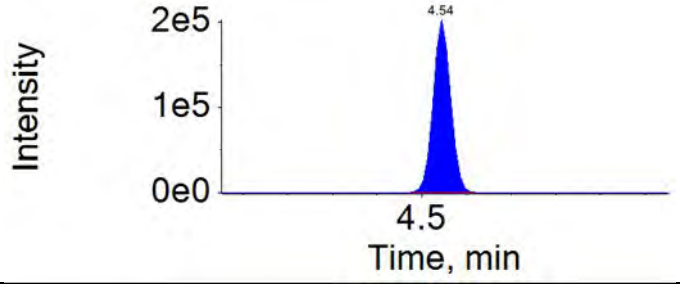
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



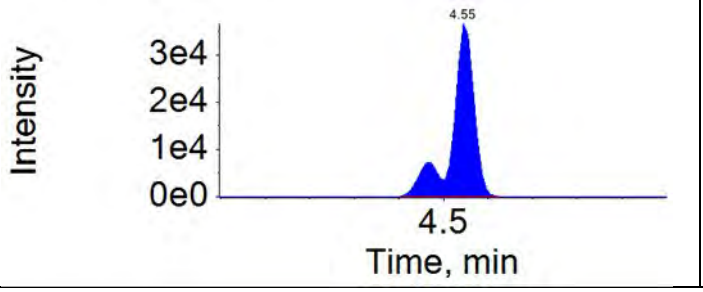


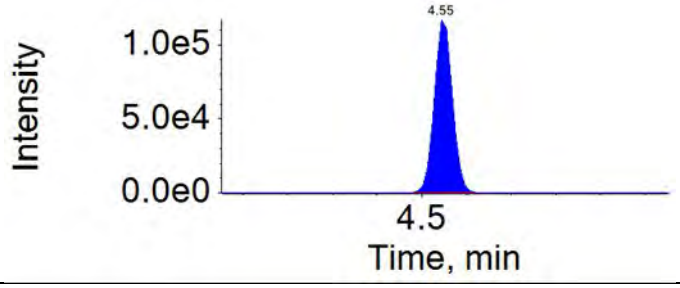
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



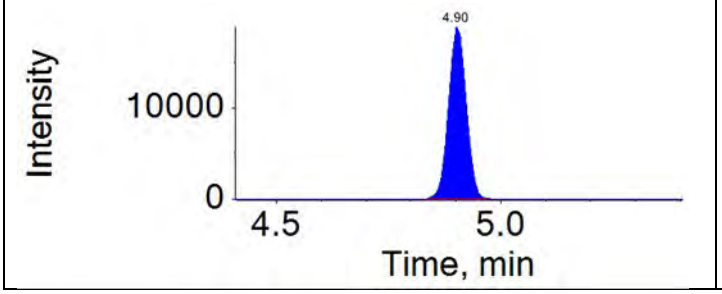


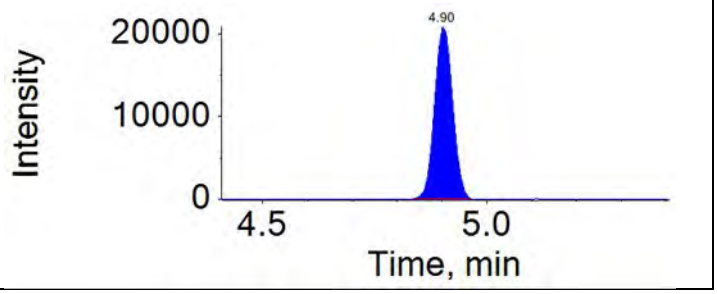
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

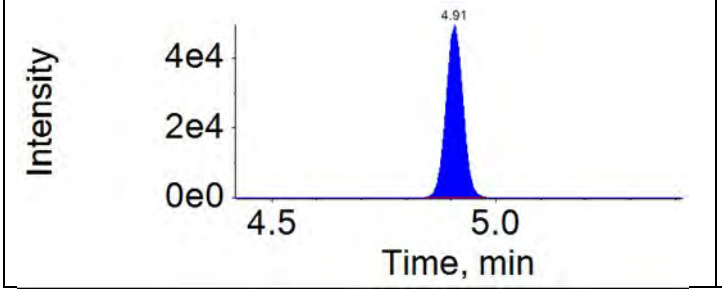
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

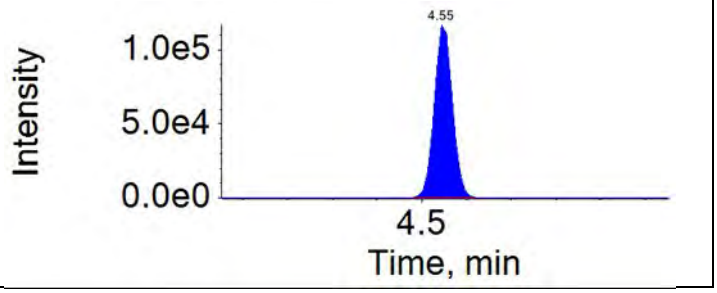
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



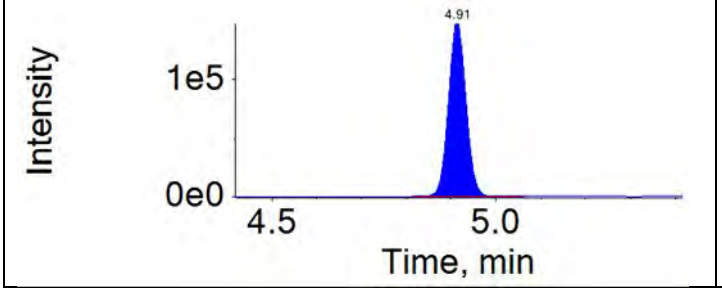


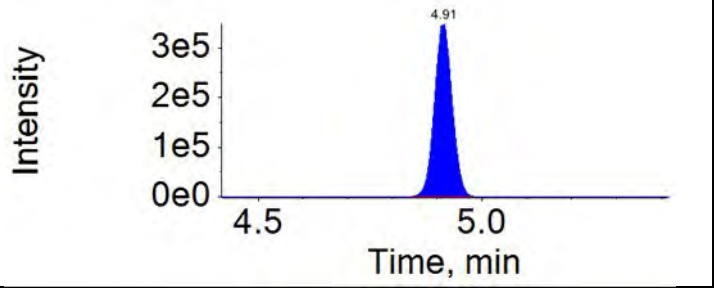
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



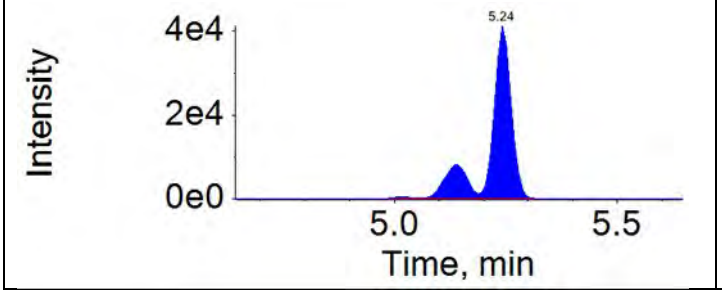


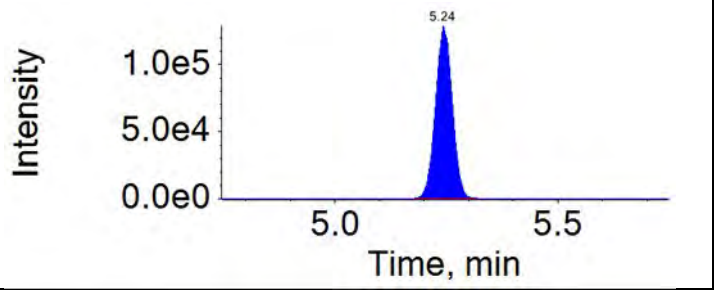
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



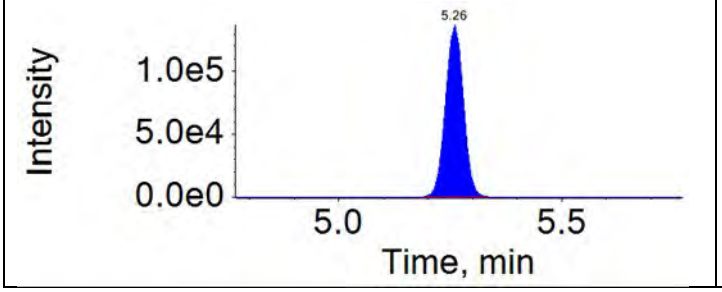


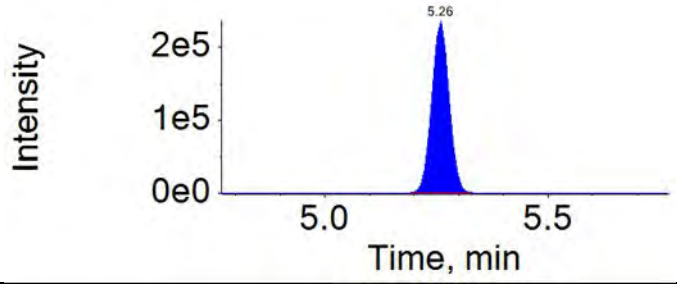
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

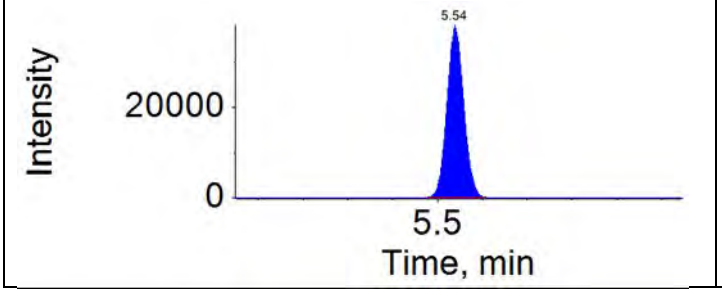
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

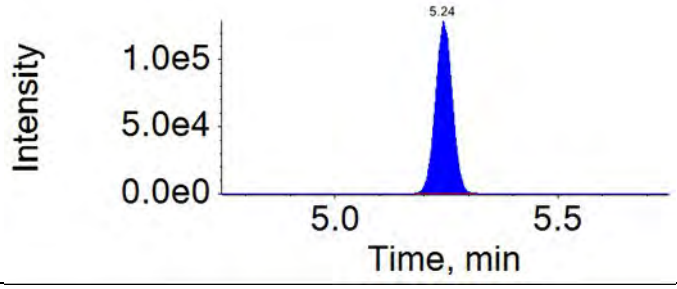
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



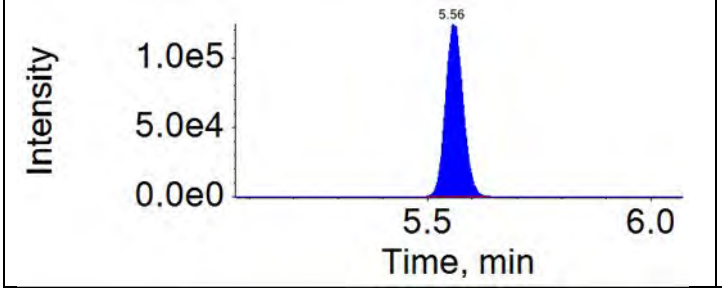


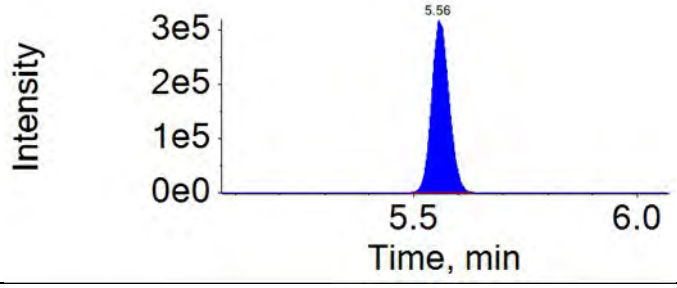
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



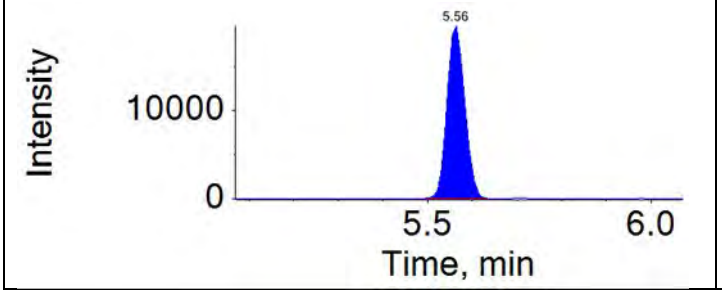


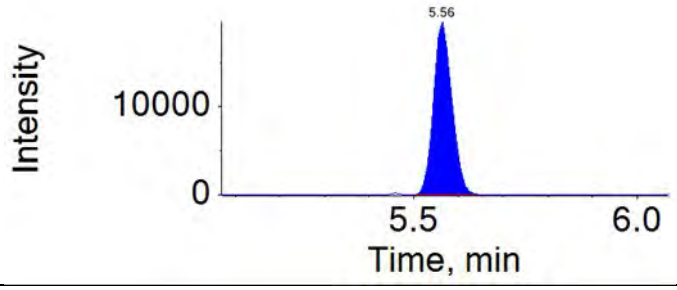
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0

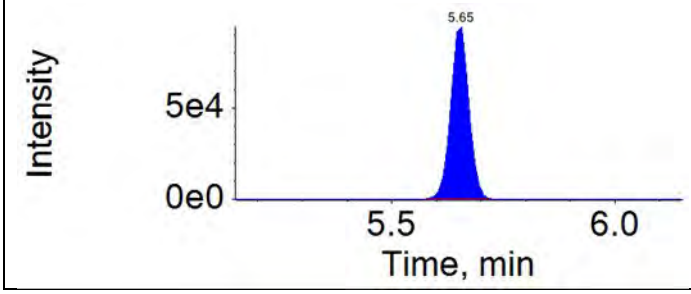
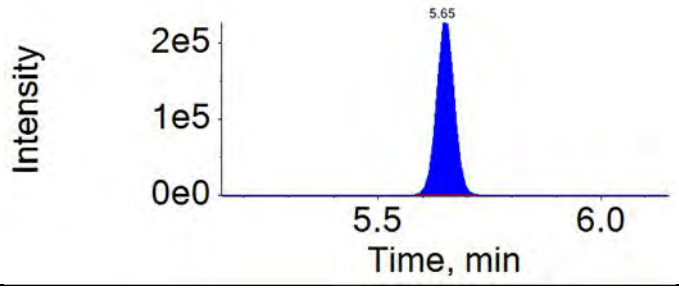


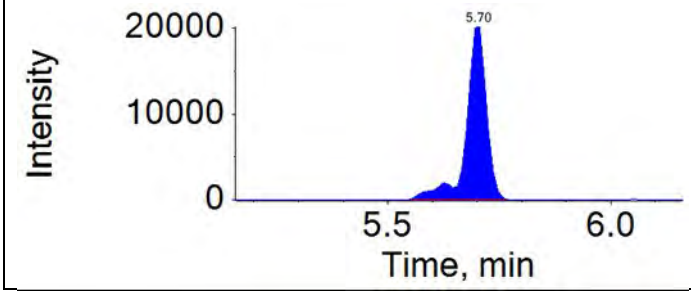
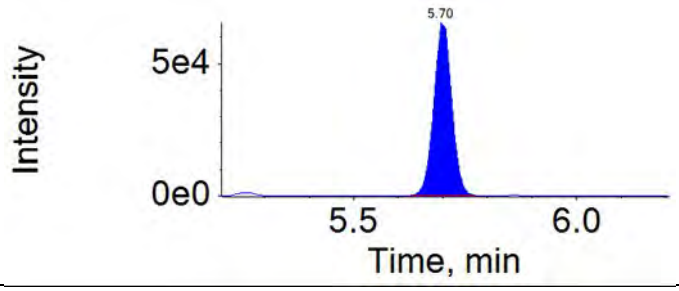


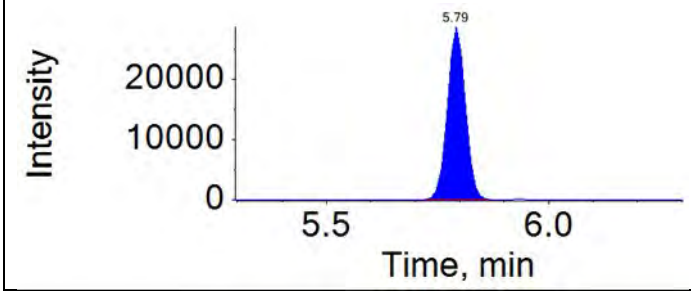
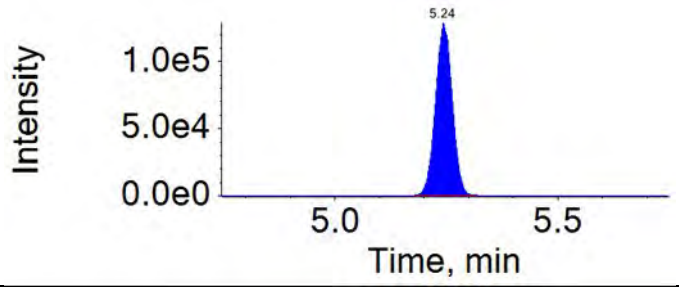
APPROVED
By MCD at 8:06 pm, 11/29/18

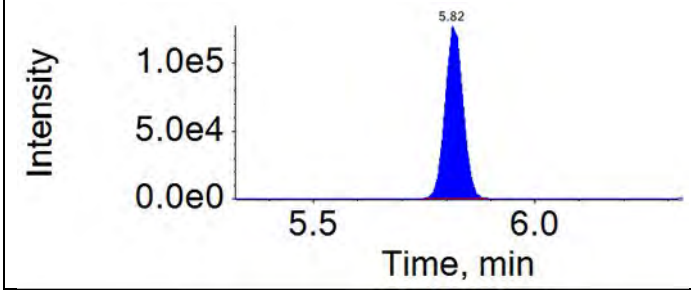
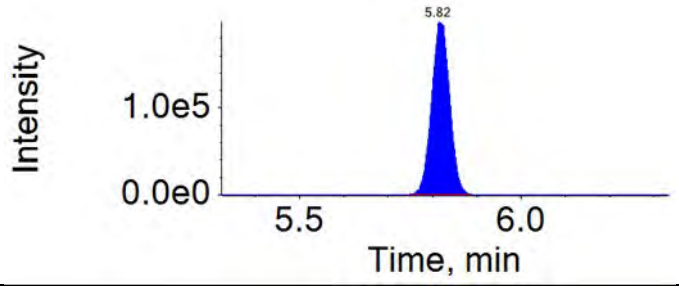
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0
	

Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0
	

Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0
	

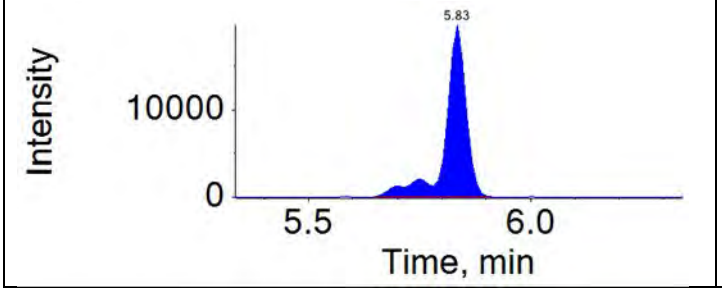
Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0
	

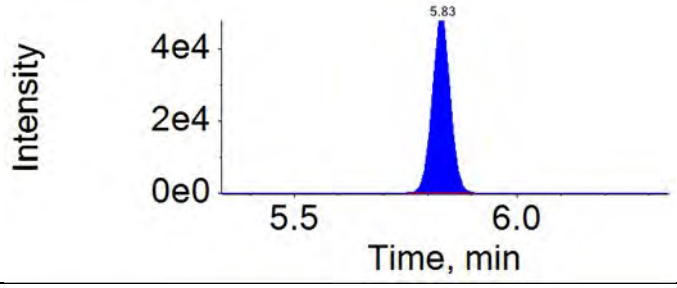
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

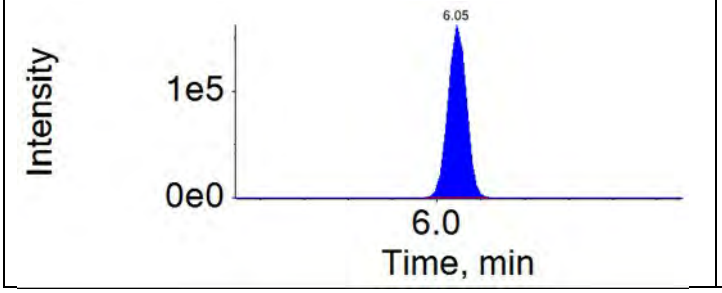
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

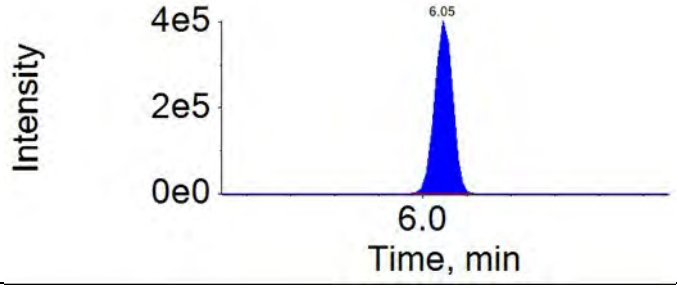
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



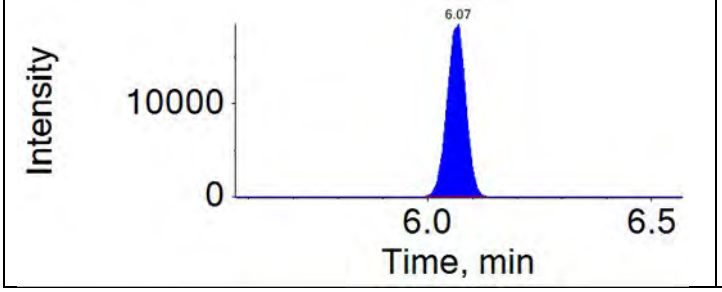


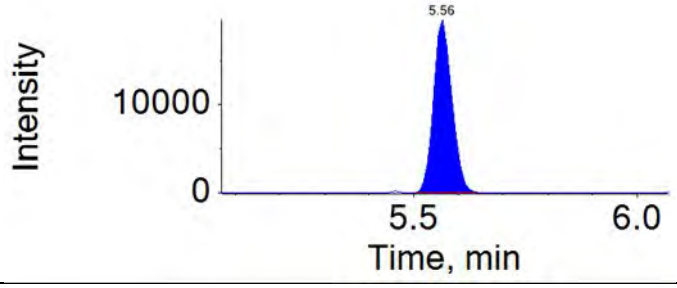
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



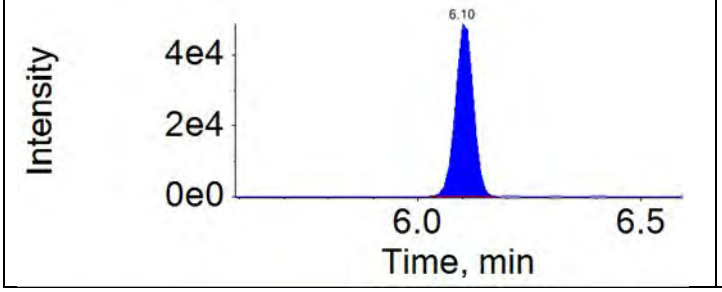


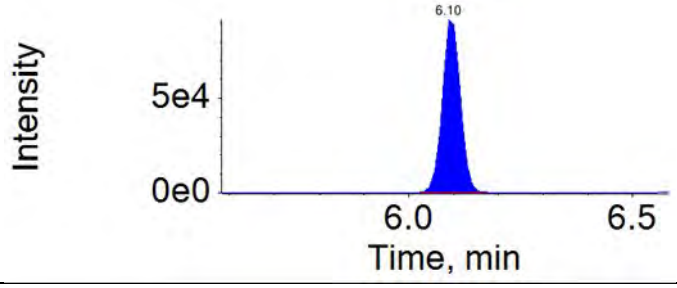
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



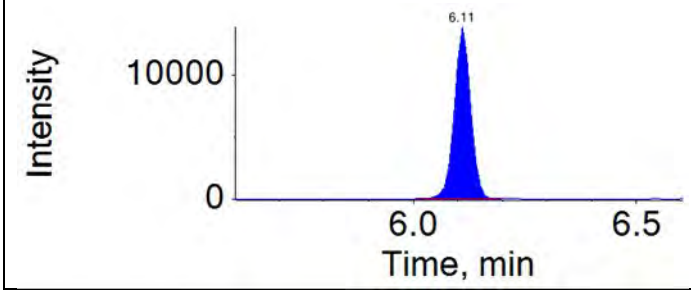


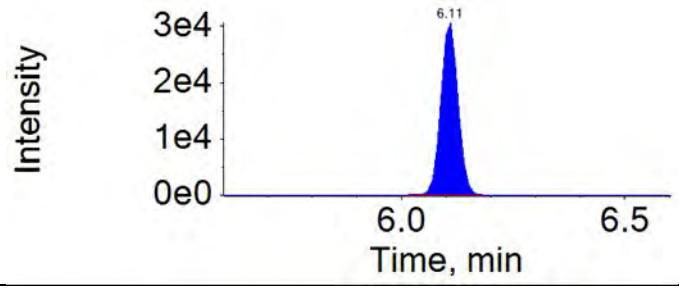
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

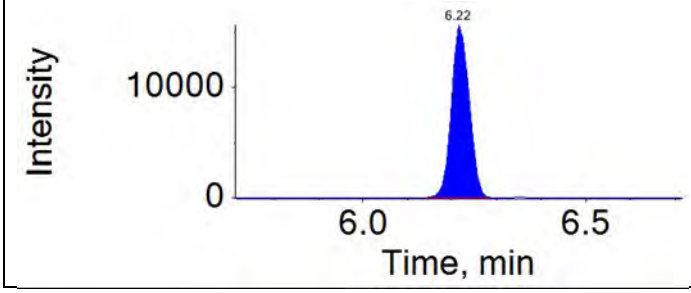
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

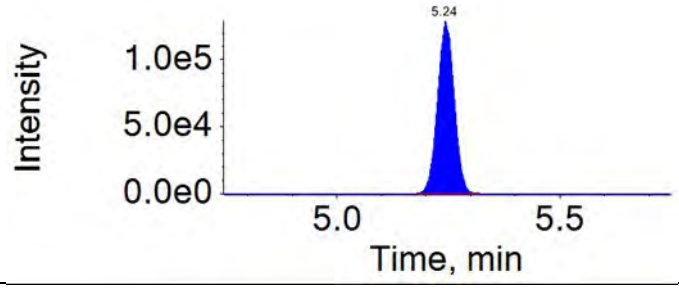
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



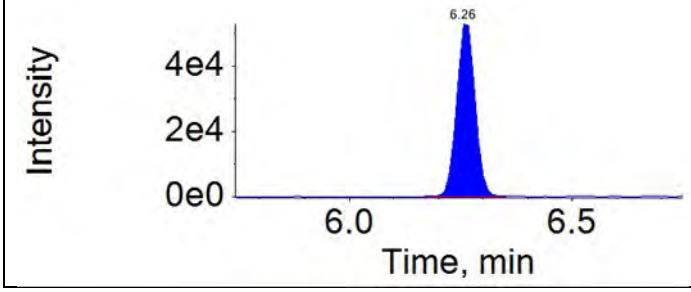


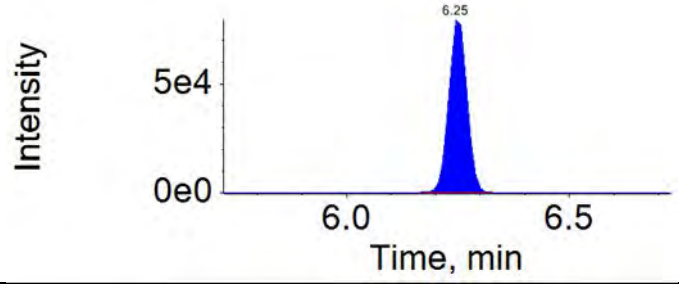
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



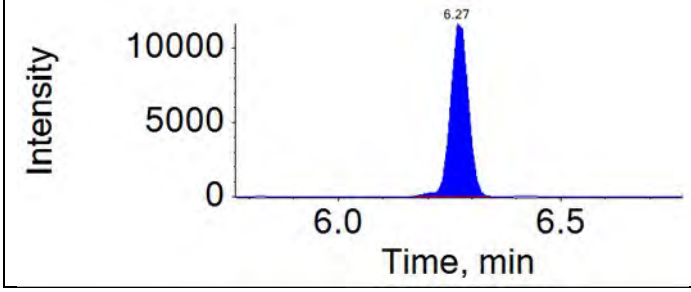


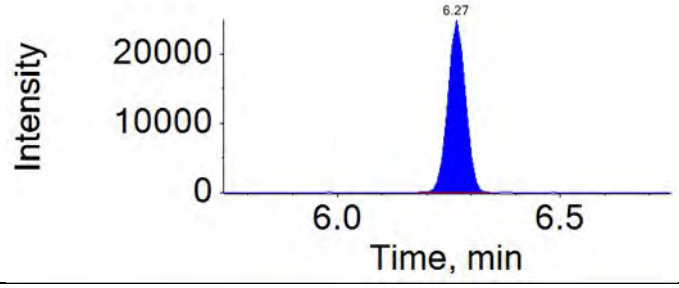
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

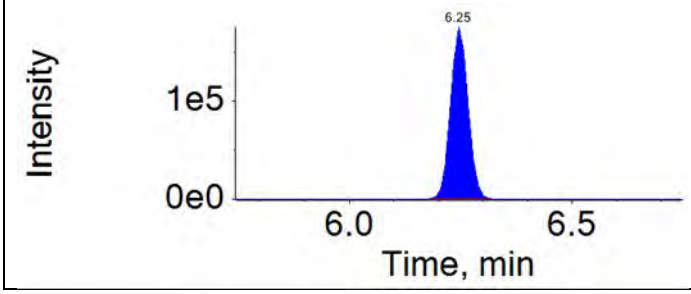
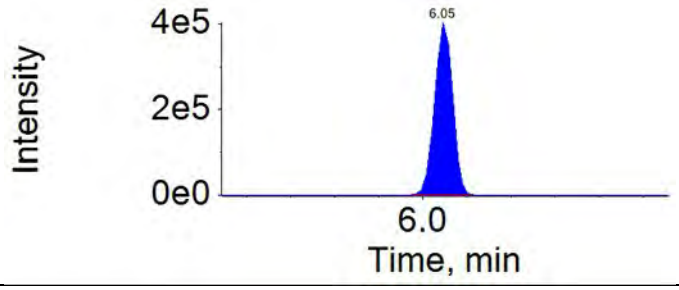


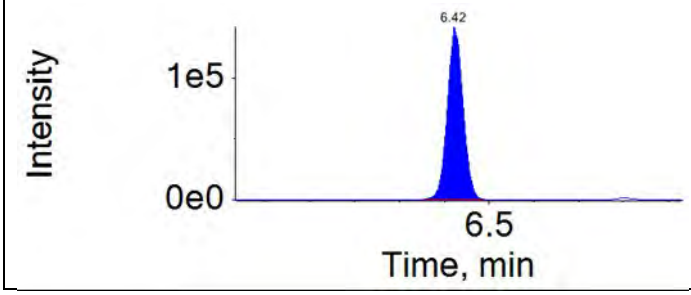
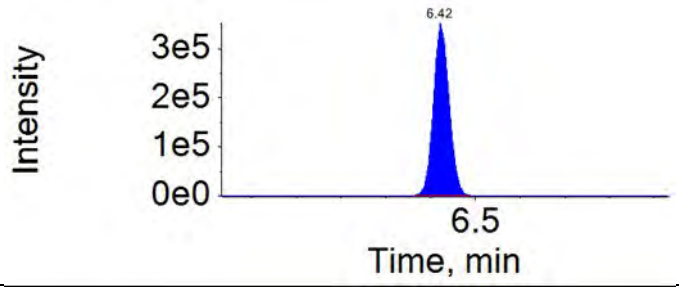


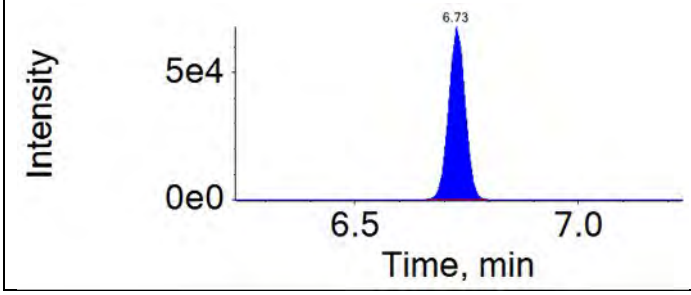
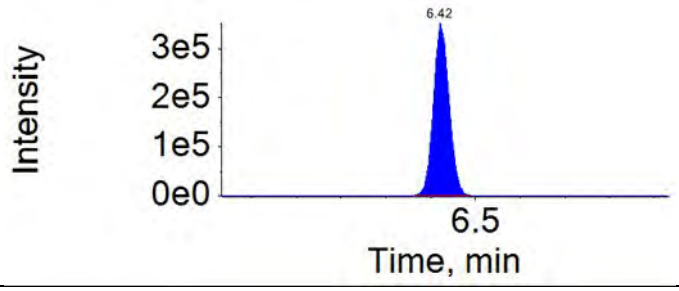
APPROVED
By MCD at 8:06 pm, 11/29/18

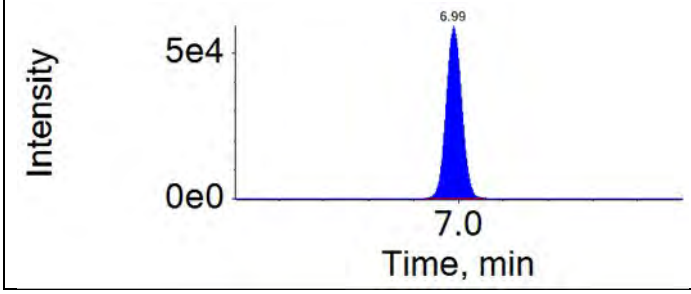
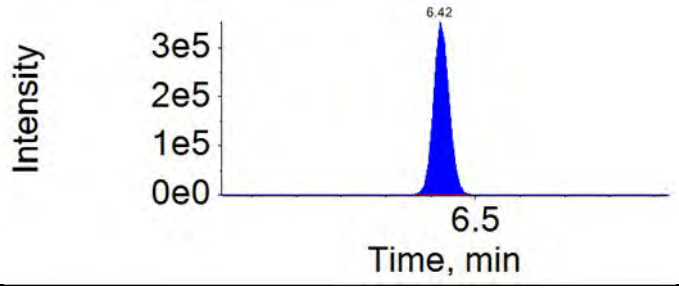
REVIEWED
By HMK at 9:40 am, 12/5/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV1-5 11/29/2018 7:58:55 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

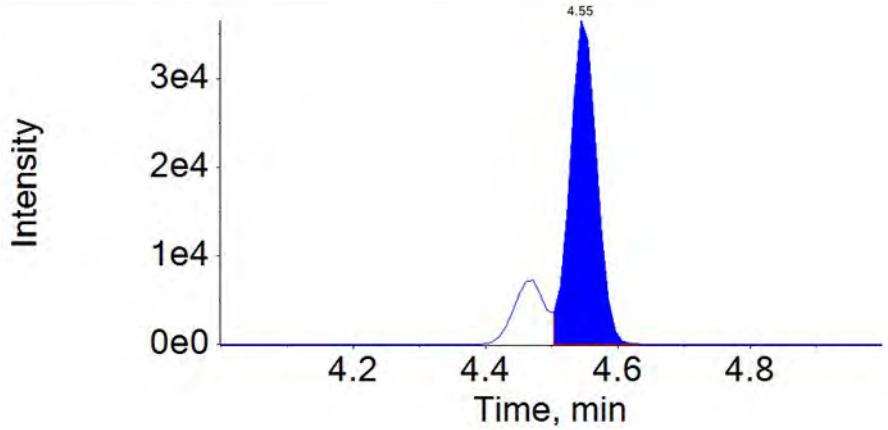
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

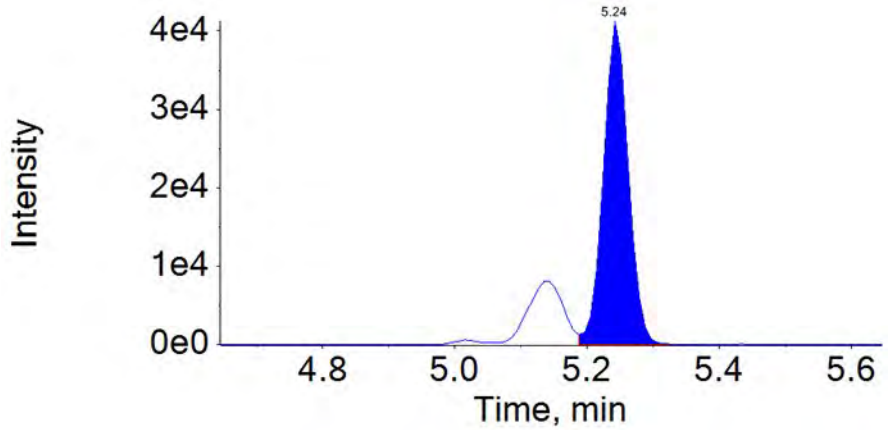
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

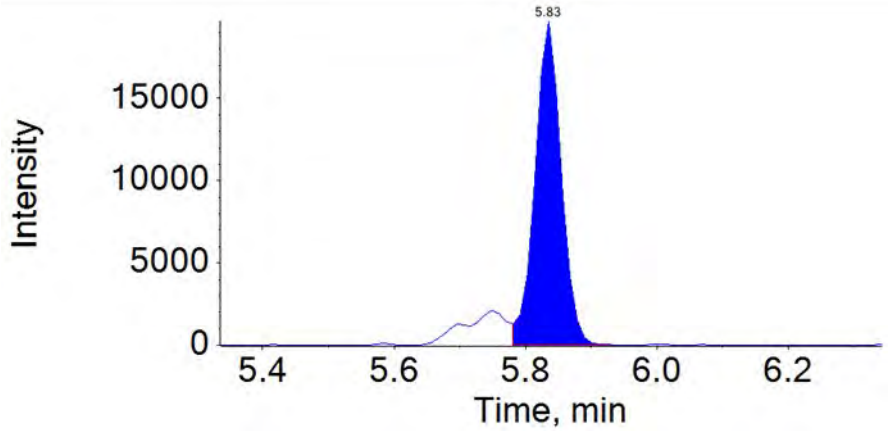
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Results Table Name: 18NOV29DCCV1-5
Results Table Date: 11/29/2018 7:58:55 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFHxS **RT (min.):** 4.55 **Peak Area:** 103048.0 **Mass Range:** 399.0 / 80.0 **File Name:** 18NOV29D-52.wiff **Sample Name:** CCV5_CAL3	 **Integration Comment:** incorrect integration

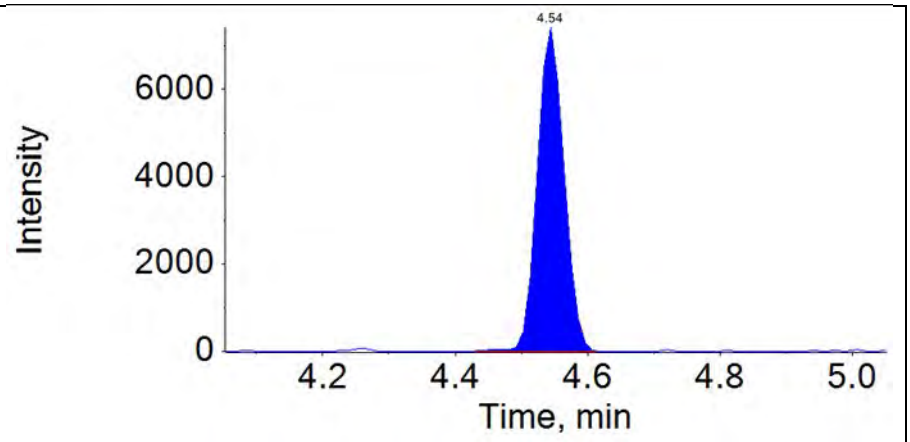
Component Name: PFOS **RT (min.):** 5.24 **Peak Area:** 107440.5 **Mass Range:** 499.0 / 80.0 **File Name:** 18NOV29D-52.wiff **Sample Name:** CCV5_CAL3	 **Integration Comment:** incorrect integration

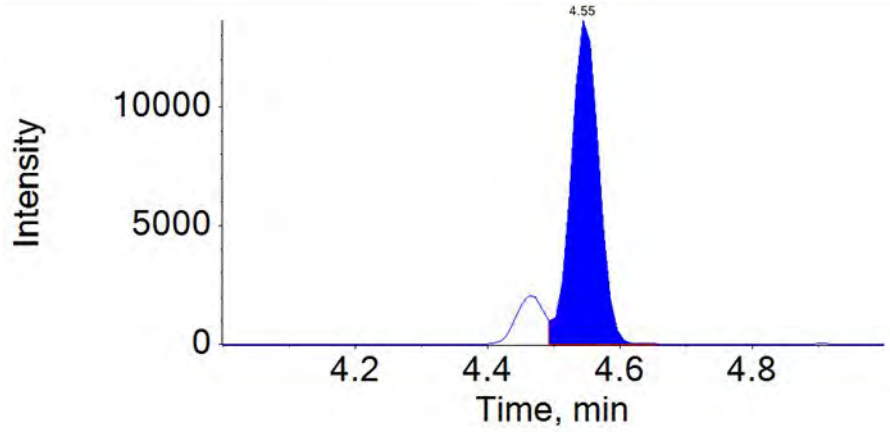
Component Name: NEtFOSAA **RT (min.):** 5.83 **Peak Area:** 54491.9 **Mass Range:** 584.0 / 419.0 **File Name:** 18NOV29D-52.wiff **Sample Name:** CCV5_CAL3	 **Integration Comment:** incorrect integration

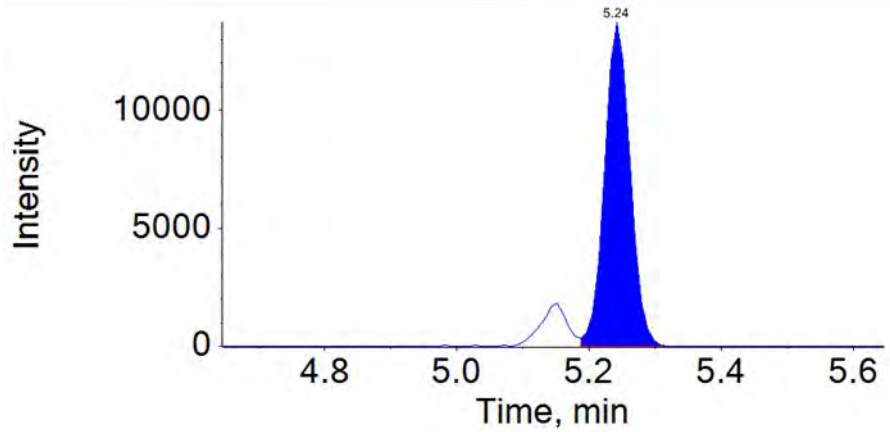
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Results Table Name: 18NOV29DCCV1-5
Results Table Date: 11/29/2018 7:58:55 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFHpA_2 **RT (min.):** 4.54 **Peak Area:** 20844.3 **Mass Range:** 363.0 / 169.0 **File Name:** 18NOV29D-52.wiff **Sample Name:** CCV5_CAL3	 **Integration Comment:** incorrect integration

Component Name: PFHxS_2 **RT (min.):** 4.55 **Peak Area:** 39908.0 **Mass Range:** 399.0 / 99.0 **File Name:** 18NOV29D-52.wiff **Sample Name:** CCV5_CAL3	 **Integration Comment:** incorrect integration

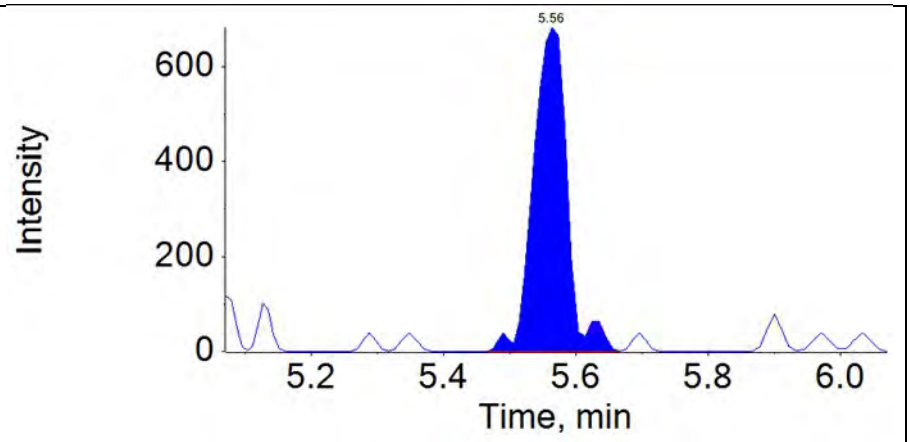
Component Name: PFOS_2 **RT (min.):** 5.24 **Peak Area:** 36914.5 **Mass Range:** 499.0 / 99.0 **File Name:** 18NOV29D-52.wiff **Sample Name:** CCV5_CAL3	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

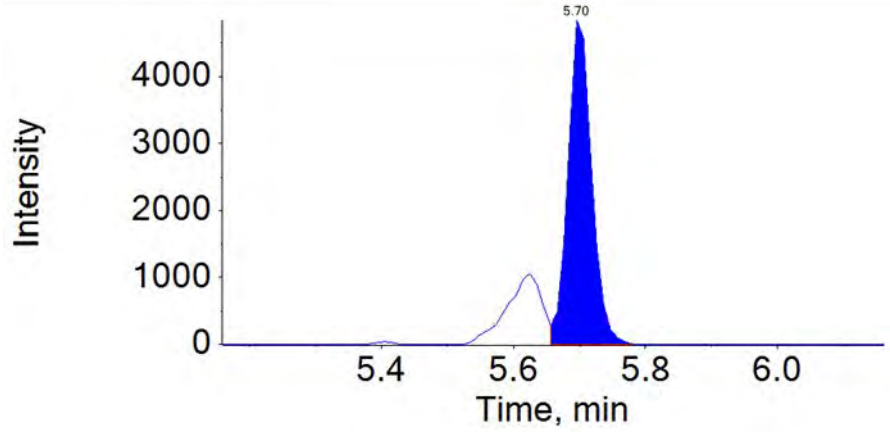
Results Table Name: 18NOV29DCCV1-5
Results Table Date: 11/29/2018 7:58:55 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFDA_2
RT (min.):
5.56
Peak Area:
2438.8
Mass Range:
513.0 / 169.0
File Name:
18NOV29D-52.wiff
Sample Name:
CCV5_CAL3



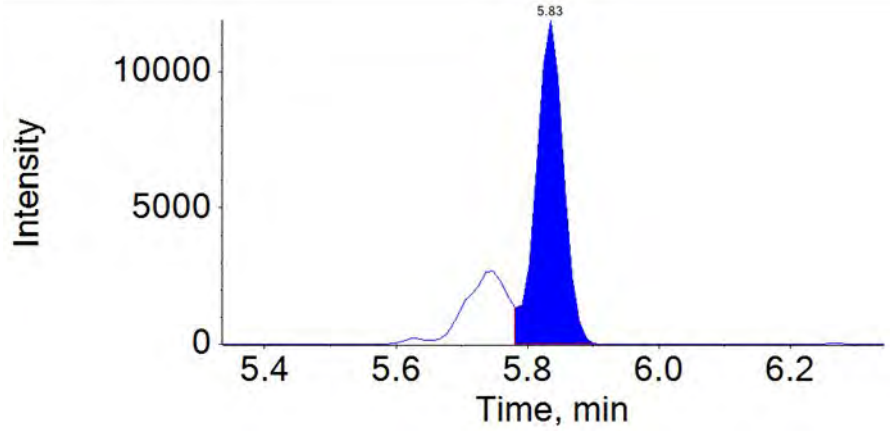
Integration Comment: incorrect integration

Component Name:
NMeFOSAA_2
RT (min.):
5.70
Peak Area:
12072.2
Mass Range:
570.0 / 483.0
File Name:
18NOV29D-52.wiff
Sample Name:
CCV5_CAL3



Integration Comment: incorrect integration

Component Name:
NEtFOSAA_2
RT (min.):
5.83
Peak Area:
34118.1
Mass Range:
584.0 / 526.0
File Name:
18NOV29D-52.wiff
Sample Name:
CCV5_CAL3

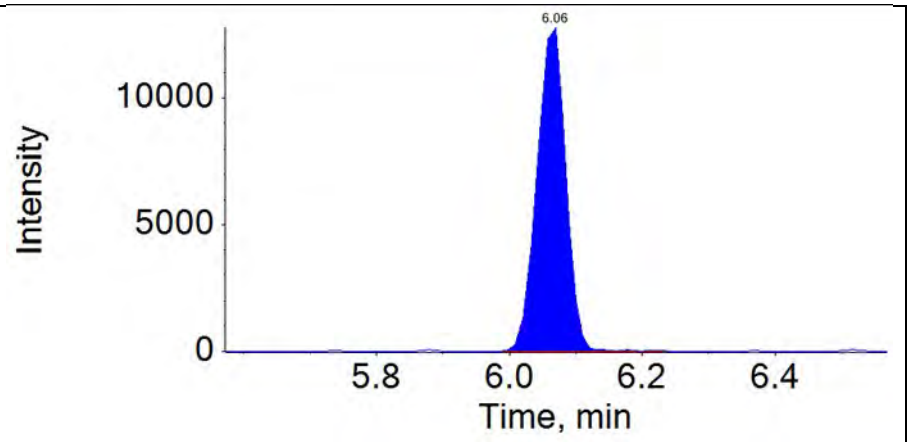


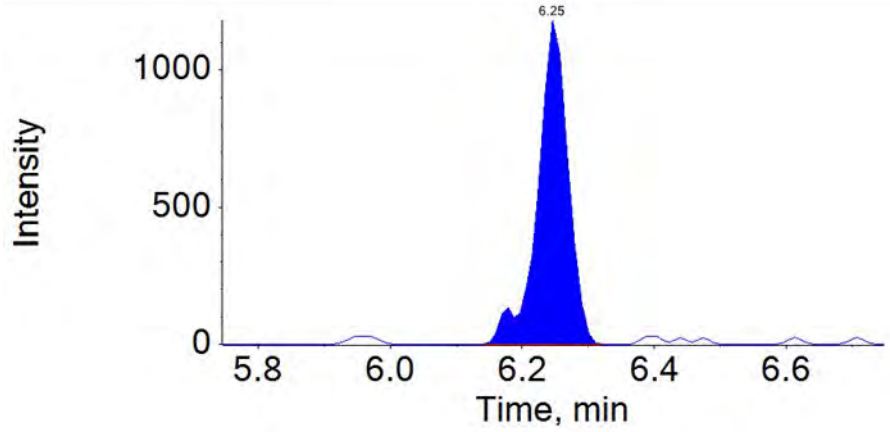
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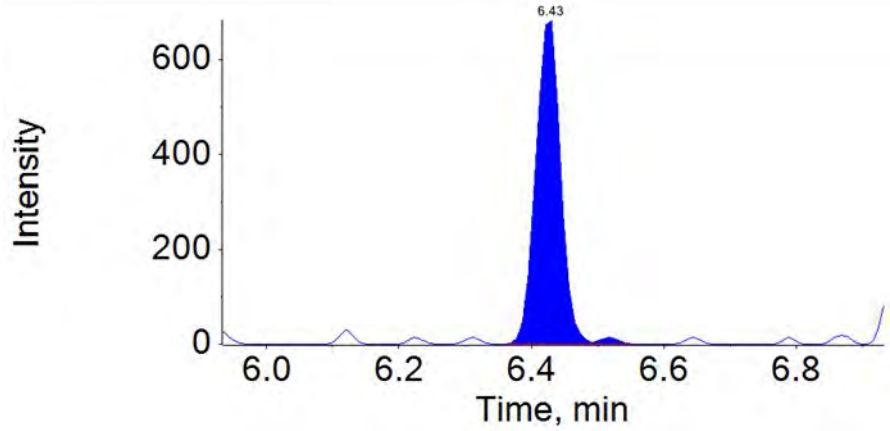
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Results Table Name: 18NOV29DCCV1-5
Results Table Date: 11/29/2018 7:58:55 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: 10:2-FTS_2 **RT (min.):** 6.06 **Peak Area:** 38871.1 **Mass Range:** 627.0 / 81.0 **File Name:** 18NOV29D-52.wiff **Sample Name:** CCV5_CAL3	 **Integration Comment:** incorrect integration

Component Name: PFTrDA_2 **RT (min.):** 6.25 **Peak Area:** 3806.2 **Mass Range:** 663.0 / 169.0 **File Name:** 18NOV29D-52.wiff **Sample Name:** CCV5_CAL3	 **Integration Comment:** incorrect integration

Component Name: PFTeDA_2 **RT (min.):** 6.43 **Peak Area:** 1816.4 **Mass Range:** 713.0 / 169.0 **File Name:** 18NOV29D-52.wiff **Sample Name:** CCV5_CAL3	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Results Table Name: 18NOV29DCCV1-5
Results Table Date: 11/29/2018 7:58:55 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Ion Ratio Report

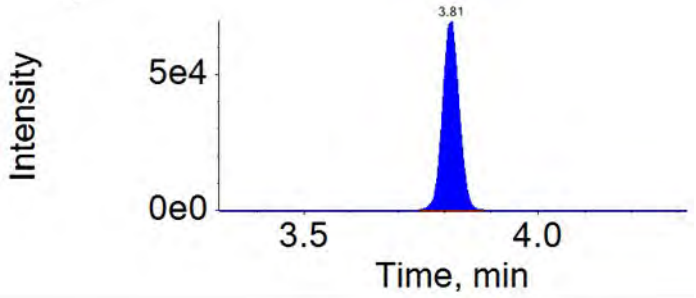
Sample Name: CCV5_CAL3 **Instrument Name:** LM27631 **File Name:** 18NOV29D-52.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	172355.2	A	N/A	0.3496			
PFBS_2	3.81	1.00	60254.5	A	N/A	0.3496	-4	50	
4:2-FTS	4.12	1.00	52632.4	A	N/A	0.6128			
4:2-FTS_2	4.12	1.00	32253.6	A	N/A	0.6128	-4	50	
PFHxA	4.16	1.00	392712.5	A	N/A	0.0095			
PFHxA_2	4.16	1.00	3748.1	A	N/A	0.0095	-8	50	
PFPeS	4.18	1.10	89389.0	A	N/A	0.5510			
PFPeS_2	4.18	1.10	49253.8	A	N/A	0.5510	11	50	
PFHpA	4.54	1.00	396806.2	A	N/A	0.0523			
PFHpA_2	4.54	1.00	20756.9	M	N/A	0.0523	-6	50	
PFHxS	4.55	1.00	127006.9	M	N/A	0.3604			
PFHxS_2	4.55	1.00	45767.4	M	N/A	0.3604	-2	50	
6:2-FTS	4.90	1.00	51799.6	A	N/A	0.5825			
6:2-FTS_2	4.90	1.00	30171.4	A	N/A	0.5825	-12	50	
PFHpS	4.91	1.08	129025.9	A	N/A	0.3916			
PFHpS_2	4.91	1.08	50522.7	A	N/A	0.3916	0	50	
PFOA	4.91	1.00	407078.9	A	N/A	0.0597			
PFOA_2	4.92	1.00	24289.8	A	N/A	0.0597	4	50	
PFOS	5.24	1.00	138995.5	M	N/A	0.3024			
PFOS_2	5.24	1.00	42028.6	M	N/A	0.3024	2	50	
PFNA	5.26	1.00	382168.0	A	N/A	0.0151			
PFNA_2	5.26	1.00	5752.1	A	N/A	0.0151	-25	50	
PFNS	5.54	1.06	98297.2	A	N/A	0.4813			
PFNS_2	5.54	1.06	47307.0	A	N/A	0.4813	0	50	
PFDA	5.56	1.00	343068.9	A	N/A	0.0067			
PFDA_2	5.56	1.00	2285.7	M	N/A	0.0067	-11	50	
8:2-FTS	5.56	1.00	54309.5	A	N/A	0.6811			
8:2-FTS_2	5.56	1.00	36991.3	A	N/A	0.6811	27	50	
NMeFOSAA	5.70	1.00	64182.7	A	N/A	0.2484			
NMeFOSAA_2	5.70	1.00	15945.6	M	N/A	0.2484	8	50	
PFDS	5.79	1.10	79891.7	A	N/A	0.4226			
PFDS_2	5.79	1.10	33761.0	A	N/A	0.4226	-21	50	
PFUnDA	5.82	1.00	355883.8	A	N/A	0.0042			
PFUnDA_2	5.82	1.00	1497.1	A	N/A	0.0042	11	50	
NEtFOSAA	5.83	1.00	64211.1	M	N/A	0.7219			
NEtFOSAA_2	5.83	1.00	46352.7	M	N/A	0.7219	-2	50	
PFDoDA	6.05	1.00	467324.6	A	N/A	0.0131			
PFDoDA_2	6.05	1.00	6130.3	A	N/A	0.0131	1	50	
10:2-FTS	6.07	1.09	54230.7	A	N/A	0.7133			
10:2-FTS_2	6.06	1.09	38681.2	M	N/A	0.7133	2	50	
PFTrDA	6.25	1.03	477187.4	A	N/A	0.0076			
PFTrDA_2	6.25	1.03	3624.2	M	N/A	0.0076	-16	50	
PFTeDA	6.42	1.00	345082.9	A	N/A	0.0052			
PFTeDA_2	6.43	1.00	1787.5	M	N/A	0.0052	-8	50	
PFHxDA	6.73	1.05	172538.3	A	N/A	0.0603			
PFHxDA_2	6.73	1.05	10401.9	A	N/A	0.0603	-7	50	
PFODA	6.99	1.09	141132.9	A	N/A	0.0256			
PFODA_2	6.99	1.09	3617.6	A	N/A	0.0256	-3	50	

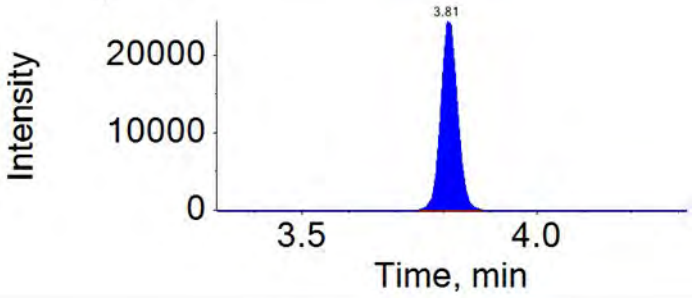
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

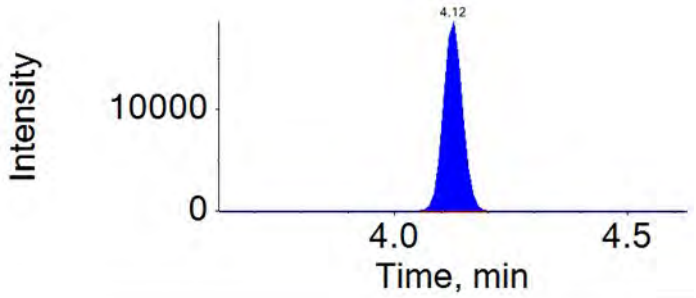
Component: PFBS
Primary Mass: 299.0 / 80.0



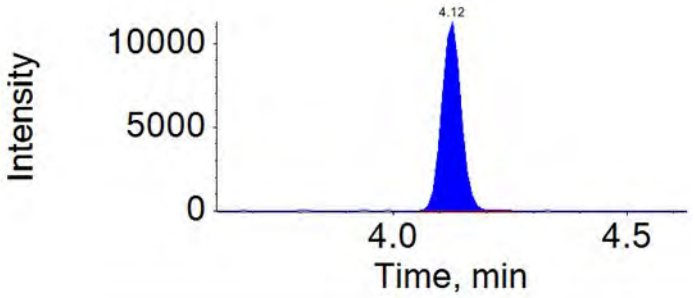
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



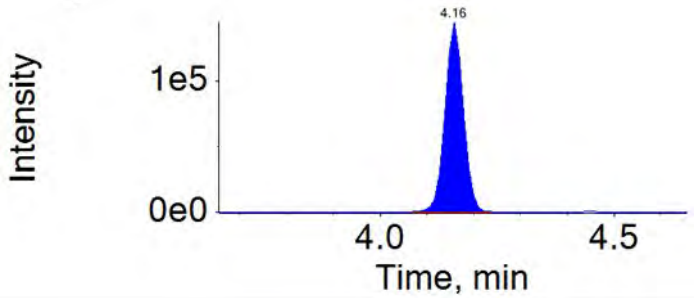
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



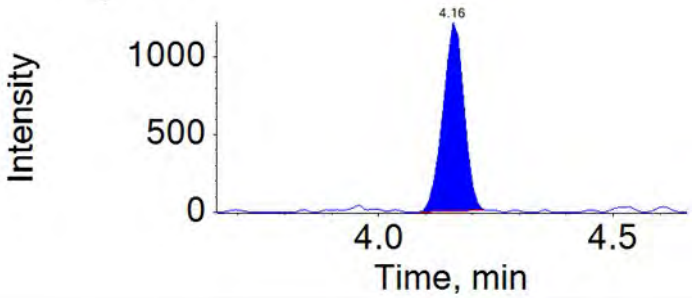
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



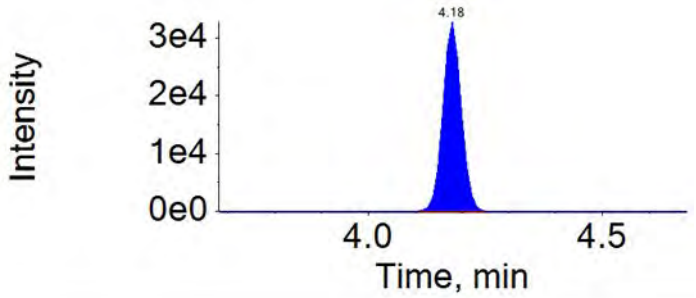
Component: PFHxA
Primary Mass: 313.0 / 269.0



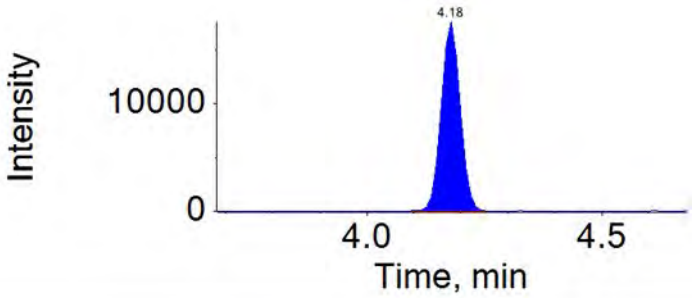
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



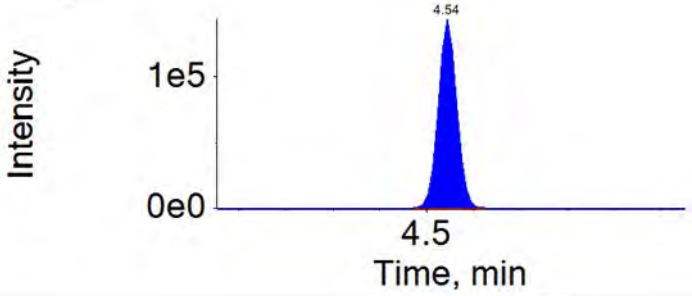
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



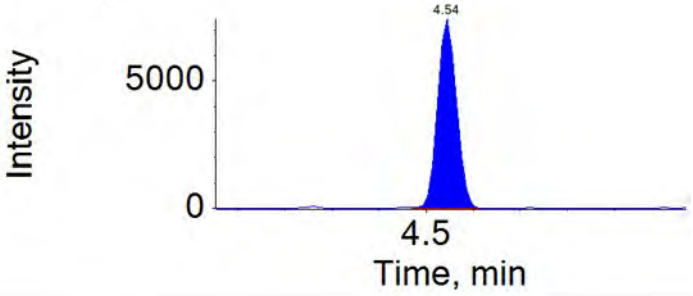
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

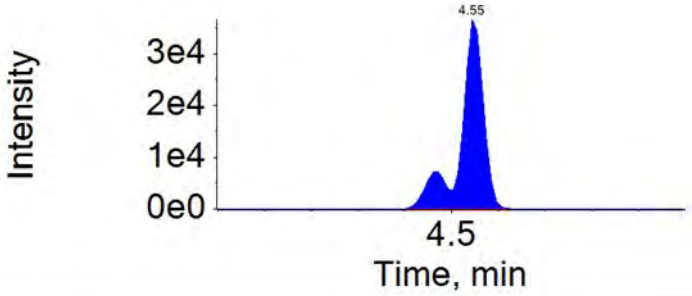
Component: PFHpA
Primary Mass: 363.0 / 319.0



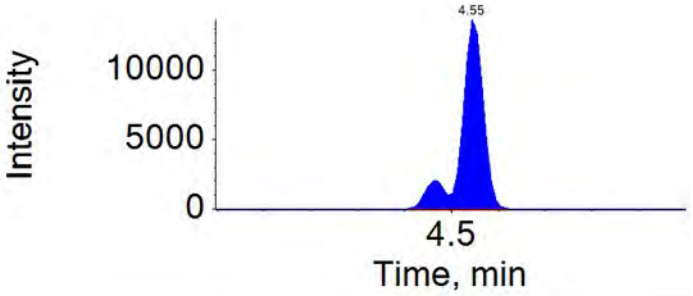
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



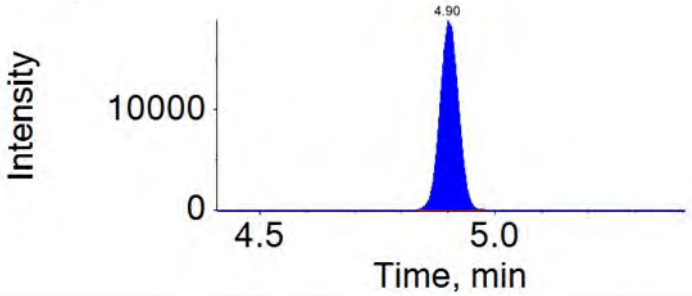
Component: PFHxS
Primary Mass: 399.0 / 80.0



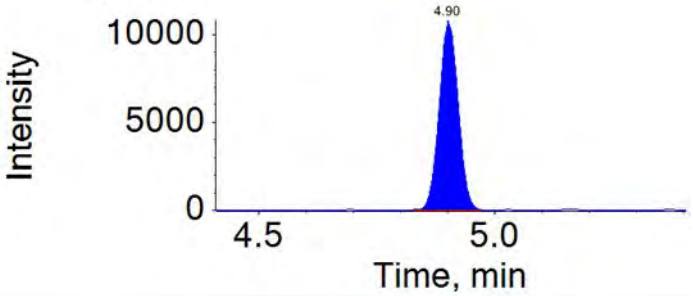
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



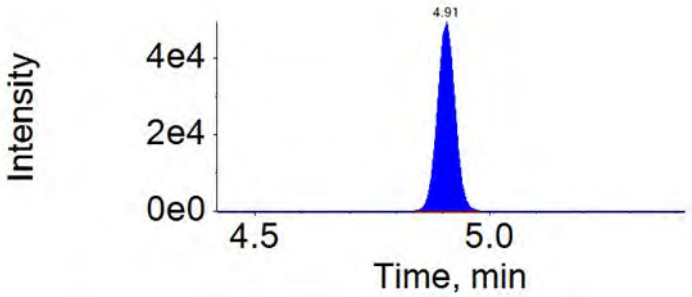
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



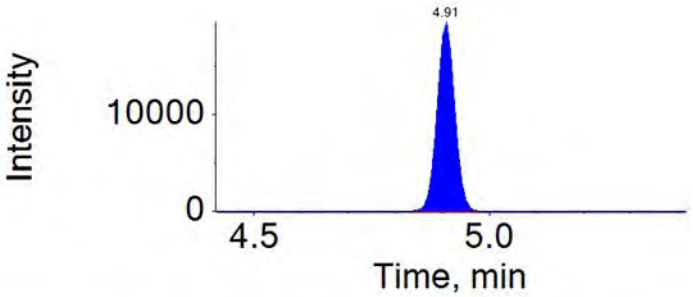
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



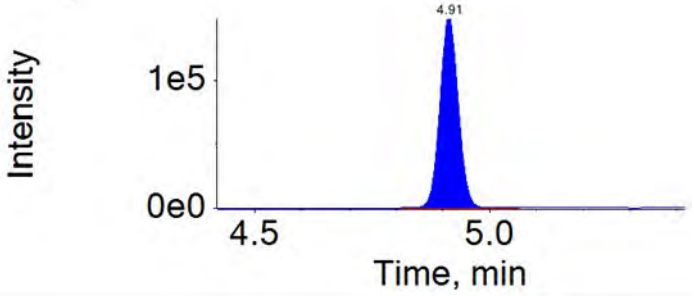
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



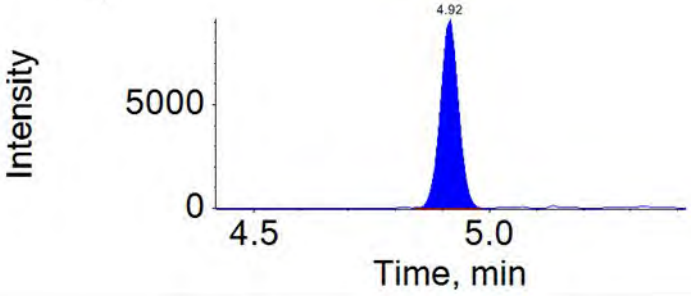
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

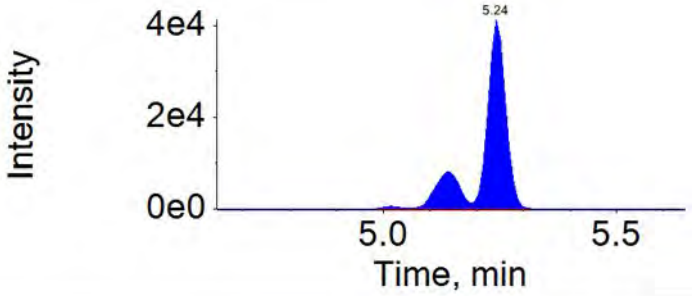
Component: PFOA
Primary Mass: 413.0 / 369.0



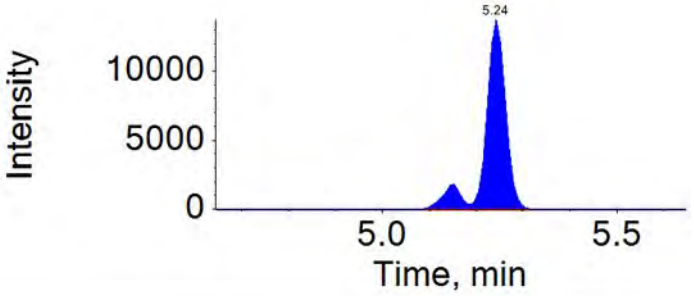
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



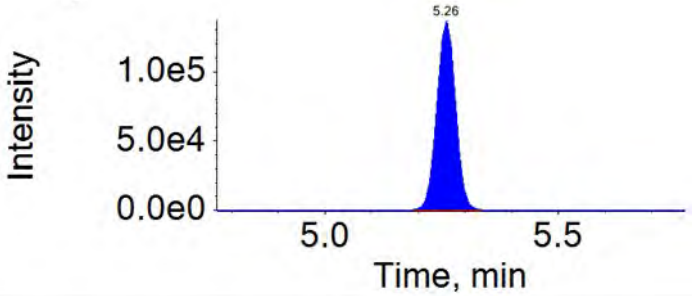
Component: PFOS
Primary Mass: 499.0 / 80.0



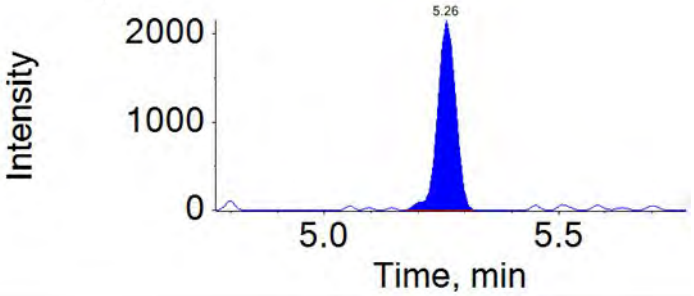
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



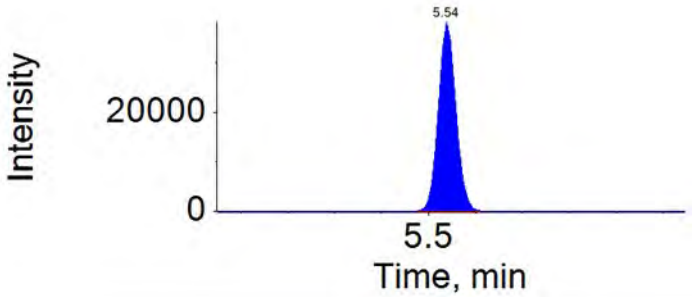
Component: PFNA
Primary Mass: 463.0 / 419.0



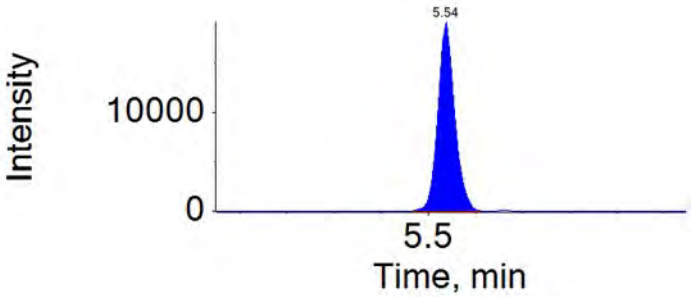
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



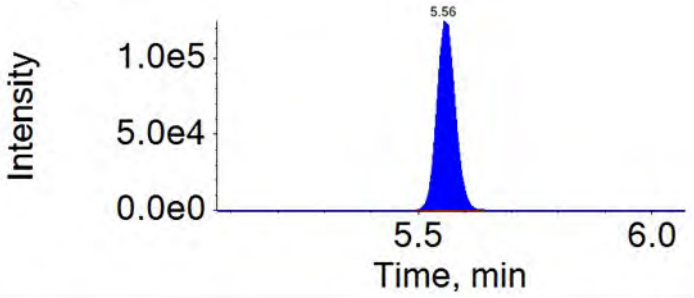
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



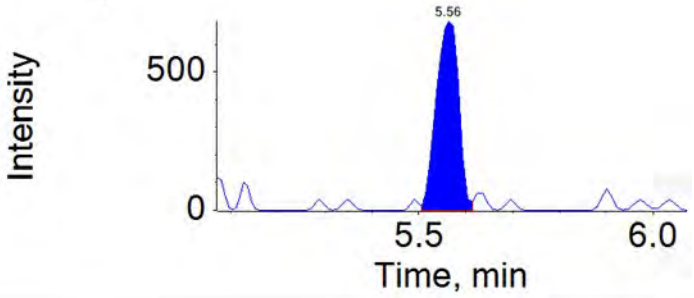
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

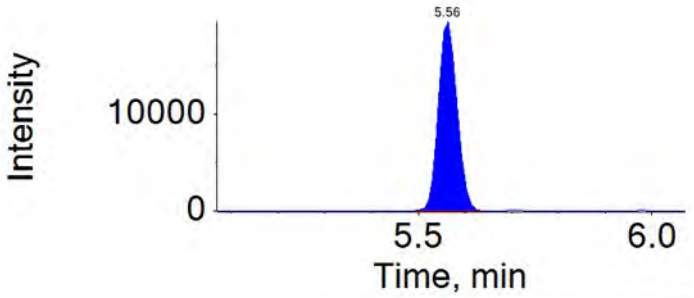
Component: PFDA
Primary Mass: 513.0 / 469.0



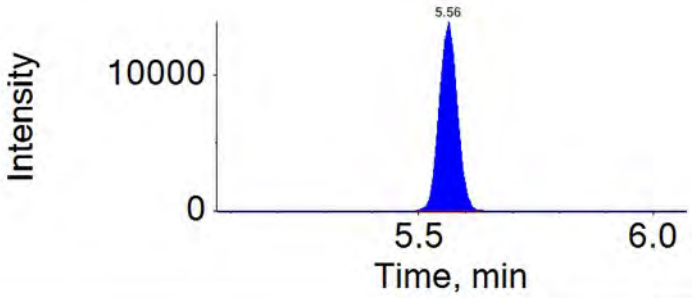
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



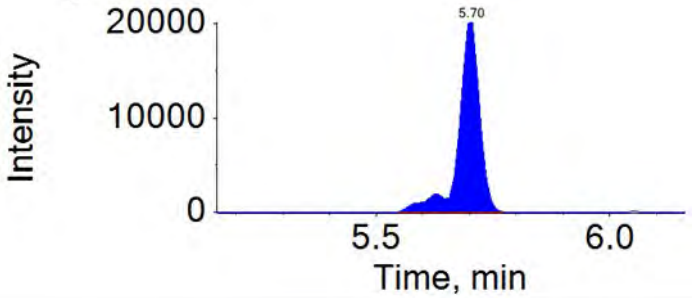
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



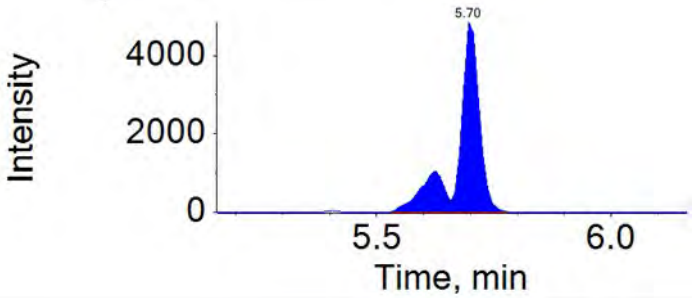
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



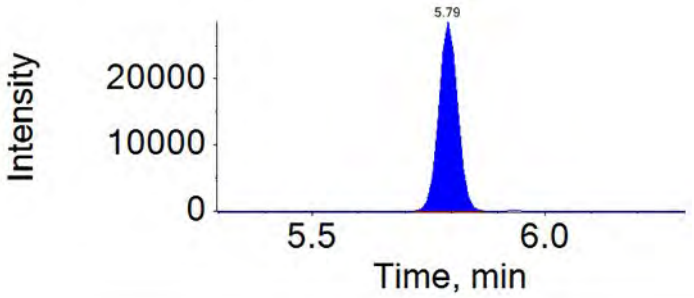
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



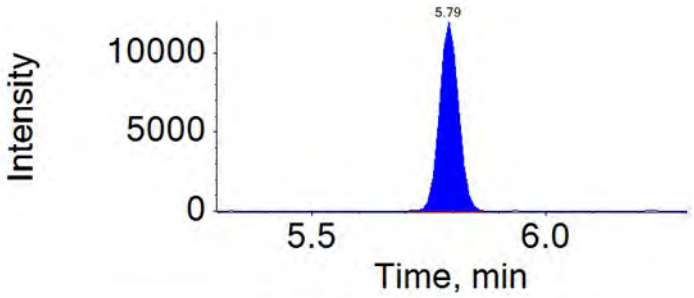
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



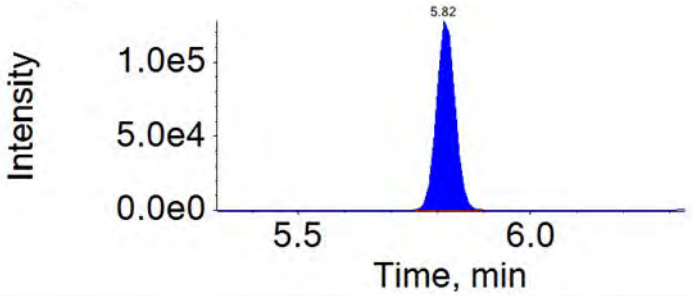
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



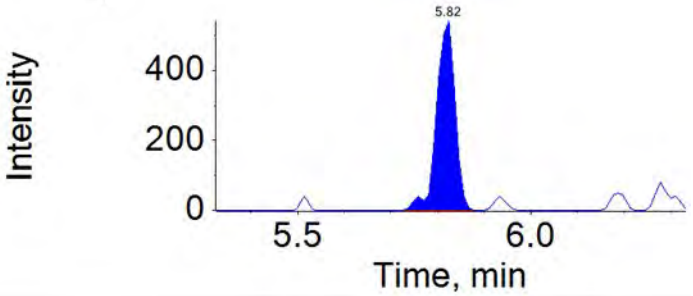
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

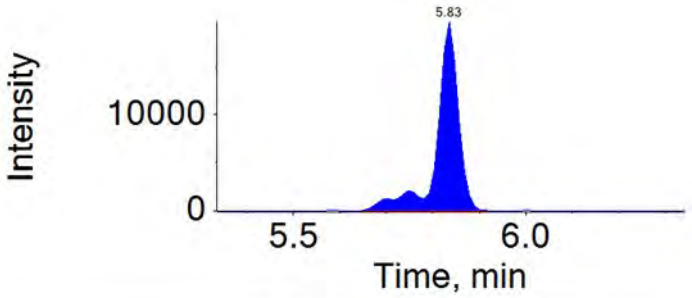
Component: PFUnDA
Primary Mass: 563.0 / 519.0



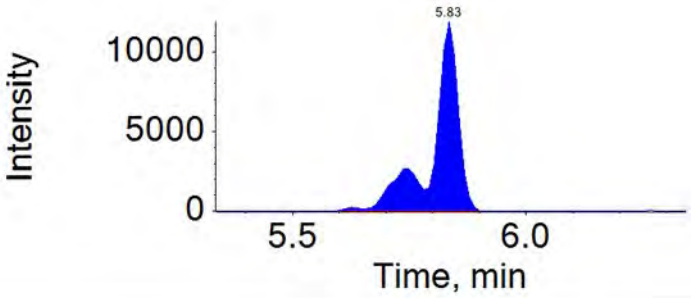
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



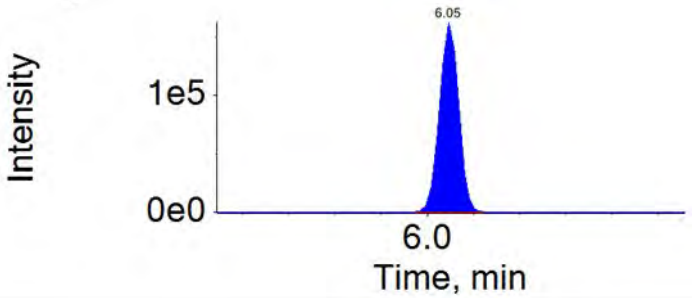
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



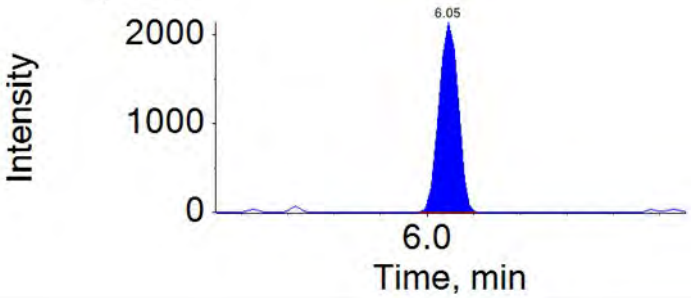
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



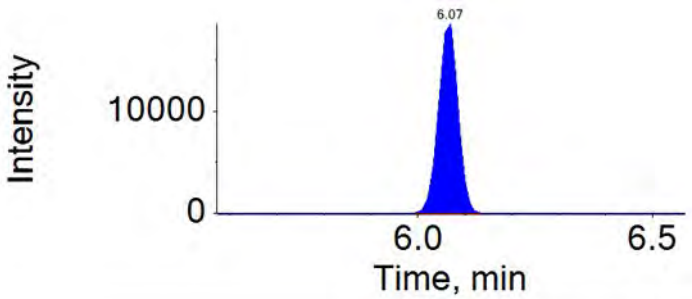
Component: PFDoDA
Primary Mass: 613.0 / 569.0



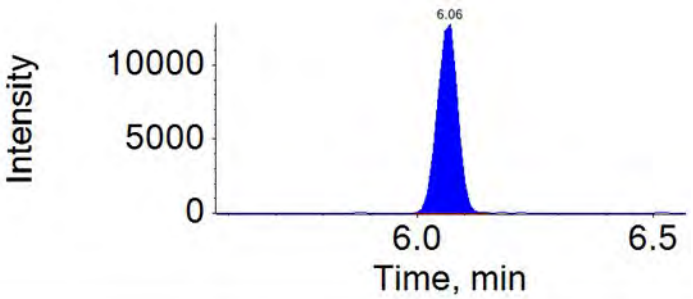
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



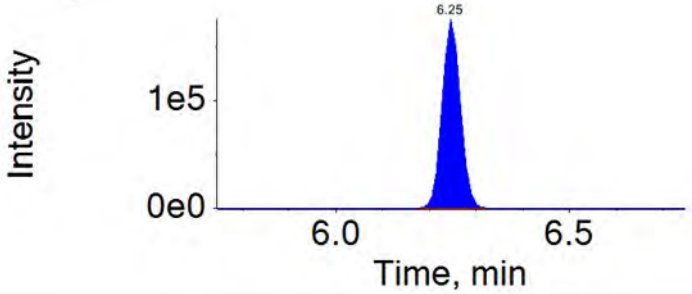
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



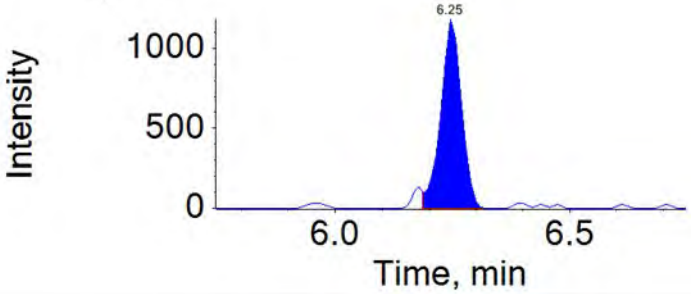
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

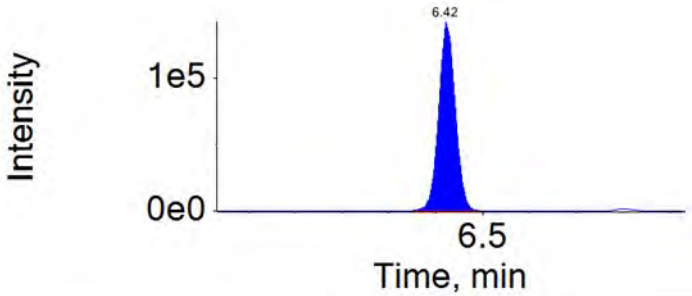
Component: PFTrDA
Primary Mass: 663.0 / 619.0



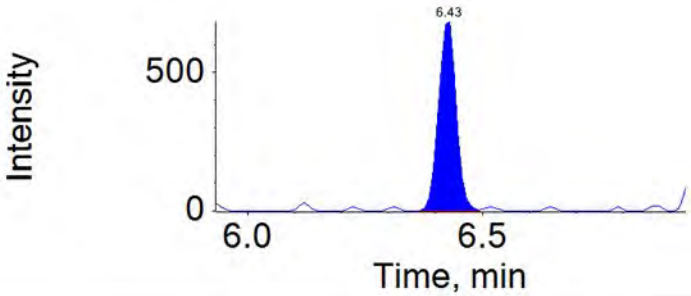
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



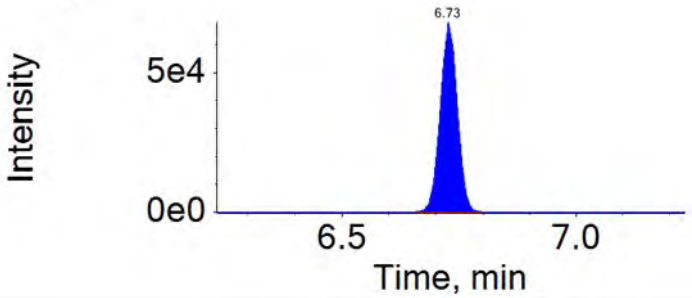
Component: PFTeDA
Primary Mass: 713.0 / 669.0



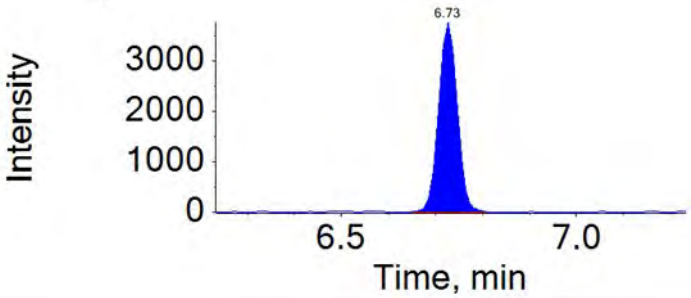
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



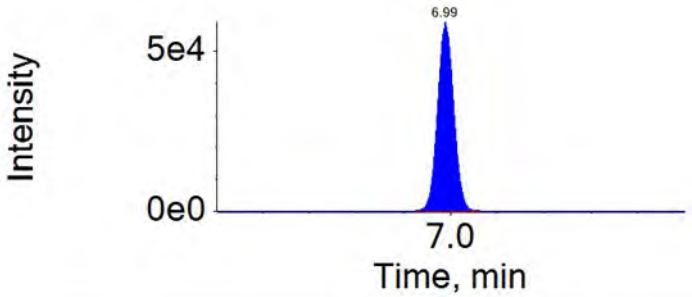
Component: PFHxDA
Primary Mass: 813.0 / 769.0



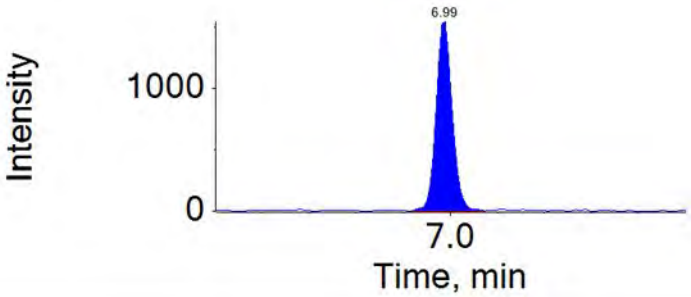
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



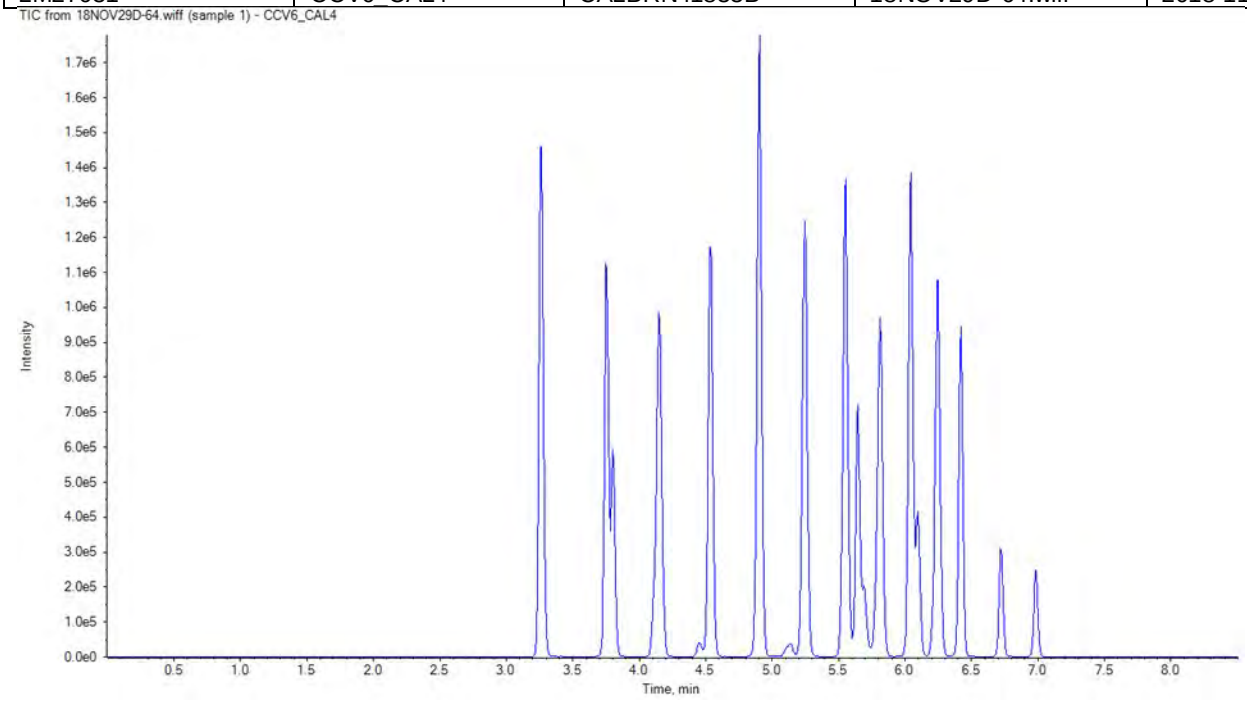
APPROVED
By MCD at 8:06 pm, 11/29/18

REVIEWED
By HMK at 9:40 am, 12/5/18

Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:19:02 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV6_CAL4	CALBRN41833B	18NOV29D-64.wiff	2018-11-29T19:25:48



Injection Standard Area Reference File: 18NOV29D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	913849.2	906425.4	1	50	
13C2-PFOA	5.0	518876.3	495984.0	5	50	
13C4-PFOS	4.8	303797.0	296261.8	3	50	
13C2-PFDA	5.0	442721.5	451203.0	-2	50	

APPROVED
By MCD at 3:26 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:19:02 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV6_CAL4	CALBRN41833B	18NOV29D-64.wiff	2018-11-29T19:25:48

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	1469628.0	10	13C4-PFBA	986963.3	5.0	1.489	3.26	1.000	8.000	8.163	2	30	
PFPeA	1427748.0	11	13C5-PFPeA	984821.1	5.0	1.450	3.75	1.000	8.000	7.114	-11	30	
PFBS	609993.7	11	13C3-PFBS	418734.6	4.7	1.457	3.80	1.000	7.080	7.071	0	30	
4:2-FTS	184688.7	11	13C2-4:2-FTS	67546.9	4.7	2.734	4.11	1.000	7.470	7.319	-2	30	
PFHxA	1387308.0	12	13C5-PFHxA	682741.9	5.0	2.032	4.15	1.000	8.000	8.156	2	30	
PFPeS	321453.2	11	13C3-PFBS	418734.6	4.7	0.768	4.17	1.100	7.500	7.765	4	30	
PFHpA	1397029.6	11	13C4-PFHpA	552888.5	5.0	2.527	4.54	1.000	8.000	7.798	-3	30	
PFHxS	466399.5	19	13C3-PFHxS	322045.5	4.7	1.448	4.54	1.000	7.300	6.781	-7	30	
6:2-FTS	179952.5	11	13C2-6:2-FTS	58279.4	4.8	3.088	4.89	1.000	7.580	8.057	6	30	
PFHpS	482601.2	11	13C3-PFHxS	322045.5	4.7	1.499	4.90	1.080	7.610	7.479	-2	30	
PFOA	1506521.1	11	13C8-PFOA	956359.3	5.0	1.575	4.90	1.000	8.000	8.140	2	30	
PFOS	507772.2	22	13C8-PFOS	318797.0	4.8	1.593	5.23	1.000	7.400	6.681	-10	30	
PFNA	1378868.3	11	13C9-PFNA	666957.5	5.0	2.067	5.25	1.000	8.000	7.923	-1	30	
PFNS	359004.1	11	13C8-PFOS	318797.0	4.8	1.126	5.53	1.060	7.680	7.110	-7	30	
PFDA	1238904.3	11	13C6-PFDA	789100.3	5.0	1.570	5.55	1.000	8.000	8.887	11	30	
8:2-FTS	195089.6	12	13C2-8:2-FTS	49965.8	4.8	3.904	5.56	1.000	7.660	7.363	-4	30	
PFOSA	965121.8	11	13C8-PFOSA	616213.8	5.0	1.566	5.64	1.000	8.000	7.934	-1	30	
NMeFOSAA	222950.9	18	d3-NMeFOSAA	183128.3	5.0	1.217	5.70	1.000	8.000	7.766	-3	30	
PFDS	286894.2	11	13C8-PFOS	318797.0	4.8	0.900	5.79	1.110	7.700	7.135	-7	30	
PFUnDA	1252226.8	12	13C7-PFUnDA	556651.0	5.0	2.250	5.81	1.000	8.000	8.041	1	30	
NEtFOSAA	239375.0	21	d5-NEtFOSAA	151553.0	5.0	1.579	5.83	1.000	8.000	7.693	-4	30	
PFDoDA	1726918.5	11	13C2-PFDoDA	1111170.4	5.0	1.554	6.04	1.000	8.000	8.513	6	30	
10:2-FTS	185245.7	12	13C2-8:2-FTS	49965.8	4.8	3.707	6.06	1.090	7.710	8.175	6	30	
NMePFOSAE	489183.9	11	d7-NMePFOSAE	257155.9	5.0	1.902	6.10	1.000	8.000	8.005	0	30	
NMePFOSA	128158.0	11	d3-NMePFOSA	84180.7	5.0	1.522	6.10	1.000	8.000	8.071	1	30	
PFDoS	162130.7	11	13C8-PFOS	318797.0	4.8	0.509	6.21	1.190	7.740	7.304	-6	30	
NEtPFOSAE	532496.8	11	d9-NEtPFOSAE	224480.4	5.0	2.372	6.26	1.000	8.000	8.533	7	30	
NEtPFOSA	113302.3	11	d5-NEtPFOSA	67601.1	5.0	1.676	6.27	1.000	8.000	7.512	-6	30	
PFTrDA	1695782.7	11	13C2-PFDoDA	1111170.4	5.0	1.526	6.24	1.030	8.000	9.199	15	30	
PFTeDA	1214917.2	10	13C2-PFTeDA	822251.9	5.0	1.478	6.42	1.000	8.000	8.372	5	30	
PFHxDA	634623.0	11	13C2-PFTeDA	822251.9	5.0	0.772	6.72	1.050	8.000	8.823	10	30	
PFODA	509959.1	10	13C2-PFTeDA	822251.9	5.0	0.620	6.98	1.090	8.000	8.262	3	30	

APPROVED
By MCD at 3:26 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL
QMethod Name: 18AUG20QM
Result Table: 18NOV29DCCV6-9 11/30/2018 3:19:02 PM
Acquisition Method: 18AUG13_3uL.dam

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV6_CAL4			**Data File:**		18NOV29D-64.wiff
Sample ID:	CALBRN41833B			**Acquis Date:**		2018-11-29T19:25:48
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	6			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV29DCCV6-9
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV29D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	913849.2	906425.4	1	50	
13C2-PFOA	5.0	518876.3	495984.0	5	50	
13C4-PFOS	4.8	303797.0	296261.8	3	50	
13C2-PFDA	5.0	442721.5	451203.0	-2	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	986963.3	13C3-PFBA	913849.2	1.080	5.000	4.819	96	70-130	
E13C5-PFPeA	984821.1	13C3-PFBA	913849.2	1.078	5.000	5.032	101	70-130	
E13C3-PFBS	418734.6	13C3-PFBA	913849.2	0.458	4.650	4.371	94	70-130	
E13C2-4:2-FTS	67546.9	13C2-PFOA	518876.3	0.130	4.670	4.486	96	70-130	
E13C5-PFHxA	682741.9	13C2-PFOA	518876.3	1.316	5.000	4.833	97	70-130	
E13C3-PFHxS	322045.5	13C2-PFOA	518876.3	0.621	4.730	4.865	103	70-130	
E13C4-PFHpA	552888.5	13C2-PFOA	518876.3	1.066	5.000	4.896	98	70-130	
E13C2-6:2-FTS	58279.4	13C2-PFOA	518876.3	0.112	4.750	4.702	99	70-130	
E13C8-PFOA	956359.3	13C2-PFOA	518876.3	1.843	5.000	5.073	101	70-130	
E13C8-PFOS	318797.0	13C4-PFOS	303797.0	1.049	4.780	4.737	99	70-130	
E13C9-PFNA	666957.5	13C4-PFOS	303797.0	2.195	5.000	4.822	96	70-130	
E13C6-PFDA	789100.3	13C2-PFDA	442721.5	1.782	5.000	5.025	101	70-130	
E13C2-8:2-FTS	49965.8	13C2-PFDA	442721.5	0.113	4.790	4.851	101	70-130	
E13C8-PFOSA	616213.8	13C2-PFDA	442721.5	1.392	5.000	5.107	102	70-130	
Ed3-NMeFOSAA	183128.3	13C2-PFDA	442721.5	0.414	5.000	5.252	105	70-130	
E13C7-PFUnDA	556651.0	13C2-PFDA	442721.5	1.257	5.000	5.314	106	70-130	
Ed5-NEtFOSAA	151553.0	13C2-PFDA	442721.5	0.342	5.000	6.099	122	70-130	
E13C2-PFDoDA	1111170.4	13C2-PFDA	442721.5	2.510	5.000	5.273	105	70-130	
Ed7-NMePFOSAE	257155.9	13C2-PFDA	442721.5	0.581	5.000	5.020	100	70-130	
Ed3-NMePFOSA	84180.7	13C2-PFDA	442721.5	0.190	5.000	5.146	103	70-130	
Ed9-NEtPFOSAE	224480.4	13C2-PFDA	442721.5	0.507	5.000	5.141	103	70-130	
Ed5-NEtPFOSA	67601.1	13C2-PFDA	442721.5	0.153	5.000	5.306	106	70-130	
E13C2-PFTeDA	822251.9	13C2-PFDA	442721.5	1.857	5.000	5.139	103	70-130	

APPROVED
By MCD at 3:26 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

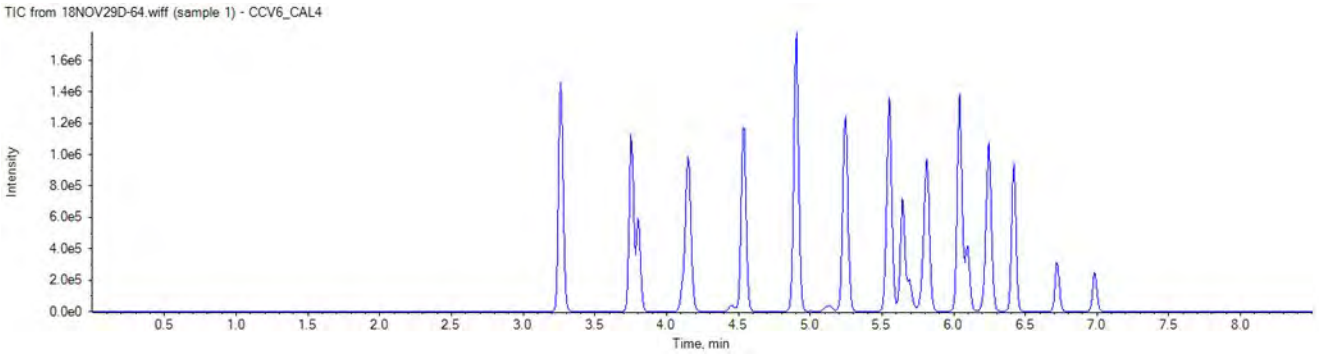
Analyte Quantitation Peak Table

Sample Name: CCV6_CAL4 **Instrument Name:** LM27631 **File Name:** 18NOV29D-64.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	1469628.0		A	13C4-PFBA	3.26	986963.3	1.489	8.163
PFPeA	3.75	1.000	1427748.0		A	13C5-PFPeA	3.76	984821.1	1.450	7.114
PFBS	3.80	1.000	609993.7		A	13C3-PFBS	3.80	418734.6	1.457	7.071
4:2-FTS	4.11	1.000	184688.7		A	13C2-4:2-FTS	4.11	67546.9	2.734	7.319
PFHxA	4.15	1.000	1387308.0		A	13C5-PFHxA	4.15	682741.9	2.032	8.156
PFPeS	4.17	1.100	321453.2		A	13C3-PFBS	3.80	418734.6	0.768	7.765
PFHpA	4.54	1.000	1397029.6		A	13C4-PFHpA	4.54	552888.5	2.527	7.798
PFHxS	4.54	1.000	466399.5		M	13C3-PFHxS	4.54	322045.5	1.448	6.781
6:2-FTS	4.89	1.000	179952.5		A	13C2-6:2-FTS	4.89	58279.4	3.088	8.057
PFHpS	4.90	1.080	482601.2		A	13C3-PFHxS	4.54	322045.5	1.499	7.479
PFOA	4.90	1.000	1506521.1		A	13C8-PFOA	4.91	956359.3	1.575	8.140
PFOS	5.23	1.000	507772.2		M	13C8-PFOS	5.24	318797.0	1.593	6.681
PFNA	5.25	1.000	1378868.3		A	13C9-PFNA	5.25	666957.5	2.067	7.923
PFNS	5.53	1.060	359004.1		A	13C8-PFOS	5.24	318797.0	1.126	7.110
PFDA	5.55	1.000	1238904.3		A	13C6-PFDA	5.55	789100.3	1.570	8.887
8:2-FTS	5.56	1.000	195089.6		A	13C2-8:2-FTS	5.56	49965.8	3.904	7.363
PFOSA	5.64	1.000	965121.8		A	13C8-PFOSA	5.65	616213.8	1.566	7.934
NMeFOSAA	5.70	1.000	222950.9		M	d3-NMeFOSAA	5.69	183128.3	1.217	7.766
PFDS	5.79	1.110	286894.2		A	13C8-PFOS	5.24	318797.0	0.900	7.135
PFUnDA	5.81	1.000	1252226.8		A	13C7-PFUnDA	5.81	556651.0	2.250	8.041
NEtFOSAA	5.83	1.000	239375.0		M	d5-NEtFOSAA	5.82	151553.0	1.579	7.693
PFDoDA	6.04	1.000	1726918.5		A	13C2-PFDoDA	6.04	1111170.4	1.554	8.513
10:2-FTS	6.06	1.090	185245.7		A	13C2-8:2-FTS	5.56	49965.8	3.707	8.175
NMePFOSAE	6.10	1.000	489183.9		A	d7-NMePFOSAE	6.09	257155.9	1.902	8.005
NMePFOSA	6.10	1.000	128158.0		A	d3-NMePFOSA	6.10	84180.7	1.522	8.071
PFDoS	6.21	1.190	162130.7		A	13C8-PFOS	5.24	318797.0	0.509	7.304
NEtPFOSAE	6.26	1.000	532496.8		A	d9-NEtPFOSAE	6.24	224480.4	2.372	8.533
NEtPFOSA	6.27	1.000	113302.3		A	d5-NEtPFOSA	6.26	67601.1	1.676	7.512
PFTrDA	6.24	1.030	1695782.7		A	13C2-PFDoDA	6.04	1111170.4	1.526	9.199
PFTeDA	6.42	1.000	1214917.2		A	13C2-PFTeDA	6.42	822251.9	1.478	8.372
PFHxDA	6.72	1.050	634623.0		A	13C2-PFTeDA	6.42	822251.9	0.772	8.823
PFODA	6.98	1.090	509959.1		A	13C2-PFTeDA	6.42	822251.9	0.620	8.262

Total Ion Chromatogram

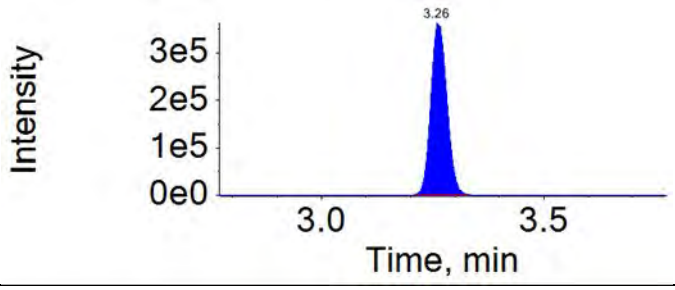


APPROVED
By MCD at 3:26 pm, 11/30/18

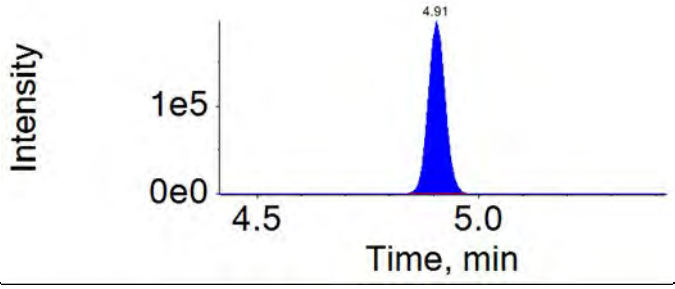
REVIEWED
By HMK at 1:40 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

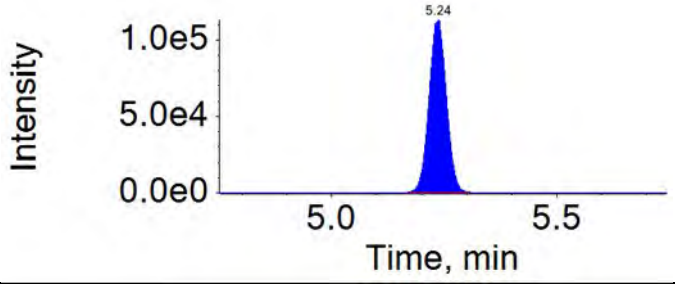
Injection Standard: 13C3-PFBA
216.0 / 172.0



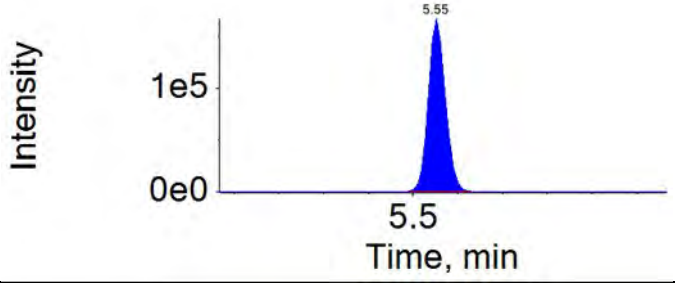
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



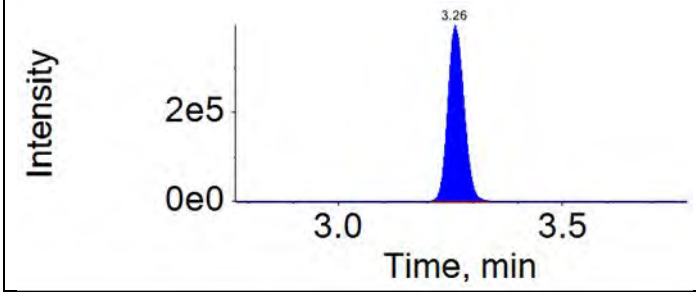
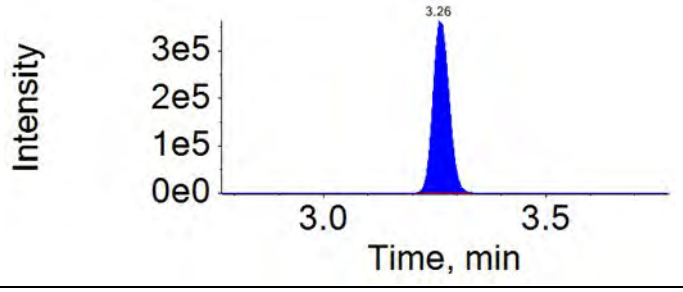
Injection Standard: 13C2-PFDA
515.0 / 470.0

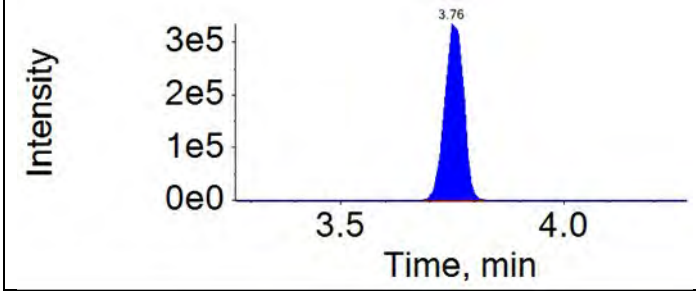
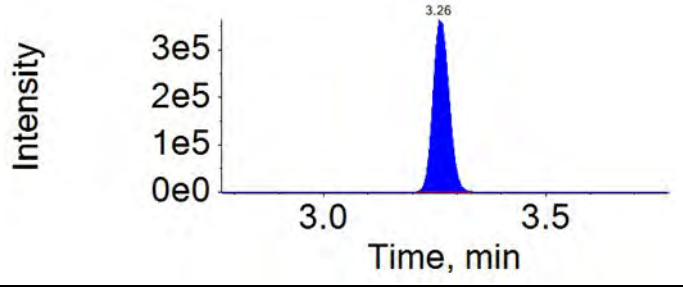


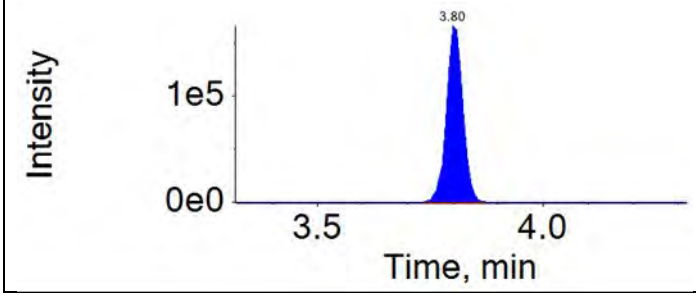
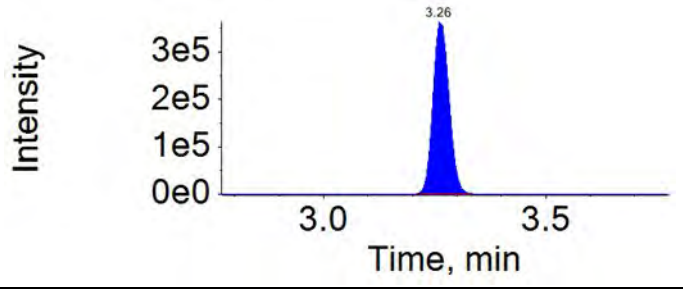
APPROVED
By MCD at 3:26 pm, 11/30/18

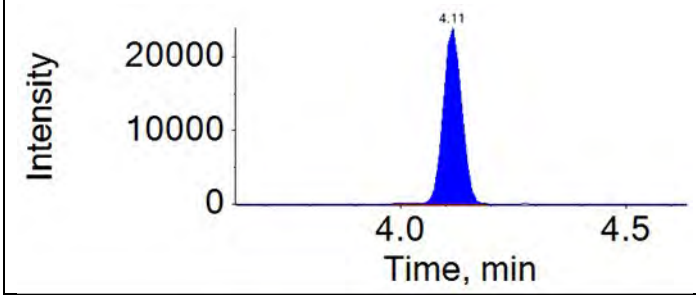
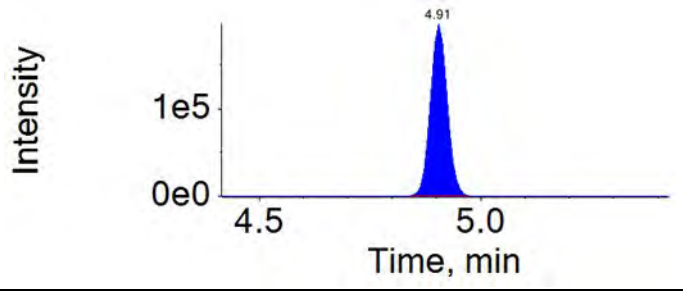
REVIEWED
By HMK at 1:40 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

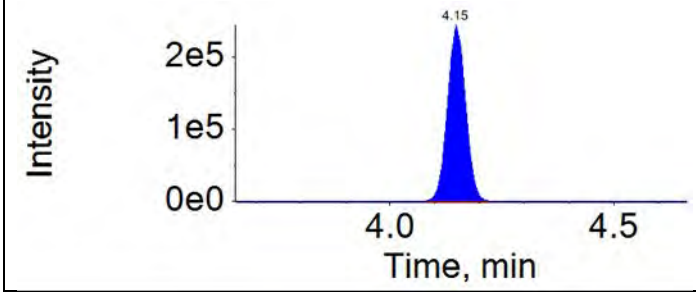
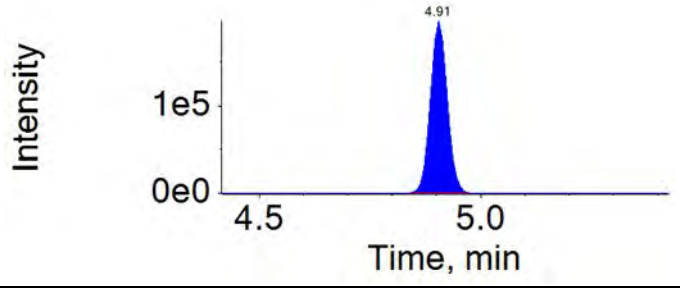
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

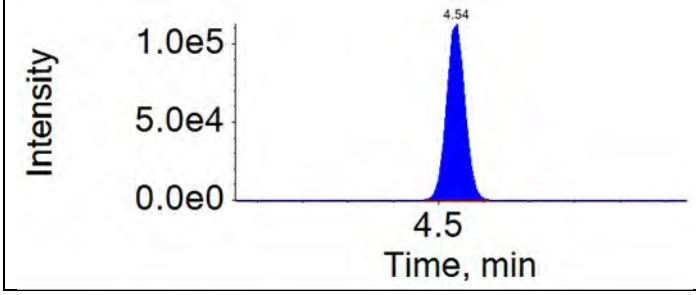
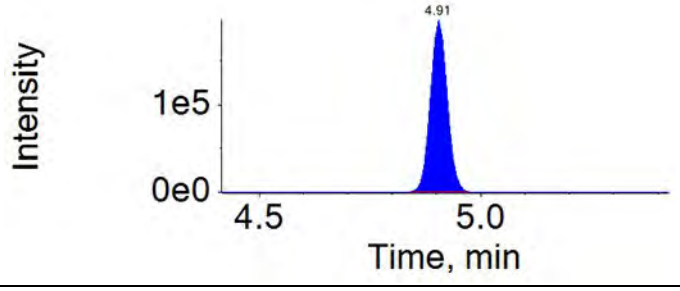
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

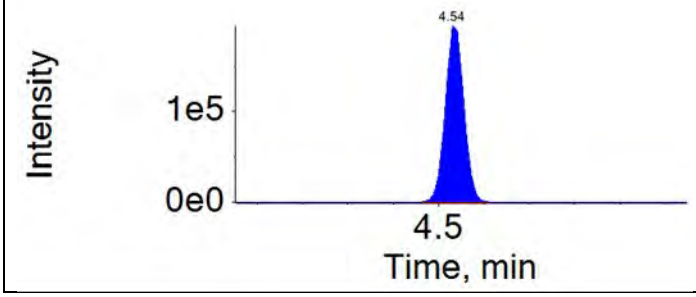
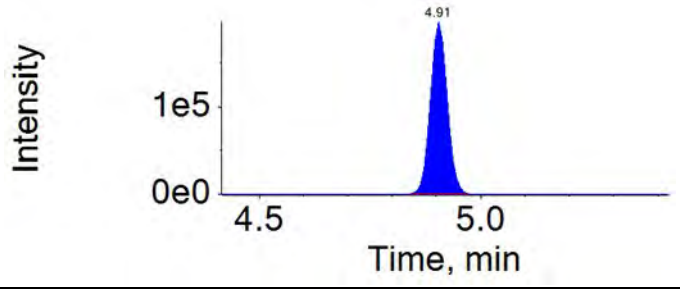
APPROVED
By MCD at 3:26 pm, 11/30/18

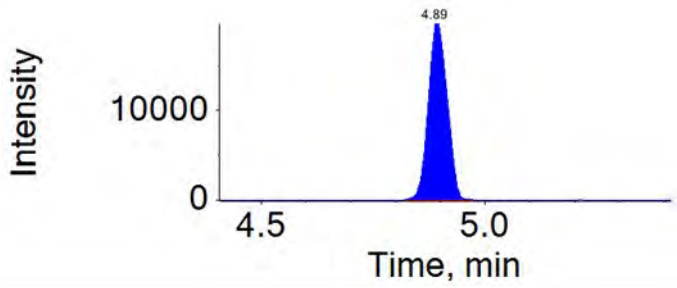
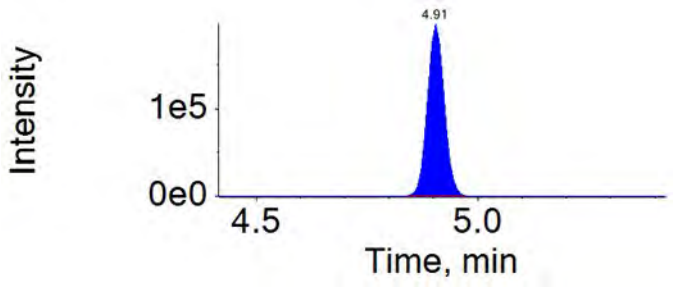
REVIEWED
By HMK at 1:40 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

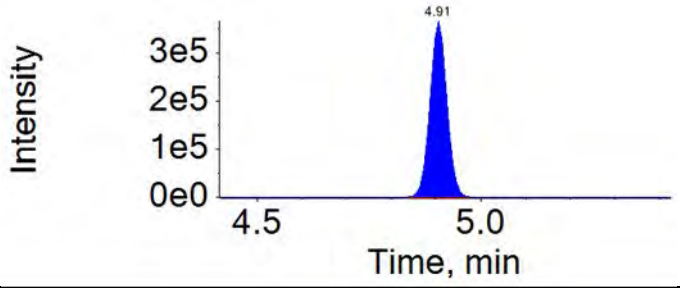
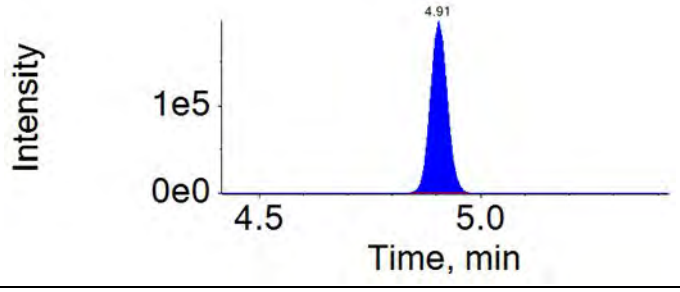
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

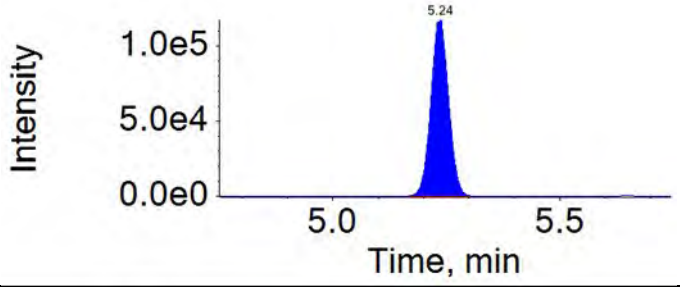
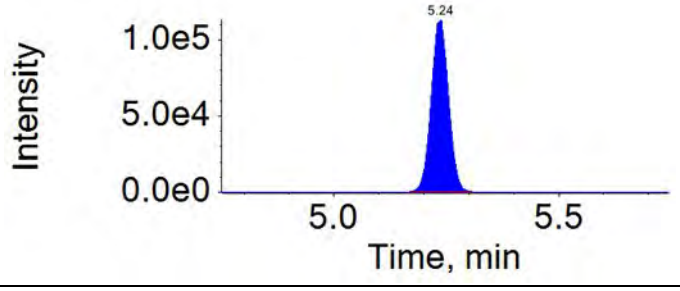
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

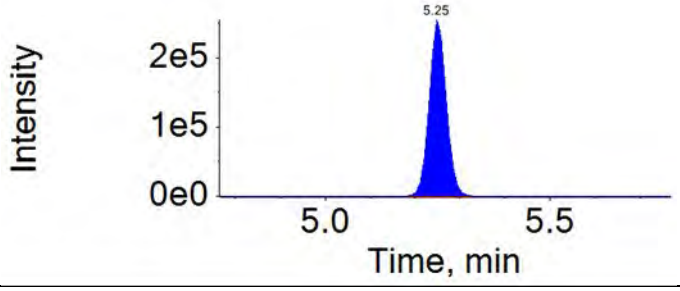
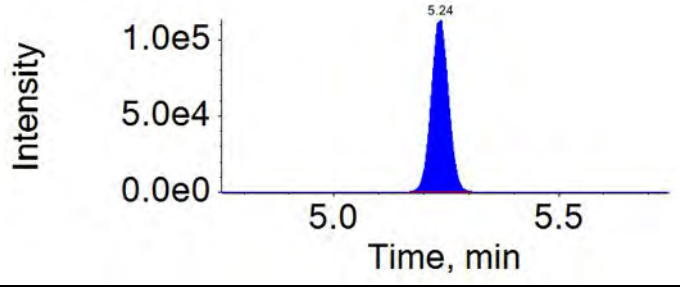
APPROVED
By MCD at 3:26 pm, 11/30/18

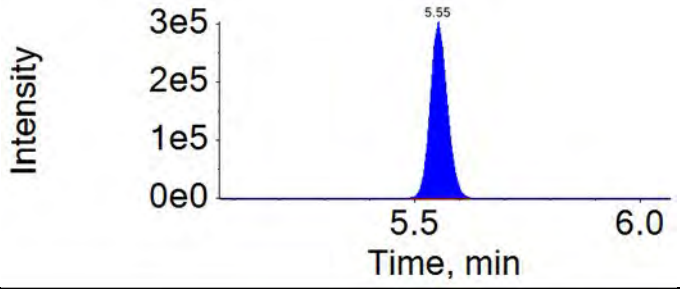
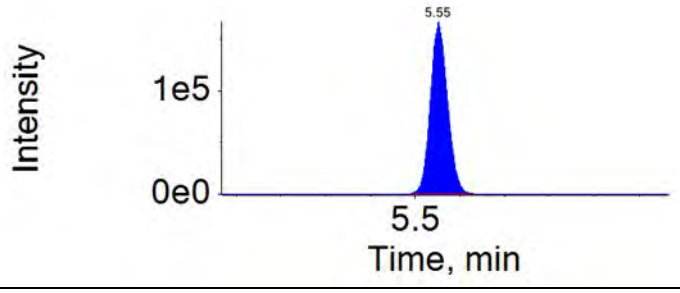
REVIEWED
By HMK at 1:40 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

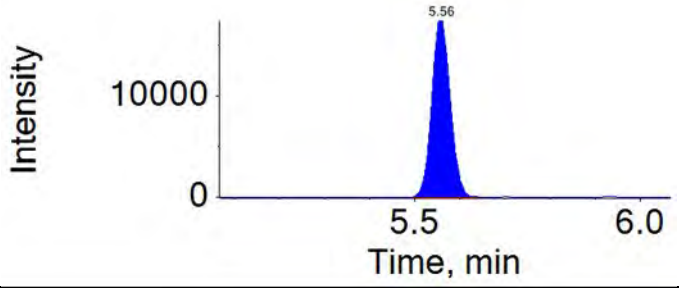
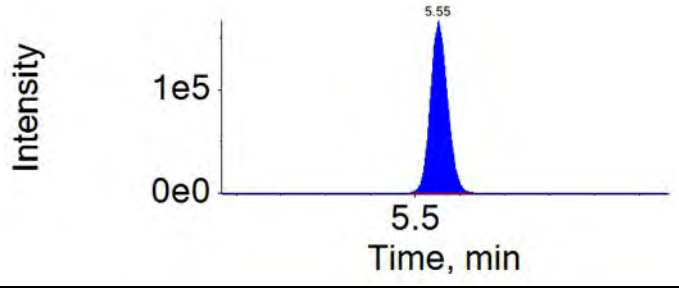
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

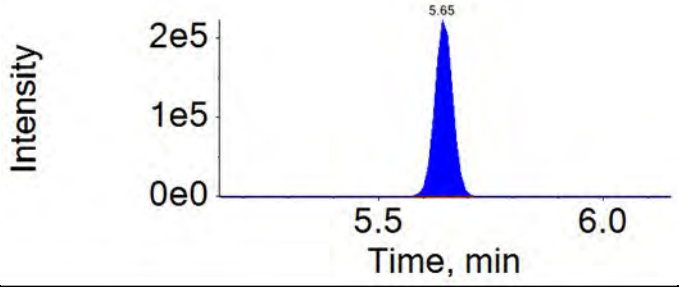
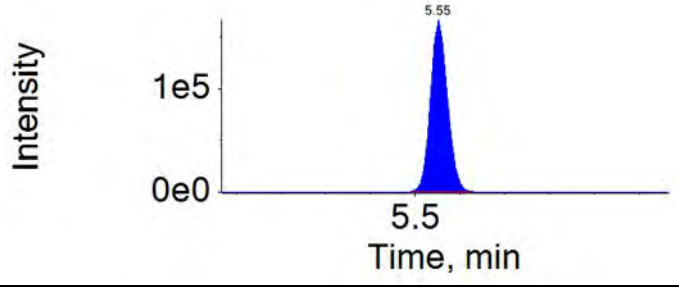
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

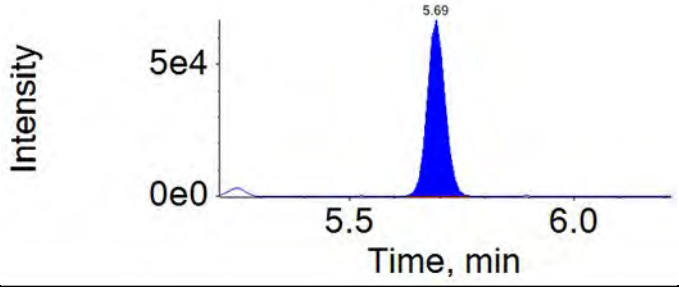
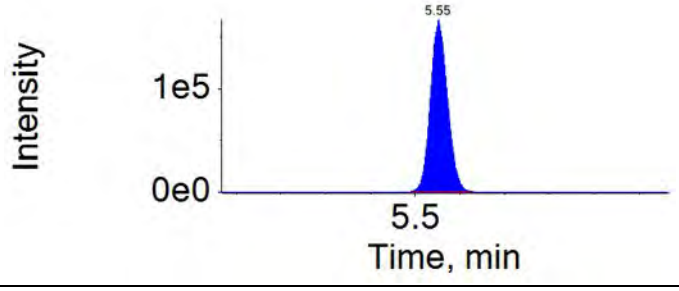
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

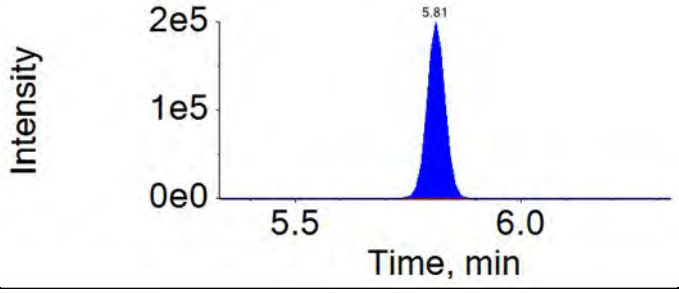
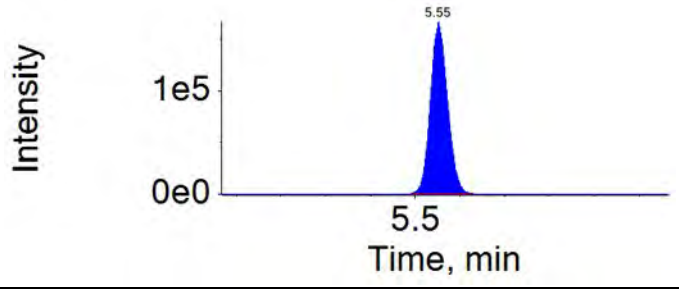
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

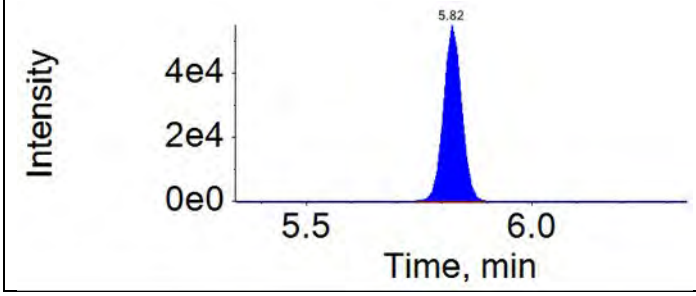
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

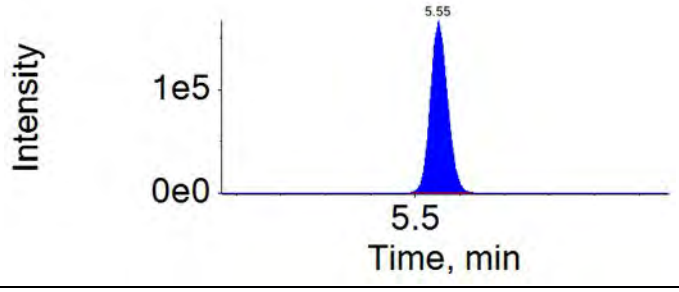
APPROVED
By MCD at 3:26 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

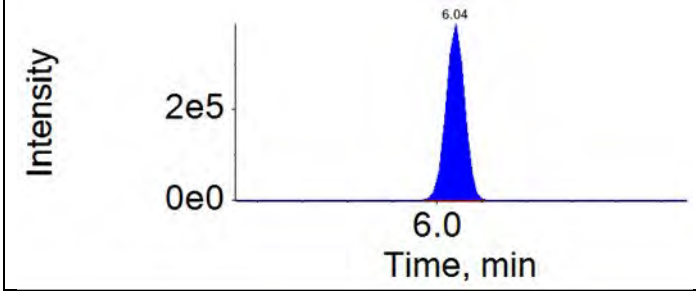
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

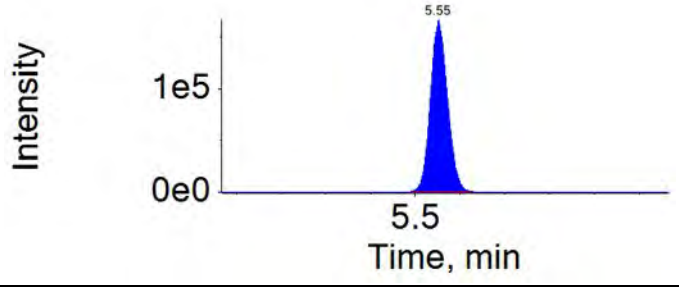
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



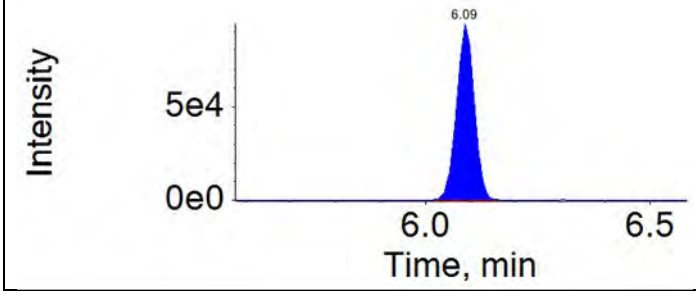


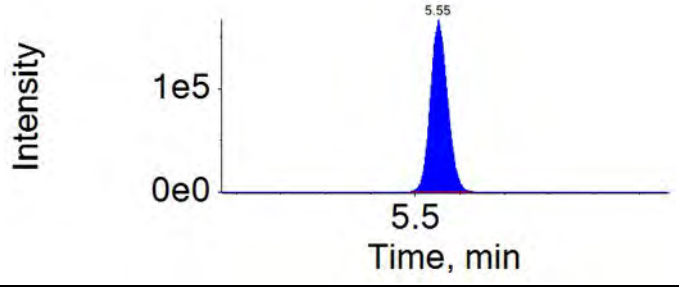
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



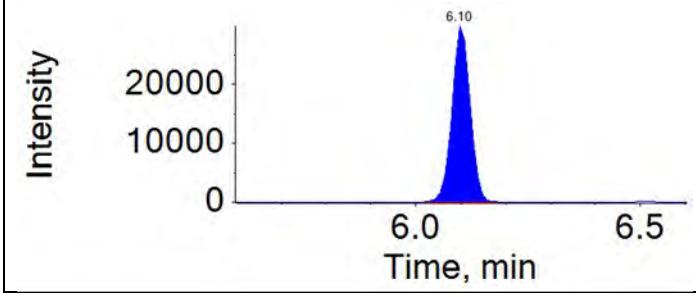


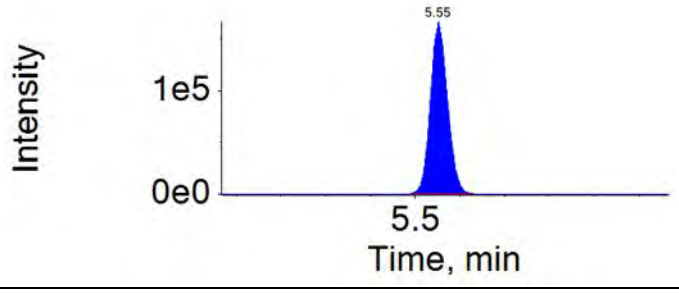
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



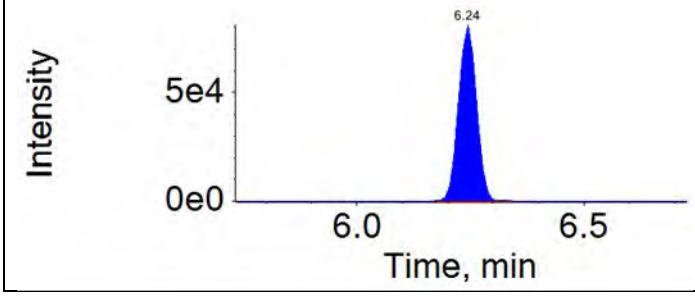


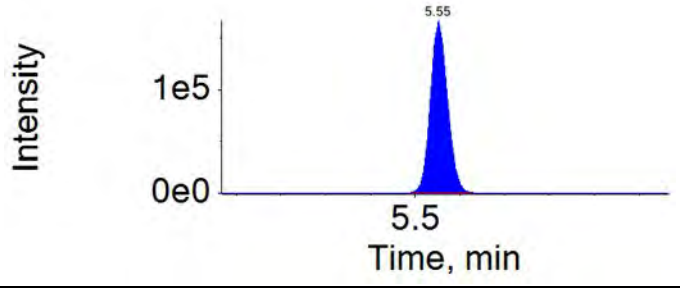
APPROVED
By MCD at 3:26 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

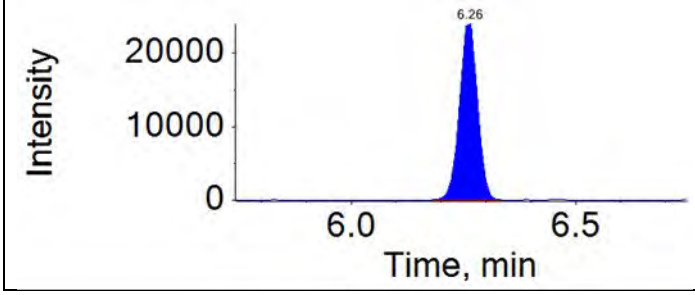
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

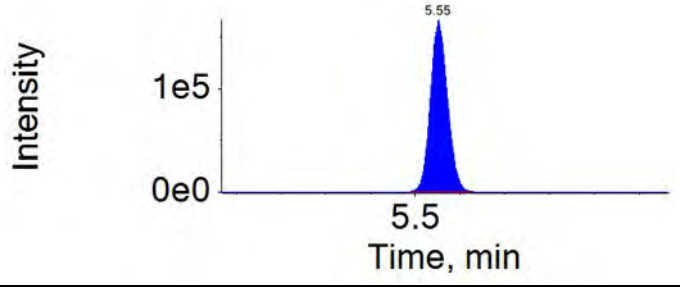
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



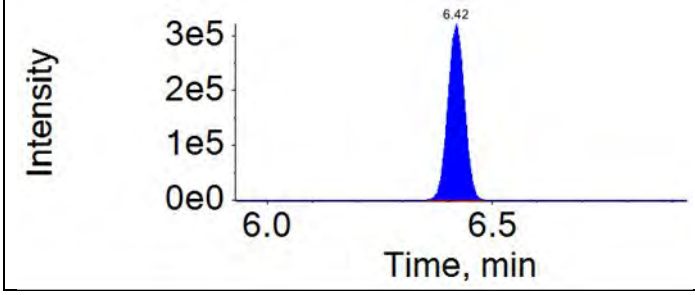


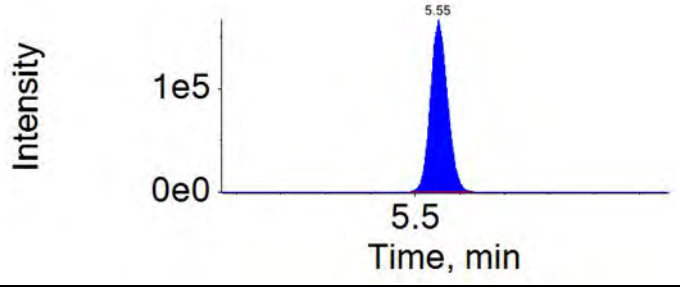
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



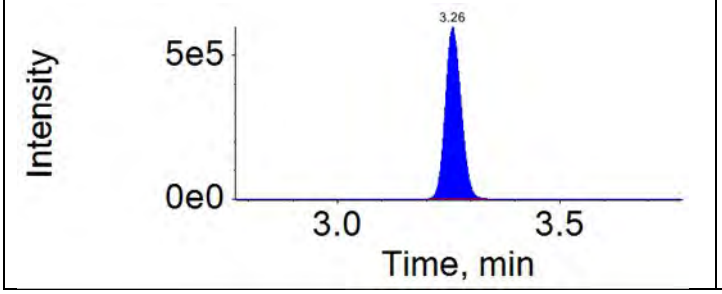


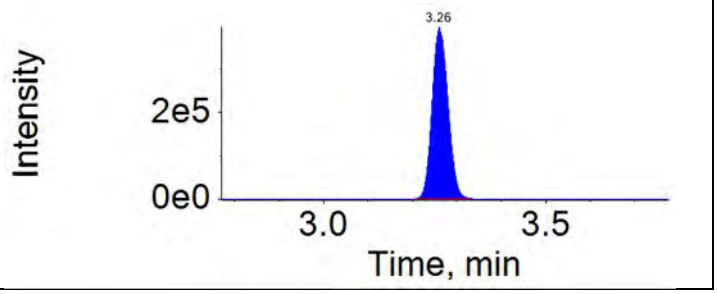
APPROVED
By MCD at 3:26 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

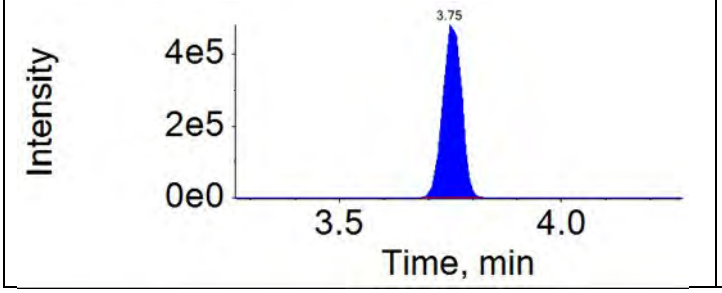
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

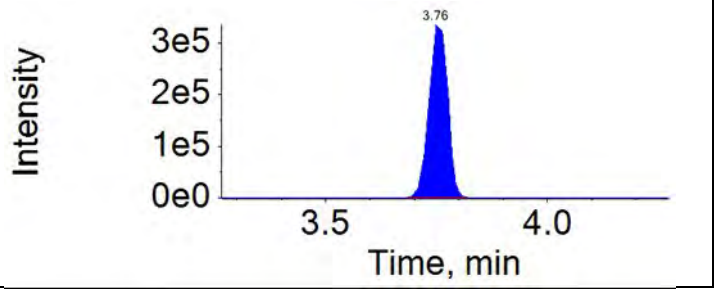
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



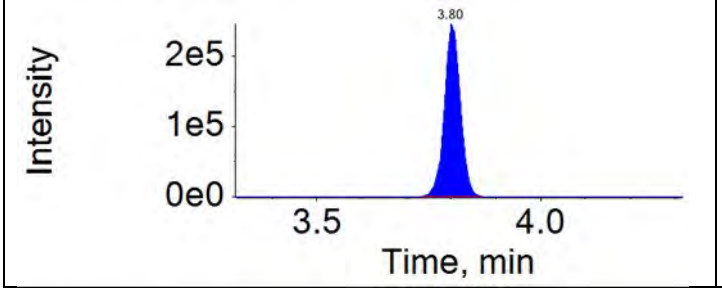


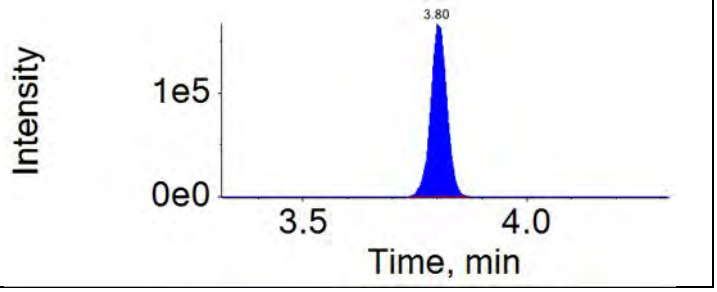
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



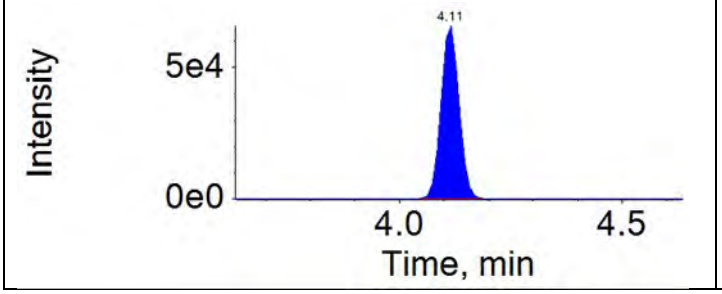


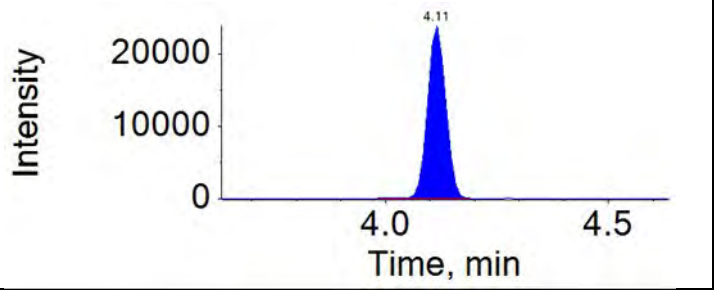
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



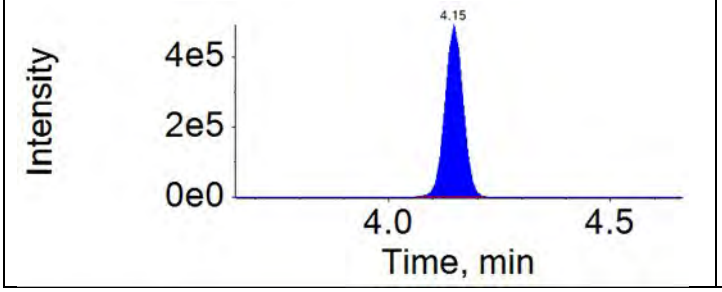


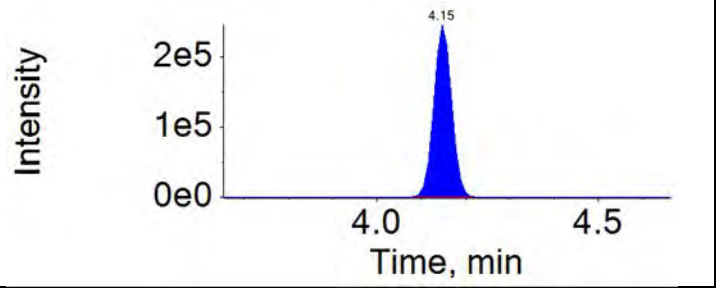
APPROVED
By MCD at 3:26 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

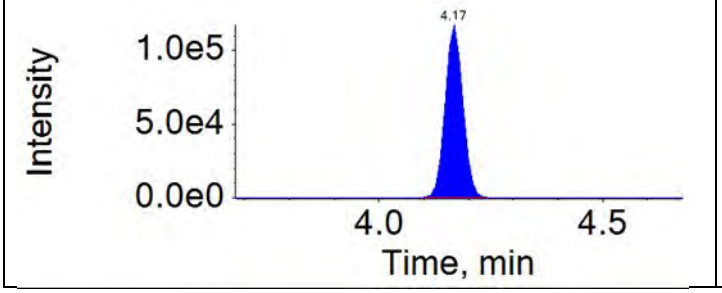
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

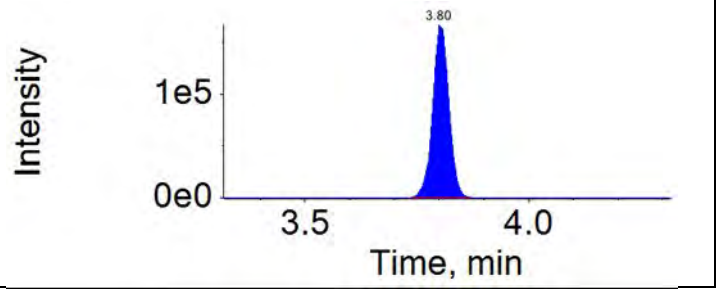
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



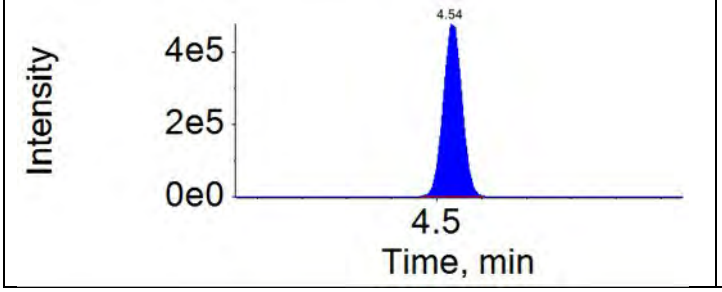


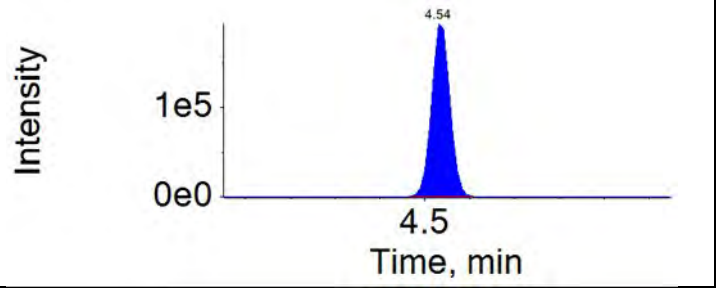
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



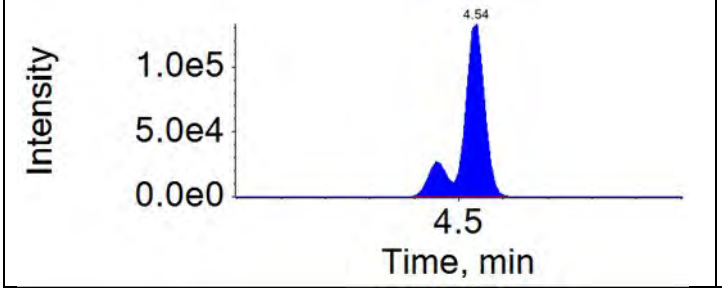


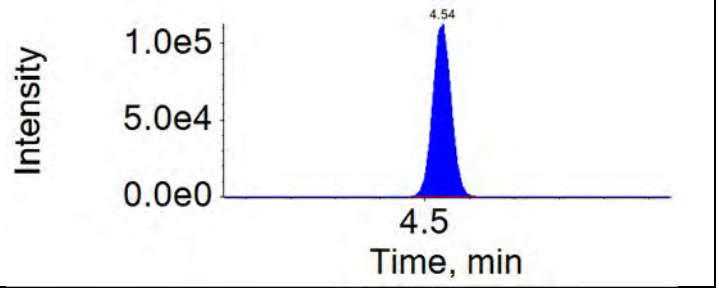
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

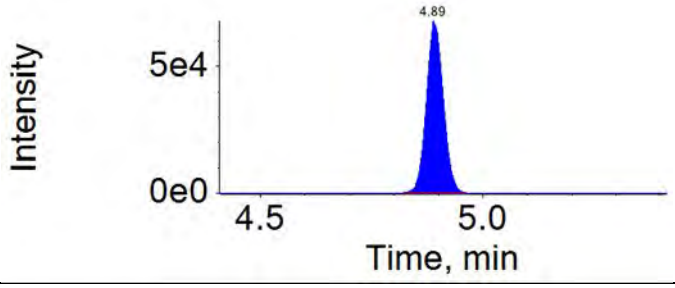
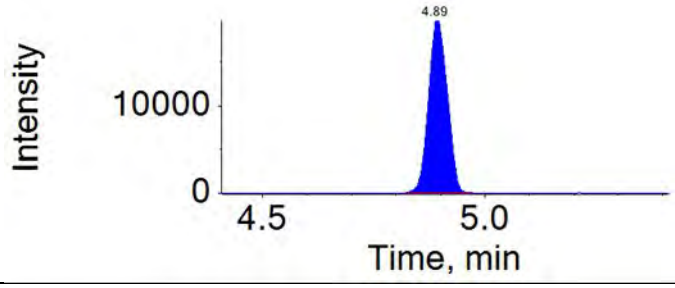


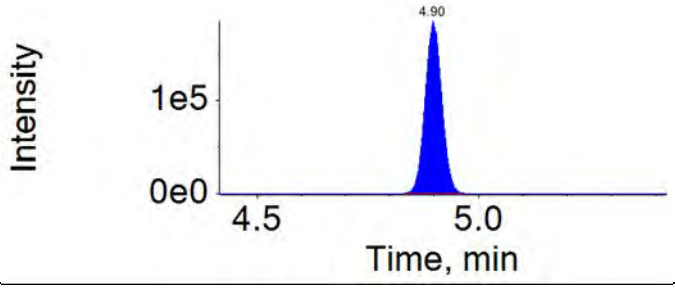
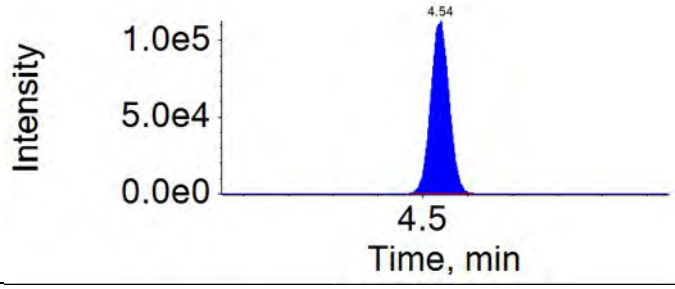


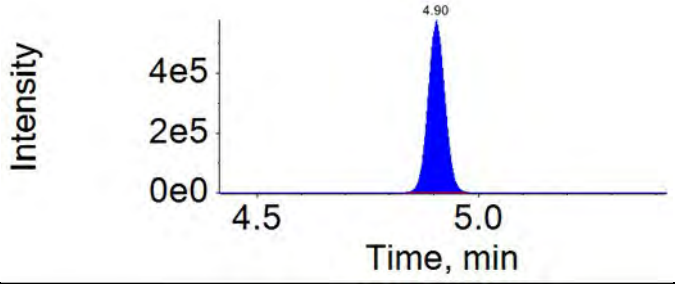
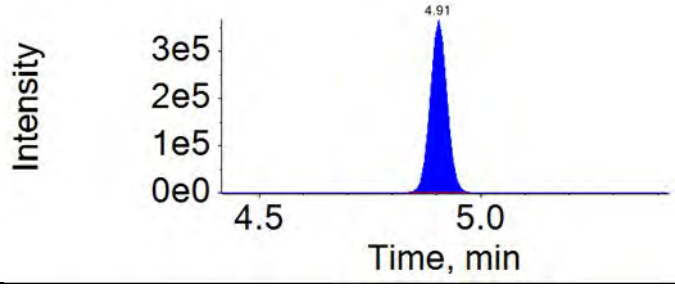
APPROVED
By MCD at 3:26 pm, 11/30/18

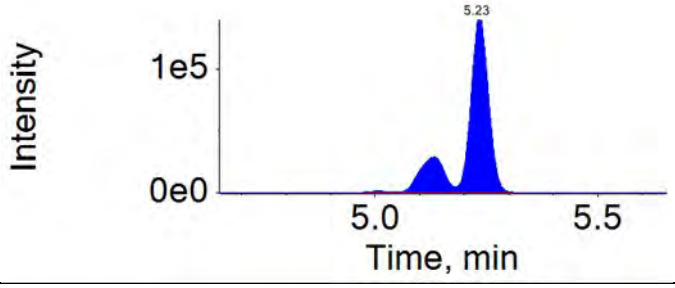
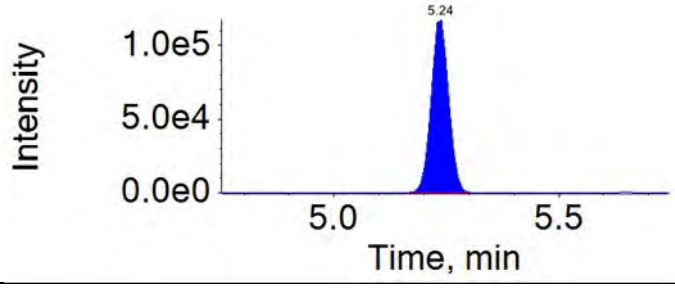
REVIEWED
By HMK at 1:40 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

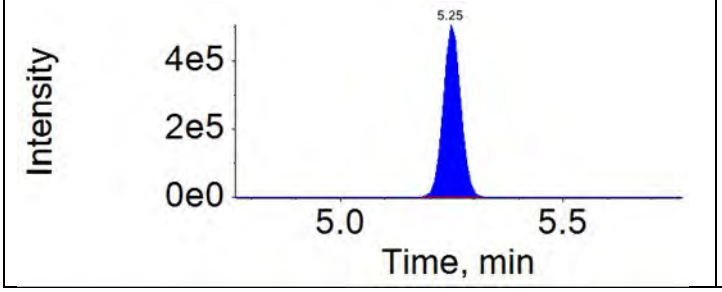
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

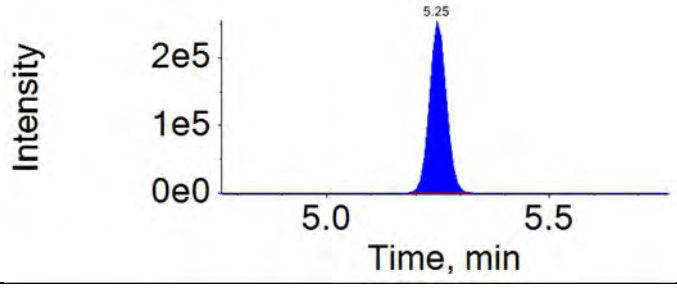
APPROVED
By MCD at 3:26 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

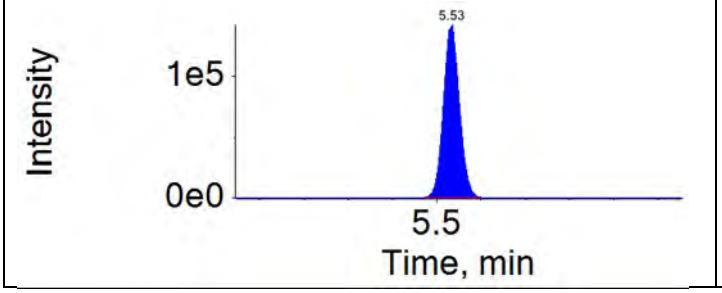
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

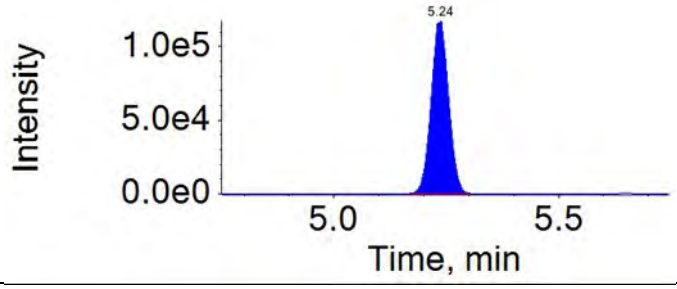
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



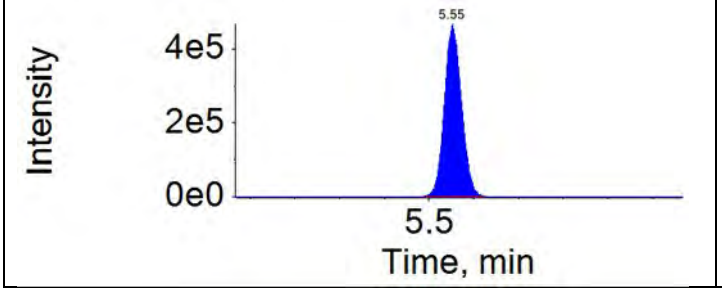


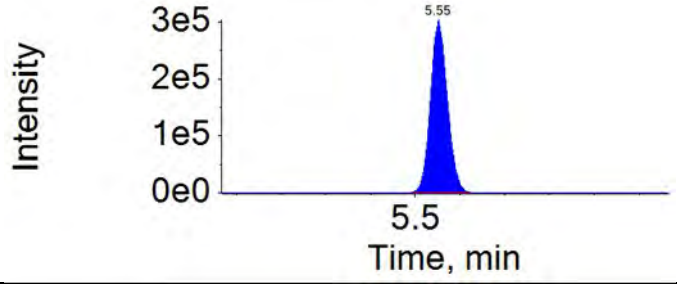
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



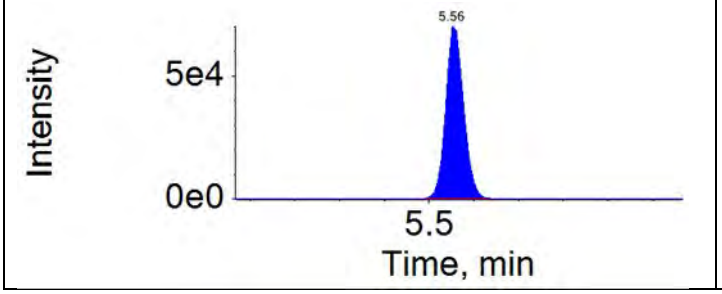


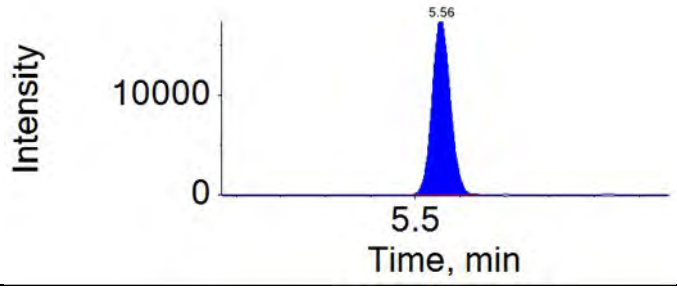
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0

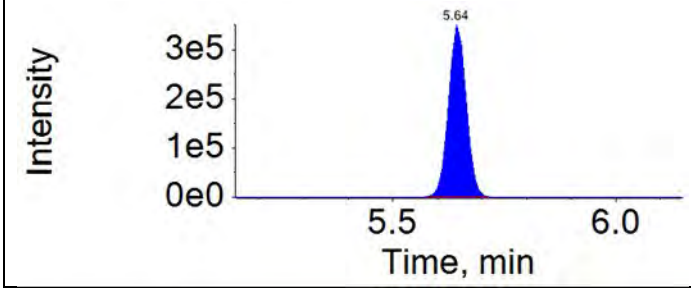
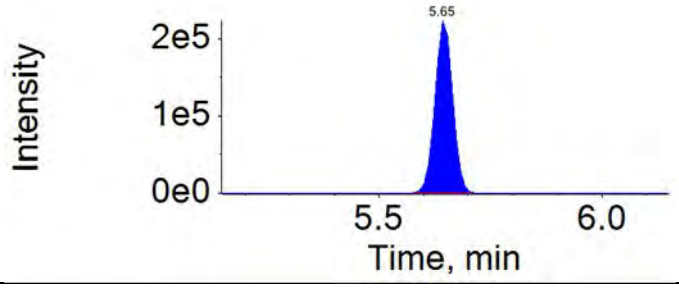


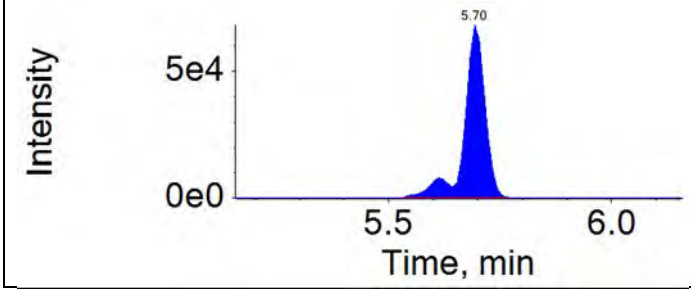
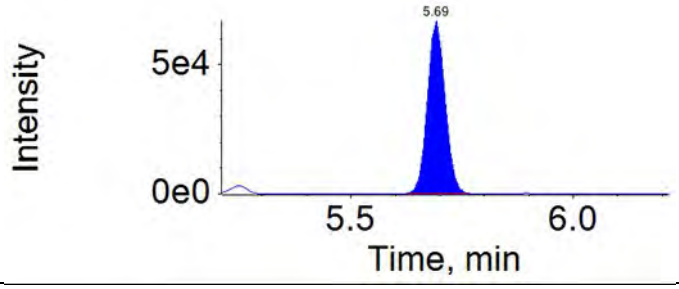


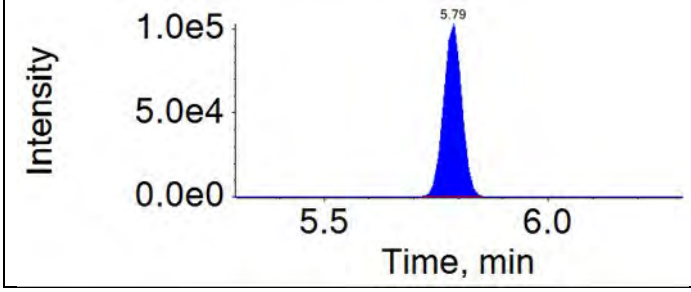
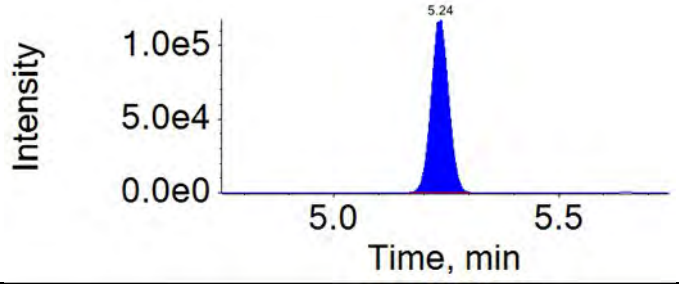
APPROVED
By MCD at 3:26 pm, 11/30/18

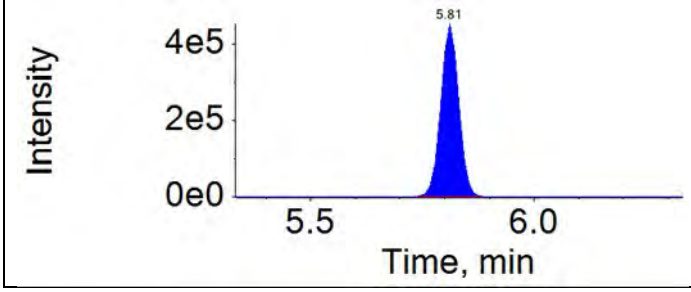
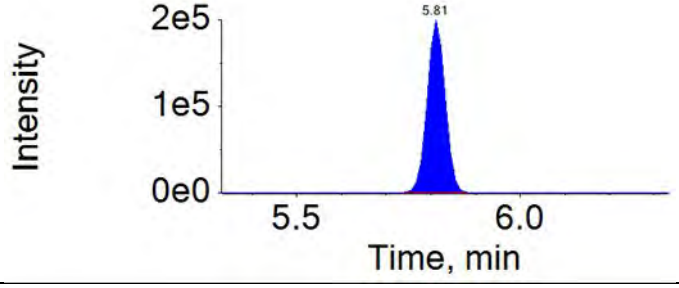
REVIEWED
By HMK at 1:40 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0
	

Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0
	

Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0
	

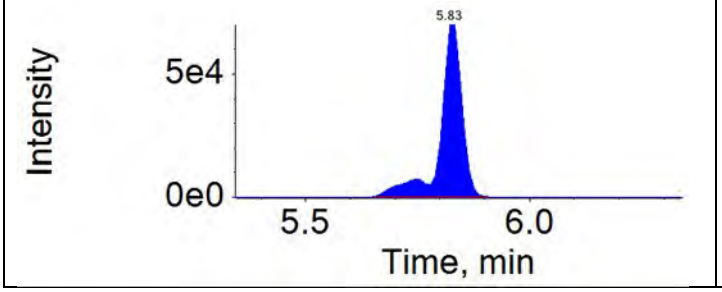
Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0
	

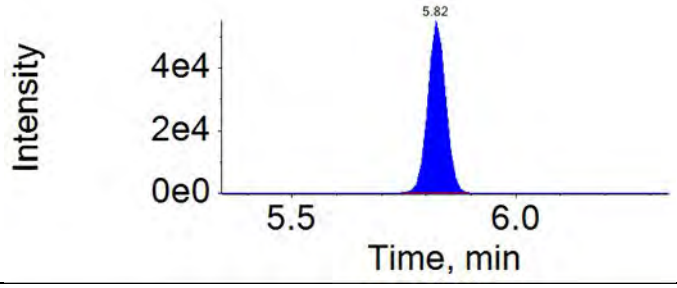
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

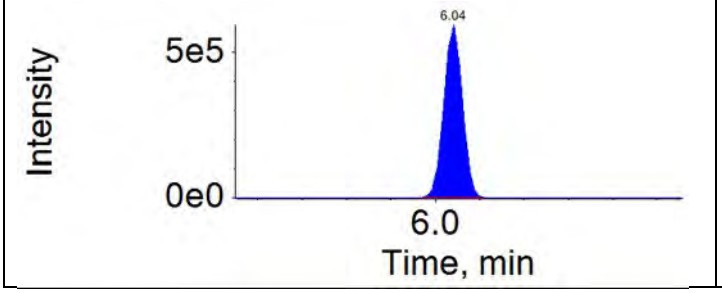
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

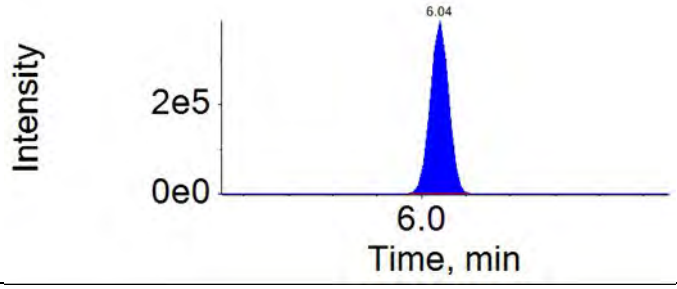
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



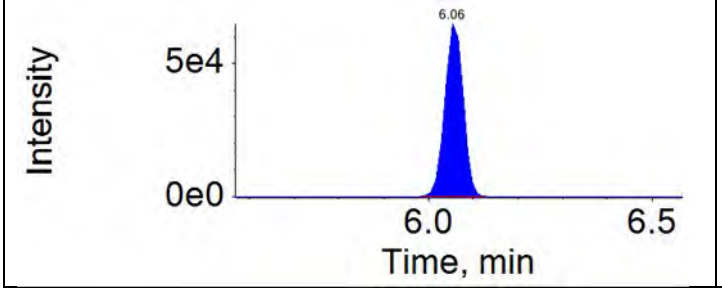


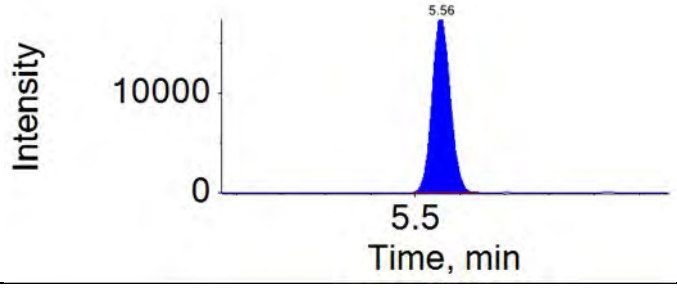
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



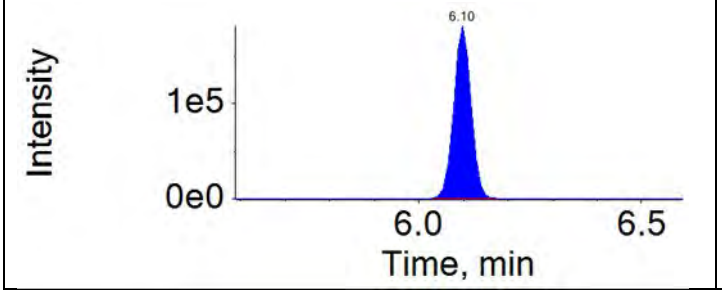


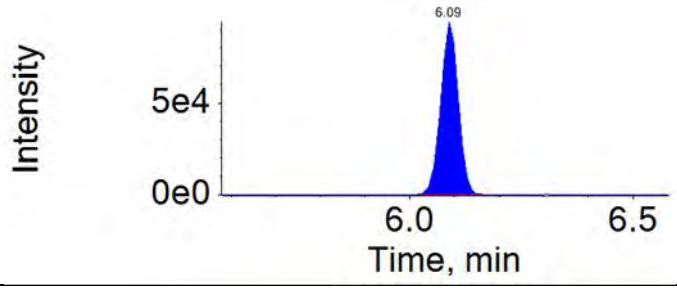
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



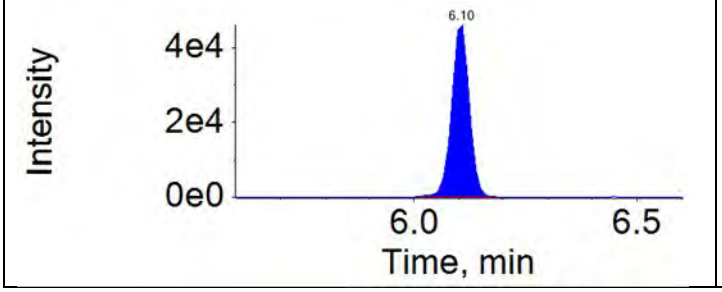


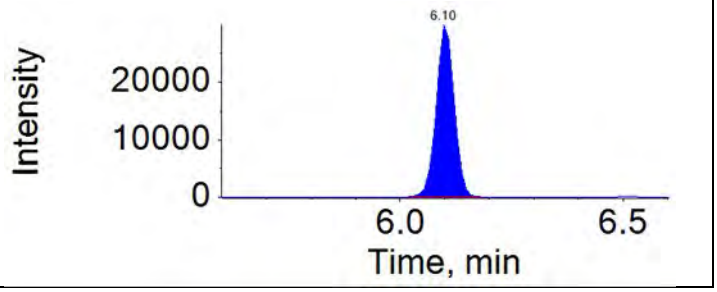
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

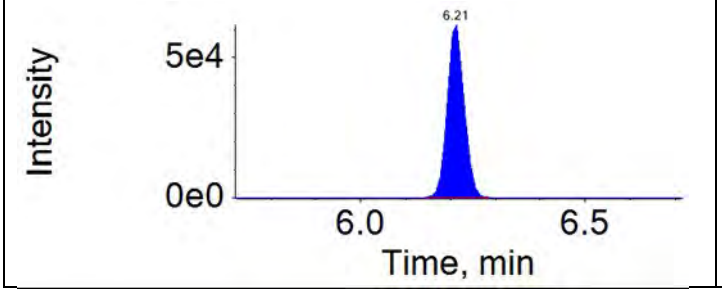
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

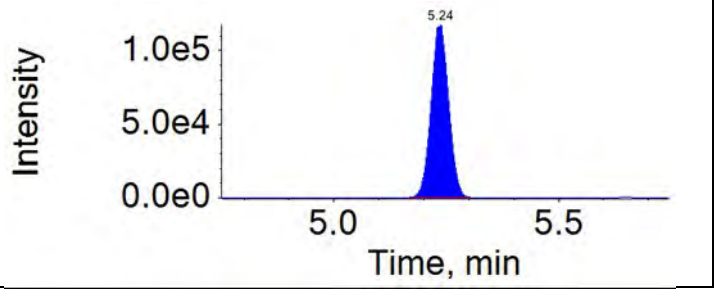
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



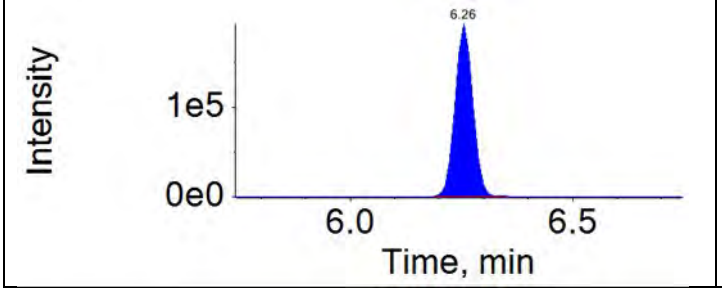


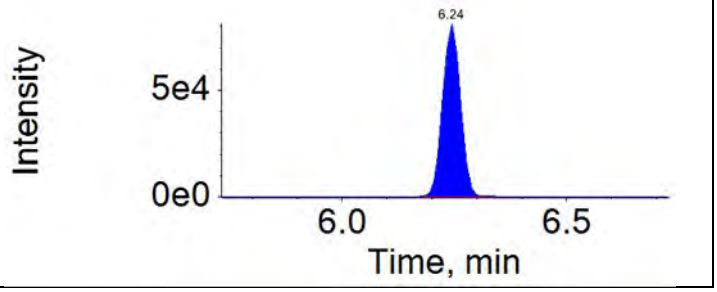
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



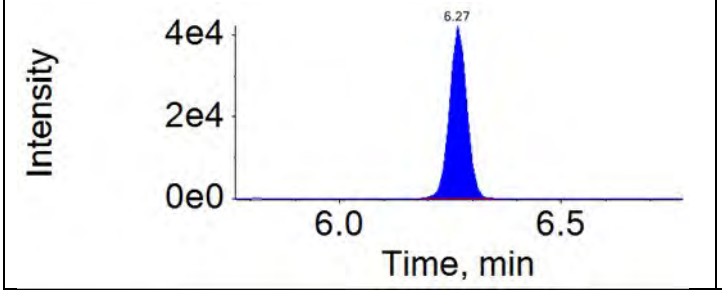


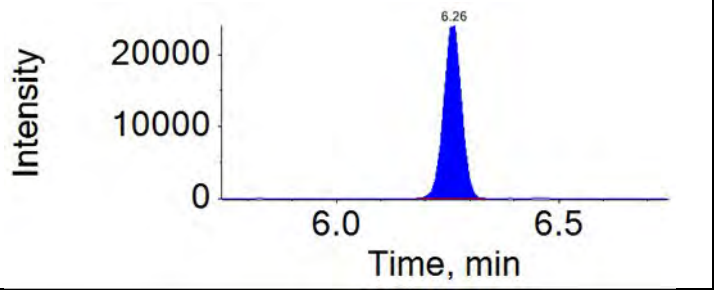
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

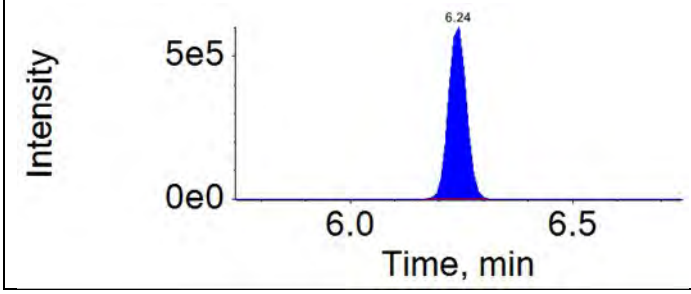
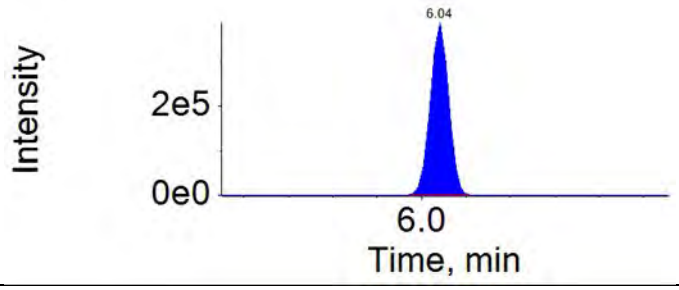


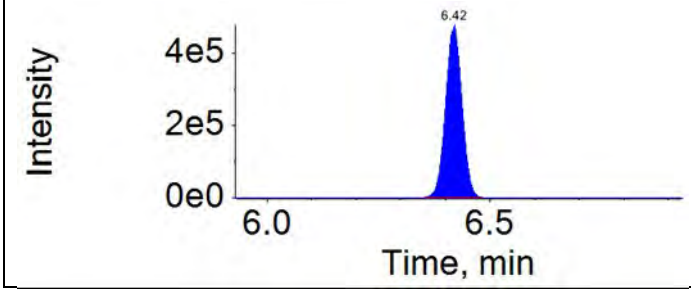
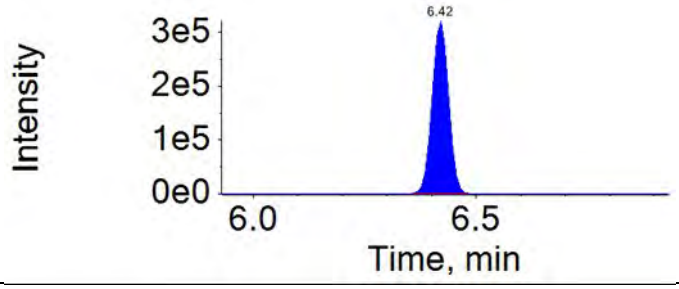


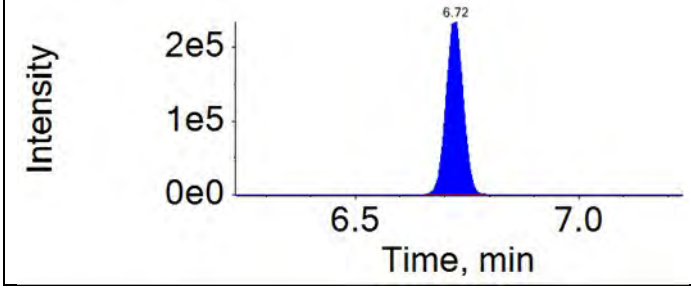
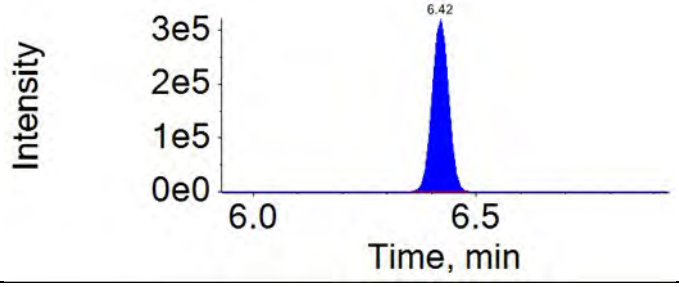
APPROVED
By MCD at 3:27 pm, 11/30/18

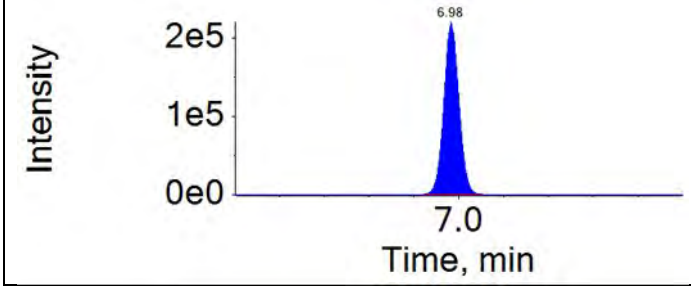
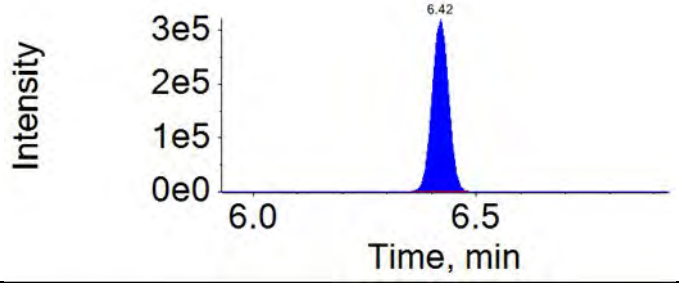
REVIEWED
By HMK at 1:40 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

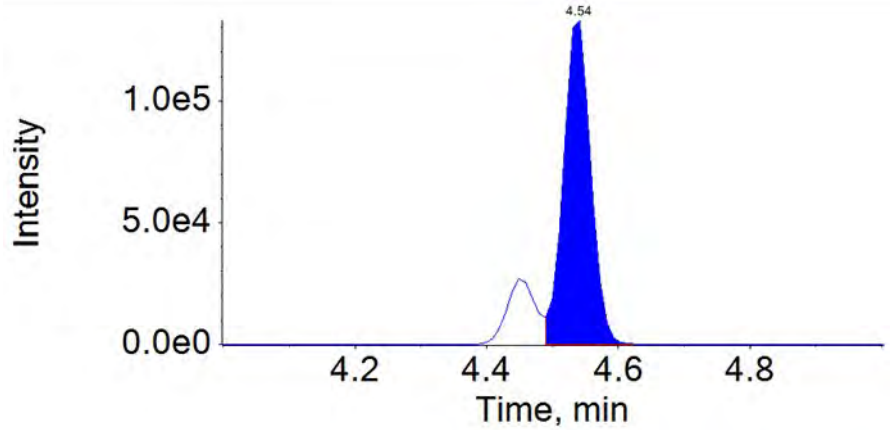
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

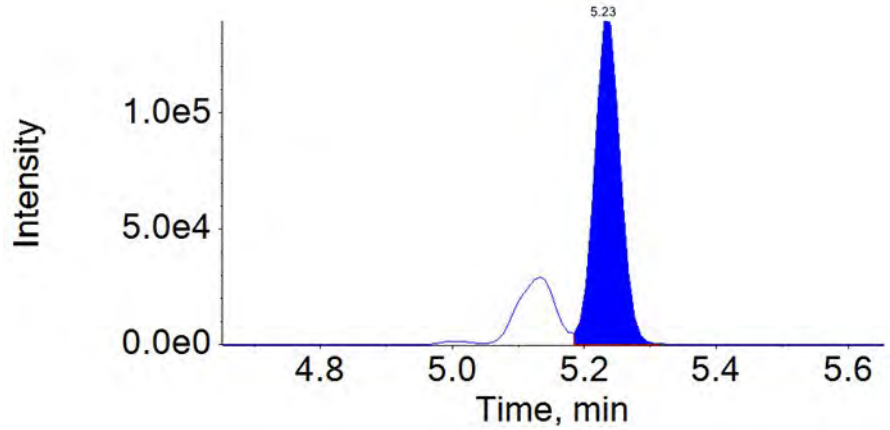
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

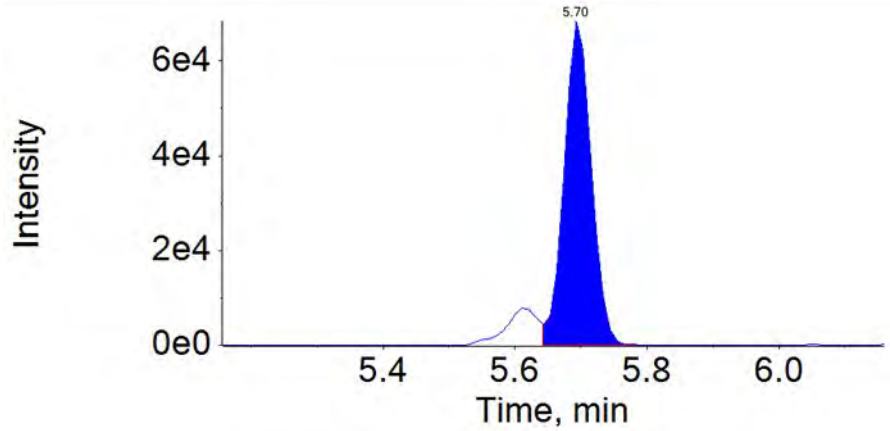
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

Results Table Name: 18NOV29DCCV6-9
Results Table Date: 11/30/2018 3:21:11 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFHxS **RT (min.):** 4.54 **Peak Area:** 384345.6 **Mass Range:** 399.0 / 80.0 **File Name:** 18NOV29D-64.wiff **Sample Name:** CCV6_CAL4	 **Integration Comment:** incorrect integration

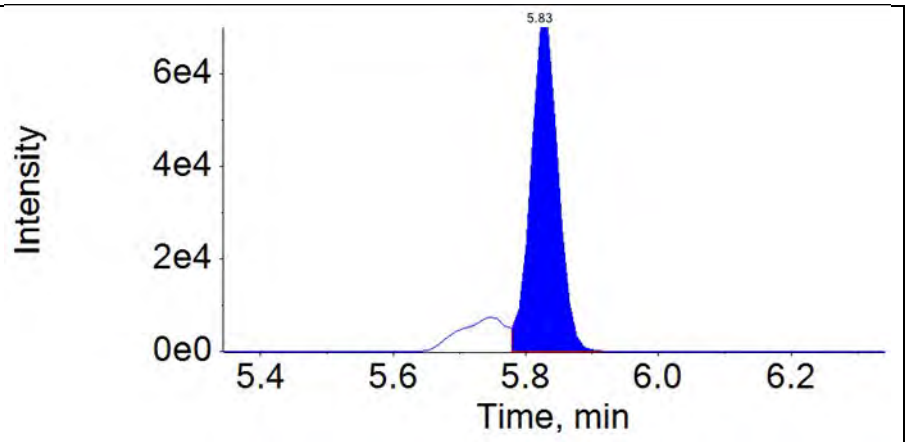
Component Name: PFOS **RT (min.):** 5.23 **Peak Area:** 386727.1 **Mass Range:** 499.0 / 80.0 **File Name:** 18NOV29D-64.wiff **Sample Name:** CCV6_CAL4	 **Integration Comment:** incorrect integration

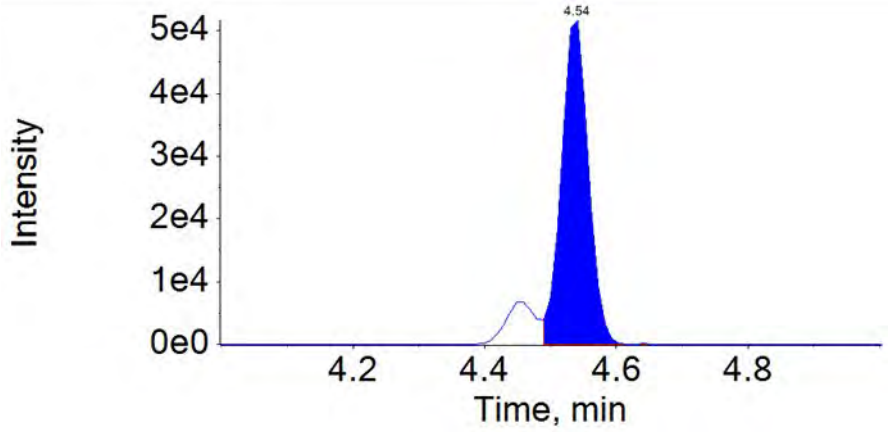
Component Name: NMeFOSAA **RT (min.):** 5.70 **Peak Area:** 196666.7 **Mass Range:** 570.0 / 419.0 **File Name:** 18NOV29D-64.wiff **Sample Name:** CCV6_CAL4	 **Integration Comment:** incorrect integration

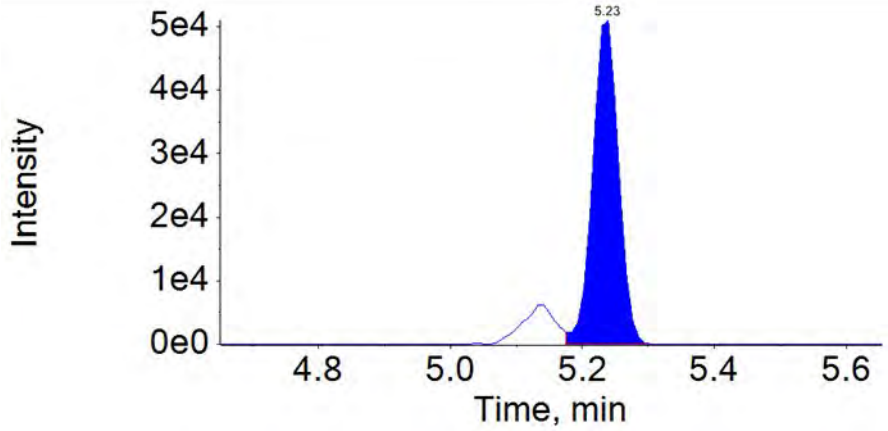
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

Results Table Name: 18NOV29DCCV6-9
Results Table Date: 11/30/2018 3:21:11 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: NEtFOSAA **RT (min.):** 5.83 **Peak Area:** 203534.1 **Mass Range:** 584.0 / 419.0 **File Name:** 18NOV29D-64.wiff **Sample Name:** CCV6_CAL4	 **Integration Comment:** incorrect integration

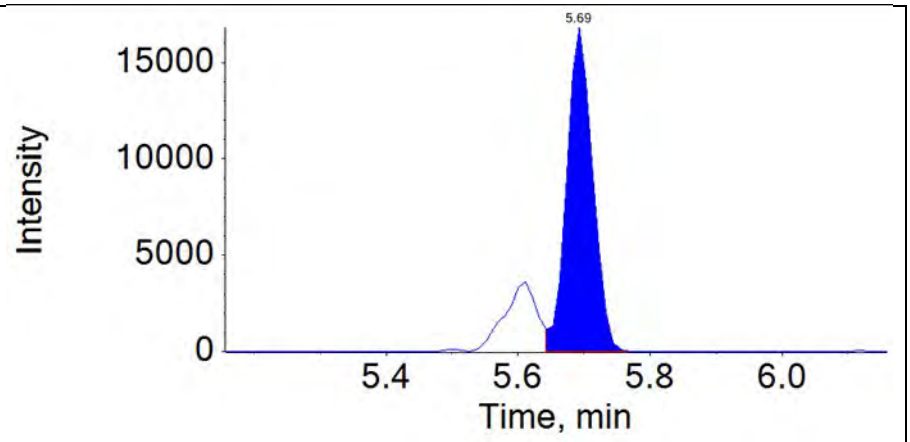
Component Name: PFHxS_2 **RT (min.):** 4.54 **Peak Area:** 147603.4 **Mass Range:** 399.0 / 99.0 **File Name:** 18NOV29D-64.wiff **Sample Name:** CCV6_CAL4	 **Integration Comment:** incorrect integration

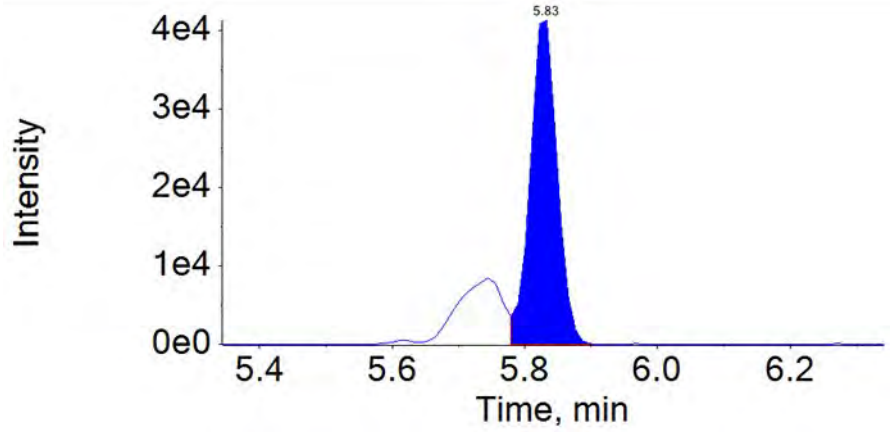
Component Name: PFOS_2 **RT (min.):** 5.23 **Peak Area:** 139568.4 **Mass Range:** 499.0 / 99.0 **File Name:** 18NOV29D-64.wiff **Sample Name:** CCV6_CAL4	 **Integration Comment:** incorrect integration

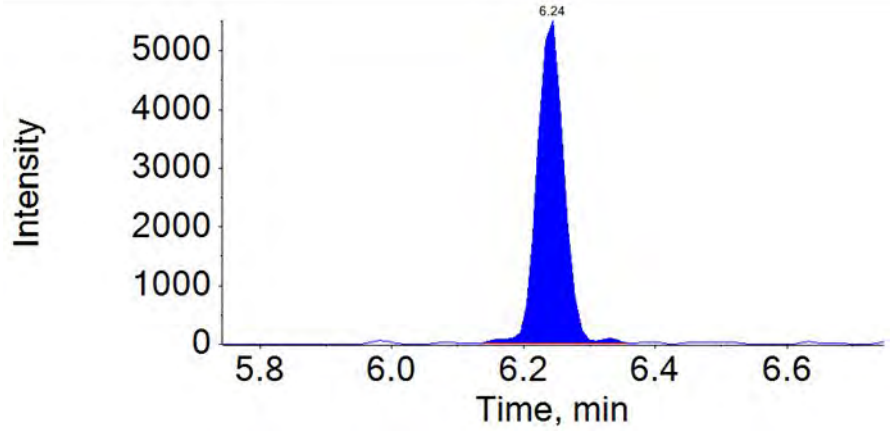
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

Results Table Name: 18NOV29DCCV6-9
Results Table Date: 11/30/2018 3:21:11 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: NMeFOSAA_2 **RT (min.):** 5.69 **Peak Area:** 46000.9 **Mass Range:** 570.0 / 483.0 **File Name:** 18NOV29D-64.wiff **Sample Name:** CCV6_CAL4	 **Integration Comment:** incorrect integration

Component Name: NEtFOSAA_2 **RT (min.):** 5.83 **Peak Area:** 117480.7 **Mass Range:** 584.0 / 526.0 **File Name:** 18NOV29D-64.wiff **Sample Name:** CCV6_CAL4	 **Integration Comment:** incorrect integration

Component Name: PFTrDA_2 **RT (min.):** 6.24 **Peak Area:** 15556.4 **Mass Range:** 663.0 / 169.0 **File Name:** 18NOV29D-64.wiff **Sample Name:** CCV6_CAL4	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

Results Table Name: 18NOV29DCCV6-9
Results Table Date: 11/30/2018 3:21:11 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

Ion Ratio Report

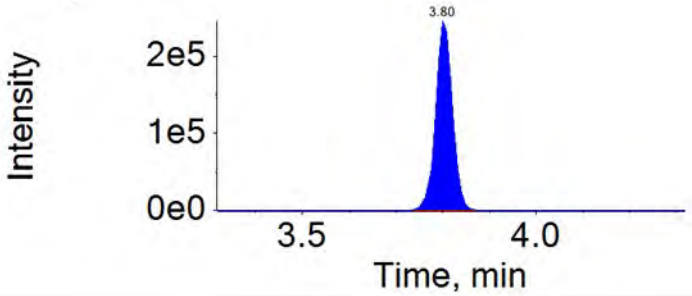
Sample Name: CCV6_CAL4 **Instrument Name:** LM27631 **File Name:** 18NOV29D-64.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.80	1.00	609993.7	A	N/A	0.3626			
PFBS_2	3.80	1.00	221209.7	A	N/A	0.3626	-1	50	
4:2-FTS	4.11	1.00	184688.7	A	N/A	0.6561			
4:2-FTS_2	4.11	1.00	121173.6	A	N/A	0.6561	3	50	
PFHxA	4.15	1.00	1387308.0	A	N/A	0.0113			
PFHxA_2	4.15	1.00	15638.7	A	N/A	0.0113	9	50	
PFPeS	4.17	1.10	321453.2	A	N/A	0.5199			
PFPeS_2	4.17	1.10	167128.9	A	N/A	0.5199	4	50	
PFHpA	4.54	1.00	1397029.6	A	N/A	0.0526			
PFHpA_2	4.53	1.00	73436.8	A	N/A	0.0526	-6	50	
PFHxS	4.54	1.00	466399.5	M	N/A	0.3627			
PFHxS_2	4.54	1.00	169164.2	M	N/A	0.3627	-2	50	
6:2-FTS	4.89	1.00	179952.5	A	N/A	0.6838			
6:2-FTS_2	4.89	1.00	123058.7	A	N/A	0.6838	3	50	
PFHpS	4.90	1.08	482601.2	A	N/A	0.4096			
PFHpS_2	4.90	1.08	197662.9	A	N/A	0.4096	5	50	
PFOA	4.90	1.00	1506521.1	A	N/A	0.0575			
PFOA_2	4.90	1.00	86578.8	A	N/A	0.0575	0	50	
PFOS	5.23	1.00	507772.2	M	N/A	0.3179			
PFOS_2	5.23	1.00	161429.0	M	N/A	0.3179	7	50	
PFNA	5.25	1.00	1378868.3	A	N/A	0.0223			
PFNA_2	5.25	1.00	30701.9	A	N/A	0.0223	11	50	
PFNS	5.53	1.06	359004.1	A	N/A	0.4601			
PFNS_2	5.53	1.06	165180.5	A	N/A	0.4601	-4	50	
PFDA	5.55	1.00	1238904.3	A	N/A	0.0070			
PFDA_2	5.55	1.00	8647.5	A	N/A	0.0070	-7	50	
8:2-FTS	5.56	1.00	195089.6	A	N/A	0.6131			
8:2-FTS_2	5.56	1.00	119606.5	A	N/A	0.6131	14	50	
NMeFOSAA	5.70	1.00	222950.9	M	N/A	0.2609			
NMeFOSAA_2	5.69	1.00	58156.9	M	N/A	0.2609	13	50	
PFDS	5.79	1.11	286894.2	A	N/A	0.5379			
PFDS_2	5.79	1.11	154307.8	A	N/A	0.5379	0	50	
PFUnDA	5.81	1.00	1252226.8	A	N/A	0.0046			
PFUnDA_2	5.82	1.00	5734.5	A	N/A	0.0046	20	50	
NEtFOSAA	5.83	1.00	239375.0	M	N/A	0.6558			
NEtFOSAA_2	5.83	1.00	156975.3	M	N/A	0.6558	-11	50	
PFDoDA	6.04	1.00	1726918.5	A	N/A	0.0120			
PFDoDA_2	6.04	1.00	20744.6	A	N/A	0.0120	-8	50	
10:2-FTS	6.06	1.09	185245.7	A	N/A	0.7610			
10:2-FTS_2	6.06	1.09	140966.2	A	N/A	0.7610	9	50	
PFTrDA	6.24	1.03	1695782.7	A	N/A	0.0091			
PFTrDA_2	6.24	1.03	15412.4	M	N/A	0.0091	1	50	
PFTeDA	6.42	1.00	1214917.2	A	N/A	0.0059			
PFTeDA_2	6.42	1.00	7159.2	A	N/A	0.0059	5	50	
PFHxDA	6.72	1.05	634623.0	A	N/A	0.0599			
PFHxDA_2	6.72	1.05	38033.4	A	N/A	0.0599	-7	50	
PFODA	6.98	1.09	509959.1	A	N/A	0.0255			
PFODA_2	6.98	1.09	12993.9	A	N/A	0.0255	-4	50	

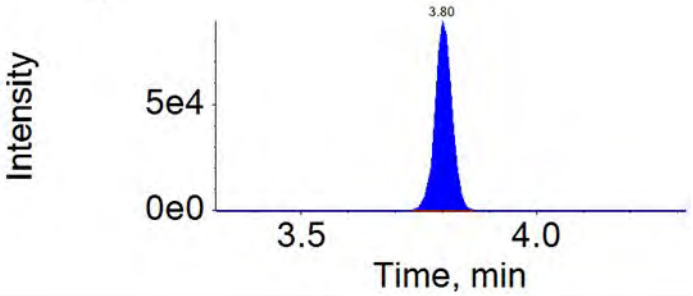
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

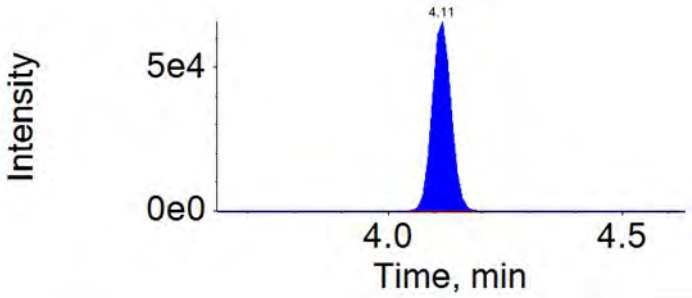
Component: PFBS
Primary Mass: 299.0 / 80.0



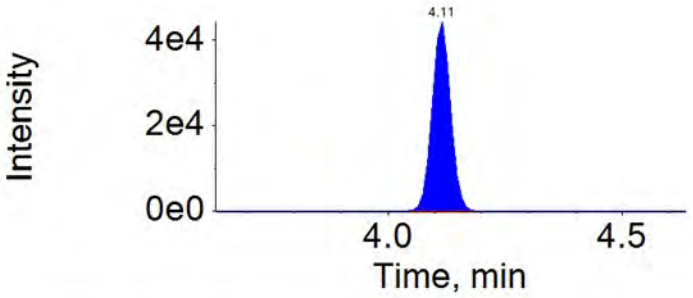
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



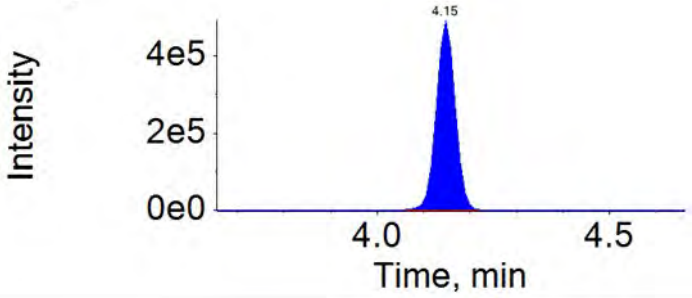
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



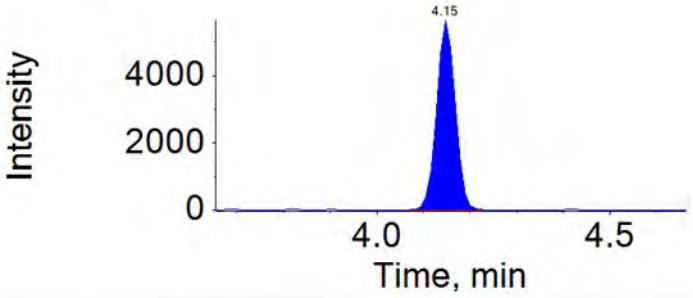
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



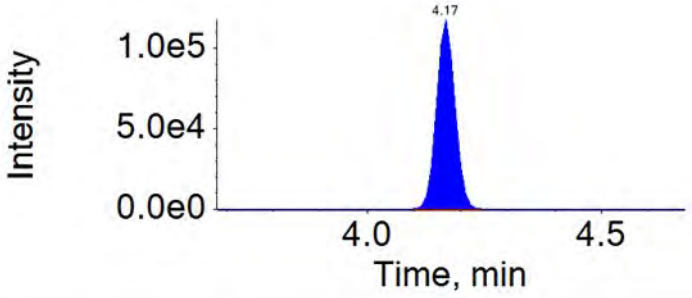
Component: PFHxA
Primary Mass: 313.0 / 269.0



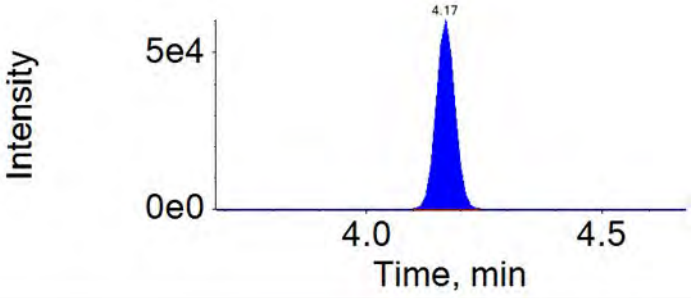
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



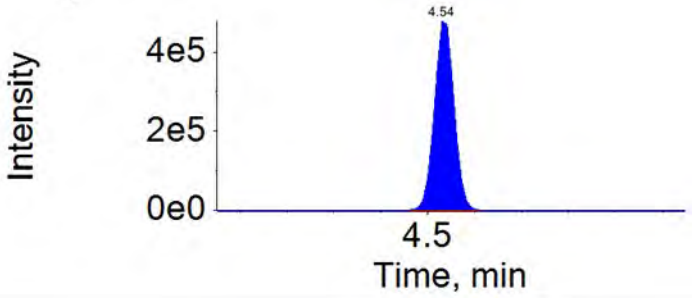
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



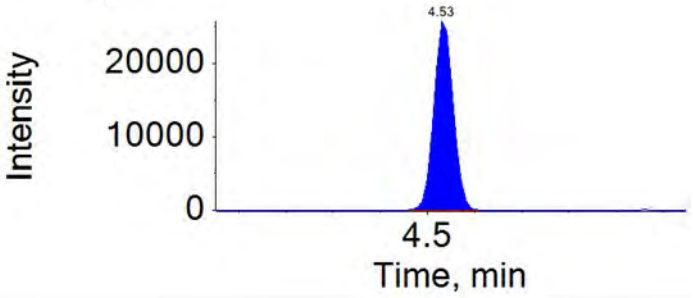
APPROVED
By MCD at 3:27 pm, 11/30/18

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By HMK at 1:40 pm, 12/6/18

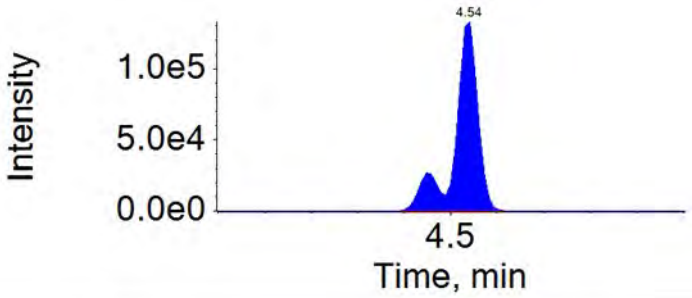
Component: PFHpA
Primary Mass: 363.0 / 319.0



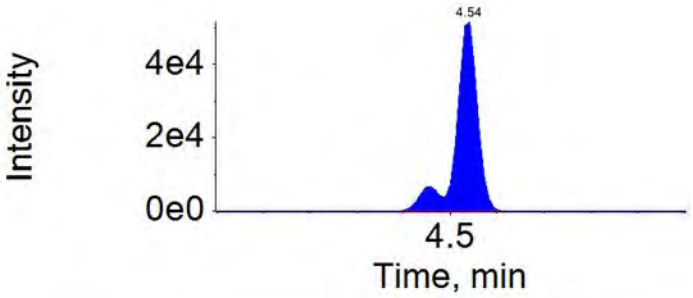
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



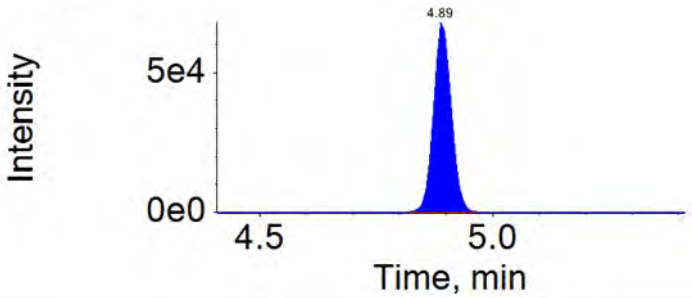
Component: PFHxS
Primary Mass: 399.0 / 80.0



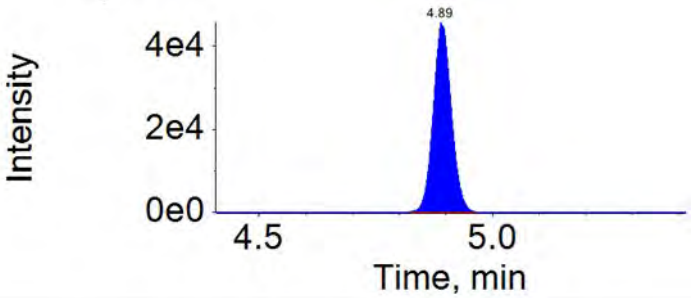
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Secondary Mass: 399.0 / 99.0



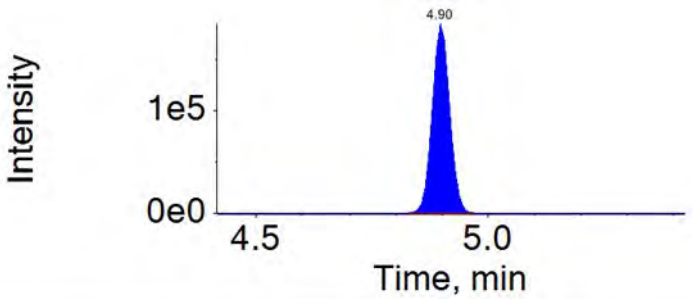
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



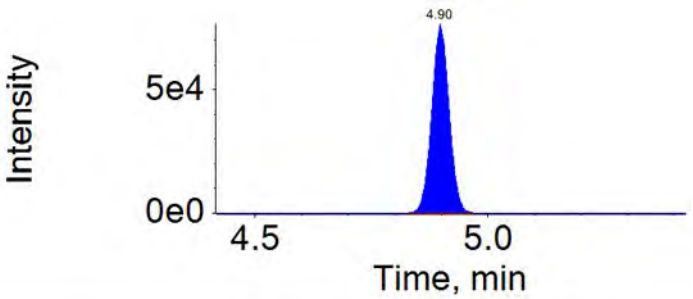
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



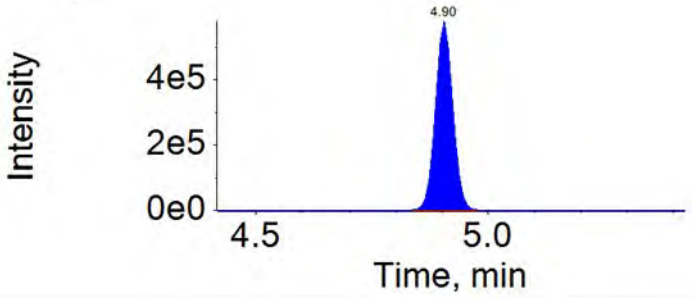
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



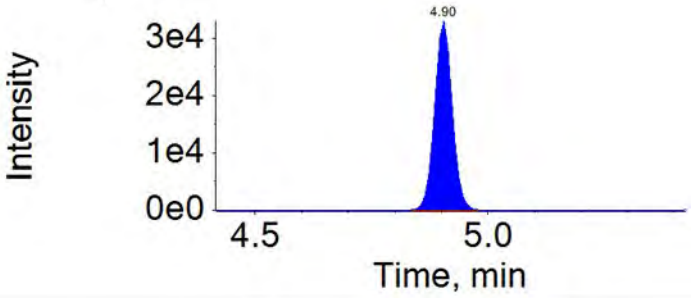
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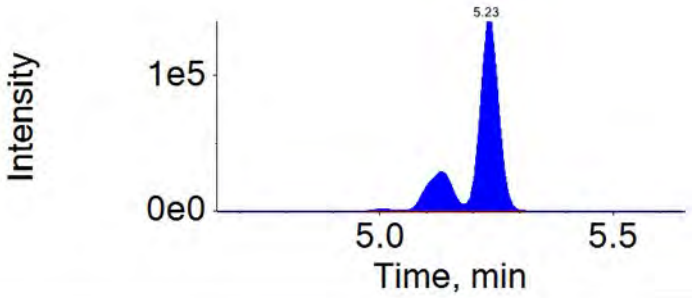
Component: PFOA
Primary Mass: 413.0 / 369.0



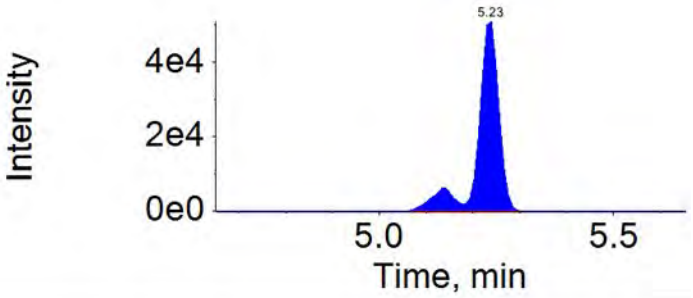
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



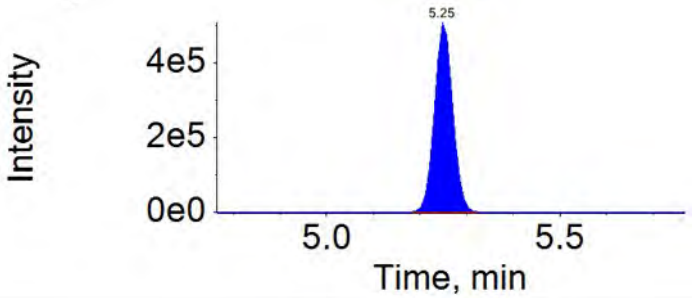
Component: PFOS
Primary Mass: 499.0 / 80.0



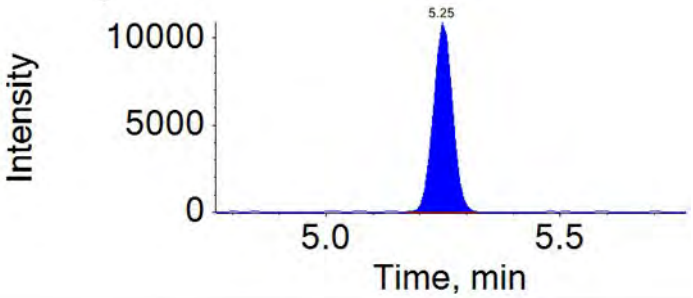
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



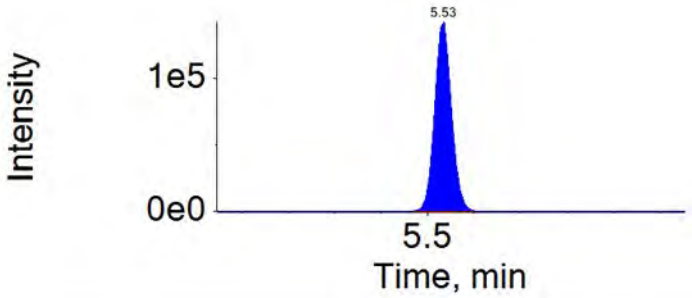
Component: PFNA
Primary Mass: 463.0 / 419.0



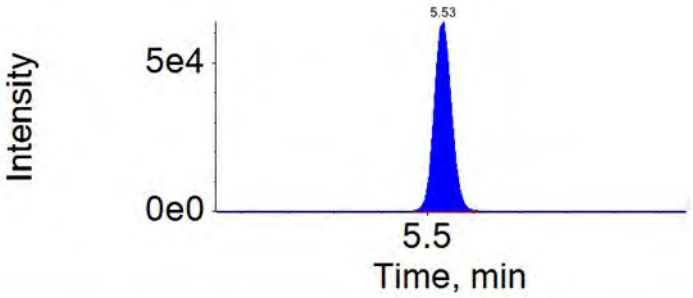
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



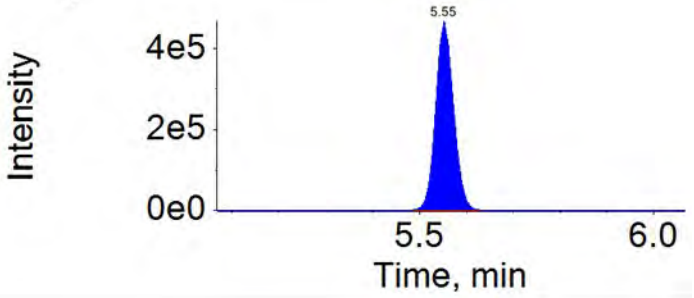
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



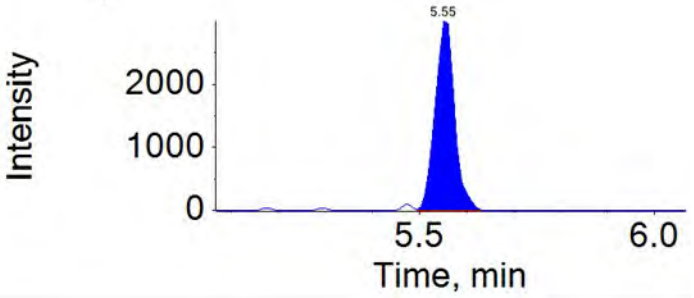
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

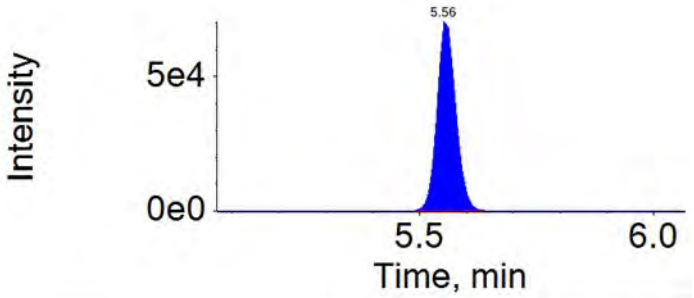
Component: PFDA
Primary Mass: 513.0 / 469.0



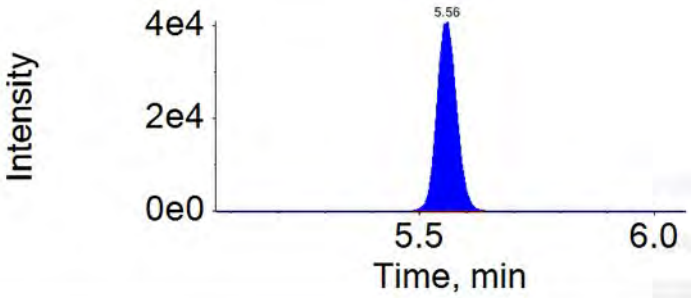
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



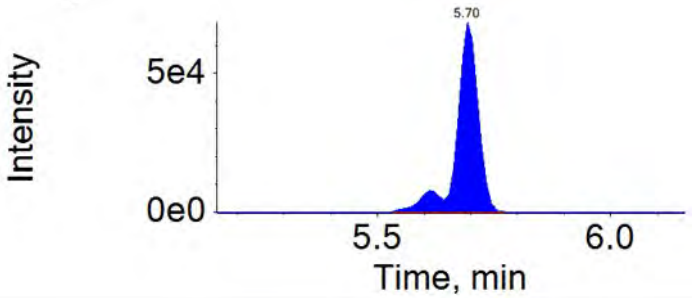
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



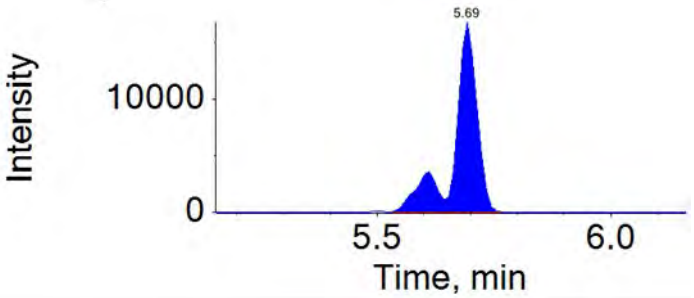
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



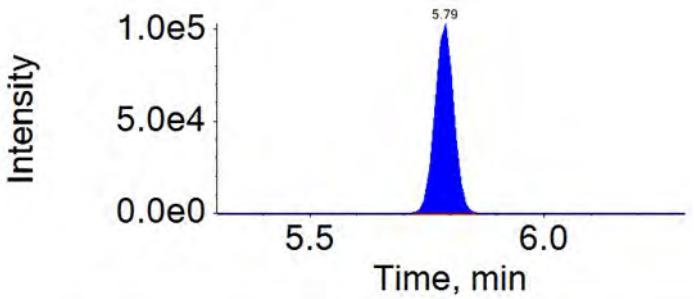
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



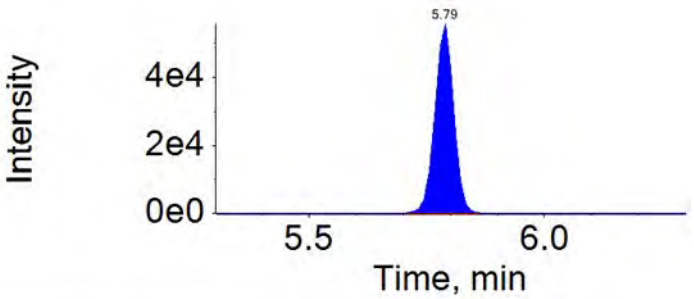
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



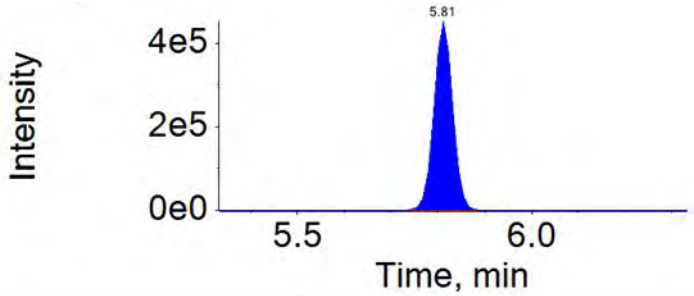
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



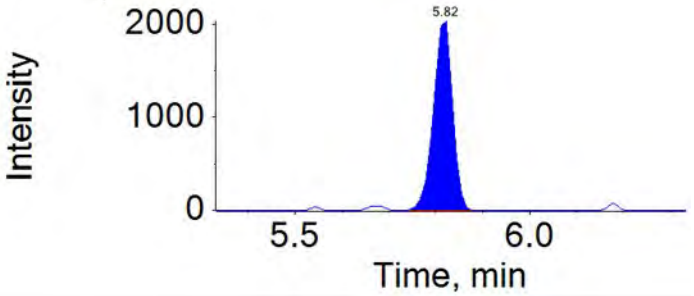
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

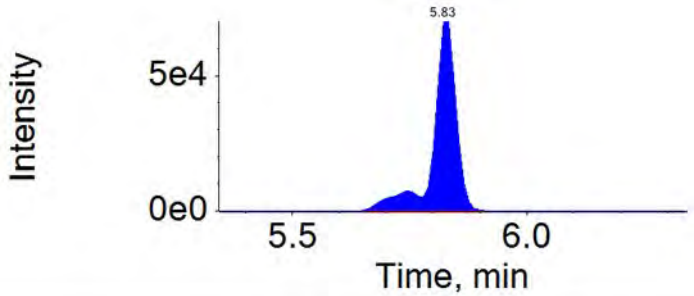
Component: PFUnDA
Primary Mass: 563.0 / 519.0



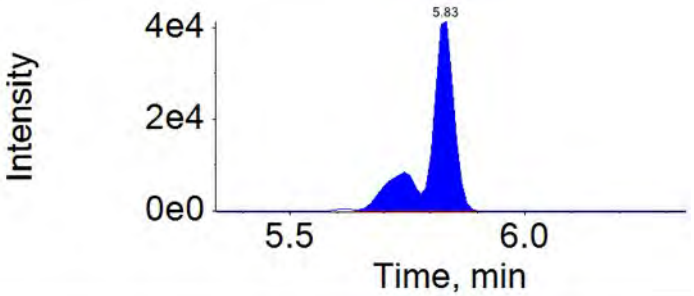
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



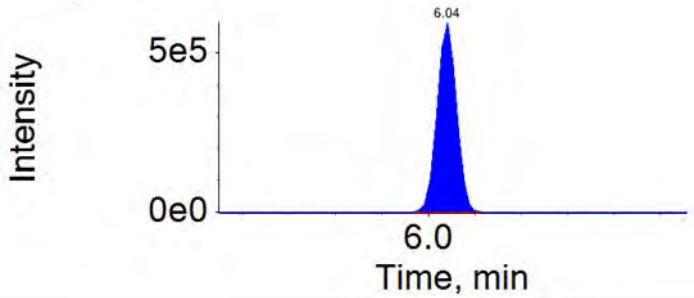
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



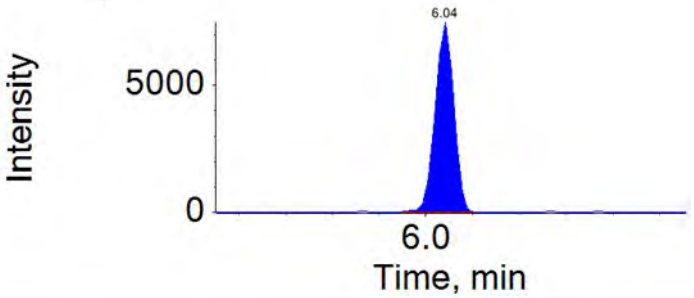
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



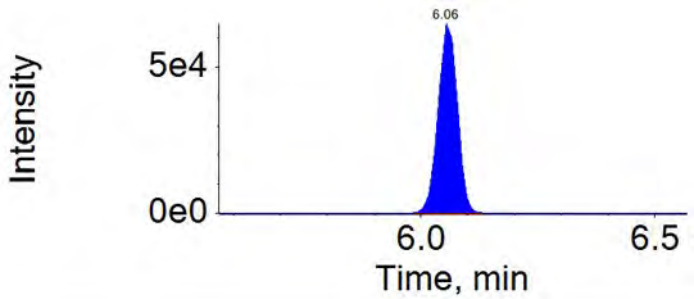
Component: PFDoDA
Primary Mass: 613.0 / 569.0



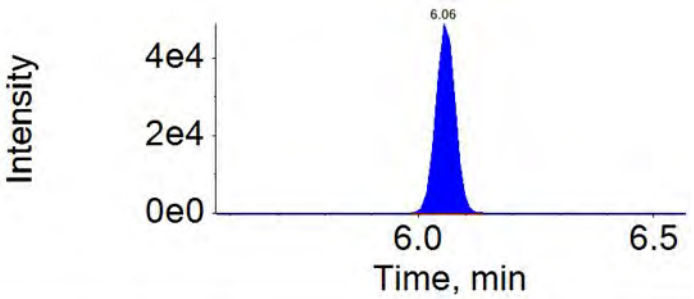
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



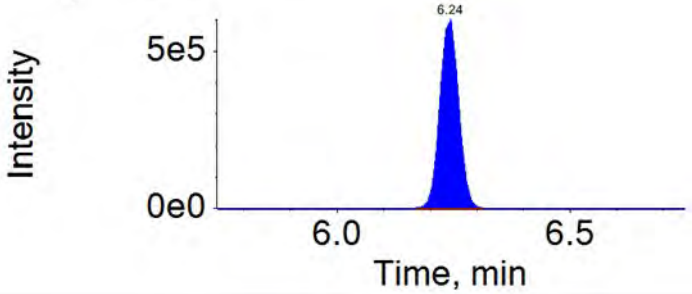
Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



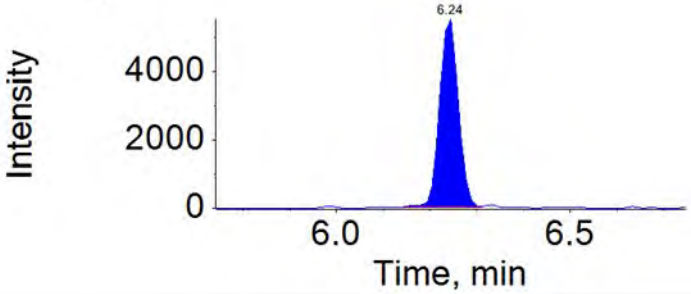
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



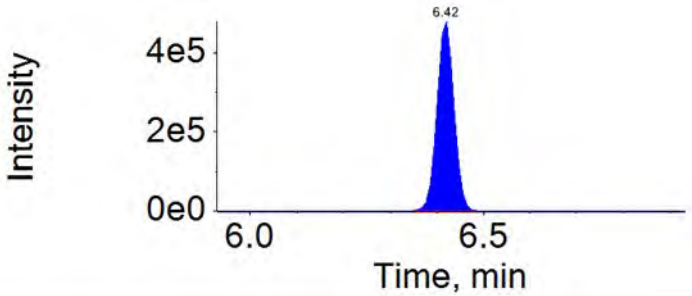
Component: PFTrDA
Primary Mass: 663.0 / 619.0



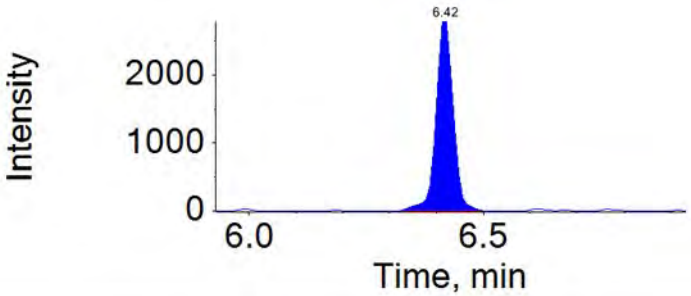
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



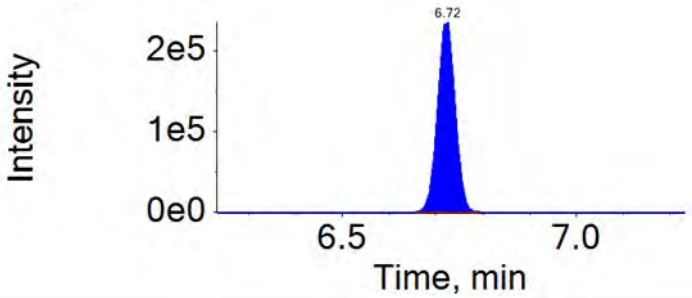
Component: PFTeDA
Primary Mass: 713.0 / 669.0



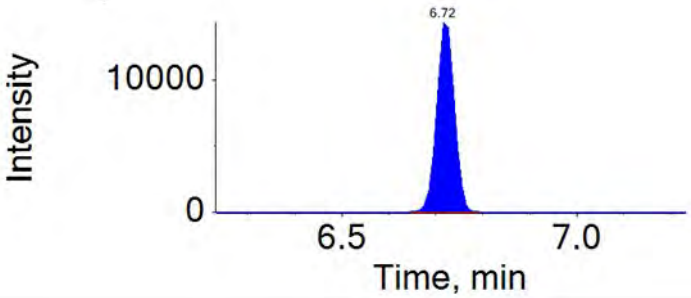
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



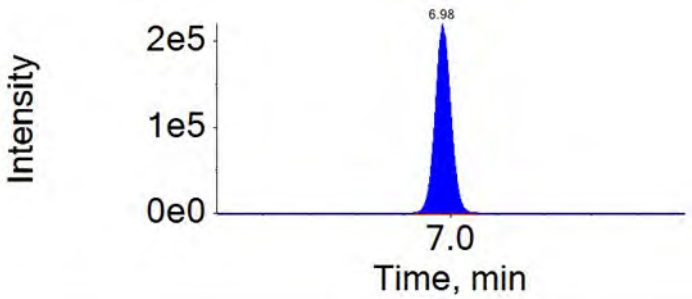
Component: PFHxDA
Primary Mass: 813.0 / 769.0



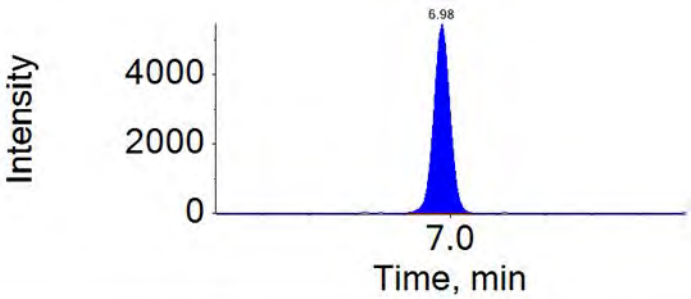
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



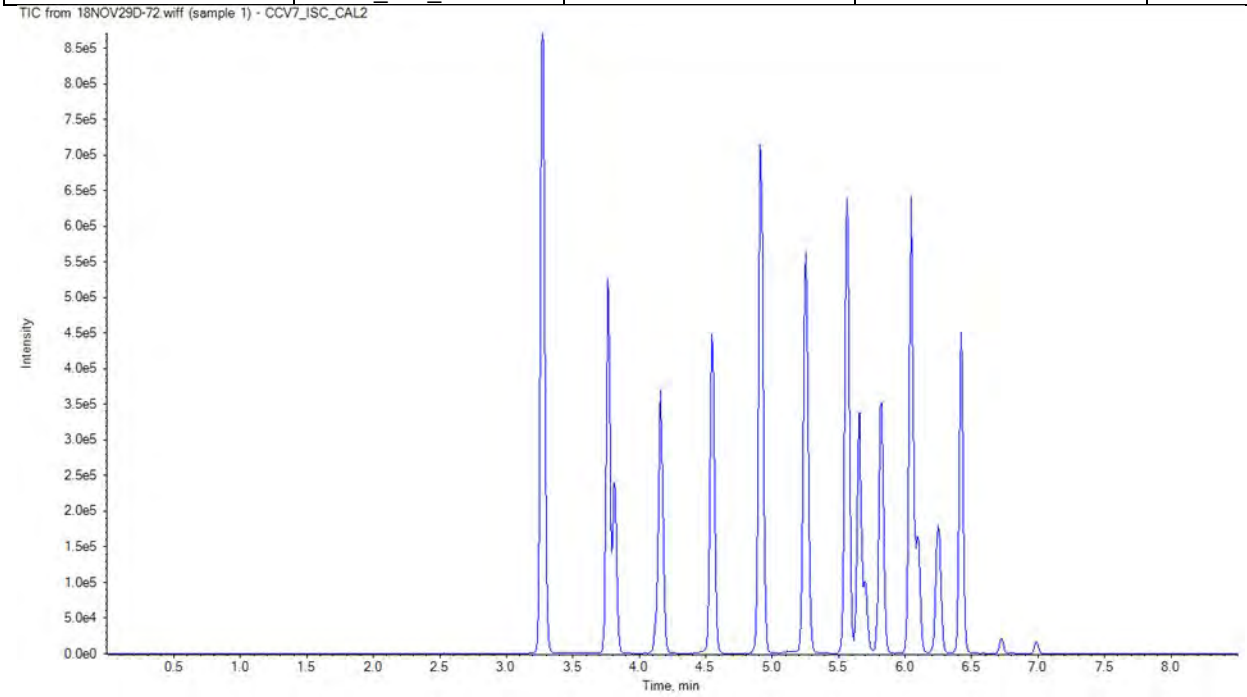
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By HMK at 1:40 pm, 12/6/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:19:02 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV7_ISC_CAL2	CALBRN21833C	18NOV29D-72.wiff	2018-11-29T20:38:03



Injection Standard Area Reference File: 18NOV29D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	898536.5	906425.4	-1	50	
13C2-PFOA	5.0	471690.2	495984.0	-5	50	
13C4-PFOS	4.8	309413.3	296261.8	4	50	
13C2-PFDA	5.0	465698.3	451203.0	3	50	

APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:19:02 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	CCV7_ISC_CAL2	CALBRN21833C	18NOV29D-72.wiff	2018-11-29T20:38:03

Analyte Name	Analyte Area	Sc /pk	Ext Std Name	Ext Std Area	Ext Std con	Area Ratio	RT (min)	RRT	Spec Amt	Calc Amt	% Diff	% Diff Lim	% Diff OOS
PFBA	107474.9	10	13C4-PFBA	1020064.9	5.0	0.105	3.27	1.000	0.600	0.578	-4	30	
PFPeA	102994.2	12	13C5-PFPeA	959635.9	5.0	0.107	3.77	1.000	0.600	0.527	-12	30	
PFBS	43546.1	10	13C3-PFBS	447017.8	4.7	0.097	3.82	1.000	0.531	0.473	-11	30	
4:2-FTS	13618.8	11	13C2-4:2-FTS	67161.7	4.7	0.203	4.13	1.000	0.560	0.543	-3	30	
PFHxA	98812.0	11	13C5-PFHxA	684377.8	5.0	0.144	4.16	1.000	0.600	0.580	-3	30	
PFPeS	22438.2	11	13C3-PFBS	447017.8	4.7	0.050	4.18	1.100	0.563	0.508	-10	30	
PFHpA	108630.6	11	13C4-PFHpA	570216.2	5.0	0.191	4.55	1.000	0.600	0.588	-2	30	
PFHxS	31005.8	19	13C3-PFHxS	336153.1	4.7	0.092	4.55	1.000	0.547	0.432	-21	30	
6:2-FTS	14871.4	11	13C2-6:2-FTS	58955.2	4.8	0.252	4.90	1.000	0.569	0.658	16	30	
PFHpS	34425.5	11	13C3-PFHxS	336153.1	4.7	0.102	4.91	1.080	0.571	0.511	-10	30	
PFOA	108379.5	11	13C8-PFOA	1000465.3	5.0	0.108	4.92	1.000	0.600	0.560	-7	30	
PFOS	36641.4	21	13C8-PFOS	327075.2	4.8	0.112	5.25	1.000	0.555	0.470	-15	30	
PFNA	105821.4	11	13C9-PFNA	663622.3	5.0	0.159	5.26	1.000	0.600	0.611	2	30	
PFNS	26569.2	11	13C8-PFOS	327075.2	4.8	0.081	5.54	1.060	0.576	0.513	-11	30	
PFDA	91975.5	11	13C6-PFDA	883928.1	5.0	0.104	5.56	1.000	0.600	0.589	-2	30	
8:2-FTS	13276.2	12	13C2-8:2-FTS	57238.1	4.8	0.232	5.56	1.000	0.575	0.437	-24	30	
PFOSA	68087.5	12	13C8-PFOSA	661254.4	5.0	0.103	5.65	1.000	0.600	0.522	-13	30	
NMeFOSAA	18118.1	17	d3-NMeFOSAA	191150.0	5.0	0.095	5.70	1.000	0.600	0.605	1	30	
PFDS	21049.9	12	13C8-PFOS	327075.2	4.8	0.064	5.79	1.100	0.578	0.510	-12	30	
PFUnDA	94365.1	11	13C7-PFUnDA	590137.5	5.0	0.160	5.82	1.000	0.600	0.572	-5	30	
NEtFOSAA	16845.3	22	d5-NEtFOSAA	154469.4	5.0	0.109	5.84	1.000	0.600	0.531	-11	30	
PFDoDA	120450.1	11	13C2-PFDoDA	1195589.2	5.0	0.101	6.04	1.000	0.600	0.552	-8	30	
10:2-FTS	13124.4	12	13C2-8:2-FTS	57238.1	4.8	0.229	6.06	1.090	0.578	0.506	-13	30	
NMePFOSAE	34280.1	11	d7-NMePFOSAE	270731.7	5.0	0.127	6.10	1.000	0.600	0.533	-11	30	
NMePFOSA	8960.3	12	d3-NMePFOSA	86905.7	5.0	0.103	6.11	1.000	0.600	0.547	-9	30	
PFDoS	11540.5	11	13C8-PFOS	327075.2	4.8	0.035	6.21	1.180	0.581	0.507	-13	30	
NEtPFOSAE	40355.4	11	d9-NEtPFOSAE	229696.2	5.0	0.176	6.26	1.000	0.600	0.632	5	30	
NEtPFOSA	8304.0	12	d5-NEtPFOSA	73267.1	5.0	0.113	6.27	1.000	0.600	0.508	-15	30	
PFTrDA	124162.6	11	13C2-PFDoDA	1195589.2	5.0	0.104	6.24	1.030	0.600	0.626	4	30	
PFTeDA	88469.7	10	13C2-PFTeDA	847108.8	5.0	0.104	6.42	1.000	0.600	0.592	-1	30	
PFHxDA	44728.9	11	13C2-PFTeDA	847108.8	5.0	0.053	6.72	1.050	0.600	0.604	1	30	
PFODA	35501.9	10	13C2-PFTeDA	847108.8	5.0	0.042	6.99	1.090	0.600	0.558	-7	30	

APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

Instrument Sensitivity Check/ Continuing Calibration Verfication

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:19:02 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	CCV7_ISC_CAL2			**Data File:**		18NOV29D-72.wiff
Sample ID:	CALBRN21833C			**Acquis Date:**		2018-11-29T20:38:03
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	4			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV29DCCV6-9
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV29D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	898536.5	906425.4	-1	50	
13C2-PFOA	5.0	471690.2	495984.0	-5	50	
13C4-PFOS	4.8	309413.3	296261.8	4	50	
13C2-PFDA	5.0	465698.3	451203.0	3	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	1020064.9	13C3-PFBA	898536.5	1.135	5.000	5.065	101	70-130	
E13C5-PFPeA	959635.9	13C3-PFBA	898536.5	1.068	5.000	4.987	100	70-130	
E13C3-PFBS	447017.8	13C3-PFBA	898536.5	0.497	4.650	4.746	102	70-130	
E13C2-4:2-FTS	67161.7	13C2-PFOA	471690.2	0.142	4.670	4.907	105	70-130	
E13C5-PFHxA	684377.8	13C2-PFOA	471690.2	1.451	5.000	5.329	107	70-130	
E13C3-PFHxS	336153.1	13C2-PFOA	471690.2	0.713	4.730	5.586	118	70-130	
E13C4-PFHpA	570216.2	13C2-PFOA	471690.2	1.209	5.000	5.555	111	70-130	
E13C2-6:2-FTS	58955.2	13C2-PFOA	471690.2	0.125	4.750	5.232	110	70-130	
E13C8-PFOA	1000465.2	13C2-PFOA	471690.2	2.121	5.000	5.838	117	70-130	
E13C8-PFOS	327075.2	13C4-PFOS	309413.3	1.057	4.780	4.772	100	70-130	
E13C9-PFNA	663622.3	13C4-PFOS	309413.3	2.145	5.000	4.711	94	70-130	
E13C6-PFDA	883928.1	13C2-PFDA	465698.3	1.898	5.000	5.352	107	70-130	
E13C2-8:2-FTS	57238.1	13C2-PFDA	465698.3	0.123	4.790	5.283	110	70-130	
E13C8-PFOSA	661254.4	13C2-PFDA	465698.3	1.420	5.000	5.210	104	70-130	
Ed3-NMeFOSAA	191150.0	13C2-PFDA	465698.3	0.410	5.000	5.211	104	70-130	
E13C7-PFUnDA	590137.5	13C2-PFDA	465698.3	1.267	5.000	5.356	107	70-130	
Ed5-NEtFOSAA	154469.4	13C2-PFDA	465698.3	0.332	5.000	5.909	118	70-130	
E13C2-PFDoDA	1195589.2	13C2-PFDA	465698.3	2.567	5.000	5.394	108	70-130	
Ed7-NMePFOSAE	270731.7	13C2-PFDA	465698.3	0.581	5.000	5.024	100	70-130	
Ed3-NMePFOSA	86905.7	13C2-PFDA	465698.3	0.187	5.000	5.051	101	70-130	
Ed9-NEtPFOSAE	229696.2	13C2-PFDA	465698.3	0.493	5.000	5.000	100	70-130	
Ed5-NEtPFOSA	73267.1	13C2-PFDA	465698.3	0.157	5.000	5.467	109	70-130	
E13C2-PFTeDA	847108.8	13C2-PFDA	465698.3	1.819	5.000	5.033	101	70-130	

APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

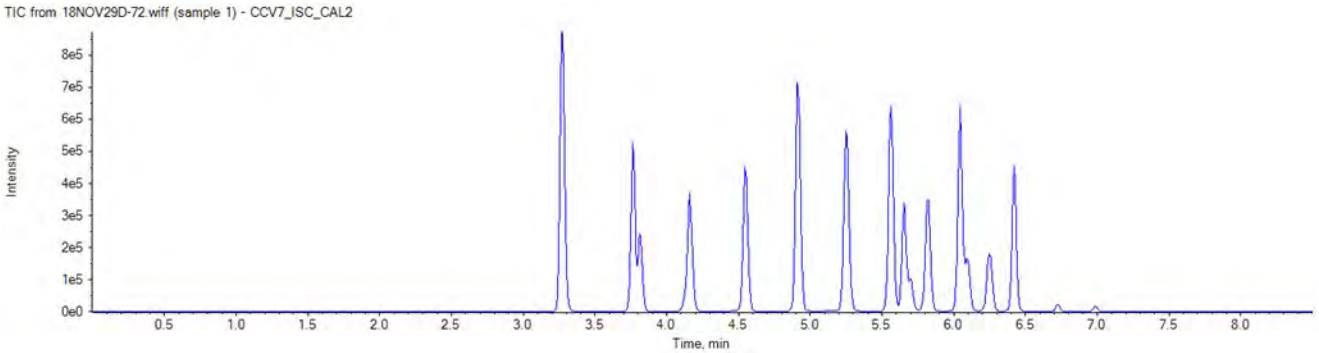
Analyte Quantitation Peak Table

Sample Name: CCV7_ISC_CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV29D-72.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	107474.9		A	13C4-PFBA	3.27	1020064.9	0.105	0.578
PFPeA	3.77	1.000	102994.2		A	13C5-PFPeA	3.77	959635.9	0.107	0.527
PFBS	3.82	1.000	43546.1		A	13C3-PFBS	3.82	447017.8	0.097	0.473
4:2-FTS	4.13	1.000	13618.8		A	13C2-4:2-FTS	4.13	67161.7	0.203	0.543
PFHxA	4.16	1.000	98812.0		A	13C5-PFHxA	4.16	684377.8	0.144	0.580
PFPeS	4.18	1.100	22438.2		A	13C3-PFBS	3.82	447017.8	0.050	0.508
PFHpA	4.55	1.000	108630.6		A	13C4-PFHpA	4.55	570216.2	0.191	0.588
PFHxS	4.55	1.000	31005.8		M	13C3-PFHxS	4.55	336153.1	0.092	0.432
6:2-FTS	4.90	1.000	14871.4		A	13C2-6:2-FTS	4.91	58955.2	0.252	0.658
PFHpS	4.91	1.080	34425.5		A	13C3-PFHxS	4.55	336153.1	0.102	0.511
PFOA	4.92	1.000	108379.5		A	13C8-PFOA	4.91	1000465.3	0.108	0.560
PFOS	5.25	1.000	36641.4		M	13C8-PFOS	5.24	327075.2	0.112	0.470
PFNA	5.26	1.000	105821.4		A	13C9-PFNA	5.26	663622.3	0.159	0.611
PFNS	5.54	1.060	26569.2		A	13C8-PFOS	5.24	327075.2	0.081	0.513
PFDA	5.56	1.000	91975.5		A	13C6-PFDA	5.56	883928.1	0.104	0.589
8:2-FTS	5.56	1.000	13276.2		A	13C2-8:2-FTS	5.57	57238.1	0.232	0.437
PFOSA	5.65	1.000	68087.5		A	13C8-PFOSA	5.65	661254.4	0.103	0.522
NMeFOSAA	5.70	1.000	18118.1		A	d3-NMeFOSAA	5.70	191150.0	0.095	0.605
PFDS	5.79	1.100	21049.9		A	13C8-PFOS	5.24	327075.2	0.064	0.510
PFUnDA	5.82	1.000	94365.1		A	13C7-PFUnDA	5.82	590137.5	0.160	0.572
NEtFOSAA	5.84	1.000	16845.3		M	d5-NEtFOSAA	5.83	154469.4	0.109	0.531
PFDoDA	6.04	1.000	120450.1		A	13C2-PFDoDA	6.04	1195589.2	0.101	0.552
10:2-FTS	6.06	1.090	13124.4		A	13C2-8:2-FTS	5.57	57238.1	0.229	0.506
NMePFOSAE	6.10	1.000	34280.1		A	d7-NMePFOSAE	6.09	270731.7	0.127	0.533
NMePFOSA	6.11	1.000	8960.3		A	d3-NMePFOSA	6.11	86905.7	0.103	0.547
PFDoS	6.21	1.180	11540.5		A	13C8-PFOS	5.24	327075.2	0.035	0.507
NEtPFOSAE	6.26	1.000	40355.4		A	d9-NEtPFOSAE	6.25	229696.2	0.176	0.632
NEtPFOSA	6.27	1.000	8304.0		A	d5-NEtPFOSA	6.27	73267.1	0.113	0.508
PFTrDA	6.24	1.030	124162.6		A	13C2-PFDoDA	6.04	1195589.2	0.104	0.626
PFTeDA	6.42	1.000	88469.7		A	13C2-PFTeDA	6.42	847108.8	0.104	0.592
PFHxDA	6.72	1.050	44728.9		A	13C2-PFTeDA	6.42	847108.8	0.053	0.604
PFODA	6.99	1.090	35501.9		A	13C2-PFTeDA	6.42	847108.8	0.042	0.558

Total Ion Chromatogram

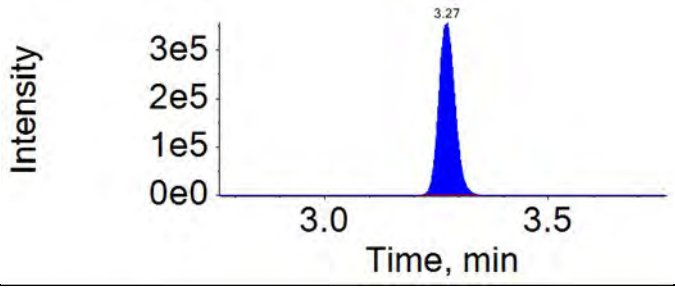


APPROVED
By MCD at 3:27 pm, 11/30/18

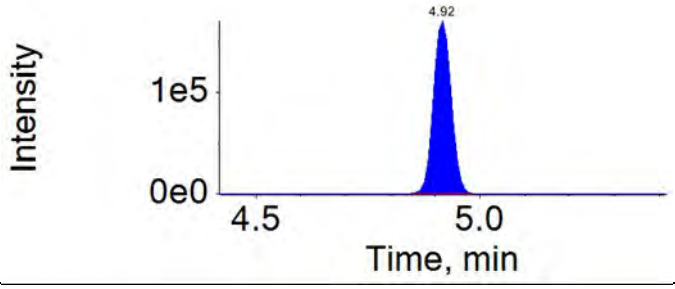
REVIEWED
By umar at 12:38 pm, 12/4/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

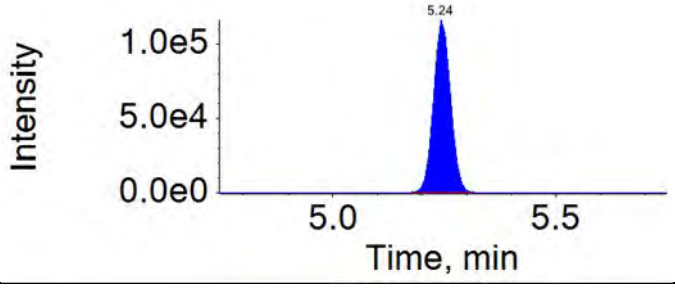
Injection Standard: 13C3-PFBA
216.0 / 172.0



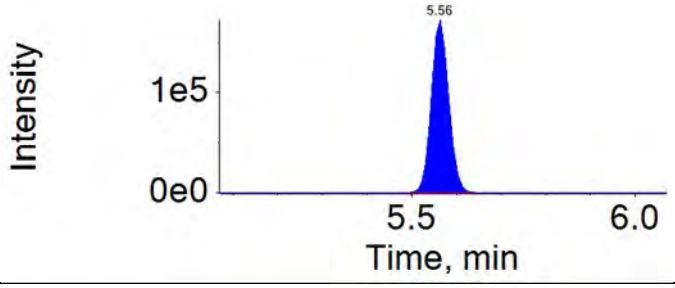
Injection Standard: 13C2-PFOA
415.0 / 370.0



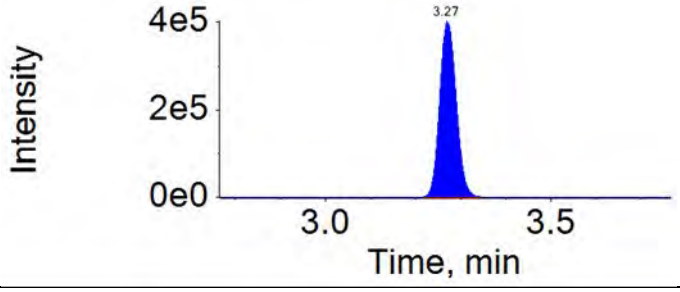
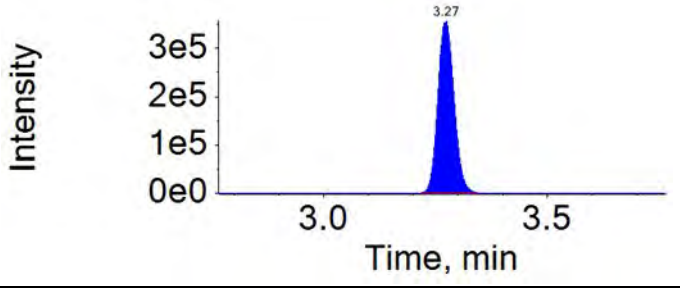
Injection Standard: 13C4-PFOS
503.0 / 80.0

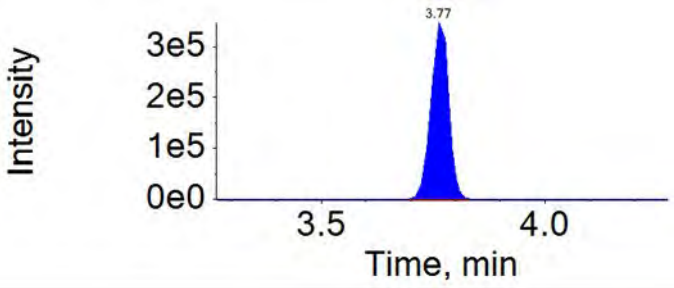
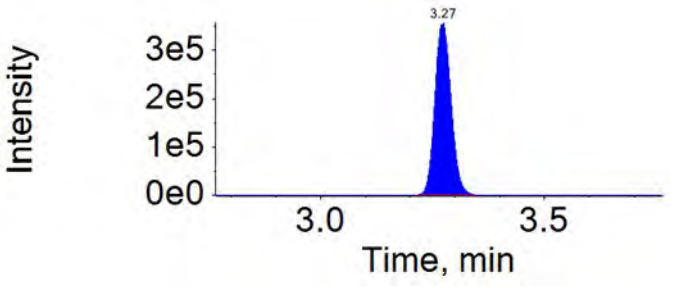


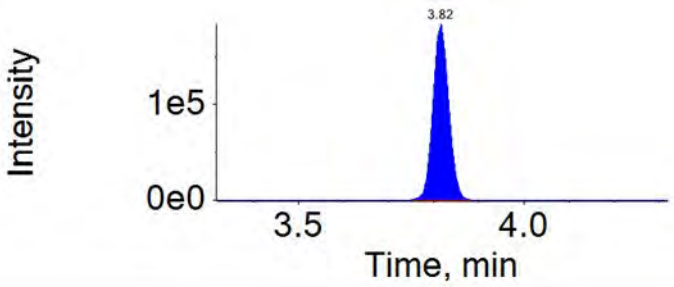
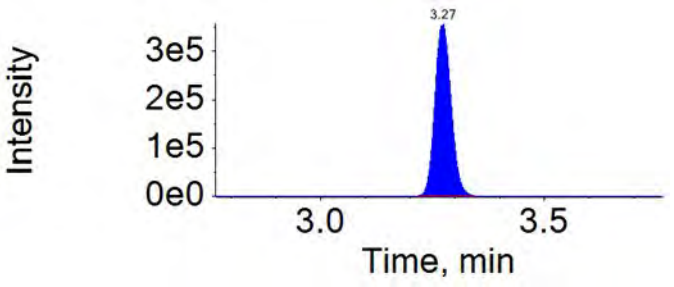
Injection Standard: 13C2-PFDA
515.0 / 470.0

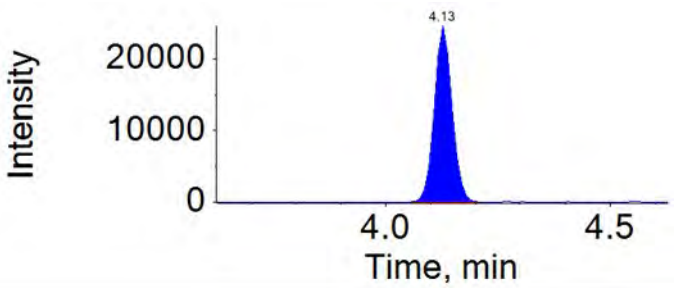
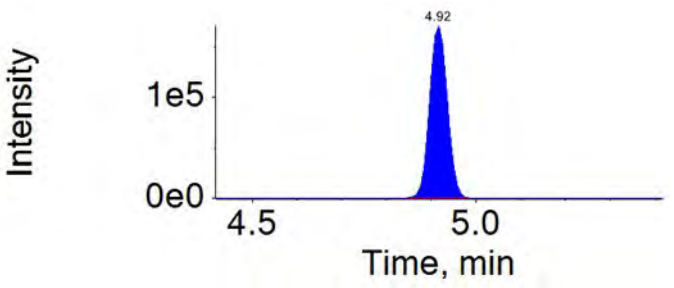


ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

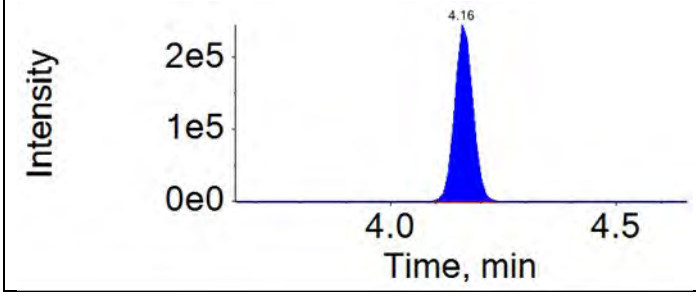
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

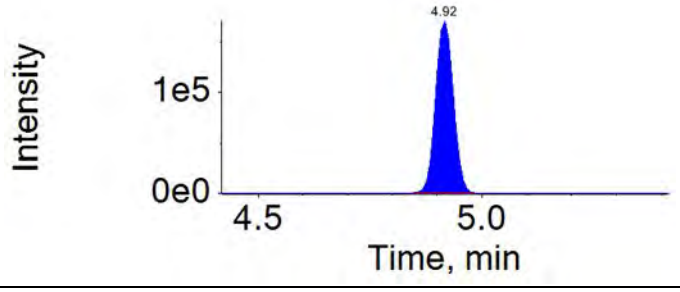
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

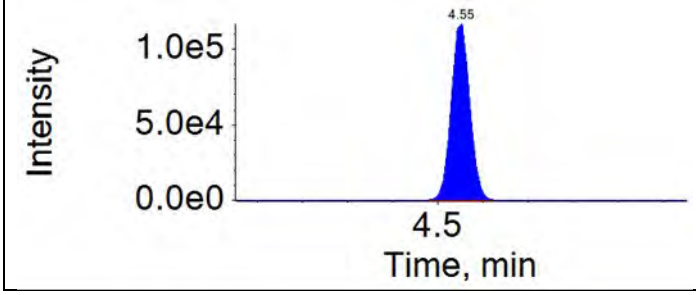
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

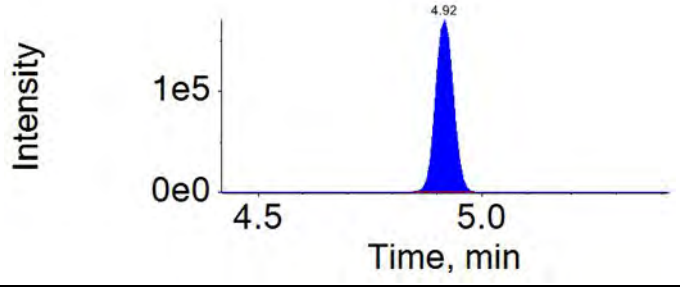
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



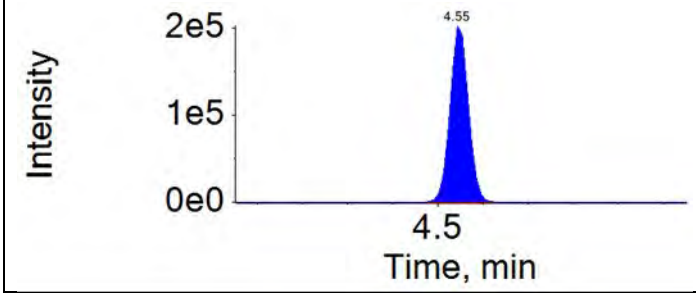


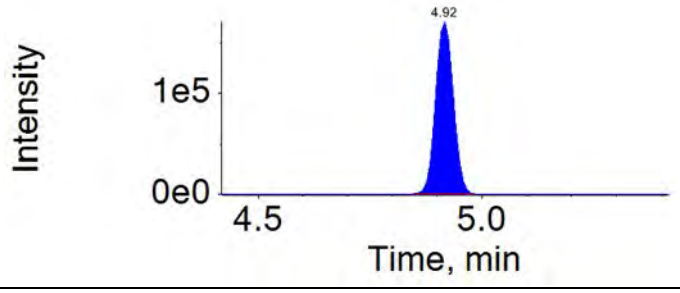
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



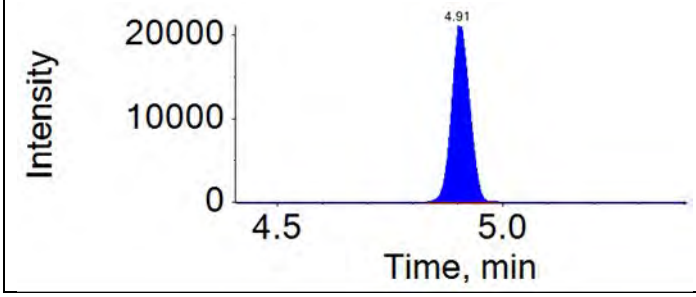


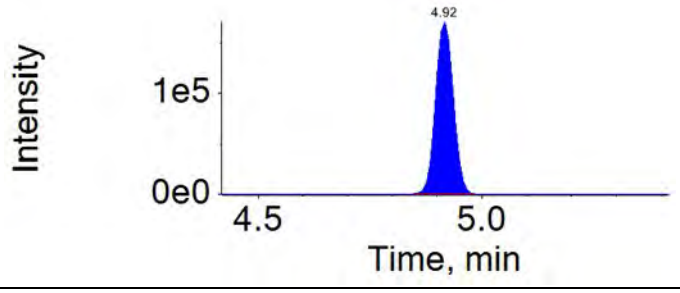
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0



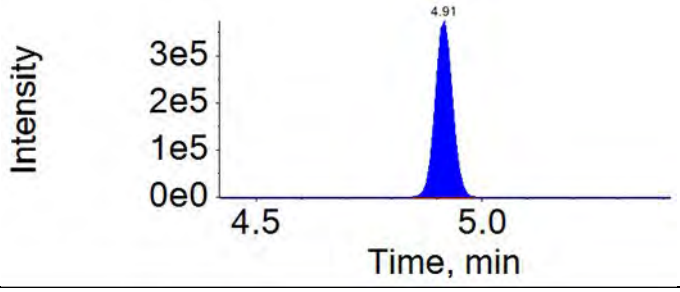
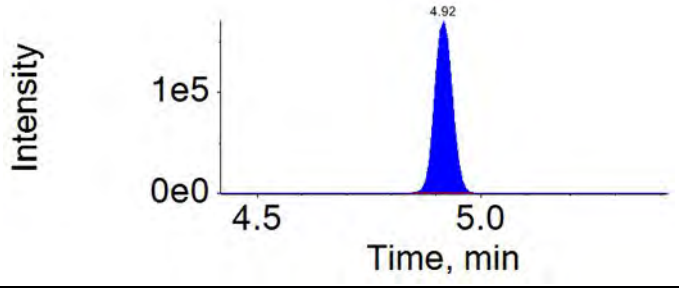


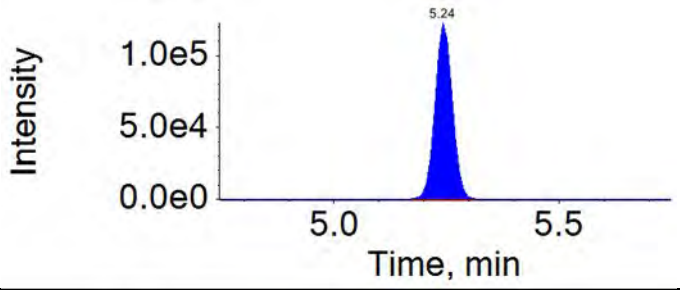
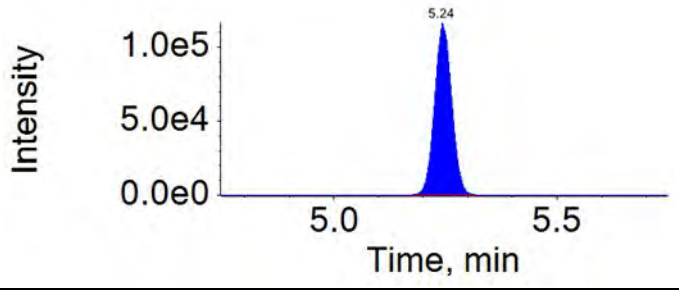
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

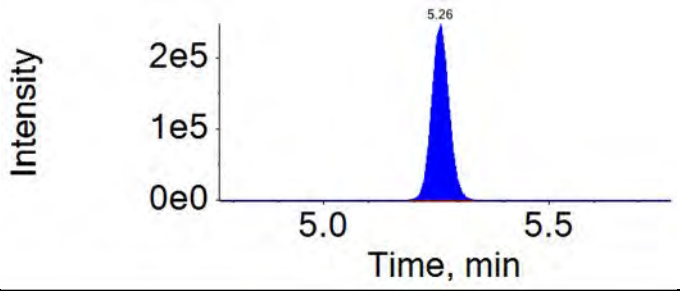
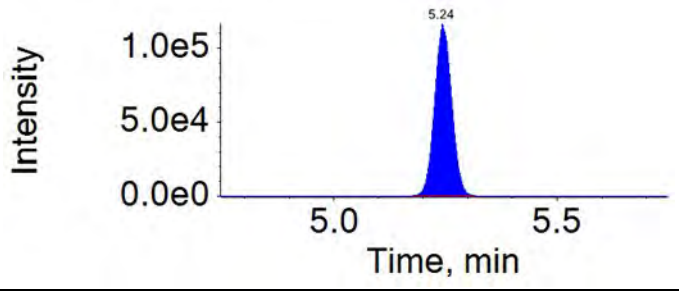


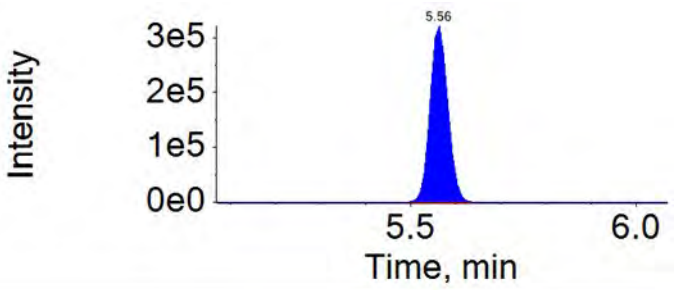
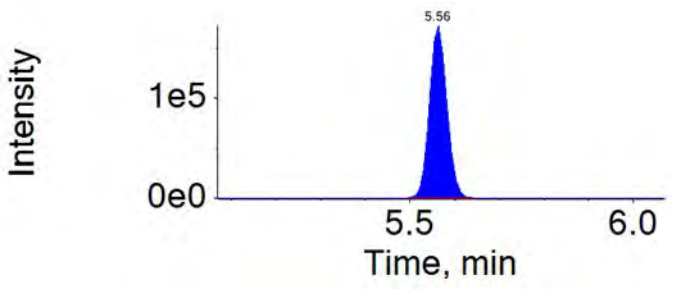


ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

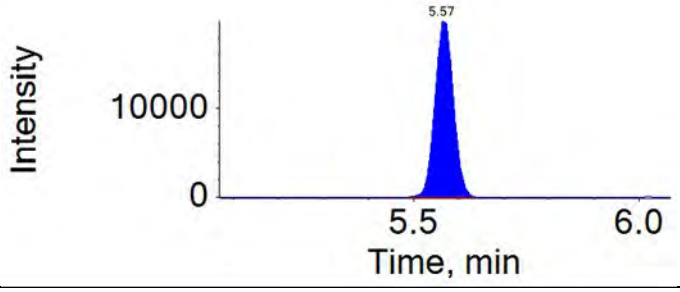
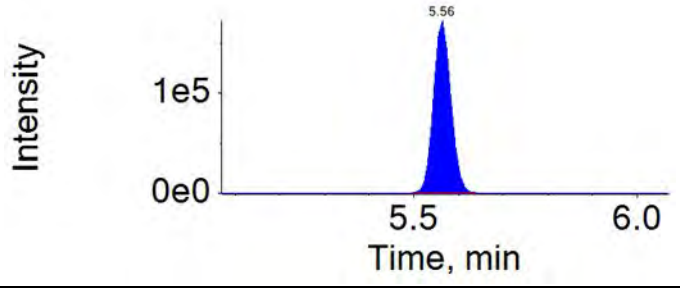
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

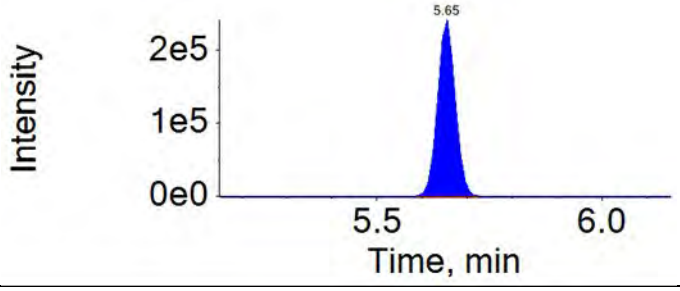
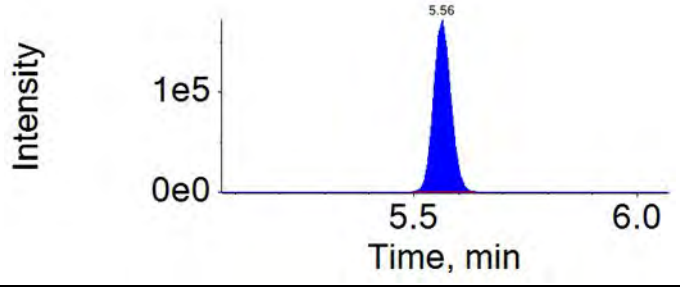
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

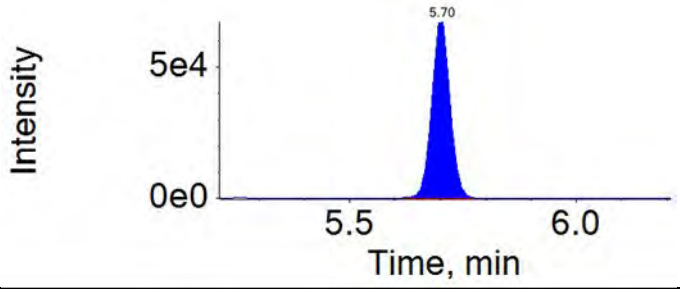
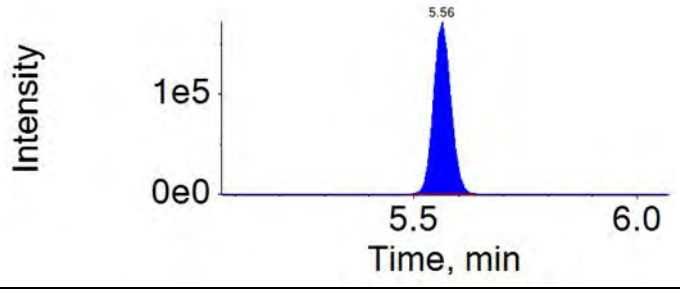
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

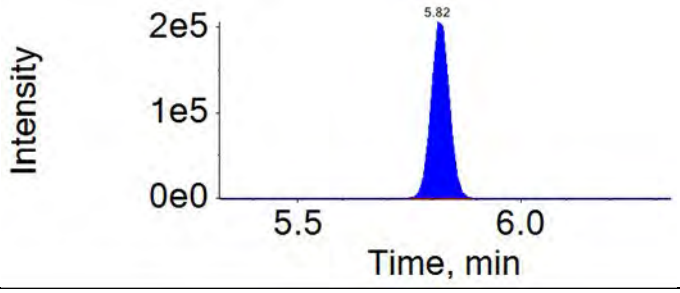
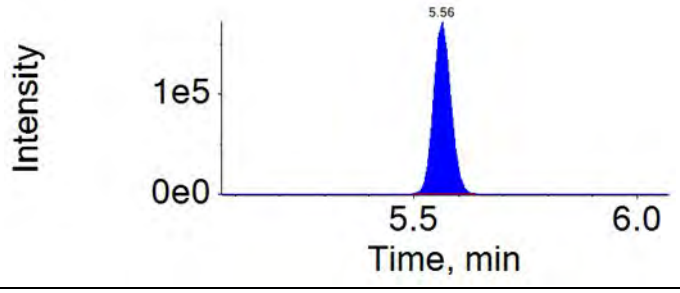
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

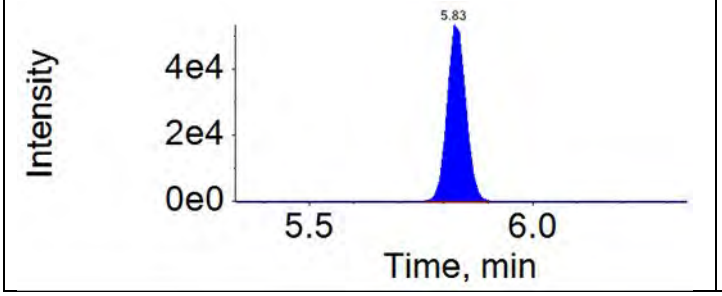
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

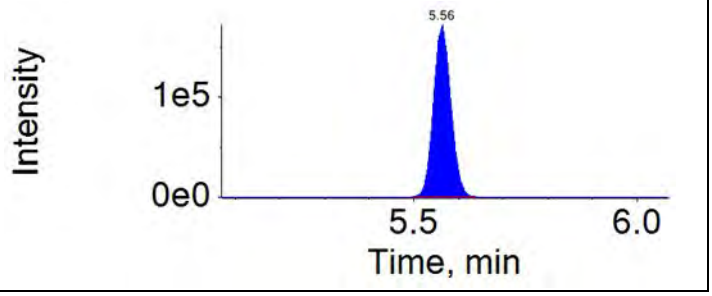
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

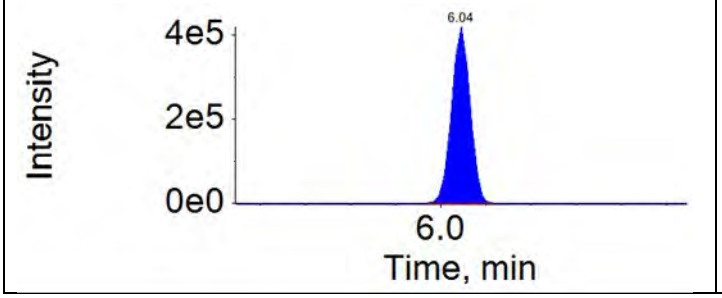
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

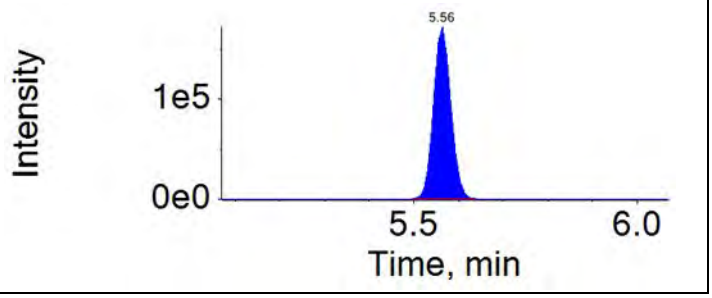
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



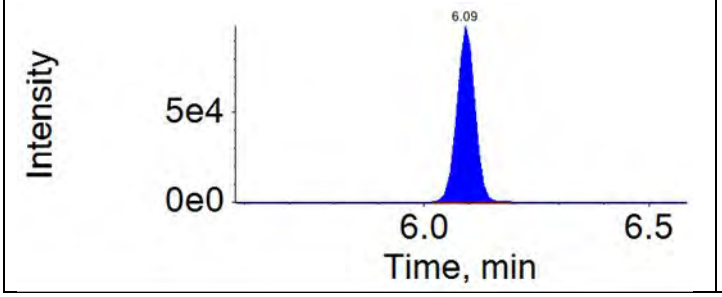


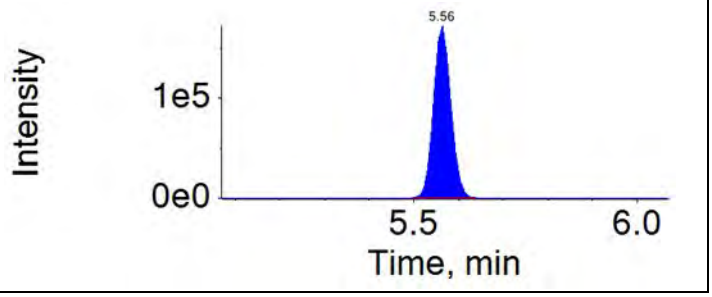
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



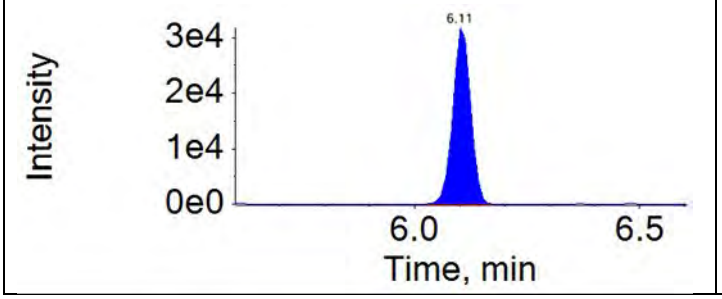


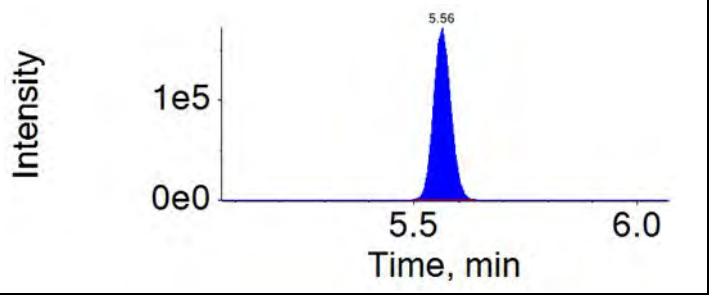
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



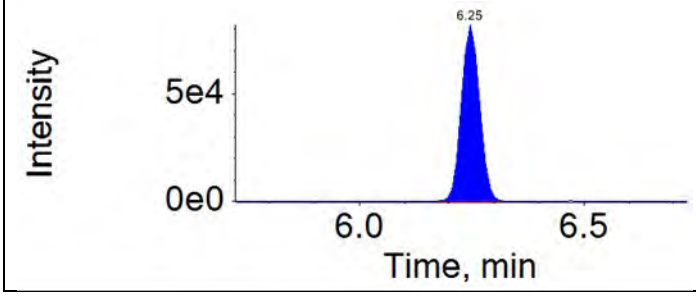


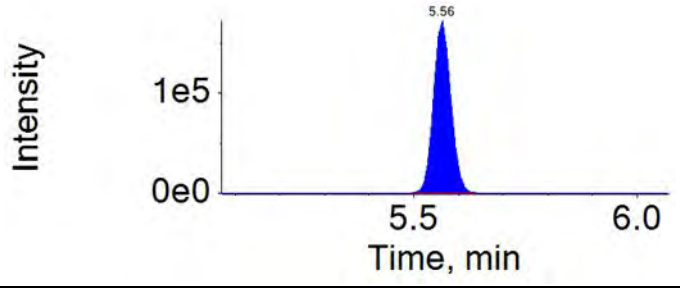
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

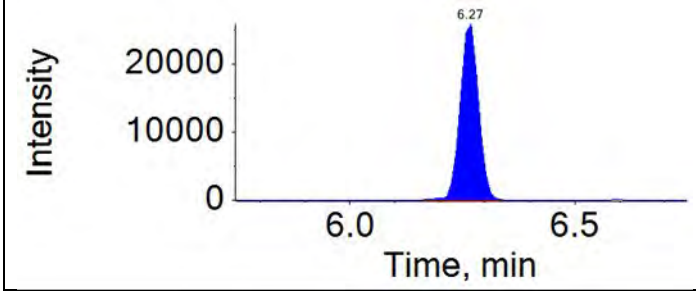
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

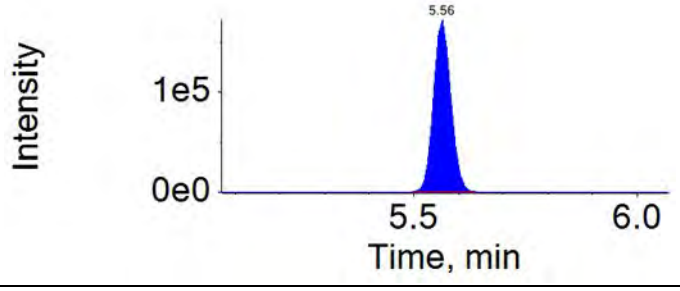
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



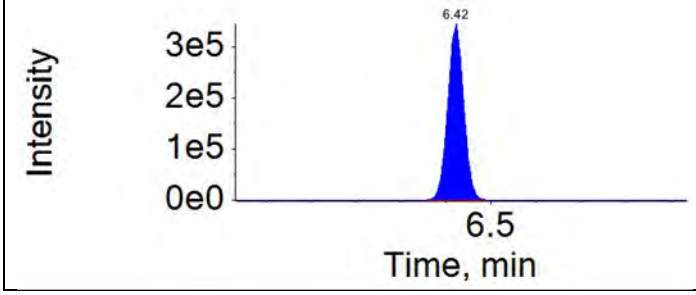


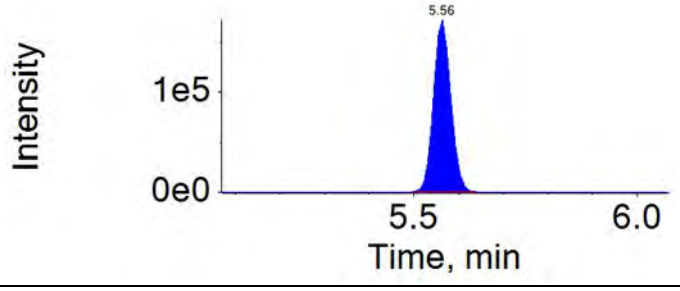
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



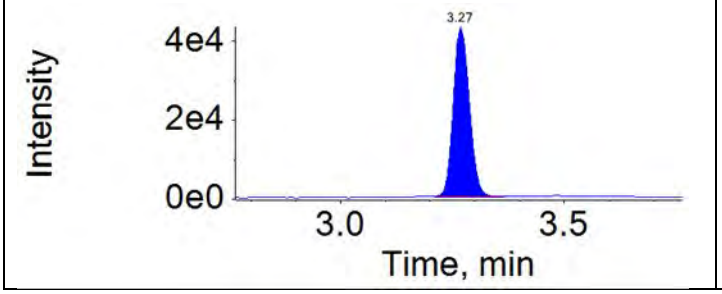


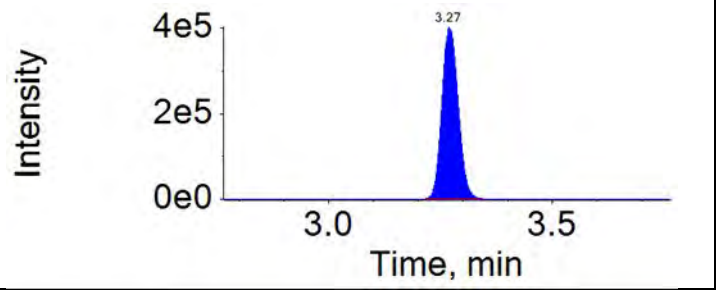
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

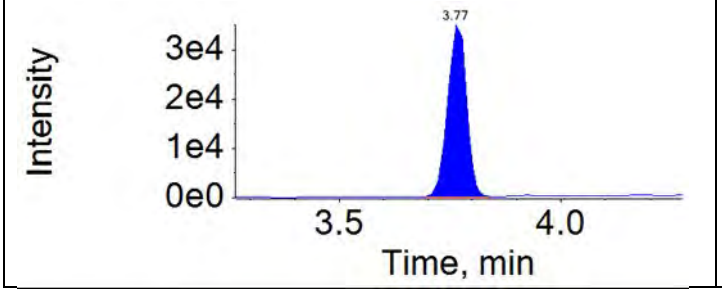
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

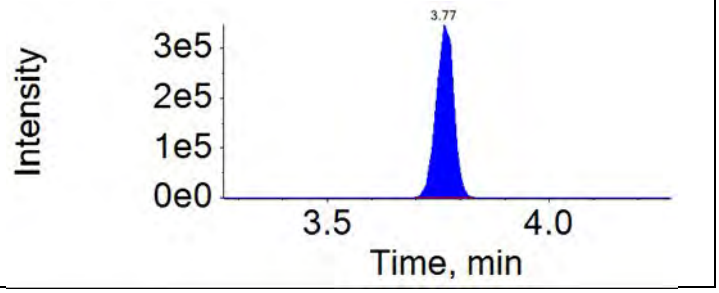
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



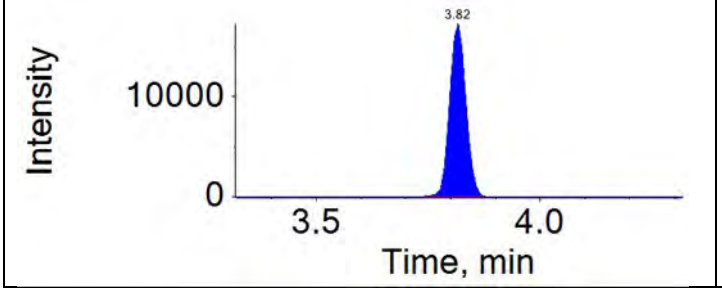


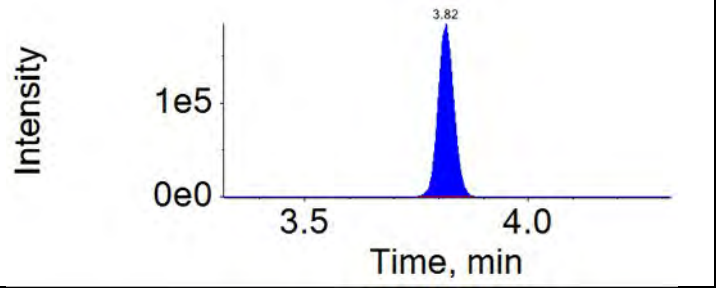
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



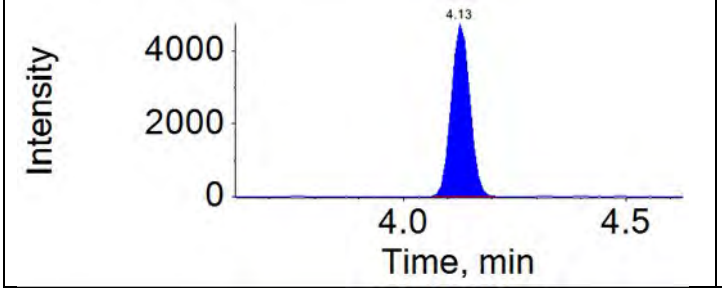


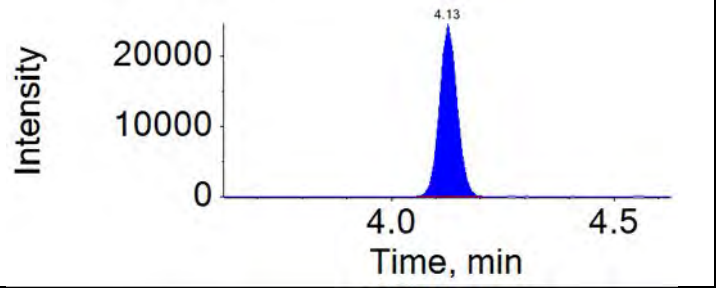
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



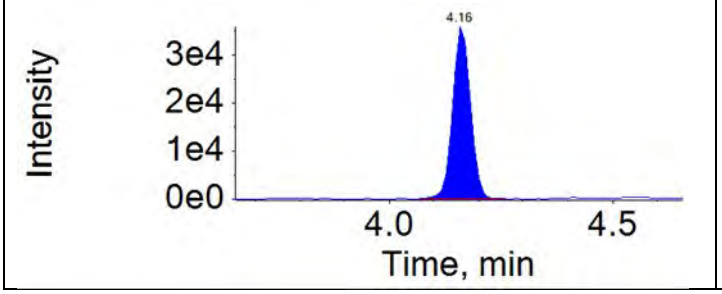


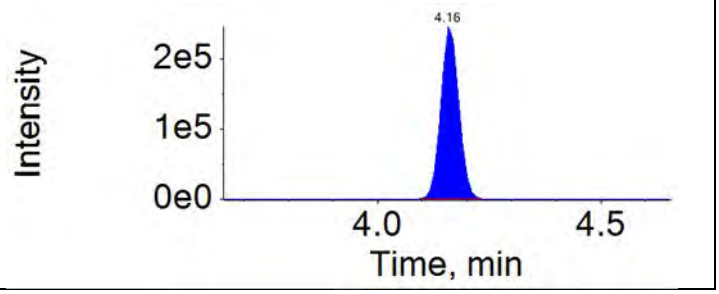
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

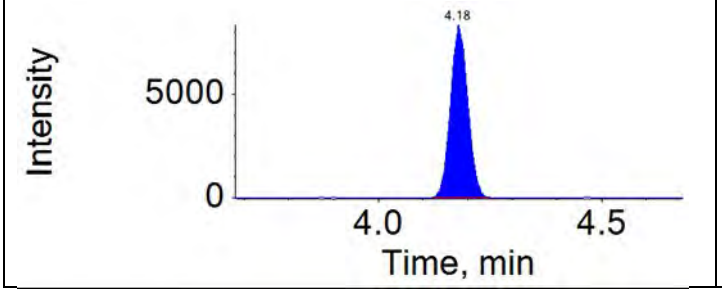
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

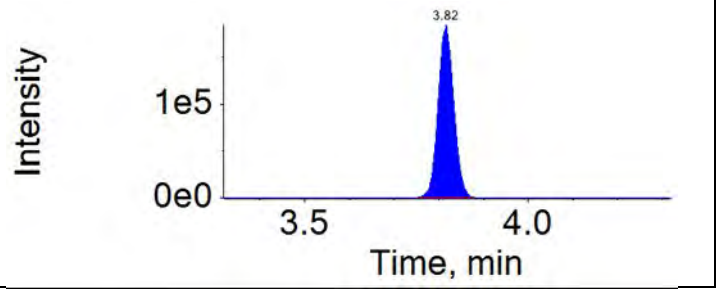
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



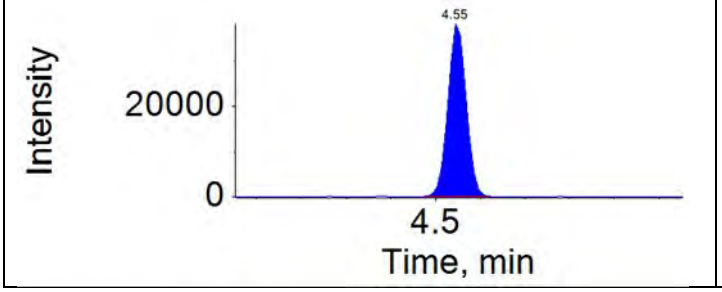


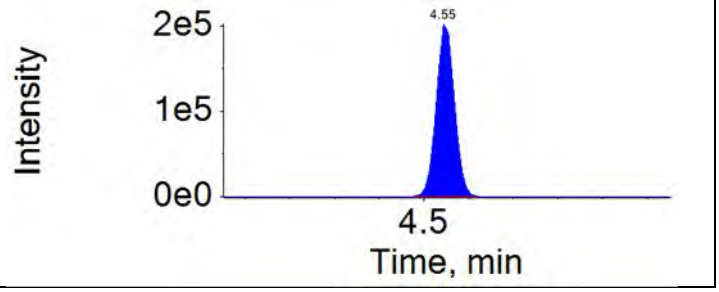
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



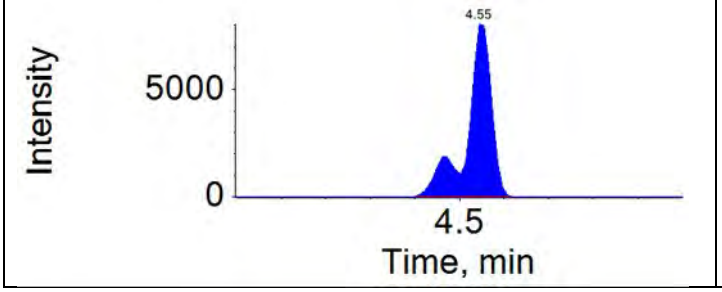


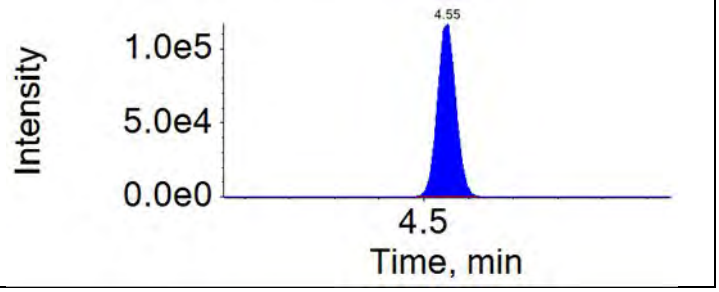
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

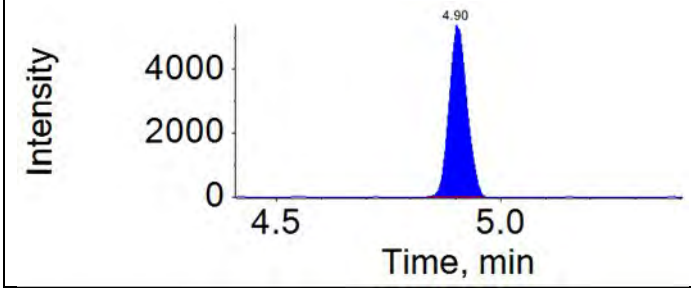
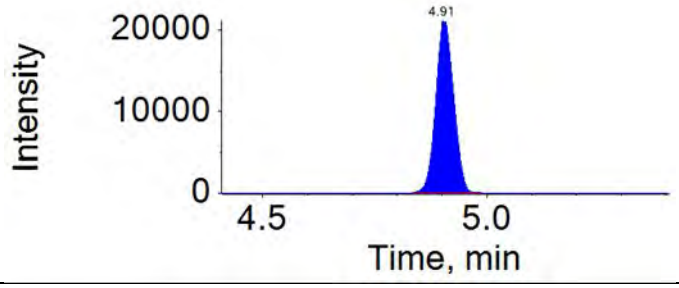


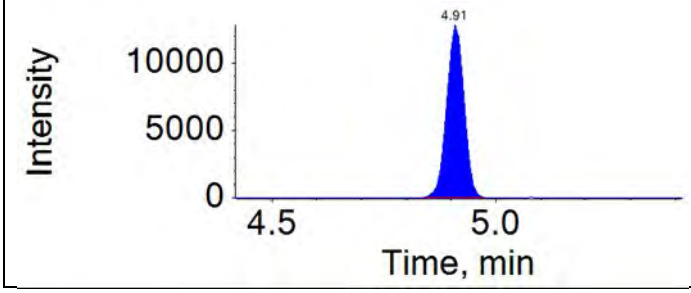
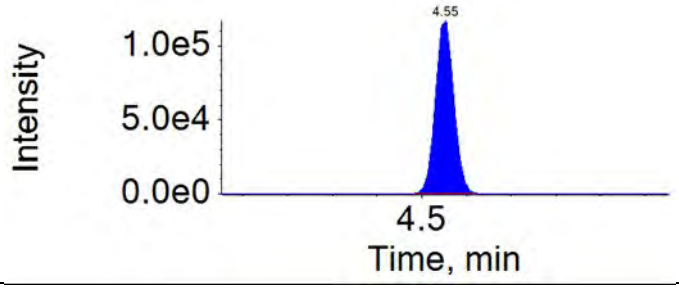


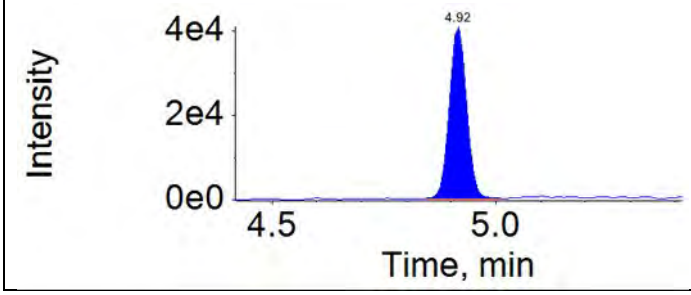
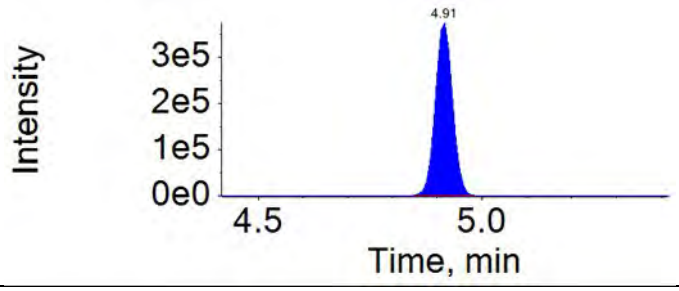
APPROVED
By MCD at 3:27 pm, 11/30/18

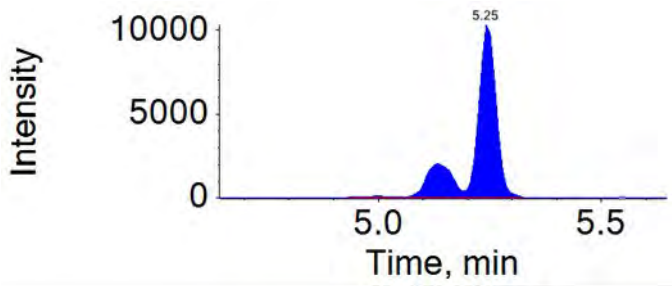
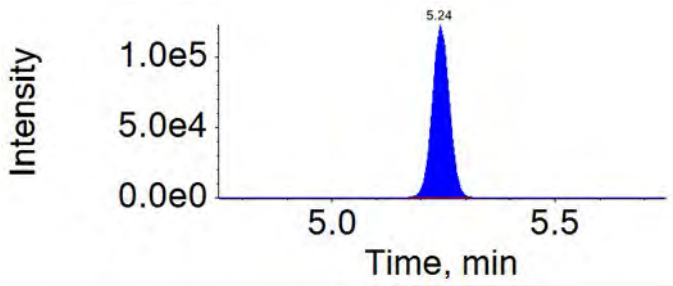
REVIEWED
By umar at 12:38 pm, 12/4/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

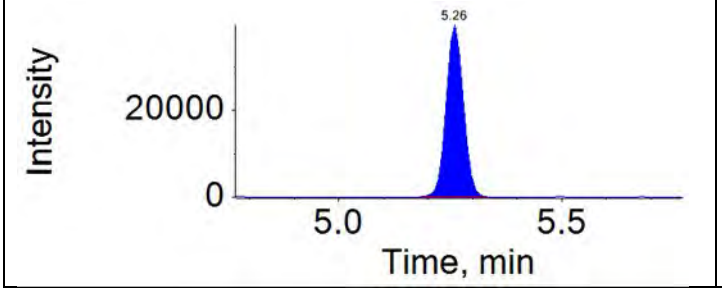
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

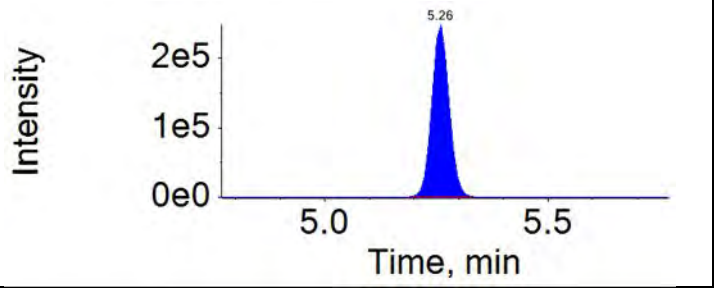
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

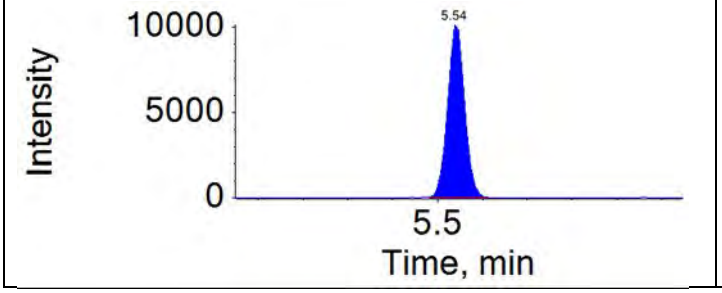
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

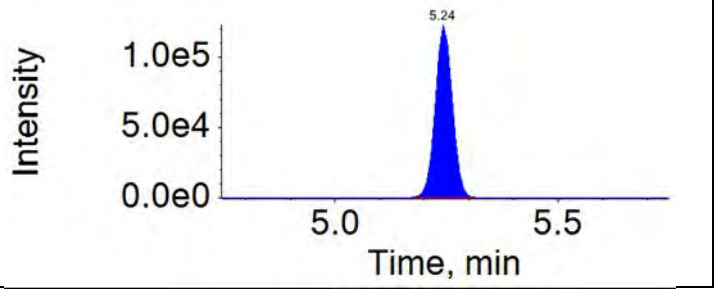
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



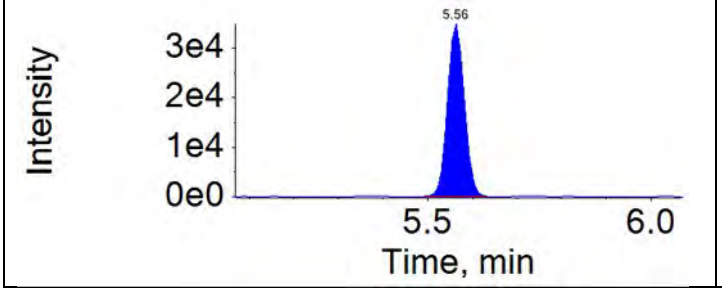


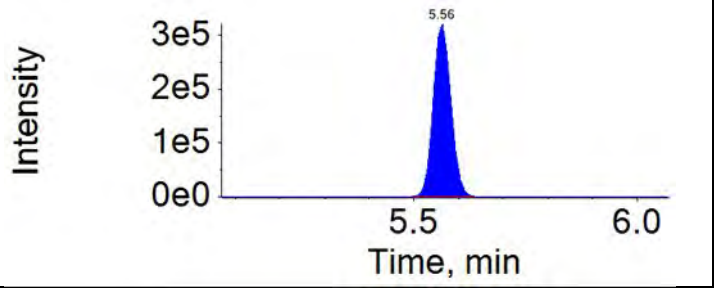
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



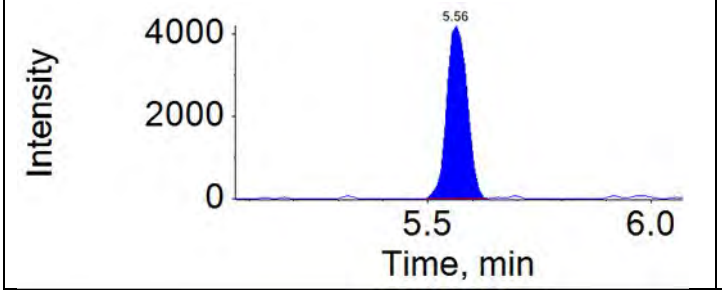


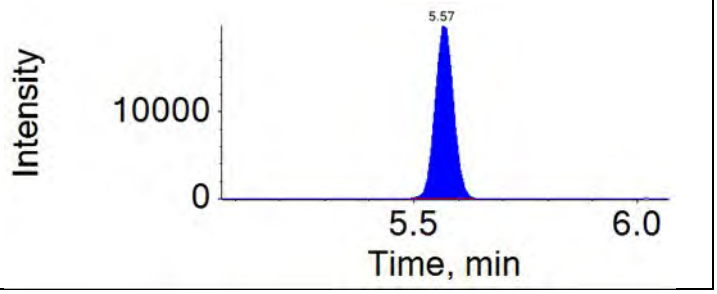
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0

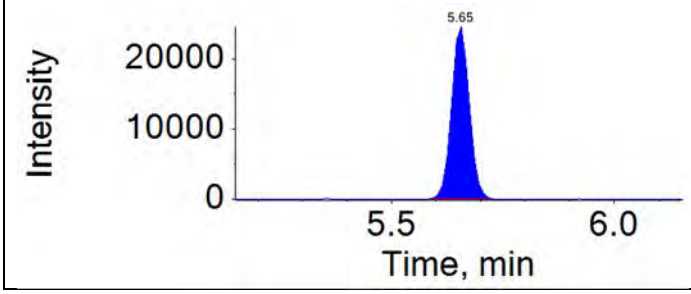
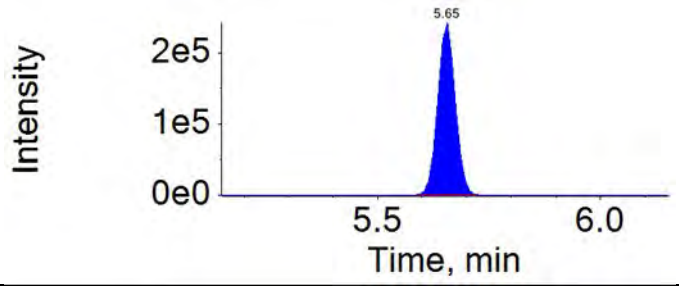


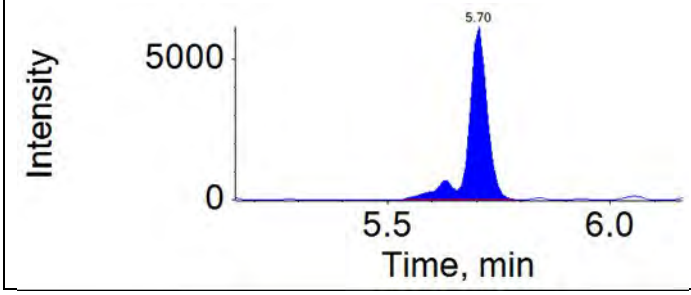
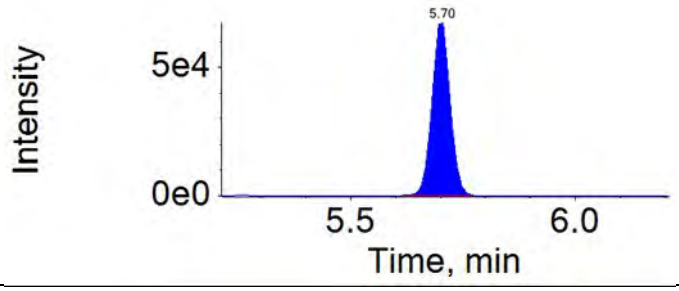


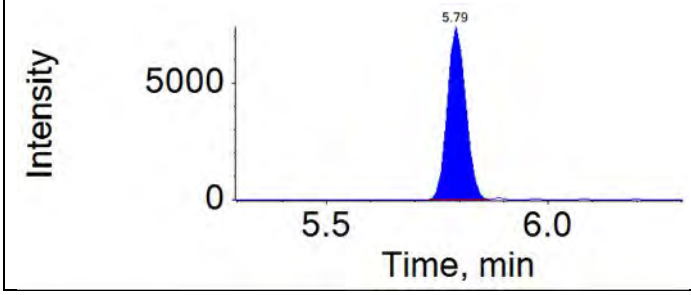
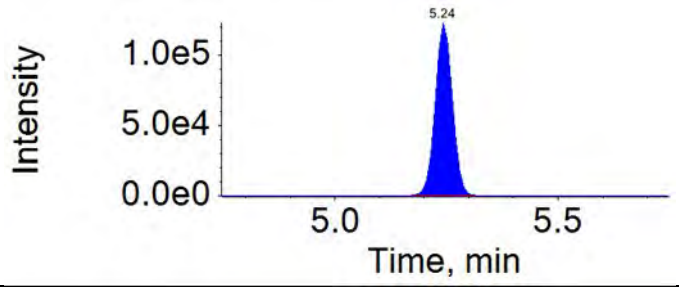
APPROVED
By MCD at 3:27 pm, 11/30/18

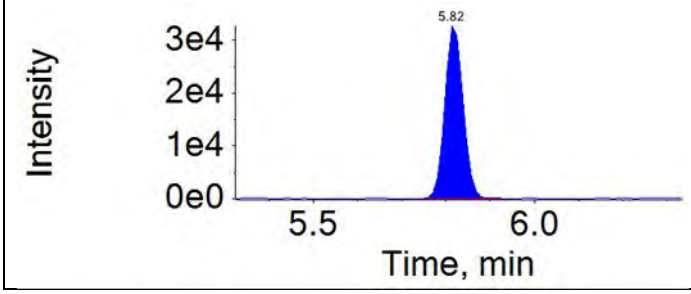
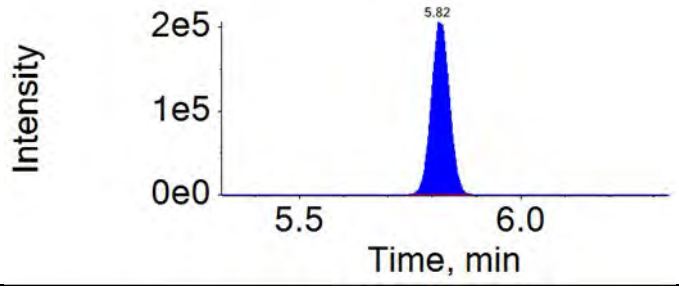
REVIEWED
By umar at 12:38 pm, 12/4/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0
	

Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0
	

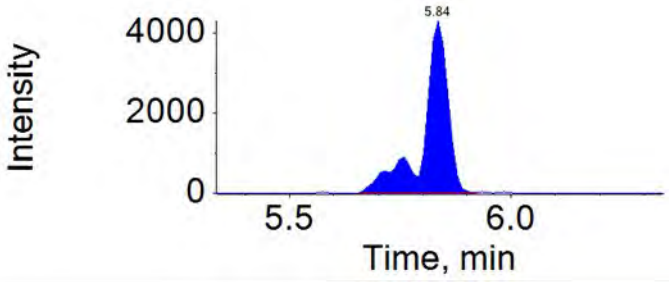
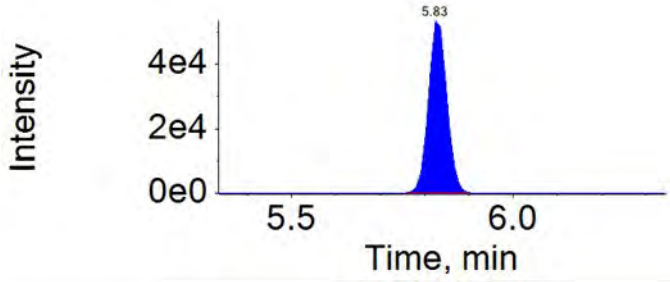
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0
	

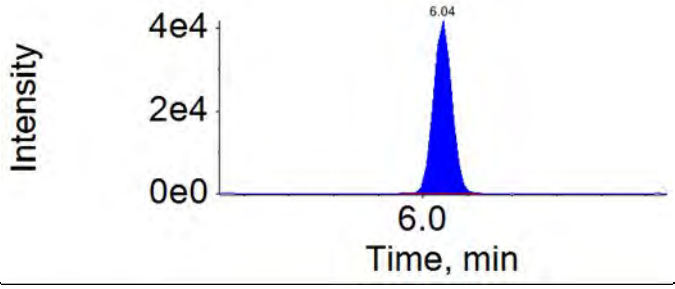
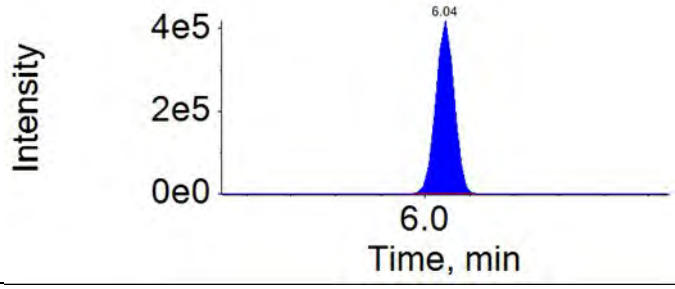
Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0
	

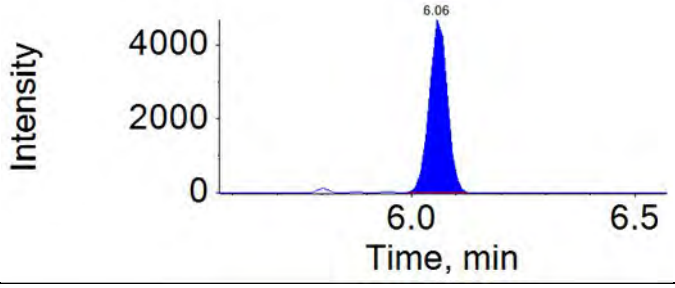
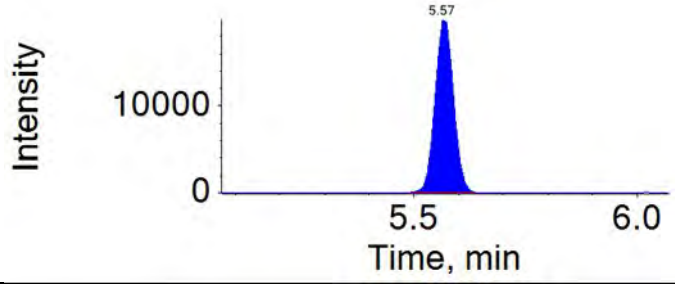
APPROVED
By MCD at 3:27 pm, 11/30/18

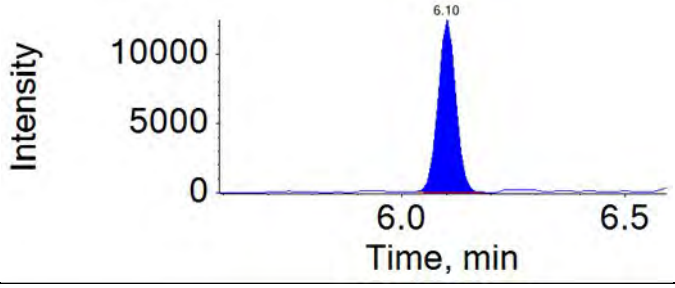
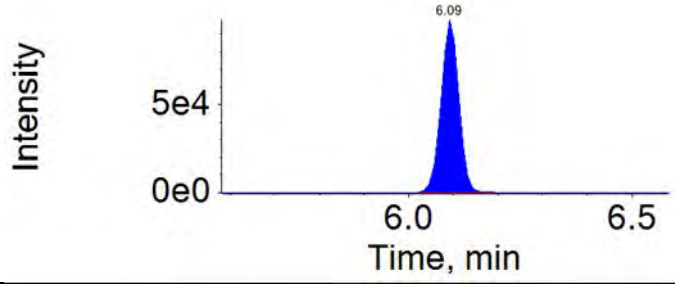
REVIEWED
By umar at 12:38 pm, 12/4/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0
	

Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0
	

Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0
	

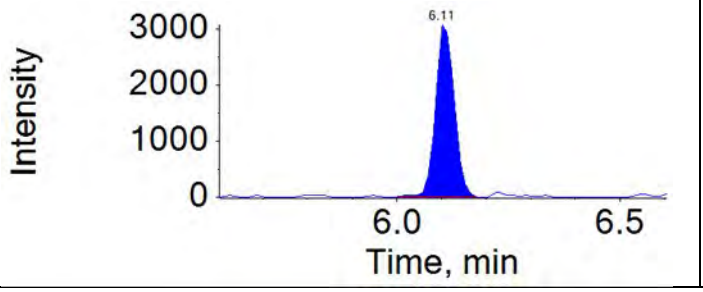
Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0
	

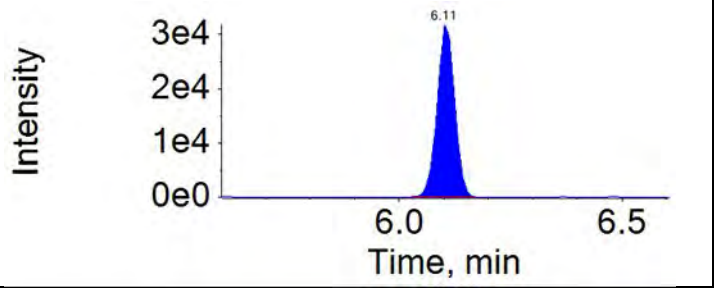
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

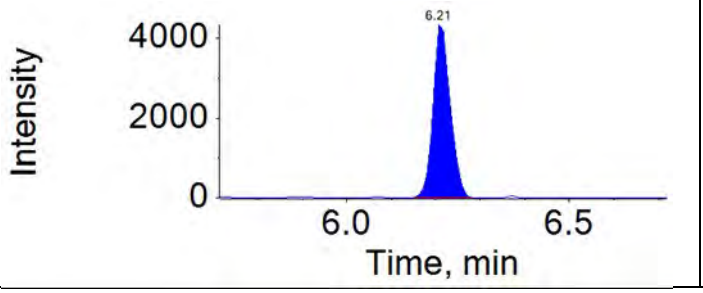
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

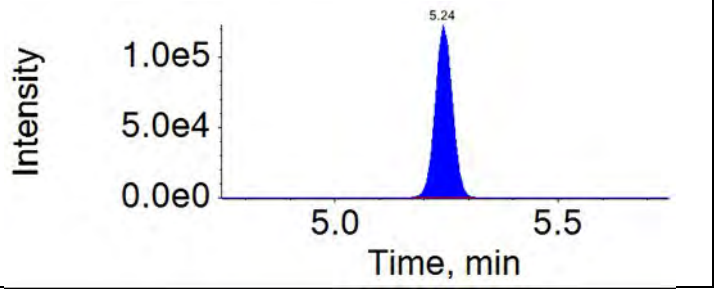
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



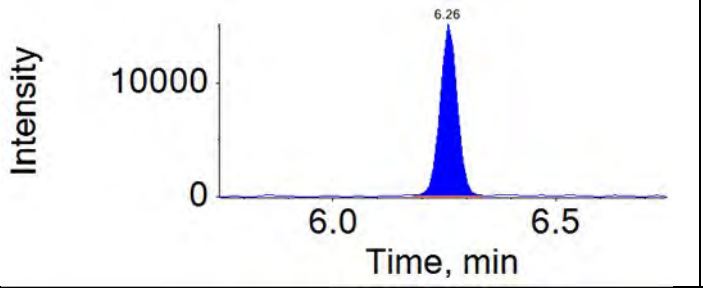


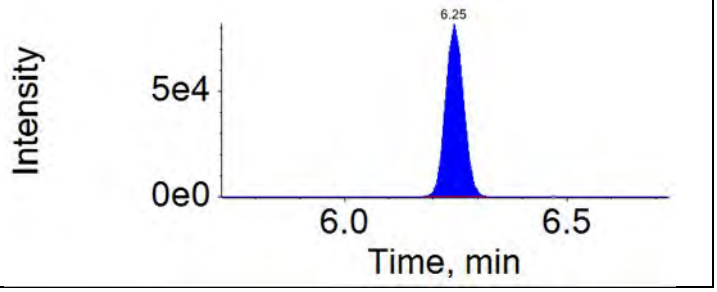
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



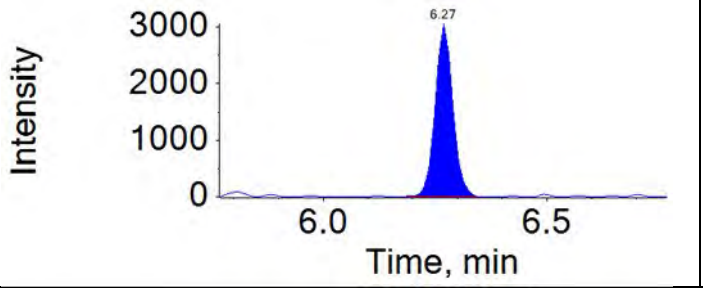


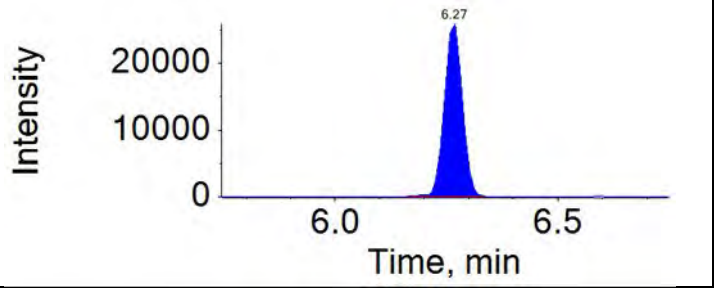
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

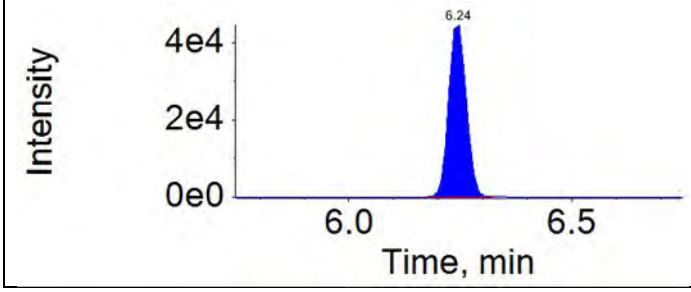
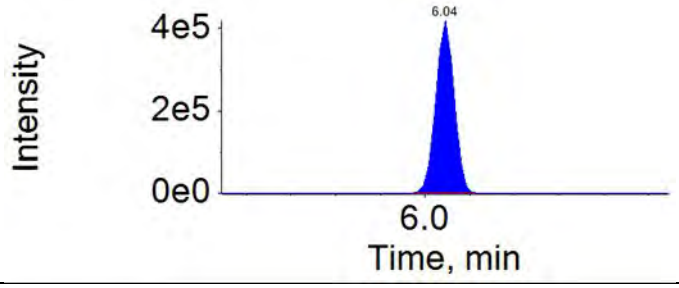


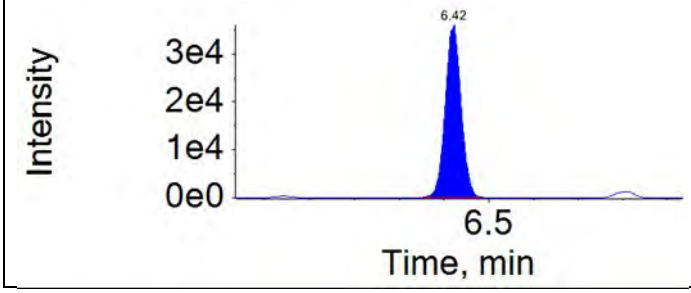
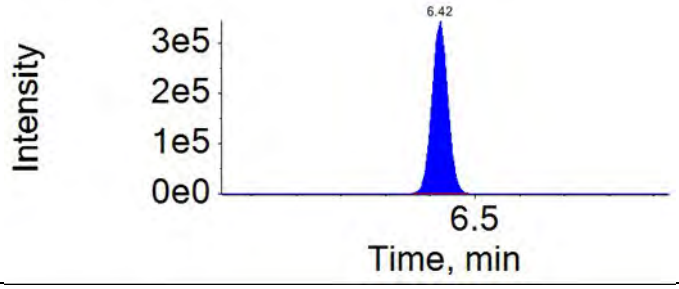


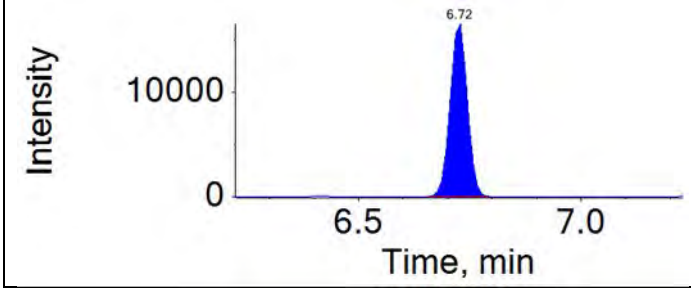
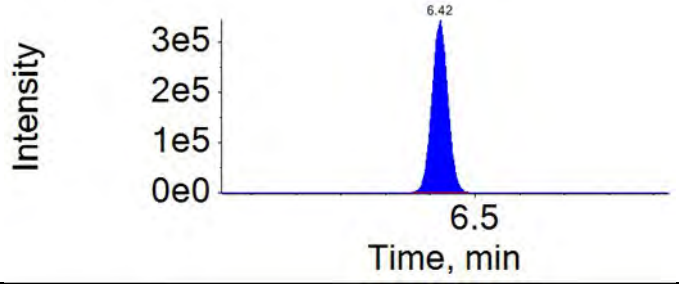
APPROVED
By MCD at 3:27 pm, 11/30/18

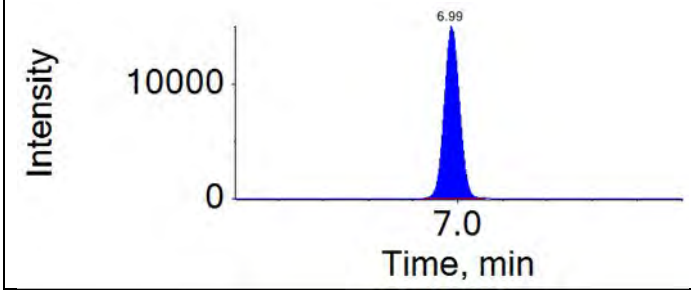
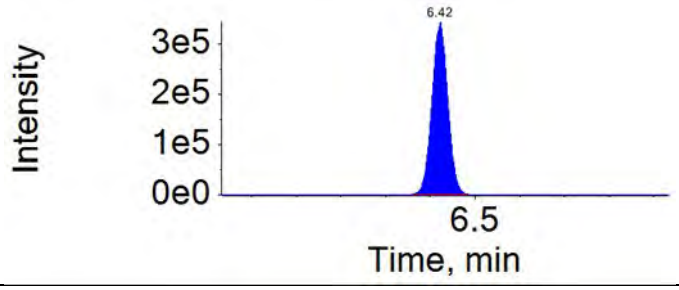
REVIEWED
By umar at 12:38 pm, 12/4/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

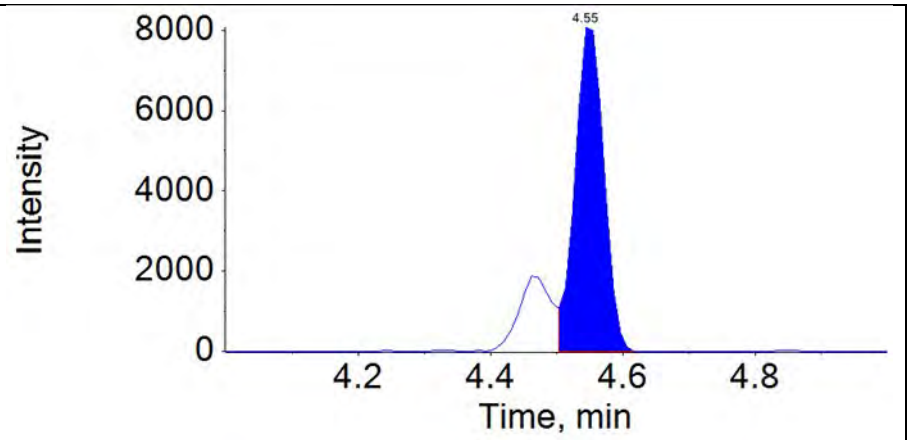
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

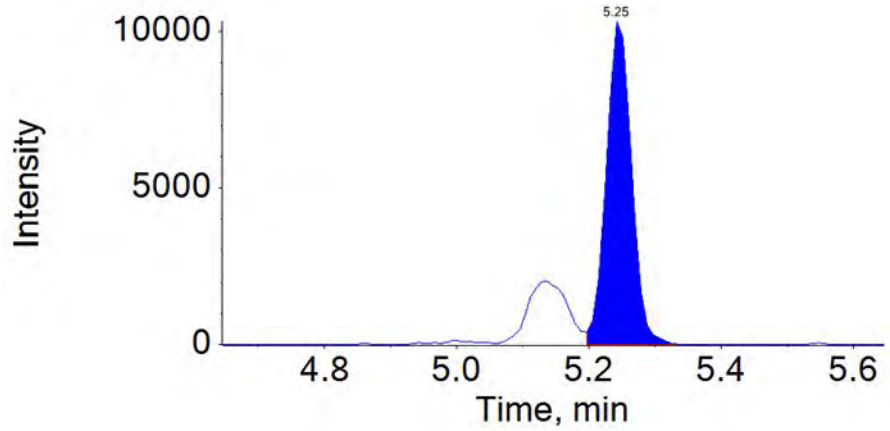
Results Table Name: 18NOV29DCCV6-9
Results Table Date: 11/30/2018 3:21:11 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS
RT (min.):
4.55
Peak Area:
24612.5
Mass Range:
399.0 / 80.0
File Name:
18NOV29D-72.wiff
Sample Name:
CCV7_ISC_CAL2



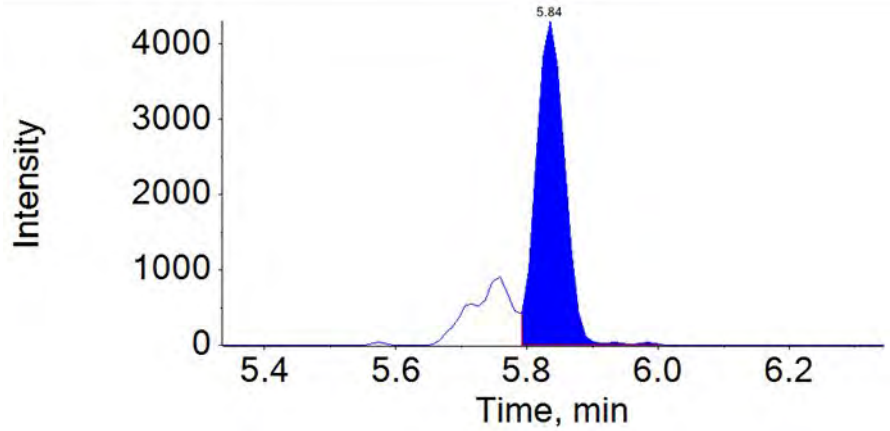
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
27561.1
Mass Range:
499.0 / 80.0
File Name:
18NOV29D-72.wiff
Sample Name:
CCV7_ISC_CAL2



Integration Comment: incorrect integration

Component Name:
NEtFOSAA
RT (min.):
5.84
Peak Area:
13046.5
Mass Range:
584.0 / 419.0
File Name:
18NOV29D-72.wiff
Sample Name:
CCV7_ISC_CAL2



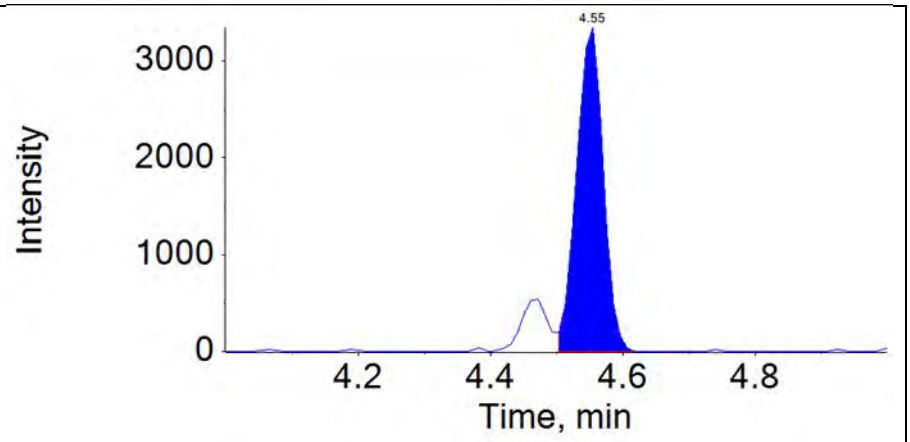
Integration Comment: incorrect integration

APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

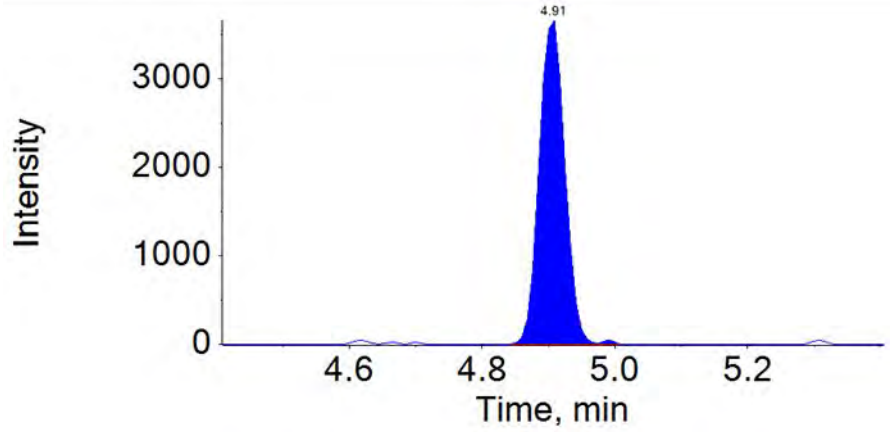
Results Table Name: 18NOV29DCCV6-9
Results Table Date: 11/30/2018 3:21:11 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHxS_2
RT (min.):
4.55
Peak Area:
9386.3
Mass Range:
399.0 / 99.0
File Name:
18NOV29D-72.wiff
Sample Name:
CCV7_ISC_CAL2



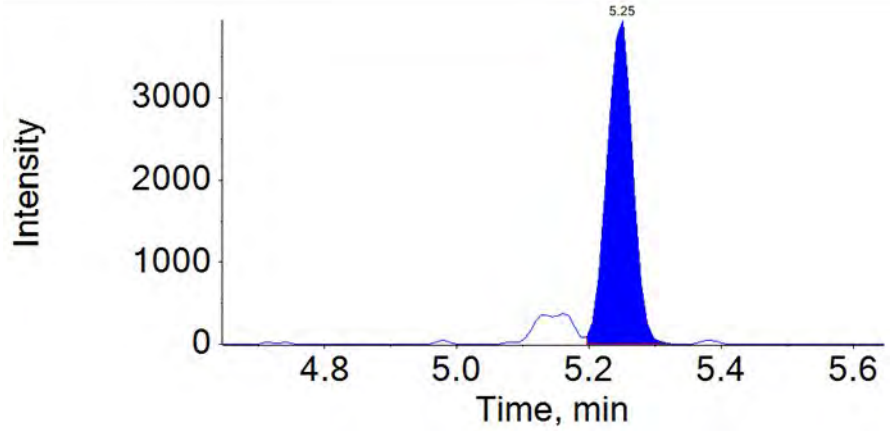
Integration Comment: incorrect integration

Component Name:
6:2-FTS_2
RT (min.):
4.91
Peak Area:
9903.4
Mass Range:
427.0 / 81.0
File Name:
18NOV29D-72.wiff
Sample Name:
CCV7_ISC_CAL2



Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.25
Peak Area:
10671.6
Mass Range:
499.0 / 99.0
File Name:
18NOV29D-72.wiff
Sample Name:
CCV7_ISC_CAL2

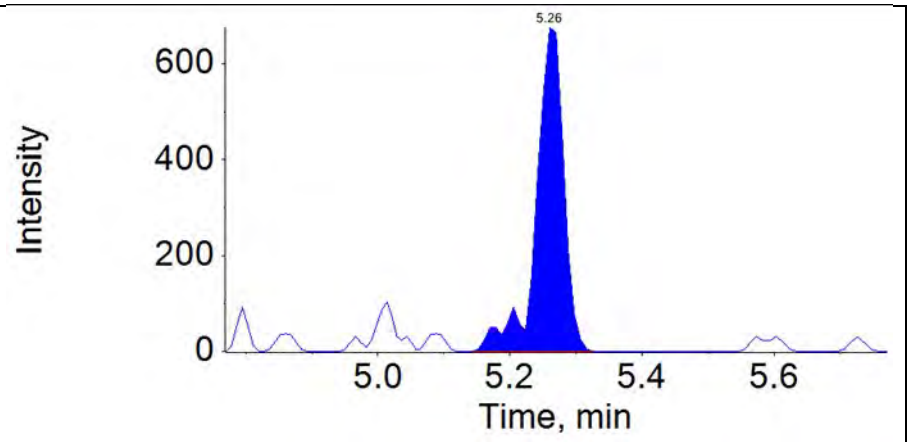


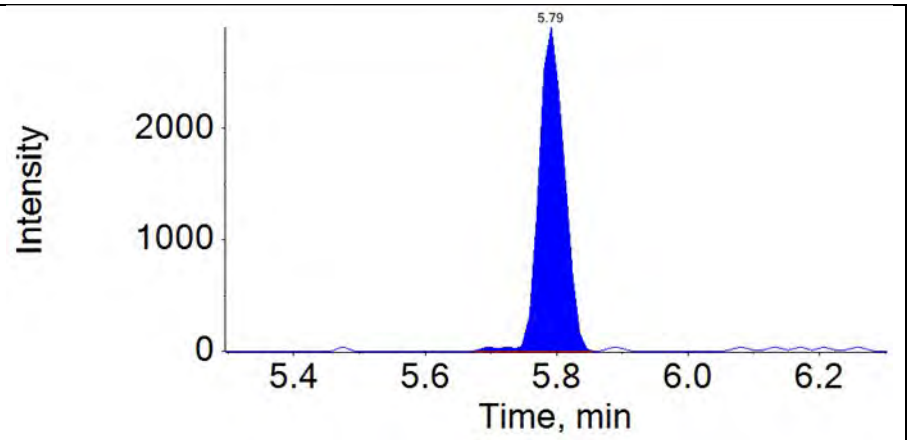
Integration Comment: incorrect integration

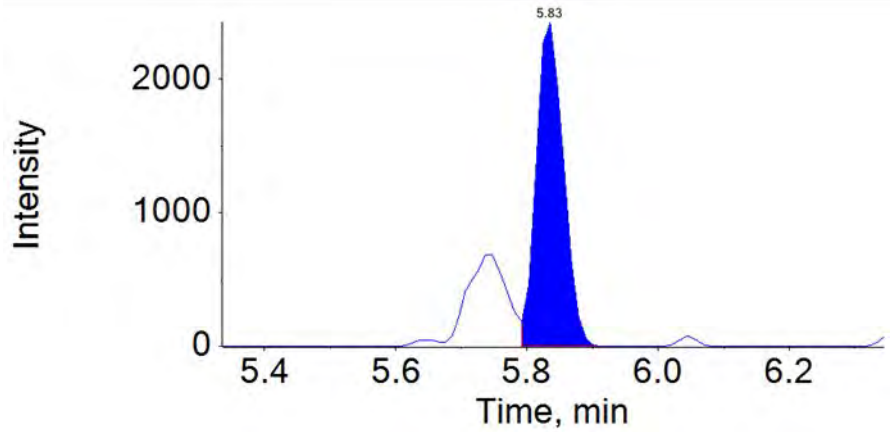
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

Results Table Name: 18NOV29DCCV6-9
Results Table Date: 11/30/2018 3:21:11 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFNA_2 **RT (min.):** 5.26 **Peak Area:** 1986.5 **Mass Range:** 463.0 / 169.0 **File Name:** 18NOV29D-72.wiff **Sample Name:** CCV7_ISC_CAL2	 **Integration Comment:** incorrect integration

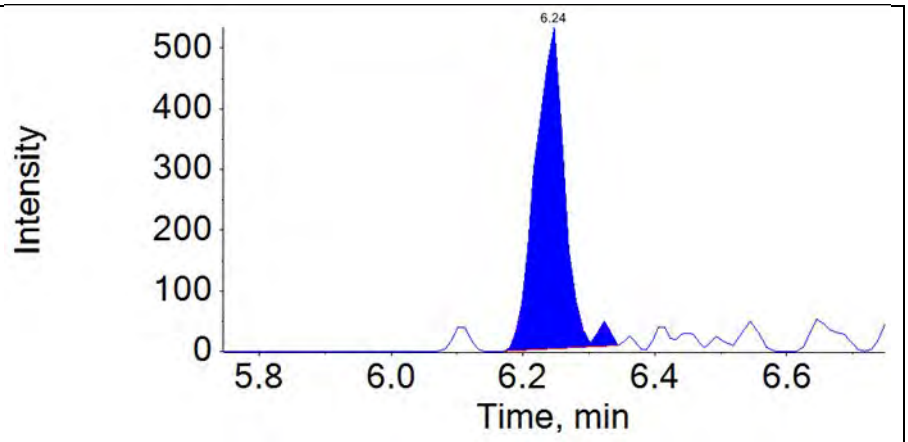
Component Name: PFDS_2 **RT (min.):** 5.79 **Peak Area:** 7803.0 **Mass Range:** 599.0 / 99.0 **File Name:** 18NOV29D-72.wiff **Sample Name:** CCV7_ISC_CAL2	 **Integration Comment:** incorrect integration

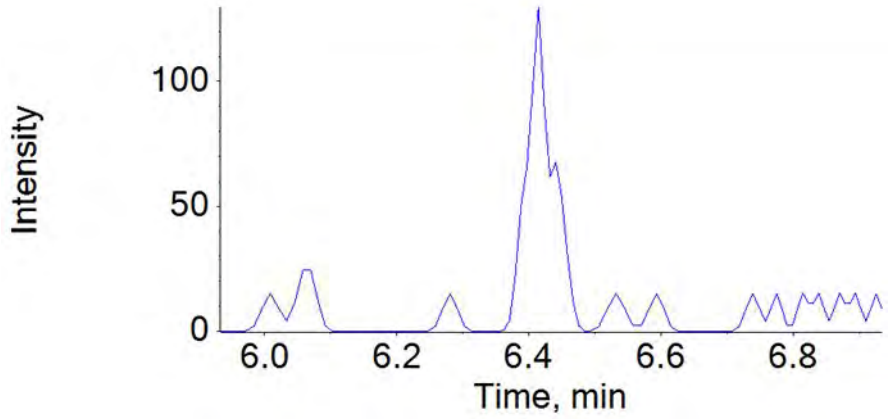
Component Name: NEtFOSAA_2 **RT (min.):** 5.83 **Peak Area:** 6992.8 **Mass Range:** 584.0 / 526.0 **File Name:** 18NOV29D-72.wiff **Sample Name:** CCV7_ISC_CAL2	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

Results Table Name: 18NOV29DCCV6-9
Results Table Date: 11/30/2018 3:21:11 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name: PFTrDA_2 **RT (min.):** 6.24 **Peak Area:** 1661.7 **Mass Range:** 663.0 / 169.0 **File Name:** 18NOV29D-72.wiff **Sample Name:** CCV7_ISC_CAL2	 **Integration Comment:** incorrect integration

Component Name: PFTeDA_2 **RT (min.):** N/A **Peak Area:** N/A **Mass Range:** 713.0 / 169.0 **File Name:** 18NOV29D-72.wiff **Sample Name:** CCV7_ISC_CAL2	 **Integration Comment:** incorrect integration

APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

Results Table Name: 18NOV29DCCV6-9
Results Table Date: 11/30/2018 3:21:11 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Ion Ratio Report

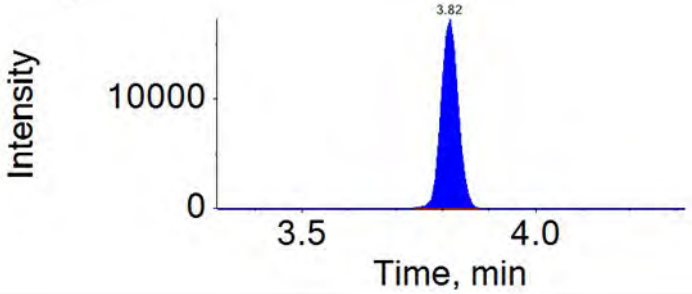
Sample Name: CCV7_ISC_CAL2 **Instrument Name:** LM27631 **File Name:** 18NOV29D-72.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	43546.1	A	N/A	0.3531			
PFBS_2	3.81	1.00	15374.0	A	N/A	0.3531	-3	50	
4:2-FTS	4.13	1.00	13618.8	A	N/A	0.5741			
4:2-FTS_2	4.13	1.00	7819.0	A	N/A	0.5741	-10	50	
PFHxA	4.16	1.00	98812.0	A	N/A	0.0083			
PFHxA_2	4.16	1.00	819.4	A	N/A	0.0083	-20	50	
PFPeS	4.18	1.10	22438.2	A	N/A	0.4999			
PFPeS_2	4.18	1.10	11216.6	A	N/A	0.4999	0	50	
PFHpA	4.55	1.00	108630.6	A	N/A	0.0517			
PFHpA_2	4.55	1.00	5616.4	A	N/A	0.0517	-7	50	
PFHxS	4.55	1.00	31005.8	M	N/A	0.3523			
PFHxS_2	4.55	1.00	10923.7	M	N/A	0.3523	-5	50	
6:2-FTS	4.90	1.00	14871.4	A	N/A	0.6620			
6:2-FTS_2	4.91	1.00	9844.3	M	N/A	0.6620	0	50	
PFHpS	4.91	1.08	34425.5	A	N/A	0.3726			
PFHpS_2	4.91	1.08	12825.2	A	N/A	0.3726	-5	50	
PFOA	4.92	1.00	108379.5	A	N/A	0.0499			
PFOA_2	4.91	1.00	5409.2	A	N/A	0.0499	-13	50	
PFOS	5.25	1.00	36641.4	M	N/A	0.3335			
PFOS_2	5.25	1.00	12218.3	M	N/A	0.3335	13	50	
PFNA	5.26	1.00	105821.4	A	N/A	0.0168			
PFNA_2	5.26	1.00	1772.5	M	N/A	0.0168	-17	50	
PFNS	5.54	1.06	26569.2	A	N/A	0.5079			
PFNS_2	5.54	1.06	13495.5	A	N/A	0.5079	6	50	
PFDA	5.56	1.00	91975.5	A	N/A	0.0047			
PFDA_2	5.56	1.00	428.3	A	N/A	0.0047	-38	50	
8:2-FTS	5.56	1.00	13276.2	A	N/A	0.7117			
8:2-FTS_2	5.57	1.00	9448.0	A	N/A	0.7117	32	50	
NMeFOSAA	5.70	1.00	18118.1	A	N/A	0.2752			
NMeFOSAA_2	5.70	1.00	4986.6	A	N/A	0.2752	19	50	
PFDS	5.79	1.10	21049.9	A	N/A	0.3654			
PFDS_2	5.79	1.10	7692.6	M	N/A	0.3654	-32	50	
PFUnDA	5.82	1.00	94365.1	A	N/A	0.0028			
PFUnDA_2	5.80	1.00	259.7	A	N/A	0.0028	-28	50	
NEtFOSAA	5.84	1.00	16845.3	M	N/A	0.5862			
NEtFOSAA_2	5.83	1.00	9875.0	M	N/A	0.5862	-20	50	
PFDoDA	6.04	1.00	120450.1	A	N/A	0.0159			
PFDoDA_2	6.05	1.00	1919.7	A	N/A	0.0159	22	50	
10:2-FTS	6.06	1.09	13124.4	A	N/A	0.8343			
10:2-FTS_2	6.06	1.09	10949.2	A	N/A	0.8343	19	50	
PFTrDA	6.24	1.03	124162.6	A	N/A	0.0132			
PFTrDA_2	6.24	1.03	1641.9	M	N/A	0.0132	47	50	
PFTeDA	6.42	1.00	88469.7	A	N/A	0.0041			
PFTeDA_2	6.41	1.00	361.6	M	N/A	0.0041	-27	50	
PFHxDA	6.72	1.05	44728.9	A	N/A	0.0648			
PFHxDA_2	6.73	1.05	2897.0	A	N/A	0.0648	0	50	
PFODA	6.99	1.09	35501.9	A	N/A	0.0275			
PFODA_2	6.98	1.09	977.9	A	N/A	0.0275	4	50	

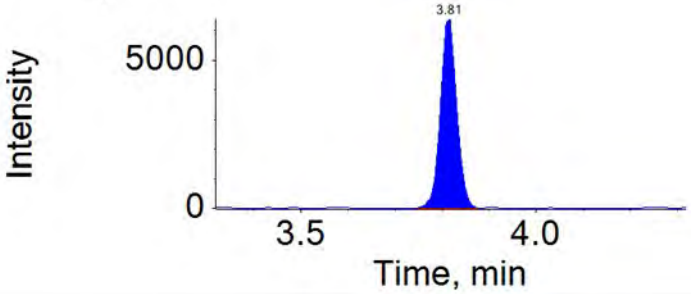
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

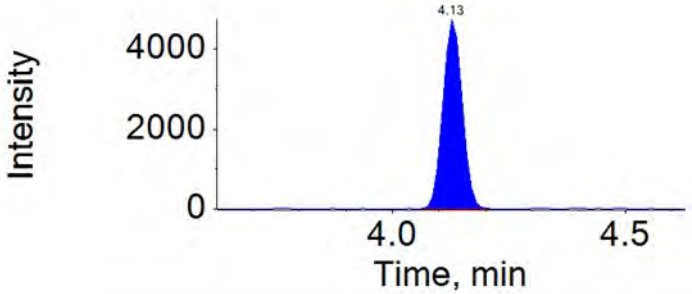
Component: PFBS
Primary Mass: 299.0 / 80.0



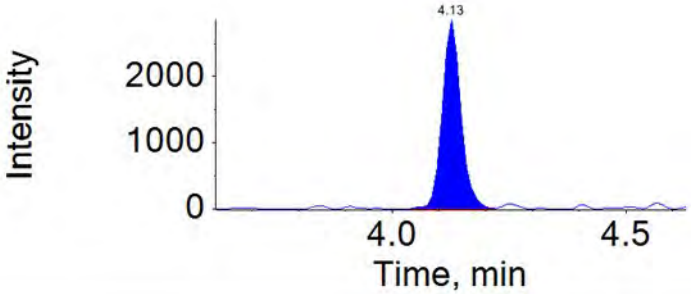
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



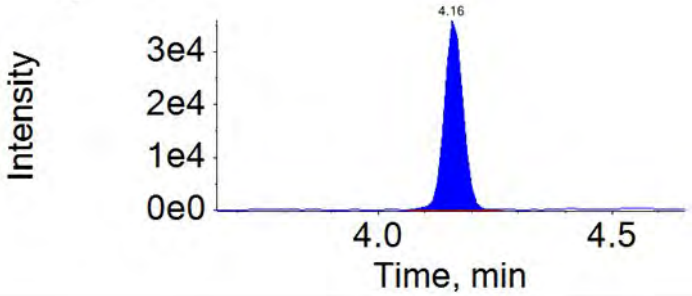
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



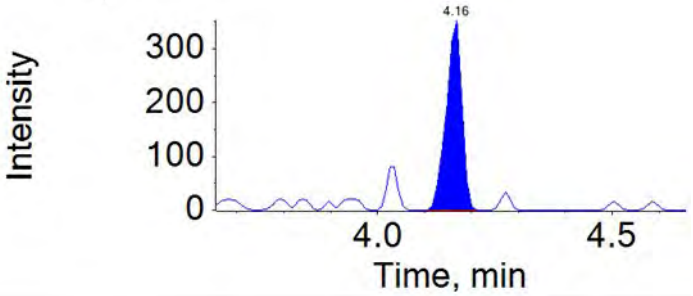
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



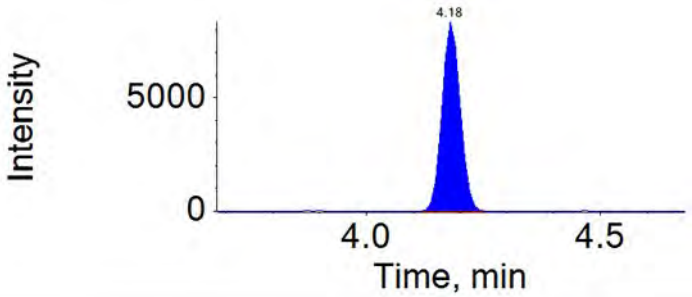
Component: PFHxA
Primary Mass: 313.0 / 269.0



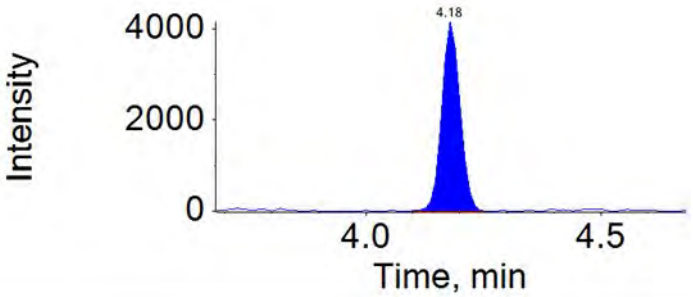
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



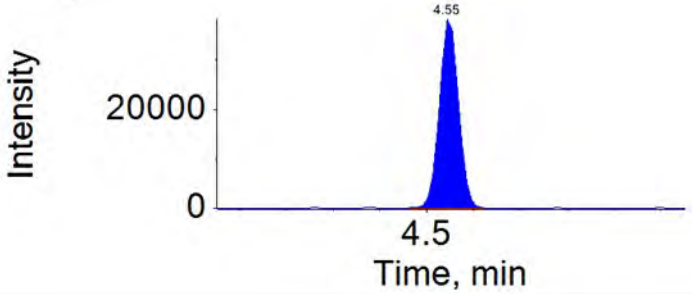
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



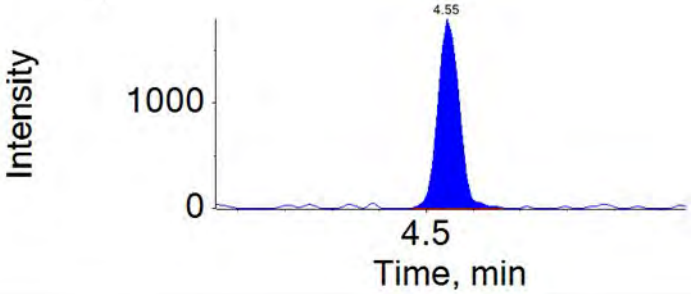
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

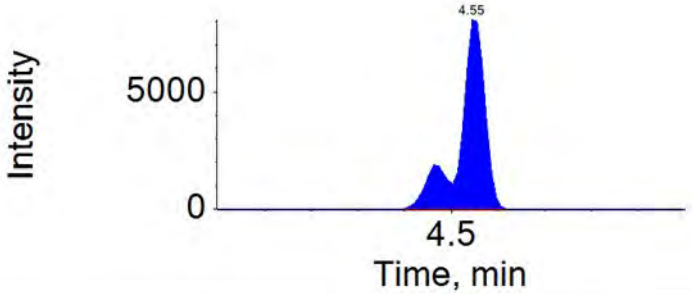
Component: PFHpA
Primary Mass: 363.0 / 319.0



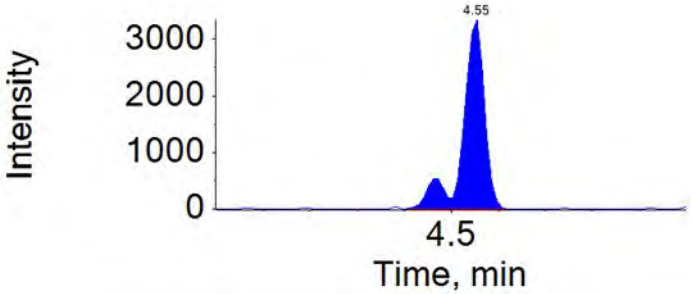
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



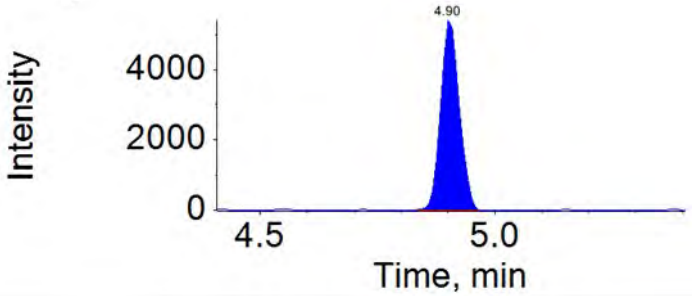
Component: PFHxS
Primary Mass: 399.0 / 80.0



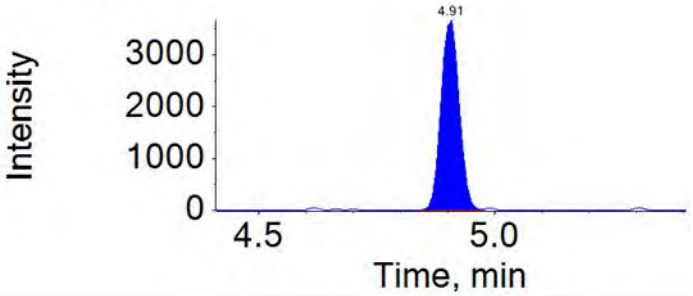
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Secondary Mass: 399.0 / 99.0



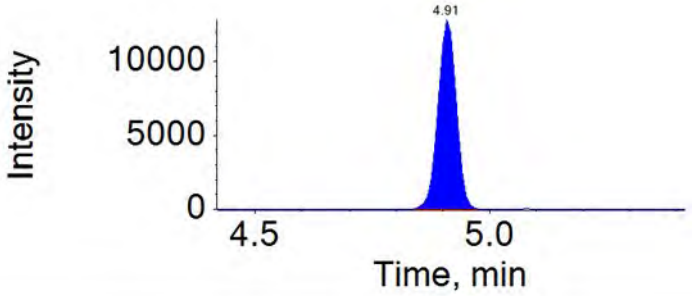
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



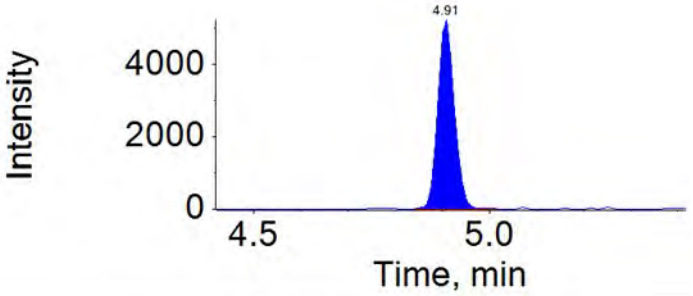
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



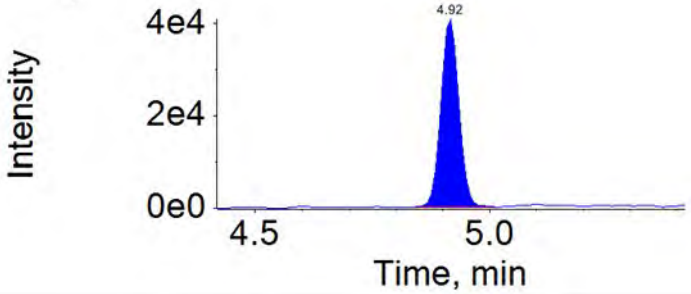
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



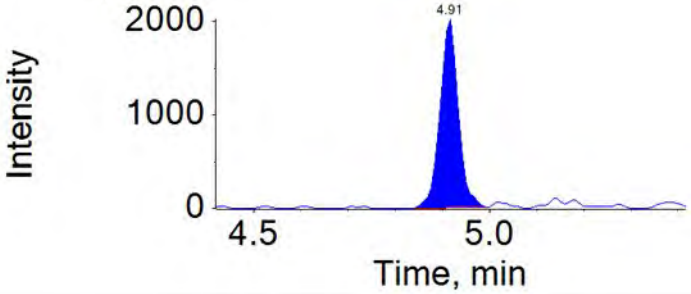
APPROVED
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REVIEWED
By umar at 12:38 pm, 12/4/18

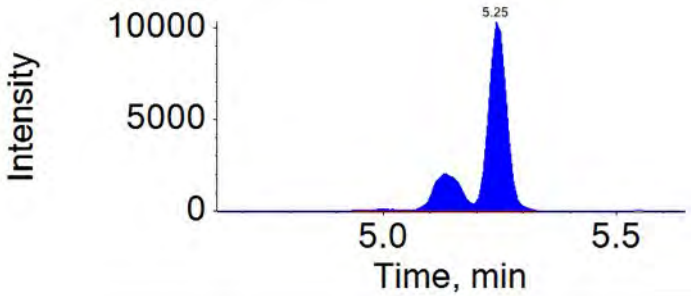
Component: PFOA
Primary Mass: 413.0 / 369.0



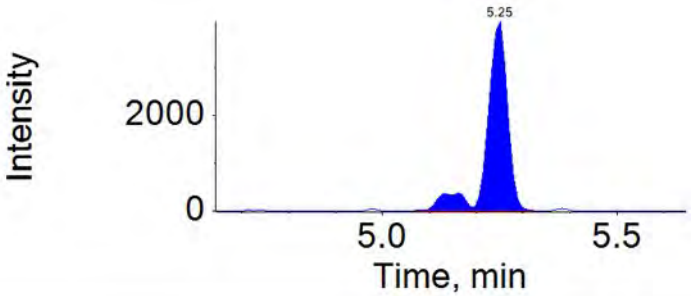
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Secondary Mass: 413.0 / 169.0



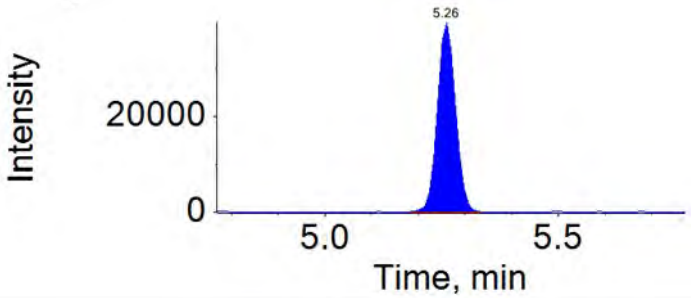
Component: PFOS
Primary Mass: 499.0 / 80.0



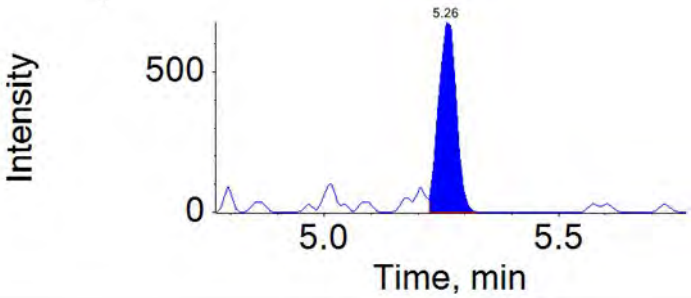
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



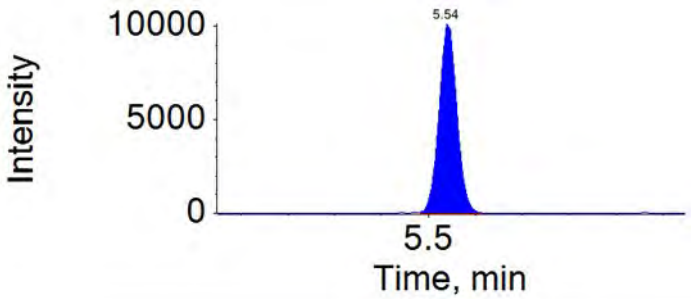
Component: PFNA
Primary Mass: 463.0 / 419.0



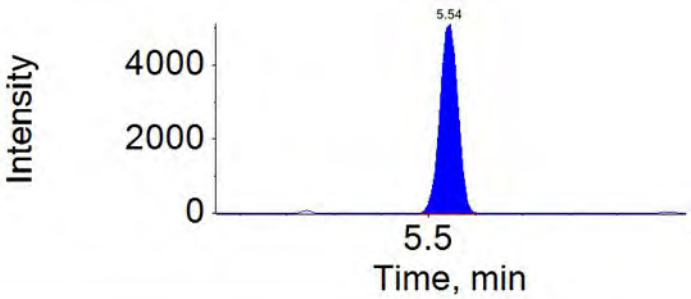
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



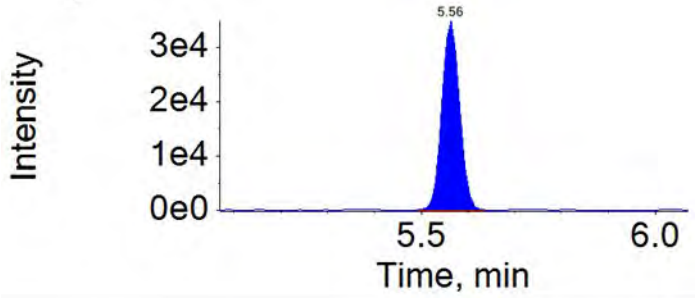
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



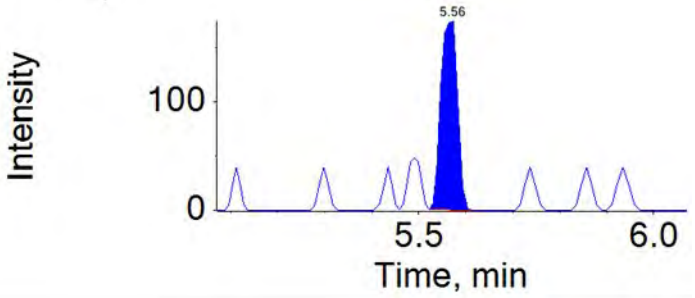
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

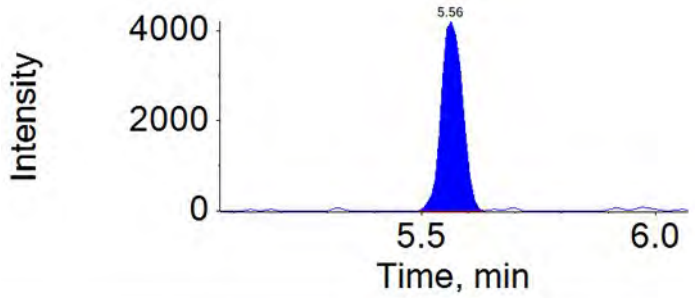
Component: PFDA
Primary Mass: 513.0 / 469.0



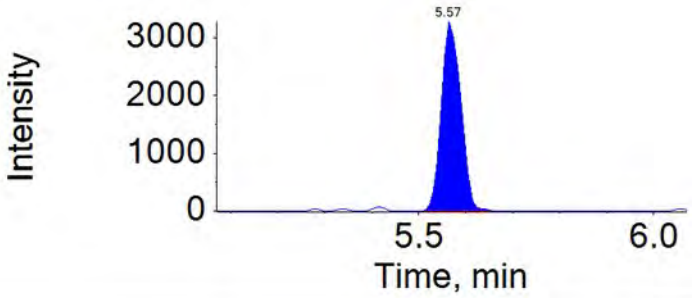
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Secondary Mass: 513.0 / 169.0



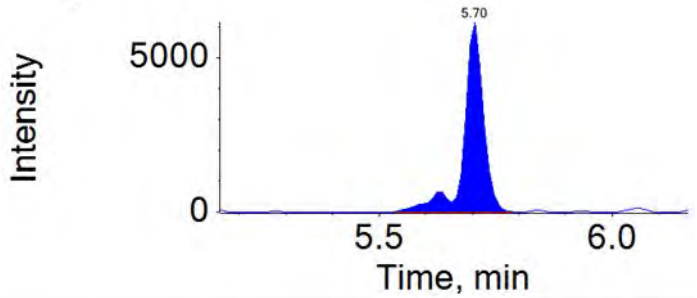
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



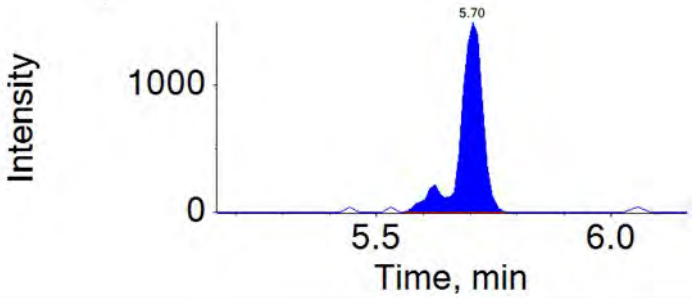
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



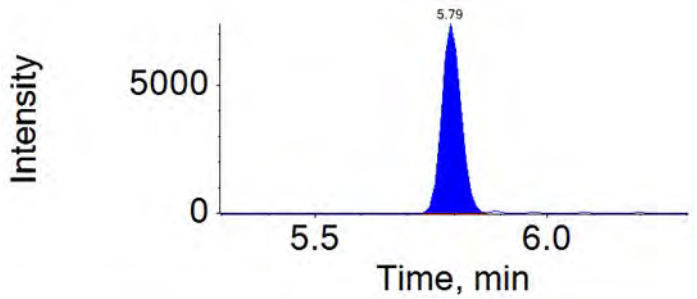
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



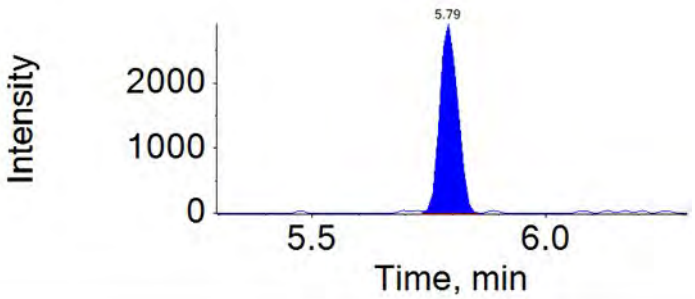
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



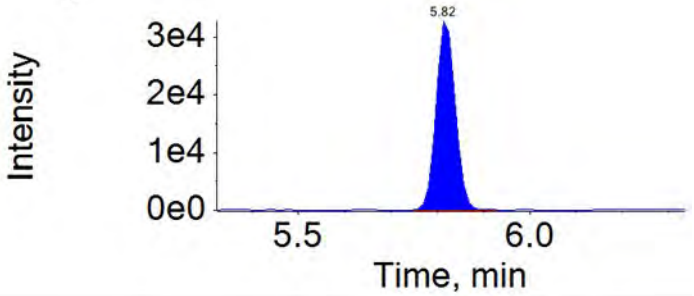
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



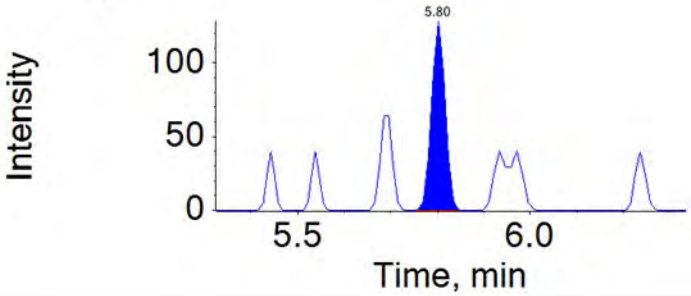
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

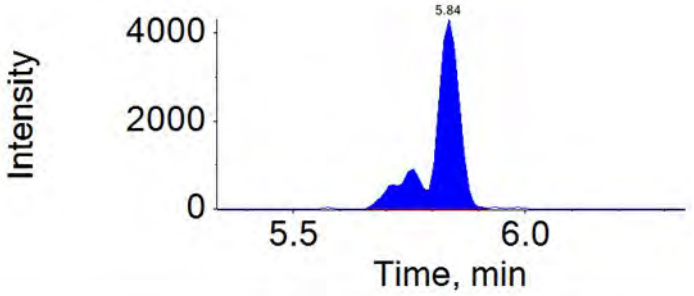
Component: PFUnDA
Primary Mass: 563.0 / 519.0



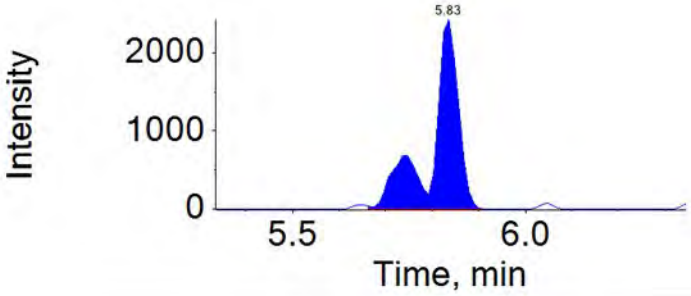
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Secondary Mass: 563.0 / 169.0



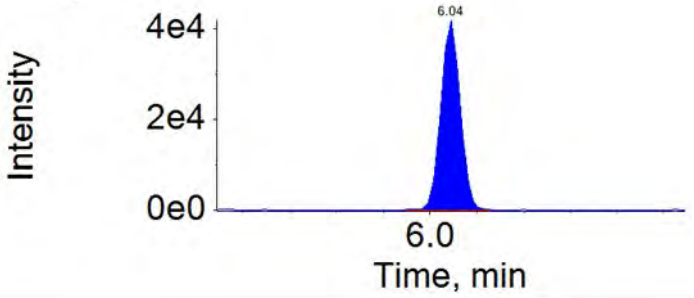
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



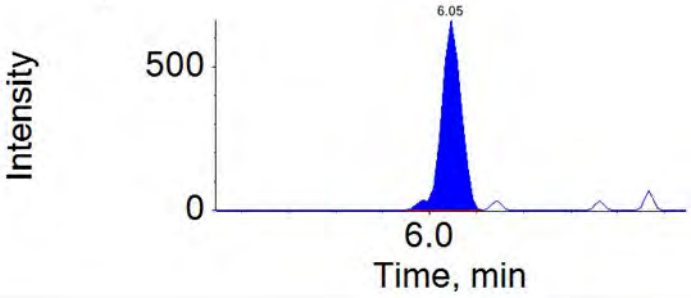
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



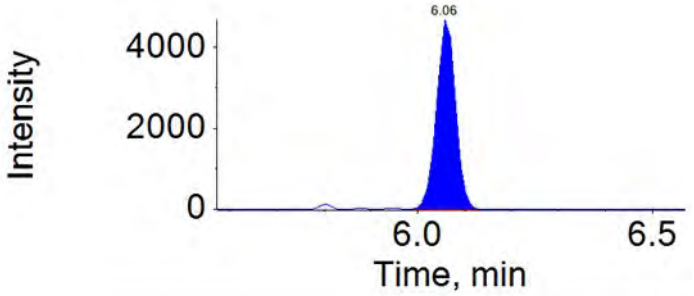
Component: PFDoDA
Primary Mass: 613.0 / 569.0



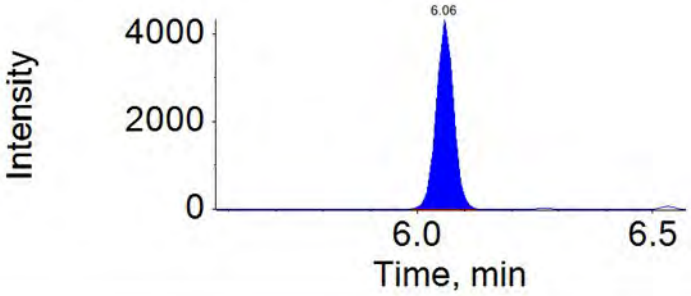
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



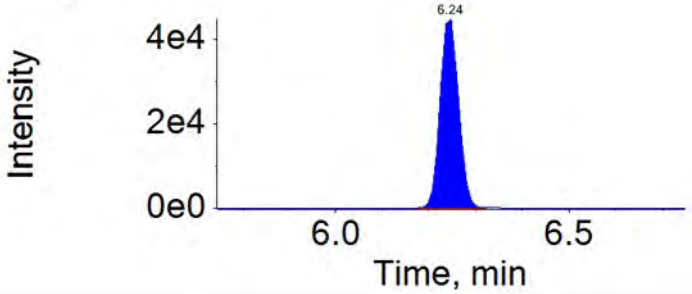
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



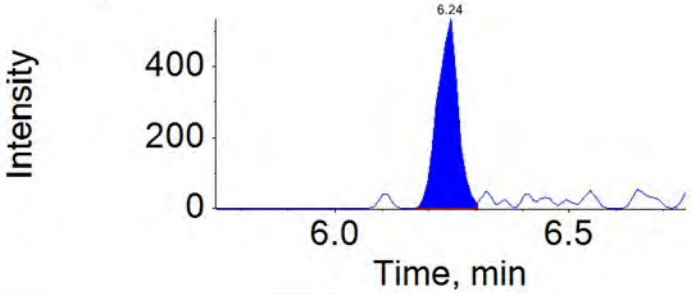
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

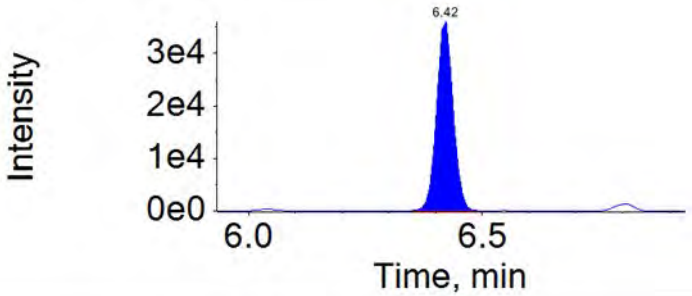
Component: PFTrDA
Primary Mass: 663.0 / 619.0



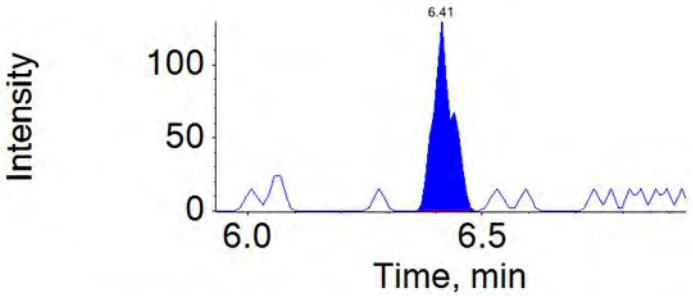
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



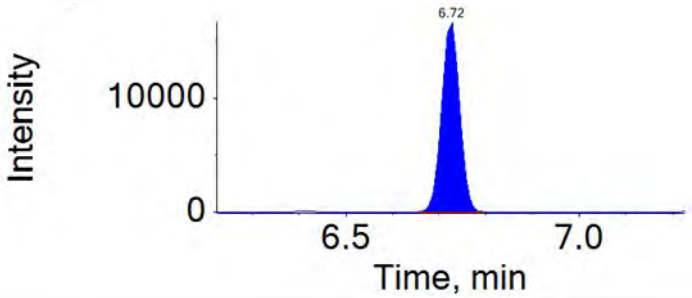
Component: PFTeDA
Primary Mass: 713.0 / 669.0



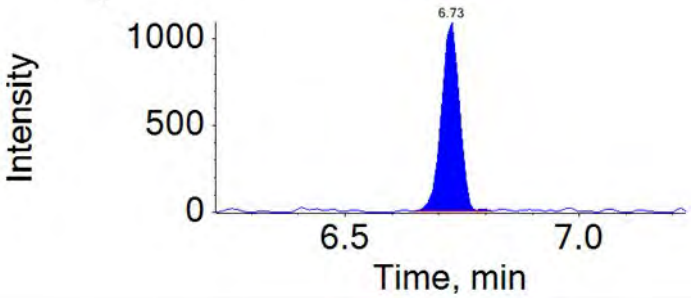
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



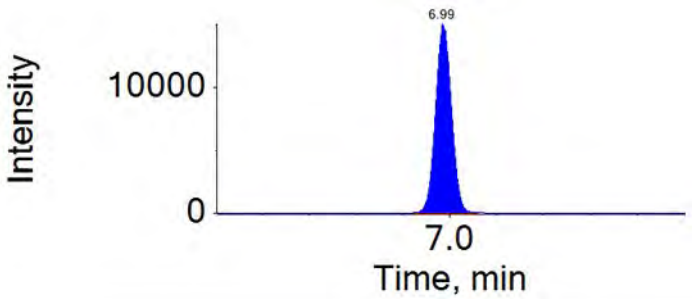
Component: PFHxDA
Primary Mass: 813.0 / 769.0



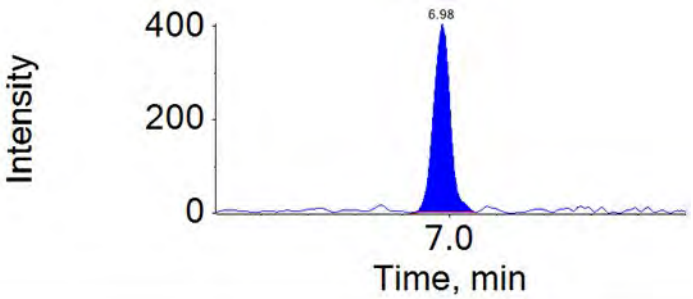
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By umar at 12:38 pm, 12/4/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	Instrument Blank			**Data File:**		18NOV29D-73.wiff
Sample ID:	methanol+labels			**Acquis Date:**		2018-11-29T20:47:06
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	1			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18NOV29DCCV6-9
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	N/A			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV29D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	1072007.1	906425.4	18	50	
13C2-PFOA	5.0	580377.1	495984.0	17	50	
13C4-PFOS	4.8	356069.8	296261.8	20	50	
13C2-PFDA	5.0	542154.6	451203.0	20	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	1146787.6	13C3-PFBA	1072007.1	1.070	5.000	4.773	95	70-130	
E13C5-PFPeA	1080213.5	13C3-PFBA	1072007.1	1.008	5.000	4.705	94	70-130	
E13C3-PFBS	467354.0	13C3-PFBA	1072007.1	0.436	4.650	4.159	89	70-130	
E13C2-4:2-FTS	83228.5	13C2-PFOA	580377.1	0.143	4.670	4.942	106	70-130	
E13C5-PFHxA	761353.7	13C2-PFOA	580377.1	1.312	5.000	4.818	96	70-130	
E13C3-PFHxS	380641.1	13C2-PFOA	580377.1	0.656	4.730	5.140	109	70-130	
E13C4-PFHpA	608352.9	13C2-PFOA	580377.1	1.048	5.000	4.816	96	70-130	
E13C2-6:2-FTS	76246.9	13C2-PFOA	580377.1	0.131	4.750	5.499	116	70-130	
E13C8-PFOA	1060868.3	13C2-PFOA	580377.1	1.828	5.000	5.031	101	70-130	
E13C8-PFOS	358159.4	13C4-PFOS	356069.8	1.006	4.780	4.541	95	70-130	
E13C9-PFNA	747835.1	13C4-PFOS	356069.8	2.100	5.000	4.613	92	70-130	
E13C6-PFDA	951251.3	13C2-PFDA	542154.6	1.755	5.000	4.947	99	70-130	
E13C2-8:2-FTS	62758.6	13C2-PFDA	542154.6	0.116	4.790	4.975	104	70-130	
E13C8-PFOSA	726331.4	13C2-PFDA	542154.6	1.340	5.000	4.916	98	70-130	
Ed3-NMeFOSAA	279222.6	13C2-PFDA	542154.6	0.515	5.000	6.539	131	70-130	OOS
E13C7-PFUnDA	639126.9	13C2-PFDA	542154.6	1.179	5.000	4.982	100	70-130	
Ed5-NEtFOSAA	158699.3	13C2-PFDA	542154.6	0.293	5.000	5.215	104	70-130	
E13C2-PFDoDA	1215903.7	13C2-PFDA	542154.6	2.243	5.000	4.712	94	70-130	
Ed7-NMePFOSAE	302120.4	13C2-PFDA	542154.6	0.557	5.000	4.816	96	70-130	
Ed3-NMePFOSA	101225.5	13C2-PFDA	542154.6	0.187	5.000	5.053	101	70-130	
Ed9-NEtPFOSAE	250994.9	13C2-PFDA	542154.6	0.463	5.000	4.694	94	70-130	
Ed5-NEtPFOSA	78115.7	13C2-PFDA	542154.6	0.144	5.000	5.007	100	70-130	
E13C2-PFTeDA	927532.4	13C2-PFDA	542154.6	1.711	5.000	4.734	95	70-130	

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

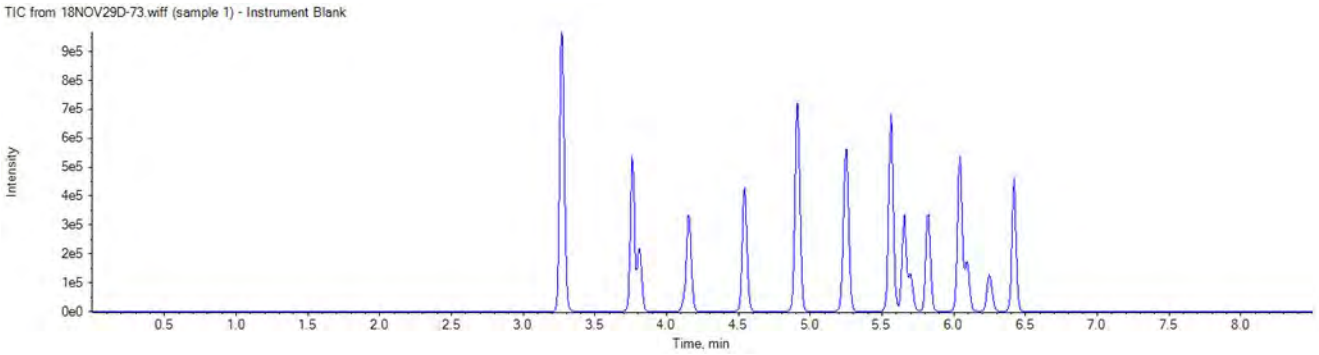
Analyte Quantitation Peak Table

Sample Name: Instrument Blank **Instrument Name:** LM27631 **File Name:** 18NOV29D-73.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	N/A	N/A	N/A		A	13C4-PFBA	3.27	1146787.6	N/A	
PFPeA	N/A	N/A	N/A		A	13C5-PFPeA	3.76	1080213.5	N/A	
PFBS	N/A	N/A	N/A		A	13C3-PFBS	3.81	467354.0	N/A	
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.12	83228.5	N/A	
PFHxA	N/A	N/A	N/A		A	13C5-PFHxA	4.15	761353.7	N/A	
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.81	467354.0	N/A	
PFHpA	N/A	N/A	N/A		A	13C4-PFHpA	4.54	608352.9	N/A	
PFHxS	N/A	N/A	N/A		A	13C3-PFHxS	4.54	380641.1	N/A	
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.90	76246.9	N/A	
PFHpS	N/A	N/A	N/A		A	13C3-PFHxS	4.54	380641.1	N/A	
PFOA	N/A	N/A	N/A		A	13C8-PFOA	4.91	1060868.3	N/A	
PFOS	N/A	N/A	N/A		A	13C8-PFOS	5.24	358159.4	N/A	
PFNA	N/A	N/A	N/A		A	13C9-PFNA	5.26	747835.1	N/A	
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.24	358159.4	N/A	
PFDA	N/A	N/A	N/A		A	13C6-PFDA	5.56	951251.3	N/A	
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.57	62758.6	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.65	726331.4	N/A	
NMeFOSAA	N/A	N/A	N/A		A	d3-NMeFOSAA	5.70	279222.6	N/A	
PFDS	N/A	N/A	N/A		A	13C8-PFOS	5.24	358159.4	N/A	
PFUnDA	N/A	N/A	N/A		A	13C7-PFUnDA	5.82	639126.9	N/A	
NEtFOSAA	N/A	N/A	N/A		A	d5-NEtFOSAA	5.83	158699.3	N/A	
PFDoDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.04	1215903.7	N/A	
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.57	62758.6	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.09	302120.4	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.10	101225.5	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.24	358159.4	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.25	250994.9	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.26	78115.7	N/A	
PFTrDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.04	1215903.7	N/A	
PFTeDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	927532.4	N/A	
PFHxDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	927532.4	N/A	
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	927532.4	N/A	

Total Ion Chromatogram

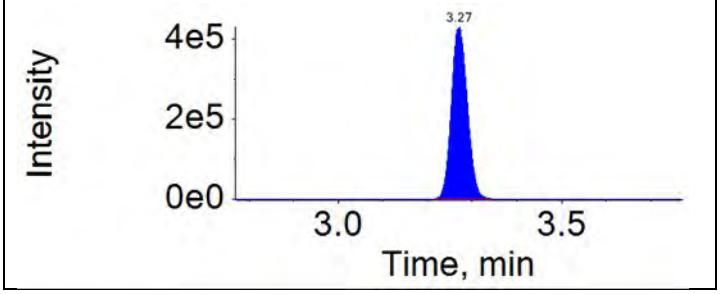


APPROVED
By MCD at 3:27 pm, 11/30/18

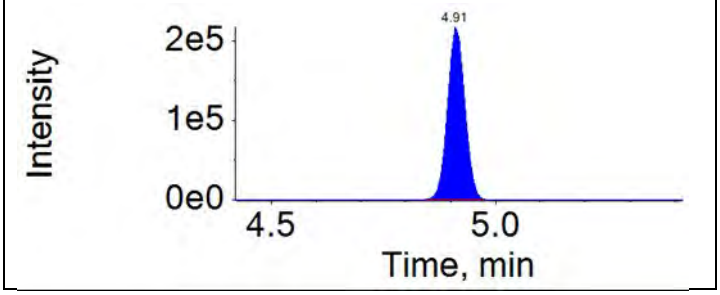
REVIEWED
By UMJS at 3:33 pm, 12/11/18

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

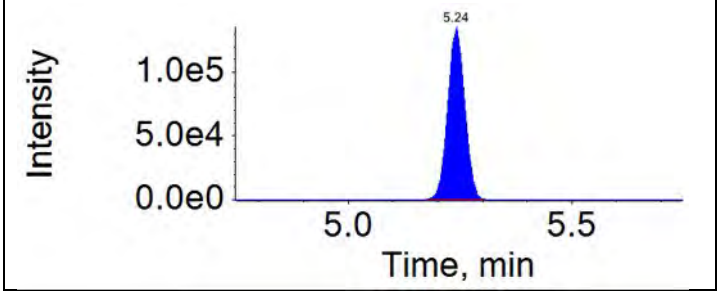
Injection Standard: 13C3-PFBA
216.0 / 172.0



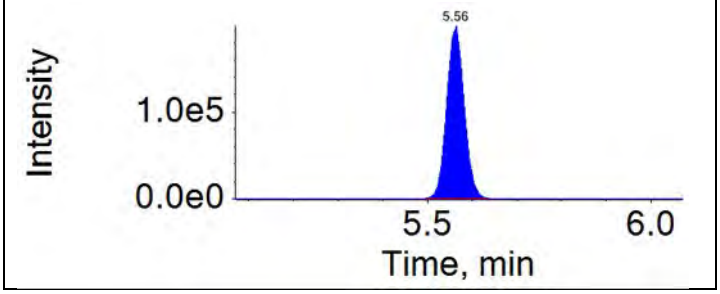
Injection Standard: 13C2-PFOA
415.0 / 370.0



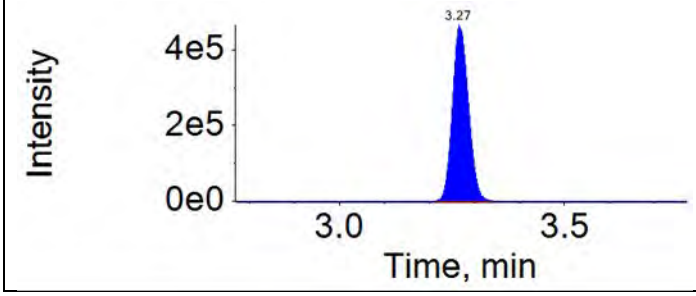
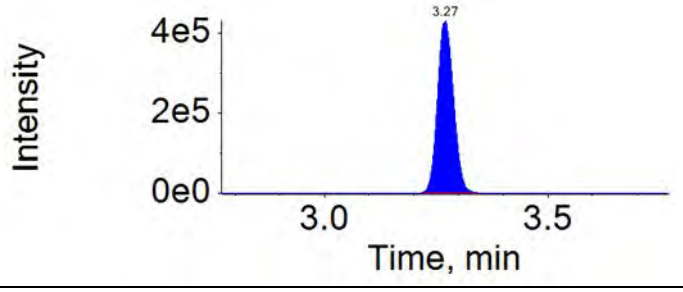
Injection Standard: 13C4-PFOS
503.0 / 80.0

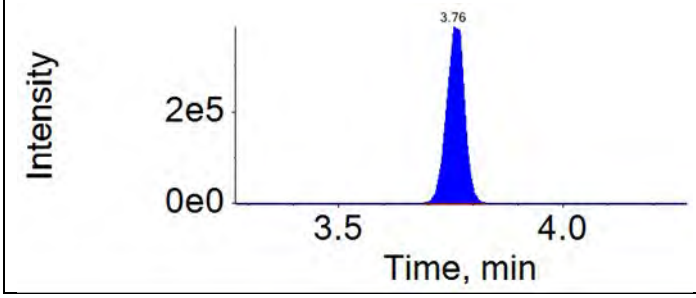
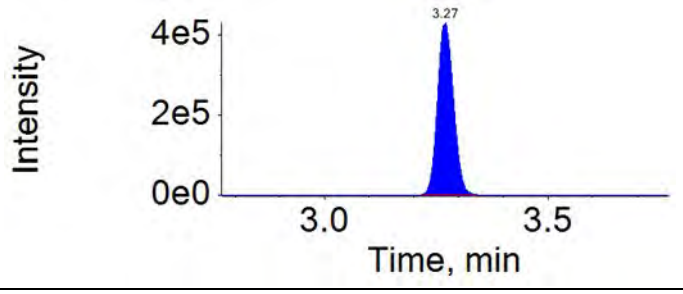


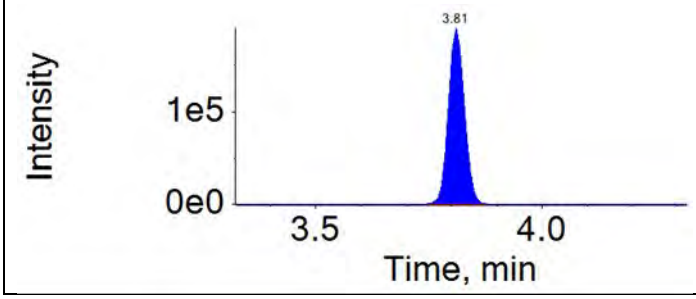
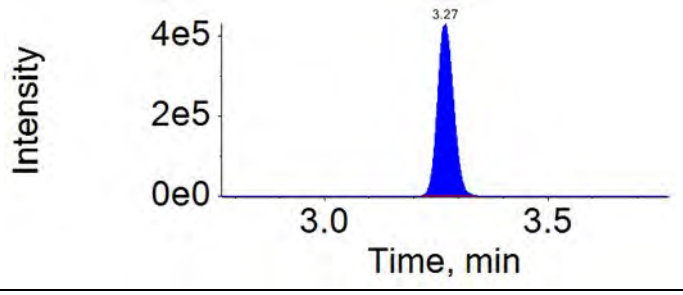
Injection Standard: 13C2-PFDA
515.0 / 470.0

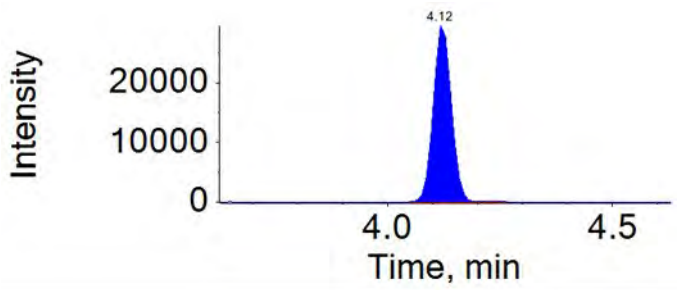
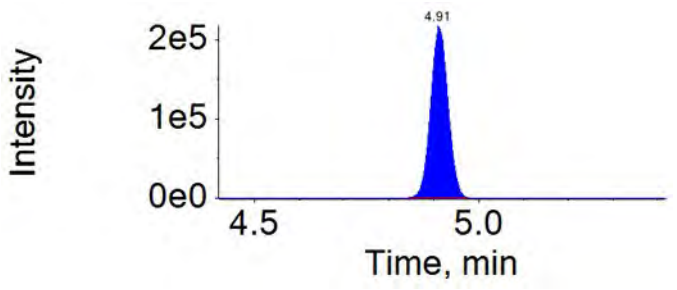


ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

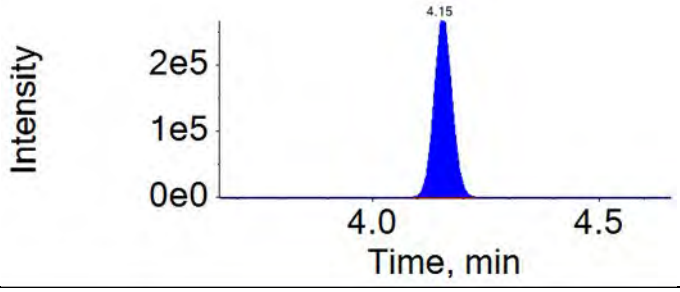
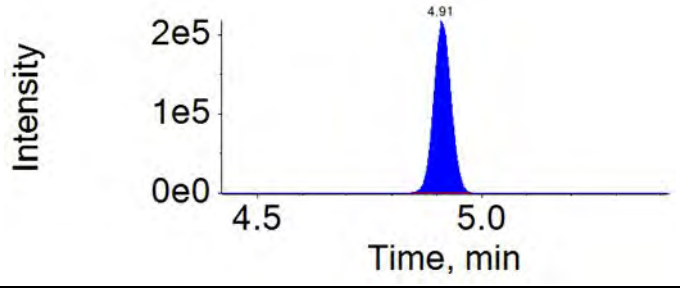
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0
	

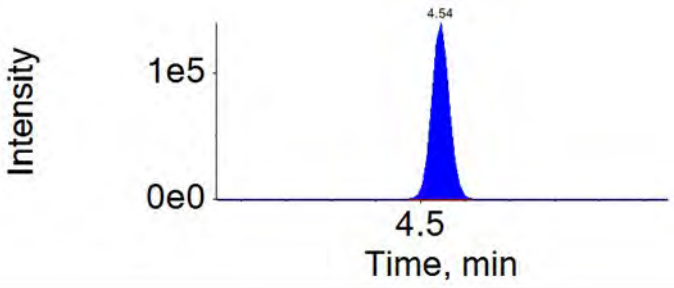
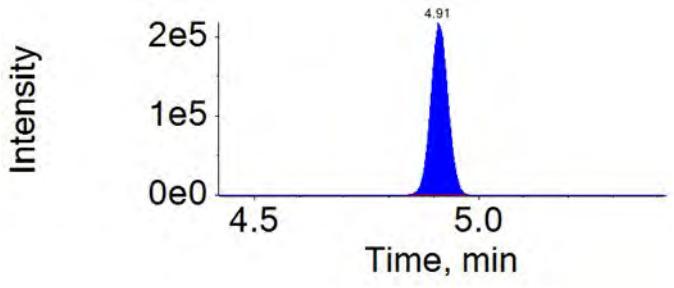
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0
	

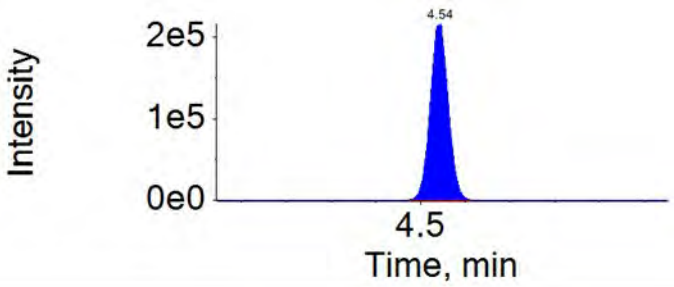
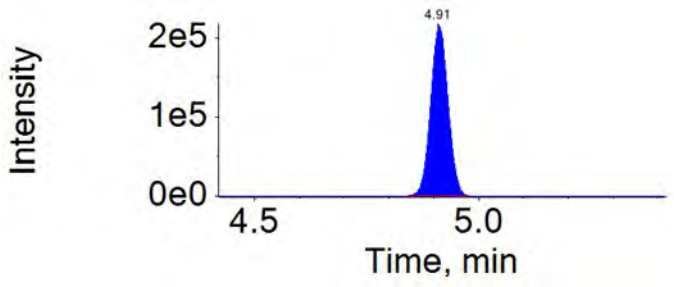
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

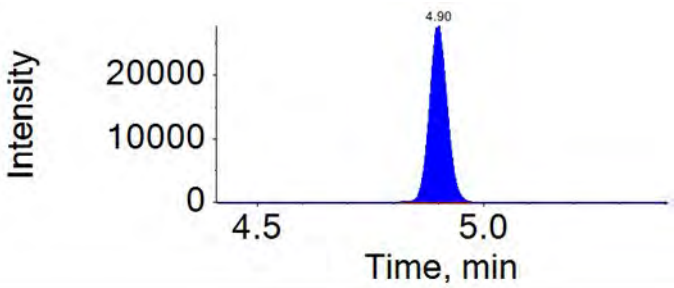
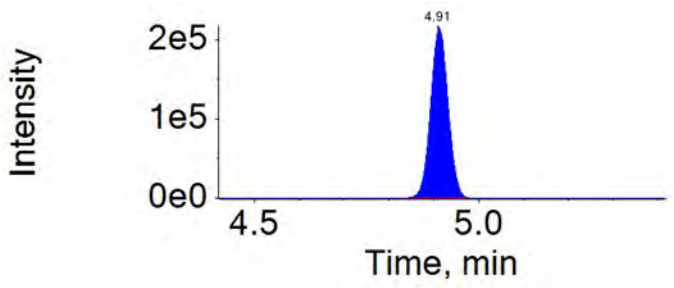
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0
	

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

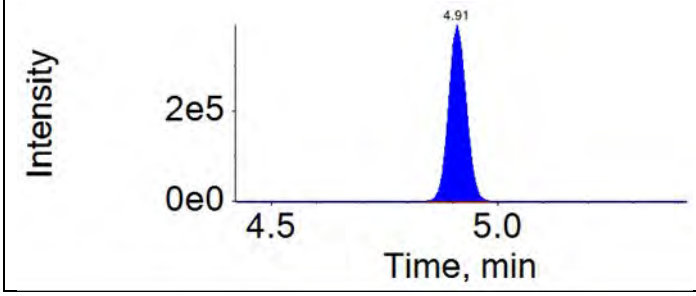
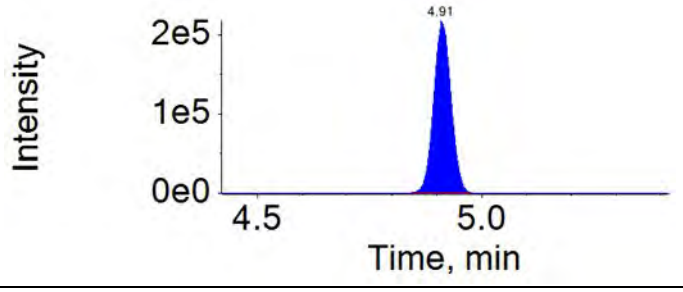
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

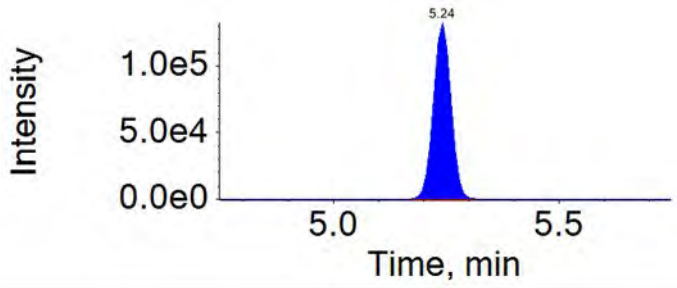
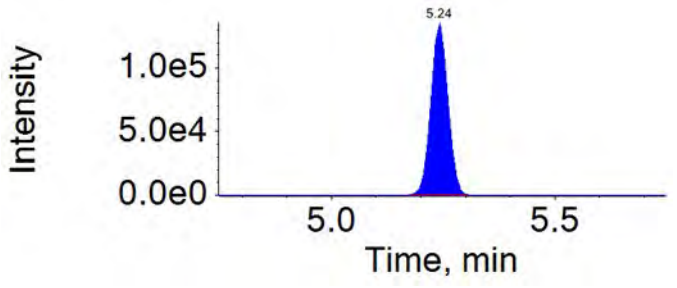
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

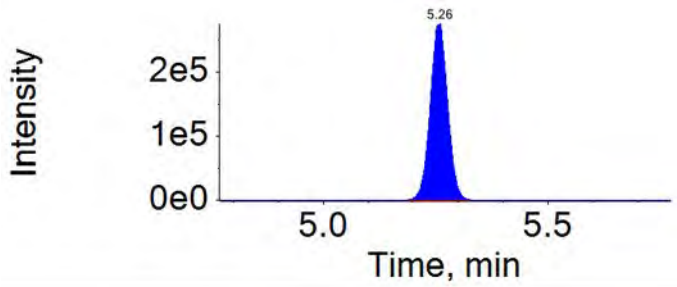
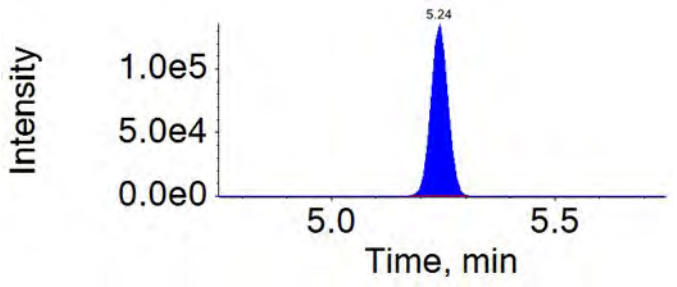
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

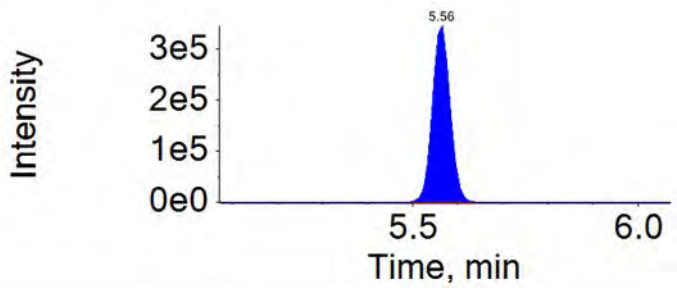
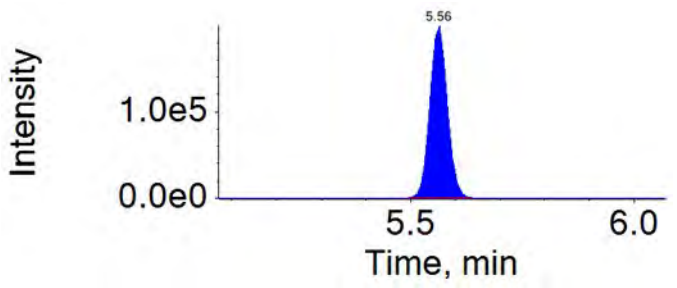
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

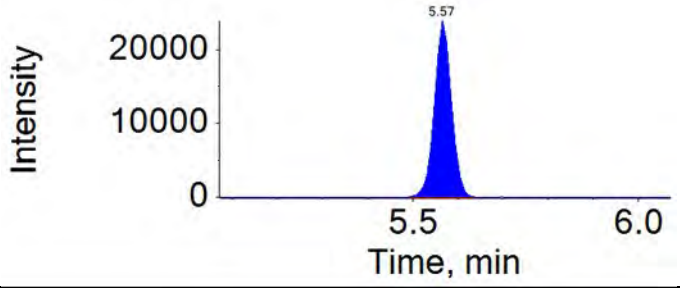
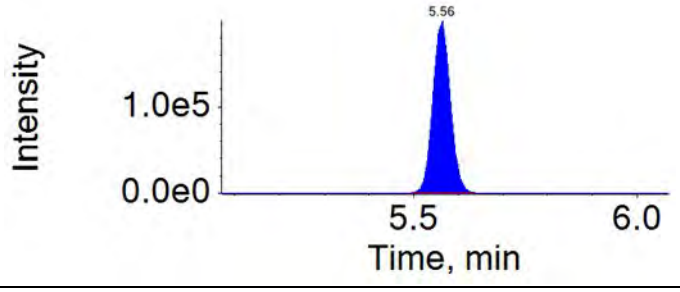
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

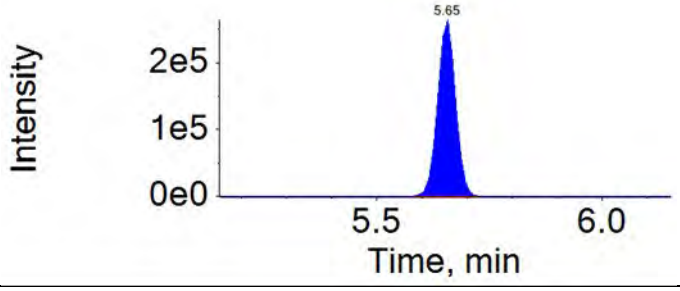
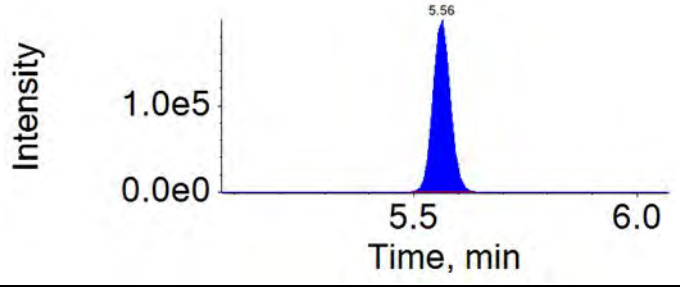
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

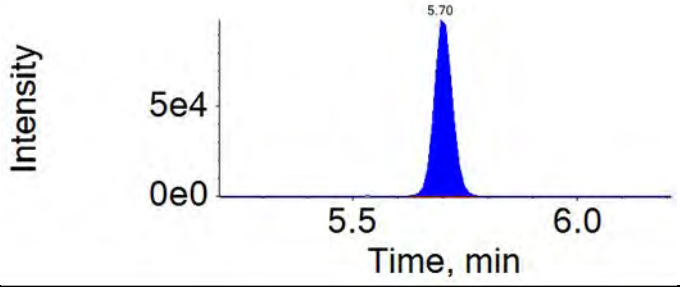
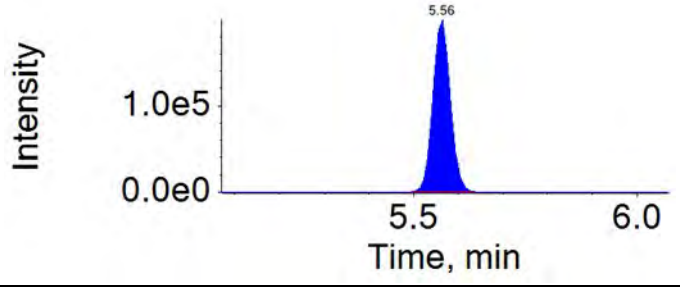
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

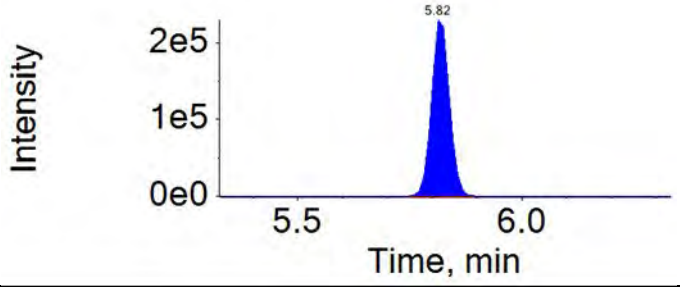
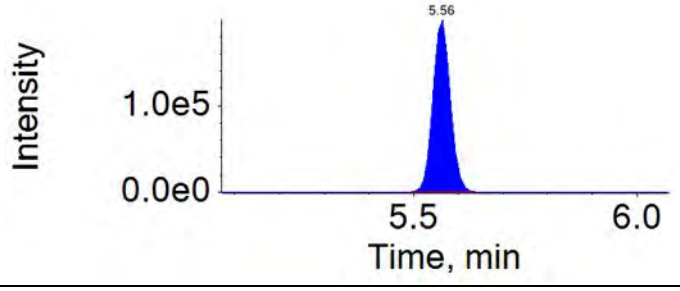
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

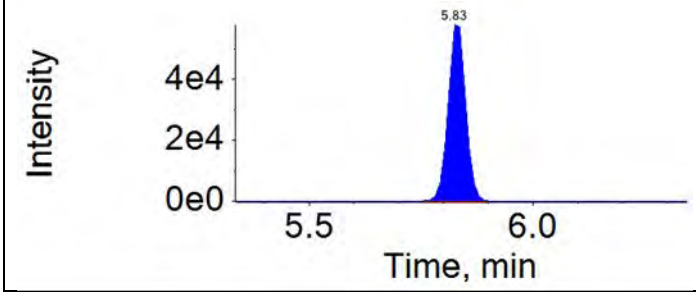
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

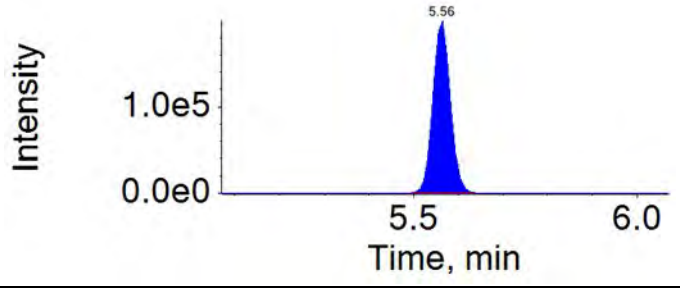
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

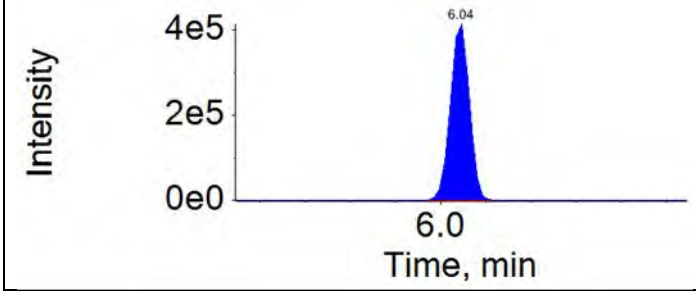
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

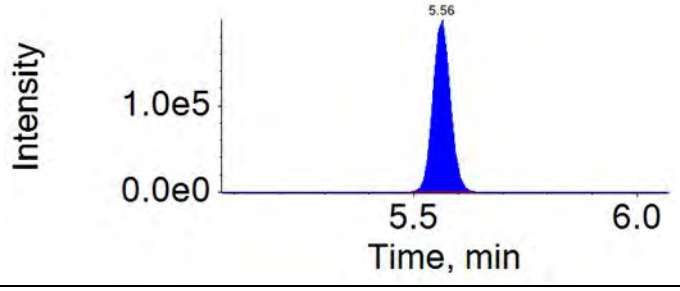
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



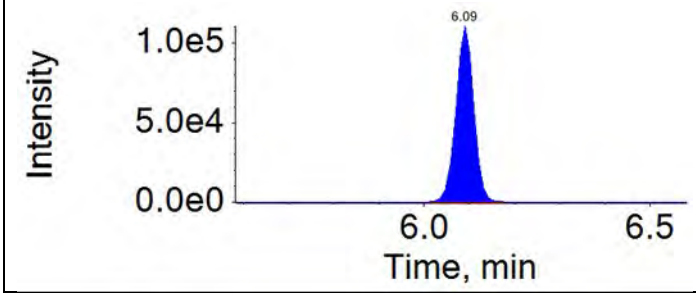


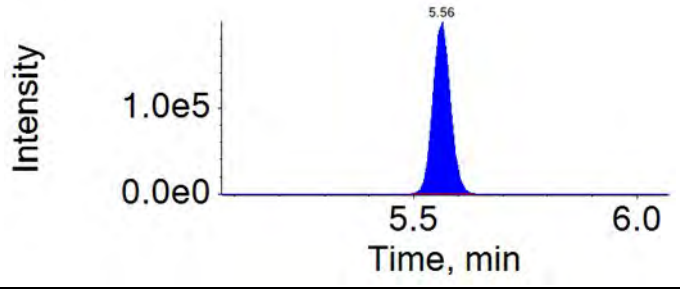
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



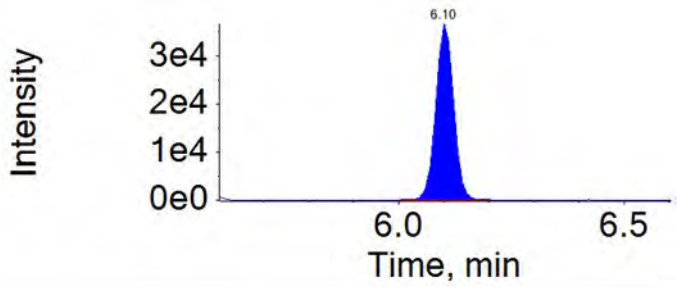


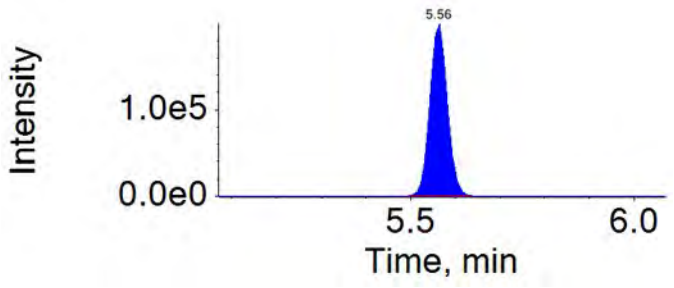
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





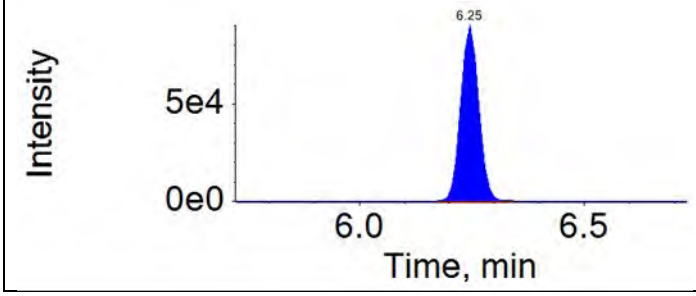
Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0

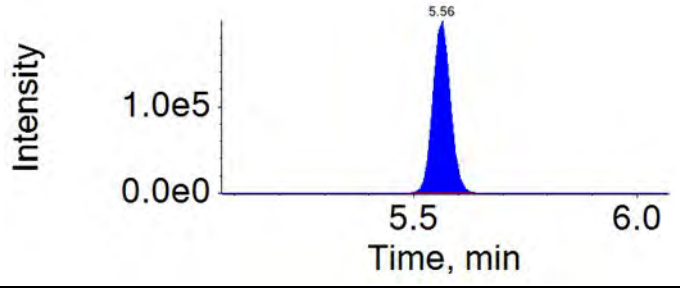




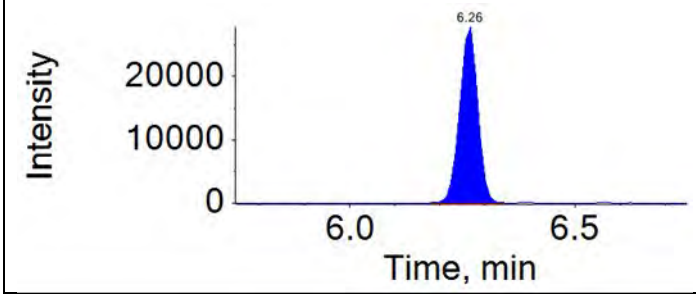
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

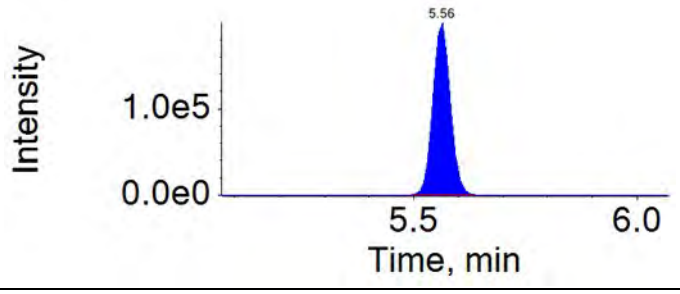
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



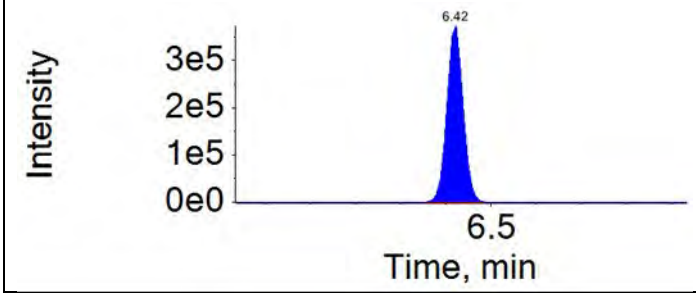


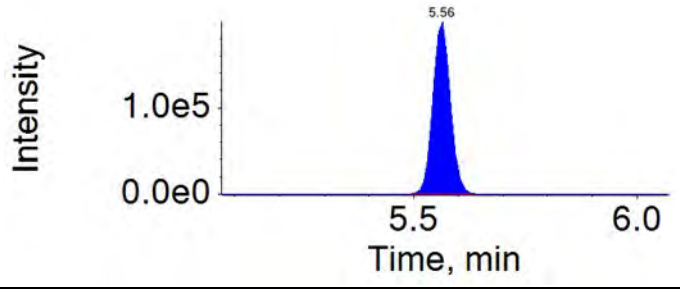
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





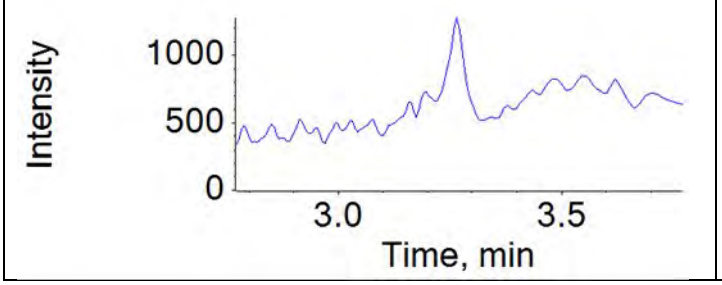
Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0

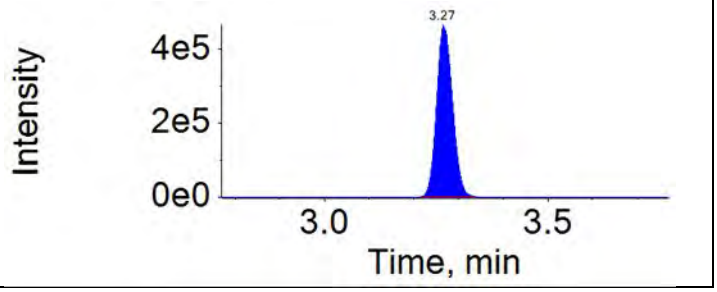




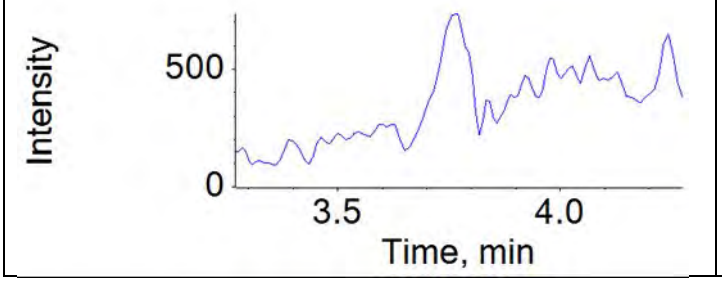
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

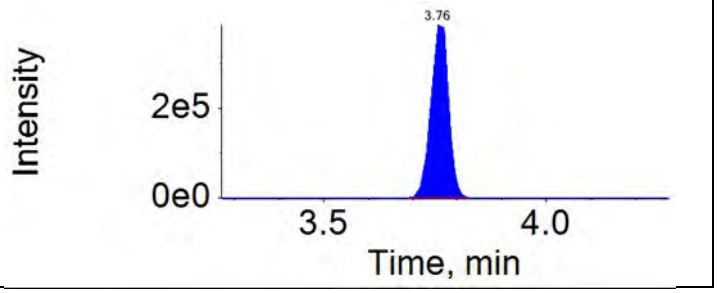
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



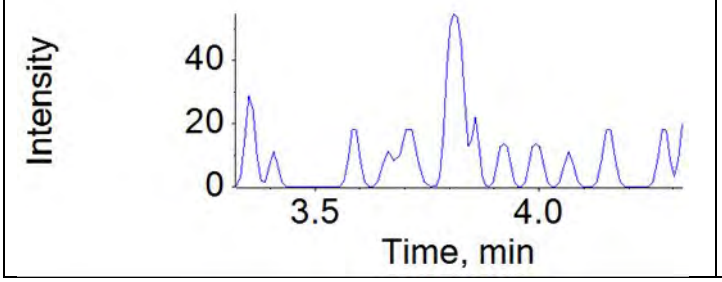


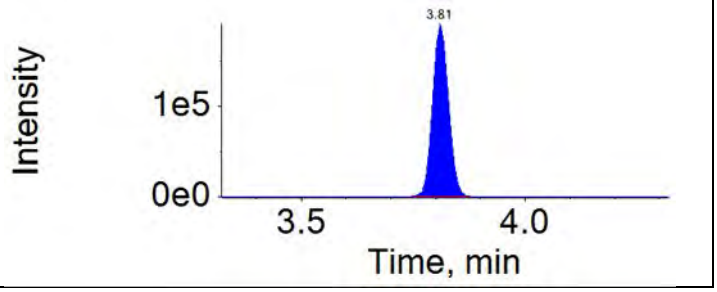
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



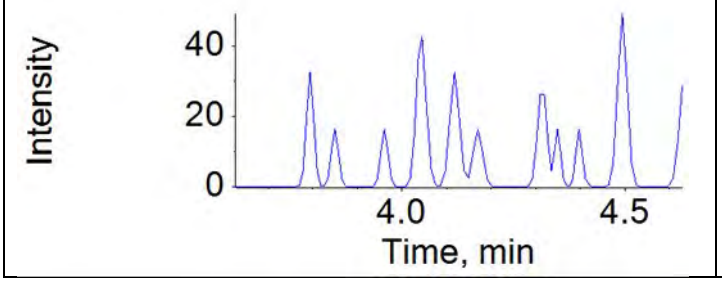


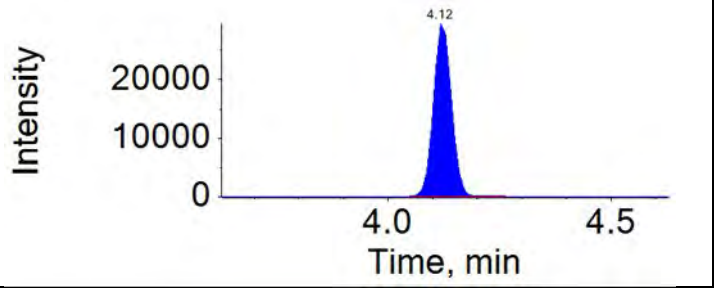
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





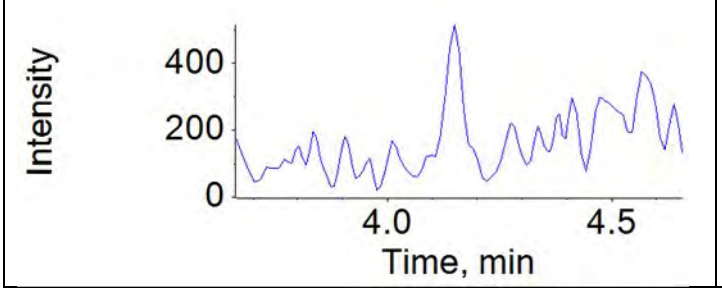
Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0

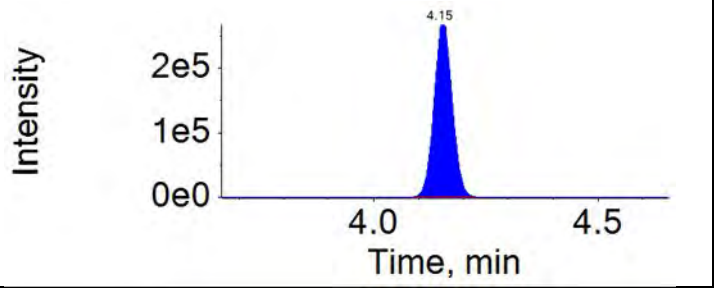




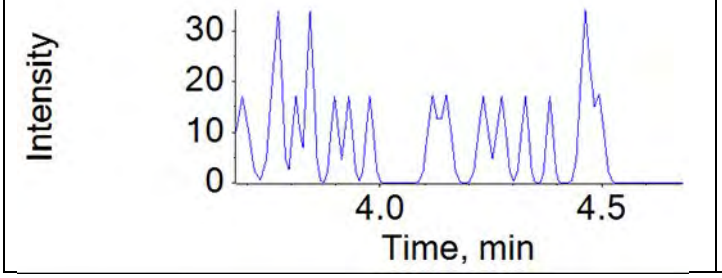
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

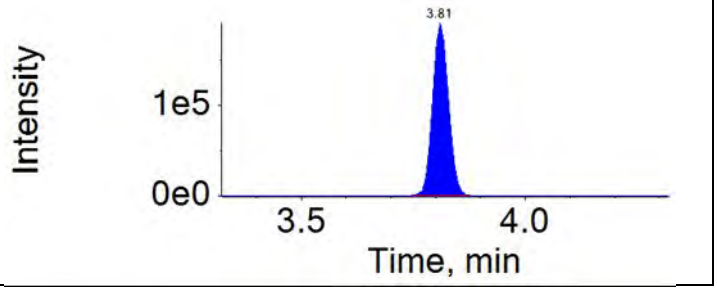
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



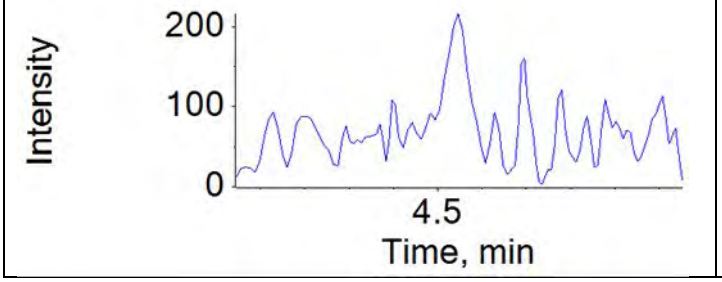


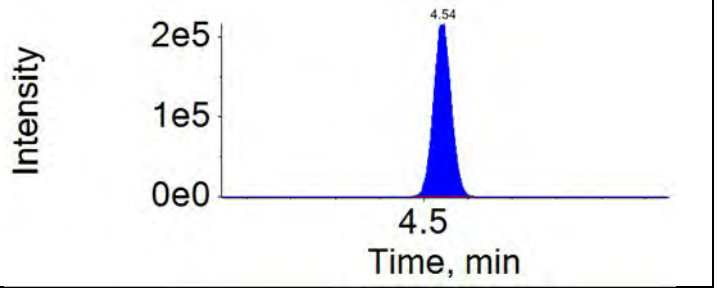
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



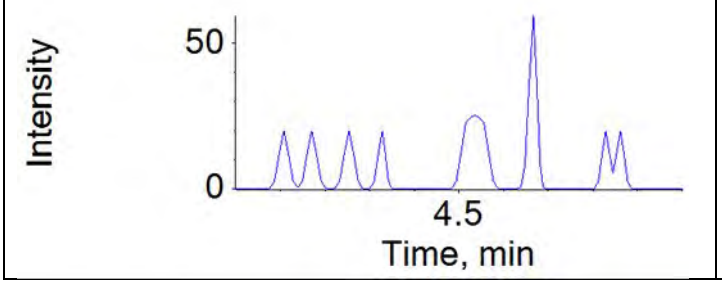


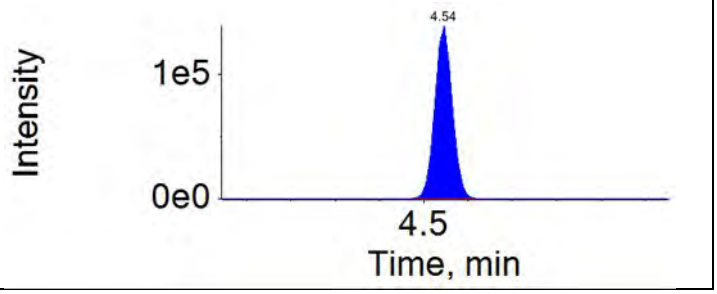
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



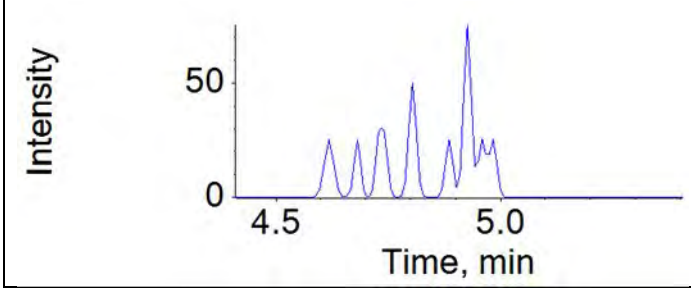


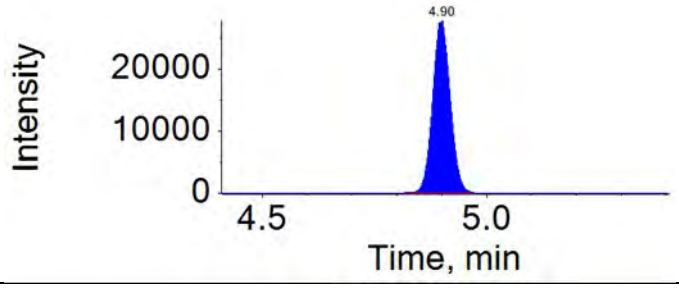
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By UMJS at 3:33 pm, 12/11/18

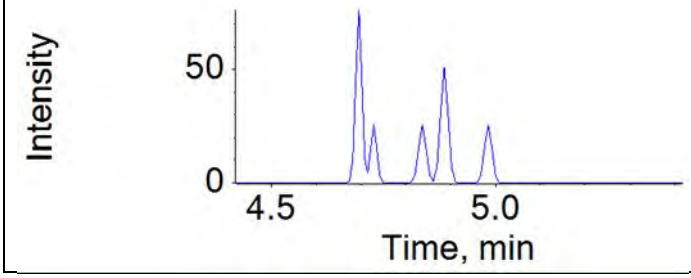
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

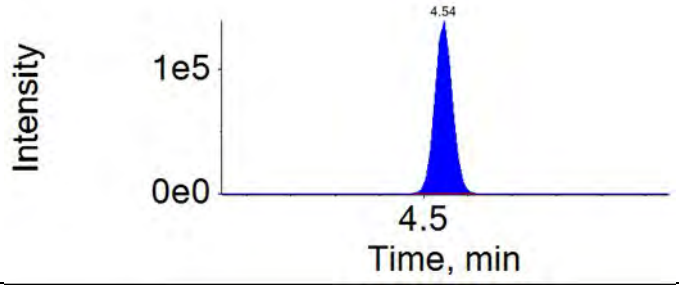
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



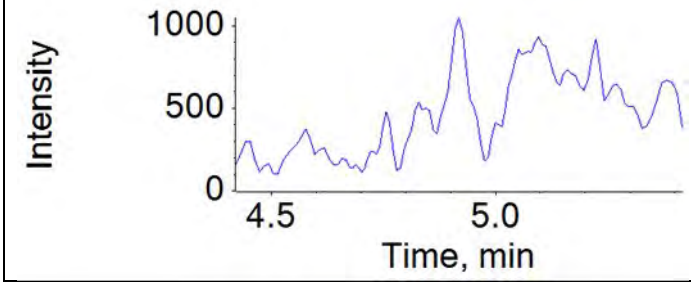


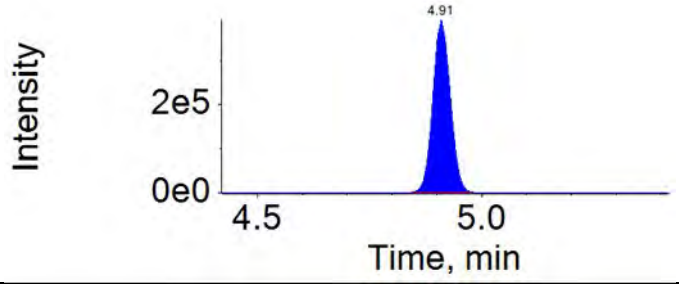
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



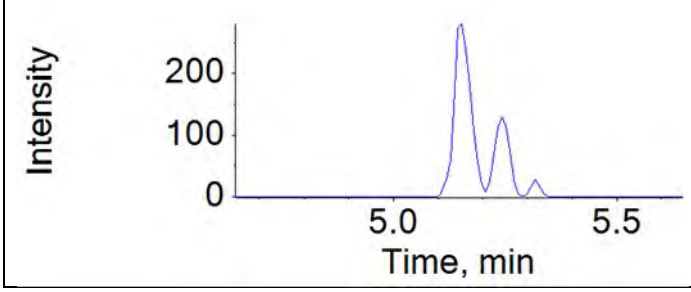


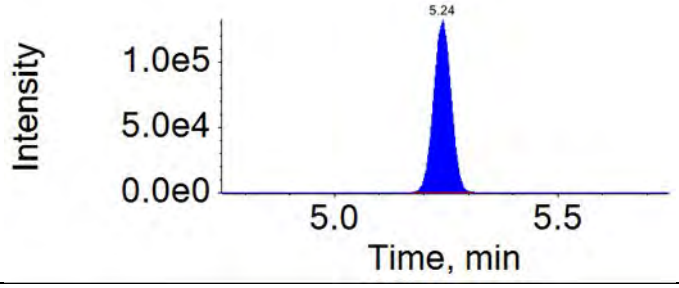
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





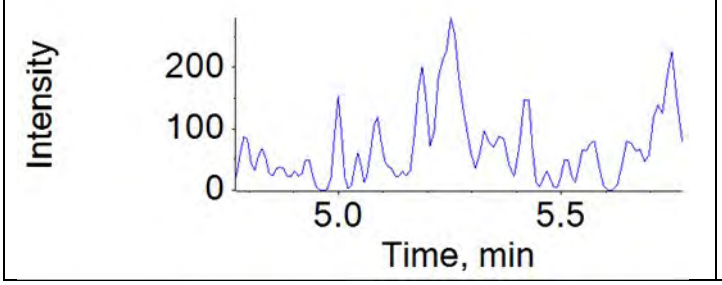
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0

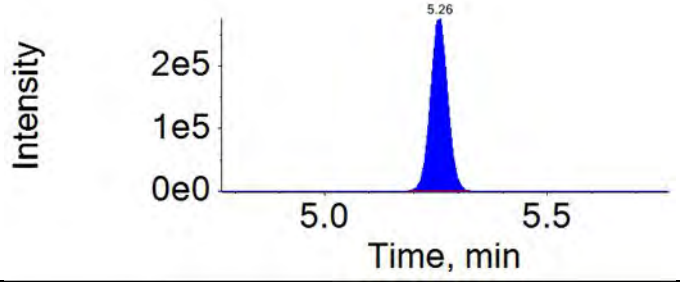




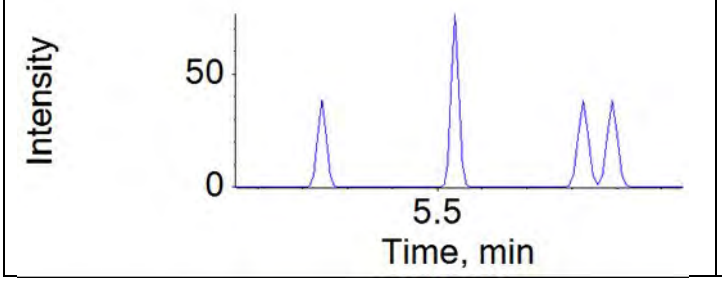
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

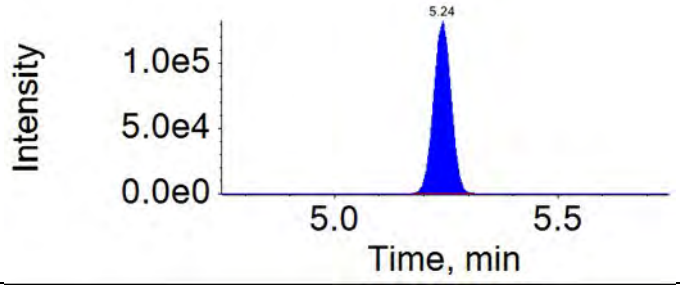
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



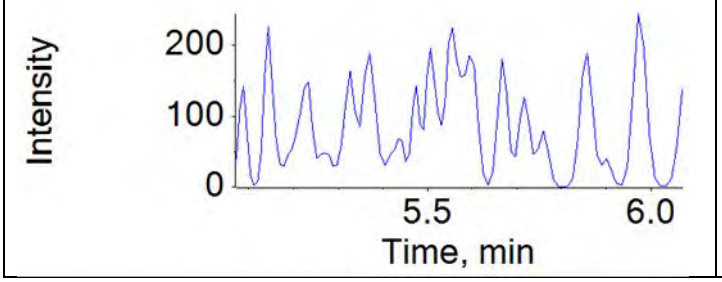


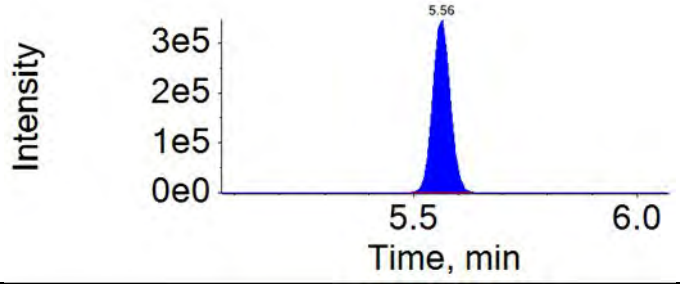
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



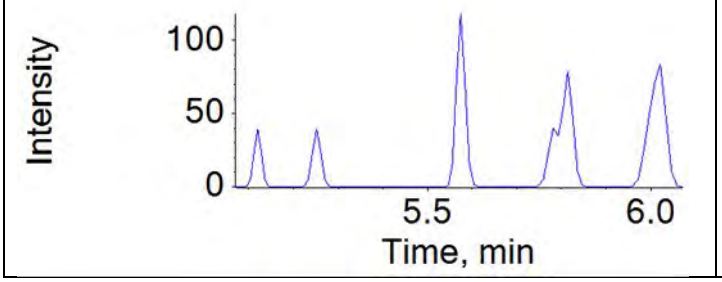


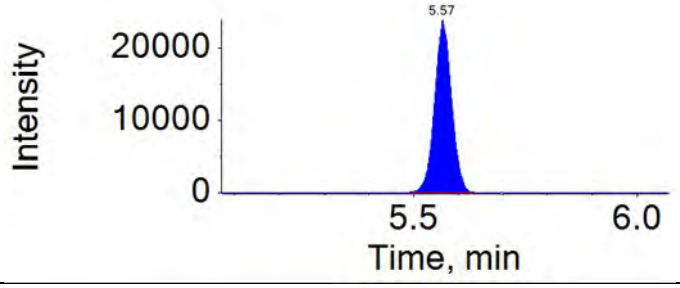
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





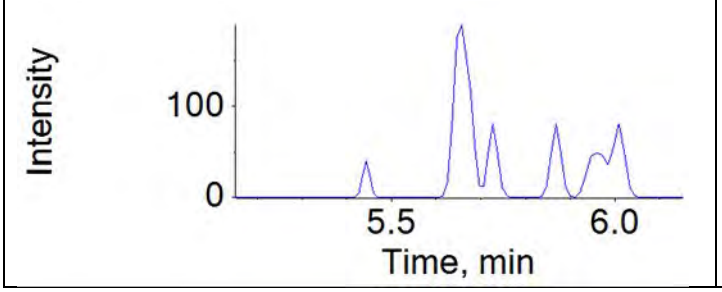
Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0

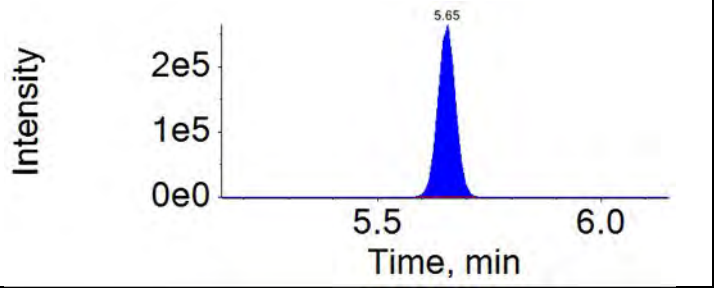




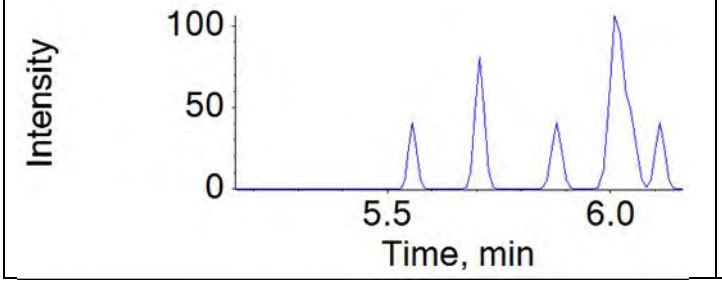
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

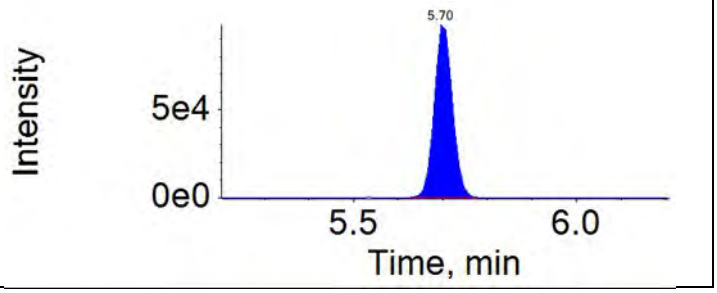
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



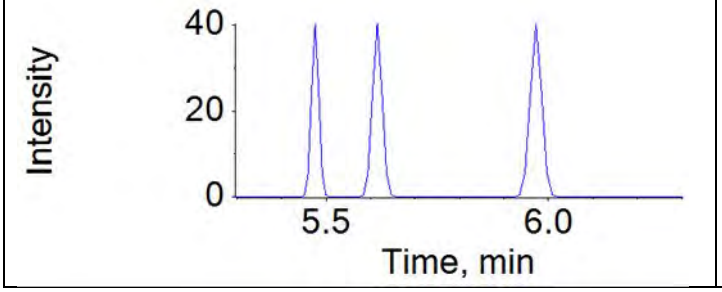


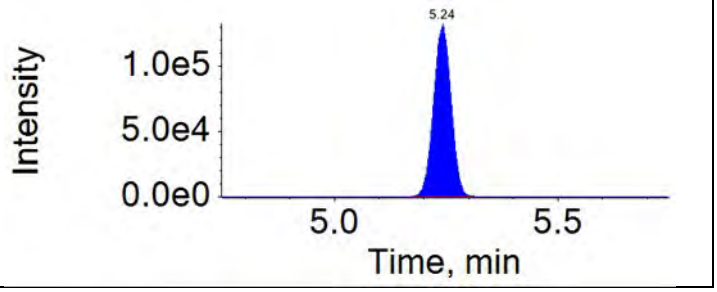
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



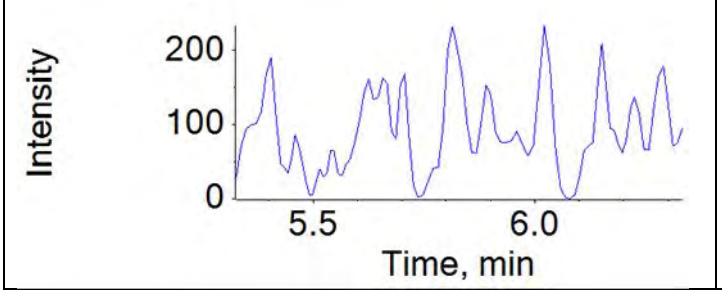


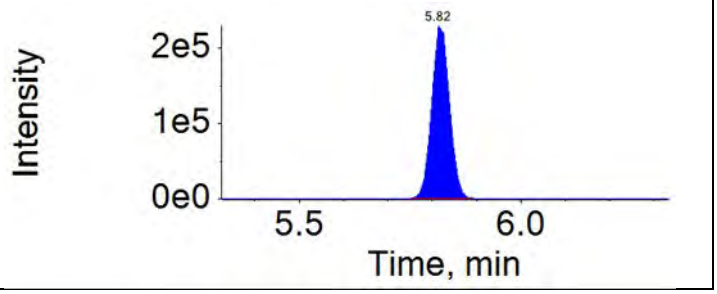
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



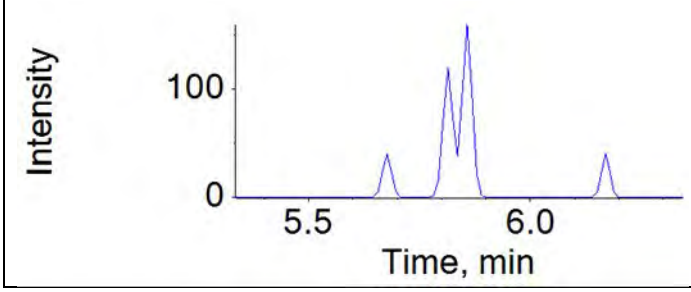


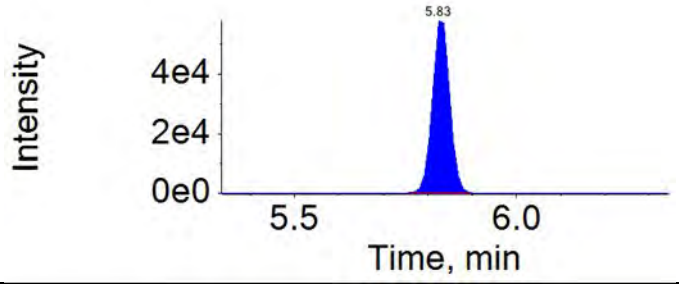
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By UMJS at 3:33 pm, 12/11/18

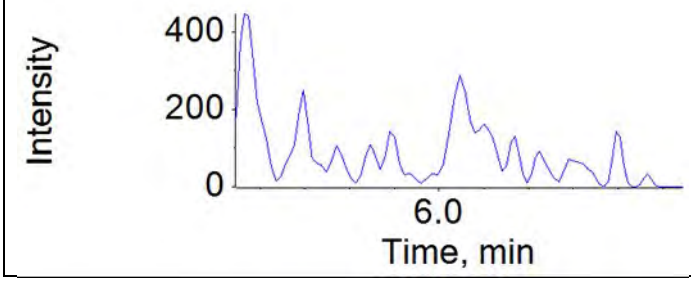
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

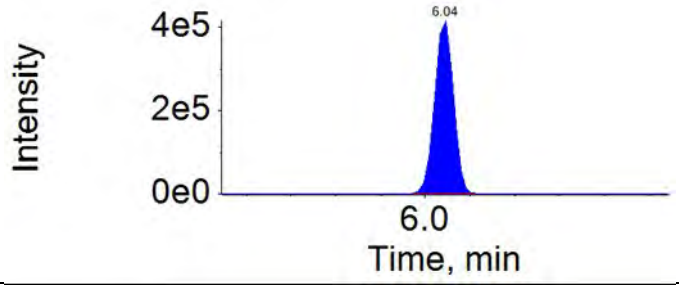
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



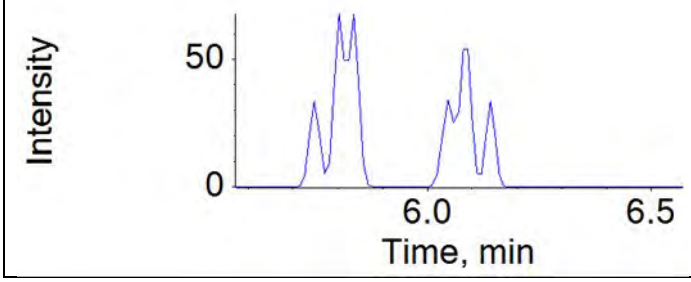


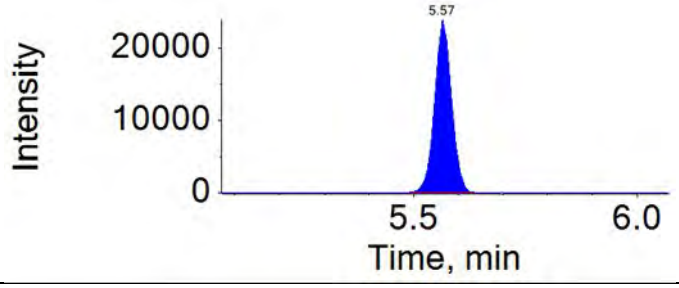
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



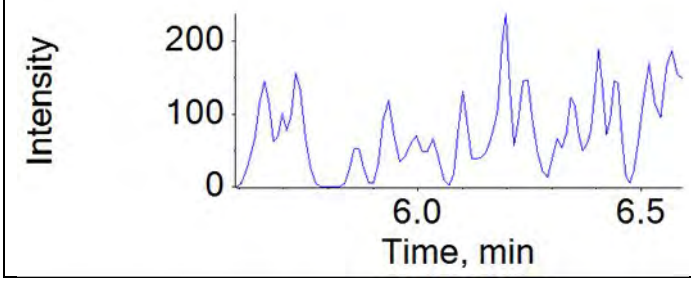


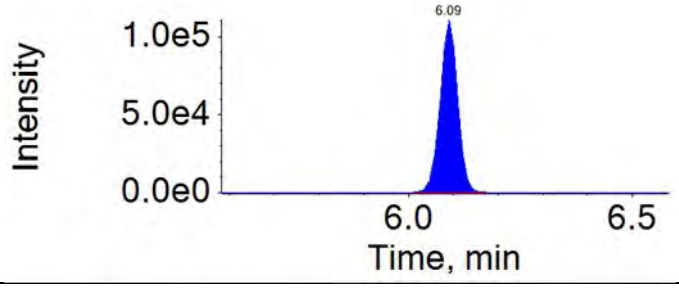
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





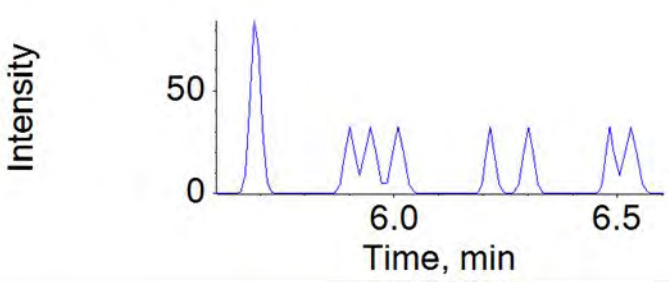
Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0

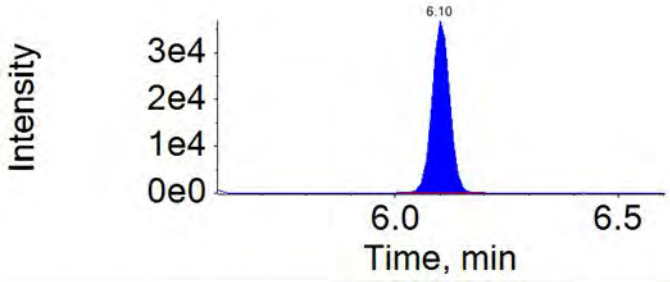




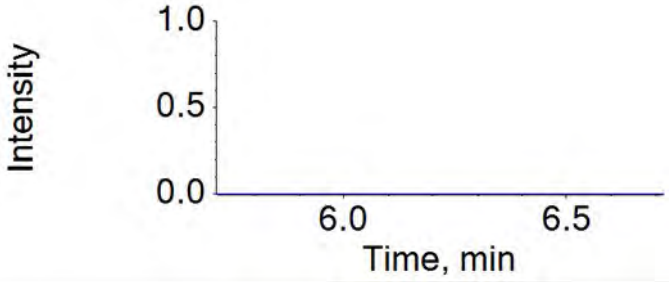
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

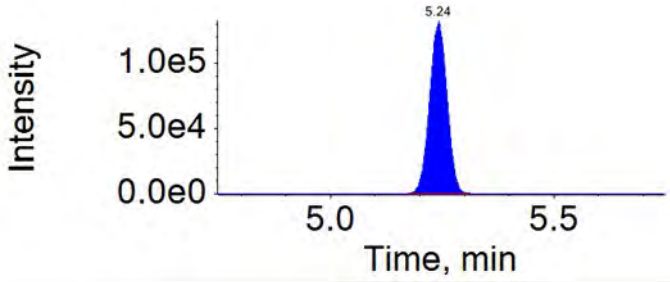
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



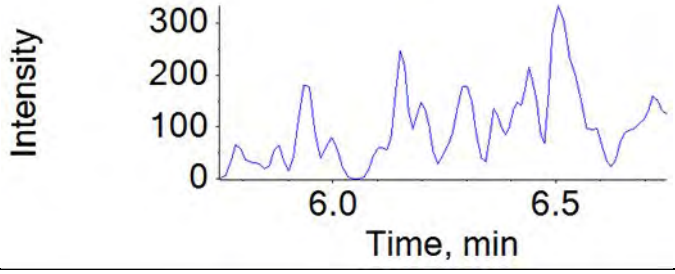


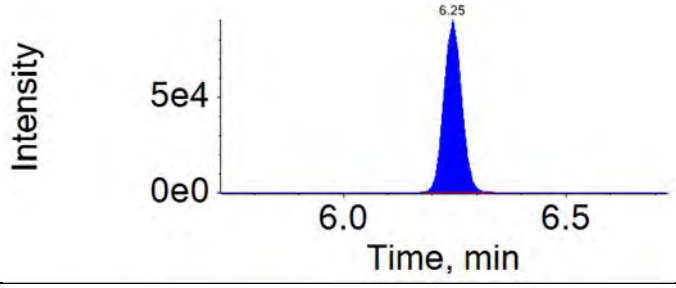
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



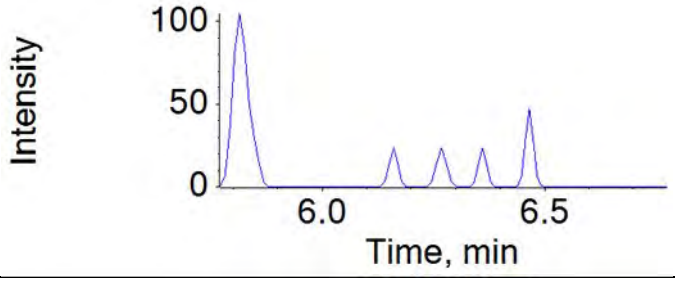


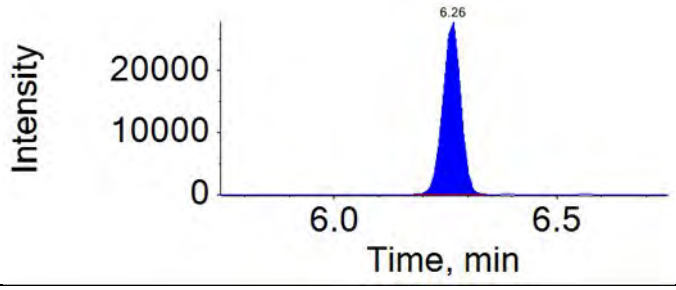
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



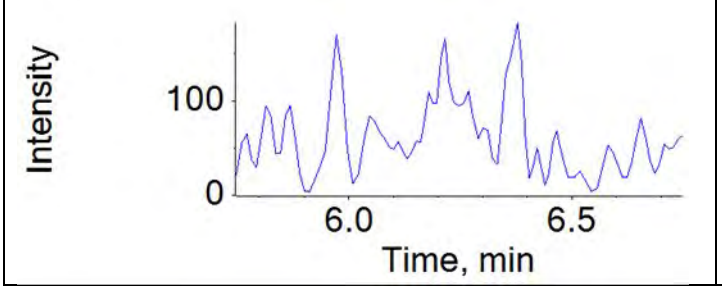


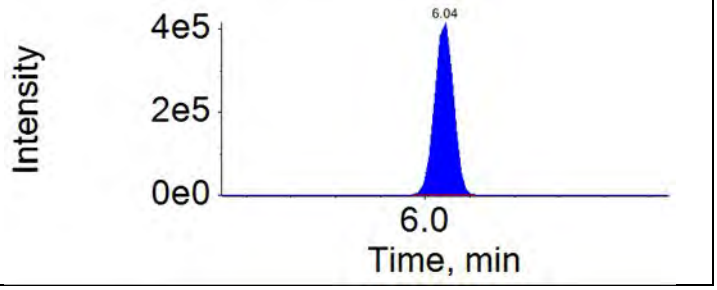
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By UMJS at 3:33 pm, 12/11/18

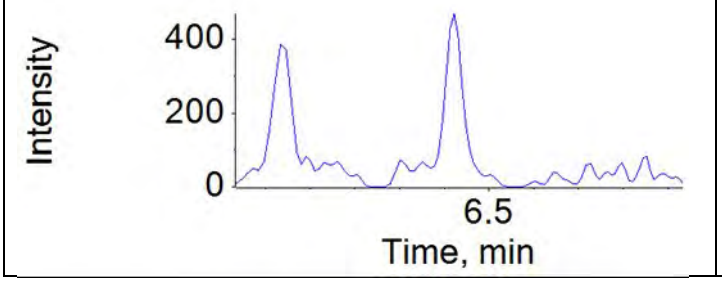
ICAL Name: 18NOV28DCAL **Result Table:** 18NOV29DCCV6-9 11/30/2018 3:21:11 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

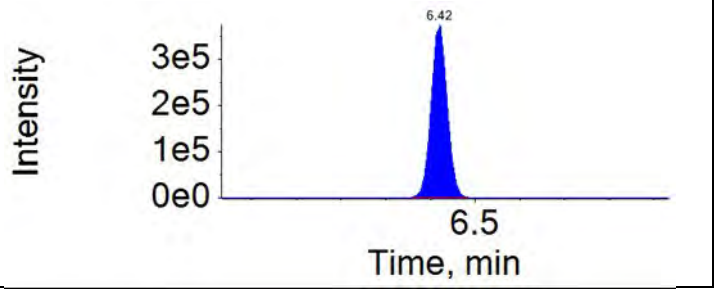
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



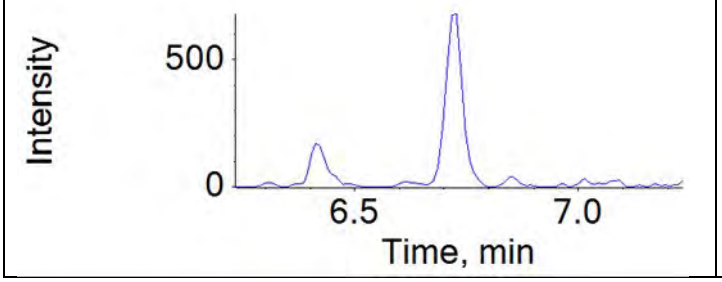


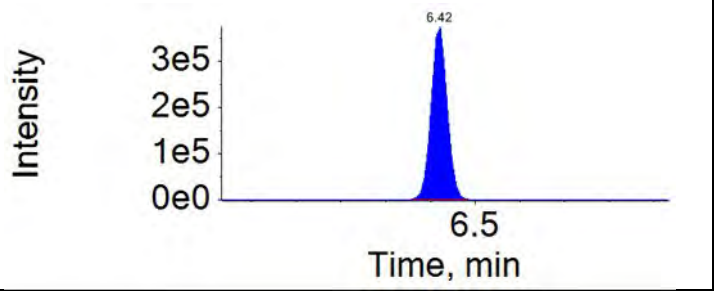
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



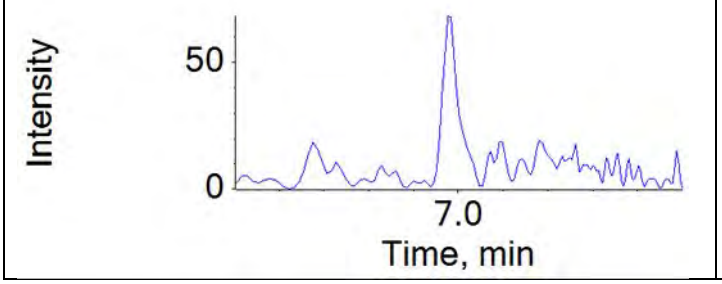


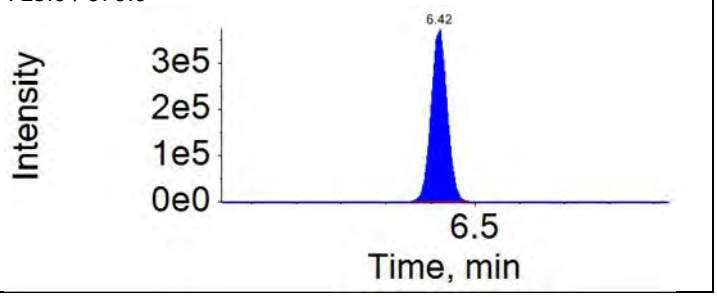
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0





Ion Ratio Report

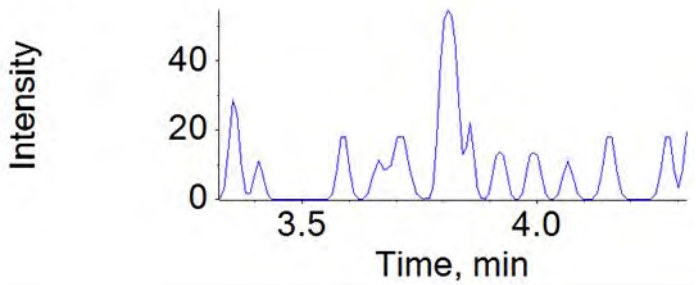
Sample Name: Instrument Blank **Instrument Name:** LM27631 **File Name:** 18NOV29D-73.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	N/A	N/A	N/A	A	N/A	N/A			
PFBS_2	N/A	N/A	N/A	A	N/A	N/A		50	
4:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
4:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxA	N/A	N/A	N/A	A	N/A	N/A			
PFHxA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFPeS	N/A	N/A	N/A	A	N/A	N/A			
PFPeS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpA	N/A	N/A	N/A	A	N/A	N/A			
PFHpA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxS	N/A	N/A	N/A	A	N/A	N/A			
PFHxS_2	N/A	N/A	N/A	A	N/A	N/A		50	
6:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
6:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpS	N/A	N/A	N/A	A	N/A	N/A			
PFHpS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOA	N/A	N/A	N/A	A	N/A	N/A			
PFOA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOS	N/A	N/A	N/A	A	N/A	N/A			
PFOS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNA	N/A	N/A	N/A	A	N/A	N/A			
PFNA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNS	N/A	N/A	N/A	A	N/A	N/A			
PFNS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDA	N/A	N/A	N/A	A	N/A	N/A			
PFDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
8:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
8:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
NMeFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NMeFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDS	N/A	N/A	N/A	A	N/A	N/A			
PFDS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFUnDA	N/A	N/A	N/A	A	N/A	N/A			
PFUnDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
NEtFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NEtFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDoDA	N/A	N/A	N/A	A	N/A	N/A			
PFDoDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
10:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
10:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTrDA	N/A	N/A	N/A	A	N/A	N/A			
PFTrDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTeDA	N/A	N/A	N/A	A	N/A	N/A			
PFTeDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxDA	N/A	N/A	N/A	A	N/A	N/A			
PFHxDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFODA	N/A	N/A	N/A	A	N/A	N/A			
PFODA_2	N/A	N/A	N/A	A	N/A	N/A		50	

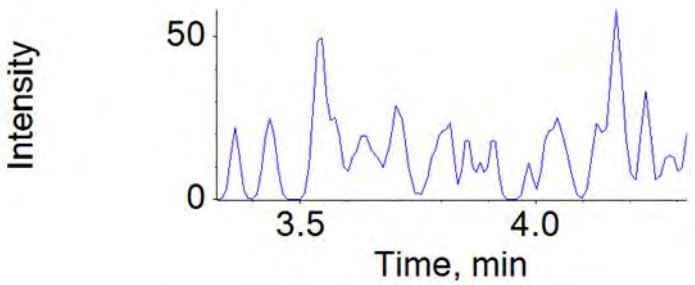
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By UMJS at 3:33 pm, 12/11/18

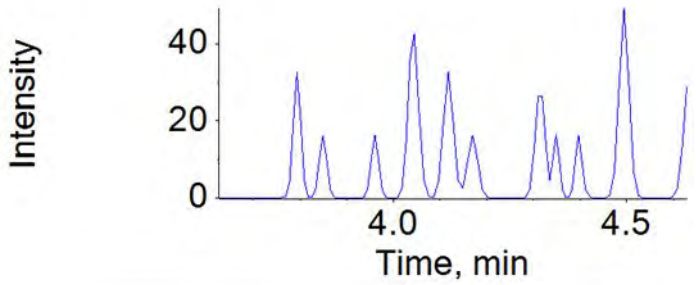
Component: PFBS
Primary Mass: 299.0 / 80.0



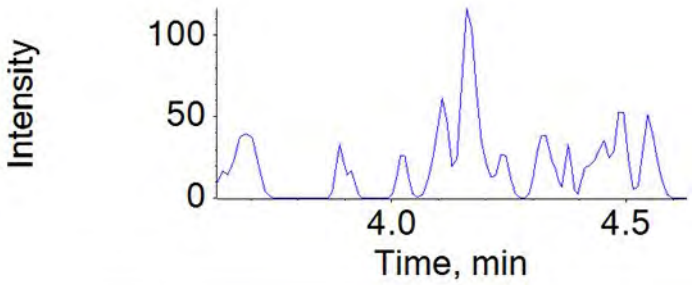
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Secondary Mass: 299.0 / 99.0



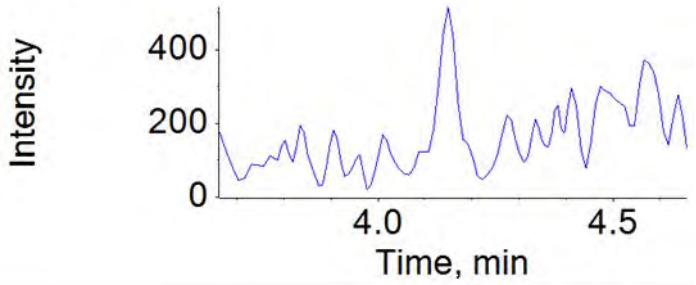
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



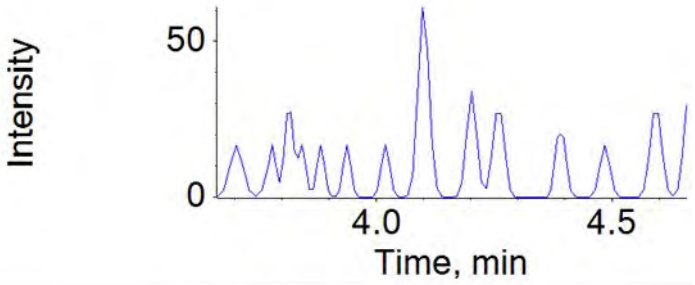
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



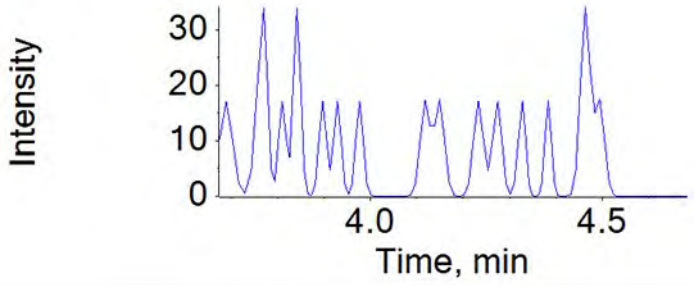
Component: PFHxA
Primary Mass: 313.0 / 269.0



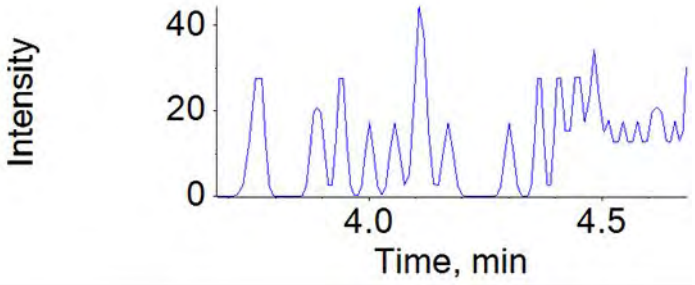
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



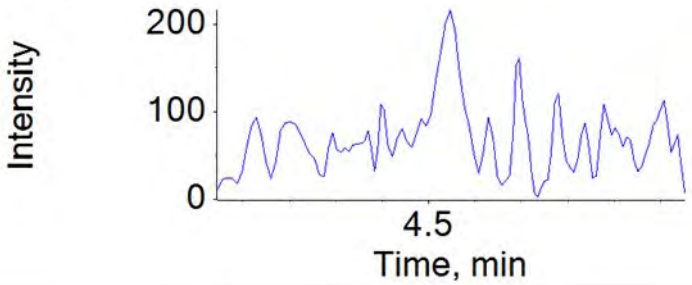
Component: PFPeS
Primary Mass: 349.0 / 80.0



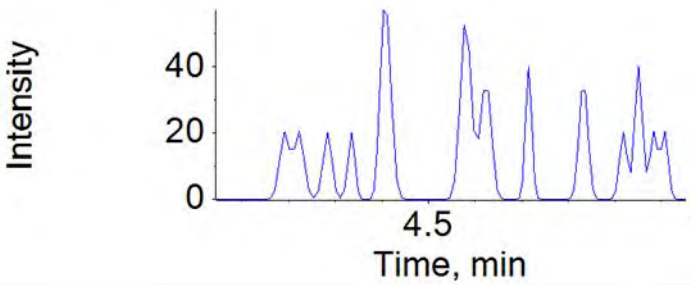
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Secondary Mass: 349.0 / 99.0



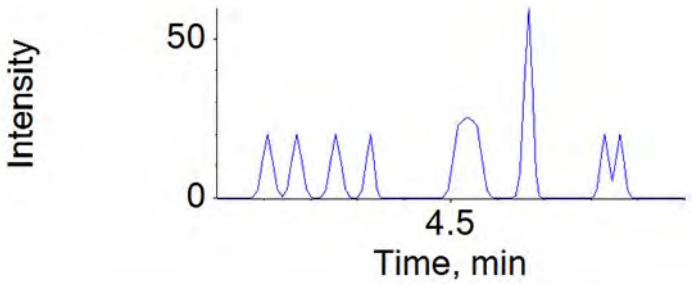
Component: PFHpA
Primary Mass: 363.0 / 319.0



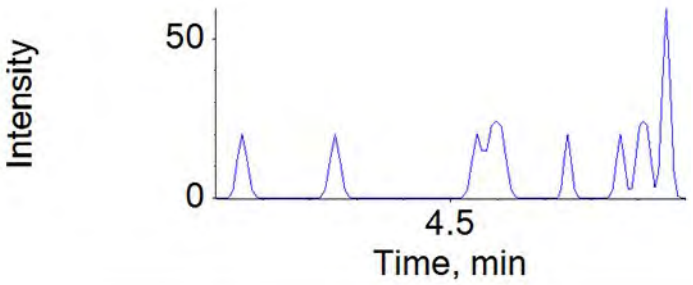
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Secondary Mass: 363.0 / 169.0



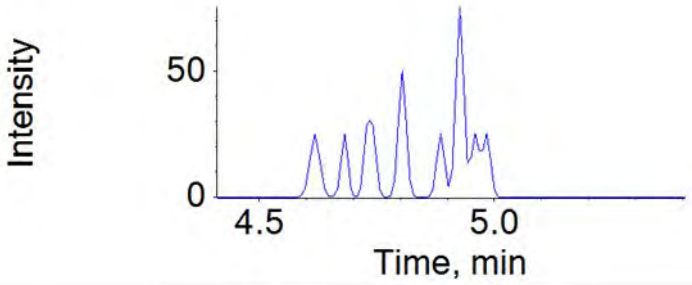
Component: PFHxS
Primary Mass: 399.0 / 80.0



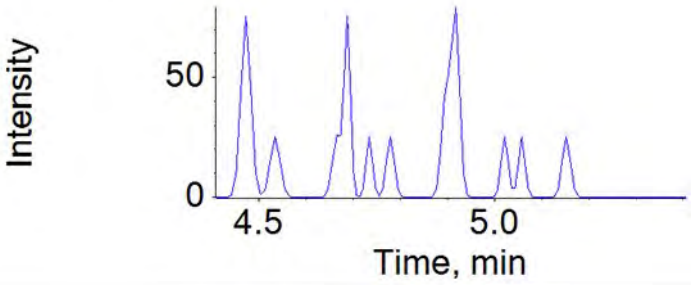
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Secondary Mass: 399.0 / 99.0



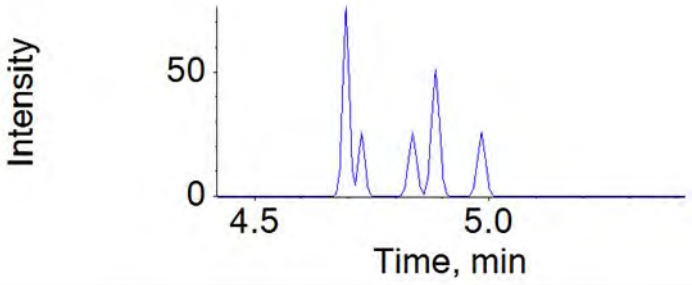
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



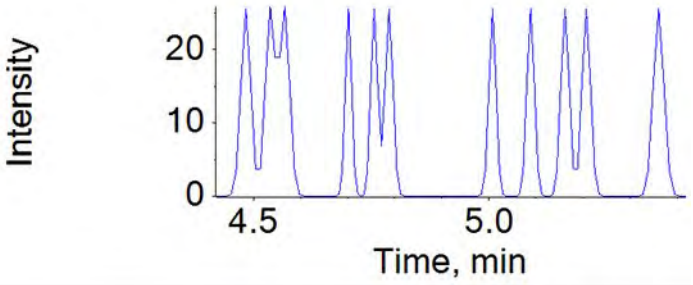
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Secondary Mass: 427.0 / 81.0



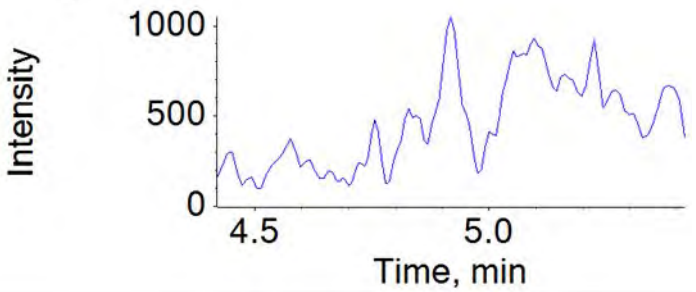
Component: PFHpS
Primary Mass: 449.0 / 80.0



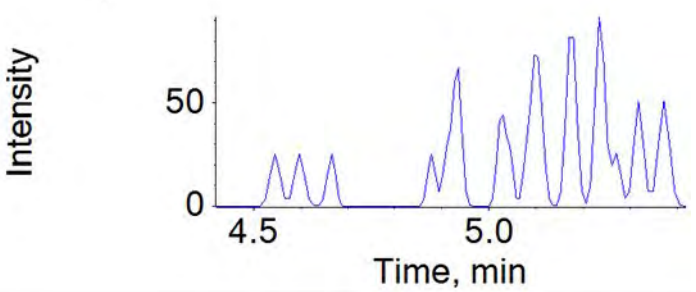
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Secondary Mass: 449.0 / 99.0



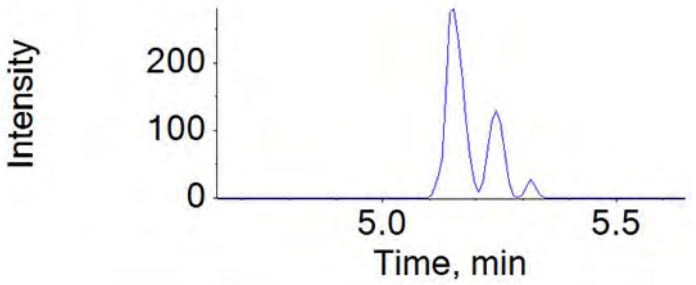
Component: PFOA
Primary Mass: 413.0 / 369.0



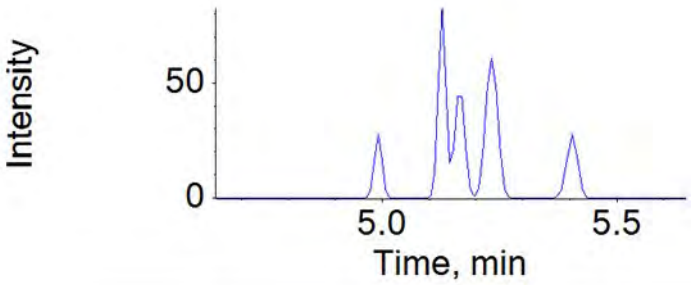
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



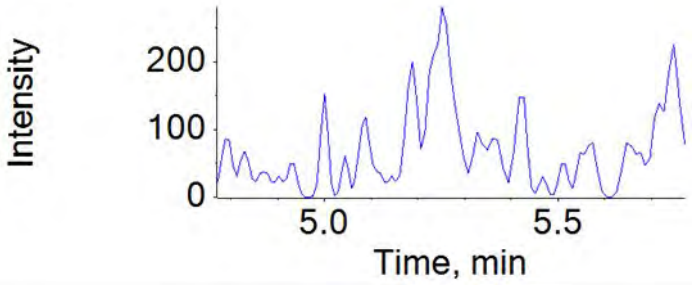
Component: PFOS
Primary Mass: 499.0 / 80.0



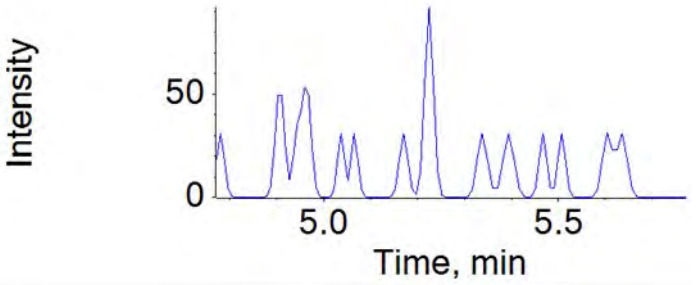
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



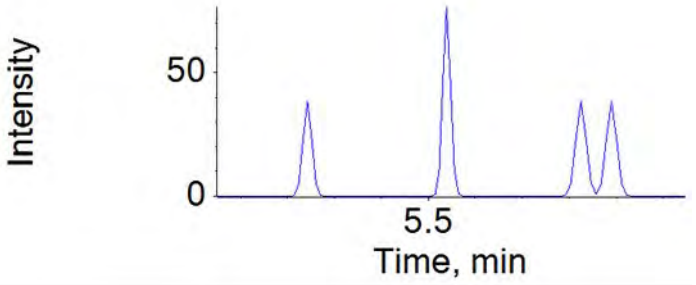
Component: PFNA
Primary Mass: 463.0 / 419.0



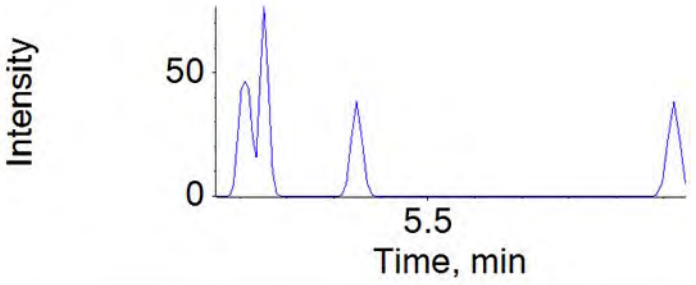
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Secondary Mass: 463.0 / 169.0



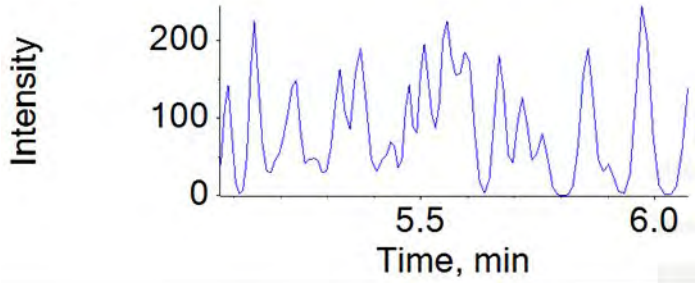
Component: PFNS
Primary Mass: 549.0 / 80.0



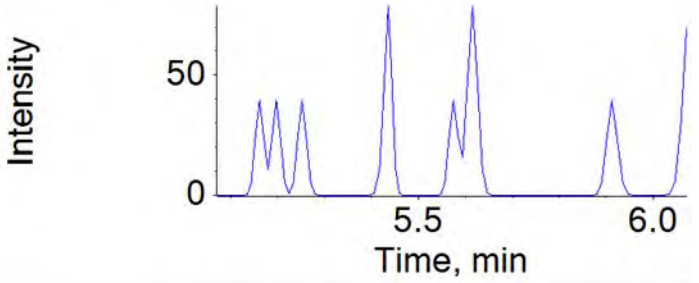
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Secondary Mass: 549.0 / 99.0



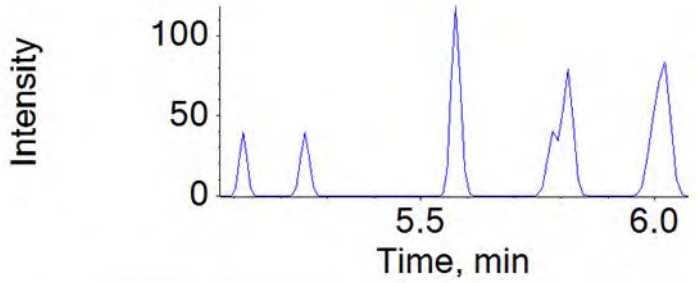
Component: PFDA
Primary Mass: 513.0 / 469.0



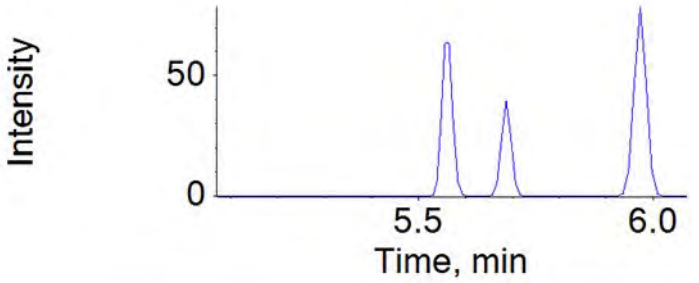
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Secondary Mass: 513.0 / 169.0



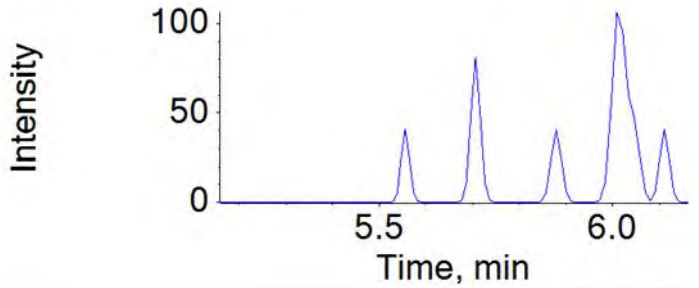
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



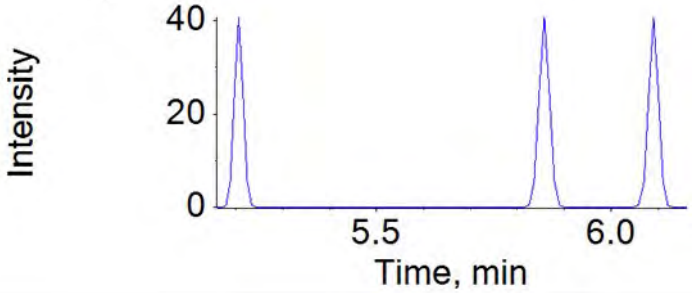
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Secondary Mass: 527.0 / 81.0



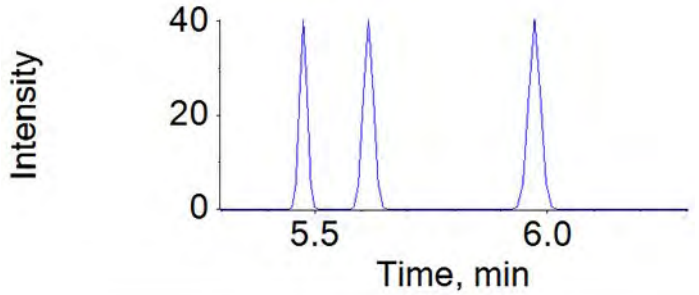
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



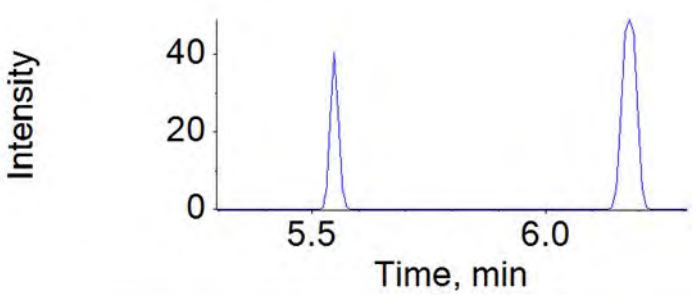
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



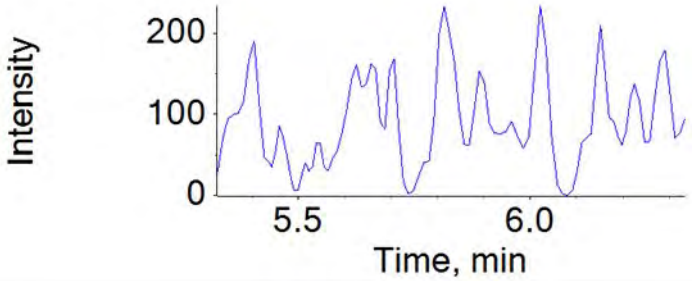
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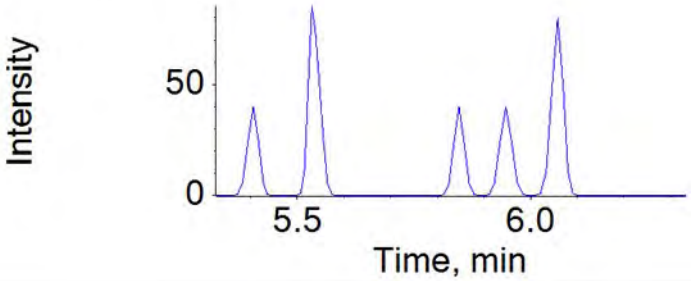
APPROVED
By MCD at 3:27 pm, 11/30/18

REVIEWED
By UMJS at 3:33 pm, 12/11/18

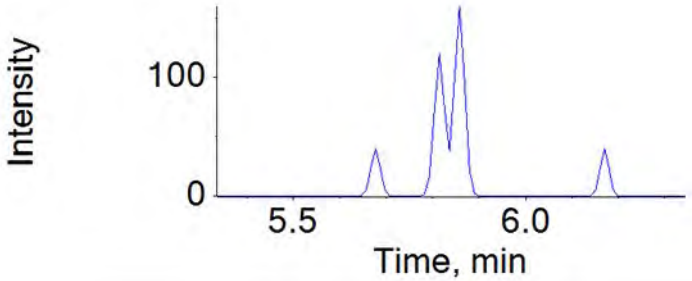
Component: PFUnDA
Primary Mass: 563.0 / 519.0



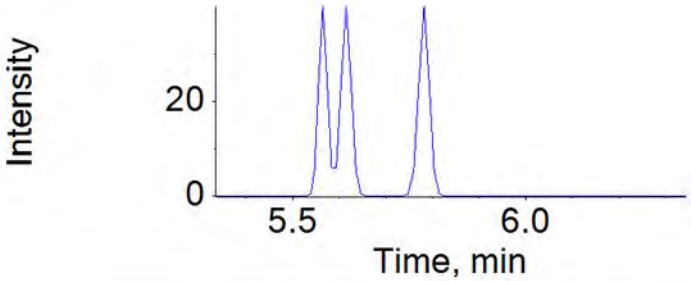
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



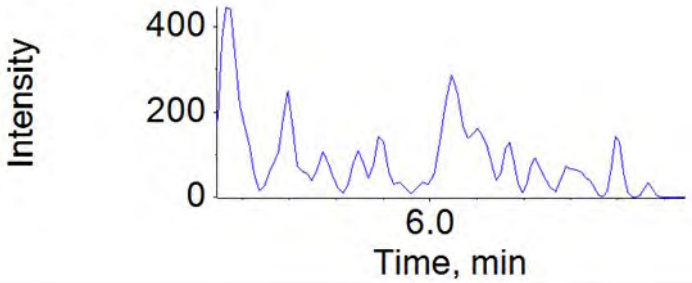
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



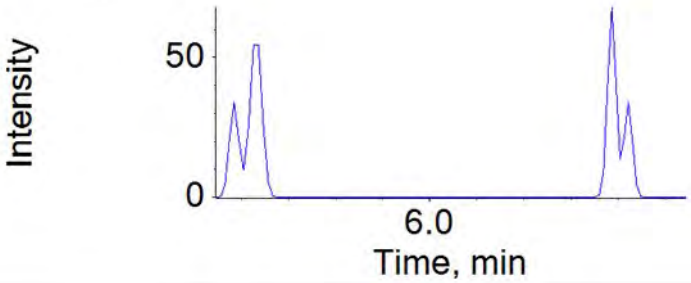
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Secondary Mass: 584.0 / 526.0



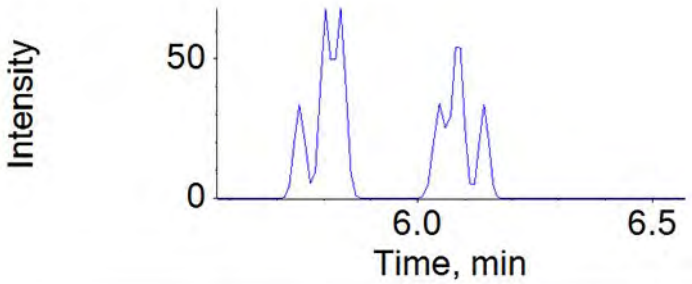
Component: PFDoDA
Primary Mass: 613.0 / 569.0



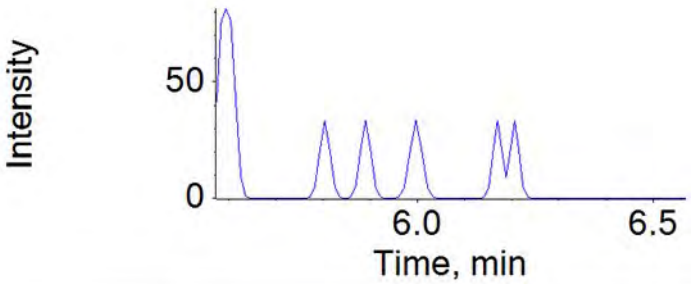
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Secondary Mass: 613.0 / 169.0



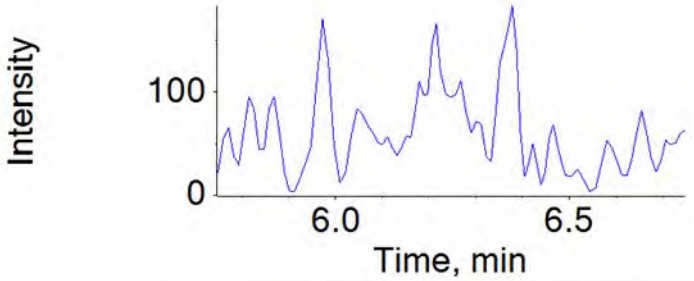
Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



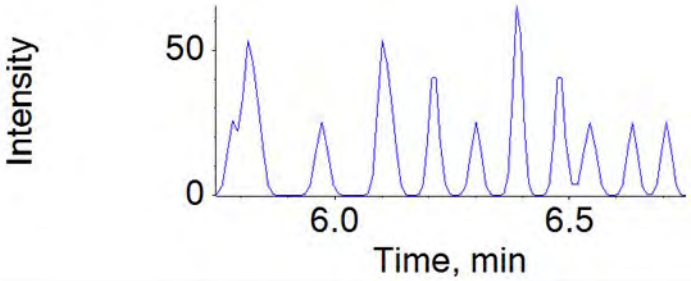
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



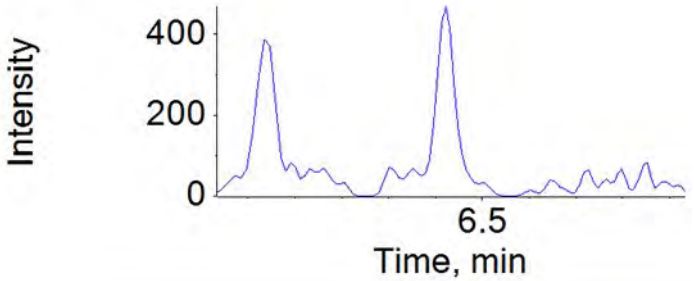
Component: PFTrDA
Primary Mass: 663.0 / 619.0



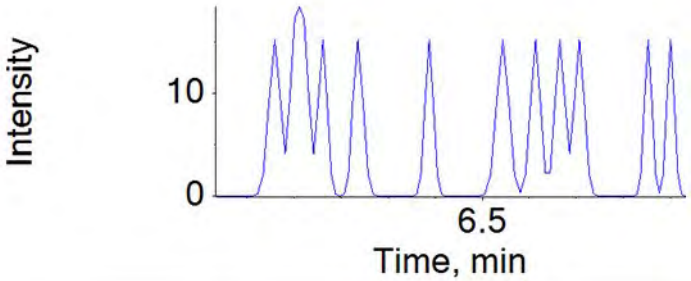
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



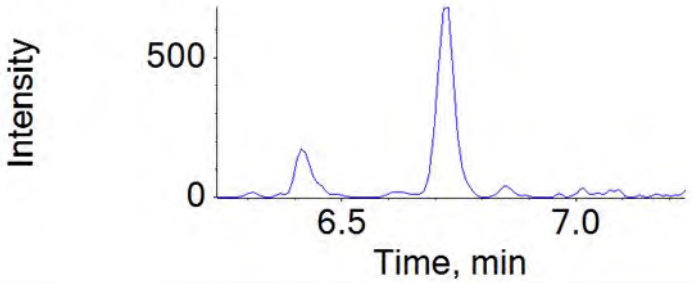
Component: PFTeDA
Primary Mass: 713.0 / 669.0



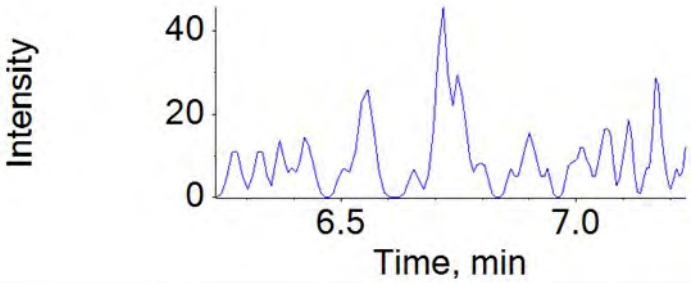
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



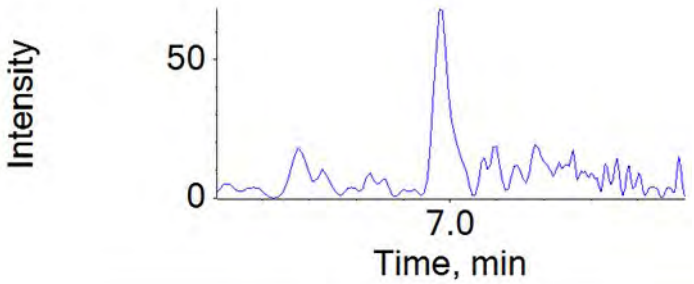
Component: PFHxDA
Primary Mass: 813.0 / 769.0



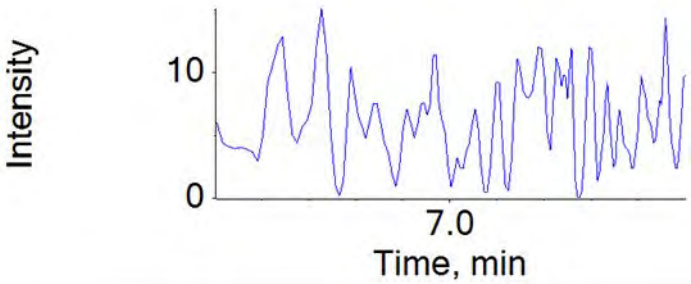
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0

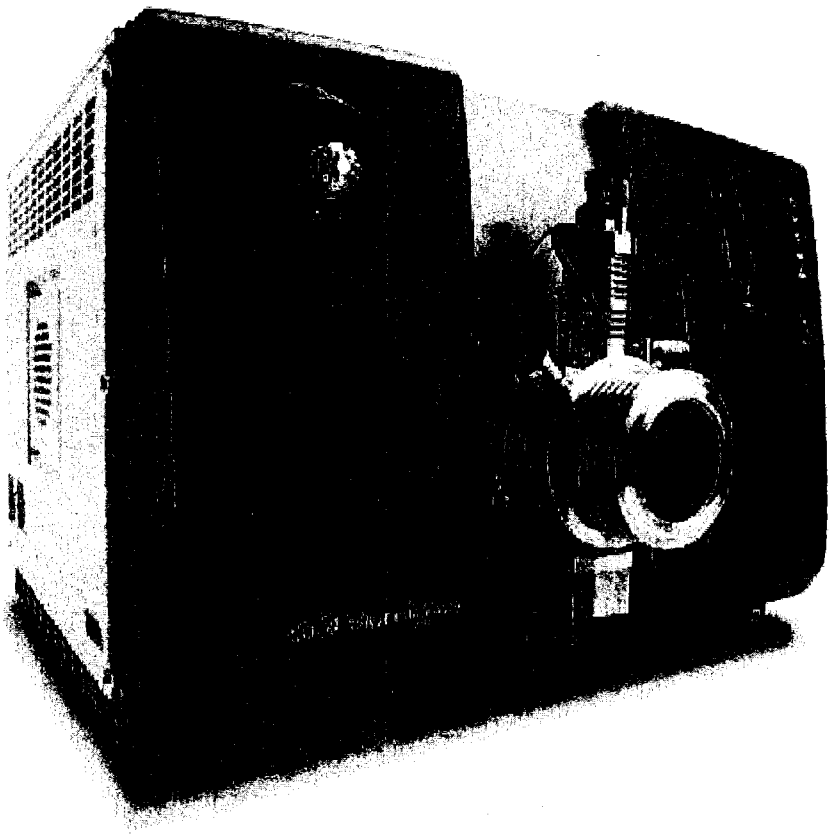


LM27631

SCIEX

Triple Quad™ 4500 and Triple Quad™ 4500MD Systems

Installation Checklist and Data Log



GEN-IDV-06-1212-C | D5082309 C

October 2016

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Installation Preparation 1

Note: For regulatory and safety information for the mass spectrometer, refer to the *System User Guide*.

Note: Before starting the installation, verify that the customer has completed the checklist in the *Site Planning Guide*.

Customer Information

Organization	Eurofins		
Address	2425 New Holland Pike Lancaster, PA 17601		
Telephone	717-556-7231	Fax	N/A
Contact name	Charles Neslund		
E-mail address	CharlesNeslund@eurofinsUS.com		

System Information

Table 1-1 Mass Spectrometer Information

Mass spectrometer location	A-223
Mass Spectrometer model name	4500QQQ
Mass spectrometer serial number	EB220251804
Firmware version	PIL1801
Roughing pump serial number	31001702300

Table 1-2 Acquisition Computer Information

Model	XE2	Service tag	5L3QLN2
OS version	Win7 64bit	OS service pack	SP1
Analyst® or Analyst® MD software version	1.7.0	Analyst® or Analyst® MD software hotfix	HF2
Cliquid® MD software version (4500MD systems only)	N/A		
MultiQuant™ or MultiQuant™ MD software version	3.0.3		

Table 1-3 Ion Source Information

Component	Serial Number
Turbo V™ ion source • TurboIonSpray® probe • APCI probe (if applicable)	2001171218 20380180321 20252180221
NanoSpray® ion source (if applicable, non-MD systems only)	N/A
DuoSpray™ ion source (if applicable, non-MD systems only) • TurboIonSpray® probe • APCI probe (if applicable)	N/A N/A N/A
Other/Third-party ion source (if applicable, non-MD systems only)	N/A

Table 1-4 System Components and Peripherals

Component	Serial Number
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

Installation Checklist 2

The Field Service Employee (FSE) must complete this checklist to make sure that every step in the installation procedure is completed. The checklist also contains an installation acceptance form for the customer representative and the FSE to sign when the work is complete. Refer to Signoff on page 21.

Unpacking and Inspection

Task	Complete	N/A
Inspect the packaging: • Inspect all tip and shock indicators for signs of excessive shock or tilting. • Inspect the boxes for exterior damage.	☑	
Unpack and inspect all of the components.	☑	
(Optional) Unpack, inspect, and install the bench. 1. Inspect the packaging for exterior damage. 2. Unpack the bench and then inspect for damage. 3. Install the bench.	◉	◉

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Hardware Installation

Task	Complete	N/A
Install the mass spectrometer on the bench.	☑	
Affix the name plate on the front cover of the mass spectrometer (only applies to mass spectrometer with the prefix 'CJ' in the serial number).	☑	
Verify that the mains supply outlets for the roughing pump and the mass spectrometer deliver stable output voltages that meet the specified electrical requirements.	☑	
(Optional) Install the SCIEX-supplied UPS.	○	○
Install the roughing pump, connecting it to the mass spectrometer and the vent. Make sure that the roughing pump contains sufficient oil.	☑	
(Optional) Install the SCIEX-supplied gas generator.	○	○
Connect the gas lines.	☑	
Install and connect the drain bottle.	☑	
Install the Turbo V™ ion source. Refer to the *Turbo V™ Ion Source Operator Guide*. For 4500MD systems, refer to the *System User Guide*. For other systems, refer to the *Turbo V™ Ion Source Operator Guide*.	☑	
Adjust the stopper on the integrated syringe pump.	☑	
WARNING! Electrical Shock Hazard. Make sure that the system can be disconnected from the mains supply outlet in an emergency. Do not block the mains supply outlet. Plug in and turn on the roughing pump, and then plug in and turn on the mass spectrometer.	☑	

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Acquisition Computer Installation

Task	Complete	N/A
Install the computer and monitor on the computer table.	☑	
Connect the Ethernet cable from the computer to the mass spectrometer.	☑	
Turn on the computer.	☑	
Configure IP addresses for communication with the mass spectrometer.	☑	
(Optional) Connect the computer to the customer network.	◉	◉
Install the Analyst® or Analyst® MD software.	☑	
Install any applicable Analyst® or Analyst® MD software hotfixes.	◉	◉
(4500MD systems) Install the Cliquid® MD software.	◉	◉
Install the MultiQuant™ or MultiQuant™ MD software.	☑	
(If applicable, not for use with 4500MD systems) Install the StatusScope® agent on the acquisition computer, and then perform these tasks: • Discuss warranty coverage for the StatusScope® software. • If the customer wants the StatusScope® software installed, then complete the StatusScope® user access form. • If the customer does not want theStatusScope® software installed, then remove the StatusScope® software.	◉	◉
(Optional) Install and license any add-on software purchased and shipped with the system. • (Non-MD systems) If applicable, Cliquid® software has been installed. • Other Analyst® or Analyst® MD compatible add-on software shipped with the system has been installed.	◉	◉

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Task	Complete	N/A
Verify and update the firmware and configuration files.	☑	
Install the factory files.	☑	

Initialization and Verification

Note: Perform these tasks after the mass spectrometer reaches operating vacuum.

Task	Complete	N/A
Perform the high pressure source and blocked exhaust flow tests.		
Measure and tune the Q1, Q3, and QJet® coil boxes.	◉	◉
Perform all installation tests, print out the test results, and complete the Data Log.	☑	

Wrap-up

Task	Complete	N/A
Delete unnecessary files from the computers.	☑	
Back up the computer file systems, including the Analyst Data folder.	☑	
Create a computer image using the image utility.	☑	
Apply the biohazard labels included in the install kit. Apply one label to the ion source, and the other to the waste bottle. Find a vacant space that is clearly visible to affix the labels.	☑	

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Task	Complete	N/A
Complete all of the sections in the *Customer Familiarization Checklist*. Make a copy of the completed checklist and then give the original to the customer.	☑	
Inform the customer about the continuous improvement telephone surveys, and then advise the customer that a third party will call to obtain feedback.	☑	
Complete the *Installation Checklist and Data Log*: • Obtain customer acceptance. • Make a copy of the form and the test results. • Provide the customer with the originals. • (For MD systems only) E-mail this completed document and the test result files to servicedata@sciex.com.	☑	

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Data Log

3

Use this log to record the test data obtained during performance of the system verification tests during installation.

Note: Perform all procedures with the Turbo V™ ion source, unless otherwise specified.

Pre-test Pressure Verification is Complete	☑

Perform this test with the Analyst® or Analyst® MD software.

Test	Specification	Result
Vacuum chamber pressure with CAD gas off	0.4×10^{-5} torr ≤ $P_{CAD\ 0}$ ≤ 1.1×10^{-5} torr	0.7 x 10e-5 torr
Vacuum chamber pressure with CAD gas set to Full	1.8×10^{-5} torr ≤ ($P_{CAD\ 12} - P_{CAD\ 0}$) ≤ 2.8×10^{-5} torr	2.1 x 10e-5 torr

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Q1 Positive PPGs Test is Complete: Intensity and Peak Width (Scan Rate=10 Da/s, Cycles=10)	☑

- **Test solution:** POS PPG, 2e-6 M
- **Flow rate:** 5 µL/min
- **MCA:** On
- **Printouts required:** Spectra for masses 59.050, 175.133, 500.380, 616.464, 906.673, 1254.925, 1545.134, 1952.427, with peak intensities, peak width, and mass shift results, complete with method file information.

Mass (Da)	Intensity (cps)		Peak width (Da)	
	Specification	Result	Specification	Result
175.133	$\geq 8.0 \times 10^6$	1.6298e7	0.6 to 0.8	0.7105
500.380	$\geq 8.0 \times 10^6$	2.4240e7	0.6 to 0.8	0.6995
906.673	$\geq 2.0 \times 10^7$	3.2349e7	0.6 to 0.8	0.7151
1952.427	$\geq 8.8 \times 10^5$	1.8122e6	0.6 to 0.8	0.7423

Q1 Positive PPGs Test is Complete: Peak Width for Identified Masses ☑

Mass (Da)	Scan Rate (Da/s)	Cycles	Specification (Da)	Result (Passed)
59.050, 175.133, 500.380, 616.464, 906.673, 1254.925, 1545.134, 1952.427	10	10	0.6 to 0.8	☑
	200	50	0.6 to 0.8	
	1000	50	0.6 to 0.8	
	2000	100	0.6 to 0.8	

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Q3 Positive PPGs Test is Complete: Intensity and Peak Width (Scan Rate=10 Da/s, Cycles=10) ☑

- **Test solution:** POS PPG, 2e-6 M
- **Flow rate:** 5 µL/min
- **MCA:** On
- **Printouts required:** Spectra for masses 59.050, 175.133, 500.380, 616.464, 906.673, 1254.925, 1545.134, 1952.427, with peak intensities, peak width, and mass shift results, complete with method file information.

Mass (Da)	Intensity (cps)		Peak width (Da)	
	Specification	Result	Specification	Result
175.133	≥ 8.0×10^6	1.950[illegible]e7	0.6 to 0.8	0.6916
500.380	≥ 8.0×10^6	1.925[illegible]e7	0.6 to 0.8	0.7278
906.673	≥ 2.0×10^7	3.1634e7	0.6 to 0.8	0.7403
1952.427	≥ 8.8×10^5	2.4968e6	0.6 to 0.8	0.7828

Q3 Positive PPGs Test is Complete: Peak Width for Identified Masses ☑

Mass (Da)	Scan Rate (Da/s)	Cycles	Specification (Da)	Result (Passed)
59.050, 175.133, 500.380, 616.464, 906.673, 1254.925, 1545.134, 1952.427	10	10	0.6 to 0.8	☑
	200	50	0.6 to 0.8	
	1000	50	0.6 to 0.8	
	2000	100	0.6 to 0.8	

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Q1 Negative PPGs Test is Complete ☑

- **Test solution:** NEG PPG, 3e-4 M
- **Flow rate:** 10 µL/min
- **MCA:** On
- **Printouts required:** Spectra for masses 44.998, 411.259, 585.385, 933.636, 1223.845, 1572.097, 1863.306, 1979.389, with peak intensities, peak width, and mass shift results, complete with method file information.

Table 3-1 Verification: Intensity and Peak Width (Scan Rate=10 Da/s, Cycles=10) for the Q1 Negative PPGs Tests

Mass (Da)	Intensity (cps)		Peak width (Da)	
	Specification	Result	Specification	Result
933.636	≥ 1.8×10^7	2.23786e7	0.6 to 0.8	0.6638
1863.306	≥ 1.4×10^6	2.11046e6	0.6 to 0.8	0.7369

Table 3-2 Verification: Peak Width for Identified Masses for the Q1 Negative PPGs Tests

Mass (Da)	Scan Rate (Da/s)	Cycles	Specification (Da)	Result (Passed)
44.998, 411.259, 585.385, 933.636 1223.845, 1572.097, 1863.306, 1979.389	10	10	0.6 to 0.8	☑
	200	50	0.6 to 0.8	
	1000	50	0.6 to 0.8	
	2000	100	0.6 to 0.8	

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Q3 Negative PPGs Test is Complete ☑

- **Test solution:** NEG PPG, 3e-4 M
- **Flow rate:** 10 µL/min
- **MCA:** On
- **Printouts required:** Spectra for masses 44.998, 411.259, 585.385, 933.636, 1223.845, 1572.097, 1863.306, 1979.389, with peak intensities, peak width, and mass shift results, complete with method file information.

Table 3-3 Verification: Intensity and Peak Width (Scan Rate=10 Da/s, Cycles=10) for the Q3 Negative PPGs Tests

Mass (Da)	Intensity (cps)		Peak width (Da)	
	Specification	Result	Specification	Result
933.636	≥ 1.8×10^7	2.6621e7	0.6 to 0.8	0.7288
1863.306	≥ 2.0×10^6	3.5734e6	0.6 to 0.8	0.7033

Table 3-4 Verification: Peak Width for Identified Masses for the Q3 Negative PPGs Tests

Mass (Da)	Scan Rate (Da/s)	Cycles	Specification (Da)	Result (Passed)
44.998, 411.259, 585.385, 933.636 1223.845, 1572.097, 1863.306 1979.389	10	10	0.6 to 0.8	☑
	200	50	0.6 to 0.8	
	1000	50	0.6 to 0.8	
	2000	100	0.6 to 0.8	

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Reserpine MS/MS Test is Complete	☑

- **Test solution:** Reserpine solution 0.167 pmol/µL
- **Flow rate:** 5 µL/min
- **Scan rate:** 10 Da/s (both MS and MS/MS)
- **Scan mode:** Product Ion (MS2)
- **Product Of:** 609.3 (or as calibrated)
- **Product Ion:** 195.1
- **Cycles:** 10
- **MCA:** On
- **Printouts required:** Spectra for masses 609.3 and 195.1, with peak intensities, peak width, and mass shift results, complete with method file information.

Table 3-5 Verification for the Reserpine MS/MS Test

Specification	Result
Transmission efficiency $\frac{Intensity\ for\ ion\ at\ m/z\ 195.1}{Intensity\ for\ ion\ at\ m/z\ 609.2\ (or\ as\ calibrated)} \times 100 \geq 10\%$	[redacted]

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Turbo V™ Ion Source Acceptance Test is Complete	☑

Table 3-6 Verification for the Turbo V™ Ion Source Acceptance Test

Probe	Test	Specification	Result (Passed)
TurboIonSpray®	Set the temperature parameter to 500 °C.	The Analyst® or Analyst® MD software reports that the temperature is reached.	☑
APCI	Set the temperature parameter to 400 °C.	The Analyst® or Analyst® MD software reports that the temperature is reached.	☑

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Post-test Pressure Verification is Complete	☑

Perform this test with the Analyst® or Analyst® MD software.

Test	Specification	Result
Vacuum chamber pressure with CAD gas off	0.4×10^{-5} torr ≤ $P_{CAD\ 0}$ ≤ 1.1×10^{-5} torr	0.4x10e-5torr
Vacuum chamber pressure with CAD gas set to Full	1.8×10^{-5} torr ≤ ($P_{CAD\ 12} - P_{CAD\ 0}$) ≤ 2.8×10^{-5} torr	2.1x10e-5torr

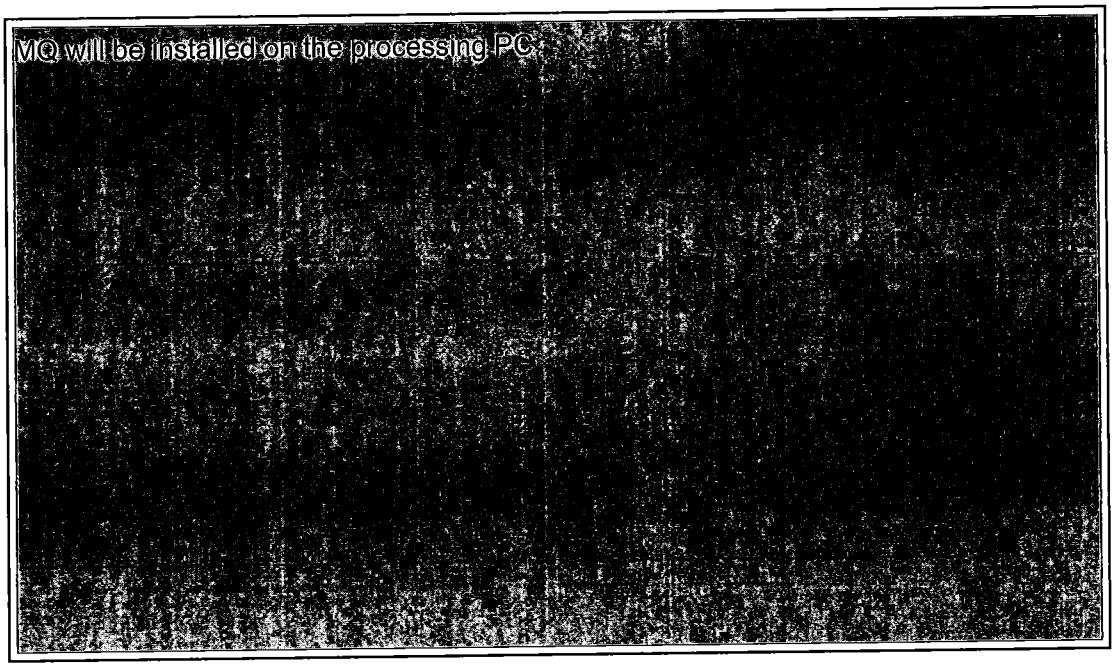
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Signoff 4

Organization	Eurofins		
Customer contact name		Date (yyyy-mm-dd)	
Customer contact signature*			
FSE name	Michael F Pennell	Date (yyyy-mm-dd)	2018-05-29
FSE signature			

* Signature required on hard copy only.

Comments and Exceptions



Revision History

Revision	Reason for Change	Date
A	First release of the combined *SCIEX Triple Quad™ 4500 and 4500MD System Installation Checklist and Data Log.* Replaces D5028556 E.	May 2014
B	Updated the installation test data.	December 2014
C	• Applied new template. • Updated the System Information, Acquisition Computer Installation, and Data Log sections.	October 2016

State Parameter Editor

Ion Source: Turbo Spray
Ion Source Temperature Reached
Curtain Gas (CUR): 10.0
IonSpray Voltage (IS): 5500.0
Temperature (TEM): 0.0
Ion Source Gas 1 (GS1): 17.0
Ion Source Gas 2 (GS2): 0.0

Entrance Potential (EP): 10.0

Q1 Resolution: Unit
Ion Energy 1 (IE1): 1.2

CEM (CEM): 1800.0

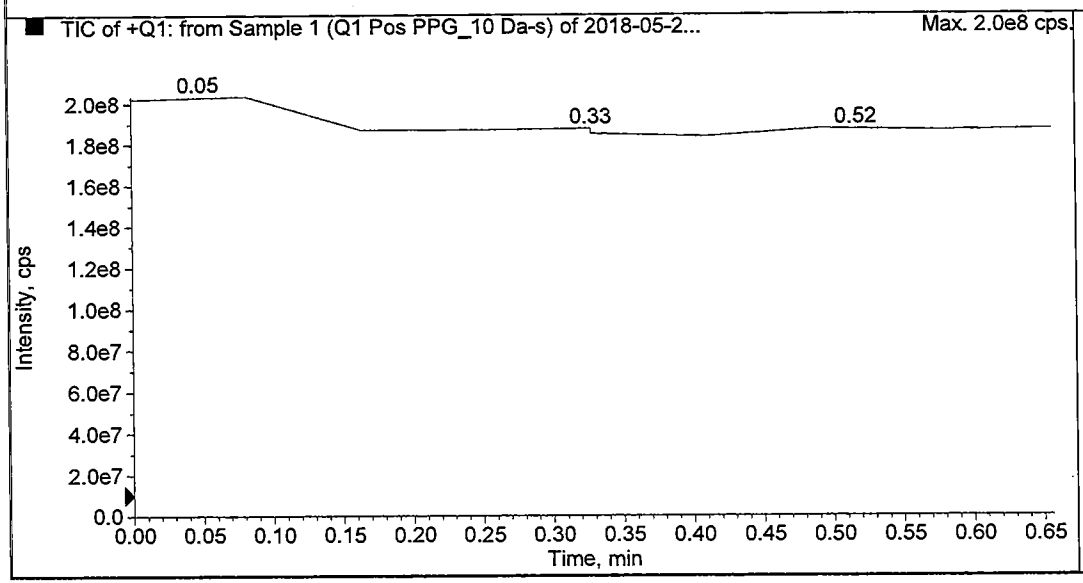
Mass Spectrometer Method Properties

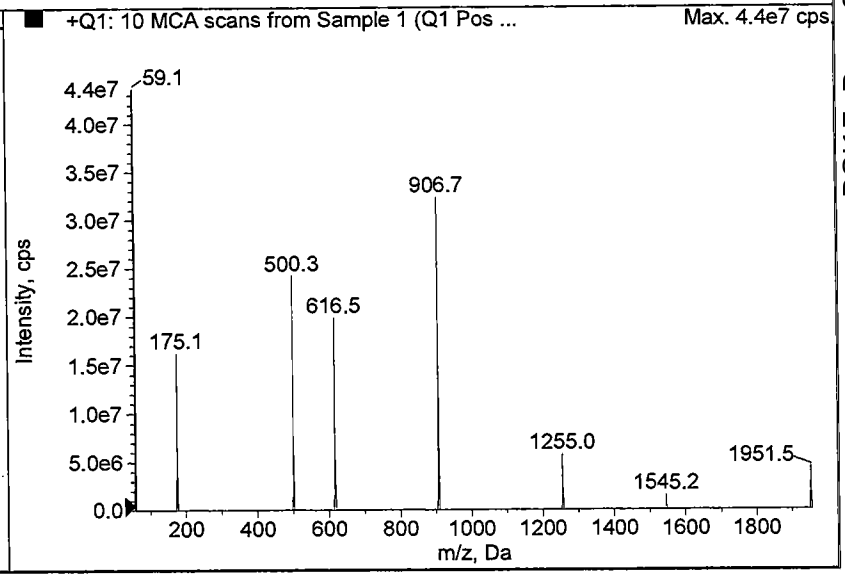
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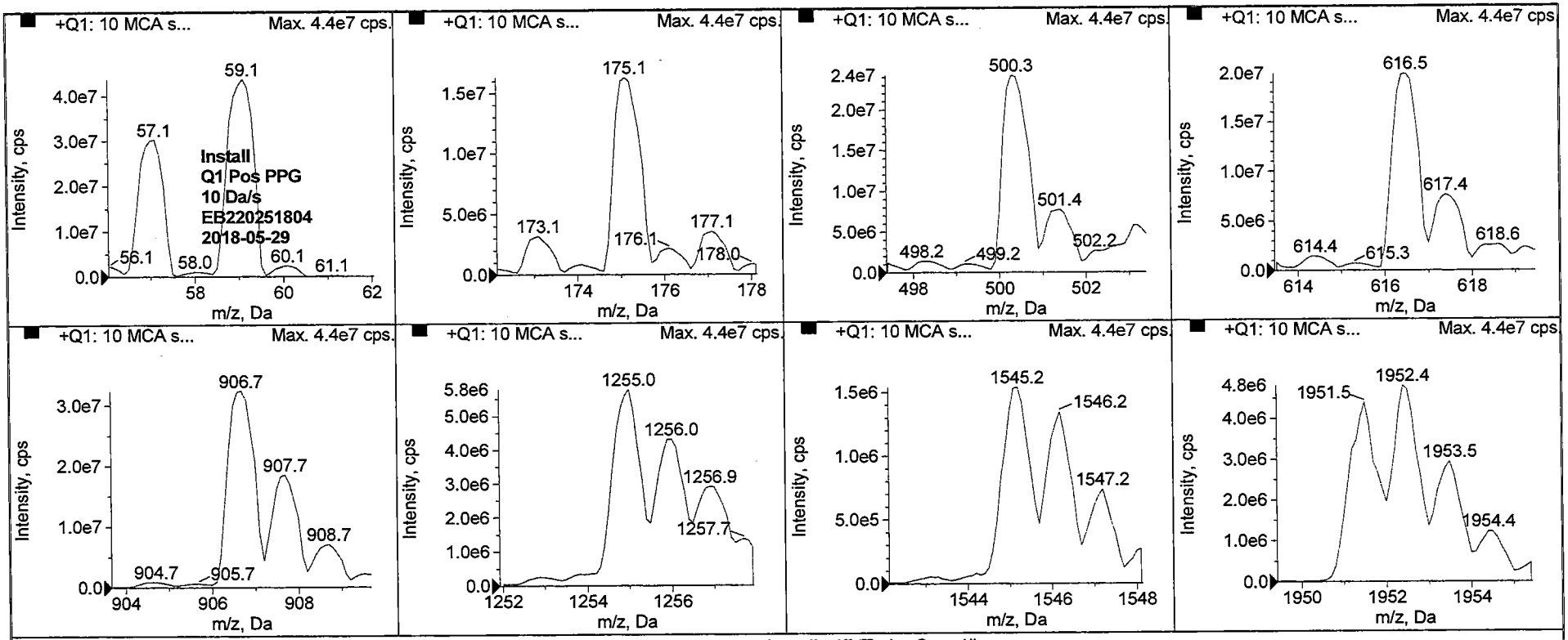
Scans in Period: 10
Relative Start Time: 0.00 msec
Scheduled Ionization: Off
Experiments in Period: 1

Period 1 Experiment 1:

Scan Type: Q1 MS (Q1)
Polarity: Positive
Scan Mode: Profile
Ion Source: Turbo Spray
Scans to Sum: 1
Resolution Q1: Unit







Peak List for " +Q1: 10 MCA scans from Sample 1 (Q1 Pos PPG_10 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	59.0500	59.0559	4.3682e7	0.6931	-5.8810e-3
2	175.1330	175.1423	1.6298e7	0.7105	-9.3008e-3
3	500.3800	500.3732	2.4240e7	0.6995	6.8010e-3
4	616.4640	616.4825	1.9901e7	0.6890	-0.0185
5	906.6730	906.6804	3.2349e7	0.7151	-7.3891e-3
6	1254.9250	1254.9327	5.7895e6	0.7632	-7.6510e-3
7	1545.1340	1545.1665	1.5381e6	0.7694	-0.0325
8	1952.4270	1952.4521	4.8122e6	0.7423	-0.0251

State Parameter Editor

Ion Source: Turbo Spray
Ion Source Temperature Reached
Curtain Gas (CUR): 10.0
IonSpray Voltage (IS): 5500.0
Temperature (TEM): 0.0
Ion Source Gas 1 (GS1): 17.0
Ion Source Gas 2 (GS2): 0.0

Entrance Potential (EP): 10.0

Q1 Resolution: Unit
Ion Energy 1 (IE1): 1.2

CEM (CEM): 1800.0

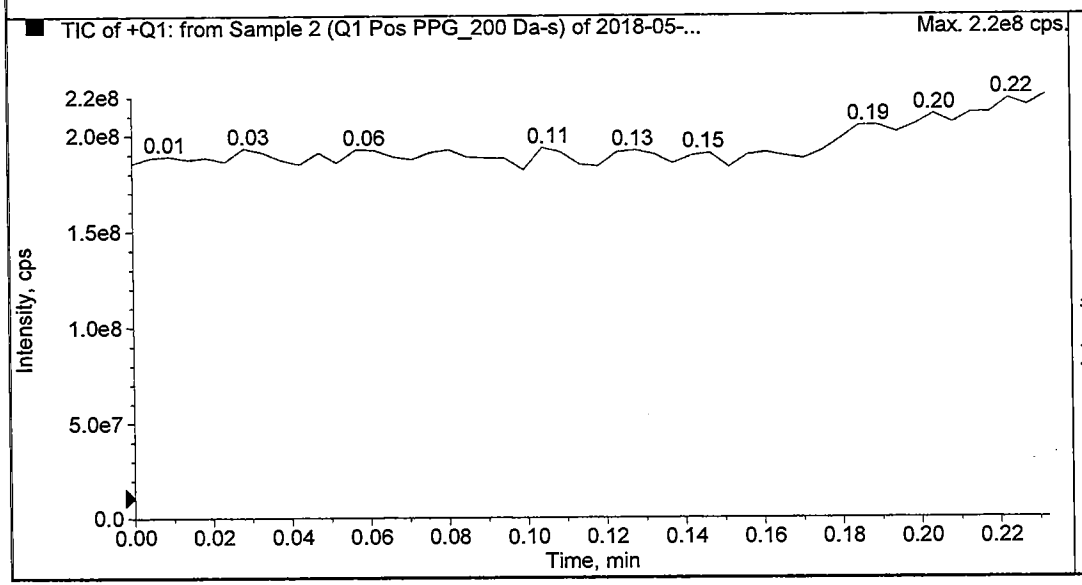
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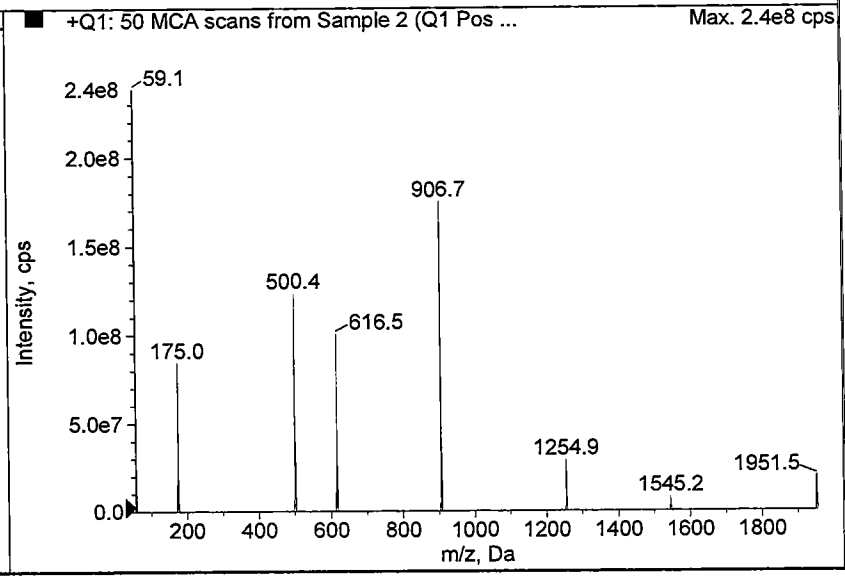
Period 1:

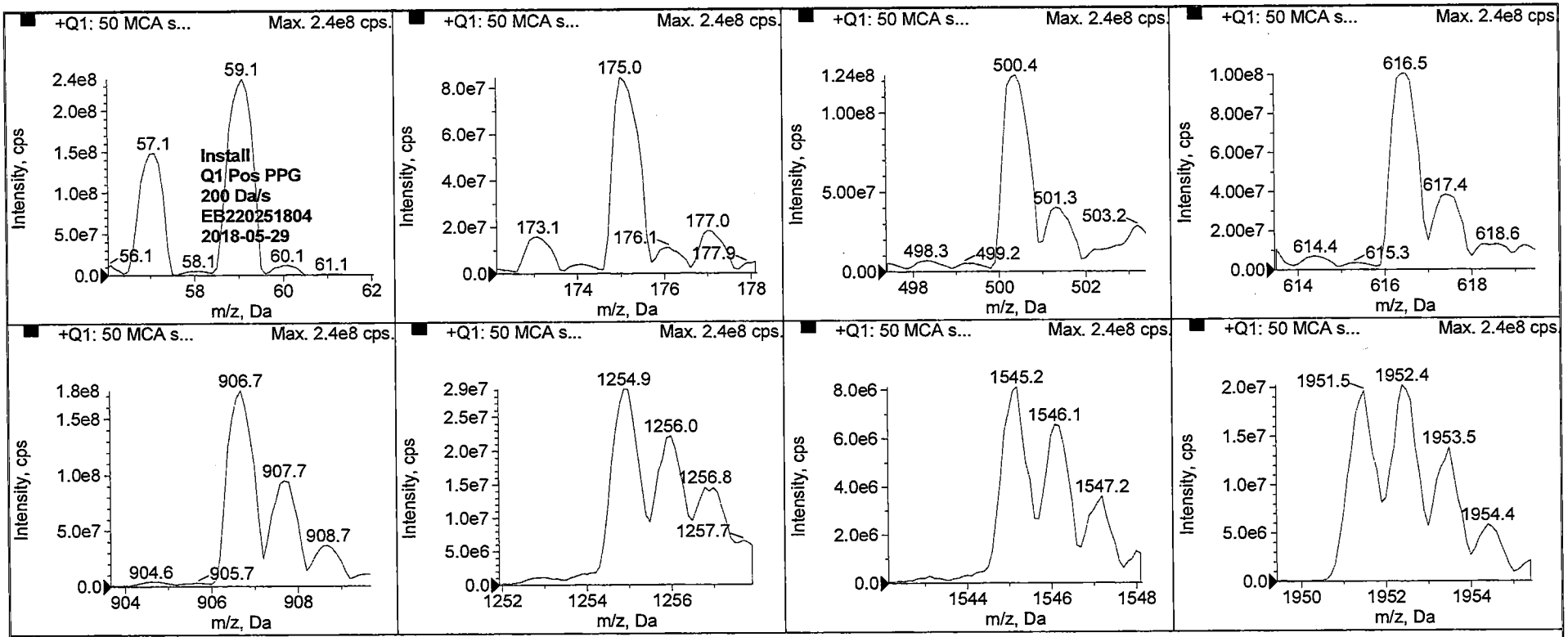
Scans in Period: 50
Relative Start Time: 0.00 msec
Scheduled Ionization: Off
Experiments in Period: 1

Period 1 Experiment 1:

Scan Type: Q1 MS (Q1)
Polarity: Positive
Scan Mode: Profile
Ion Source: Turbo Spray
Scans to Sum: 1
Resolution Q1: Unit







Peak List for " +Q1: 50 MCA scans from Sample 2 (Q1 Pos PPG_200 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	59.0500	59.0570	2.3875e8	0.6632	-6.9868e-3
2	175.1330	175.1204	8.4656e7	0.7253	0.0126
3	500.3800	500.3915	1.2366e8	0.7160	-0.0115
4	616.4640	616.4631	1.0058e8	0.7191	9.0862e-4
5	906.6730	906.6801	1.7505e8	0.7187	-7.0740e-3
6	1254.9250	1254.9211	2.9174e7	0.7662	3.8790e-3
7	1545.1340	1545.1254	8.1140e6	0.7324	8.6264e-3
8	1952.4270	1952.4458	2.0214e7	0.7760	-0.0188

State Parameter Editor

Ion Source: Turbo Spray
Ion Source Temperature Reached
Curtain Gas (CUR): 10.0
IonSpray Voltage (IS): 5500.0
Temperature (TEM): 0.0
Ion Source Gas 1 (GS1): 17.0
Ion Source Gas 2 (GS2): 0.0

Entrance Potential (EP): 10.0

Q1 Resolution: Unit
Ion Energy 1 (IE1): 1.2

CEM (CEM): 1800.0

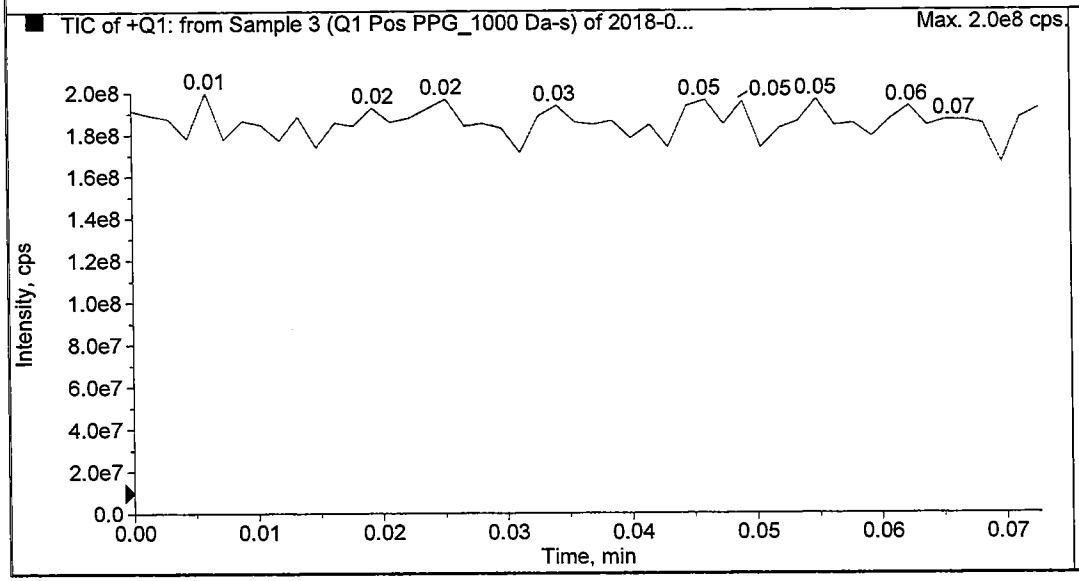
Mass Spectrometer Method Properties

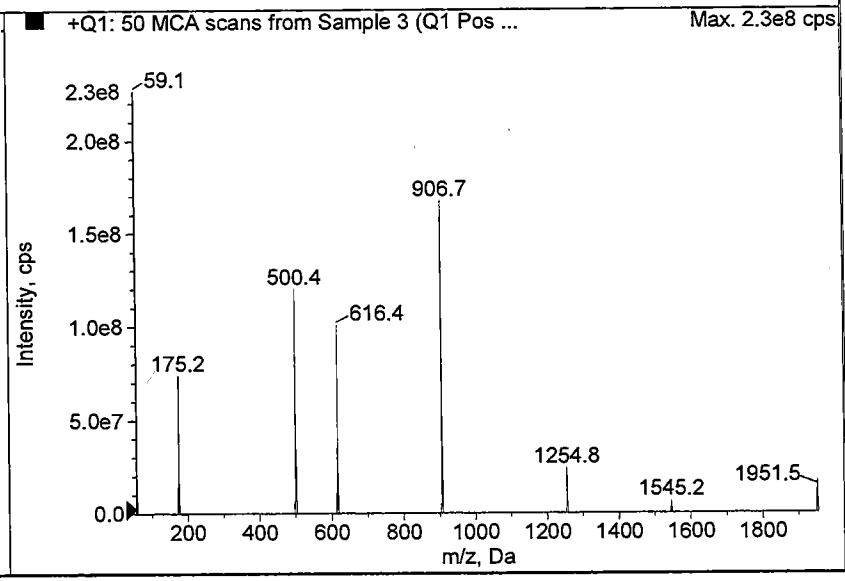
Period 1:

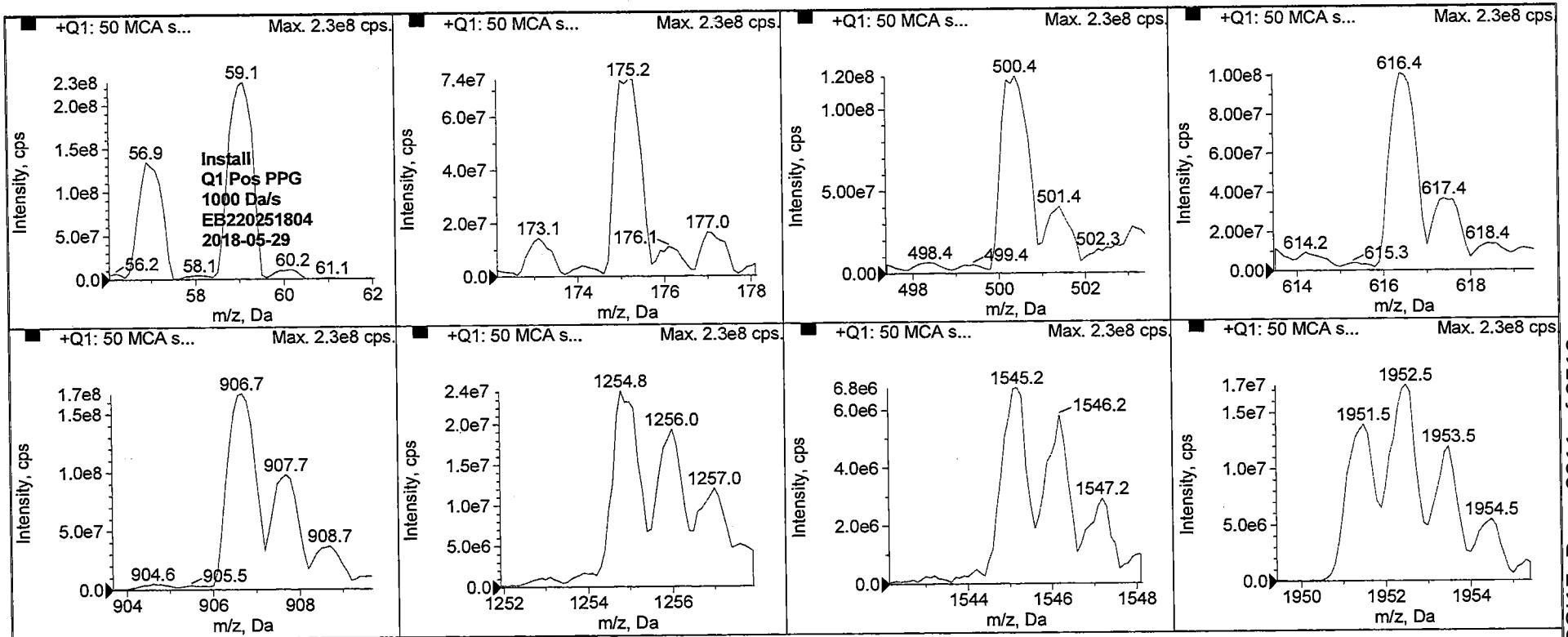
Scans in Period: 50
Relative Start Time: 0.00 msec
Scheduled Ionization: Off
Experiments in Period: 1

Period 1 Experiment 1:

Scan Type: Q1 MS (Q1)
Polarity: Positive
Scan Mode: Profile
Ion Source: Turbo Spray
Scans to Sum: 1
Resolution Q1: Unit







Peak List for " +Q1: 50 MCA scans from Sample 3 (Q1 Pos PPG_1000 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	59.0500	59.0540	2.2668e8	0.6411	-4.0020e-3
2	175.1330	175.1630	7.4160e7	0.7037	-0.0300
3	500.3800	500.3767	1.2013e8	0.7536	3.3425e-3
4	616.4640	616.4720	1.0080e8	0.7224	-8.0022e-3
5	906.6730	906.6738	1.6743e8	0.7638	-8.2831e-4
6	1254.9250	1254.9160	2.4100e7	0.7104	9.0009e-3
7	1545.1340	1545.1314	6.7600e6	0.6758	2.5866e-3
8	1952.4270	1952.4259	1.7440e7	0.7572	1.0770e-3

State Parameter Editor

Ion Source: Turbo Spray
Ion Source Temperature Reached
Curtain Gas (CUR): 10.0
IonSpray Voltage (IS): 5500.0
Temperature (TEM): 0.0
Ion Source Gas 1 (GS1): 17.0
Ion Source Gas 2 (GS2): 0.0

Entrance Potential (EP): 10.0

Q1 Resolution: Unit
Ion Energy 1 (IE1): 1.2

CEM (CEM): 1800.0

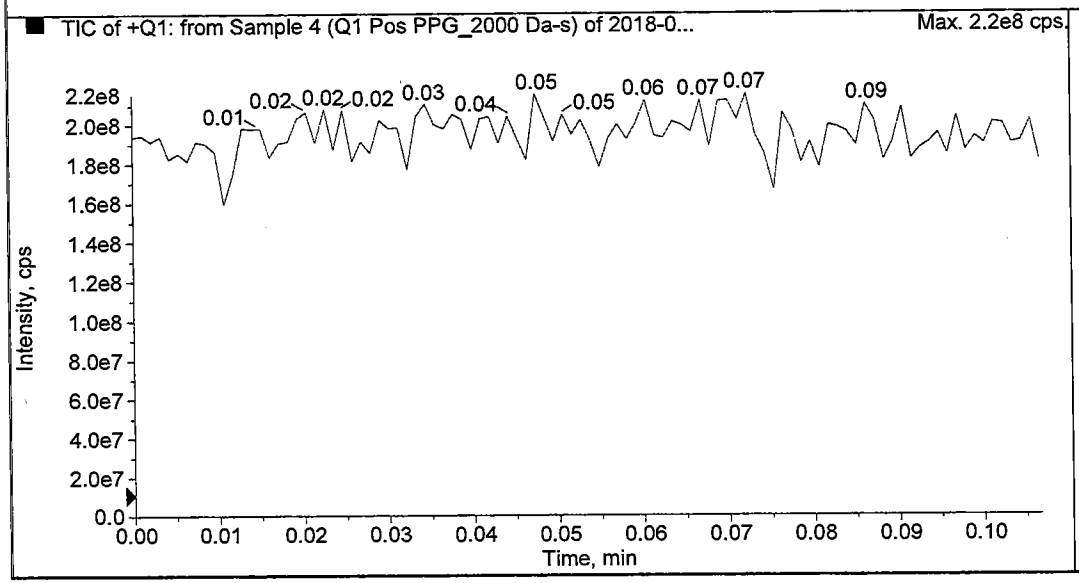
Mass Spectrometer Method Properties

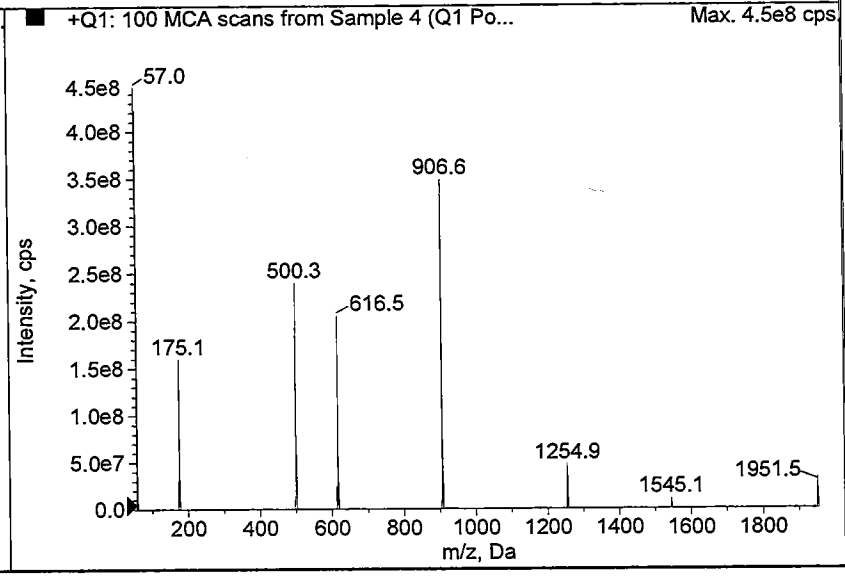
Period 1:

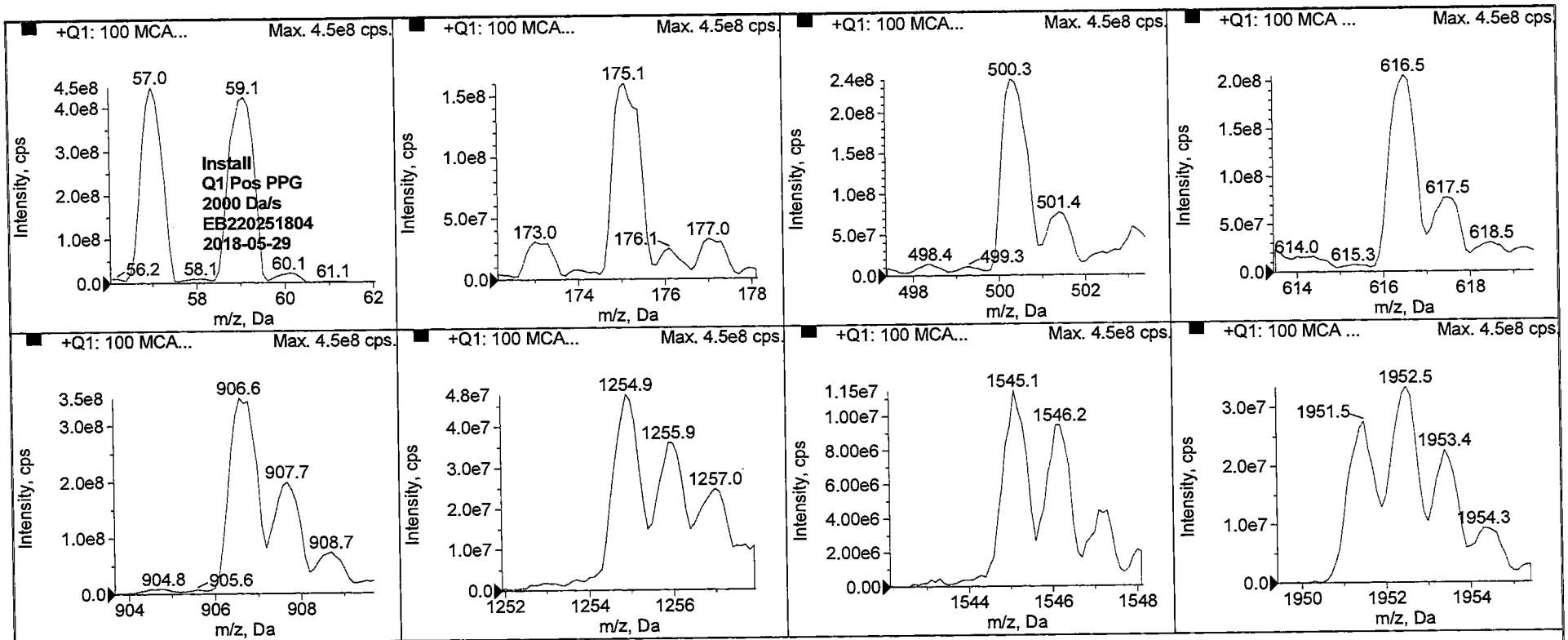
Scans in Period: 100
Relative Start Time: 0.00 msec
Scheduled Ionization: Off
Experiments in Period: 1

Period 1 Experiment 1:

Scan Type: Q1 MS (Q1)
Polarity: Positive
Scan Mode: Profile
Ion Source: Turbo Spray
Scans to Sum: 1
Resolution Q1: Unit







Peak List for " +Q1: 100 MCA scans from Sample 4 (Q1 Pos PPG_2000 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	59.0500	59.0541	4.2264e8	0.6747	-4.1197e-3
2	175.1330	175.1367	1.6034e8	0.7378	-3.7421e-3
3	500.3800	500.3744	2.4052e8	0.6995	5.5649e-3
4	616.4640	616.4767	2.0538e8	0.7070	-0.0127
5	906.6730	906.6844	3.4888e8	0.7414	-0.0114
6	1254.9250	1254.9130	4.7800e7	0.7332	0.0120
7	1545.1340	1545.1396	1.1460e7	0.6649	-5.5517e-3
8	1952.4270	1952.4475	3.3400e7	0.7743	-0.0205

State Parameter Editor

Ion Source:	Turbo Spray
Ion Source Temperature Reached	
Curtain Gas (CUR):	10.0
IonSpray Voltage (IS):	5500.0
Temperature (TEM):	0.0
Ion Source Gas 1 (GS1):	17.0
Ion Source Gas 2 (GS2):	0.0
Entrance Potential (EP):	10.0
Q3 Resolution:	Unit
Ion Energy 3 (IE3):	1.1
CEM (CEM):	1800.0

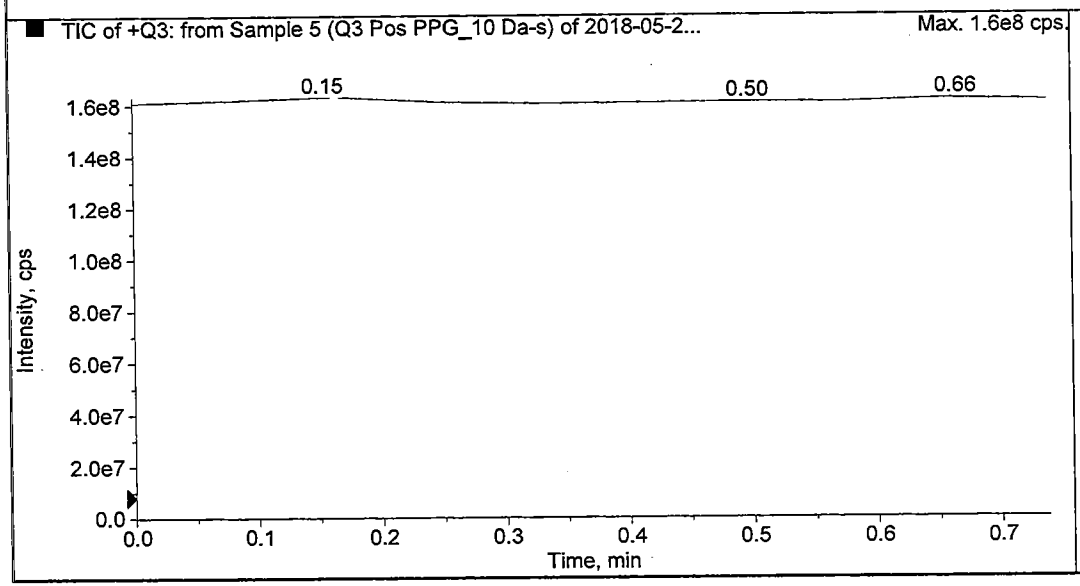
Mass Spectrometer Method Properties

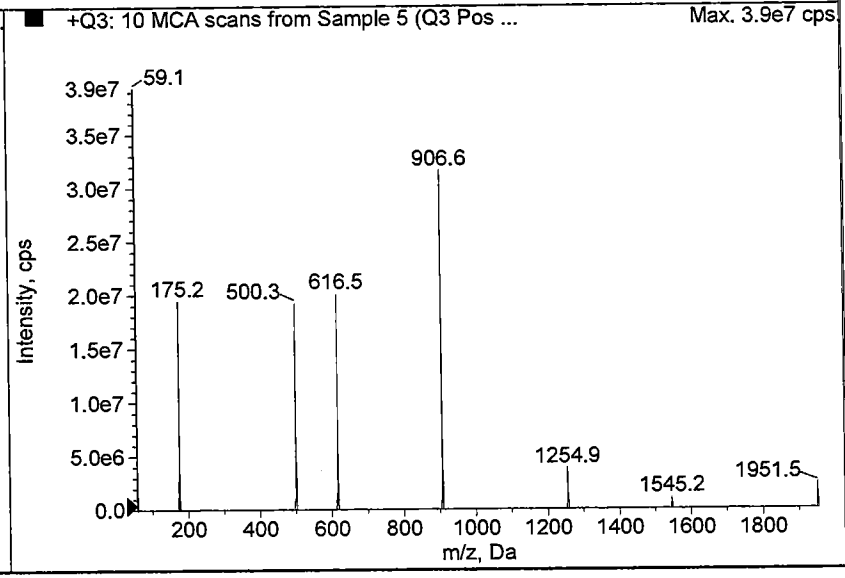
Period 1:

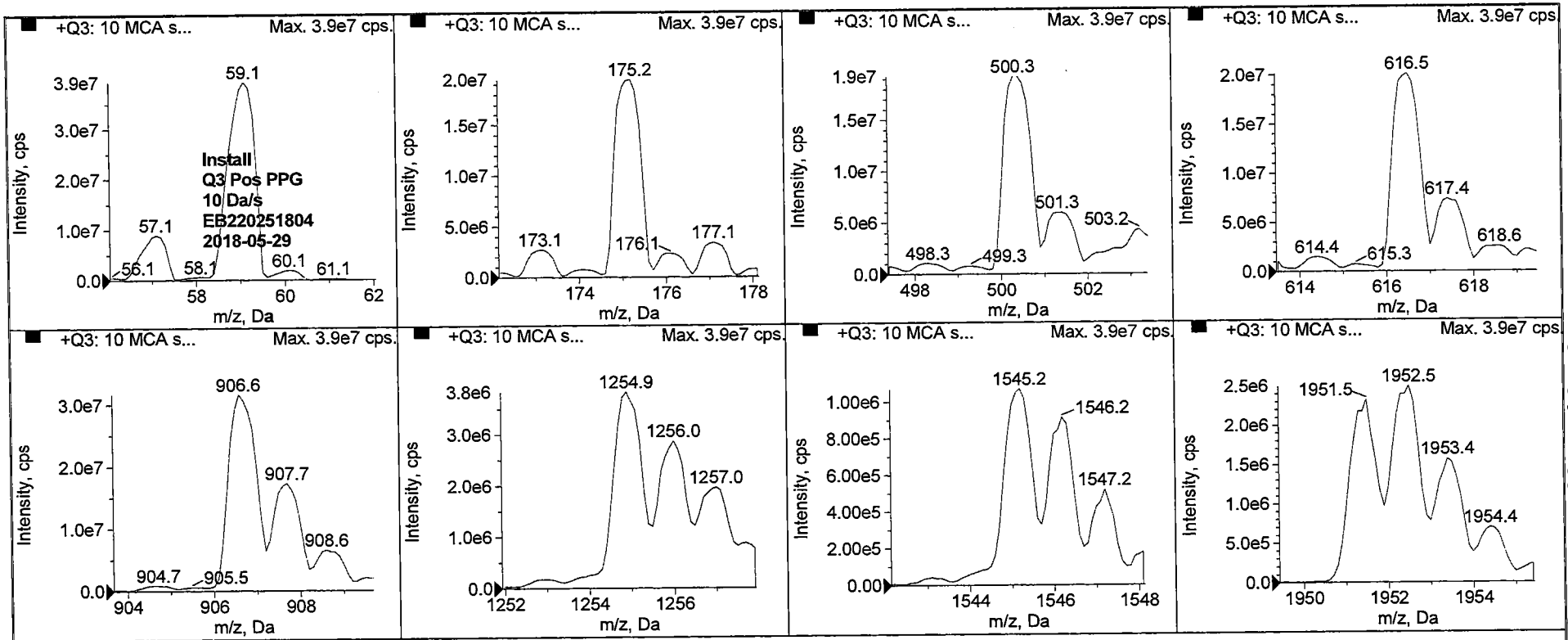
Scans in Period:	10
Relative Start Time:	0.00 msec
Scheduled Ionization:	Off
Experiments in Period:	1

Period 1 Experiment 1:

Scan Type:	Q3 MS (Q3)
Polarity:	Positive
Scan Mode:	Profile
Ion Source:	Turbo Spray
# Scans to Sum:	1
Resolution Q3:	Unit







Peak List for "+Q3: 10 MCA scans from Sample 5 (Q3 Pos PPG_10 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	59.0500	59.0600	3.9407e7	0.7175	-9.9728e-3
2	175.1330	175.1331	1.9501e7	0.6916	-1.2286e-4
3	500.3800	500.3823	1.9253e7	0.7278	-2.2612e-3
4	616.4640	616.4685	2.0128e7	0.7214	-4.5095e-3
5	906.6730	906.6736	3.1634e7	0.7403	-6.1273e-4
6	1254.9250	1254.9230	3.8338e6	0.7464	2.0449e-3
7	1545.1340	1545.1599	1.0717e6	0.7475	-0.0259
8	1952.4270	1952.4105	2.4968e6	0.7828	0.0165

State Parameter Editor

Ion Source: Turbo Spray
Ion Source Temperature Reached
Curtain Gas (CUR): 10.0
IonSpray Voltage (IS): 5500.0
Temperature (TEM): 0.0
Ion Source Gas 1 (GS1): 17.0
Ion Source Gas 2 (GS2): 0.0

Entrance Potential (EP): 10.0

Q3 Resolution: Unit
Ion Energy 3 (IE3): 1.0

CEM (CEM): 1800.0

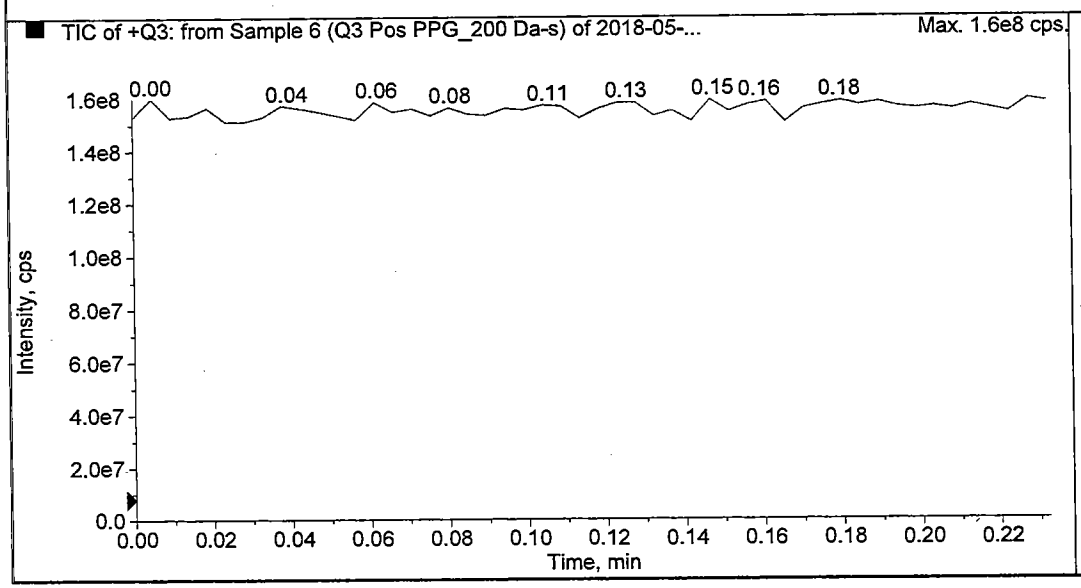
Mass Spectrometer Method Properties

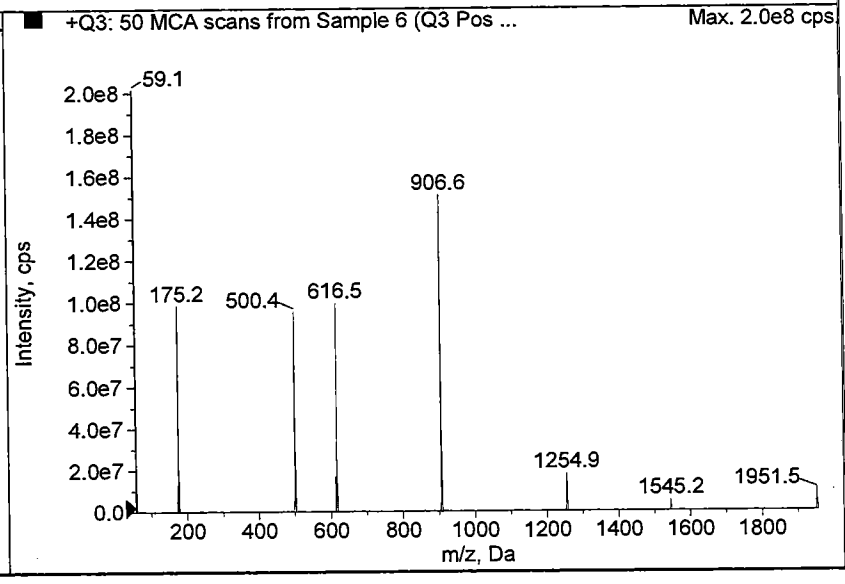
Period 1:

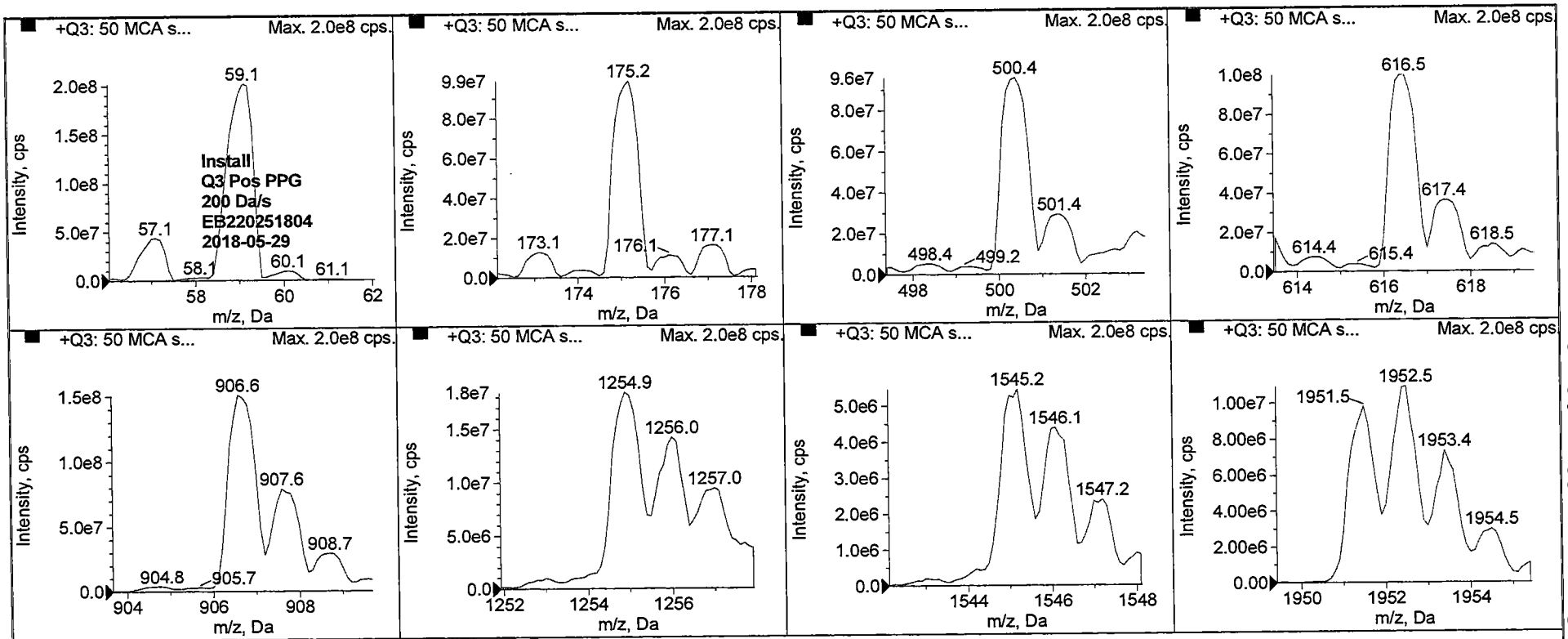
Scans in Period: 50
Relative Start Time: 0.00 msec
Scheduled Ionization: Off
Experiments in Period: 1

Period 1 Experiment 1:

Scan Type: Q3 MS (Q3)
Polarity: Positive
Scan Mode: Profile
Ion Source: Turbo Spray
Scans to Sum: 1
Resolution Q3: Unit







Peak List for " +Q3: 50 MCA scans from Sample 6 (Q3 Pos PPG_200 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	59.0500	59.0535	2.0159e8	0.6898	-3.5186e-3
2	175.1330	175.1234	9.8734e7	0.6779	9.5931e-3
3	500.3800	500.3781	9.5670e7	0.7134	1.9254e-3
4	616.4640	616.4537	9.9852e7	0.7073	0.0103
5	906.6730	906.6796	1.5094e8	0.7211	-6.5779e-3
6	1254.9250	1254.9165	1.8432e7	0.7818	8.4504e-3
7	1545.1340	1545.1060	5.4540e6	0.7324	0.0280
8	1952.4270	1952.4363	1.0900e7	0.7220	-9.3366e-3

State Parameter Editor

Ion Source: Turbo Spray
Ion Source Temperature Reached
Curtain Gas (CUR): 10.0
IonSpray Voltage (IS): 5500.0
Temperature (TEM): 0.0
Ion Source Gas 1 (GS1): 17.0
Ion Source Gas 2 (GS2): 0.0

Entrance Potential (EP): 10.0

Q3 Resolution: Unit
Ion Energy 3 (IE3): 1.0

CEM (CEM): 1800.0

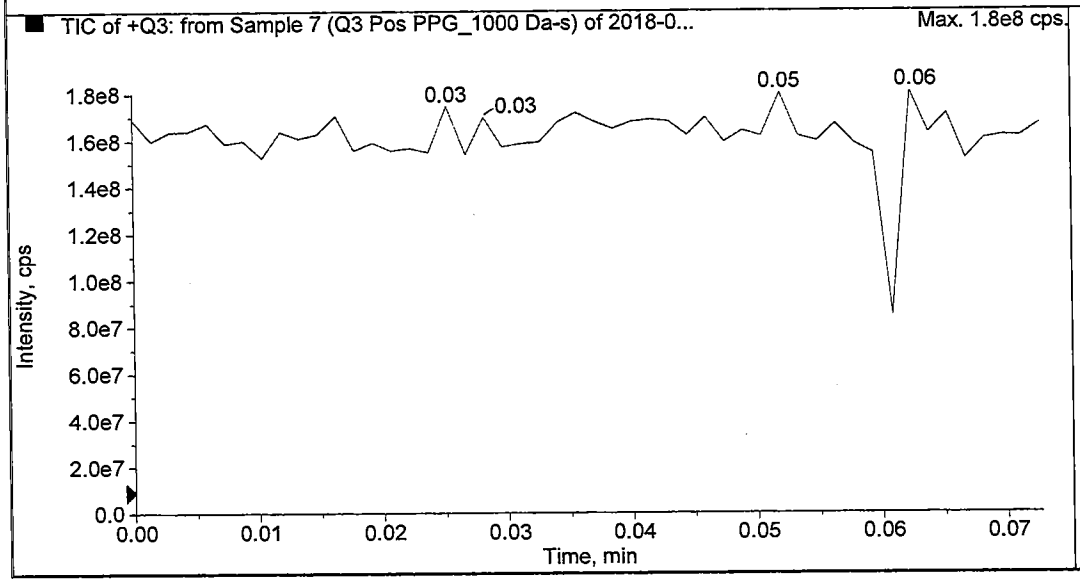
Mass Spectrometer Method Properties

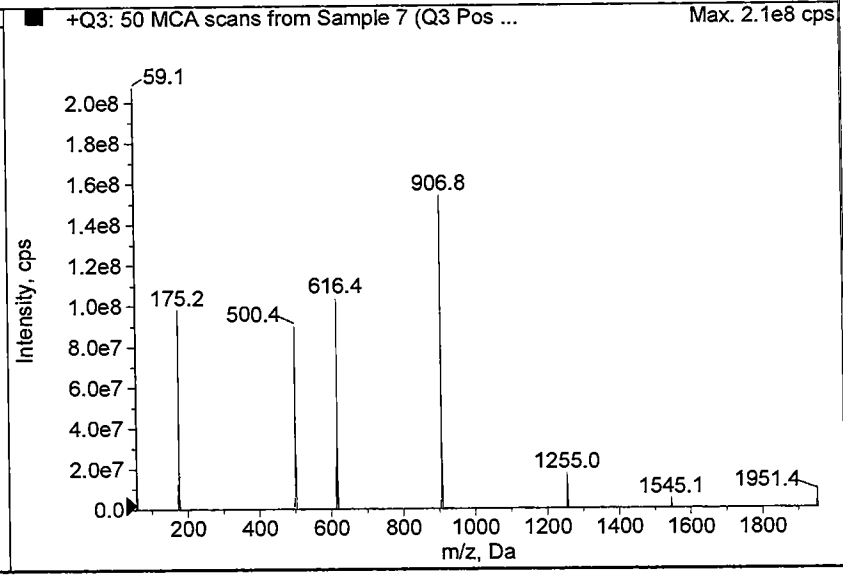
Period 1:

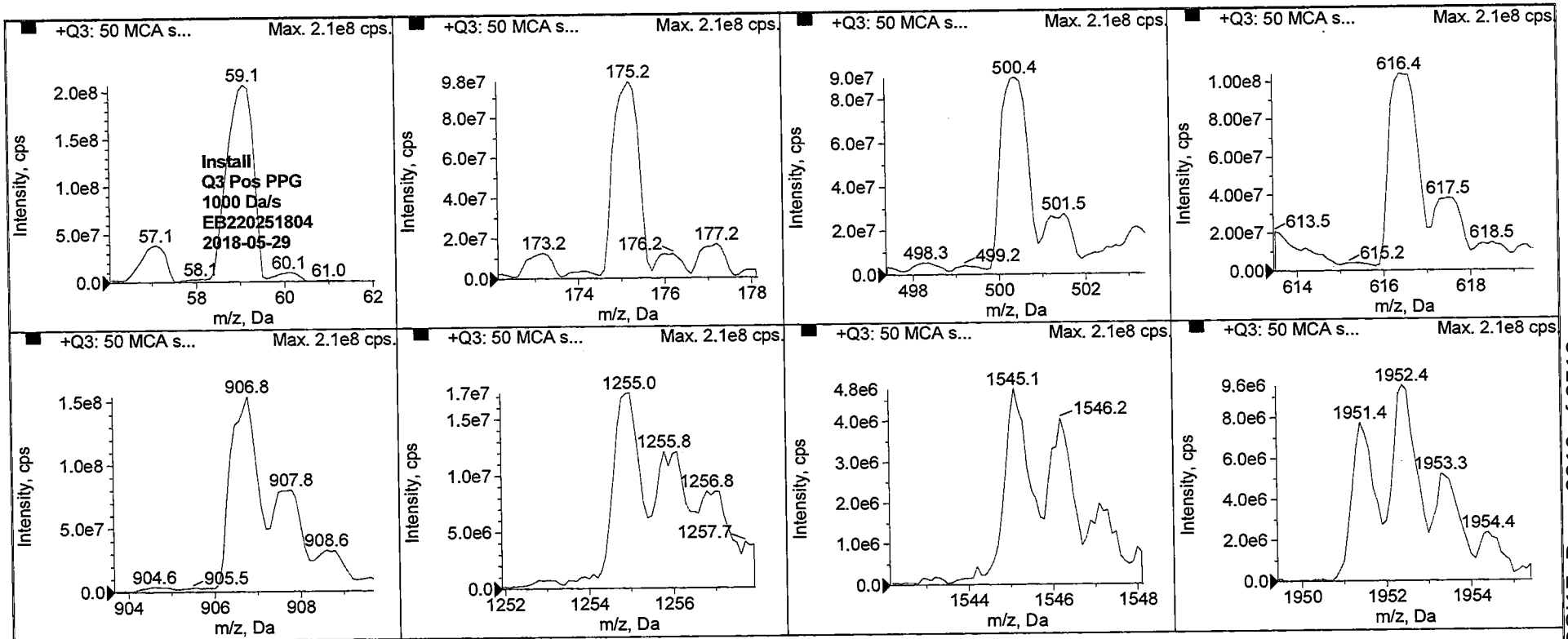
Scans in Period: 50
Relative Start Time: 0.00 msec
Scheduled Ionization: Off
Experiments in Period: 1

Period 1 Experiment 1:

Scan Type: Q3 MS (Q3)
Polarity: Positive
Scan Mode: Profile
Ion Source: Turbo Spray
Scans to Sum: 1
Resolution Q3: Unit







Peak List for " +Q3: 50 MCA scans from Sample 7 (Q3 Pos PPG_1000 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	59.0500	59.0525	2.0725e8	0.7070	-2.4950e-3
2	175.1330	175.1317	9.8190e7	0.6991	1.2969e-3
3	500.3800	500.3731	8.9990e7	0.7222	6.9400e-3
4	616.4640	616.4761	1.0393e8	0.7599	-0.0121
5	906.6730	906.6936	1.5407e8	0.7541	-0.0206
6	1254.9250	1254.9120	1.7310e7	0.7068	0.0130
7	1545.1340	1545.1453	4.7800e6	0.6227	-0.0113
8	1952.4270	1952.4249	9.5700e6	0.6631	2.0854e-3

State Parameter Editor

Ion Source: Turbo Spray
Ion Source Temperature Reached
Curtain Gas (CUR): 10.0
IonSpray Voltage (IS): 5500.0
Temperature (TEM): 0.0
Ion Source Gas 1 (GS1): 17.0
Ion Source Gas 2 (GS2): 0.0

Entrance Potential (EP): 10.0

Q3 Resolution: Unit
Ion Energy 3 (IE3): 1.2

CEM (CEM): 1800.0

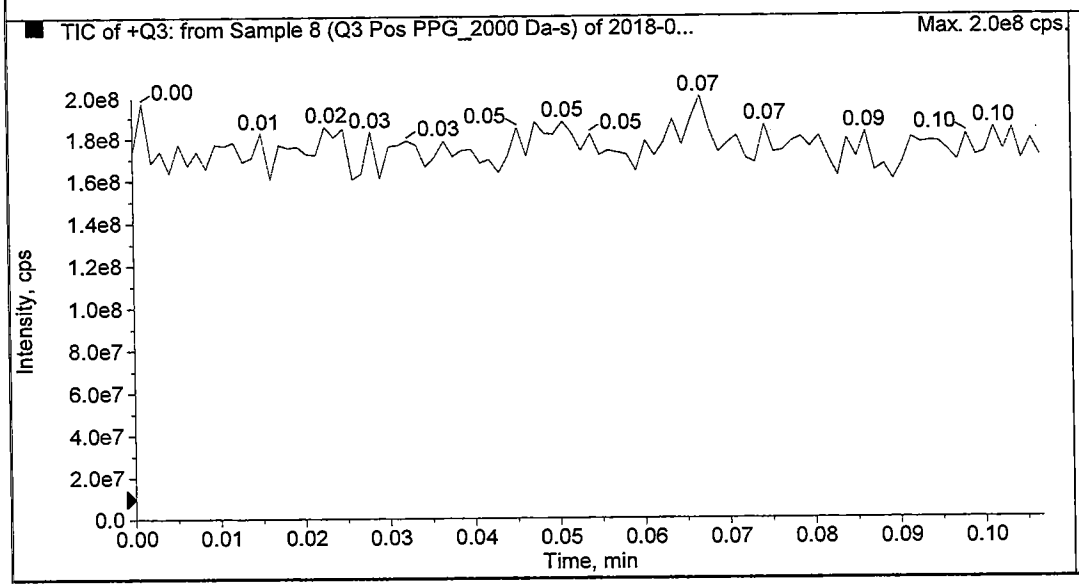
Mass Spectrometer Method Properties

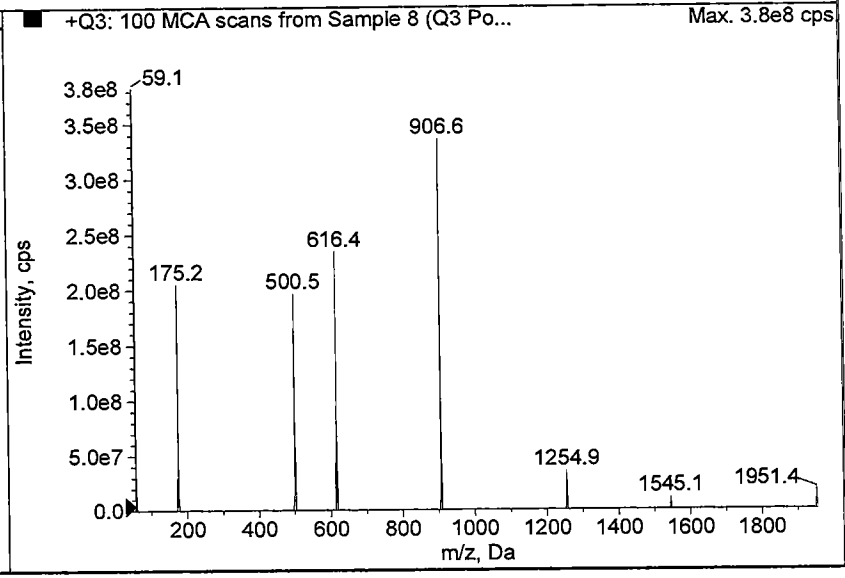
Period 1:

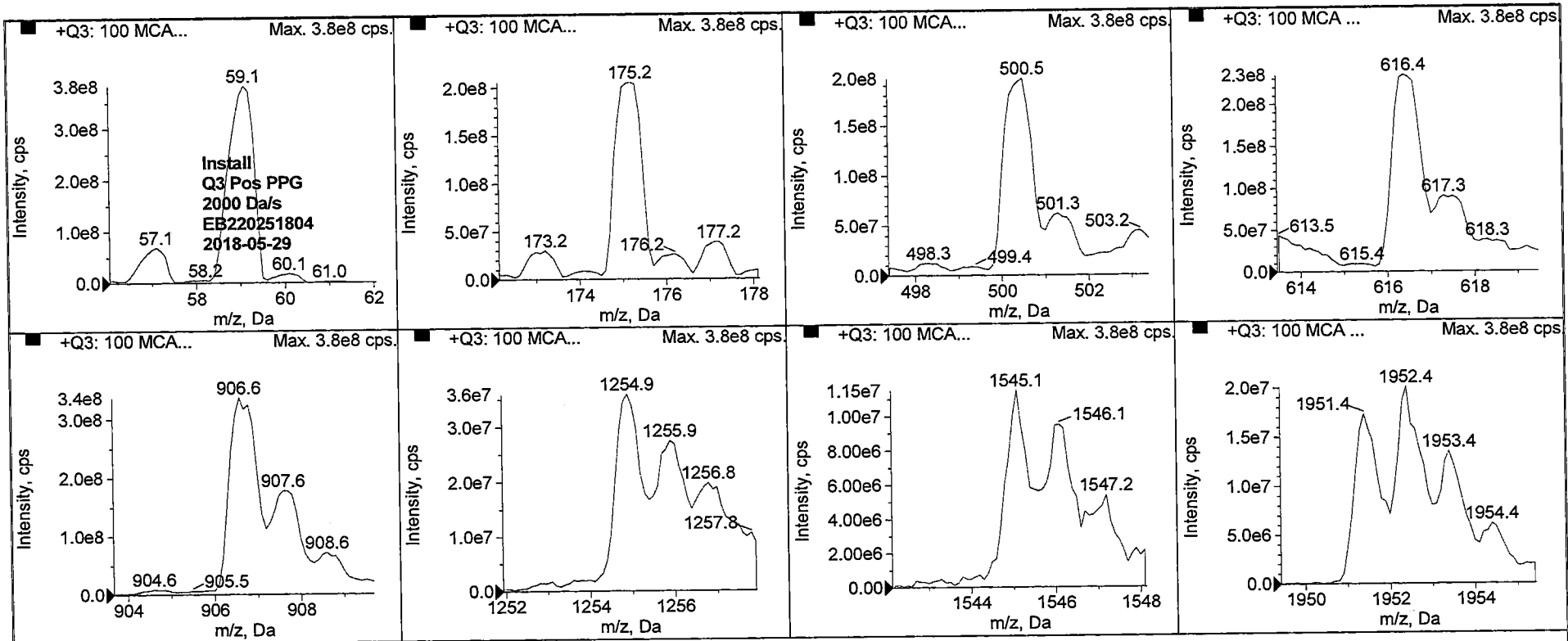
Scans in Period: 100
Relative Start Time: 0.00 msec
Scheduled Ionization: Off
Experiments in Period: 1

Period 1 Experiment 1:

Scan Type: Q3 MS (Q3)
Polarity: Positive
Scan Mode: Profile
Ion Source: Turbo Spray
Scans to Sum: 1
Resolution Q3: Unit







Peak List for " +Q3: 100 MCA scans from Sample 8 (Q3 Pos PPG_2000 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	59.0500	59.0613	3.8304e8	0.6857	-0.0113
2	175.1330	175.1384	2.0544e8	0.7196	-5.4303e-3
3	500.3800	500.3896	1.9692e8	0.7603	-9.6113e-3
4	616.4640	616.4545	2.3484e8	0.7563	9.5275e-3
5	906.6730	906.6804	3.3638e8	0.7428	-7.4202e-3
6	1254.9250	1254.9055	3.5980e7	0.7182	0.0195
7	1545.1340	1545.0988	1.1500e7	0.6834	0.0352
8	1952.4270	1952.4546	2.0100e7	0.7640	-0.0276

State Parameter Editor

Ion Source:	Turbo Spray
Ion Source Temperature Reached	
Curtain Gas (CUR):	10.0
IonSpray Voltage (IS):	-4500.0
Temperature (TEM):	0.0
Ion Source Gas 1 (GS1):	17.0
Ion Source Gas 2 (GS2):	0.0
Entrance Potential (EP):	-10.0
Q1 Resolution:	Unit
Ion Energy 1 (IE1):	-1.0
CEM (CEM):	1900.0

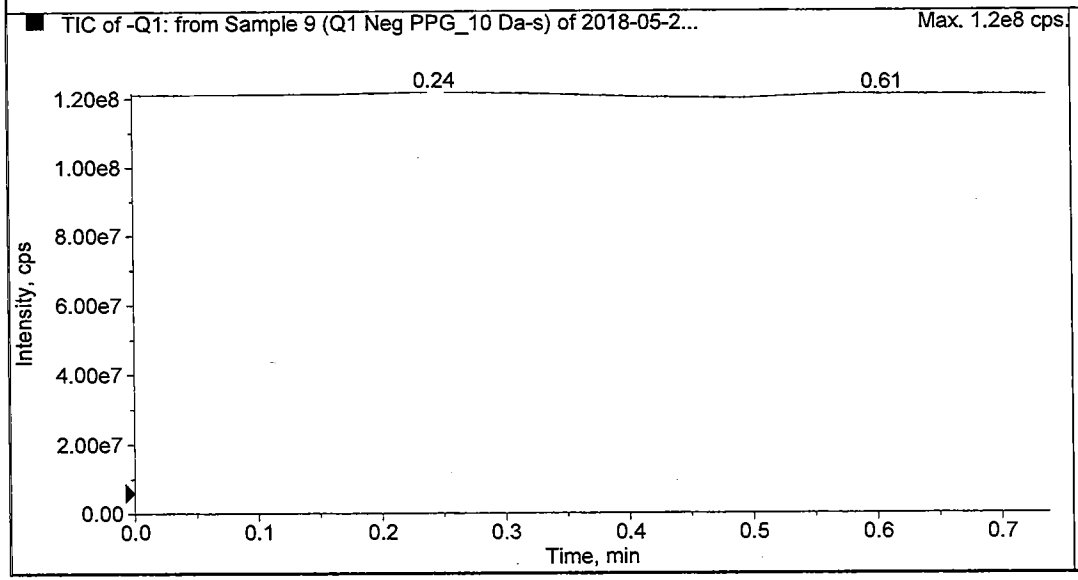
Mass Spectrometer Method Properties

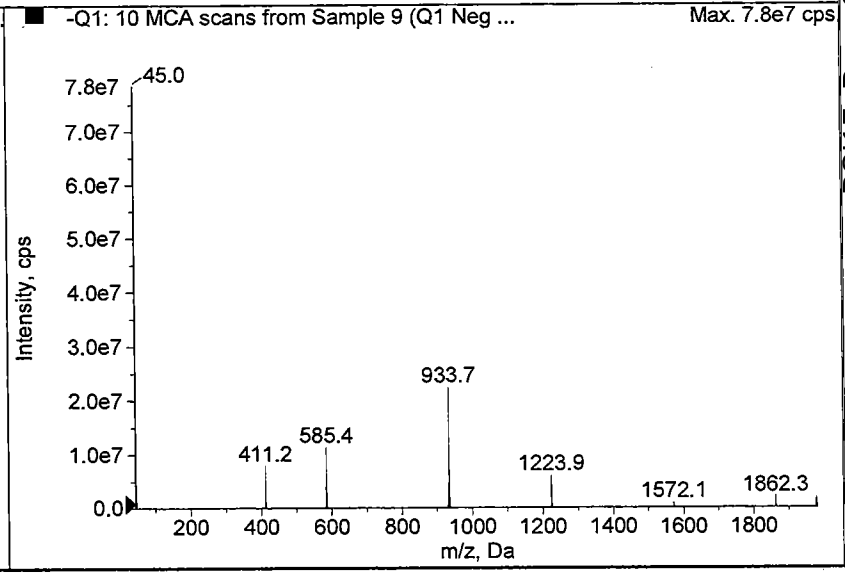
Period 1:

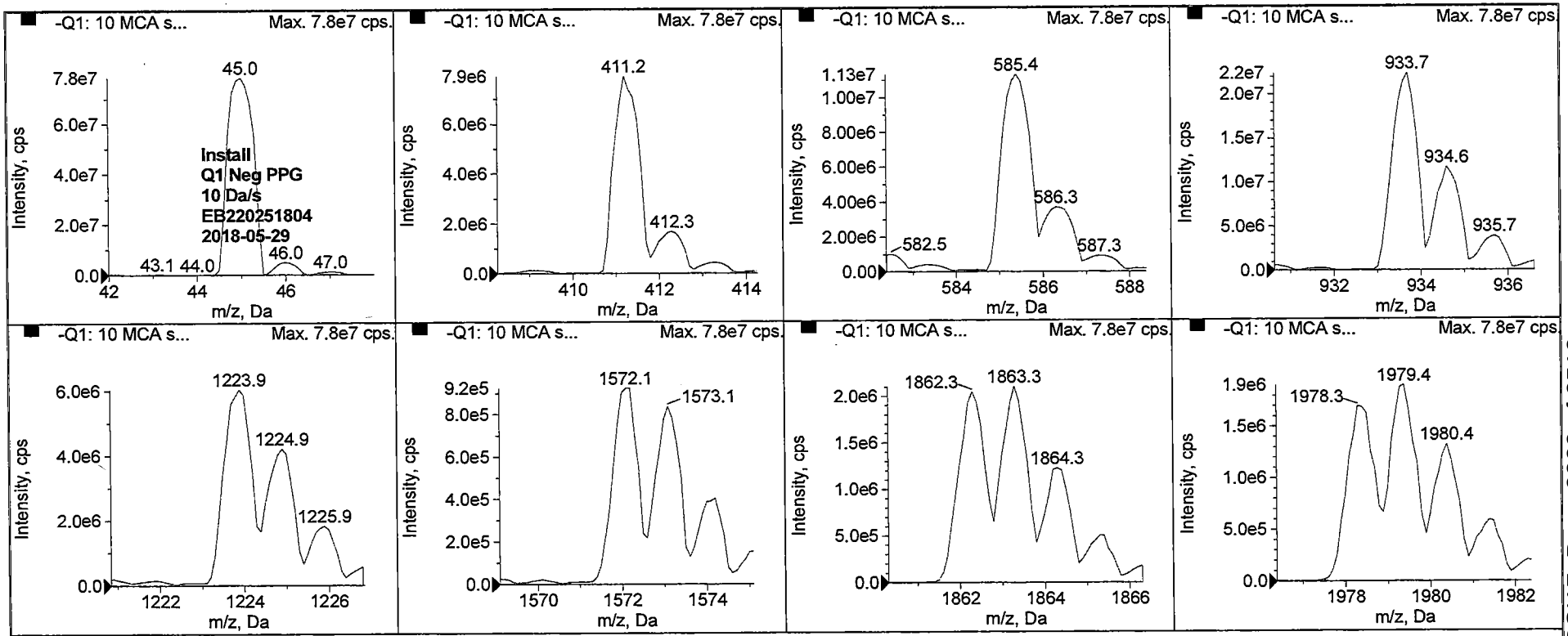
Scans in Period:	10
Relative Start Time:	0.00 msec
Scheduled Ionization:	Off
Experiments in Period:	1

Period 1 Experiment 1:

Scan Type:	Q1 MS (Q1)
Polarity:	Negative
Scan Mode:	Profile
Ion Source:	Turbo Spray
# Scans to Sum:	1
Resolution Q1:	Unit







Peak List for "-Q1: 10 MCA scans from Sample 9 (Q1 Neg PPG_10 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9947	7.8484e7	0.6977	3.3302e-3
2	411.2590	411.2640	7.9184e6	0.7009	-4.9843e-3
3	585.3850	585.3944	1.1318e7	0.7674	-9.3834e-3
4	933.6360	933.6513	2.2378e7	0.6638	-0.0153
5	1223.8450	1223.8605	6.0413e6	0.7621	-0.0155
6	1572.0970	1572.0967	9.2320e5	0.6727	2.8078e-4
7	1863.3060	1863.2949	2.1046e6	0.7369	0.0111
8	1979.3890	1979.3655	1.8985e6	0.7323	0.0235

State Parameter Editor

Ion Source: Turbo Spray
Ion Source Temperature Reached
Curtain Gas (CUR): 10.0
IonSpray Voltage (IS): -4500.0
Temperature (TEM): 0.0
Ion Source Gas 1 (GS1): 17.0
Ion Source Gas 2 (GS2): 0.0

Entrance Potential (EP): -10.0

Q1 Resolution: Unit
Ion Energy 1 (IE1): -1.0

CEM (CEM): 1900.0

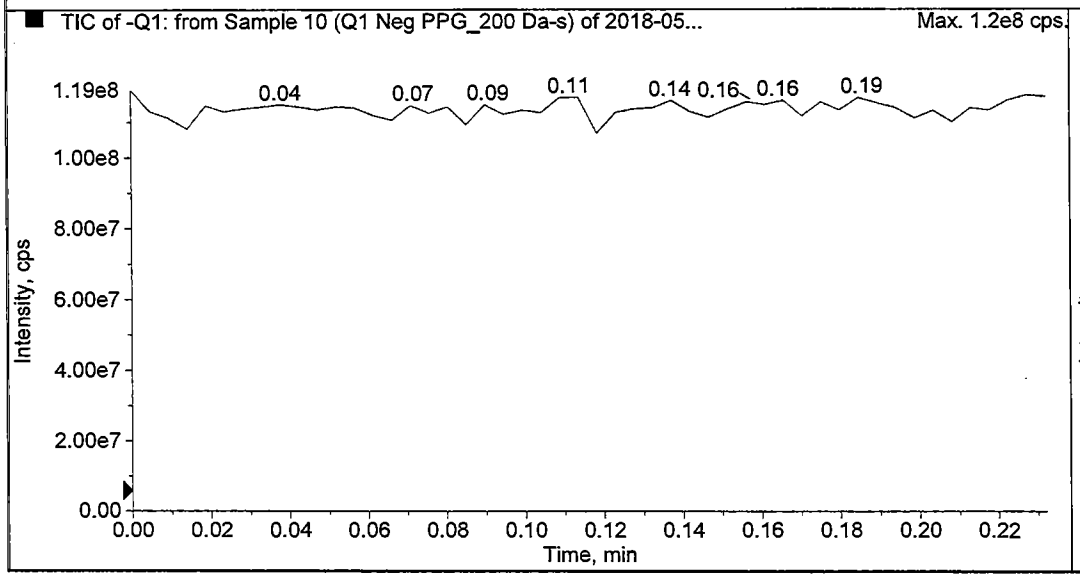
Mass Spectrometer Method Properties

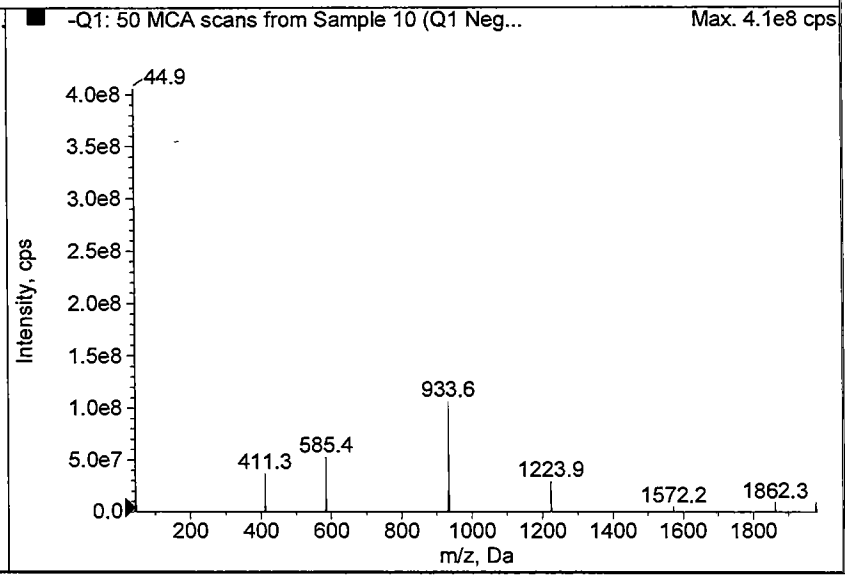
Period 1:

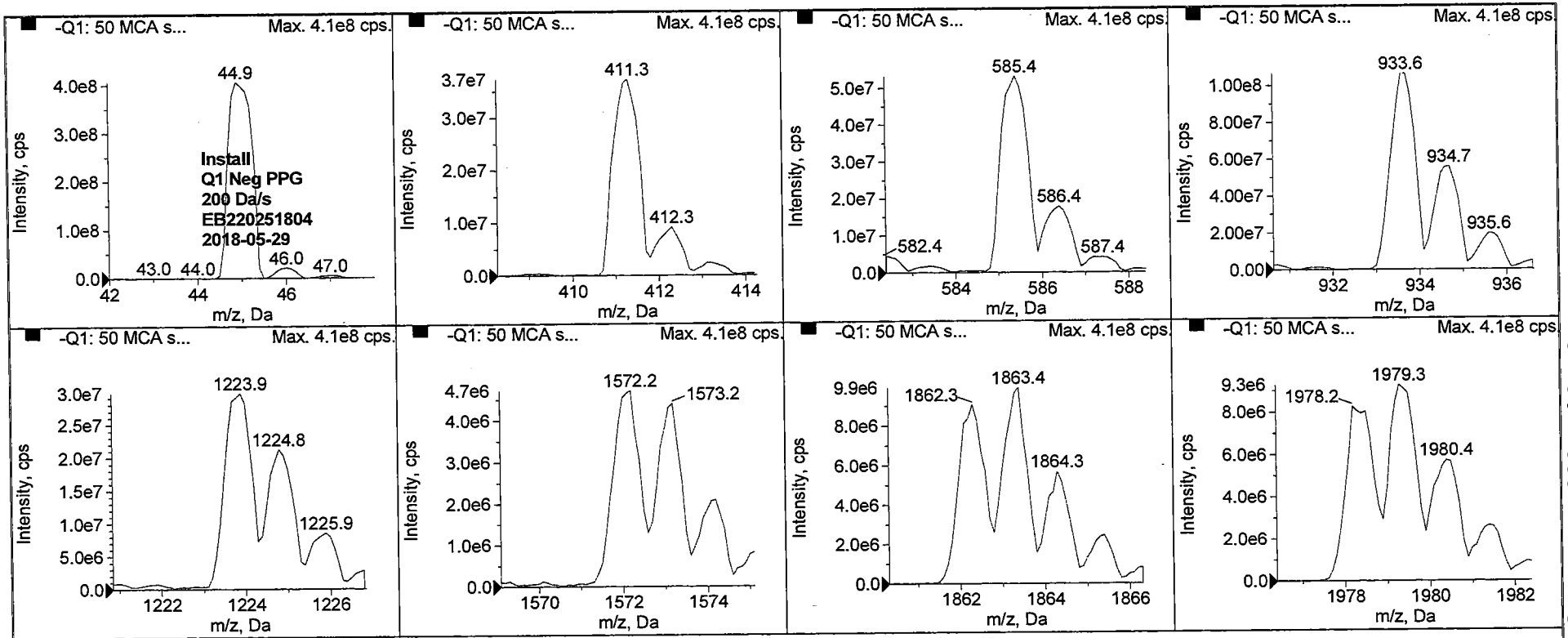
Scans in Period: 50
Relative Start Time: 0.00 msec
Scheduled Ionization: Off
Experiments in Period: 1

Period 1 Experiment 1:

Scan Type: Q1 MS (Q1)
Polarity: Negative
Scan Mode: Profile
Ion Source: Turbo Spray
Scans to Sum: 1
Resolution Q1: Unit







Peak List for "-Q1: 50 MCA scans from Sample 10 (Q1 Neg PPG_200 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9900	4.0582e8	0.6493	8.0001e-3
2	411.2590	411.2621	3.7274e7	0.7276	-3.1008e-3
3	585.3850	585.3787	5.3084e7	0.7168	6.3372e-3
4	933.6360	933.6551	1.0649e8	0.6450	-0.0191
5	1223.8450	1223.8398	2.9712e7	0.7456	5.1659e-3
6	1572.0970	1572.1026	4.7160e6	0.7330	-5.5764e-3
7	1863.3060	1863.3085	9.9060e6	0.6832	-2.5396e-3
8	1979.3890	1979.3715	9.2680e6	0.7385	0.0175

State Parameter Editor

Ion Source: Turbo Spray
Ion Source Temperature Reached
Curtain Gas (CUR): 10.0
IonSpray Voltage (IS): -4500.0
Temperature (TEM): 0.0
Ion Source Gas 1 (GS1): 17.0
Ion Source Gas 2 (GS2): 0.0

Entrance Potential (EP): -10.0

Q1 Resolution: Unit
Ion Energy 1 (IE1): -1.0

CEM (CEM): 1900.0

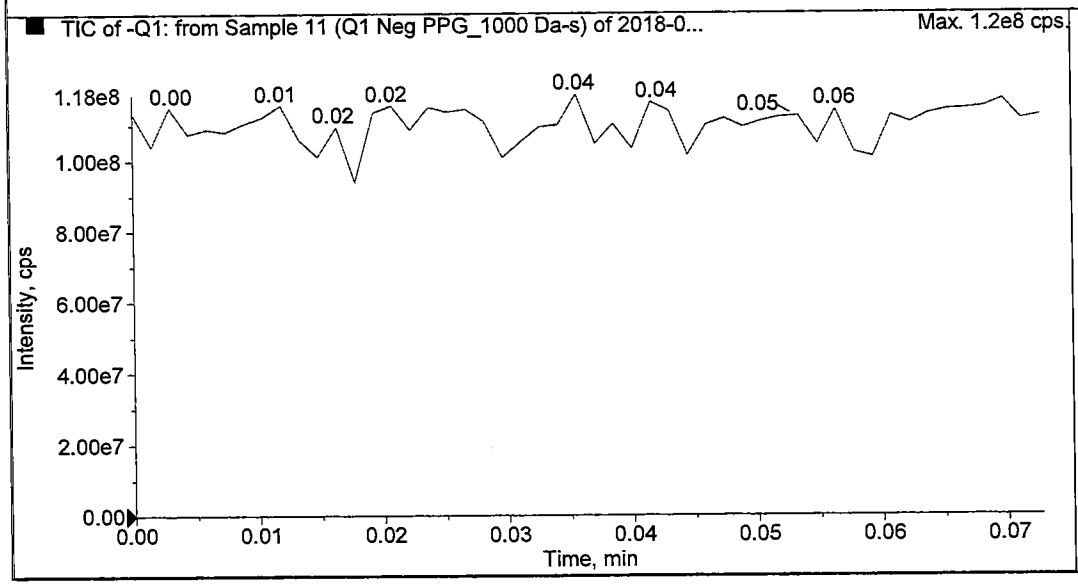
Mass Spectrometer Method Properties

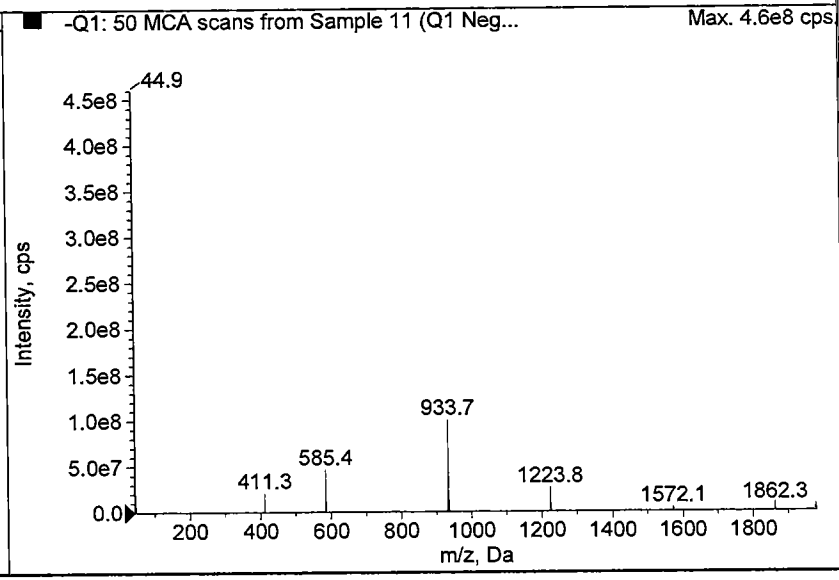
Period 1:

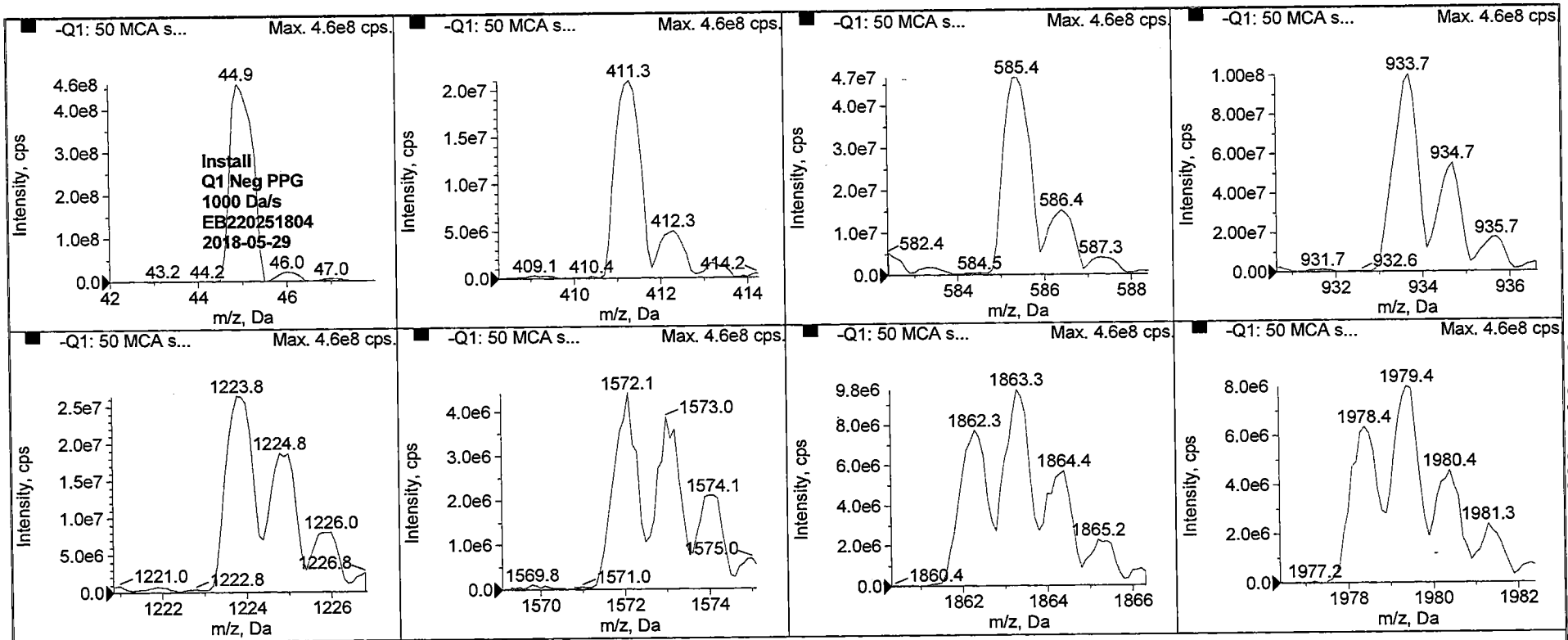
Scans in Period: 50
Relative Start Time: 0.00 msec
Scheduled Ionization: Off
Experiments in Period: 1

Period 1 Experiment 1:

Scan Type: Q1 MS (Q1)
Polarity: Negative
Scan Mode: Profile
Ion Source: Turbo Spray
Scans to Sum: 1
Resolution Q1: Unit







Peak List for "-Q1: 50 MCA scans from Sample 11 (Q1 Neg PPG_1000 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	45.0048	4.6001e8	0.6178	-6.8036e-3
2	411.2590	411.2622	2.1000e7	0.6966	-3.2270e-3
3	585.3850	585.3835	4.6680e7	0.7152	1.4984e-3
4	933.6360	933.6542	1.0040e8	0.6380	-0.0182
5	1223.8450	1223.8506	2.6440e7	0.7474	-5.6084e-3
6	1572.0970	1572.0547	4.4200e6	0.6569	0.0423
7	1863.3060	1863.3097	9.7600e6	0.7294	-3.6879e-3
8	1979.3890	1979.3736	7.9900e6	0.7077	0.0154

State Parameter Editor

Ion Source:	Turbo Spray
Ion Source Temperature Reached	
Curtain Gas (CUR):	10.0
IonSpray Voltage (IS):	-4500.0
Temperature (TEM):	0.0
Ion Source Gas 1 (GS1):	17.0
Ion Source Gas 2 (GS2):	0.0
Entrance Potential (EP):	-10.0
Q1 Resolution:	Unit
Ion Energy 1 (IE1):	-1.0
CEM (CEM):	1900.0

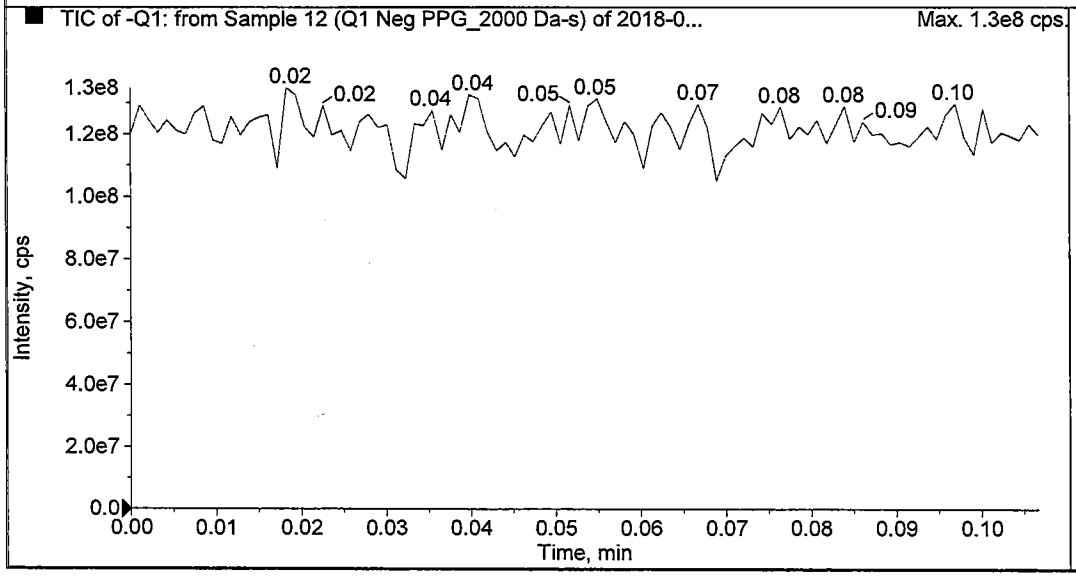
Mass Spectrometer Method Properties

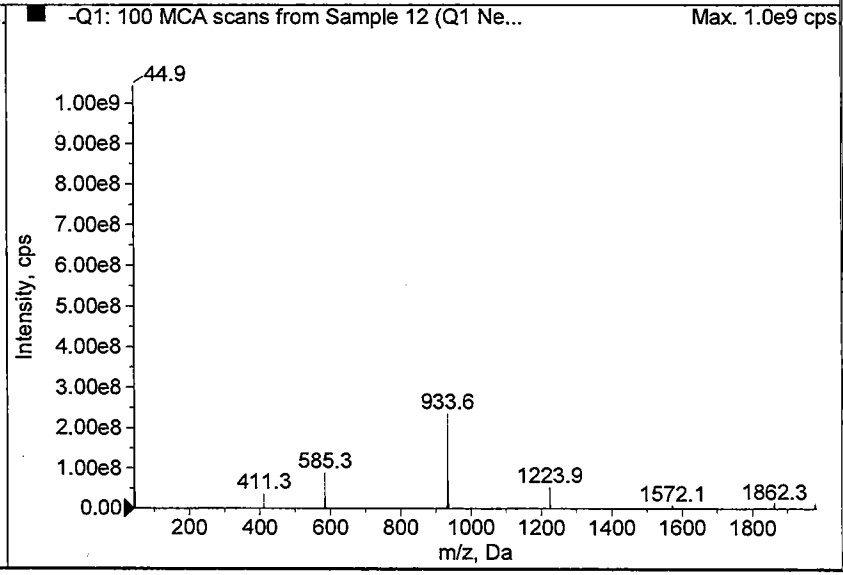
Period 1:

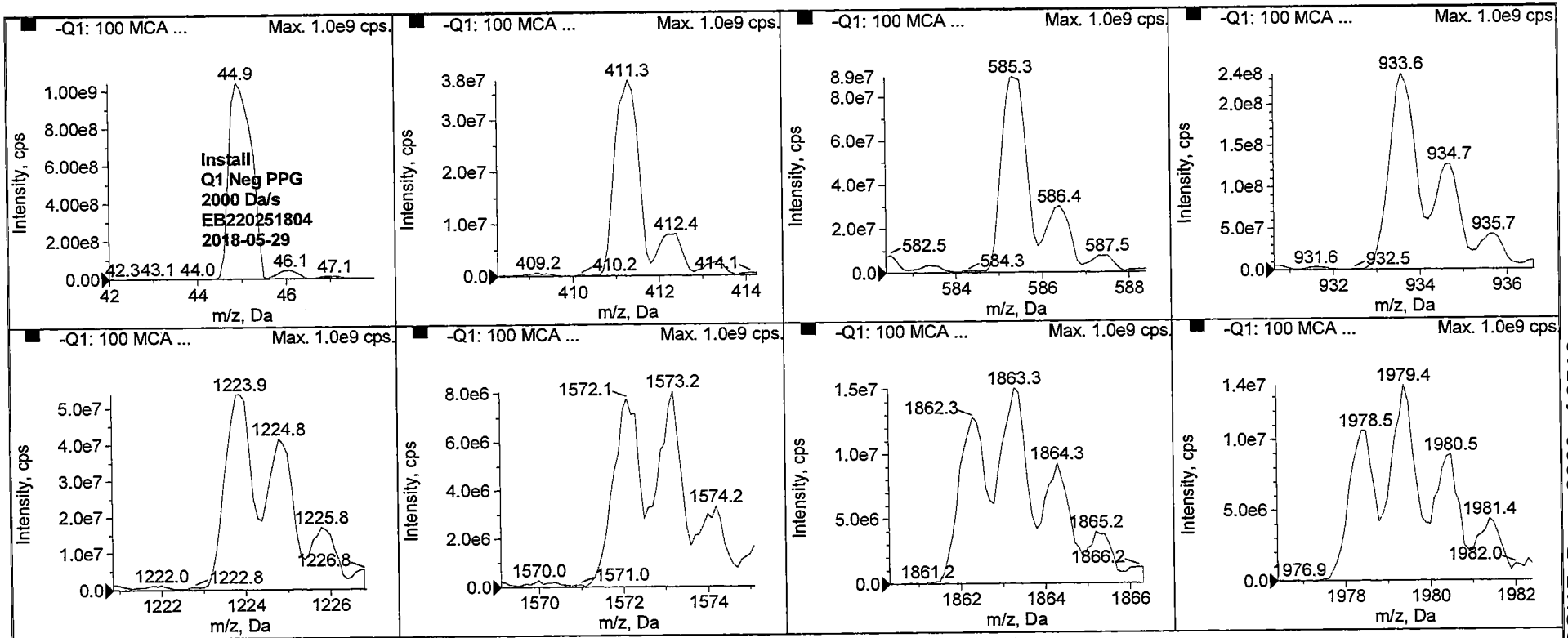
Scans in Period:	100
Relative Start Time:	0.00 msec
Scheduled Ionization:	Off
Experiments in Period:	1

Period 1 Experiment 1:

Scan Type:	Q1 MS (Q1)
Polarity:	Negative
Scan Mode:	Profile
Ion Source:	Turbo Spray
# Scans to Sum:	1
Resolution Q1:	Unit







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Peak List for "-Q1: 100 MCA scans from Sample 12 (Q1 Neg PPG_2000 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9988	1.0432e9	0.6290	-7.8776e-4
2	411.2590	411.2681	3.7700e7	0.6335	-9.0706e-3
3	585.3850	585.3670	8.9260e7	0.6465	0.0180
4	933.6360	933.6310	2.3632e8	0.6639	4.9633e-3
5	1223.8450	1223.8469	5.3740e7	0.7138	-1.8551e-3
6	1572.0970	1572.1139	7.7800e6	0.7223	-0.0169
7	1863.3060	1863.2638	1.5060e7	0.7553	0.0422
8	1979.3890	1979.3750	1.3800e7	0.6556	0.0140

State Parameter Editor

Ion Source: Turbo Spray
Ion Source Temperature Reached
Curtain Gas (CUR): 10.0
IonSpray Voltage (IS): -4500.0
Temperature (TEM): 0.0
Ion Source Gas 1 (GS1): 17.0
Ion Source Gas 2 (GS2): 0.0

Entrance Potential (EP): -10.0

Q3 Resolution: Unit
Ion Energy 3 (IE3): -1.5

CEM (CEM): 1900.0

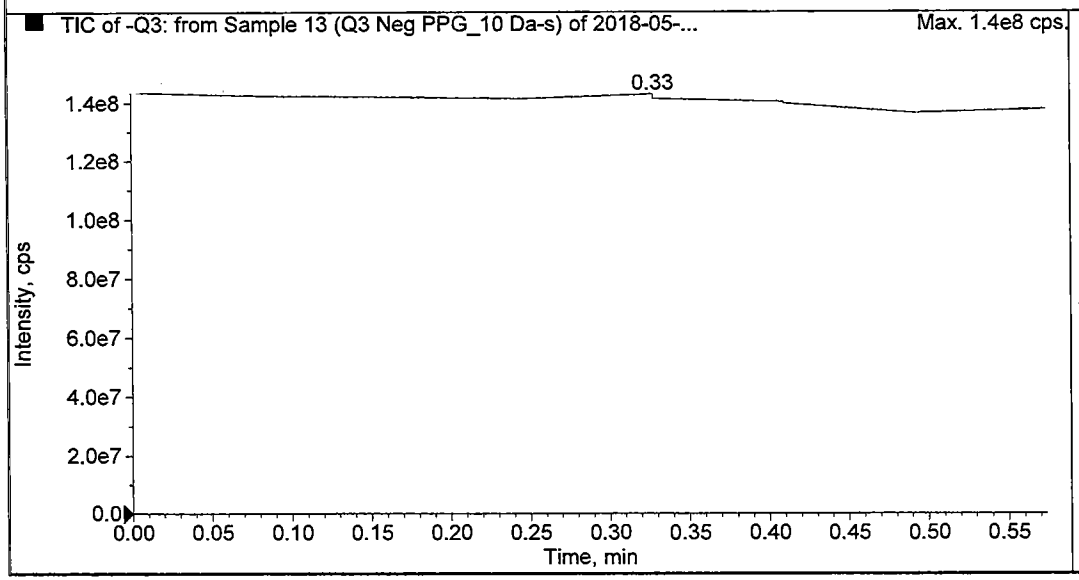
Mass Spectrometer Method Properties

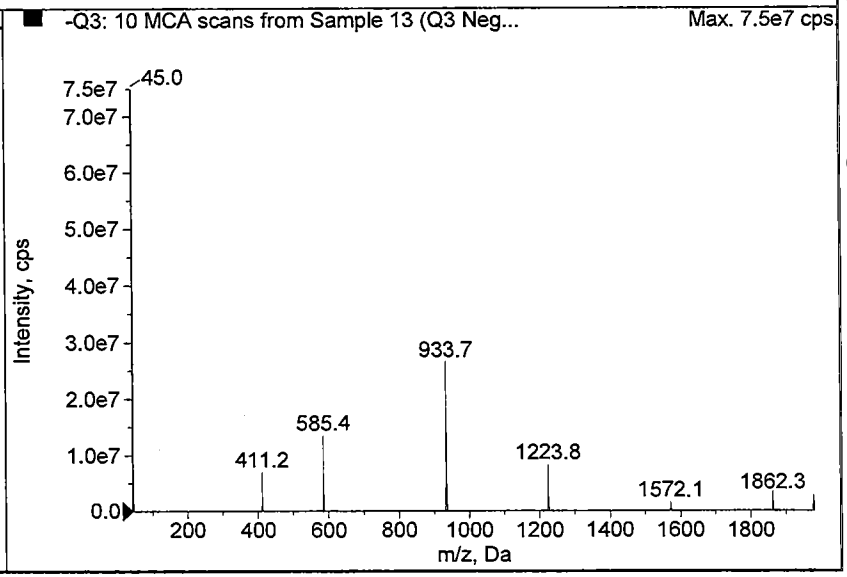
Period 1:

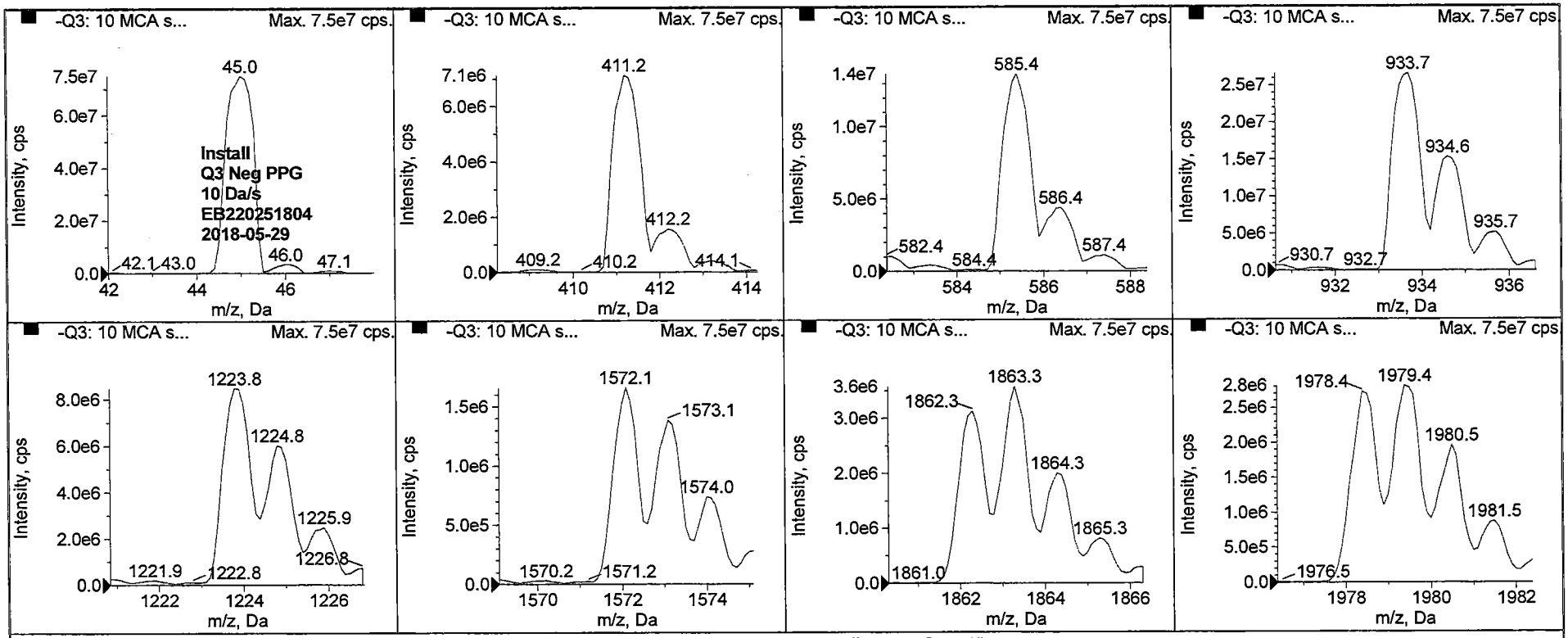
Scans in Period: 10
Relative Start Time: 0.00 msec
Scheduled Ionization: Off
Experiments in Period: 1

Period 1 Experiment 1:

Scan Type: Q3 MS (Q3)
Polarity: Negative
Scan Mode: Profile
Ion Source: Turbo Spray
Scans to Sum: 1
Resolution Q3: Unit







Peak List for "-Q3: 10 MCA scans from Sample 13 (Q3 Neg PPG_10 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9972	7.5007e7	0.7320	7.7711e-4
2	411.2590	411.2344	7.1361e6	0.7370	0.0246
3	585.3850	585.3868	1.3657e7	0.7362	-1.8161e-3
4	933.6360	933.6384	2.6621e7	0.7288	-2.4244e-3
5	1223.8450	1223.8430	8.4746e6	0.7528	1.9856e-3
6	1572.0970	1572.0927	1.6606e6	0.6651	4.2840e-3
7	1863.3060	1863.3066	3.5734e6	0.7033	-6.4400e-4
8	1979.3890	1979.4384	2.8091e6	0.7513	-0.0494

State Parameter Editor

Ion Source:	Turbo Spray
Ion Source Temperature Reached	
Curtain Gas (CUR):	10.0
IonSpray Voltage (IS):	-4500.0
Temperature (TEM):	0.0
Ion Source Gas 1 (GS1):	17.0
Ion Source Gas 2 (GS2):	0.0
Entrance Potential (EP):	-10.0
Q3 Resolution:	Unit
Ion Energy 3 (IE3):	-1.5
CEM (CEM):	1900.0

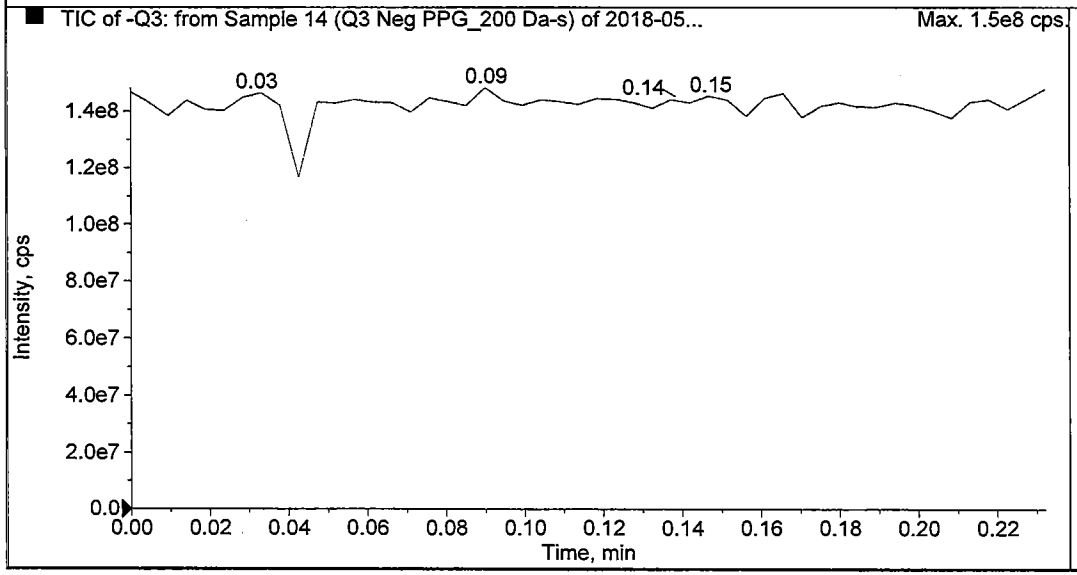
Mass Spectrometer Method Properties

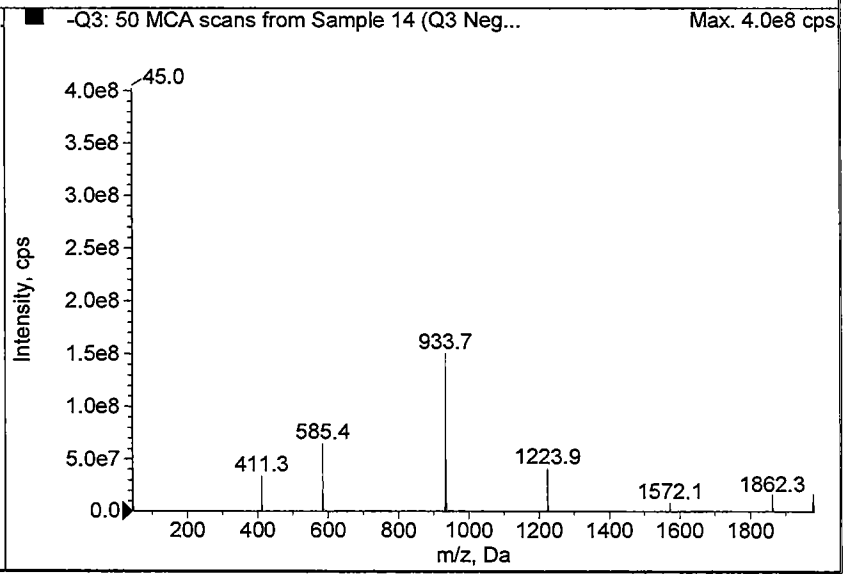
Period 1:

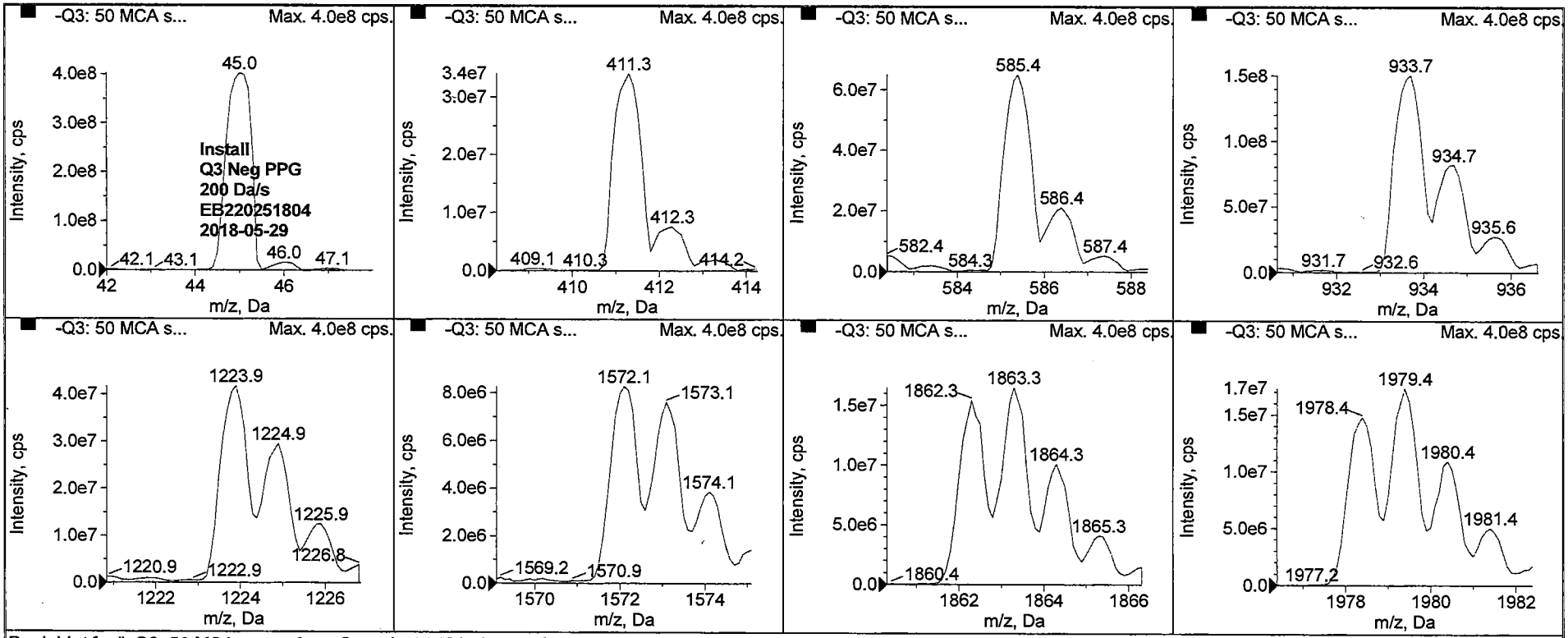
Scans in Period:	50
Relative Start Time:	0.00 msec
Scheduled Ionization:	Off
Experiments in Period:	1

Period 1 Experiment 1:

Scan Type:	Q3 MS (Q3)
Polarity:	Negative
Scan Mode:	Profile
Ion Source:	Turbo Spray
# Scans to Sum:	1
Resolution Q3:	Unit







Peak List for "-Q3: 50 MCA scans from Sample 14 (Q3 Neg PPG_200 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9962	4.0241e8	0.6638	1.8369e-3
2	411.2590	411.2556	3.4052e7	0.7417	3.4492e-3
3	585.3850	585.3842	6.5036e7	0.7136	7.7195e-4
4	933.6360	933.6363	1.5056e8	0.7374	-3.0811e-4
5	1223.8450	1223.8530	4.1810e7	0.7279	-7.9656e-3
6	1572.0970	1572.1021	8.2680e6	0.7241	-5.0694e-3
7	1863.3060	1863.3199	1.6482e7	0.6755	-0.0139
8	1979.3890	1979.3879	1.7328e7	0.7116	1.1118e-3

State Parameter Editor

Ion Source:	Turbo Spray
Ion Source Temperature Reached	
Curtain Gas (CUR):	10.0
IonSpray Voltage (IS):	-4500.0
Temperature (TEM):	0.0
Ion Source Gas 1 (GS1):	17.0
Ion Source Gas 2 (GS2):	0.0
Entrance Potential (EP):	-10.0
Q3 Resolution:	Unit
Ion Energy 3 (IE3):	-1.5
CEM (CEM):	1900.0

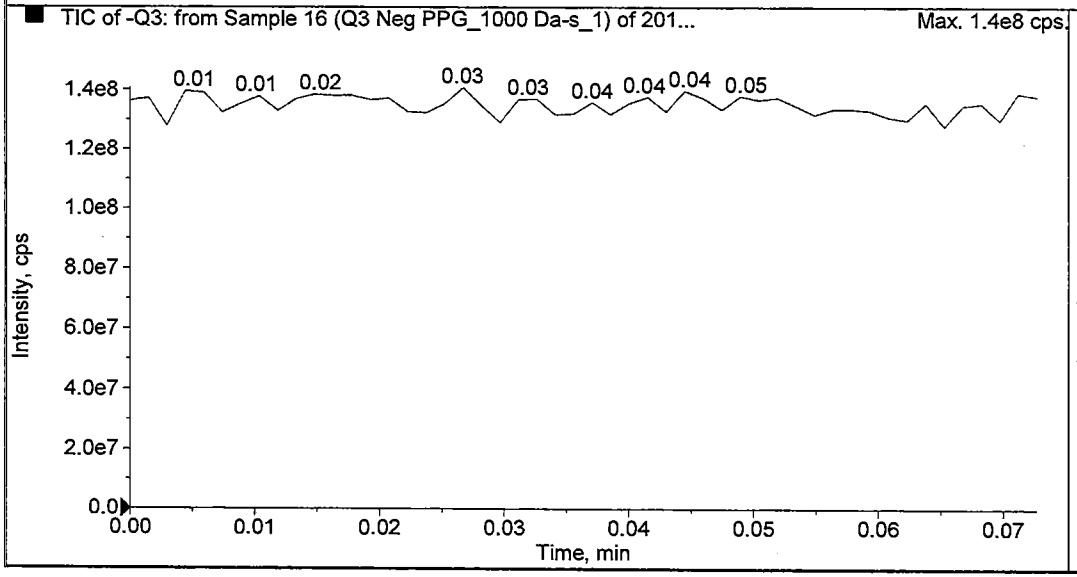
Mass Spectrometer Method Properties

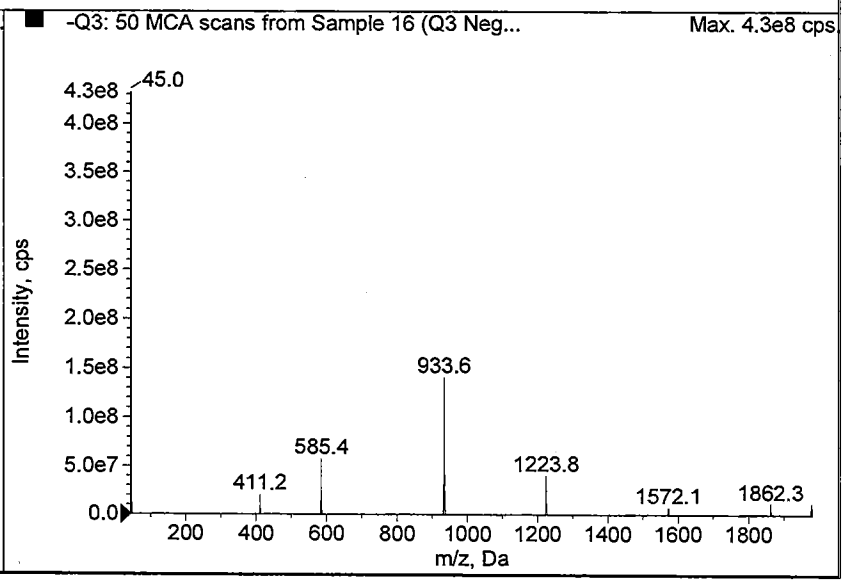
Period 1:

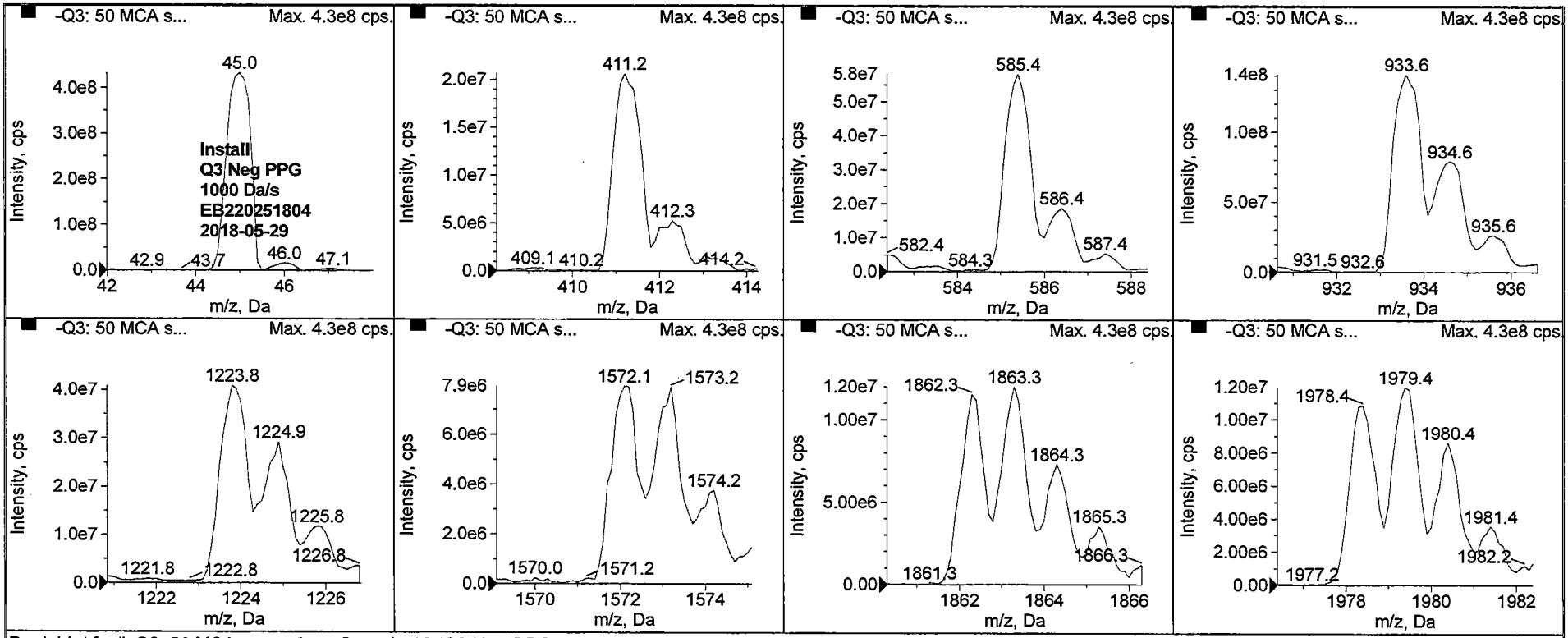
Scans in Period:	50
Relative Start Time:	0.00 msec
Scheduled Ionization:	Off
Experiments in Period:	1

Period 1 Experiment 1:

Scan Type:	Q3 MS (Q3)
Polarity:	Negative
Scan Mode:	Profile
Ion Source:	Turbo Spray
# Scans to Sum:	1
Resolution Q3:	Unit







Peak List for "-Q3: 50 MCA scans from Sample 16 (Q3 Neg PPG_1000 Da-s_1) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9825	4.3310e8	0.6384	0.0155
2	411.2590	411.2576	2.0660e7	0.7352	1.4357e-3
3	585.3850	585.3827	5.8190e7	0.6719	2.2702e-3
4	933.6360	933.6150	1.4107e8	0.7226	0.0210
5	1223.8450	1223.8394	4.0960e7	0.7336	5.6019e-3
6	1572.0970	1572.1001	7.9400e6	0.7950	-3.0523e-3
7	1863.3060	1863.2902	1.2010e7	0.6806	0.0158
8	1979.3890	1979.4012	1.1960e7	0.7138	-0.0122

State Parameter Editor

Ion Source:	Turbo Spray
Ion Source Temperature Reached	
Curtain Gas (CUR):	10.0
IonSpray Voltage (IS):	-4500.0
Temperature (TEM):	0.0
Ion Source Gas 1 (GS1):	17.0
Ion Source Gas 2 (GS2):	0.0
Entrance Potential (EP):	-10.0
Q3 Resolution:	Unit
Ion Energy 3 (IE3):	-1.5
CEM (CEM):	1900.0

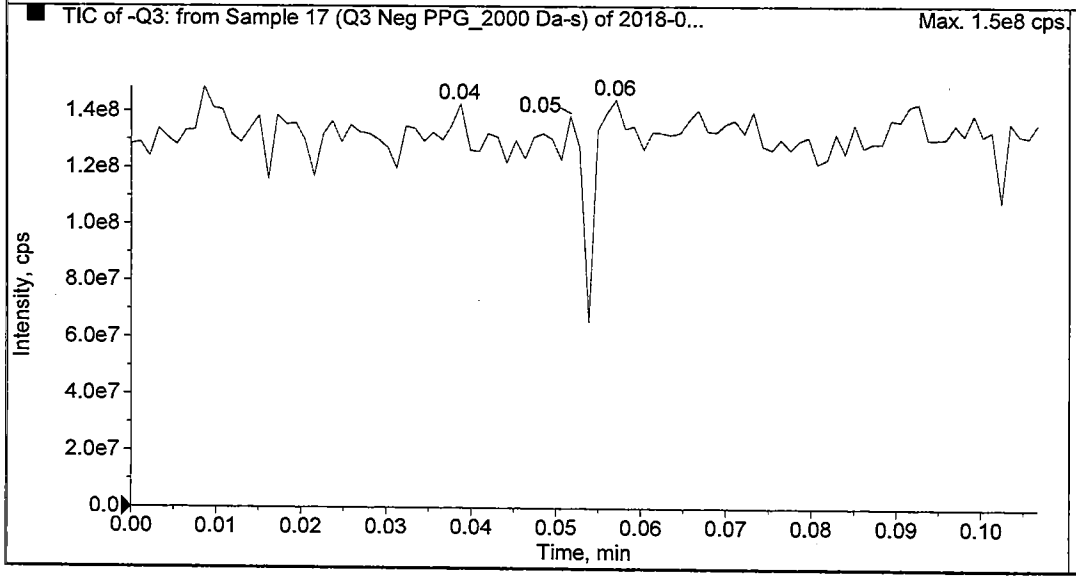
Mass Spectrometer Method Properties

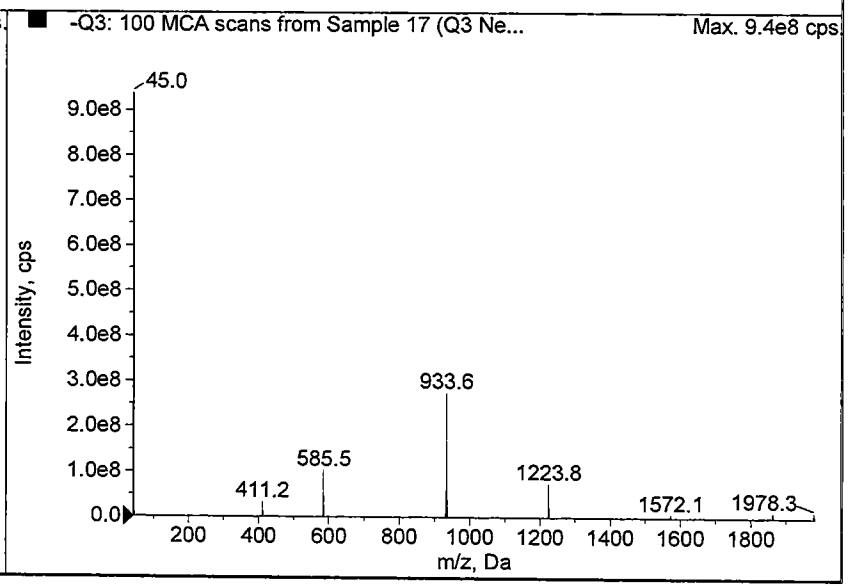
Period 1:

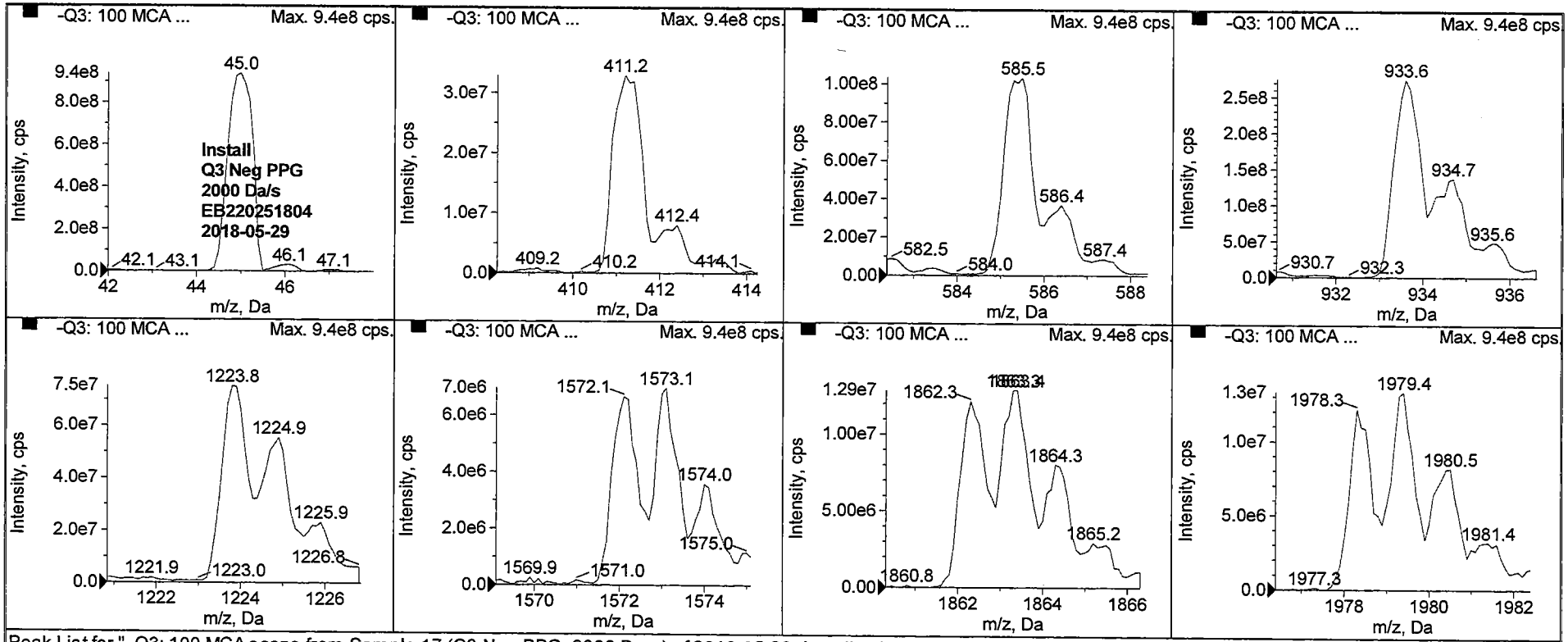
Scans in Period:	100
Relative Start Time:	0.00 msec
Scheduled Ionization:	Off
Experiments in Period:	1

Period 1 Experiment 1:

Scan Type:	Q3 MS (Q3)
Polarity:	Negative
Scan Mode:	Profile
Ion Source:	Turbo Spray
# Scans to Sum:	1
Resolution Q3:	Unit







Peak List for "-Q3: 100 MCA scans from Sample 17 (Q3 Neg PPG_2000 Da-s) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9950	9.3786e8	0.6643	2.9882e-3
2	411.2590	411.2370	3.2920e7	0.7732	0.0220
3	585.3850	585.3850	1.0332e8	0.6994	-4.8105e-6
4	933.6360	933.6288	2.7486e8	0.7105	7.2155e-3
5	1223.8450	1223.8546	7.5140e7	0.6946	-9.5568e-3
6	1572.0970	1572.1115	6.6600e6	0.6890	-0.0145
7	1863.3060	1863.3250	1.2880e7	0.7704	-0.0190
8	1979.3890	1979.3741	1.3320e7	0.6259	0.0149

Sate Parameter Editor

Ion Source: Turbo Spray
Ion Source Temperature Reached
Curtain Gas (CUR): 28.0
IonSpray Voltage (IS): 5500.0
Temperature (TEM): 0.0
Ion Source Gas 1 (GS1): 17.0
Ion Source Gas 2 (GS2): 0.0

Declustering Potential (DP): 135.0
Entrance Potential (EP): 10.0

Q1 Resolution: Unit
Ion Energy 1 (IE1): 1.2

CEM (CEM): 1800.0

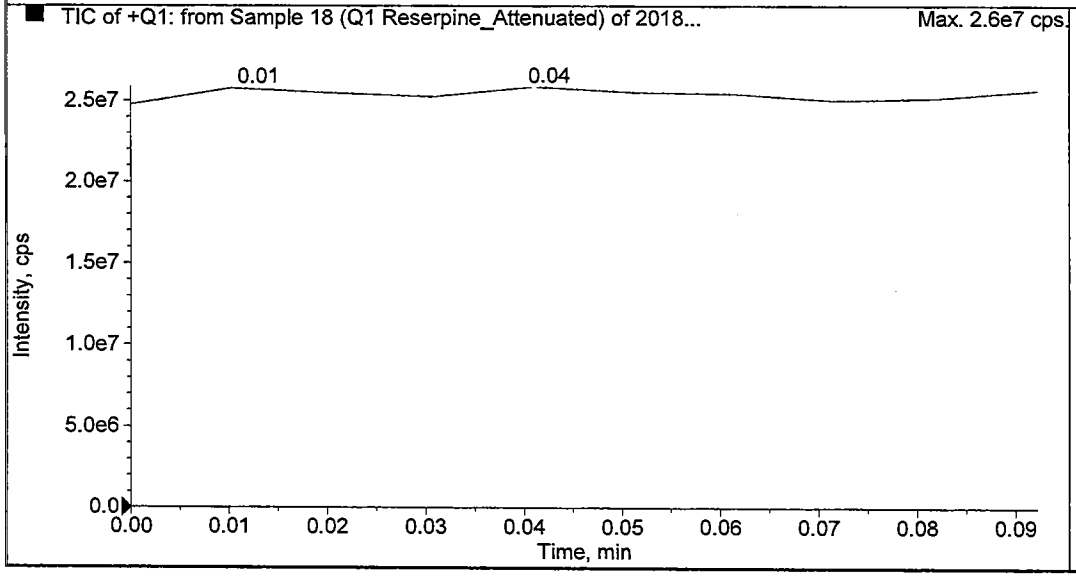
Mass Spectrometer Method Properties

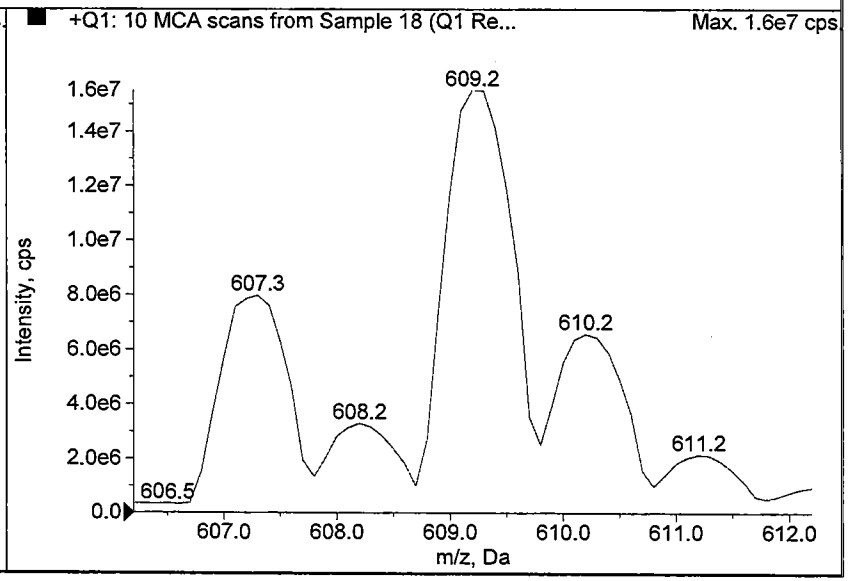
Period 1:

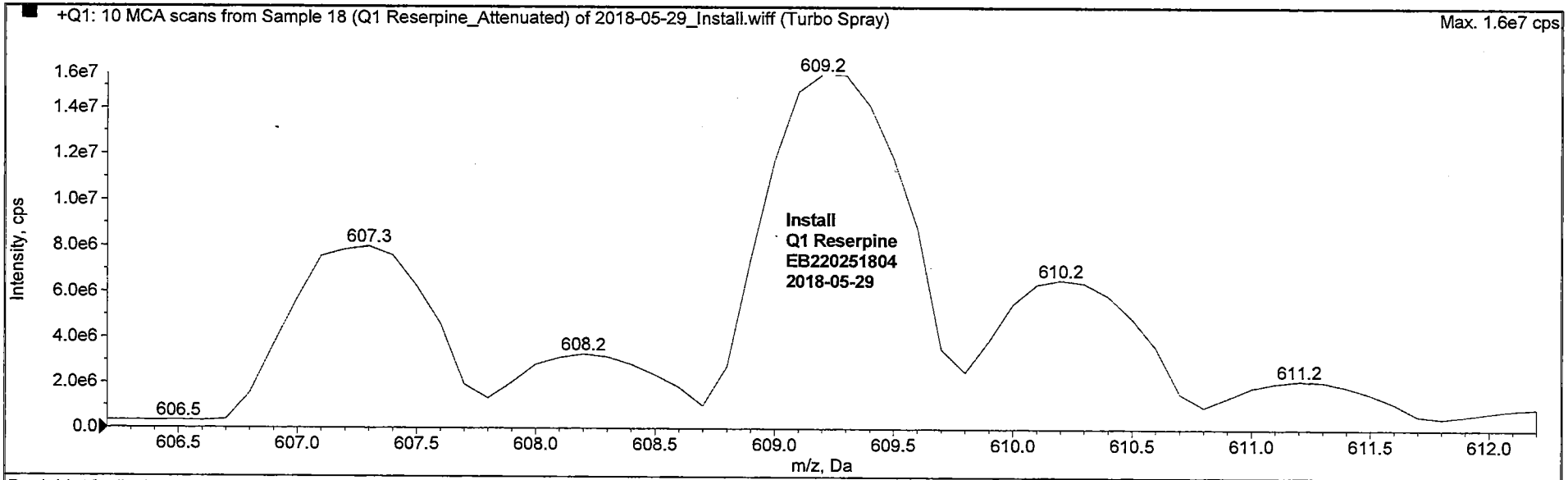
Scans in Period: 10
Relative Start Time: 0.00 msec
Scheduled Ionization: Off
Experiments in Period: 1

Period 1 Experiment 1:

Scan Type: Q1 MS (Q1)
Polarity: Positive
Scan Mode: Profile
Ion Source: Turbo Spray
Scans to Sum: 1
Resolution Q1: Unit







Peak List for " +Q1: 10 MCA scans from Sample 18 (Q1 Reserpine_Attenuated) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	195.1000	n/a	n/a	n/a	n/a
2	609.2810	609.2580	1.5520e7	0.7138	0.0230

State Parameter Editor

Ion Source: Turbo Spray
Ion Source Temperature Reached
Curtain Gas (CUR): 28.0
Collision Gas (CAD): 9
IonSpray Voltage (IS): 5500.0
Temperature (TEM): 0.0
Ion Source Gas 1 (GS1): 17.0
Ion Source Gas 2 (GS2): 0.0

Declustering Potential (DP): 135.0
Entrance Potential (EP): 10.0
Collision Energy (CE): 44.5
Collision Cell Exit Potential (CXP): 6.2

Q1 Resolution: Unit Q3 Resolution: Unit
Ion Energy 1 (IE1): 1.2

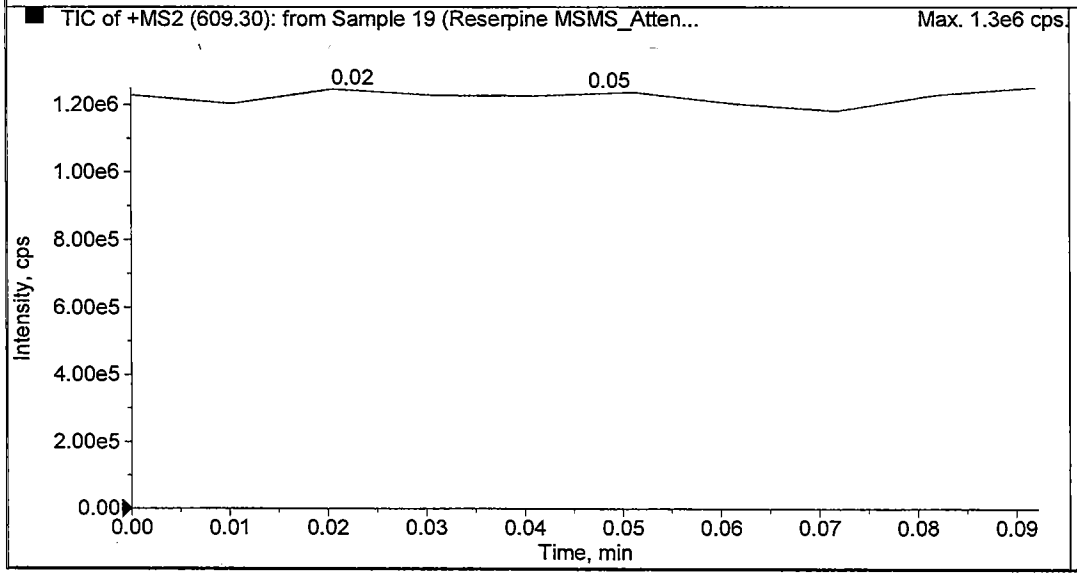
Mass Spectrometer Method Properties

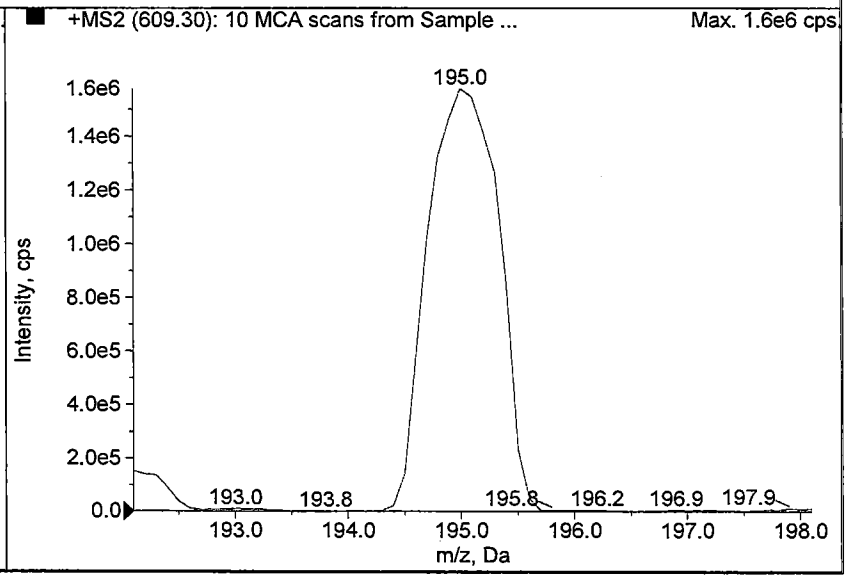
Period 1:

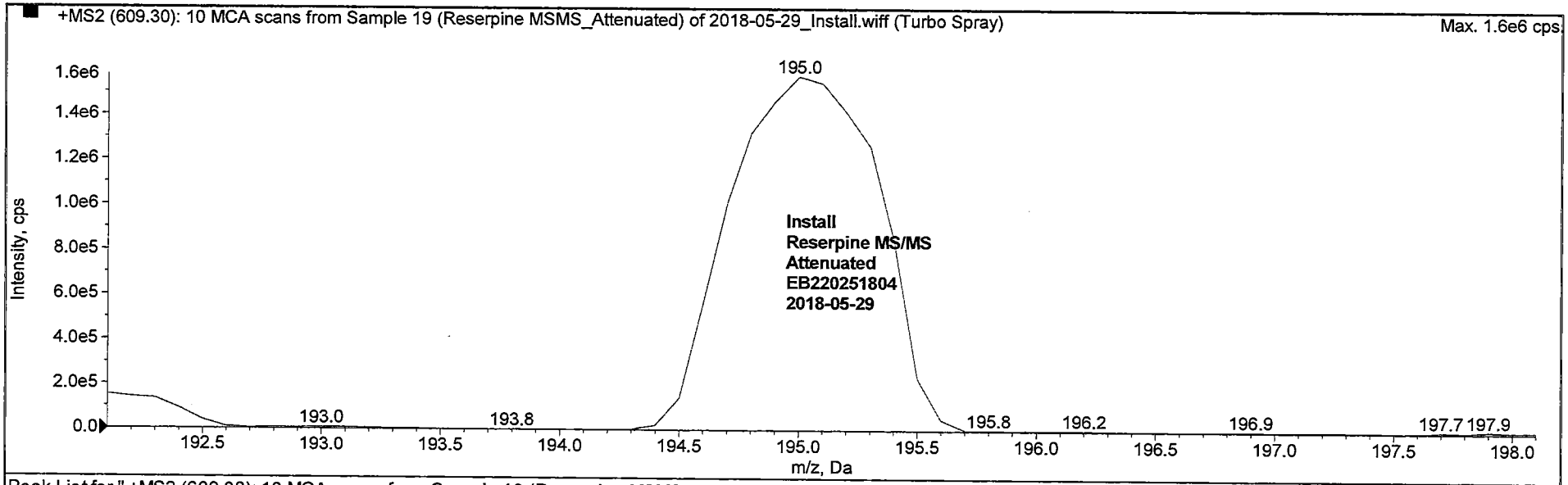
Scans in Period: 10
Relative Start Time: 0.00 msec
Scheduled Ionization: Off
Experiments in Period: 1

Period 1 Experiment 1:

Scan Type: Product Ion (MS2)
Polarity: Positive
Scan Mode: Profile
Ion Source: Turbo Spray
Scans to Sum: 1
Product Of: 609.30 Da







Peak List for "+MS2 (609.30): 10 MCA scans from Sample 19 (Reserpine MSMS_Attenuated) of 2018-05-29_Install.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	195.1000	195.0306	1.5772e6	0.7615	0.0694
2	609.2810	n/a	n/a	n/a	n/a

Raw QC Data

PFAS by LC/MS/MS

ICAL Name: 18NOV07DCAL
QMethod Name: MQ4-18AUG13
Result Table: 18312004 11/10/2018 12:05:42 AM
Acquisition Method: 18AUG13_3uL.dam

Sample Name:	BLK312004			**Data File:**		18NOV09D-63.wiff
Sample ID:	EPA 537 mod QSM 5.1 table B-15 18312004			**Acquis Date:**		2018-11-09T13:58:27
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	93			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18312004
QMethod File:	MQ4-18AUG13			**ICAL Name:**		18NOV07DCAL
Batch Number:	18312004			**Operator:**		MCD7824
Sample Wt.:	0.25000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV09D-03

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	738987.6	725974.7	2	50	
13C2-PFOA	5.0	499279.4	506876.7	-1	50	
13C4-PFOS	4.8	260982.1	274910.1	-5	50	
13C2-PFDA	5.0	305623.6	307276.7	-1	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	782606.0	13C3-PFBA	738987.6	1.059	20.000	19.603	98	50-150	
E13C5-PFPeA	755334.2	13C3-PFBA	738987.6	1.022	20.000	17.811	89	50-150	
E13C3-PFBS	383719.8	13C3-PFBA	738987.6	0.519	18.600	15.243	82	50-150	
E13C2-4:2-FTS	50639.7	13C2-PFOA	499279.4	0.101	18.680	18.306	98	50-150	
E13C5-PFHxA	645997.0	13C2-PFOA	499279.4	1.294	20.000	19.038	95	50-150	
E13C3-PFHxS	319121.2	13C2-PFOA	499279.4	0.639	18.920	18.354	97	50-150	
E13C4-PFHpA	527596.0	13C2-PFOA	499279.4	1.057	20.000	19.229	96	50-150	
E13C2-6:2-FTS	32684.5	13C2-PFOA	499279.4	0.065	19.000	17.461	92	50-150	
E13C8-PFOA	866130.3	13C2-PFOA	499279.4	1.735	20.000	19.351	97	50-150	
E13C8-PFOS	281044.3	13C4-PFOS	260982.1	1.077	19.120	19.047	100	50-150	
E13C9-PFNA	476932.6	13C4-PFOS	260982.1	1.827	20.000	19.967	100	50-150	
E13C6-PFDA	598934.2	13C2-PFDA	305623.6	1.960	20.000	19.713	99	50-150	
E13C2-8:2-FTS	27697.1	13C2-PFDA	305623.6	0.091	19.160	19.181	100	50-150	
E13C8-PFOSA	621786.6	13C2-PFDA	305623.6	2.034	20.000	17.758	89	50-150	
Ed3-NMeFOSAA	82740.6	13C2-PFDA	305623.6	0.271	20.000	20.138	101	50-150	
E13C7-PFUnDA	270005.2	13C2-PFDA	305623.6	0.883	20.000	20.386	102	50-150	
Ed5-NEtFOSAA	65219.2	13C2-PFDA	305623.6	0.213	20.000	19.754	99	50-150	
E13C2-PFDoDA	521263.3	13C2-PFDA	305623.6	1.706	20.000	18.392	92	50-150	
Ed7-NMePFOSAE	261901.6	13C2-PFDA	305623.6	0.857	20.000	15.940	80	50-150	
Ed3-NMePFOSA	55142.7	13C2-PFDA	305623.6	0.180	20.000	13.213	66	50-150	
Ed9-NEtPFOSAE	227598.0	13C2-PFDA	305623.6	0.745	20.000	17.011	85	50-150	
Ed5-NEtPFOSA	49210.4	13C2-PFDA	305623.6	0.161	20.000	14.913	75	50-150	
E13C2-PFTeDA	363684.9	13C2-PFDA	305623.6	1.190	20.000	17.136	86	50-150	

APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

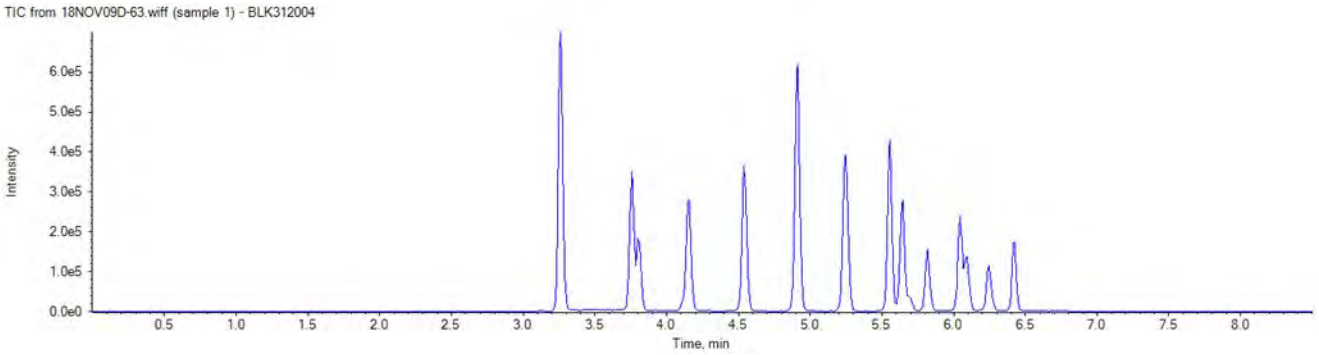
Analyte Quantitation Peak Table

Sample Name: BLK312004 **Instrument Name:** LM27631 **File Name:** 18NOV09D-63.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
0.25000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/L)
PFBA	N/A	N/A	N/A		A	13C4-PFBA	3.26	782606.0	N/A	
PFPeA	N/A	N/A	N/A		A	13C5-PFPeA	3.76	755334.2	N/A	
PFBS	N/A	N/A	N/A		A	13C3-PFBS	3.81	383719.8	N/A	
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.12	50639.7	N/A	
PFHxA	N/A	N/A	N/A		A	13C5-PFHxA	4.15	645997.0	N/A	
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.81	383719.8	N/A	
PFHxS	N/A	N/A	N/A		A	13C3-PFHxS	4.54	319121.2	N/A	
PFHpA	N/A	N/A	N/A		A	13C4-PFHpA	4.54	527596.0	N/A	
6:2-FTS	4.90	1.000	638.6		A	13C2-6:2-FTS	4.90	32684.5	0.020	0.195
PFHpS	N/A	N/A	N/A		A	13C3-PFHxS	4.54	319121.2	N/A	
PFOA	N/A	N/A	N/A		A	13C8-PFOA	4.91	866130.3	N/A	
PFOS	N/A	N/A	N/A		A	13C8-PFOS	5.24	281044.3	N/A	
PFNA	N/A	N/A	N/A		A	13C9-PFNA	5.25	476932.6	N/A	
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.24	281044.3	N/A	
PFDA	N/A	N/A	N/A		A	13C6-PFDA	5.55	598934.2	N/A	
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.56	27697.1	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.64	621786.6	N/A	
NMeFOSAA	N/A	N/A	N/A		A	d3-NMeFOSAA	5.69	82740.6	N/A	
PFDS	N/A	N/A	N/A		A	13C8-PFOS	5.24	281044.3	N/A	
PFUnDA	N/A	N/A	N/A		A	13C7-PFUnDA	5.82	270005.2	N/A	
NEtFOSAA	N/A	N/A	N/A		A	d5-NEtFOSAA	5.83	65219.2	N/A	
PFDoDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.04	521263.3	N/A	
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.56	27697.1	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.09	261901.6	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.10	55142.7	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.24	281044.3	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.24	227598.0	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.26	49210.4	N/A	
PFTrDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.04	521263.3	N/A	
PFTeDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	363684.9	N/A	
PFHxDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	363684.9	N/A	
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	363684.9	N/A	

Total Ion Chromatogram

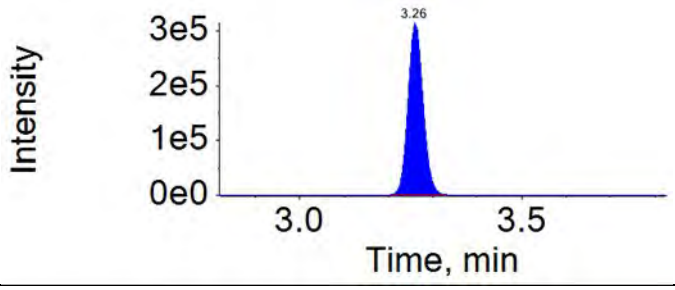


APPROVED
By MCD at 0:13 am, 11/10/18

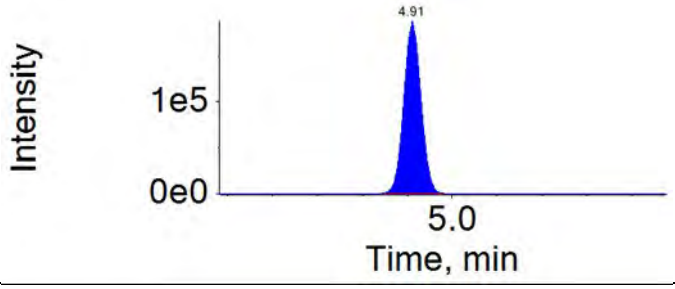
REVIEWED
By HMK at 7:51 am, 11/15/18

ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

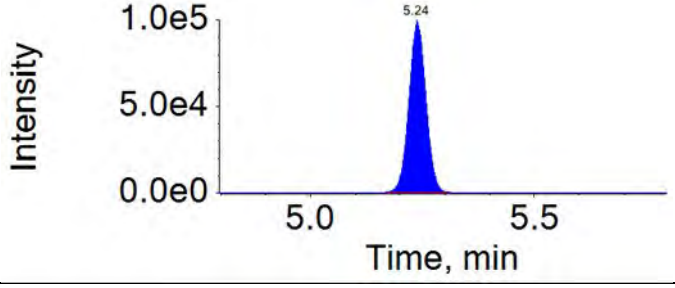
Injection Standard: 13C3-PFBA
216.0 / 172.0



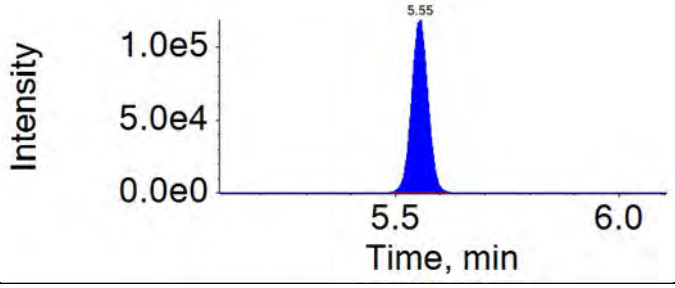
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

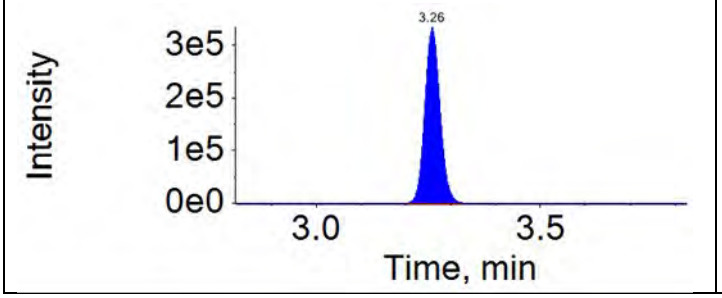


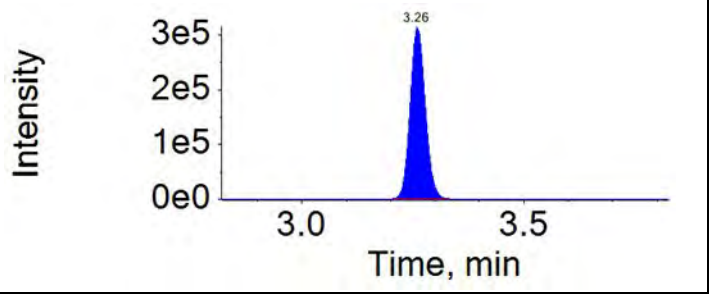
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

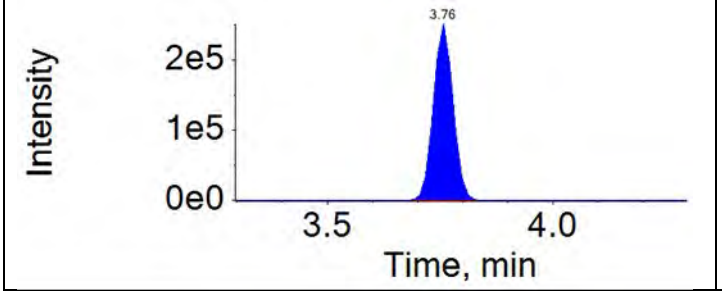
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

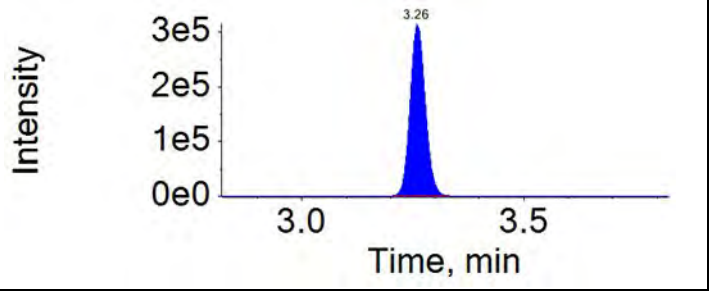
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



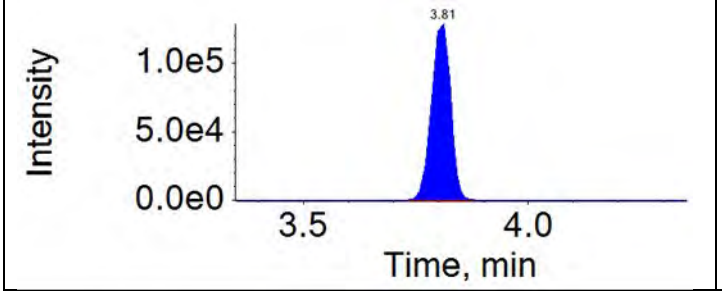


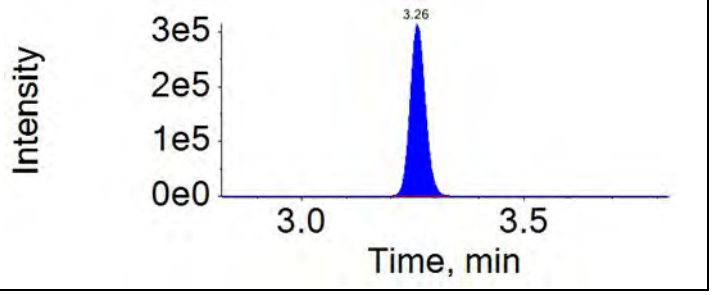
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



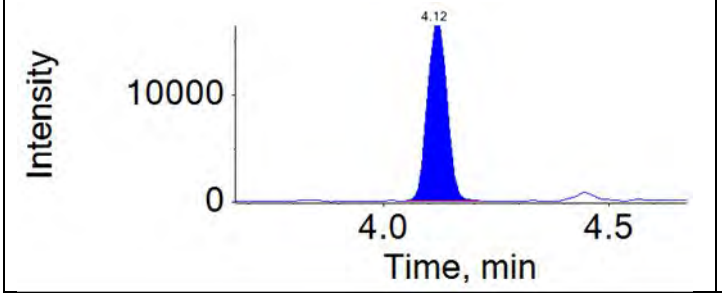


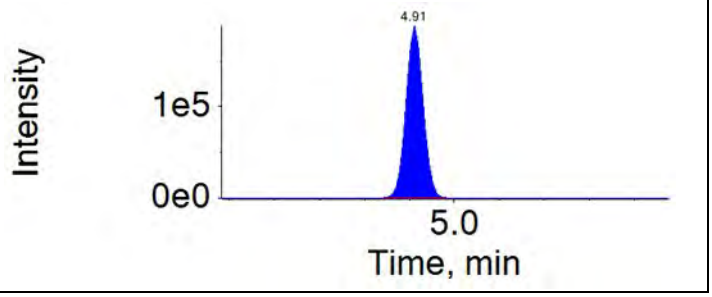
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



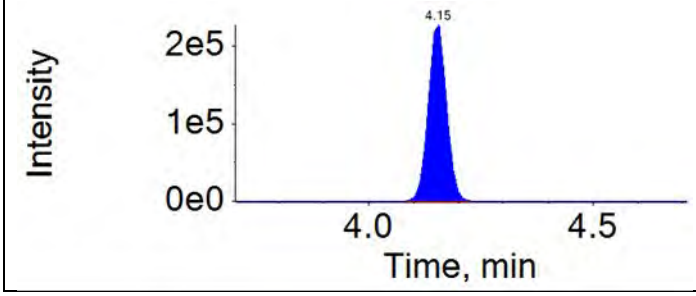


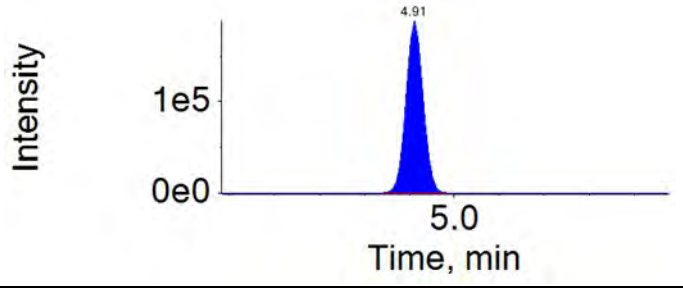
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

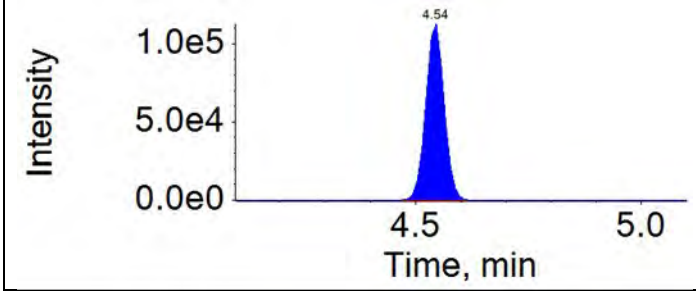
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

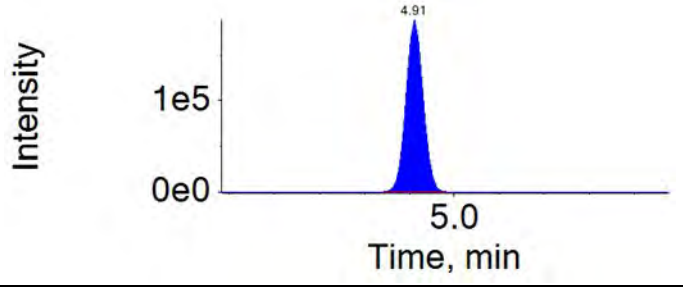
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



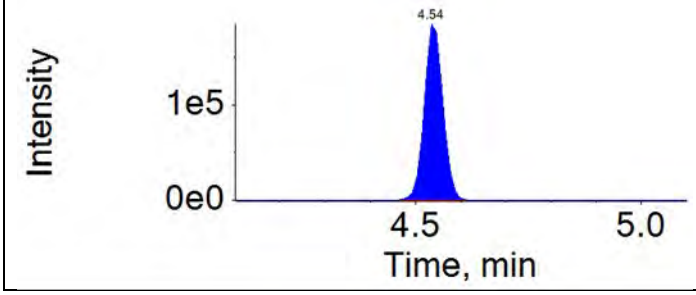


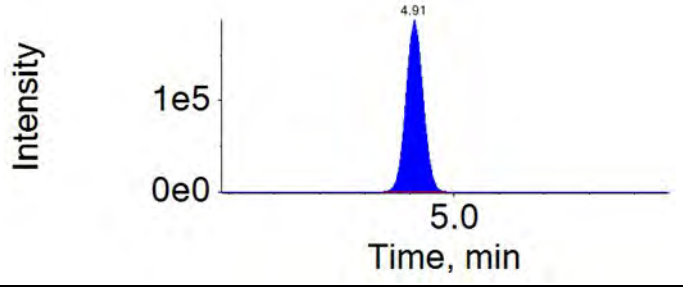
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



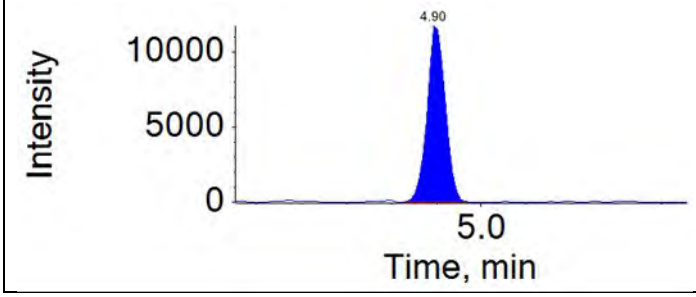


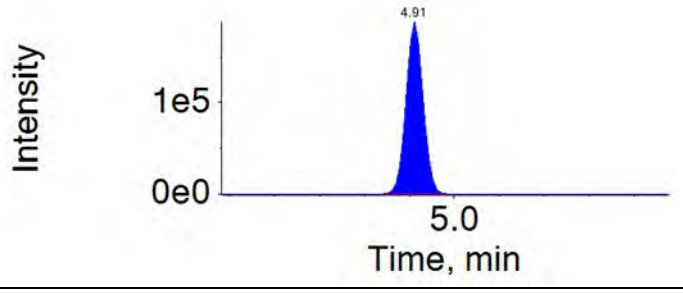
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

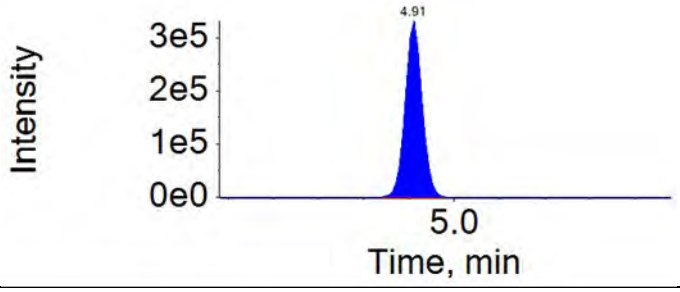
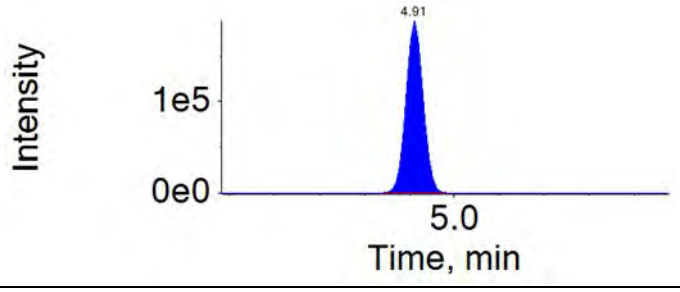


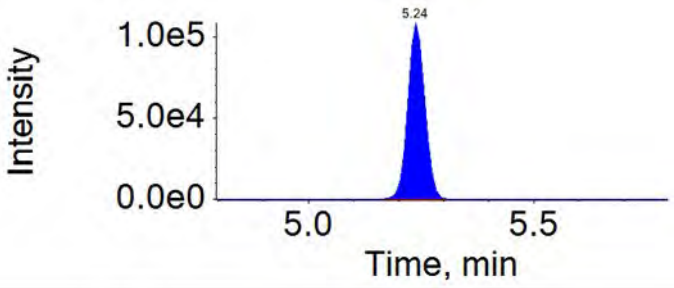
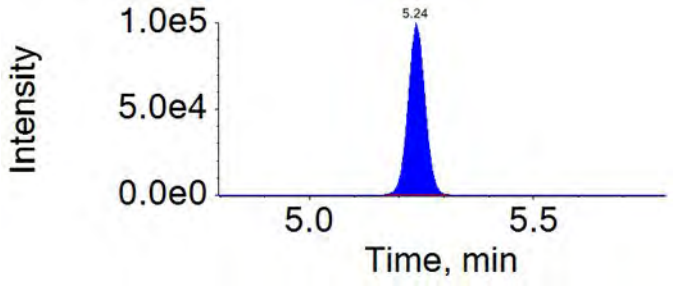


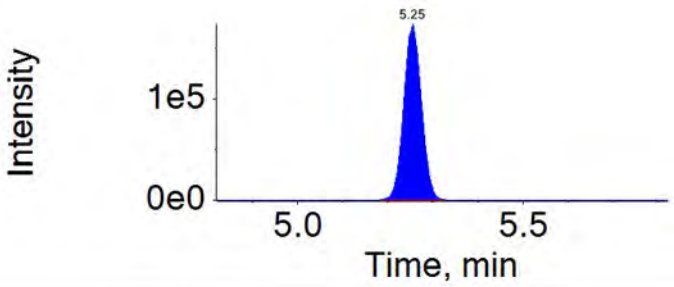
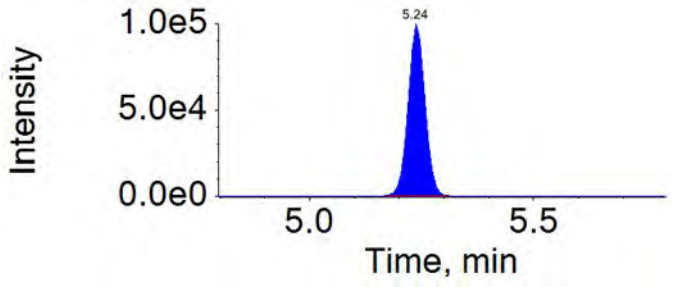
APPROVED
By MCD at 0:13 am, 11/10/18

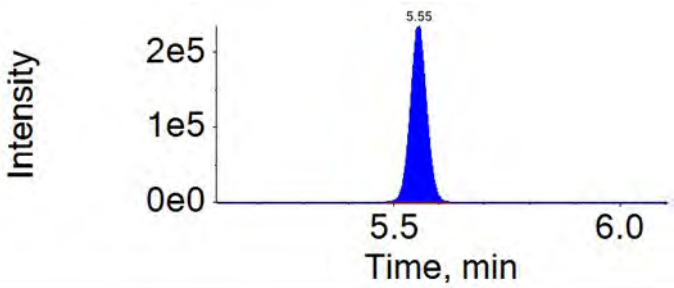
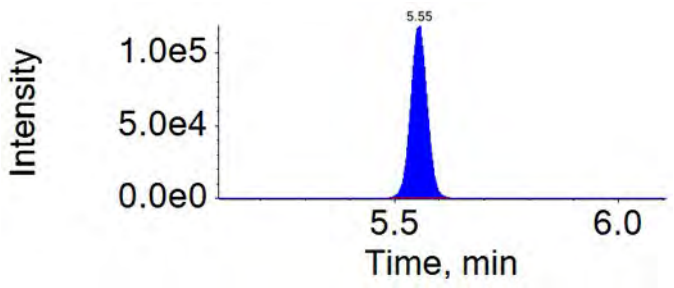
REVIEWED
By HMK at 7:51 am, 11/15/18

ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

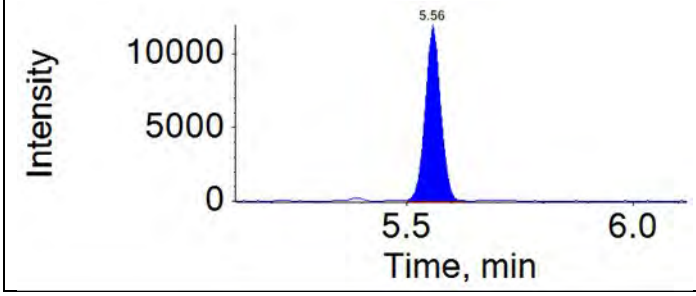
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

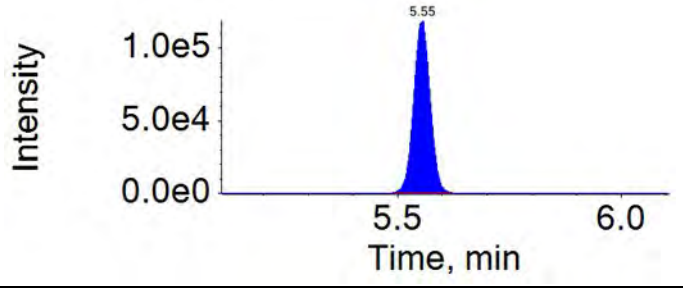
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

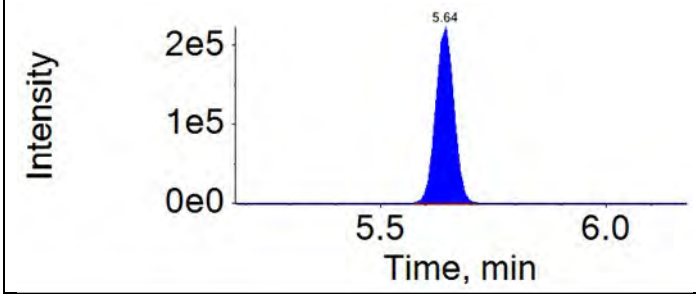
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

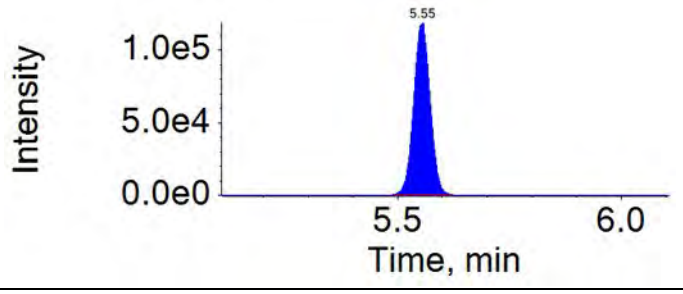
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



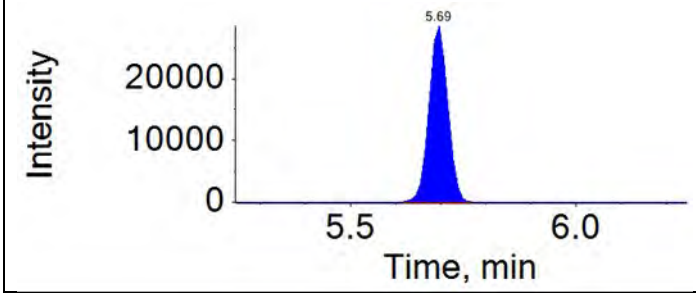


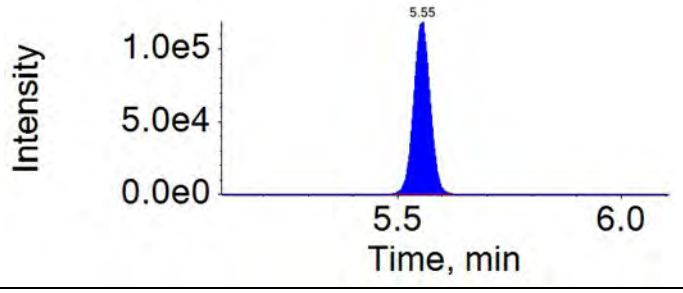
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



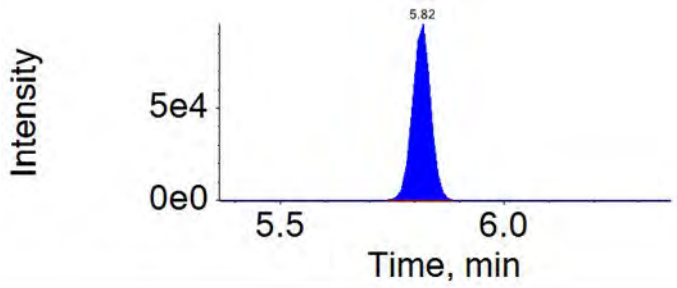


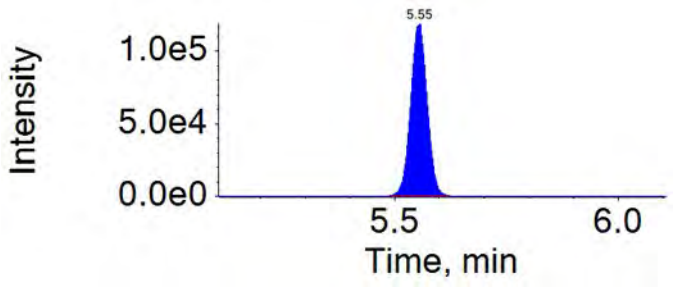
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0



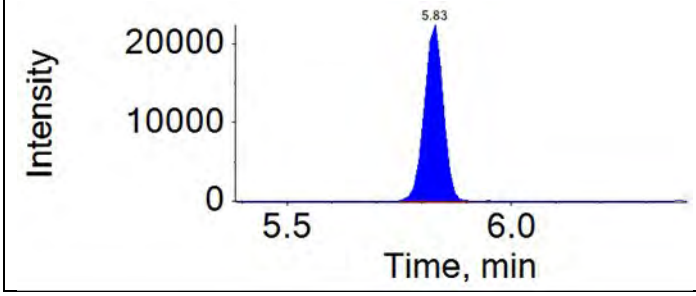


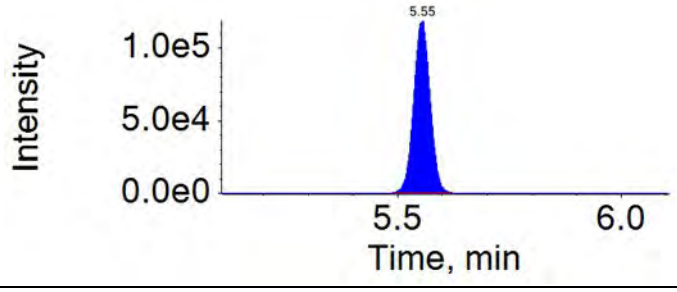
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

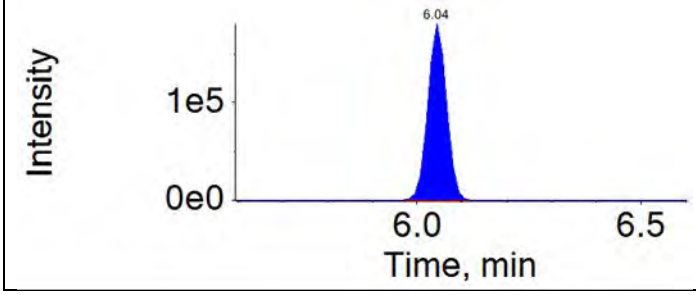
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

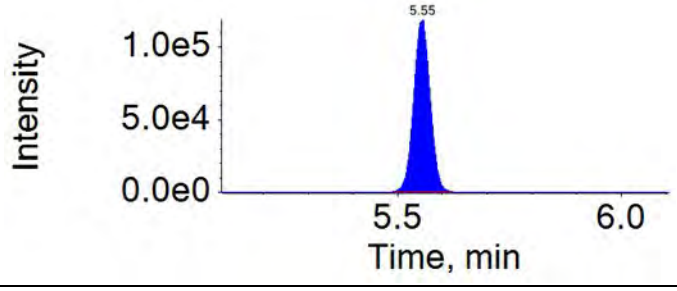
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



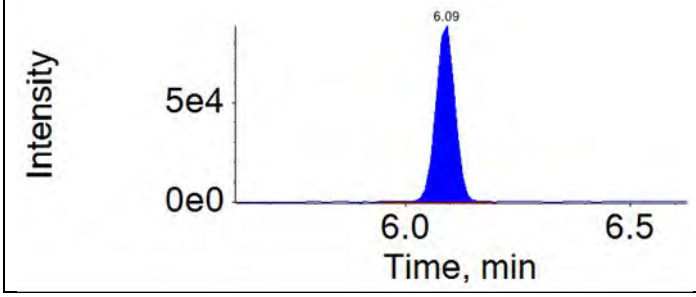


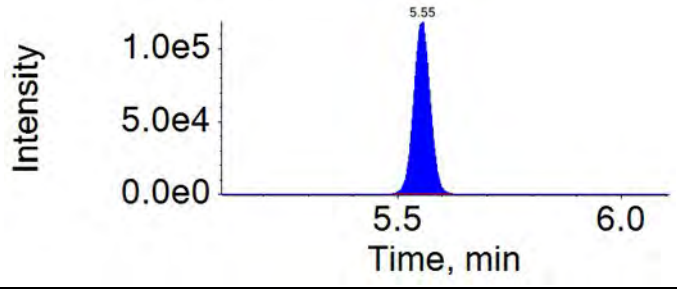
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



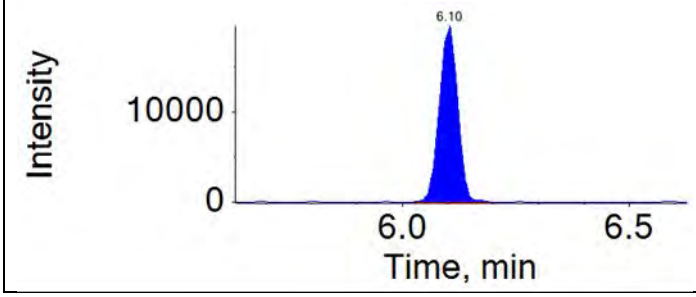


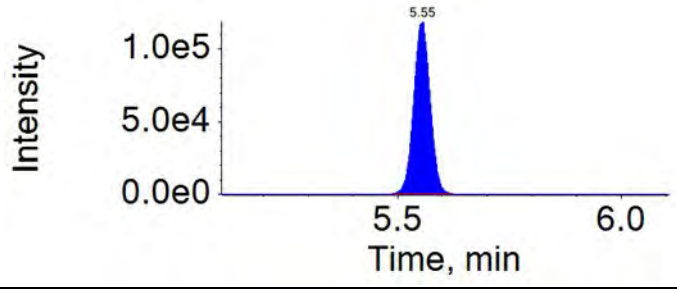
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



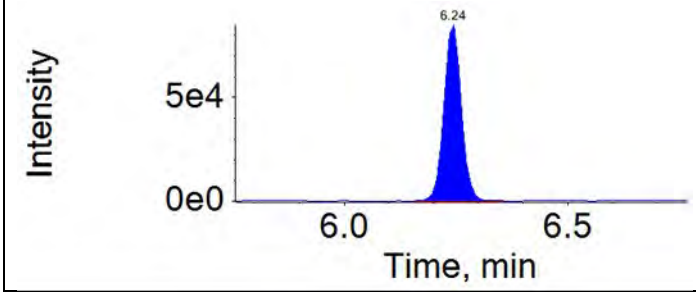


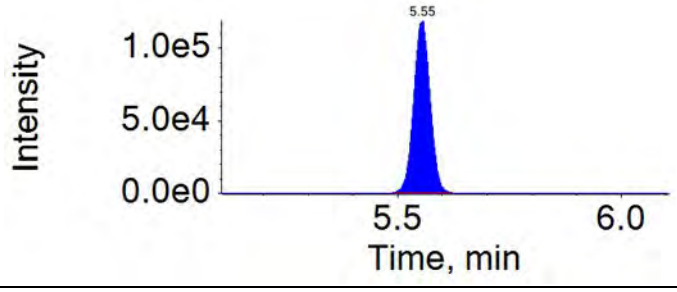
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

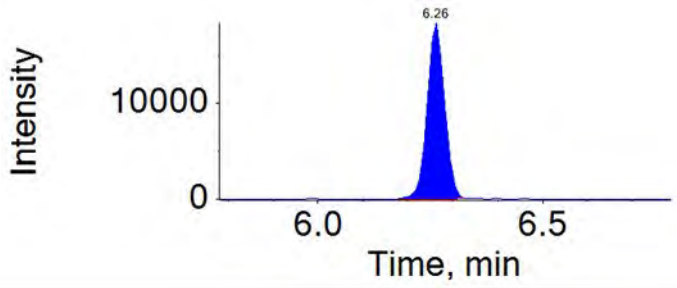
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

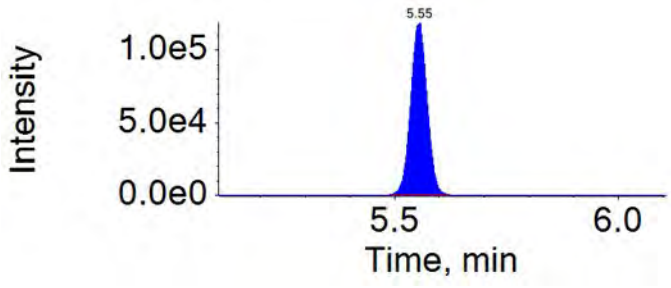
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



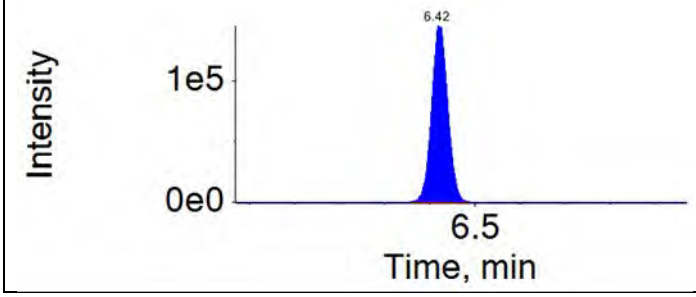


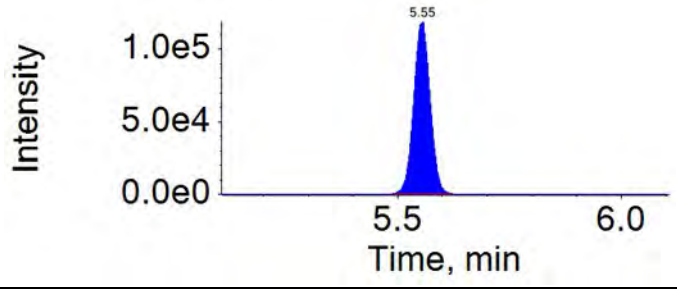
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



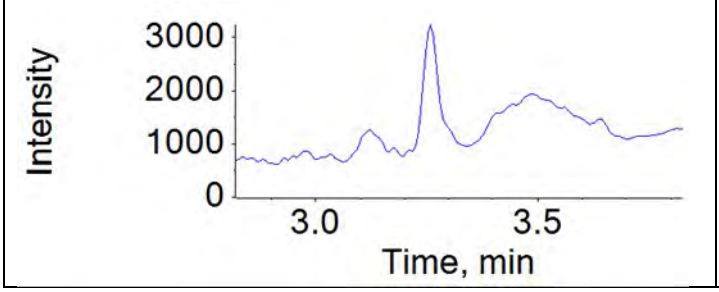


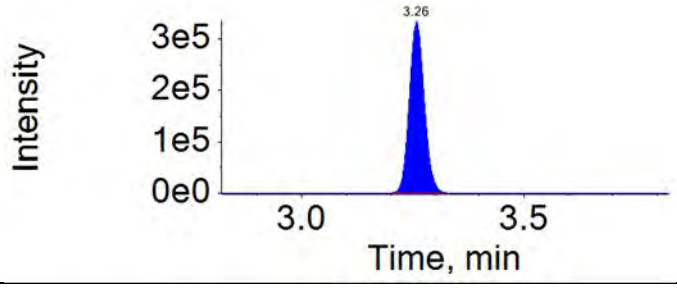
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

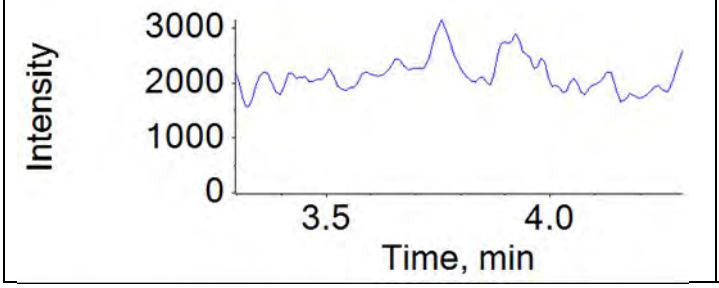
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

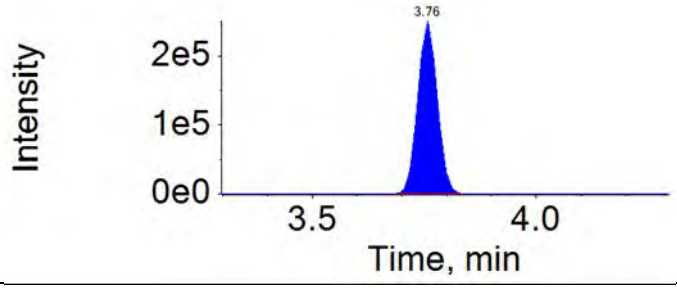
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



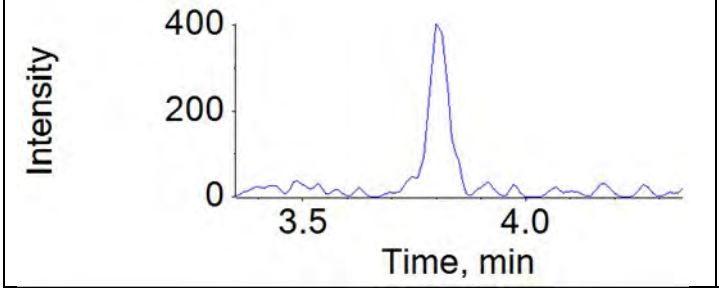


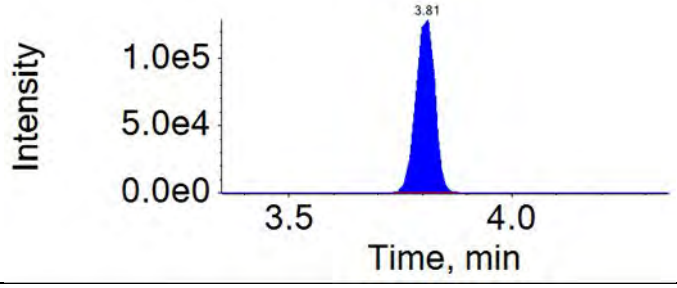
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



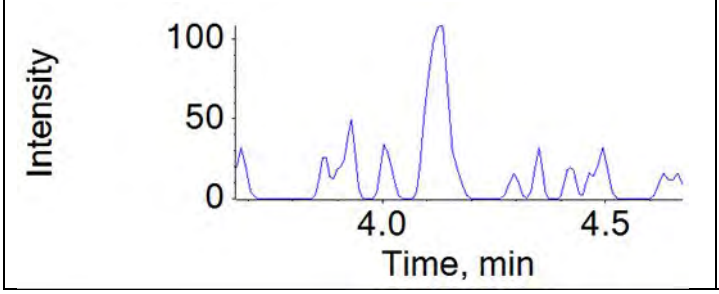


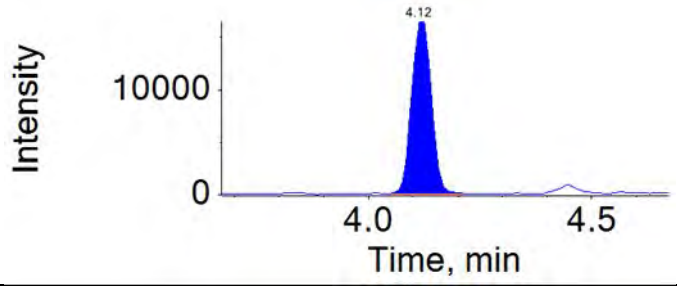
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



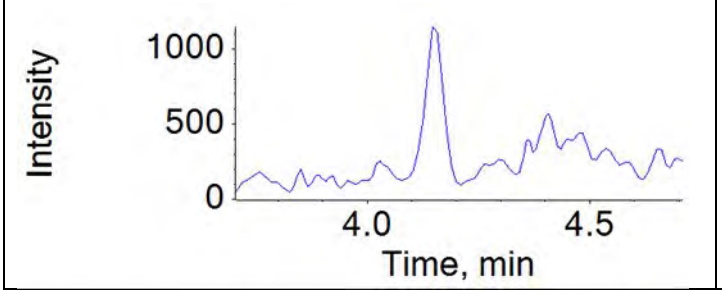


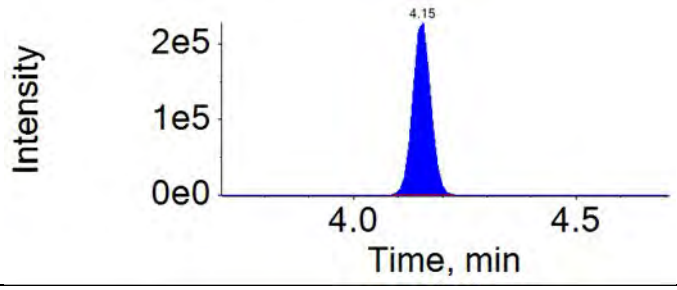
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

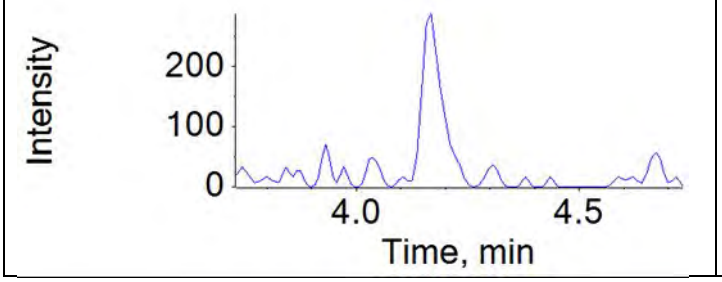
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

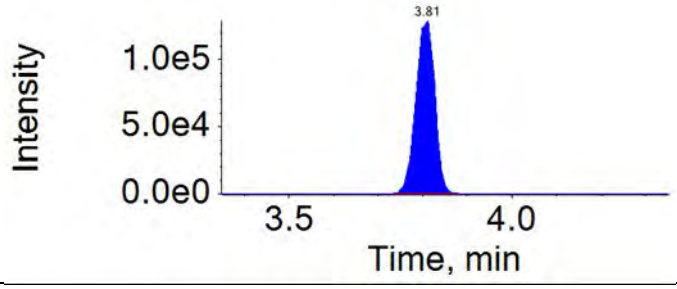
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



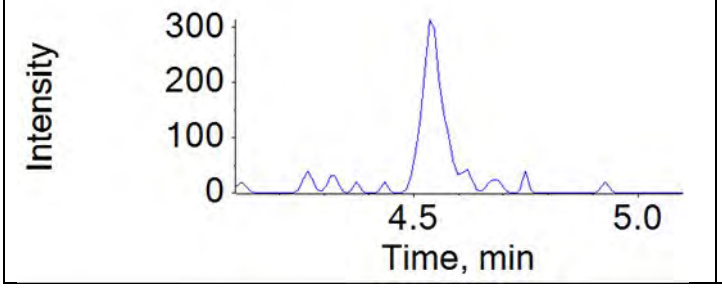


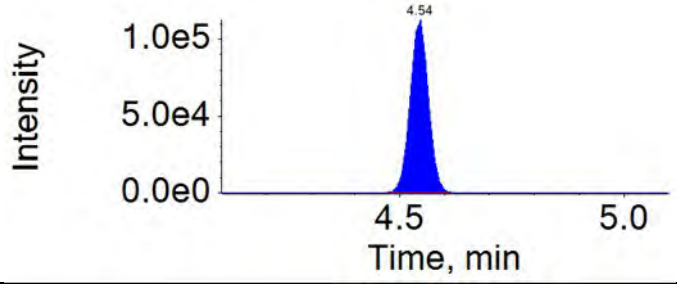
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



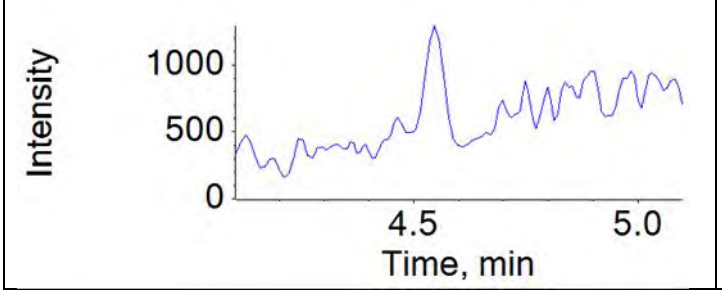


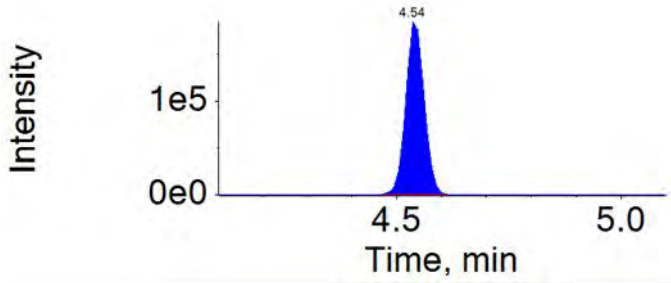
Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0





Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0



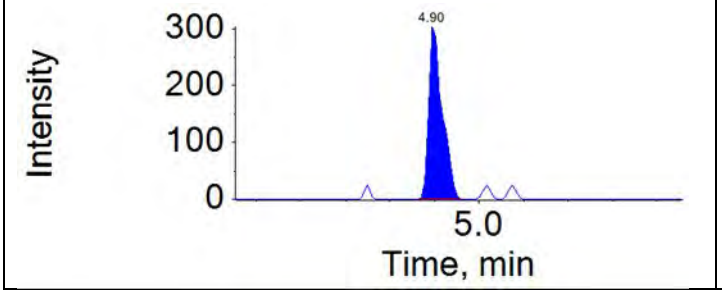


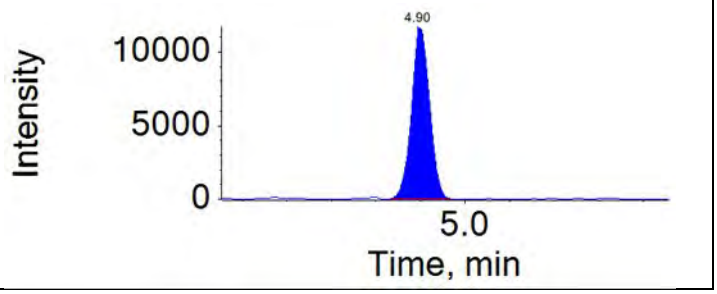
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

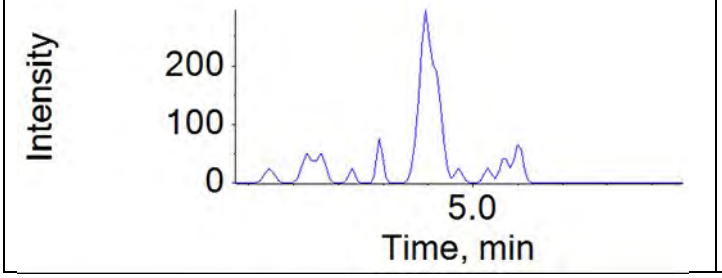
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

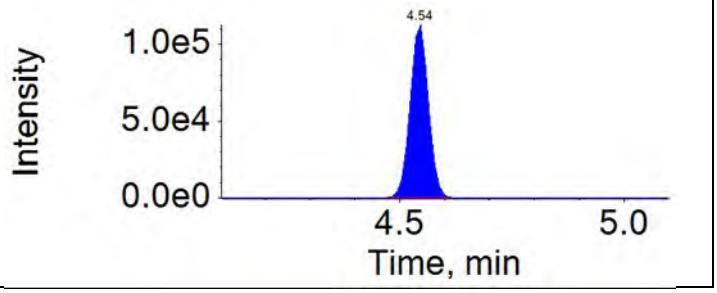
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



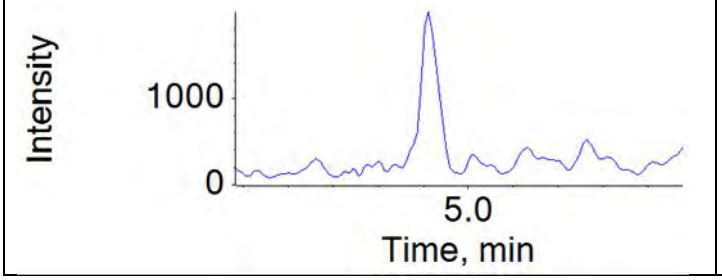


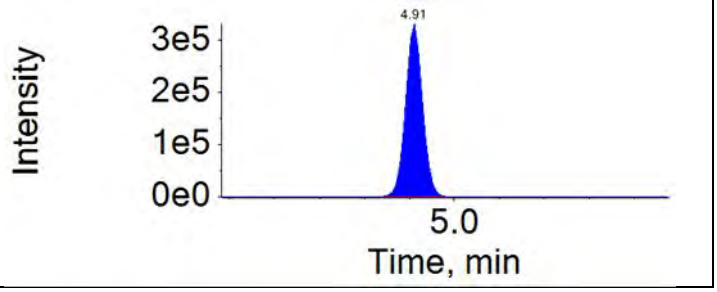
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



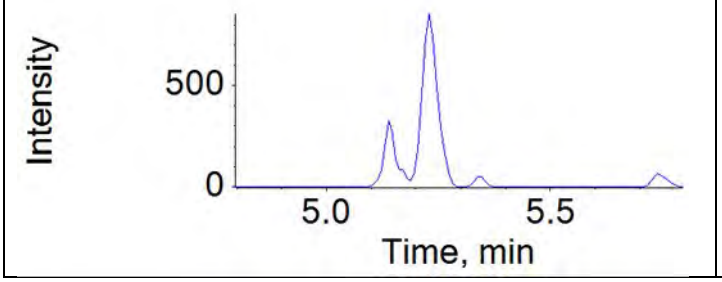


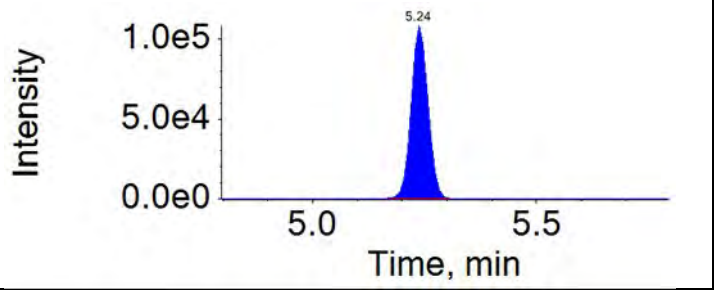
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





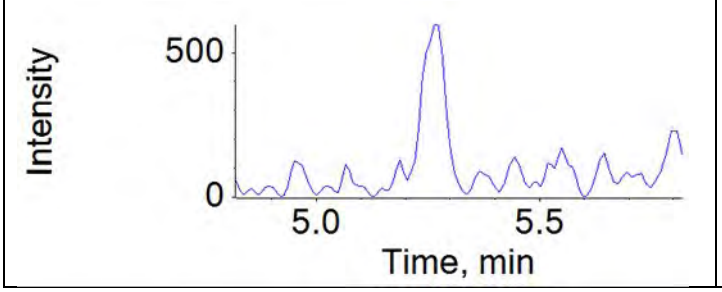
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0

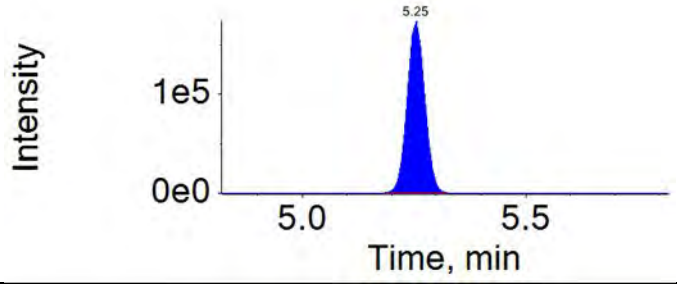




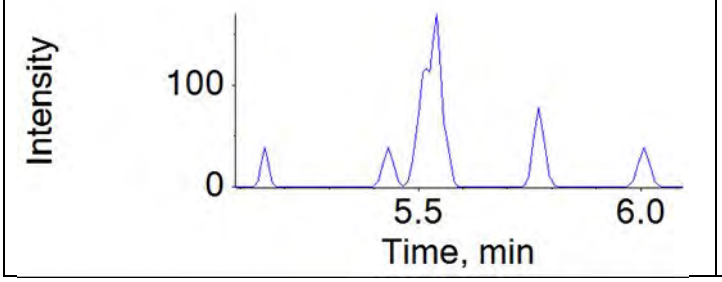
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

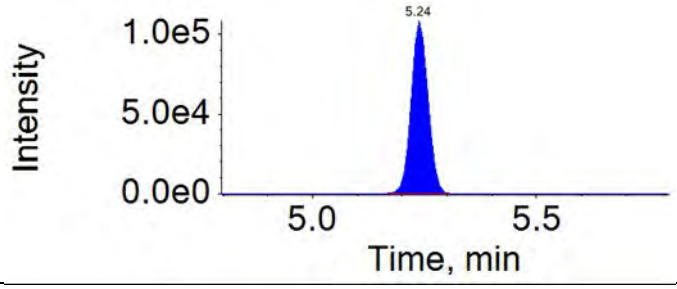
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



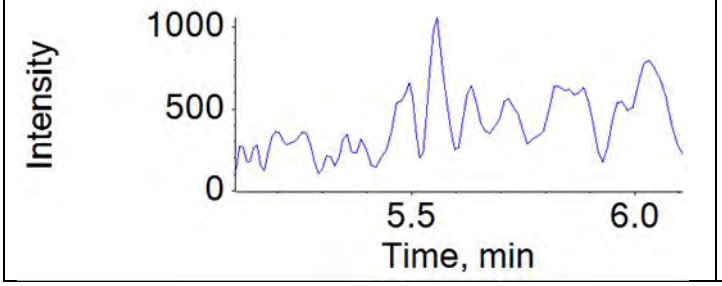


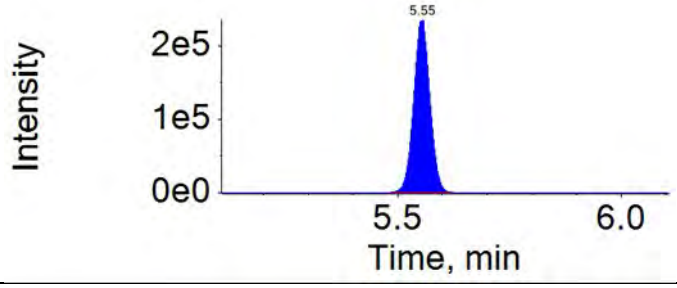
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



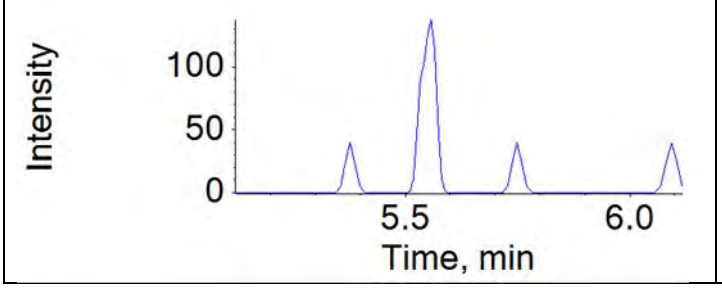


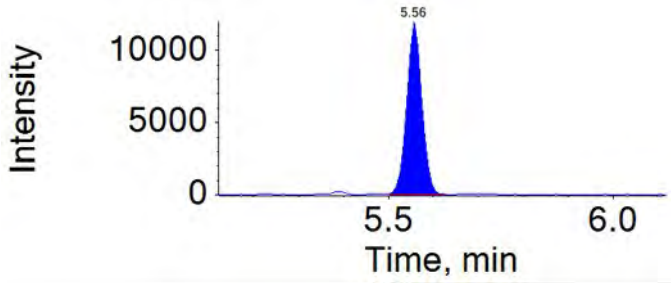
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



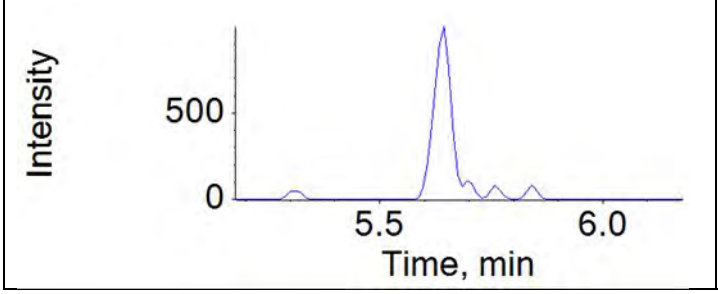


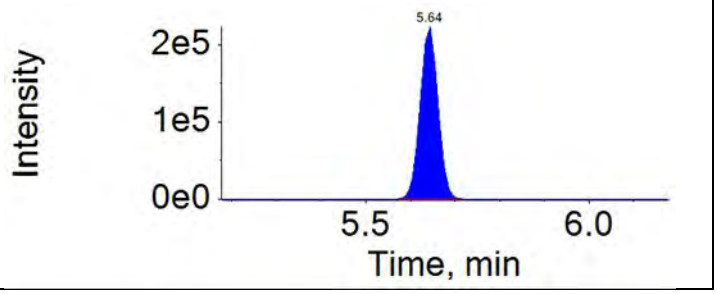
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

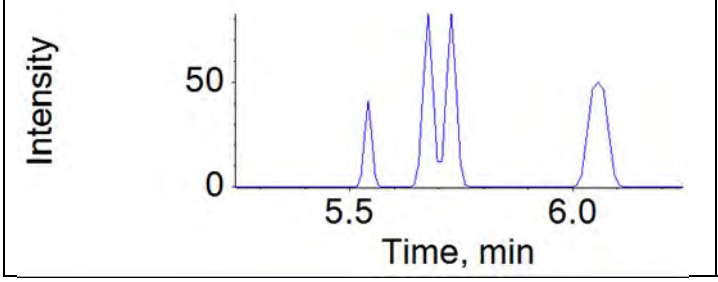
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

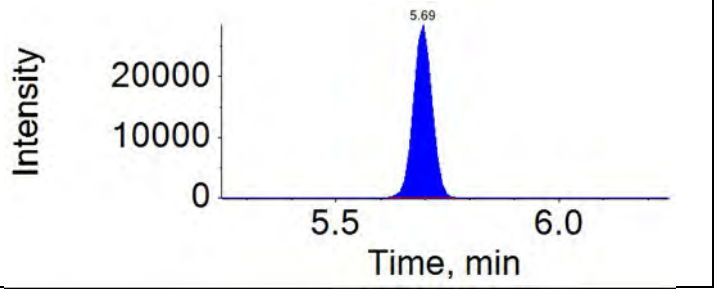
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



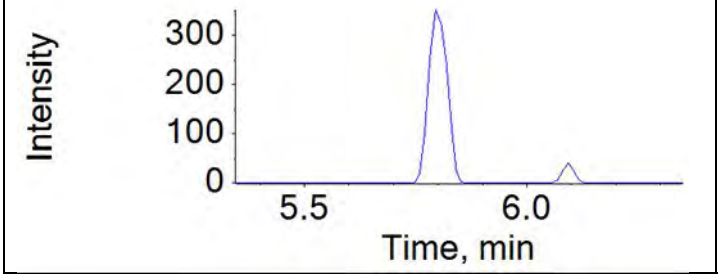


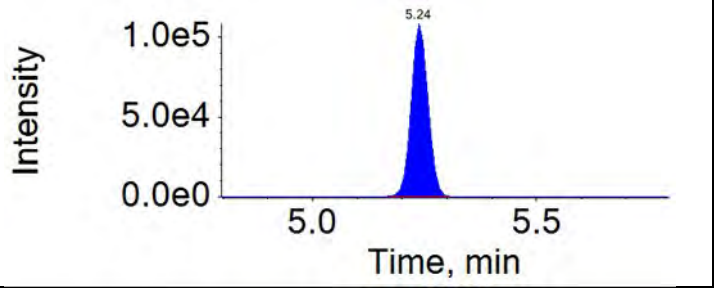
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



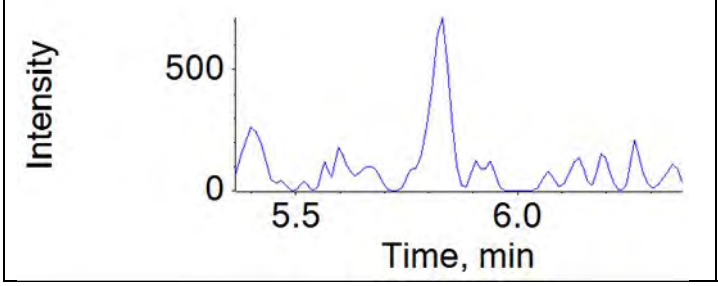


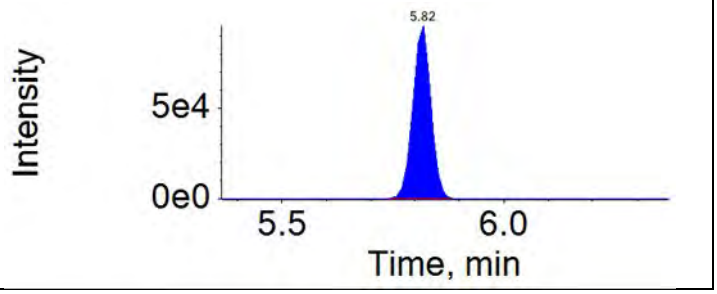
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



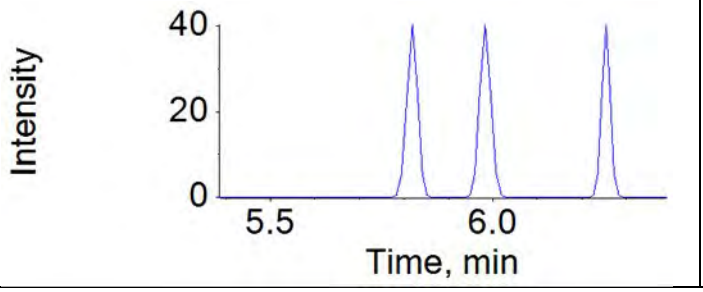


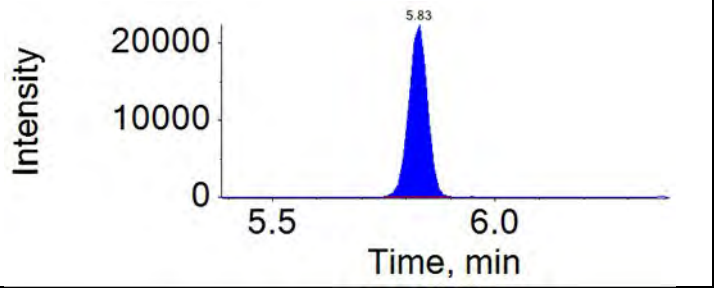
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

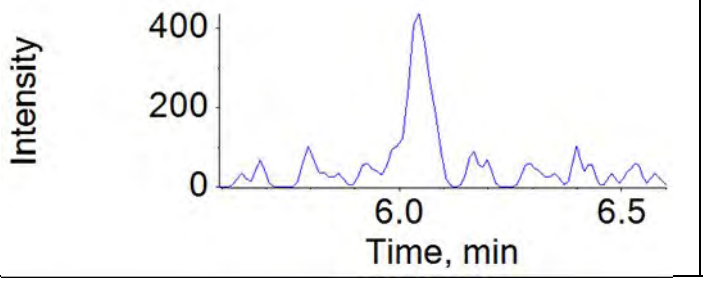
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

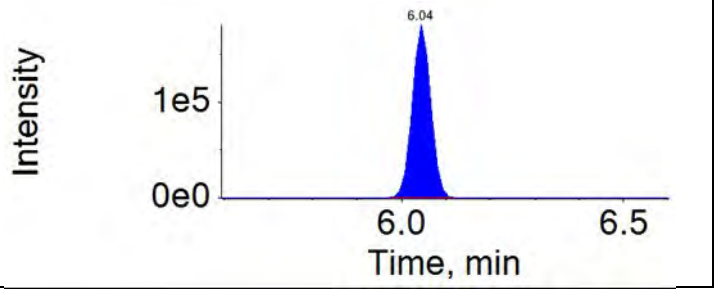
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



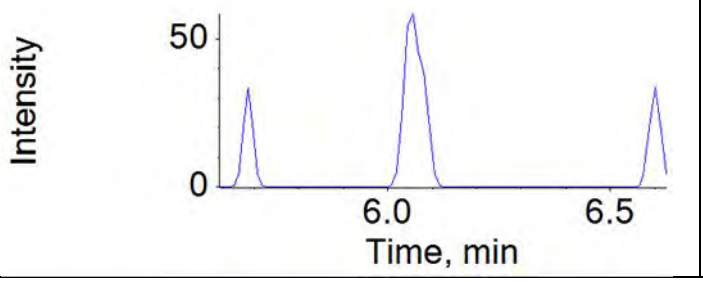


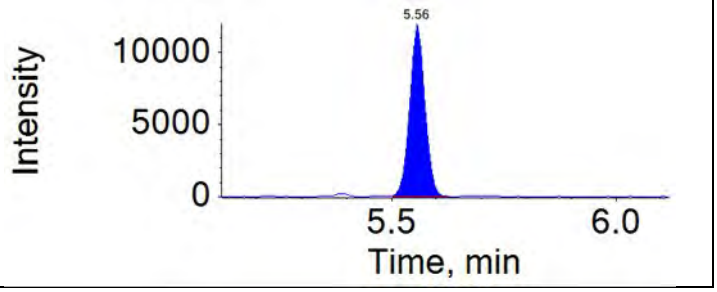
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



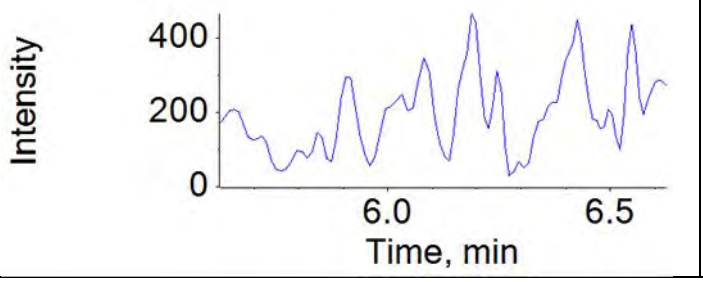


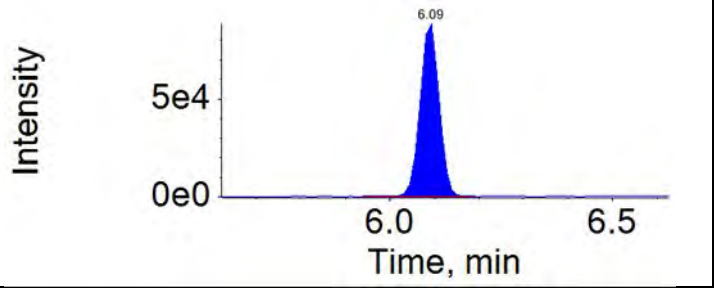
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



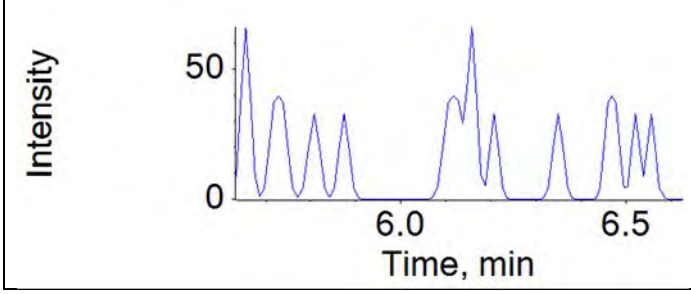


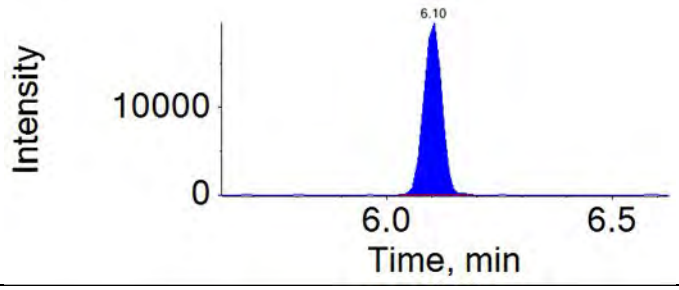
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

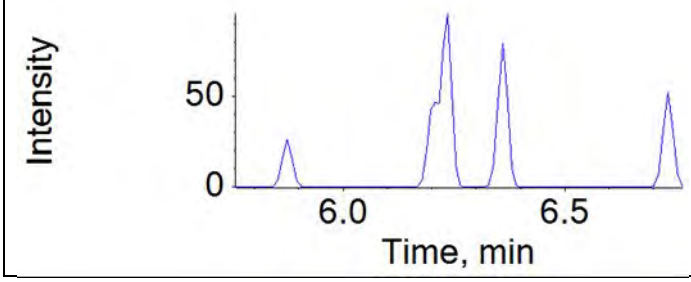
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

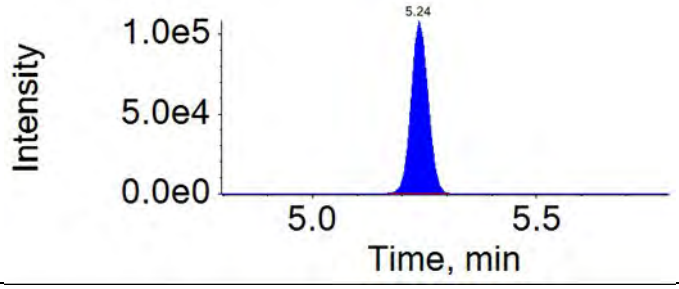
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



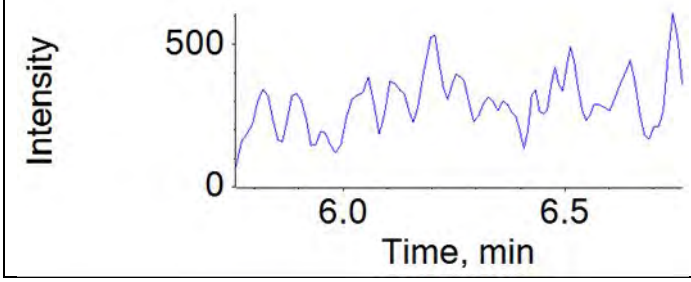


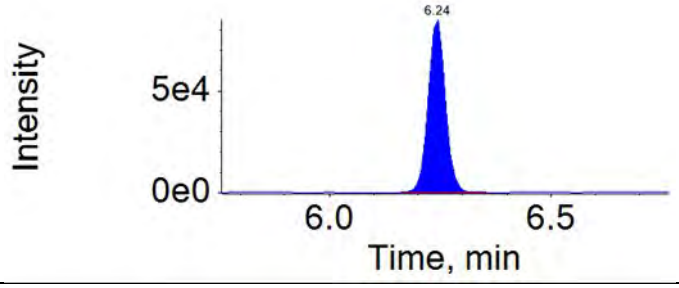
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



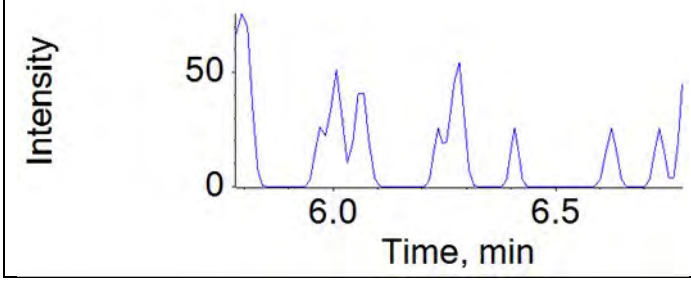


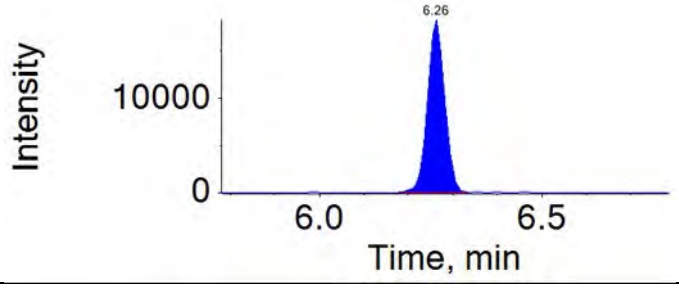
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

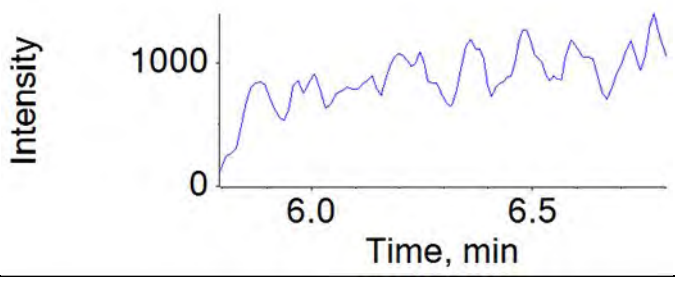
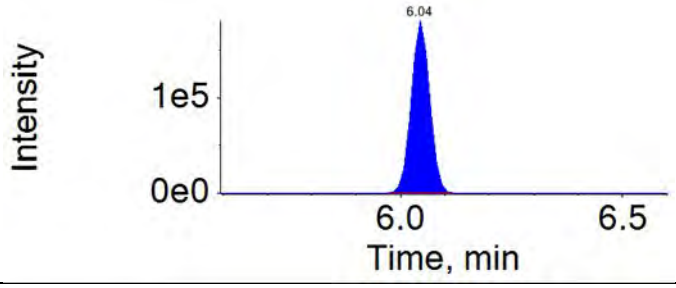


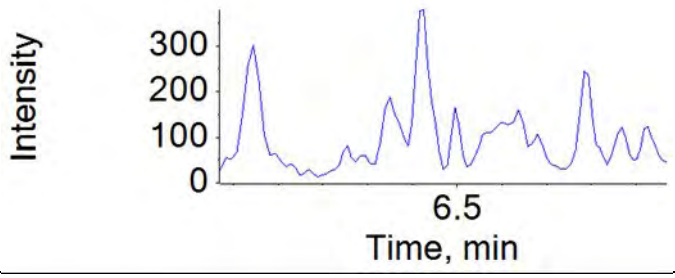
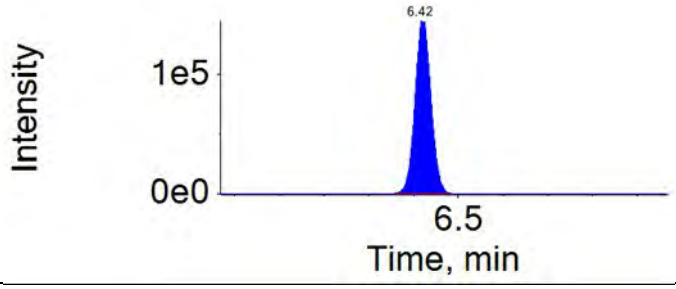


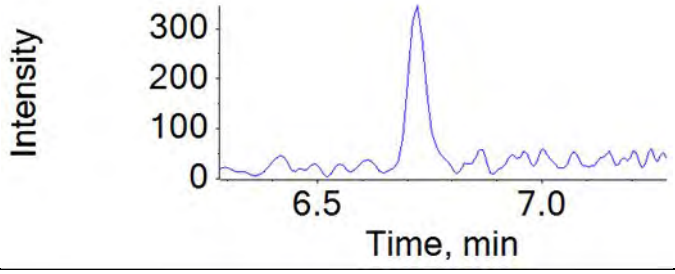
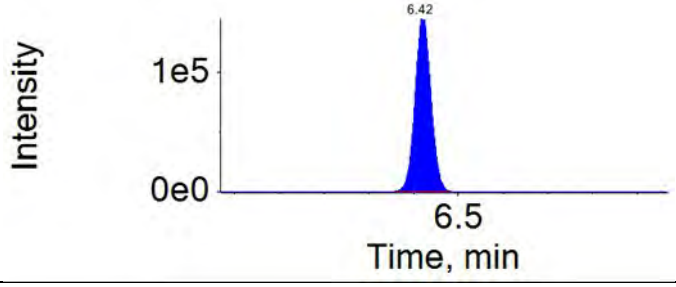
APPROVED
By MCD at 0:13 am, 11/10/18

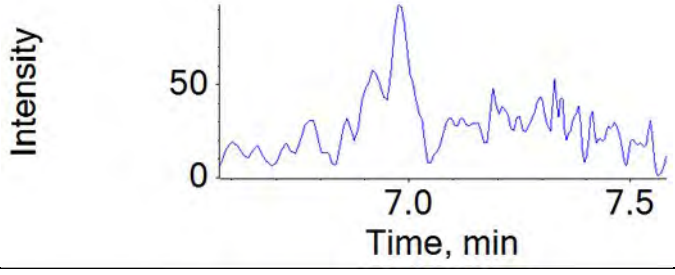
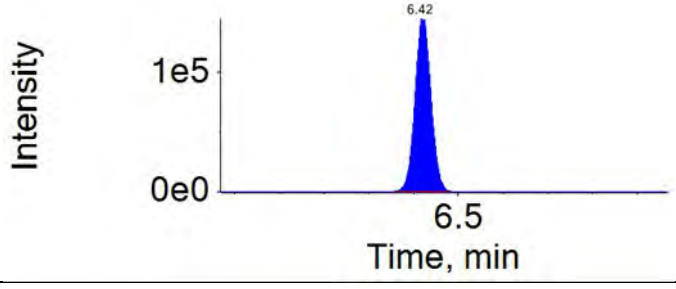
REVIEWED
By HMK at 7:51 am, 11/15/18

ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

Ion Ratio Report

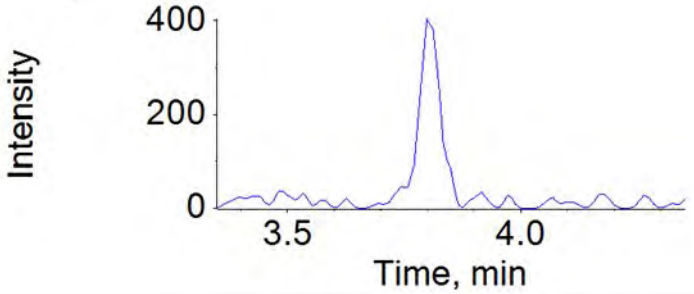
Sample Name: BLK312004 **Instrument Name:** LM27631 **File Name:** 18NOV09D-63.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	N/A	N/A	N/A	A	N/A	N/A			
PFBS_2	N/A	N/A	N/A	A	N/A	N/A		50	
4:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
4:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxA	N/A	N/A	N/A	A	N/A	N/A			
PFHxA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFPeS	N/A	N/A	N/A	A	N/A	N/A			
PFPeS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxS	N/A	N/A	N/A	A	N/A	N/A			
PFHxS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpA	N/A	N/A	N/A	A	N/A	N/A			
PFHpA_2	N/A	N/A	N/A	A	N/A	N/A		50	
6:2-FTS	4.90	1.00	638.6	A	N/A	0.2583			
6:2-FTS_2	4.91	1.00	165.0	A	N/A	0.2583	-62	50	OOS
PFHpS	N/A	N/A	N/A	A	N/A	N/A			
PFHpS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOA	N/A	N/A	N/A	A	N/A	N/A			
PFOA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOS	N/A	N/A	N/A	A	N/A	N/A			
PFOS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNA	N/A	N/A	N/A	A	N/A	N/A			
PFNA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNS	N/A	N/A	N/A	A	N/A	N/A			
PFNS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDA	N/A	N/A	N/A	A	N/A	N/A			
PFDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
8:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
8:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
NMeFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NMeFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDS	N/A	N/A	N/A	A	N/A	N/A			
PFDS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFUnDA	N/A	N/A	N/A	A	N/A	N/A			
PFUnDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
NEtFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NEtFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDoDA	N/A	N/A	N/A	A	N/A	N/A			
PFDoDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
10:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
10:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTrDA	N/A	N/A	N/A	A	N/A	N/A			
PFTrDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTeDA	N/A	N/A	N/A	A	N/A	N/A			
PFTeDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxDA	N/A	N/A	N/A	A	N/A	N/A			
PFHxDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFODA	N/A	N/A	N/A	A	N/A	N/A			
PFODA_2	N/A	N/A	N/A	A	N/A	N/A		50	

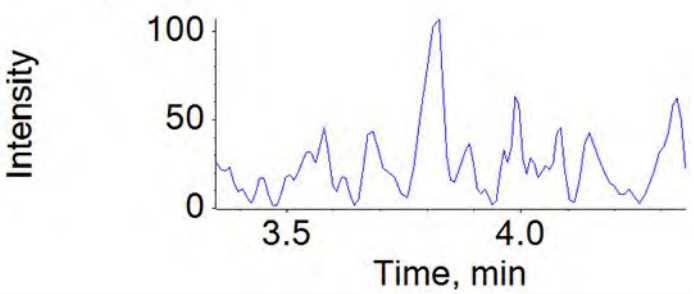
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

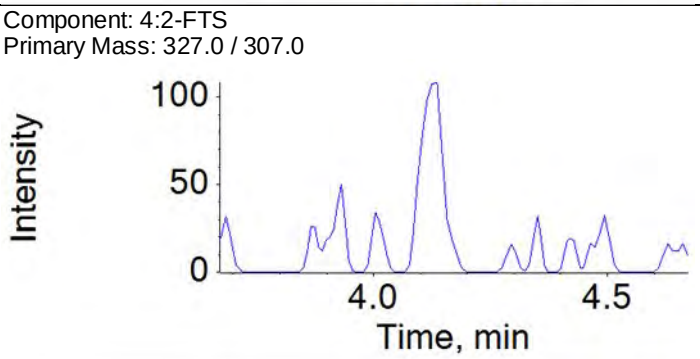
Component: PFBS
Primary Mass: 299.0 / 80.0



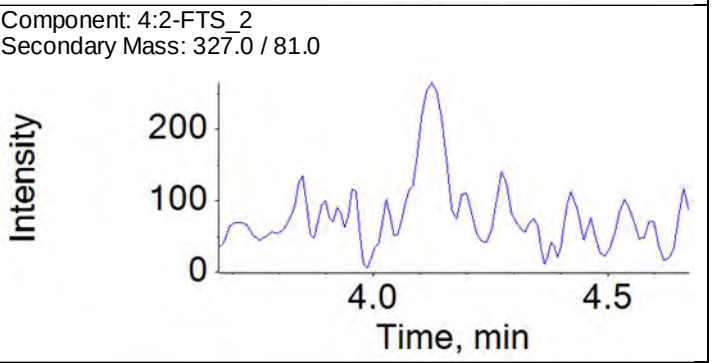
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



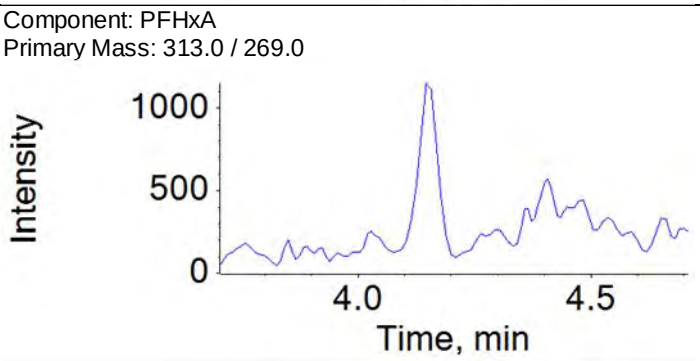
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



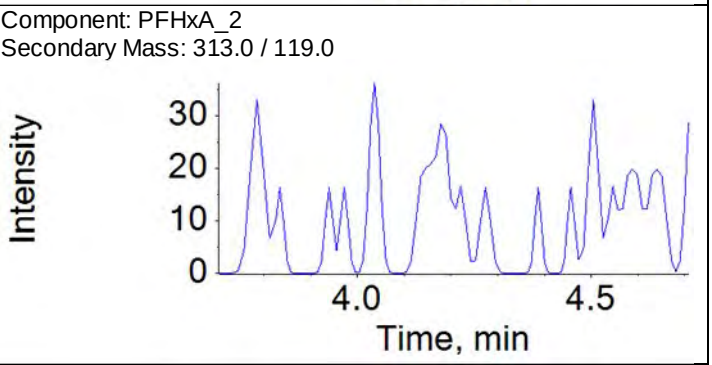
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



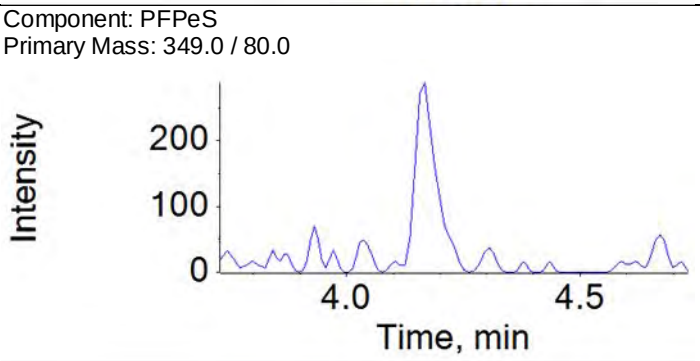
Component: PFHxA
Primary Mass: 313.0 / 269.0



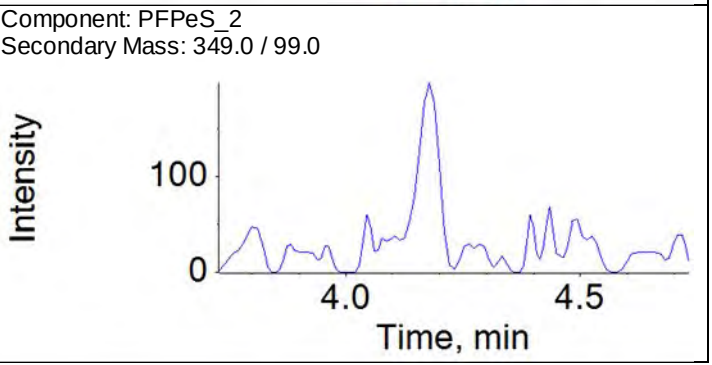
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



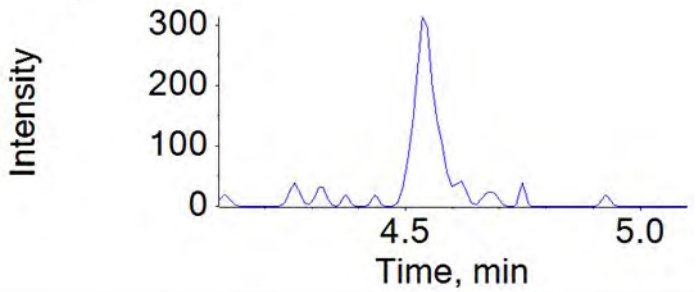
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



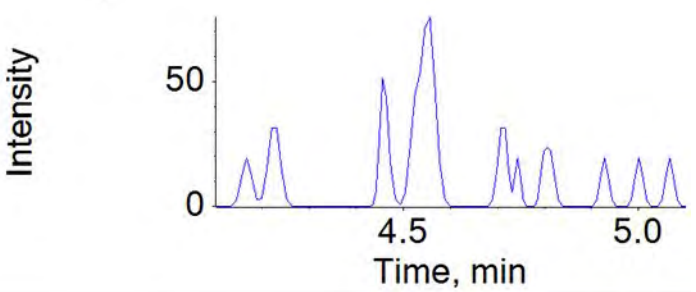
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

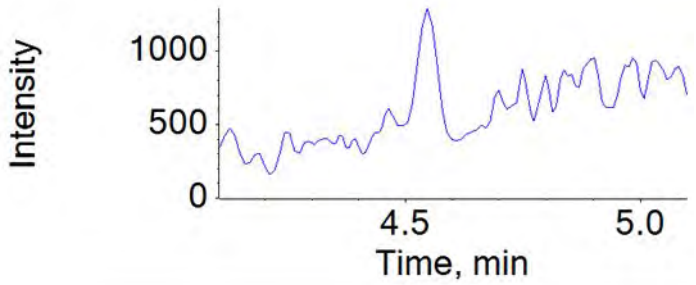
Component: PFHxS
Primary Mass: 399.0 / 80.0



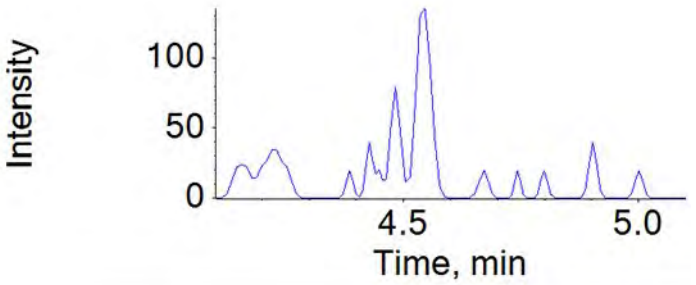
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



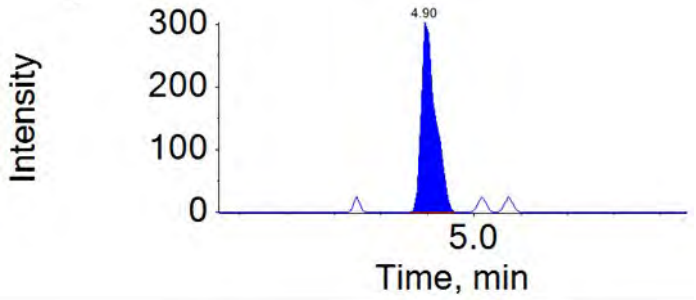
Component: PFHpA
Primary Mass: 363.0 / 319.0



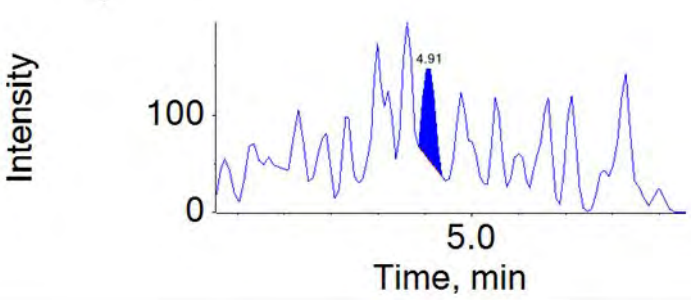
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



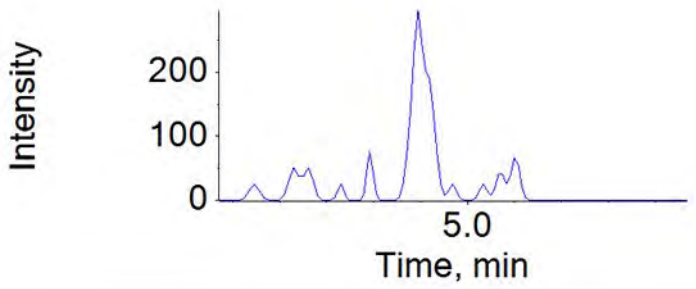
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



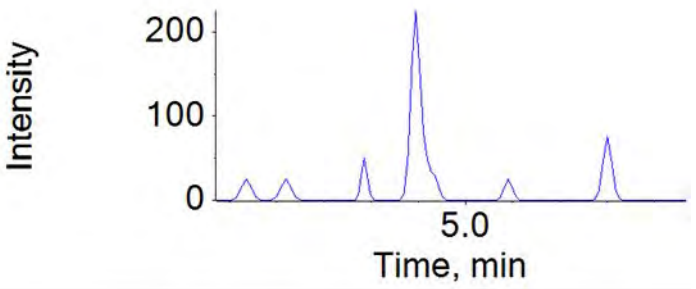
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



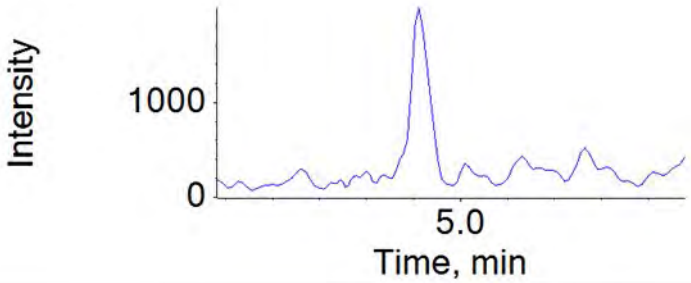
Component: PFHpS
Primary Mass: 449.0 / 80.0



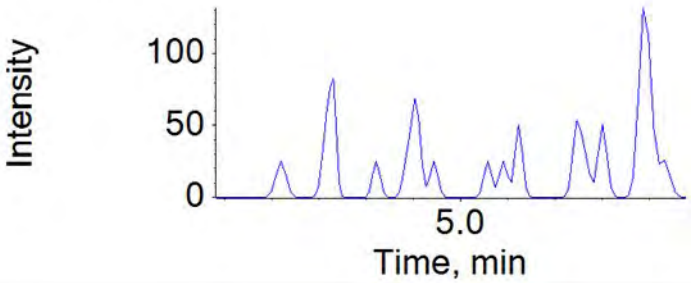
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



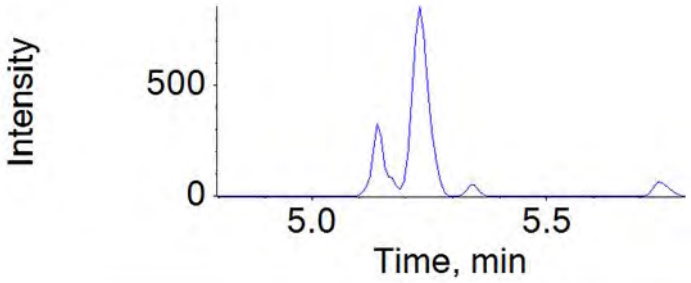
Component: PFOA
Primary Mass: 413.0 / 369.0



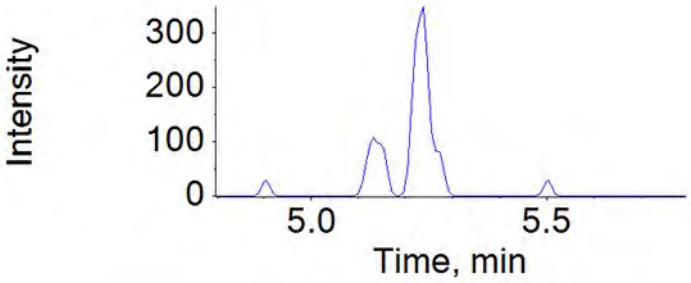
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



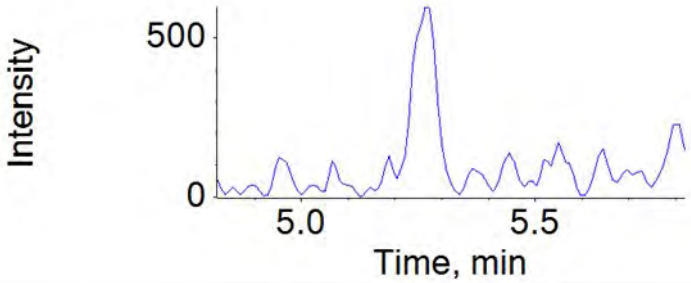
Component: PFOS
Primary Mass: 499.0 / 80.0



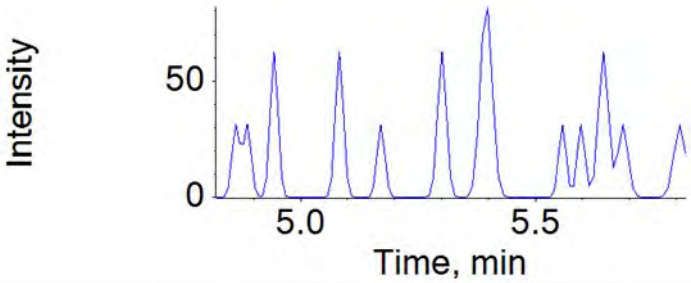
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



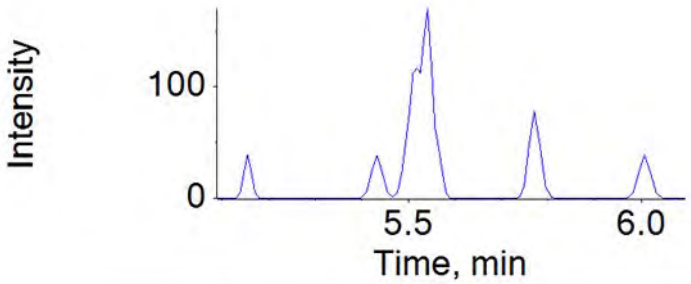
Component: PFNA
Primary Mass: 463.0 / 419.0



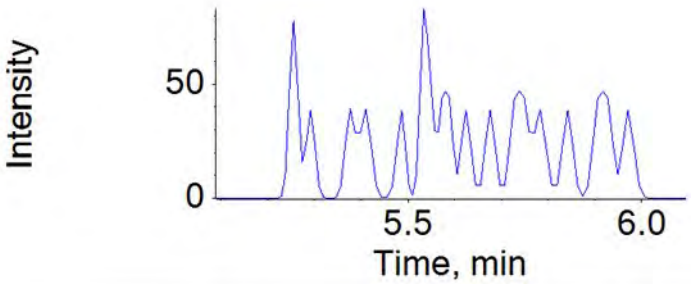
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



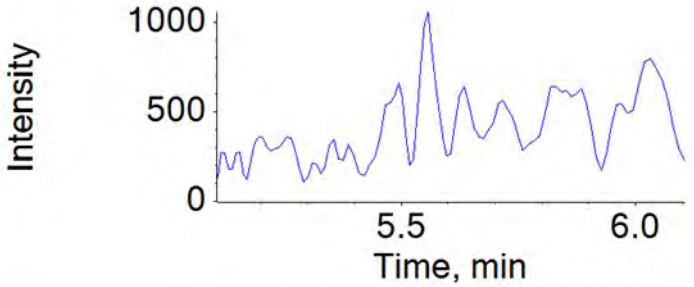
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



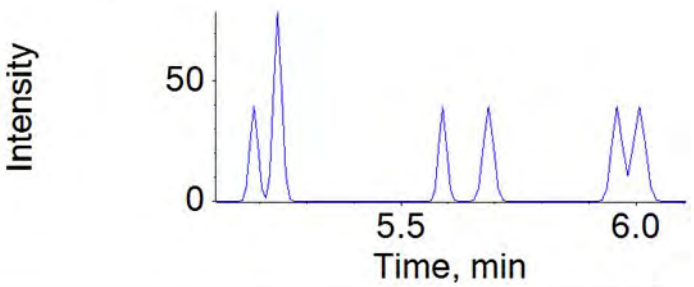
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

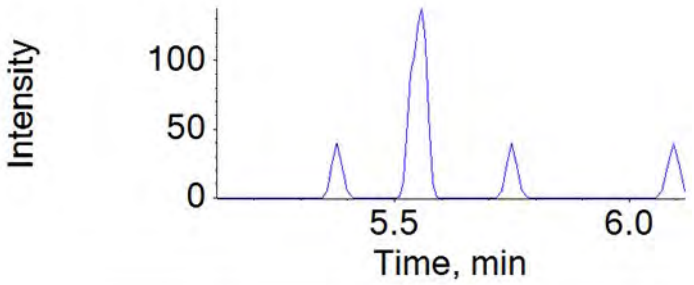
Component: PFDA
Primary Mass: 513.0 / 469.0



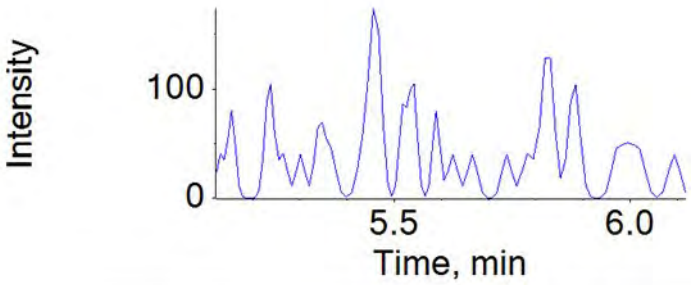
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Secondary Mass: 513.0 / 169.0



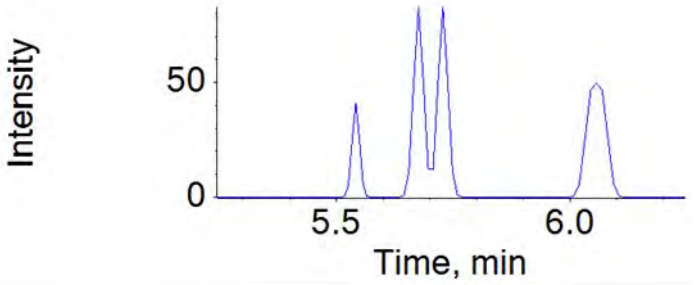
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



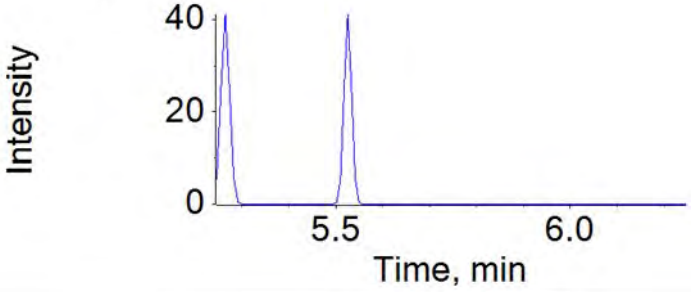
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



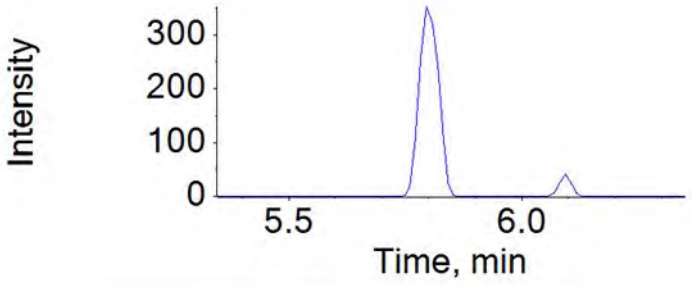
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



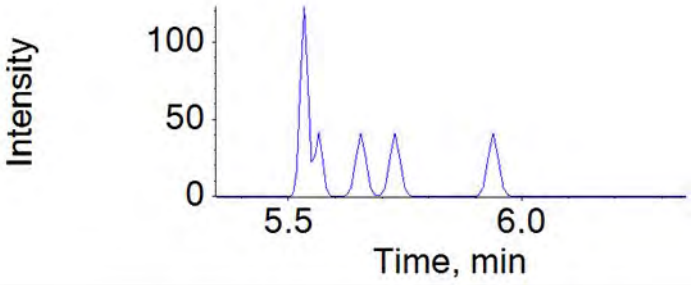
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



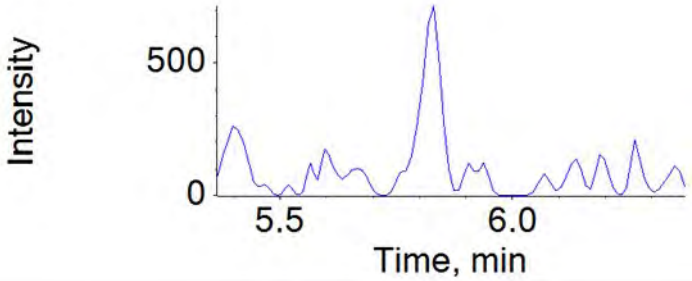
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Secondary Mass: 599.0 / 99.0



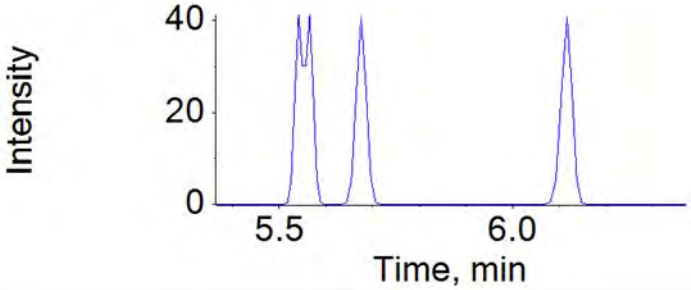
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

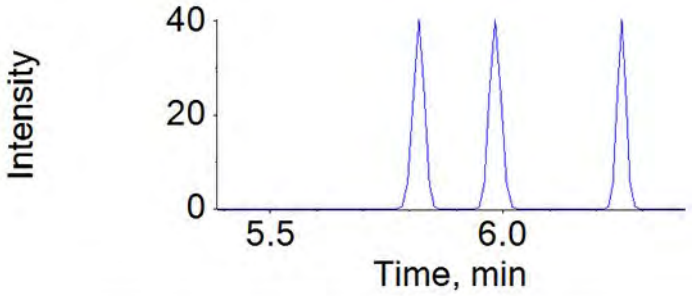
Component: PFUnDA
Primary Mass: 563.0 / 519.0



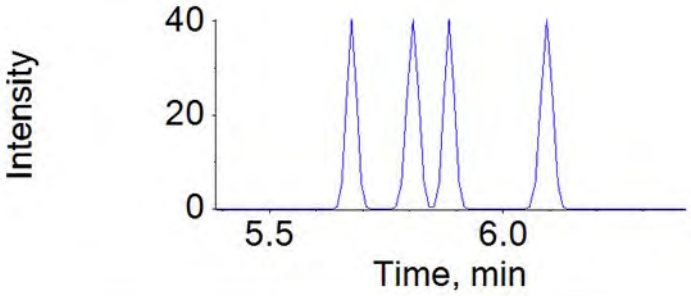
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Secondary Mass: 563.0 / 169.0



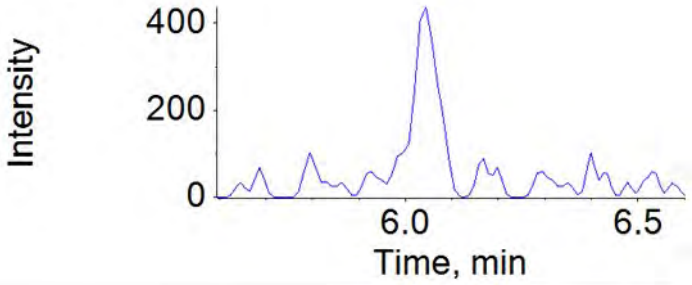
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



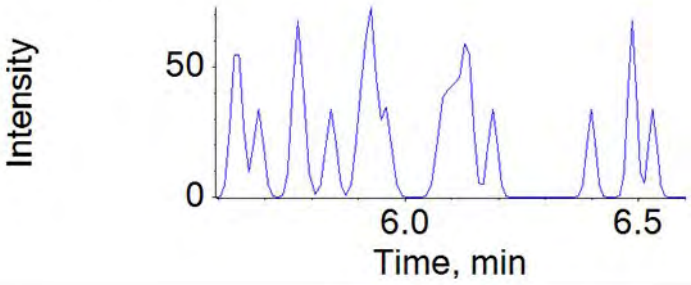
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



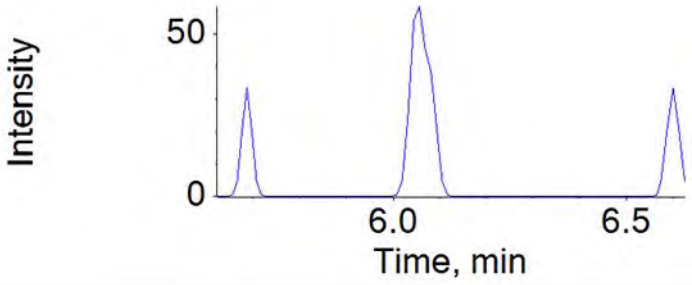
Component: PFDoDA
Primary Mass: 613.0 / 569.0



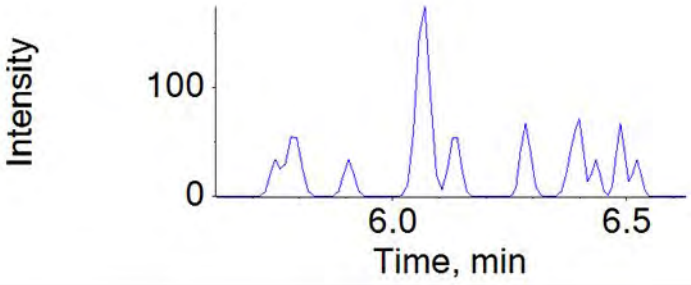
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



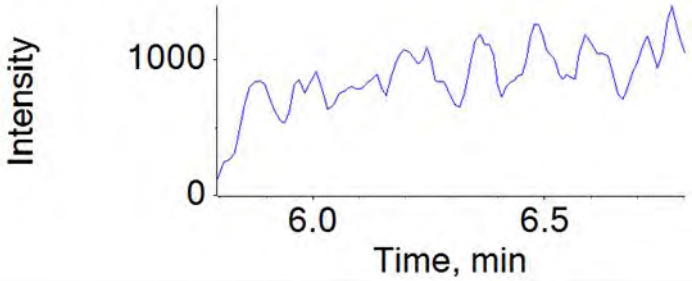
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



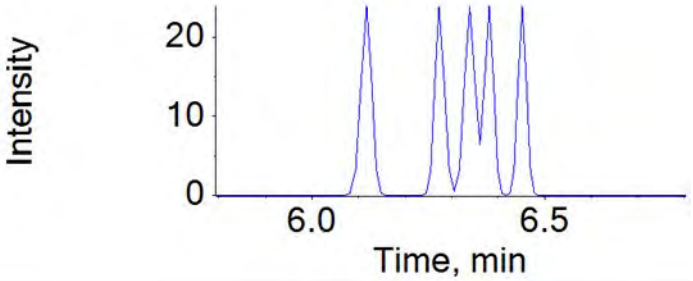
APPROVED
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By HMK at 7:51 am, 11/15/18

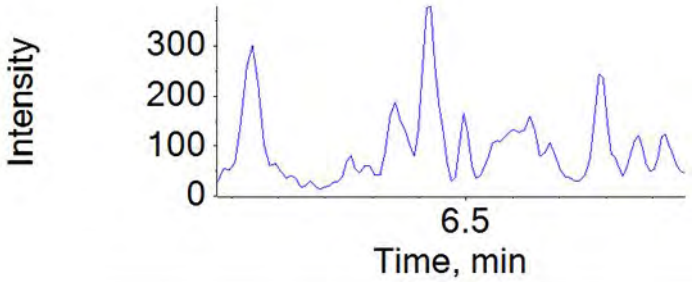
Component: PFTrDA
Primary Mass: 663.0 / 619.0



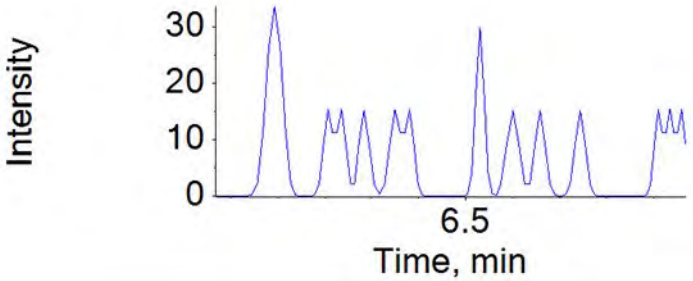
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



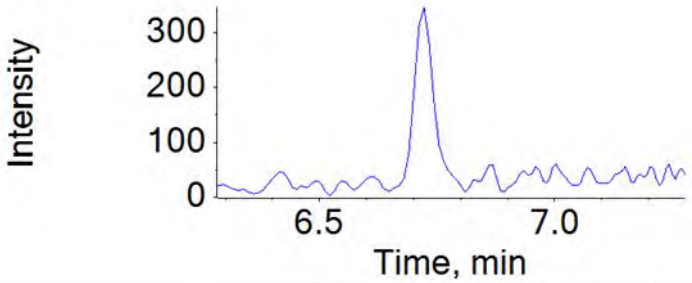
Component: PFTeDA
Primary Mass: 713.0 / 669.0



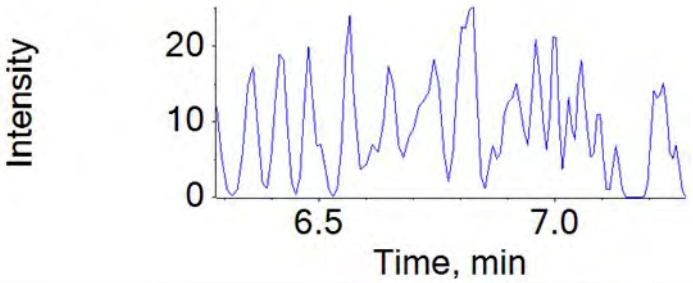
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



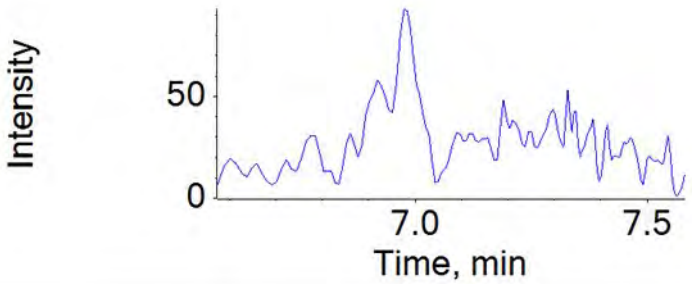
Component: PFHxDA
Primary Mass: 813.0 / 769.0



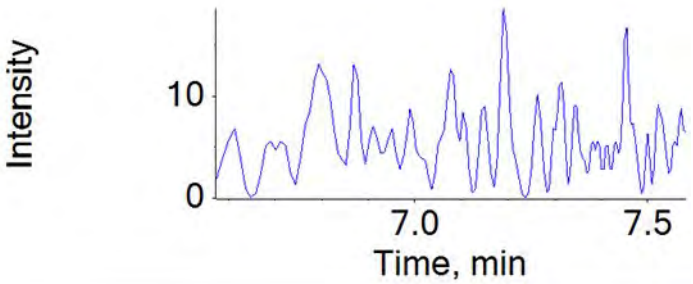
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	BLK316028			**Data File:**		18NOV13D-25.wiff
Sample ID:	EPA 537 mod QSM 5.1 table B-15 18316028			**Acquis Date:**		2018-11-13T13:19:50
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	29			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18316028
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	18316028			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		2.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	747214.8	661126.9	13	50	
13C2-PFOA	5.0	517501.8	466902.6	11	50	
13C4-PFOS	4.8	281399.9	247446.9	14	50	
13C2-PFDA	5.0	343688.4	295381.6	16	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	724330.9	13C3-PFBA	747214.8	0.969	10.000	8.692	87	50-150	
E13C5-PFPeA	714556.4	13C3-PFBA	747214.8	0.956	10.000	8.578	86	50-150	
E13C3-PFBS	401770.9	13C3-PFBA	747214.8	0.538	9.300	7.591	82	50-150	
E13C2-4:2-FTS	48230.4	13C2-PFOA	517501.8	0.093	9.340	8.302	89	50-150	
E13C5-PFHxA	653066.5	13C2-PFOA	517501.8	1.262	10.000	9.117	91	50-150	
E13C3-PFHxS	314492.4	13C2-PFOA	517501.8	0.608	9.460	8.340	88	50-150	
E13C4-PFHpA	502786.4	13C2-PFOA	517501.8	0.972	10.000	8.754	88	50-150	
E13C2-6:2-FTS	34668.7	13C2-PFOA	517501.8	0.067	9.500	8.964	94	50-150	
E13C8-PFOA	839075.5	13C2-PFOA	517501.8	1.621	10.000	8.934	89	50-150	
E13C8-PFOS	260290.2	13C4-PFOS	281399.9	0.925	9.560	8.197	86	50-150	
E13C9-PFNA	453917.7	13C4-PFOS	281399.9	1.613	10.000	8.995	90	50-150	
E13C6-PFDA	616264.6	13C2-PFDA	343688.4	1.793	10.000	8.369	84	50-150	
E13C2-8:2-FTS	23767.5	13C2-PFDA	343688.4	0.069	9.580	6.898	72	50-150	
E13C8-PFOSA	612001.0	13C2-PFDA	343688.4	1.781	10.000	7.895	79	50-150	
Ed3-NMeFOSAA	88197.5	13C2-PFDA	343688.4	0.257	10.000	9.264	93	50-150	
E13C7-PFUnDA	248999.7	13C2-PFDA	343688.4	0.724	10.000	8.413	84	50-150	
Ed5-NEtFOSAA	59882.7	13C2-PFDA	343688.4	0.174	10.000	7.372	74	50-150	
E13C2-PFDoDA	521235.4	13C2-PFDA	343688.4	1.517	10.000	7.875	79	50-150	
Ed7-NMePFOSAE	310399.3	13C2-PFDA	343688.4	0.903	10.000	7.817	78	50-150	
Ed3-NMePFOSA	72481.6	13C2-PFDA	343688.4	0.211	10.000	7.663	77	50-150	
Ed9-NEtPFOSAE	263122.1	13C2-PFDA	343688.4	0.766	10.000	7.964	80	50-150	
Ed5-NEtPFOSA	61331.3	13C2-PFDA	343688.4	0.178	10.000	8.372	84	50-150	
E13C2-PFTeDA	382795.9	13C2-PFDA	343688.4	1.114	10.000	7.820	78	50-150	

APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

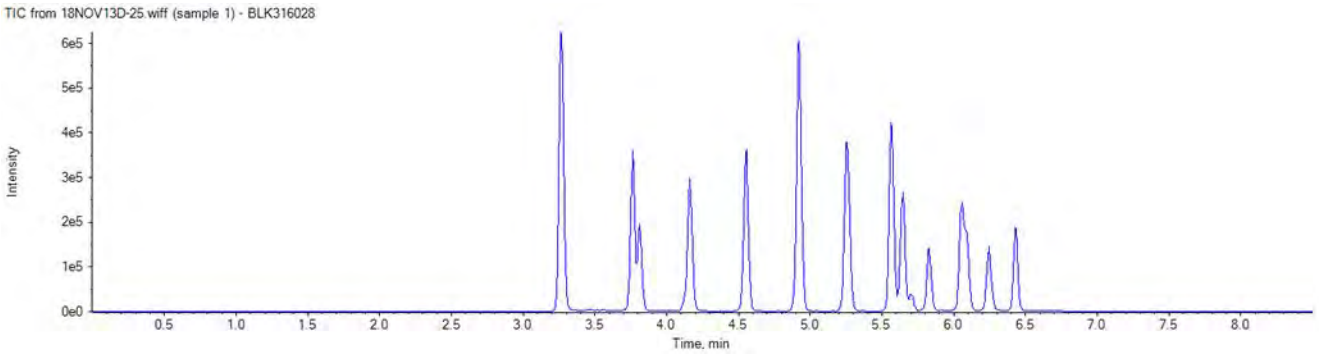
Analyte Quantitation Peak Table

Sample Name: BLK316028 **Instrument Name:** LM27631 **File Name:** 18NOV13D-25.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	2.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	N/A	N/A	N/A		A	13C4-PFBA	3.26	724330.9	N/A	
PFPeA	N/A	N/A	N/A		A	13C5-PFPeA	3.76	714556.4	N/A	
PFBS	N/A	N/A	N/A		A	13C3-PFBS	3.81	401770.9	N/A	
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.13	48230.4	N/A	
PFHxA	N/A	N/A	N/A		A	13C5-PFHxA	4.16	653066.5	N/A	
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.81	401770.9	N/A	
PFHpA	N/A	N/A	N/A		A	13C4-PFHpA	4.55	502786.4	N/A	
PFHxS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	314492.4	N/A	
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.91	34668.7	N/A	
PFHpS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	314492.4	N/A	
PFOA	N/A	N/A	N/A		A	13C8-PFOA	4.92	839075.5	N/A	
PFOS	N/A	N/A	N/A		A	13C8-PFOS	5.25	260290.2	N/A	
PFNA	N/A	N/A	N/A		A	13C9-PFNA	5.27	453917.7	N/A	
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.25	260290.2	N/A	
PFDA	N/A	N/A	N/A		A	13C6-PFDA	5.56	616264.6	N/A	
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.57	23767.5	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.64	612001.0	N/A	
NMeFOSAA	N/A	N/A	N/A		A	d3-NMeFOSAA	5.70	88197.5	N/A	
PFDS	N/A	N/A	N/A		A	13C8-PFOS	5.25	260290.2	N/A	
PFUnDA	N/A	N/A	N/A		A	13C7-PFUnDA	5.83	248999.7	N/A	
NEtFOSAA	N/A	N/A	N/A		A	d5-NEtFOSAA	5.84	59882.7	N/A	
PFDoDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	521235.4	N/A	
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.57	23767.5	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.09	310399.3	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.10	72481.6	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.25	260290.2	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.24	263122.1	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.26	61331.3	N/A	
PFTrDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	521235.4	N/A	
PFTeDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	382795.9	N/A	
PFHxDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	382795.9	N/A	
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	382795.9	N/A	

Total Ion Chromatogram

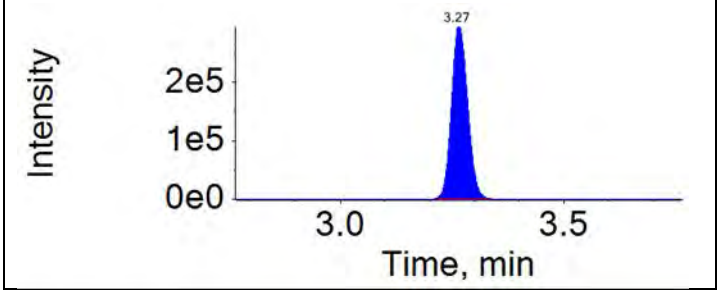


APPROVED
By JPT at 4:13 pm, 11/14/18

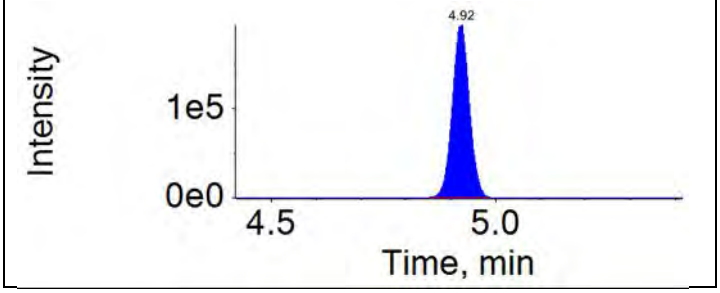
REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

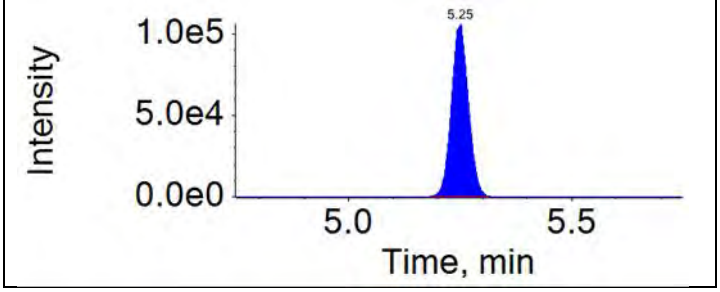
Injection Standard: 13C3-PFBA
216.0 / 172.0



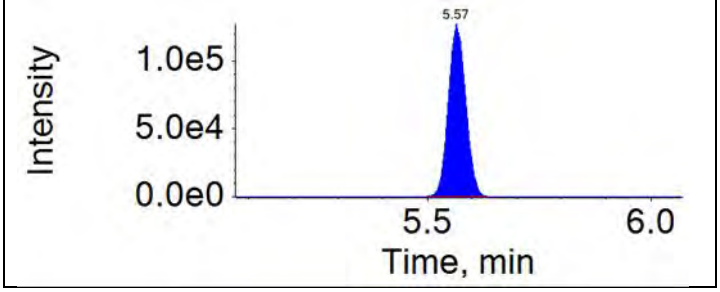
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

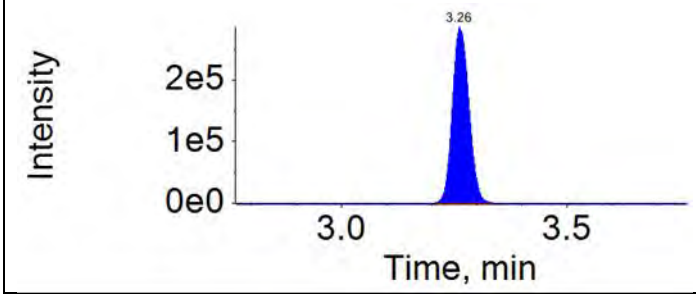


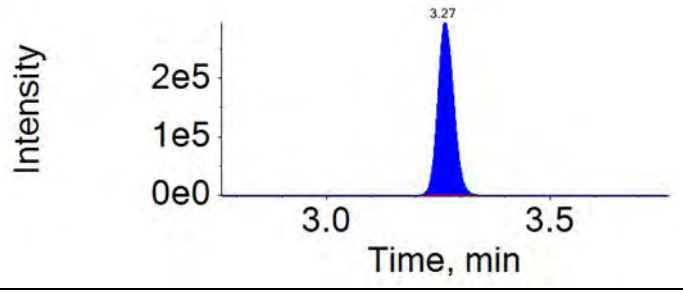
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

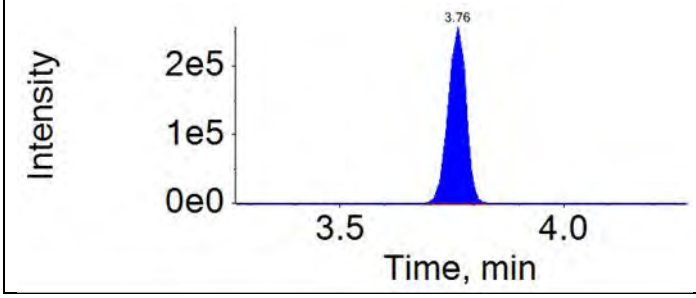
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

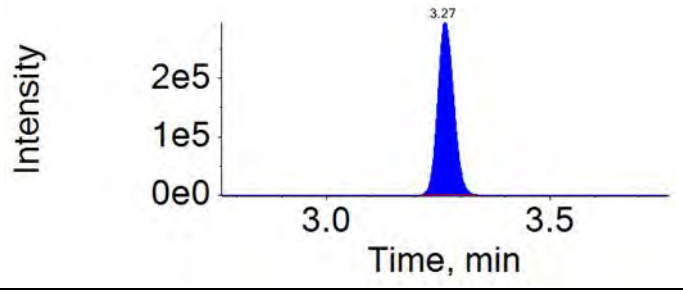
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



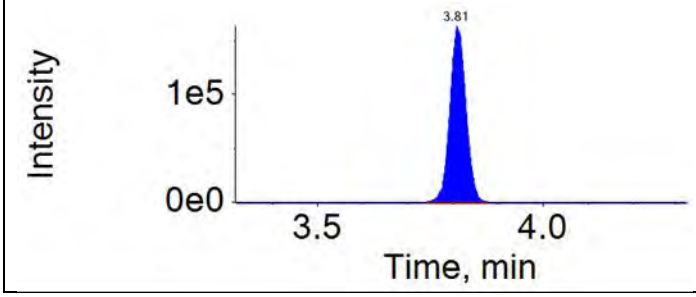


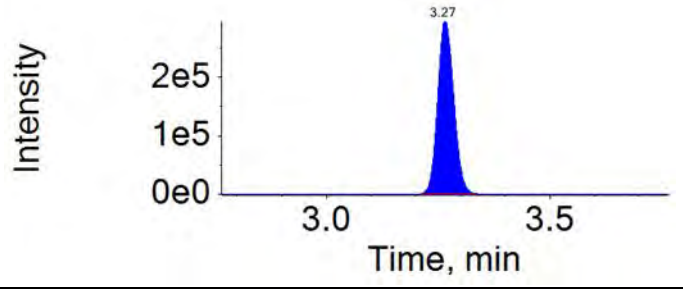
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



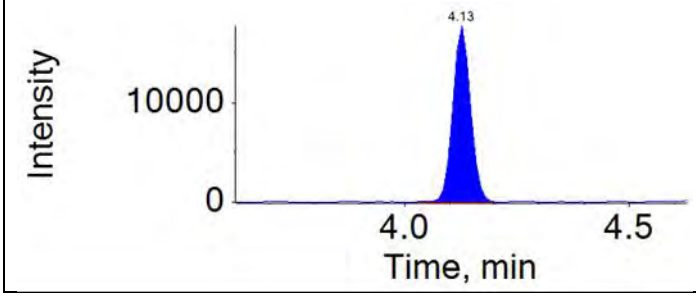


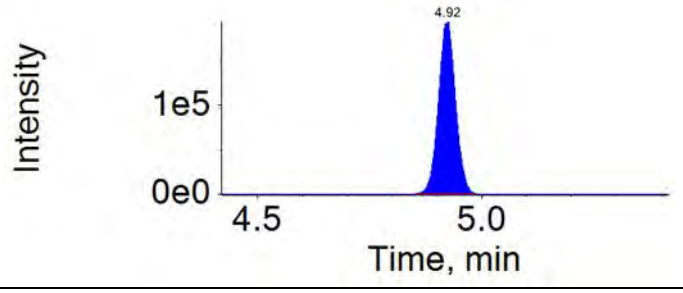
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





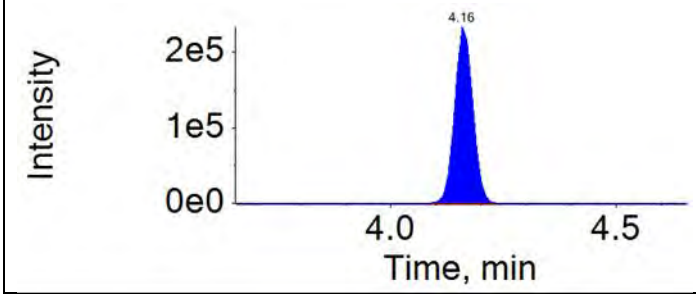
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

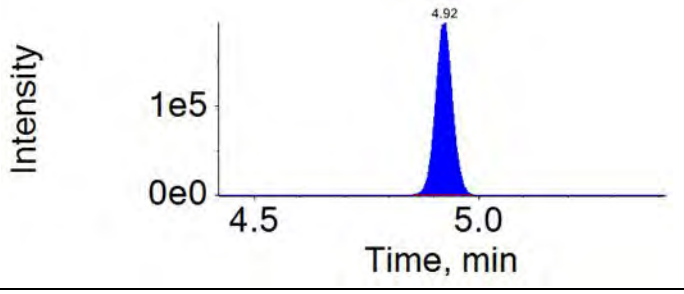




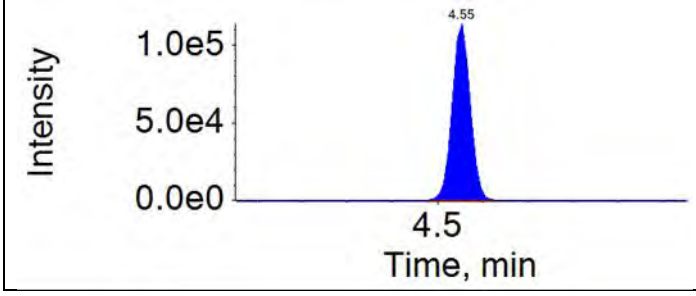
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

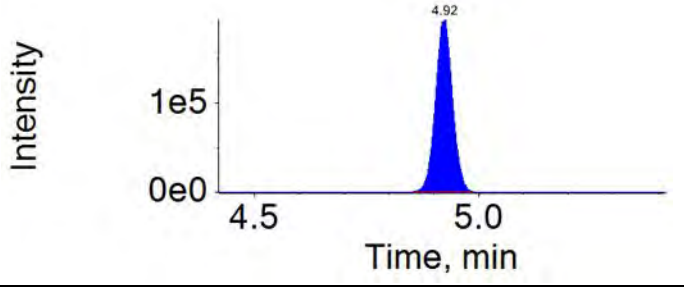
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



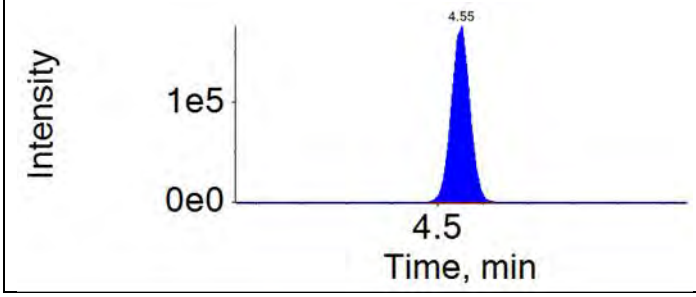


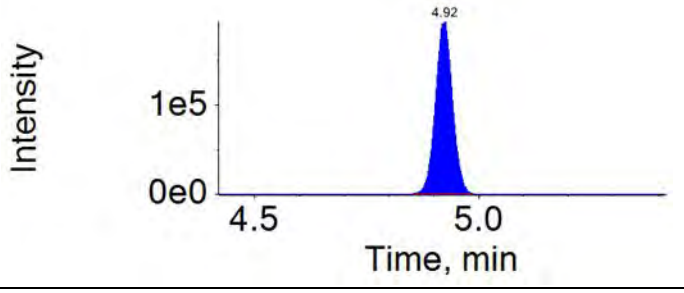
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



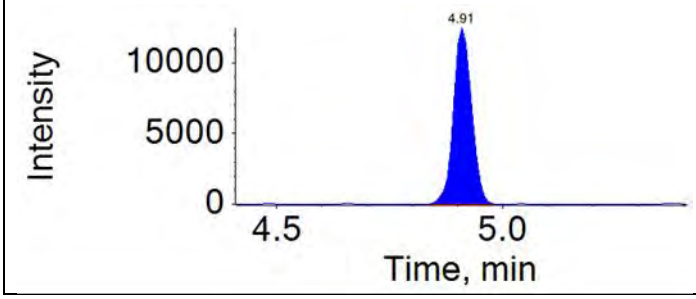


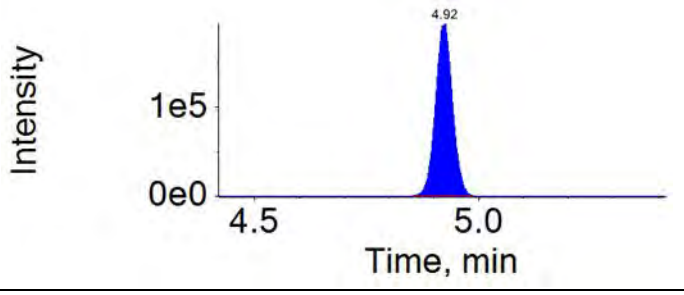
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

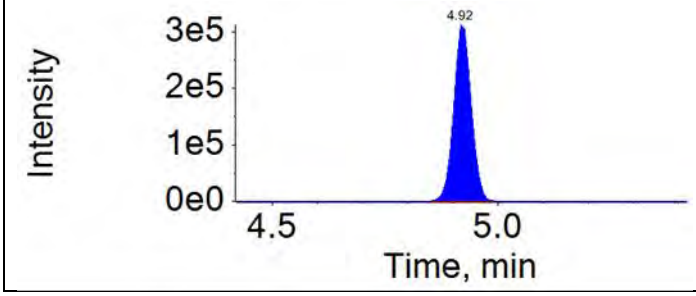
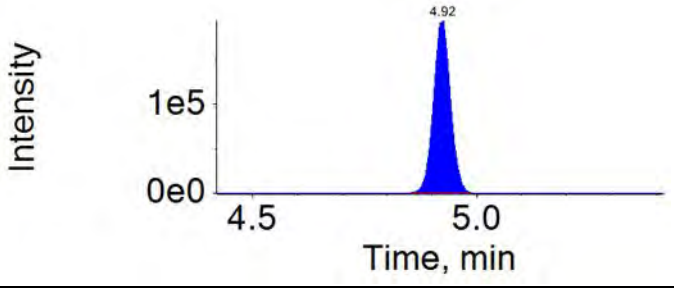


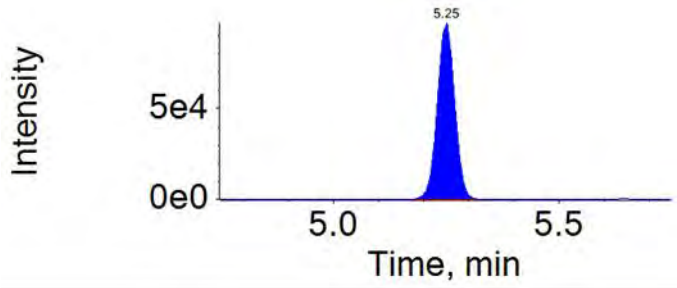
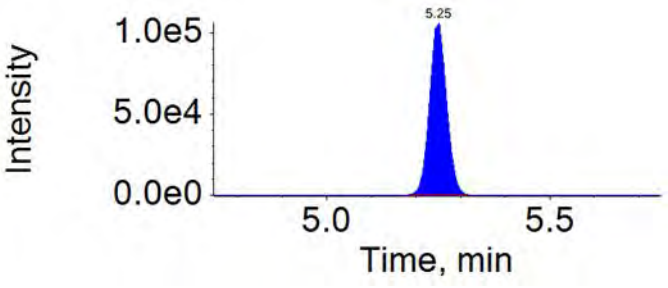


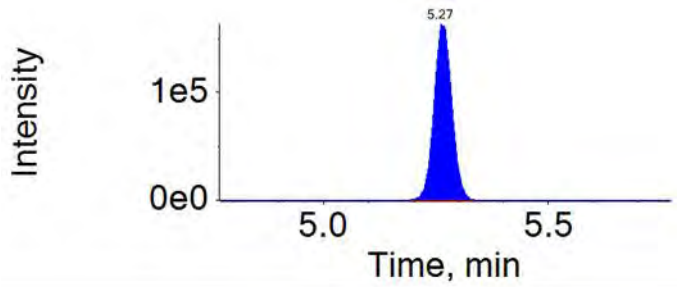
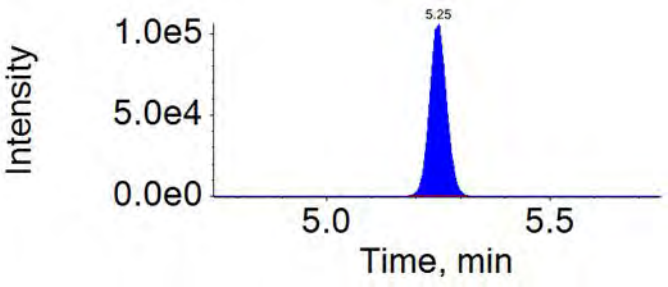
APPROVED
By JPT at 4:13 pm, 11/14/18

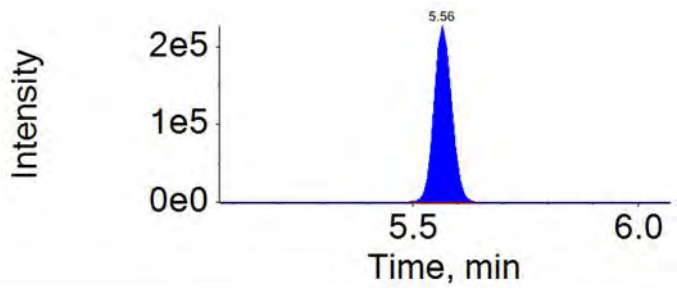
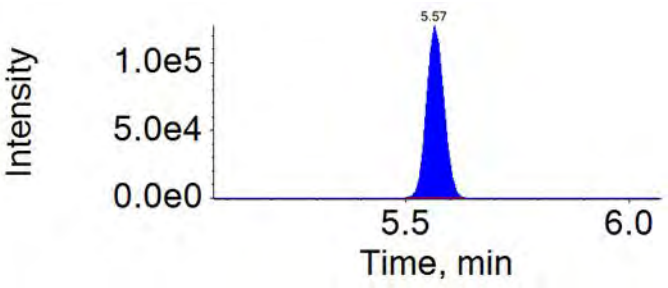
REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

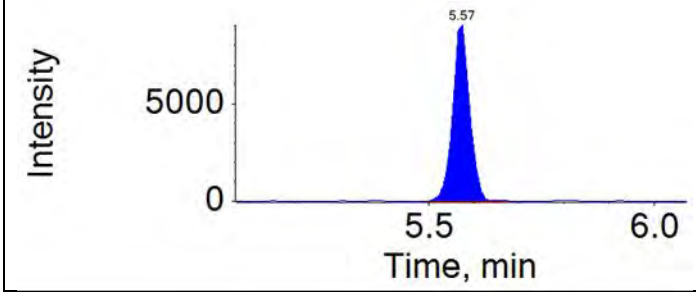
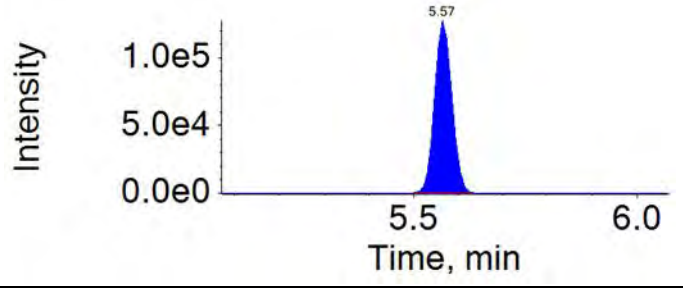
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

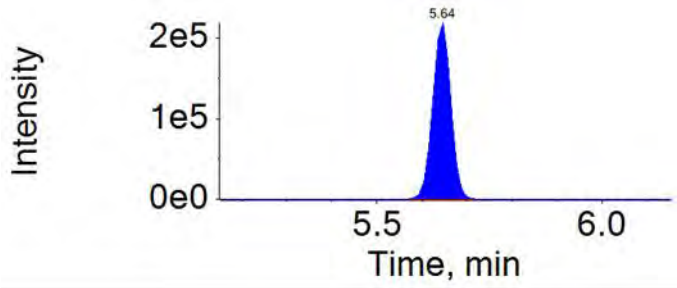
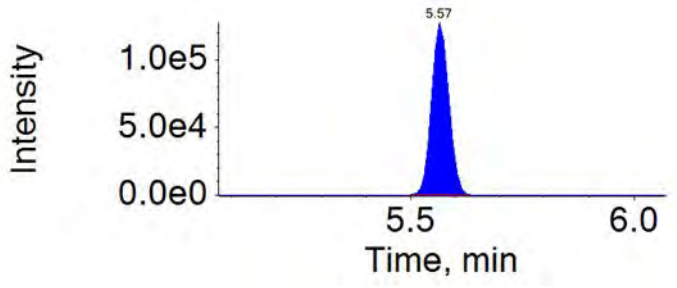
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

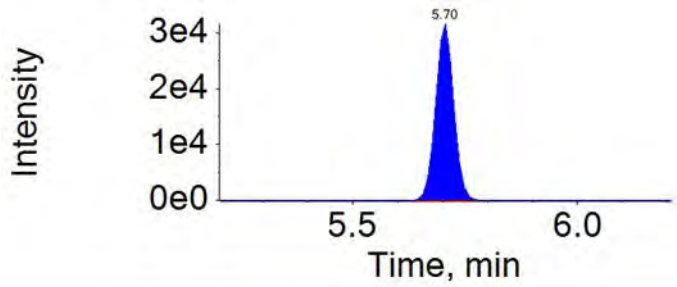
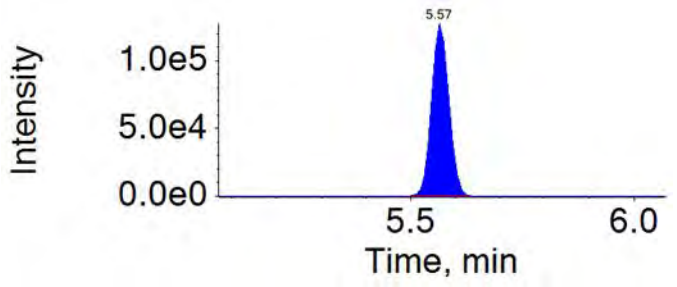
APPROVED
By JPT at 4:13 pm, 11/14/18

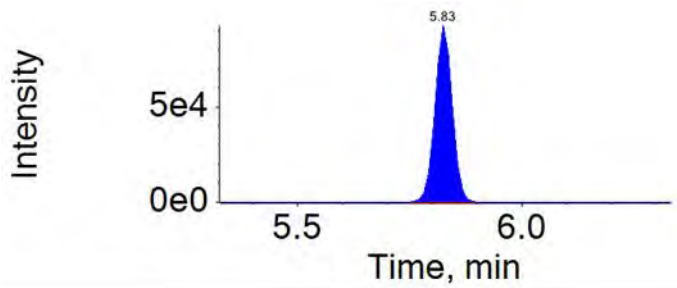
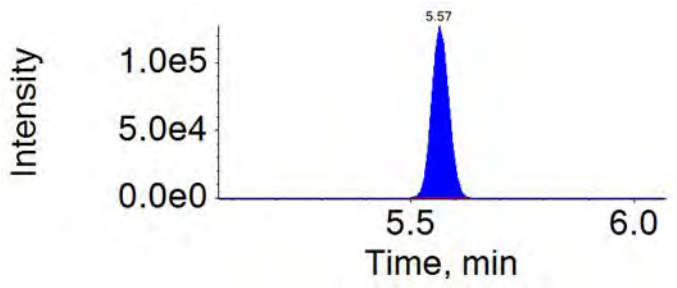
REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

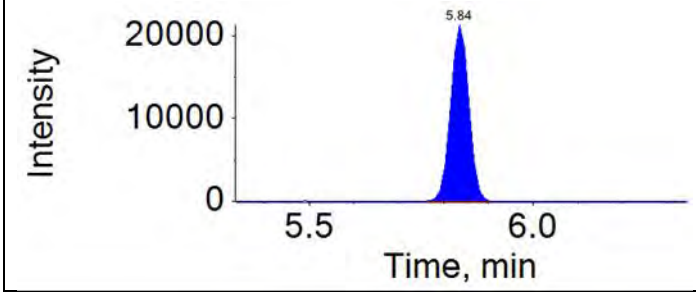
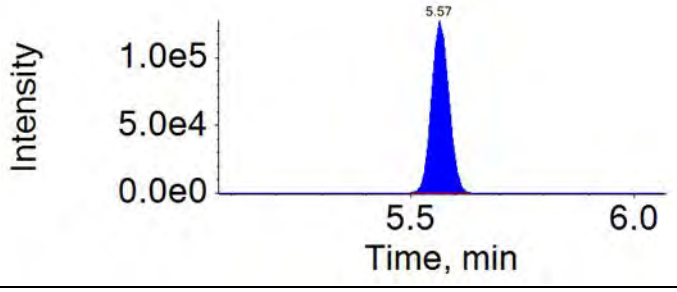
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

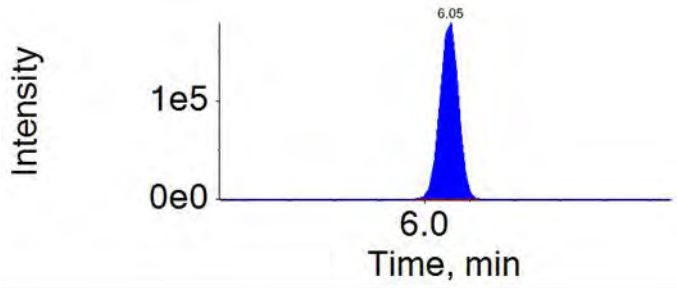
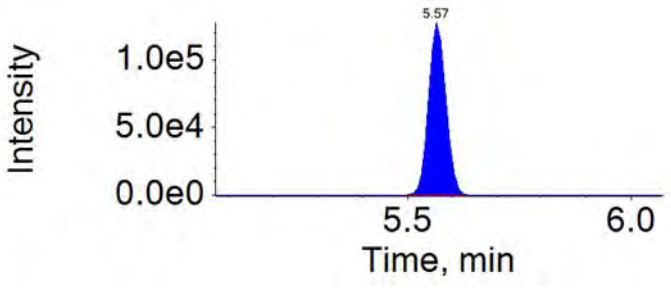
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

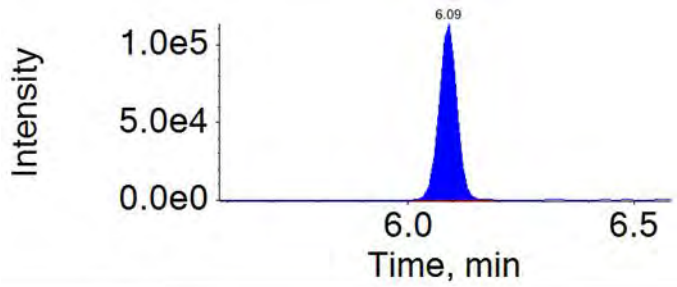
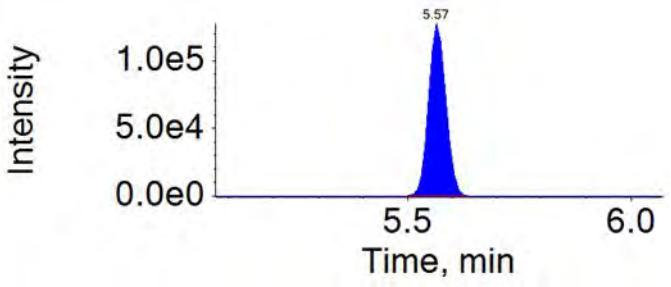
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

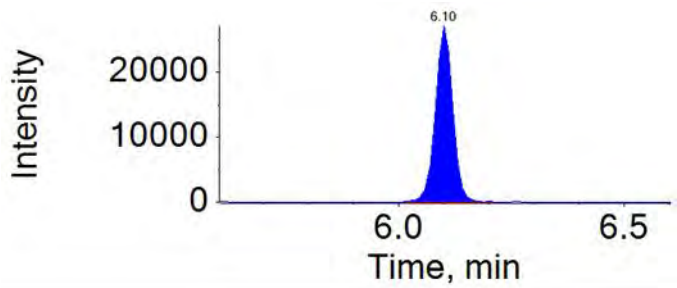
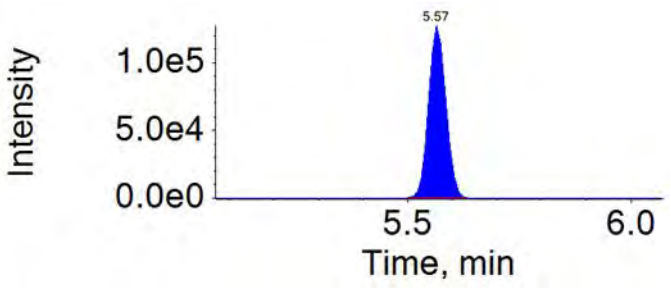
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

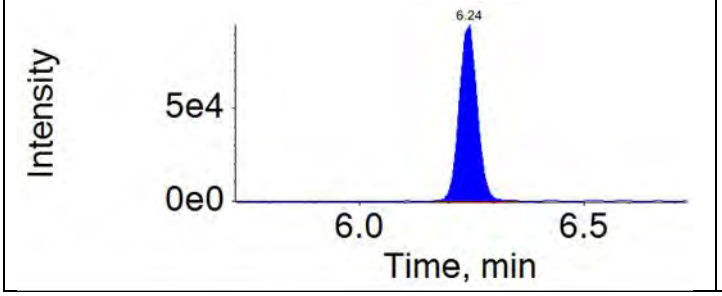
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

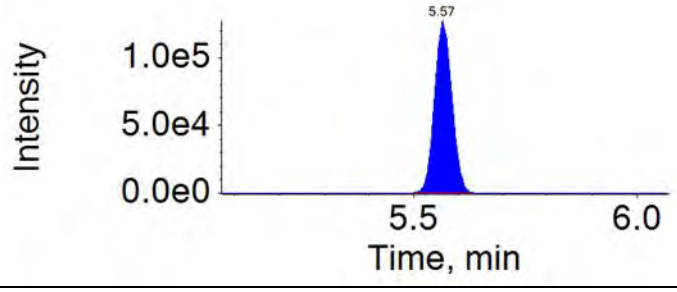
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

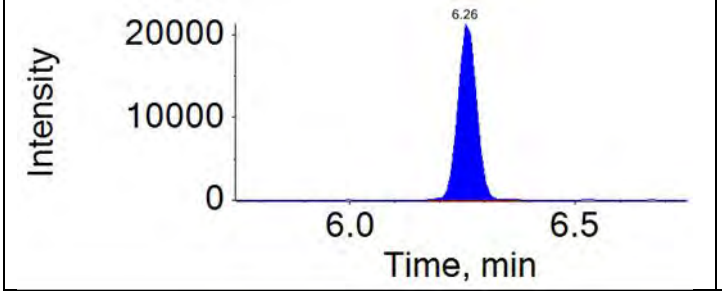
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

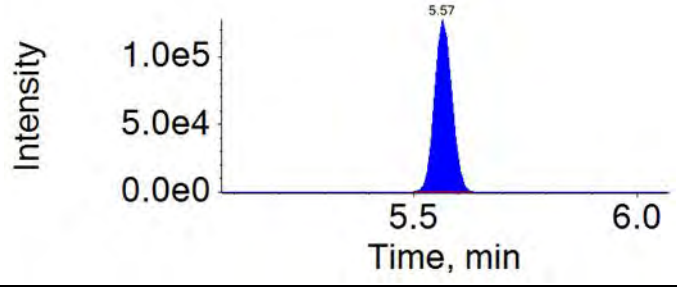
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



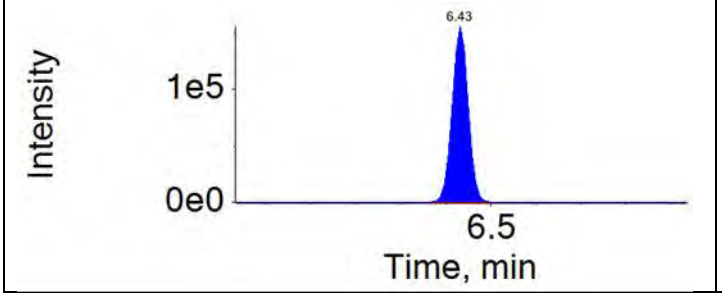


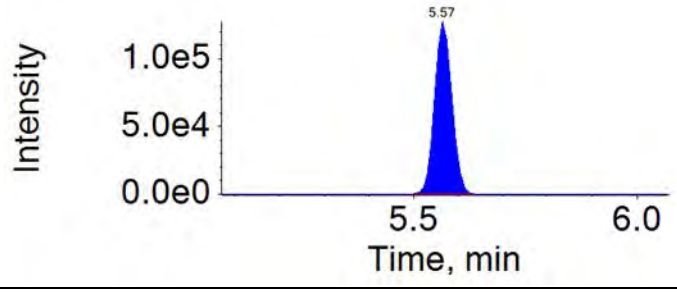
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



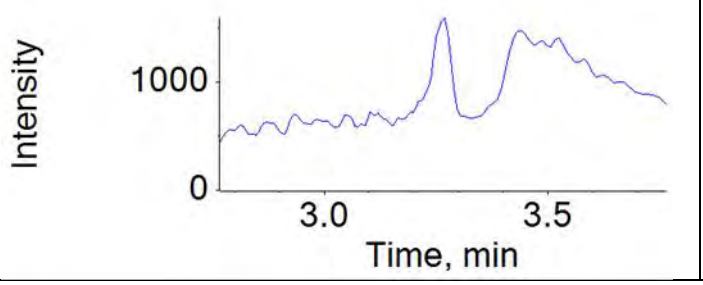


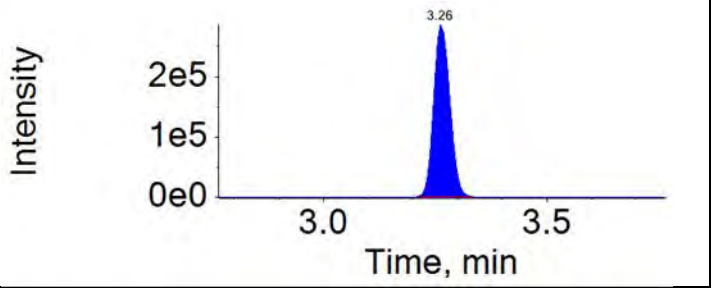
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

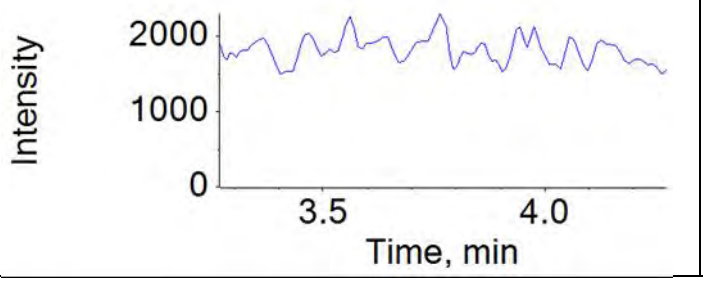
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

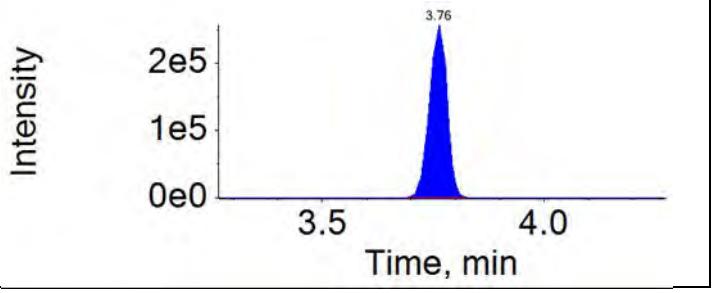
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



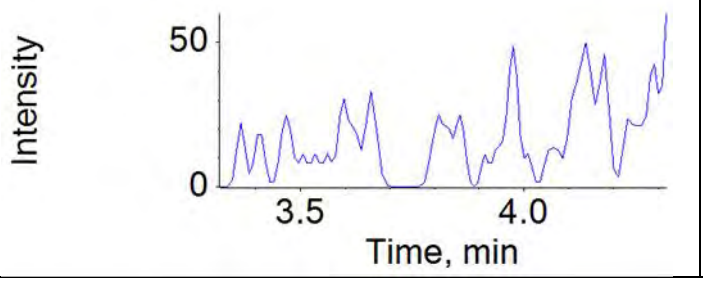


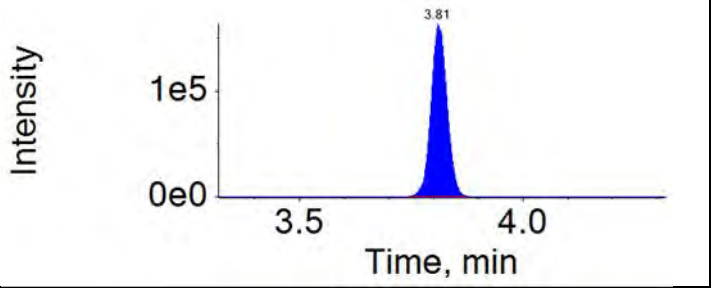
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



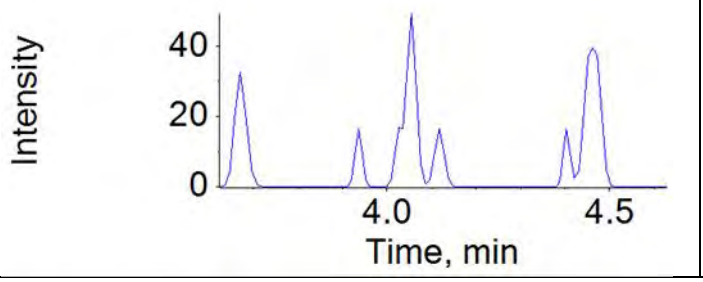


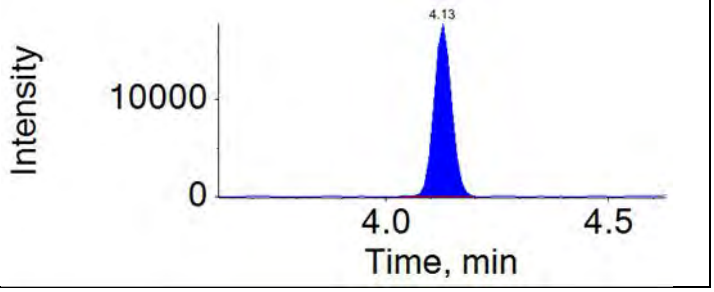
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



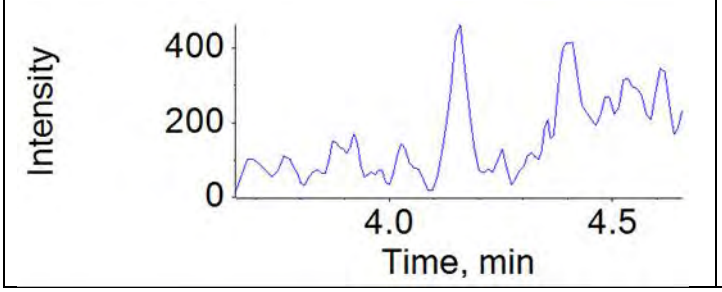


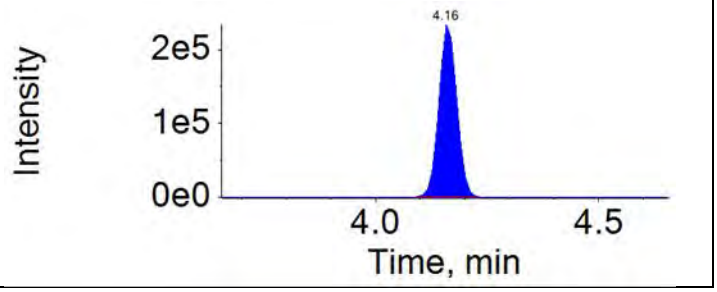
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

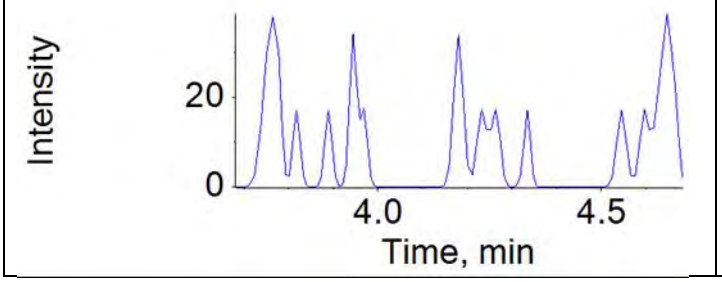
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

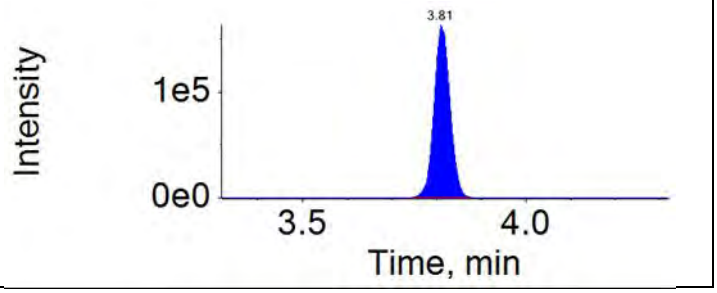
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



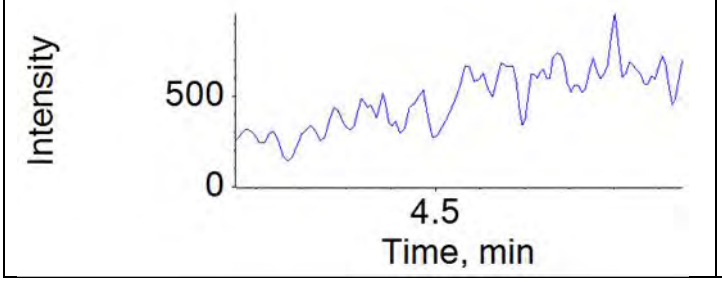


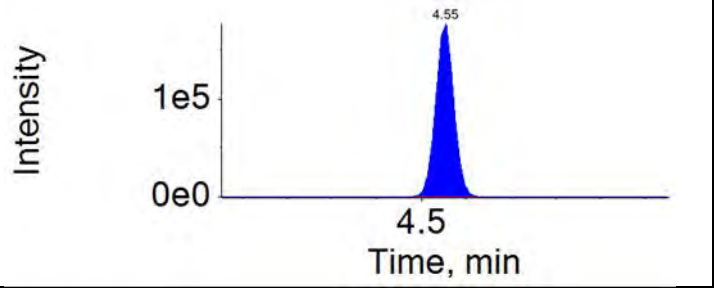
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



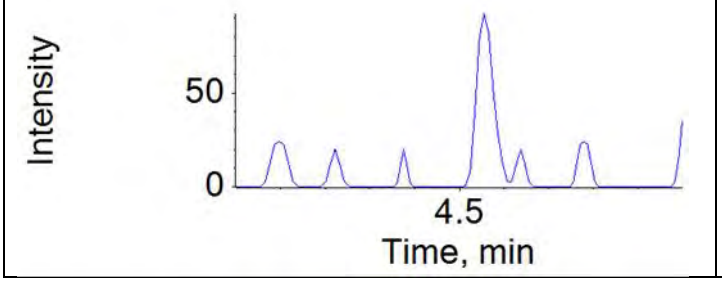


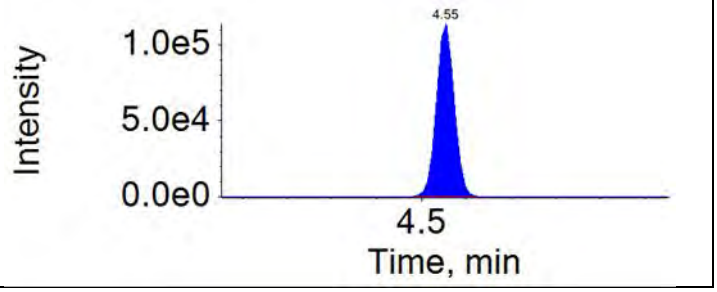
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

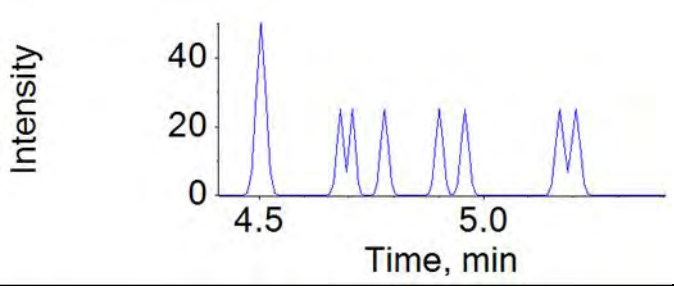
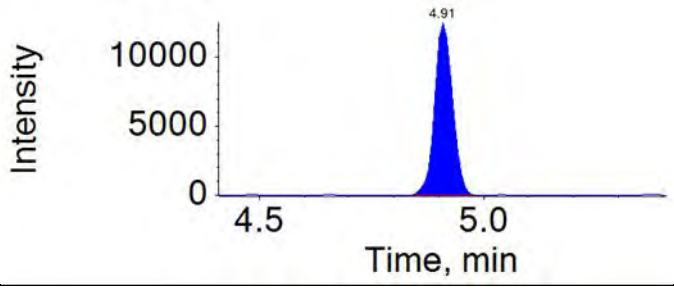


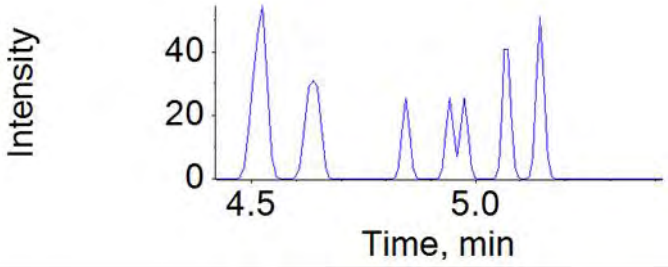
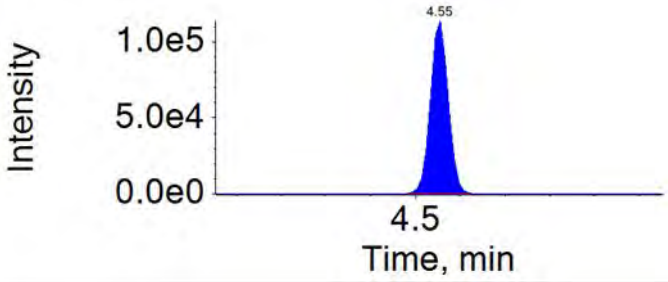


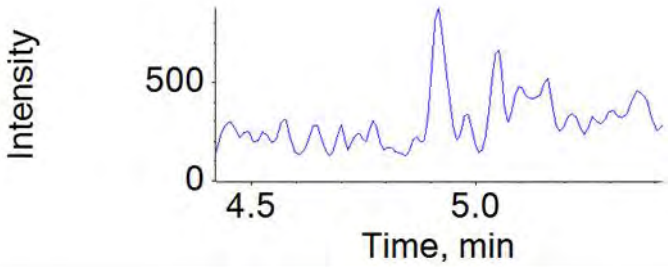
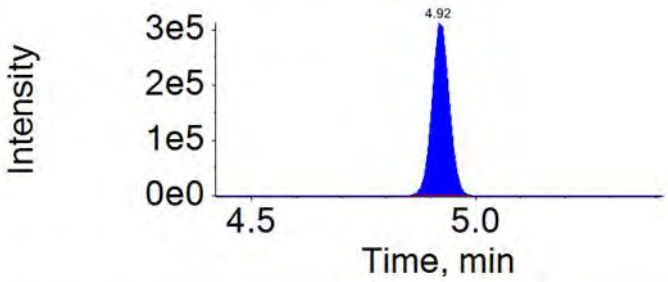
APPROVED
By JPT at 4:13 pm, 11/14/18

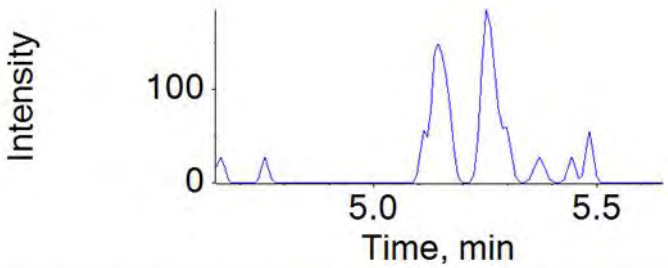
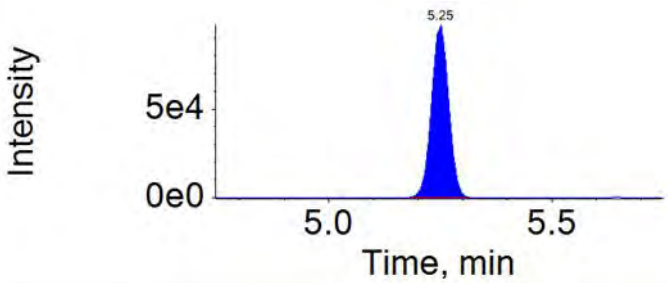
REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

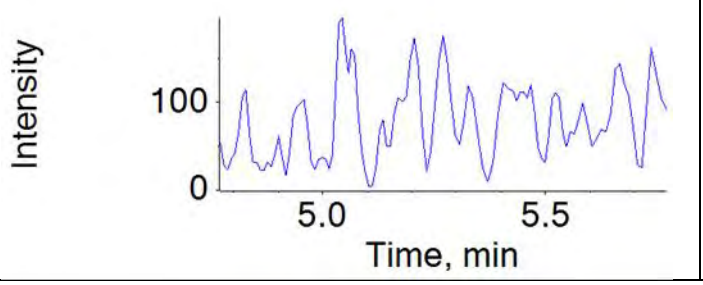
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

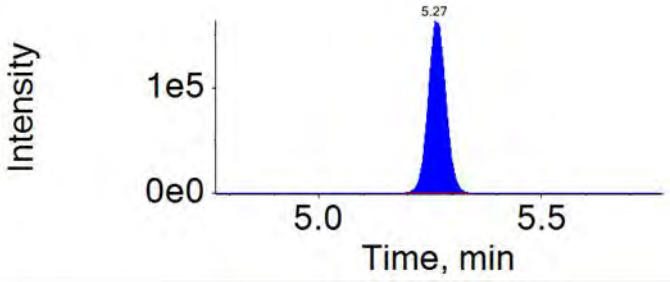
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

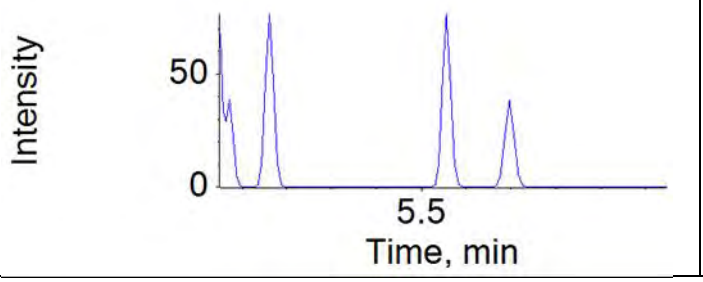
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

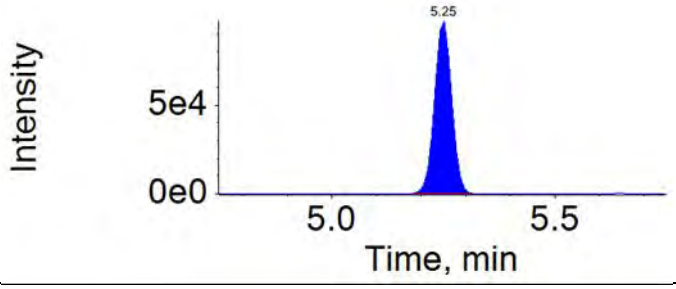
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



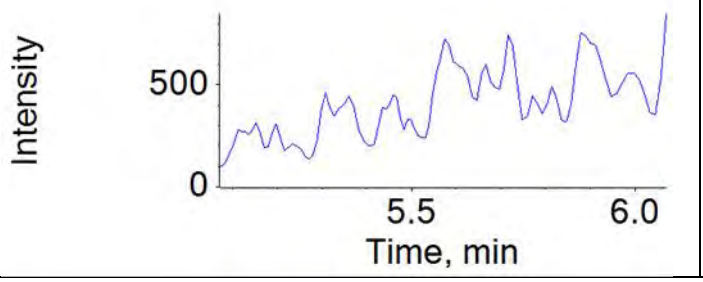


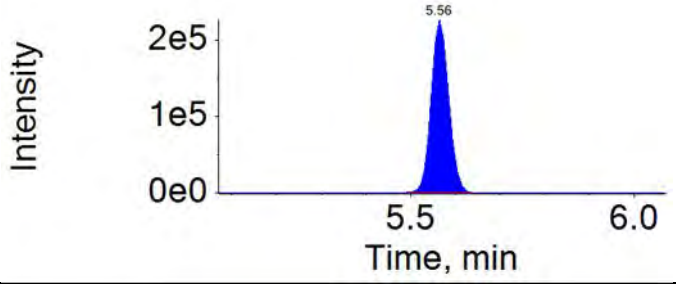
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



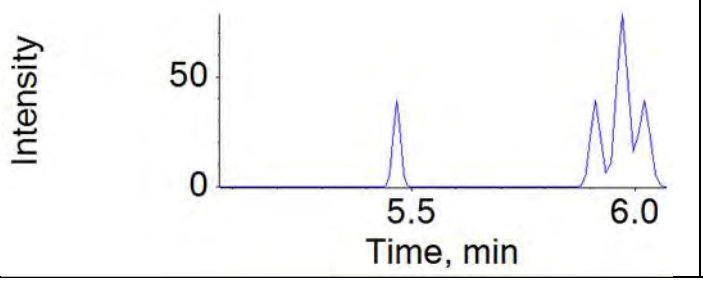


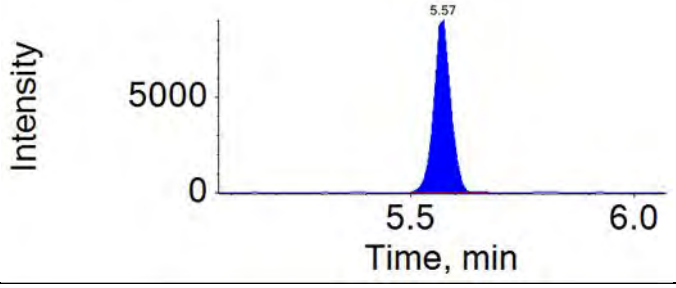
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



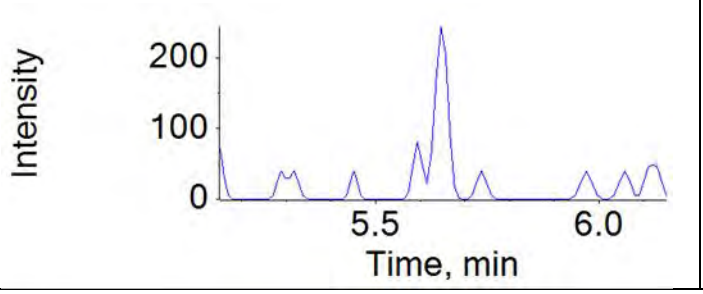


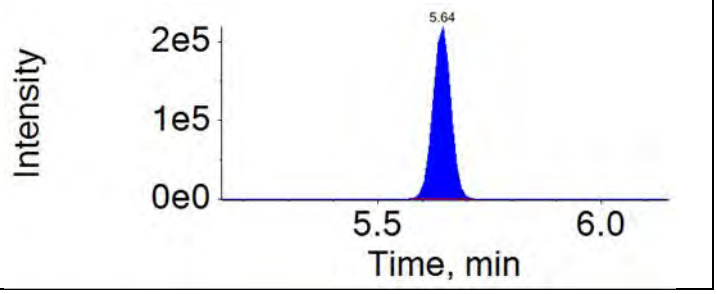
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

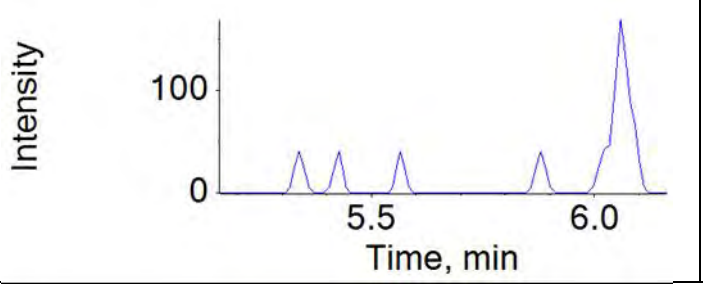
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

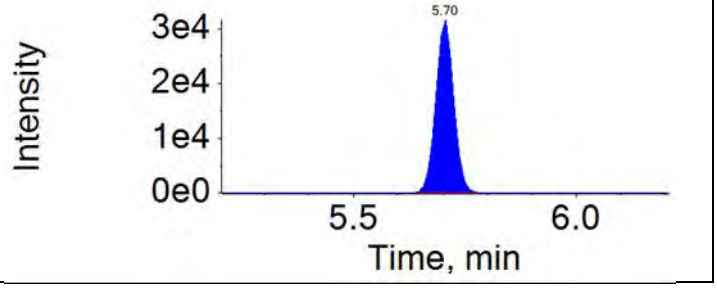
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



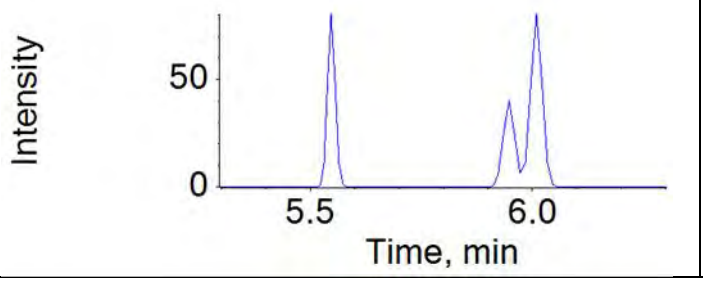


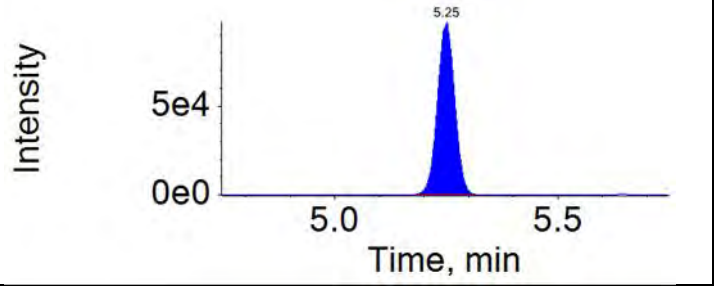
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



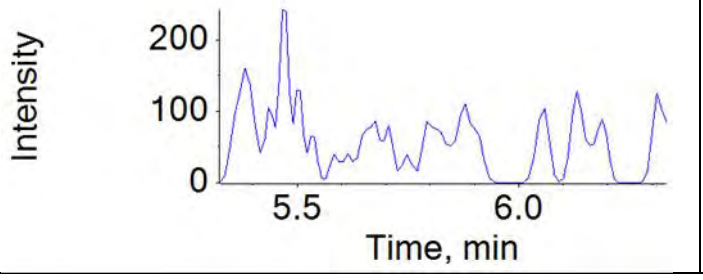


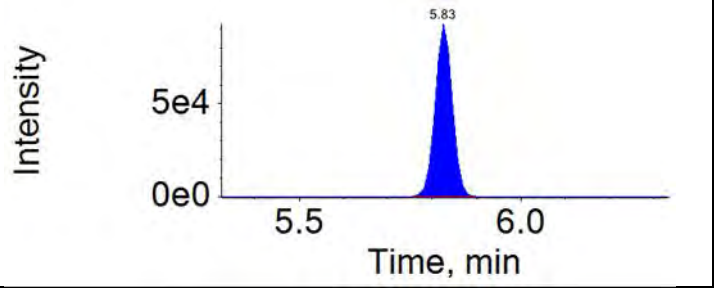
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



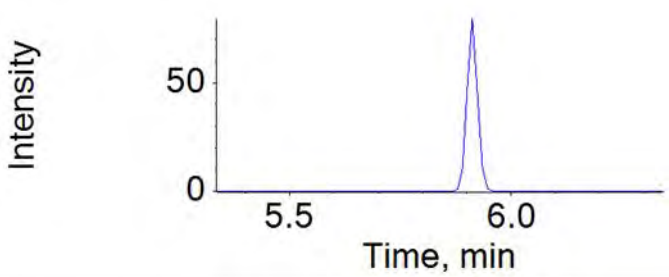


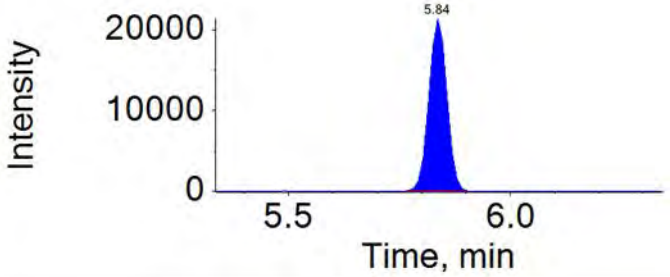
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

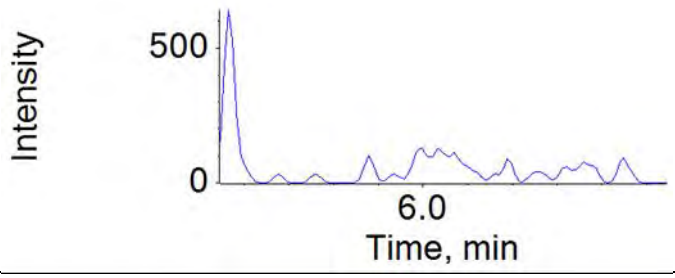
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

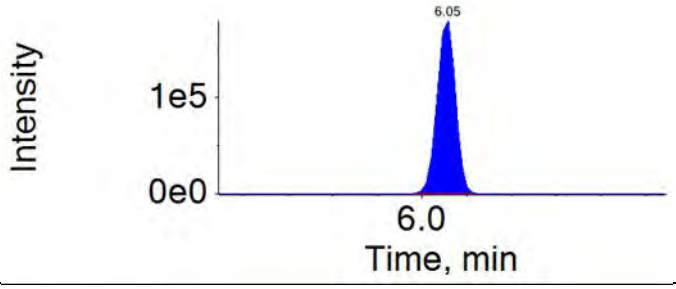
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



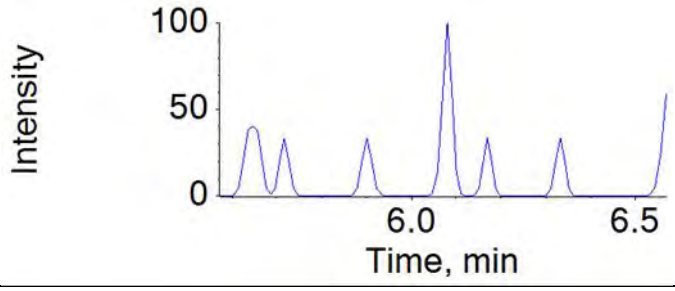


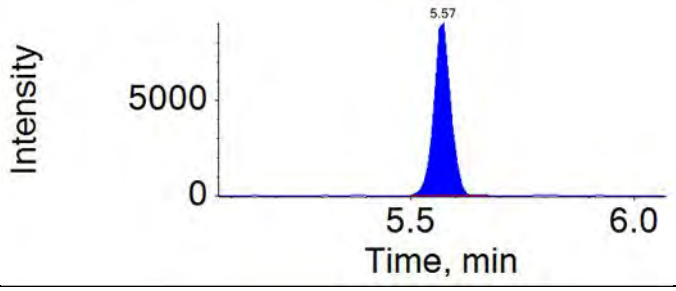
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



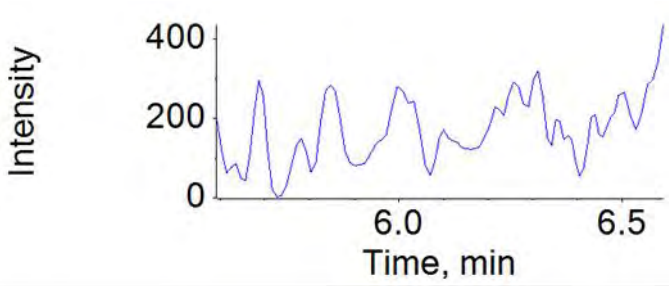


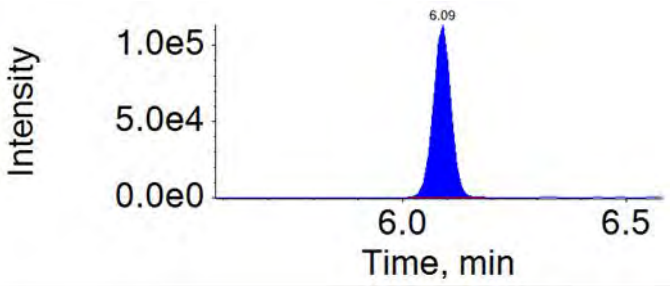
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



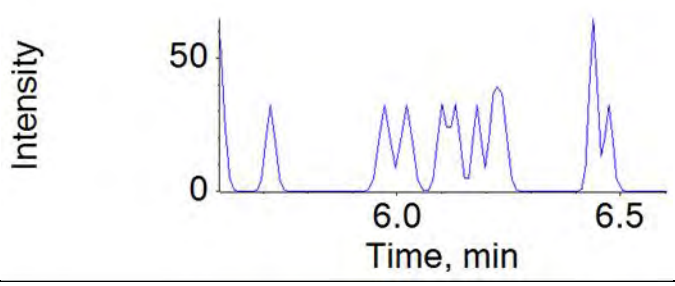


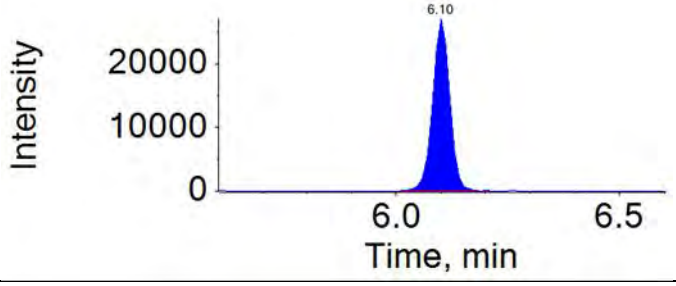
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

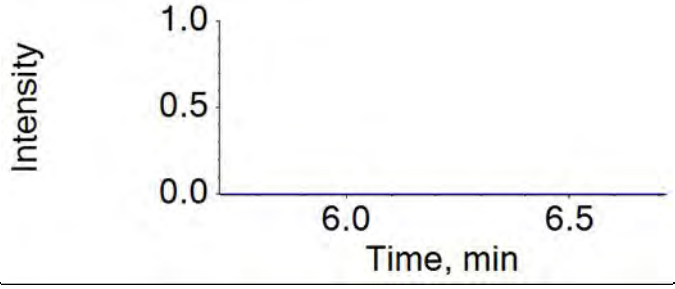
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

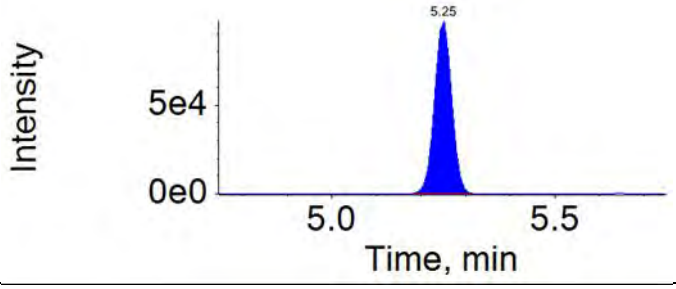
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



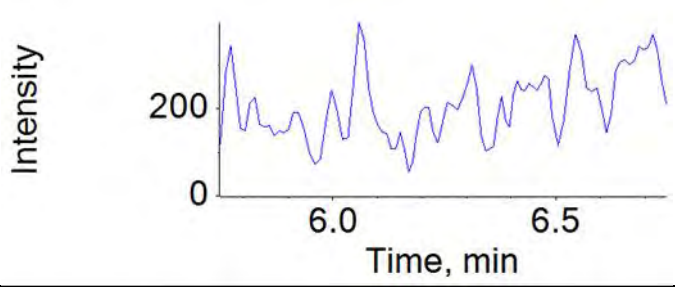


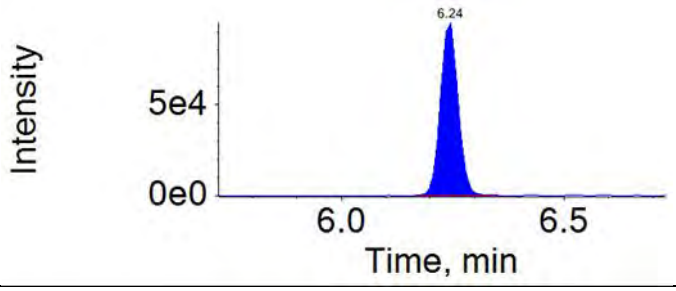
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



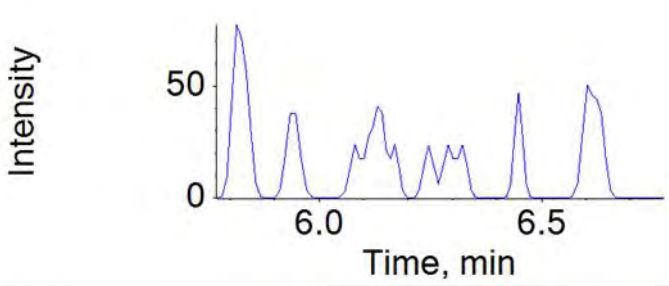


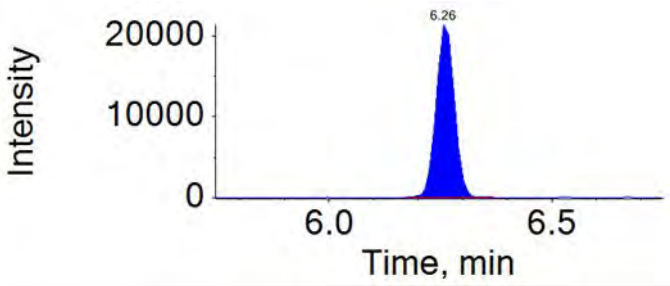
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



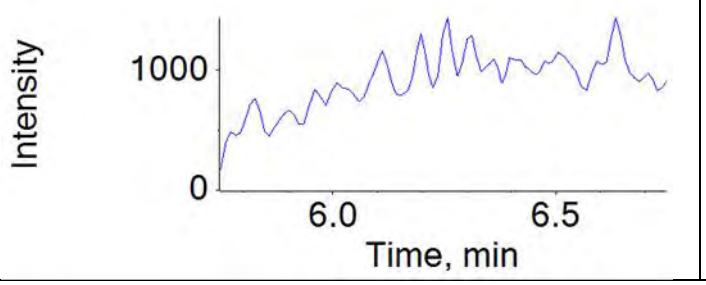


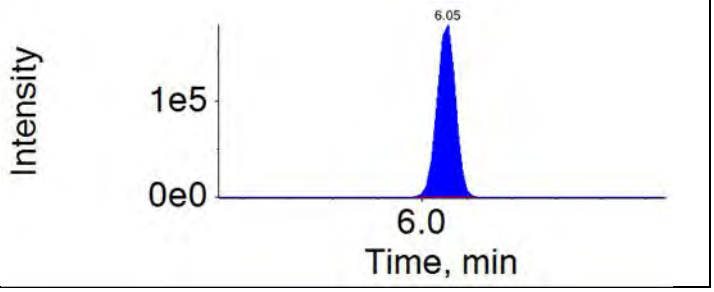
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By JPT at 4:13 pm, 11/14/18

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By HMK at 11:33 am, 11/15/18

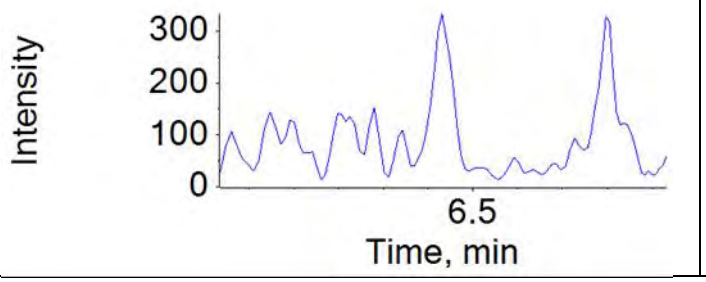
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

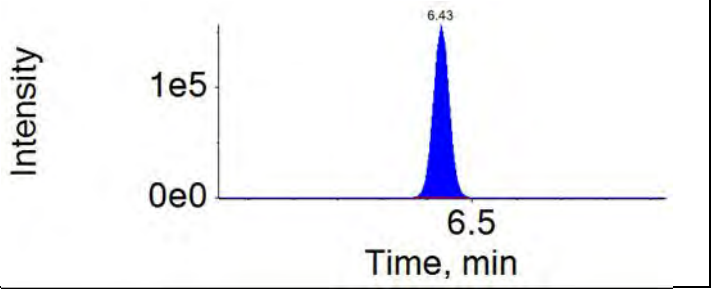
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



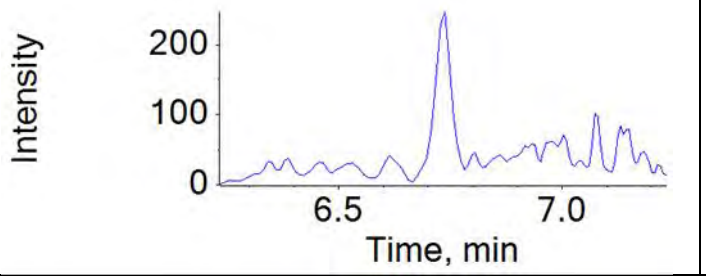


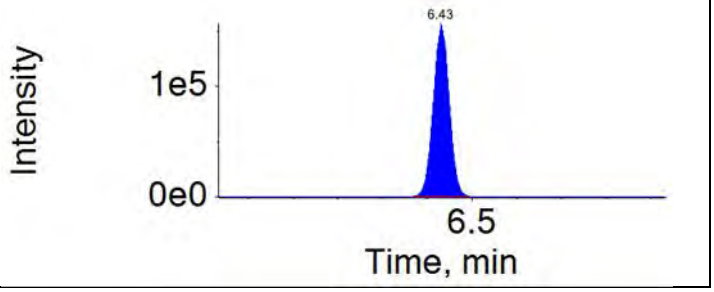
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



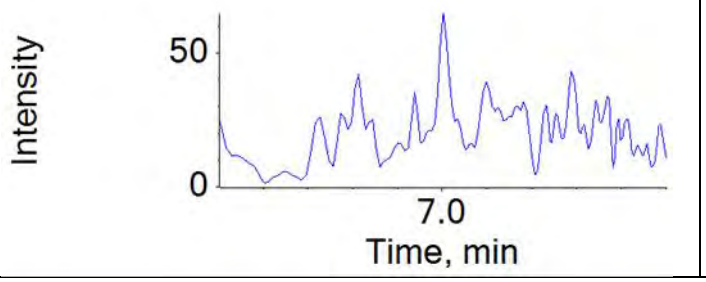


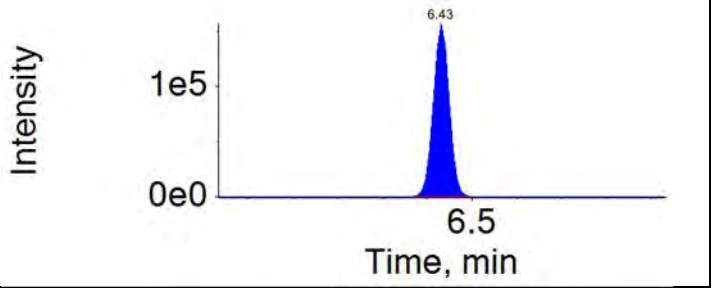
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0





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By JPT at 4:13 pm, 11/14/18

REVIEWED
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Ion Ratio Report

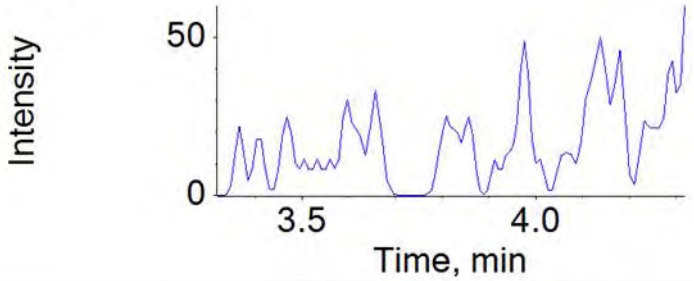
Sample Name: BLK316028 **Instrument Name:** LM27631 **File Name:** 18NOV13D-25.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	N/A	N/A	N/A	A	N/A	N/A			
PFBS_2	N/A	N/A	N/A	A	N/A	N/A		50	
4:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
4:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFHxA	N/A	N/A	N/A	A	N/A	N/A			
PFHxA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFPeS	N/A	N/A	N/A	A	N/A	N/A			
PFPeS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpA	N/A	N/A	N/A	A	N/A	N/A			
PFHpA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxS	N/A	N/A	N/A	A	N/A	N/A			
PFHxS_2	N/A	N/A	N/A	A	N/A	N/A		50	
6:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
6:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFHpS	N/A	N/A	N/A	A	N/A	N/A			
PFHpS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOA	N/A	N/A	N/A	A	N/A	N/A			
PFOA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOS	N/A	N/A	N/A	A	N/A	N/A			
PFOS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNA	N/A	N/A	N/A	A	N/A	N/A			
PFNA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNS	N/A	N/A	N/A	A	N/A	N/A			
PFNS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDA	N/A	N/A	N/A	A	N/A	N/A			
PFDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
8:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
8:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
NMeFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NMeFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDS	N/A	N/A	N/A	A	N/A	N/A			
PFDS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFUnDA	N/A	N/A	N/A	A	N/A	N/A			
PFUnDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
NEtFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NEtFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDoDA	N/A	N/A	N/A	A	N/A	N/A			
PFDoDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
10:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
10:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFTrDA	N/A	N/A	N/A	A	N/A	N/A			
PFTrDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTeDA	N/A	N/A	N/A	A	N/A	N/A			
PFTeDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxDA	N/A	N/A	N/A	A	N/A	N/A			
PFHxDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFODA	N/A	N/A	N/A	A	N/A	N/A			
PFODA_2	N/A	N/A	N/A	A	N/A	N/A		50	

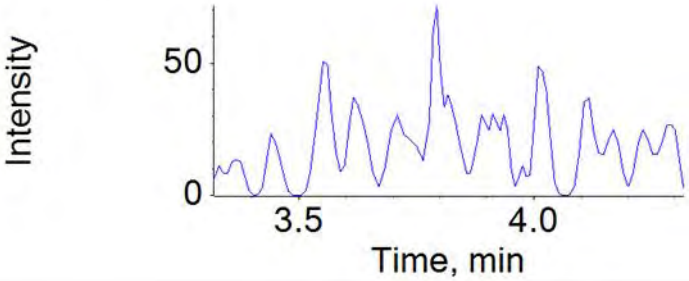
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

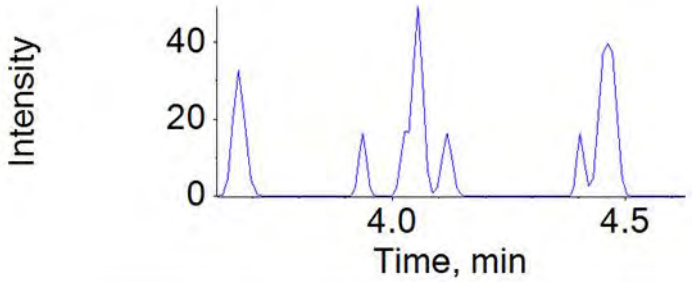
Component: PFBS
Primary Mass: 299.0 / 80.0



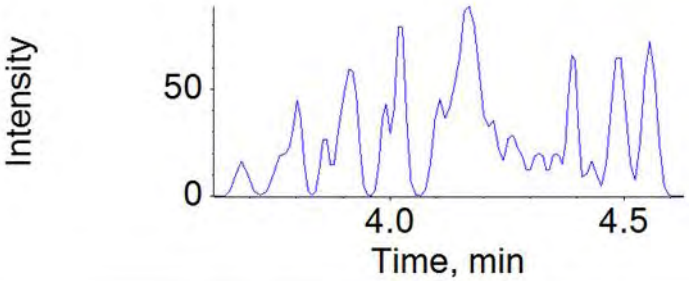
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



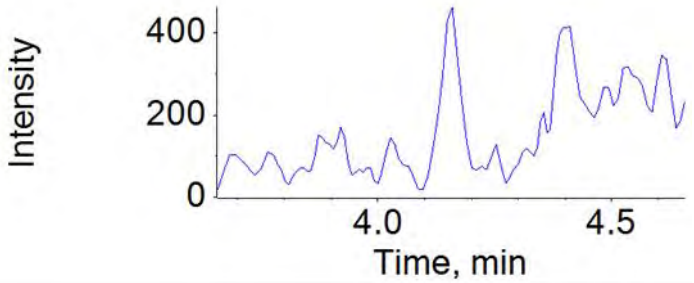
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



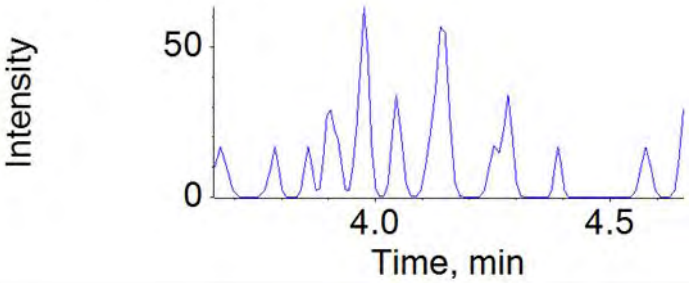
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



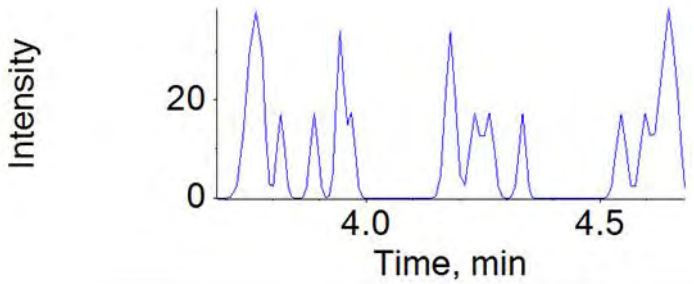
Component: PFHxA
Primary Mass: 313.0 / 269.0



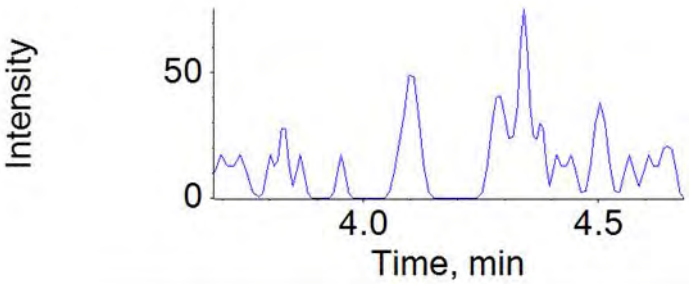
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



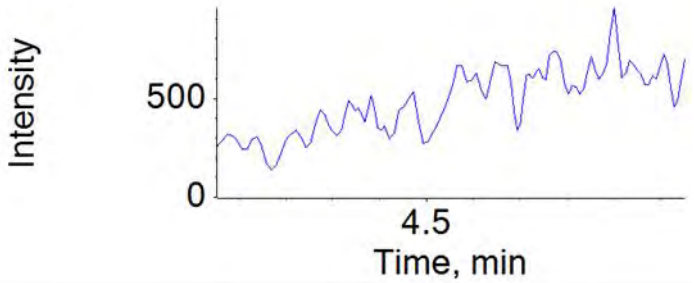
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



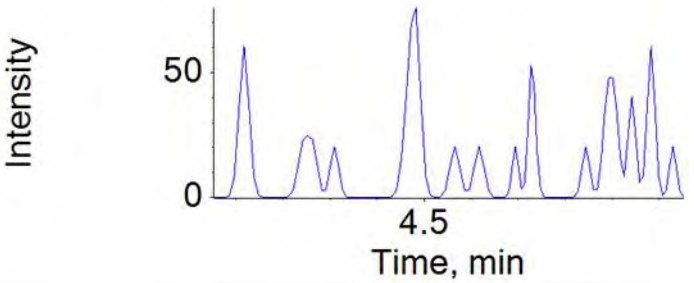
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

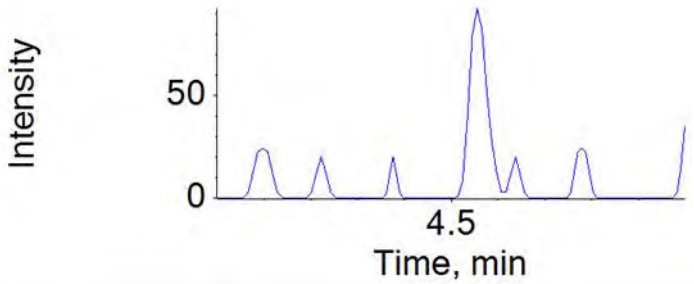
Component: PFHpA
Primary Mass: 363.0 / 319.0



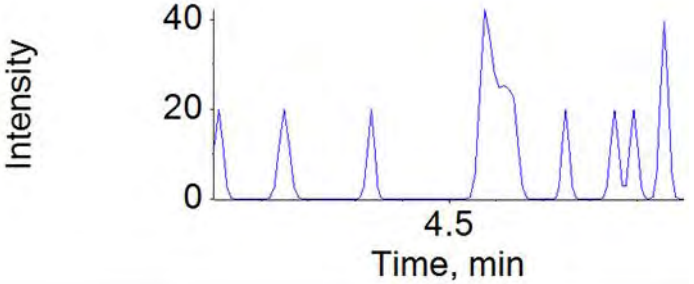
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



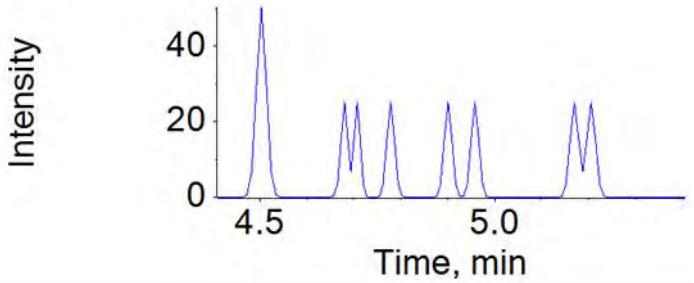
Component: PFHxS
Primary Mass: 399.0 / 80.0



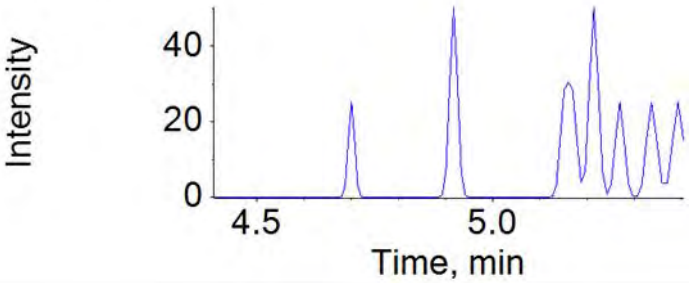
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



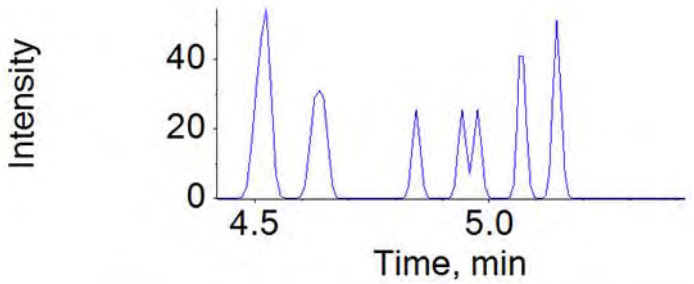
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



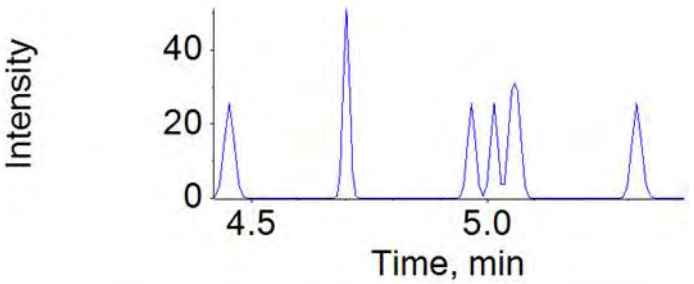
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



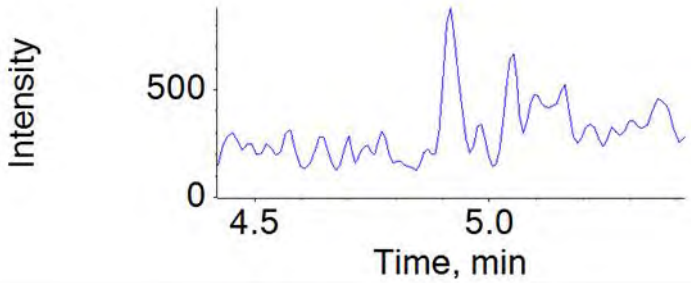
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



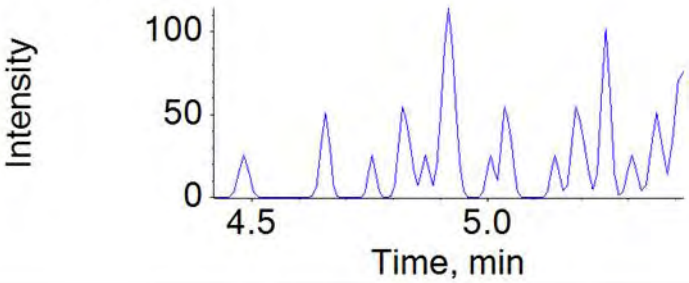
APPROVED
By JPT at 4:13 pm, 11/14/18

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By HMK at 11:33 am, 11/15/18

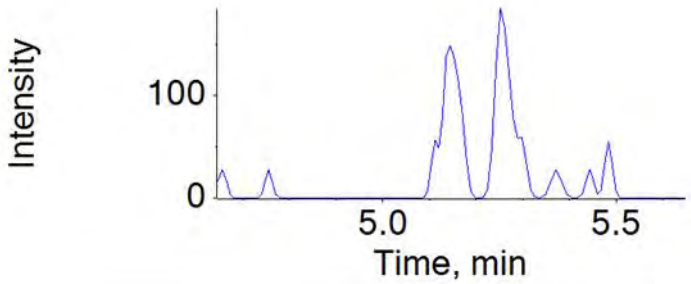
Component: PFOA
Primary Mass: 413.0 / 369.0



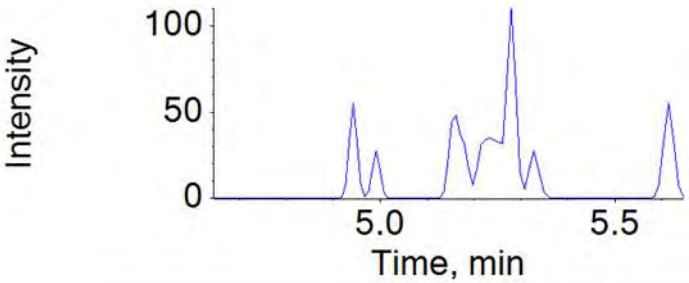
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



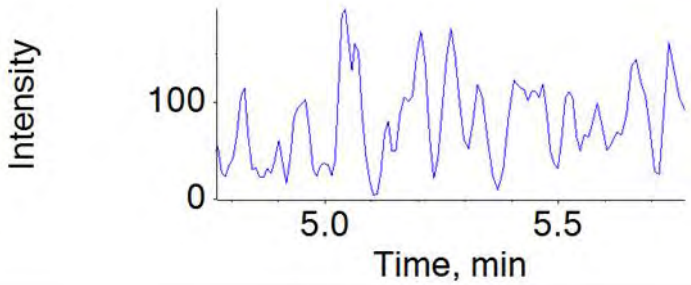
Component: PFOS
Primary Mass: 499.0 / 80.0



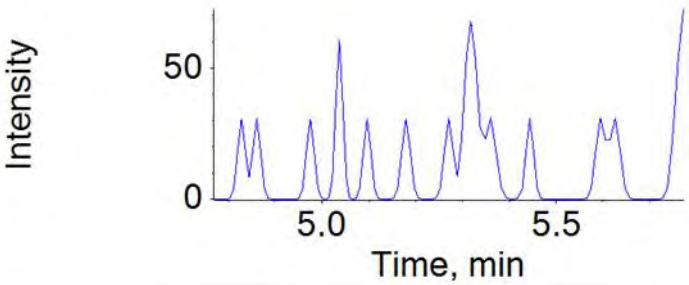
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



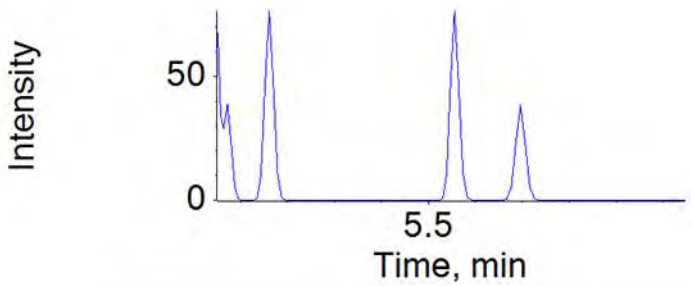
Component: PFNA
Primary Mass: 463.0 / 419.0



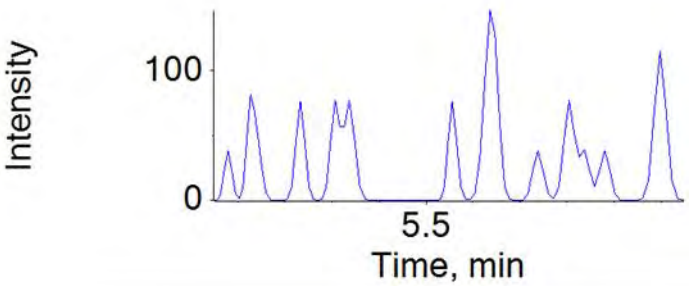
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



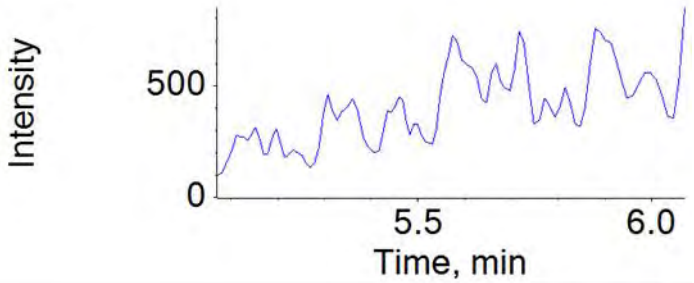
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



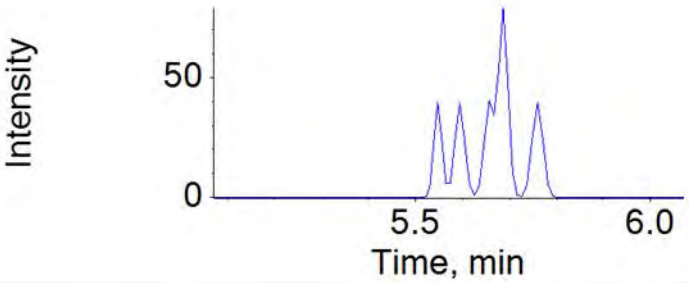
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

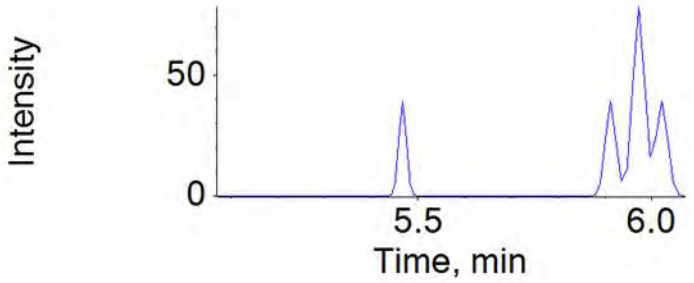
Component: PFDA
Primary Mass: 513.0 / 469.0



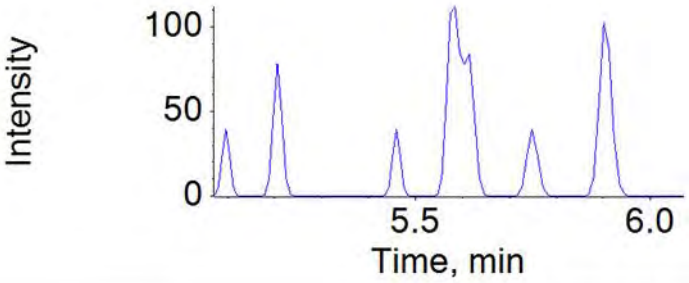
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



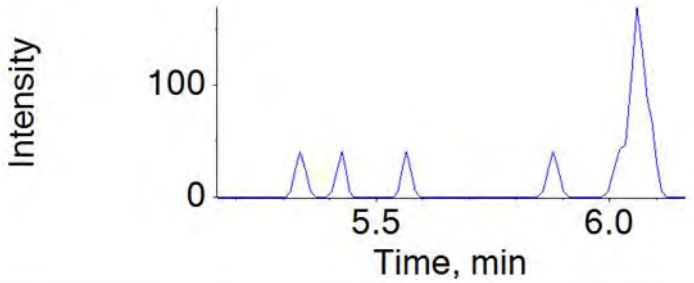
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



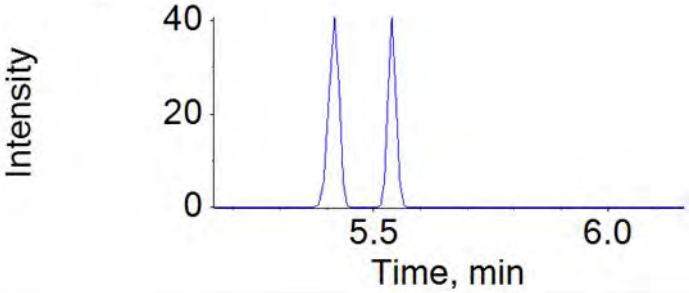
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



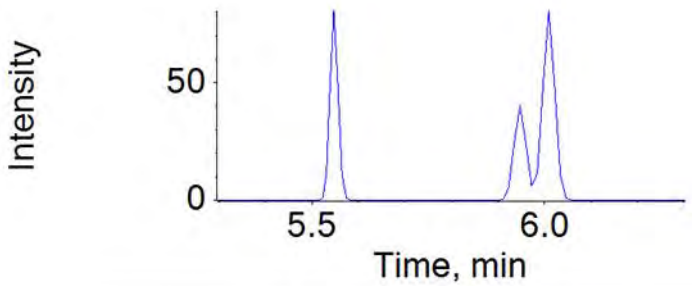
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



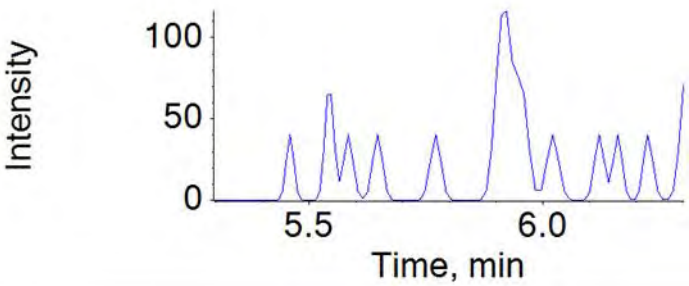
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



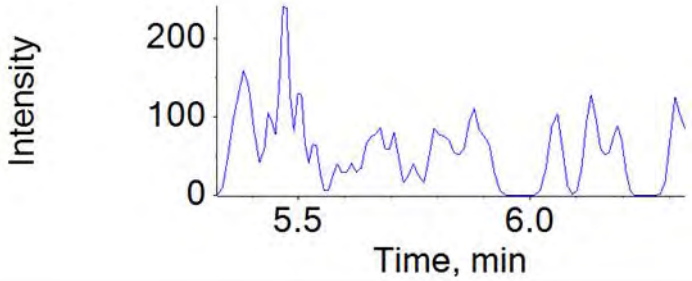
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Secondary Mass: 599.0 / 99.0



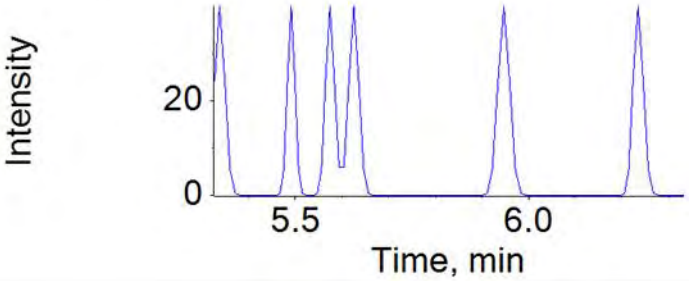
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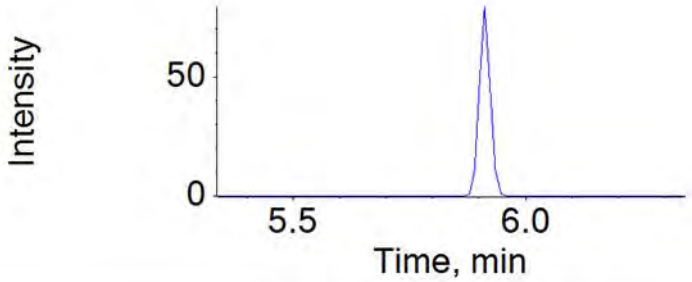
Component: PFUnDA
Primary Mass: 563.0 / 519.0



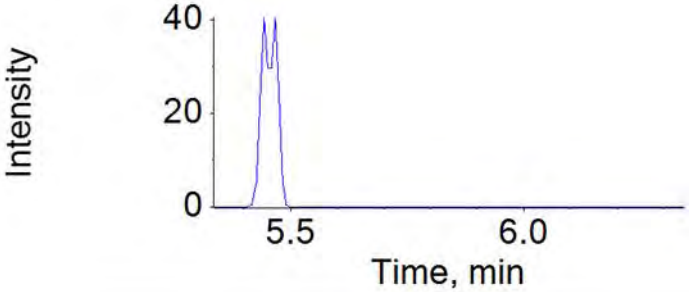
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



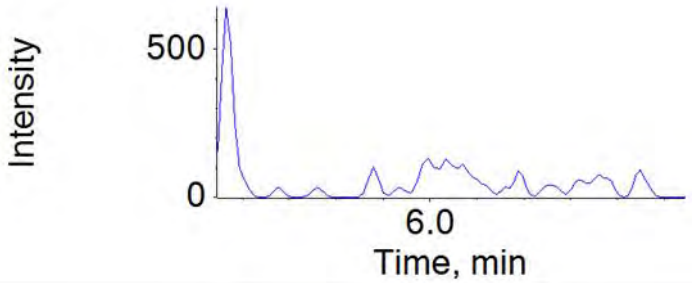
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



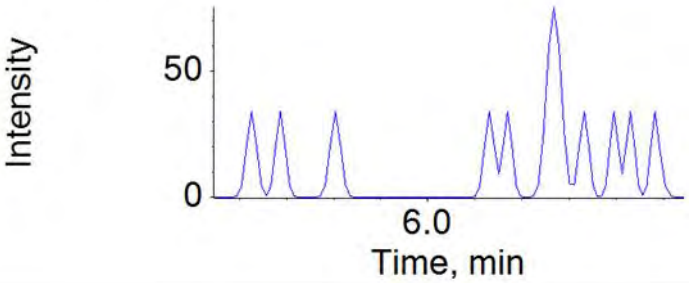
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



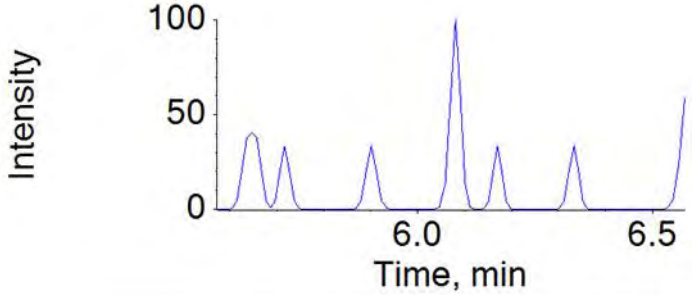
Component: PFDoDA
Primary Mass: 613.0 / 569.0



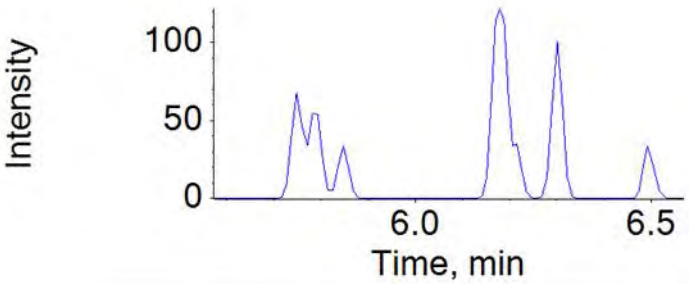
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



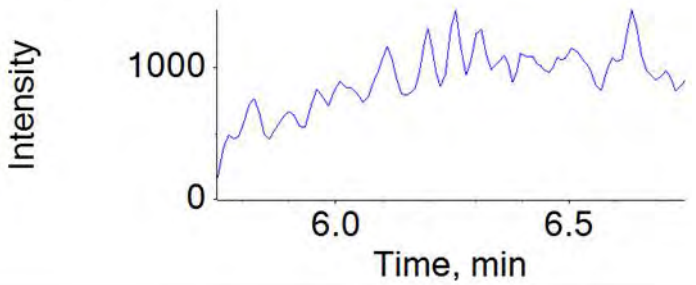
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



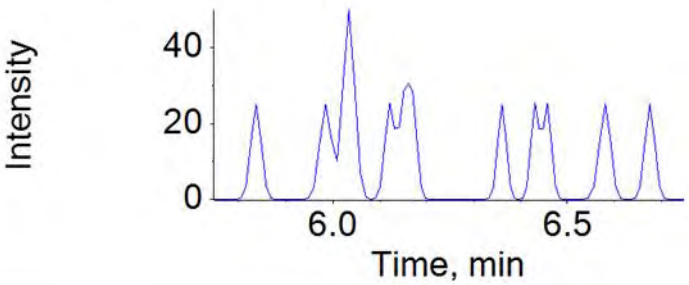
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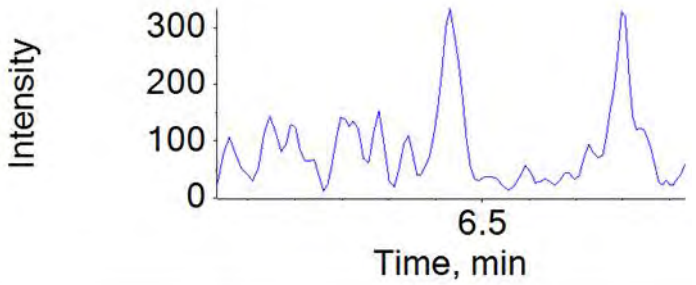
Component: PFTrDA
Primary Mass: 663.0 / 619.0



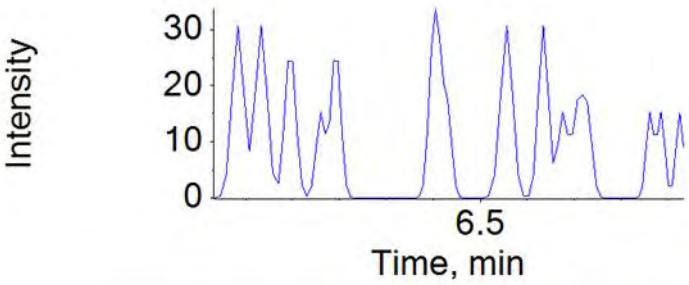
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



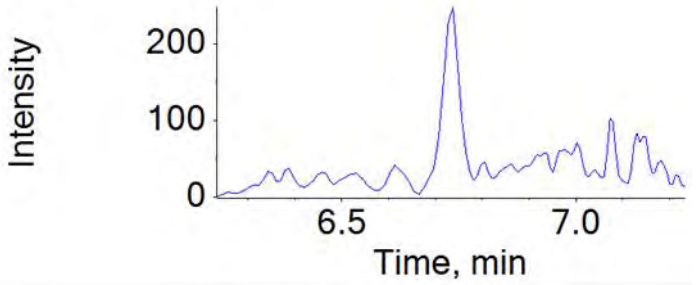
Component: PFTeDA
Primary Mass: 713.0 / 669.0



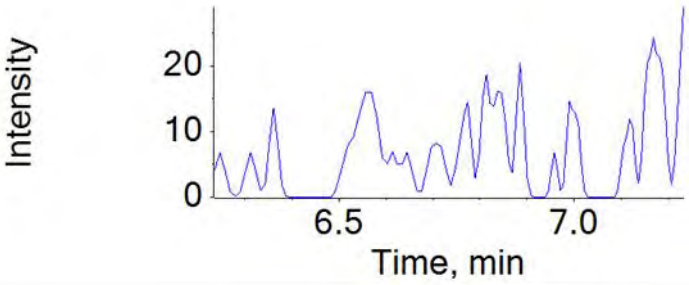
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



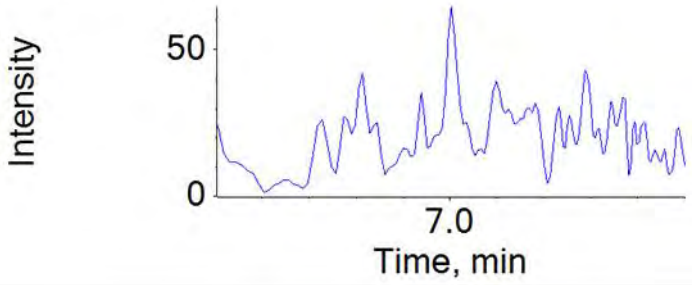
Component: PFHxDA
Primary Mass: 813.0 / 769.0



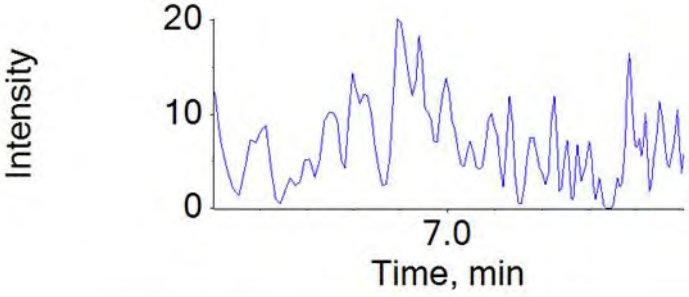
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	BLK319003			**Data File:**		18NOV15D-07.wiff
Sample ID:	EPA 537 mod QSM 5.1 table B-15 18319003			**Acquis Date:**		2018-11-15T12:57:12
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	25			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18319003
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	18319003			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		2.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV15D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	742585.3	732179.1	1	50	
13C2-PFOA	5.0	510635.8	479663.2	6	50	
13C4-PFOS	4.8	281649.3	269685.3	4	50	
13C2-PFDA	5.0	311632.0	302309.9	3	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	709228.9	13C3-PFBA	742585.3	0.955	10.000	8.564	86	50-150	
E13C5-PFPeA	681844.0	13C3-PFBA	742585.3	0.918	10.000	8.237	82	50-150	
E13C3-PFBS	367141.2	13C3-PFBA	742585.3	0.494	9.300	6.980	75	50-150	
E13C2-4:2-FTS	49033.5	13C2-PFOA	510635.8	0.096	9.340	8.554	92	50-150	
E13C5-PFHxA	587657.3	13C2-PFOA	510635.8	1.151	10.000	8.314	83	50-150	
E13C3-PFHxS	293554.8	13C2-PFOA	510635.8	0.575	9.460	7.890	83	50-150	
E13C4-PFHpA	489633.0	13C2-PFOA	510635.8	0.959	10.000	8.640	86	50-150	
E13C2-6:2-FTS	36333.3	13C2-PFOA	510635.8	0.071	9.500	9.521	100	50-150	
E13C8-PFOA	822063.6	13C2-PFOA	510635.8	1.610	10.000	8.871	89	50-150	
E13C8-PFOS	258528.6	13C4-PFOS	281649.3	0.918	9.560	8.134	85	50-150	
E13C9-PFNA	433269.4	13C4-PFOS	281649.3	1.538	10.000	8.578	86	50-150	
E13C6-PFDA	580673.2	13C2-PFDA	311632.0	1.863	10.000	8.697	87	50-150	
E13C2-8:2-FTS	25196.7	13C2-PFDA	311632.0	0.081	9.580	8.065	84	50-150	
E13C8-PFOSA	645025.6	13C2-PFDA	311632.0	2.070	10.000	9.178	92	50-150	
Ed3-NMeFOSAA	84691.7	13C2-PFDA	311632.0	0.272	10.000	9.811	98	50-150	
E13C7-PFUnDA	237867.0	13C2-PFDA	311632.0	0.763	10.000	8.863	89	50-150	
Ed5-NEtFOSAA	61364.4	13C2-PFDA	311632.0	0.197	10.000	8.332	83	50-150	
E13C2-PFDoDA	503994.2	13C2-PFDA	311632.0	1.617	10.000	8.398	84	50-150	
Ed7-NMePFOSAE	326361.2	13C2-PFDA	311632.0	1.047	10.000	9.064	91	50-150	
Ed3-NMePFOSA	74301.8	13C2-PFDA	311632.0	0.238	10.000	8.664	87	50-150	
Ed9-NEtPFOSAE	264458.0	13C2-PFDA	311632.0	0.849	10.000	8.827	88	50-150	
Ed5-NEtPFOSA	60107.7	13C2-PFDA	311632.0	0.193	10.000	9.049	90	50-150	
E13C2-PFTeDA	348872.4	13C2-PFDA	311632.0	1.120	10.000	7.860	79	50-150	





ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

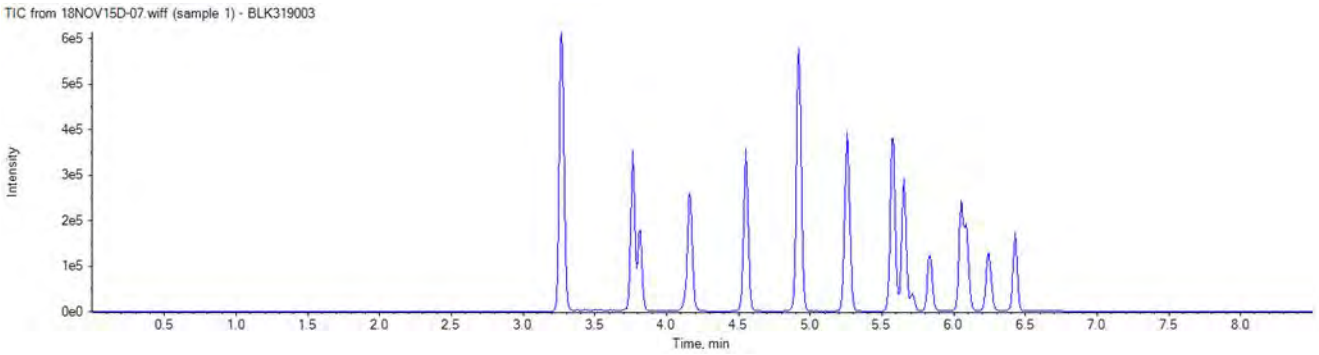
Analyte Quantitation Peak Table

Sample Name: BLK319003 **Instrument Name:** LM27631 **File Name:** 18NOV15D-07.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	2.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	N/A	N/A	N/A		A	13C4-PFBA	3.27	709228.9	N/A	
PFPeA	N/A	N/A	N/A		A	13C5-PFPeA	3.76	681844.0	N/A	
PFBS	N/A	N/A	N/A		A	13C3-PFBS	3.81	367141.2	N/A	
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.13	49033.5	N/A	
PFHxA	N/A	N/A	N/A		A	13C5-PFHxA	4.16	587657.3	N/A	
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.81	367141.2	N/A	
PFHpA	N/A	N/A	N/A		A	13C4-PFHpA	4.55	489633.0	N/A	
PFHxS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	293554.8	N/A	
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.91	36333.3	N/A	
PFHpS	N/A	N/A	N/A		A	13C3-PFHxS	4.55	293554.8	N/A	
PFOA	N/A	N/A	N/A		A	13C8-PFOA	4.92	822063.6	N/A	
PFOS	N/A	N/A	N/A		A	13C8-PFOS	5.25	258528.6	N/A	
PFNA	N/A	N/A	N/A		A	13C9-PFNA	5.27	433269.4	N/A	
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.25	258528.6	N/A	
PFDA	N/A	N/A	N/A		A	13C6-PFDA	5.57	580673.2	N/A	
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.58	25196.7	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.65	645025.6	N/A	
NMeFOSAA	N/A	N/A	N/A		A	d3-NMeFOSAA	5.71	84691.7	N/A	
PFDS	N/A	N/A	N/A		A	13C8-PFOS	5.25	258528.6	N/A	
PFUnDA	N/A	N/A	N/A		A	13C7-PFUnDA	5.83	237867.0	N/A	
NEtFOSAA	N/A	N/A	N/A		A	d5-NEtFOSAA	5.84	61364.4	N/A	
PFDoDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	503994.2	N/A	
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.58	25196.7	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.09	326361.2	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.10	74301.8	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.25	258528.6	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.24	264458.0	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.26	60107.7	N/A	
PFTrDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.05	503994.2	N/A	
PFTeDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	348872.4	N/A	
PFHxDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	348872.4	N/A	
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.43	348872.4	N/A	

Total Ion Chromatogram

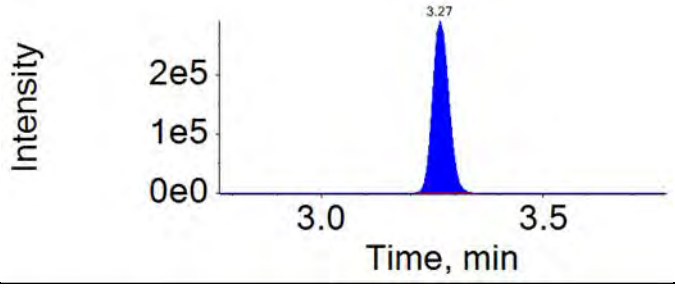


APPROVED
By JPT at 10:38 am, 11/19/18

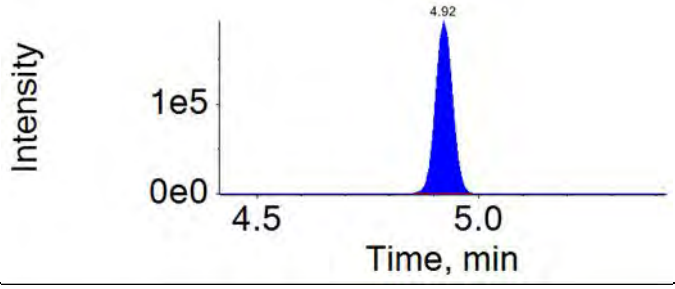
REVIEWED
By HMK at 11:46 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

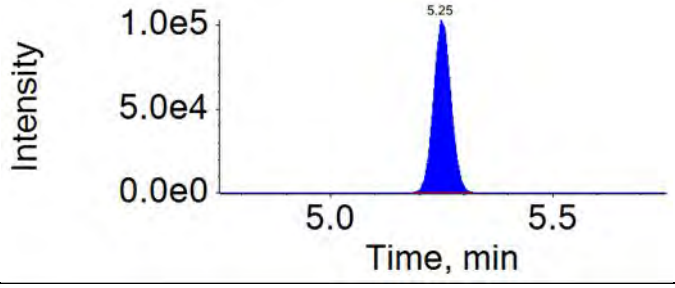
Injection Standard: 13C3-PFBA
216.0 / 172.0



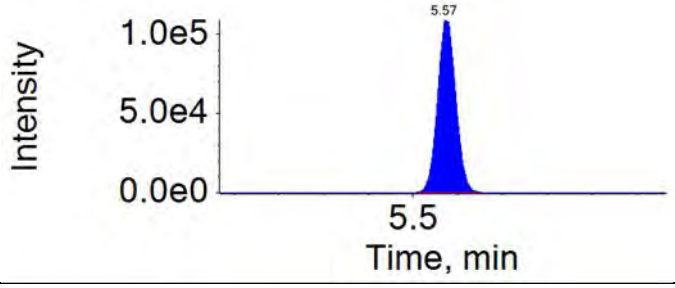
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

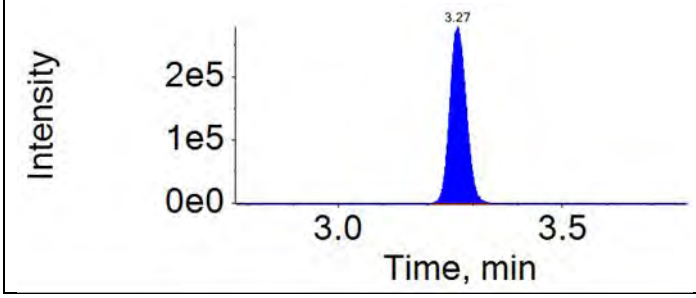


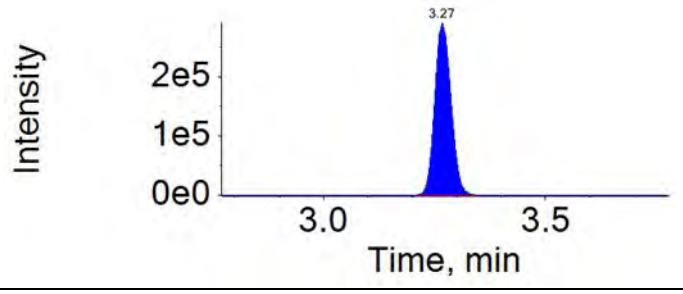
APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

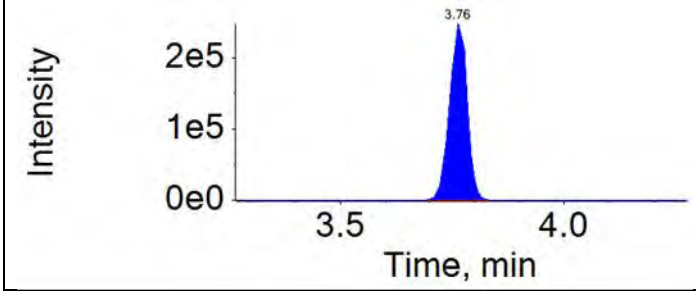
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

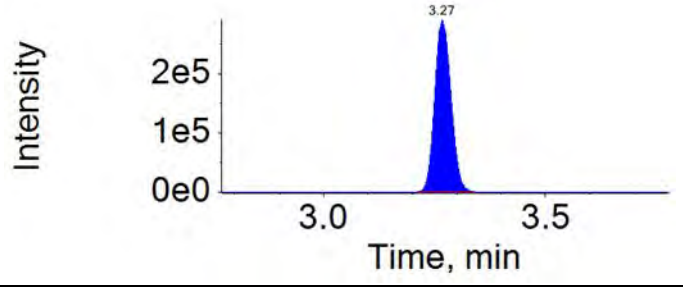
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



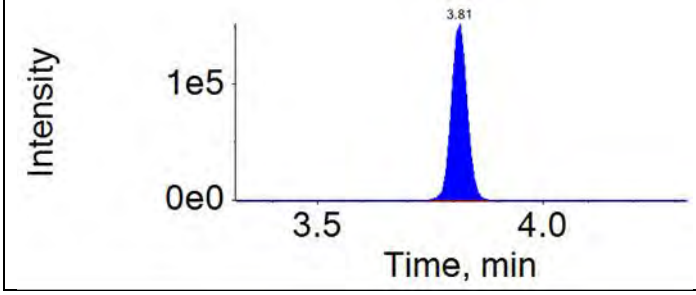


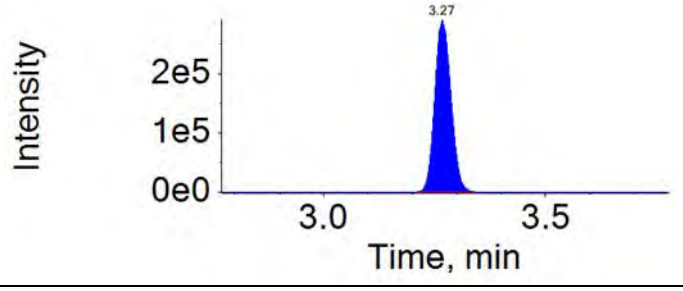
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



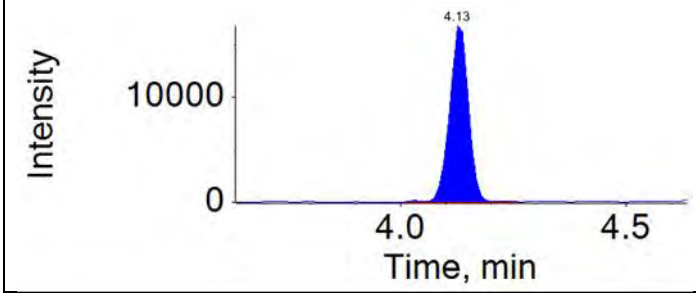


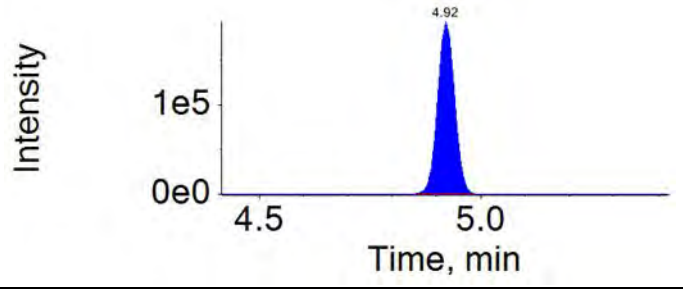
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



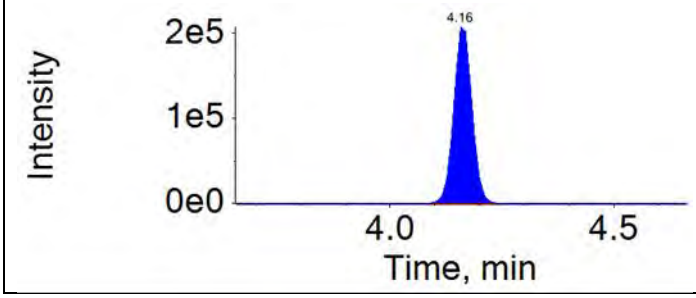


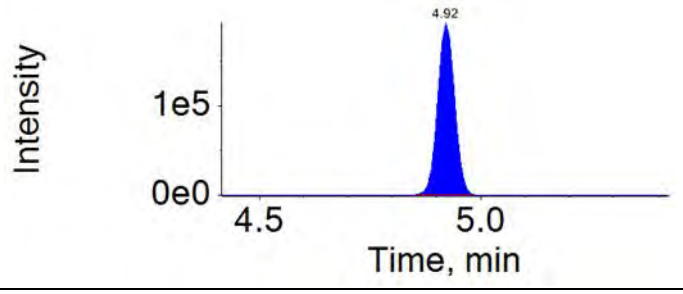
APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

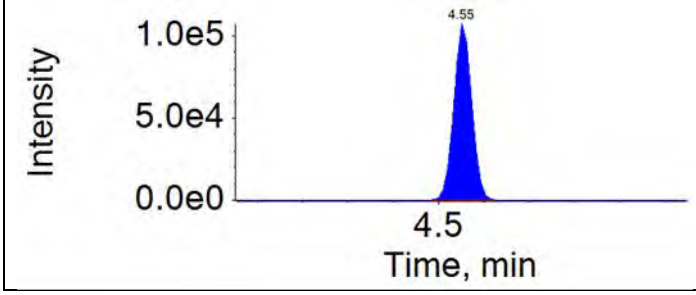
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

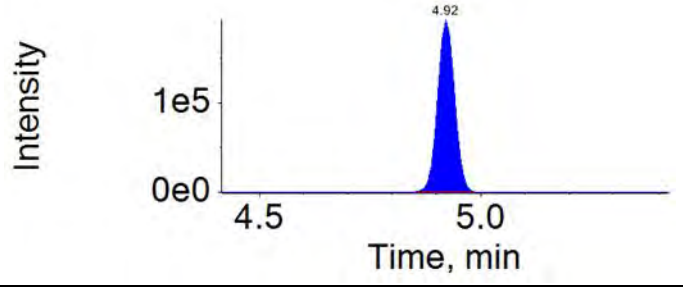
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



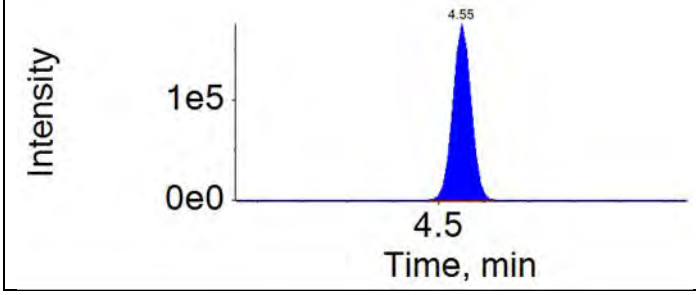


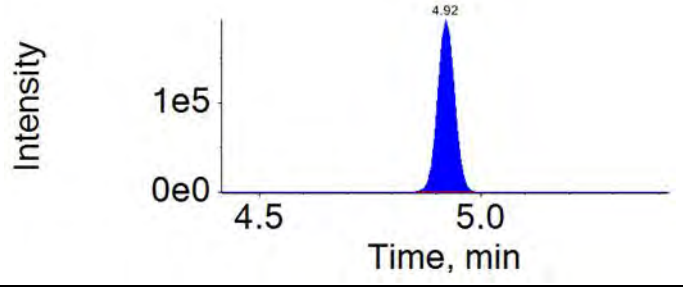
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



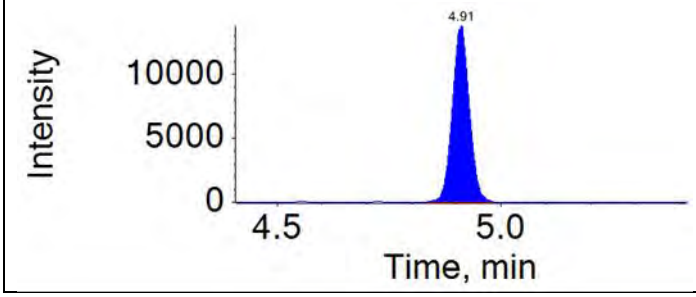


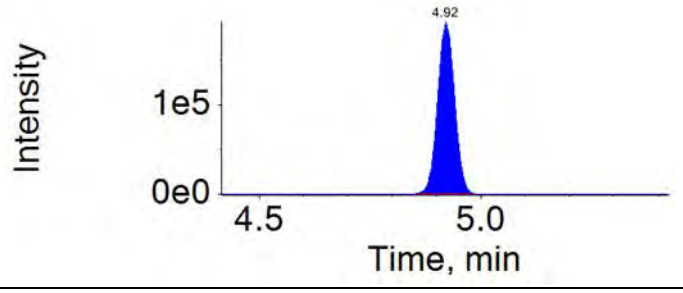
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

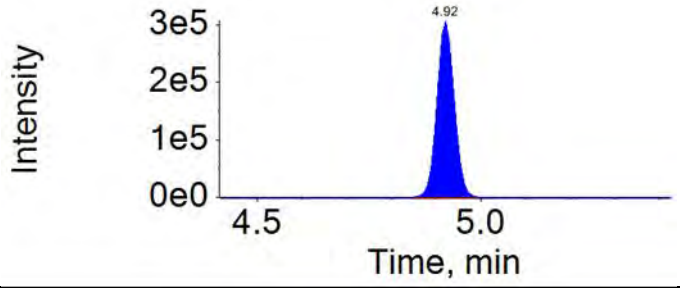
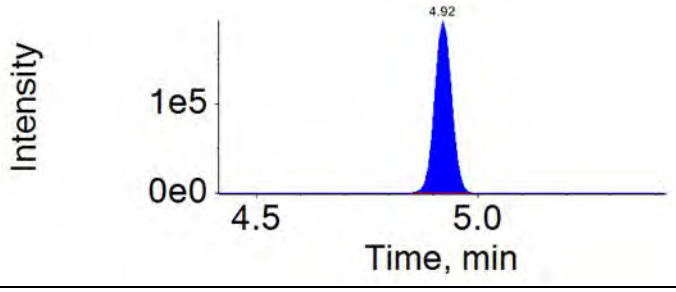


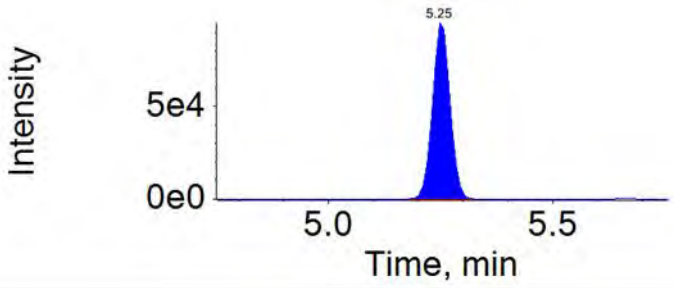
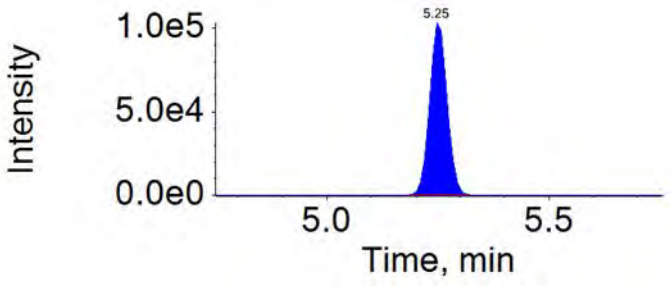


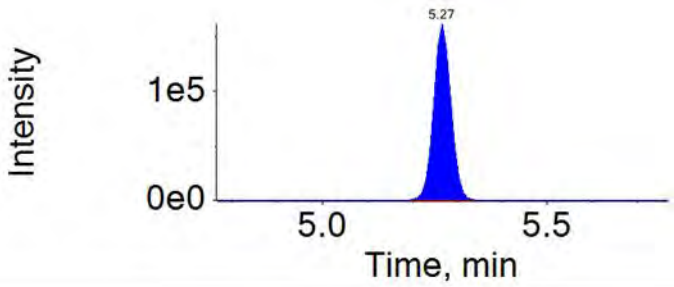
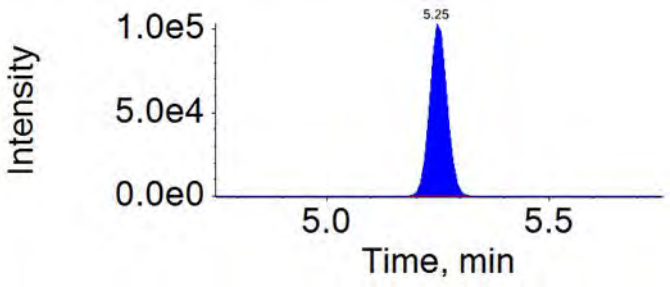
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By JPT at 10:38 am, 11/19/18

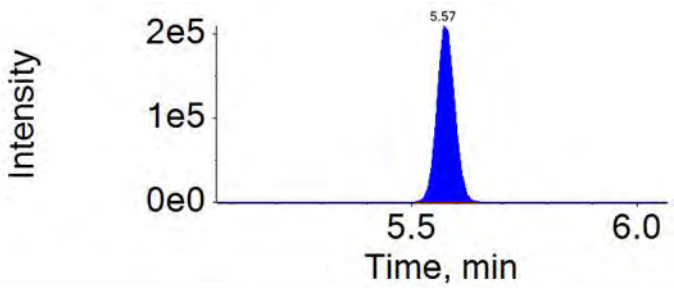
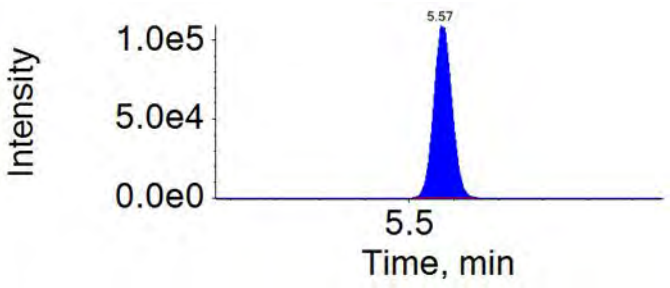
REVIEWED
By HMK at 11:46 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

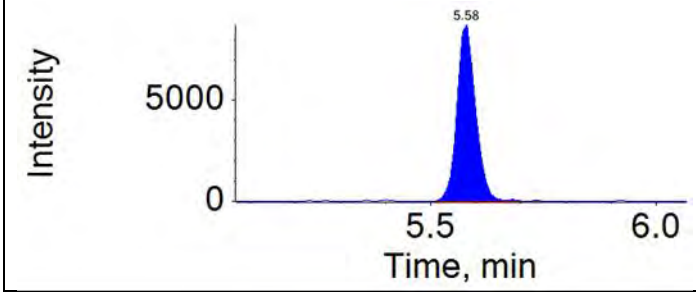
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

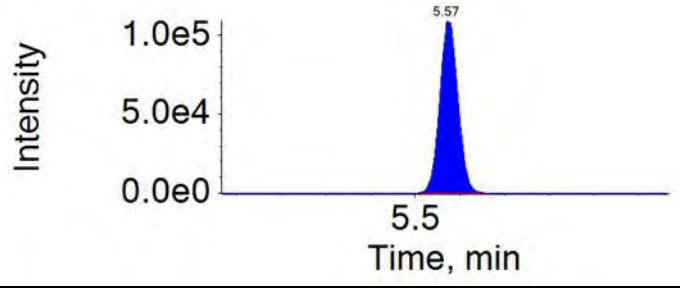
APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

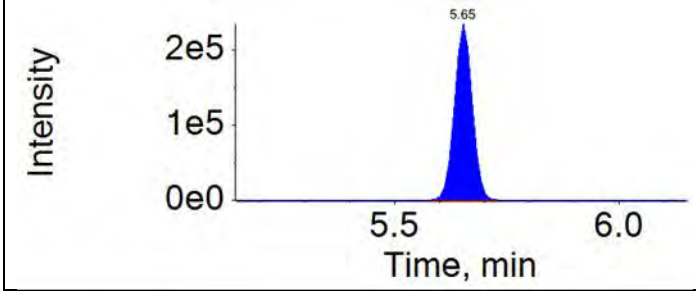
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

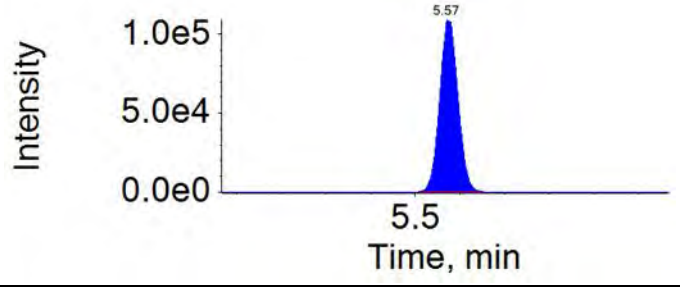
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



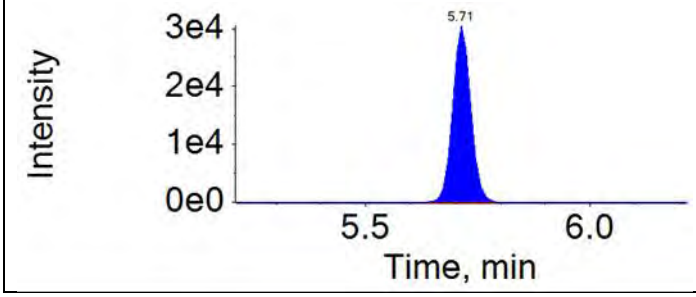


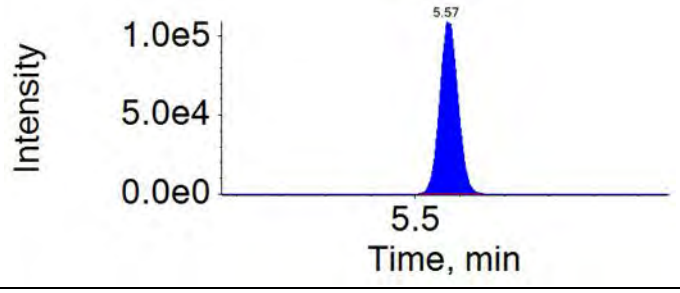
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



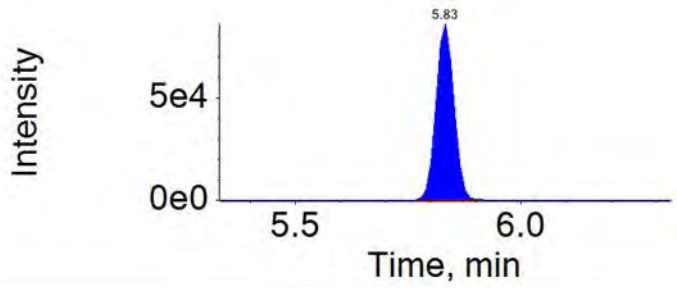


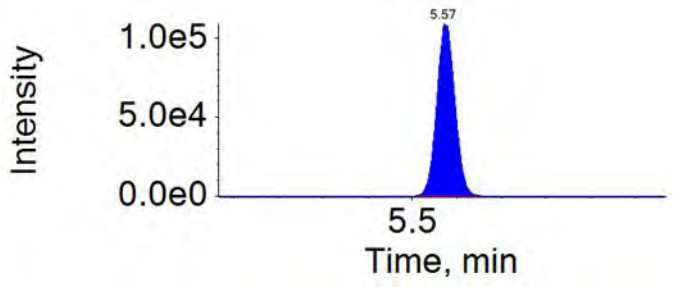
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0



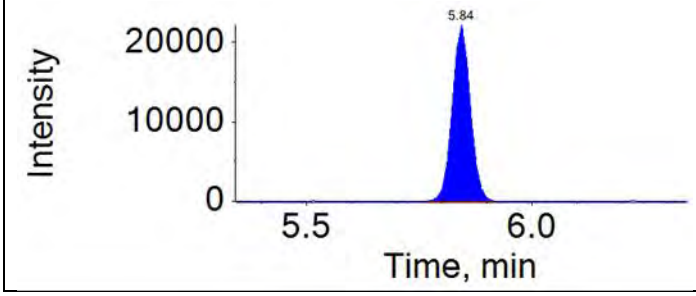


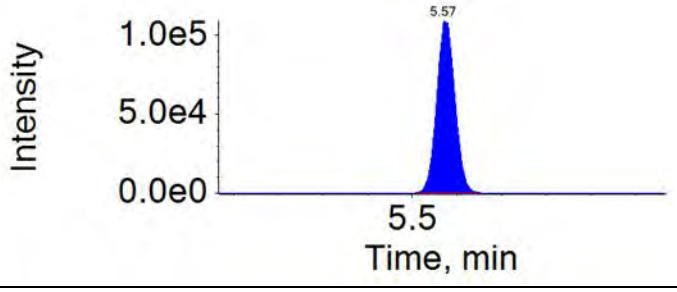
APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

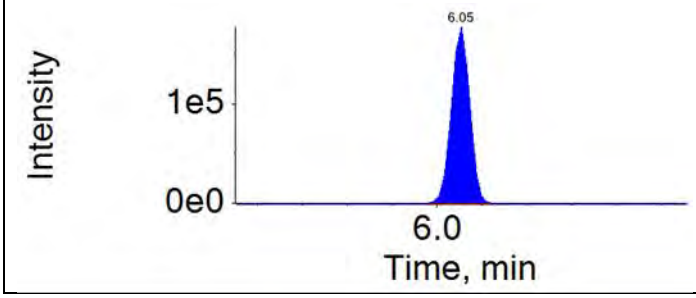
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

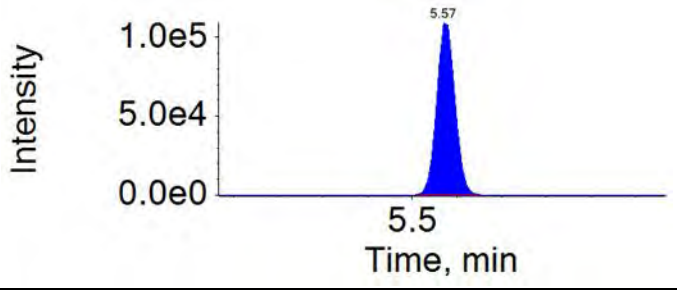
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



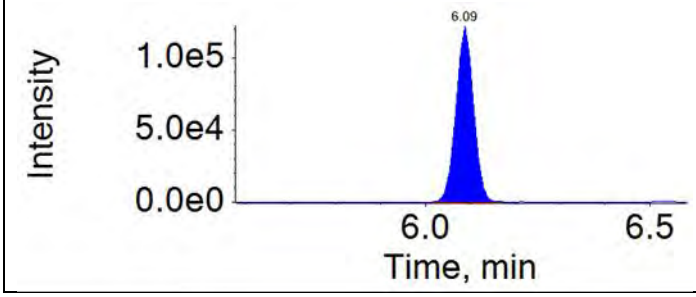


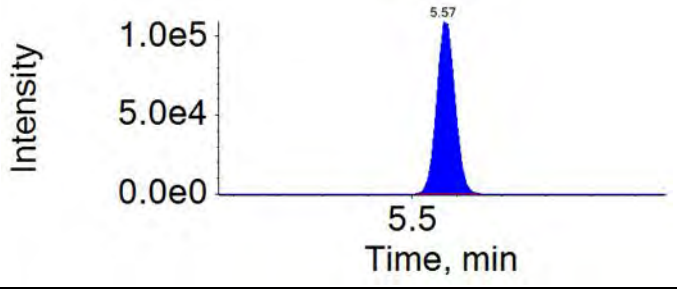
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



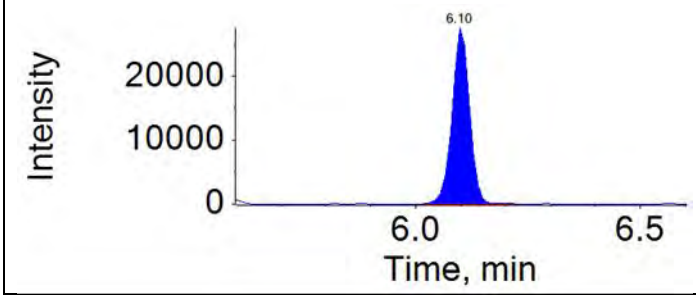


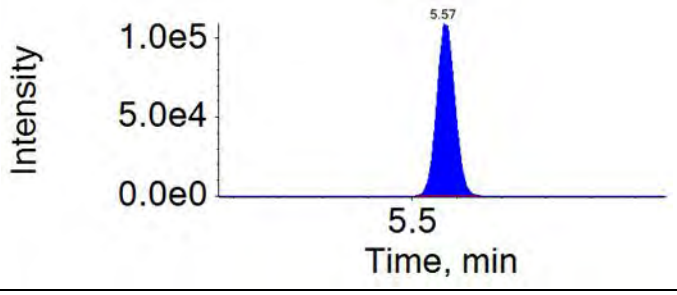
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



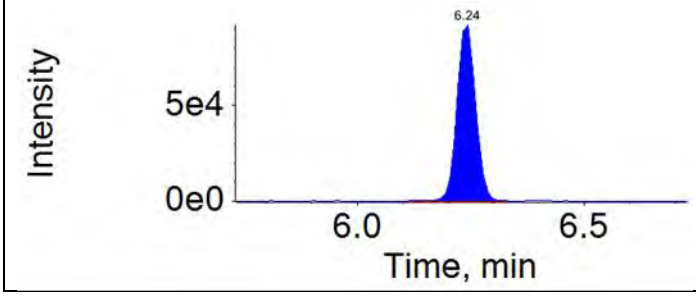


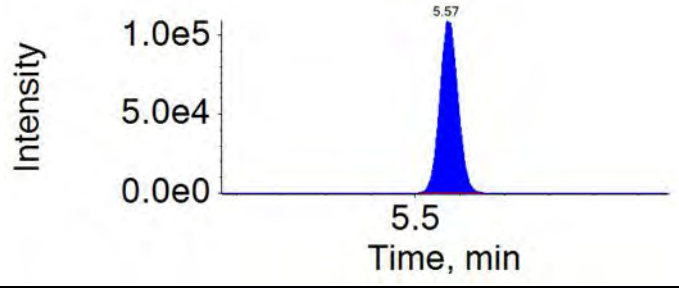
APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

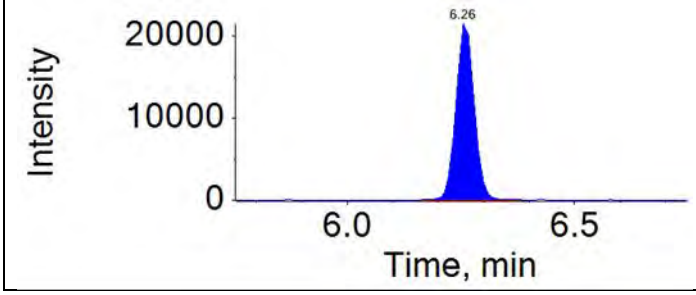
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

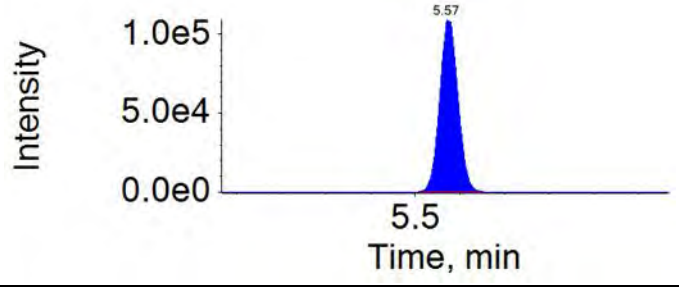
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



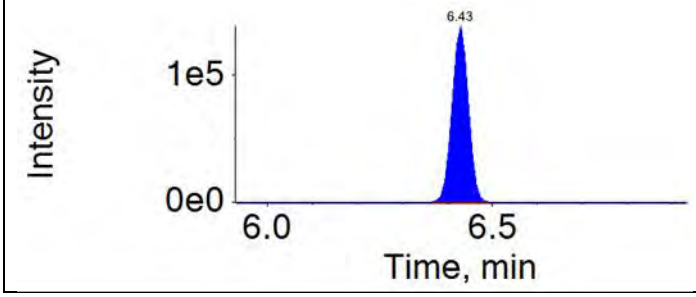


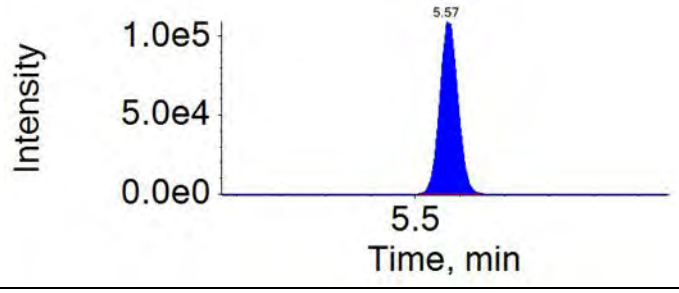
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



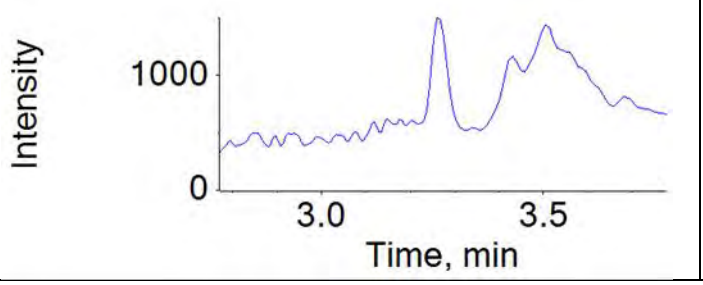


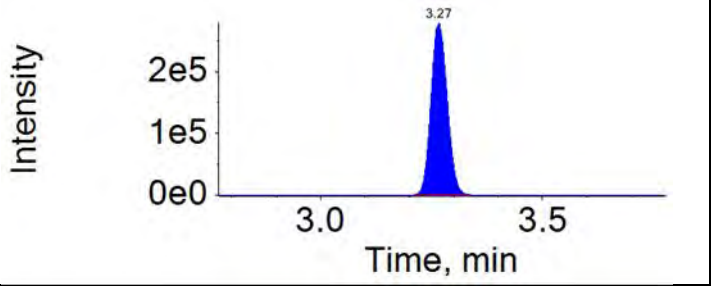
APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

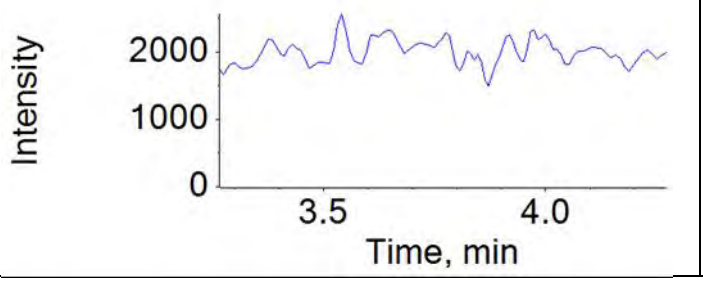
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

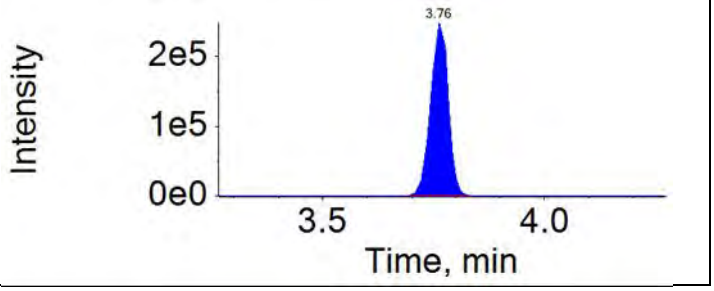
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



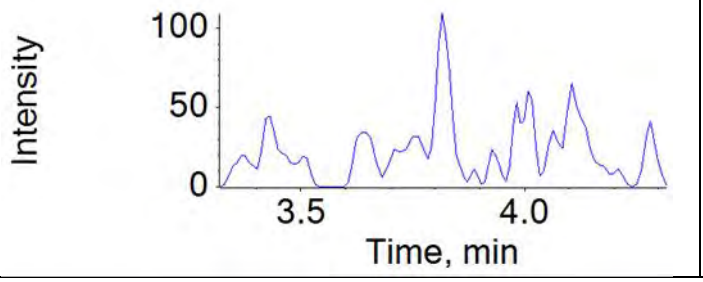


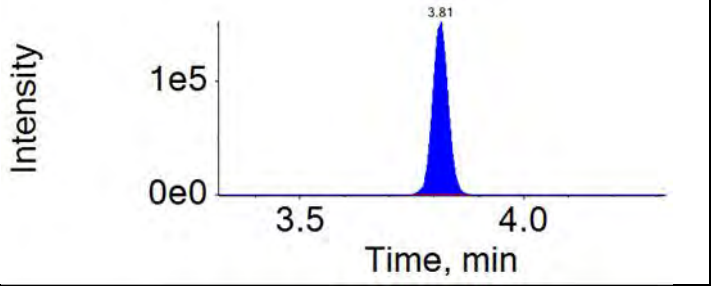
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



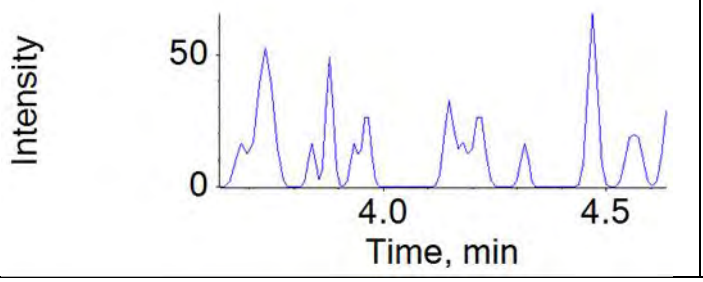


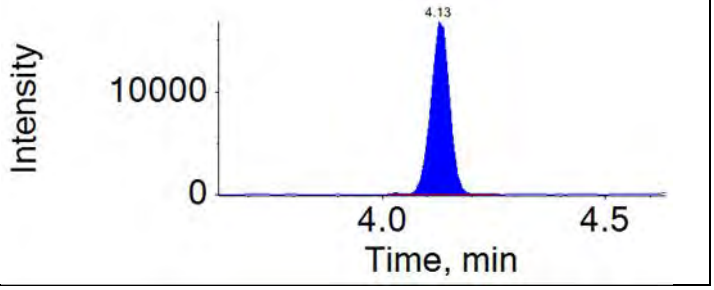
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



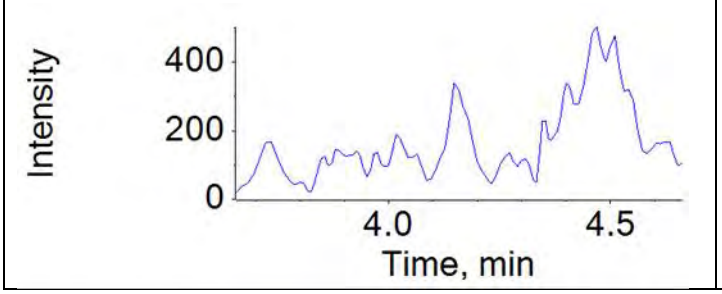


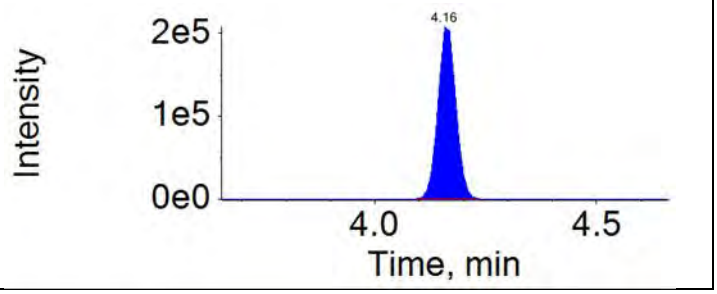
APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

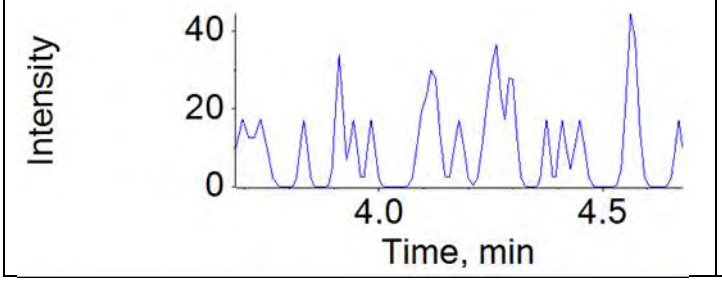
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

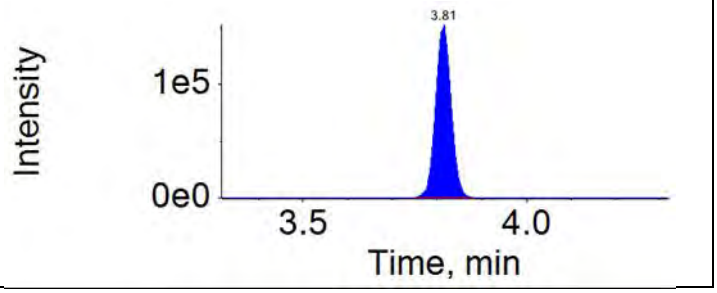
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



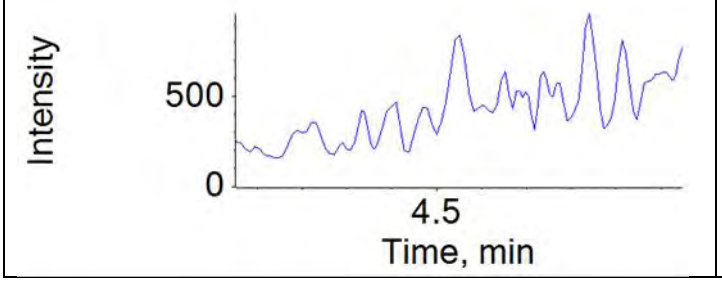


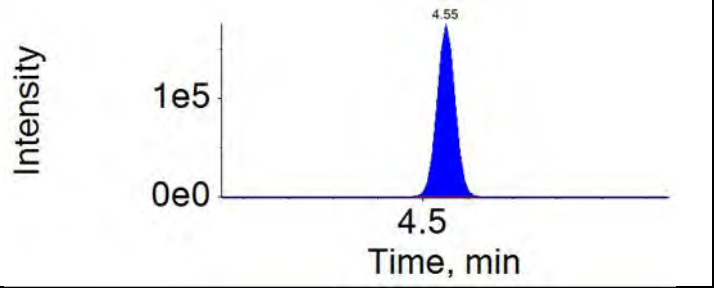
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



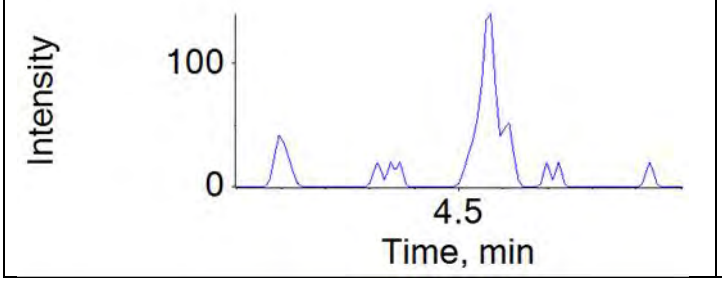


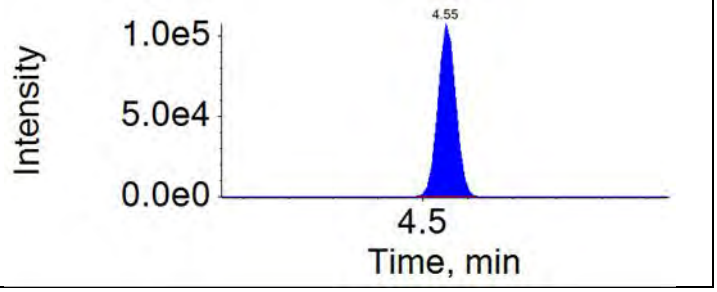
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

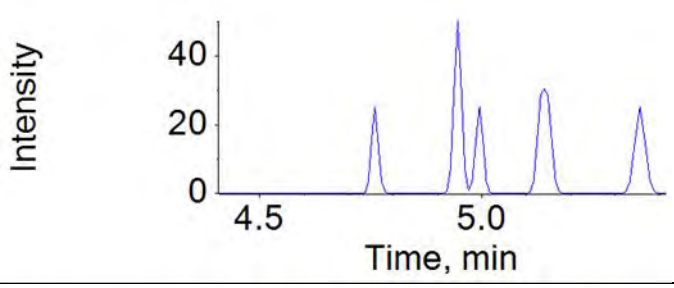
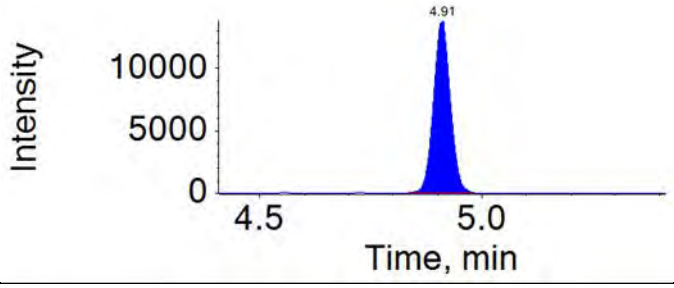


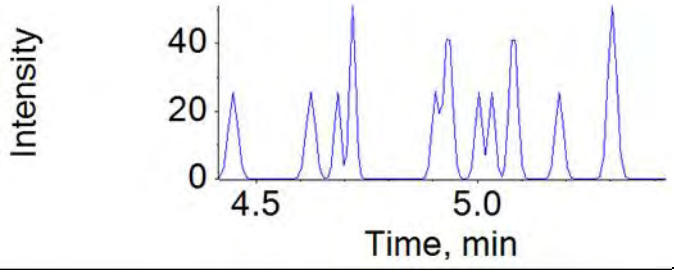
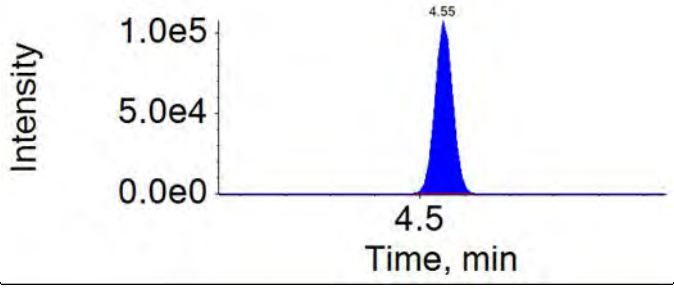


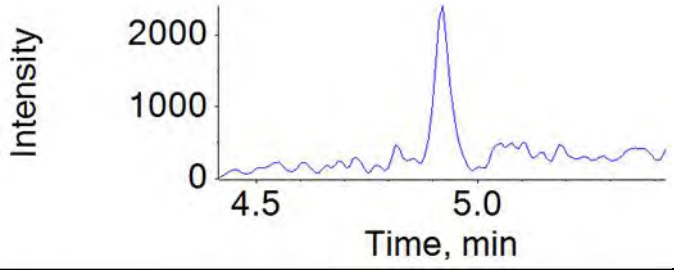
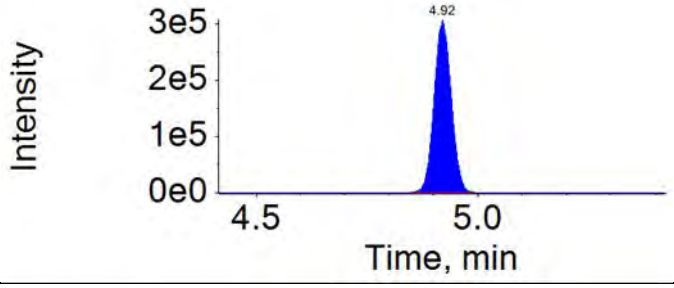
APPROVED
By JPT at 10:38 am, 11/19/18

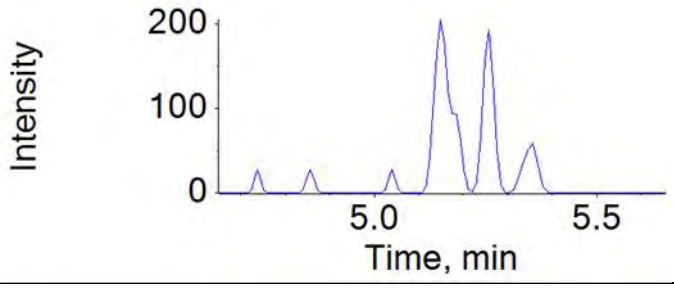
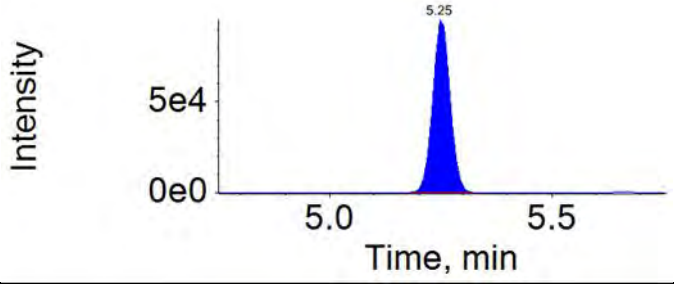
REVIEWED
By HMK at 11:46 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

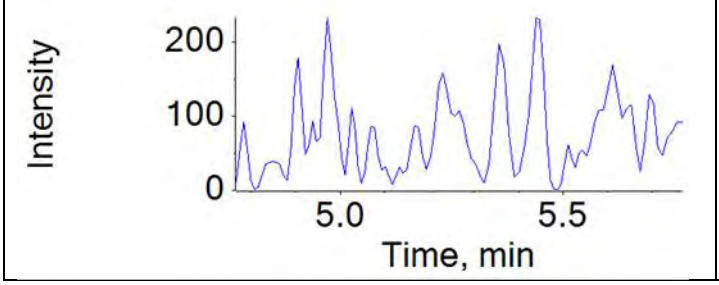
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

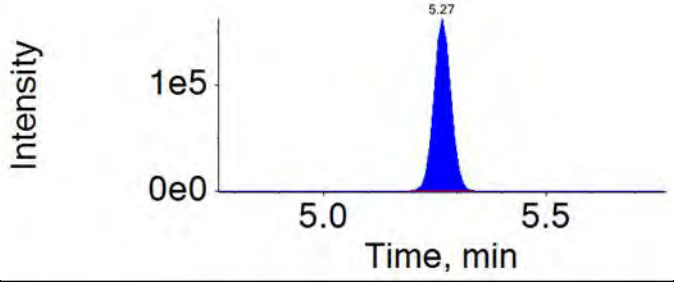
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

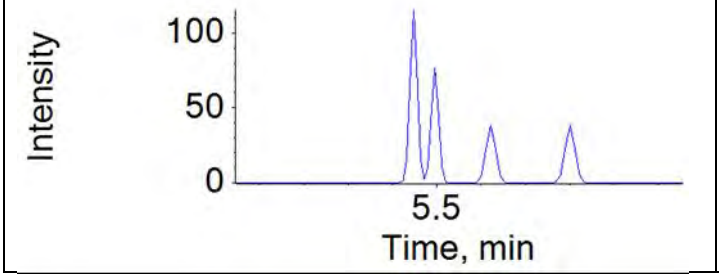
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

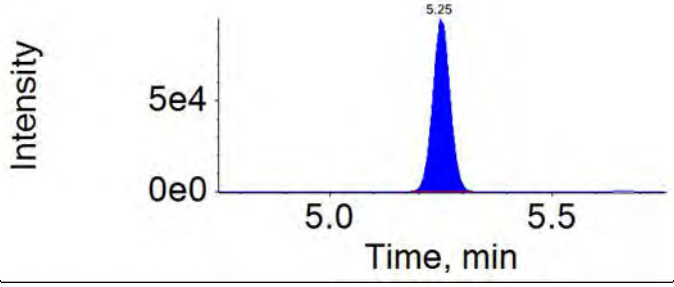
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



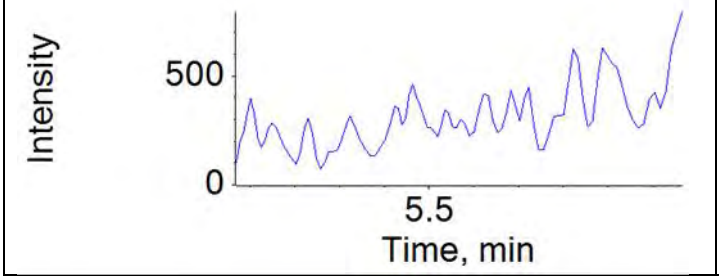


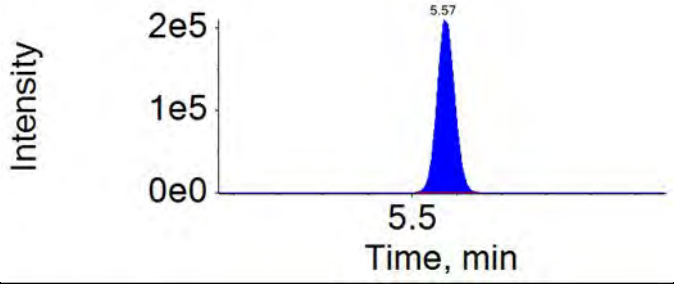
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



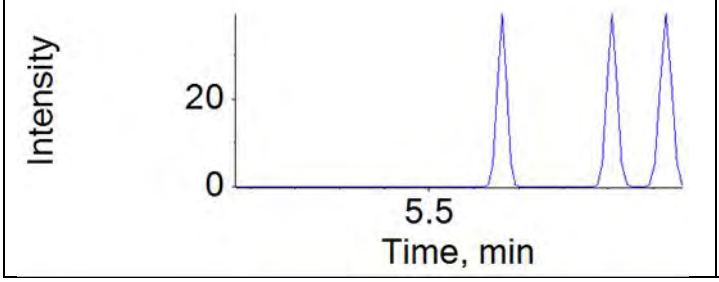


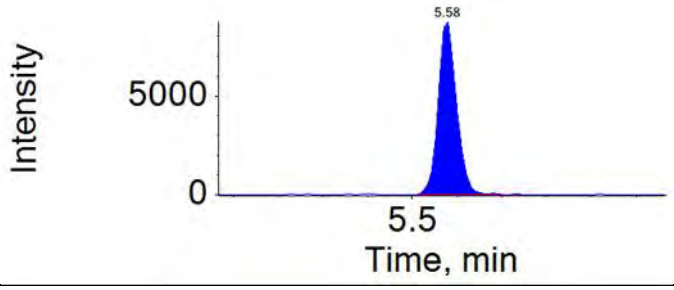
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



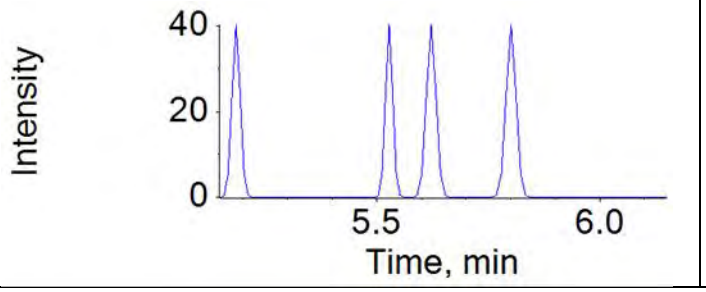


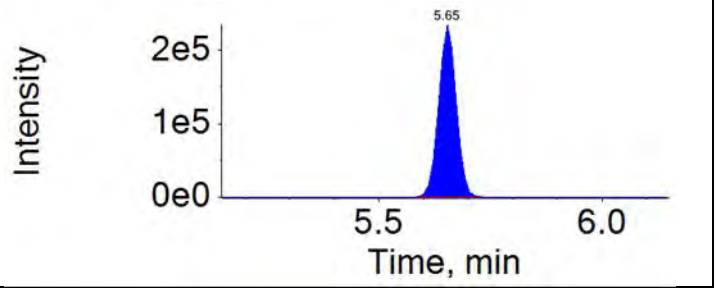
APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

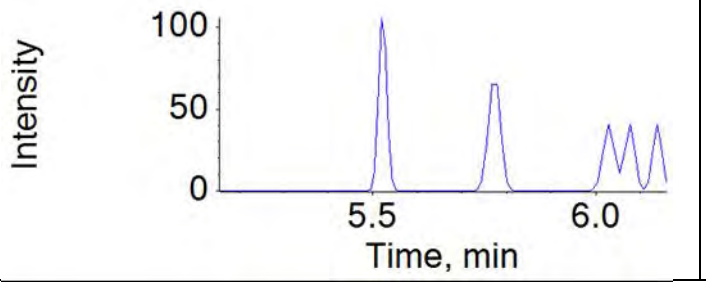
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

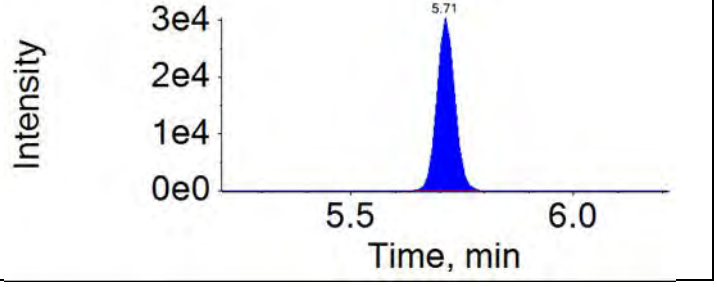
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



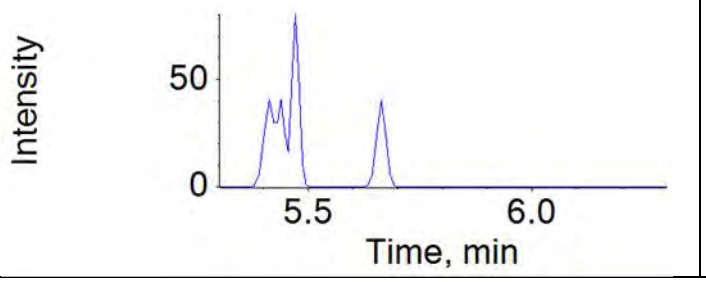


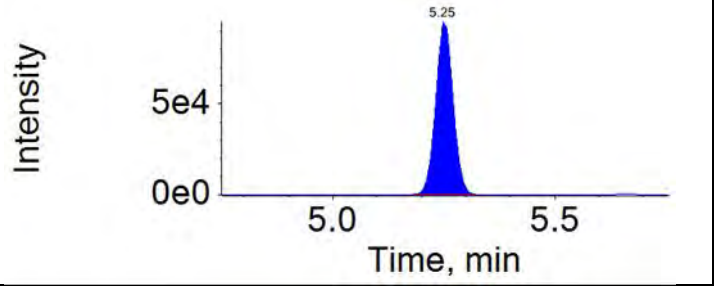
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



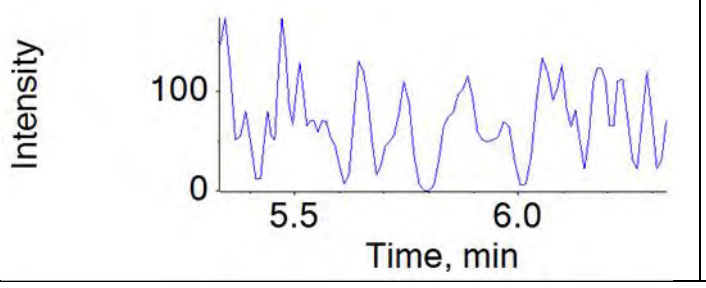


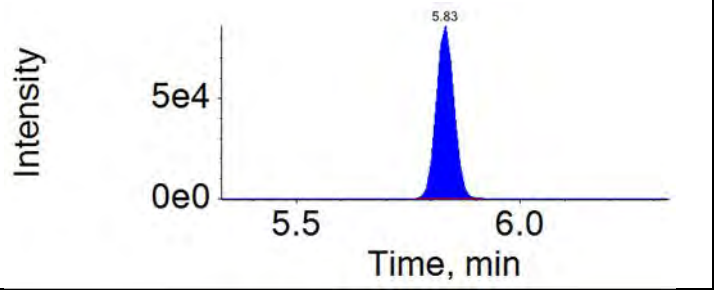
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



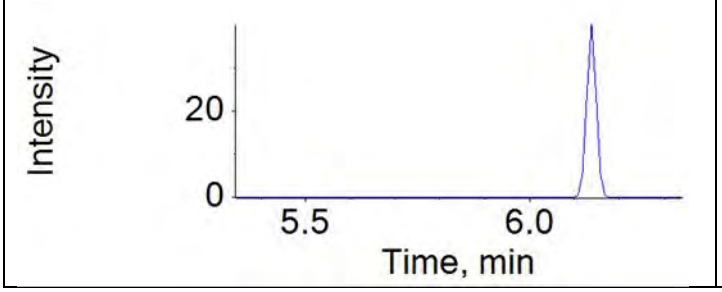


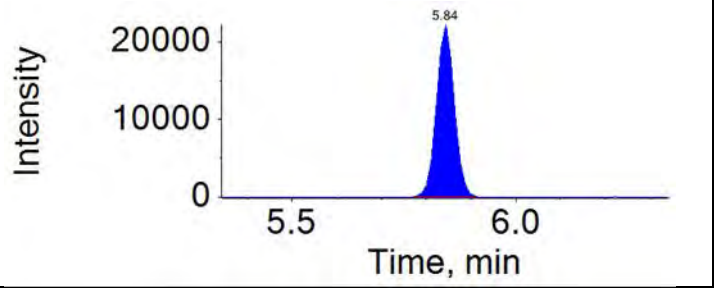
APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

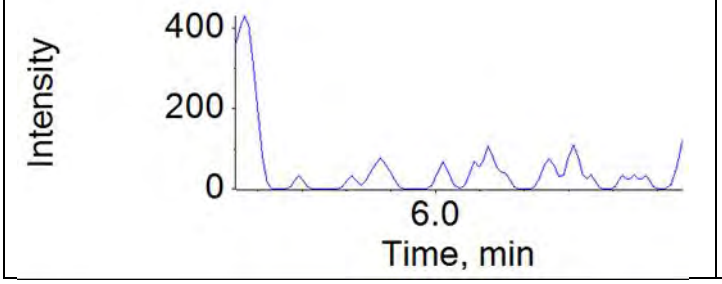
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

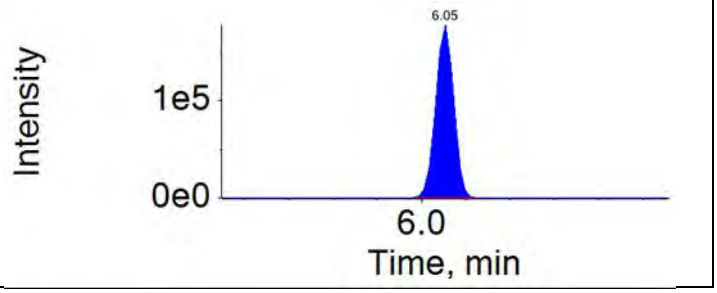
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



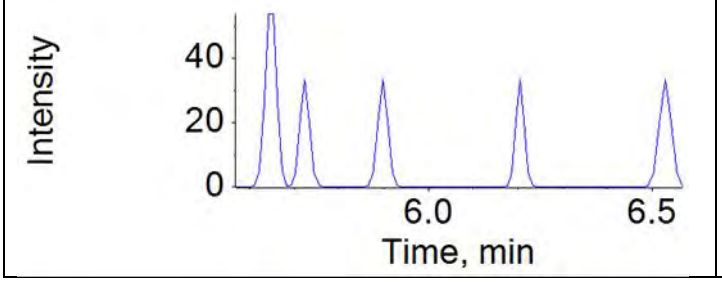


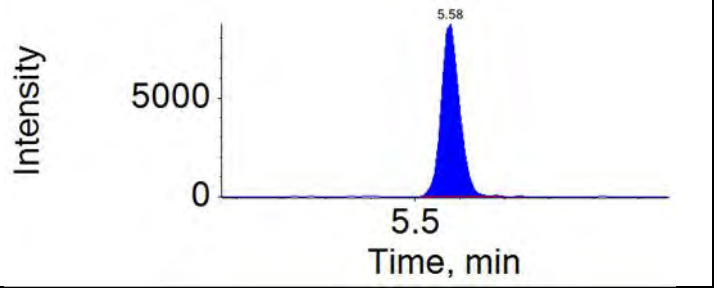
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



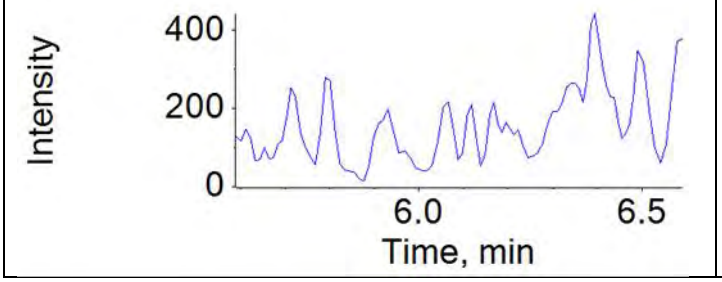


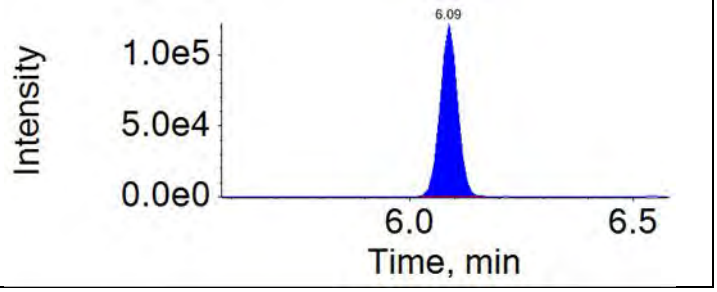
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



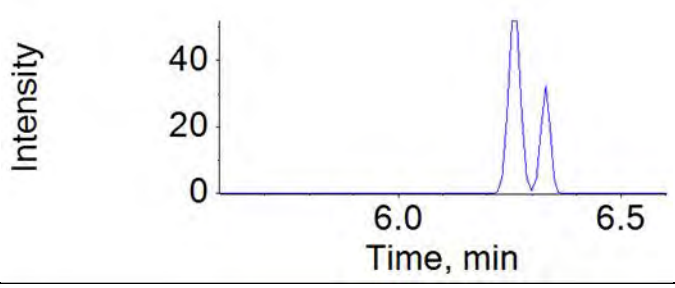


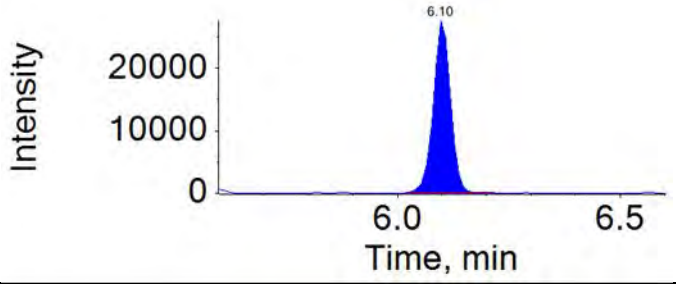
APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

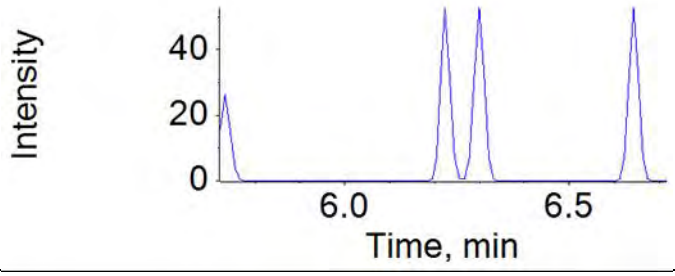
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

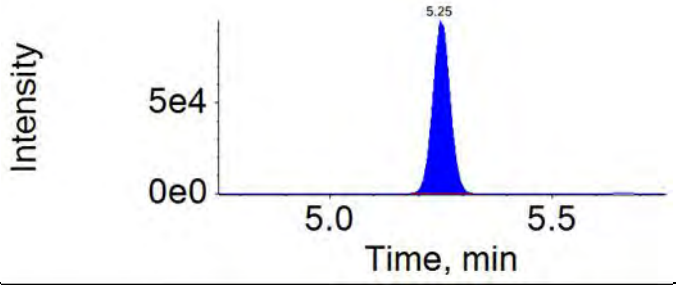
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



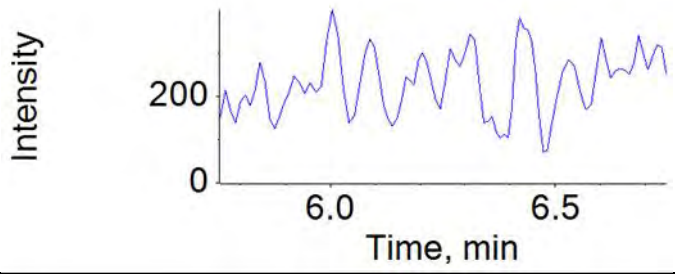


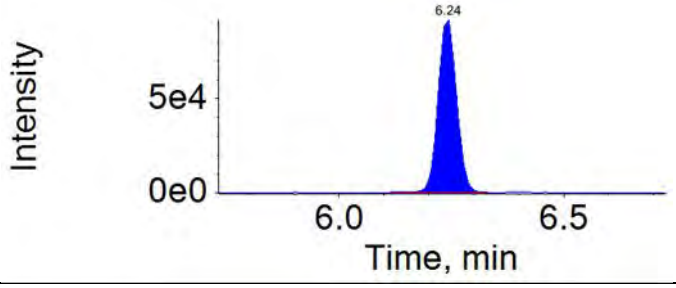
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



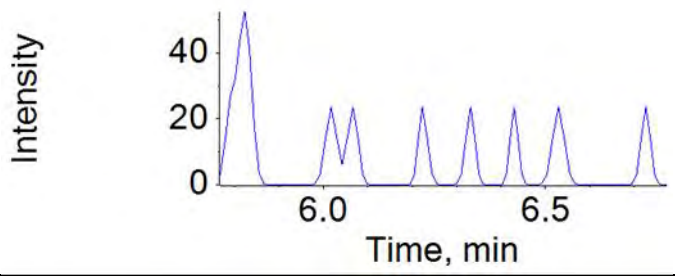


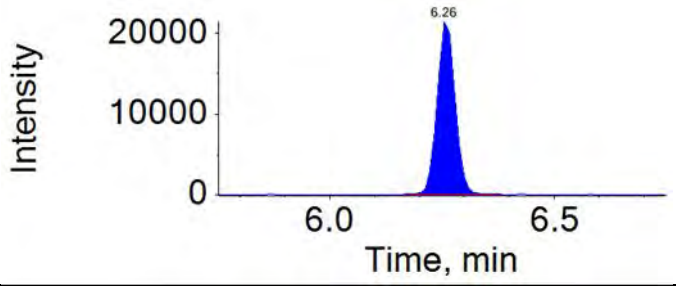
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

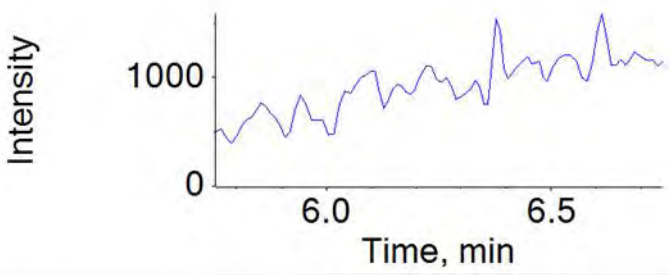
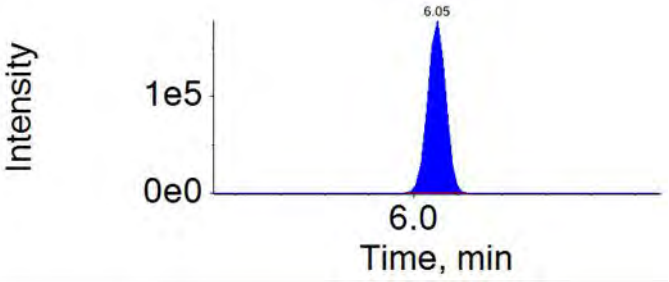


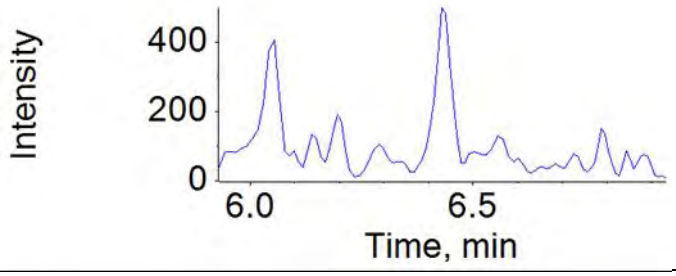
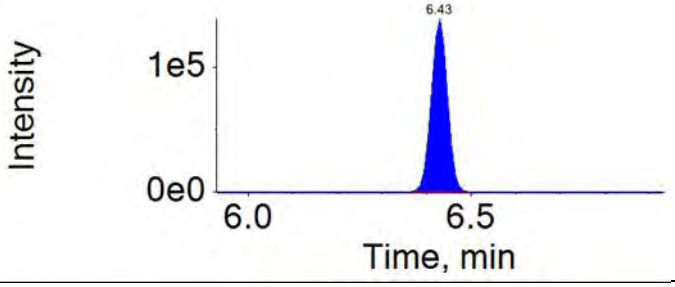


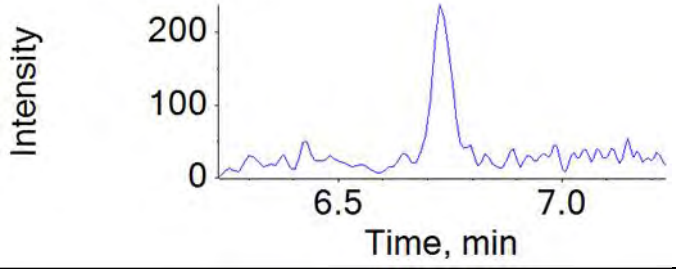
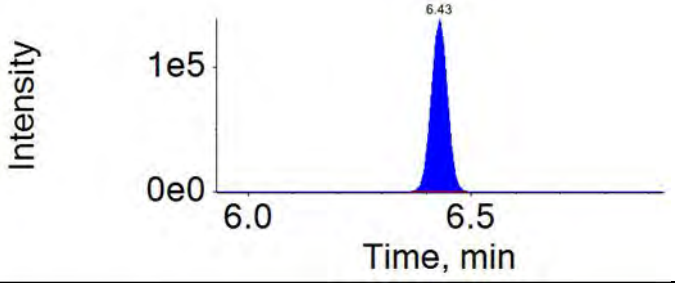
APPROVED
By JPT at 10:38 am, 11/19/18

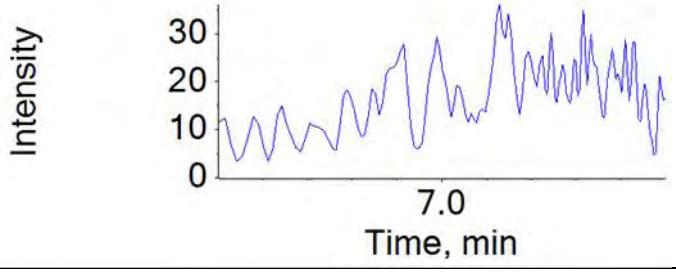
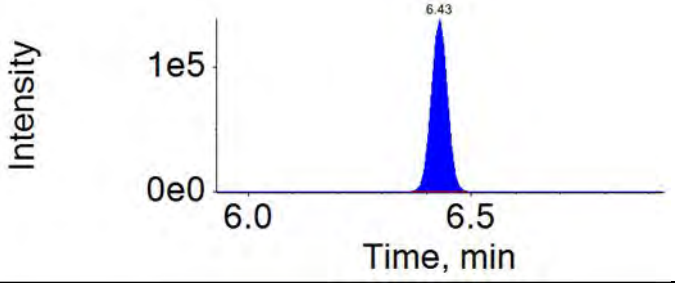
REVIEWED
By HMK at 11:46 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/19/2018 10:28:58 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

Ion Ratio Report

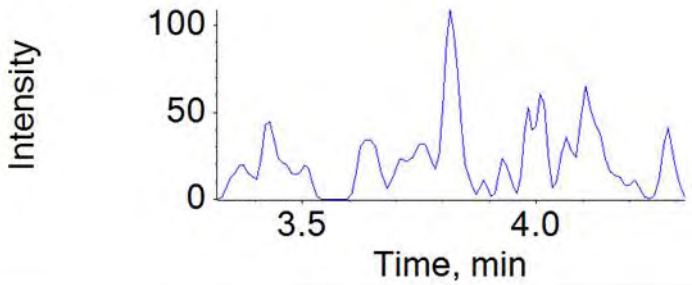
Sample Name: BLK319003 **Instrument Name:** LM27631 **File Name:** 18NOV15D-07.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	N/A	N/A	N/A	A	N/A	N/A			
PFBS_2	N/A	N/A	N/A	A	N/A	N/A		50	
4:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
4:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFHxA	N/A	N/A	N/A	A	N/A	N/A			
PFHxA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFPeS	N/A	N/A	N/A	A	N/A	N/A			
PFPeS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpA	N/A	N/A	N/A	A	N/A	N/A			
PFHpA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxS	N/A	N/A	N/A	A	N/A	N/A			
PFHxS_2	N/A	N/A	N/A	A	N/A	N/A		50	
6:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
6:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFHpS	N/A	N/A	N/A	A	N/A	N/A			
PFHpS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOA	N/A	N/A	N/A	A	N/A	N/A			
PFOA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOS	N/A	N/A	N/A	A	N/A	N/A			
PFOS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNA	N/A	N/A	N/A	A	N/A	N/A			
PFNA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNS	N/A	N/A	N/A	A	N/A	N/A			
PFNS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDA	N/A	N/A	N/A	A	N/A	N/A			
PFDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
8:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
8:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
NMeFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NMeFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDS	N/A	N/A	N/A	A	N/A	N/A			
PFDS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFUnDA	N/A	N/A	N/A	A	N/A	N/A			
PFUnDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
NEtFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NEtFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDoDA	N/A	N/A	N/A	A	N/A	N/A			
PFDoDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
10:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
10:2 FTS_2	N/A	N/A	N/A	A	N/A	N/A		#NA!	
PFTrDA	N/A	N/A	N/A	A	N/A	N/A			
PFTrDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTeDA	N/A	N/A	N/A	A	N/A	N/A			
PFTeDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxDA	N/A	N/A	N/A	A	N/A	N/A			
PFHxDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFODA	N/A	N/A	N/A	A	N/A	N/A			
PFODA_2	N/A	N/A	N/A	A	N/A	N/A		50	

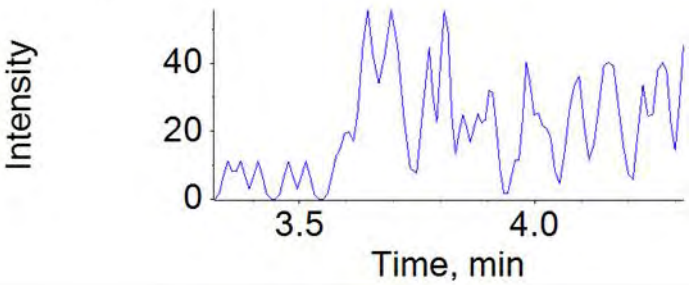
APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

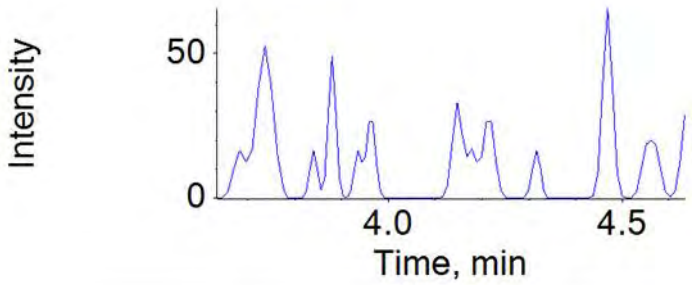
Component: PFBS
Primary Mass: 299.0 / 80.0



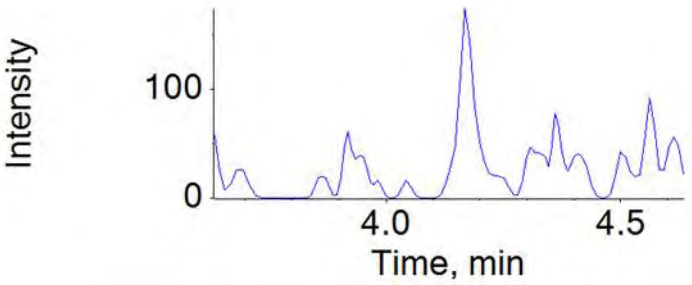
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



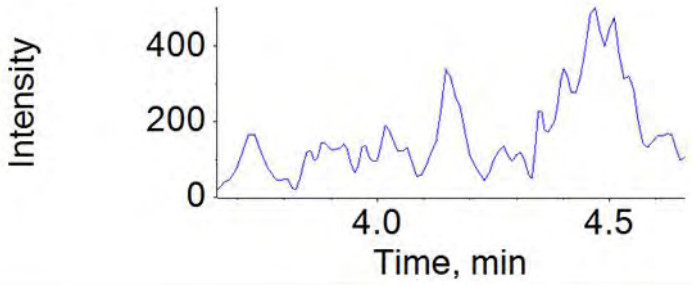
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



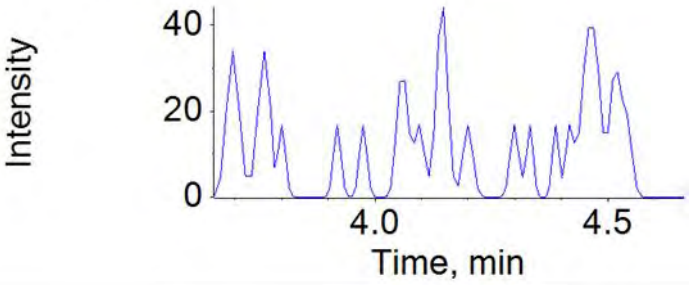
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



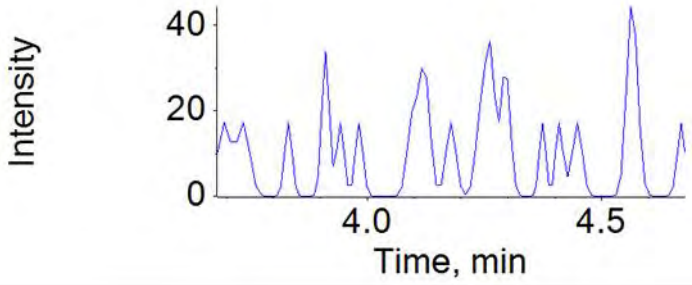
Component: PFHxA
Primary Mass: 313.0 / 269.0



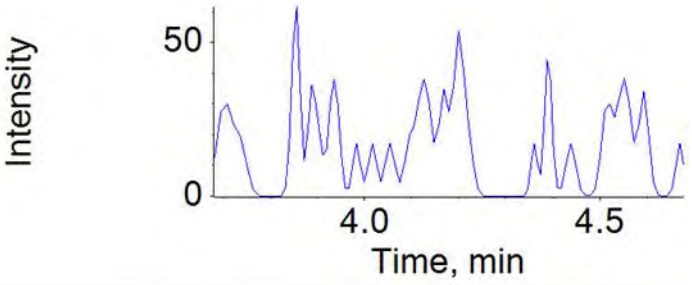
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



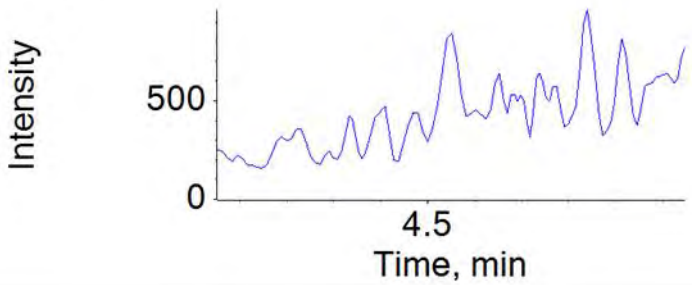
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



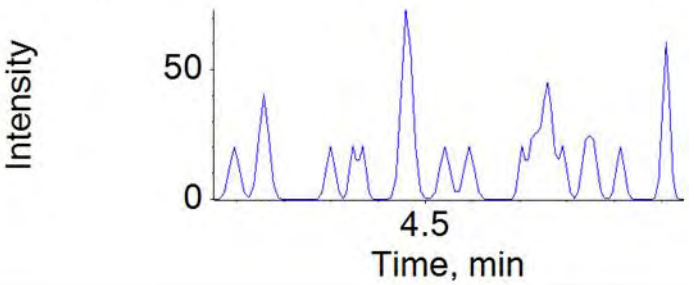
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By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

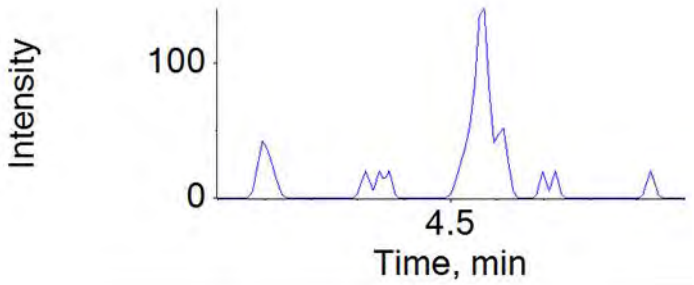
Component: PFHpA
Primary Mass: 363.0 / 319.0



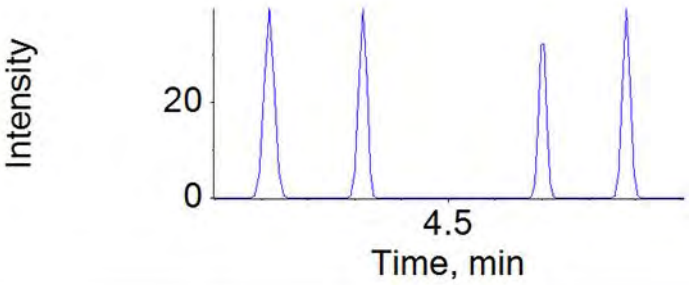
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



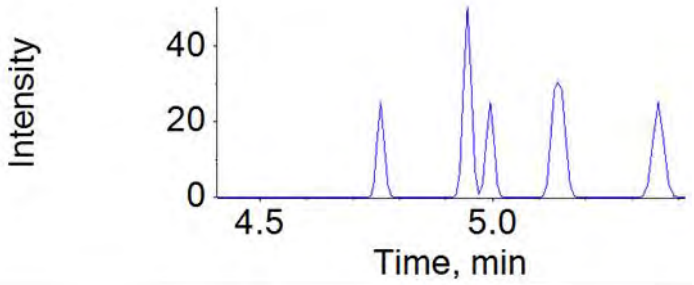
Component: PFHxS
Primary Mass: 399.0 / 80.0



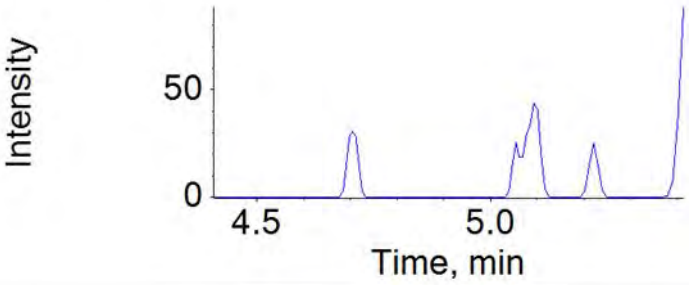
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



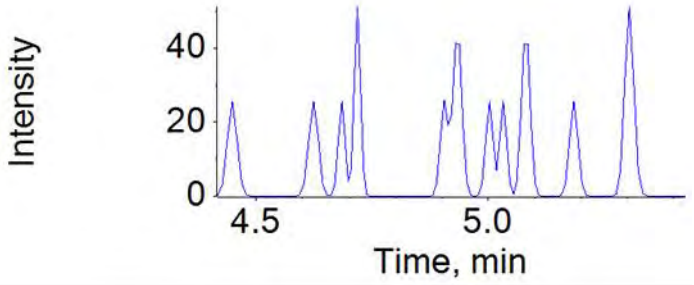
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



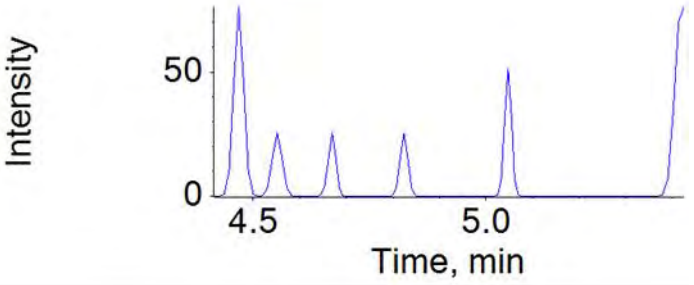
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



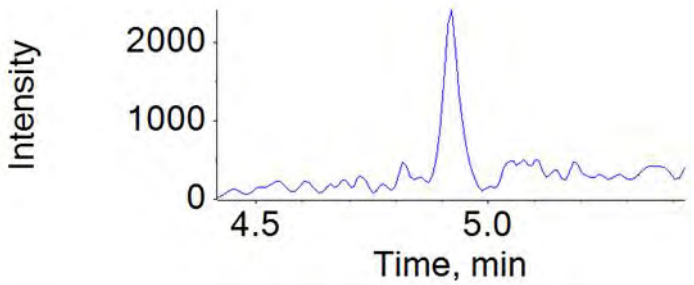
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



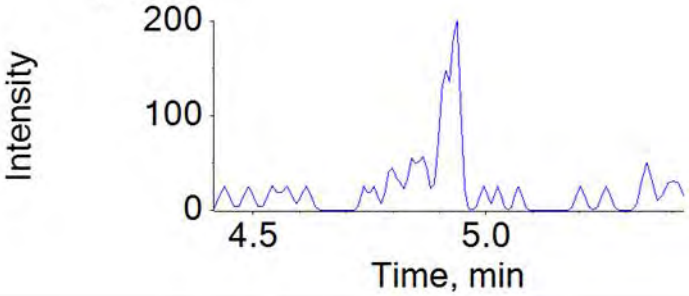
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By HMK at 11:46 am, 11/19/18

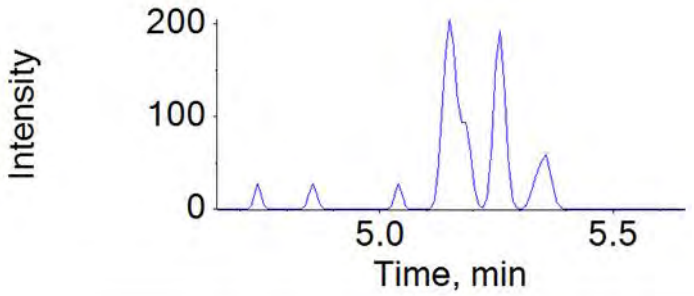
Component: PFOA
Primary Mass: 413.0 / 369.0



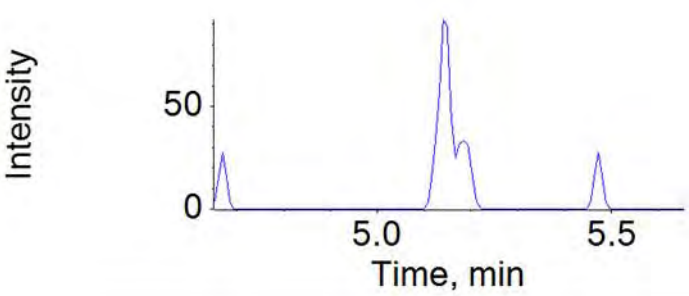
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



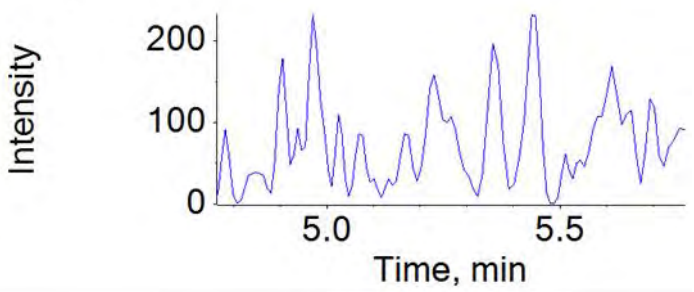
Component: PFOS
Primary Mass: 499.0 / 80.0



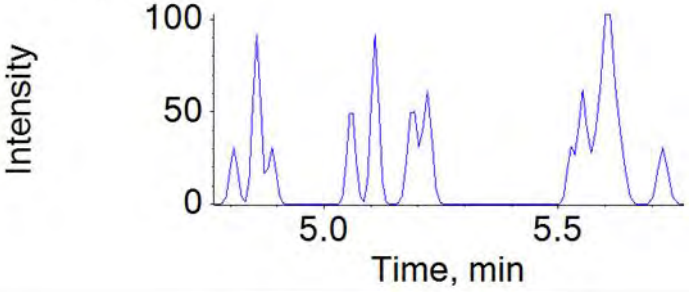
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



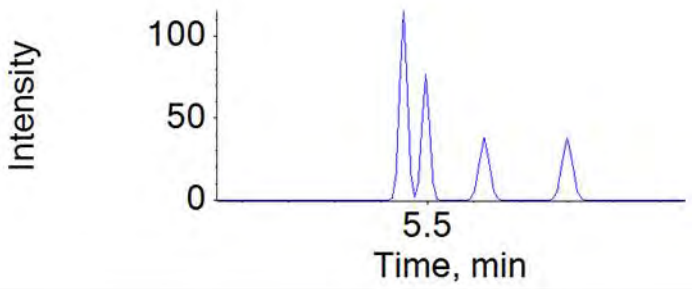
Component: PFNA
Primary Mass: 463.0 / 419.0



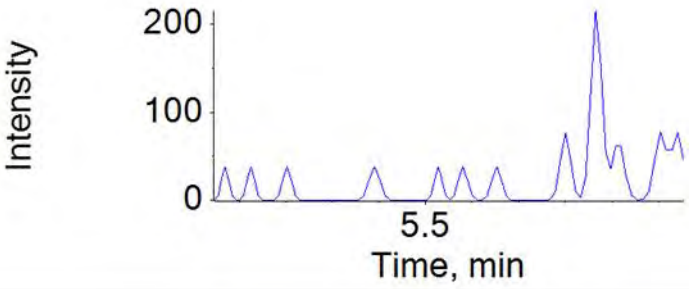
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



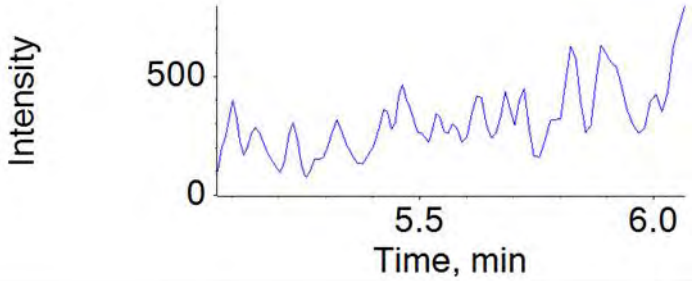
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



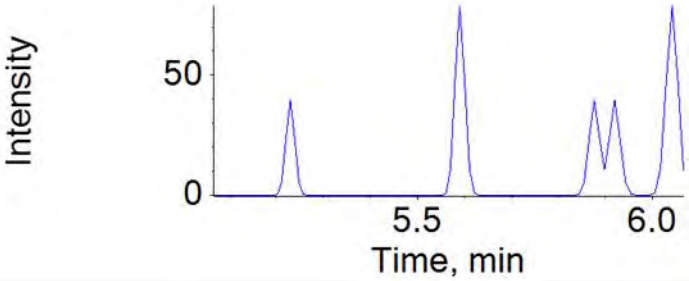
APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

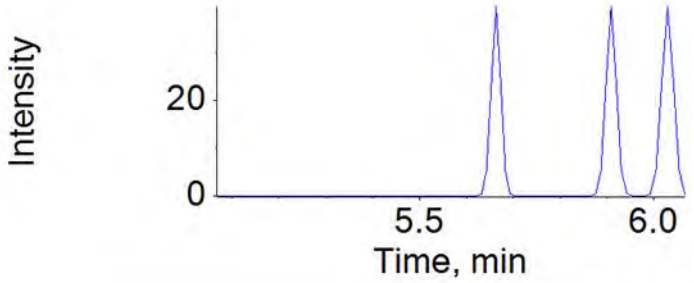
Component: PFDA
Primary Mass: 513.0 / 469.0



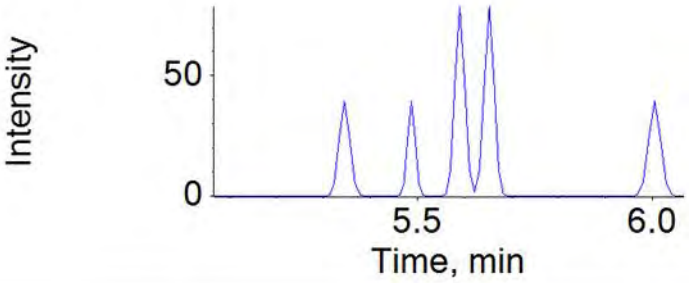
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



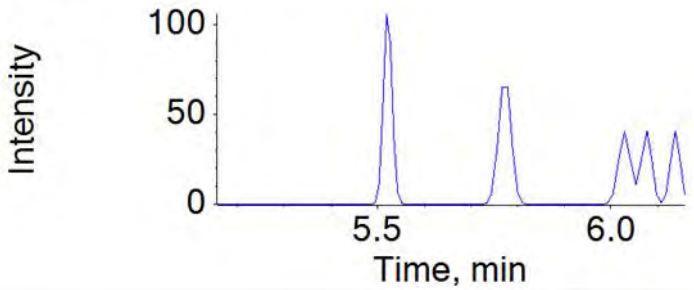
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



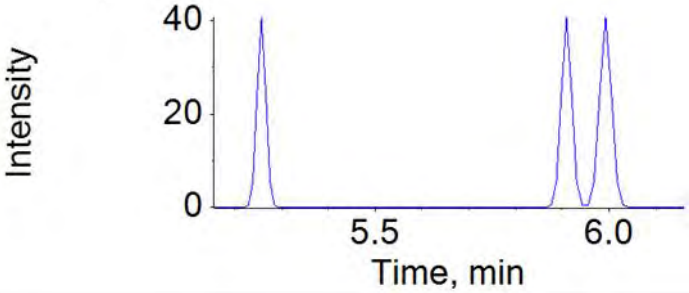
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



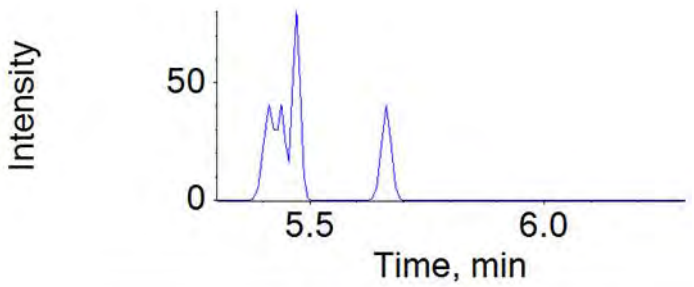
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



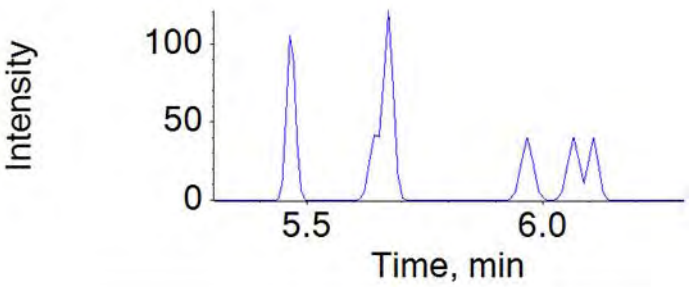
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



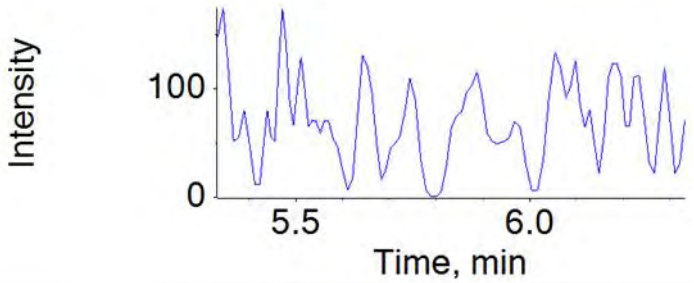
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Secondary Mass: 599.0 / 99.0



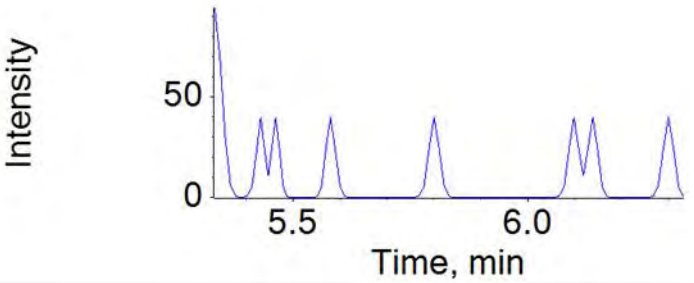
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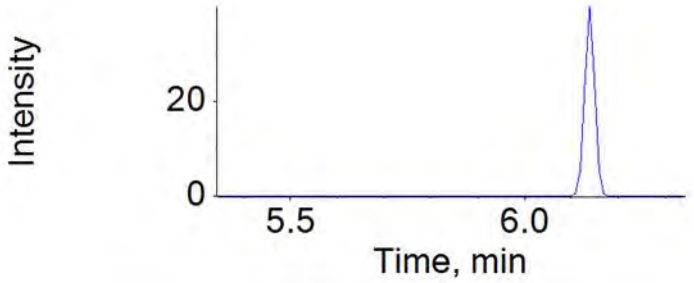
Component: PFUnDA
Primary Mass: 563.0 / 519.0



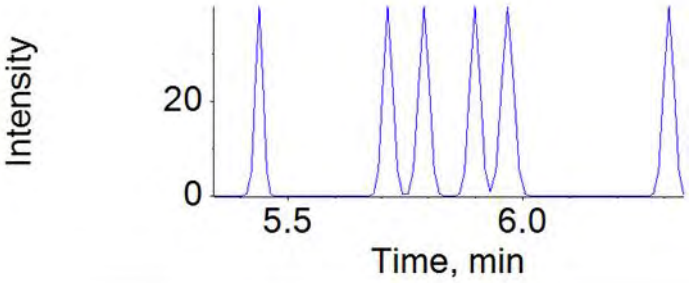
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



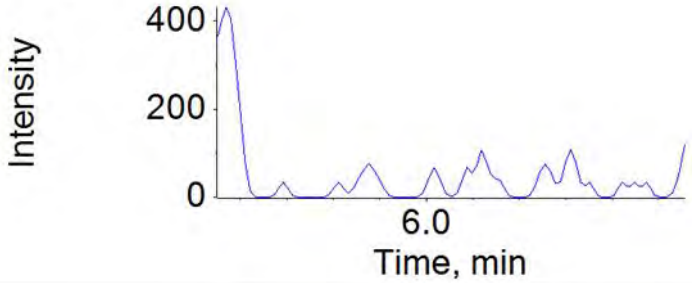
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



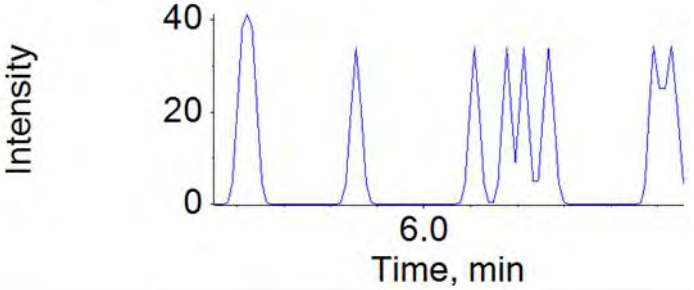
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



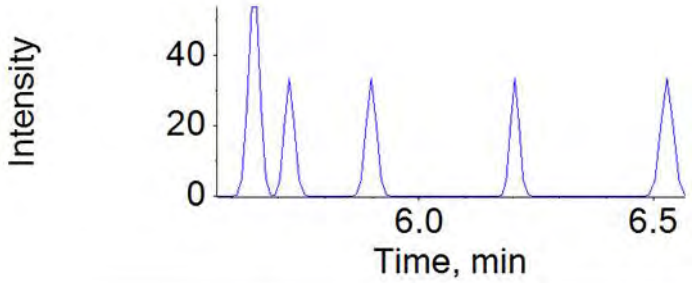
Component: PFDoDA
Primary Mass: 613.0 / 569.0



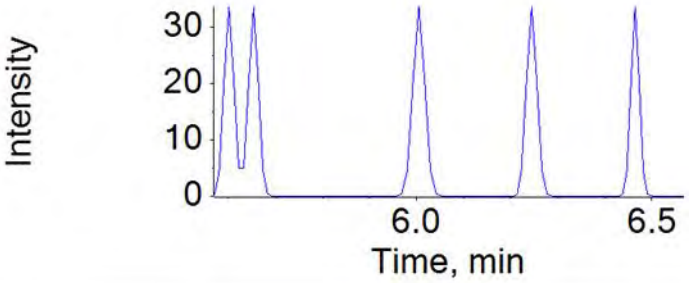
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



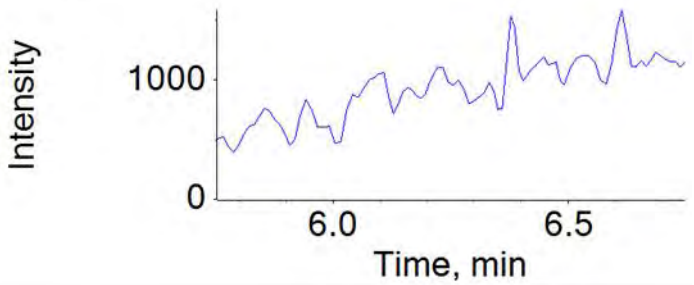
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



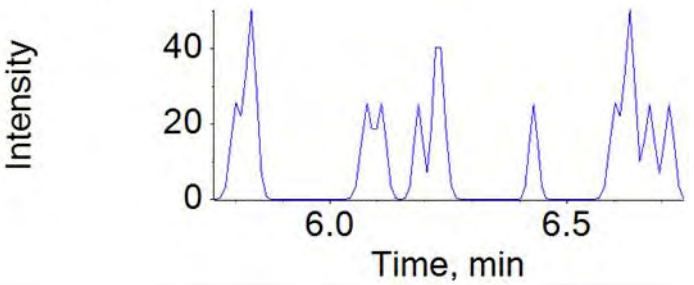
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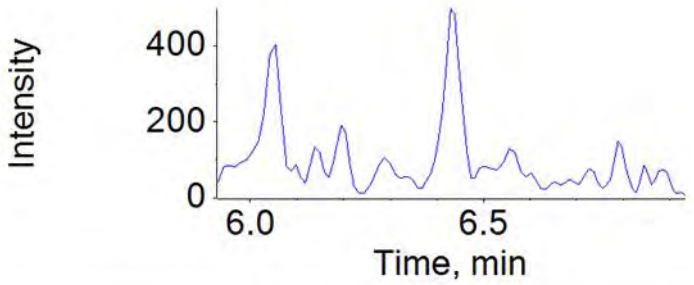
Component: PFTrDA
Primary Mass: 663.0 / 619.0



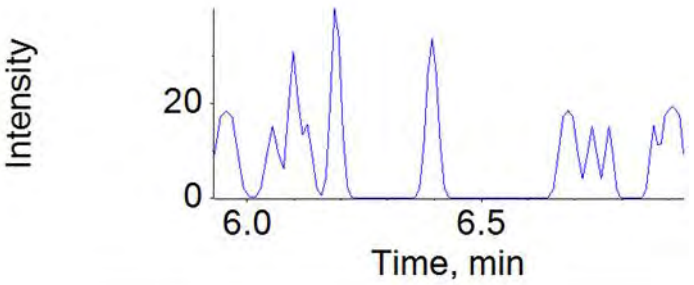
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Secondary Mass: 663.0 / 169.0



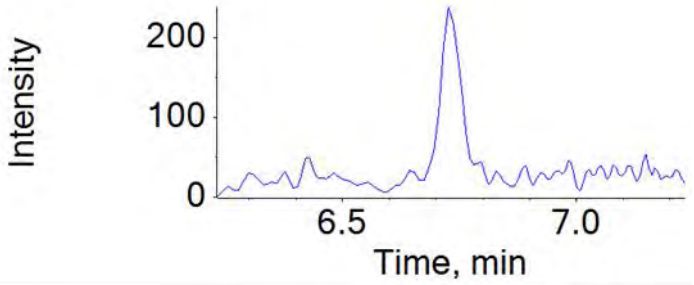
Component: PFTeDA
Primary Mass: 713.0 / 669.0



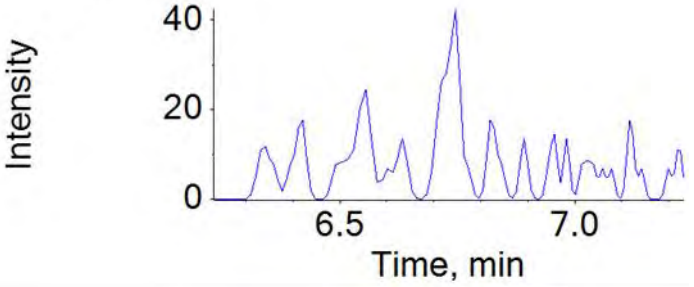
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



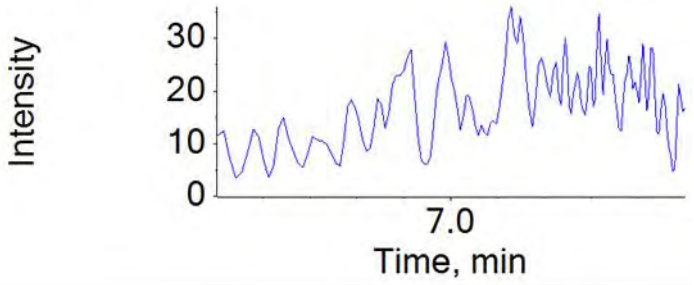
Component: PFHxDA
Primary Mass: 813.0 / 769.0



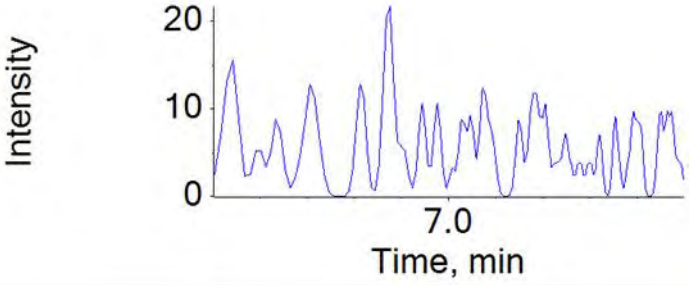
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By JPT at 10:38 am, 11/19/18

REVIEWED
By HMK at 11:46 am, 11/19/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	BLK332003			**Data File:**		18NOV29D-55.wiff
Sample ID:	EPA 537 mod QSM 5.1 table B-15 18332003			**Acquis Date:**		2018-11-29T18:04:39
Sample Type:	Unknown			**Instrument:**		LM27631
Vial Position:	35			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18332003
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	18332003			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		2.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV29D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	1052098.8	906425.4	16	50	
13C2-PFOA	5.0	583595.2	495984.0	18	50	
13C4-PFOS	4.8	370221.3	296261.8	25	50	
13C2-PFDA	5.0	538785.8	451203.0	19	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	1166068.6	13C3-PFBA	1052098.8	1.108	10.000	9.890	99	50-150	
E13C5-PFPeA	1140810.2	13C3-PFBA	1052098.8	1.084	10.000	10.127	101	50-150	
E13C3-PFBS	483273.6	13C3-PFBA	1052098.8	0.459	9.300	8.765	94	50-150	
E13C2-4:2-FTS	88299.6	13C2-PFOA	583595.2	0.151	9.340	10.428	112	50-150	
E13C5-PFHxA	810532.0	13C2-PFOA	583595.2	1.389	10.000	10.203	102	50-150	
E13C3-PFHxS	390556.7	13C2-PFOA	583595.2	0.669	9.460	10.490	111	50-150	
E13C4-PFHpA	638162.6	13C2-PFOA	583595.2	1.094	10.000	10.049	100	50-150	
E13C2-6:2-FTS	85768.5	13C2-PFOA	583595.2	0.147	9.500	12.304	130	50-150	
E13C8-PFOA	1115290.8	13C2-PFOA	583595.2	1.911	10.000	10.520	105	50-150	
E13C8-PFOS	380904.6	13C4-PFOS	370221.3	1.029	9.560	9.289	97	50-150	
E13C9-PFNA	767466.6	13C4-PFOS	370221.3	2.073	10.000	9.106	91	50-150	
E13C6-PFDA	985084.0	13C2-PFDA	538785.8	1.828	10.000	10.310	103	50-150	
E13C2-8:2-FTS	68023.4	13C2-PFDA	538785.8	0.126	9.580	10.853	113	50-150	
E13C8-PFOSA	779450.6	13C2-PFDA	538785.8	1.447	10.000	10.617	106	50-150	
Ed3-NMeFOSAA	278947.3	13C2-PFDA	538785.8	0.518	10.000	13.147	131	50-150	
E13C7-PFUnDA	661426.3	13C2-PFDA	538785.8	1.228	10.000	10.377	104	50-150	
Ed5-NEtFOSAA	157048.2	13C2-PFDA	538785.8	0.291	10.000	10.386	104	50-150	
E13C2-PFDoDA	1314480.9	13C2-PFDA	538785.8	2.440	10.000	10.252	103	50-150	
Ed7-NMePFOSAE	315785.5	13C2-PFDA	538785.8	0.586	10.000	10.131	101	50-150	
Ed3-NMePFOSA	100147.5	13C2-PFDA	538785.8	0.186	10.000	10.061	101	50-150	
Ed9-NEtPFOSAE	274958.1	13C2-PFDA	538785.8	0.510	10.000	10.348	103	50-150	
Ed5-NEtPFOSA	88626.3	13C2-PFDA	538785.8	0.164	10.000	11.431	114	50-150	
E13C2-PFTeDA	925597.8	13C2-PFDA	538785.8	1.718	10.000	9.507	95	50-150	

APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

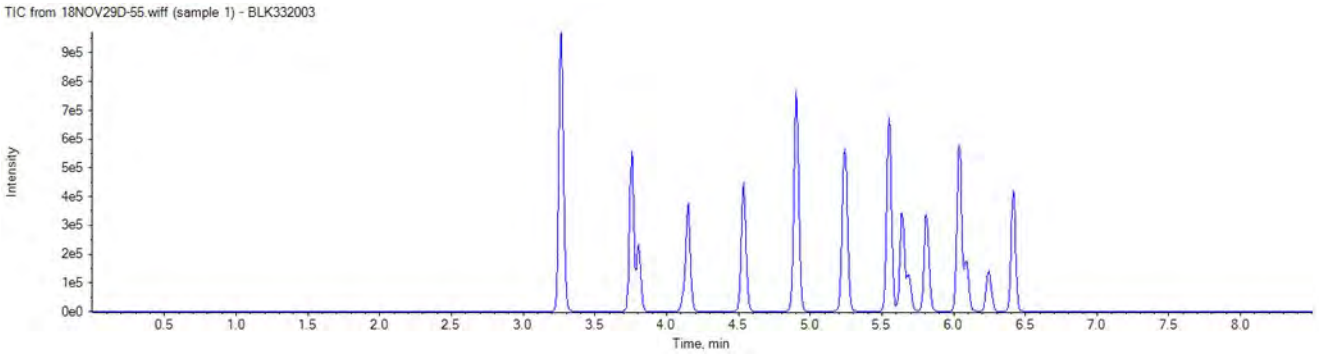
Analyte Quantitation Peak Table

Sample Name: BLK332003 **Instrument Name:** LM27631 **File Name:** 18NOV29D-55.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	2.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	N/A	N/A	N/A		A	13C4-PFBA	3.26	1166068.6	N/A	
PFPeA	N/A	N/A	N/A		A	13C5-PFPeA	3.76	1140810.2	N/A	
PFBS	N/A	N/A	N/A		A	13C3-PFBS	3.80	483273.6	N/A	
4:2-FTS	N/A	N/A	N/A		A	13C2-4:2-FTS	4.11	88299.6	N/A	
PFHxA	N/A	N/A	N/A		A	13C5-PFHxA	4.15	810532.0	N/A	
PFPeS	N/A	N/A	N/A		A	13C3-PFBS	3.80	483273.6	N/A	
PFHpA	N/A	N/A	N/A		A	13C4-PFHpA	4.53	638162.6	N/A	
PFHxS	N/A	N/A	N/A		A	13C3-PFHxS	4.54	390556.7	N/A	
6:2-FTS	N/A	N/A	N/A		A	13C2-6:2-FTS	4.89	85768.5	N/A	
PFHpS	N/A	N/A	N/A		A	13C3-PFHxS	4.54	390556.7	N/A	
PFOA	N/A	N/A	N/A		A	13C8-PFOA	4.90	1115290.8	N/A	
PFOS	N/A	N/A	N/A		A	13C8-PFOS	5.23	380904.6	N/A	
PFNA	N/A	N/A	N/A		A	13C9-PFNA	5.25	767466.6	N/A	
PFNS	N/A	N/A	N/A		A	13C8-PFOS	5.23	380904.6	N/A	
PFDA	N/A	N/A	N/A		A	13C6-PFDA	5.55	985084.0	N/A	
8:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.55	68023.4	N/A	
PFOSA	N/A	N/A	N/A		A	13C8-PFOSA	5.64	779450.6	N/A	
NMeFOSAA	N/A	N/A	N/A		A	d3-NMeFOSAA	5.69	278947.3	N/A	
PFDS	N/A	N/A	N/A		A	13C8-PFOS	5.23	380904.6	N/A	
PFUnDA	N/A	N/A	N/A		A	13C7-PFUnDA	5.81	661426.3	N/A	
NEtFOSAA	N/A	N/A	N/A		A	d5-NEtFOSAA	5.82	157048.2	N/A	
PFDoDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.04	1314480.9	N/A	
10:2-FTS	N/A	N/A	N/A		A	13C2-8:2-FTS	5.55	68023.4	N/A	
NMePFOSAE	N/A	N/A	N/A		A	d7-NMePFOSAE	6.09	315785.5	N/A	
NMePFOSA	N/A	N/A	N/A		A	d3-NMePFOSA	6.10	100147.5	N/A	
PFDoS	N/A	N/A	N/A		A	13C8-PFOS	5.23	380904.6	N/A	
NEtPFOSAE	N/A	N/A	N/A		A	d9-NEtPFOSAE	6.24	274958.1	N/A	
NEtPFOSA	N/A	N/A	N/A		A	d5-NEtPFOSA	6.26	88626.3	N/A	
PFTrDA	N/A	N/A	N/A		A	13C2-PFDoDA	6.04	1314480.9	N/A	
PFTeDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	925597.8	N/A	
PFHxDA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	925597.8	N/A	
PFODA	N/A	N/A	N/A		A	13C2-PFTeDA	6.42	925597.8	N/A	

Total Ion Chromatogram

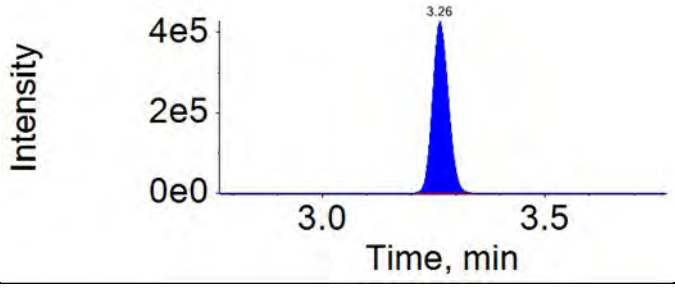


APPROVED
By MCD at 10:13 pm, 11/30/18

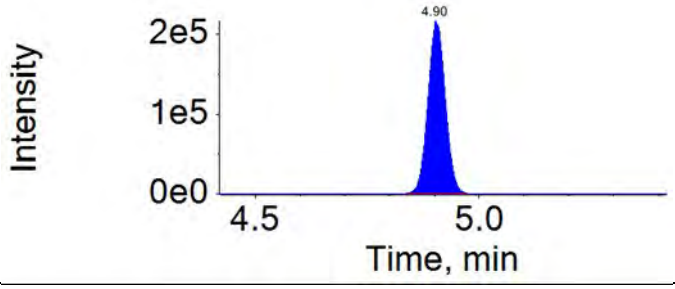
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

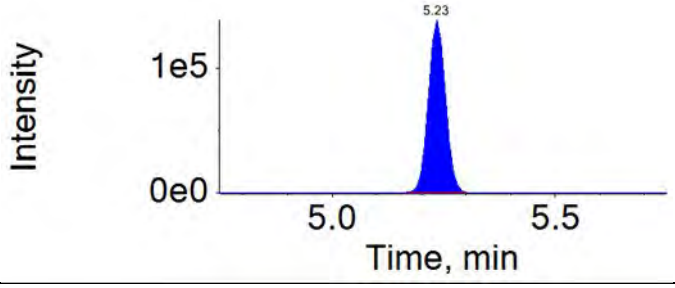
Injection Standard: 13C3-PFBA
216.0 / 172.0



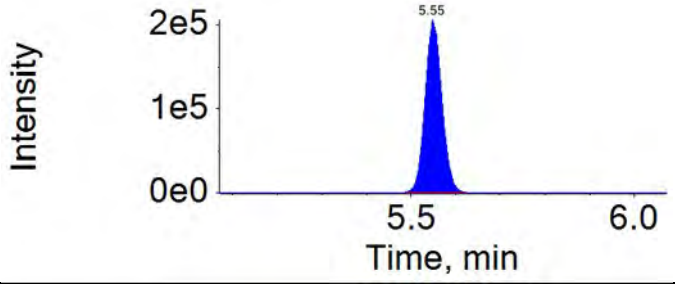
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

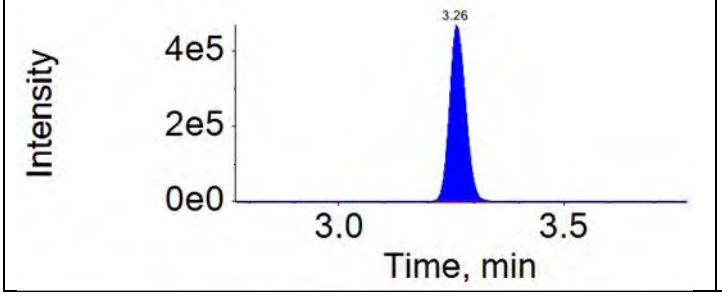


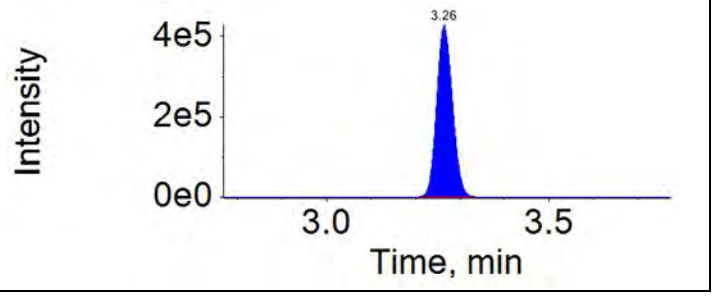
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

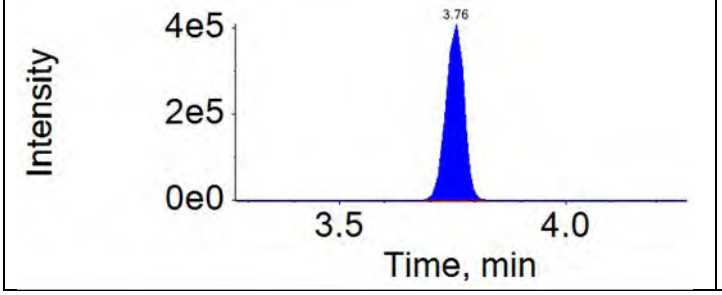
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

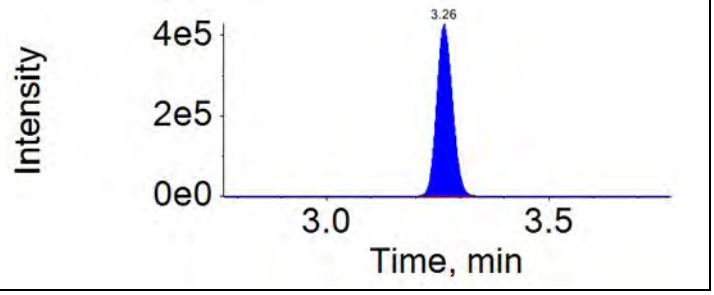
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



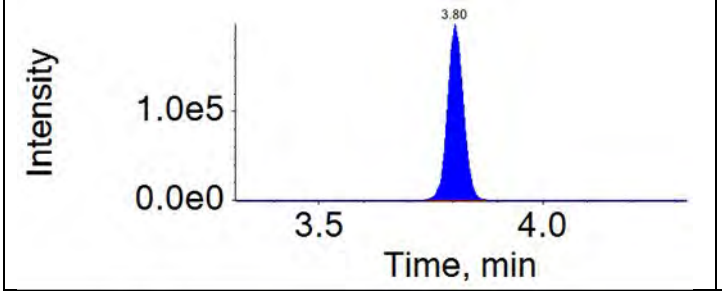


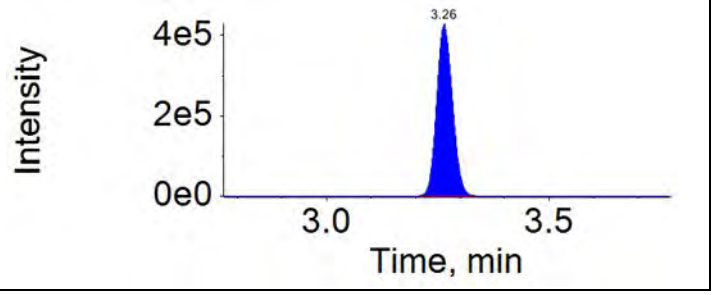
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



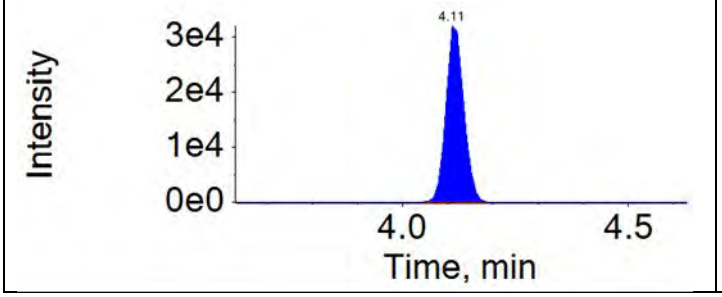


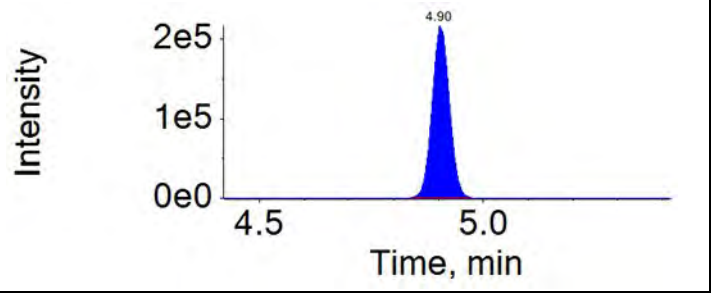
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

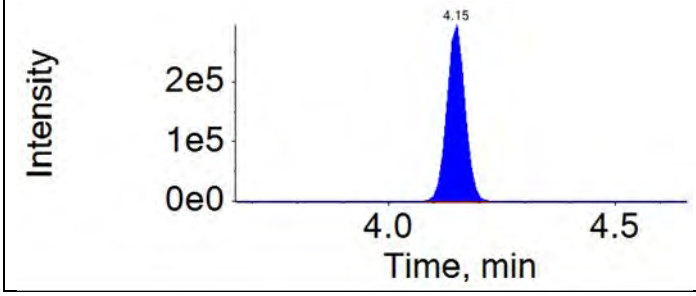
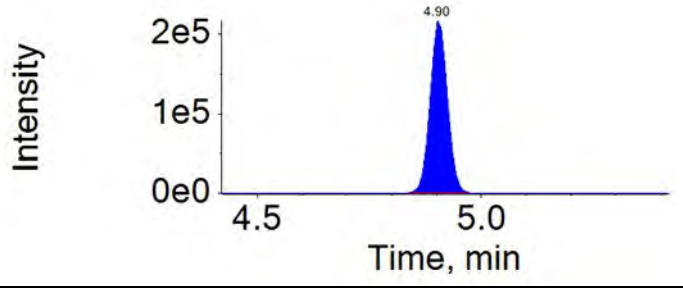


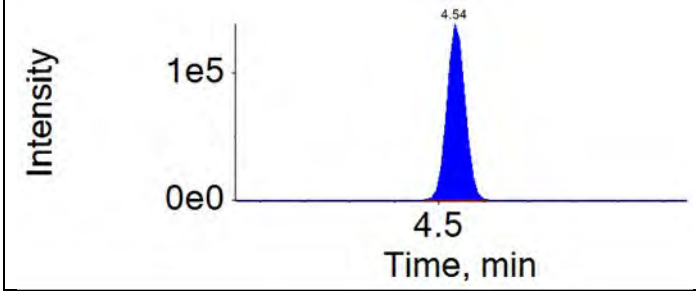
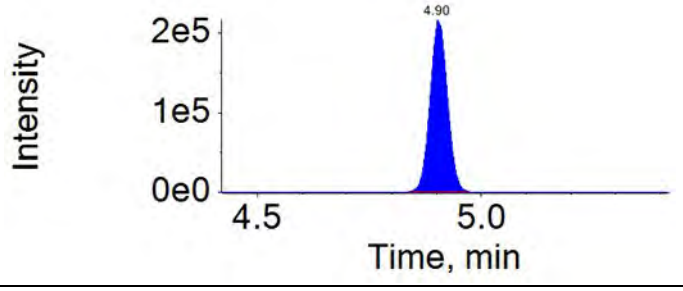


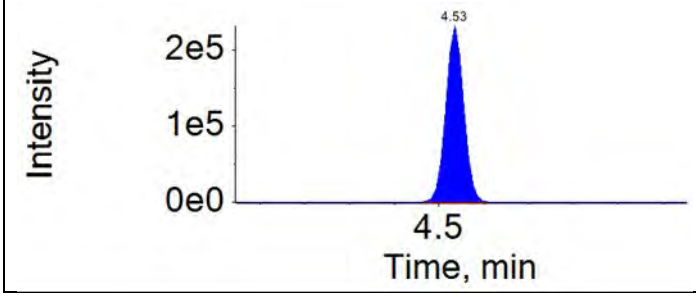
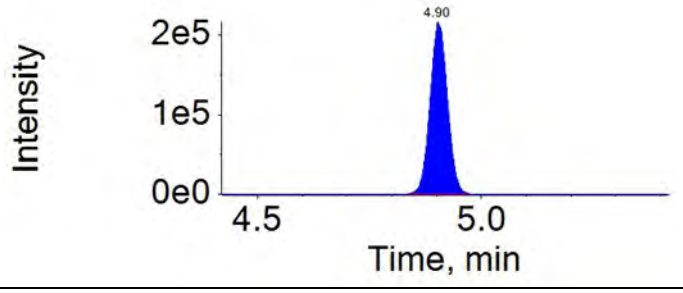
APPROVED
By MCD at 10:13 pm, 11/30/18

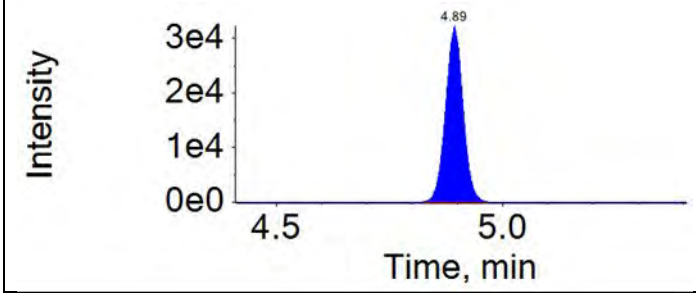
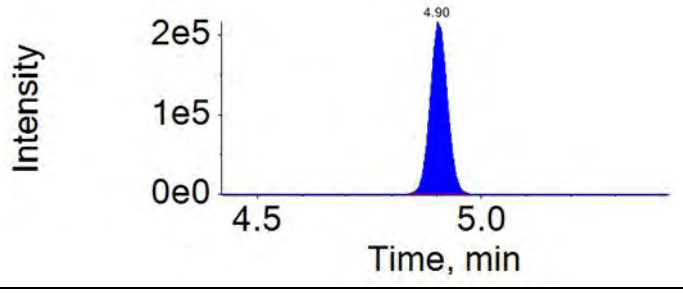
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

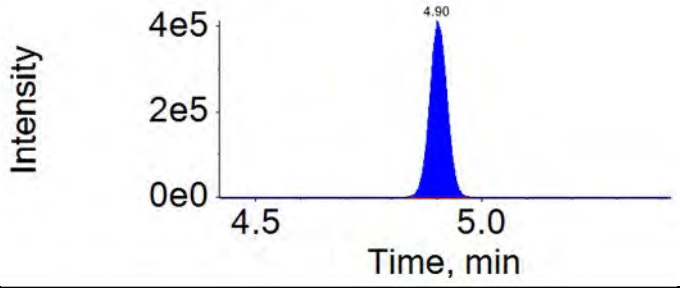
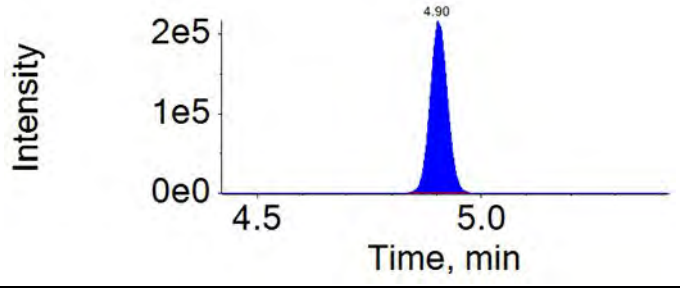
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

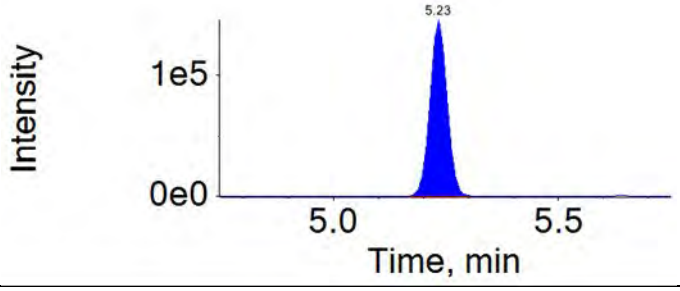
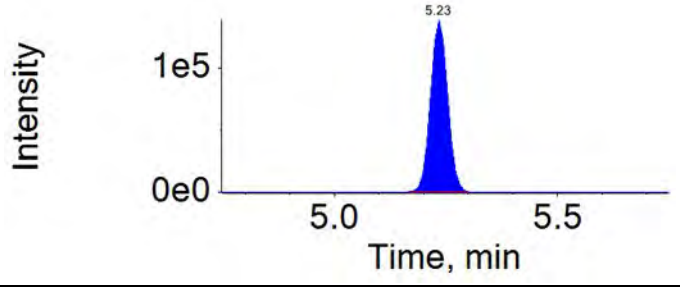
Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0
	

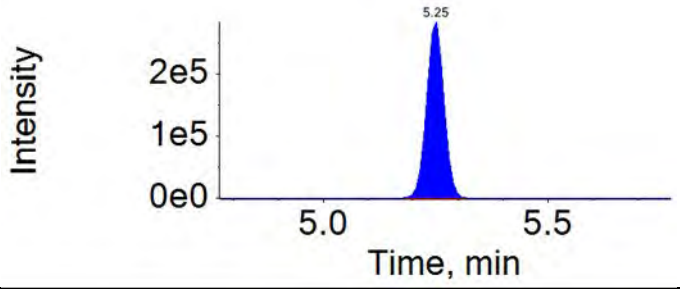
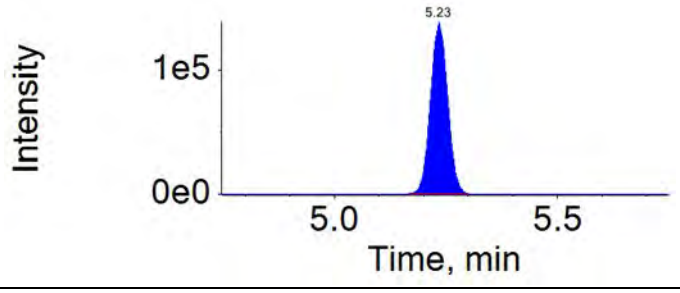
APPROVED
By MCD at 10:13 pm, 11/30/18

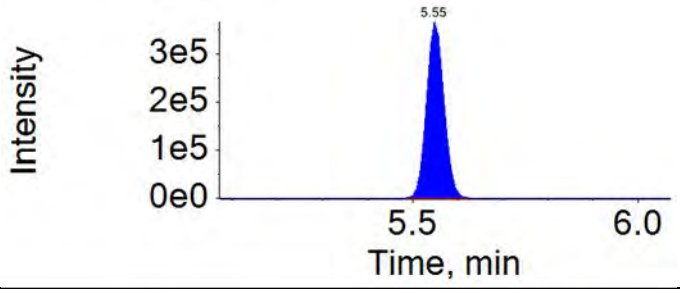
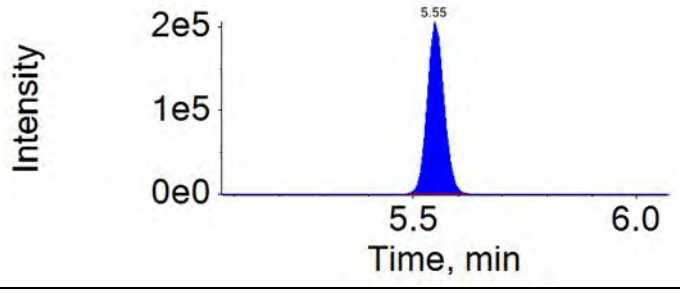
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

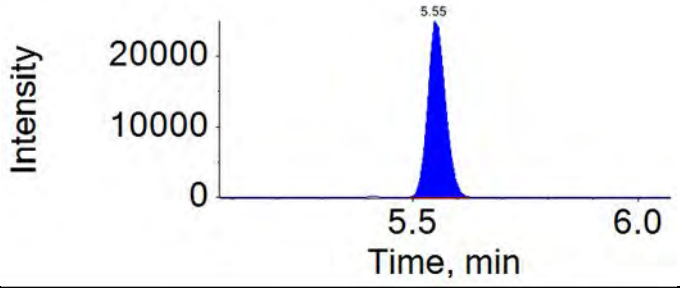
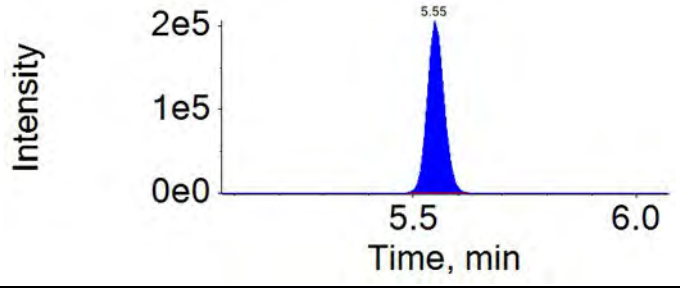
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

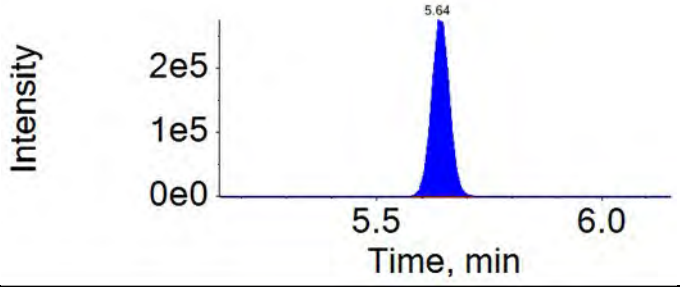
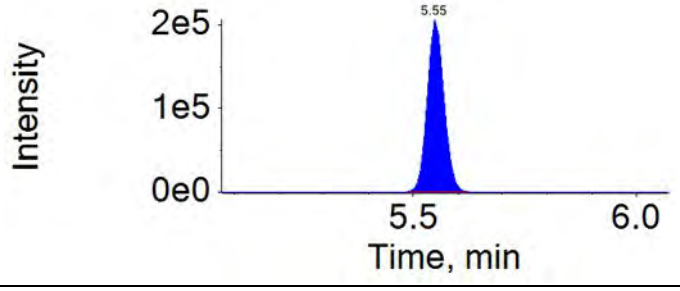
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

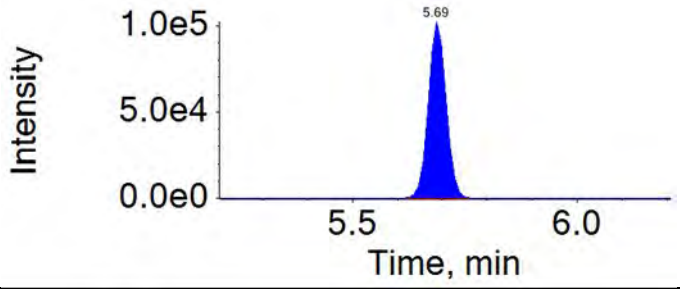
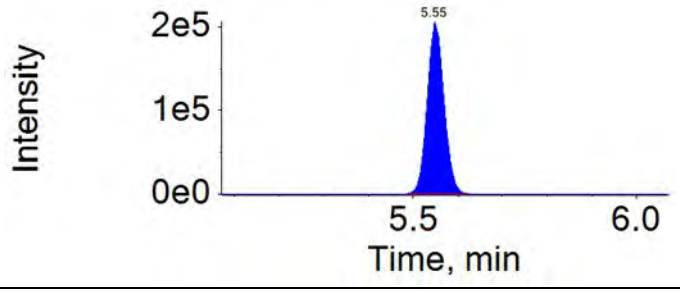
APPROVED
By MCD at 10:13 pm, 11/30/18

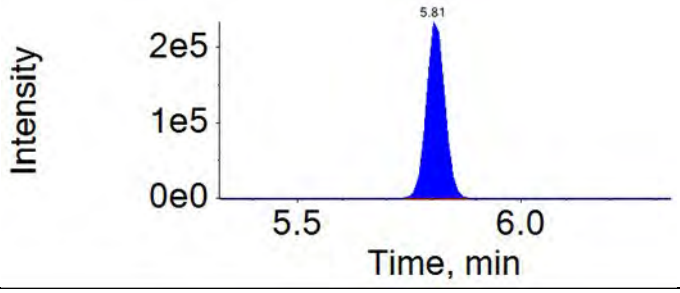
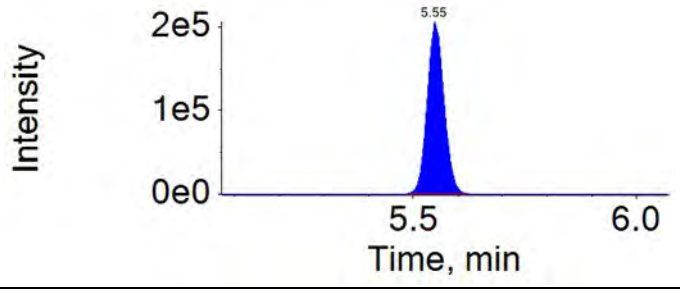
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

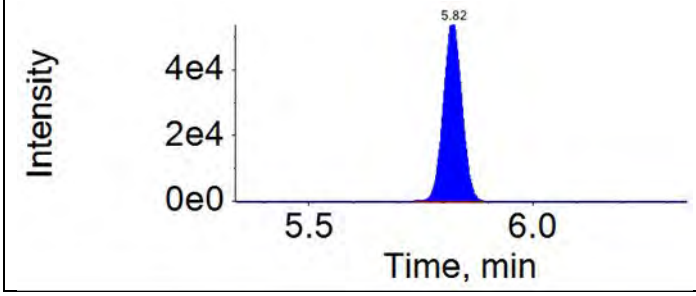
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

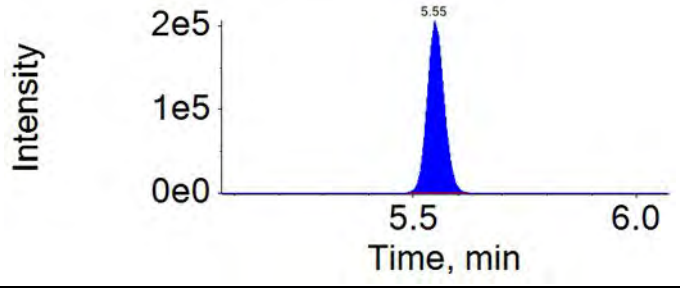
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

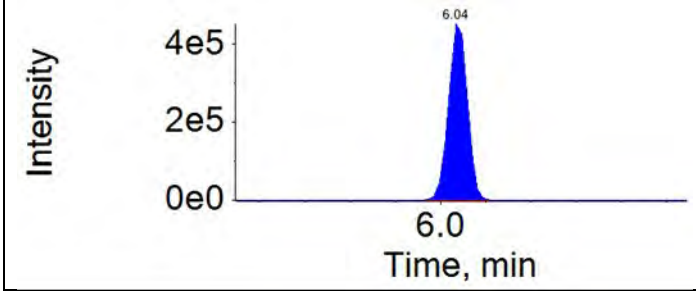
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

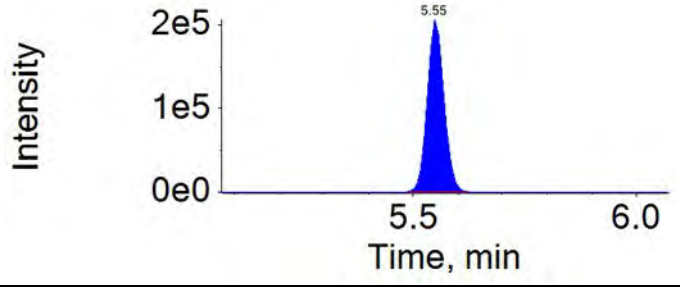
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



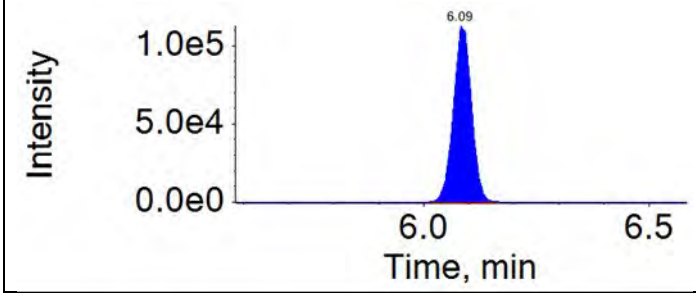


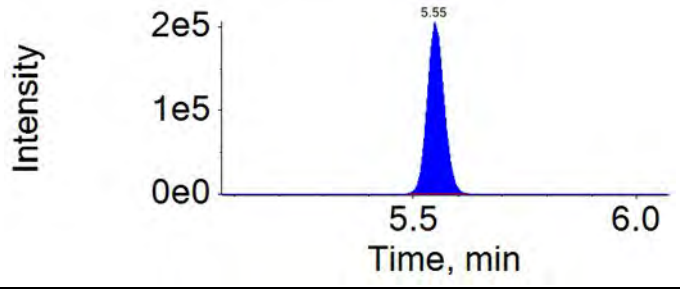
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



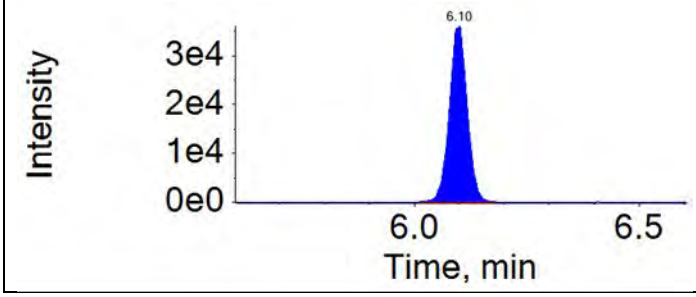


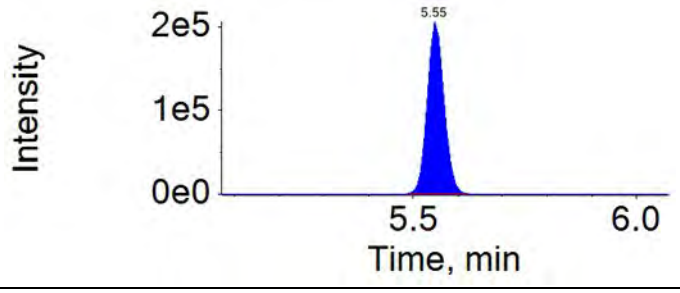
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



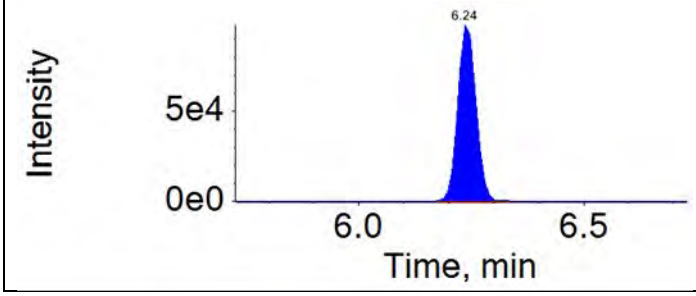


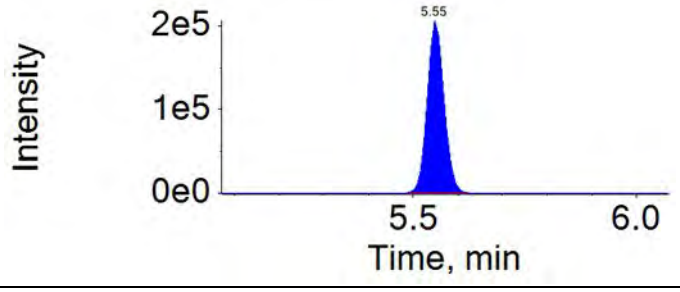
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

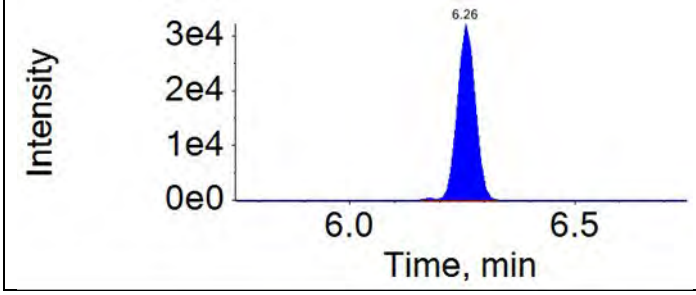
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

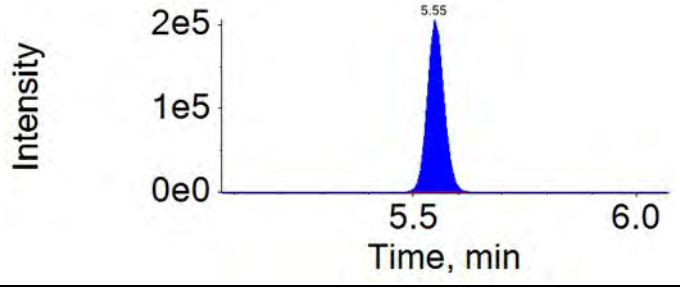
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



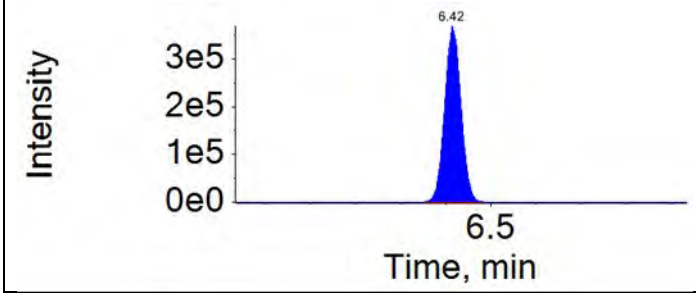


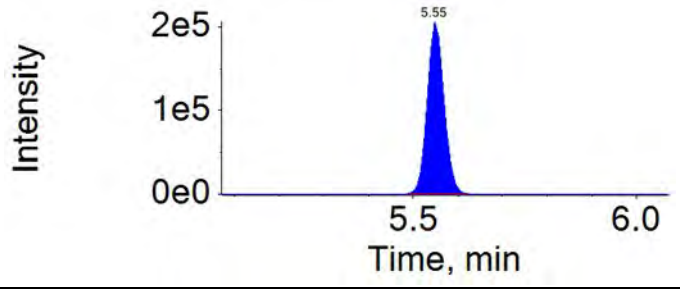
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





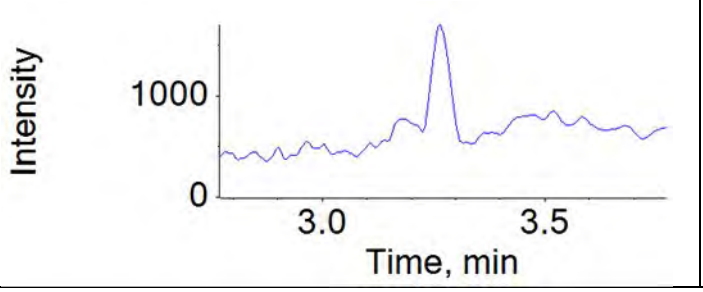
Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0

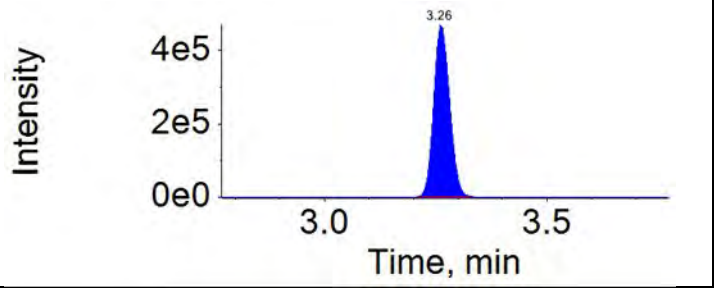




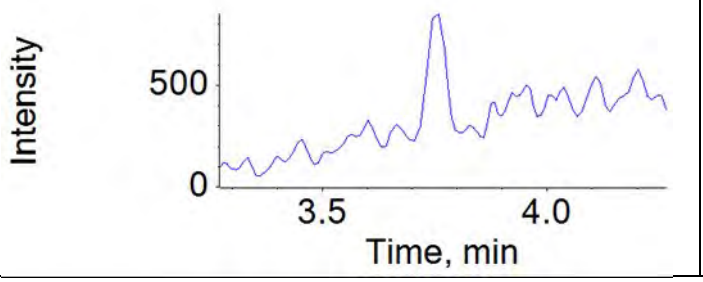
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

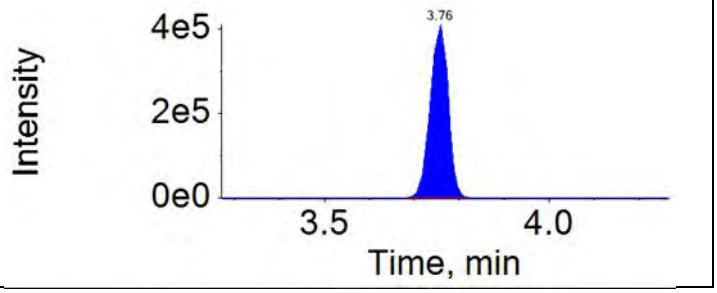
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



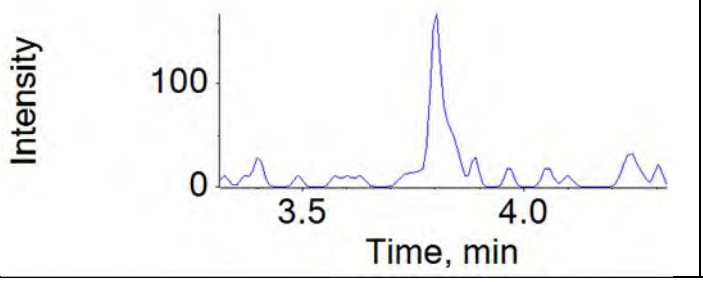


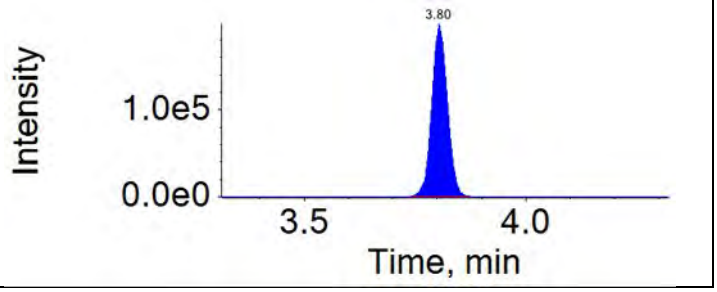
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



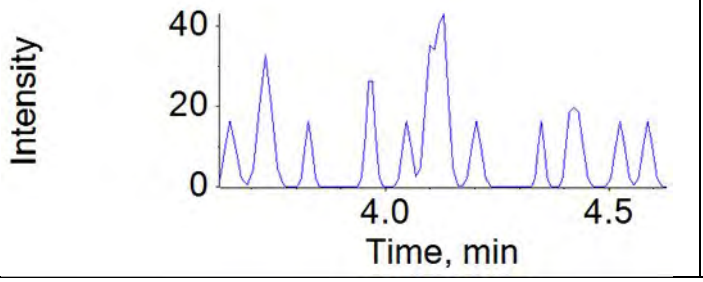


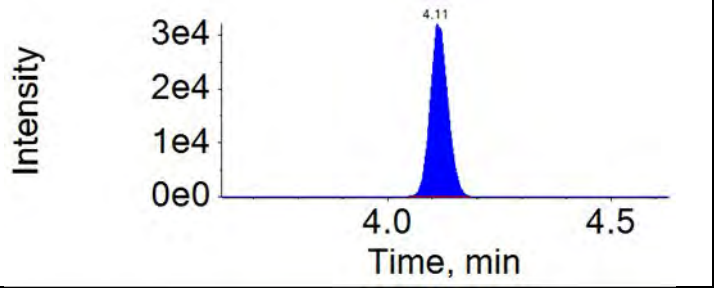
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



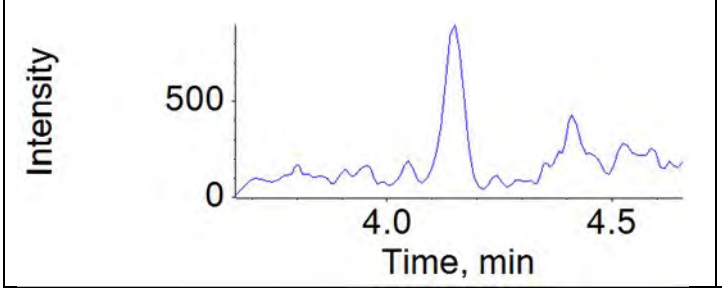


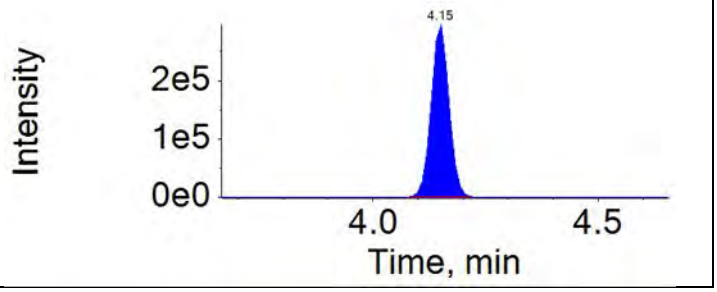
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

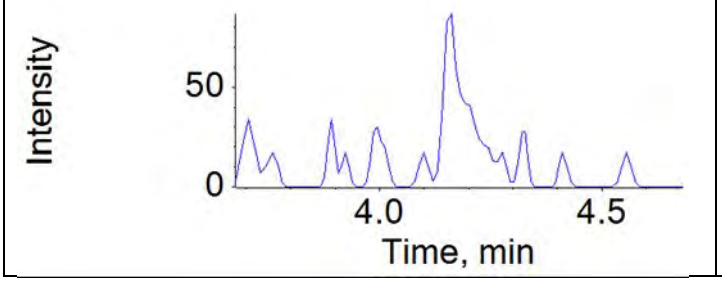
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

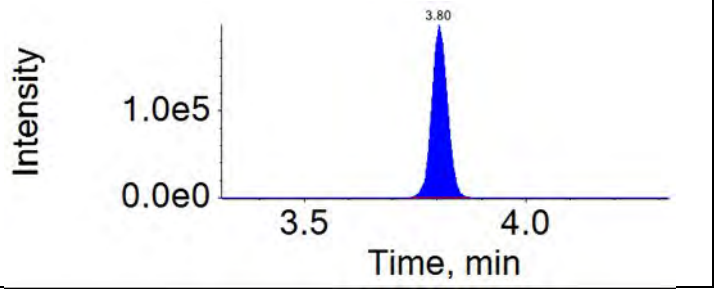
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



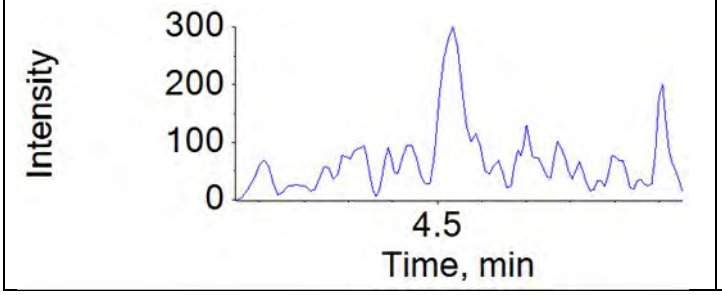


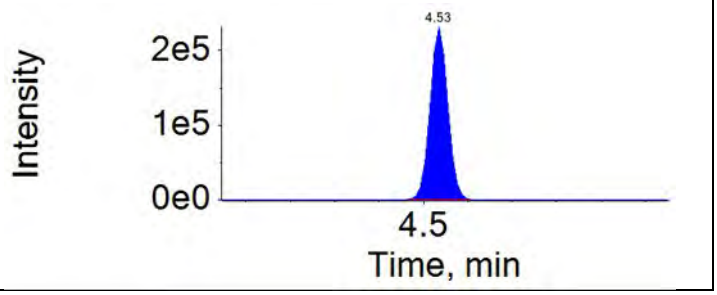
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



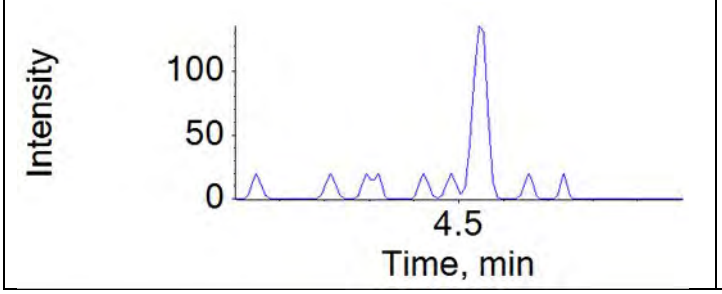


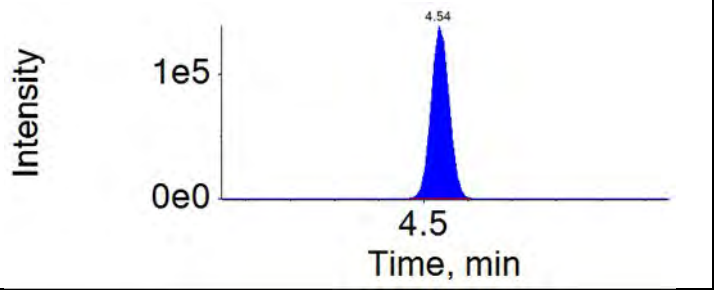
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

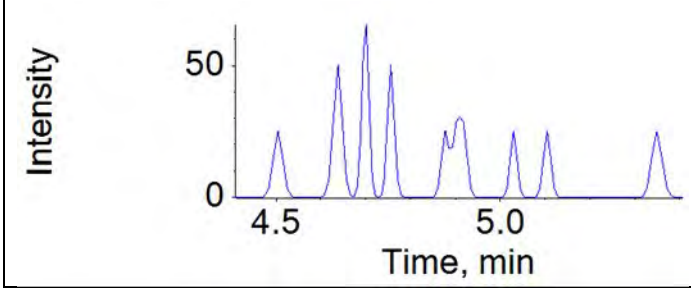
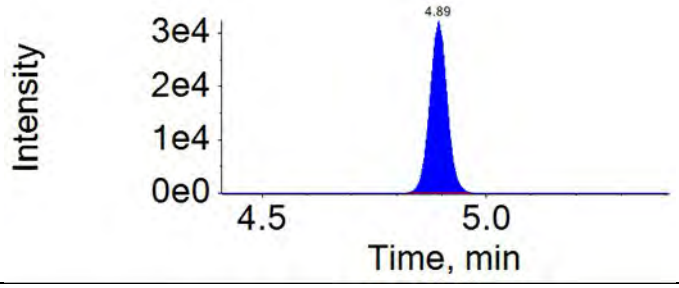


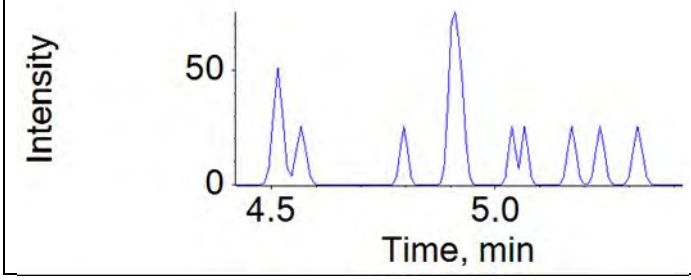
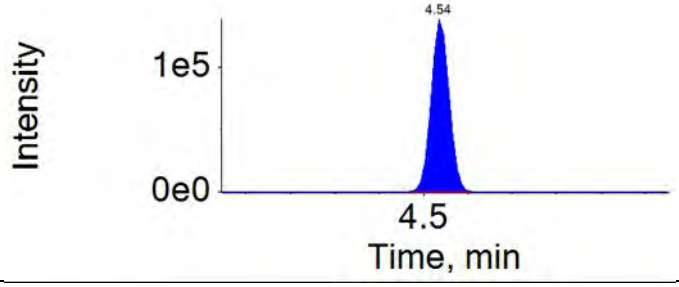


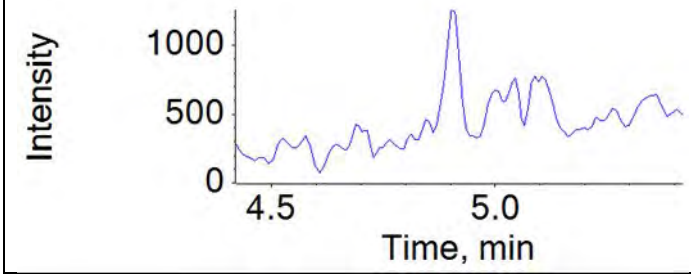
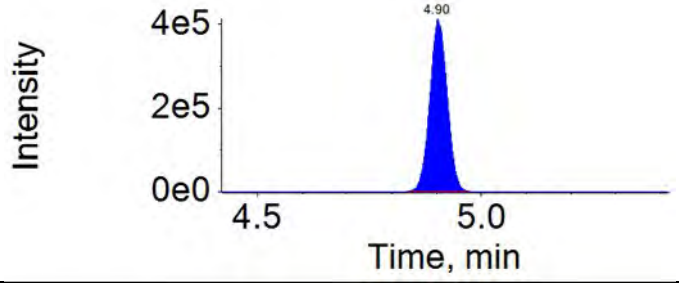
APPROVED
By MCD at 10:13 pm, 11/30/18

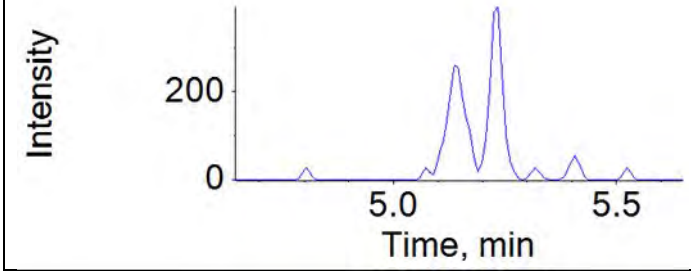
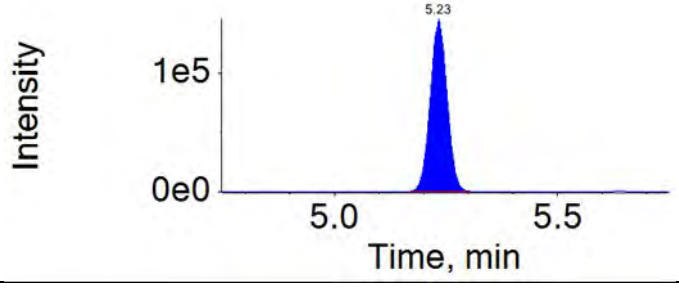
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

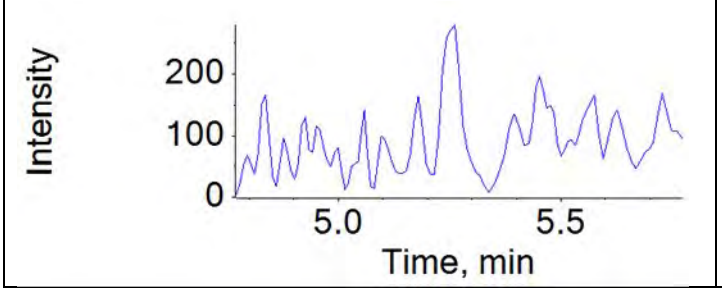
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

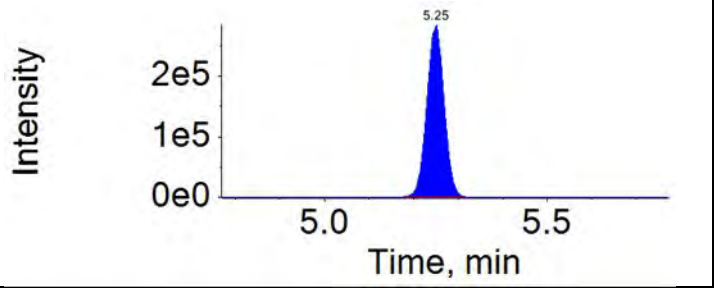
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

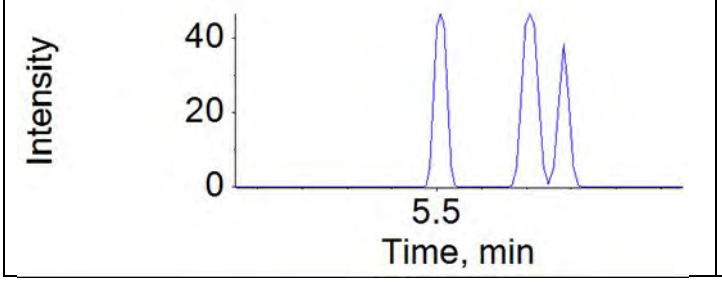
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

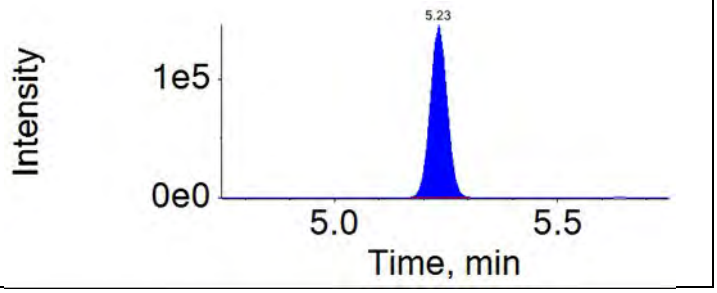
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



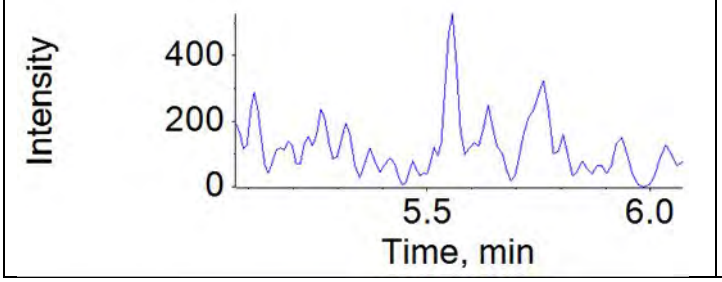


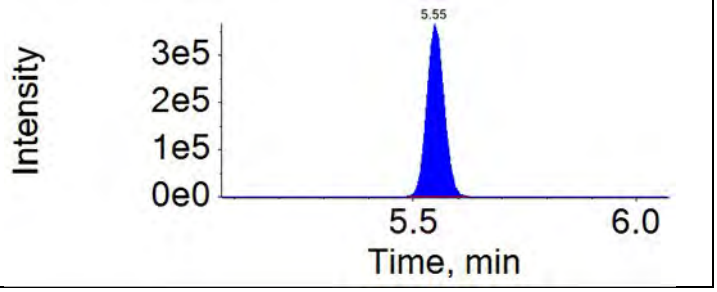
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



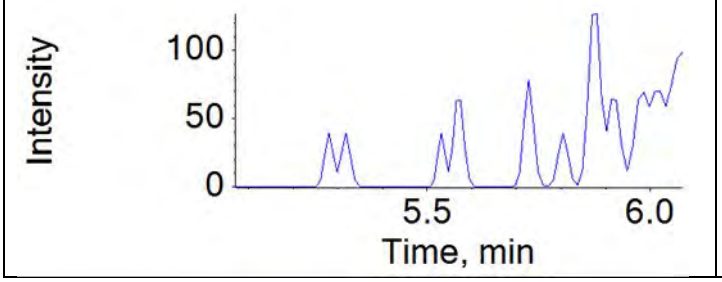


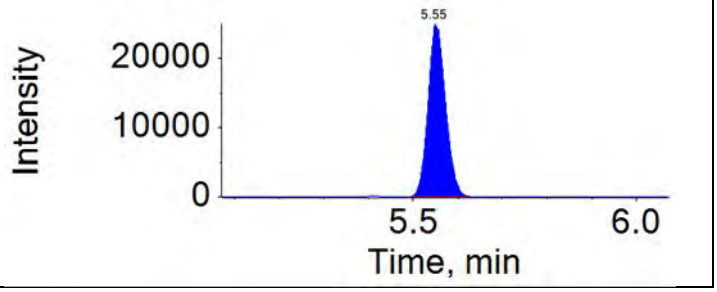
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



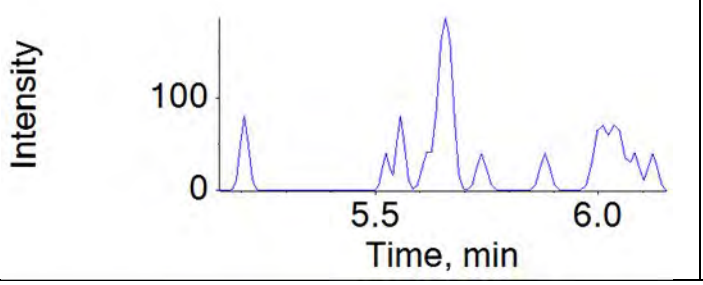


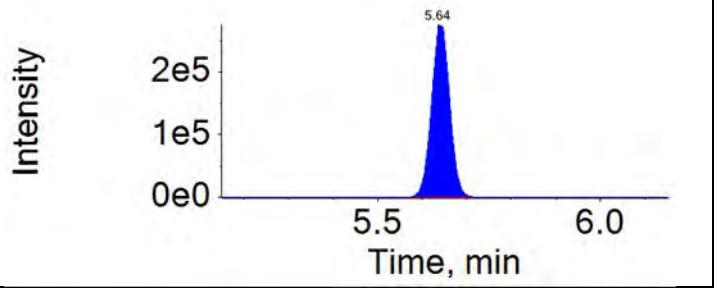
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

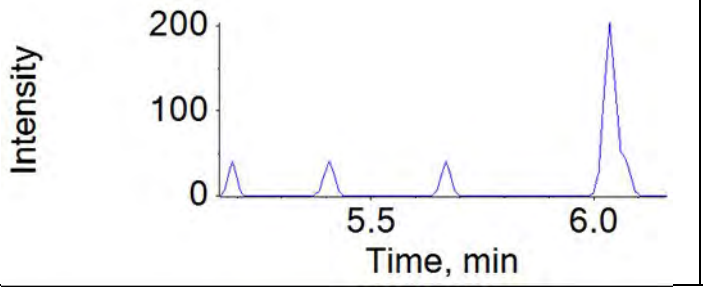
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

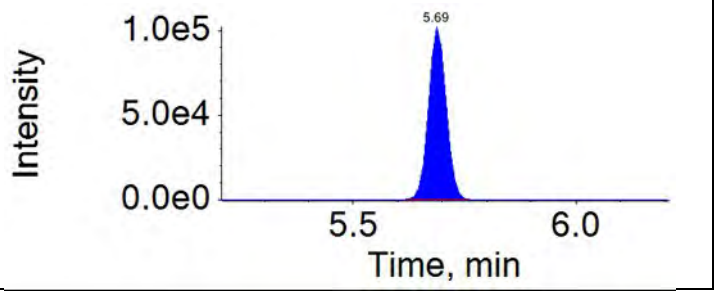
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



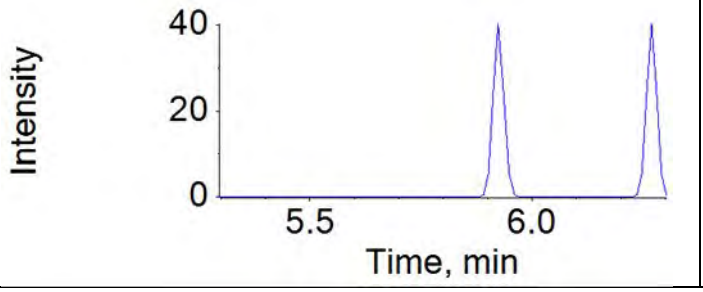


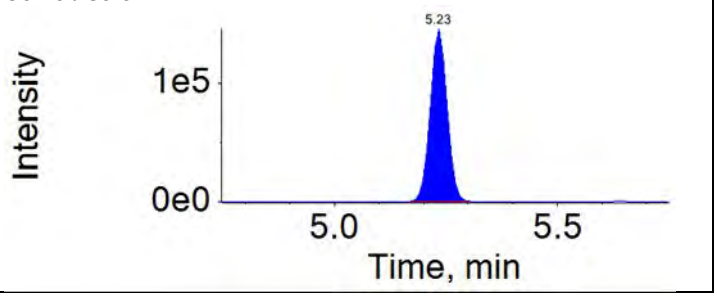
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



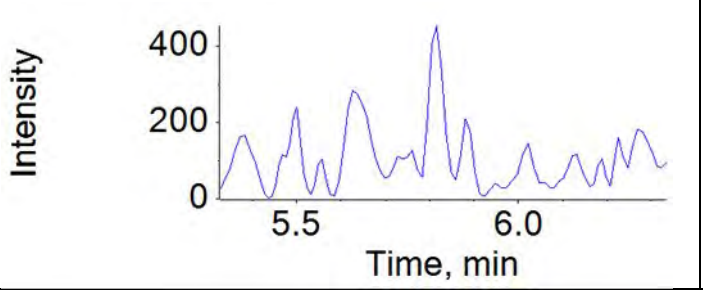


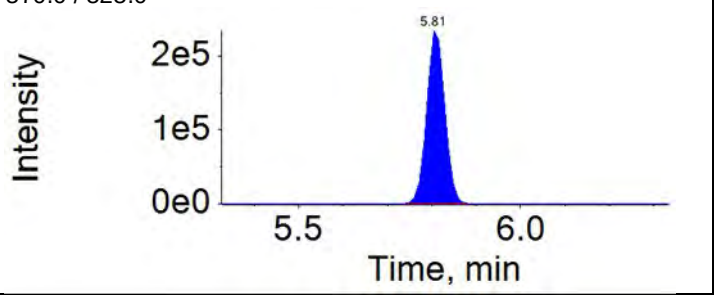
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



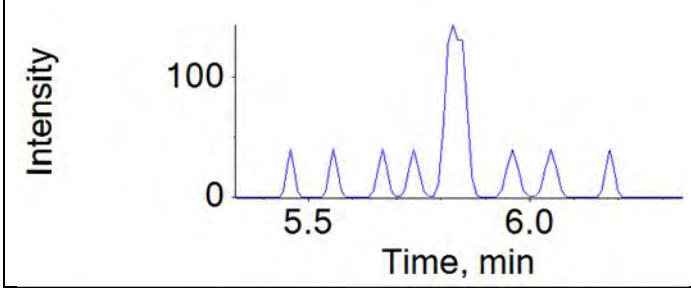


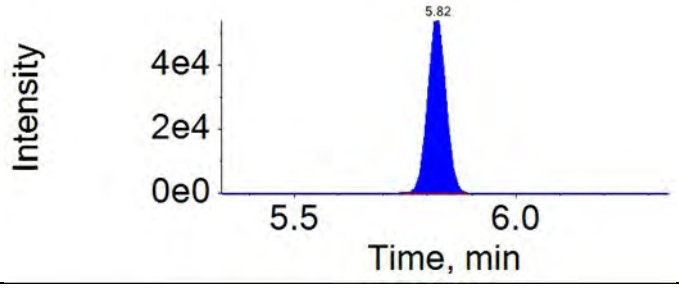
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

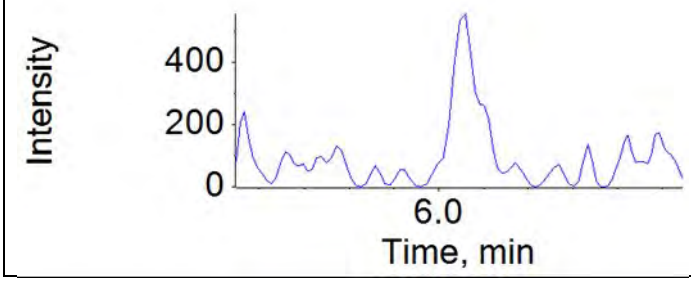
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

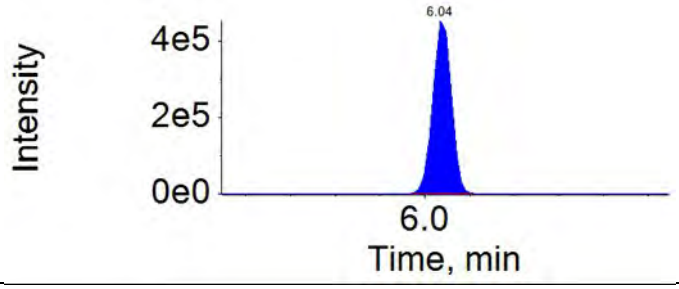
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



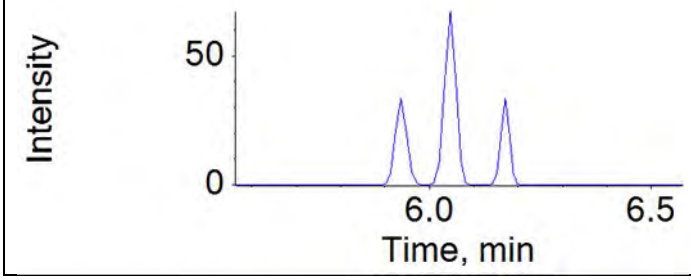


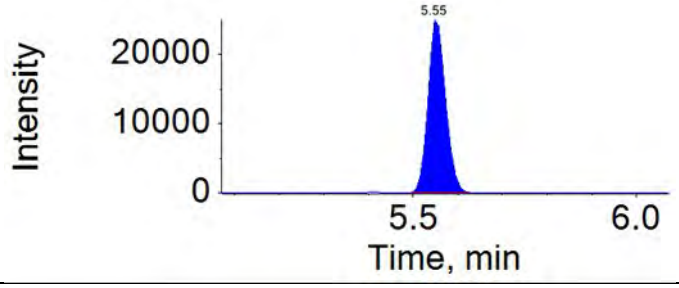
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



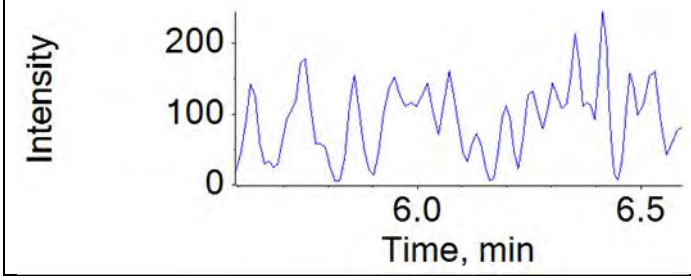


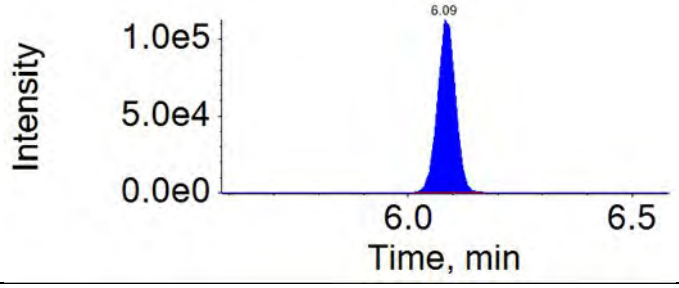
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



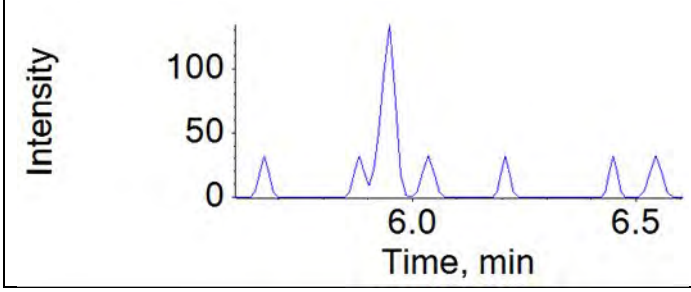


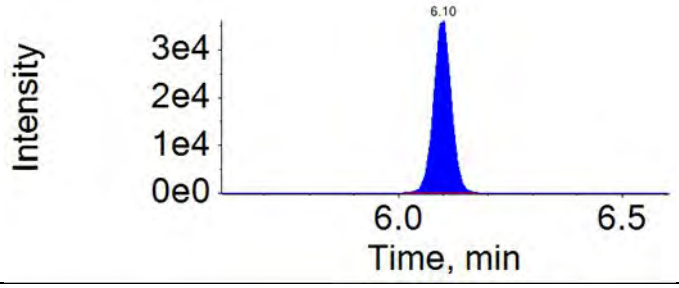
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

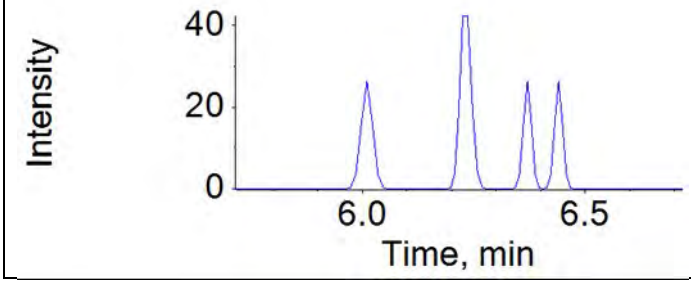
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

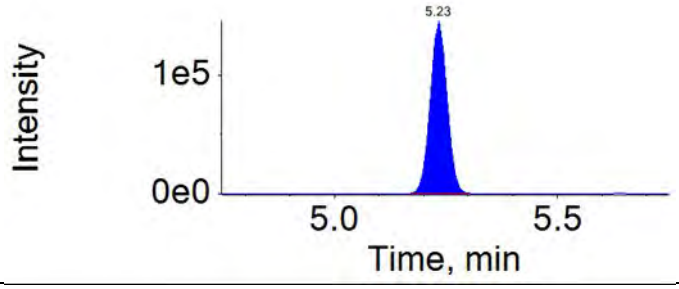
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



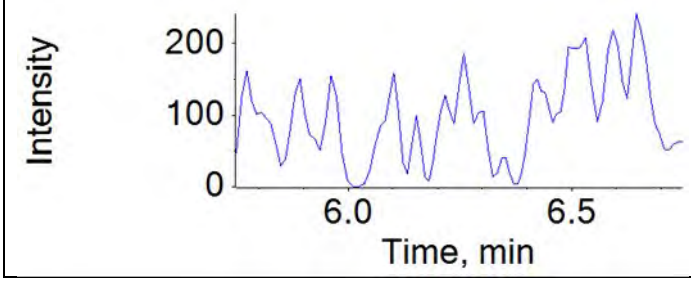


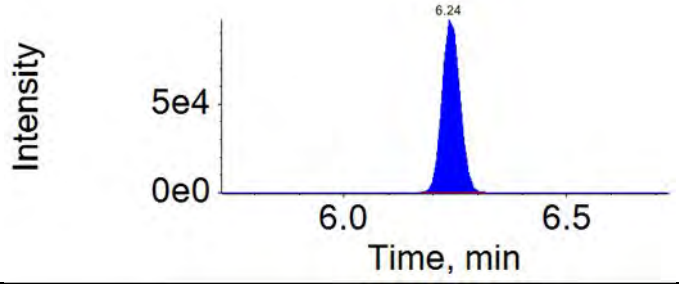
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



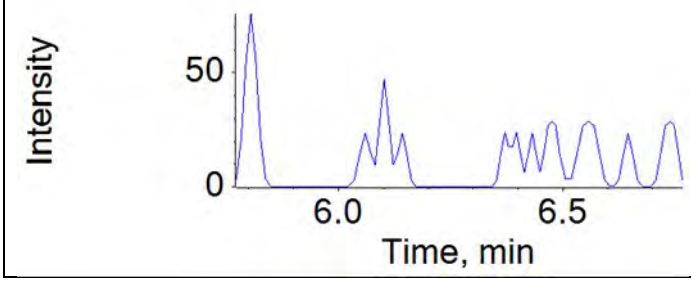


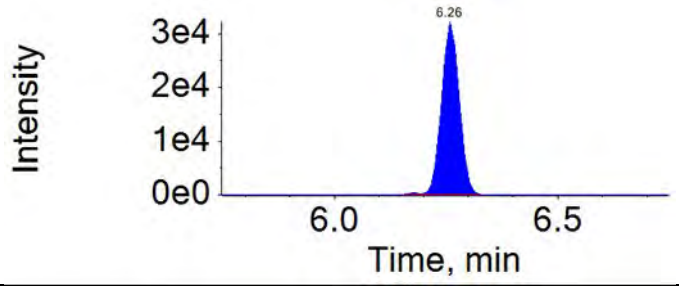
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0



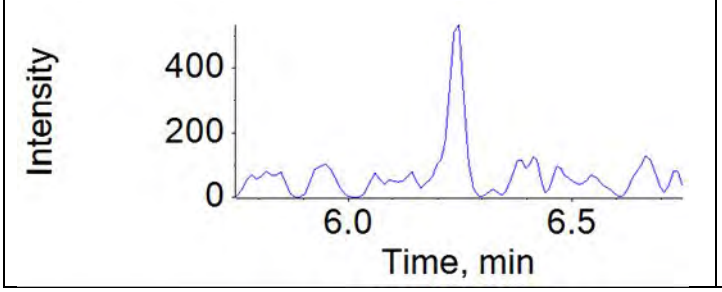


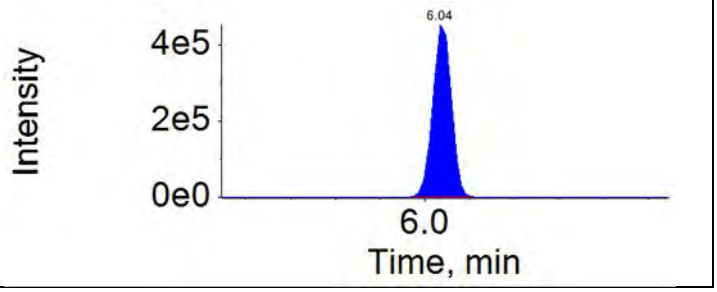
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

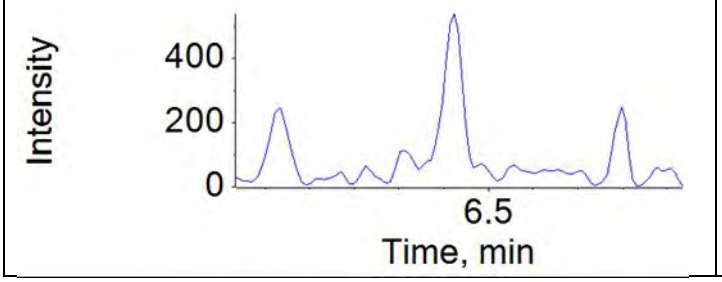
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

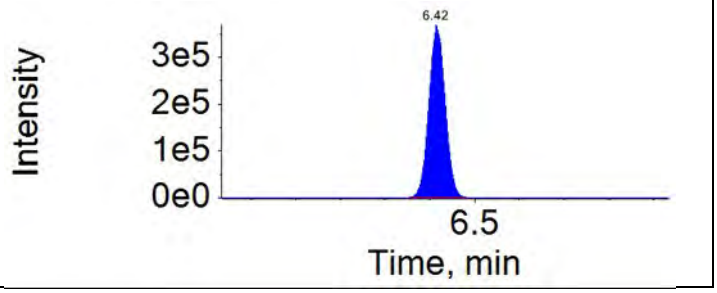
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0



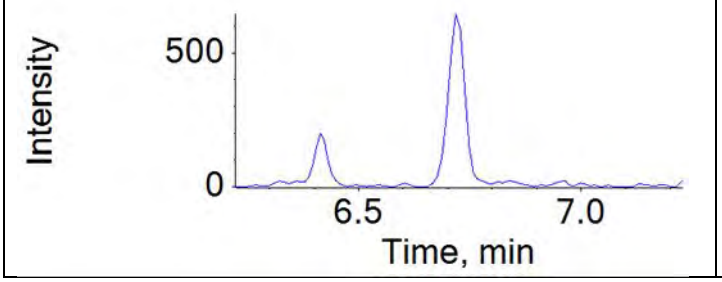


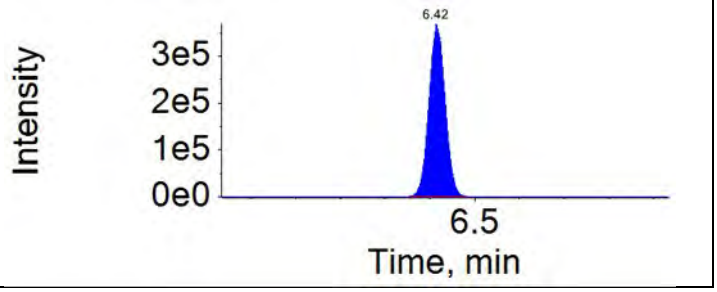
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



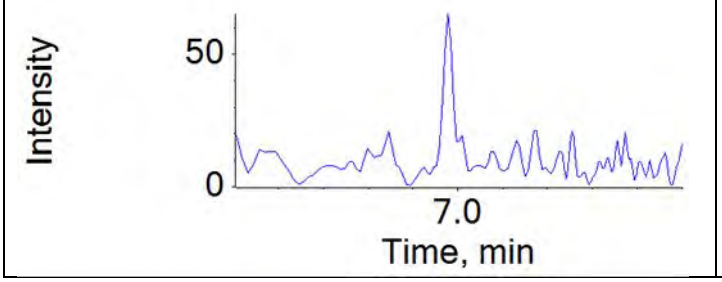


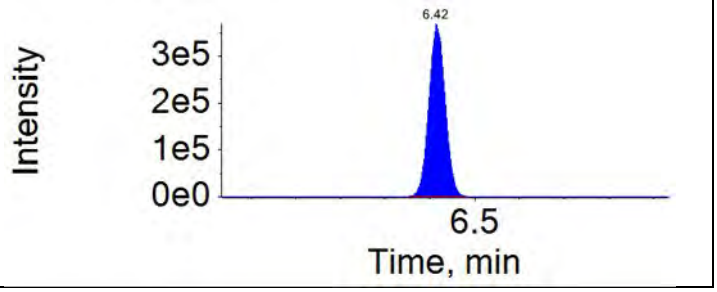
Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0





Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0





APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

Ion Ratio Report

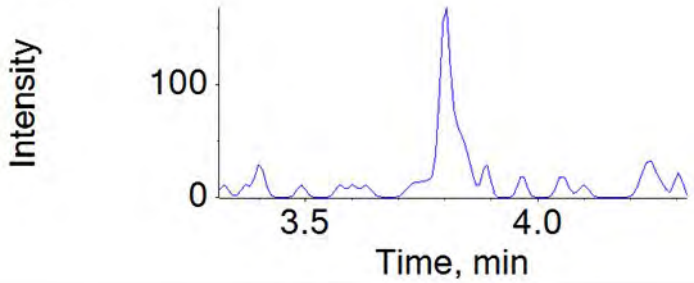
Sample Name: BLK332003 **Instrument Name:** LM27631 **File Name:** 18NOV29D-55.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	N/A	N/A	N/A	A	N/A	N/A			
PFBS_2	N/A	N/A	N/A	A	N/A	N/A		50	
4:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
4:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxA	N/A	N/A	N/A	A	N/A	N/A			
PFHxA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFPeS	N/A	N/A	N/A	A	N/A	N/A			
PFPeS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpA	N/A	N/A	N/A	A	N/A	N/A			
PFHpA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxS	N/A	N/A	N/A	A	N/A	N/A			
PFHxS_2	N/A	N/A	N/A	A	N/A	N/A		50	
6:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
6:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHpS	N/A	N/A	N/A	A	N/A	N/A			
PFHpS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOA	N/A	N/A	N/A	A	N/A	N/A			
PFOA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFOS	N/A	N/A	N/A	A	N/A	N/A			
PFOS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNA	N/A	N/A	N/A	A	N/A	N/A			
PFNA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFNS	N/A	N/A	N/A	A	N/A	N/A			
PFNS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDA	N/A	N/A	N/A	A	N/A	N/A			
PFDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
8:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
8:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
NMeFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NMeFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDS	N/A	N/A	N/A	A	N/A	N/A			
PFDS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFUnDA	N/A	N/A	N/A	A	N/A	N/A			
PFUnDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
NEtFOSAA	N/A	N/A	N/A	A	N/A	N/A			
NEtFOSAA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFDoDA	N/A	N/A	N/A	A	N/A	N/A			
PFDoDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
10:2-FTS	N/A	N/A	N/A	A	N/A	N/A			
10:2-FTS_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTrDA	N/A	N/A	N/A	A	N/A	N/A			
PFTrDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFTeDA	N/A	N/A	N/A	A	N/A	N/A			
PFTeDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFHxDA	N/A	N/A	N/A	A	N/A	N/A			
PFHxDA_2	N/A	N/A	N/A	A	N/A	N/A		50	
PFODA	N/A	N/A	N/A	A	N/A	N/A			
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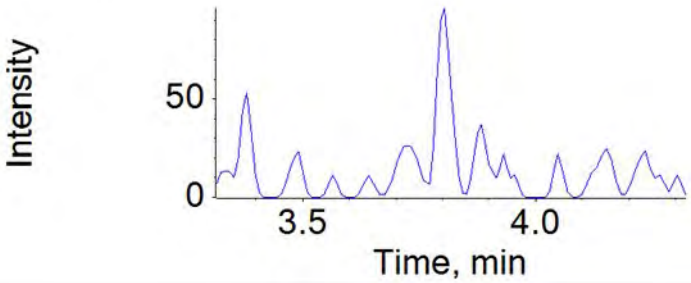
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

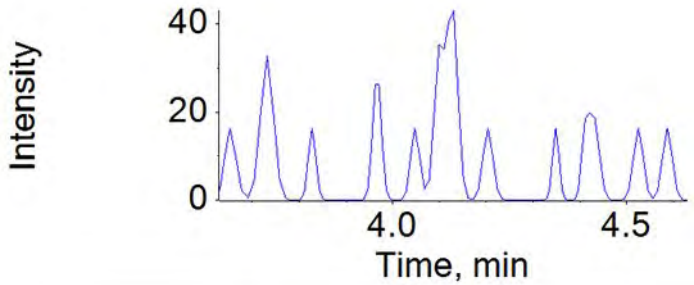
Component: PFBS
Primary Mass: 299.0 / 80.0



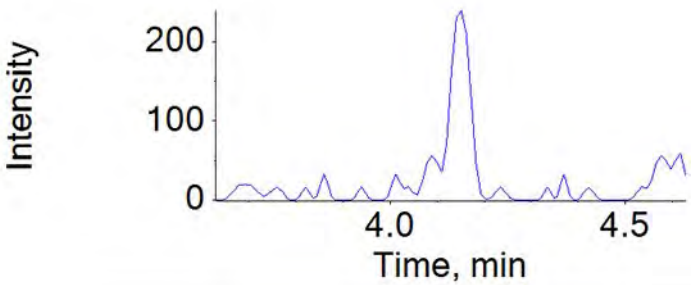
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



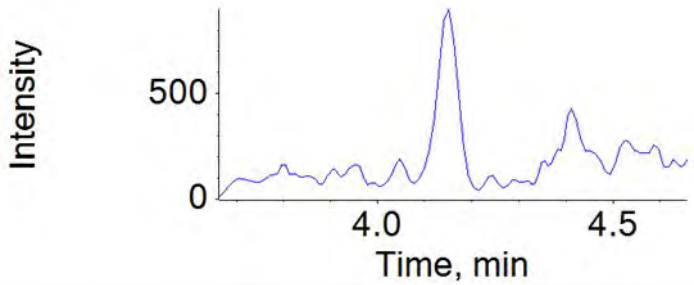
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



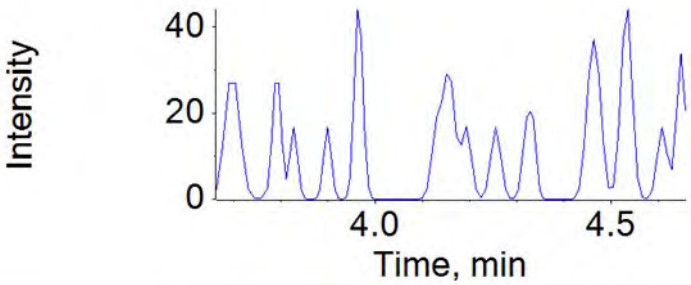
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



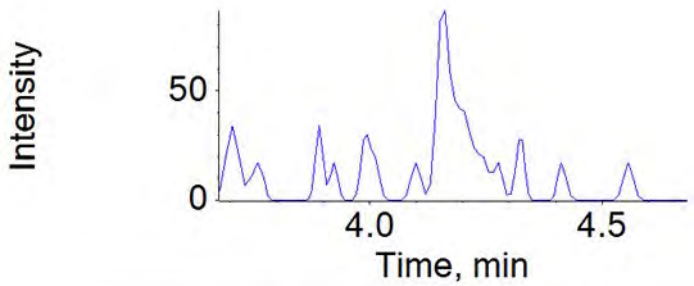
Component: PFHxA
Primary Mass: 313.0 / 269.0



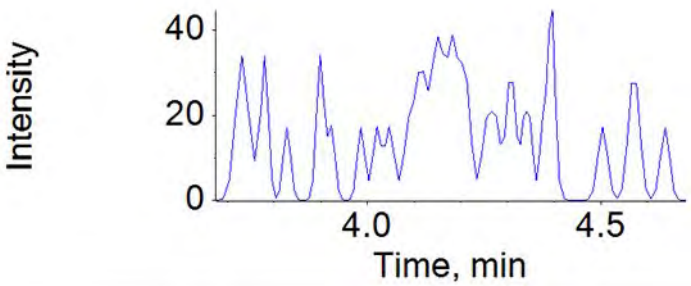
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



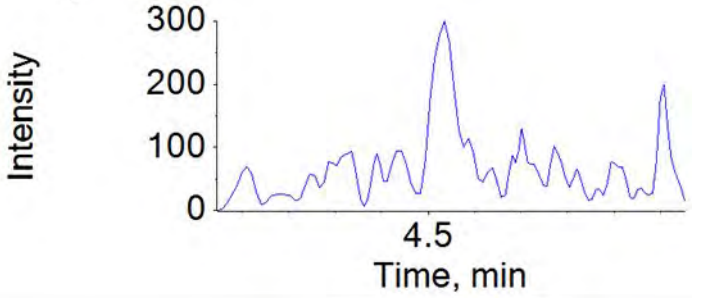
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



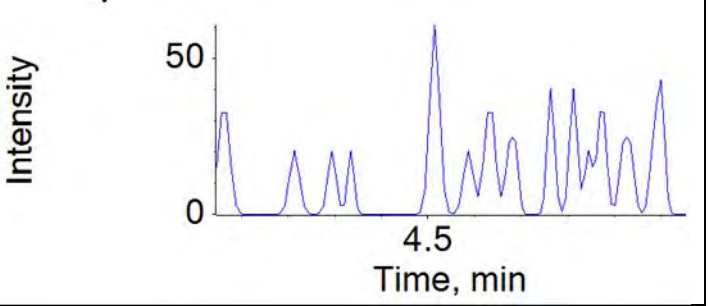
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

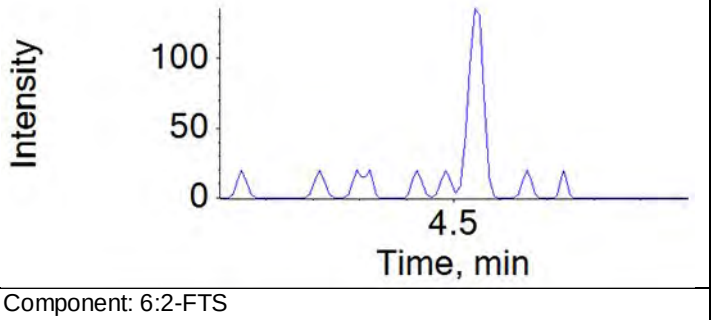
Component: PFHpA
Primary Mass: 363.0 / 319.0



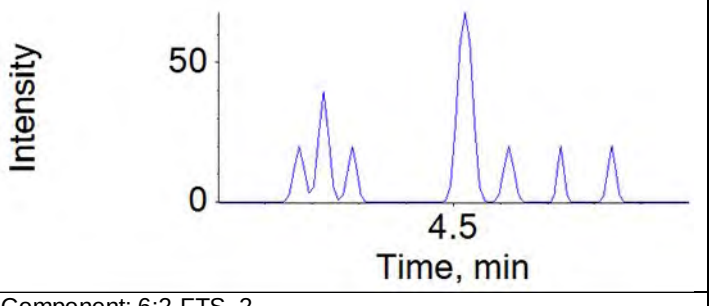
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



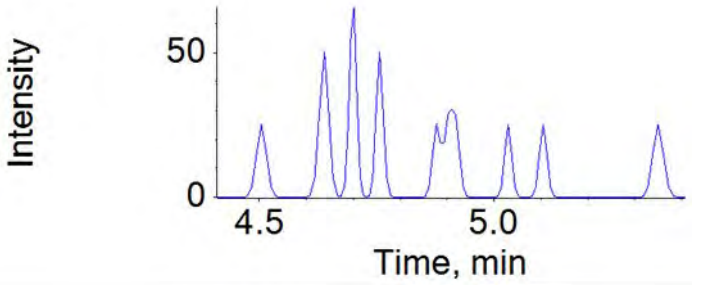
Component: PFHxS
Primary Mass: 399.0 / 80.0



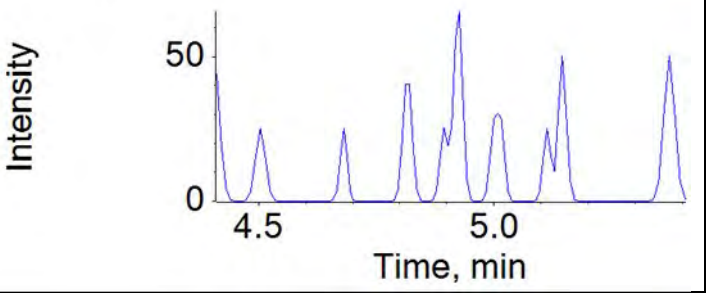
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



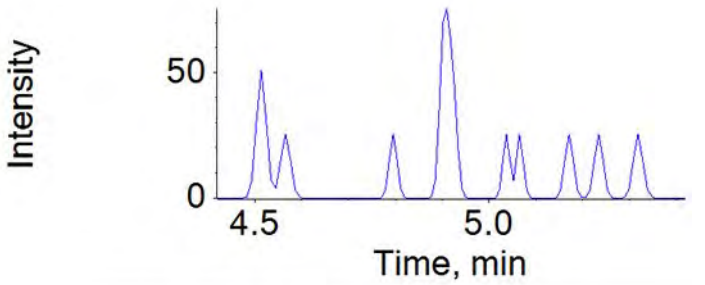
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



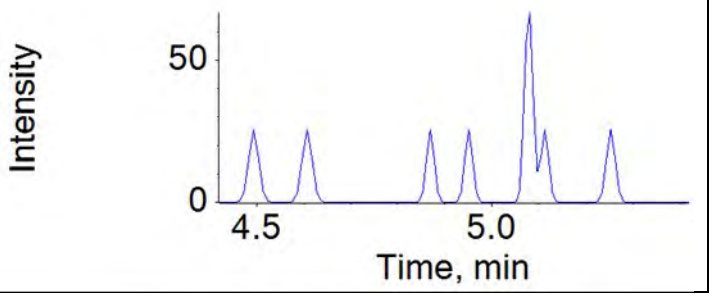
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



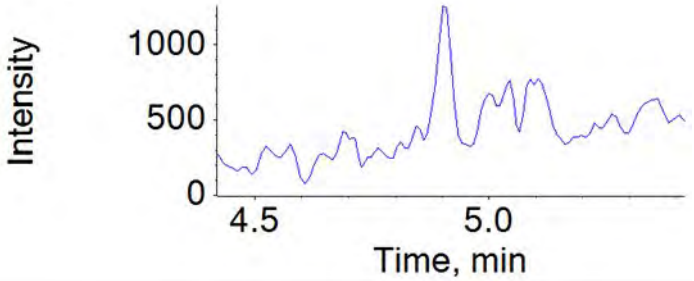
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



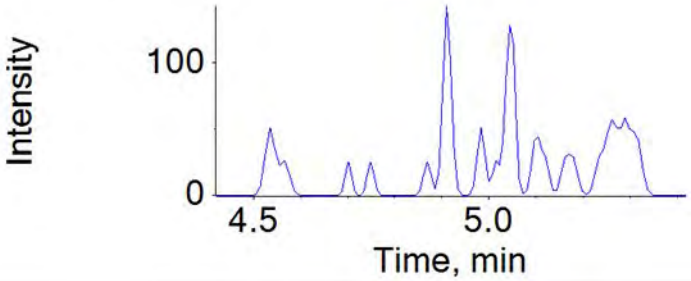
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

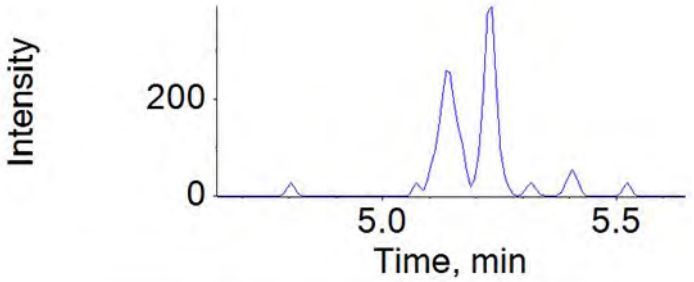
Component: PFOA
Primary Mass: 413.0 / 369.0



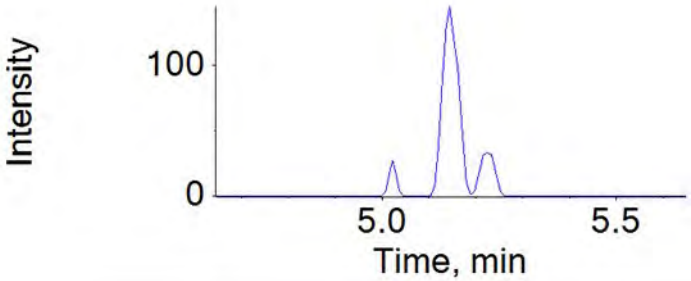
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



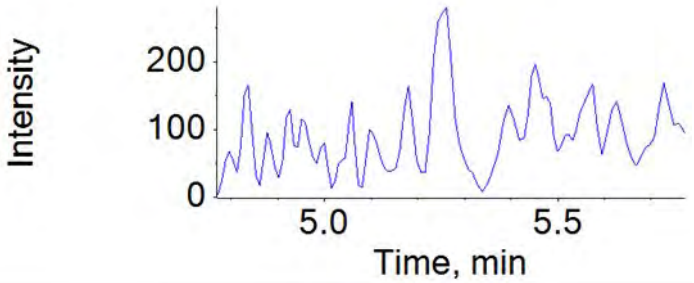
Component: PFOS
Primary Mass: 499.0 / 80.0



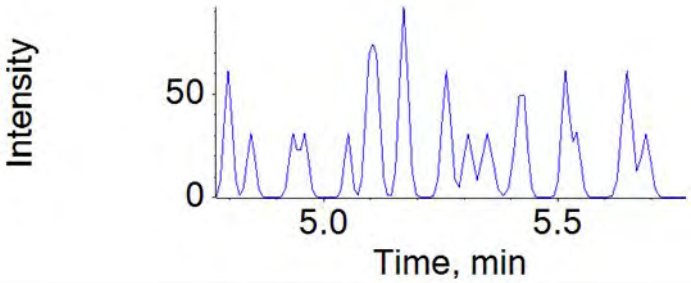
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



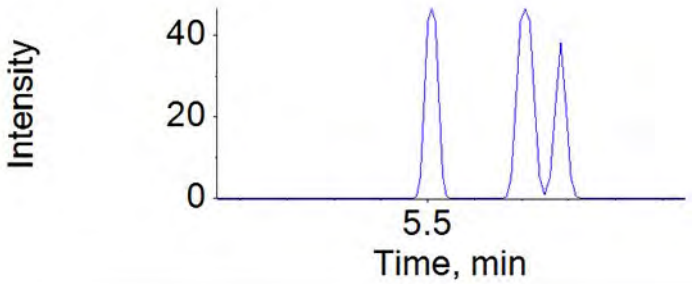
Component: PFNA
Primary Mass: 463.0 / 419.0



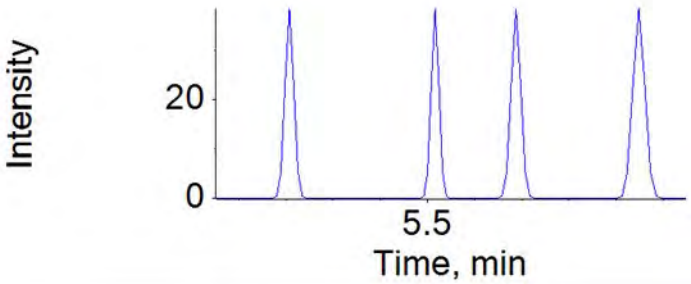
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



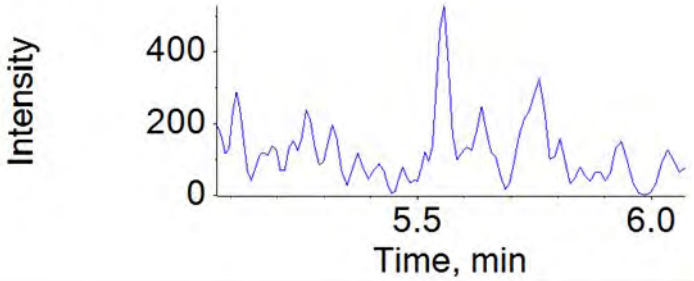
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Secondary Mass: 549.0 / 99.0



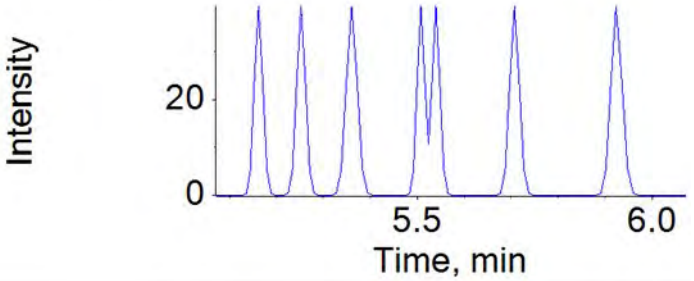
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

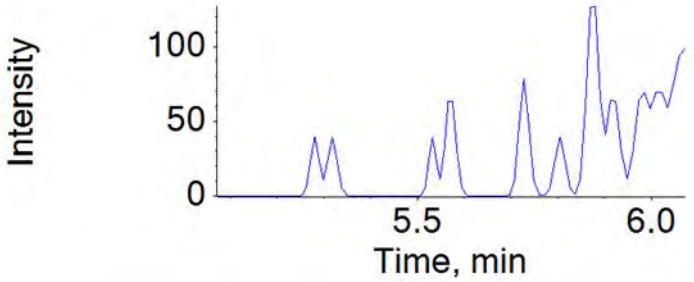
Component: PFDA
Primary Mass: 513.0 / 469.0



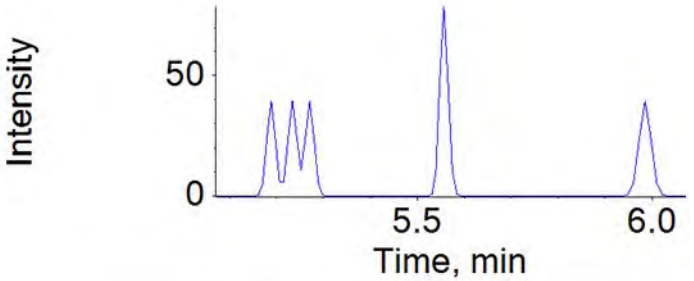
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Secondary Mass: 513.0 / 169.0



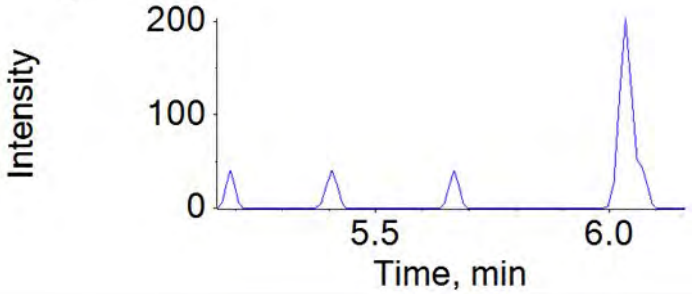
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



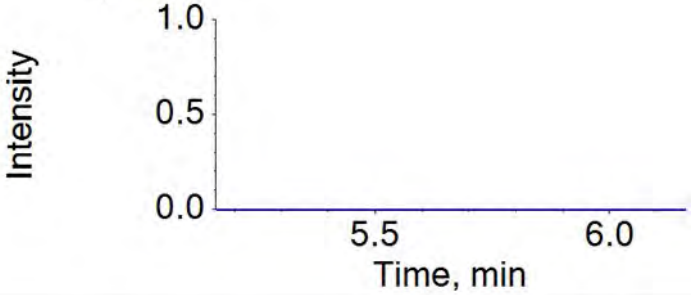
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



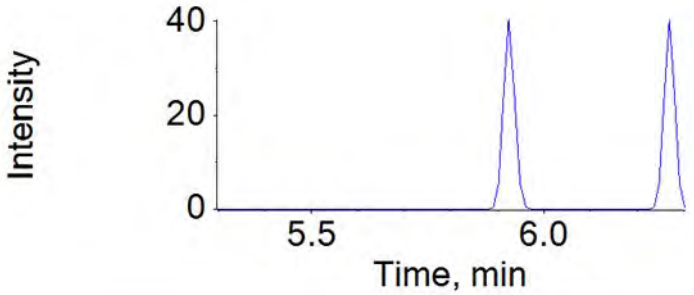
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



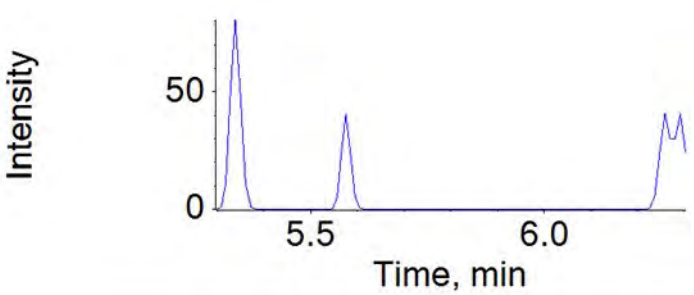
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



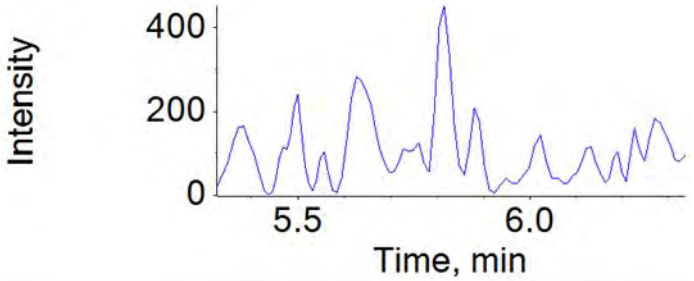
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



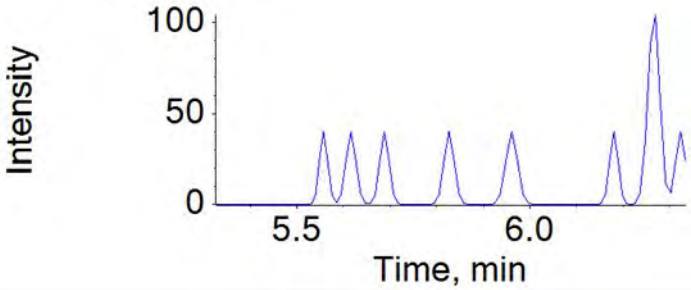
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

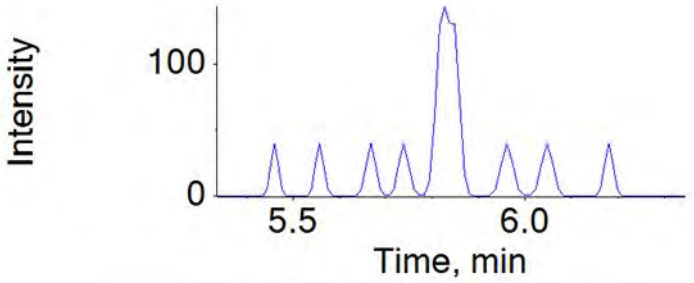
Component: PFUnDA
Primary Mass: 563.0 / 519.0



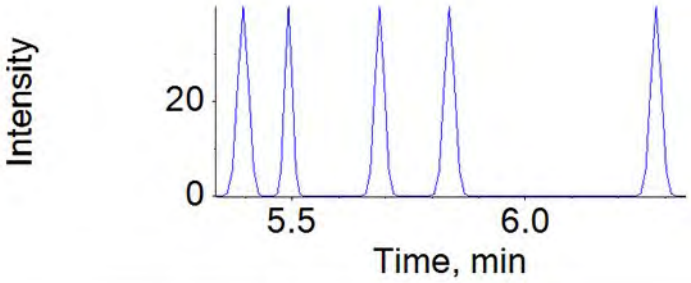
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Secondary Mass: 563.0 / 169.0



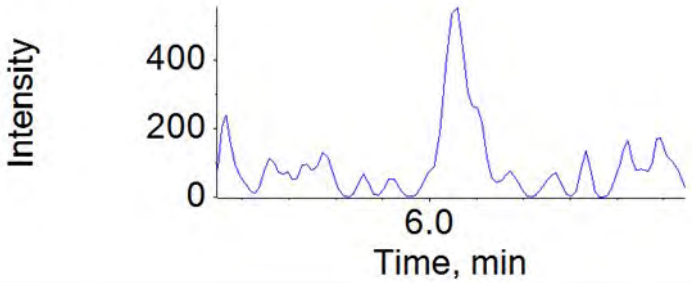
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



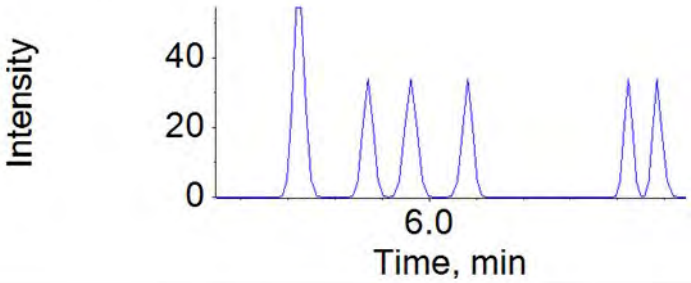
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



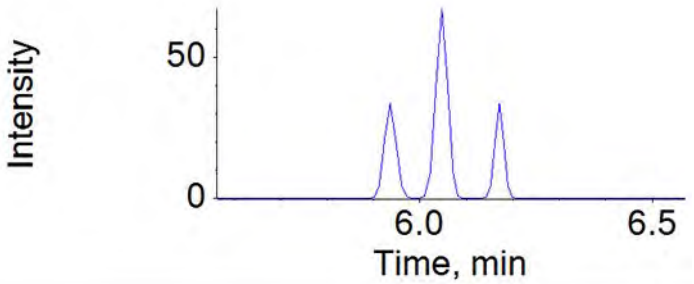
Component: PFDoDA
Primary Mass: 613.0 / 569.0



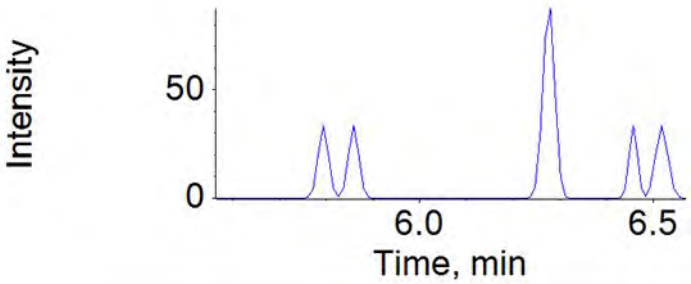
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



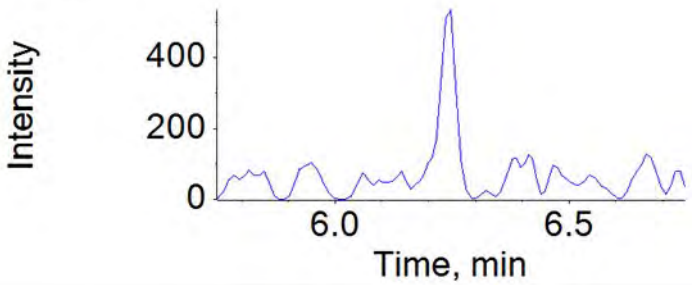
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



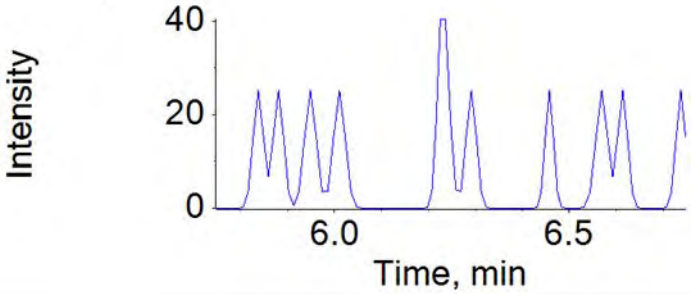
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

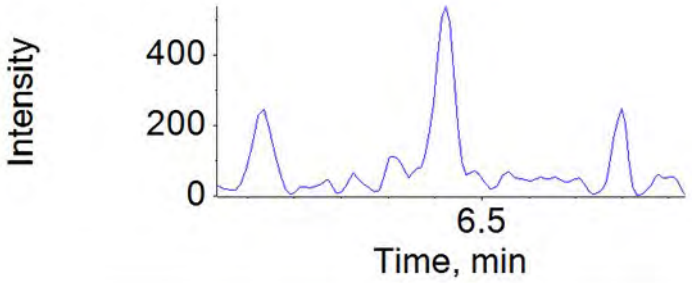
Component: PFTrDA
Primary Mass: 663.0 / 619.0



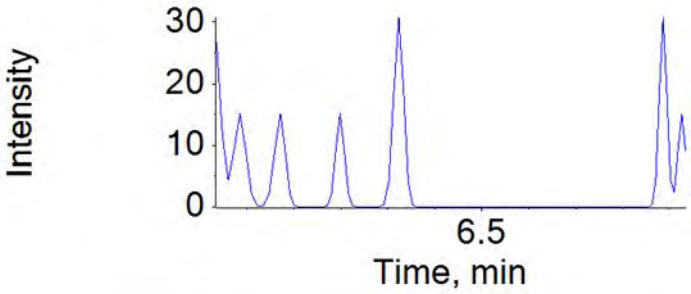
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



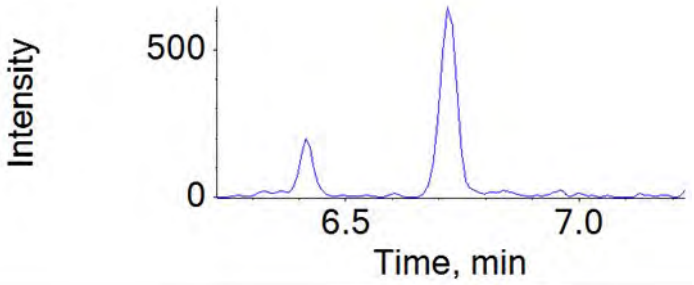
Component: PFTeDA
Primary Mass: 713.0 / 669.0



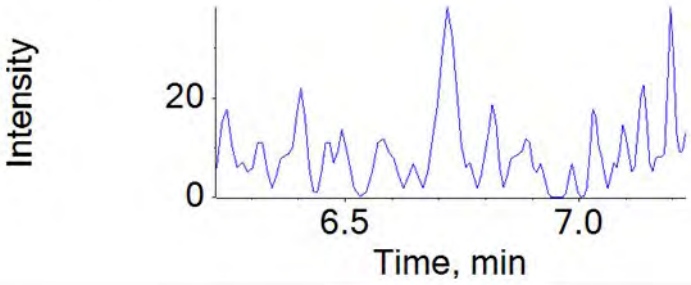
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



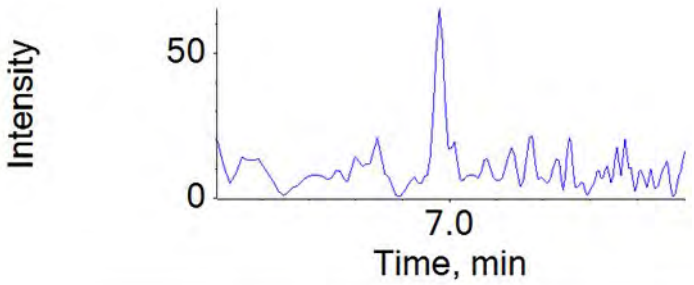
Component: PFHxDA
Primary Mass: 813.0 / 769.0



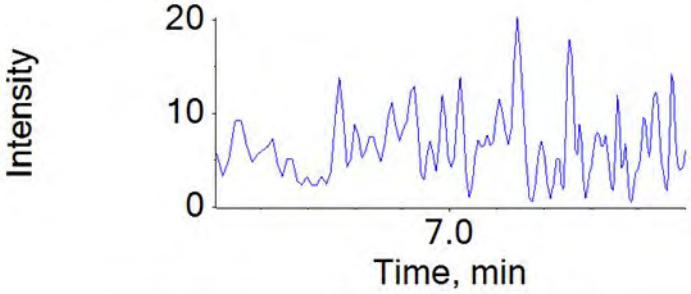
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



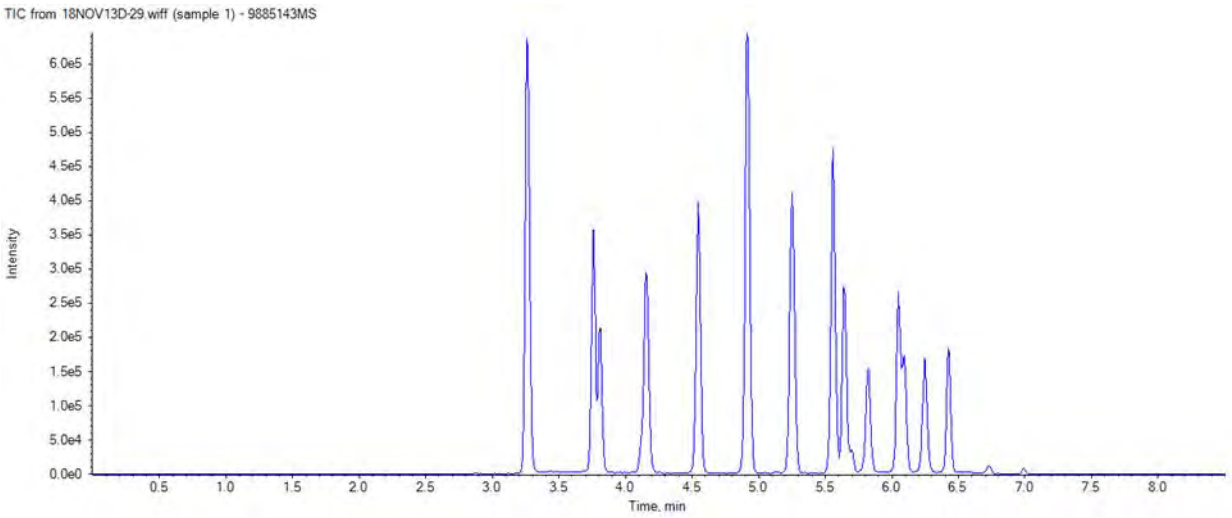
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

Matrix Spike Recovery

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18316028 11/14/2018 1:56:44 PM
Acquisition Method: 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	9885143MS	EPA 537 mod QSM 5.1 table B-15 18316028 OU1-Bldg338-S-01-03 MS Grab Soil	18NOV13D-29.wiff	2018-11-13T13:55:59



Injection Standard Area Reference File**:** 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.00	743285.5	661126.9	12	50	
13C2-PFOA	5.00	521950.7	466902.6	12	50	
13C4-PFOS	4.78	273918.4	247446.9	11	50	
13C2-PFDA	5.00	333280.8	295381.6	13	50	

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

Matrix Spike Recovery

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	9885143MS	EPA 537 mod QSM 5.1 table B-15 18316028 OU1-Bldg338-S-01-03 MS Grab Soil	18NOV13D-29.wiff	2018-11-13T13:55:59

Analyte Name	Analyte Area	Ext Std Area	Area Ratio	Adj Actual Conc	Sample Result	%REC	% REC Limit	%REC OOS
PFBS	49571.4	379787.3	0.131	1.095	1.129	103	70-130	
PFHxA	107776.1	567996.5	0.190	1.236	1.440	117	70-130	
PFHpA	108625.9	459484.5	0.236	1.236	1.425	115	70-130	
PFHxS	41094.8	280412.0	0.147	1.169	1.292	111	70-130	
PFOA	111791.1	788083.1	0.142	1.236	1.377	111	70-130	
PFOS	48344.0	233330.6	0.207	1.182	1.647	139	70-130	OOS
PFNA	91743.9	418809.2	0.219	1.236	1.436	116	70-130	
PFDA	79654.6	554542.8	0.144	1.236	1.385	112	70-130	
NMeFOSAA	7215.8	66012.5	0.109	1.236	1.123	91	70-130	
PFUnDA	66721.9	223273.5	0.299	1.236	1.420	115	70-130	
NEtFOSAA	7953.1	53367.4	0.149	1.236	1.420	115	70-130	
PFDoDA	66613.8	472918.4	0.141	1.236	1.304	105	70-130	
PFTrDA	56525.3	472918.4	0.120	1.236	1.372	111	70-130	
PFTeDA	46301.4	348092.6	0.133	1.236	1.356	110	70-130	

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

Matrix Spike Recovery

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18316028 11/14/2018 1:56:44 PM
Acquisition Method: 18AUG13_3uL.dam

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	9885143MS			**Data File:**		18NOV13D-29.wiff
Sample ID:	EPA 537 mod QSM 5.1 table B-15 18316028 OU1-Bldg338-S-01-03 MS Grab Soil			**Acquis Date:**		2018-11-13T13:55:59
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	33			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18316028
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	18316028			**Operator:**		JPT12262
Sample Wt.:	1.10000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		2.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	743285.5	661126.9	12	50	
13C2-PFOA	5.0	521950.7	466902.6	12	50	
13C4-PFOS	4.8	273918.4	247446.9	11	50	
13C2-PFDA	5.0	333280.8	295381.6	13	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C3-PFBS	379787.3	13C3-PFBA	743285.5	0.511	8.455	6.558	78	50-150	
E13C5-PFHxA	567996.5	13C2-PFOA	521950.7	1.088	9.091	7.147	79	50-150	
E13C3-PFHxS	280412.0	13C2-PFOA	521950.7	0.537	8.600	6.703	78	50-150	
E13C4-PFHpA	459484.5	13C2-PFOA	521950.7	0.880	9.091	7.211	79	50-150	
E13C8-PFOA	788083.1	13C2-PFOA	521950.7	1.510	9.091	7.563	83	50-150	
E13C8-PFOS	233330.6	13C4-PFOS	273918.4	0.852	8.691	6.862	79	50-150	
E13C9-PFNA	418809.2	13C4-PFOS	273918.4	1.529	9.091	7.751	85	50-150	
E13C6-PFDA	554542.8	13C2-PFDA	333280.8	1.664	9.091	7.060	78	50-150	
Ed3-NMeFOSAA	66012.5	13C2-PFDA	333280.8	0.198	9.091	6.500	72	50-150	
E13C7-PFUnDA	223273.5	13C2-PFDA	333280.8	0.670	9.091	7.072	78	50-150	
Ed5-NEtFOSAA	53367.4	13C2-PFDA	333280.8	0.160	9.091	6.159	68	50-150	
E13C2-PFDoDA	472918.4	13C2-PFDA	333280.8	1.419	9.091	6.699	74	50-150	
E13C2-PFTeDA	348092.6	13C2-PFDA	333280.8	1.044	9.091	6.667	73	50-150	

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

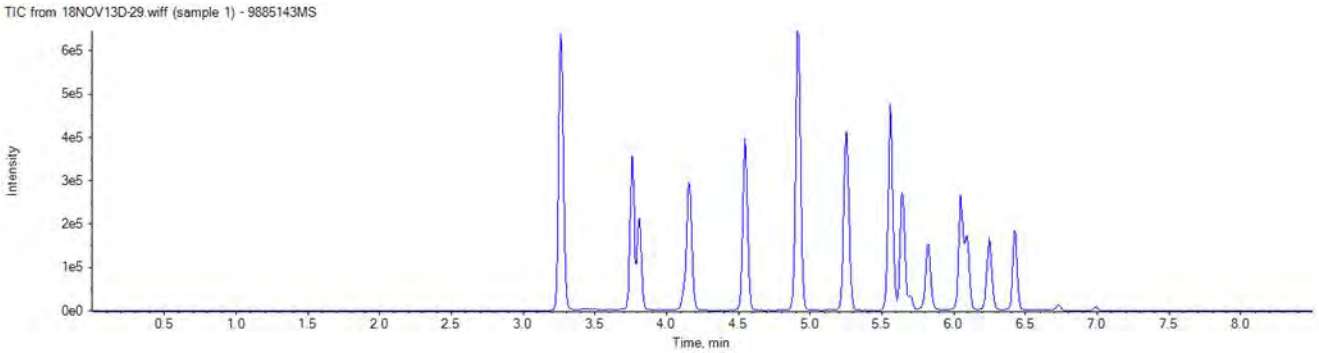
Analyte Quantitation Peak Table

Sample Name: 9885143MS **Instrument Name:** LM27631 **File Name:** 18NOV13D-29.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.10000	1.000	1.00	2.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBS	3.81	1.000	49571.4		A	13C3-PFBS	3.81	379787.3	0.131	1.129
PFHxA	4.16	1.000	107776.1		A	13C5-PFHxA	4.16	567996.5	0.190	1.440
PFHpA	4.55	1.000	108625.9		A	13C4-PFHpA	4.55	459484.5	0.236	1.425
PFHxS	4.55	1.000	41094.8		A	13C3-PFHxS	4.55	280412.0	0.147	1.292
PFOA	4.92	1.000	111791.1		A	13C8-PFOA	4.92	788083.1	0.142	1.377
PFOS	5.24	1.000	48344.0		M	13C8-PFOS	5.24	233330.6	0.207	1.647
PFNA	5.26	1.000	91743.9		A	13C9-PFNA	5.26	418809.2	0.219	1.436
PFDA	5.56	1.000	79654.6		A	13C6-PFDA	5.56	554542.8	0.144	1.385
NMeFOSAA	5.70	1.000	7215.8		M	d3-NMeFOSAA	5.70	66012.5	0.109	1.123
PFUnDA	5.82	1.000	66721.9		A	13C7-PFUnDA	5.82	223273.5	0.299	1.420
NEtFOSAA	5.84	1.000	7953.1		A	d5-NEtFOSAA	5.83	53367.4	0.149	1.420
PFDoDA	6.05	1.000	66613.8		A	13C2-PFDoDA	6.05	472918.4	0.141	1.304
PFTrDA	6.25	1.030	56525.3		A	13C2-PFDoDA	6.05	472918.4	0.120	1.372
PFTeDA	6.43	1.000	46301.4		A	13C2-PFTeDA	6.43	348092.6	0.133	1.356

Total Ion Chromatogram

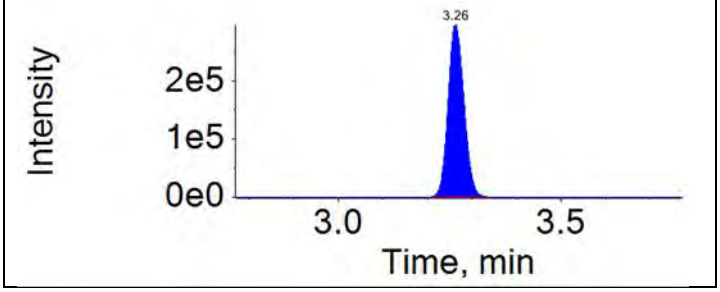


APPROVED
By JPT at 4:12 pm, 11/14/18

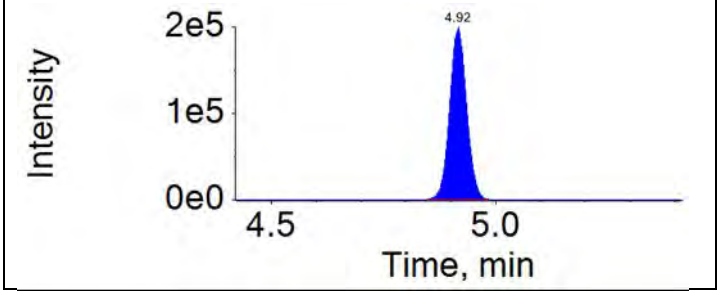
REVIEWED
By HMK at 11:32 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

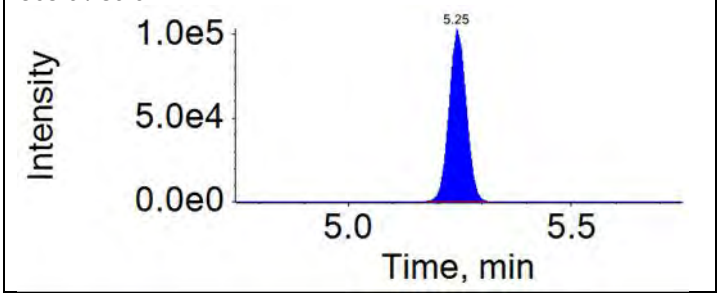
Injection Standard: 13C3-PFBA
216.0 / 172.0



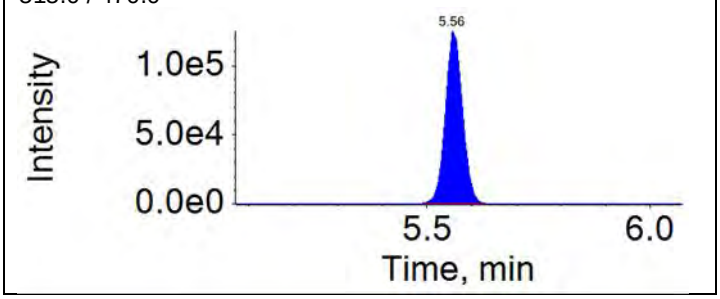
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



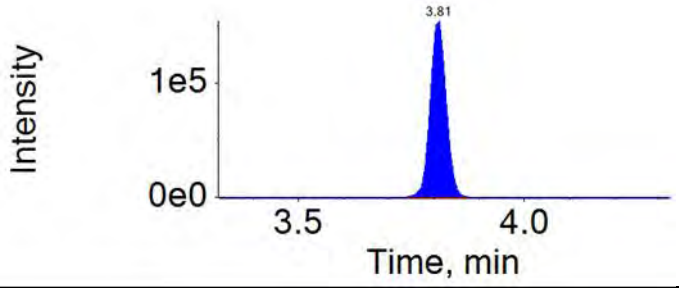
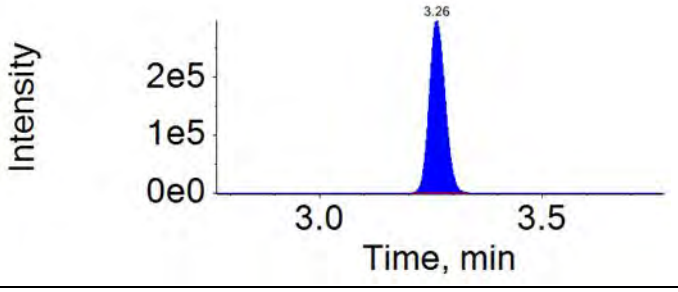
Injection Standard: 13C2-PFDA
515.0 / 470.0

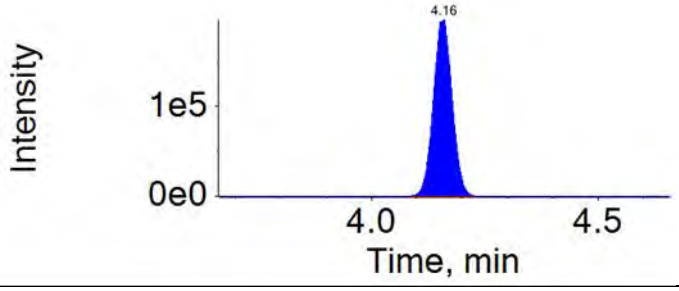
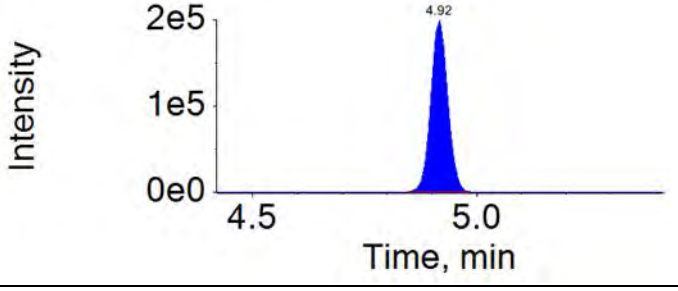


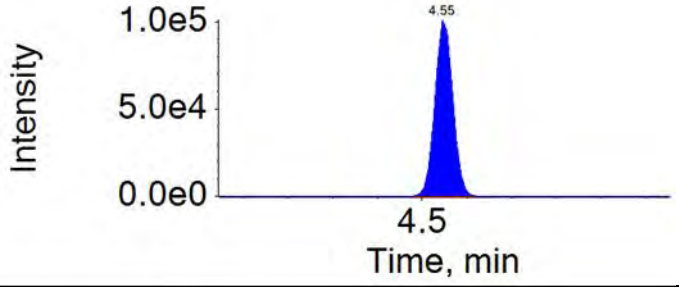
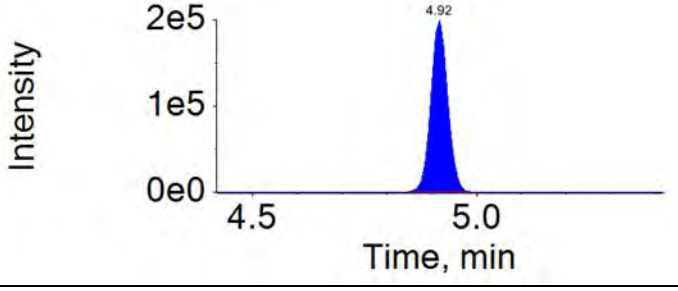
APPROVED
By JPT at 4:12 pm, 11/14/18

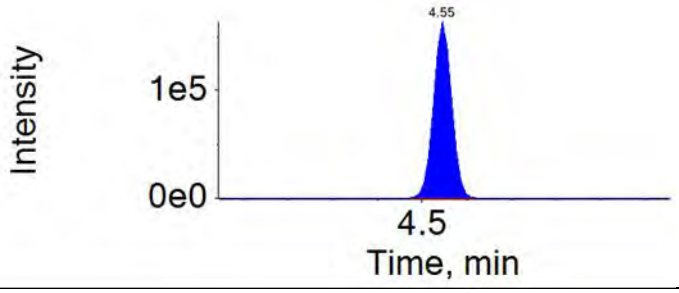
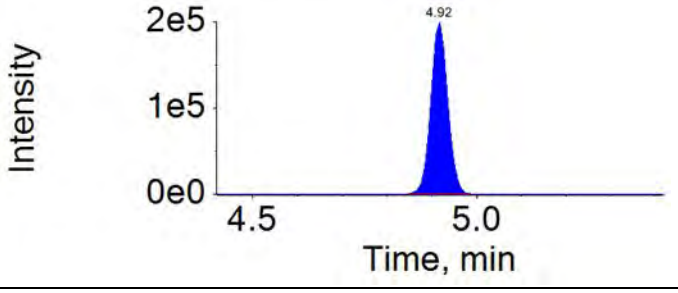
REVIEWED
By HMK at 11:32 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

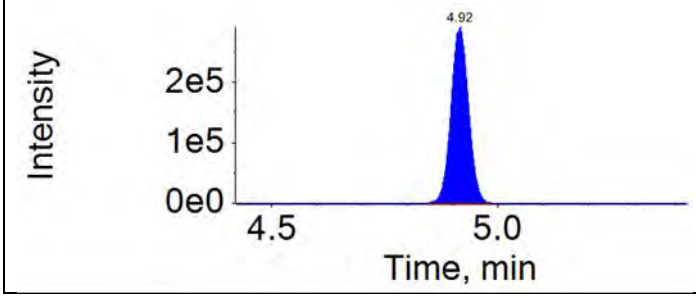
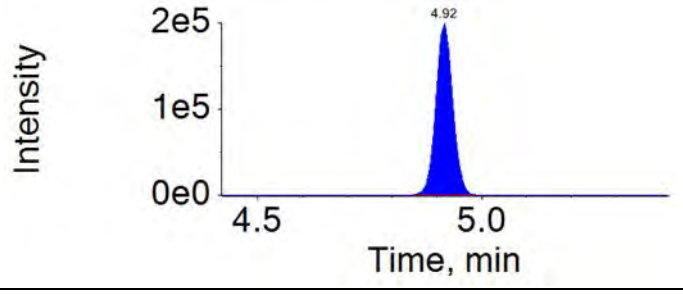
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

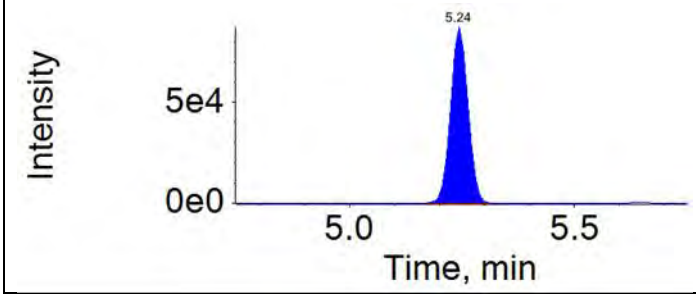
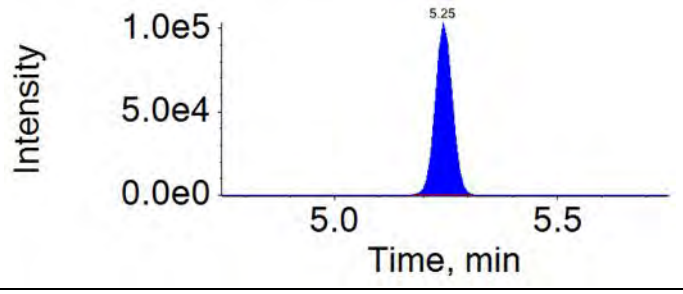
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

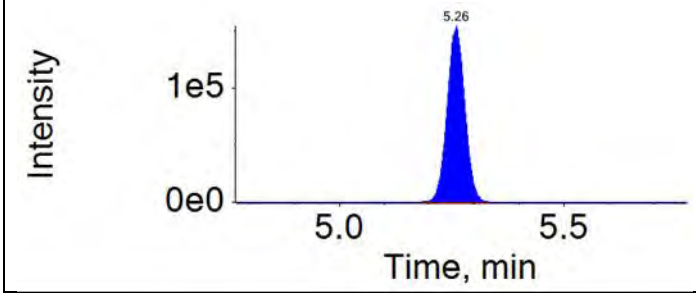
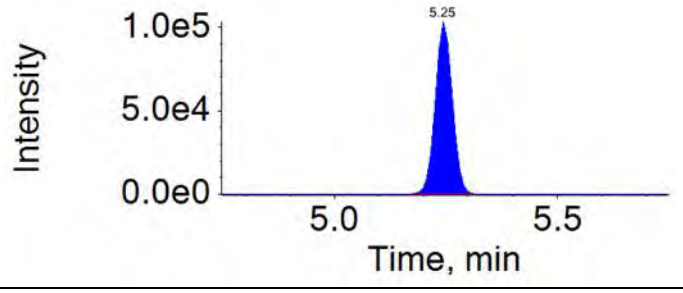
APPROVED
By JPT at 4:12 pm, 11/14/18

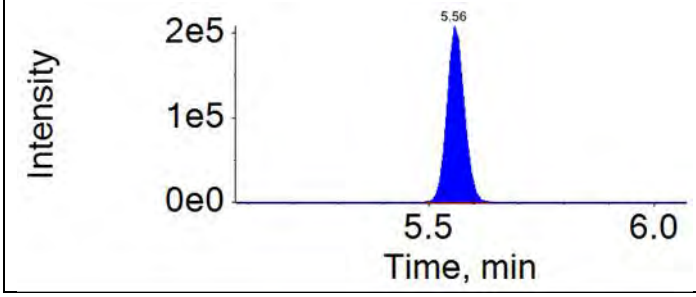
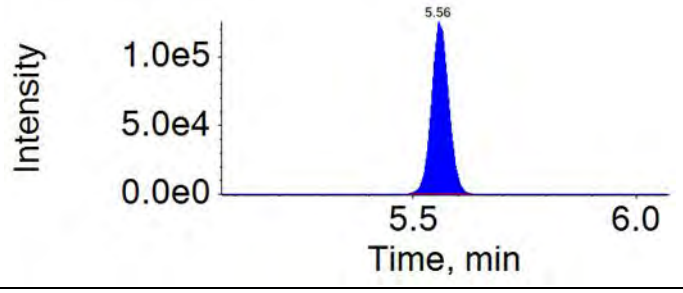
REVIEWED
By HMK at 11:32 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

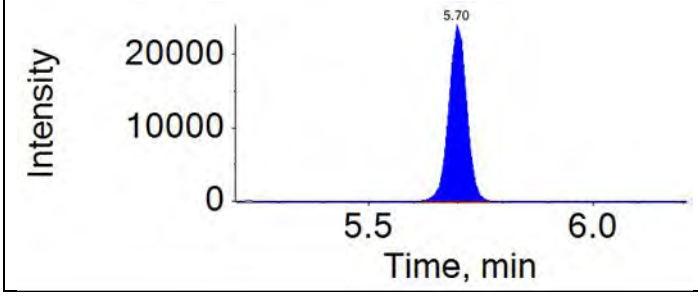
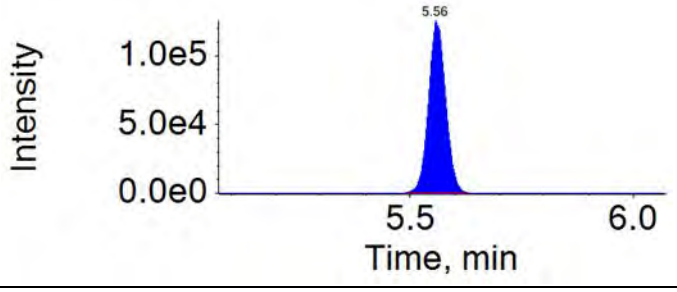
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

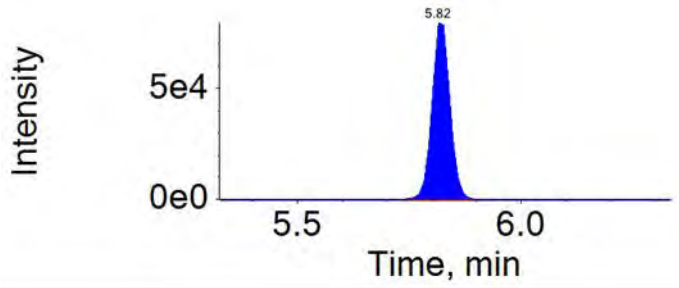
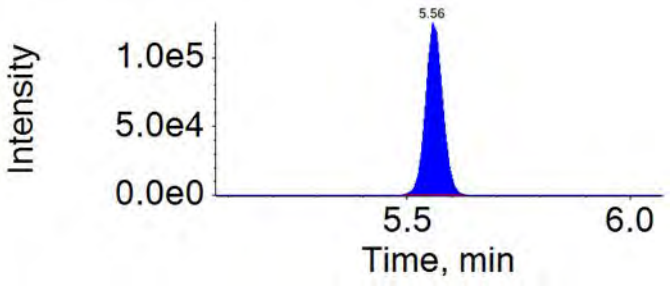
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

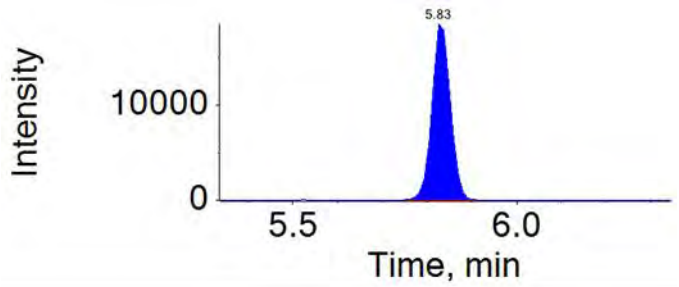
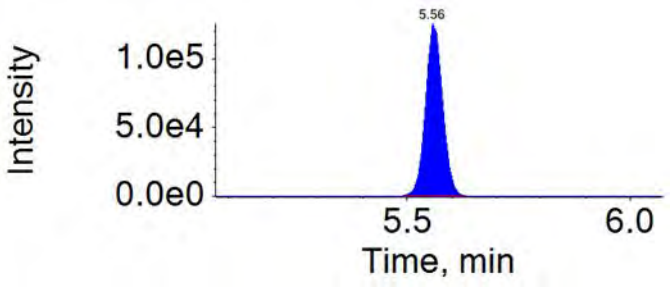
APPROVED
By JPT at 4:12 pm, 11/14/18

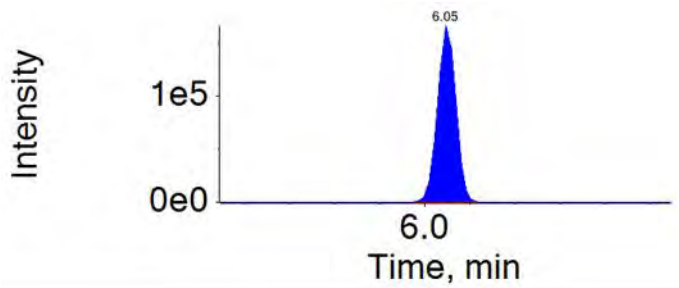
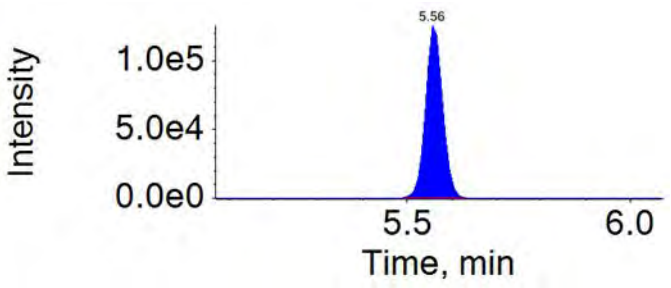
REVIEWED
By HMK at 11:32 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

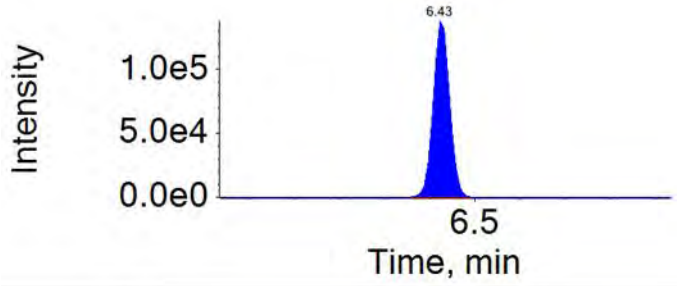
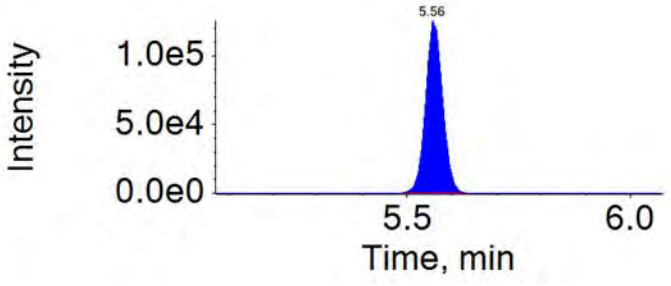
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

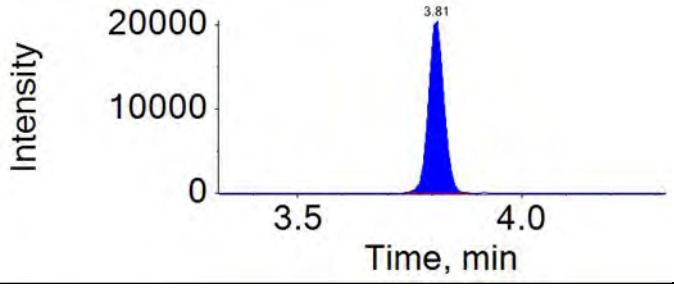
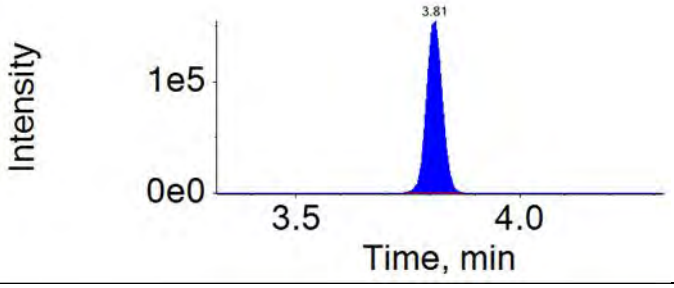
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

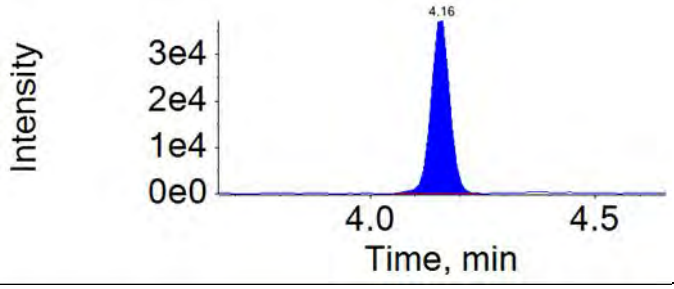
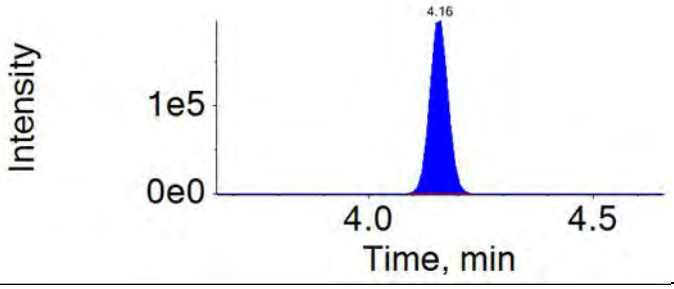
Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0
	

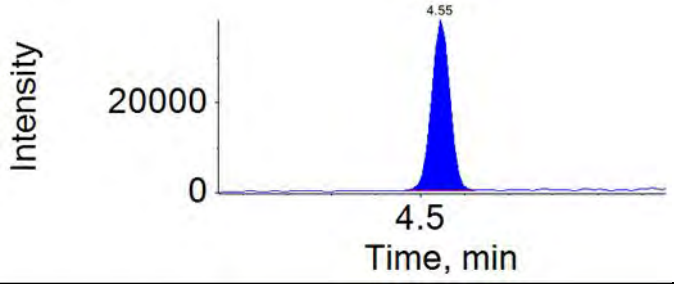
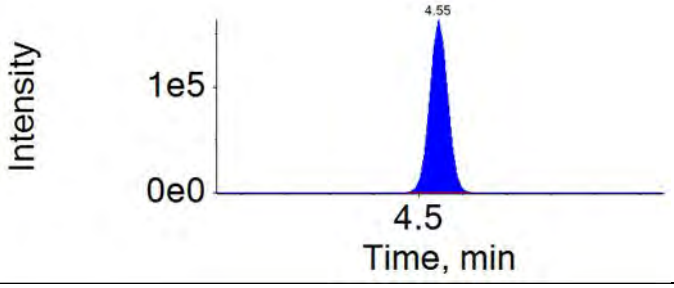
APPROVED
By JPT at 4:12 pm, 11/14/18

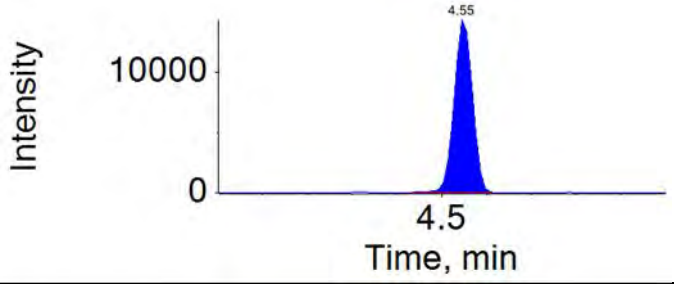
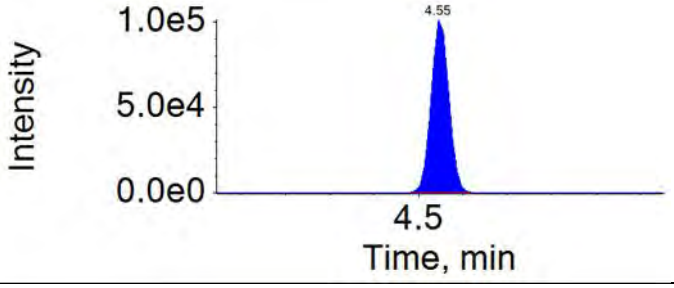
REVIEWED
By HMK at 11:32 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0
	

Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0
	

Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0
	

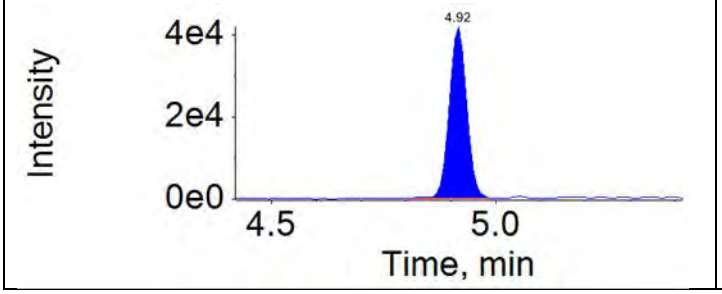
Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0
	

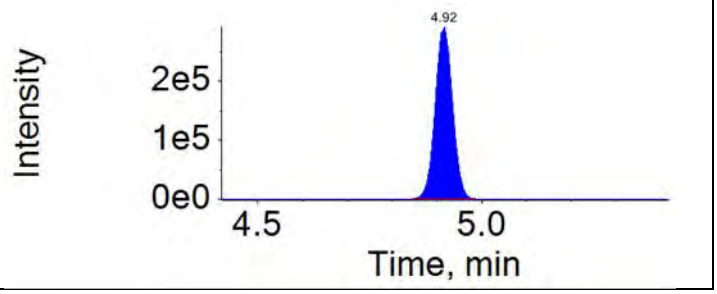
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By JPT at 4:12 pm, 11/14/18

REVIEWED
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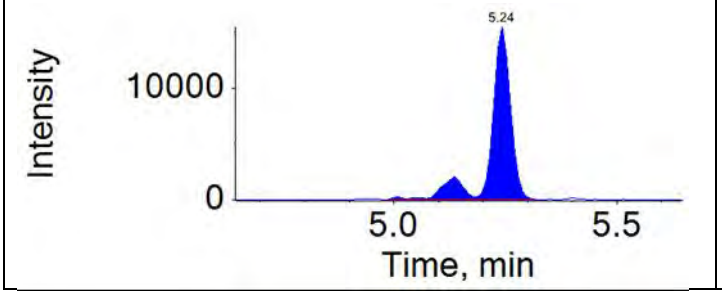
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

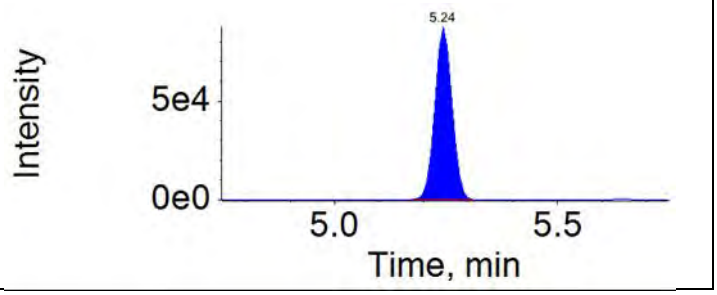
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0



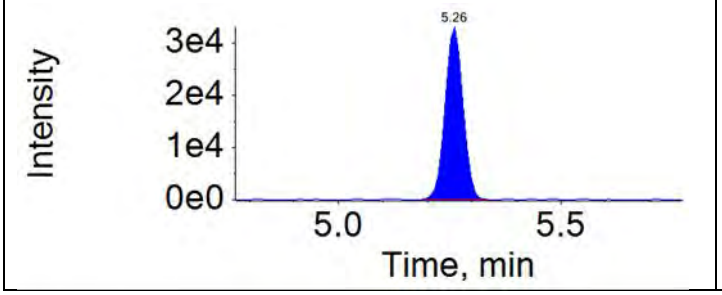


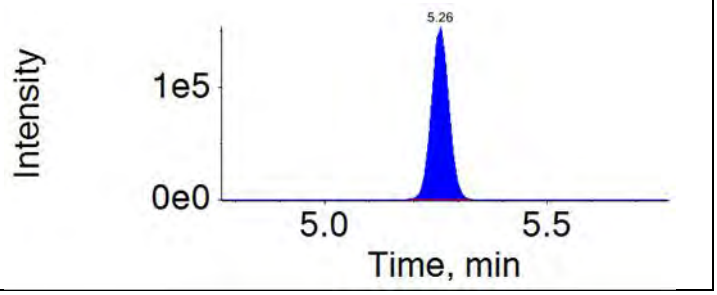
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



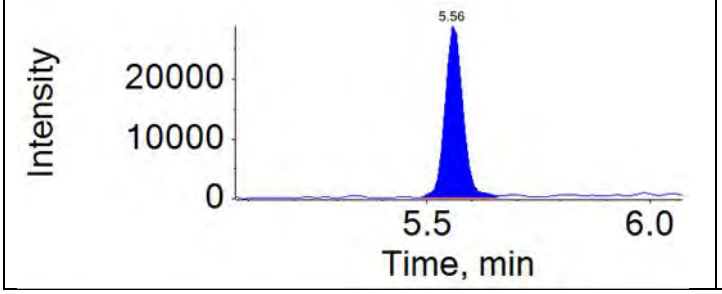


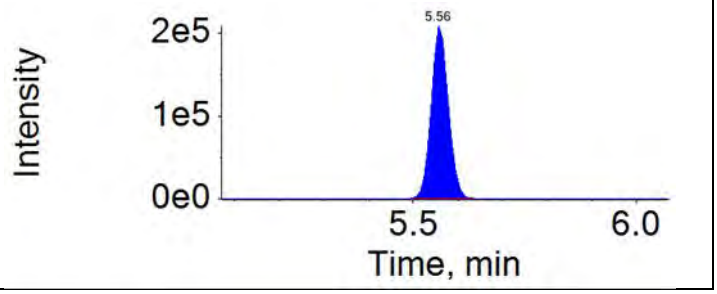
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0





Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0



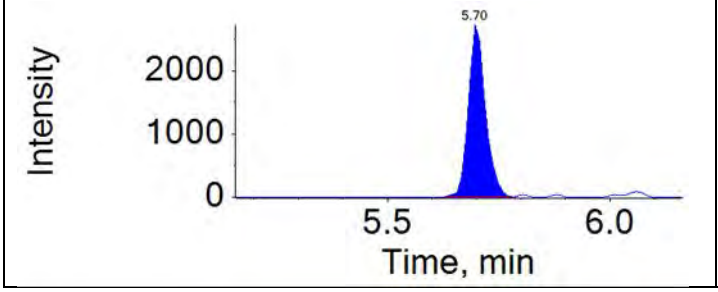


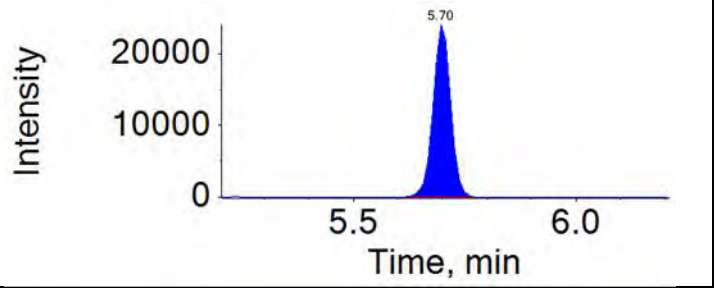
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

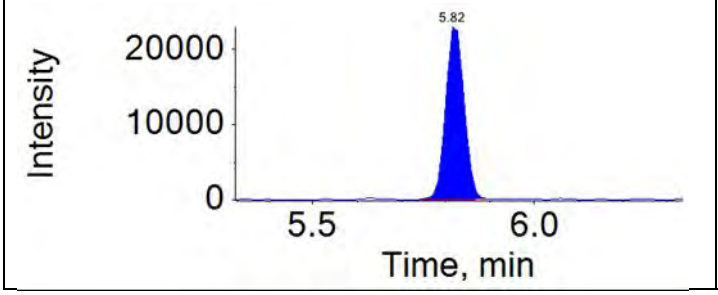
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

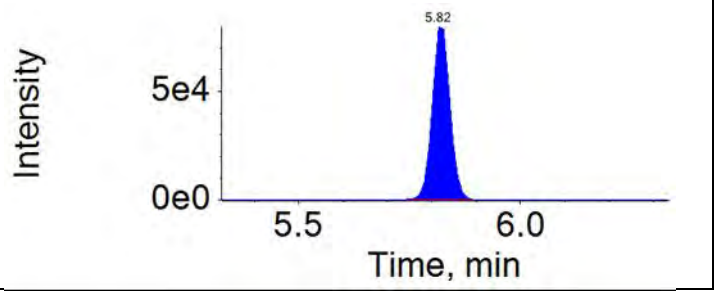
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



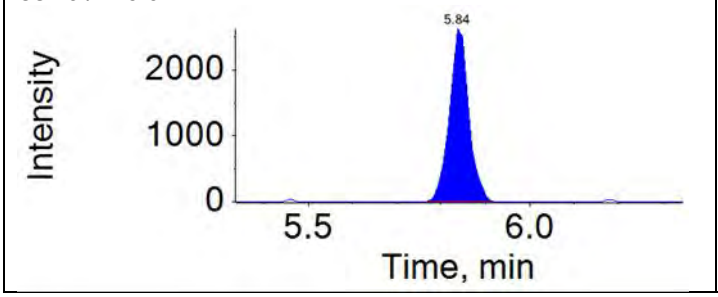


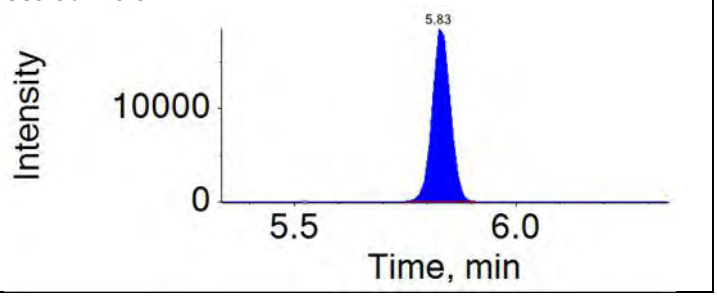
Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



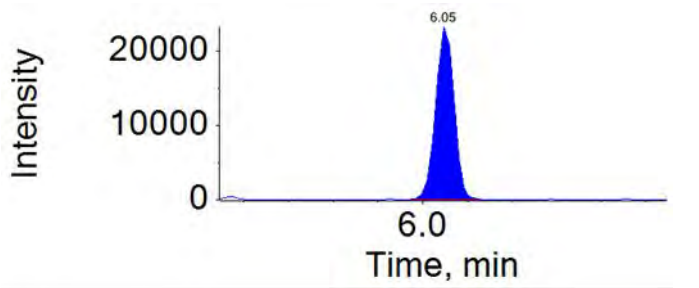


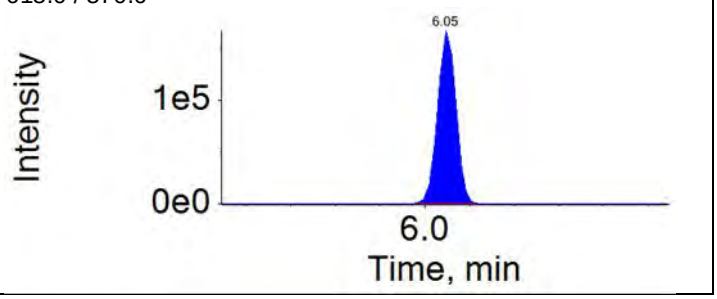
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0





Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



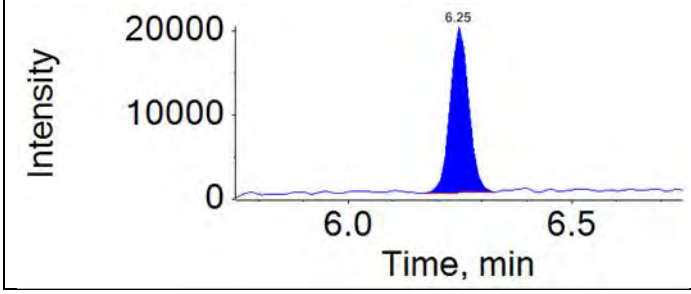


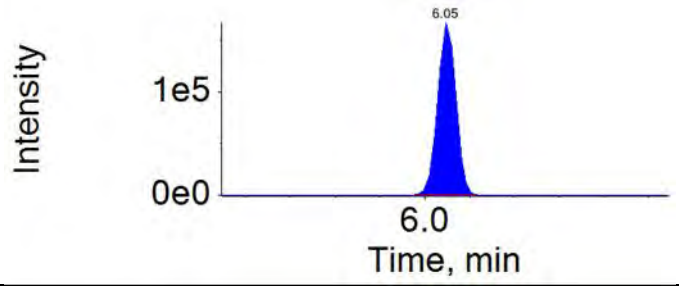
APPROVED
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REVIEWED
By HMK at 11:32 am, 11/15/18

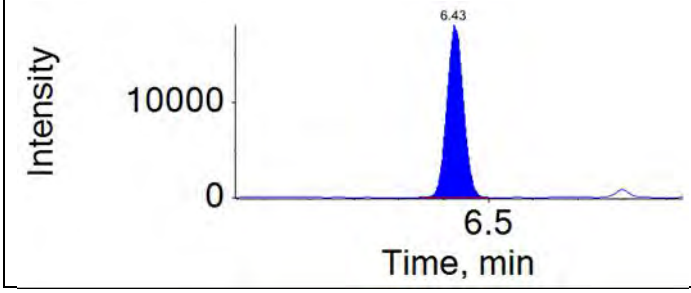
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

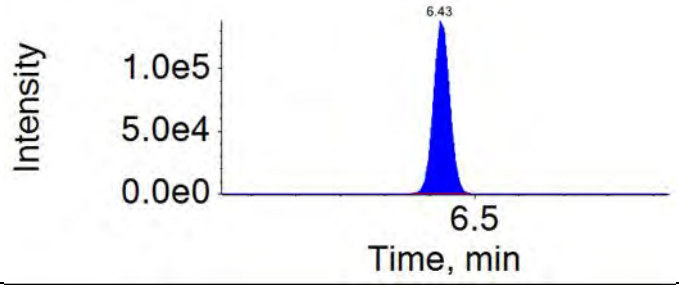
Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0





Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0



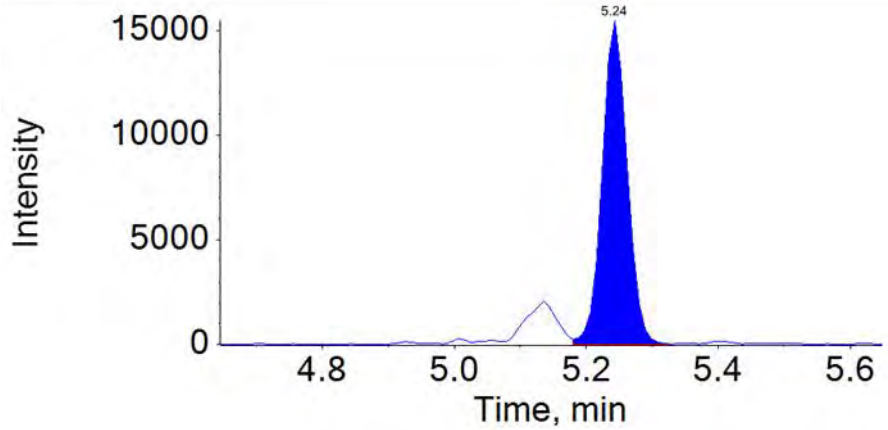


APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

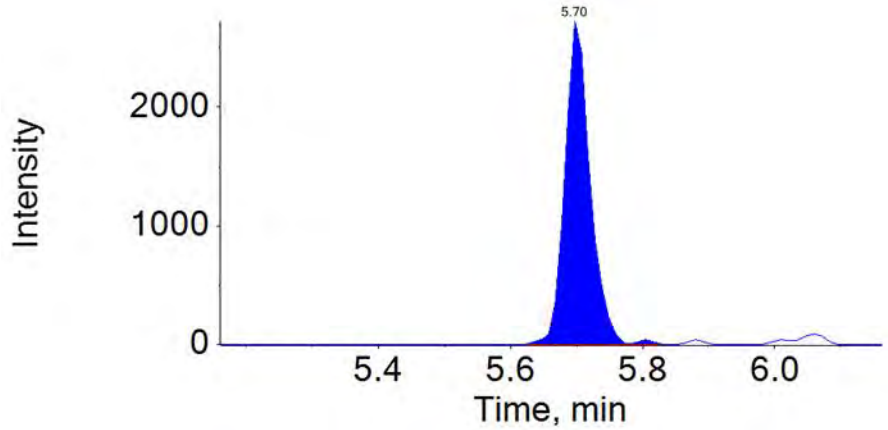
Results Table Name: 18316028
Results Table Date: 11/14/2018 2:10:57 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
40551.3
Mass Range:
499.0 / 80.0
File Name:
18NOV13D-29.wiff
Sample Name:
9885143MS



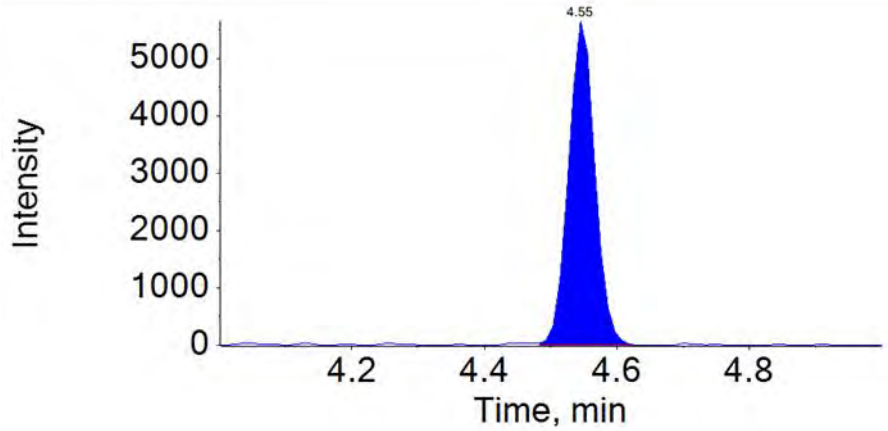
Integration Comment: incorrect integration

Component Name:
NMeFOSAA
RT (min.):
5.70
Peak Area:
7278.5
Mass Range:
570.0 / 419.0
File Name:
18NOV13D-29.wiff
Sample Name:
9885143MS



Integration Comment: incorrect integration

Component Name:
PFHxS_2
RT (min.):
4.55
Peak Area:
15657.7
Mass Range:
399.0 / 99.0
File Name:
18NOV13D-29.wiff
Sample Name:
9885143MS



Integration Comment: incorrect integration

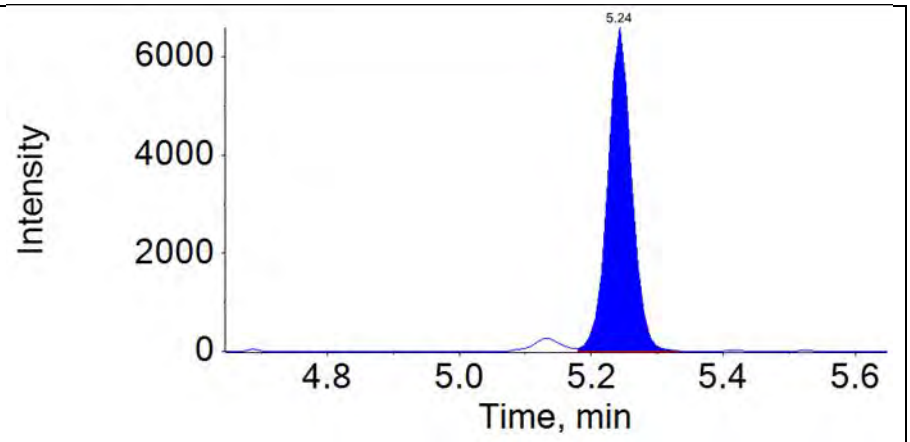
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

Results Table Name: 18316028
Results Table Date: 11/14/2018 2:10:57 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFOS_2
RT (min.):
5.24
Peak Area:
16605.1
Mass Range:
499.0 / 99.0
File Name:
18NOV13D-29.wiff
Sample Name:
9885143MS



Integration Comment: incorrect integration

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

Results Table Name: 18316028
Results Table Date: 11/14/2018 2:10:57 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

Ion Ratio Report

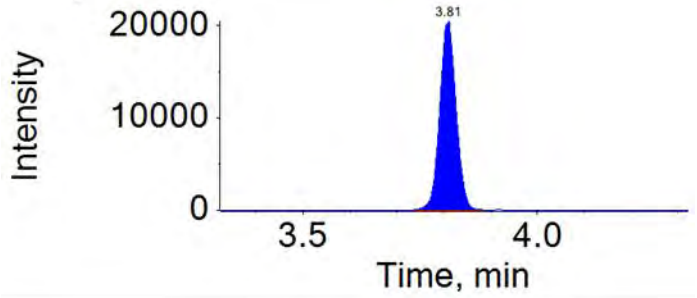
Sample Name: 9885143MS **Instrument Name:** LM27631 **File Name:** 18NOV13D-29.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	49571.4	A	N/A	1.0000			
PFBS_2	3.81	1.00	18087.5	A	N/A	0.3649	0	50	
PFHxA	4.16	1.00	107776.1	A	N/A	1.0000			
PFHxA_2	4.16	1.00	1587.6	A	N/A	0.0147	25	50	
PFHpA	4.55	1.00	108625.9	A	N/A	1.0000			
PFHpA_2	4.55	1.00	4577.2	A	N/A	0.0421	-25	50	
PFHxS	4.55	1.00	41094.8	A	N/A	1.0000			
PFHxS_2	4.55	1.00	15782.7	M	N/A	0.3841	11	50	
PFOA	4.92	1.00	111791.1	A	N/A	1.0000			
PFOA_2	4.92	1.00	6957.1	A	N/A	0.0622	9	50	
PFOS	5.24	1.00	48344.0	M	N/A	1.0000			
PFOS_2	5.24	1.00	17417.5	M	N/A	0.3603	21	50	
PFNA	5.26	1.00	91743.9	A	N/A	1.0000			
PFNA_2	5.27	1.00	1588.2	A	N/A	0.0173	-24	50	
PFDA	5.56	1.00	79654.6	A	N/A	1.0000			
PFDA_2	5.56	1.00	688.4	A	N/A	0.0086	9	50	
NMeFOSAA	5.70	1.00	7215.8	M	N/A	1.0000			
NMeFOSAA_2	5.70	1.00	1532.1	A	N/A	0.2123	-18	50	
PFUnDA	5.82	1.00	66721.9	A	N/A	1.0000			
PFUnDA_2	5.82	1.00	324.4	A	N/A	0.0049	-12	50	
NEtFOSAA	5.84	1.00	7953.1	A	N/A	1.0000			
NEtFOSAA_2	5.84	1.00	4401.5	A	N/A	0.5534	-23	50	
PFDoDA	6.05	1.00	66613.8	A	N/A	1.0000			
PFDoDA_2	6.05	1.00	1053.4	A	N/A	0.0158	3	50	
PFTrDA	6.25	1.03	56525.3	A	N/A	1.0000			
PFTrDA_2	6.23	1.03	496.9	A	N/A	0.0088	3	50	
PFTeDA	6.43	1.00	46301.4	A	N/A	1.0000			
PFTeDA_2	6.42	1.00	158.6	A	N/A	0.0034	-45	50	

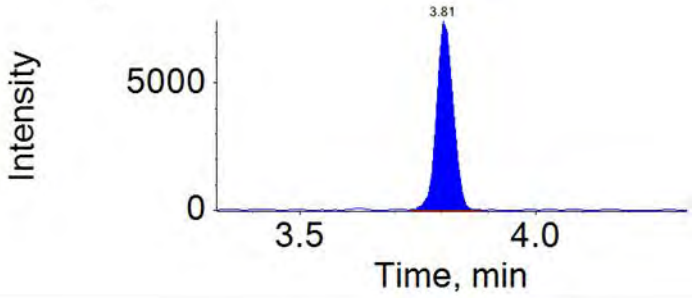
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

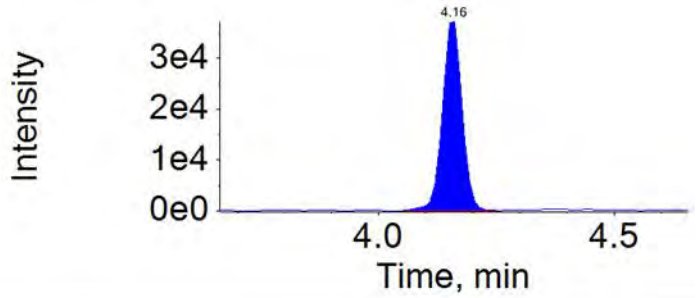
Component: PFBS
Primary Mass: 299.0 / 80.0



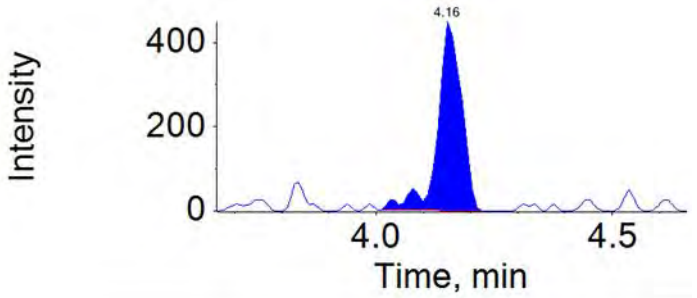
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



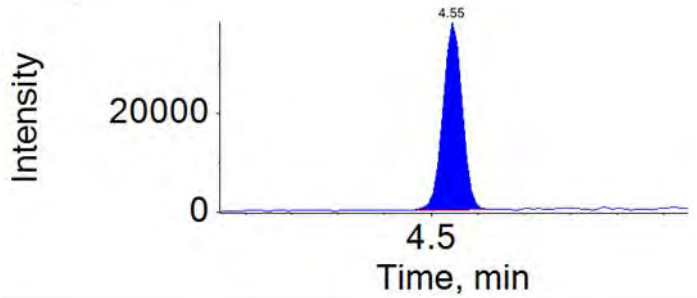
Component: PFHxA
Primary Mass: 313.0 / 269.0



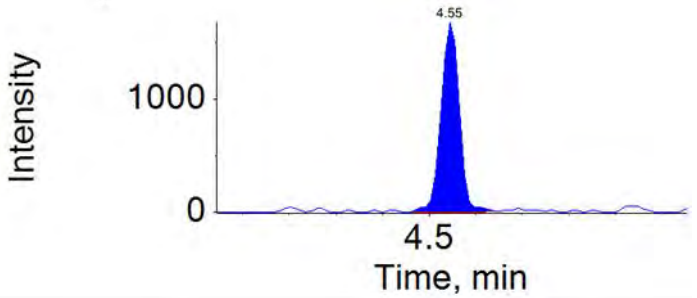
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



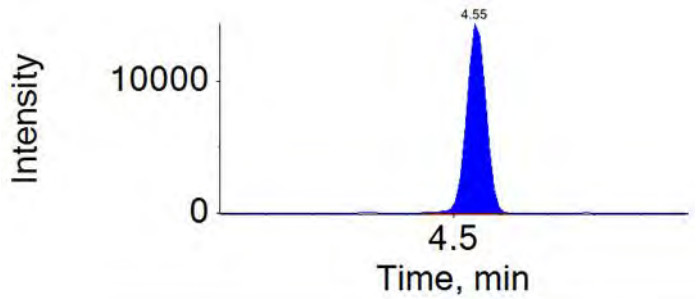
Component: PFHpA
Primary Mass: 363.0 / 319.0



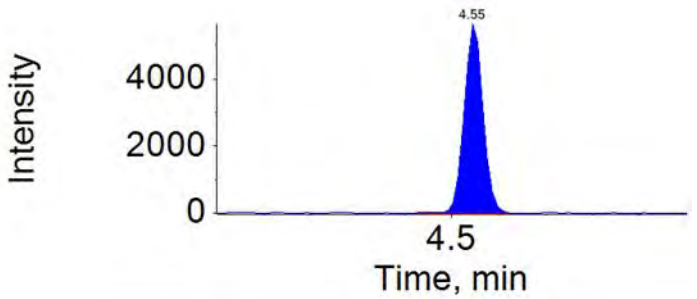
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



Component: PFHxS
Primary Mass: 399.0 / 80.0



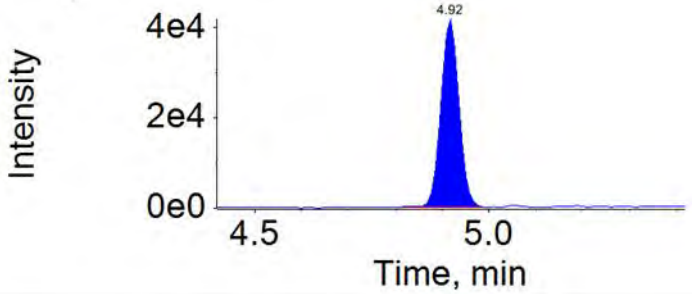
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



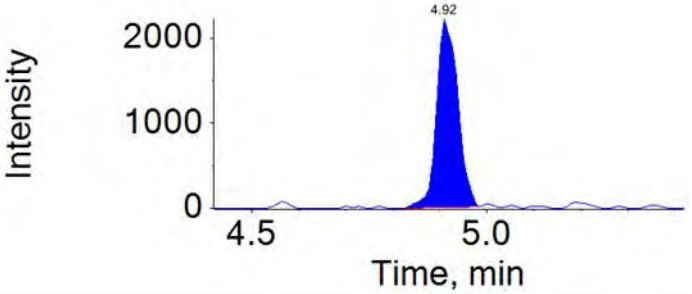
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

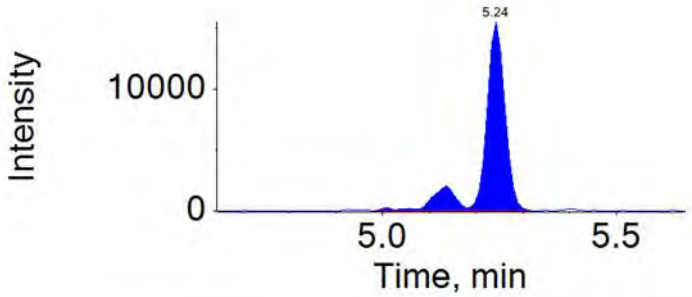
Component: PFOA
Primary Mass: 413.0 / 369.0



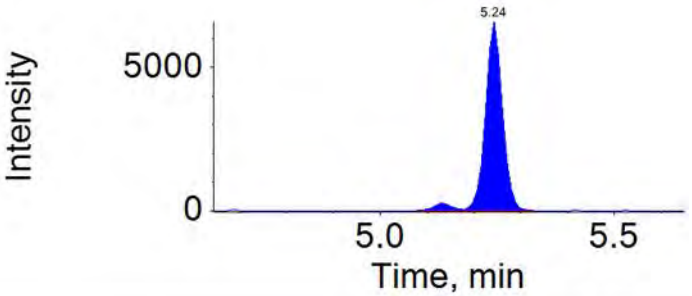
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



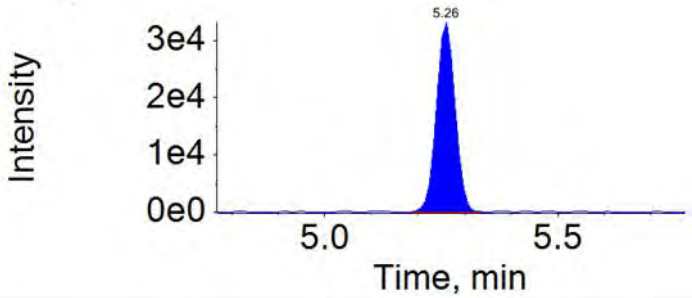
Component: PFOS
Primary Mass: 499.0 / 80.0



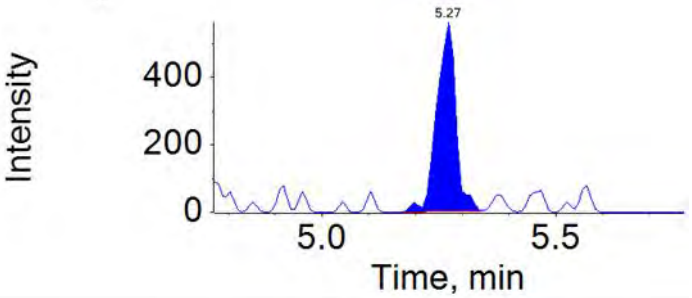
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



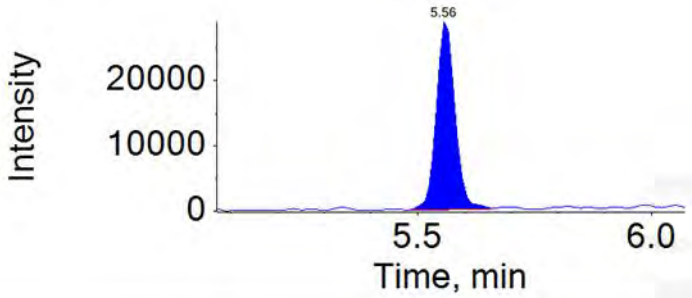
Component: PFNA
Primary Mass: 463.0 / 419.0



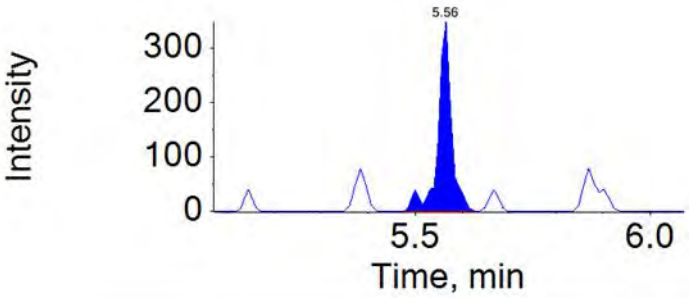
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFDA
Primary Mass: 513.0 / 469.0



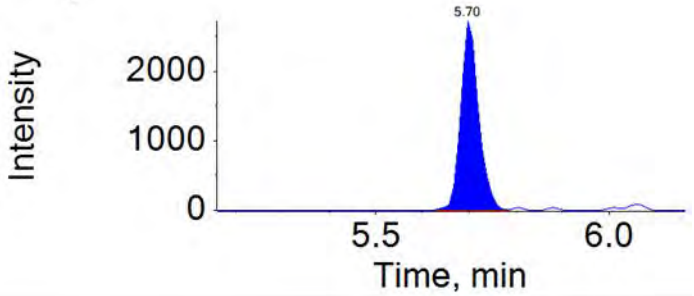
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



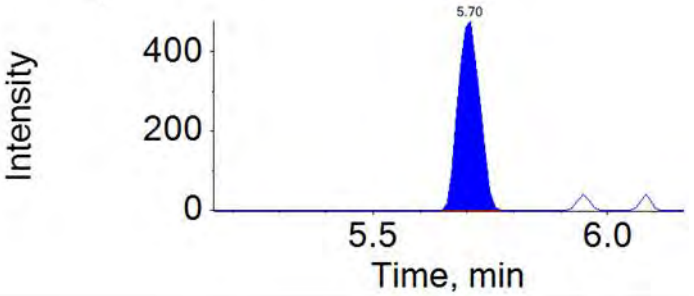
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

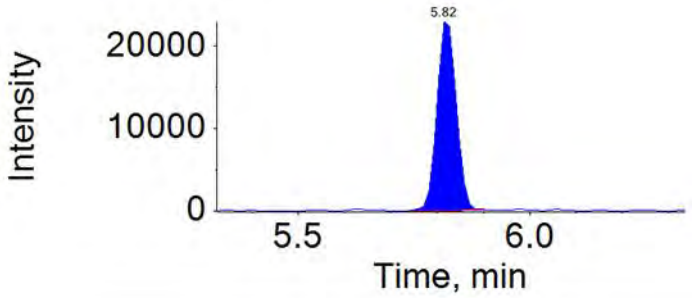
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



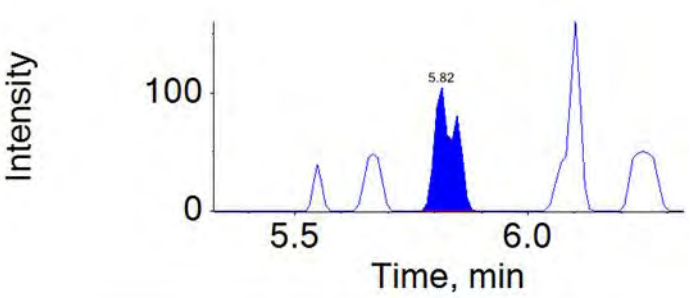
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



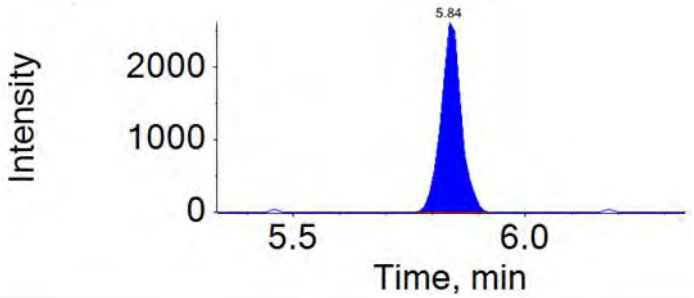
Component: PFUnDA
Primary Mass: 563.0 / 519.0



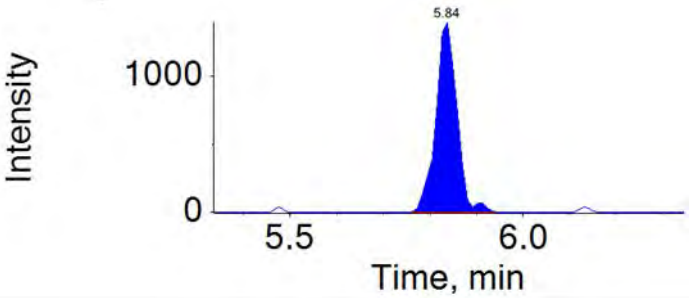
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



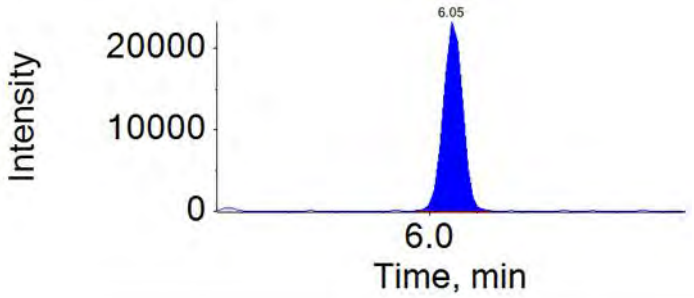
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



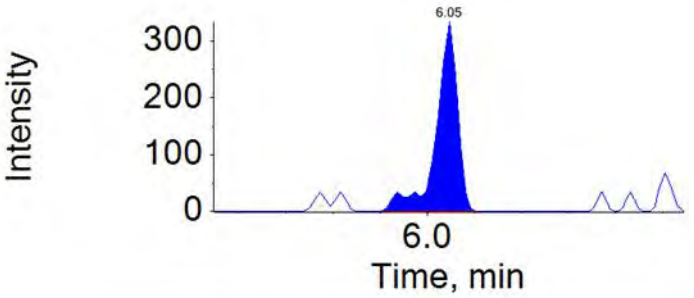
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



Component: PFDoDA
Primary Mass: 613.0 / 569.0



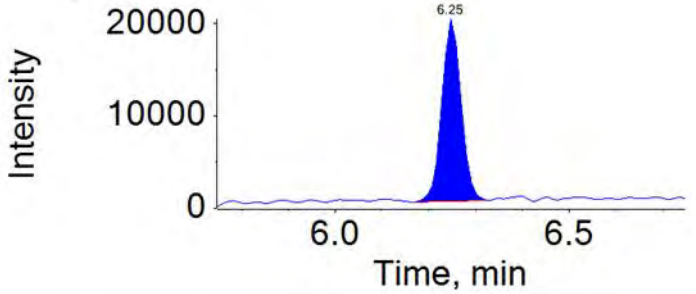
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



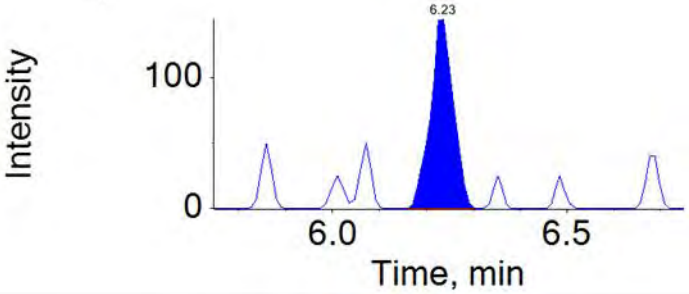
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

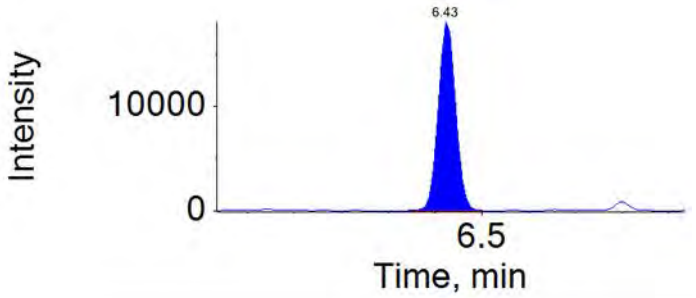
Component: PFTrDA
Primary Mass: 663.0 / 619.0



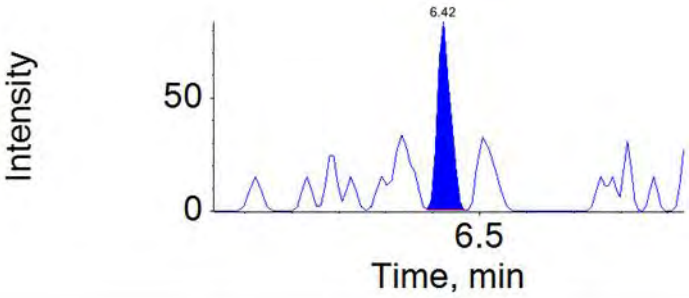
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



Component: PFTeDA
Primary Mass: 713.0 / 669.0



Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



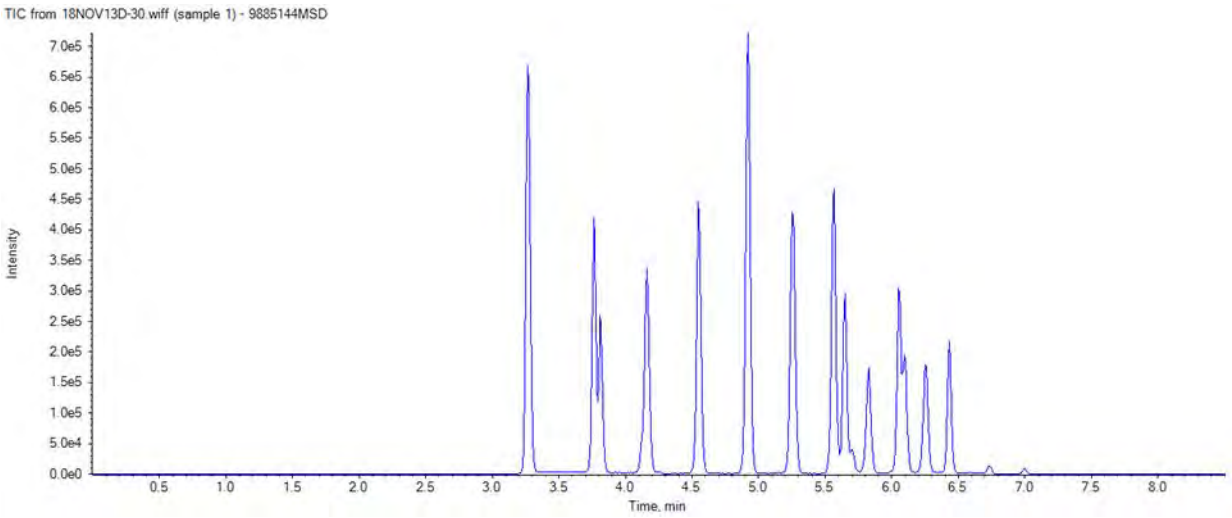
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

Matrix Spike Recovery

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18316028 11/14/2018 1:56:44 PM
Acquisition Method: 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	9885144MSD	EPA 537 mod QSM 5.1 table B-15 18316028 OU1-Bldg338-S-01-03 MSD Grab Soil	18NOV13D-30.wiff	2018-11-13T14:05:02



Injection Standard Area Reference File**:** 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.00	710996.3	661126.9	8	50	
13C2-PFOA	5.00	497505.2	466902.6	7	50	
13C4-PFOS	4.78	275532.8	247446.9	11	50	
13C2-PFDA	5.00	307792.2	295381.6	4	50	

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

Matrix Spike Recovery

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	9885144MSD	EPA 537 mod QSM 5.1 table B-15 18316028 OU1-Bldg338-S-01-03 MSD Grab Soil	18NOV13D-30.wiff	2018-11-13T14:05:02

Analyte Name	Analyte Area	Ext Std Area	Area Ratio	Adj Actual Conc	Sample Result	%REC	% REC Limit	%REC OOS
PFBS	52603.7	416817.5	0.126	1.147	1.143	100	70-130	
PFHxA	114977.1	622752.7	0.185	1.295	1.468	113	70-130	
PFHpA	118812.3	521237.3	0.228	1.295	1.439	111	70-130	
PFHxS	45333.2	303269.9	0.149	1.225	1.381	113	70-130	
PFOA	136091.3	886651.9	0.153	1.295	1.561	121	70-130	
PFOS	45845.4	268277.9	0.171	1.238	1.423	115	70-130	
PFNA	97584.4	445633.6	0.219	1.295	1.504	116	70-130	
PFDA	85109.9	623439.7	0.137	1.295	1.379	106	70-130	
NMeFOSAA	8358.2	77642.2	0.108	1.295	1.159	89	70-130	
PFUnDA	68604.9	253031.9	0.271	1.295	1.350	104	70-130	
NEtFOSAA	8153.0	61814.9	0.132	1.295	1.317	102	70-130	
PFDoDA	84948.1	529329.1	0.160	1.295	1.557	120	70-130	
PFTrDA	67236.2	529329.1	0.127	1.295	1.527	118	70-130	
PFTeDA	53235.4	385083.5	0.138	1.295	1.476	114	70-130	

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

Matrix Spike Recovery

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18316028 11/14/2018 1:56:44 PM
Acquisition Method: 18AUG13_3uL.dam

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	9885144MSD			**Data File:**		18NOV13D-30.wiff
Sample ID:	EPA 537 mod QSM 5.1 table B-15 18316028 OU1-Bldg338-S-01-03 MSD Grab Soil			**Acquis Date:**		2018-11-13T14:05:02
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	34			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18316028
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	18316028			**Operator:**		JPT12262
Sample Wt.:	1.05000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		2.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	710996.3	661126.9	8	50	
13C2-PFOA	5.0	497505.2	466902.6	7	50	
13C4-PFOS	4.8	275532.8	247446.9	11	50	
13C2-PFDA	5.0	307792.2	295381.6	4	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C3-PFBS	416817.5	13C3-PFBA	710996.3	0.586	8.857	7.883	89	50-150	
E13C5-PFHxA	622752.7	13C2-PFOA	497505.2	1.252	9.524	8.613	90	50-150	
E13C3-PFHxS	303269.9	13C2-PFOA	497505.2	0.610	9.010	7.967	88	50-150	
E13C4-PFHpA	521237.3	13C2-PFOA	497505.2	1.048	9.524	8.991	94	50-150	
E13C8-PFOA	886651.9	13C2-PFOA	497505.2	1.782	9.524	9.353	98	50-150	
E13C8-PFOS	268277.9	13C4-PFOS	275532.8	0.974	9.105	8.217	90	50-150	
E13C9-PFNA	445633.5	13C4-PFOS	275532.8	1.617	9.524	8.589	90	50-150	
E13C6-PFDA	623439.7	13C2-PFDA	307792.2	2.026	9.524	9.003	95	50-150	
Ed3-NMeFOSAA	77642.2	13C2-PFDA	307792.2	0.252	9.524	8.673	91	50-150	
E13C7-PFUnDA	253031.9	13C2-PFDA	307792.2	0.822	9.524	9.091	95	50-150	
Ed5-NEtFOSAA	61814.9	13C2-PFDA	307792.2	0.201	9.524	8.093	85	50-150	
E13C2-PFDoDA	529329.1	13C2-PFDA	307792.2	1.720	9.524	8.505	89	50-150	
E13C2-PFTeDA	385083.5	13C2-PFDA	307792.2	1.251	9.524	8.366	88	50-150	

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

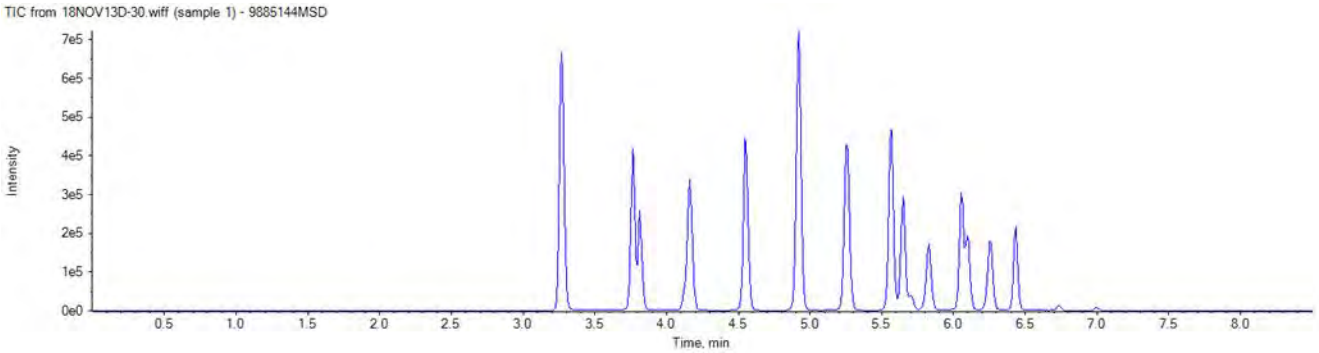
Analyte Quantitation Peak Table

Sample Name: 9885144MSD **Instrument Name:** LM27631 **File Name:** 18NOV13D-30.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.05000	1.000	1.00	2.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBS	3.81	1.000	52603.7		A	13C3-PFBS	3.81	416817.5	0.126	1.143
PFHxA	4.16	1.000	114977.1		A	13C5-PFHxA	4.16	622752.7	0.185	1.468
PFHpA	4.55	1.000	118812.3		A	13C4-PFHpA	4.55	521237.3	0.228	1.439
PFHxS	4.55	1.000	45333.2		A	13C3-PFHxS	4.55	303269.9	0.149	1.381
PFOA	4.92	1.000	136091.3		M	13C8-PFOA	4.92	886651.9	0.153	1.561
PFOS	5.25	1.000	45845.4		M	13C8-PFOS	5.25	268277.9	0.171	1.423
PFNA	5.27	1.000	97584.4		A	13C9-PFNA	5.26	445633.6	0.219	1.504
PFDA	5.56	1.000	85109.9		M	13C6-PFDA	5.56	623439.7	0.137	1.379
NMeFOSAA	5.71	1.000	8358.2		A	d3-NMeFOSAA	5.70	77642.2	0.108	1.159
PFUnDA	5.83	1.000	68604.9		A	13C7-PFUnDA	5.83	253031.9	0.271	1.350
NEtFOSAA	5.84	1.000	8153.0		A	d5-NEtFOSAA	5.84	61814.9	0.132	1.317
PFDoDA	6.05	1.000	84948.1		A	13C2-PFDoDA	6.06	529329.1	0.160	1.557
PFTrDA	6.25	1.030	67236.2		A	13C2-PFDoDA	6.06	529329.1	0.127	1.527
PFTeDA	6.43	1.000	53235.4		A	13C2-PFTeDA	6.43	385083.5	0.138	1.476

Total Ion Chromatogram

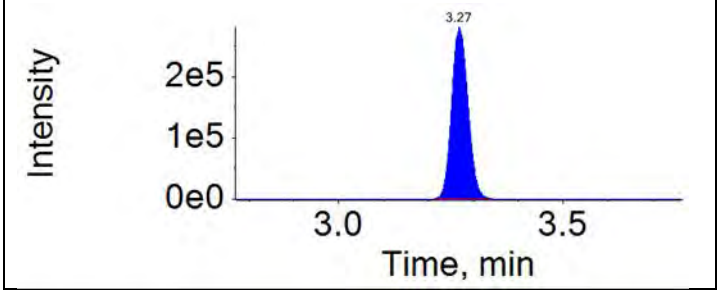


APPROVED
By JPT at 4:12 pm, 11/14/18

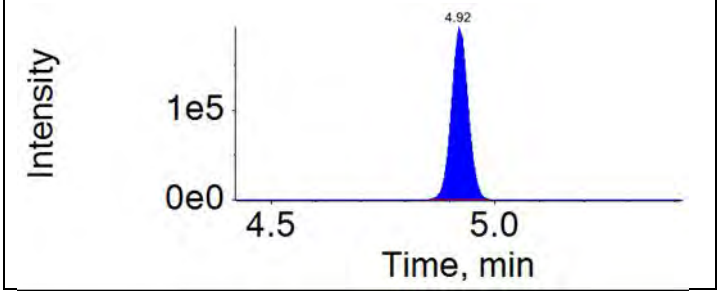
REVIEWED
By HMK at 11:32 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

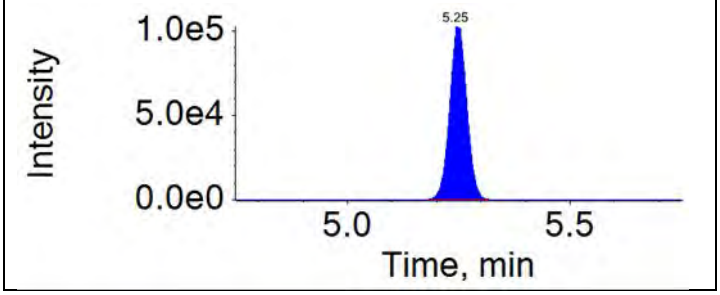
Injection Standard: 13C3-PFBA
216.0 / 172.0



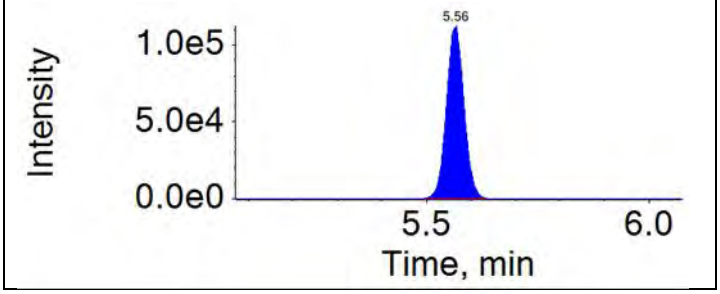
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



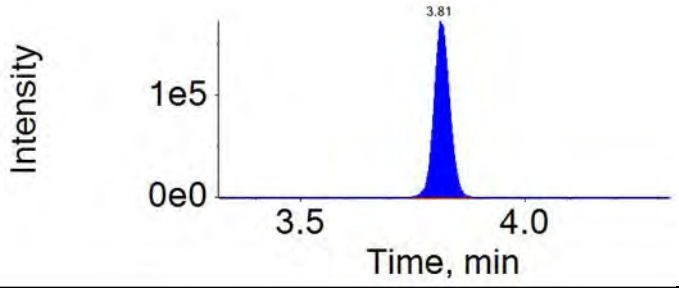
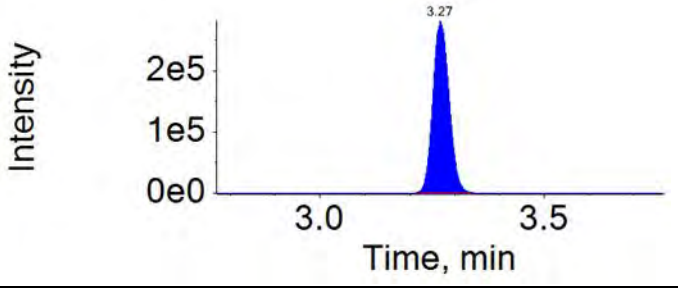
Injection Standard: 13C2-PFDA
515.0 / 470.0

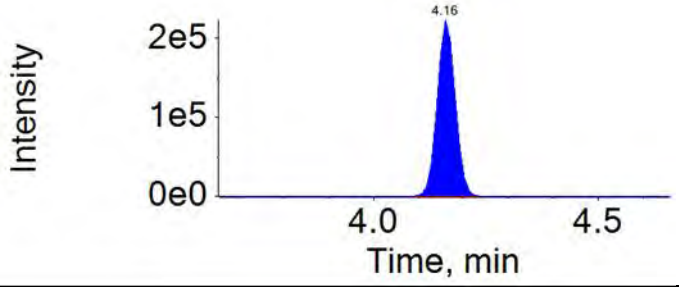
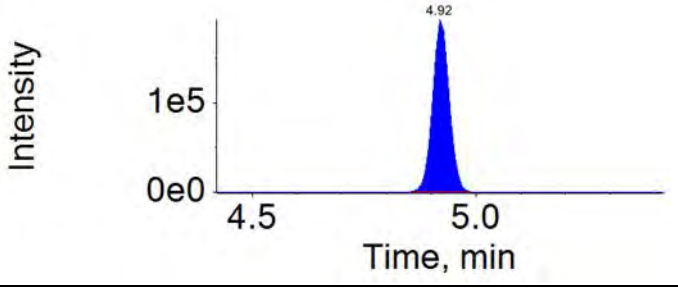


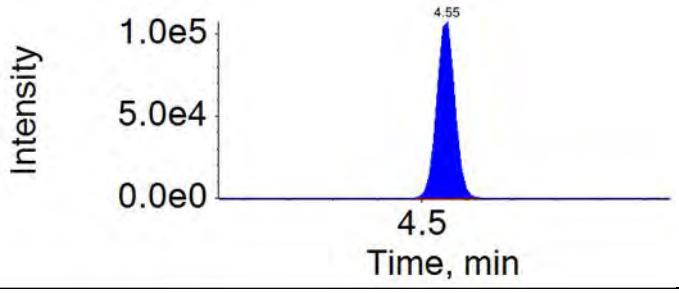
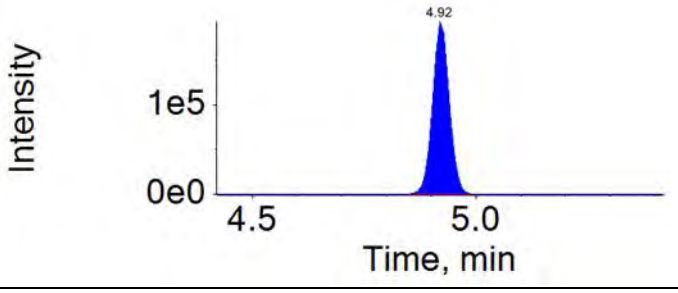
APPROVED
By JPT at 4:12 pm, 11/14/18

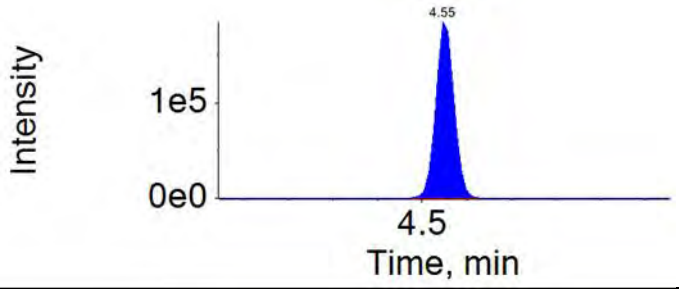
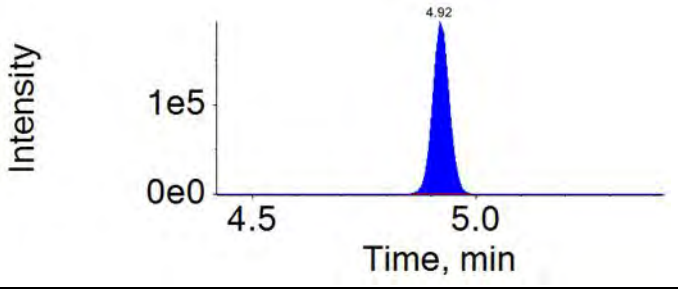
REVIEWED
By HMK at 11:32 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0
	

Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0
	

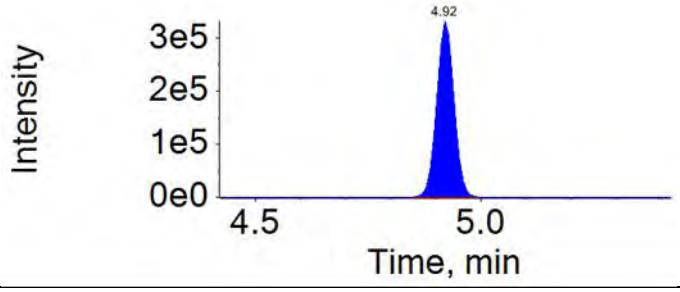
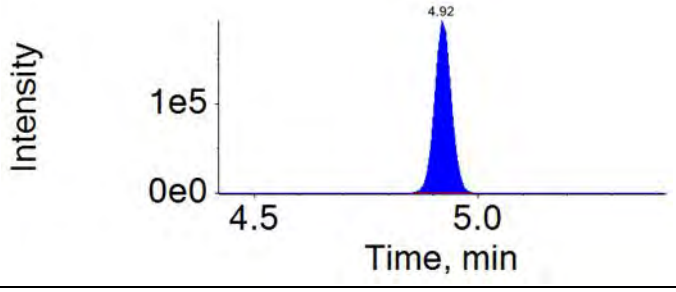
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0
	

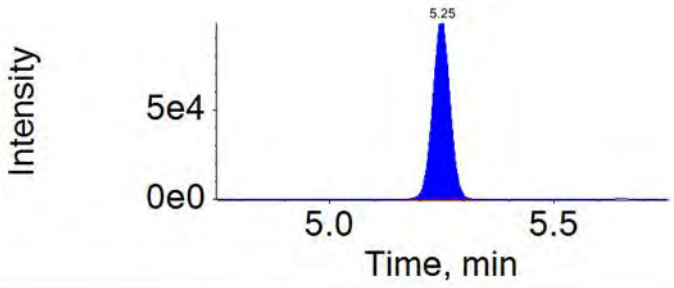
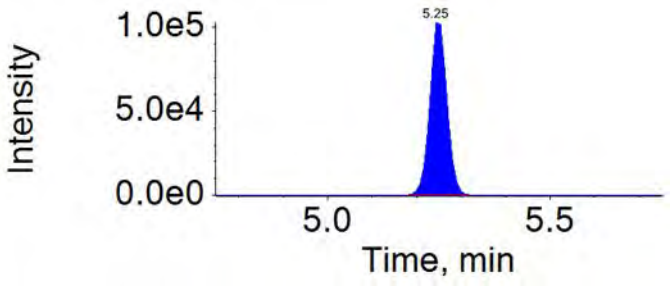
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0
	

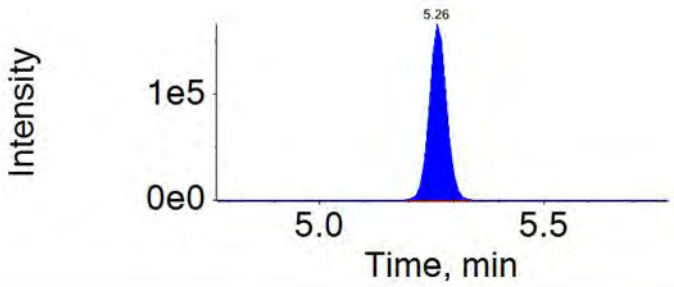
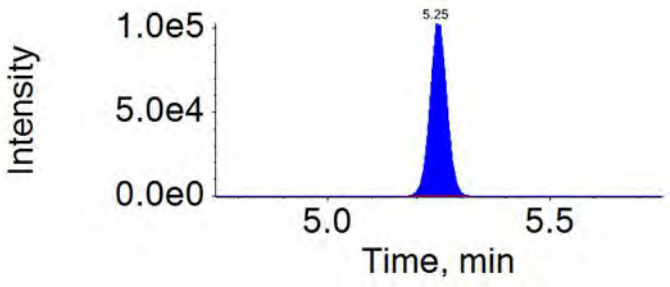
APPROVED
By JPT at 4:12 pm, 11/14/18

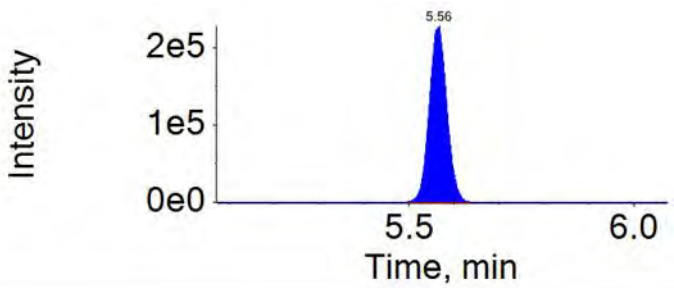
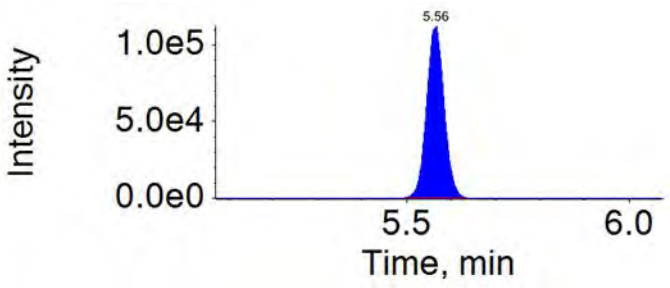
REVIEWED
By HMK at 11:32 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

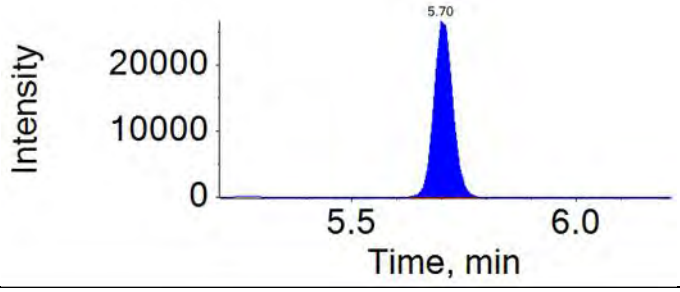
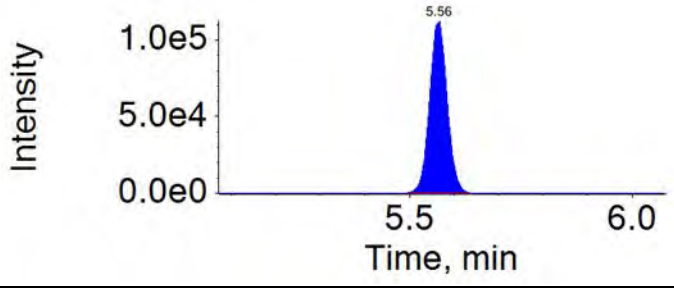
Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

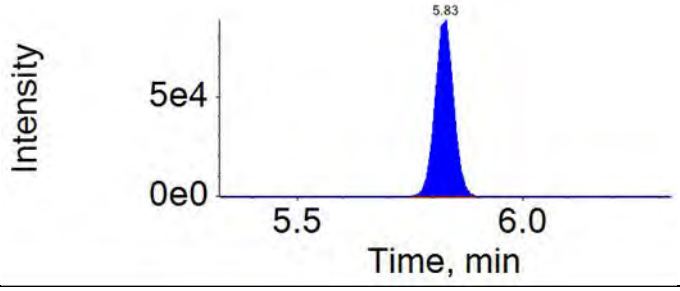
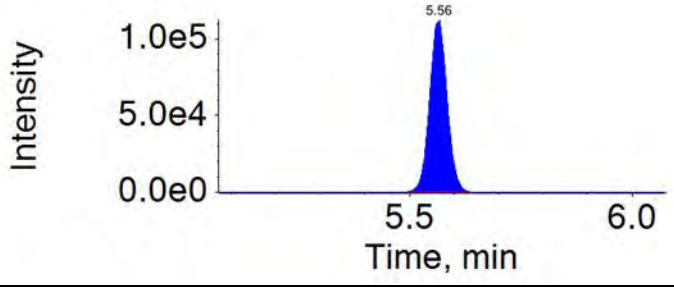
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

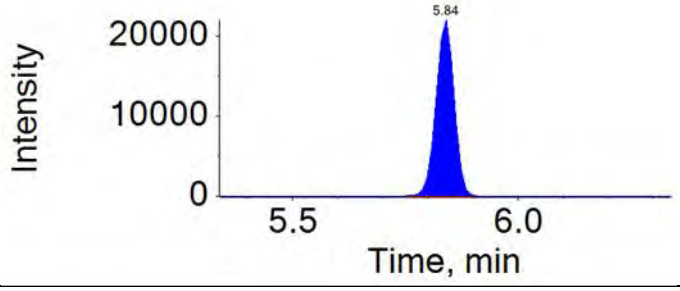
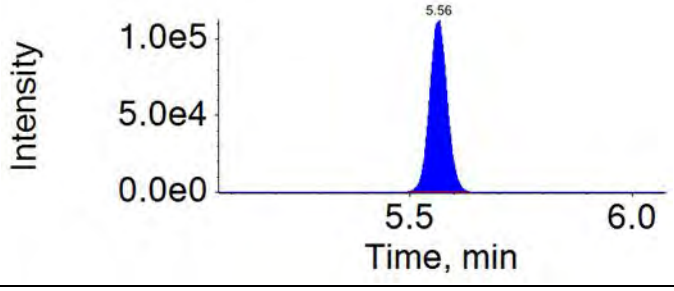
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

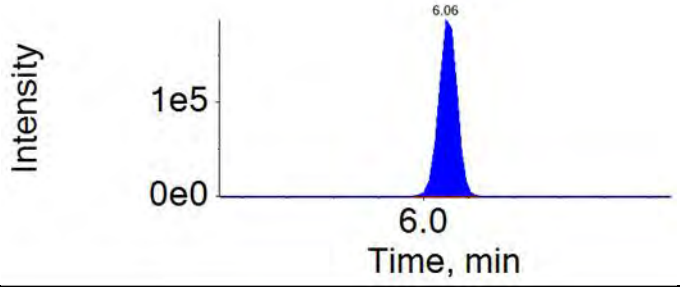
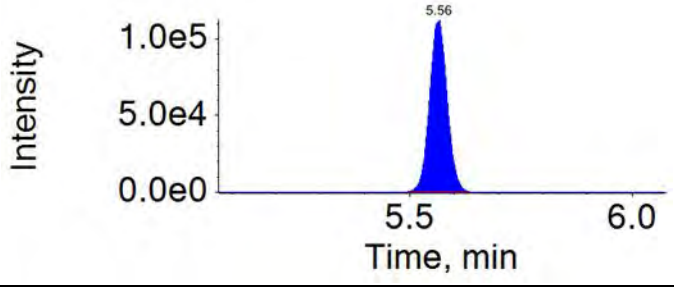
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

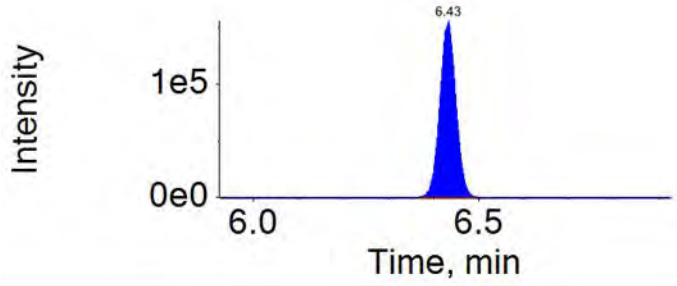
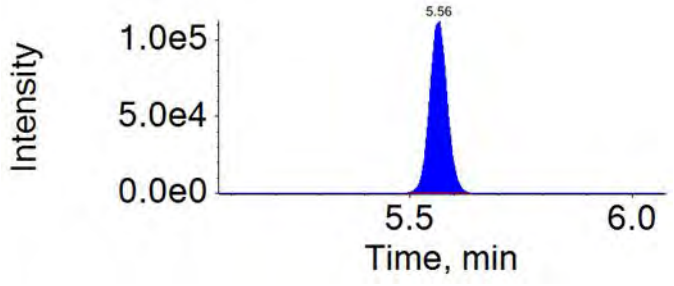
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

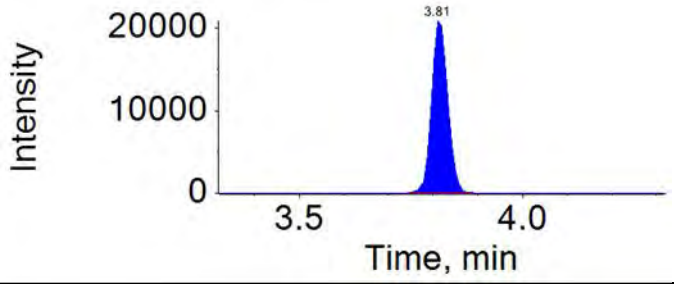
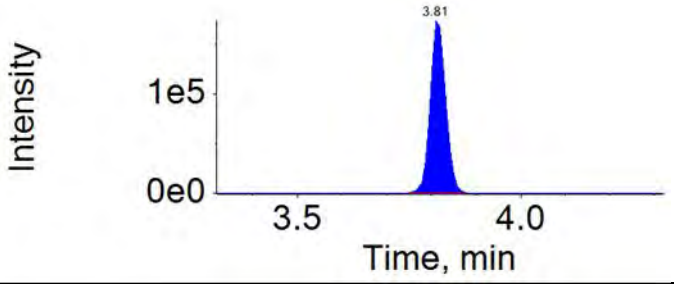
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

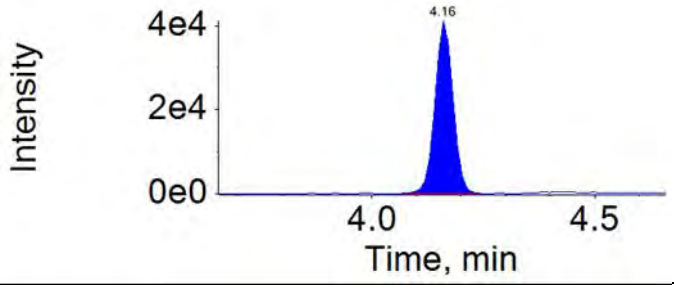
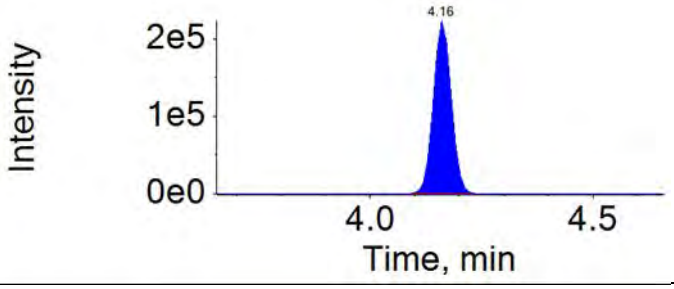
Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0
	

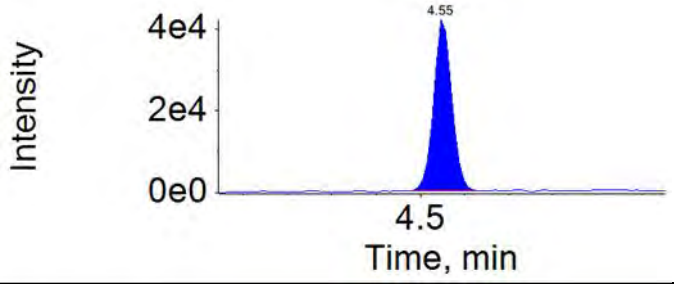
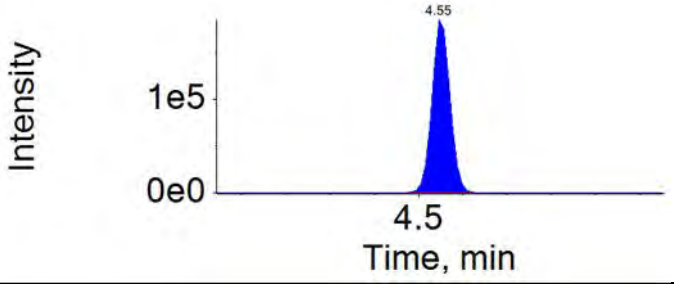
APPROVED
By JPT at 4:12 pm, 11/14/18

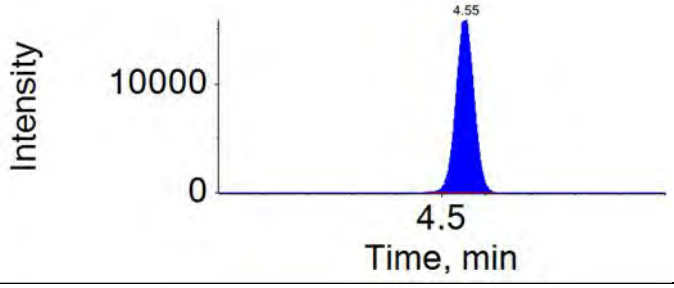
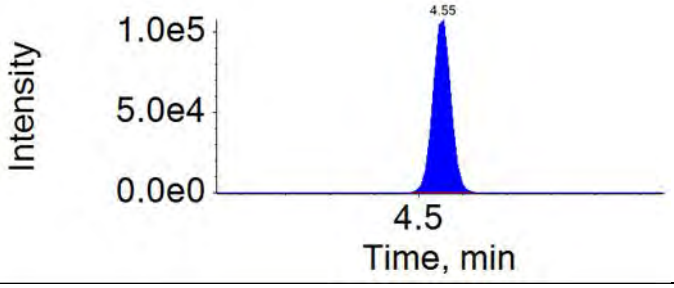
REVIEWED
By HMK at 11:32 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0
	

Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0
	

Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0
	

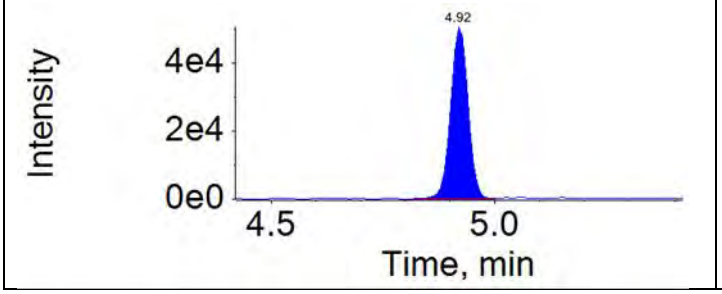
Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0
	

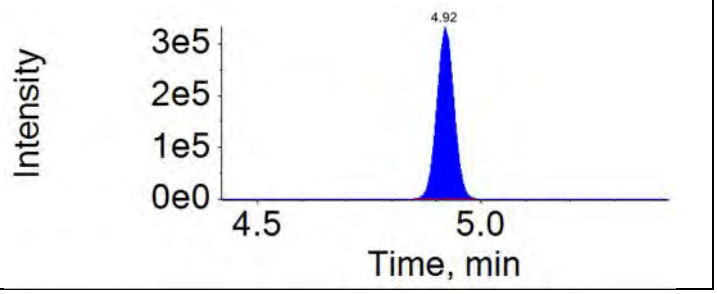
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

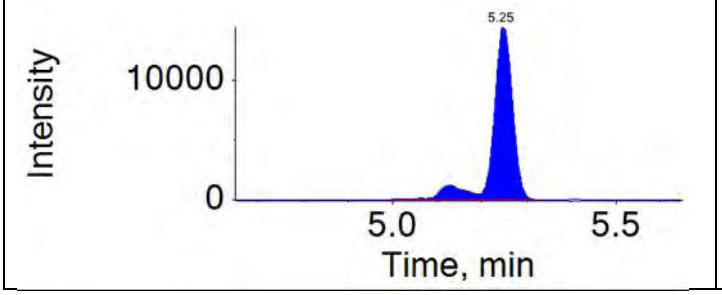
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

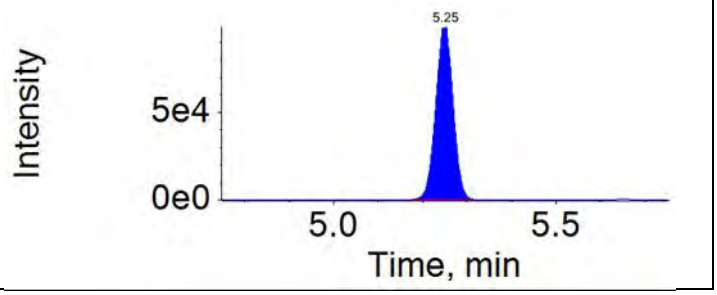
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0



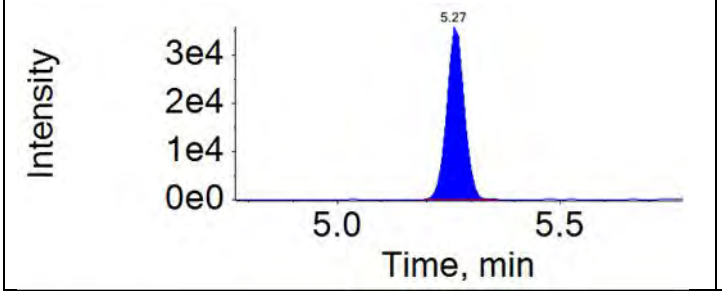


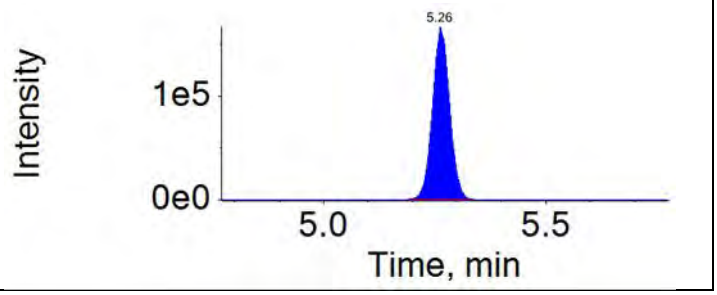
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



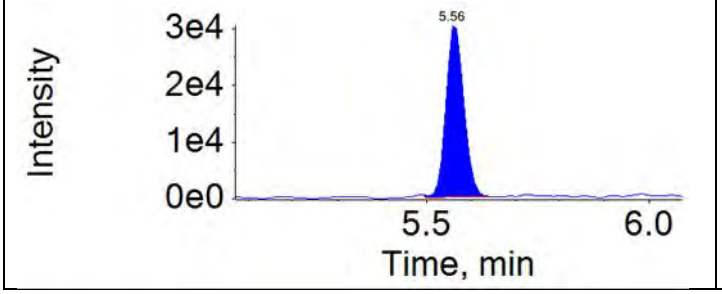


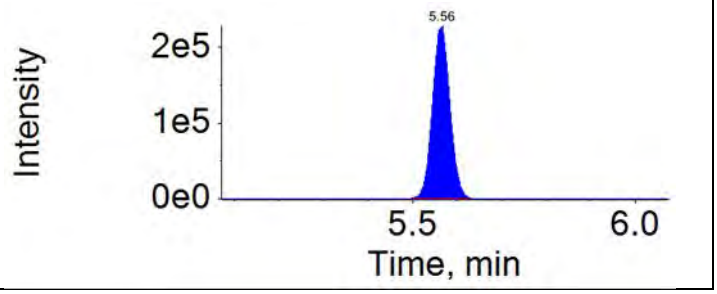
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0





Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0



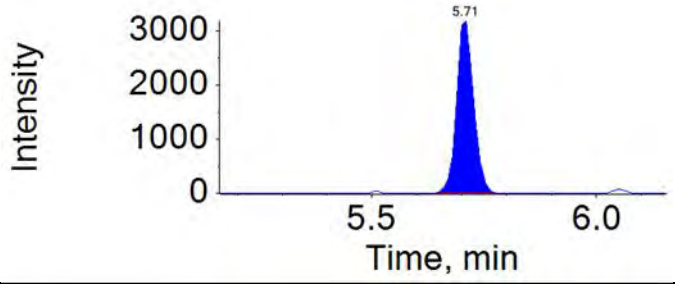


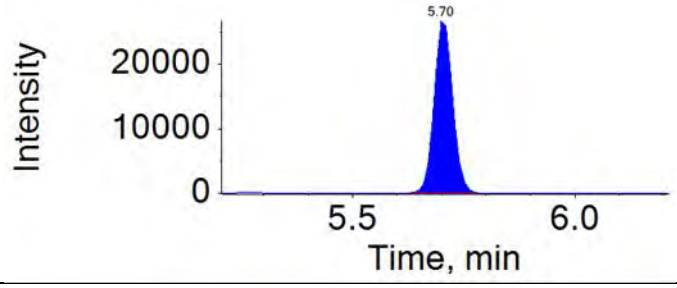
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

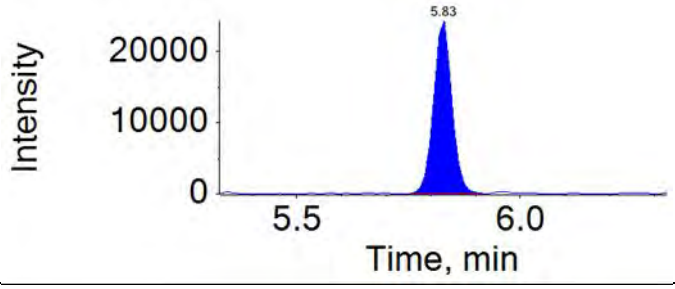
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

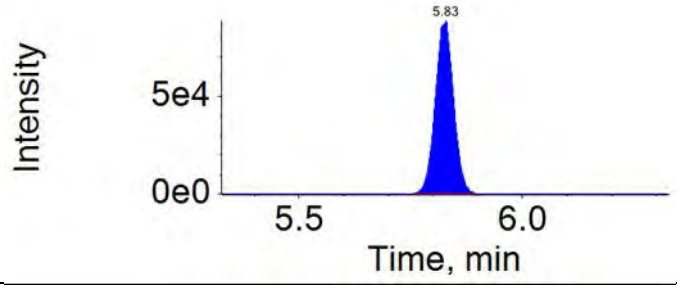
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



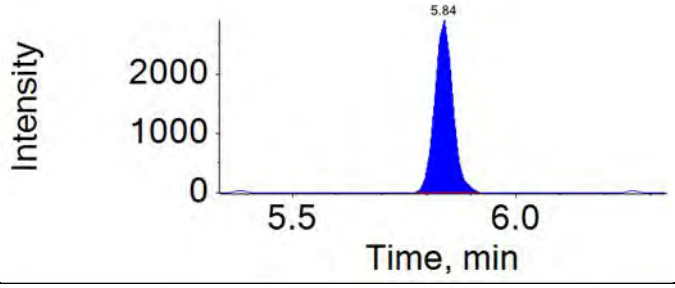


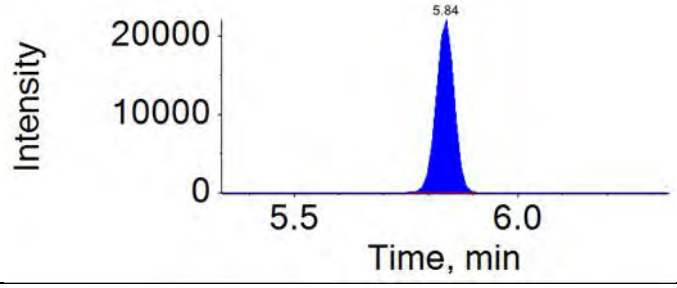
Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



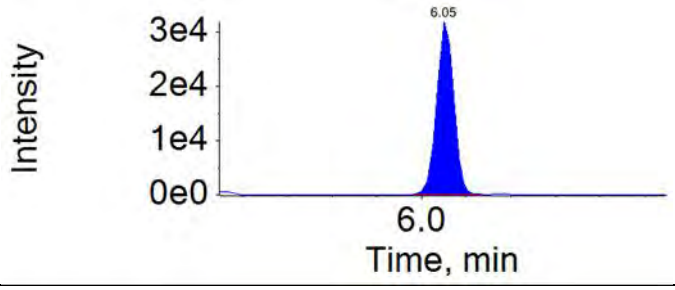


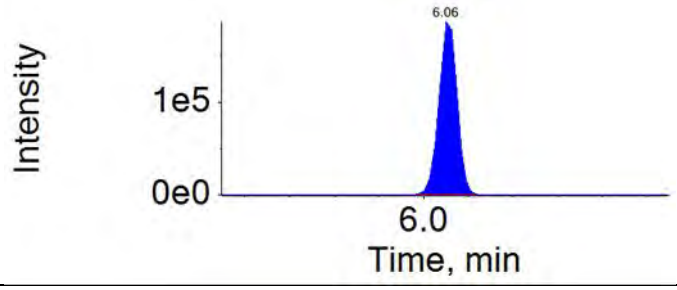
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0





Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0

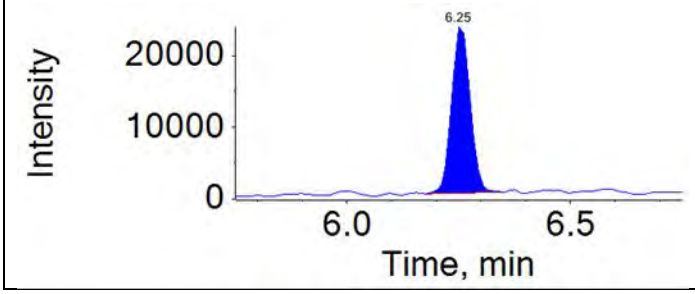
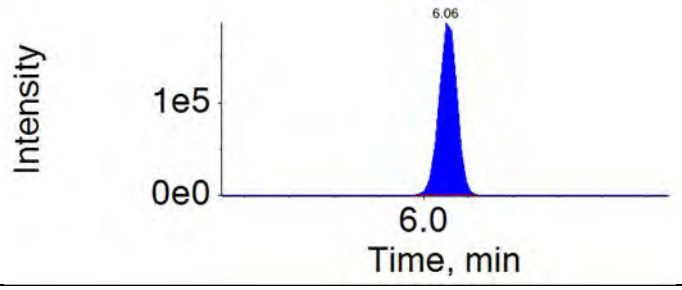


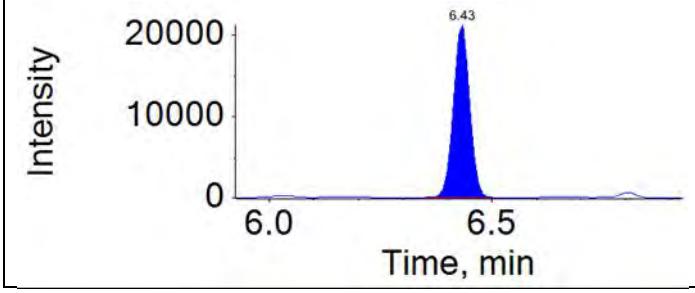
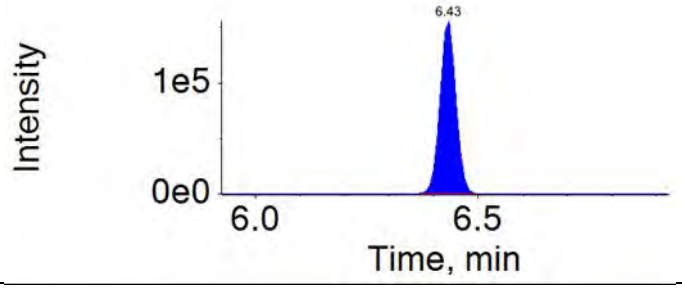


APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

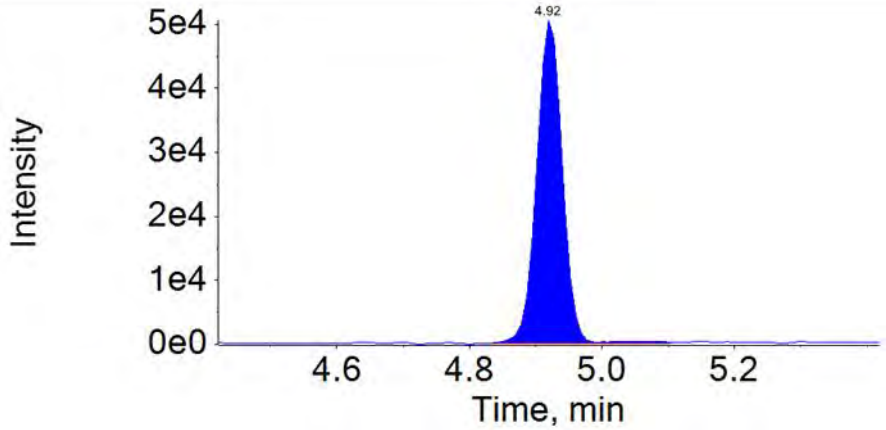
Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

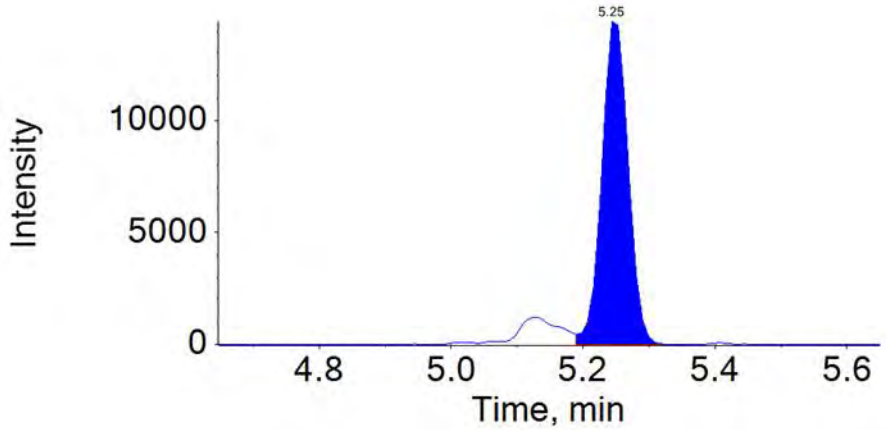
Results Table Name: 18316028
Results Table Date: 11/14/2018 2:10:57 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFOA
RT (min.):
4.92
Peak Area:
137226.8
Mass Range:
413.0 / 369.0
File Name:
18NOV13D-30.wiff
Sample Name:
9885144MSD



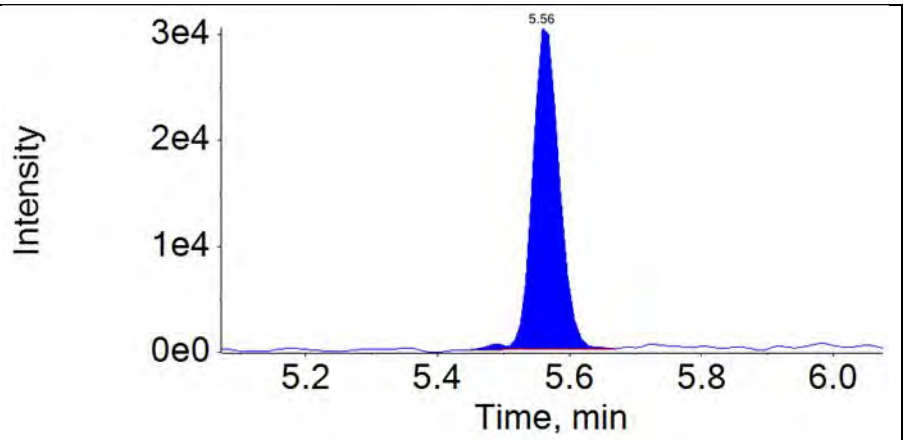
Integration Comment: incorrect integration

Component Name:
PFOS
RT (min.):
5.25
Peak Area:
40317.9
Mass Range:
499.0 / 80.0
File Name:
18NOV13D-30.wiff
Sample Name:
9885144MSD



Integration Comment: incorrect integration

Component Name:
PFDA
RT (min.):
5.56
Peak Area:
85954.9
Mass Range:
513.0 / 469.0
File Name:
18NOV13D-30.wiff
Sample Name:
9885144MSD



Integration Comment: incorrect integration

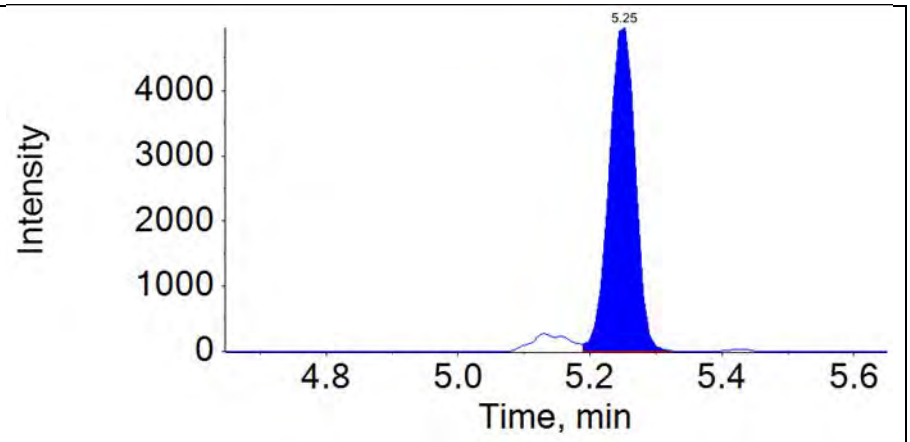
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

Results Table Name: 18316028
Results Table Date: 11/14/2018 2:10:57 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFOS_2
RT (min.):
5.25
Peak Area:
13880.5
Mass Range:
499.0 / 99.0
File Name:
18NOV13D-30.wiff
Sample Name:
9885144MSD



Integration Comment: incorrect integration

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

Results Table Name: 18316028
Results Table Date: 11/14/2018 2:10:57 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

Ion Ratio Report

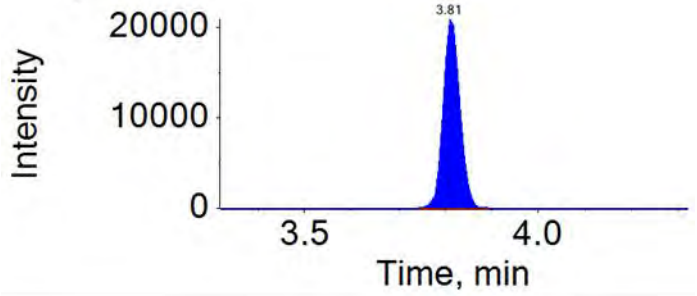
Sample Name: 9885144MSD **Instrument Name:** LM27631 **File Name:** 18NOV13D-30.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	52603.7	A	N/A	1.0000			
PFBS_2	3.81	1.00	20337.3	A	N/A	0.3866	6	50	
PFHxA	4.16	1.00	114977.1	A	N/A	1.0000			
PFHxA_2	4.16	1.00	1173.3	A	N/A	0.0102	-13	50	
PFHpA	4.55	1.00	118812.3	A	N/A	1.0000			
PFHpA_2	4.55	1.00	7264.6	A	N/A	0.0611	9	50	
PFHxS	4.55	1.00	45333.2	A	N/A	1.0000			
PFHxS_2	4.55	1.00	15204.7	A	N/A	0.3354	-3	50	
PFOA	4.92	1.00	136091.3	M	N/A	1.0000			
PFOA_2	4.92	1.00	5970.8	A	N/A	0.0439	-23	50	
PFOS	5.25	1.00	45845.4	M	N/A	1.0000			
PFOS_2	5.25	1.00	14954.2	M	N/A	0.3262	10	50	
PFNA	5.27	1.00	97584.4	A	N/A	1.0000			
PFNA_2	5.27	1.00	2333.7	A	N/A	0.0239	6	50	
PFDA	5.56	1.00	85109.9	M	N/A	1.0000			
PFDA_2	5.57	1.00	613.5	A	N/A	0.0072	-9	50	
NMeFOSAA	5.71	1.00	8358.2	A	N/A	1.0000			
NMeFOSAA_2	5.71	1.00	2296.9	A	N/A	0.2748	6	50	
PFUnDA	5.83	1.00	68604.9	A	N/A	1.0000			
PFUnDA_2	5.94	1.02	72.6	A	N/A	0.0011	-81	50	OOS
NEtFOSAA	5.84	1.00	8153.0	A	N/A	1.0000			
NEtFOSAA_2	5.84	1.00	4918.4	A	N/A	0.6033	-16	50	
PFDoDA	6.05	1.00	84948.1	A	N/A	1.0000			
PFDoDA_2	6.05	1.00	1136.7	A	N/A	0.0134	-13	50	
PFTrDA	6.25	1.03	67236.2	A	N/A	1.0000			
PFTrDA_2	6.25	1.03	527.8	A	N/A	0.0078	-8	50	
PFTeDA	6.43	1.00	53235.4	A	N/A	1.0000			
PFTeDA_2	6.43	1.00	180.4	A	N/A	0.0034	-45	50	

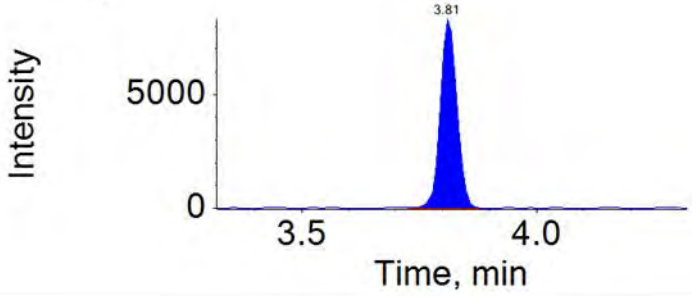
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

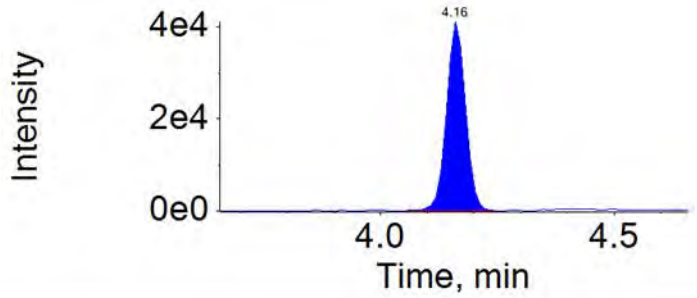
Component: PFBS
Primary Mass: 299.0 / 80.0



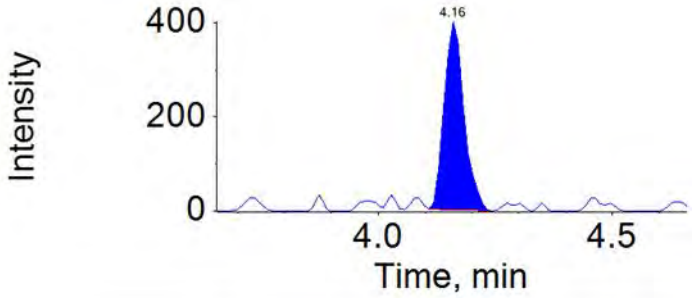
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Secondary Mass: 299.0 / 99.0



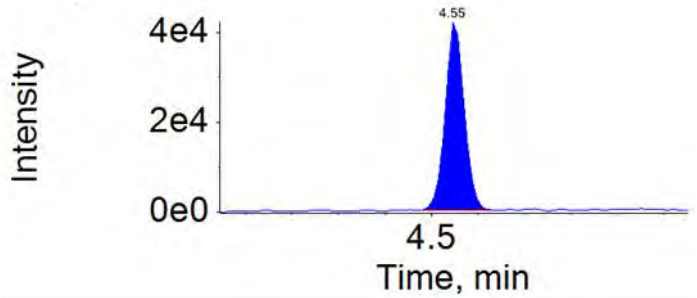
Component: PFHxA
Primary Mass: 313.0 / 269.0



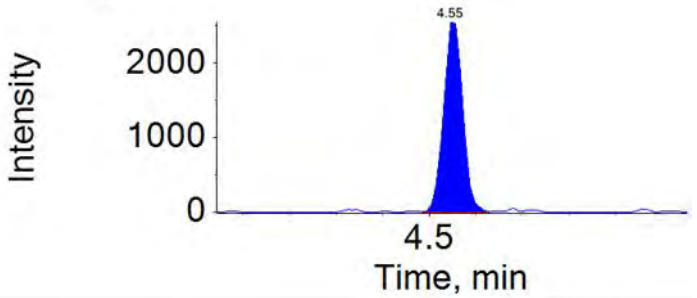
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



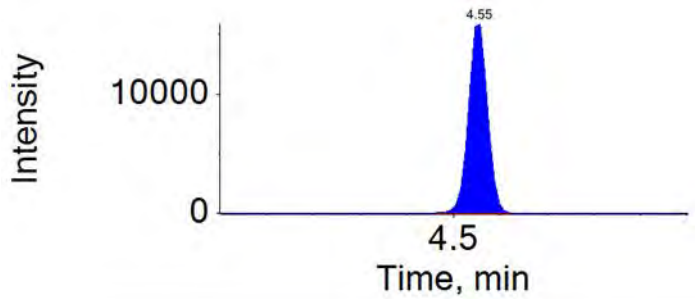
Component: PFHpA
Primary Mass: 363.0 / 319.0



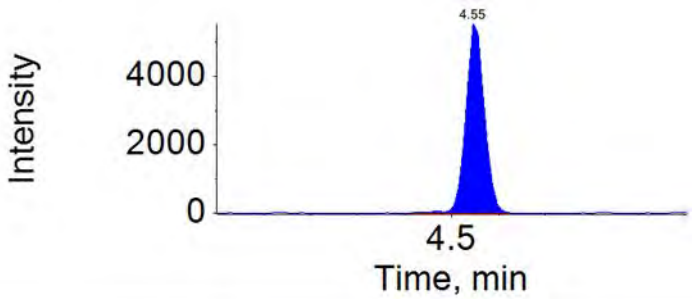
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



Component: PFHxS
Primary Mass: 399.0 / 80.0



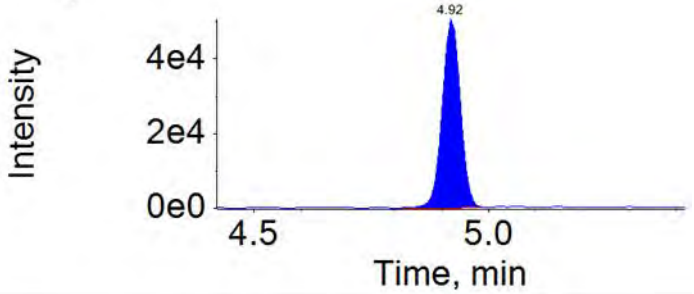
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Secondary Mass: 399.0 / 99.0



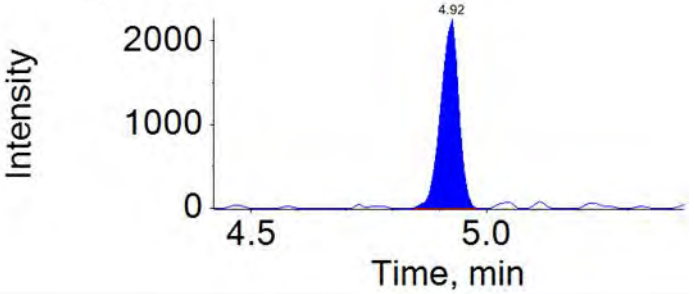
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

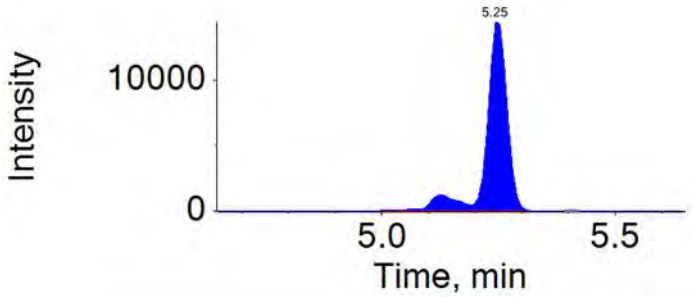
Component: PFOA
Primary Mass: 413.0 / 369.0



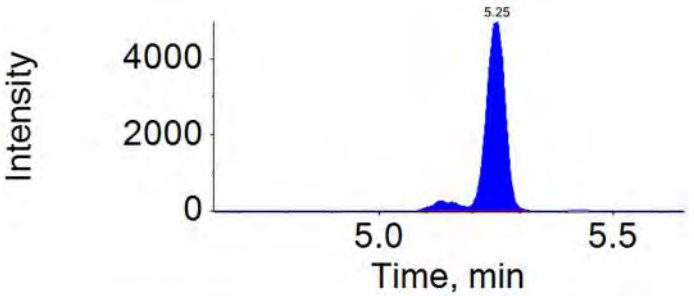
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Secondary Mass: 413.0 / 169.0



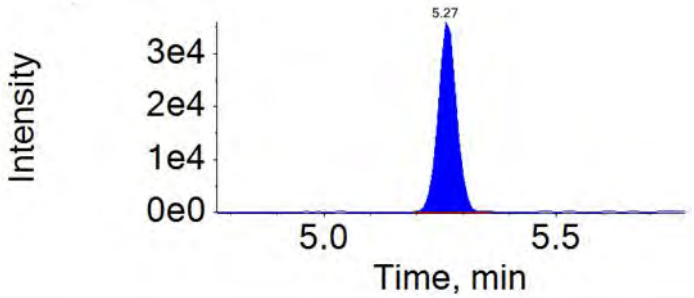
Component: PFOS
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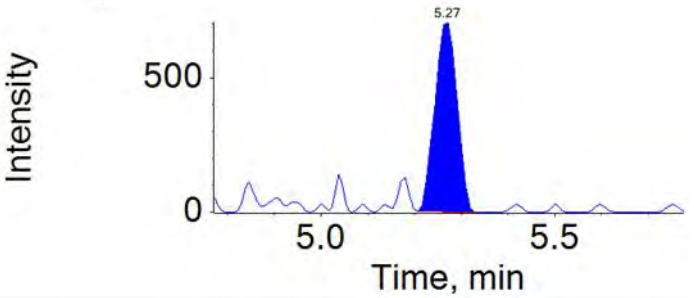
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Secondary Mass: 499.0 / 99.0



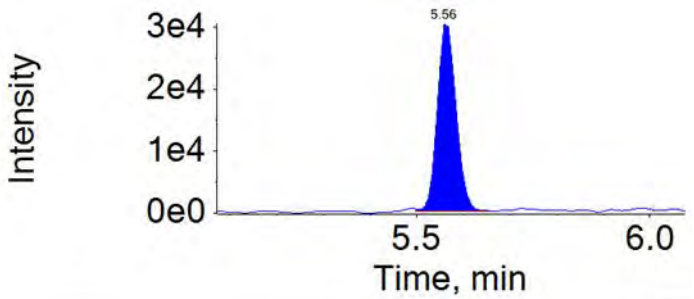
Component: PFNA
Primary Mass: 463.0 / 419.0



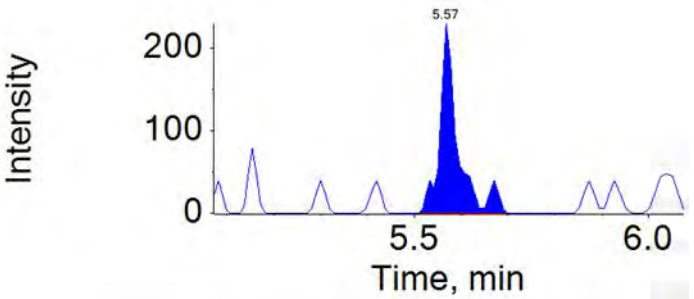
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFDA
Primary Mass: 513.0 / 469.0



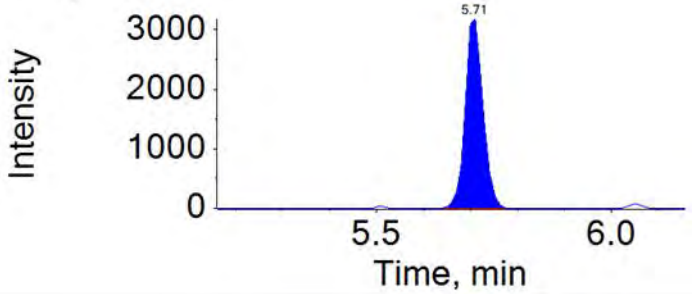
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Secondary Mass: 513.0 / 169.0



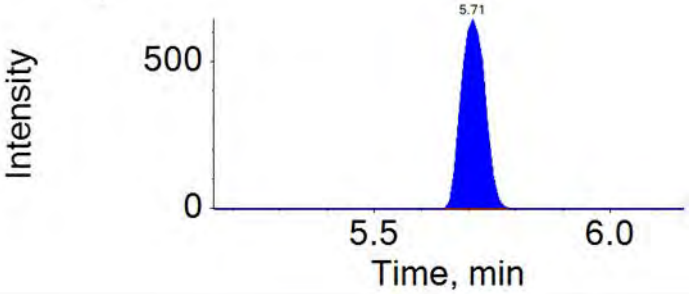
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REVIEWED
By HMK at 11:32 am, 11/15/18

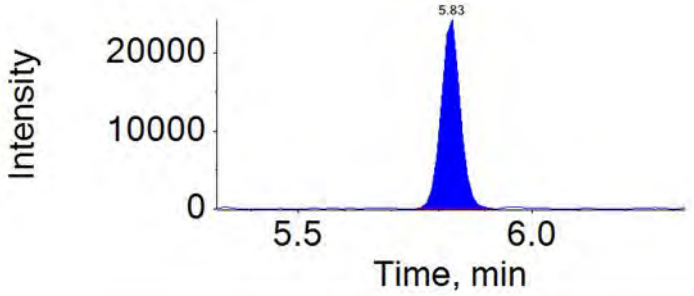
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



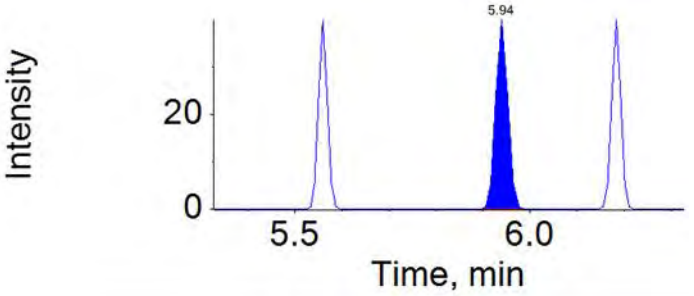
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Secondary Mass: 570.0 / 483.0



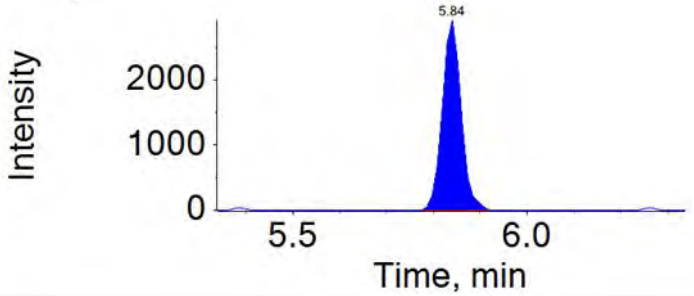
Component: PFUnDA
Primary Mass: 563.0 / 519.0



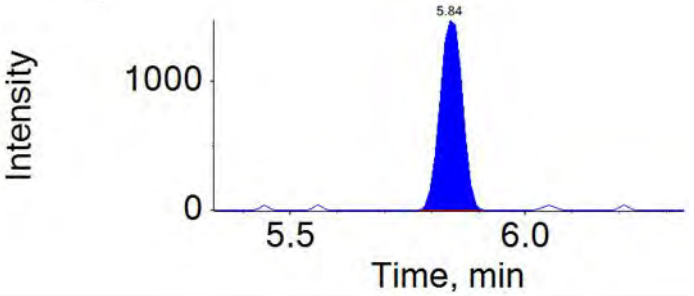
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Secondary Mass: 563.0 / 169.0



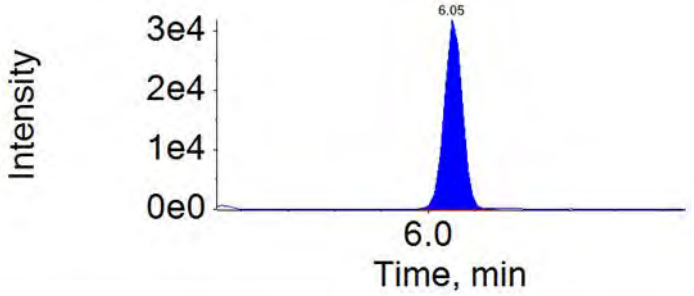
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Primary Mass: 584.0 / 419.0



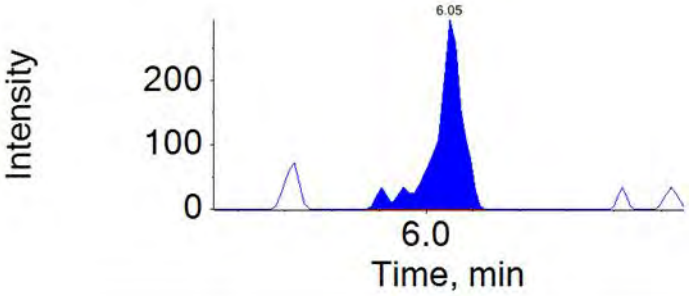
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



Component: PFDoDA
Primary Mass: 613.0 / 569.0



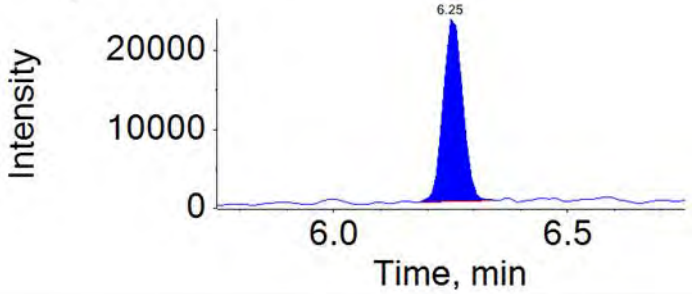
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



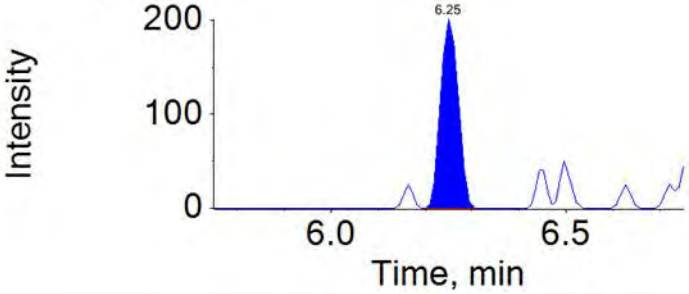
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

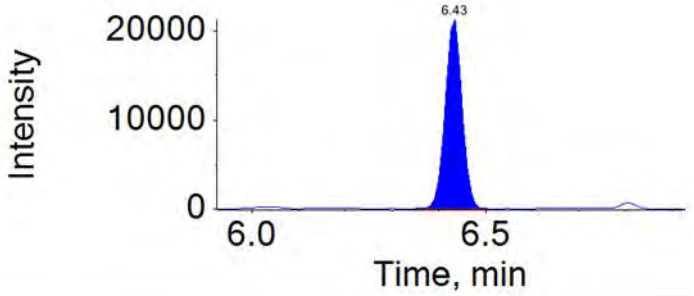
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Primary Mass: 663.0 / 619.0



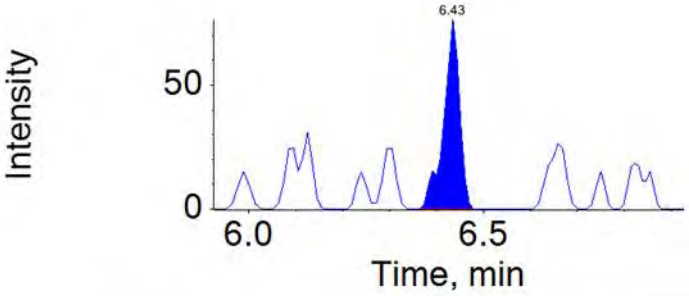
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



Component: PFTeDA
Primary Mass: 713.0 / 669.0



Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



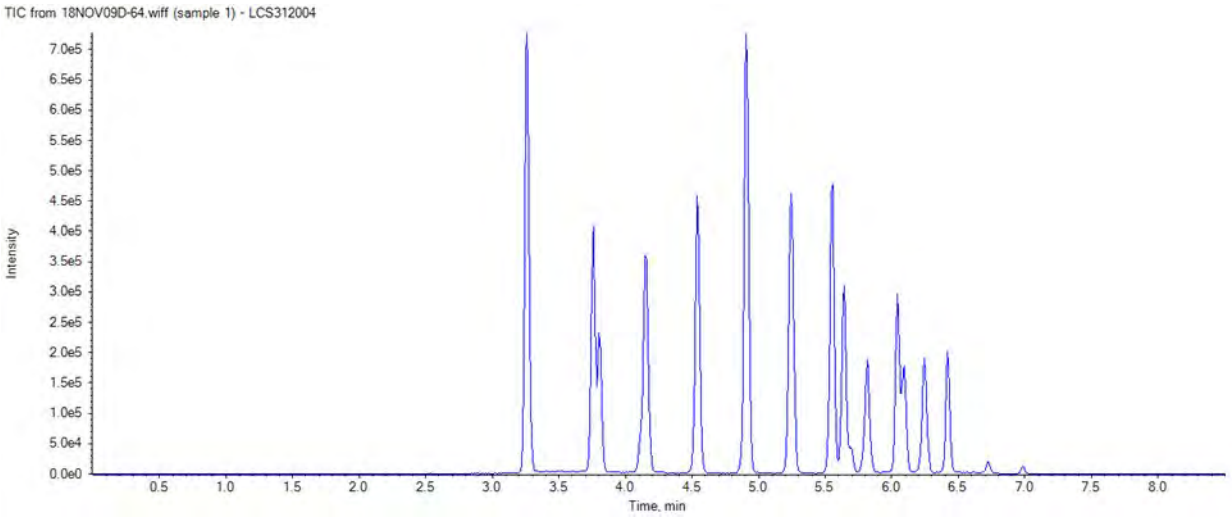
APPROVED
By JPT at 4:12 pm, 11/14/18

REVIEWED
By HMK at 11:32 am, 11/15/18

Lab Control Sample Recovery

ICAL Name: 18NOV07DCAL
QMethod Name: MQ4-18AUG13
Result Table: 18312004 11/10/2018 12:03:44 AM
Acquisition Method: 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	LCS312004	EPA 537 mod QSM 5.1 table B-15 18312004	18NOV09D-64.wiff	2018-11-09T14:07:27



Injection Standard Area Reference File**:** 18NOV09D-03

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.00	734192.9	725974.7	1	50	
13C2-PFOA	5.00	507585.3	506876.7	0	50	
13C4-PFOS	4.78	266990.3	274910.1	-3	50	
13C2-PFDA	5.00	298940.9	307276.7	-3	50	

APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

Lab Control Sample Recovery

ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:03:44 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	LCS312004	EPA 537 mod QSM 5.1 table B-15 18312004	18NOV09D-64.wiff	2018-11-09T14:07:27

Analyte Name	Analyte Area	Ext Std Area	Area Ratio	Adj Actual Conc	Sample Result	%REC	% REC Limit	%REC OOS
PFBA	173620.4	719398.9	0.241	5.440	5.650	104	70-130	
PFPeA	159420.0	713688.4	0.223	5.440	5.310	98	70-130	
PFBS	86246.6	359612.0	0.240	4.812	4.837	101	72-127	
4:2-FTS	57561.1	46308.8	1.243	14.944	13.366	89	70-130	
PFHxA	192379.6	608112.4	0.316	5.440	5.427	100	77-132	
PFPeS	45131.6	359612.0	0.126	5.104	4.951	97	70-130	
PFHxS	66527.4	289113.1	0.230	5.144	4.665	91	71-130	
PFHpA	204610.6	473269.2	0.432	5.440	5.816	107	75-139	
6:2-FTS	47108.0	33603.2	1.402	15.168	13.989	92	70-130	
PFHpS	68206.6	289113.1	0.236	5.176	4.937	95	70-130	
PFOA	206072.1	804321.6	0.256	5.440	5.770	106	76-136	
PFOS	63039.5	253461.8	0.249	5.200	5.159	99	67-134	
PFNA	171879.6	436830.4	0.393	5.440	5.882	108	73-144	
PFNS	41098.7	253461.8	0.162	5.224	5.143	98	70-130	
PFDA	136106.0	536765.6	0.254	5.440	5.580	103	67-141	
8:2-FTS	36945.8	24016.5	1.538	15.328	13.870	90	70-130	
PFOSA	134220.0	570366.6	0.235	5.440	5.088	94	70-130	
NMeFOSAA	15599.1	80489.0	0.194	5.440	3.989	73	67-124	
PFDS	31247.4	253461.8	0.123	5.240	4.711	90	70-130	
PFUnDA	107715.6	241255.4	0.446	5.440	5.122	94	83-132	
NEtFOSAA	12912.0	55386.7	0.233	5.440	4.007	74	60-131	
PFDoDA	116982.1	488669.5	0.239	5.440	5.189	95	72-137	
10:2-FTS	25712.9	24016.5	1.071	15.424	13.335	86	70-130	
NMePFOSAE	75401.4	251688.8	0.300	5.440	5.370	99	70-130	
NMePFOSA	12721.5	57069.6	0.223	5.440	4.991	92	70-130	
PFDoS	14921.7	253461.8	0.059	5.264	4.545	86	70-130	
NEtPFOSAE	86103.0	213636.3	0.403	5.440	5.168	95	70-130	
NEtPFOSA	12443.3	47162.5	0.264	5.440	4.648	85	70-130	
PFTrDA	98180.4	488669.5	0.201	5.440	5.068	93	57-137	
PFTeDA	79821.1	338635.5	0.236	5.440	5.537	102	70-142	
PFHxDA	35529.8	338635.5	0.105	5.440	5.210	96	70-130	
PFODA	25174.1	338635.5	0.074	5.440	4.260	78	70-130	

APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

Lab Control Sample Recovery

ICAL Name: 18NOV07DCAL
QMethod Name: MQ4-18AUG13
Result Table: 18312004 11/10/2018 12:03:44 AM
Acquisition Method: 18AUG13_3uL.dam

APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

ICAL Name: 18NOV07DCAL
QMethod Name: MQ4-18AUG13
Result Table: 18312004 11/10/2018 12:05:42 AM
Acquisition Method: 18AUG13_3uL.dam

Sample Name:	LCS312004			**Data File:**		18NOV09D-64.wiff
Sample ID:	EPA 537 mod QSM 5.1 table B-15 18312004			**Acquis Date:**		2018-11-09T14:07:27
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	94			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18312004
QMethod File:	MQ4-18AUG13			**ICAL Name:**		18NOV07DCAL
Batch Number:	18312004			**Operator:**		MCD7824
Sample Wt.:	0.25000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		1.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV09D-03

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	734192.9	725974.7	1	50	
13C2-PFOA	5.0	507585.3	506876.7	0	50	
13C4-PFOS	4.8	266990.3	274910.1	-3	50	
13C2-PFDA	5.0	298940.9	307276.7	-3	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	719398.9	13C3-PFBA	734192.9	0.980	20.000	18.138	91	50-150	
E13C5-PFPeA	713688.4	13C3-PFBA	734192.9	0.972	20.000	16.939	85	50-150	
E13C3-PFBS	359612.0	13C3-PFBA	734192.9	0.490	18.600	14.379	77	50-150	
E13C2-4:2-FTS	46308.8	13C2-PFOA	507585.3	0.091	18.680	16.467	88	50-150	
E13C5-PFHxA	608112.4	13C2-PFOA	507585.3	1.198	20.000	17.628	88	50-150	
E13C3-PFHxS	289113.1	13C2-PFOA	507585.3	0.570	18.920	16.356	86	50-150	
E13C4-PFHpA	473269.2	13C2-PFOA	507585.3	0.932	20.000	16.966	85	50-150	
E13C2-6:2-FTS	33603.2	13C2-PFOA	507585.3	0.066	19.000	17.659	93	50-150	
E13C8-PFOA	804321.6	13C2-PFOA	507585.3	1.585	20.000	17.676	88	50-150	
E13C8-PFOS	253461.8	13C4-PFOS	266990.3	0.949	19.120	16.791	88	50-150	
E13C9-PFNA	436830.4	13C4-PFOS	266990.3	1.636	20.000	17.877	89	50-150	
E13C6-PFDA	536765.6	13C2-PFDA	298940.9	1.796	20.000	18.062	90	50-150	
E13C2-8:2-FTS	24016.5	13C2-PFDA	298940.9	0.080	19.160	17.004	89	50-150	
E13C8-PFOSA	570366.6	13C2-PFDA	298940.9	1.908	20.000	16.654	83	50-150	
Ed3-NMeFOSAA	80489.0	13C2-PFDA	298940.9	0.269	20.000	20.028	100	50-150	
E13C7-PFUnDA	241255.4	13C2-PFDA	298940.9	0.807	20.000	18.622	93	50-150	
Ed5-NEtFOSAA	55386.7	13C2-PFDA	298940.9	0.185	20.000	17.151	86	50-150	
E13C2-PFDoDA	488669.5	13C2-PFDA	298940.9	1.635	20.000	17.627	88	50-150	
Ed7-NMePFOSAE	251688.8	13C2-PFDA	298940.9	0.842	20.000	15.661	78	50-150	
Ed3-NMePFOSA	57069.6	13C2-PFDA	298940.9	0.191	20.000	13.980	70	50-150	
Ed9-NEtPFOSAE	213636.3	13C2-PFDA	298940.9	0.715	20.000	16.325	82	50-150	
Ed5-NEtPFOSA	47162.5	13C2-PFDA	298940.9	0.158	20.000	14.612	73	50-150	
E13C2-PFTeDA	338635.5	13C2-PFDA	298940.9	1.133	20.000	16.312	82	50-150	

APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

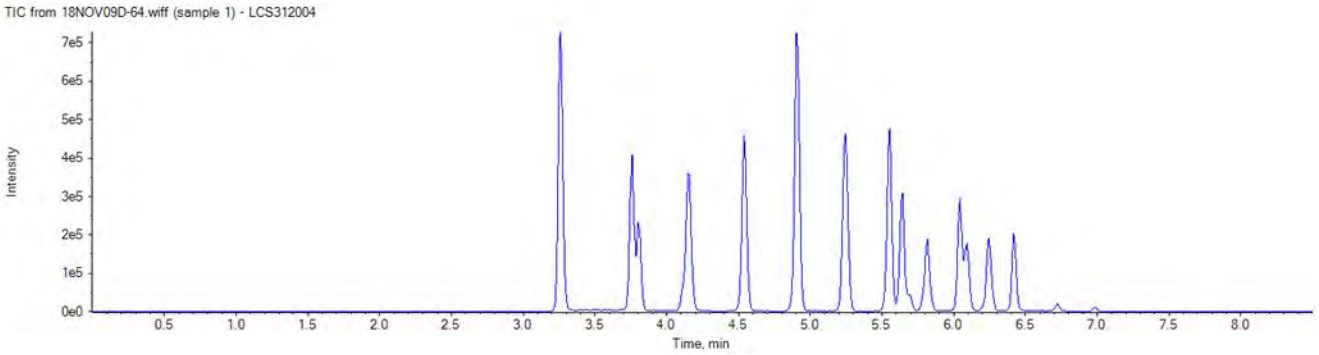
Analyte Quantitation Peak Table

Sample Name: LCS312004 **Instrument Name:** LM27631 **File Name:** 18NOV09D-64.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
0.25000	1.000	1.00	1.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/L)
PFBA	3.26	1.000	173620.4		A	13C4-PFBA	3.26	719398.9	0.241	5.650
PFPeA	3.76	1.000	159420.0		A	13C5-PFPeA	3.76	713688.4	0.223	5.310
PFBS	3.81	1.000	86246.6		A	13C3-PFBS	3.81	359612.0	0.240	4.837
4:2-FTS	4.12	1.000	57561.1		A	13C2-4:2-FTS	4.12	46308.8	1.243	13.366
PFHxA	4.15	1.000	192379.6		A	13C5-PFHxA	4.15	608112.4	0.316	5.427
PFPeS	4.17	1.100	45131.6		A	13C3-PFBS	3.81	359612.0	0.126	4.951
PFHxS	4.54	1.000	66527.4		A	13C3-PFHxS	4.54	289113.1	0.230	4.665
PFHpA	4.54	1.000	204610.6		A	13C4-PFHpA	4.54	473269.2	0.432	5.816
6:2-FTS	4.90	1.000	47108.0		A	13C2-6:2-FTS	4.90	33603.2	1.402	13.989
PFHpS	4.90	1.080	68206.6		A	13C3-PFHxS	4.54	289113.1	0.236	4.937
PFOA	4.91	1.000	206072.1		A	13C8-PFOA	4.91	804321.6	0.256	5.770
PFOS	5.24	1.000	63039.5		A	13C8-PFOS	5.24	253461.8	0.249	5.159
PFNA	5.25	1.000	171879.6		A	13C9-PFNA	5.25	436830.4	0.393	5.882
PFNS	5.53	1.060	41098.7		A	13C8-PFOS	5.24	253461.8	0.162	5.143
PFDA	5.55	1.000	136106.0		A	13C6-PFDA	5.55	536765.6	0.254	5.580
8:2-FTS	5.55	1.000	36945.8		A	13C2-8:2-FTS	5.56	24016.5	1.538	13.870
PFOSA	5.64	1.000	134220.0		A	13C8-PFOSA	5.64	570366.6	0.235	5.088
NMeFOSAA	5.70	1.000	15599.1		A	d3-NMeFOSAA	5.69	80489.0	0.194	3.989
PFDS	5.79	1.110	31247.4		A	13C8-PFOS	5.24	253461.8	0.123	4.711
PFUnDA	5.81	1.000	107715.6		A	13C7-PFUnDA	5.82	241255.4	0.446	5.122
NEtFOSAA	5.83	1.000	12912.0		M	d5-NEtFOSAA	5.83	55386.7	0.233	4.007
PFDoDA	6.04	1.000	116982.1		A	13C2-PFDoDA	6.04	488669.5	0.239	5.189
10:2-FTS	6.06	1.090	25712.9		A	13C2-8:2-FTS	5.56	24016.5	1.071	13.335
NMePFOSAE	6.10	1.000	75401.4		A	d7-NMePFOSAE	6.09	251688.8	0.300	5.370
NMePFOSA	6.11	1.000	12721.5		A	d3-NMePFOSA	6.10	57069.6	0.223	4.991
PFDoS	6.21	1.190	14921.7		A	13C8-PFOS	5.24	253461.8	0.059	4.545
NEtPFOSAE	6.25	1.000	86103.0		A	d9-NEtPFOSAE	6.24	213636.3	0.403	5.168
NEtPFOSA	6.27	1.000	12443.3		A	d5-NEtPFOSA	6.26	47162.5	0.264	4.648
PFTrDA	6.24	1.030	98180.4		A	13C2-PFDoDA	6.04	488669.5	0.201	5.068
PFTeDA	6.42	1.000	79821.1		A	13C2-PFTeDA	6.42	338635.5	0.236	5.537
PFHxDA	6.72	1.050	35529.8		A	13C2-PFTeDA	6.42	338635.5	0.105	5.210
PFODA	6.99	1.090	25174.1		A	13C2-PFTeDA	6.42	338635.5	0.074	4.260

Total Ion Chromatogram

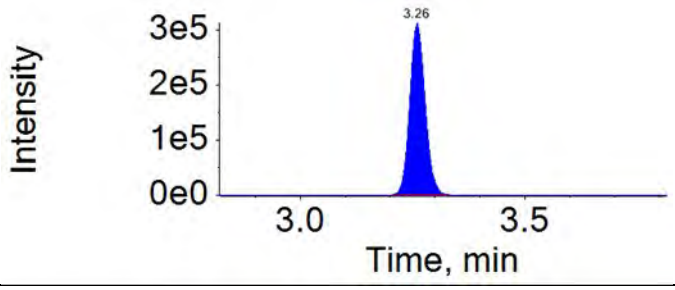


APPROVED
By MCD at 0:13 am, 11/10/18

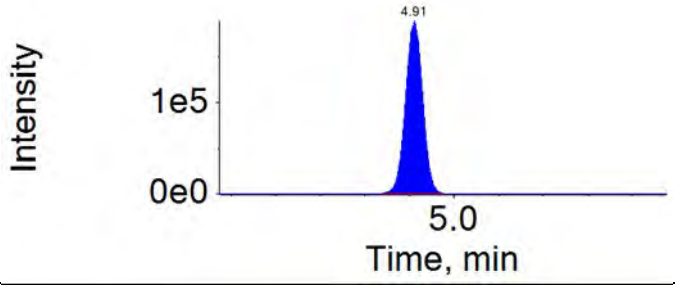
REVIEWED
By HMK at 7:51 am, 11/15/18

ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

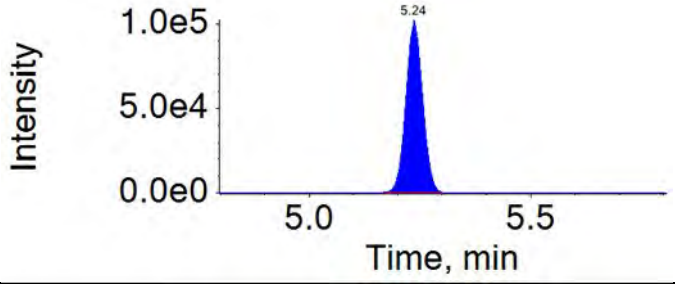
Injection Standard: 13C3-PFBA
216.0 / 172.0



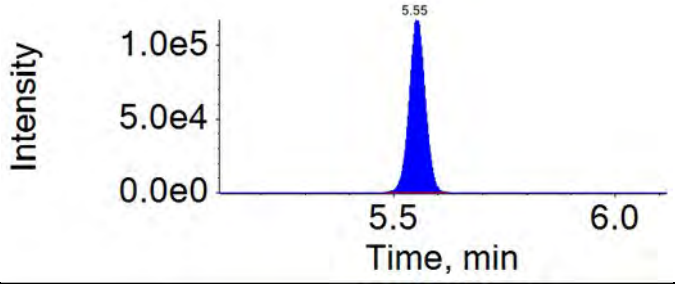
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

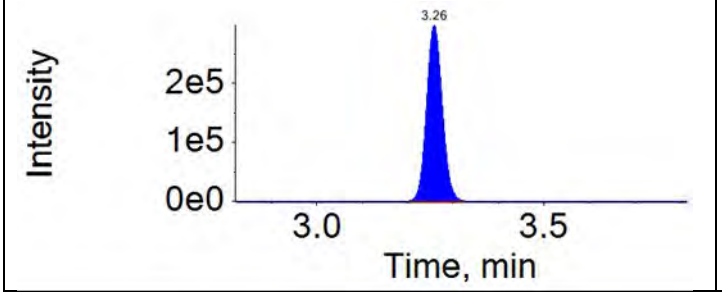


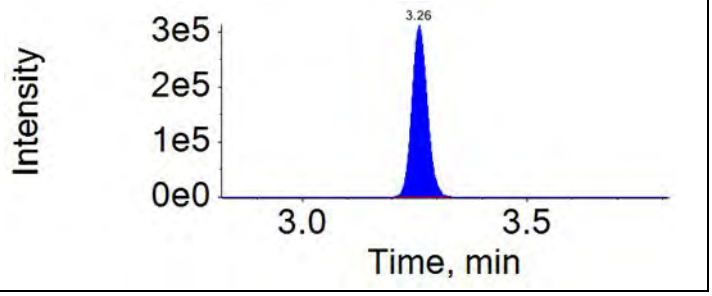
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

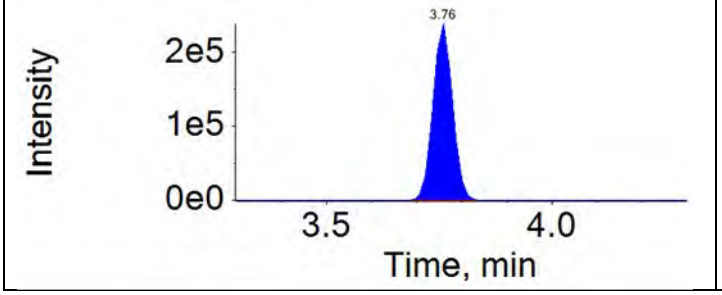
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

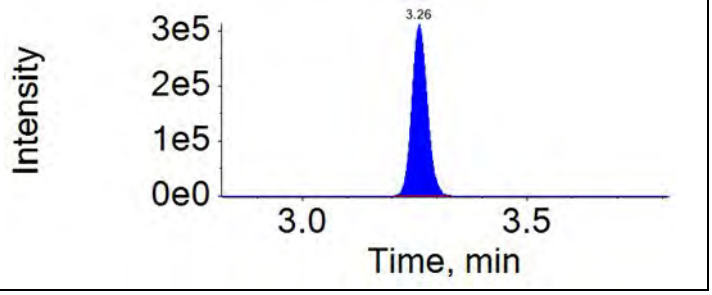
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



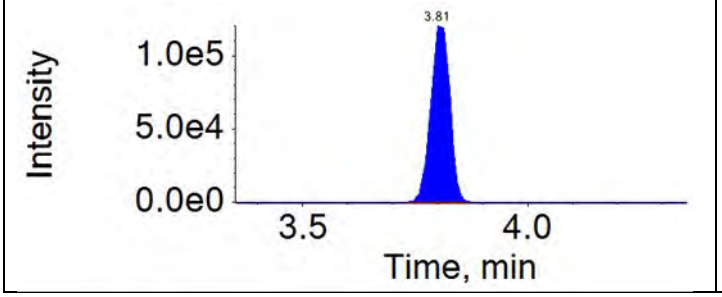


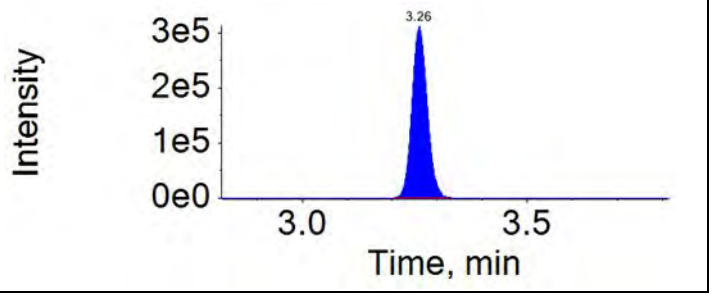
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



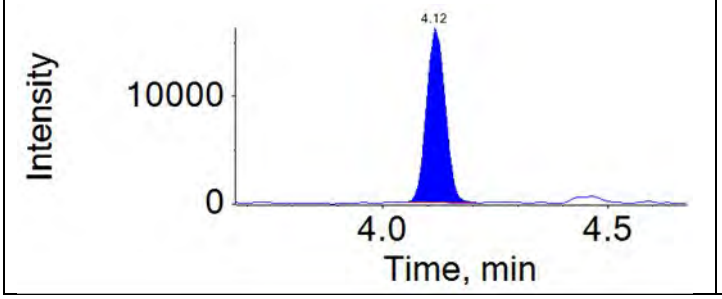


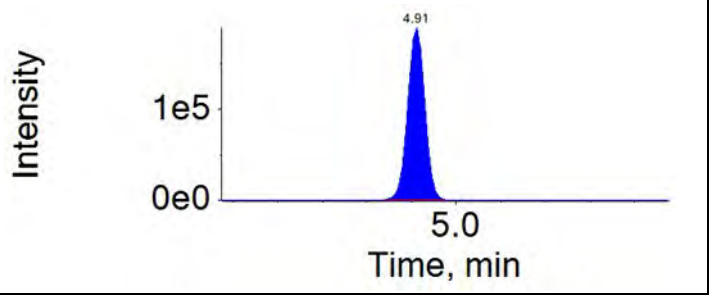
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302.0 / 80.0	216.0 / 172.0





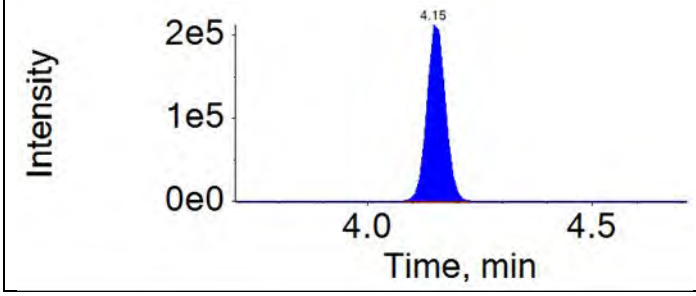
Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0

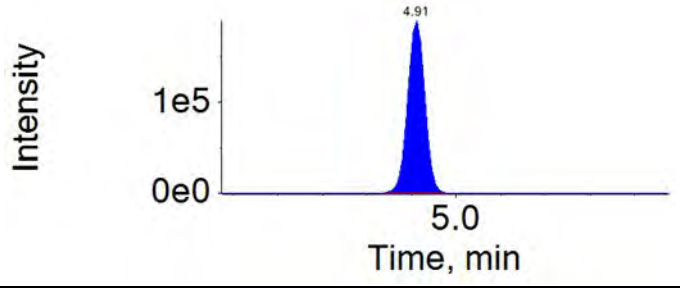




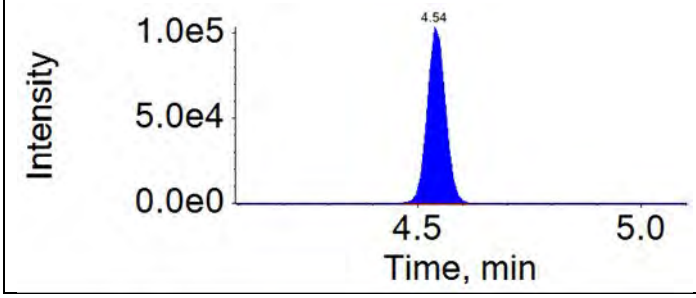
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

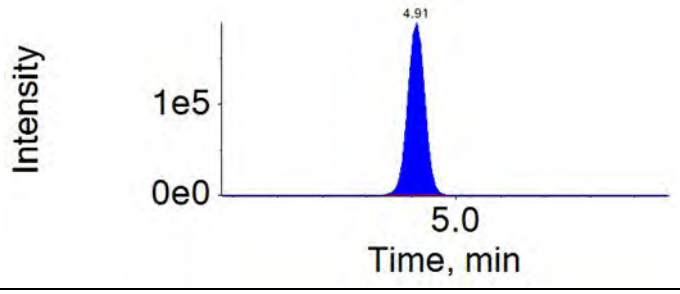
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



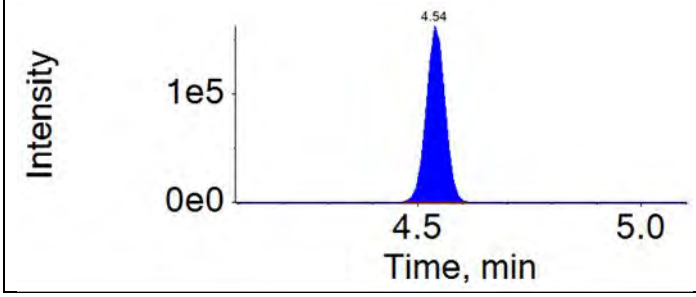


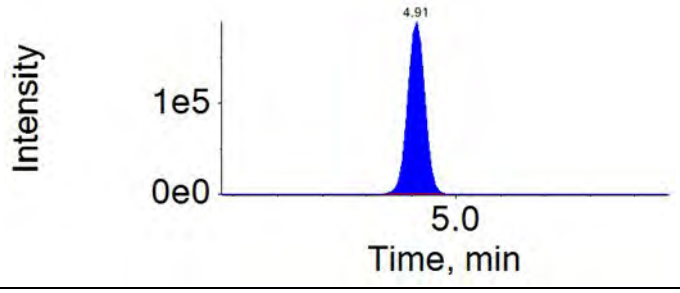
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



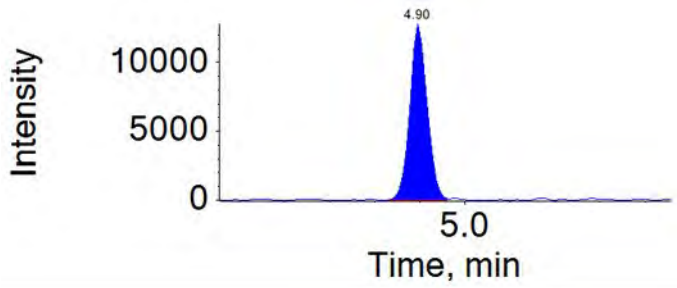


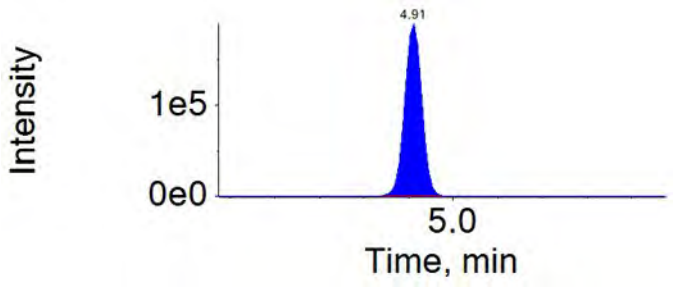
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

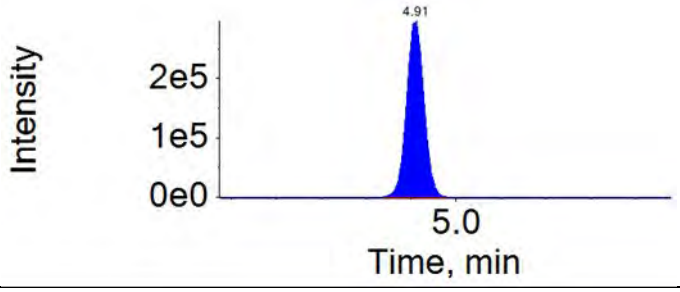
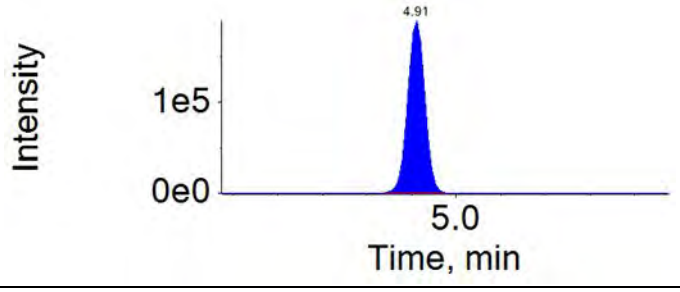


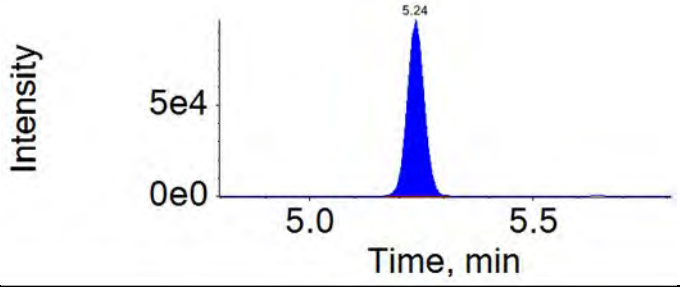
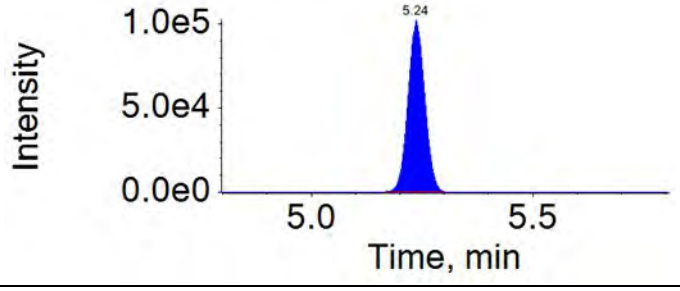


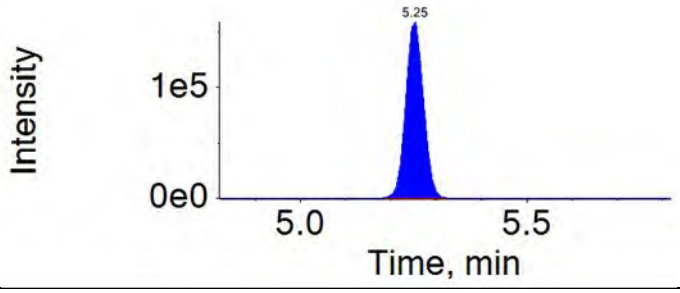
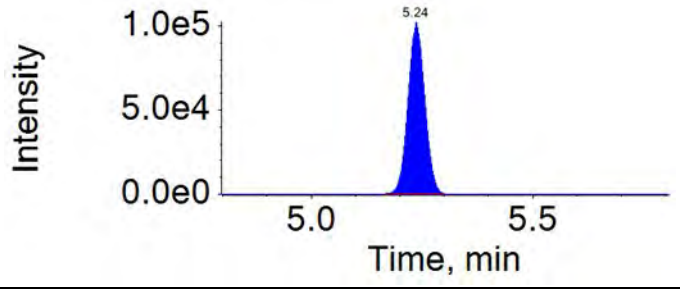
APPROVED
By MCD at 0:13 am, 11/10/18

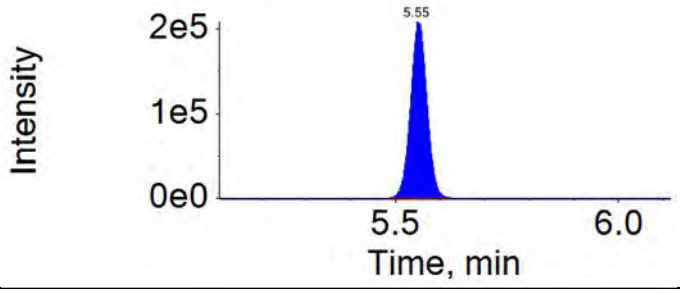
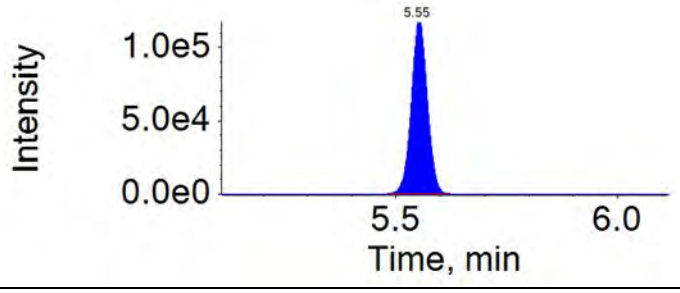
REVIEWED
By HMK at 7:51 am, 11/15/18

ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

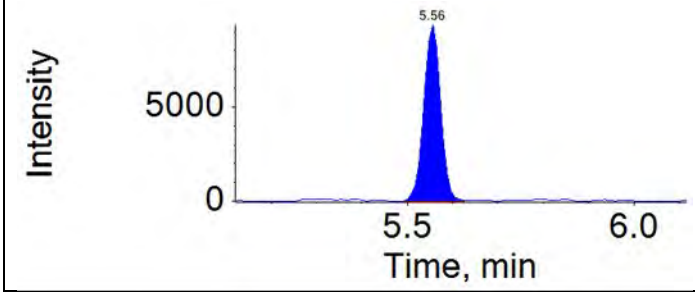
Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

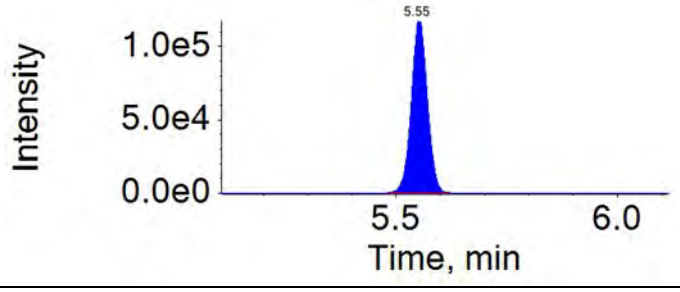
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

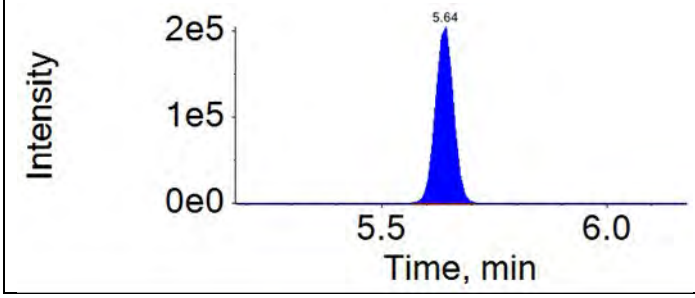
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

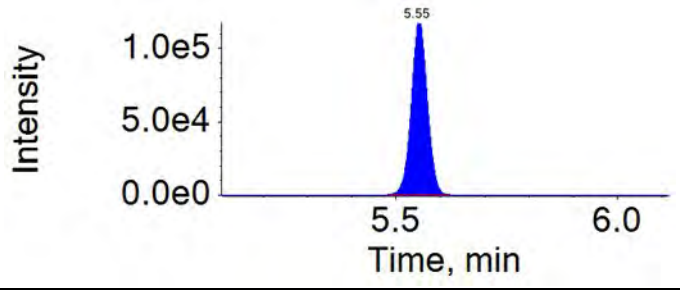
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0



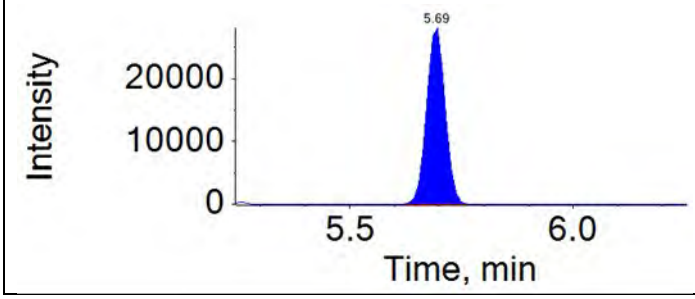


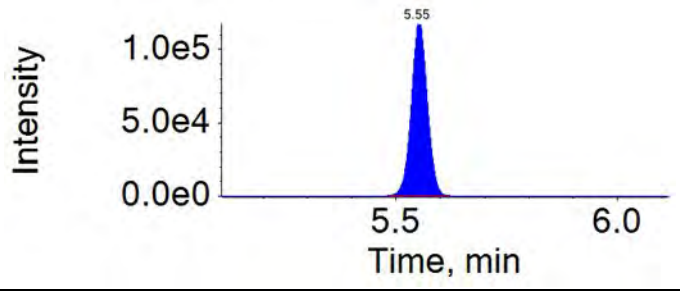
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0



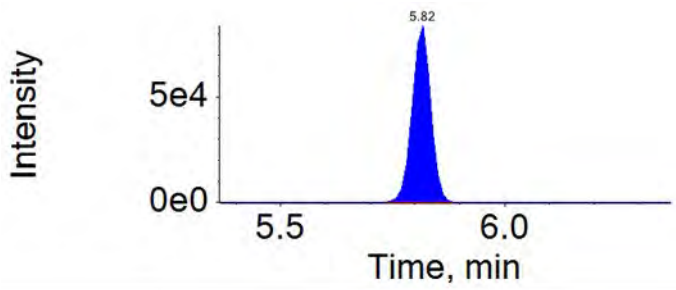


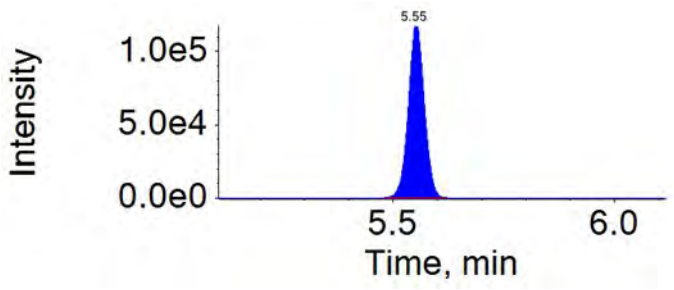
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0





Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0



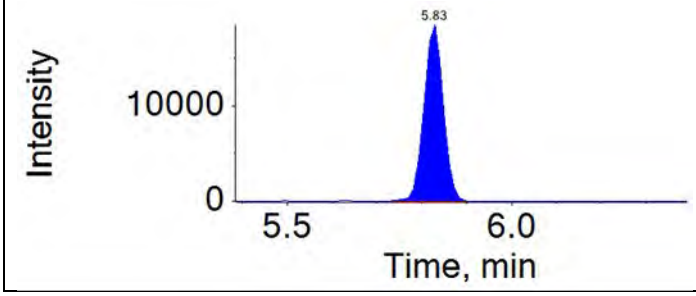


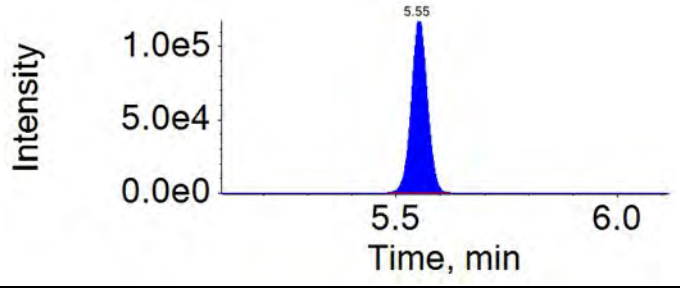
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

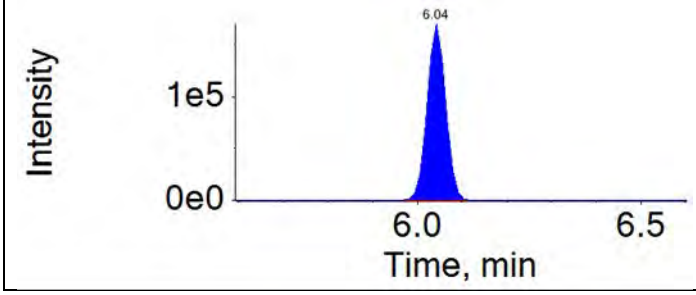
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

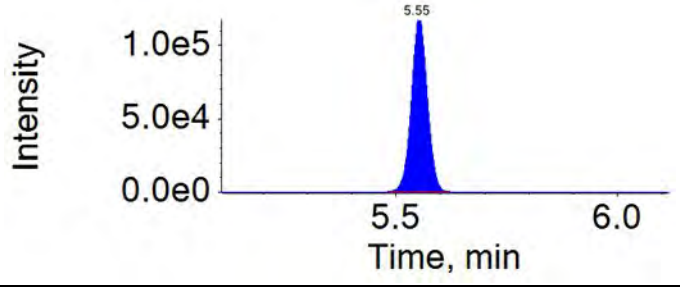
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



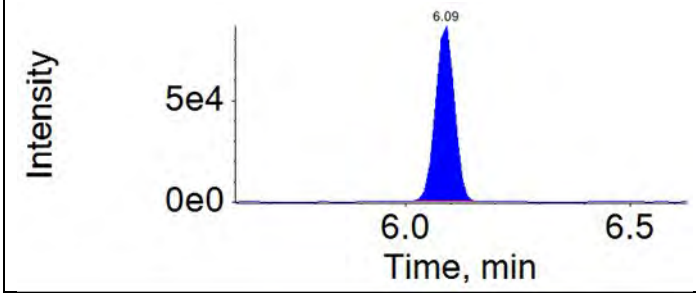


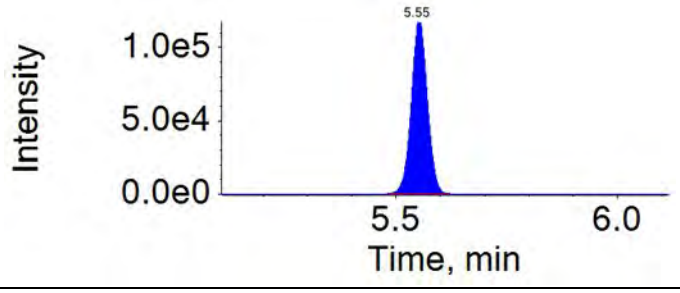
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



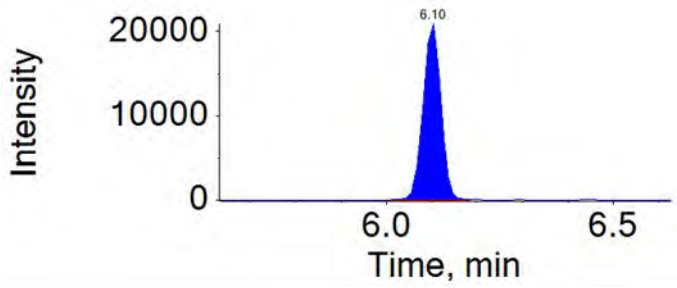


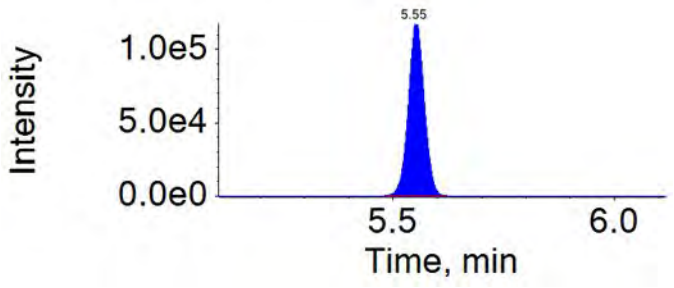
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



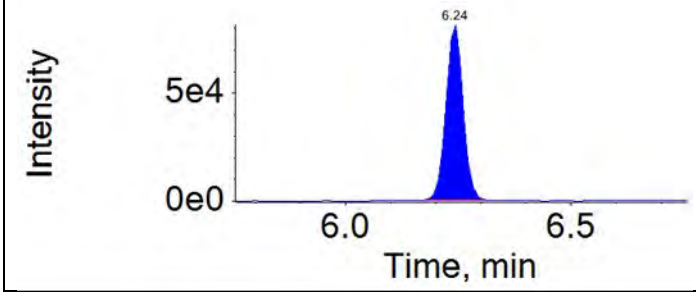


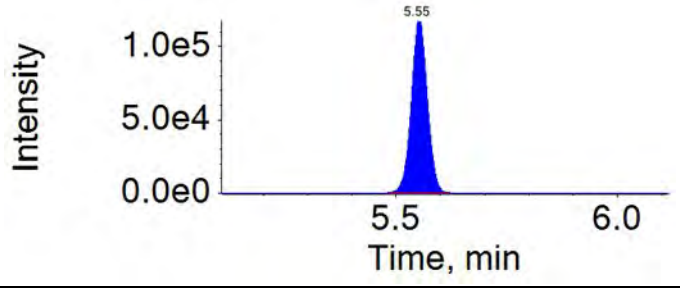
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

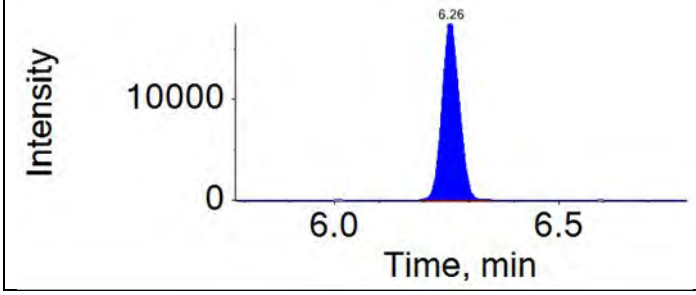
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

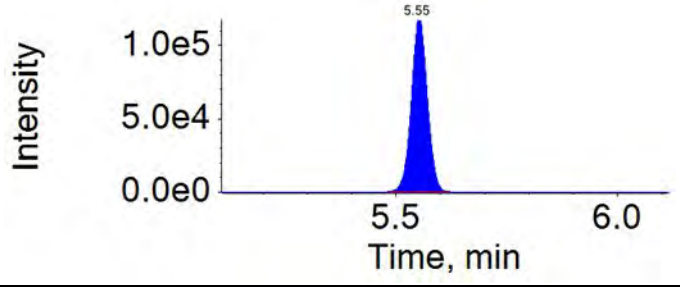
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



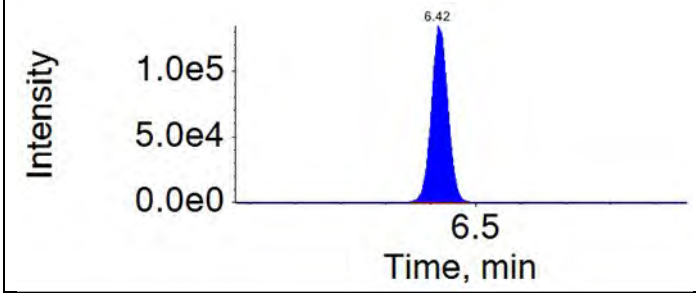


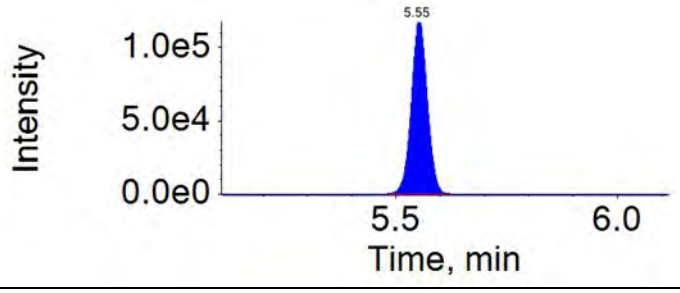
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



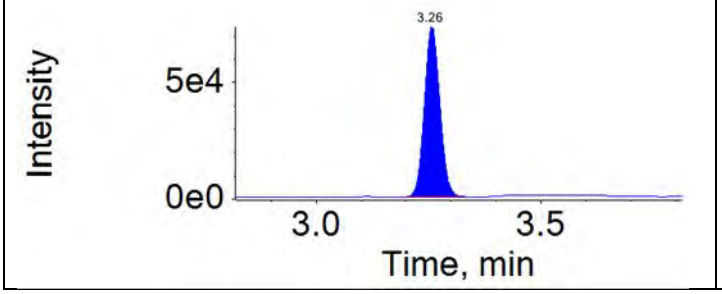


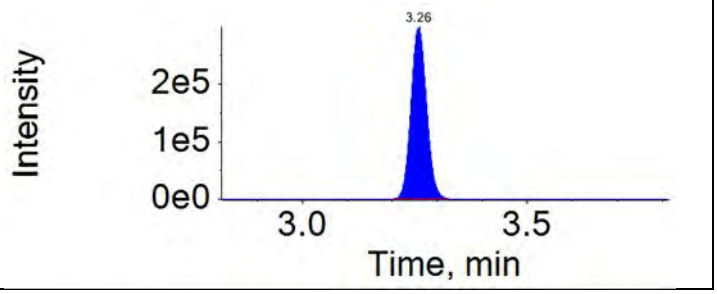
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

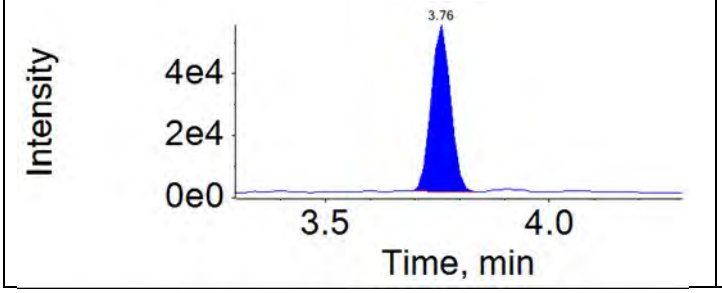
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

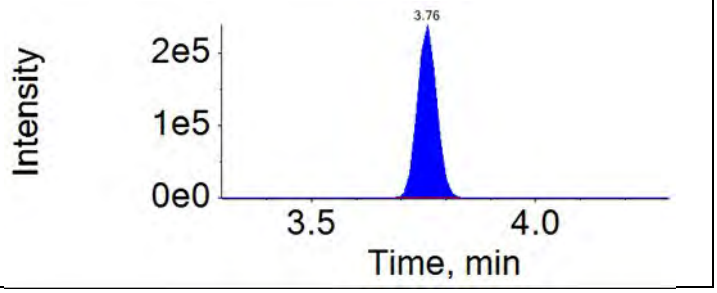
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



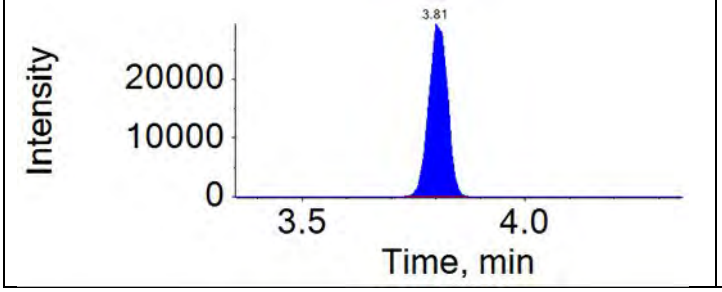


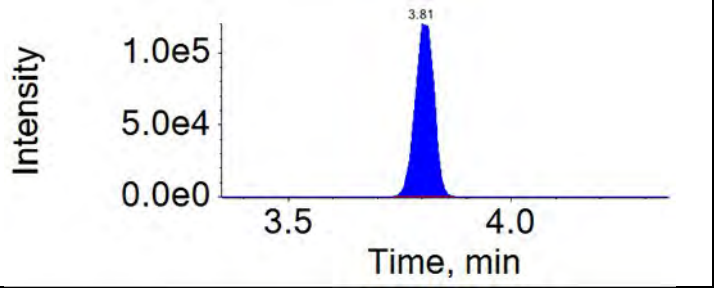
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



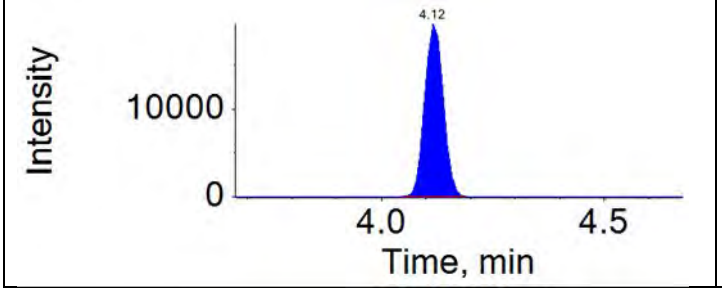


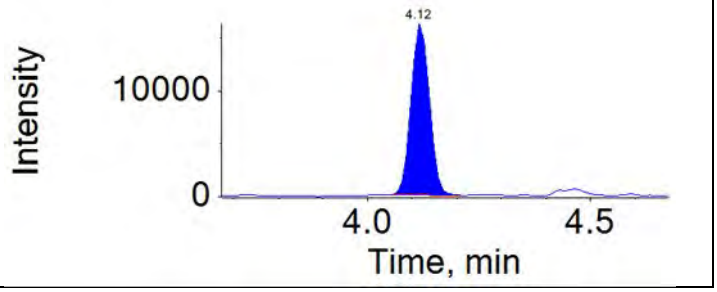
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0

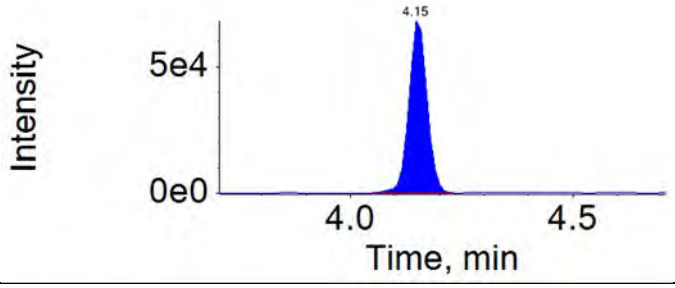
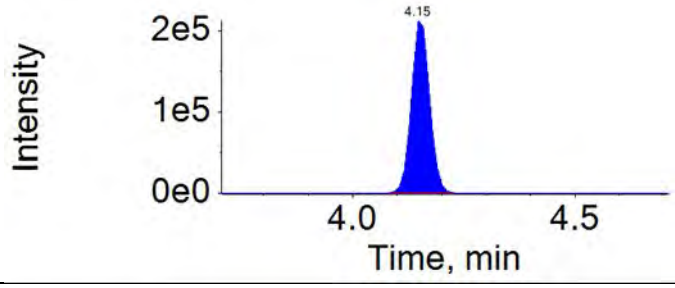


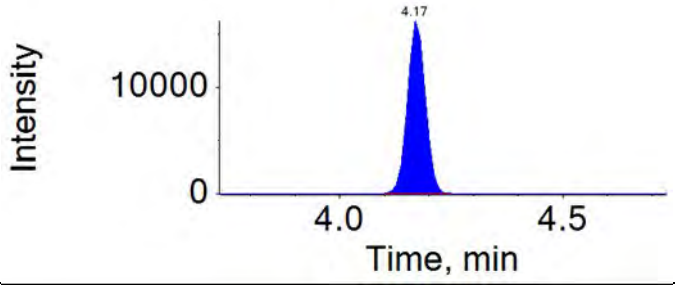
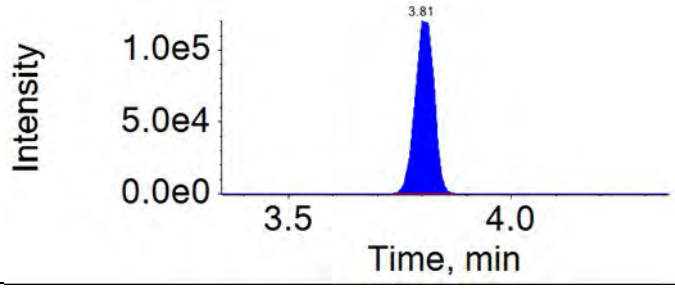


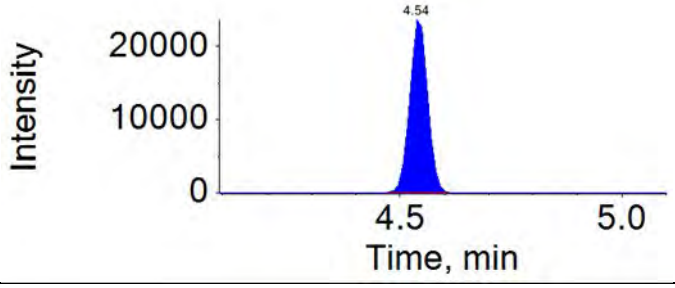
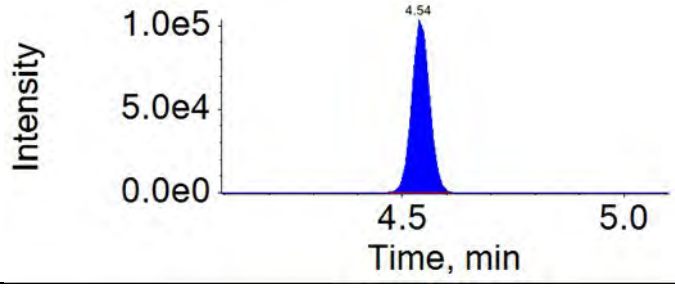
APPROVED
By MCD at 0:13 am, 11/10/18

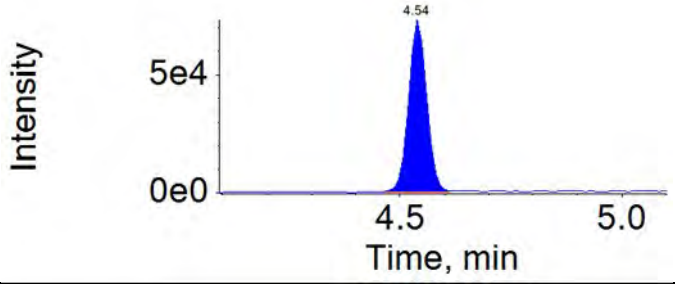
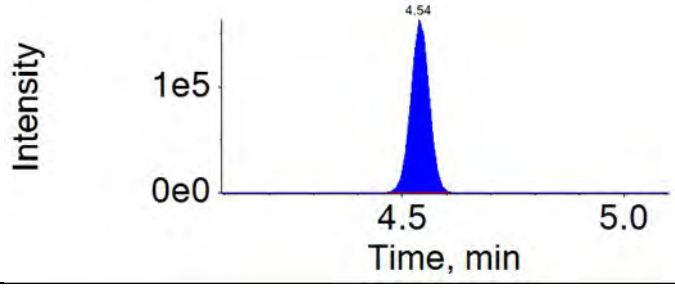
REVIEWED
By HMK at 7:51 am, 11/15/18

ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0
	

Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0
	

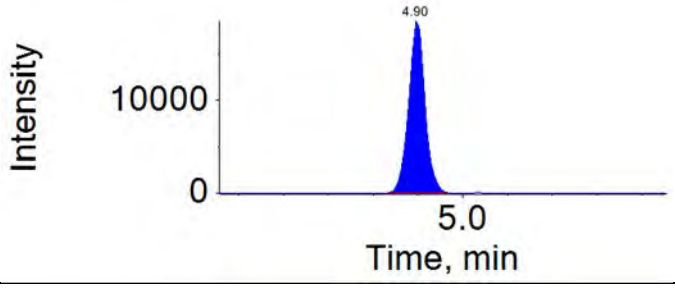
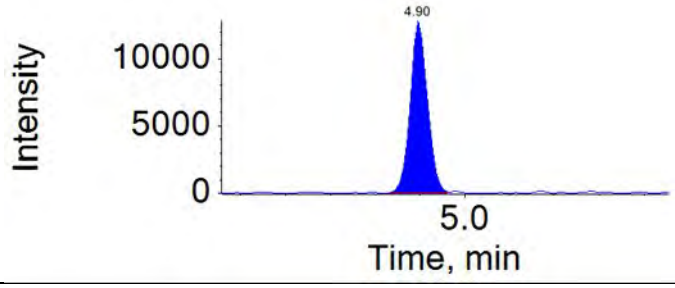
Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0
	

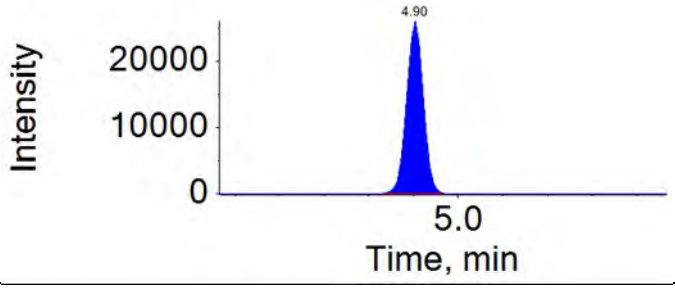
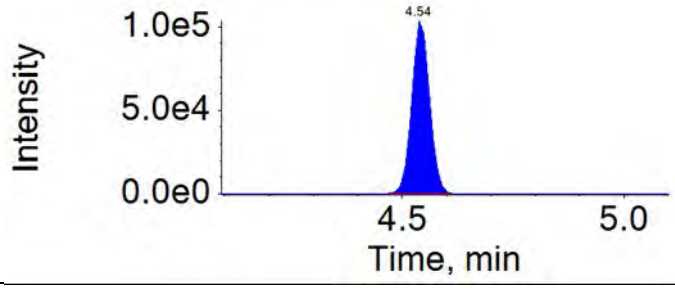
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0
	

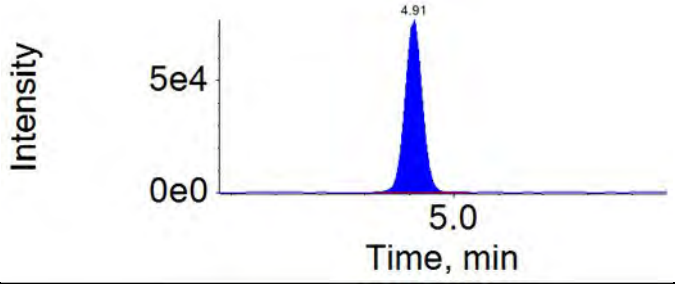
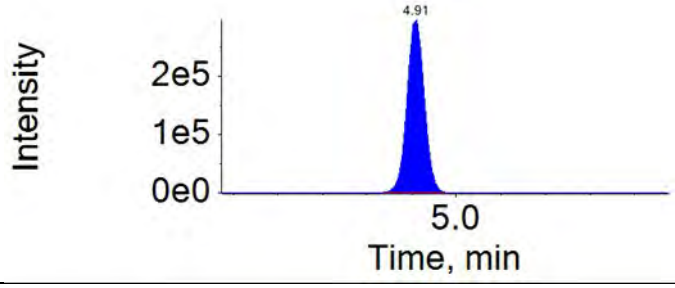
APPROVED
By MCD at 0:13 am, 11/10/18

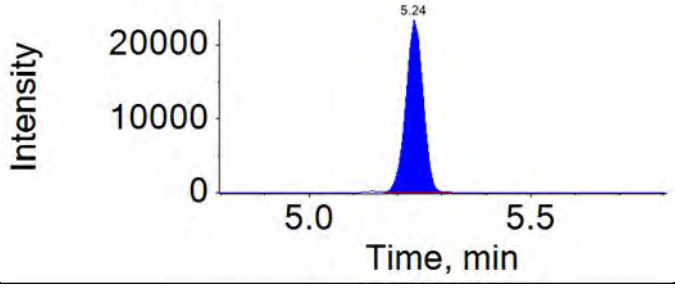
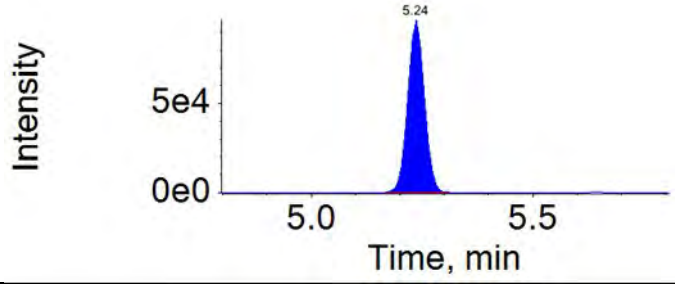
REVIEWED
By HMK at 7:51 am, 11/15/18

ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

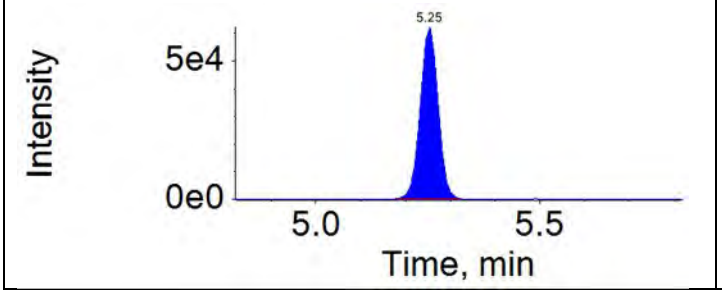
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

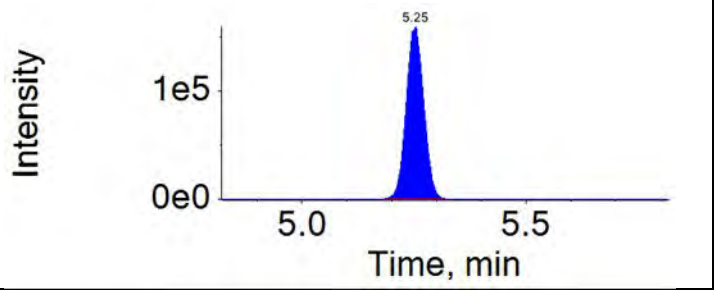
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

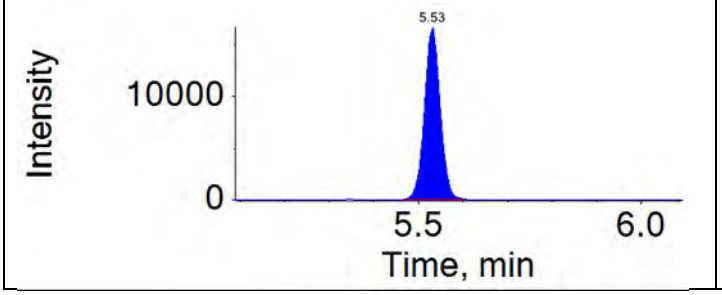
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

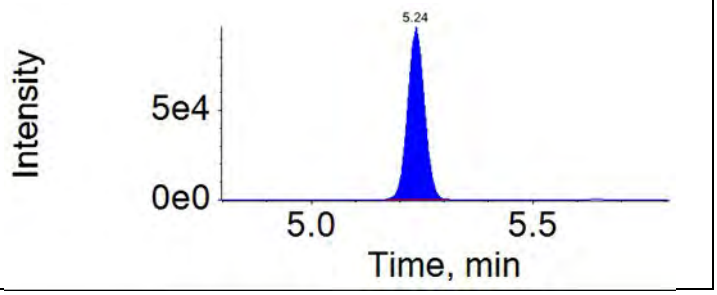
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



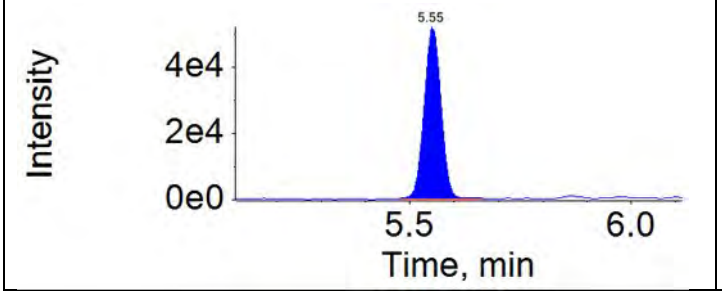


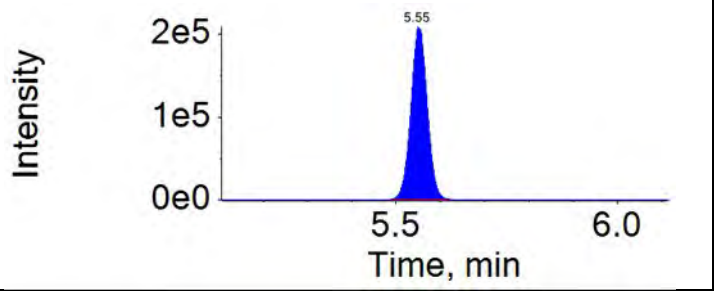
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



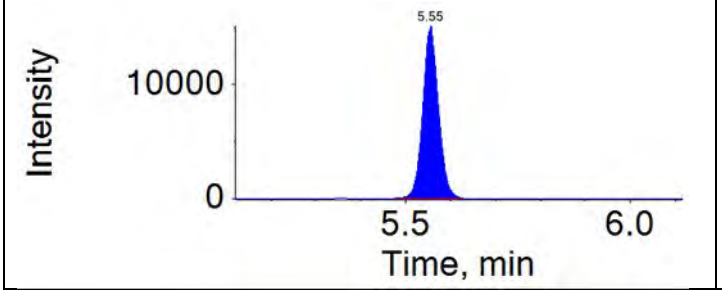


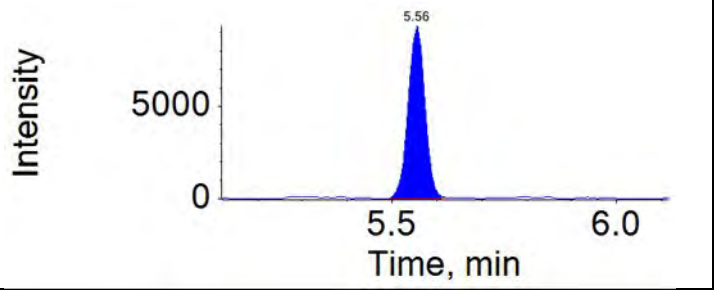
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



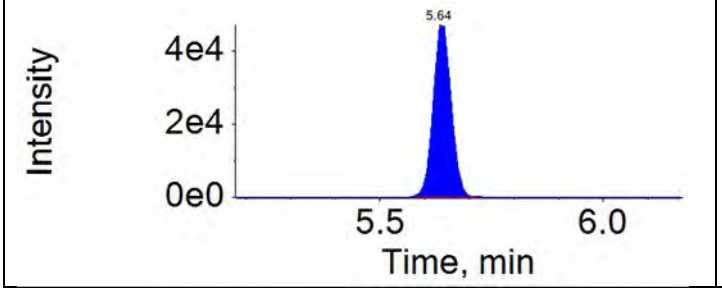


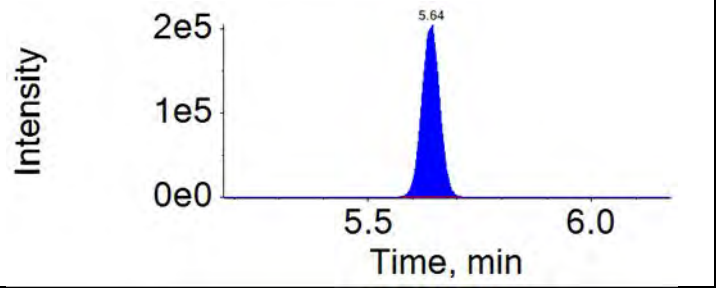
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

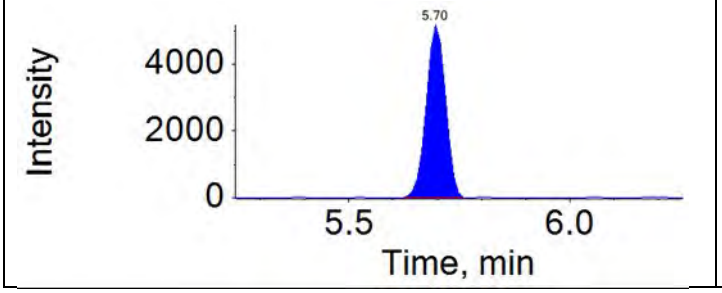
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

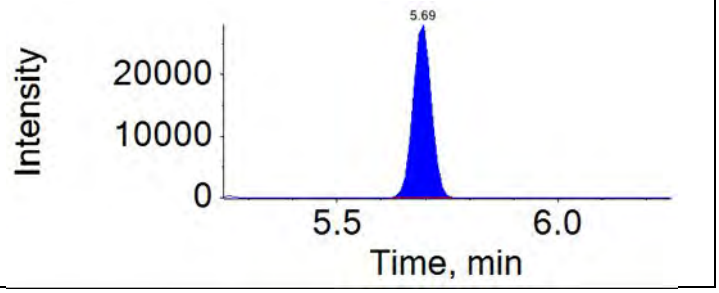
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



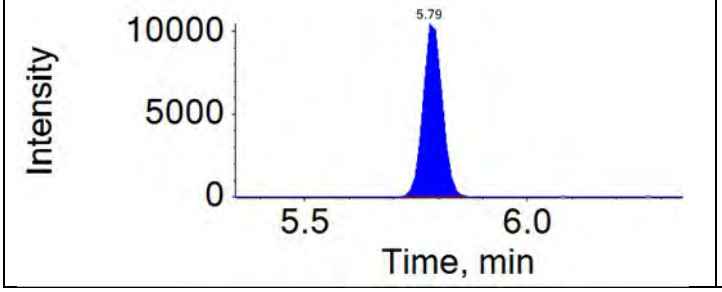


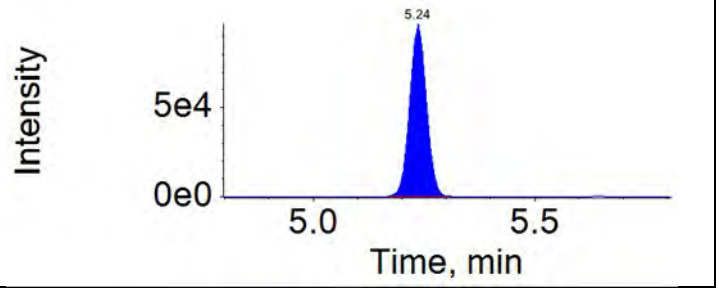
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



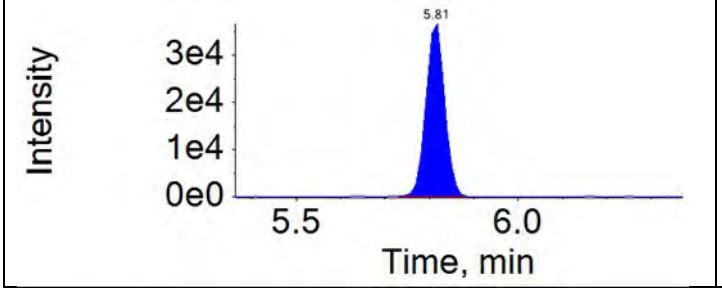


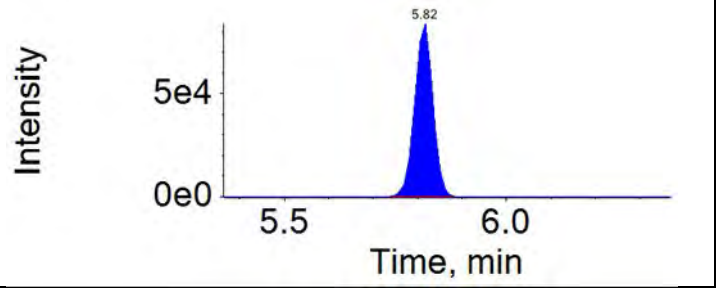
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



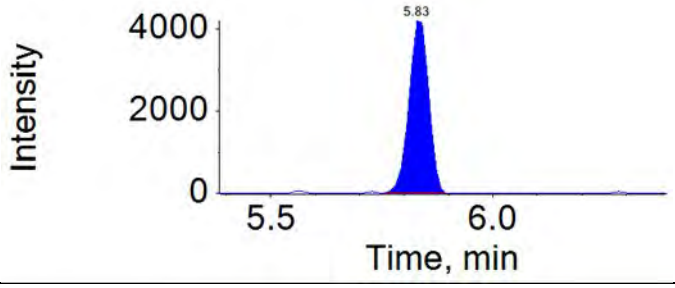


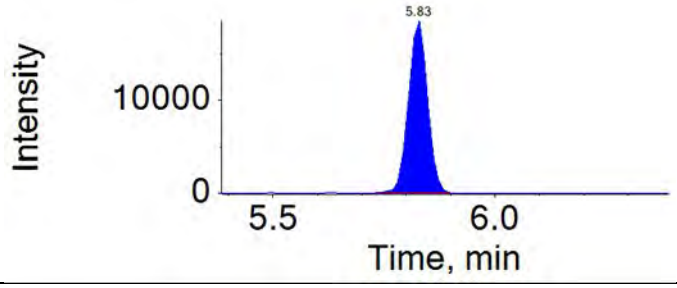
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

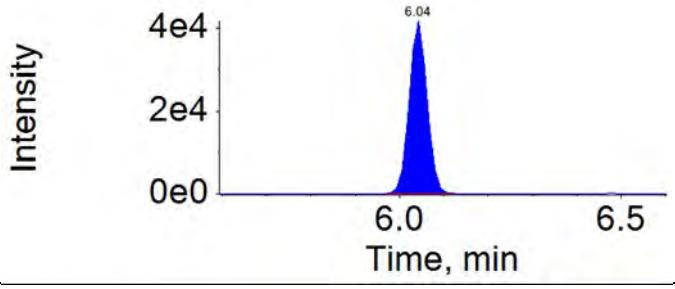
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

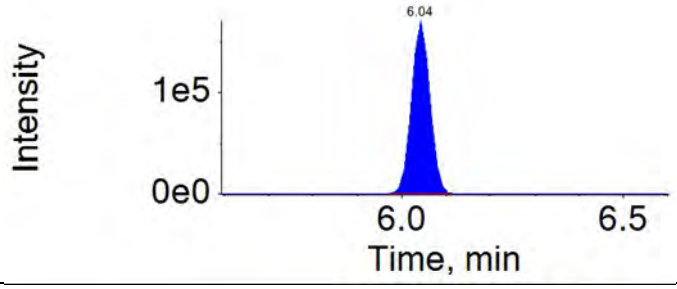
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



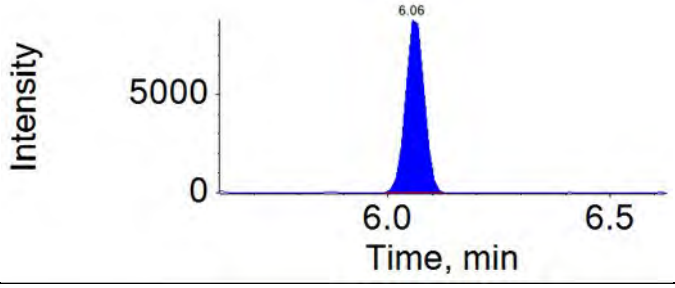


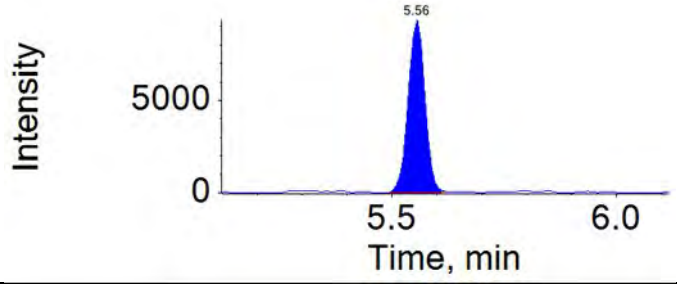
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



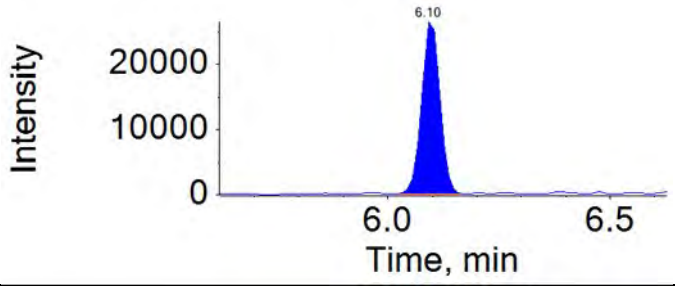


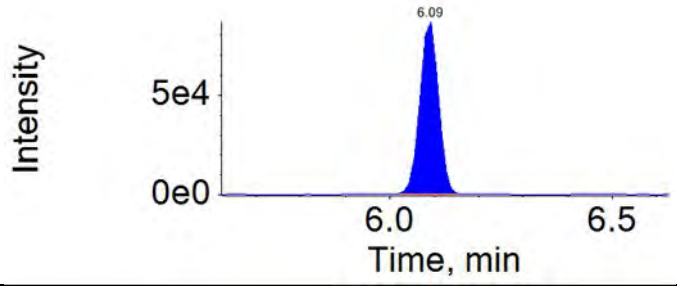
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



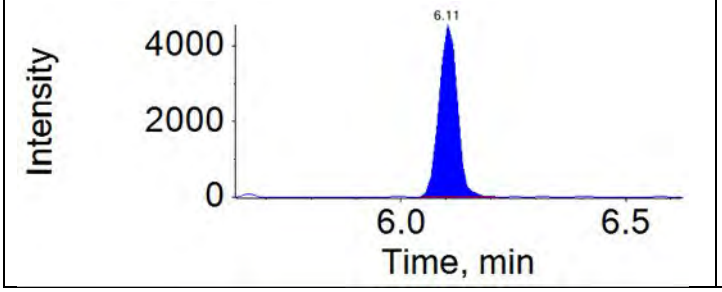


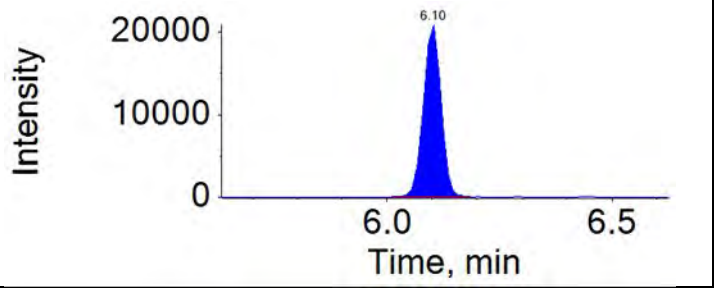
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

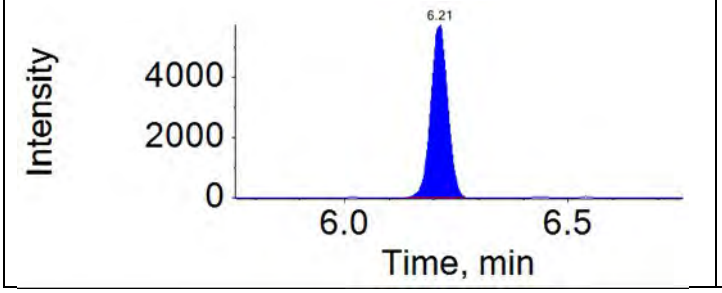
ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

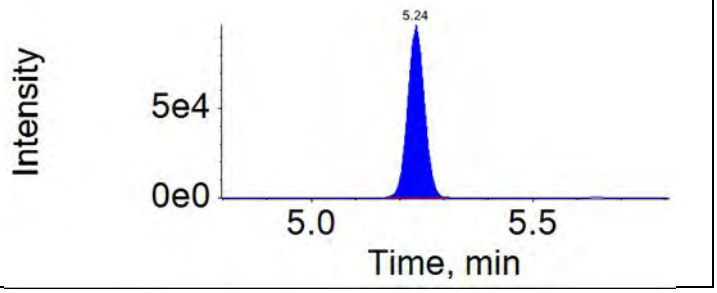
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



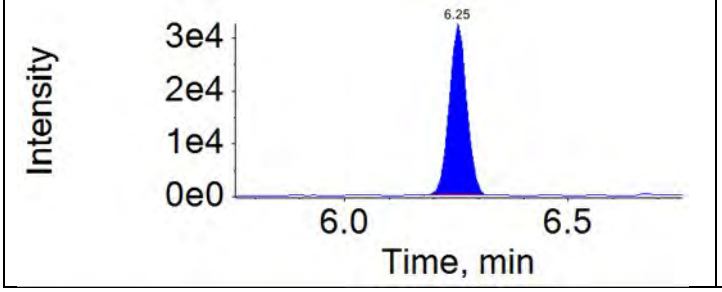


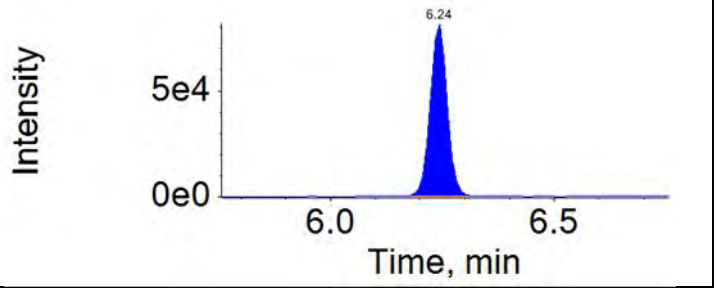
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



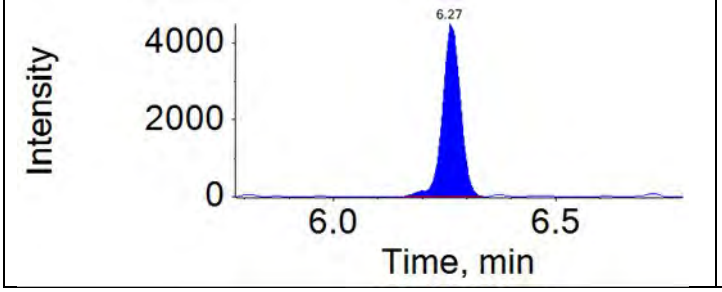


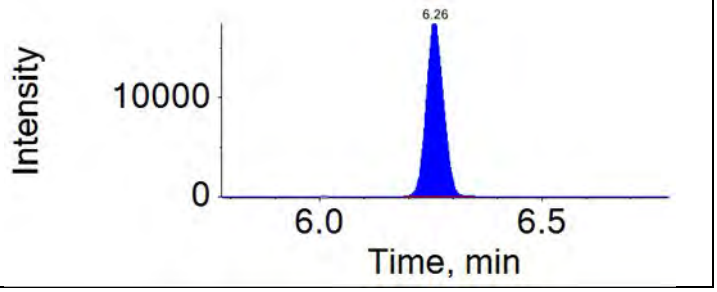
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

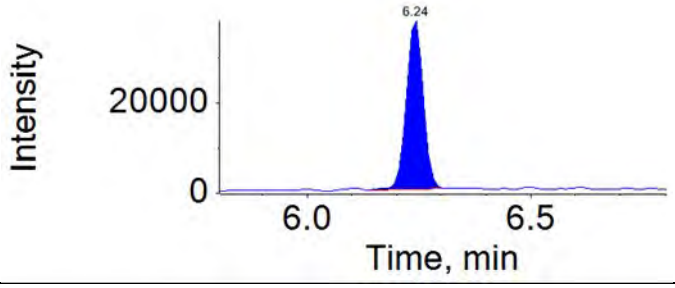
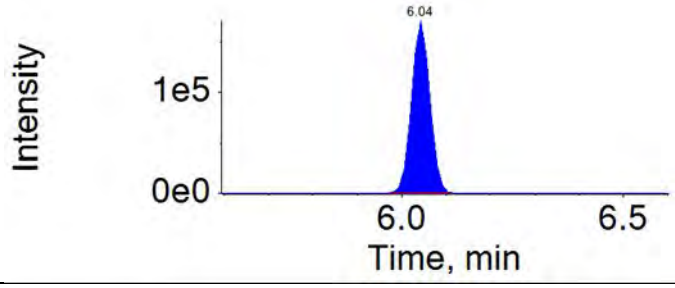


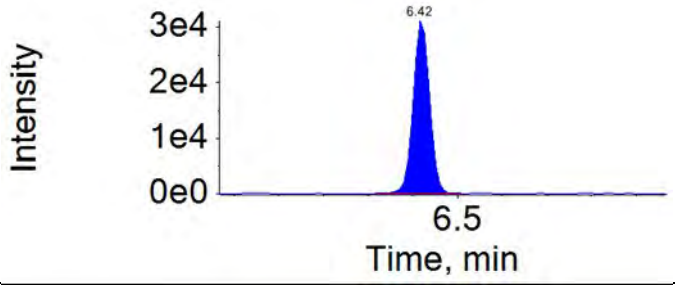
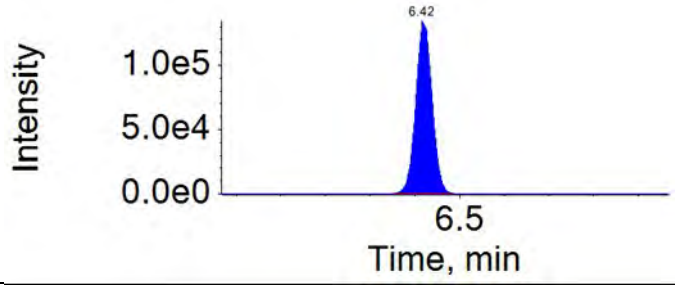


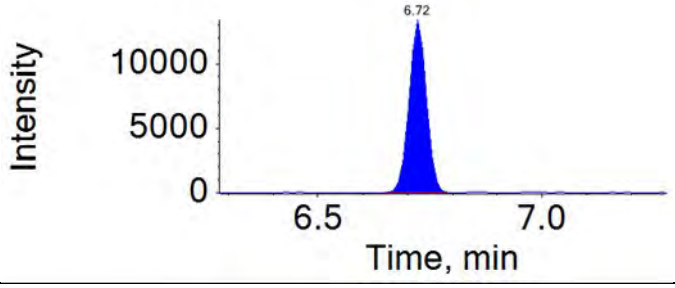
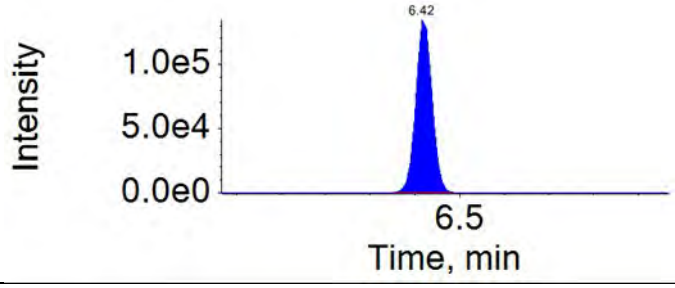
APPROVED
By MCD at 0:13 am, 11/10/18

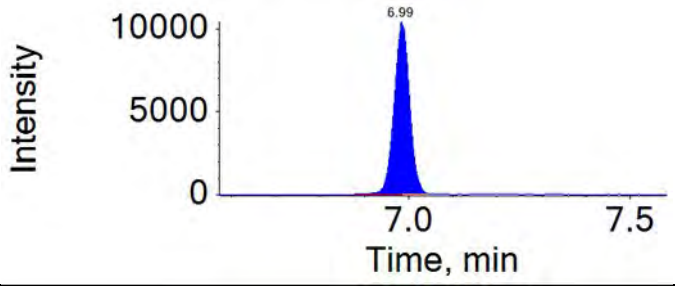
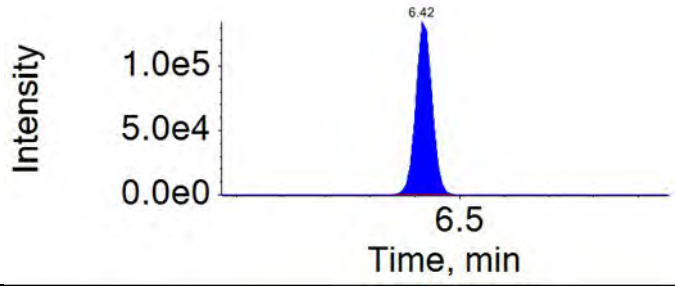
REVIEWED
By HMK at 7:51 am, 11/15/18

ICAL Name: 18NOV07DCAL **Result Table:** 18312004 11/10/2018 12:05:42 AM
QMethod Name: MQ4-18AUG13 **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

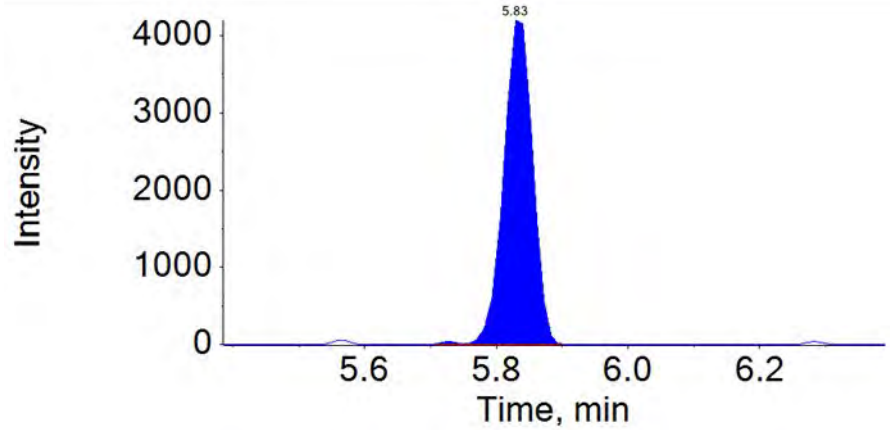
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

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By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

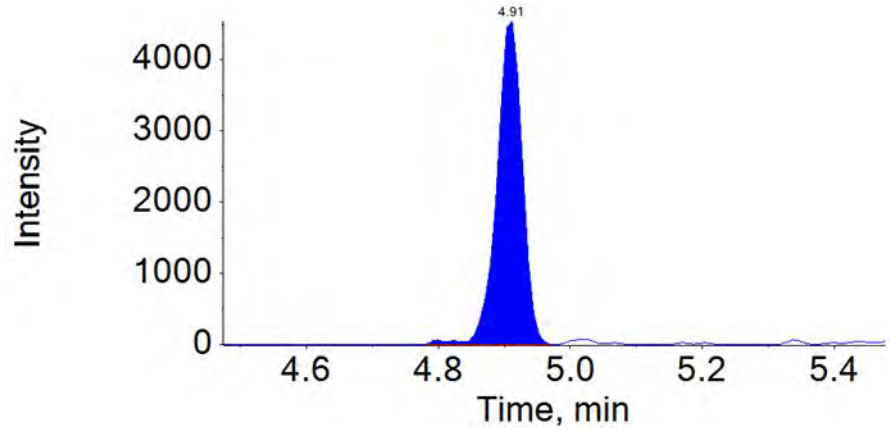
Results Table Name: 18312004
Results Table Date: 11/10/2018 12:05:42 AM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: MQ4-18AUG13

Component Name:
NEtFOSAA
RT (min.):
5.83
Peak Area:
12973.3
Mass Range:
584.0 / 419.0
File Name:
18NOV09D-64.wiff
Sample Name:
LCS312004



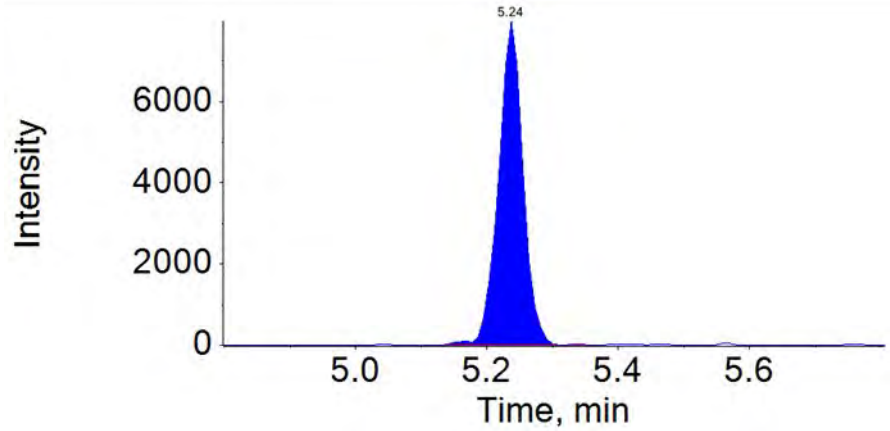
Integration Comment: incorrect integration

Component Name:
PFOA_2
RT (min.):
4.91
Peak Area:
12253.8
Mass Range:
413.0 / 169.0
File Name:
18NOV09D-64.wiff
Sample Name:
LCS312004



Integration Comment: incorrect integration

Component Name:
PFOS_2
RT (min.):
5.24
Peak Area:
20822.1
Mass Range:
499.0 / 99.0
File Name:
18NOV09D-64.wiff
Sample Name:
LCS312004



Integration Comment: incorrect integration

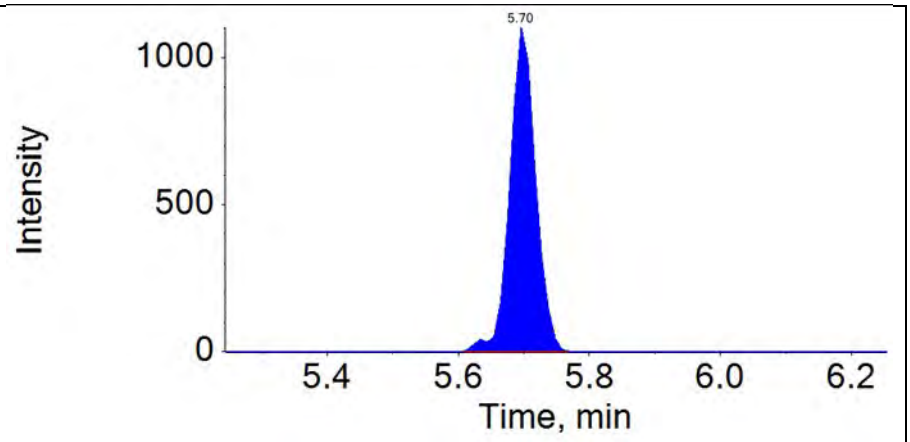
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

Results Table Name: 18312004
Results Table Date: 11/10/2018 12:05:42 AM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: MQ4-18AUG13

Component Name:
NMeFOSAA_2
RT (min.):
5.70
Peak Area:
3030.0
Mass Range:
570.0 / 483.0
File Name:
18NOV09D-64.wiff
Sample Name:
LCS312004



Integration Comment: incorrect integration

APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

Results Table Name: 18312004
Results Table Date: 11/10/2018 12:05:42 AM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: MQ4-18AUG13

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By MCD at 0:13 am, 11/10/18

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By HMK at 7:51 am, 11/15/18

Ion Ratio Report

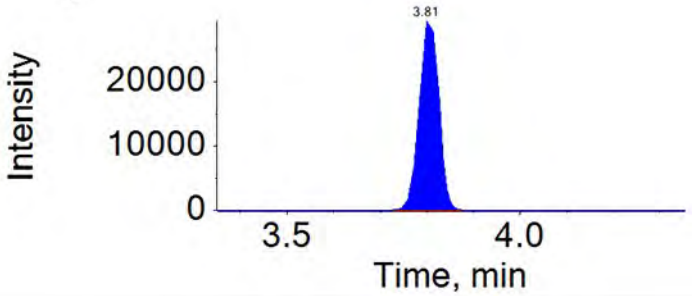
Sample Name: LCS312004 **Instrument Name:** LM27631 **File Name:** 18NOV09D-64.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	86246.6	A	N/A	0.3535			
PFBS_2	3.81	1.00	30487.8	A	N/A	0.3535	-1	50	
4:2-FTS	4.12	1.00	57561.1	A	N/A	0.6738			
4:2-FTS_2	4.12	1.00	38787.3	A	N/A	0.6738	5	50	
PFHxA	4.15	1.00	192379.6	A	N/A	0.0111			
PFHxA_2	4.16	1.00	2143.2	A	N/A	0.0111	-1	50	
PFPeS	4.17	1.10	45131.6	A	N/A	0.5847			
PFPeS_2	4.17	1.10	26388.5	A	N/A	0.5847	8	50	
PFHxS	4.54	1.00	66527.4	A	N/A	0.3910			
PFHxS_2	4.54	1.00	26014.2	A	N/A	0.3910	9	50	
PFHpA	4.54	1.00	204610.6	A	N/A	0.0537			
PFHpA_2	4.54	1.00	10979.6	A	N/A	0.0537	-7	50	
6:2-FTS	4.90	1.00	47108.0	A	N/A	0.6236			
6:2-FTS_2	4.90	1.00	29378.6	A	N/A	0.6236	-9	50	
PFHpS	4.90	1.08	68206.6	A	N/A	0.4039			
PFHpS_2	4.90	1.08	27550.4	A	N/A	0.4039	2	50	
PFOA	4.91	1.00	206072.1	A	N/A	0.0588			
PFOA_2	4.91	1.00	12115.6	M	N/A	0.0588	-8	50	
PFOS	5.24	1.00	63039.5	A	N/A	0.3270			
PFOS_2	5.24	1.00	20611.2	M	N/A	0.3270	-7	50	
PFNA	5.25	1.00	171879.6	A	N/A	0.0192			
PFNA_2	5.25	1.00	3294.7	A	N/A	0.0192	-7	50	
PFNS	5.53	1.06	41098.7	A	N/A	0.4306			
PFNS_2	5.53	1.06	17699.0	A	N/A	0.4306	-12	50	
PFDA	5.55	1.00	136106.0	A	N/A	0.0062			
PFDA_2	5.54	1.00	838.6	A	N/A	0.0062	13	50	
8:2-FTS	5.55	1.00	36945.8	A	N/A	0.6181			
8:2-FTS_2	5.56	1.00	22836.0	A	N/A	0.6181	-1	50	
NMeFOSAA	5.70	1.00	15599.1	A	N/A	0.1911			
NMeFOSAA_2	5.70	1.00	2980.8	M	N/A	0.1911	-12	50	
PFDS	5.79	1.11	31247.4	A	N/A	0.4735			
PFDS_2	5.79	1.11	14794.1	A	N/A	0.4735	3	50	
PFUnDA	5.81	1.00	107715.6	A	N/A	0.0007			
PFUnDA_2	5.81	1.00	73.8	A	N/A	0.0007	-78	50	OOS
NEtFOSAA	5.83	1.00	12912.0	M	N/A	0.6852			
NEtFOSAA_2	5.83	1.00	8847.5	A	N/A	0.6852	13	50	
PFDoDA	6.04	1.00	116982.1	A	N/A	0.0107			
PFDoDA_2	6.04	1.00	1250.3	A	N/A	0.0107	2	50	
10:2-FTS	6.06	1.09	25712.9	A	N/A	0.6061			
10:2-FTS_2	6.06	1.09	15583.7	A	N/A	0.6061	-15	50	
PFTrDA	6.24	1.03	98180.4	A	N/A	0.0083			
PFTrDA_2	6.24	1.03	817.0	A	N/A	0.0083	-13	50	
PFTeDA	6.42	1.00	79821.1	A	N/A	0.0050			
PFTeDA_2	6.42	1.00	400.0	A	N/A	0.0050	-7	50	
PFHxDA	6.72	1.05	35529.8	A	N/A	0.0665			
PFHxDA_2	6.72	1.05	2361.0	A	N/A	0.0665	12	50	
PFODA	6.99	1.09	25174.1	A	N/A	0.0297			
PFODA_2	6.98	1.09	747.7	A	N/A	0.0297	16	50	

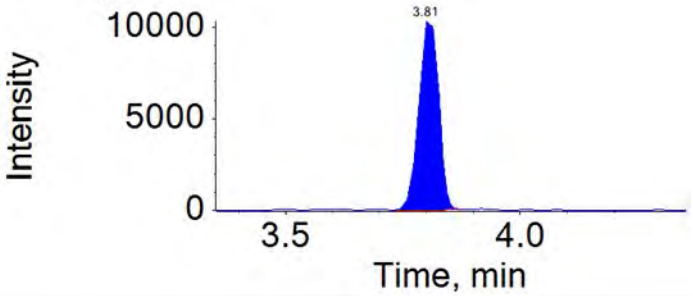
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:51 am, 11/15/18

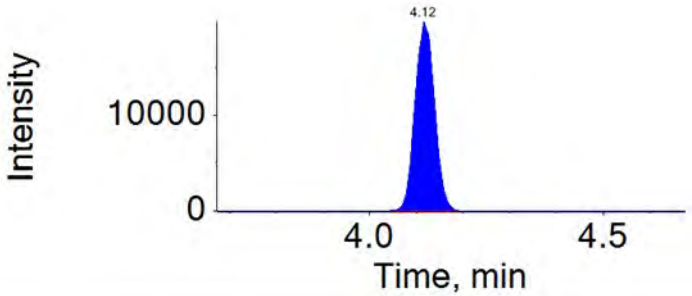
Component: PFBS
Primary Mass: 299.0 / 80.0



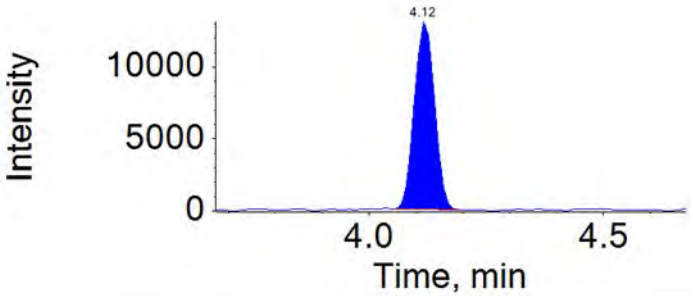
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



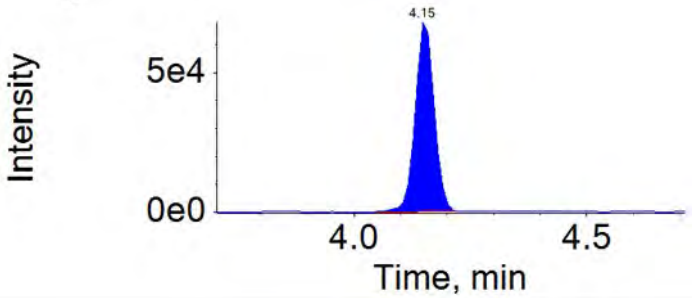
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



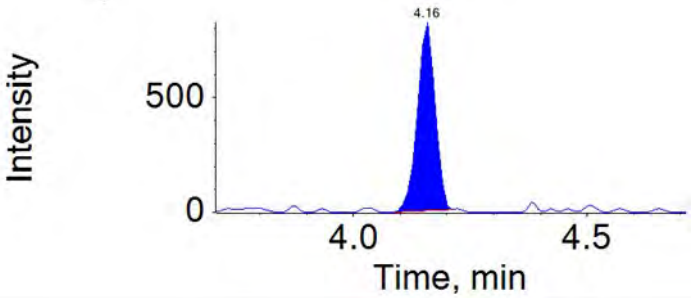
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



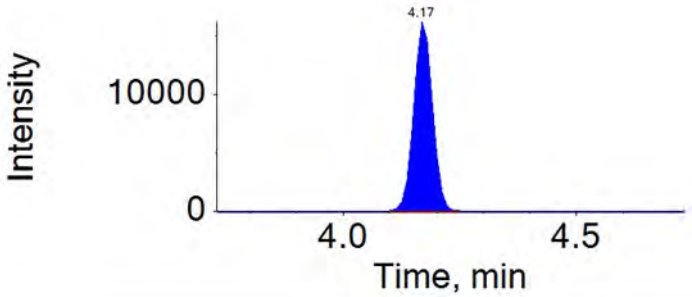
Component: PFHxA
Primary Mass: 313.0 / 269.0



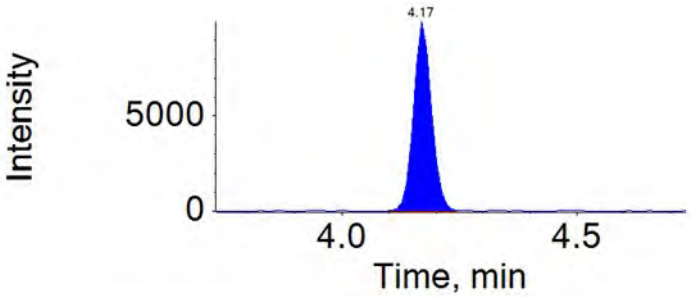
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



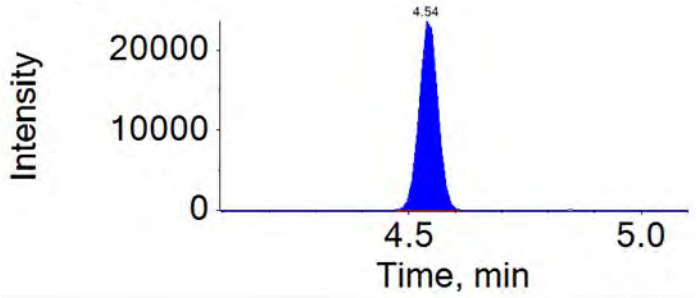
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



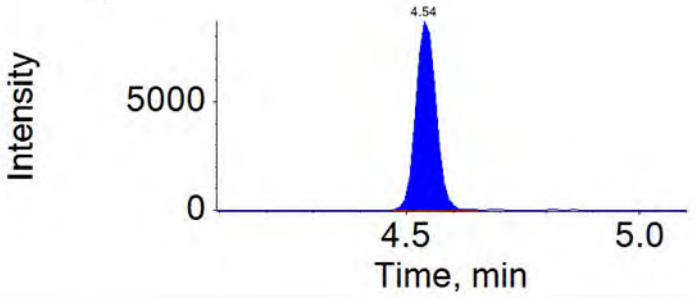
APPROVED
By MCD at 0:13 am, 11/10/18

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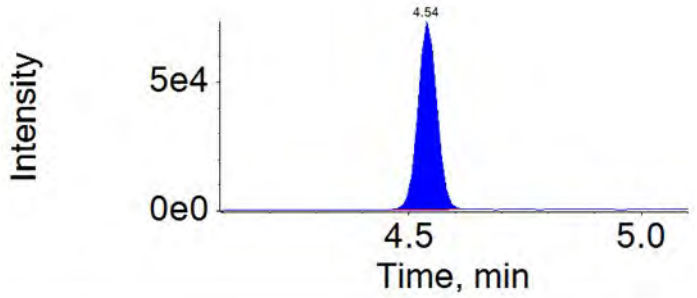
Component: PFHxS
Primary Mass: 399.0 / 80.0



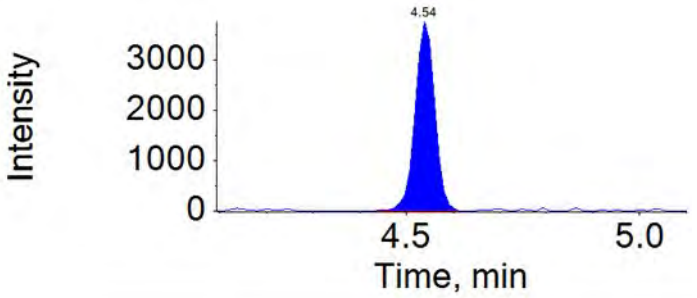
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Secondary Mass: 399.0 / 99.0



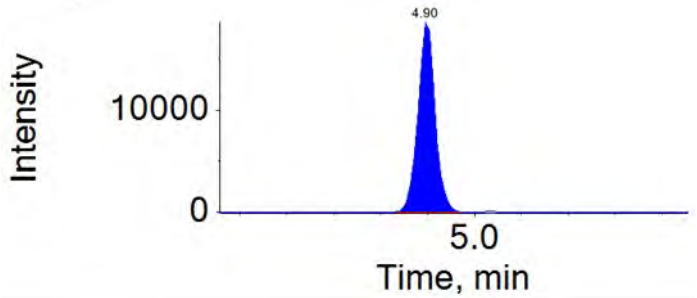
Component: PFHpA
Primary Mass: 363.0 / 319.0



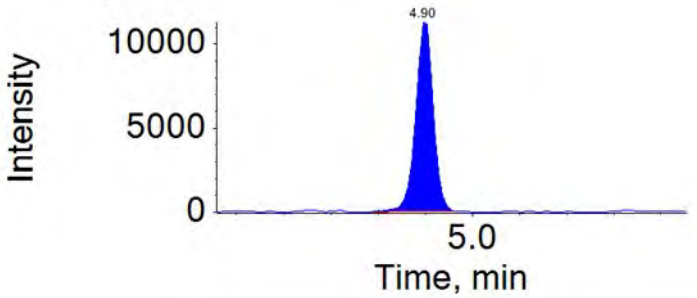
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



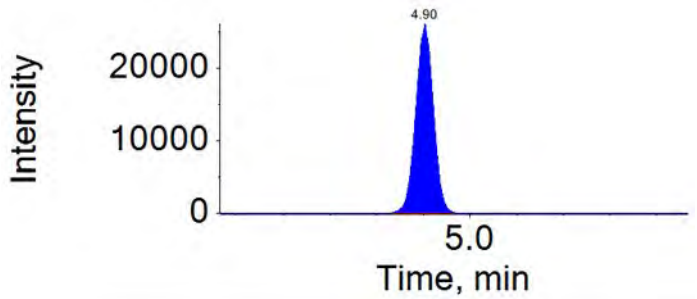
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



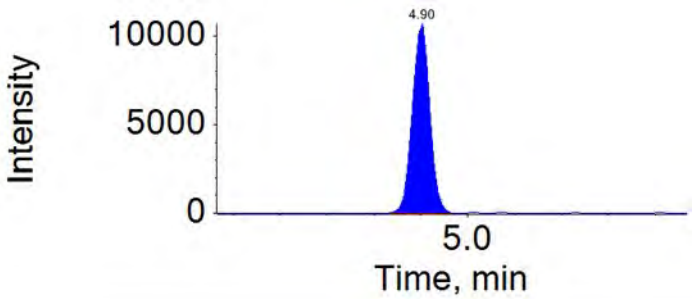
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



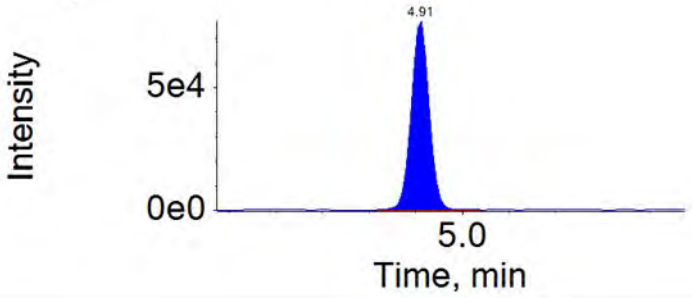
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



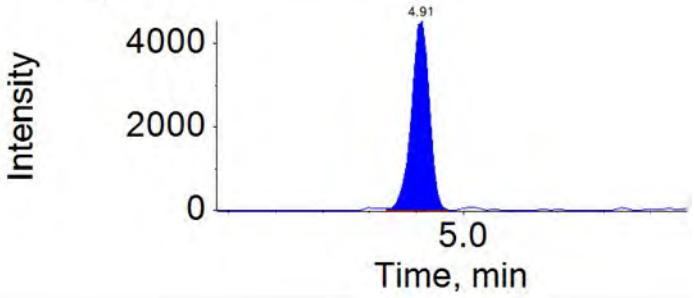
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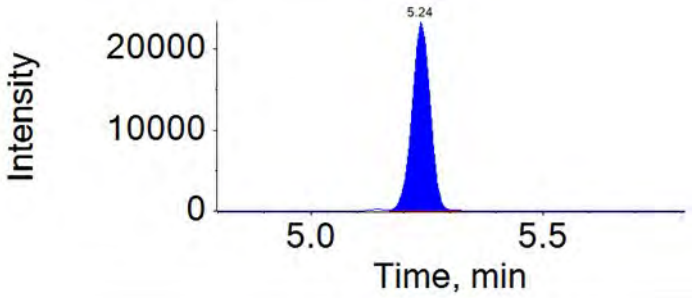
Component: PFOA
Primary Mass: 413.0 / 369.0



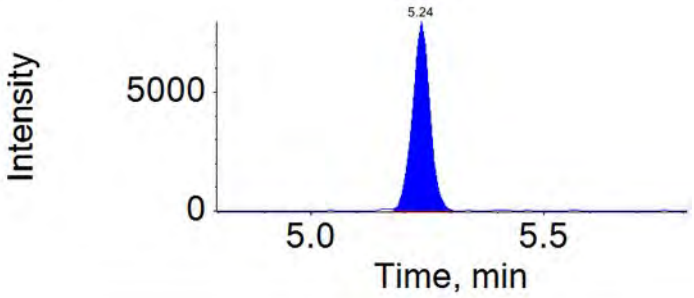
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



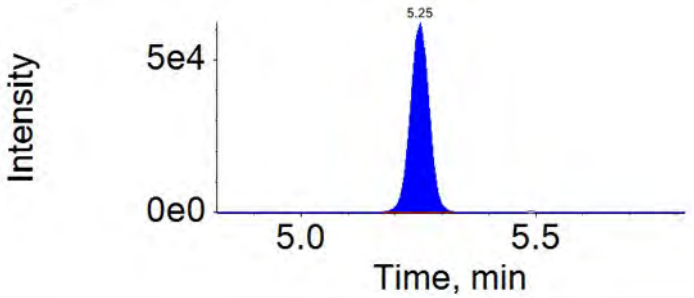
Component: PFOS
Primary Mass: 499.0 / 80.0



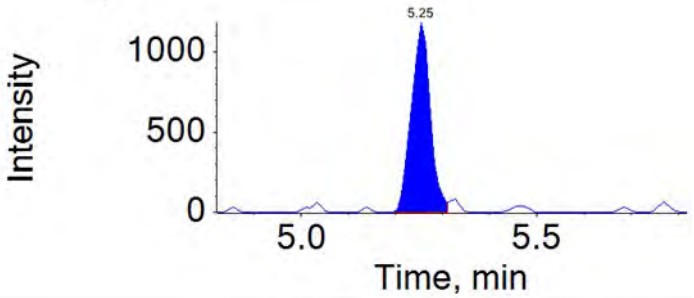
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



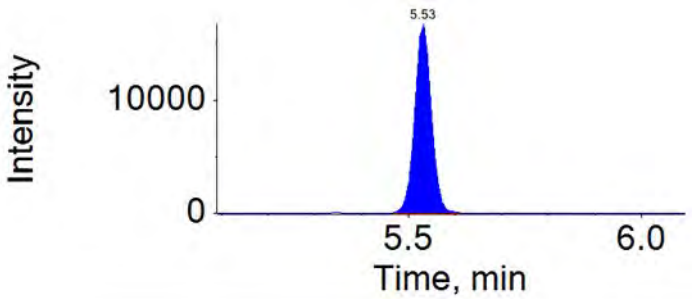
Component: PFNA
Primary Mass: 463.0 / 419.0



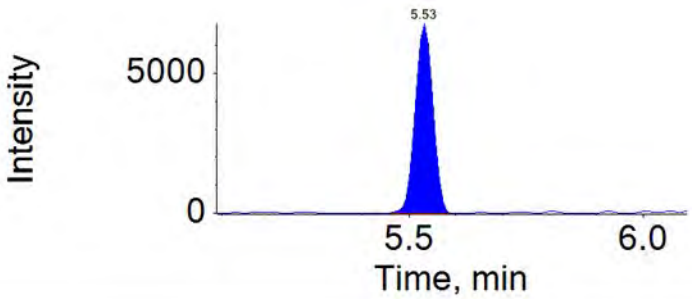
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



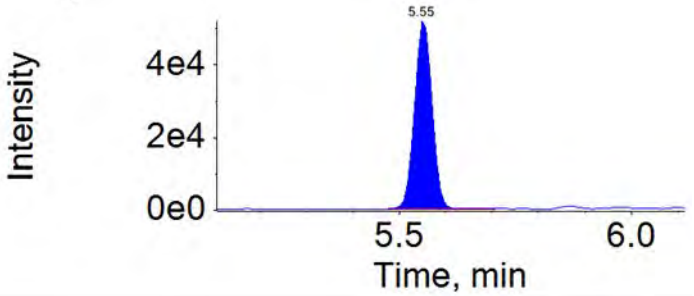
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Secondary Mass: 549.0 / 99.0



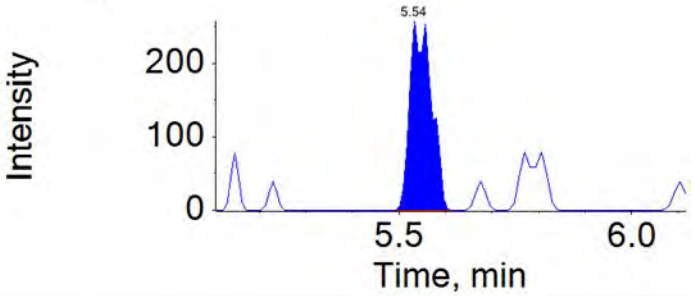
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:52 am, 11/15/18

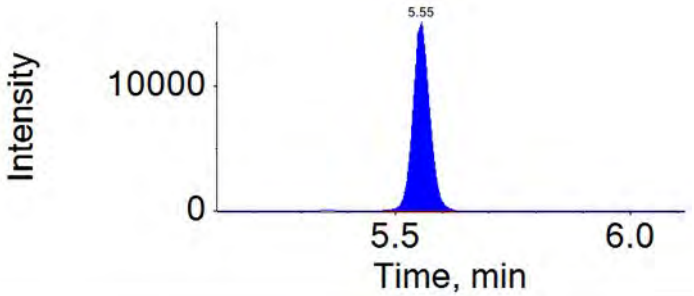
Component: PFDA
Primary Mass: 513.0 / 469.0



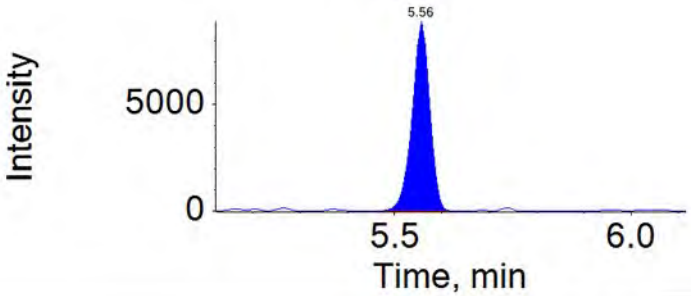
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



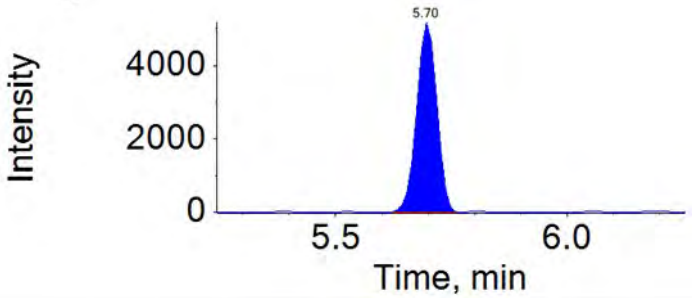
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



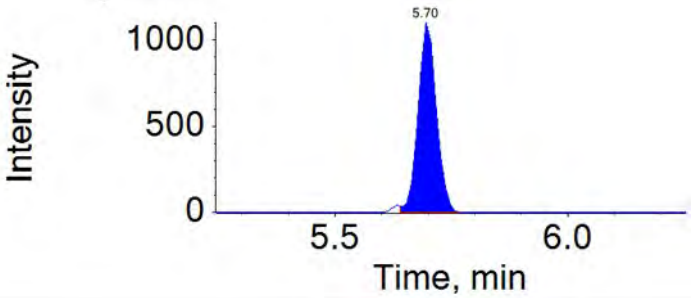
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



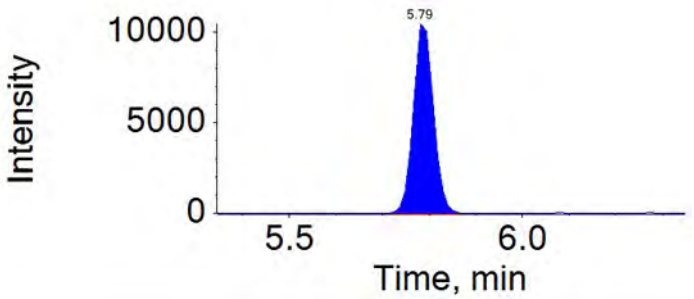
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



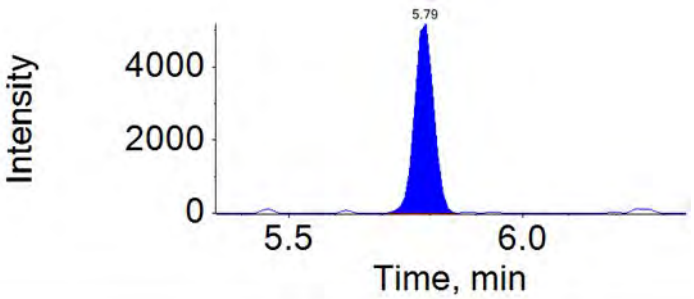
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



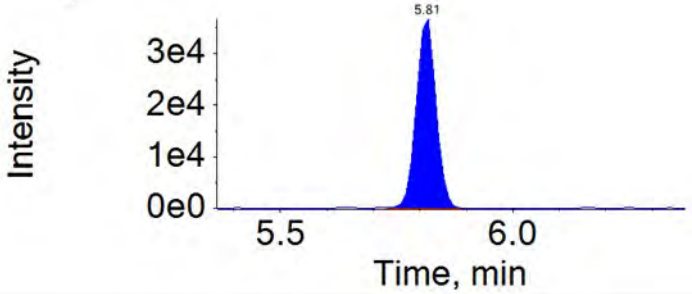
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



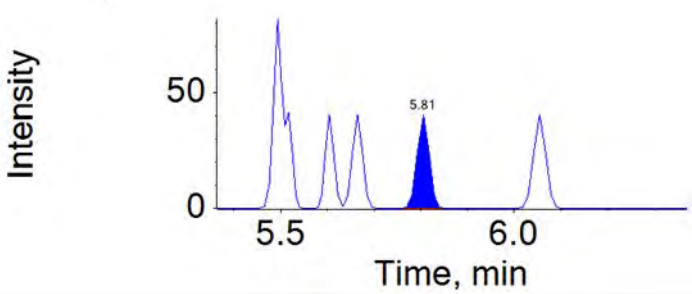
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:52 am, 11/15/18

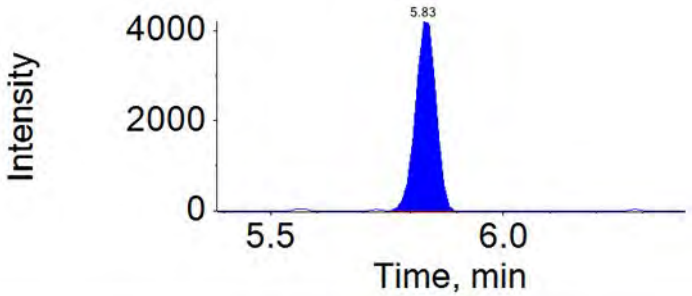
Component: PFUnDA
Primary Mass: 563.0 / 519.0



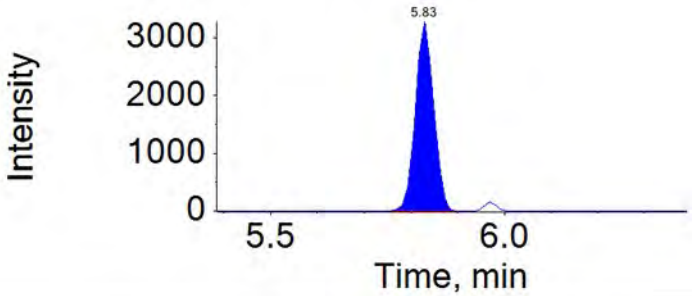
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



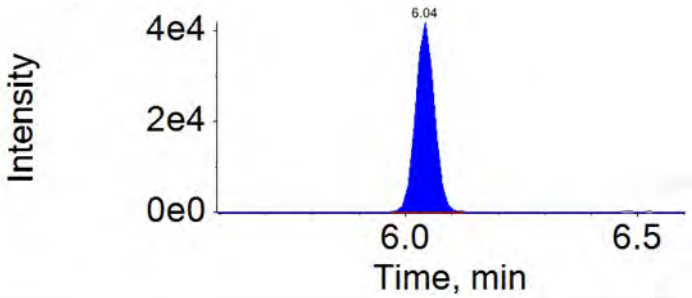
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



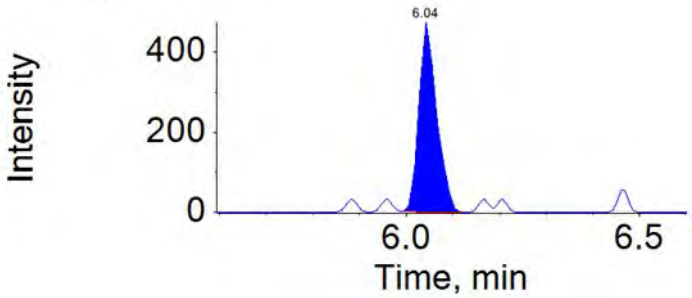
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Secondary Mass: 584.0 / 526.0



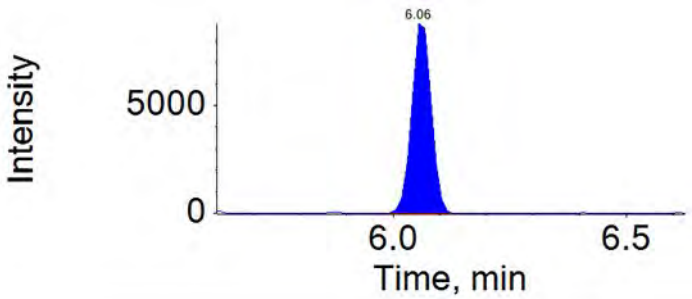
Component: PFDoDA
Primary Mass: 613.0 / 569.0



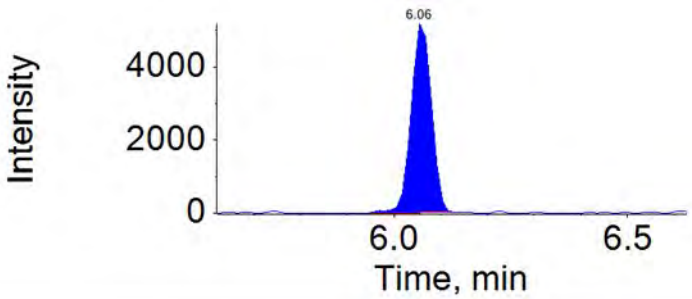
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



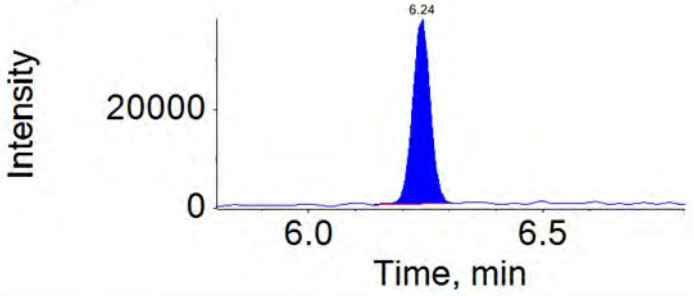
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



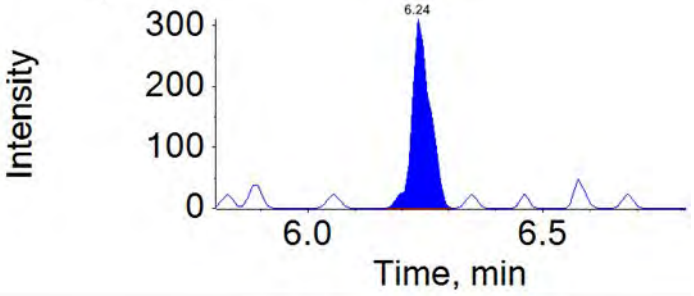
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:52 am, 11/15/18

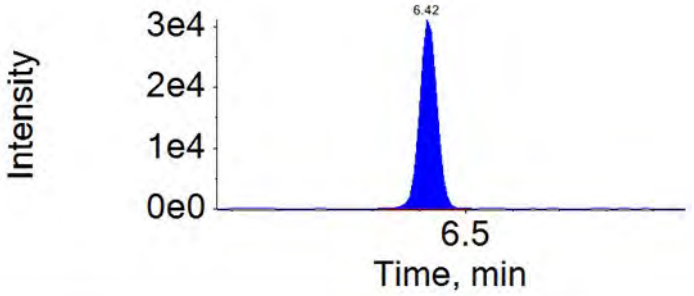
Component: PFTrDA
Primary Mass: 663.0 / 619.0



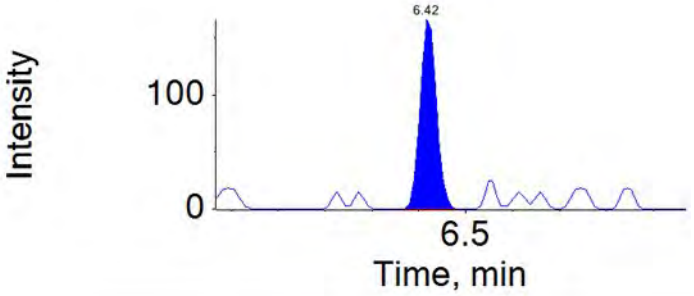
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



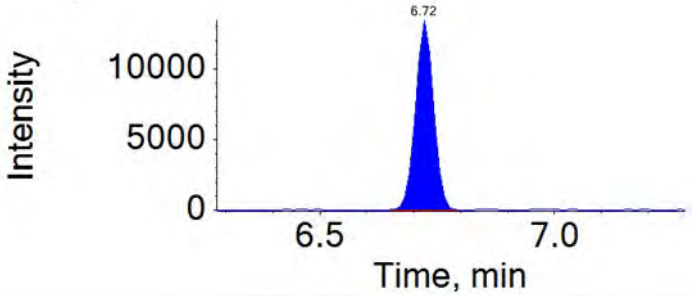
Component: PFTeDA
Primary Mass: 713.0 / 669.0



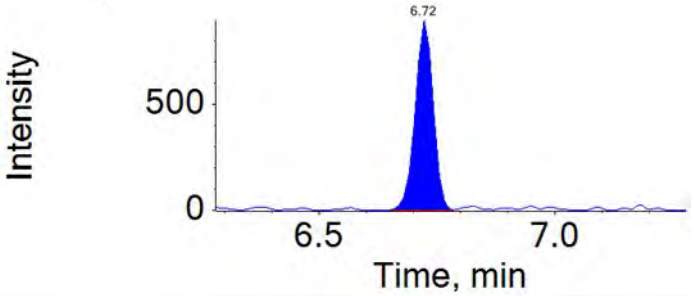
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



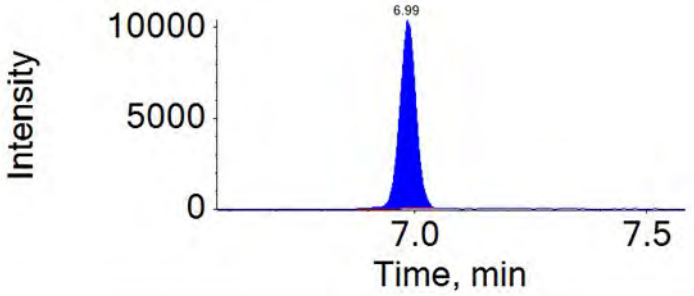
Component: PFHxDA
Primary Mass: 813.0 / 769.0



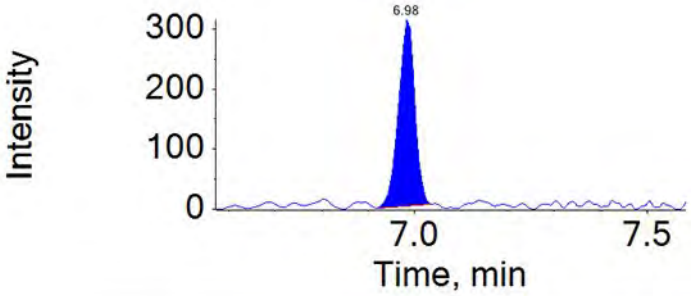
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



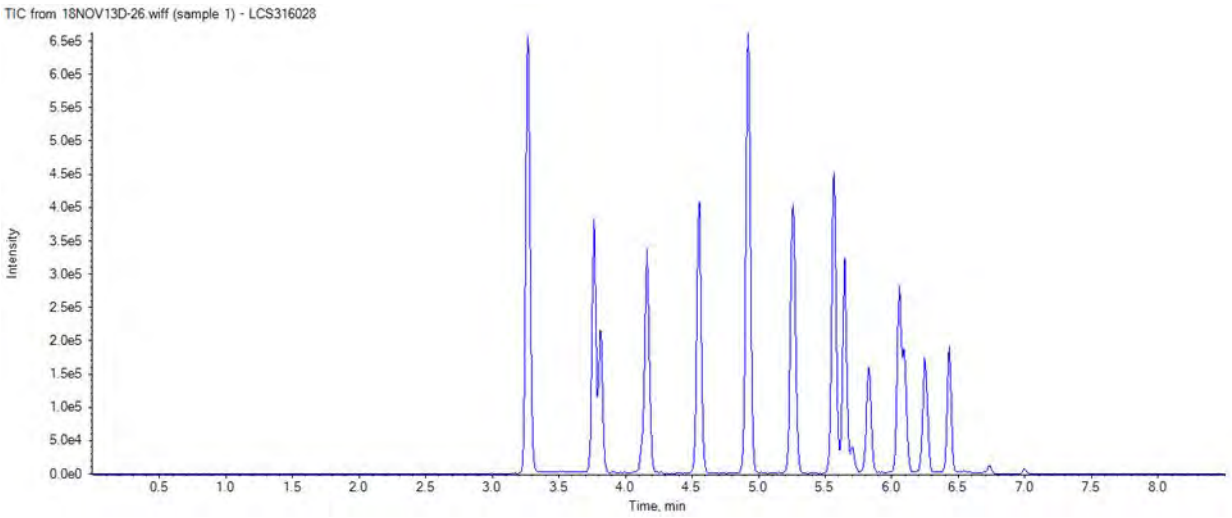
APPROVED
By MCD at 0:13 am, 11/10/18

REVIEWED
By HMK at 7:52 am, 11/15/18

Lab Control Sample Recovery

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18316028 11/14/2018 1:56:44 PM
Acquisition Method: 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	LCS316028	EPA 537 mod QSM 5.1 table B-15 18316028	18NOV13D-26.wiff	2018-11-13T13:28:53



Injection Standard Area Reference File**:** 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.00	731544.6	661126.9	11	50	
13C2-PFOA	5.00	502087.9	466902.6	8	50	
13C4-PFOS	4.78	266849.0	247446.9	8	50	
13C2-PFDA	5.00	325314.4	295381.6	10	50	

APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

Lab Control Sample Recovery

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	LCS316028	EPA 537 mod QSM 5.1 table B-15 18316028	18NOV13D-26.wiff	2018-11-13T13:28:53

Analyte Name	Analyte Area	Ext Std Area	Area Ratio	Adj Actual Conc	Sample Result	%REC	% REC Limit	%REC OOS
PFBA	88770.9	688725.3	0.129	1.360	1.428	105	70-130	
PFPeA	87936.5	680921.2	0.129	1.360	1.495	110	70-130	
PFBS	48277.4	379343.9	0.127	1.204	1.211	101	70-130	
4:2-FTS	28215.5	43918.7	0.642	3.736	3.489	93	70-130	
PFHxA	105663.5	604078.8	0.175	1.360	1.461	107	70-130	
PFPeS	24483.2	379343.9	0.065	1.276	1.253	98	70-130	
PFHpA	114669.1	493231.4	0.232	1.360	1.541	113	70-130	
PFHxS	37966.2	290125.1	0.131	1.286	1.269	99	70-130	
6:2-FTS	26403.8	30603.1	0.863	3.792	4.176	110	70-130	
PFHpS	37974.2	290125.1	0.131	1.294	1.378	106	70-130	
PFOA	111355.1	837348.4	0.133	1.360	1.421	104	70-130	
PFOS	37313.9	242304.1	0.154	1.300	1.347	104	70-130	
PFNA	92343.0	437818.9	0.211	1.360	1.521	112	70-130	
PFNS	21309.9	242304.1	0.088	1.306	1.231	94	70-130	
PFDA	69580.8	588358.8	0.118	1.360	1.254	92	70-130	
8:2-FTS	19963.8	24588.8	0.812	3.832	3.786	99	70-130	
PFOSA	79633.9	603787.9	0.132	1.360	1.288	95	70-130	
NMeFOSAA	8862.0	81153.8	0.109	1.360	1.234	91	70-130	
PFDS	17634.3	242304.1	0.073	1.310	1.319	101	70-130	
PFUnDA	63915.5	238122.5	0.268	1.360	1.403	103	70-130	
NEtFOSAA	6873.4	63067.2	0.109	1.360	1.143	84	70-130	
PFDoDA	67190.4	501361.2	0.134	1.360	1.365	100	70-130	
10:2-FTS	13281.7	24588.8	0.540	3.856	3.598	93	70-130	
NMePFOSAE	51745.4	285919.9	0.181	1.360	1.506	111	70-130	
NMePFOSA	9220.6	68531.0	0.135	1.360	1.328	98	70-130	
PFDoS	10663.9	242304.1	0.044	1.316	1.542	117	70-130	
NEtPFOSAE	53677.6	244474.4	0.220	1.360	1.409	104	70-130	
NEtPFOSA	7829.8	55682.9	0.141	1.360	1.292	95	70-130	
PFTrDA	56101.7	501361.2	0.112	1.360	1.413	104	70-130	
PFTeDA	47282.0	350156.7	0.135	1.360	1.514	111	70-130	
PFHxDA	21870.8	350156.7	0.062	1.360	1.488	109	70-130	
PFODA	14706.8	350156.7	0.042	1.360	1.170	86	70-130	

APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

Lab Control Sample Recovery

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18316028 11/14/2018 1:56:44 PM
Acquisition Method: 18AUG13_3uL.dam

APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	LCS316028			**Data File:**		18NOV13D-26.wiff
Sample ID:	EPA 537 mod QSM 5.1 table B-15 18316028			**Acquis Date:**		2018-11-13T13:28:53
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	30			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18316028
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	18316028			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		2.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV13D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	731544.6	661126.9	11	50	
13C2-PFOA	5.0	502087.9	466902.6	8	50	
13C4-PFOS	4.8	266849.0	247446.9	8	50	
13C2-PFDA	5.0	325314.4	295381.6	10	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	688725.3	13C3-PFBA	731544.6	0.941	10.000	8.442	84	50-150	
E13C5-PFPeA	680921.2	13C3-PFBA	731544.6	0.931	10.000	8.350	83	50-150	
E13C3-PFBS	379343.9	13C3-PFBA	731544.6	0.519	9.300	7.321	79	50-150	
E13C2-4:2-FTS	43918.7	13C2-PFOA	502087.9	0.087	9.340	7.792	83	50-150	
E13C5-PFHxA	604078.8	13C2-PFOA	502087.9	1.203	10.000	8.692	87	50-150	
E13C3-PFHxS	290125.1	13C2-PFOA	502087.9	0.578	9.460	7.930	84	50-150	
E13C4-PFHpA	493231.4	13C2-PFOA	502087.9	0.982	10.000	8.851	89	50-150	
E13C2-6:2-FTS	30603.1	13C2-PFOA	502087.9	0.061	9.500	8.156	86	50-150	
E13C8-PFOA	837348.4	13C2-PFOA	502087.9	1.668	10.000	9.190	92	50-150	
E13C8-PFOS	242304.1	13C4-PFOS	266849.0	0.908	9.560	8.047	84	50-150	
E13C9-PFNA	437818.9	13C4-PFOS	266849.0	1.641	10.000	9.149	91	50-150	
E13C6-PFDA	588358.8	13C2-PFDA	325314.4	1.809	10.000	8.441	84	50-150	
E13C2-8:2-FTS	24588.8	13C2-PFDA	325314.4	0.076	9.580	7.539	79	50-150	
E13C8-PFOSA	603787.9	13C2-PFDA	325314.4	1.856	10.000	8.229	82	50-150	
Ed3-NMeFOSAA	81153.8	13C2-PFDA	325314.4	0.249	10.000	9.006	90	50-150	
E13C7-PFUnDA	238122.5	13C2-PFDA	325314.4	0.732	10.000	8.500	85	50-150	
Ed5-NEtFOSAA	63067.2	13C2-PFDA	325314.4	0.194	10.000	8.203	82	50-150	
E13C2-PFDoDA	501361.2	13C2-PFDA	325314.4	1.541	10.000	8.003	80	50-150	
Ed7-NMePFOSAE	285919.9	13C2-PFDA	325314.4	0.879	10.000	7.607	76	50-150	
Ed3-NMePFOSA	68531.0	13C2-PFDA	325314.4	0.211	10.000	7.655	77	50-150	
Ed9-NEtPFOSAE	244474.4	13C2-PFDA	325314.4	0.752	10.000	7.817	78	50-150	
Ed5-NEtPFOSA	55682.9	13C2-PFDA	325314.4	0.171	10.000	8.030	80	50-150	
E13C2-PFTeDA	350156.7	13C2-PFDA	325314.4	1.076	10.000	7.558	76	50-150	

APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

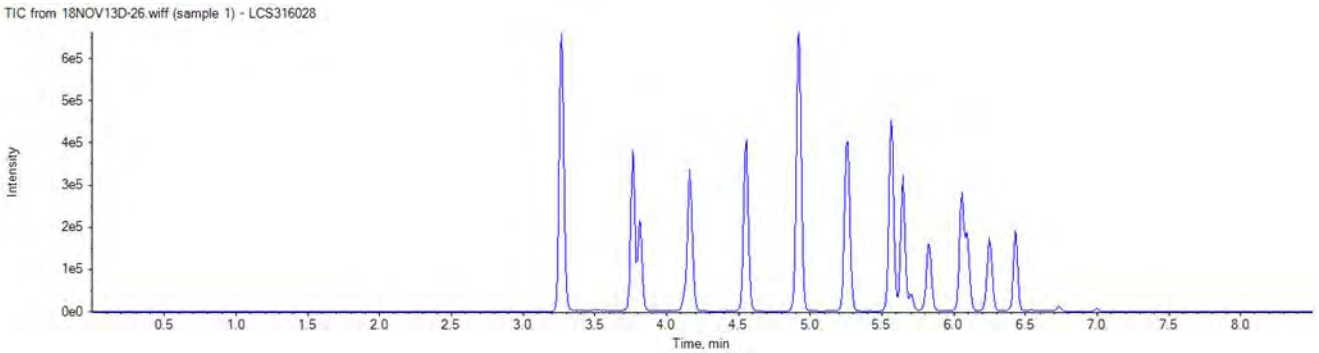
Analyte Quantitation Peak Table

Sample Name: LCS316028 **Instrument Name:** LM27631 **File Name:** 18NOV13D-26.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	2.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.26	1.000	88770.9		A	13C4-PFBA	3.27	688725.3	0.129	1.428
PFPeA	3.76	1.000	87936.5		M	13C5-PFPeA	3.76	680921.2	0.129	1.495
PFBS	3.81	1.000	48277.4		A	13C3-PFBS	3.81	379343.9	0.127	1.211
4:2-FTS	4.13	1.000	28215.5		A	13C2-4:2-FTS	4.13	43918.7	0.642	3.489
PFHxA	4.16	1.000	105663.5		A	13C5-PFHxA	4.16	604078.8	0.175	1.461
PFPeS	4.18	1.100	24483.2		A	13C3-PFBS	3.81	379343.9	0.065	1.253
PFHpA	4.55	1.000	114669.1		A	13C4-PFHpA	4.55	493231.4	0.232	1.541
PFHxS	4.55	1.000	37966.2		A	13C3-PFHxS	4.55	290125.1	0.131	1.269
6:2-FTS	4.91	1.000	26403.8		A	13C2-6:2-FTS	4.91	30603.1	0.863	4.176
PFHpS	4.91	1.080	37974.2		A	13C3-PFHxS	4.55	290125.1	0.131	1.378
PFOA	4.92	1.000	111355.1		A	13C8-PFOA	4.92	837348.4	0.133	1.421
PFOS	5.25	1.000	37313.9		A	13C8-PFOS	5.25	242304.1	0.154	1.347
PFNA	5.27	1.000	92343.0		A	13C9-PFNA	5.27	437818.9	0.211	1.521
PFNS	5.54	1.060	21309.9		A	13C8-PFOS	5.25	242304.1	0.088	1.231
PFDA	5.57	1.000	69580.8		A	13C6-PFDA	5.57	588358.8	0.118	1.254
8:2-FTS	5.57	1.000	19963.8		A	13C2-8:2-FTS	5.57	24588.8	0.812	3.786
PFOSA	5.64	1.000	79633.9		A	13C8-PFOSA	5.65	603787.9	0.132	1.288
NMeFOSAA	5.71	1.000	8862.0		A	d3-NMeFOSAA	5.70	81153.8	0.109	1.234
PFDS	5.80	1.110	17634.3		A	13C8-PFOS	5.25	242304.1	0.073	1.319
PFUnDA	5.83	1.000	63915.5		A	13C7-PFUnDA	5.83	238122.5	0.268	1.403
NEtFOSAA	5.84	1.000	6873.4		M	d5-NEtFOSAA	5.84	63067.2	0.109	1.143
PFDoDA	6.05	1.000	67190.4		A	13C2-PFDoDA	6.06	501361.2	0.134	1.365
10:2-FTS	6.07	1.090	13281.7		A	13C2-8:2-FTS	5.57	24588.8	0.540	3.598
NMePFOSAE	6.10	1.000	51745.4		A	d7-NMePFOSAE	6.09	285919.9	0.181	1.506
NMePFOSA	6.11	1.000	9220.6		A	d3-NMePFOSA	6.10	68531.0	0.135	1.328
PFDoS	6.22	1.190	10663.9		A	13C8-PFOS	5.25	242304.1	0.044	1.542
NEtPFOSAE	6.26	1.000	53677.6		A	d9-NEtPFOSAE	6.25	244474.4	0.220	1.409
NEtPFOSA	6.27	1.000	7829.8		M	d5-NEtPFOSA	6.26	55682.9	0.141	1.292
PFTrDA	6.25	1.030	56101.7		M	13C2-PFDoDA	6.06	501361.2	0.112	1.413
PFTeDA	6.43	1.000	47282.0		A	13C2-PFTeDA	6.43	350156.7	0.135	1.514
PFHxDA	6.73	1.050	21870.8		A	13C2-PFTeDA	6.43	350156.7	0.062	1.488
PFODA	7.00	1.090	14706.8		A	13C2-PFTeDA	6.43	350156.7	0.042	1.170

Total Ion Chromatogram

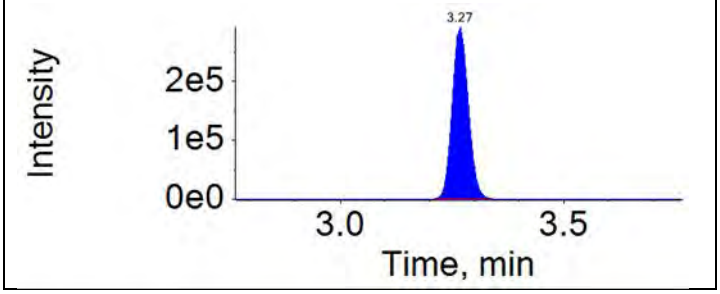


APPROVED
By JPT at 4:13 pm, 11/14/18

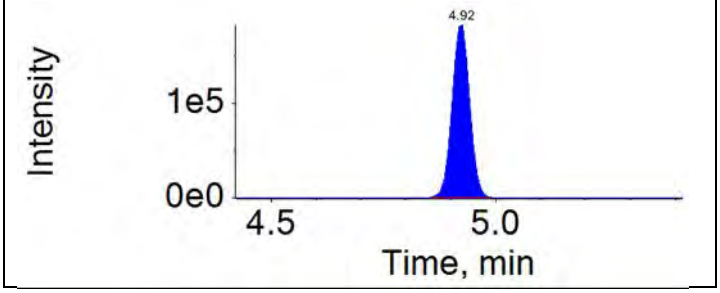
REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

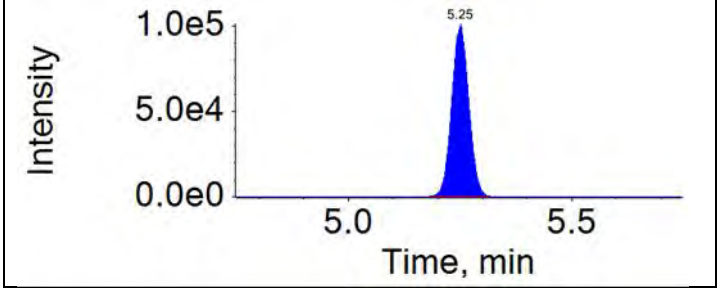
Injection Standard: 13C3-PFBA
216.0 / 172.0



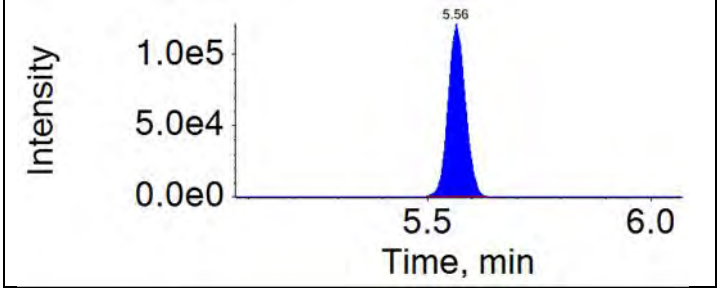
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

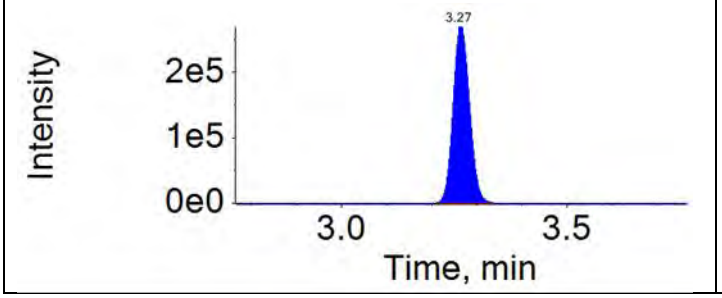


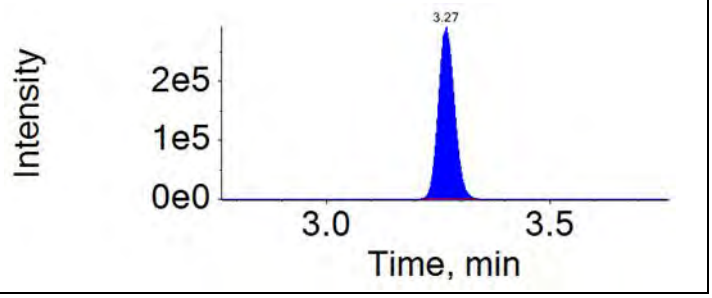
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

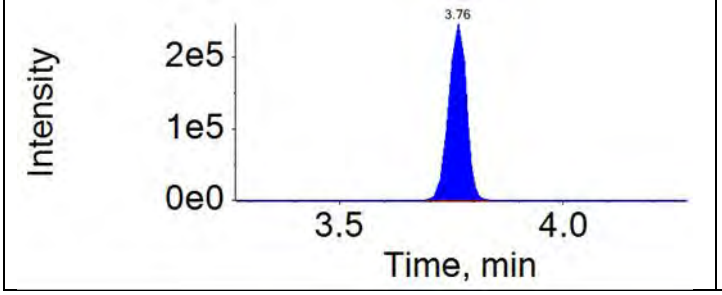
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

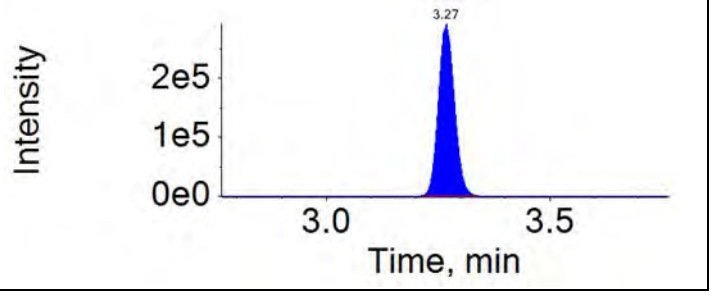
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



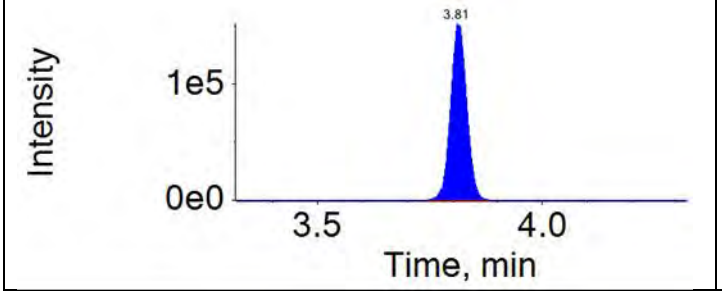


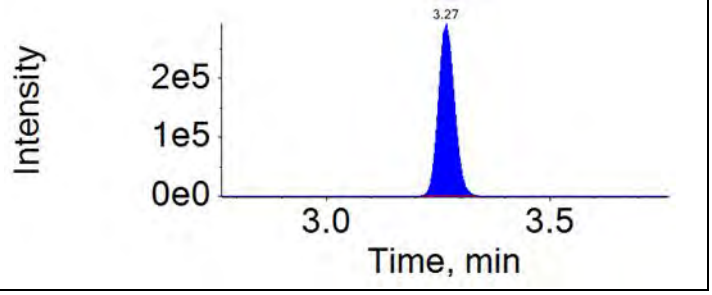
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



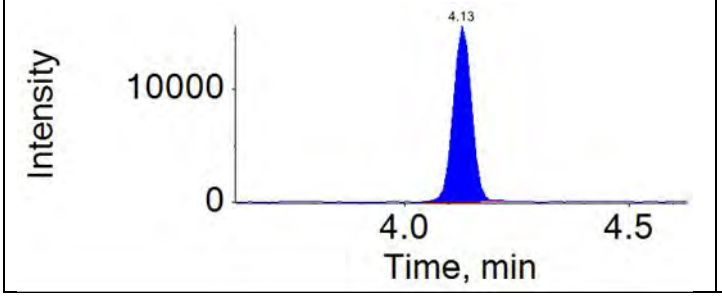


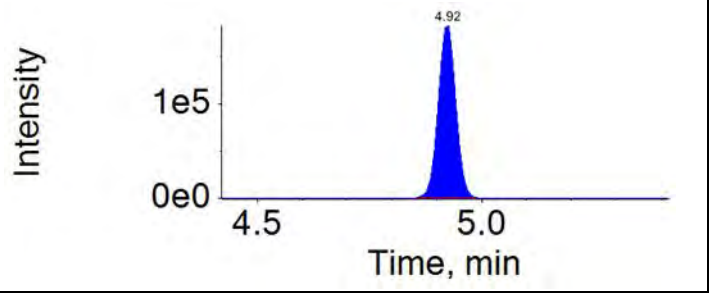
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



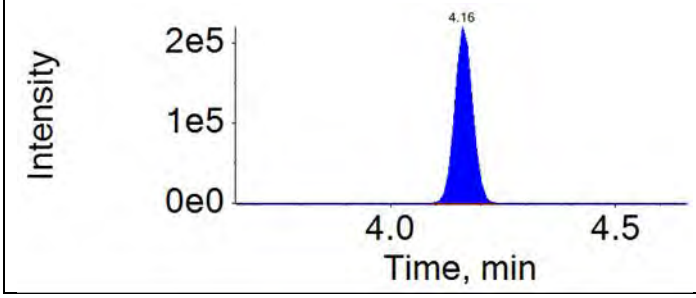


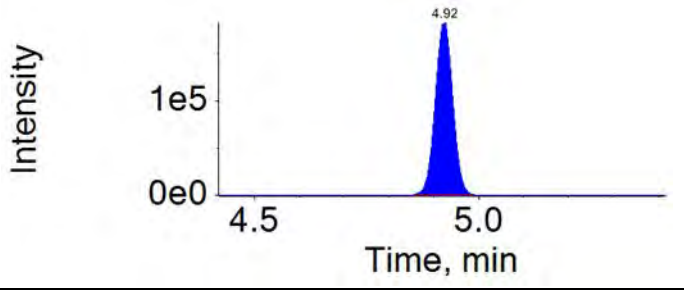
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

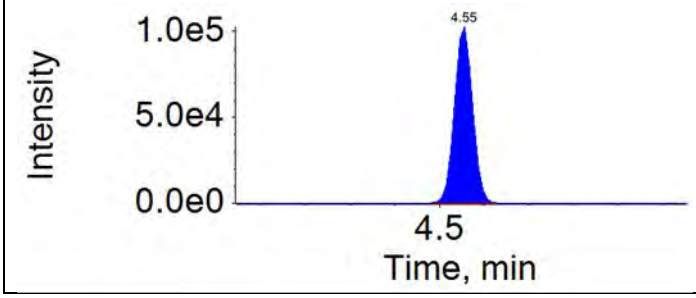
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

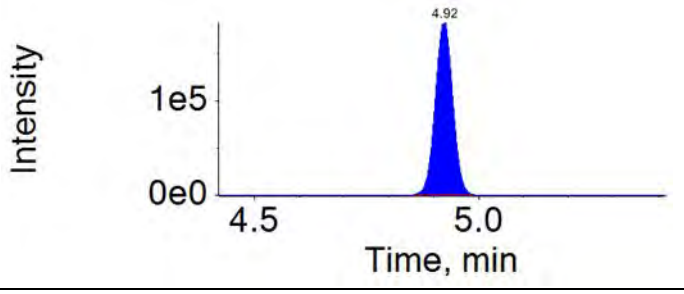
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



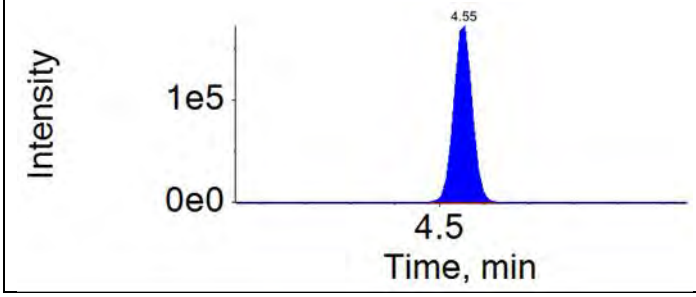


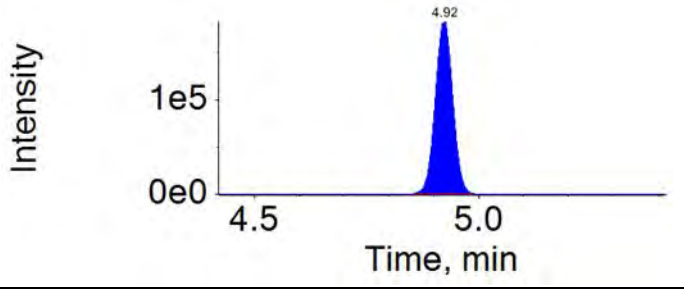
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



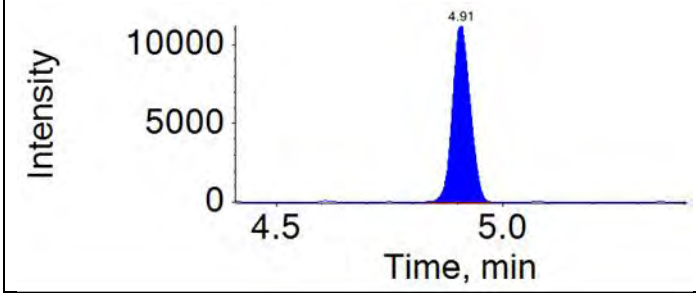


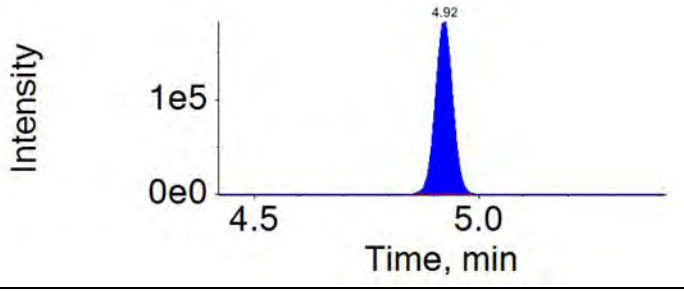
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

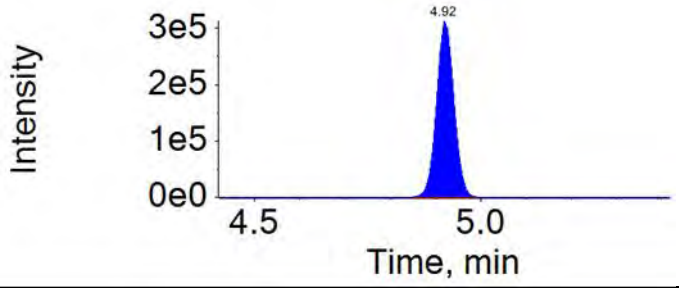
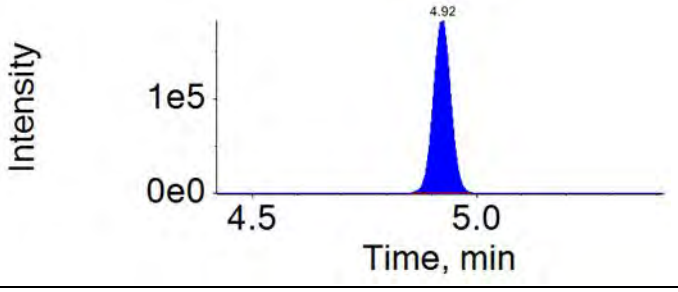


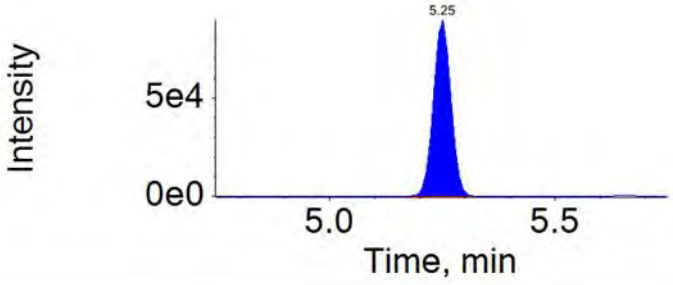
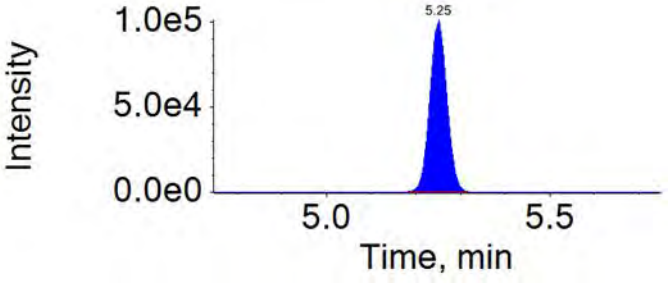


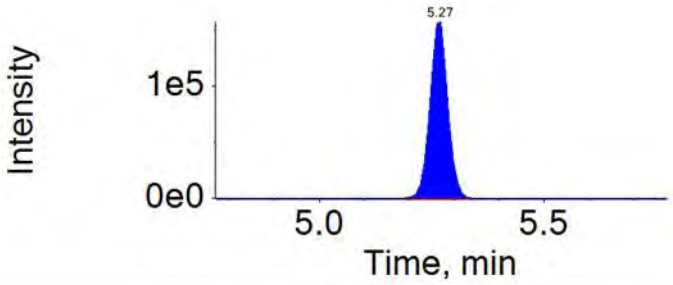
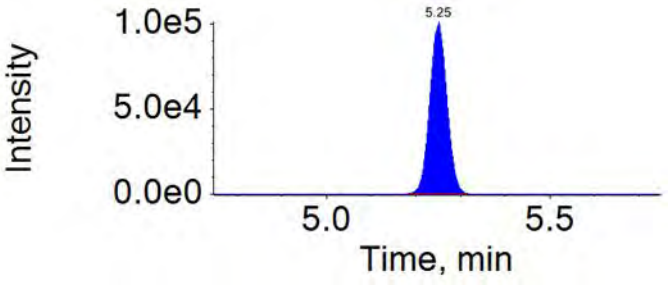
APPROVED
By JPT at 4:13 pm, 11/14/18

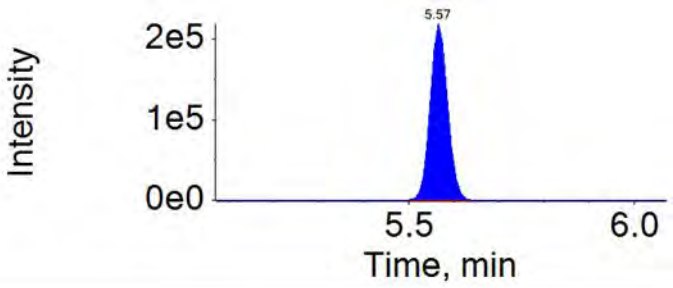
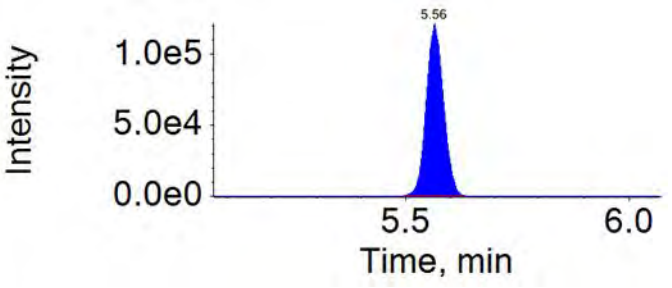
REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

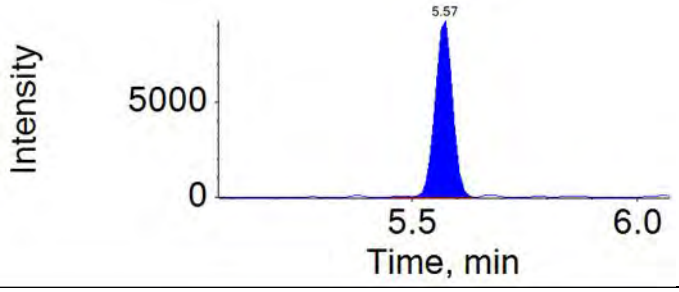
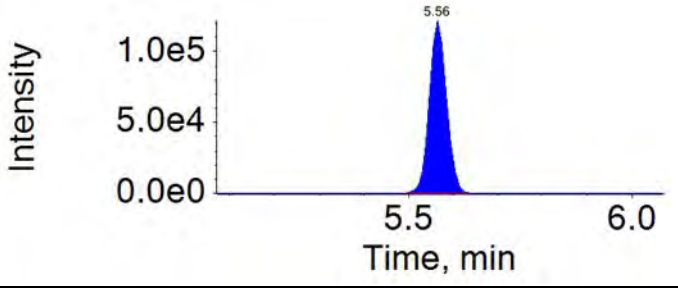
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

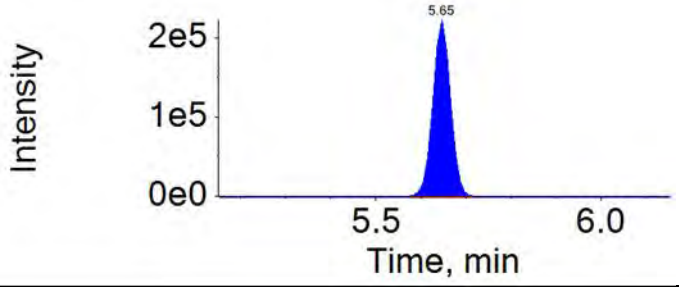
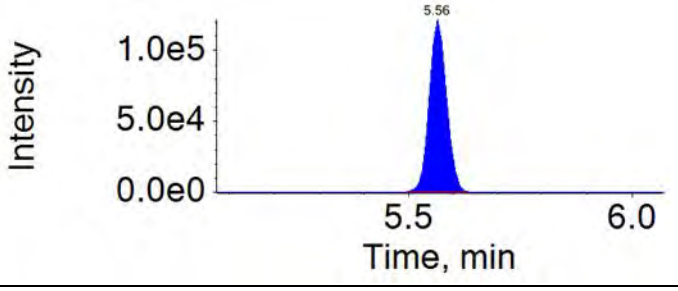
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

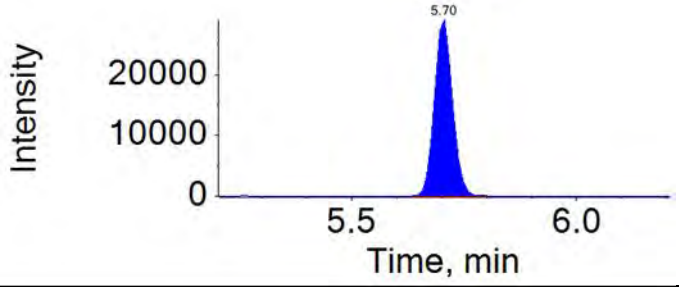
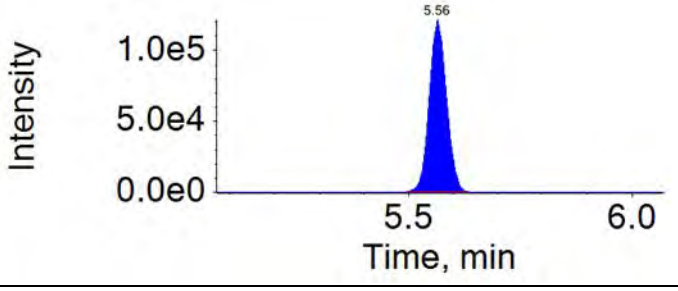
APPROVED
By JPT at 4:13 pm, 11/14/18

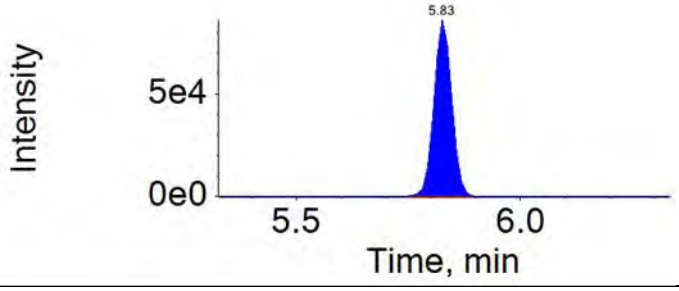
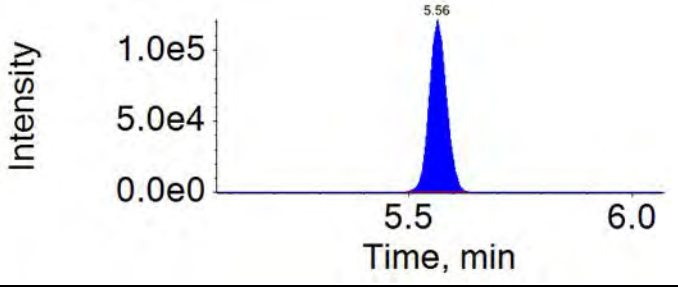
REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

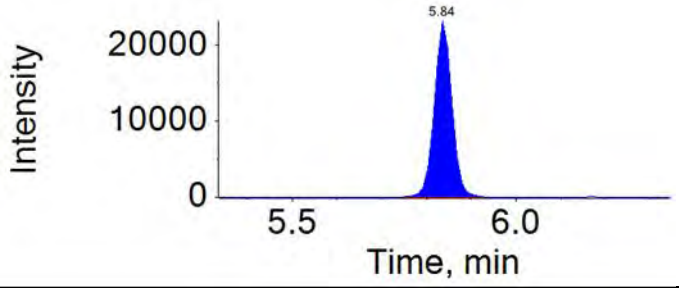
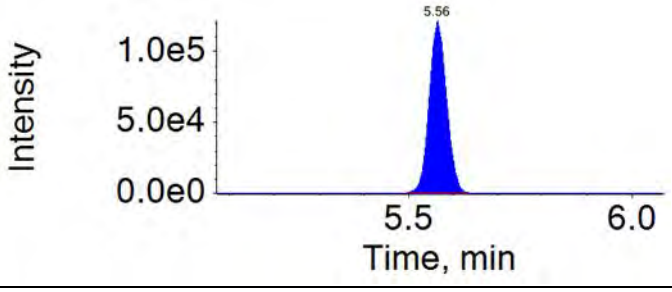
Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

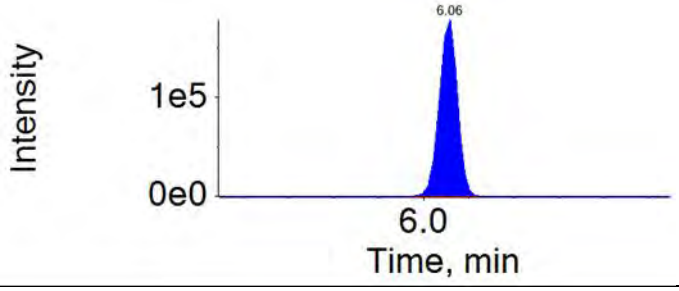
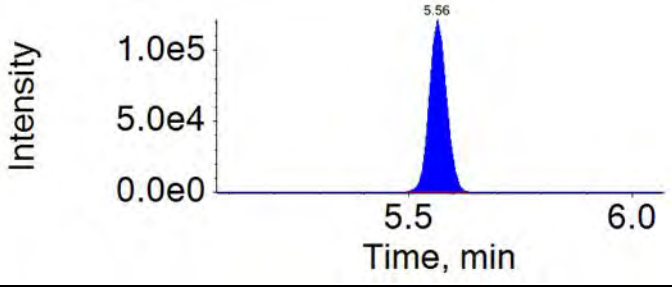
Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

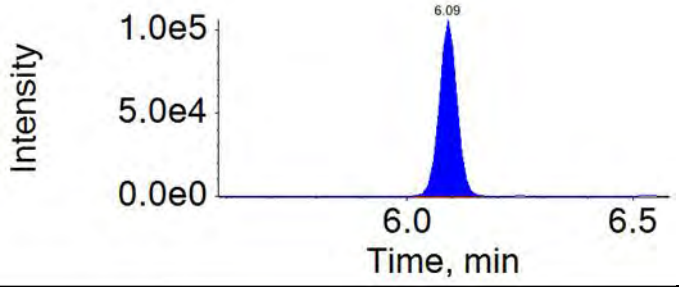
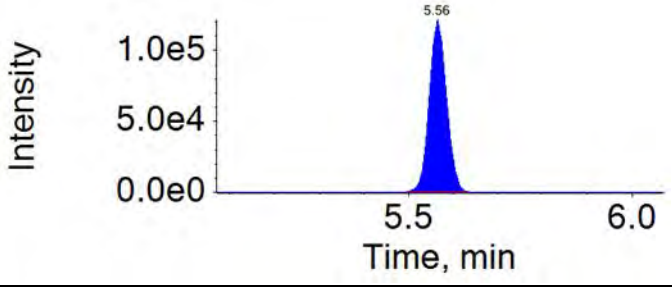
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

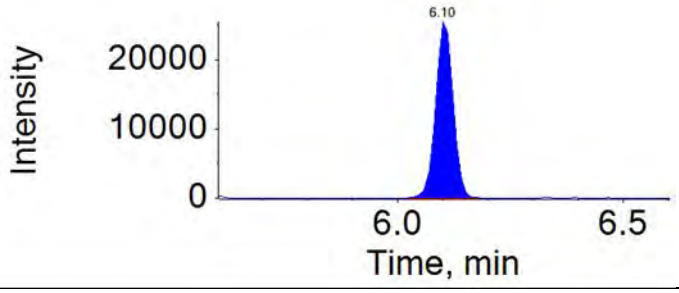
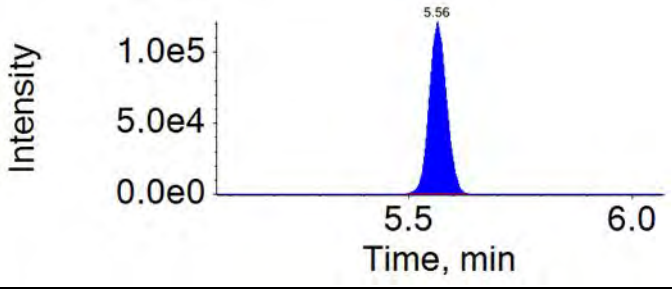
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

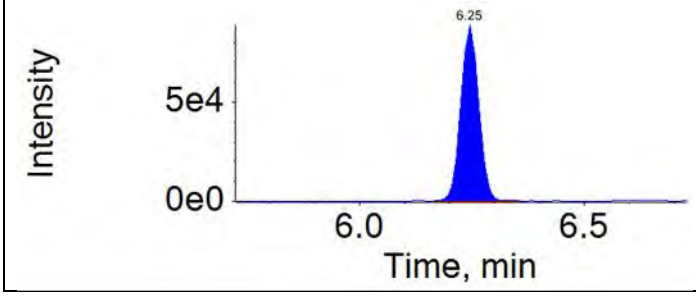
Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

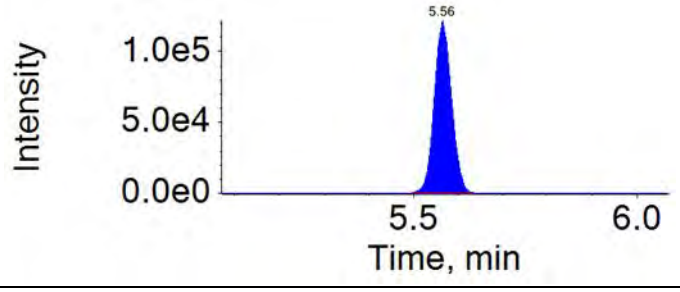
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

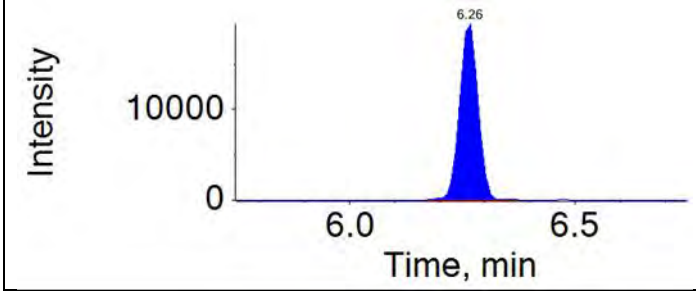
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

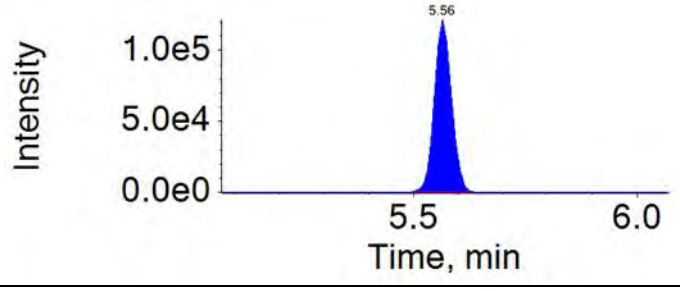
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



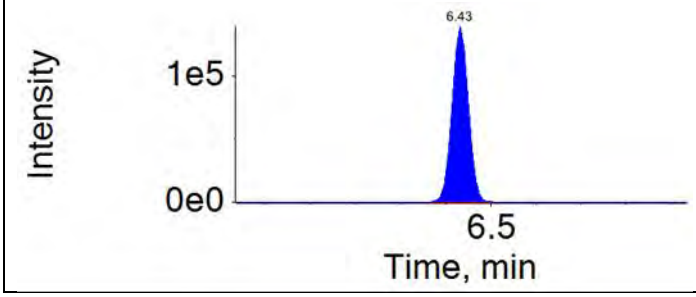


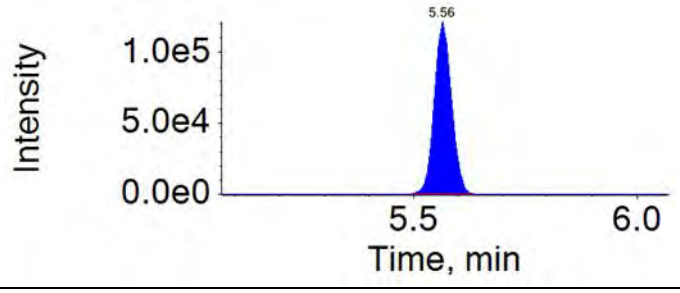
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



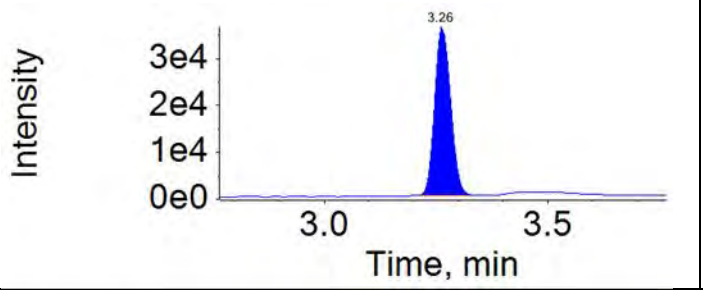


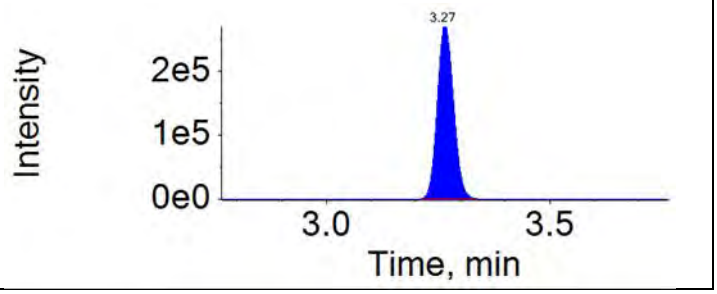
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

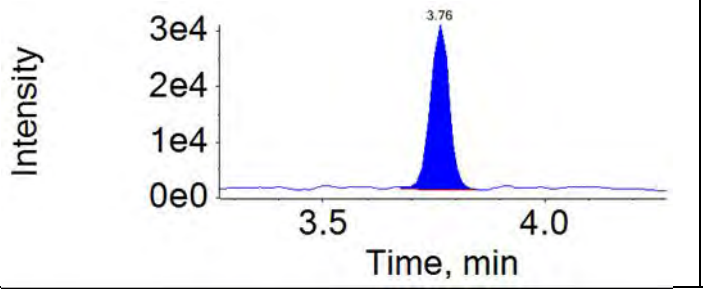
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

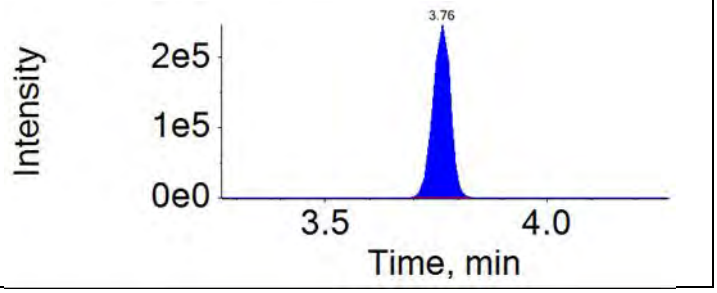
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



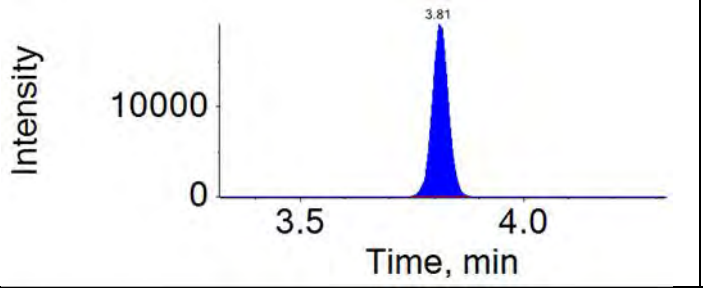


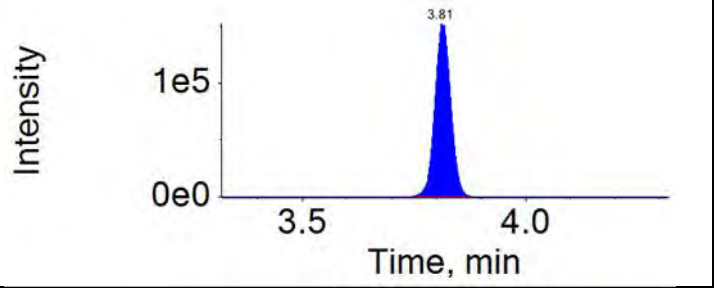
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



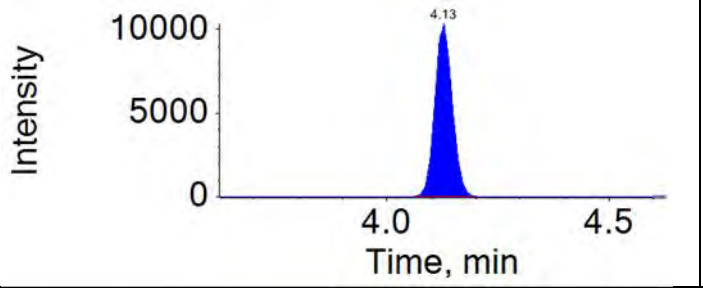


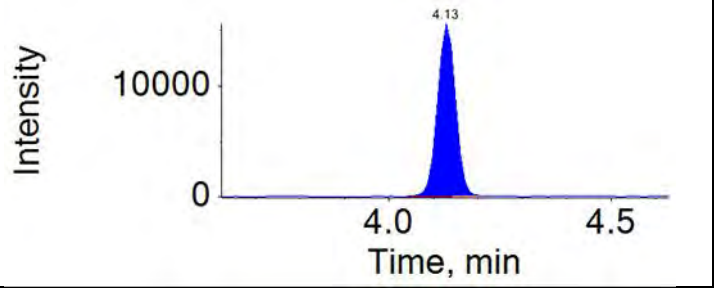
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



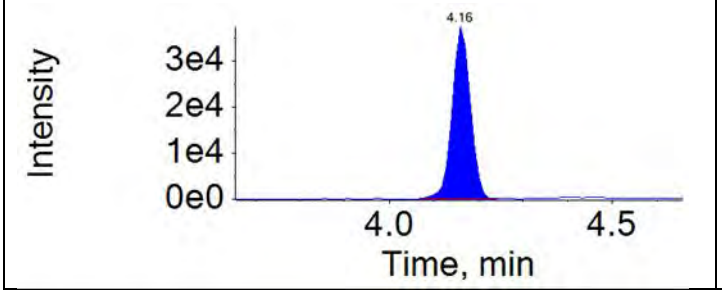


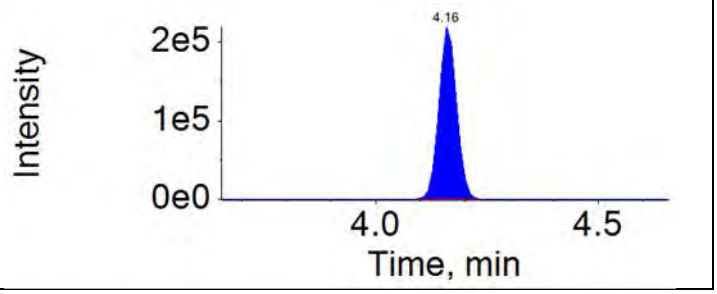
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

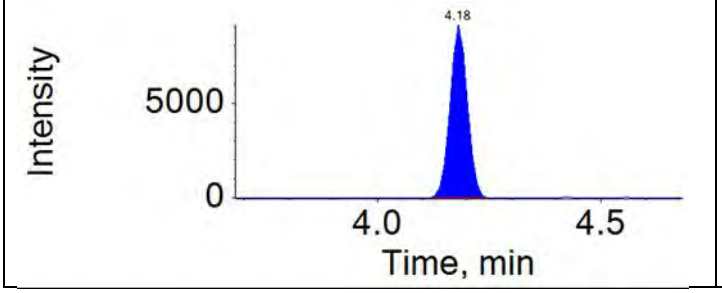
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

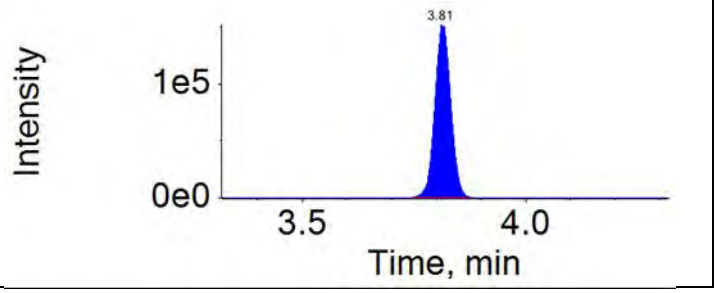
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



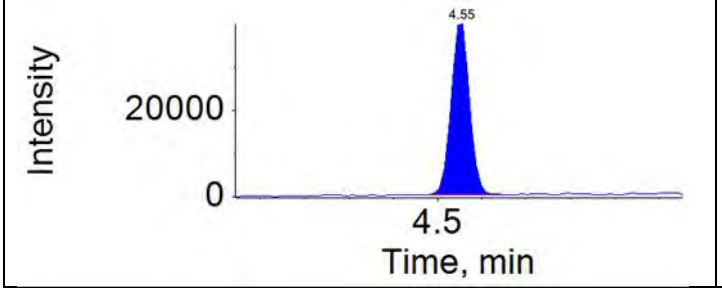


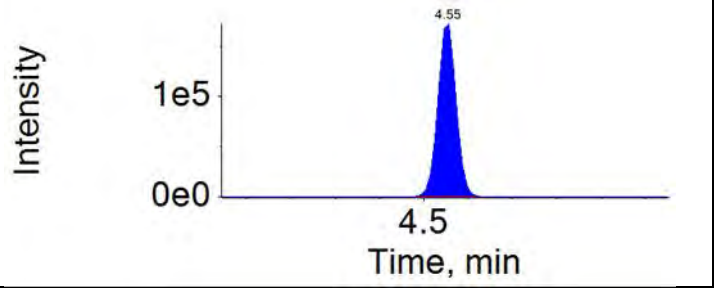
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



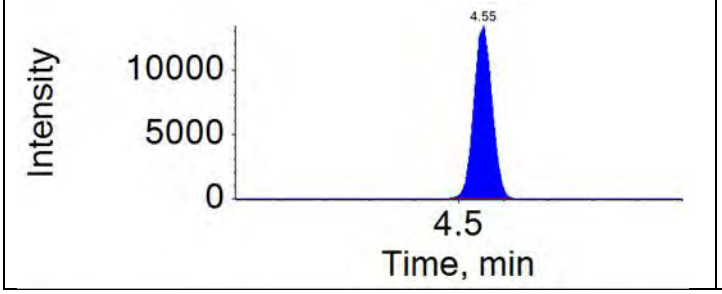


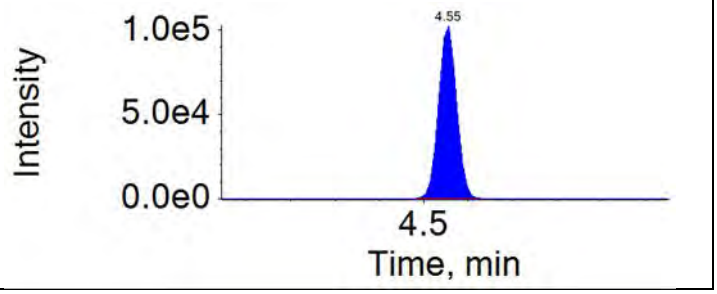
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

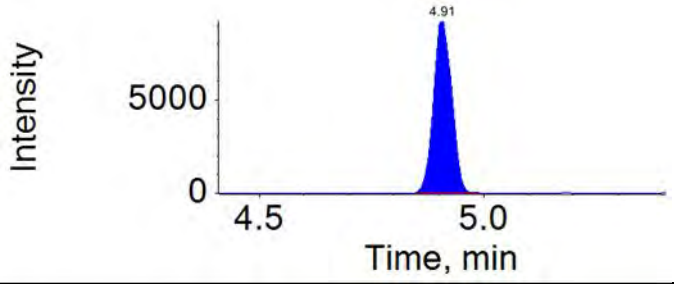
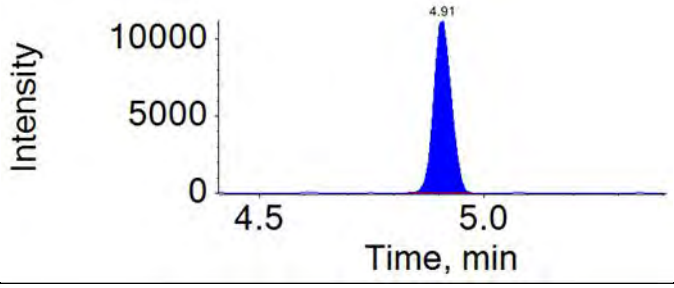


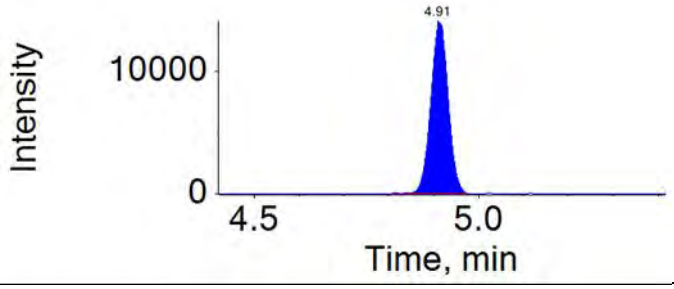
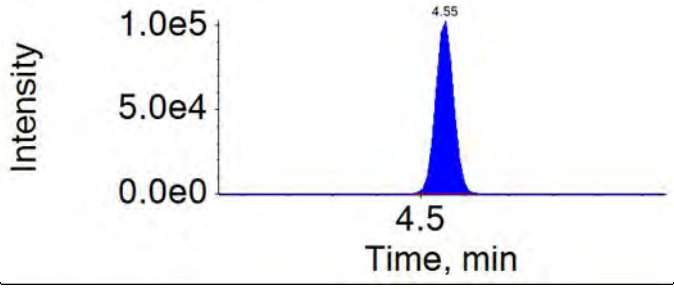


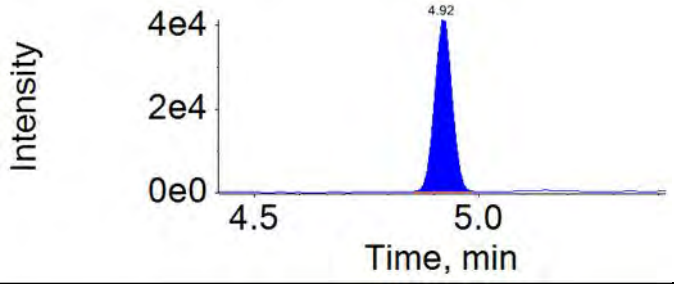
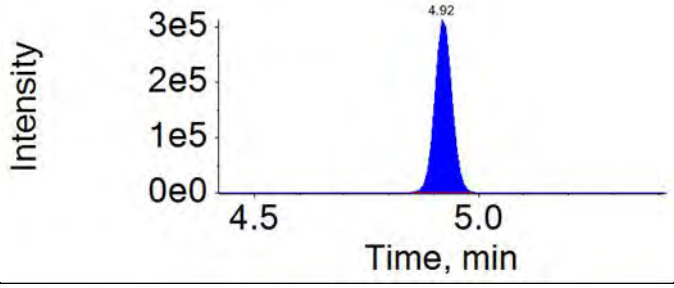
APPROVED
By JPT at 4:13 pm, 11/14/18

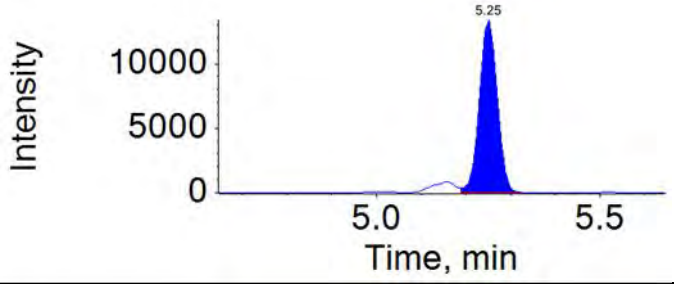
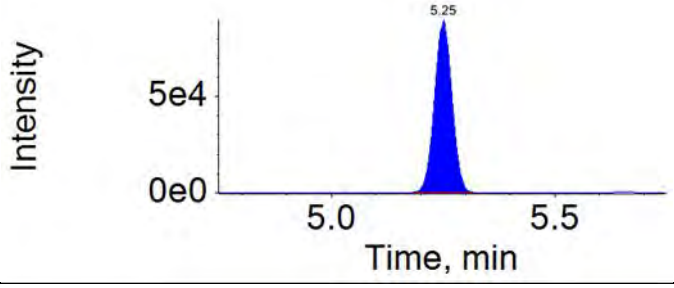
REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

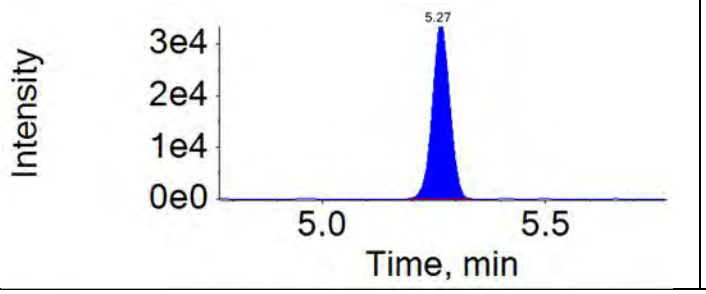
Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

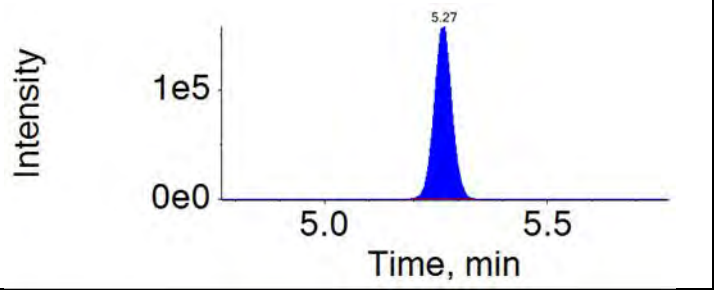
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

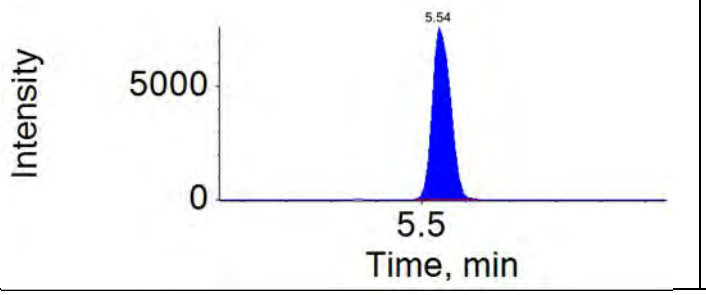
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

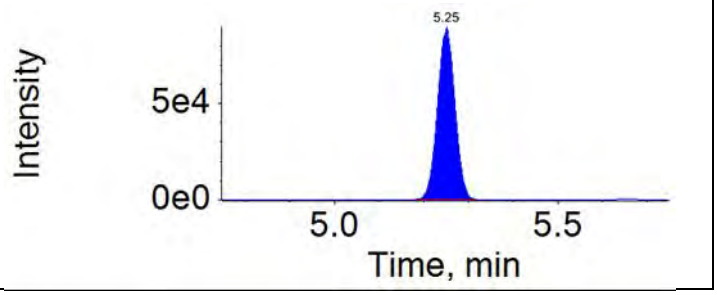
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



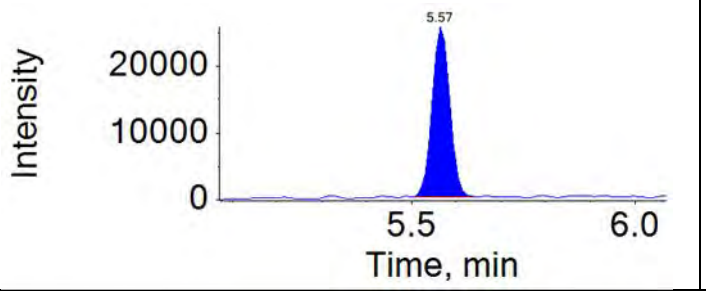


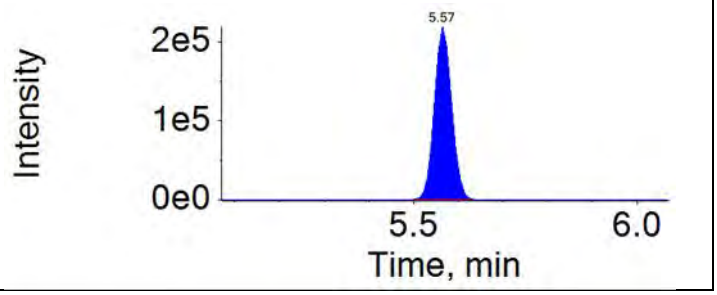
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



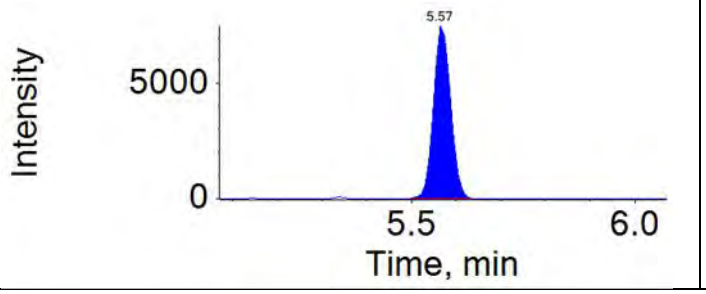


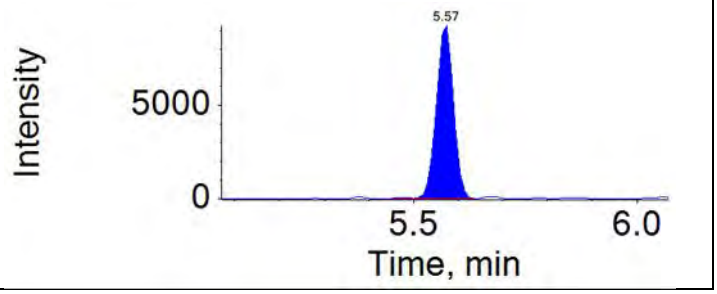
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



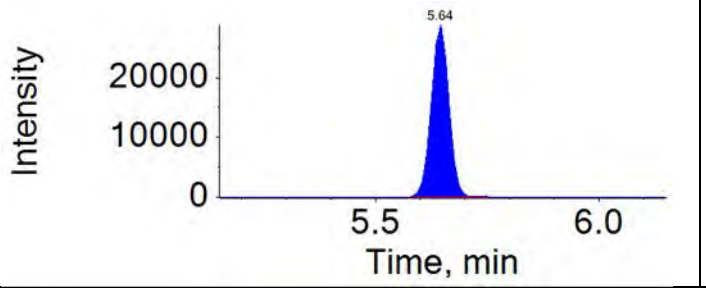


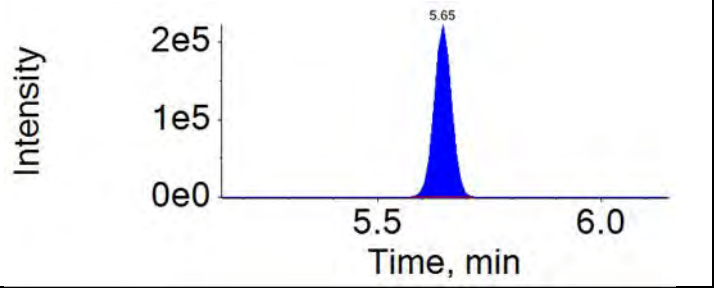
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

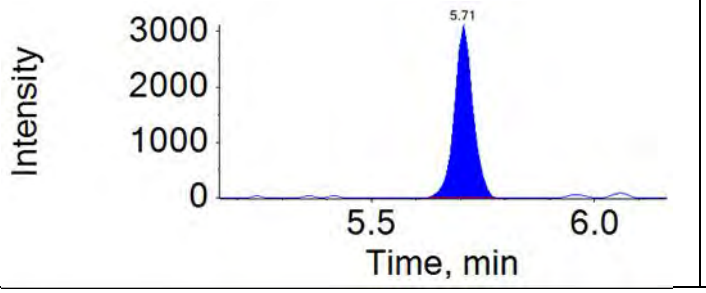
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

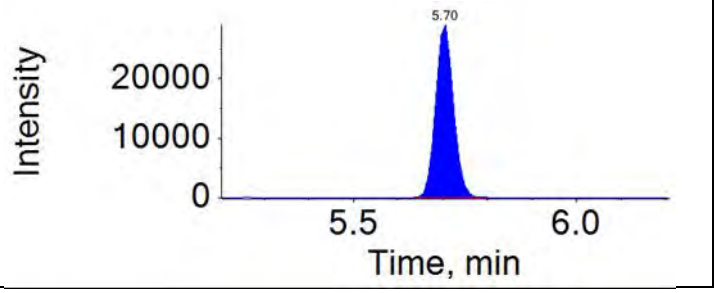
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



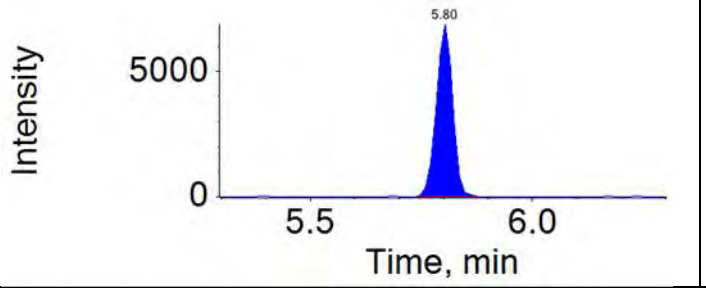


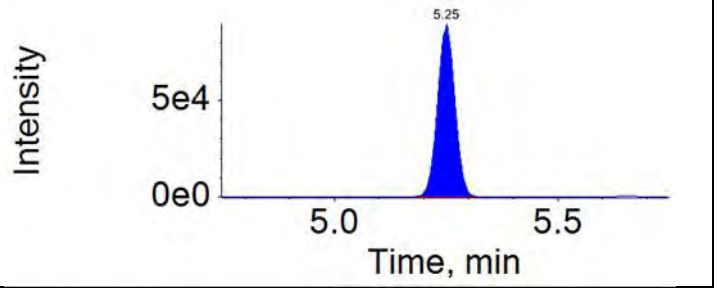
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



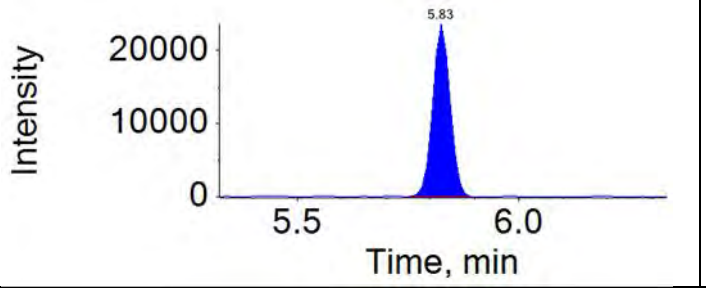


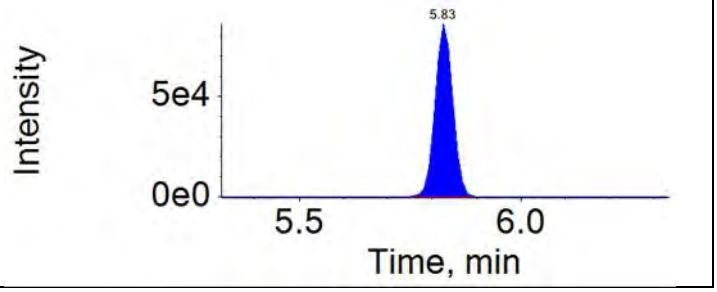
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0

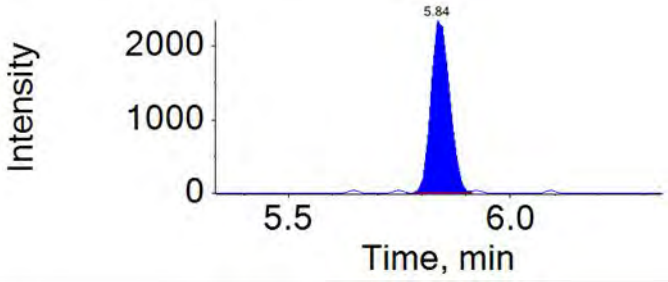
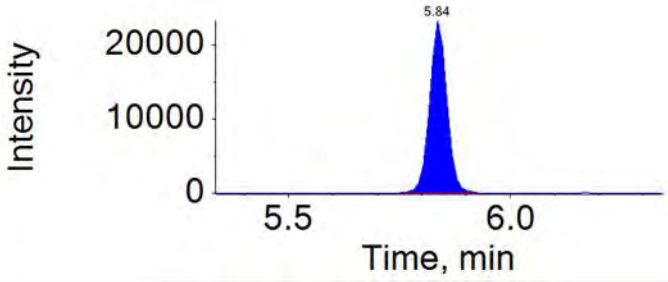


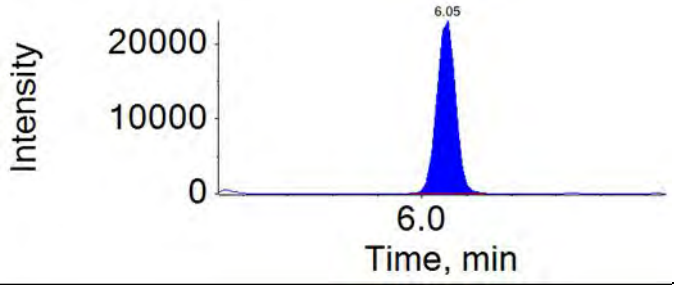
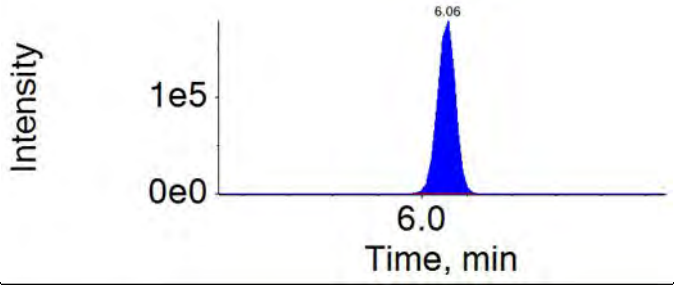


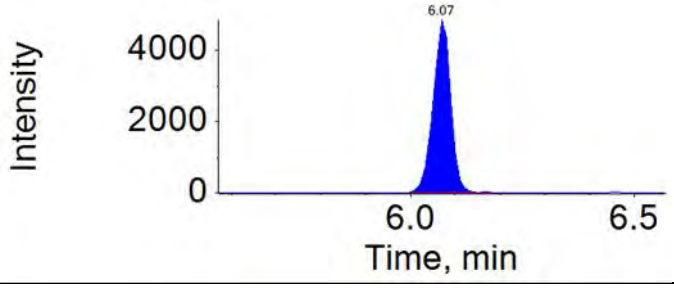
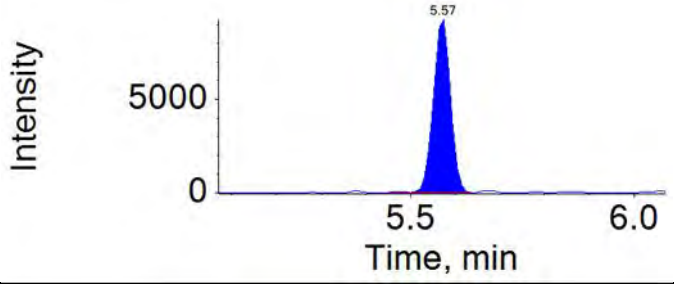
APPROVED
By JPT at 4:13 pm, 11/14/18

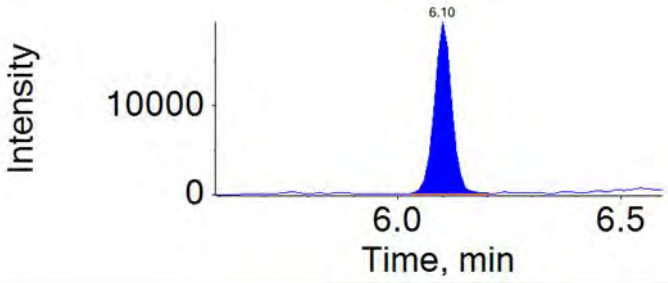
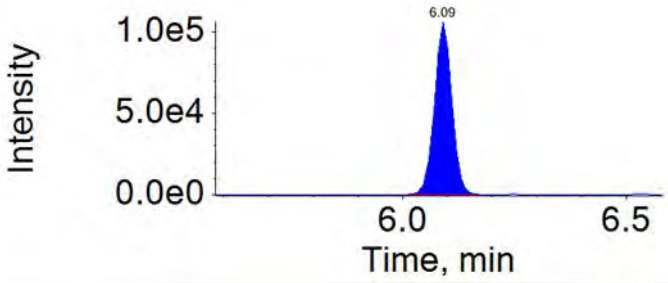
REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0
	

Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0
	

Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0
	

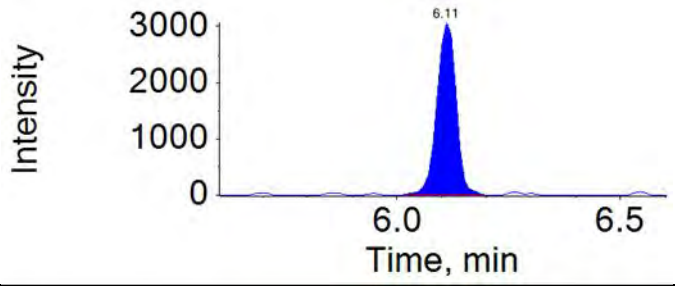
Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0
	

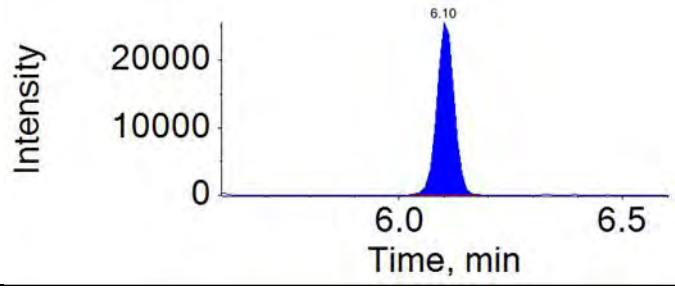
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

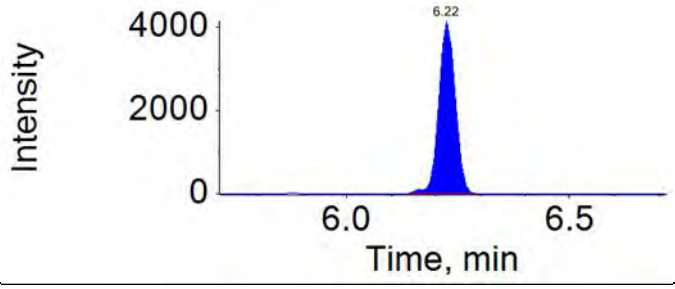
ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

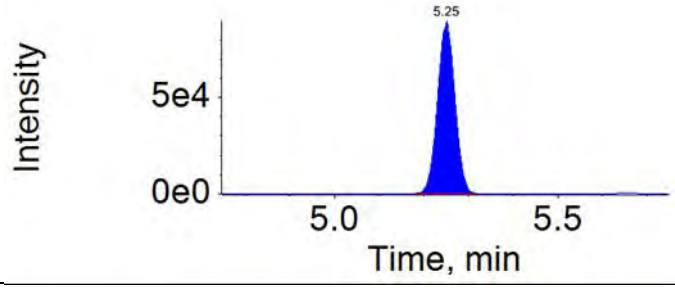
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



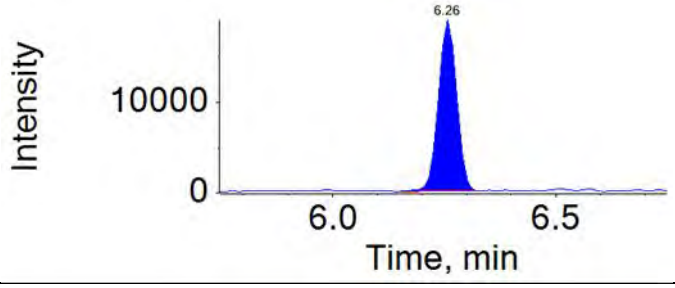


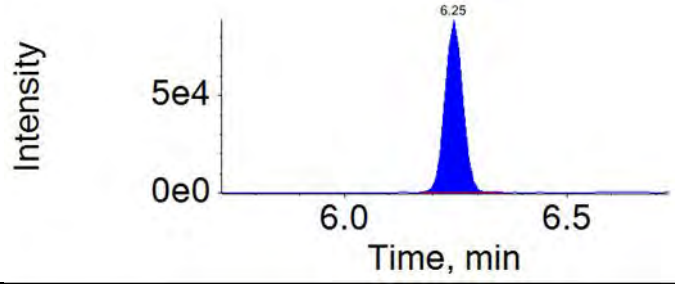
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



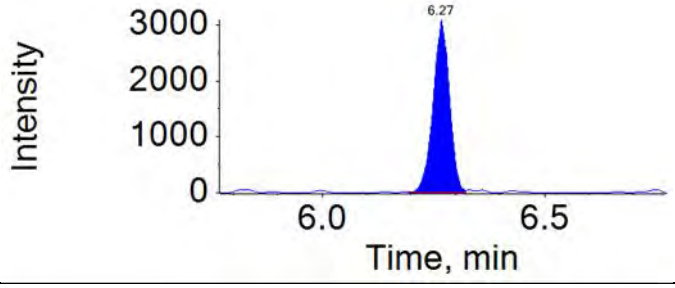


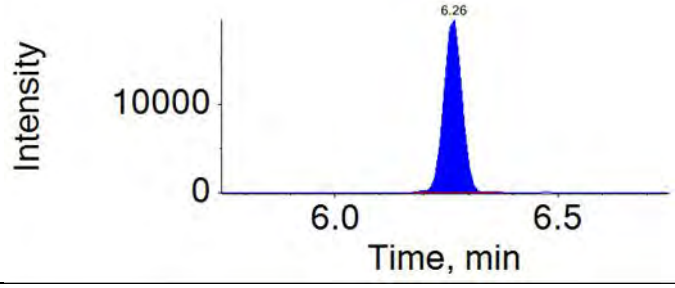
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

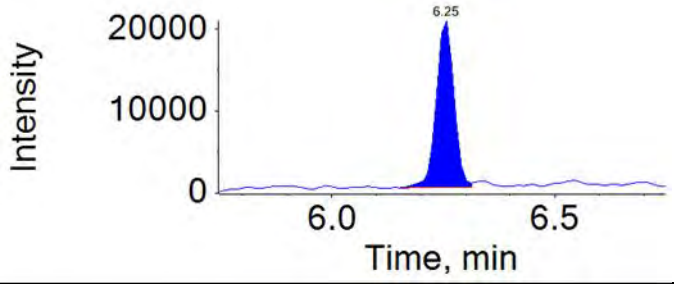
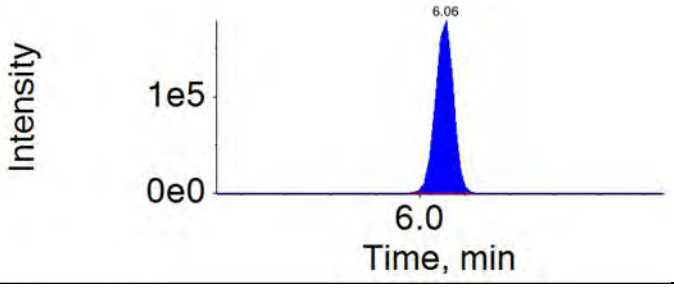


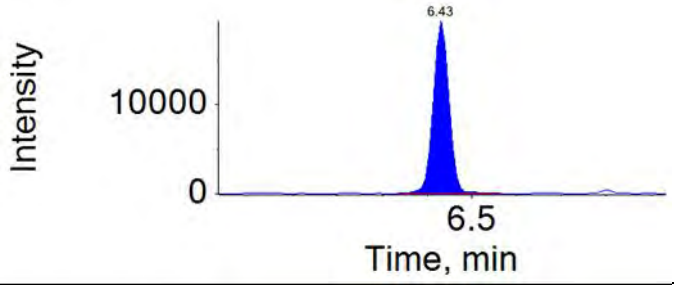
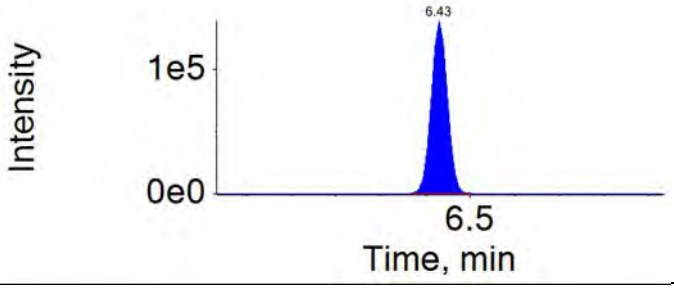


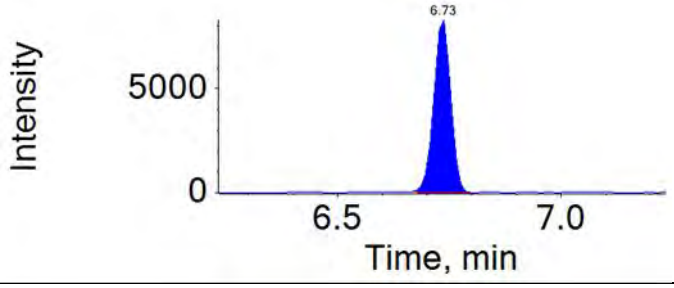
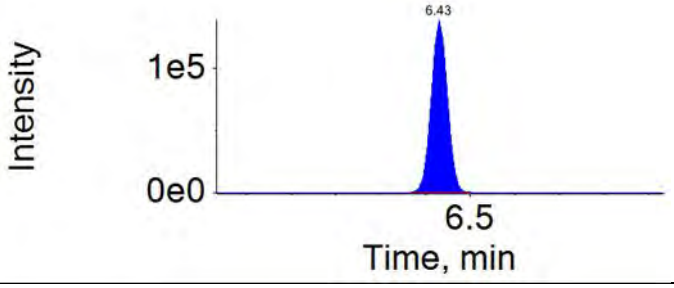
APPROVED
By JPT at 4:13 pm, 11/14/18

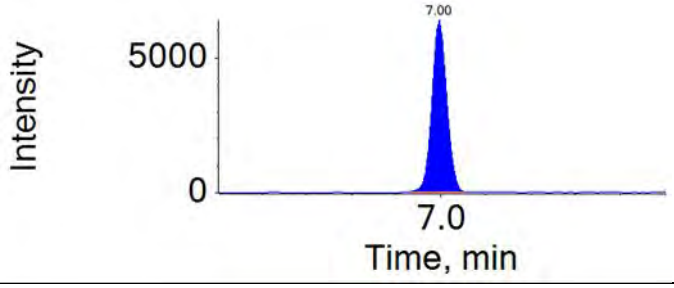
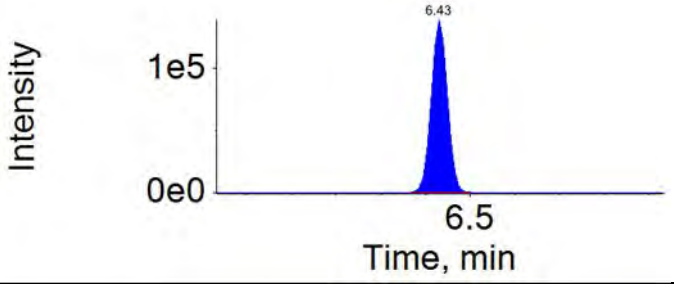
REVIEWED
By HMK at 11:33 am, 11/15/18

ICAL Name: 18NOV12DCAL **Result Table:** 18316028 11/14/2018 1:56:44 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

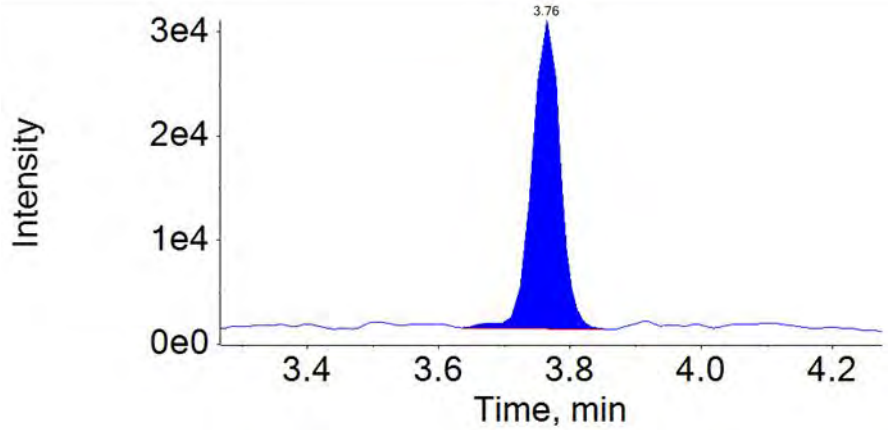
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

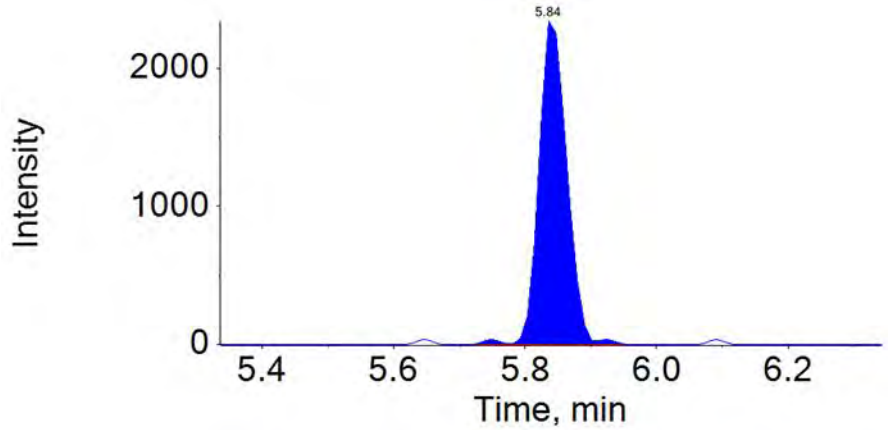
Results Table Name: 18316028
Results Table Date: 11/14/2018 2:10:57 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFPeA
RT (min.):
3.76
Peak Area:
88615.6
Mass Range:
263.0 / 219.0
File Name:
18NOV13D-26.wiff
Sample Name:
LCS316028



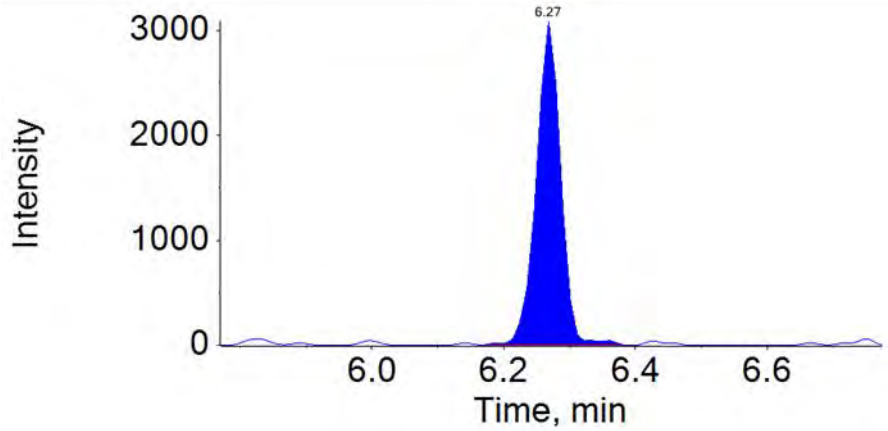
Integration Comment: incorrect integration

Component Name:
NEtFOSAA
RT (min.):
5.84
Peak Area:
6992.3
Mass Range:
584.0 / 419.0
File Name:
18NOV13D-26.wiff
Sample Name:
LCS316028



Integration Comment: incorrect integration

Component Name:
NEtPFOSA
RT (min.):
6.27
Peak Area:
7955.7
Mass Range:
526.0 / 169.0
File Name:
18NOV13D-26.wiff
Sample Name:
LCS316028



Integration Comment: incorrect integration

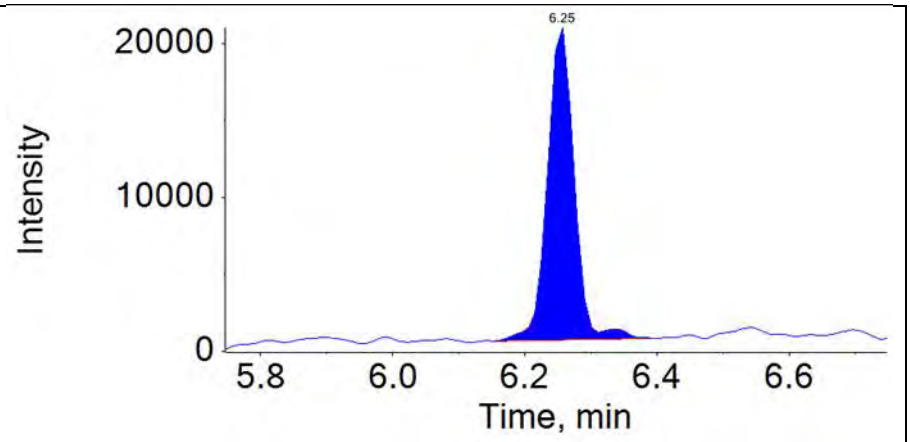
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

Results Table Name: 18316028
Results Table Date: 11/14/2018 2:10:57 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFTrDA
RT (min.):
6.25
Peak Area:
57589.4
Mass Range:
663.0 / 619.0
File Name:
18NOV13D-26.wiff
Sample Name:
LCS316028



Integration Comment: incorrect integration

APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

Results Table Name: 18316028
Results Table Date: 11/14/2018 2:10:57 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

Ion Ratio Report

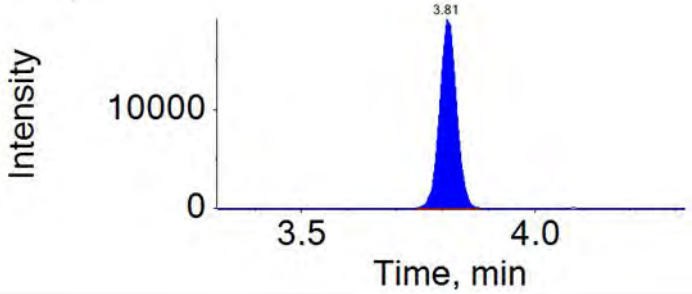
Sample Name: LCS316028 **Instrument Name:** LM27631 **File Name:** 18NOV13D-26.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	48277.4	A	N/A	1.0000			
PFBS_2	3.81	1.00	18567.0	A	N/A	0.3846	6	50	
4:2-FTS	4.13	1.00	28215.5	A	N/A	1.0000			
4:2 FTS_2	4.13	1.00	20463.2	A	N/A	0.7252		#NA!	
PFHxA	4.16	1.00	105663.5	A	N/A	1.0000			
PFHxA_2	4.16	1.00	1187.2	A	N/A	0.0112	-4	50	
PFPeS	4.18	1.10	24483.2	A	N/A	1.0000			
PFPeS_2	4.18	1.10	13950.1	A	N/A	0.5698	10	50	
PFHpA	4.55	1.00	114669.1	A	N/A	1.0000			
PFHpA_2	4.55	1.00	5494.6	A	N/A	0.0479	-15	50	
PFHxS	4.55	1.00	37966.2	A	N/A	1.0000			
PFHxS_2	4.56	1.00	13738.7	A	N/A	0.3619	5	50	
6:2-FTS	4.91	1.00	26403.8	A	N/A	1.0000			
6:2 FTS_2	4.91	1.00	18386.1	A	N/A	0.6963		#NA!	
PFHpS	4.91	1.08	37974.2	A	N/A	1.0000			
PFHpS_2	4.91	1.08	15230.3	A	N/A	0.4011	-1	50	
PFOA	4.92	1.00	111355.1	A	N/A	1.0000			
PFOA_2	4.92	1.00	5835.1	A	N/A	0.0524	-8	50	
PFOS	5.25	1.00	37313.9	A	N/A	1.0000			
PFOS_2	5.25	1.00	15024.3	A	N/A	0.4026	36	50	
PFNA	5.27	1.00	92343.0	A	N/A	1.0000			
PFNA_2	5.26	1.00	1806.2	A	N/A	0.0196	-14	50	
PFNS	5.54	1.06	21309.9	A	N/A	1.0000			
PFNS_2	5.55	1.06	10125.8	A	N/A	0.4752	0	50	
PFDA	5.57	1.00	69580.8	A	N/A	1.0000			
PFDA_2	5.58	1.00	671.1	A	N/A	0.0096	22	50	
8:2-FTS	5.57	1.00	19963.8	A	N/A	1.0000			
8:2 FTS_2	5.57	1.00	11803.1	A	N/A	0.5912		#NA!	
NMeFOSAA	5.71	1.00	8862.0	A	N/A	1.0000			
NMeFOSAA_2	5.71	1.00	1119.4	A	N/A	0.1263	-51	50	OOS
PFDS	5.80	1.11	17634.3	A	N/A	1.0000			
PFDS_2	5.80	1.10	8512.2	A	N/A	0.4827	-5	50	
PFUnDA	5.83	1.00	63915.5	A	N/A	1.0000			
PFUnDA_2	5.83	1.00	389.2	A	N/A	0.0061	10	50	
NEtFOSAA	5.84	1.00	6873.4	M	N/A	1.0000			
NEtFOSAA_2	5.85	1.00	5497.6	A	N/A	0.7998	11	50	
PFDoDA	6.05	1.00	67190.4	A	N/A	1.0000			
PFDoDA_2	6.06	1.00	532.7	A	N/A	0.0079	-49	50	
10:2-FTS	6.07	1.09	13281.7	A	N/A	1.0000			
10:2 FTS_2	6.07	1.09	9465.8	A	N/A	0.7127		#NA!	
PFTrDA	6.25	1.03	56101.7	M	N/A	1.0000			
PFTrDA_2	6.24	1.03	917.7	A	N/A	0.0164	92	50	OOS
PFTeDA	6.43	1.00	47282.0	A	N/A	1.0000			
PFTeDA_2	6.43	1.00	221.1	A	N/A	0.0047	-25	50	
PFHxDA	6.73	1.05	21870.8	A	N/A	1.0000			
PFHxDA_2	6.73	1.05	1249.5	A	N/A	0.0571	-16	50	
PFODA	7.00	1.09	14706.8	A	N/A	1.0000			
PFODA_2	7.00	1.09	436.2	A	N/A	0.0297	8	50	

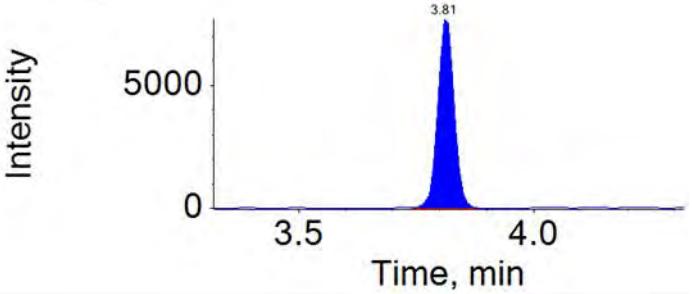
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

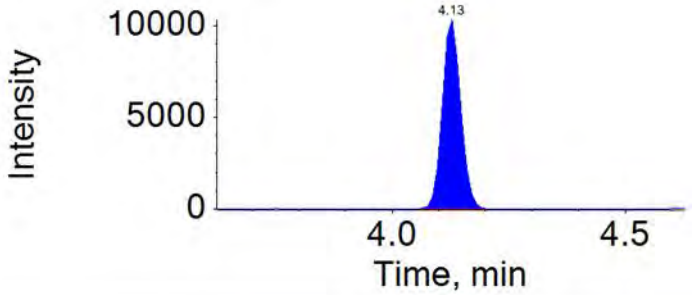
Component: PFBS
Primary Mass: 299.0 / 80.0



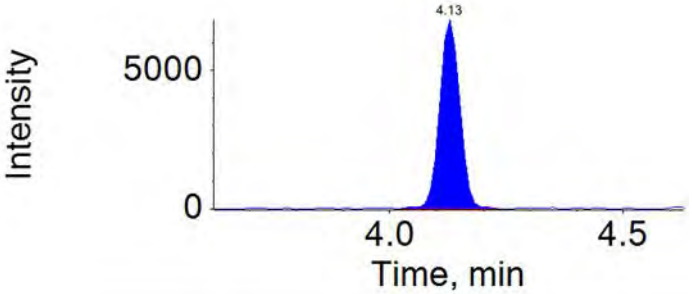
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



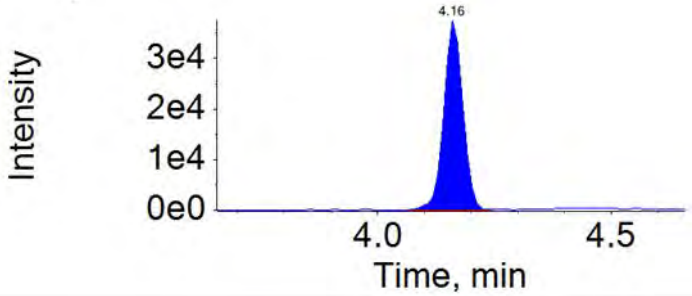
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



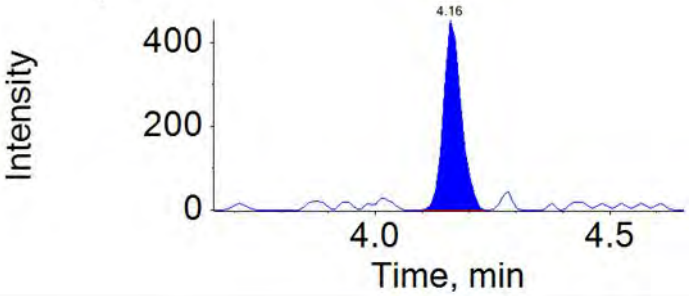
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



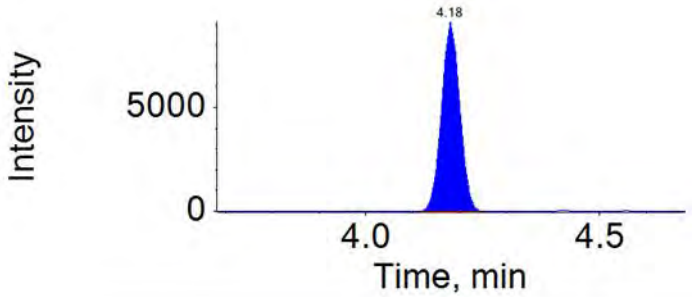
Component: PFHxA
Primary Mass: 313.0 / 269.0



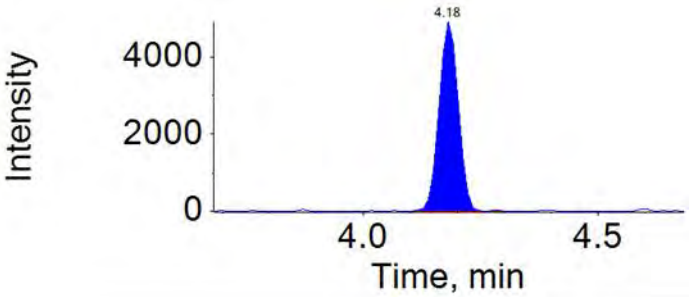
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



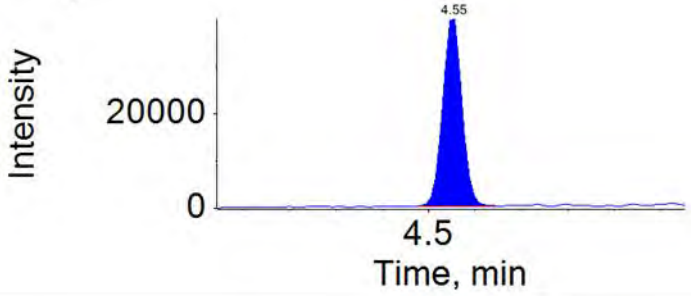
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



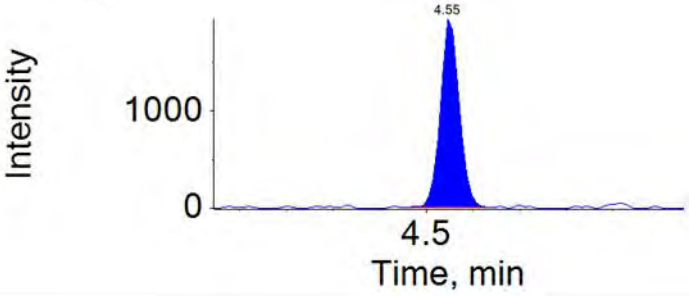
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

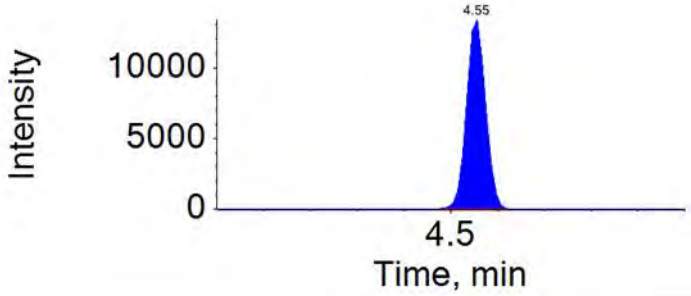
Component: PFHpA
Primary Mass: 363.0 / 319.0



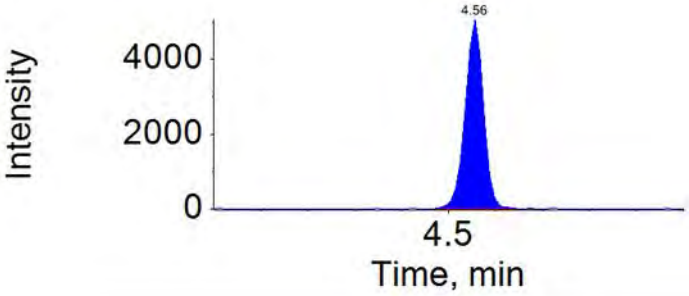
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



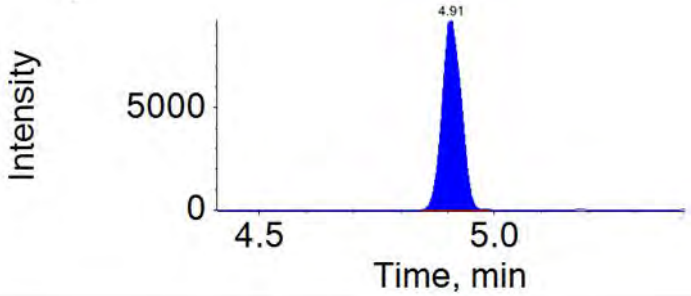
Component: PFHxS
Primary Mass: 399.0 / 80.0



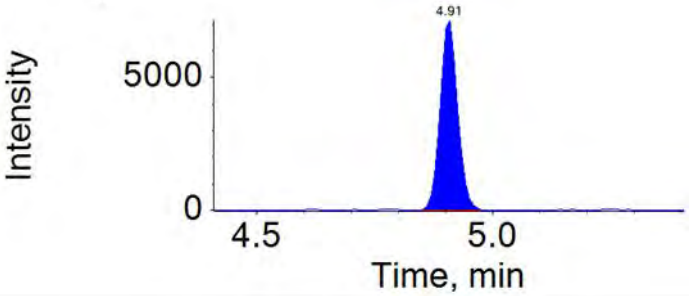
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



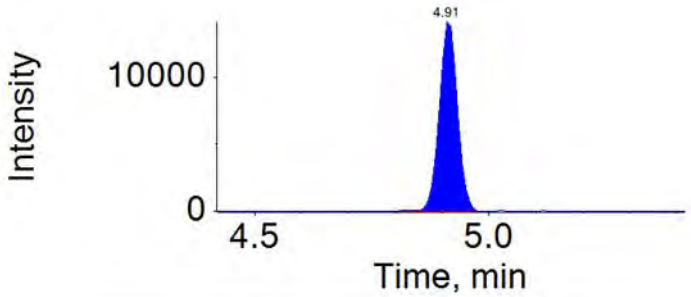
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



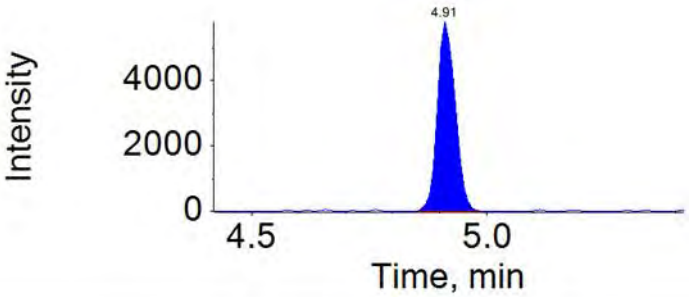
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



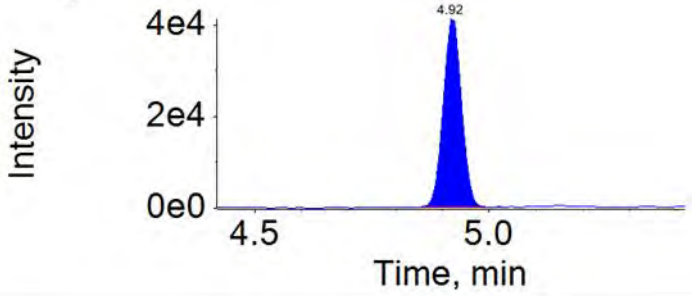
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



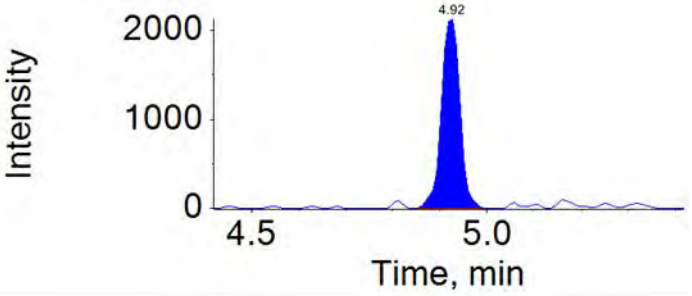
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

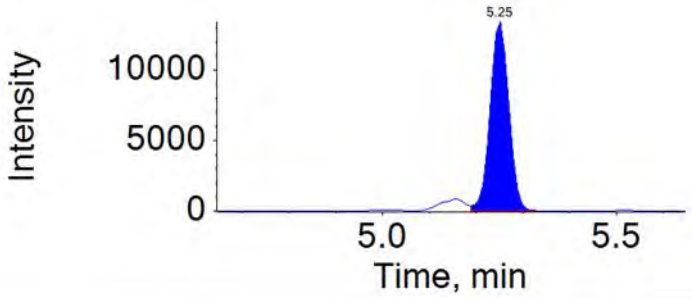
Component: PFOA
Primary Mass: 413.0 / 369.0



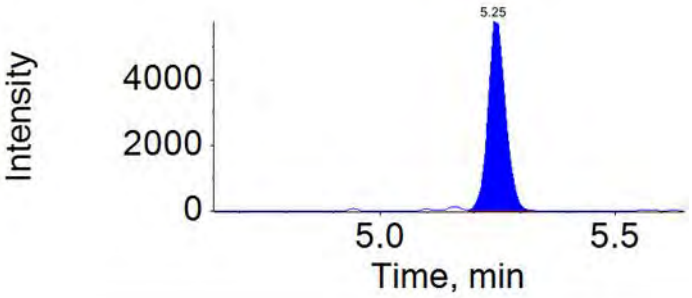
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



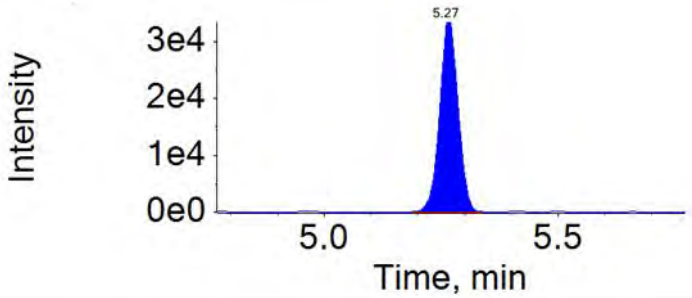
Component: PFOS
Primary Mass: 499.0 / 80.0



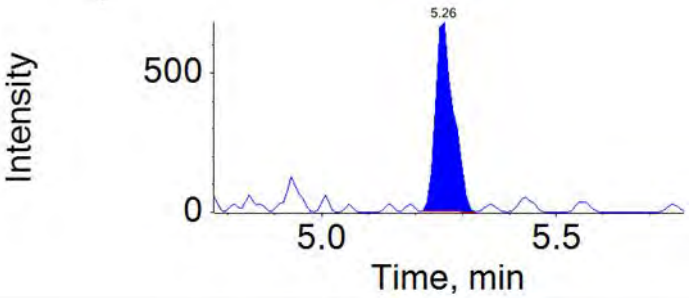
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



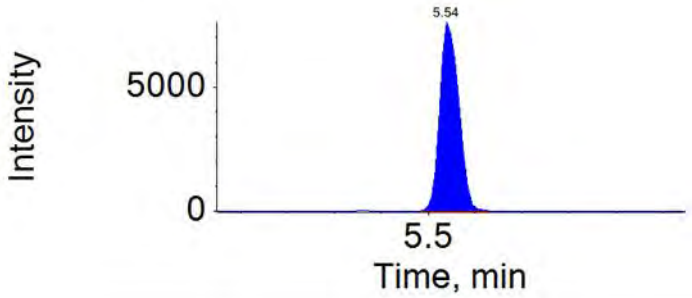
Component: PFNA
Primary Mass: 463.0 / 419.0



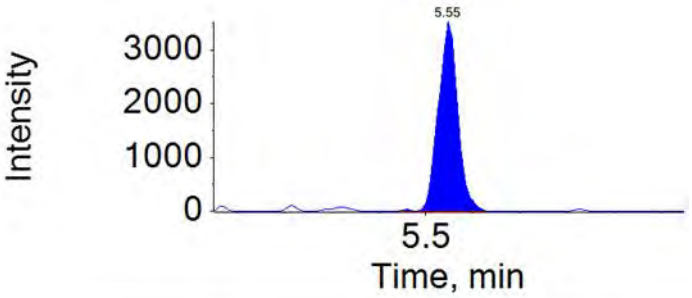
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



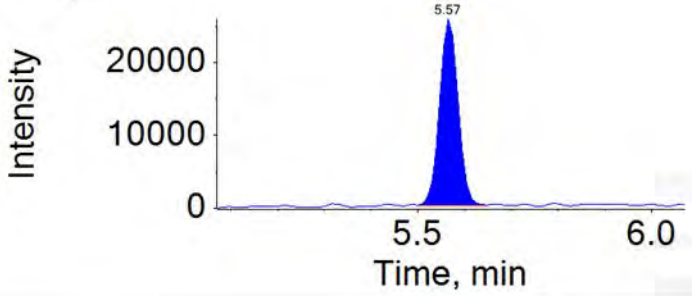
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



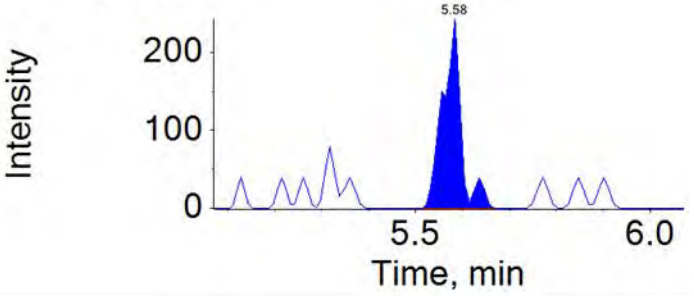
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

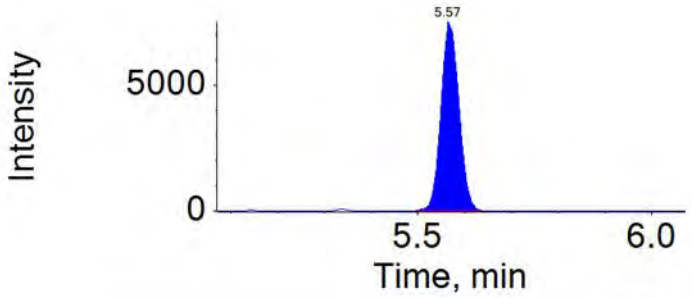
Component: PFDA
Primary Mass: 513.0 / 469.0



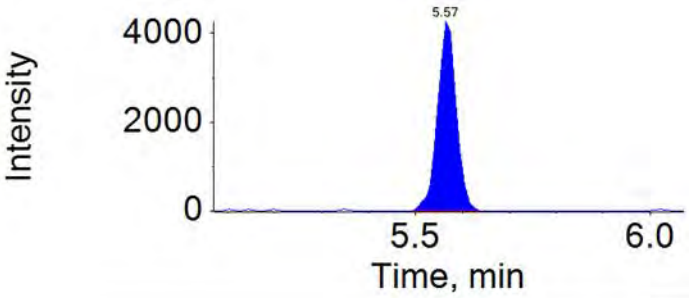
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



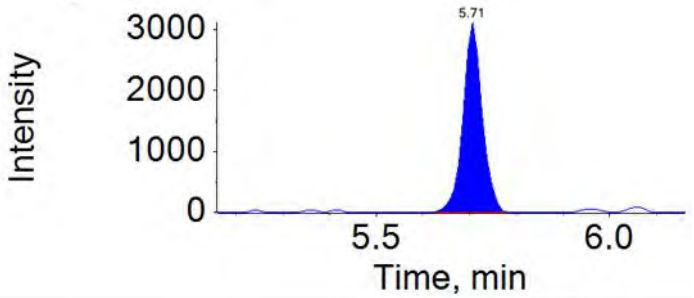
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



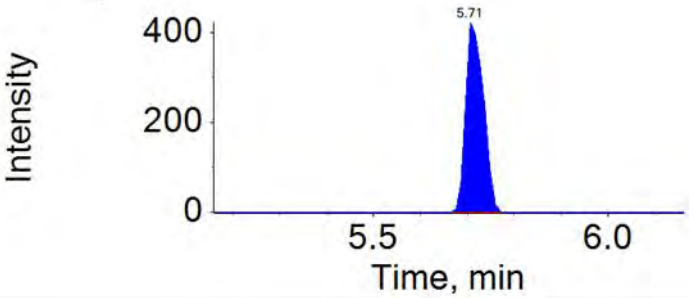
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



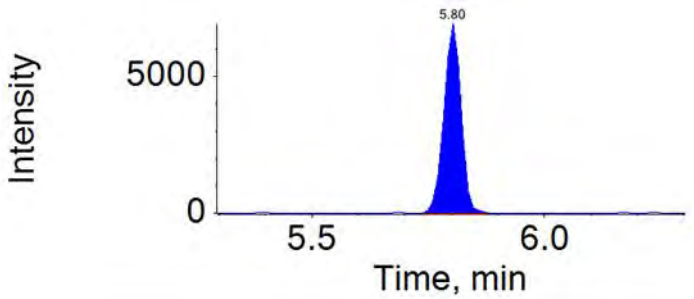
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



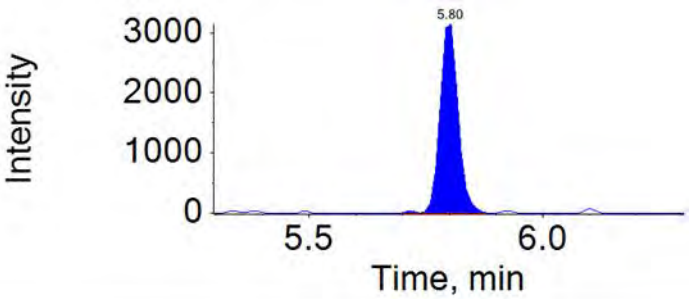
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



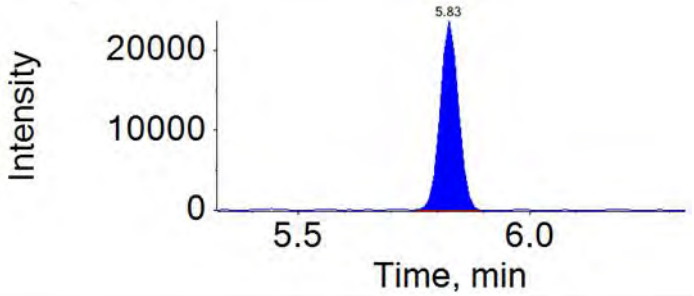
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



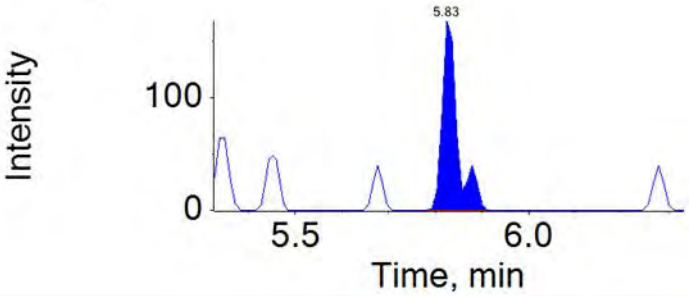
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

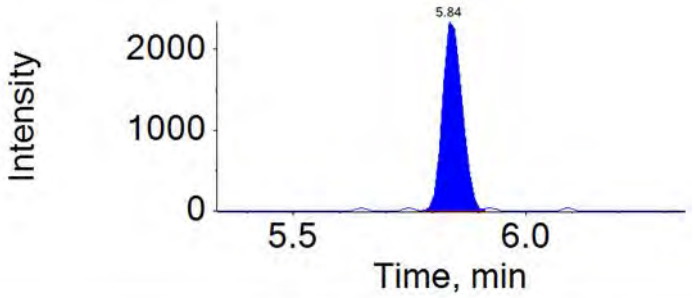
Component: PFUnDA
Primary Mass: 563.0 / 519.0



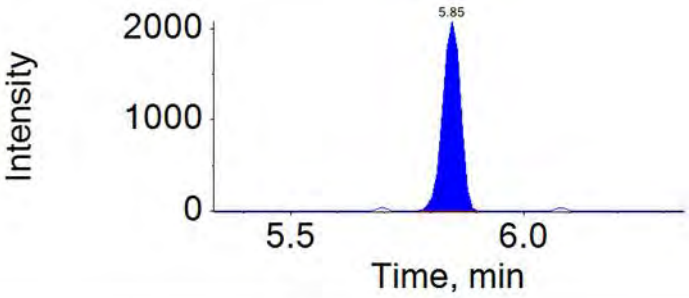
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



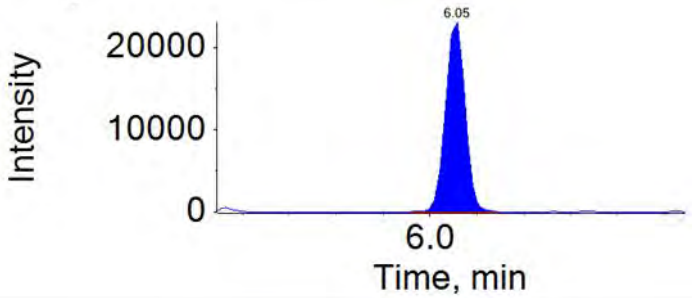
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



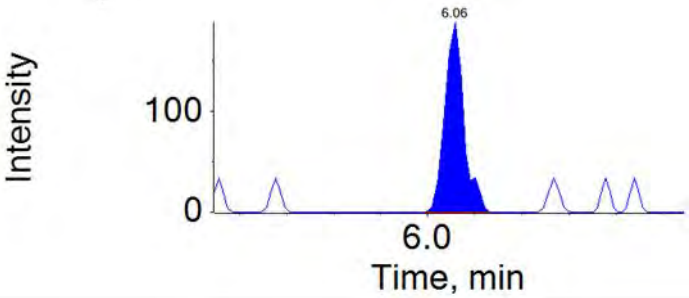
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



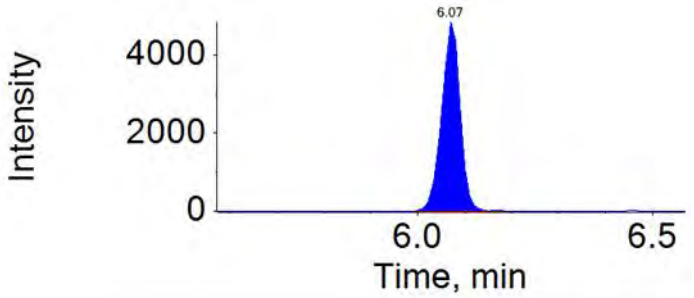
Component: PFDoDA
Primary Mass: 613.0 / 569.0



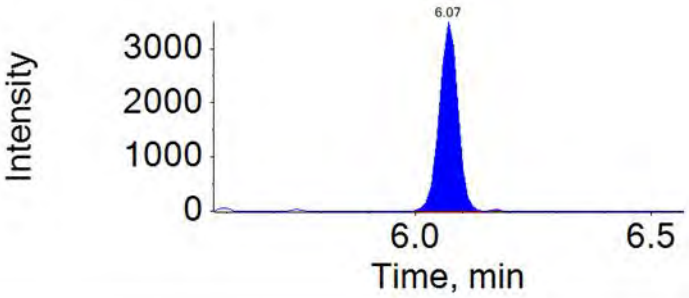
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



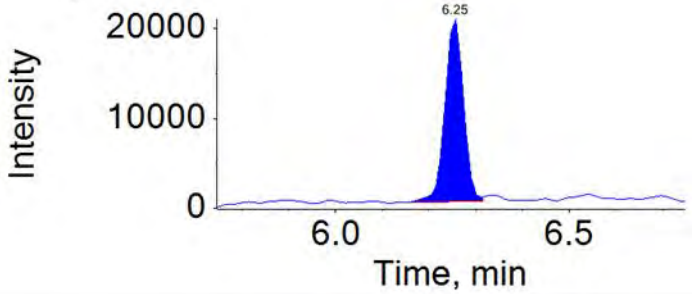
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



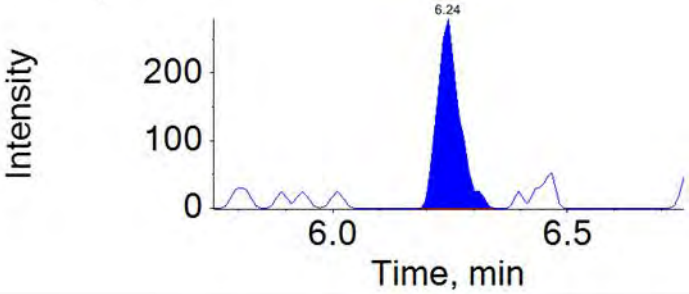
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

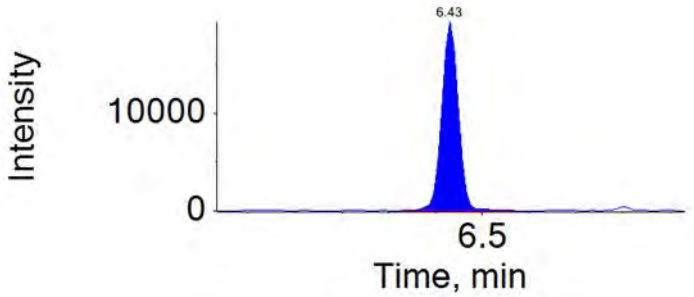
Component: PFTrDA
Primary Mass: 663.0 / 619.0



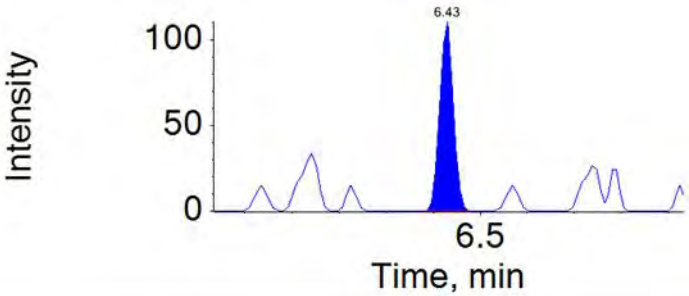
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Secondary Mass: 663.0 / 169.0



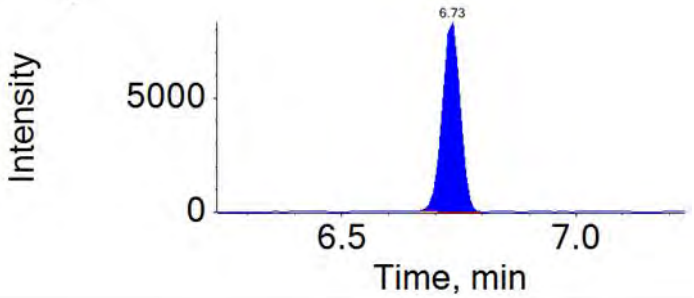
Component: PFTeDA
Primary Mass: 713.0 / 669.0



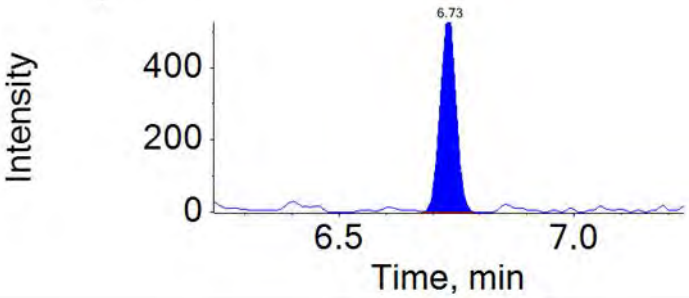
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



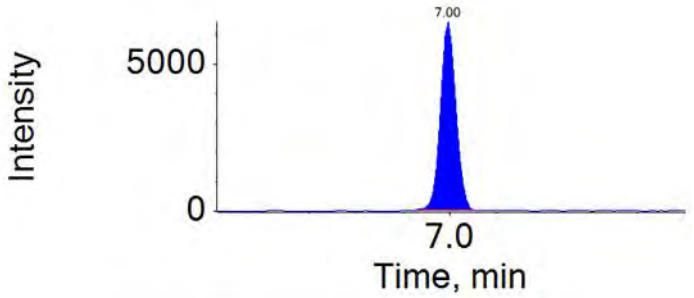
Component: PFHxDA
Primary Mass: 813.0 / 769.0



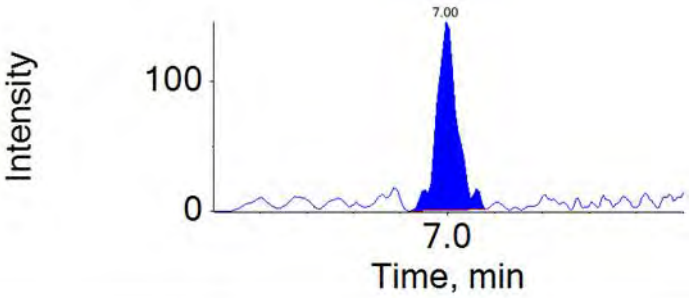
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



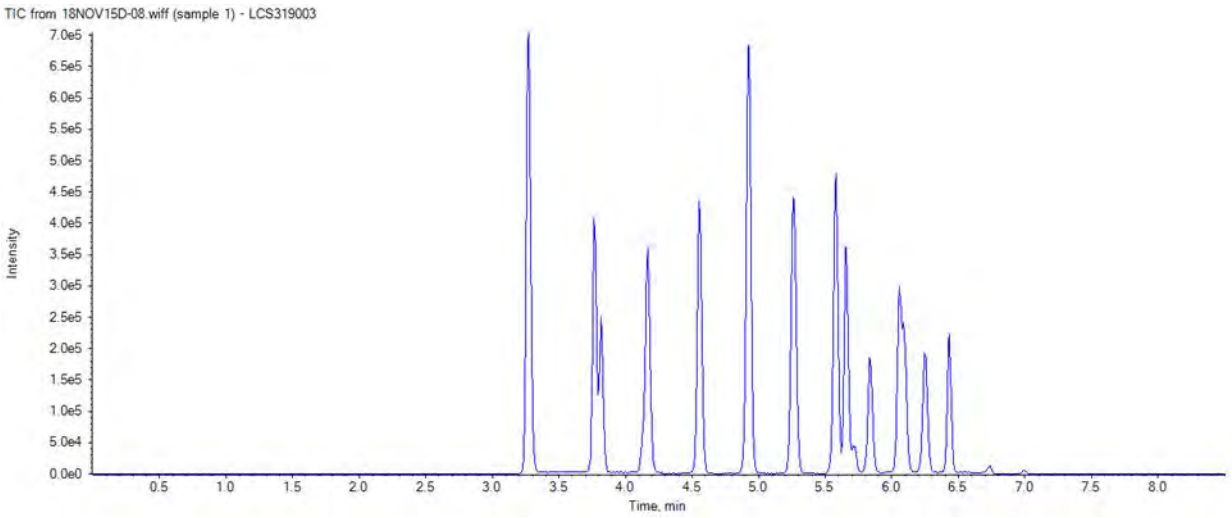
APPROVED
By JPT at 4:13 pm, 11/14/18

REVIEWED
By HMK at 11:33 am, 11/15/18

Lab Control Sample Recovery

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18319003 11/16/2018 11:16:11 AM
Acquisition Method: 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	LCS319003	EPA 537 mod QSM 5.1 table B-15 18319003	18NOV15D-08.wiff	2018-11-15T13:06:11



Injection Standard Area Reference File**:** 18NOV15D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.00	756224.3	732179.1	3	50	
13C2-PFOA	5.00	502285.0	479663.2	5	50	
13C4-PFOS	4.78	282772.9	269685.3	5	50	
13C2-PFDA	5.00	329902.7	302309.9	9	50	

APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

Lab Control Sample Recovery

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	LCS319003	EPA 537 mod QSM 5.1 table B-15 18319003	18NOV15D-08.wiff	2018-11-15T13:06:11

Analyte Name	Analyte Area	Ext Std Area	Area Ratio	Adj Actual Conc	Sample Result	%REC	% REC Limit	%REC OOS
PFBA	97875.0	788006.6	0.124	1.360	1.376	101	70-130	
PFPeA	94816.7	753516.0	0.126	1.360	1.457	107	70-130	
PFBS	53803.5	413205.2	0.130	1.204	1.239	103	70-130	
4:2-FTS	34785.2	56747.2	0.613	3.736	3.329	89	70-130	
PFHxA	115450.6	681052.3	0.170	1.360	1.416	104	70-130	
PFPeS	28041.6	413205.2	0.068	1.276	1.318	103	70-130	
PFHpA	116528.3	534203.2	0.218	1.360	1.446	106	70-130	
PFHxS	40913.0	319083.2	0.128	1.286	1.243	97	70-130	
6:2-FTS	23078.1	42954.7	0.537	3.792	2.600	69	70-130	OOS
PFHpS	38823.1	319083.2	0.122	1.294	1.281	99	70-130	
PFOA	116200.1	913960.0	0.127	1.360	1.358	100	70-130	
PFOS	38126.7	276190.7	0.138	1.300	1.207	93	70-130	
PFNA	95101.2	490105.2	0.194	1.360	1.399	103	70-130	
PFNS	23860.4	276190.7	0.086	1.306	1.209	93	70-130	
PFDA	86587.1	619069.1	0.140	1.360	1.483	109	70-130	
8:2-FTS	25748.7	29681.0	0.868	3.832	4.045	106	70-130	
PFOSA	82146.1	720978.4	0.114	1.360	1.113	82	70-130	
NMeFOSAA	10024.7	93620.3	0.107	1.360	1.210	89	70-130	
PFDS	18153.9	276190.7	0.066	1.310	1.191	91	70-130	
PFUnDA	63237.5	279986.9	0.226	1.360	1.181	87	70-130	
NEtFOSAA	8923.3	66993.9	0.133	1.360	1.396	103	70-130	
PFDoDA	70480.1	564024.4	0.125	1.360	1.273	94	70-130	
10:2-FTS	16623.2	29681.0	0.560	3.856	3.731	97	70-130	
NMePFOSAE	50545.1	356644.7	0.142	1.360	1.180	87	70-130	
NMePFOSA	7949.0	79924.1	0.099	1.360	0.981	72	70-130	
PFDoS	9445.0	276190.7	0.034	1.316	1.198	91	70-130	
NEtPFOSAE	51976.9	296606.9	0.175	1.360	1.124	83	70-130	
NEtPFOSA	8376.7	66129.7	0.127	1.360	1.163	86	70-130	
PFTrDA	57256.2	564024.4	0.102	1.360	1.281	94	70-130	
PFTeDA	47809.8	394599.0	0.121	1.360	1.358	100	70-130	
PFHxDA	20634.2	394599.0	0.052	1.360	1.246	92	70-130	
PFODA	12388.9	394599.0	0.031	1.360	0.875	64	70-130	OOS

APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

Lab Control Sample Recovery

ICAL Name: 18NOV12DCAL
QMethod Name: 18AUG20QM
Result Table: 18319003 11/16/2018 11:16:11 AM
Acquisition Method: 18AUG13_3uL.dam

APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	LCS319003			**Data File:**		18NOV15D-08.wiff
Sample ID:	EPA 537 mod QSM 5.1 table B-15 18319003			**Acquis Date:**		2018-11-15T13:06:11
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	26			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18319003
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV12DCAL
Batch Number:	18319003			**Operator:**		JPT12262
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		2.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV15D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	756224.3	732179.1	3	50	
13C2-PFOA	5.0	502285.0	479663.2	5	50	
13C4-PFOS	4.8	282772.9	269685.3	5	50	
13C2-PFDA	5.0	329902.7	302309.9	9	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	788006.6	13C3-PFBA	756224.3	1.042	10.000	9.344	93	50-150	
E13C5-PFPeA	753516.0	13C3-PFBA	756224.3	0.996	10.000	8.938	89	50-150	
E13C3-PFBS	413205.2	13C3-PFBA	756224.3	0.546	9.300	7.714	83	50-150	
E13C2-4:2-FTS	56747.2	13C2-PFOA	502285.0	0.113	9.340	10.064	108	50-150	
E13C5-PFHxA	681052.3	13C2-PFOA	502285.0	1.356	10.000	9.796	98	50-150	
E13C3-PFHxS	319083.2	13C2-PFOA	502285.0	0.635	9.460	8.718	92	50-150	
E13C4-PFHpA	534203.2	13C2-PFOA	502285.0	1.064	10.000	9.583	96	50-150	
E13C2-6:2-FTS	42954.7	13C2-PFOA	502285.0	0.086	9.500	11.443	120	50-150	
E13C8-PFOA	913960.0	13C2-PFOA	502285.0	1.820	10.000	10.027	100	50-150	
E13C8-PFOS	276190.7	13C4-PFOS	282772.9	0.977	9.560	8.655	91	50-150	
E13C9-PFNA	490105.2	13C4-PFOS	282772.9	1.733	10.000	9.665	97	50-150	
E13C6-PFDA	619069.1	13C2-PFDA	329902.7	1.877	10.000	8.758	88	50-150	
E13C2-8:2-FTS	29681.0	13C2-PFDA	329902.7	0.090	9.580	8.974	94	50-150	
E13C8-PFOSA	720978.4	13C2-PFDA	329902.7	2.185	10.000	9.690	97	50-150	
Ed3-NMeFOSAA	93620.3	13C2-PFDA	329902.7	0.284	10.000	10.245	102	50-150	
E13C7-PFUnDA	279986.9	13C2-PFDA	329902.7	0.849	10.000	9.855	99	50-150	
Ed5-NEtFOSAA	66993.9	13C2-PFDA	329902.7	0.203	10.000	8.593	86	50-150	
E13C2-PFDoDA	564024.4	13C2-PFDA	329902.7	1.710	10.000	8.878	89	50-150	
Ed7-NMePFOSAE	356644.7	13C2-PFDA	329902.7	1.081	10.000	9.356	94	50-150	
Ed3-NMePFOSA	79924.1	13C2-PFDA	329902.7	0.242	10.000	8.803	88	50-150	
Ed9-NEtPFOSAE	296606.9	13C2-PFDA	329902.7	0.899	10.000	9.352	94	50-150	
Ed5-NEtPFOSA	66129.7	13C2-PFDA	329902.7	0.200	10.000	9.404	94	50-150	
E13C2-PFTeDA	394599.0	13C2-PFDA	329902.7	1.196	10.000	8.398	84	50-150	

APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

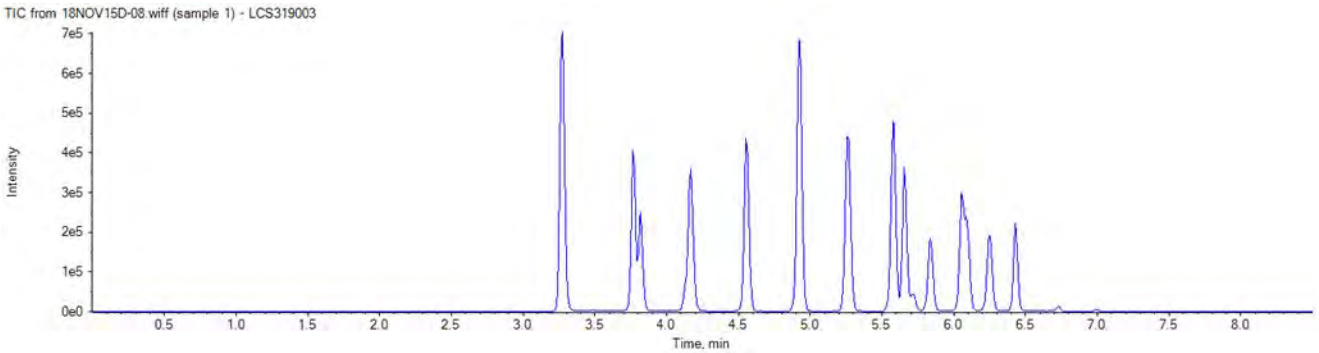
Analyte Quantitation Peak Table

Sample Name: LCS319003 **Instrument Name:** LM27631 **File Name:** 18NOV15D-08.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	2.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	97875.0		A	13C4-PFBA	3.27	788006.6	0.124	1.376
PFPeA	3.77	1.000	94816.7		M	13C5-PFPeA	3.77	753516.0	0.126	1.457
PFBS	3.82	1.000	53803.5		A	13C3-PFBS	3.82	413205.2	0.130	1.239
4:2-FTS	4.13	1.000	34785.2		A	13C2-4:2-FTS	4.13	56747.2	0.613	3.329
PFHxA	4.17	1.000	115450.6		A	13C5-PFHxA	4.17	681052.3	0.170	1.416
PFPeS	4.19	1.100	28041.6		A	13C3-PFBS	3.82	413205.2	0.068	1.318
PFHpA	4.56	1.000	116528.3		A	13C4-PFHpA	4.56	534203.2	0.218	1.446
PFHxS	4.56	1.000	40913.0		A	13C3-PFHxS	4.56	319083.2	0.128	1.243
6:2-FTS	4.91	1.000	23078.1		A	13C2-6:2-FTS	4.91	42954.7	0.537	2.600
PFHpS	4.92	1.080	38823.1		A	13C3-PFHxS	4.56	319083.2	0.122	1.281
PFOA	4.93	1.000	116200.1		A	13C8-PFOA	4.93	913960.0	0.127	1.358
PFOS	5.25	1.000	38126.7		A	13C8-PFOS	5.25	276190.7	0.138	1.207
PFNA	5.27	1.000	95101.2		A	13C9-PFNA	5.27	490105.2	0.194	1.399
PFNS	5.56	1.060	23860.4		A	13C8-PFOS	5.25	276190.7	0.086	1.209
PFDA	5.58	1.000	86587.1		A	13C6-PFDA	5.58	619069.1	0.140	1.483
8:2-FTS	5.58	1.000	25748.7		A	13C2-8:2-FTS	5.58	29681.0	0.868	4.045
PFOSA	5.66	1.000	82146.1		A	13C8-PFOSA	5.66	720978.4	0.114	1.113
NMeFOSAA	5.72	1.000	10024.7		A	d3-NMeFOSAA	5.72	93620.3	0.107	1.210
PFDS	5.81	1.110	18153.9		A	13C8-PFOS	5.25	276190.7	0.066	1.191
PFUnDA	5.84	1.000	63237.5		A	13C7-PFUnDA	5.84	279986.9	0.226	1.181
NEtFOSAA	5.85	1.000	8923.3		A	d5-NEtFOSAA	5.85	66993.9	0.133	1.396
PFDoDA	6.06	1.000	70480.1		A	13C2-PFDoDA	6.06	564024.4	0.125	1.273
10:2-FTS	6.07	1.090	16623.2		A	13C2-8:2-FTS	5.58	29681.0	0.560	3.731
NMePFOSAE	6.10	1.000	50545.1		A	d7-NMePFOSAE	6.09	356644.7	0.142	1.180
NMePFOSA	6.11	1.000	7949.0		M	d3-NMePFOSA	6.10	79924.1	0.099	0.981
PFDoS	6.23	1.190	9445.0		A	13C8-PFOS	5.25	276190.7	0.034	1.198
NEtPFOSAE	6.26	1.000	51976.9		A	d9-NEtPFOSAE	6.25	296606.9	0.175	1.124
NEtPFOSA	6.27	1.000	8376.7		M	d5-NEtPFOSA	6.26	66129.7	0.127	1.163
PFTrDA	6.25	1.030	57256.2		A	13C2-PFDoDA	6.06	564024.4	0.102	1.281
PFTeDA	6.43	1.000	47809.8		A	13C2-PFTeDA	6.43	394599.0	0.121	1.358
PFHxDA	6.73	1.050	20634.2		A	13C2-PFTeDA	6.43	394599.0	0.052	1.246
PFODA	6.99	1.090	12388.9		A	13C2-PFTeDA	6.43	394599.0	0.031	0.875

Total Ion Chromatogram

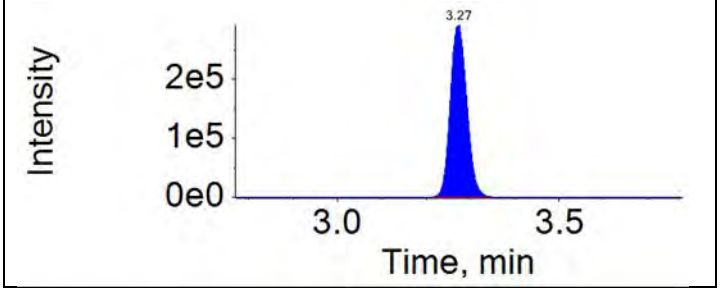


APPROVED
By JPT at 3:32 pm, 11/16/18

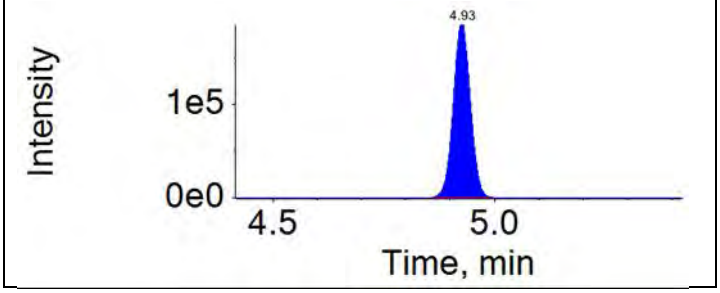
REVIEWED
By HMK at 9:05 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

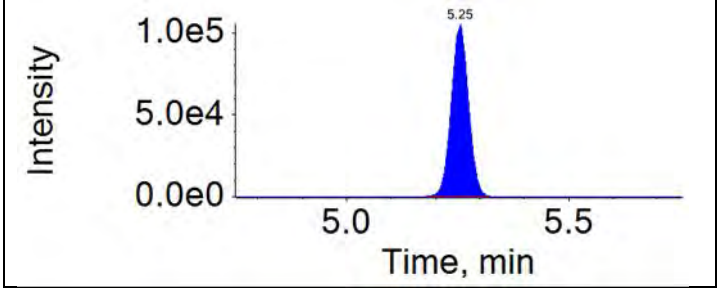
Injection Standard: 13C3-PFBA
216.0 / 172.0



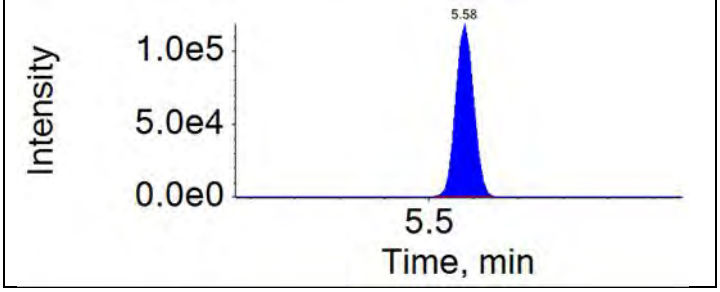
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

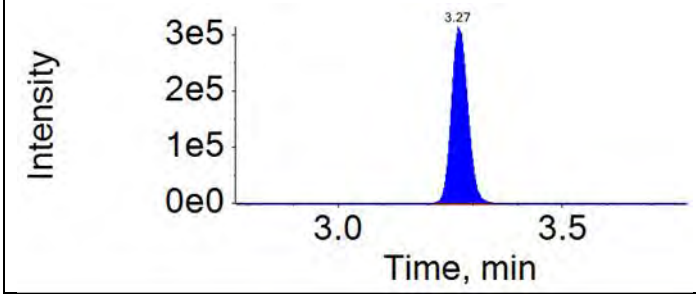


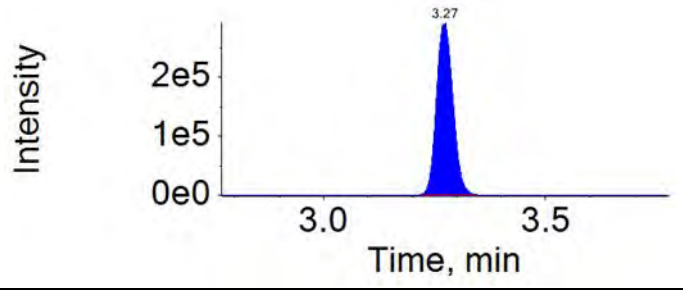
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

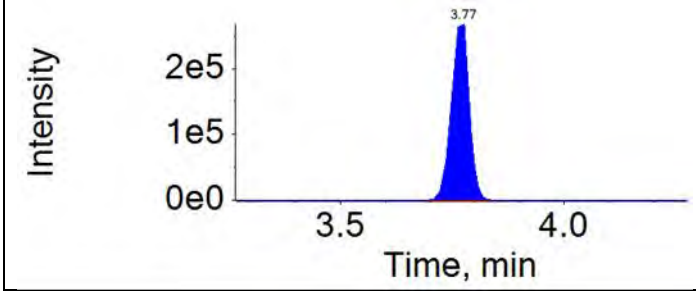
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

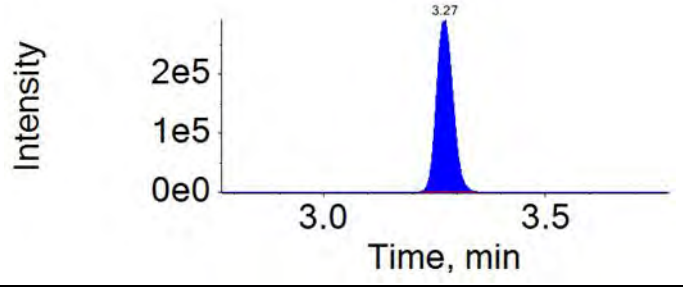
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



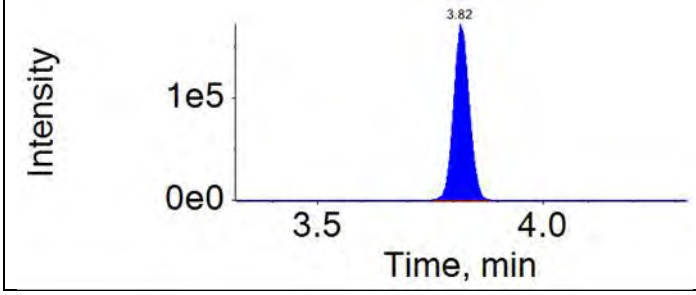


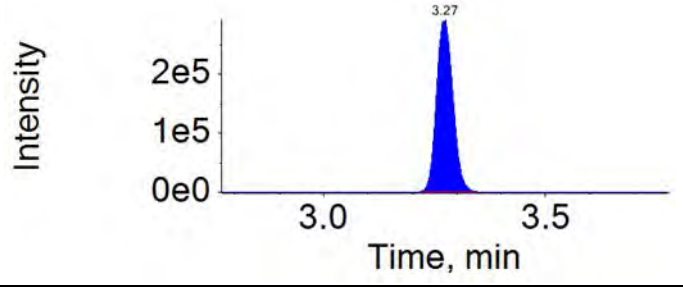
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



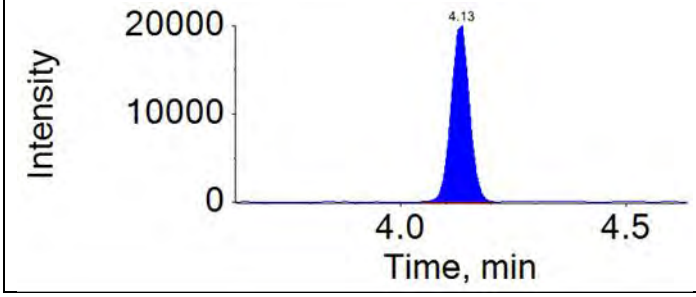


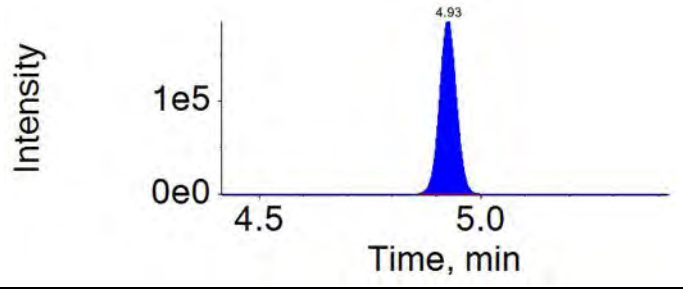
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



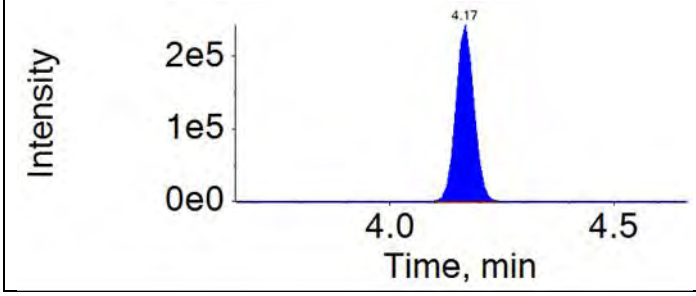


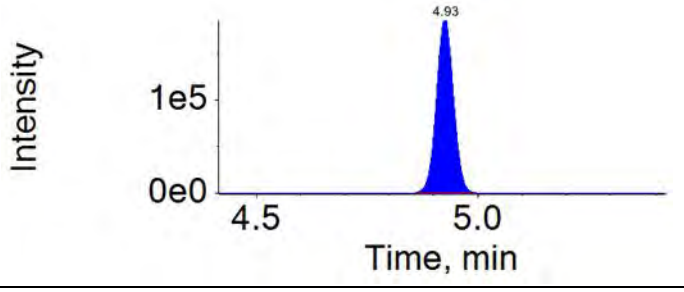
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

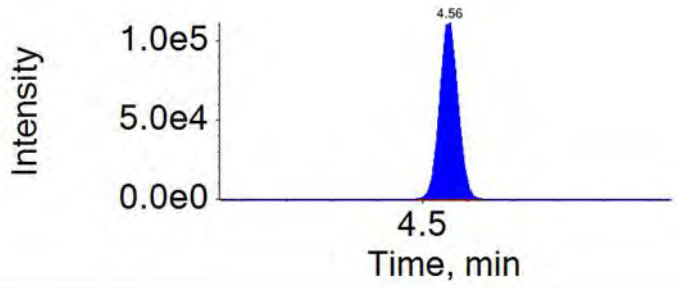
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

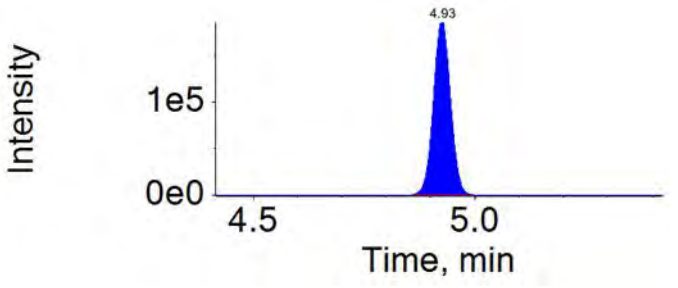
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



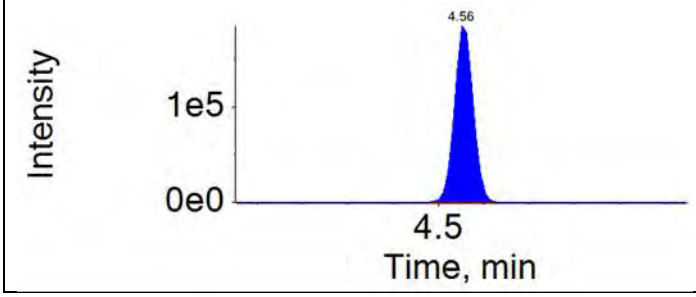


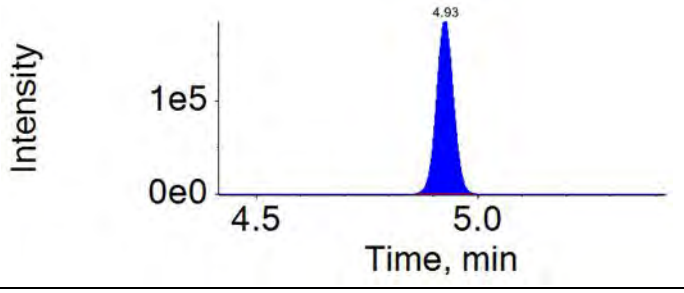
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



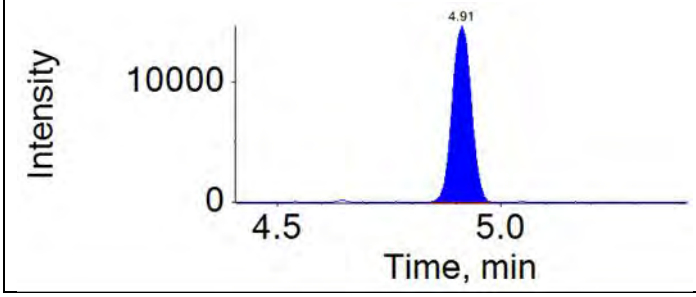


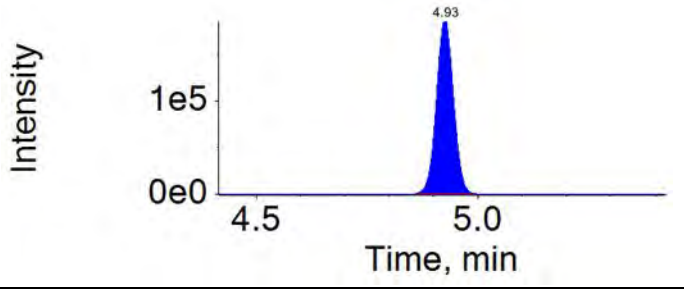
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

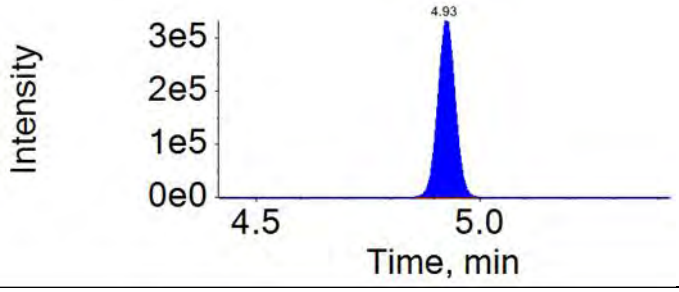
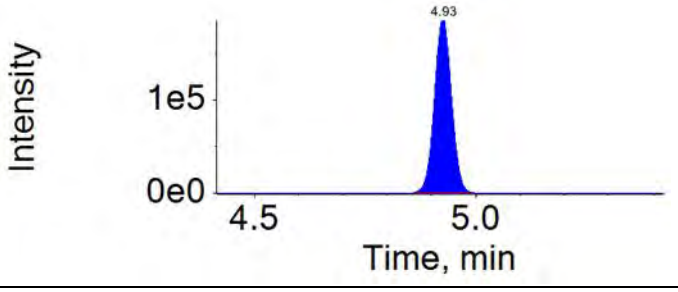


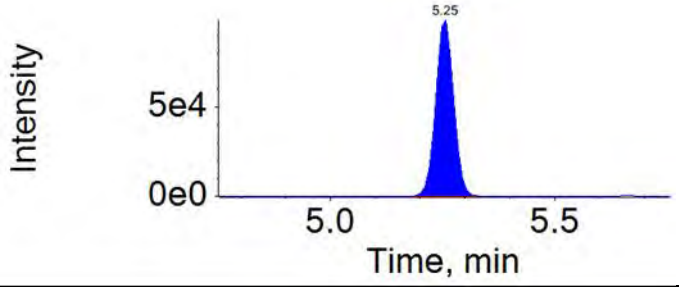
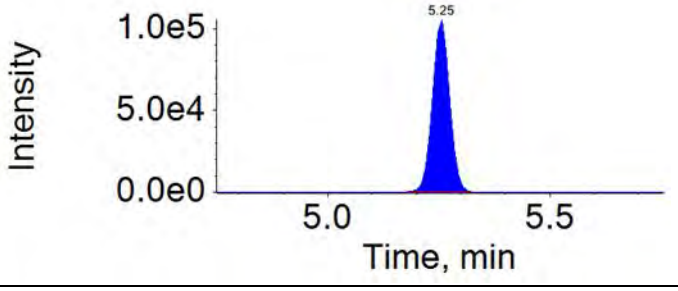


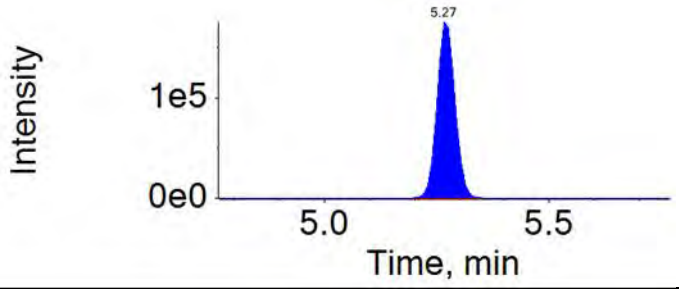
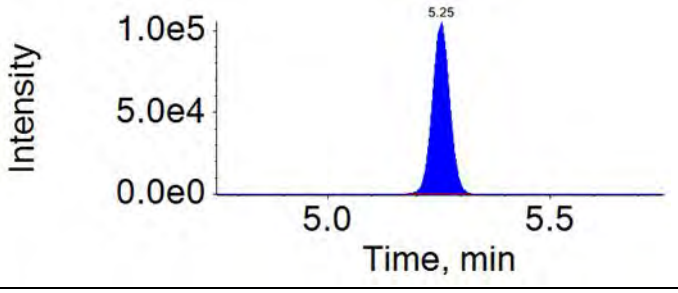
APPROVED
By JPT at 3:32 pm, 11/16/18

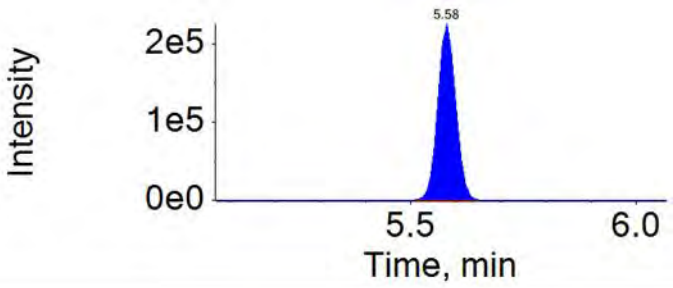
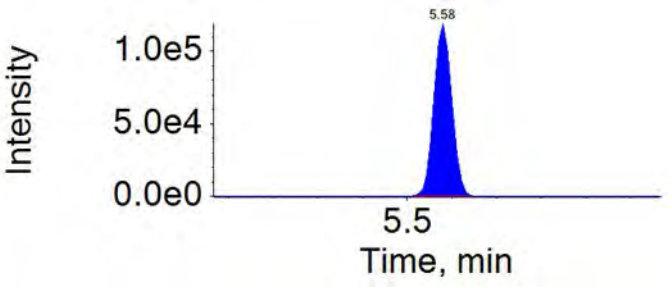
REVIEWED
By HMK at 9:05 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

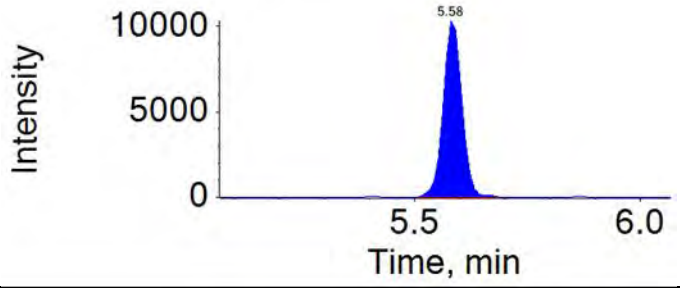
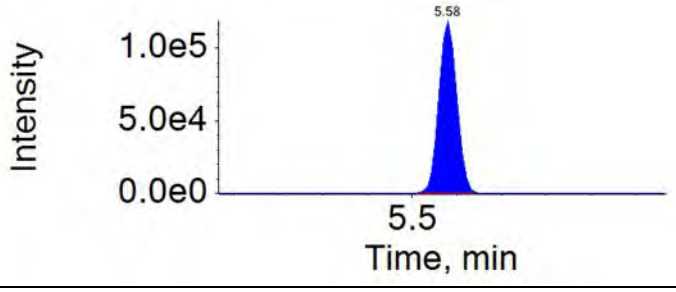
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

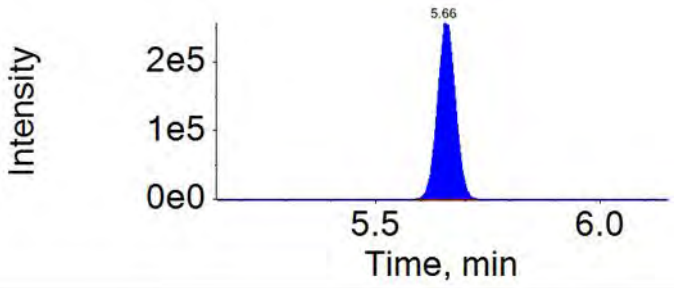
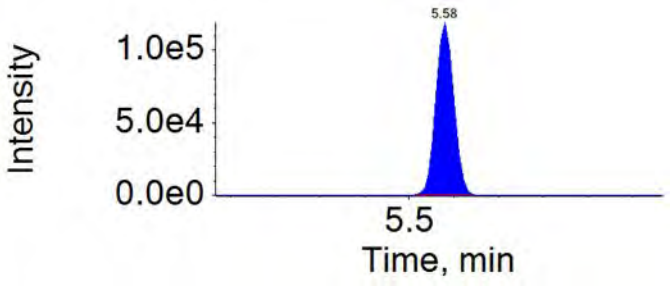
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

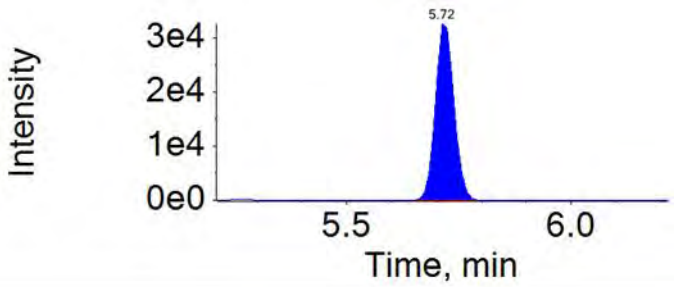
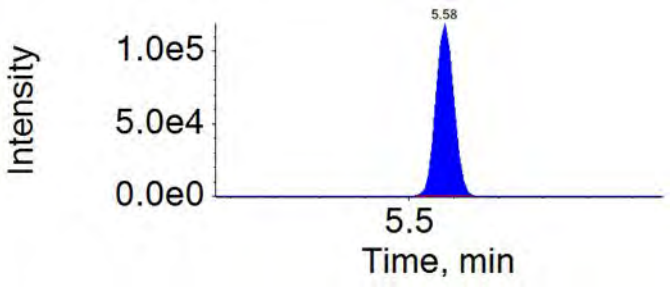
APPROVED
By JPT at 3:32 pm, 11/16/18

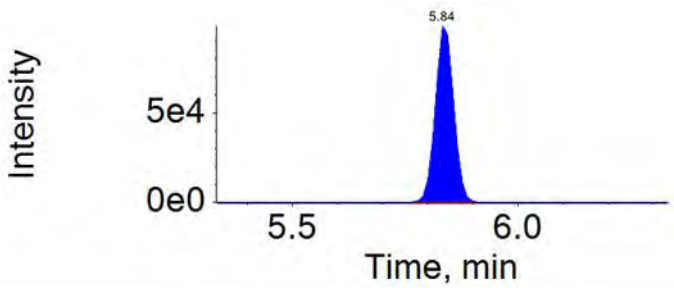
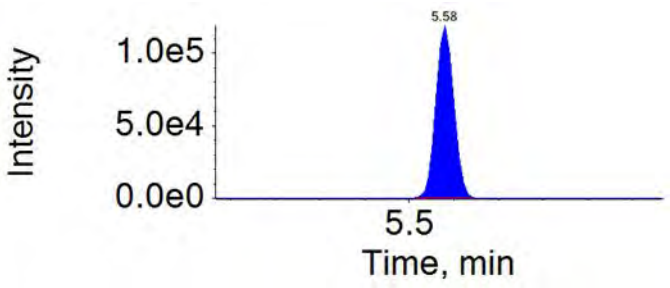
REVIEWED
By HMK at 9:05 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

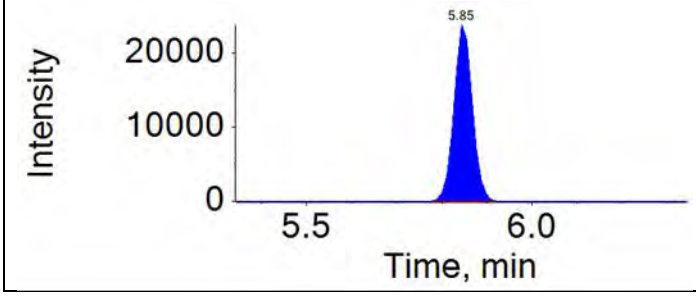
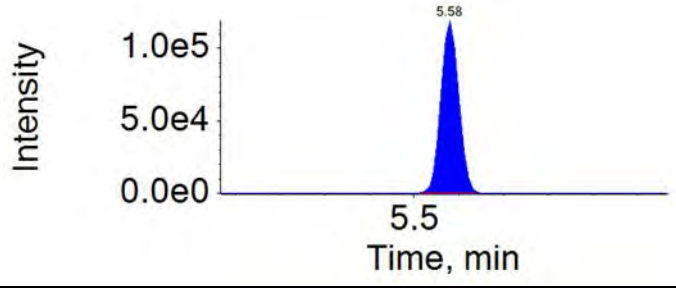
Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

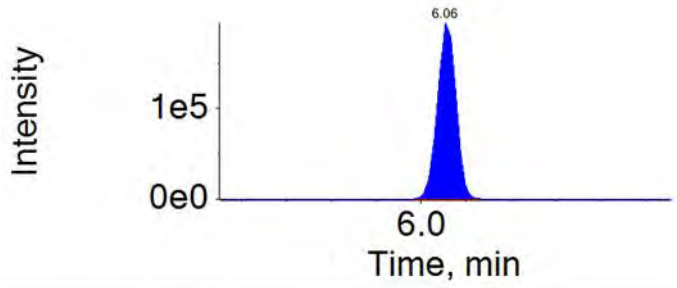
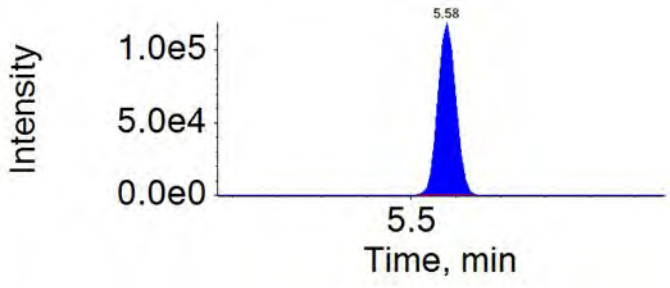
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

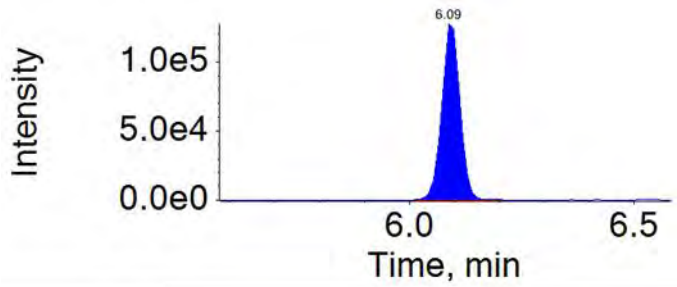
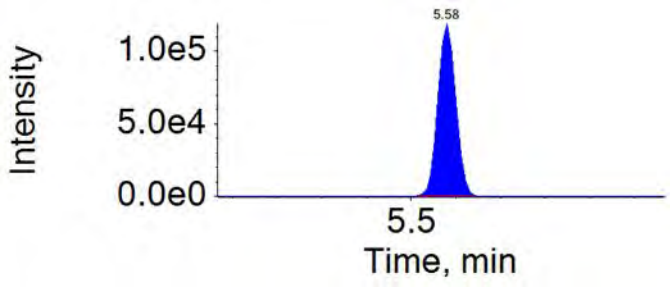
APPROVED
By JPT at 3:32 pm, 11/16/18

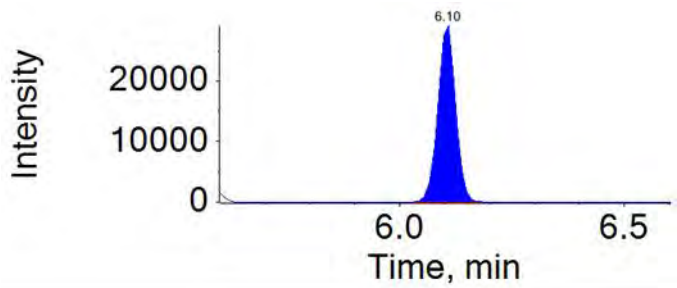
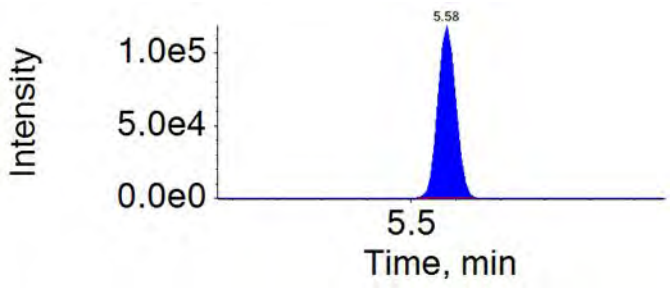
REVIEWED
By HMK at 9:05 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0
	

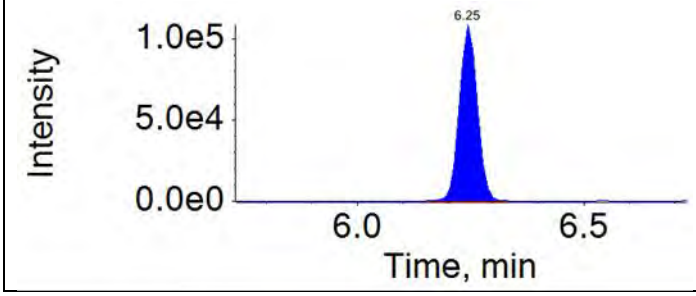
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0
	

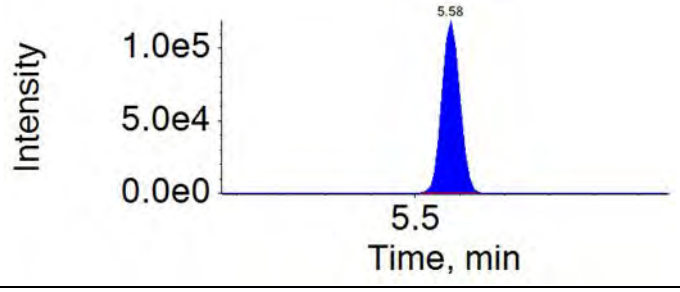
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0
	

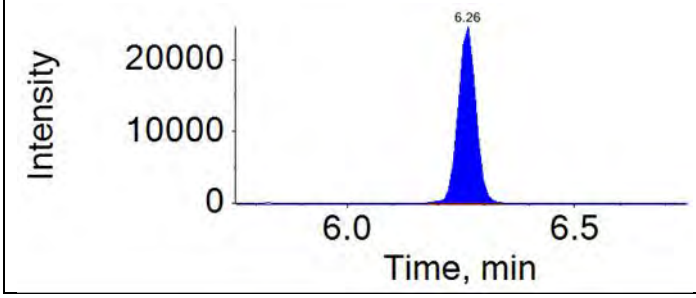
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

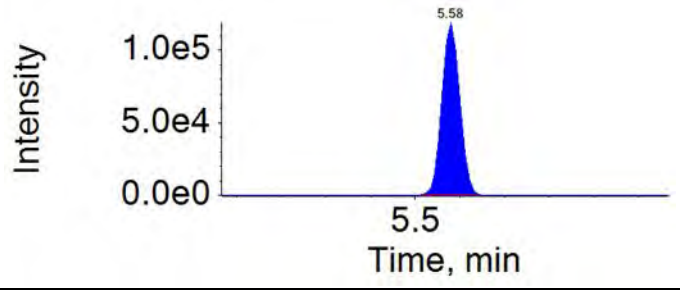
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



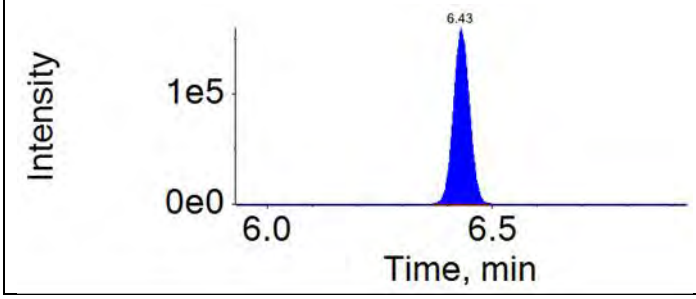


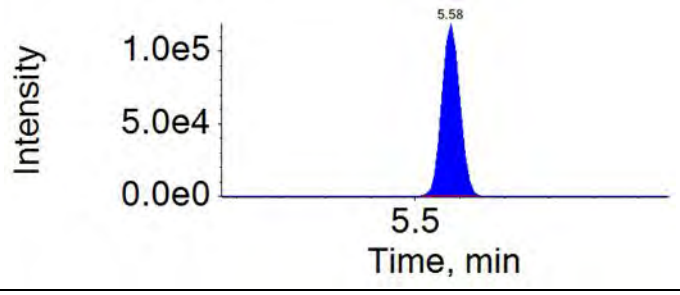
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0



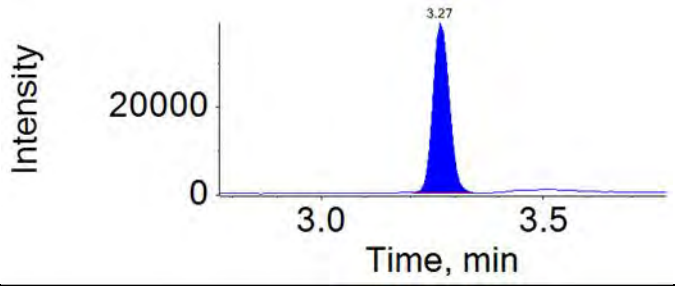


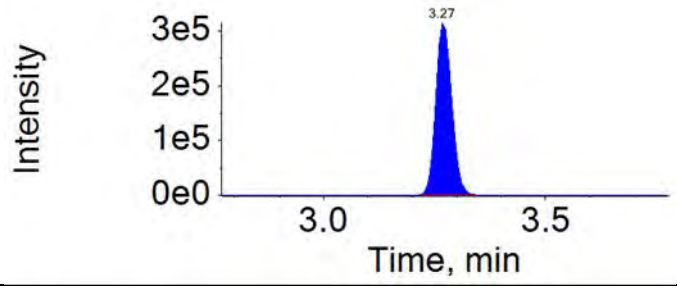
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

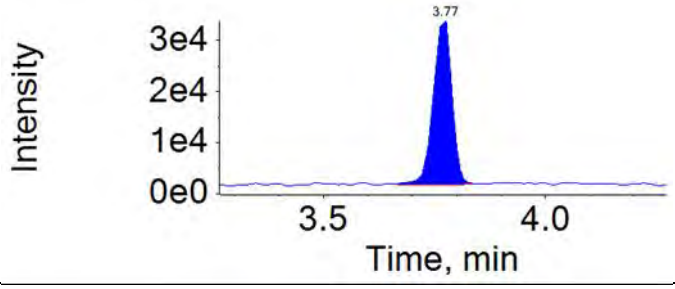
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

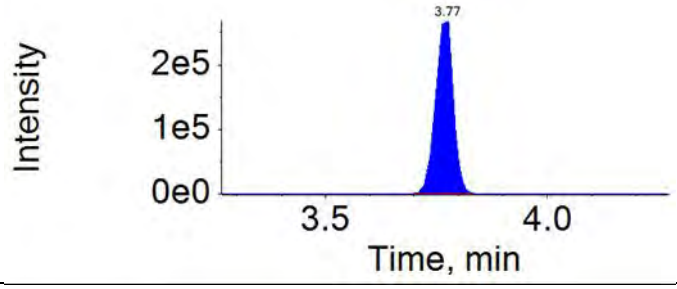
Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0



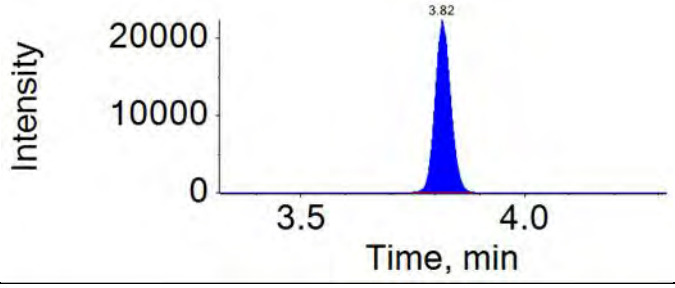


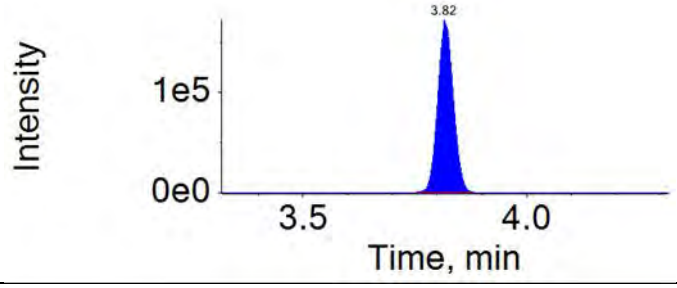
Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0



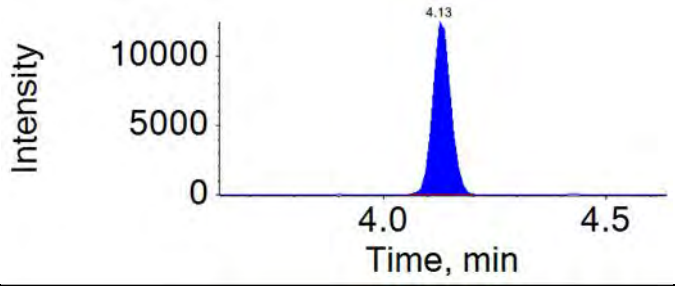


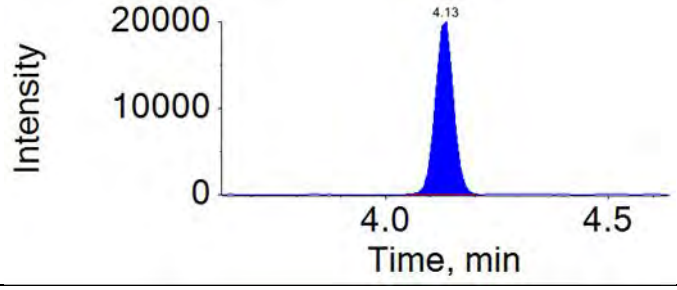
Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0





Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0



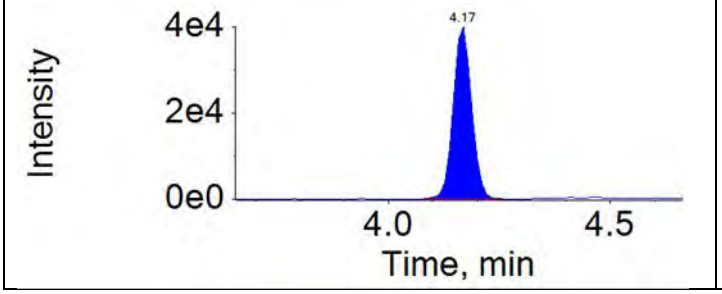


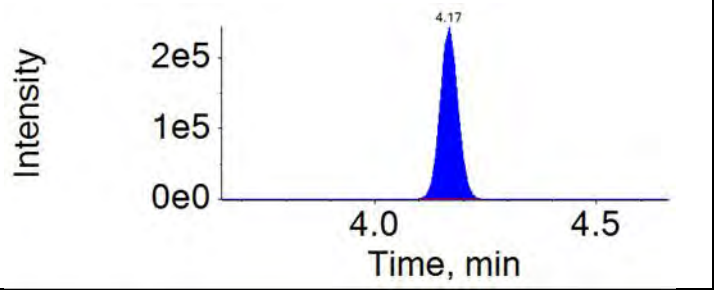
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

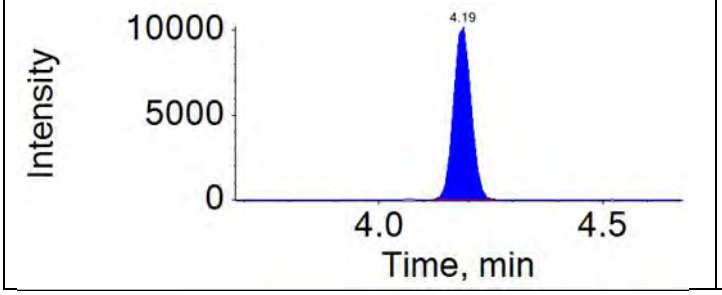
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

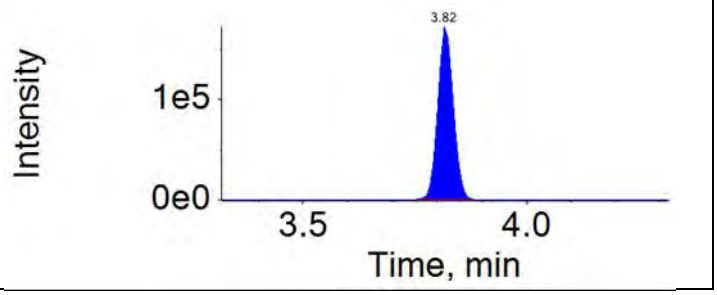
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



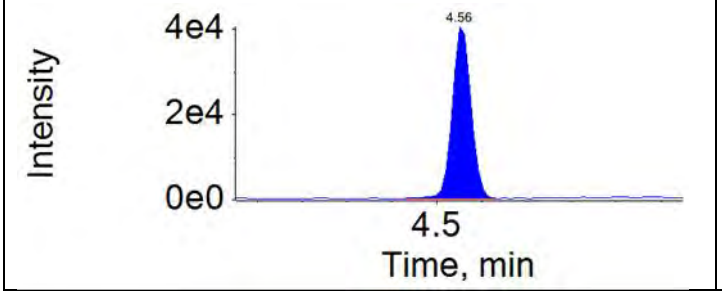


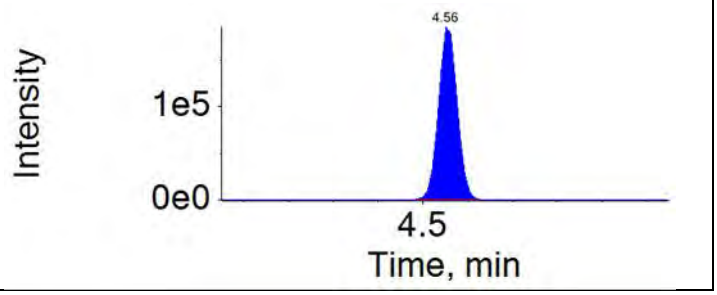
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



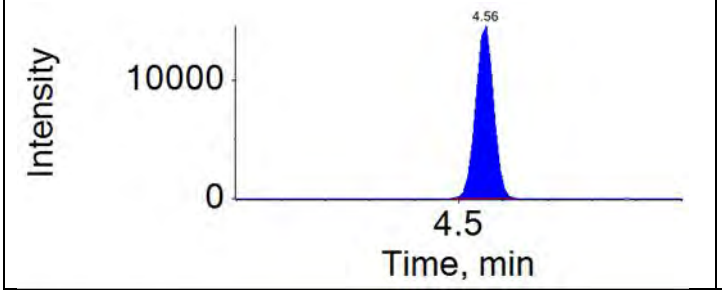


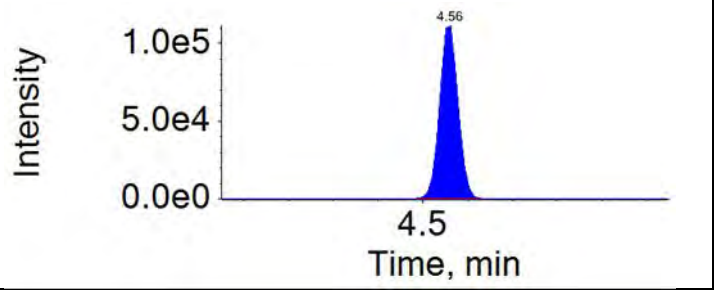
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0



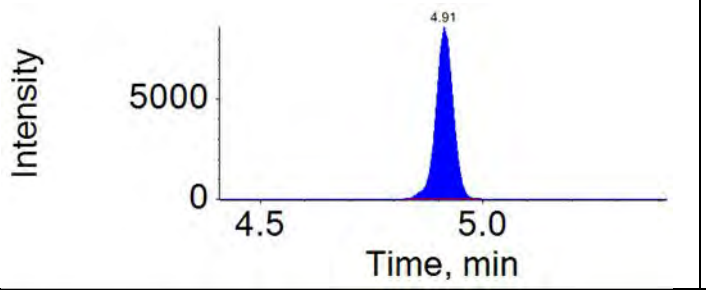


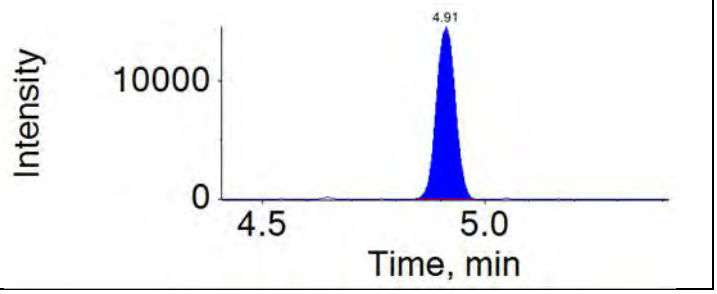
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

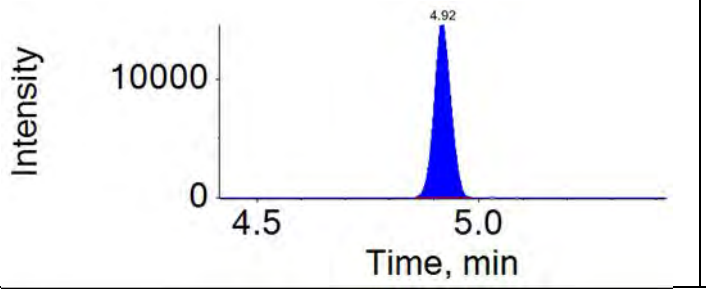
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

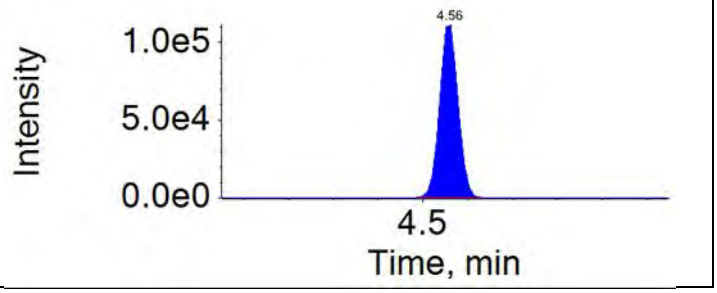
Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0



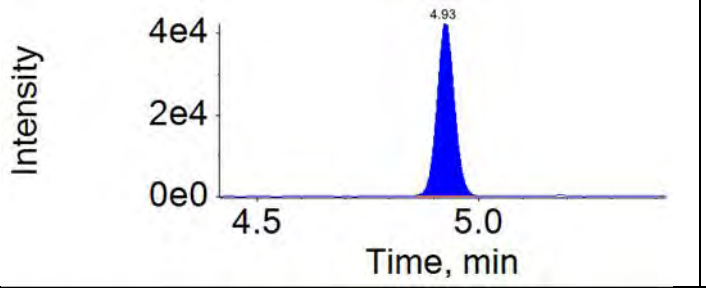


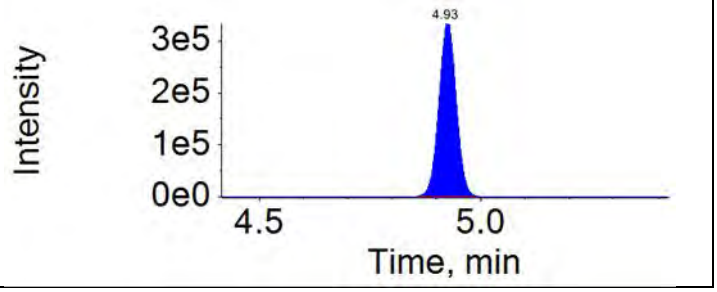
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0



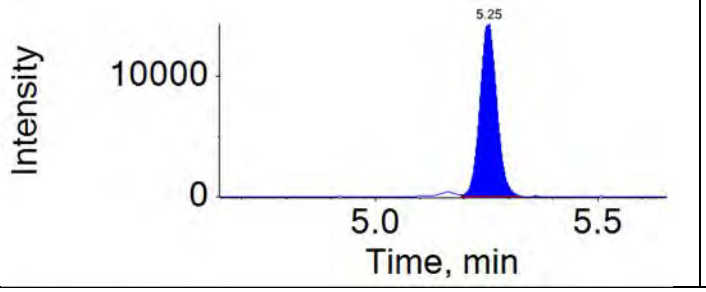


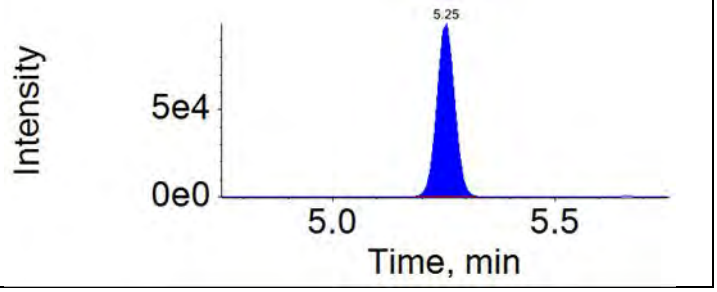
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0





Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0



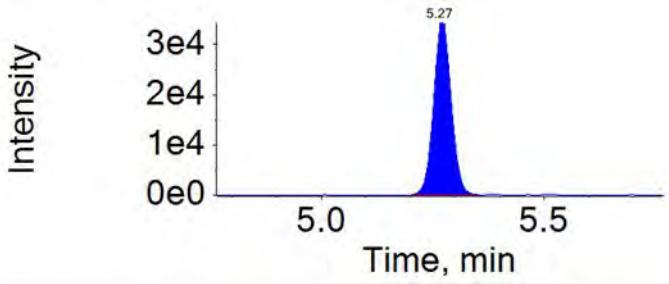


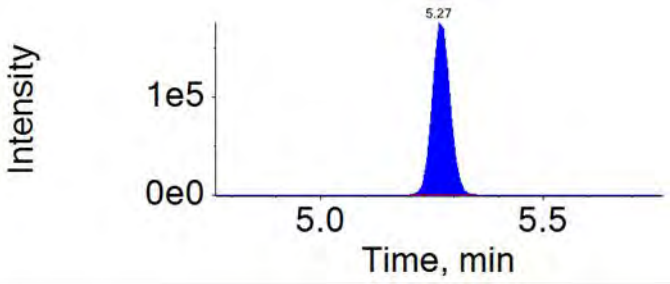
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

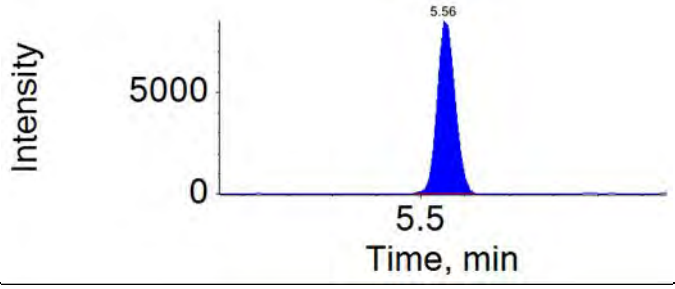
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

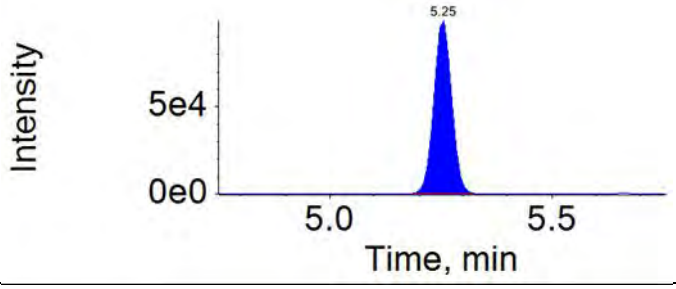
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



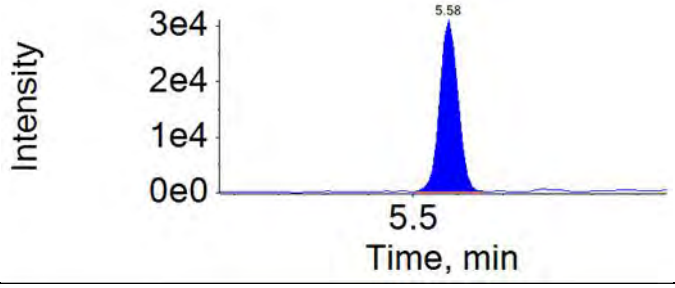


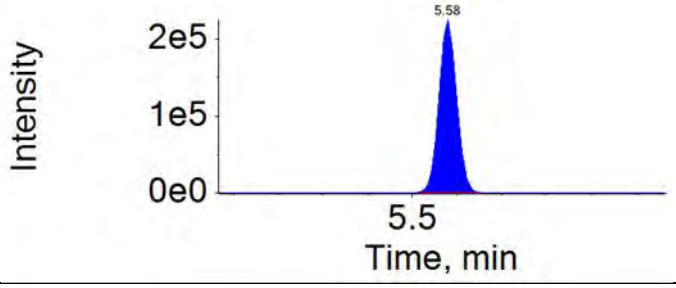
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



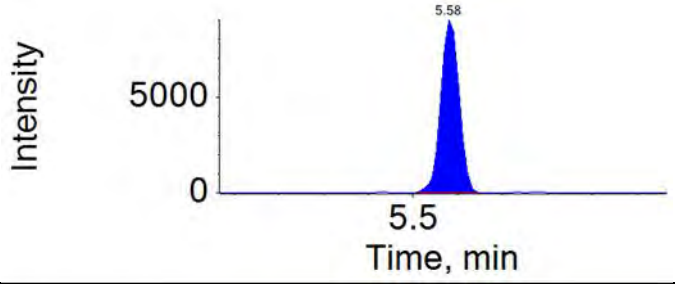


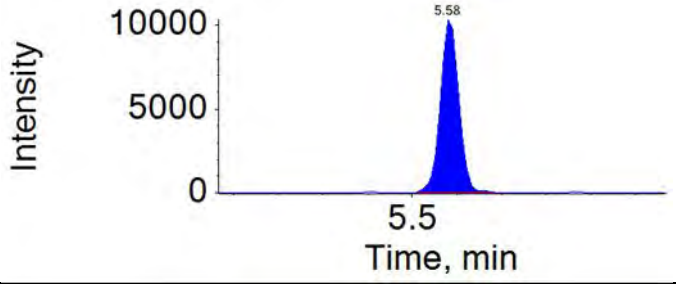
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0



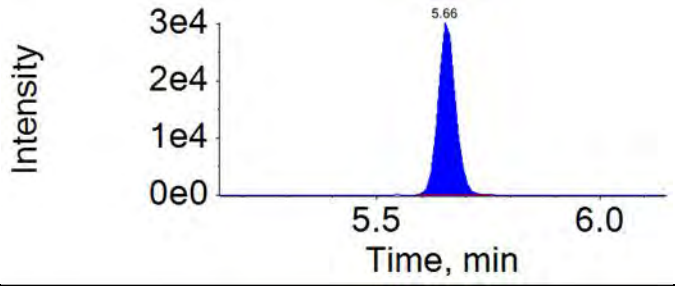


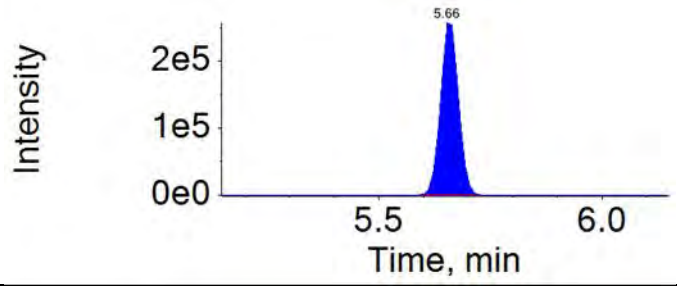
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

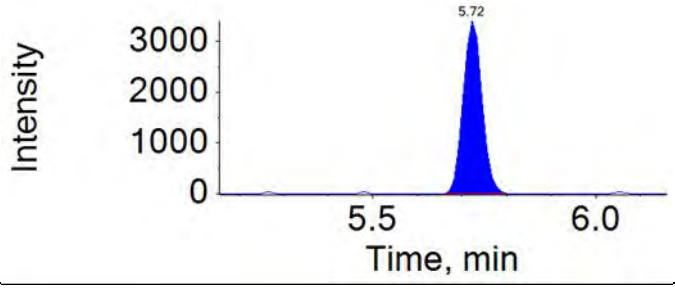
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

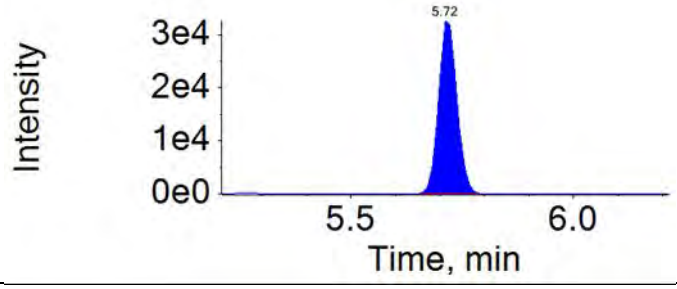
Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0



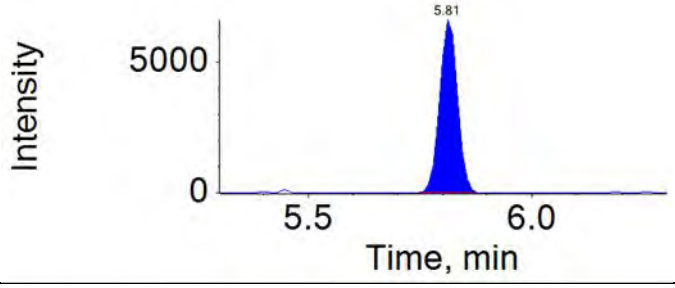


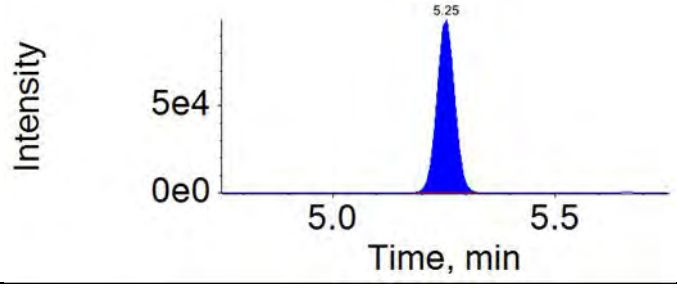
Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0



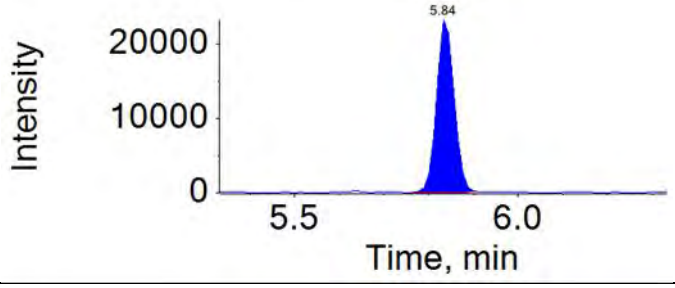


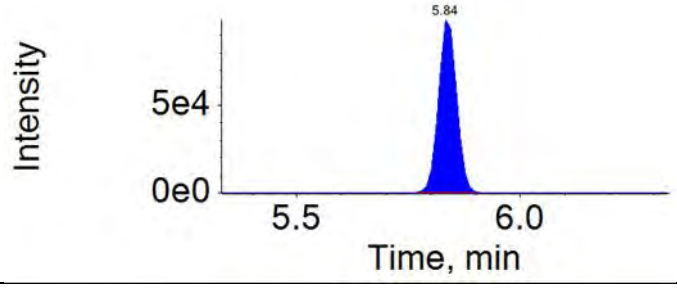
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0





Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0



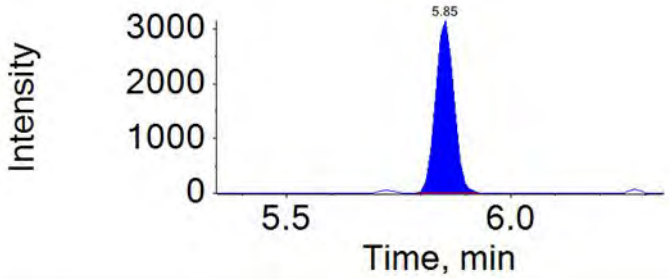


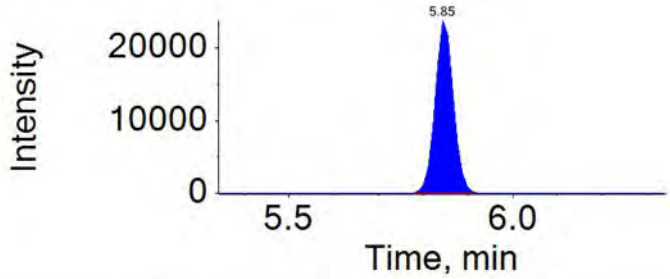
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

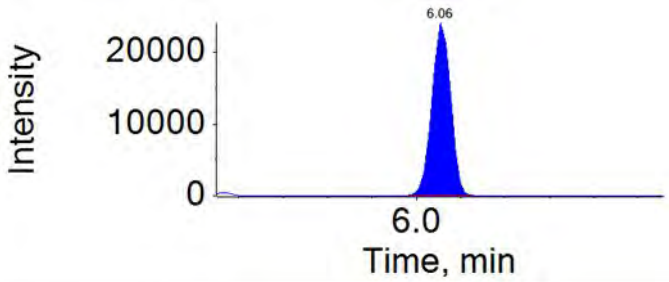
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

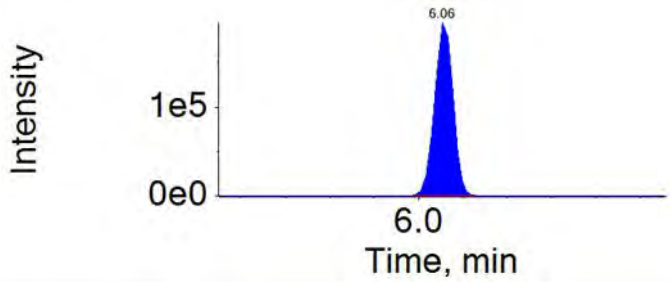
Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0



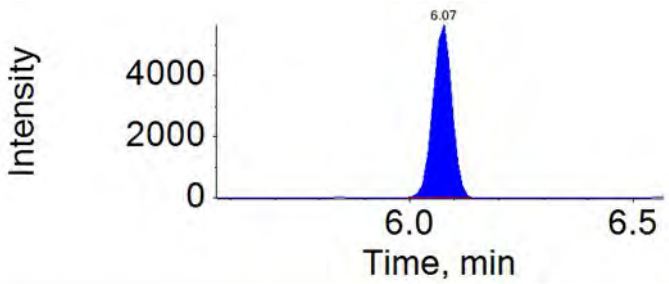


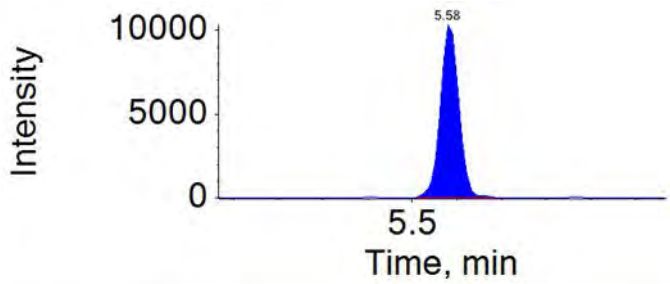
Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0



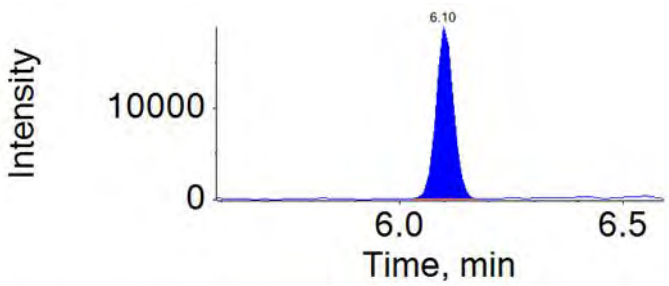


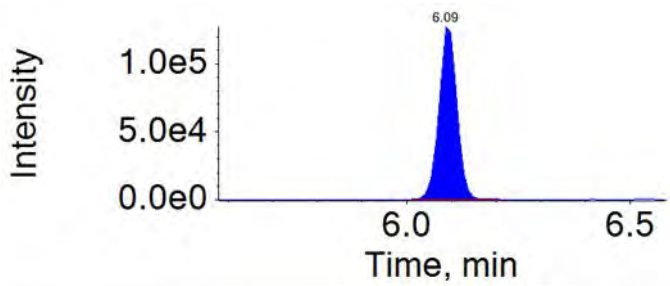
Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0





Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0



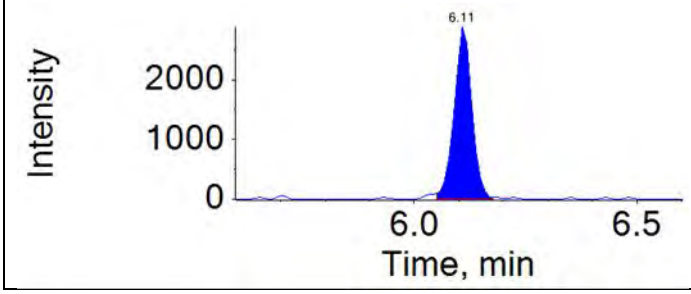


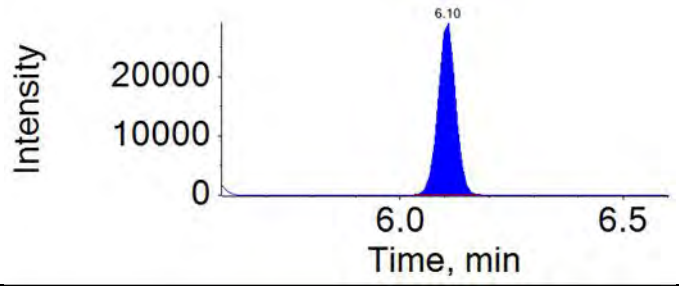
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

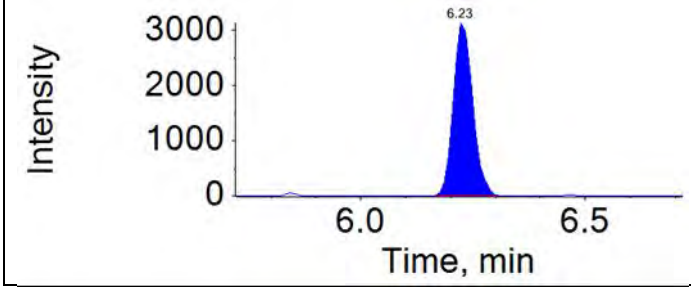
ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

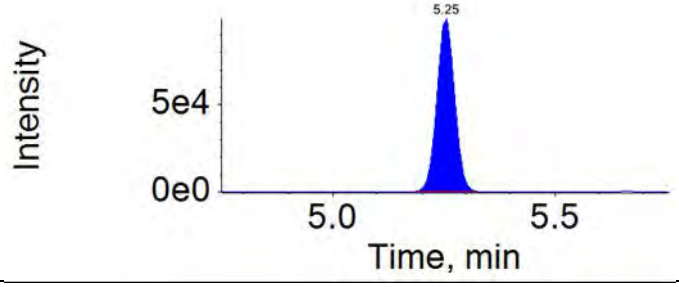
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



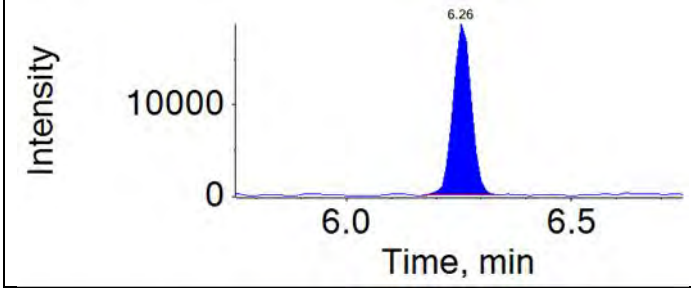


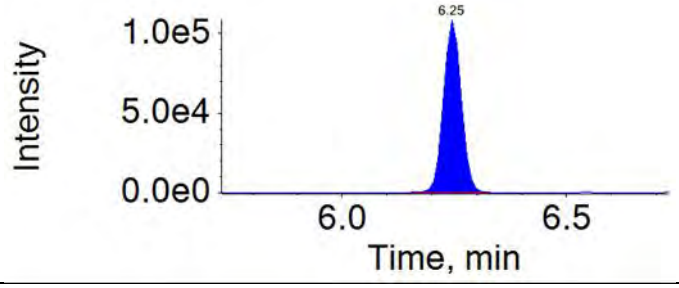
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



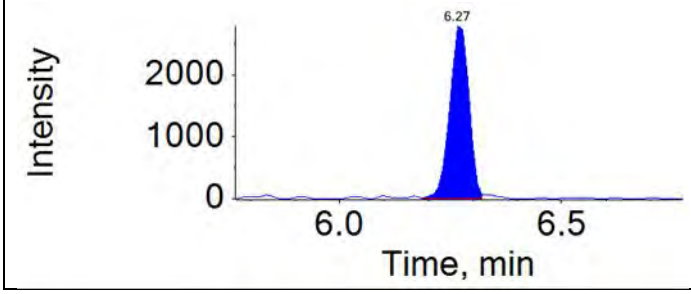


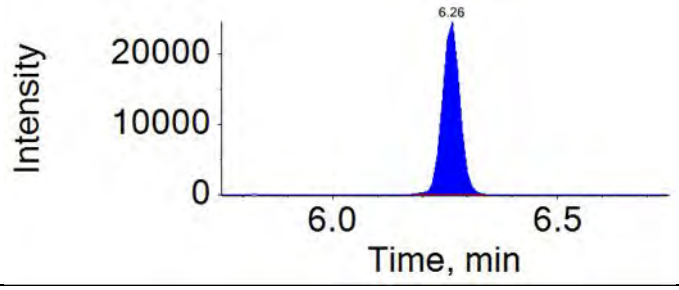
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

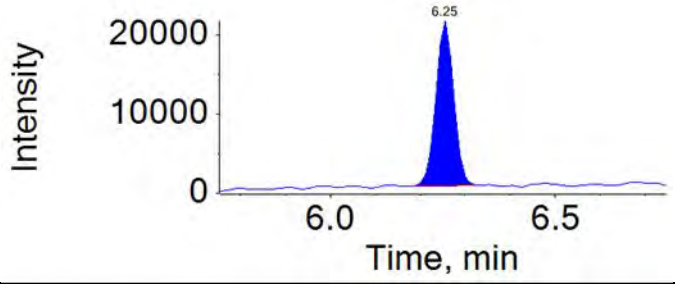
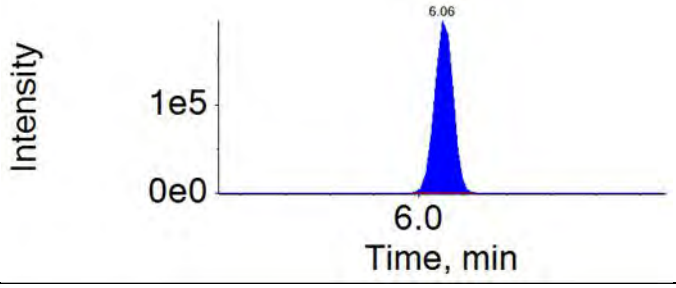


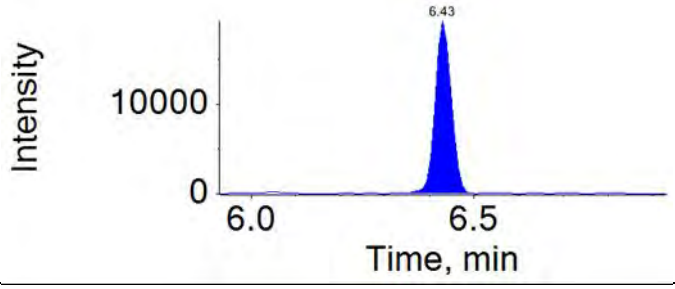
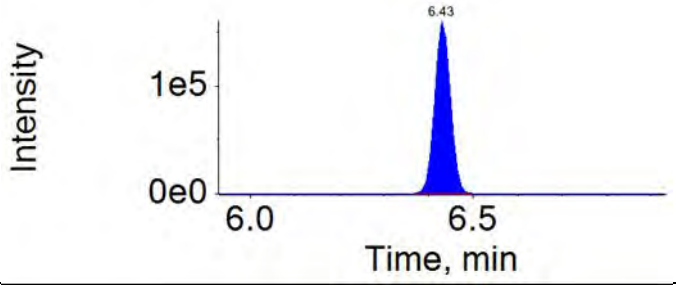


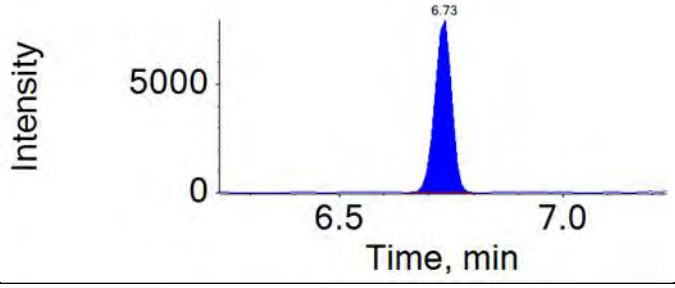
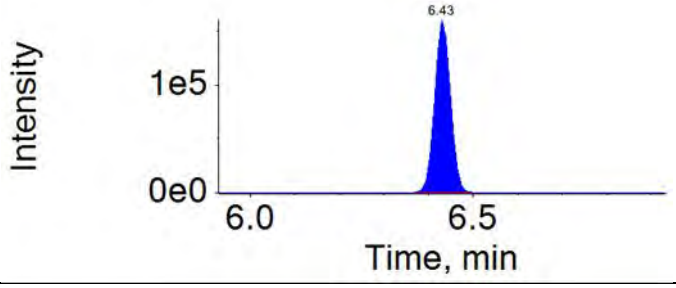
APPROVED
By JPT at 3:32 pm, 11/16/18

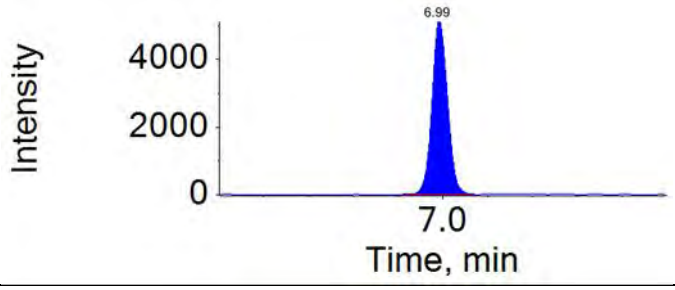
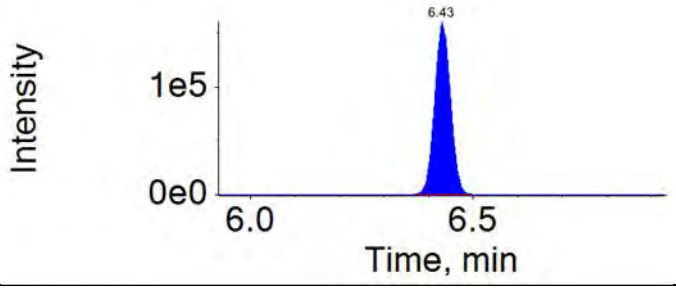
REVIEWED
By HMK at 9:05 am, 11/19/18

ICAL Name: 18NOV12DCAL **Result Table:** 18319003 11/16/2018 11:16:11 AM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

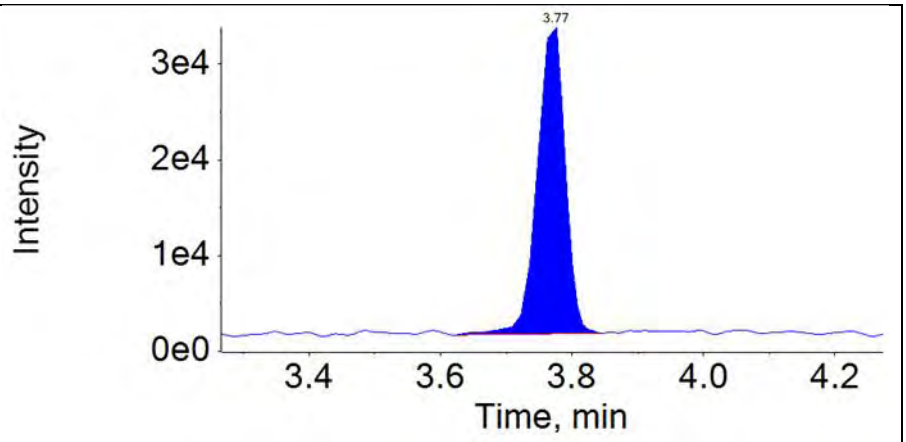
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

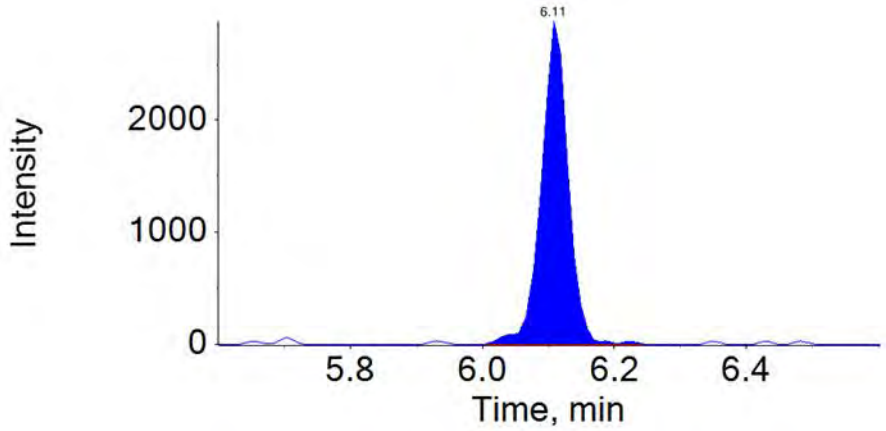
Results Table Name: 18319003
Results Table Date: 11/16/2018 3:25:03 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFPeA
RT (min.):
3.77
Peak Area:
95187.2
Mass Range:
263.0 / 219.0
File Name:
18NOV15D-08.wiff
Sample Name:
LCS319003



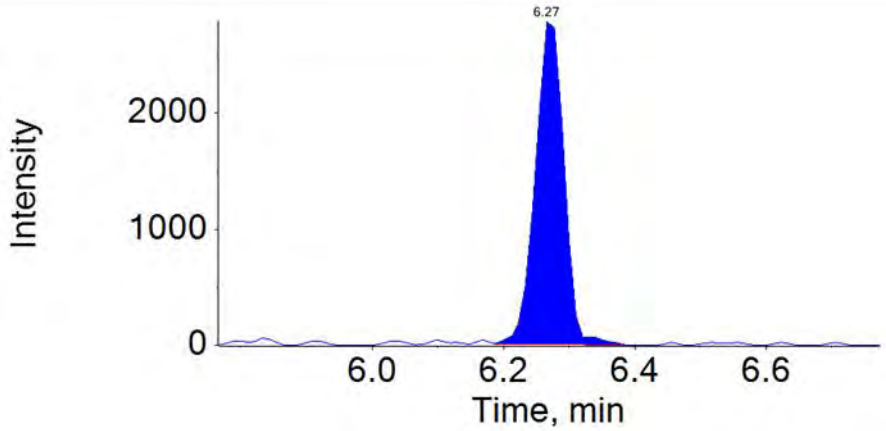
Integration Comment: incorrect integration

Component Name:
NMePFOSA
RT (min.):
6.11
Peak Area:
8201.5
Mass Range:
512.0 / 169.0
File Name:
18NOV15D-08.wiff
Sample Name:
LCS319003



Integration Comment: incorrect integration

Component Name:
NEtPFOSA
RT (min.):
6.27
Peak Area:
8482.5
Mass Range:
526.0 / 169.0
File Name:
18NOV15D-08.wiff
Sample Name:
LCS319003



Integration Comment: incorrect integration

APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

Results Table Name: 18319003
Results Table Date: 11/16/2018 3:25:03 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

Ion Ratio Report

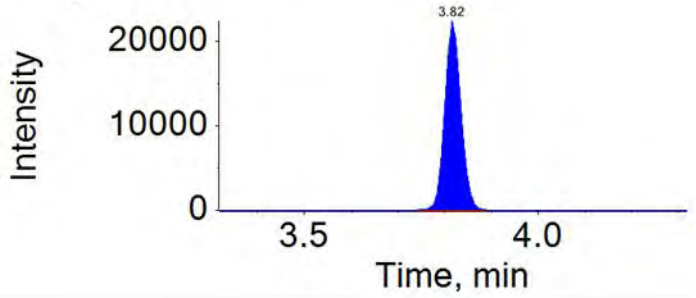
Sample Name: LCS319003 **Instrument Name:** LM27631 **File Name:** 18NOV15D-08.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.82	1.00	53803.5	A	N/A	1.0000			
PFBS_2	3.82	1.00	19363.3	A	N/A	0.3599	-1	50	
4:2-FTS	4.13	1.00	34785.2	A	N/A	1.0000			
4:2 FTS_2	4.13	1.00	23678.5	A	N/A	0.6807		#NA!	
PFHxA	4.17	1.00	115450.6	A	N/A	1.0000			
PFHxA_2	4.17	1.00	1074.1	A	N/A	0.0093	-21	50	
PFPeS	4.19	1.10	28041.6	A	N/A	1.0000			
PFPeS_2	4.19	1.10	13855.5	A	N/A	0.4941	-5	50	
PFHpA	4.56	1.00	116528.3	A	N/A	1.0000			
PFHpA_2	4.55	1.00	5194.4	A	N/A	0.0446	-21	50	
PFHxS	4.56	1.00	40913.0	A	N/A	1.0000			
PFHxS_2	4.56	1.00	14829.9	A	N/A	0.3625	5	50	
6:2-FTS	4.91	1.00	23078.1	A	N/A	1.0000			
6:2 FTS_2	4.91	1.00	15608.5	A	N/A	0.6763		#NA!	
PFHpS	4.92	1.08	38823.1	A	N/A	1.0000			
PFHpS_2	4.91	1.08	17913.2	A	N/A	0.4614	13	50	
PFOA	4.93	1.00	116200.1	A	N/A	1.0000			
PFOA_2	4.92	1.00	6524.2	A	N/A	0.0561	-1	50	
PFOS	5.25	1.00	38126.7	A	N/A	1.0000			
PFOS_2	5.25	1.00	12747.5	A	N/A	0.3343	13	50	
PFNA	5.27	1.00	95101.2	A	N/A	1.0000			
PFNA_2	5.27	1.00	1914.9	A	N/A	0.0201	-11	50	
PFNS	5.56	1.06	23860.4	A	N/A	1.0000			
PFNS_2	5.56	1.06	11783.1	A	N/A	0.4938	4	50	
PFDA	5.58	1.00	86587.1	A	N/A	1.0000			
PFDA_2	5.58	1.00	231.4	A	N/A	0.0027	-66	50	OOS
8:2-FTS	5.58	1.00	25748.7	A	N/A	1.0000			
8:2 FTS_2	5.58	1.00	11850.3	A	N/A	0.4602		#NA!	
NMeFOSAA	5.72	1.00	10024.7	A	N/A	1.0000			
NMeFOSAA_2	5.72	1.00	2221.6	A	N/A	0.2216	-14	50	
PFDS	5.81	1.11	18153.9	A	N/A	1.0000			
PFDS_2	5.81	1.11	9495.9	A	N/A	0.5231	3	50	
PFUnDA	5.84	1.00	63237.5	A	N/A	1.0000			
PFUnDA_2	5.85	1.00	324.4	A	N/A	0.0051	-7	50	
NEtFOSAA	5.85	1.00	8923.3	A	N/A	1.0000			
NEtFOSAA_2	5.85	1.00	4462.8	A	N/A	0.5001	-30	50	
PFDoDA	6.06	1.00	70480.1	A	N/A	1.0000			
PFDoDA_2	6.06	1.00	1143.2	A	N/A	0.0162	5	50	
10:2-FTS	6.07	1.09	16623.2	A	N/A	1.0000			
10:2 FTS_2	6.08	1.09	9758.7	A	N/A	0.5871		#NA!	
PFTrDA	6.25	1.03	57256.2	A	N/A	1.0000			
PFTrDA_2	6.25	1.03	568.0	A	N/A	0.0099	16	50	
PFTeDA	6.43	1.00	47809.8	A	N/A	1.0000			
PFTeDA_2	6.44	1.00	417.0	A	N/A	0.0087	40	50	
PFHxDA	6.73	1.05	20634.2	A	N/A	1.0000			
PFHxDA_2	6.73	1.05	1200.4	A	N/A	0.0582	-14	50	
PFODA	6.99	1.09	12388.9	A	N/A	1.0000			
PFODA_2	7.00	1.09	445.4	A	N/A	0.0360	30	50	

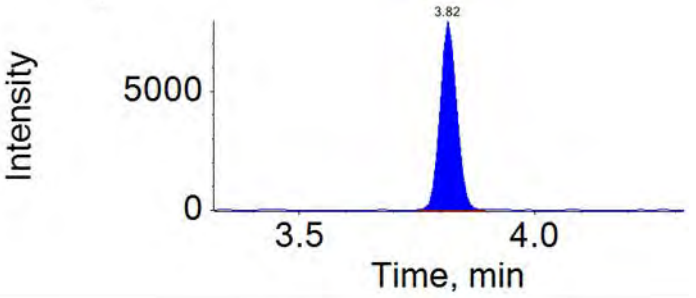
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

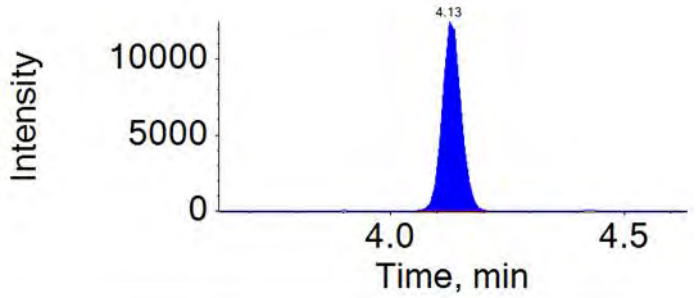
Component: PFBS
Primary Mass: 299.0 / 80.0



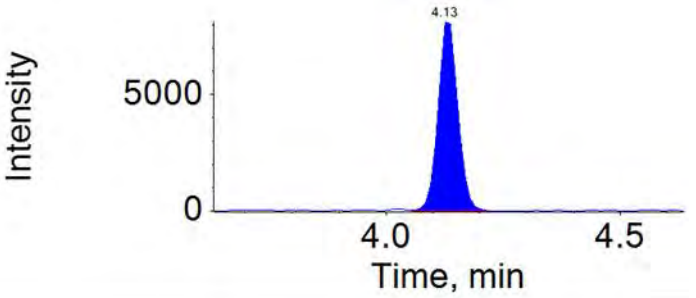
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



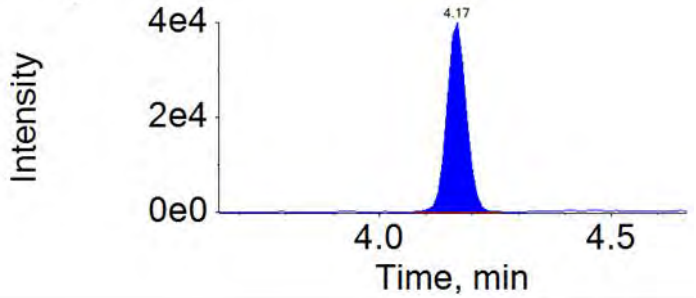
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



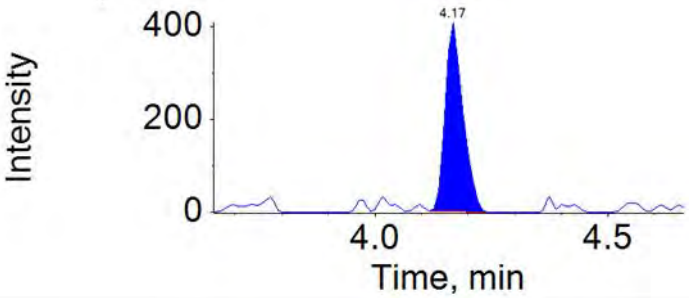
Component: 4:2 FTS_2
Secondary Mass: 327.0 / 81.0



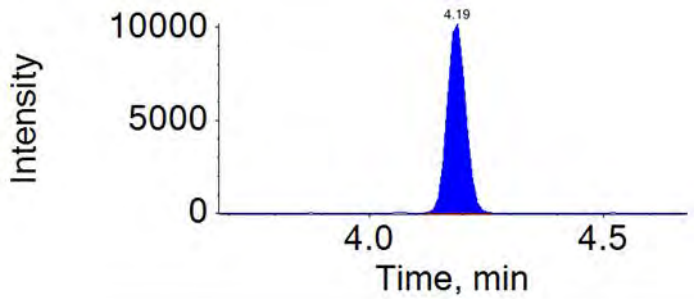
Component: PFHxA
Primary Mass: 313.0 / 269.0



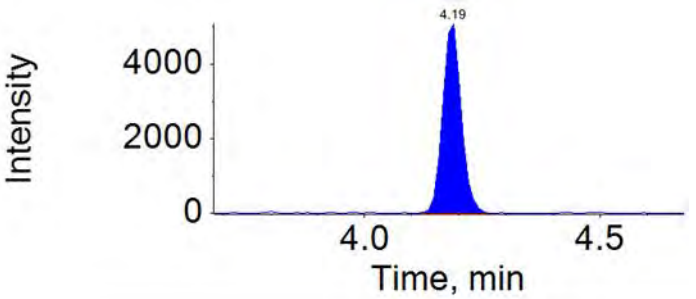
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



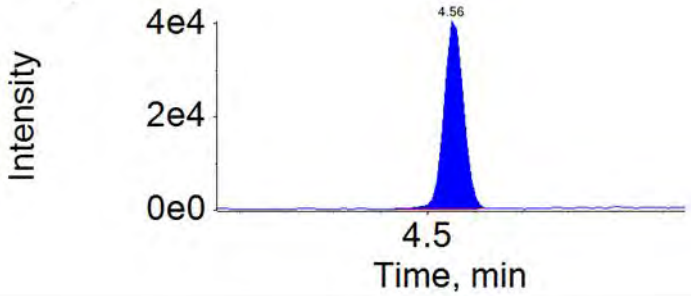
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



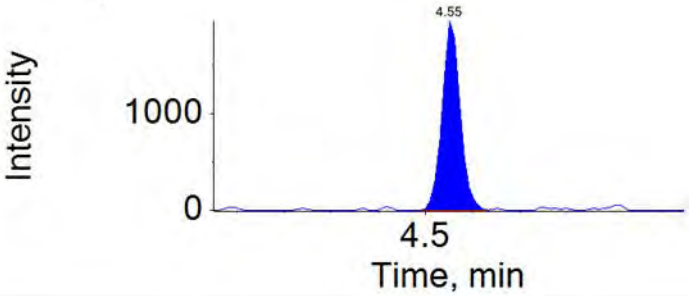
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

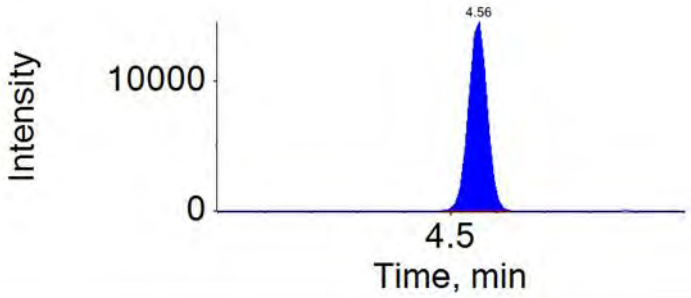
Component: PFHpA
Primary Mass: 363.0 / 319.0



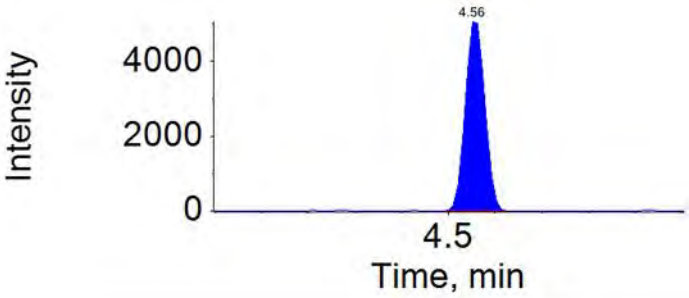
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



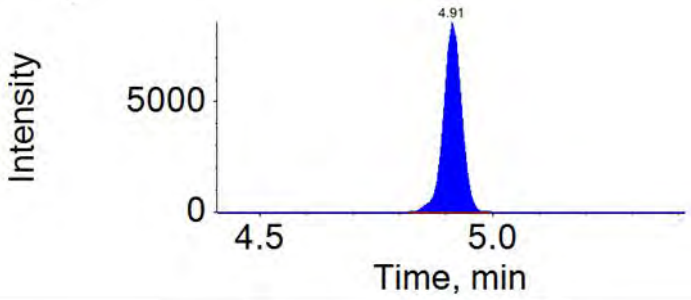
Component: PFHxS
Primary Mass: 399.0 / 80.0



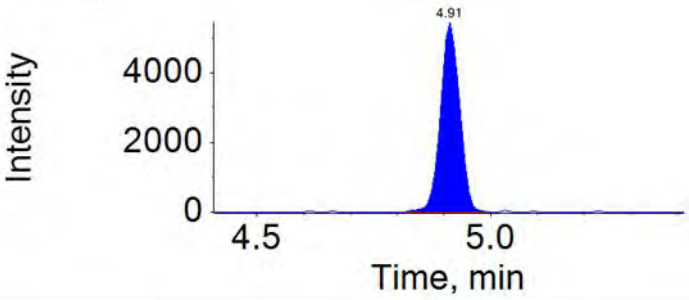
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



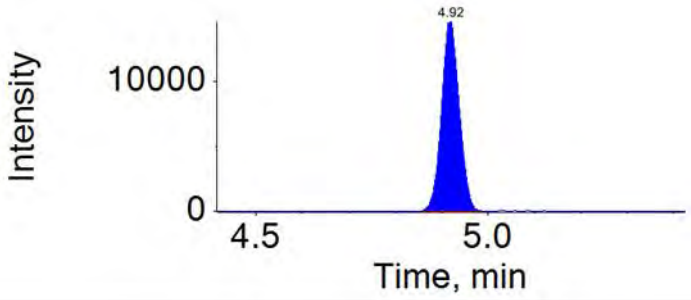
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



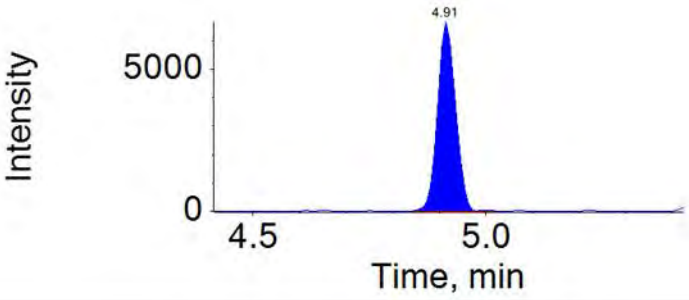
Component: 6:2 FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



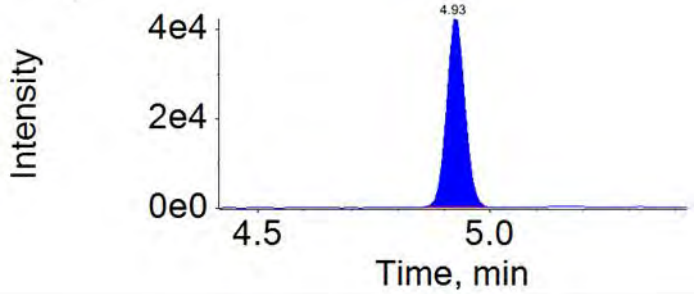
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



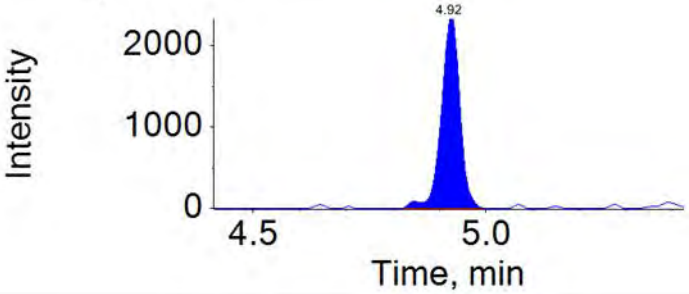
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REVIEWED
By HMK at 9:05 am, 11/19/18

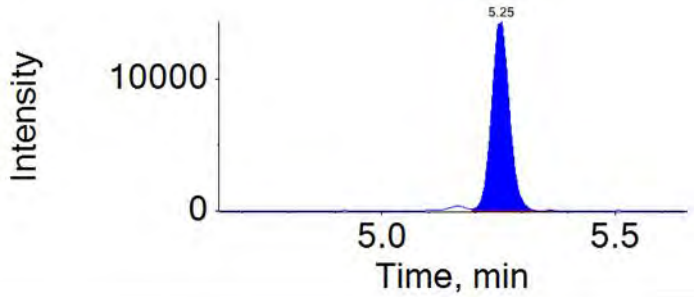
Component: PFOA
Primary Mass: 413.0 / 369.0



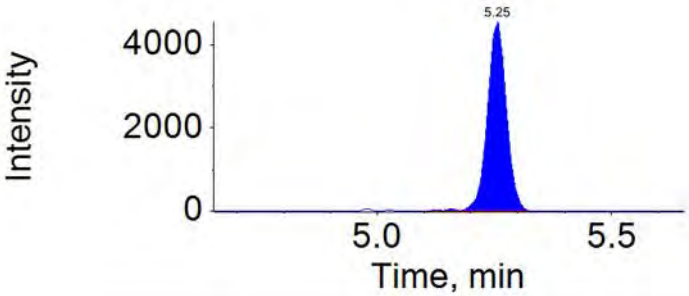
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



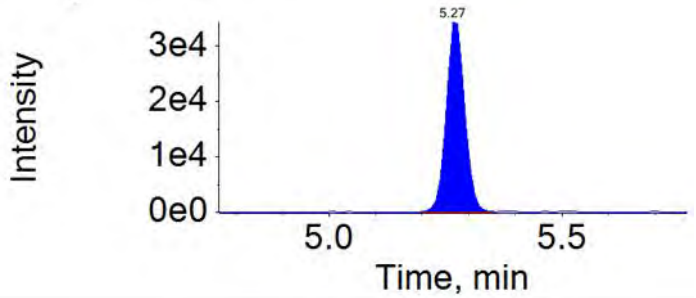
Component: PFOS
Primary Mass: 499.0 / 80.0



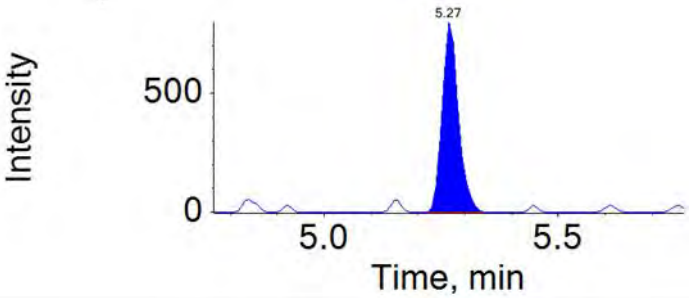
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Secondary Mass: 499.0 / 99.0



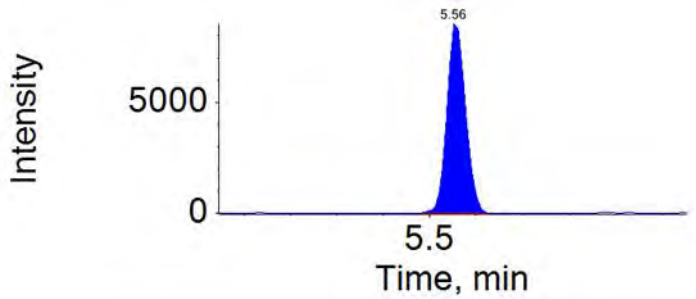
Component: PFNA
Primary Mass: 463.0 / 419.0



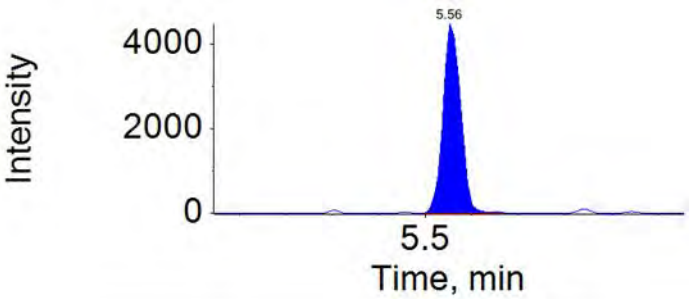
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



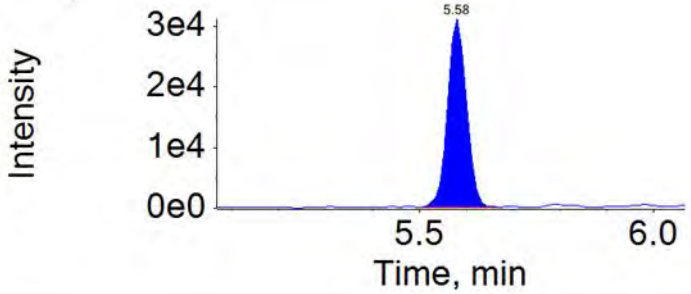
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



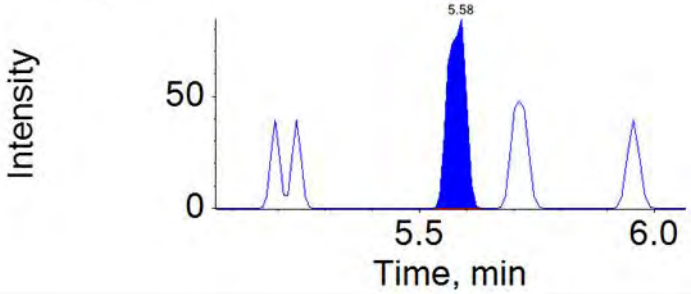
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By HMK at 9:05 am, 11/19/18

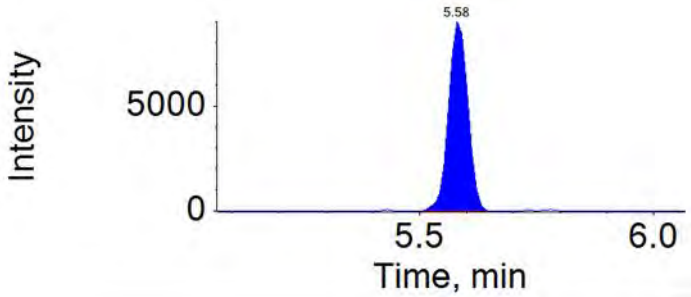
Component: PFDA
Primary Mass: 513.0 / 469.0



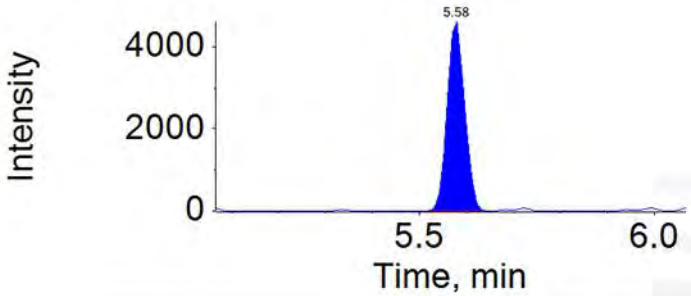
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Secondary Mass: 513.0 / 169.0



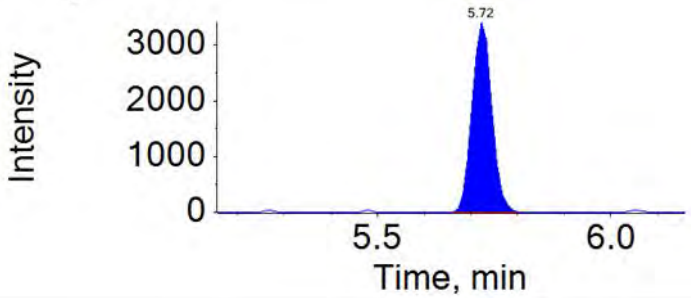
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



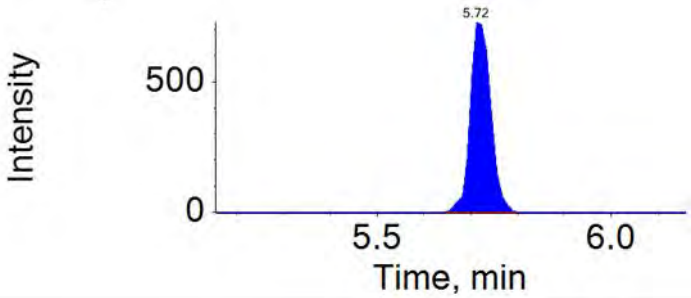
Component: 8:2 FTS_2
Secondary Mass: 527.0 / 81.0



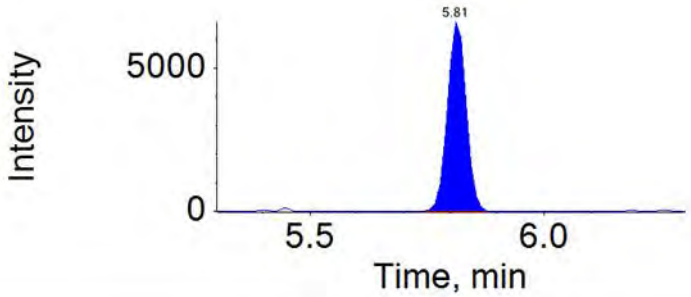
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



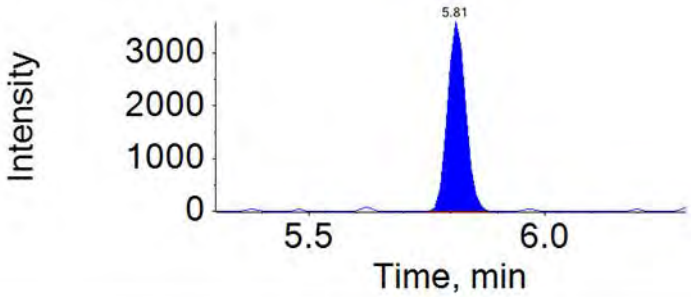
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



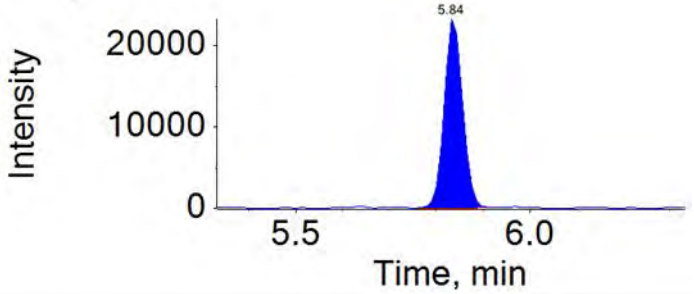
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



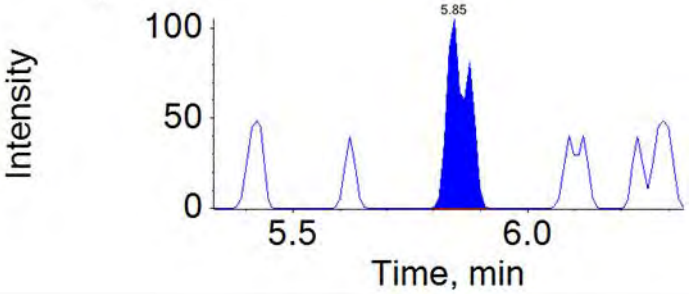
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

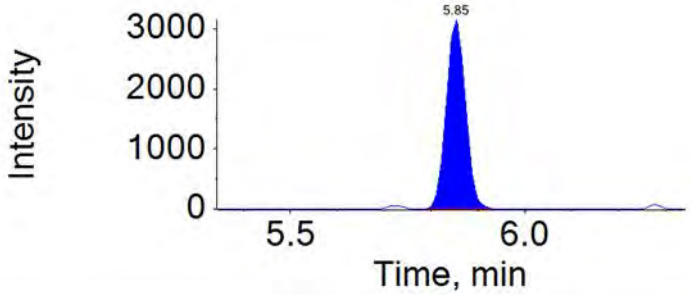
Component: PFUnDA
Primary Mass: 563.0 / 519.0



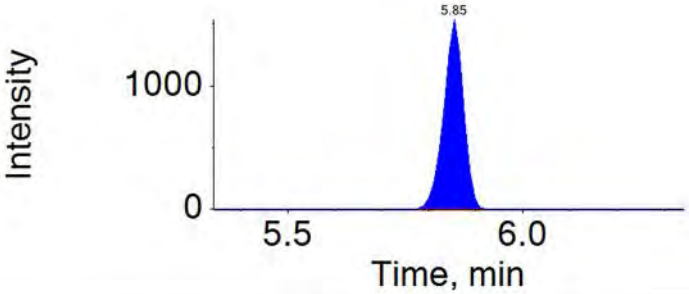
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



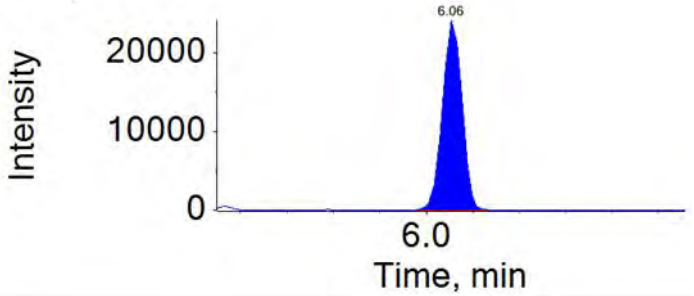
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



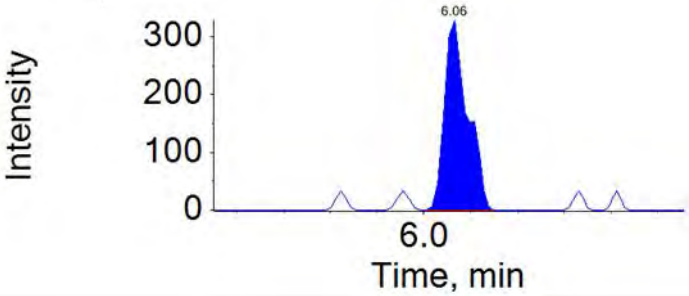
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



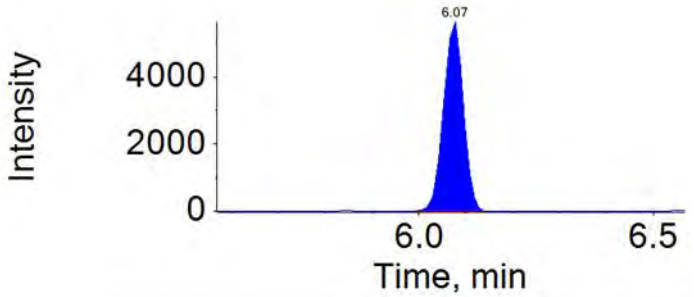
Component: PFDoDA
Primary Mass: 613.0 / 569.0



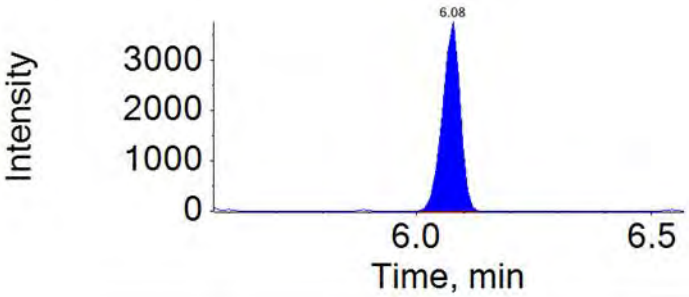
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



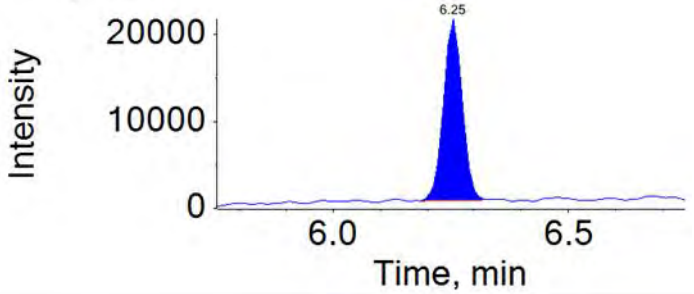
Component: 10:2 FTS_2
Secondary Mass: 627.0 / 81.0



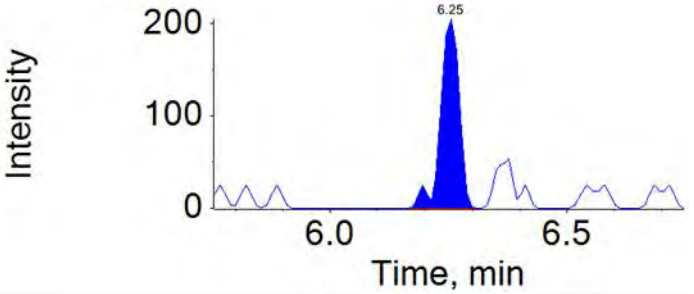
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

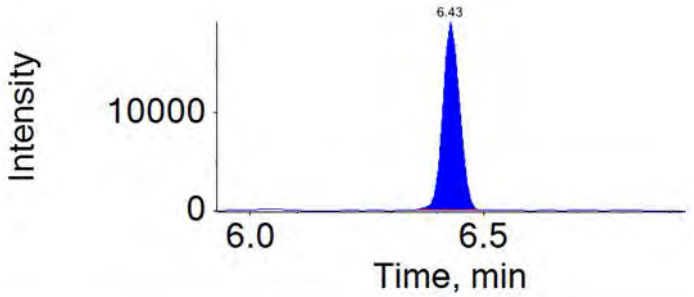
Component: PFTrDA
Primary Mass: 663.0 / 619.0



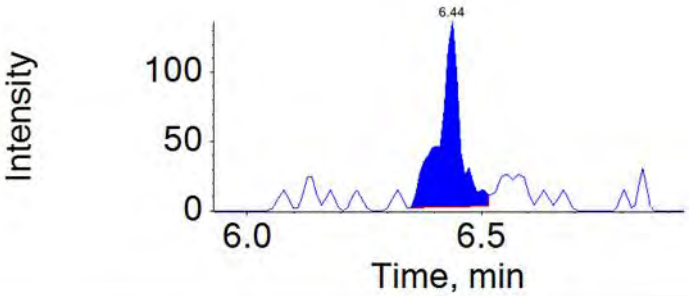
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



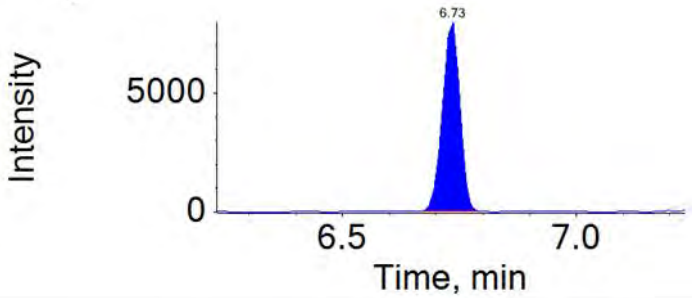
Component: PFTeDA
Primary Mass: 713.0 / 669.0



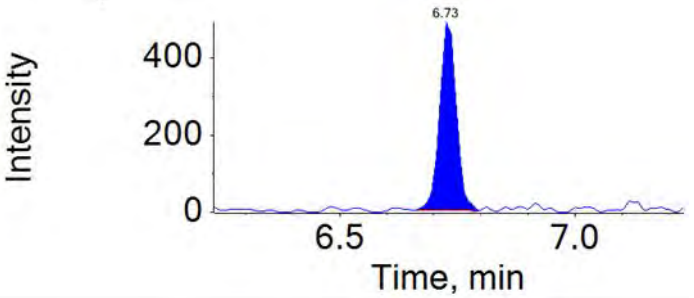
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



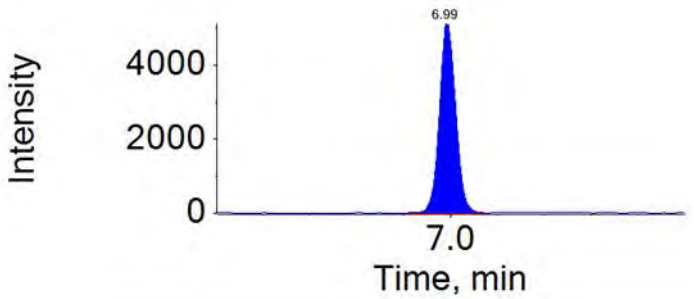
Component: PFHxDA
Primary Mass: 813.0 / 769.0



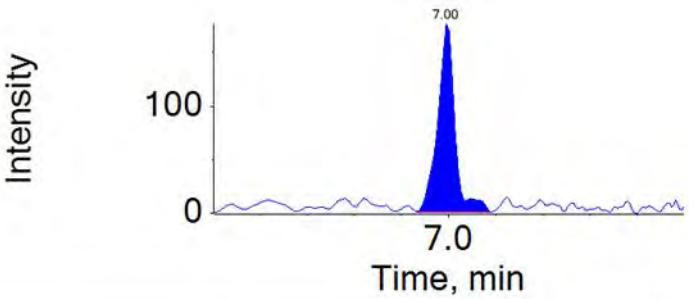
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



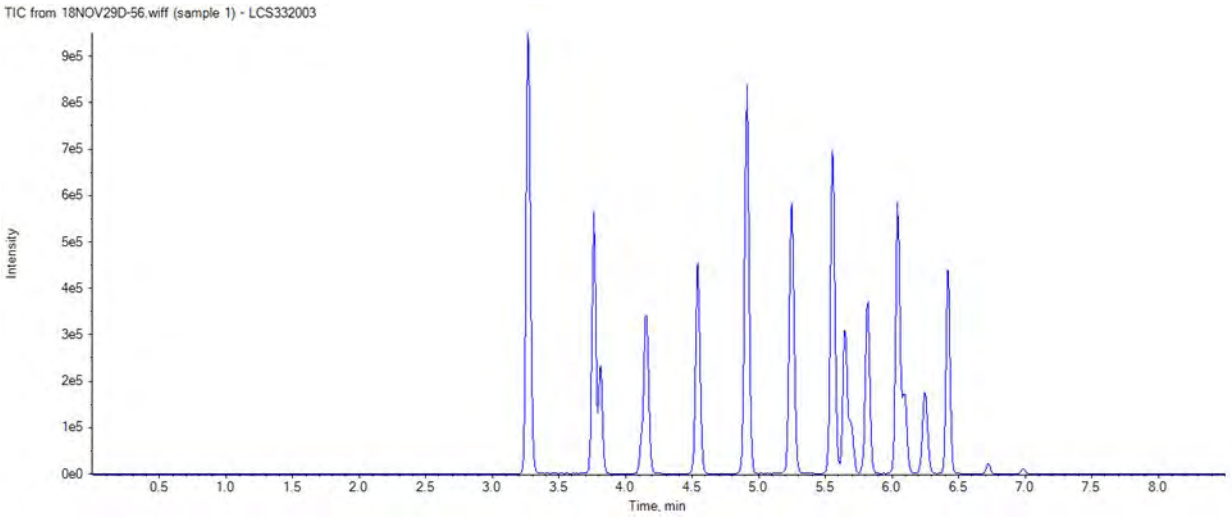
APPROVED
By JPT at 3:32 pm, 11/16/18

REVIEWED
By HMK at 9:05 am, 11/19/18

Lab Control Sample Recovery

ICAL Name: 18NOV28DCAL
QMethod Name: 18AUG20QM
Result Table: 18332003 11/30/2018 9:52:39 PM
Acquisition Method: 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	LCS332003	EPA 537 mod QSM 5.1 table B-15 18332003	18NOV29D-56.wiff	2018-11-29T18:13:39



Injection Standard Area Reference File**:** 18NOV29D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Reference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.00	1066376.9	906425.4	18	50	
13C2-PFOA	5.00	600874.3	495984.0	21	50	
13C4-PFOS	4.78	371548.8	296261.8	25	50	
13C2-PFDA	5.00	557509.7	451203.0	24	50	

APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

Lab Control Sample Recovery

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:52:39 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Instrument Name:	Sample Name:	Sample ID:	Sample File:	Acquisition Date:
LM27631	LCS332003	EPA 537 mod QSM 5.1 table B-15 18332003	18NOV29D-56.wiff	2018-11-29T18:13:39

Analyte Name	Analyte Area	Ext Std Area	Area Ratio	Adj Actual Conc	Sample Result	%REC	% REC Limit	%REC OOS
PFBA	115213.7	1010092.5	0.114	1.360	1.251	92	70-130	
PFPeA	108769.2	993629.3	0.109	1.360	1.074	79	70-130	
PFBS	47400.8	411158.2	0.115	1.204	1.119	93	70-130	
4:2-FTS	44925.4	83476.3	0.538	3.736	2.881	77	70-130	
PFHxA	108517.0	673048.2	0.161	1.360	1.294	95	70-130	
PFPeS	25275.2	411158.2	0.061	1.276	1.244	97	70-130	
PFHpA	111132.4	537048.3	0.207	1.360	1.277	94	70-130	
PFHxS	38520.3	340075.1	0.113	1.286	1.061	82	70-130	
6:2-FTS	43250.5	75006.8	0.577	3.792	3.009	79	70-130	
PFHpS	39014.5	340075.1	0.115	1.294	1.145	88	70-130	
PFOA	111412.0	997849.3	0.112	1.360	1.154	85	70-130	
PFOS	36350.5	335227.0	0.108	1.300	0.910	70	70-130	
PFNA	107498.4	627256.0	0.171	1.360	1.314	97	70-130	
PFNS	25510.1	335227.0	0.076	1.306	0.961	74	70-130	
PFDA	91367.7	841987.6	0.109	1.360	1.228	90	70-130	
8:2-FTS	47406.4	58620.1	0.809	3.832	3.050	80	70-130	
PFOSA	71087.0	662825.4	0.107	1.360	1.087	80	70-130	
NMeFOSAA	20635.0	232183.4	0.089	1.360	1.134	83	70-130	
PFDS	22691.0	335227.0	0.068	1.310	1.073	82	70-130	
PFUnDA	109727.5	579460.2	0.189	1.360	1.354	100	70-130	
NEtFOSAA	18556.9	146322.6	0.127	1.360	1.235	91	70-130	
PFDoDA	127385.4	1116373.7	0.114	1.360	1.250	92	70-130	
10:2-FTS	43892.0	58620.1	0.749	3.856	3.302	86	70-130	
NMePFOSAE	37415.4	275450.0	0.136	1.360	1.143	84	70-130	
NMePFOSA	9167.5	93937.0	0.098	1.360	1.035	76	70-130	
PFDoS	12671.5	335227.0	0.038	1.316	1.086	83	70-130	
NEtPFOSAE	38059.3	218517.0	0.174	1.360	1.253	92	70-130	
NEtPFOSA	8729.3	72668.5	0.120	1.360	1.077	79	70-130	
PFTrDA	125876.8	1116373.7	0.113	1.360	1.359	100	70-130	
PFTeDA	91923.0	824972.6	0.111	1.360	1.263	93	70-130	
PFHxDA	44242.6	824972.6	0.054	1.360	1.226	90	70-130	
PFODA	24810.3	824972.6	0.030	1.360	0.801	59	70-130	OOS

APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

Lab Control Sample Recovery

ICAL Name: 18NOV28DCAL
QMethod Name: 18AUG20QM
Result Table: 18332003 11/30/2018 9:52:39 PM
Acquisition Method: 18AUG13_3uL.dam

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Sample Name:	LCS332003			**Data File:**		18NOV29D-56.wiff
Sample ID:	EPA 537 mod QSM 5.1 table B-15 18332003			**Acquis Date:**		2018-11-29T18:13:39
Sample Type:	Quality Control			**Instrument:**		LM27631
Vial Position:	36			**Acquis Method:**		18AUG13_3uL.dam
Injection Vol:	3.00			**Result Table:**		18332003
QMethod File:	18AUG20QM			**ICAL Name:**		18NOV28DCAL
Batch Number:	18332003			**Operator:**		MCD7824
Sample Wt.:	1.00000			**Dilution Factor:**		1.00
Sample Vol.:	1.000			**Prep Factor:**		2.000

Injection Standard Peak Table

Injection Standard Area Reference File: 18NOV29D-05

Injection Standard Name	Inj Std Conc	Injection Std Peak Area	Rreference Injection Standard Area	Injection Std %Diff	Injection Std %Diff Limit	Injection Std %Diff OOS
13C3-PFBA	5.0	1066376.9	906425.4	18	50	
13C2-PFOA	5.0	600874.3	495984.0	21	50	
13C4-PFOS	4.8	371548.8	296261.8	25	50	
13C2-PFDA	5.0	557509.7	451203.0	24	50	

Extraction Standard Peak Table

Extraction Standard Name	Ext Std Area	Inj Std Name	Inj Std Area	Area Ratio	Ext Std Conc	Ext Std Result	Ext Std %REC	Ext Std %REC Limit	Ext Std OOS
E13C4-PFBA	1010092.5	13C3-PFBA	1066376.9	0.947	10.000	8.452	85	50-150	
E13C5-PFPeA	993629.3	13C3-PFBA	1066376.9	0.932	10.000	8.702	87	50-150	
E13C3-PFBS	411158.2	13C3-PFBA	1066376.9	0.386	9.300	7.357	79	50-150	
E13C2-4:2-FTS	83476.3	13C2-PFOA	600874.3	0.139	9.340	9.575	103	50-150	
E13C5-PFHxA	673048.2	13C2-PFOA	600874.3	1.120	10.000	8.228	82	50-150	
E13C3-PFHxS	340075.1	13C2-PFOA	600874.3	0.566	9.460	8.872	94	50-150	
E13C4-PFHpA	537048.3	13C2-PFOA	600874.3	0.894	10.000	8.214	82	50-150	
E13C2-6:2-FTS	75006.8	13C2-PFOA	600874.3	0.125	9.500	10.451	110	50-150	
E13C8-PFOA	997849.3	13C2-PFOA	600874.3	1.661	10.000	9.142	91	50-150	
E13C8-PFOS	335227.0	13C4-PFOS	371548.8	0.902	9.560	8.146	85	50-150	
E13C9-PFNA	627256.0	13C4-PFOS	371548.8	1.688	10.000	7.416	74	50-150	
E13C6-PFDA	841987.6	13C2-PFDA	557509.7	1.510	10.000	8.516	85	50-150	
E13C2-8:2-FTS	58620.1	13C2-PFDA	557509.7	0.105	9.580	9.038	94	50-150	
E13C8-PFOSA	662825.4	13C2-PFDA	557509.7	1.189	10.000	8.725	87	50-150	
Ed3-NMeFOSAA	232183.4	13C2-PFDA	557509.7	0.416	10.000	10.575	106	50-150	
E13C7-PFUnDA	579460.2	13C2-PFDA	557509.7	1.039	10.000	8.786	88	50-150	
Ed5-NEtFOSAA	146322.6	13C2-PFDA	557509.7	0.262	10.000	9.352	94	50-150	
E13C2-PFDoDA	1116373.7	13C2-PFDA	557509.7	2.002	10.000	8.414	84	50-150	
Ed7-NMePFOSAE	275450.0	13C2-PFDA	557509.7	0.494	10.000	8.540	85	50-150	
Ed3-NMePFOSA	93937.0	13C2-PFDA	557509.7	0.168	10.000	9.120	91	50-150	
Ed9-NEtPFOSAE	218517.0	13C2-PFDA	557509.7	0.392	10.000	7.947	79	50-150	
Ed5-NEtPFOSA	72668.5	13C2-PFDA	557509.7	0.130	10.000	9.058	91	50-150	
E13C2-PFTeDA	824972.6	13C2-PFDA	557509.7	1.480	10.000	8.189	82	50-150	

APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

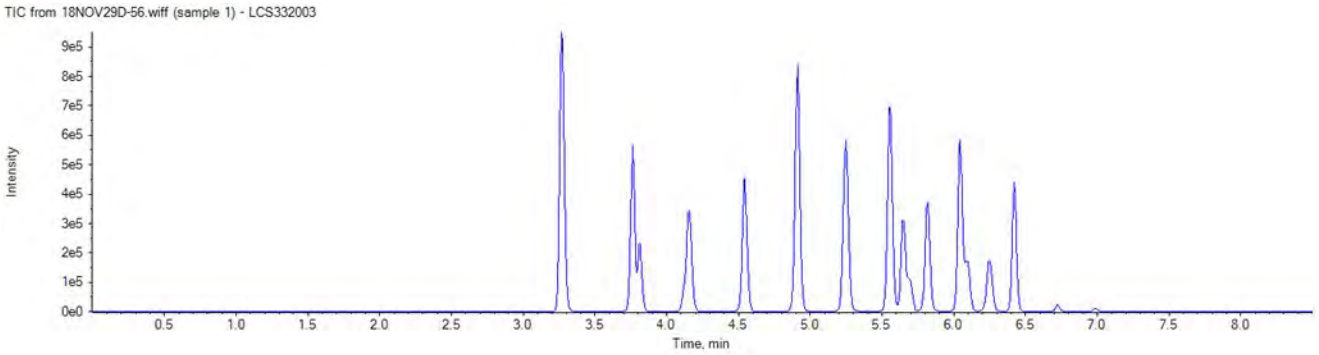
Analyte Quantitation Peak Table

Sample Name: LCS332003 **Instrument Name:** LM27631 **File Name:** 18NOV29D-56.wiff

Sample Wt	Sample Vol	Dilution Factor	PrepFactor
1.00000	1.000	1.00	2.000

Analyte Name	RT	RRT	Analyte Area Response	E	Int Typ	ES Name	ES RT	ES Area Response	Area Ratio	Sample Result (ng/g)
PFBA	3.27	1.000	115213.7		A	13C4-PFBA	3.27	1010092.5	0.114	1.251
PFPeA	3.76	1.000	108769.2		A	13C5-PFPeA	3.76	993629.3	0.109	1.074
PFBS	3.81	1.000	47400.8		A	13C3-PFBS	3.81	411158.2	0.115	1.119
4:2-FTS	4.12	1.000	44925.4		A	13C2-4:2-FTS	4.12	83476.3	0.538	2.881
PFHxA	4.15	1.000	108517.0		A	13C5-PFHxA	4.16	673048.2	0.161	1.294
PFPeS	4.18	1.100	25275.2		A	13C3-PFBS	3.81	411158.2	0.061	1.244
PFHpA	4.54	1.000	111132.4		A	13C4-PFHpA	4.54	537048.3	0.207	1.277
PFHxS	4.54	1.000	38520.3		A	13C3-PFHxS	4.55	340075.1	0.113	1.061
6:2-FTS	4.90	1.000	43250.5		A	13C2-6:2-FTS	4.90	75006.8	0.577	3.009
PFHpS	4.91	1.080	39014.5		A	13C3-PFHxS	4.55	340075.1	0.115	1.145
PFOA	4.91	1.000	111412.0		A	13C8-PFOA	4.91	997849.3	0.112	1.154
PFOS	5.24	1.000	36350.5		M	13C8-PFOS	5.24	335227.0	0.108	0.910
PFNA	5.26	1.000	107498.4		A	13C9-PFNA	5.25	627256.0	0.171	1.314
PFNS	5.53	1.060	25510.1		A	13C8-PFOS	5.24	335227.0	0.076	0.961
PFDA	5.56	1.000	91367.7		A	13C6-PFDA	5.55	841987.6	0.109	1.228
8:2-FTS	5.56	1.000	47406.4		A	13C2-8:2-FTS	5.56	58620.1	0.809	3.050
PFOSA	5.65	1.000	71087.0		A	13C8-PFOSA	5.65	662825.4	0.107	1.087
NMeFOSAA	5.70	1.000	20635.0		M	d3-NMeFOSAA	5.69	232183.4	0.089	1.134
PFDS	5.79	1.100	22691.0		A	13C8-PFOS	5.24	335227.0	0.068	1.073
PFUnDA	5.81	1.000	109727.5		A	13C7-PFUnDA	5.82	579460.2	0.189	1.354
NEtFOSAA	5.83	1.000	18556.9		A	d5-NEtFOSAA	5.83	146322.6	0.127	1.235
PFDoDA	6.04	1.000	127385.4		A	13C2-PFDoDA	6.04	1116373.7	0.114	1.250
10:2-FTS	6.06	1.090	43892.0		A	13C2-8:2-FTS	5.56	58620.1	0.749	3.302
NMePFOSAE	6.10	1.000	37415.4		A	d7-NMePFOSAE	6.09	275450.0	0.136	1.143
NMePFOSA	6.11	1.000	9167.5		A	d3-NMePFOSA	6.10	93937.0	0.098	1.035
PFDoS	6.21	1.190	12671.5		A	13C8-PFOS	5.24	335227.0	0.038	1.086
NEtPFOSAE	6.26	1.000	38059.3		A	d9-NEtPFOSAE	6.25	218517.0	0.174	1.253
NEtPFOSA	6.27	1.000	8729.3		A	d5-NEtPFOSA	6.27	72668.5	0.120	1.077
PFTrDA	6.24	1.030	125876.8		A	13C2-PFDoDA	6.04	1116373.7	0.113	1.359
PFTeDA	6.42	1.000	91923.0		A	13C2-PFTeDA	6.42	824972.6	0.111	1.263
PFHxDA	6.72	1.050	44242.6		A	13C2-PFTeDA	6.42	824972.6	0.054	1.226
PFODA	6.99	1.090	24810.3		A	13C2-PFTeDA	6.42	824972.6	0.030	0.801

Total Ion Chromatogram

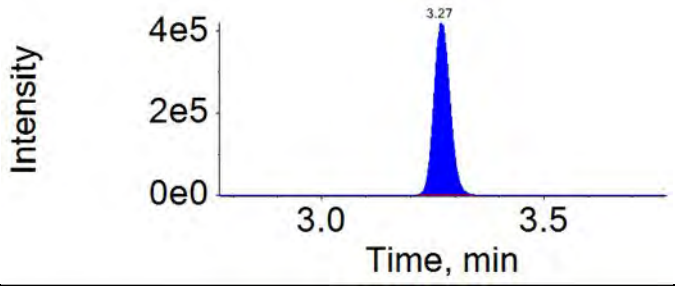


APPROVED
By MCD at 10:13 pm, 11/30/18

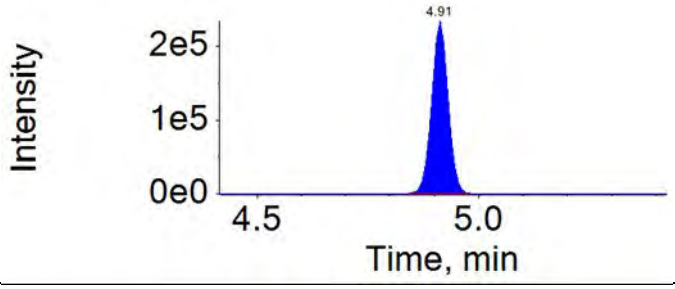
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

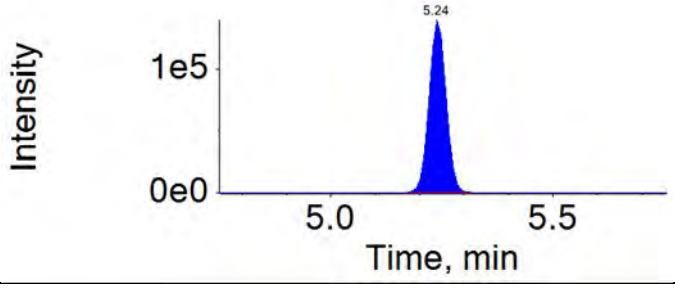
Injection Standard: 13C3-PFBA
216.0 / 172.0



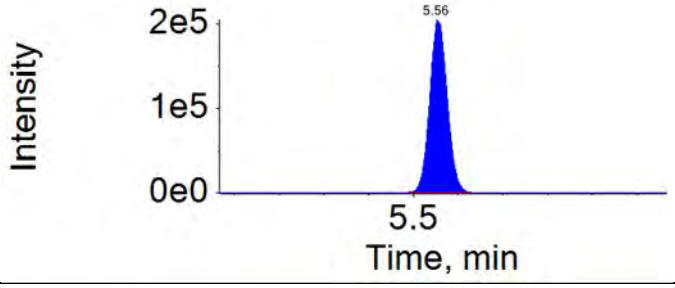
Injection Standard: 13C2-PFOA
415.0 / 370.0



Injection Standard: 13C4-PFOS
503.0 / 80.0



Injection Standard: 13C2-PFDA
515.0 / 470.0

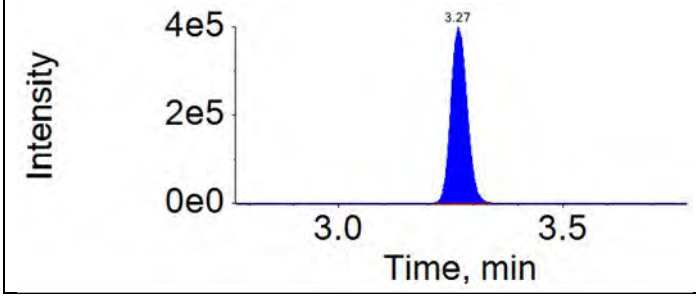


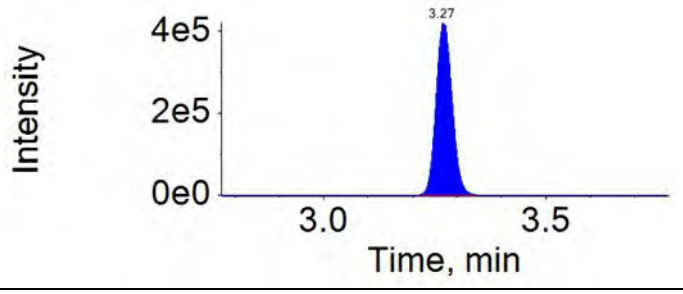
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

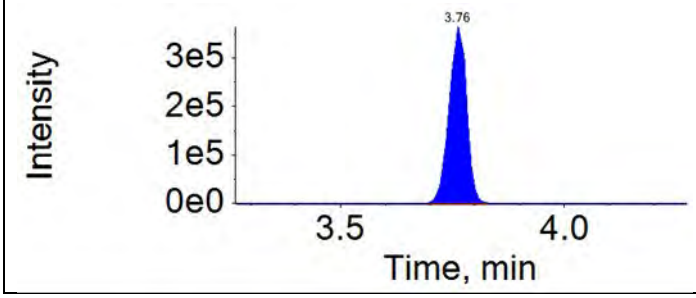
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

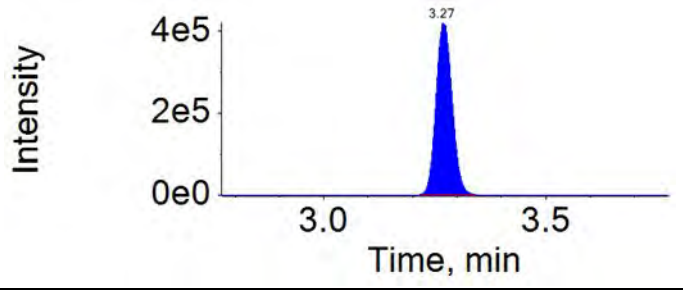
Extraction Standard: E13C4-PFBA	Injection Standard: 13C3-PFBA
217.0 / 172.0	216.0 / 172.0



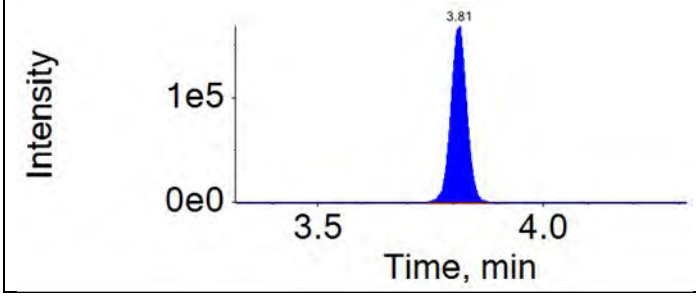


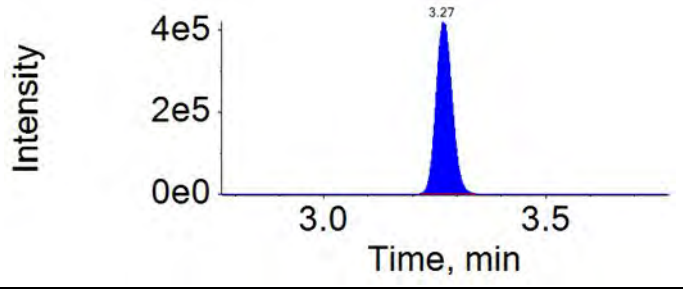
Extraction Standard: E13C5-PFPeA	Injection Standard: 13C3-PFBA
268.0 / 223.0	216.0 / 172.0



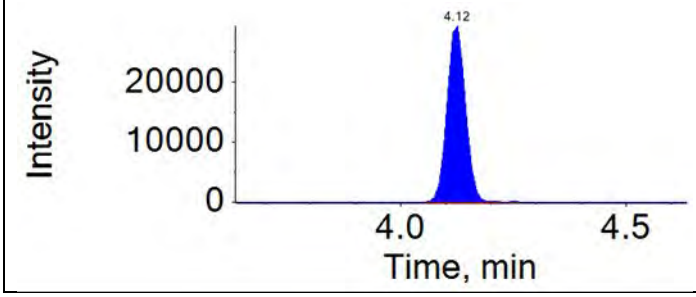


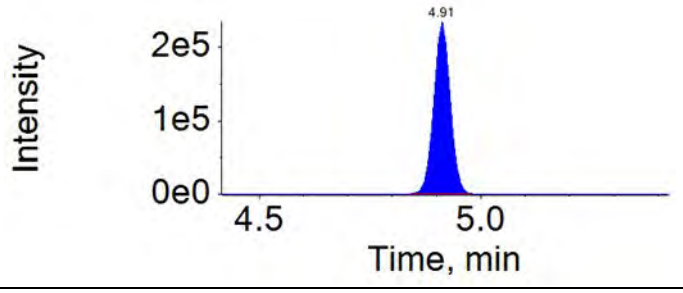
Extraction Standard: E13C3-PFBS	Injection Standard: 13C3-PFBA
302.0 / 80.0	216.0 / 172.0





Extraction Standard: E13C2-4:2-FTS	Injection Standard: 13C2-PFOA
329.0 / 81.0	415.0 / 370.0



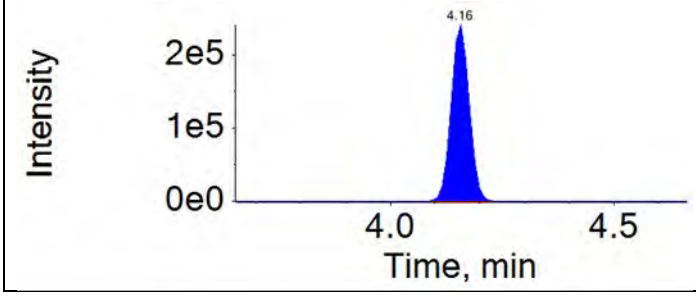


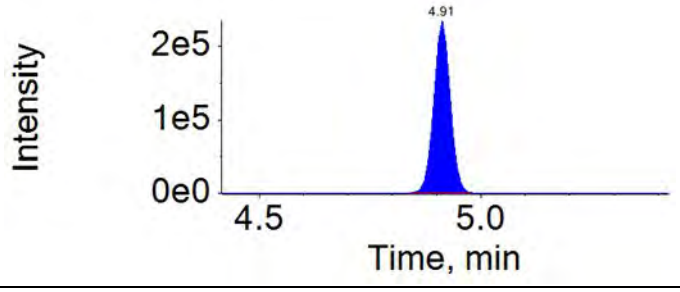
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

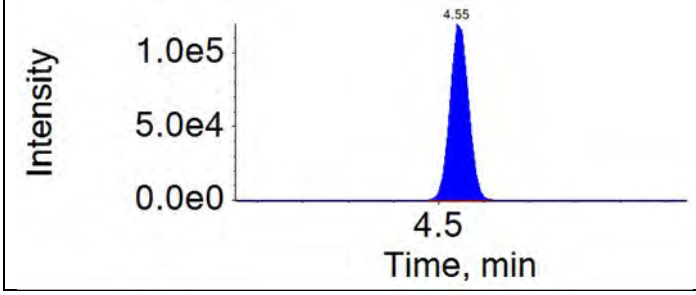
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

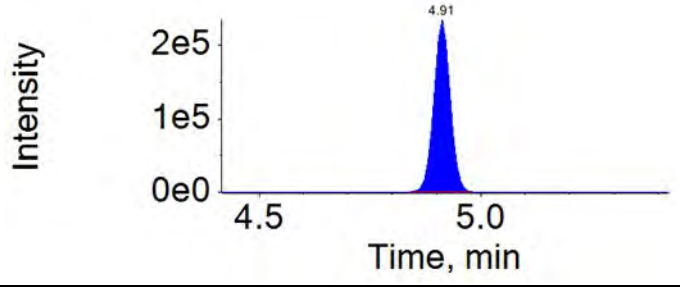
Extraction Standard: E13C5-PFHxA	Injection Standard: 13C2-PFOA
318.0 / 273.0	415.0 / 370.0



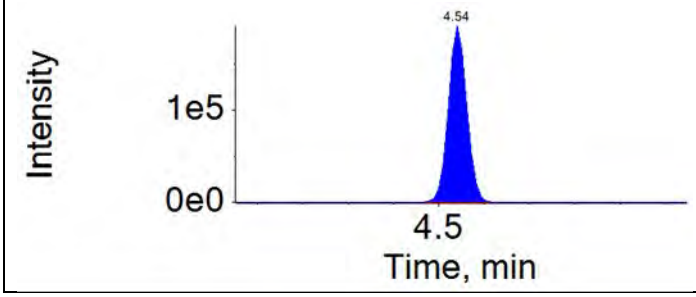


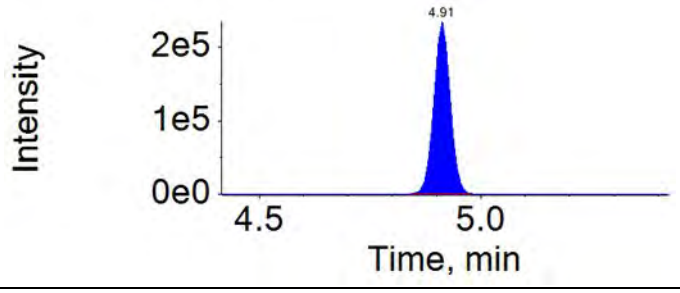
Extraction Standard: E13C3-PFHxS	Injection Standard: 13C2-PFOA
402.0 / 80.0	415.0 / 370.0



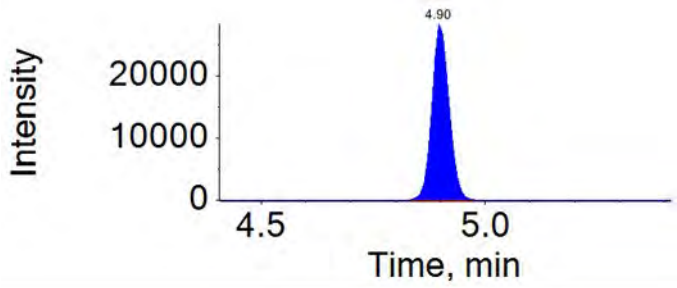


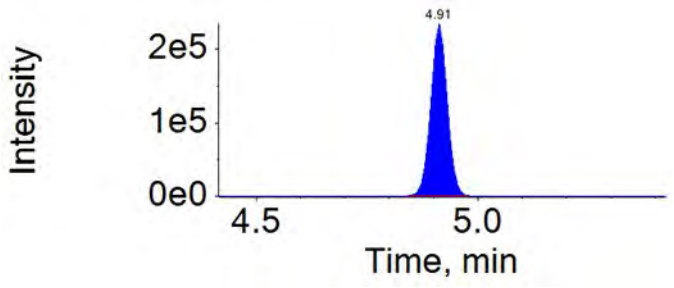
Extraction Standard: E13C4-PFHpA	Injection Standard: 13C2-PFOA
367.0 / 322.0	415.0 / 370.0





Extraction Standard: E13C2-6:2-FTS	Injection Standard: 13C2-PFOA
429.0 / 81.0	415.0 / 370.0

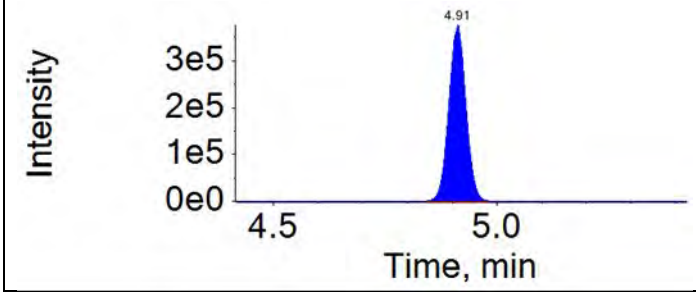
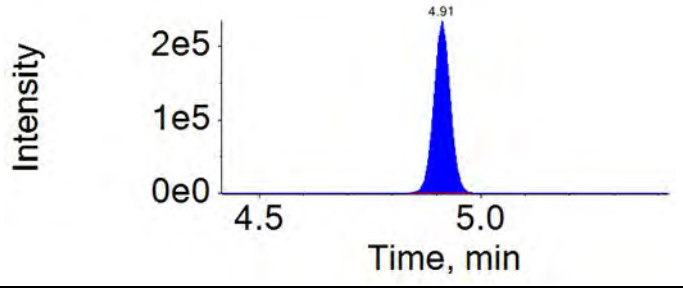


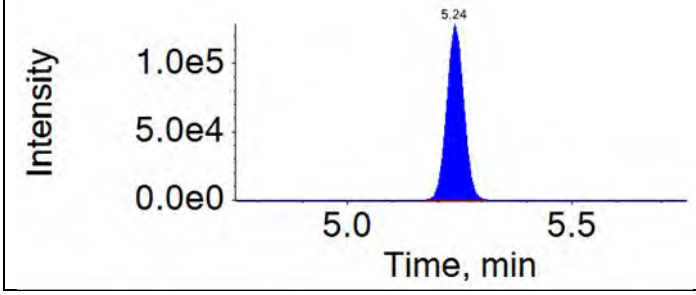
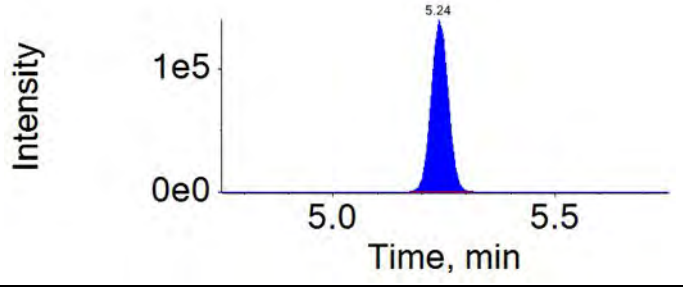


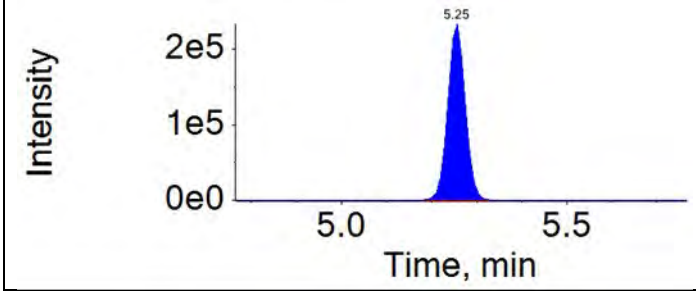
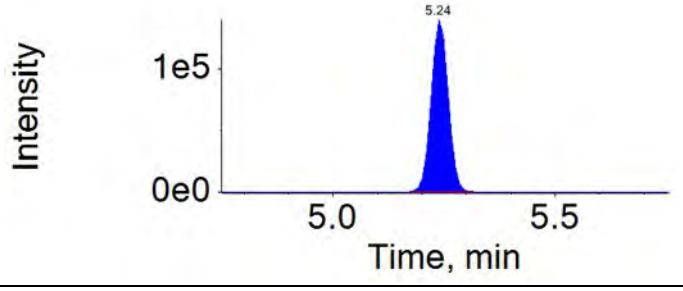
APPROVED
By MCD at 10:13 pm, 11/30/18

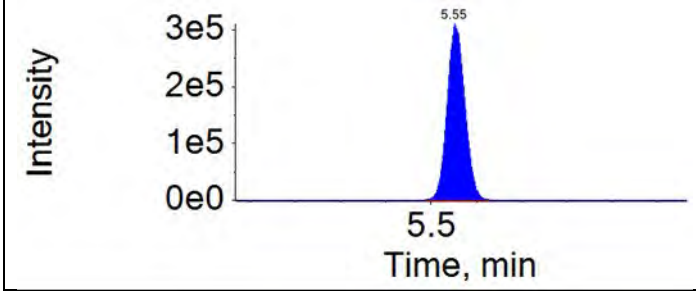
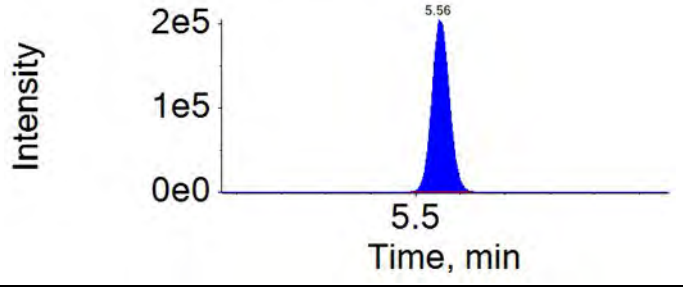
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C8-PFOA	Injection Standard: 13C2-PFOA
421.0 / 376.0	415.0 / 370.0
	

Extraction Standard: E13C8-PFOS	Injection Standard: 13C4-PFOS
507.0 / 80.0	503.0 / 80.0
	

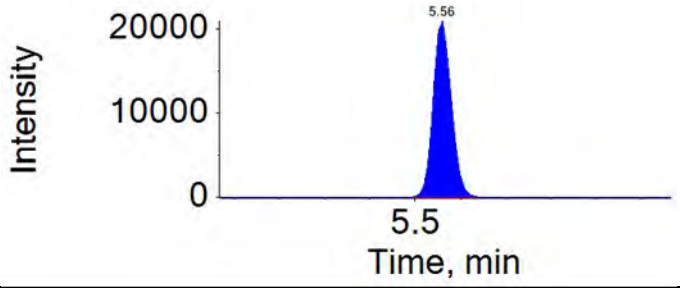
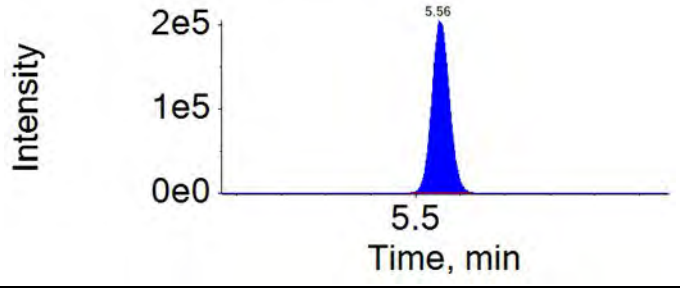
Extraction Standard: E13C9-PFNA	Injection Standard: 13C4-PFOS
472.0 / 427.0	503.0 / 80.0
	

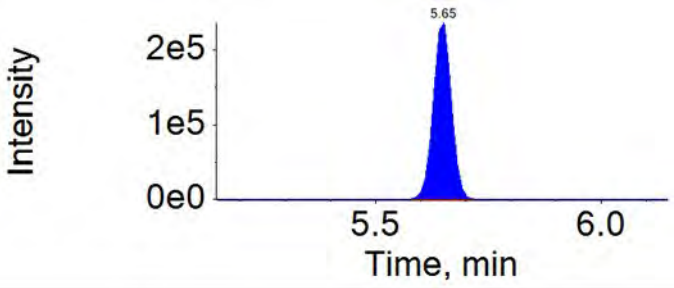
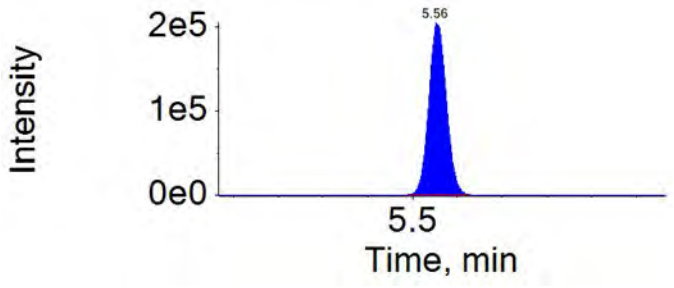
Extraction Standard: E13C6-PFDA	Injection Standard: 13C2-PFDA
519.0 / 474.0	515.0 / 470.0
	

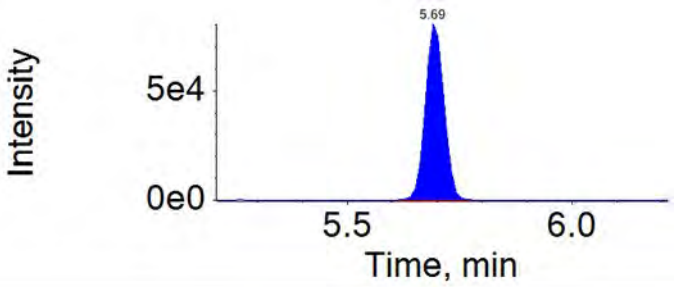
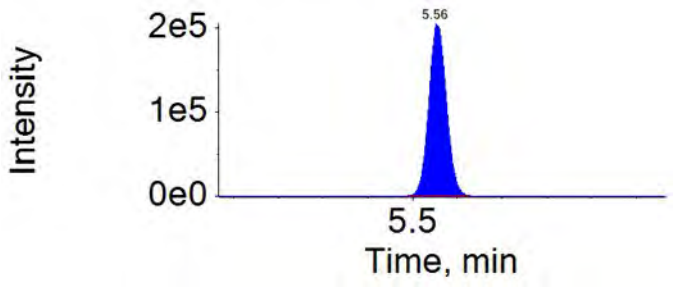
APPROVED
By MCD at 10:13 pm, 11/30/18

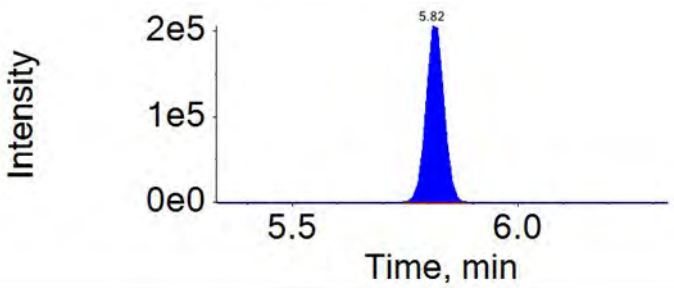
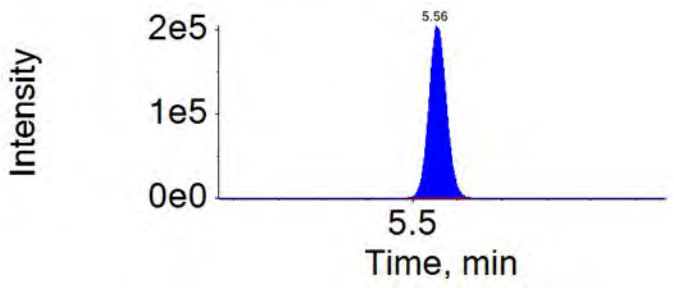
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Extraction Standard: E13C2-8:2-FTS	Injection Standard: 13C2-PFDA
529.0 / 81.0	515.0 / 470.0
	

Extraction Standard: E13C8-PFOSA	Injection Standard: 13C2-PFDA
506.0 / 78.0	515.0 / 470.0
	

Extraction Standard: Ed3-NMeFOSAA	Injection Standard: 13C2-PFDA
573.0 / 419.0	515.0 / 470.0
	

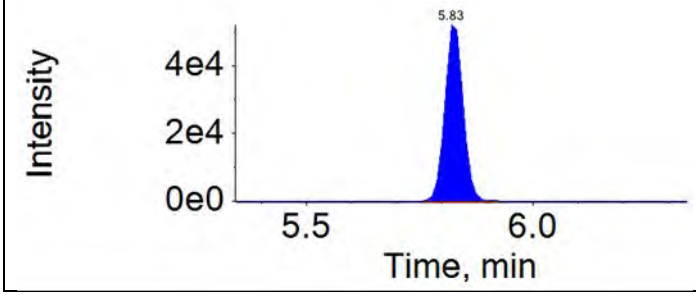
Extraction Standard: E13C7-PFUnDA	Injection Standard: 13C2-PFDA
570.0 / 525.0	515.0 / 470.0
	

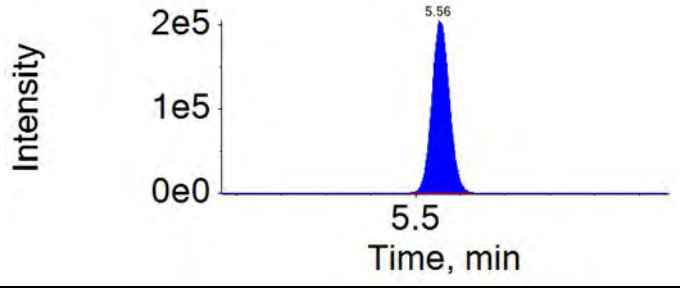
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

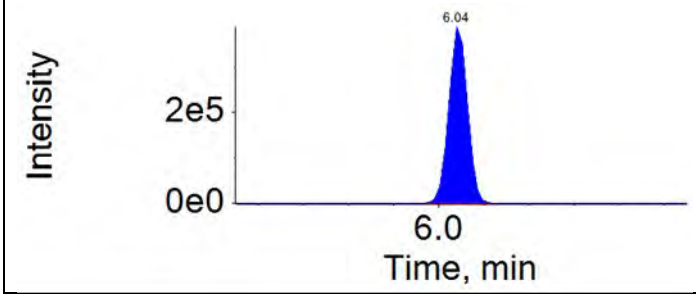
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

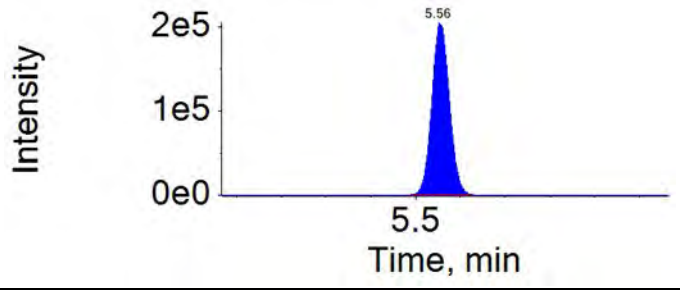
Extraction Standard: Ed5-NEtFOSAA	Injection Standard: 13C2-PFDA
589.0 / 419.0	515.0 / 470.0



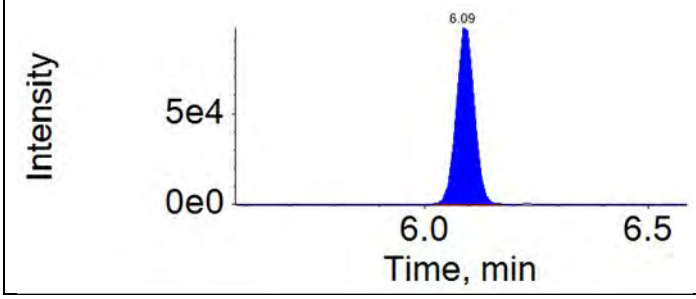


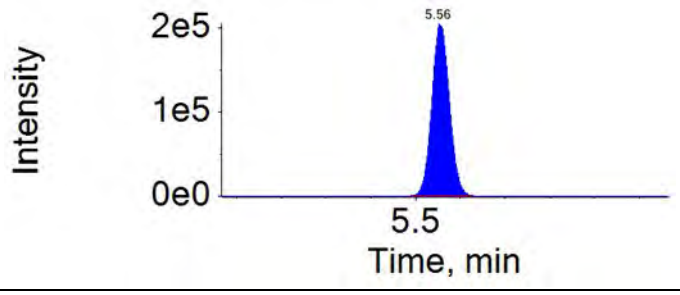
Extraction Standard: E13C2-PFDoDA	Injection Standard: 13C2-PFDA
615.0 / 570.0	515.0 / 470.0



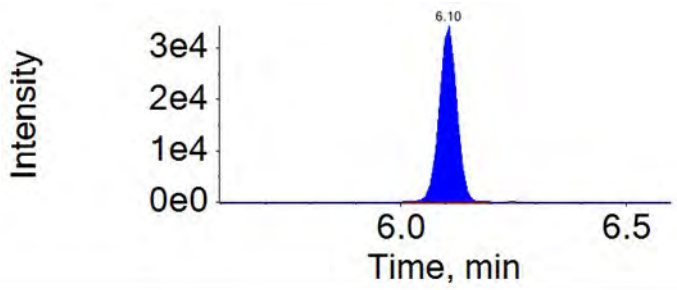


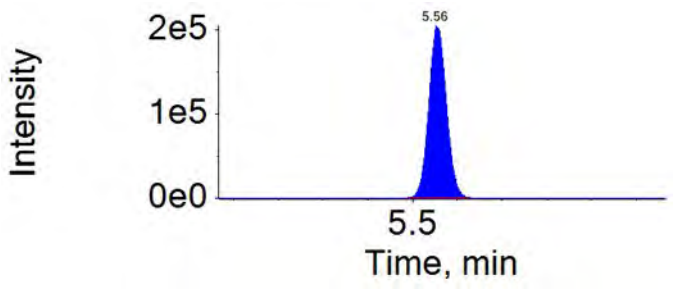
Extraction Standard: Ed7-NMePFOSAE	Injection Standard: 13C2-PFDA
623.0 / 59.0	515.0 / 470.0





Extraction Standard: Ed3-NMePFOSA	Injection Standard: 13C2-PFDA
515.0 / 169.0	515.0 / 470.0



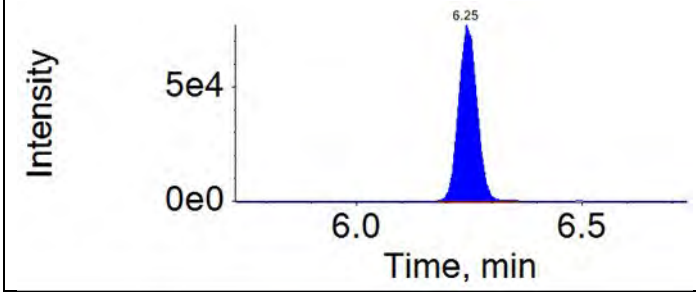


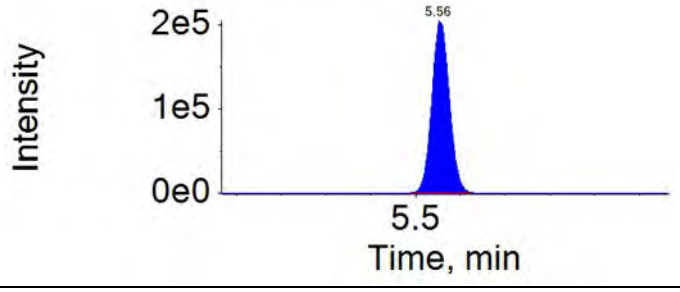
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

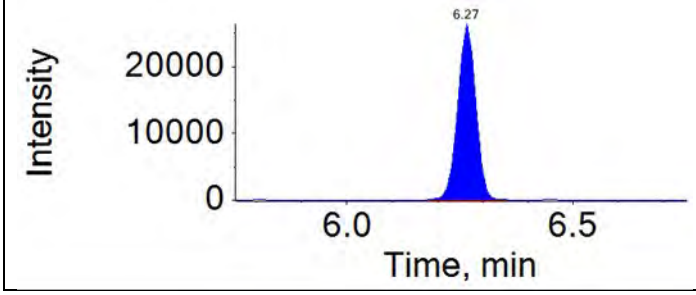
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

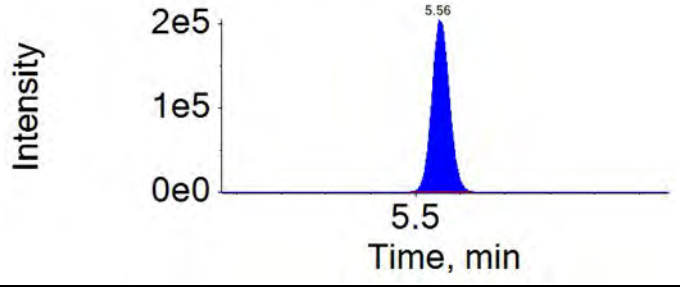
Extraction Standard: Ed9-NEtPFOSAE	Injection Standard: 13C2-PFDA
639.0 / 59.0	515.0 / 470.0



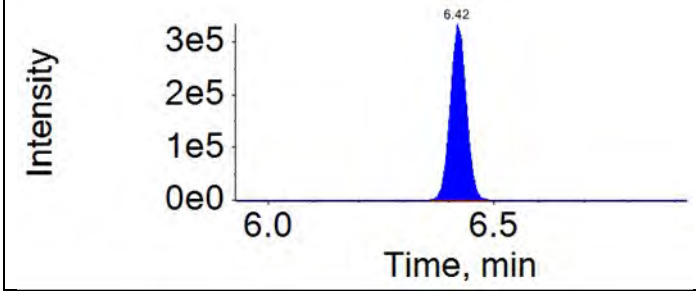


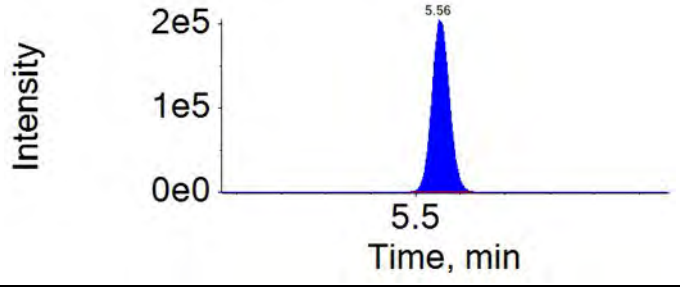
Extraction Standard: Ed5-NEtPFOSA	Injection Standard: 13C2-PFDA
531.0 / 169.0	515.0 / 470.0





Extraction Standard: E13C2-PFTeDA	Injection Standard: 13C2-PFDA
715.0 / 670.0	515.0 / 470.0

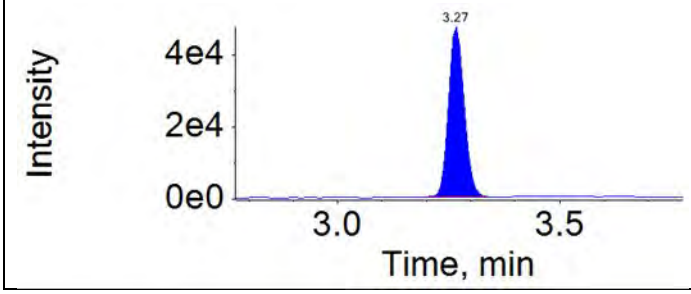
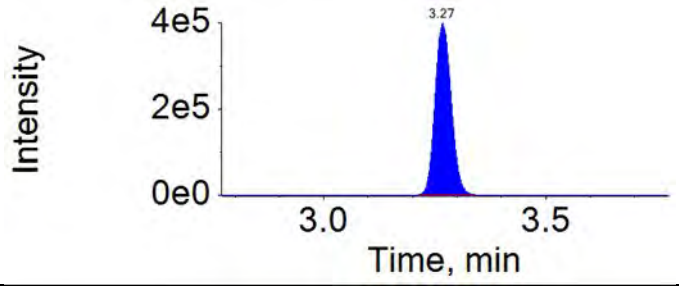


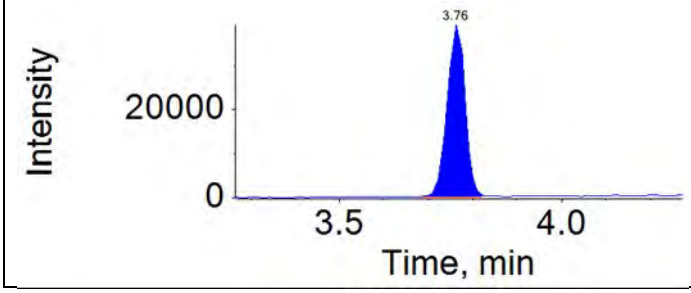
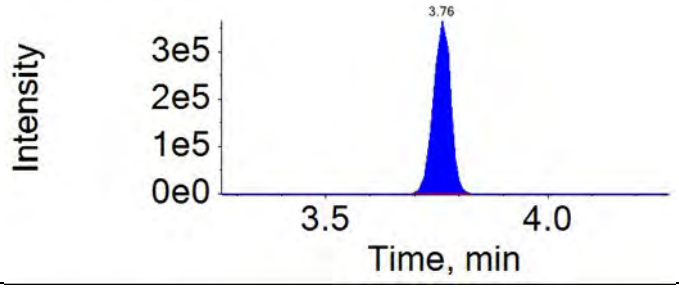


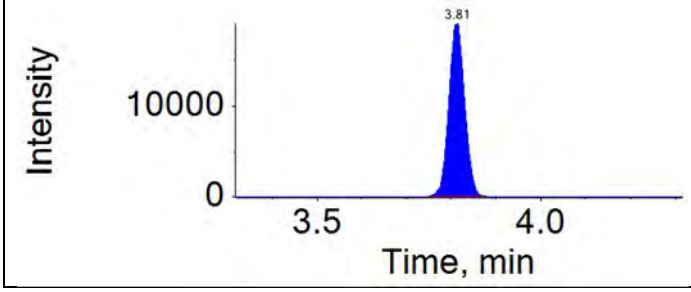
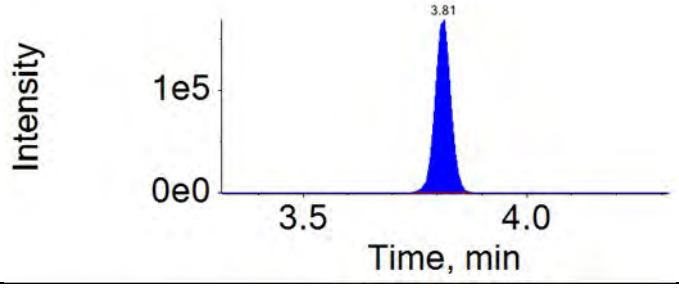
APPROVED
By MCD at 10:13 pm, 11/30/18

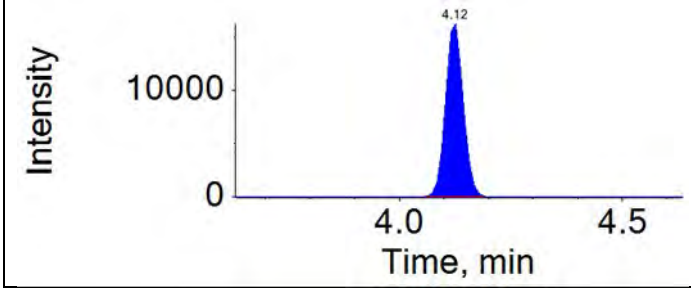
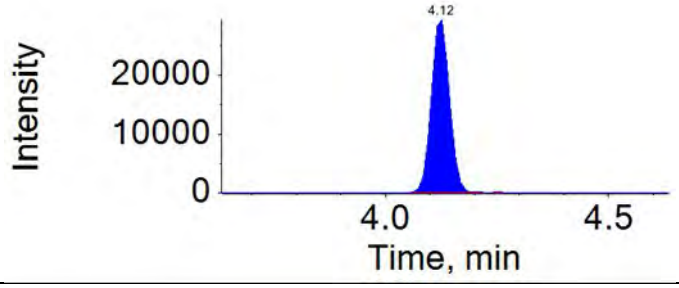
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFBA	Extraction Standard: 13C4-PFBA
213.0 / 169.0	217.0 / 172.0
	

Analyte: PFPeA	Extraction Standard: 13C5-PFPeA
263.0 / 219.0	268.0 / 223.0
	

Analyte: PFBS	Extraction Standard: 13C3-PFBS
299.0 / 80.0	302.0 / 80.0
	

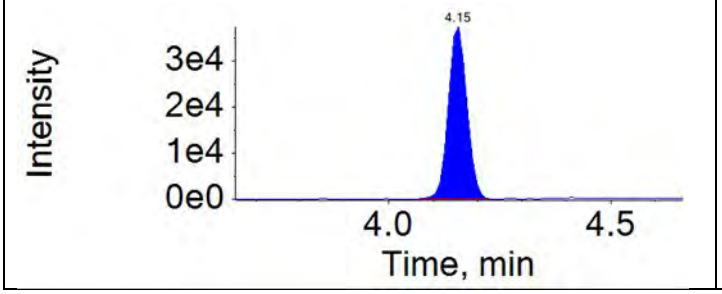
Analyte: 4:2-FTS	Extraction Standard: 13C2-4:2-FTS
327.0 / 307.0	329.0 / 81.0
	

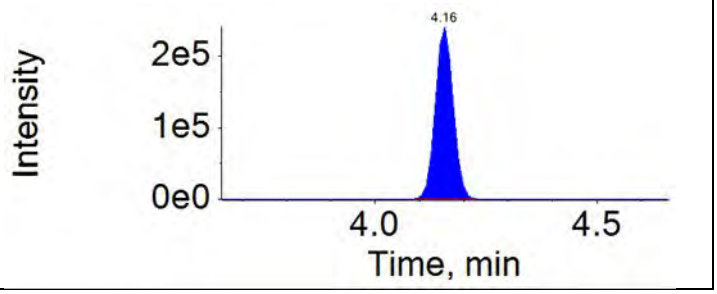
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

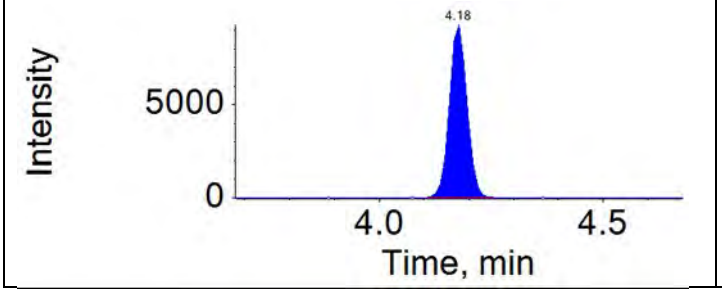
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

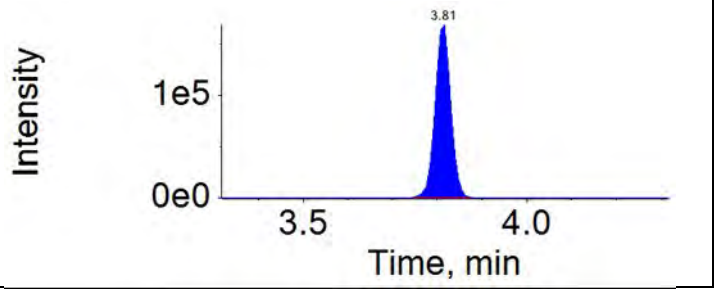
Analyte: PFHxA	Extraction Standard: 13C5-PFHxA
313.0 / 269.0	318.0 / 273.0



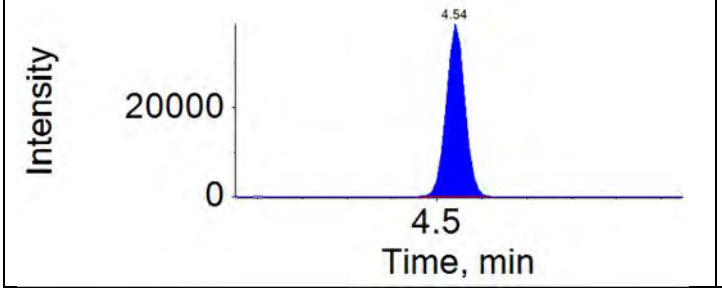


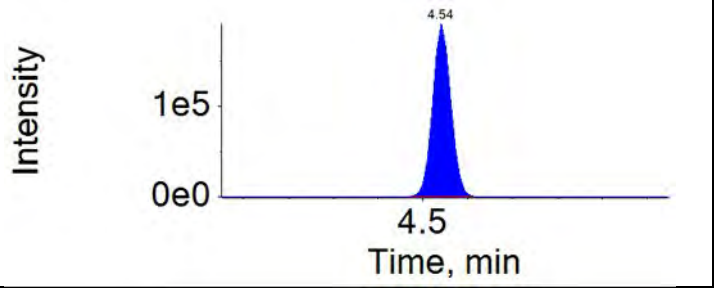
Analyte: PFPeS	Extraction Standard: 13C3-PFBS
349.0 / 80.0	302.0 / 80.0



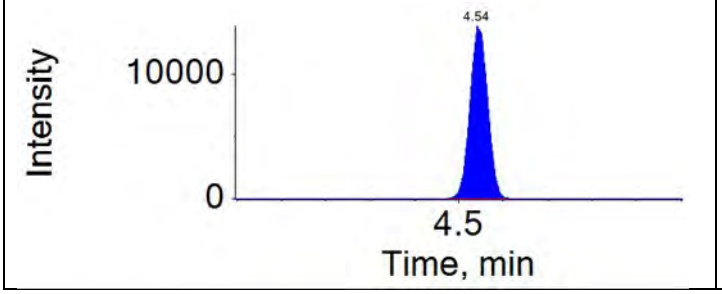


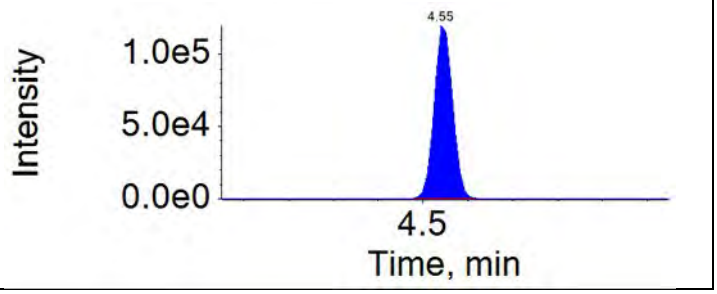
Analyte: PFHpA	Extraction Standard: 13C4-PFHpA
363.0 / 319.0	367.0 / 322.0





Analyte: PFHxS	Extraction Standard: 13C3-PFHxS
399.0 / 80.0	402.0 / 80.0

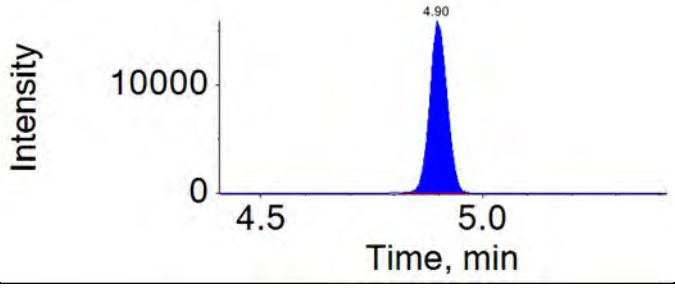
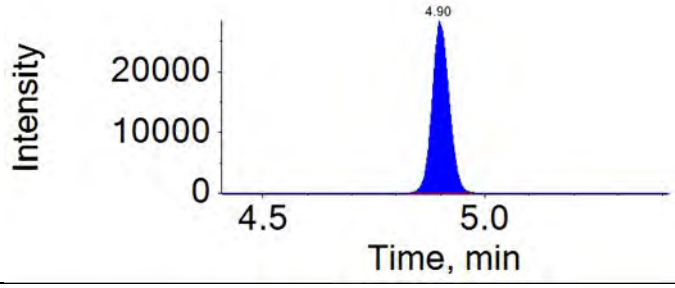


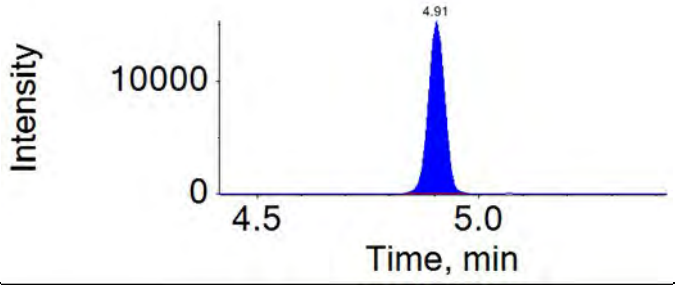
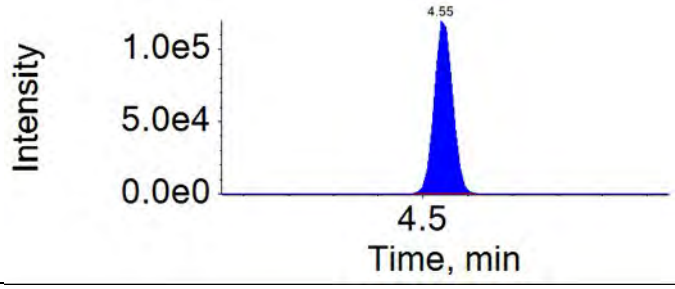


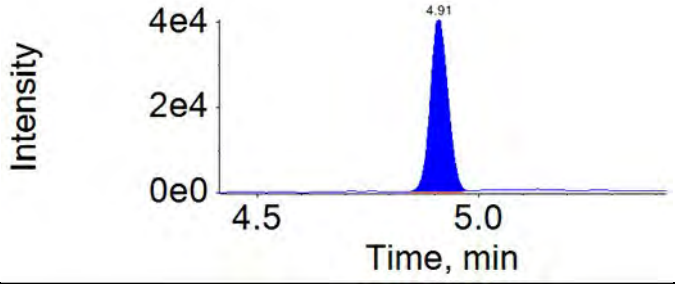
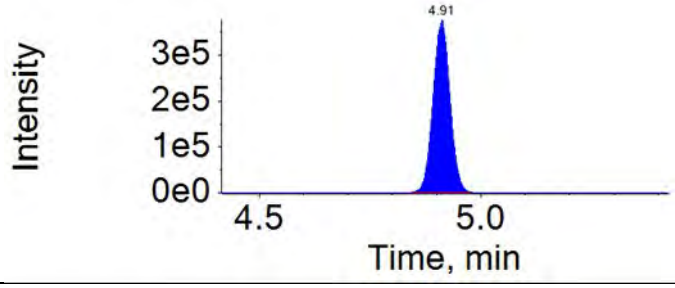
APPROVED
By MCD at 10:13 pm, 11/30/18

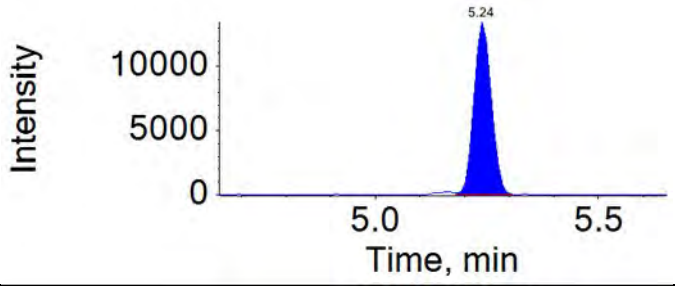
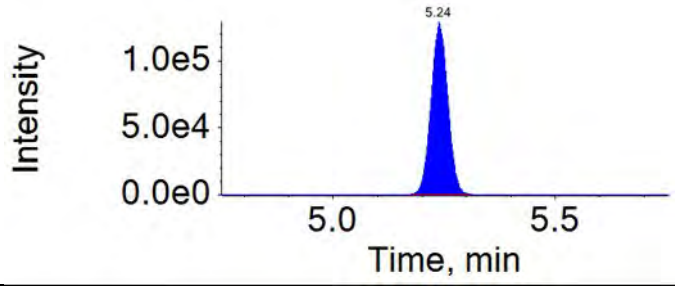
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: 6:2-FTS	Extraction Standard: 13C2-6:2-FTS
427.0 / 407.0	429.0 / 81.0
	

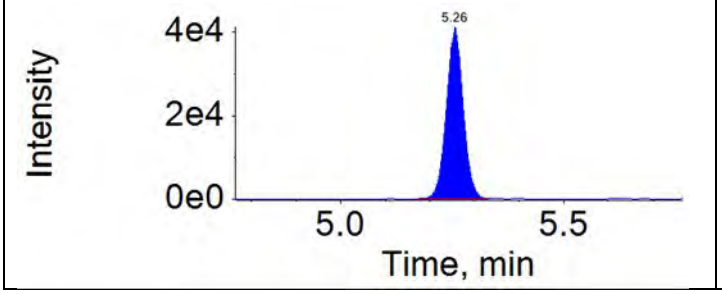
Analyte: PFHpS	Extraction Standard: 13C3-PFHxS
449.0 / 80.0	402.0 / 80.0
	

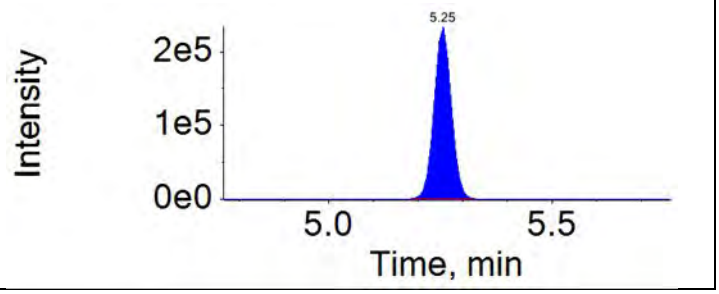
Analyte: PFOA	Extraction Standard: 13C8-PFOA
413.0 / 369.0	421.0 / 376.0
	

Analyte: PFOS	Extraction Standard: 13C8-PFOS
499.0 / 80.0	507.0 / 80.0
	

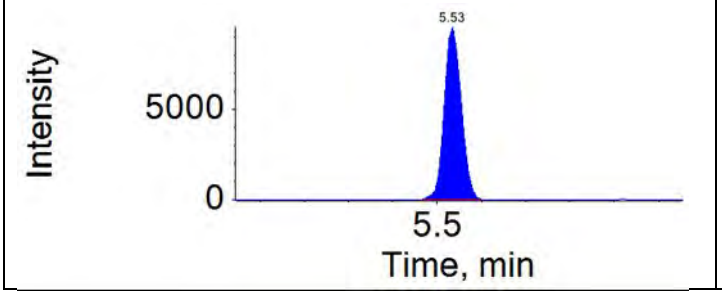
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

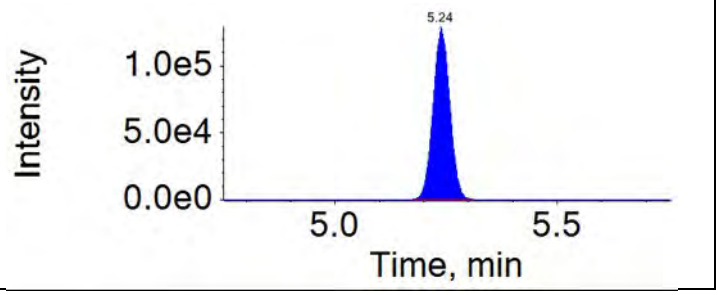
Analyte: PFNA	Extraction Standard: 13C9-PFNA
463.0 / 419.0	472.0 / 427.0



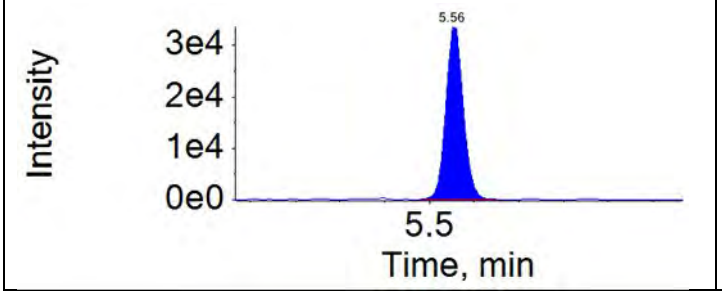


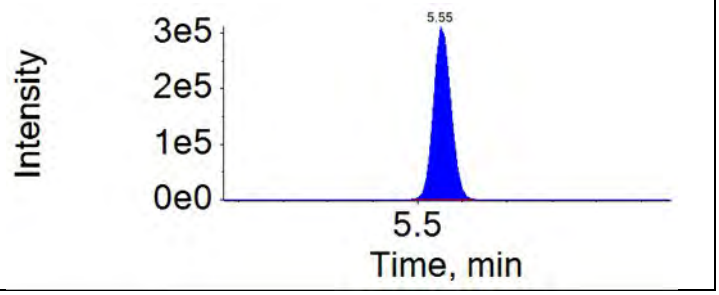
Analyte: PFNS	Extraction Standard: 13C8-PFOS
549.0 / 80.0	507.0 / 80.0



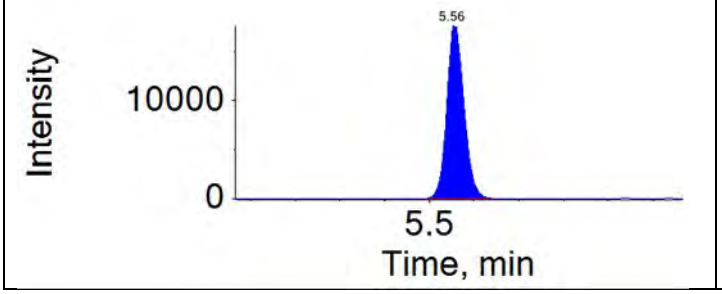


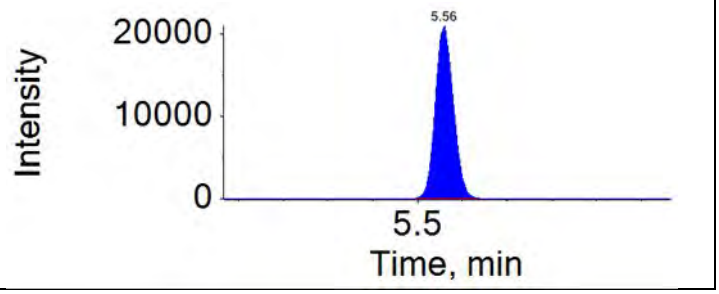
Analyte: PFDA	Extraction Standard: 13C6-PFDA
513.0 / 469.0	519.0 / 474.0





Analyte: 8:2-FTS	Extraction Standard: 13C2-8:2-FTS
527.0 / 507.0	529.0 / 81.0

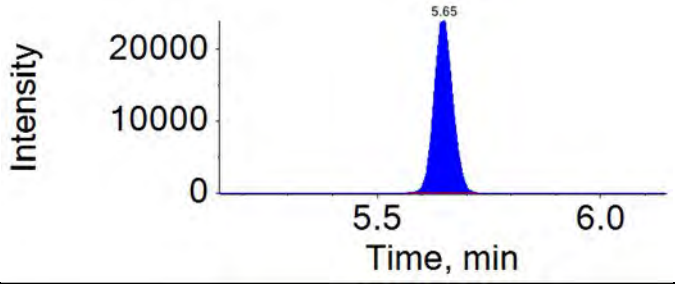
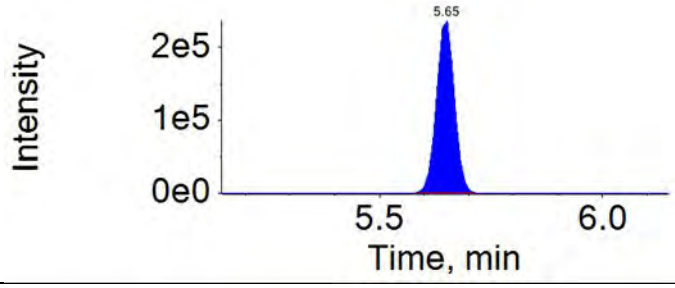


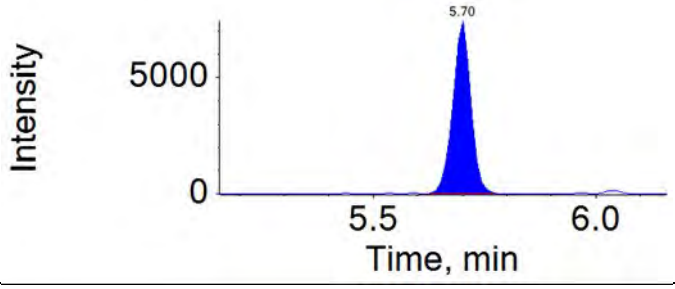
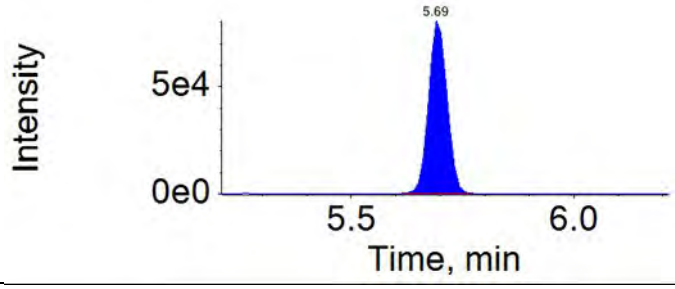


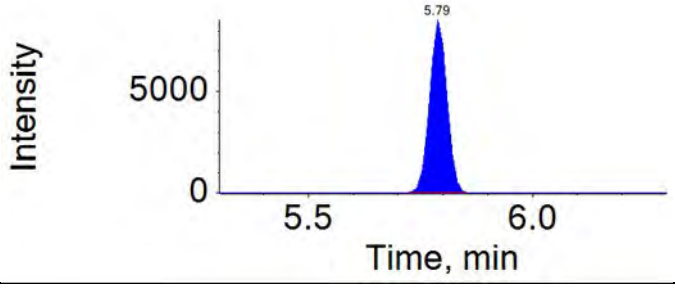
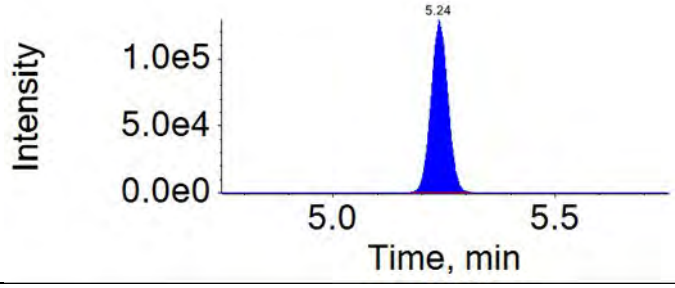
APPROVED
By MCD at 10:13 pm, 11/30/18

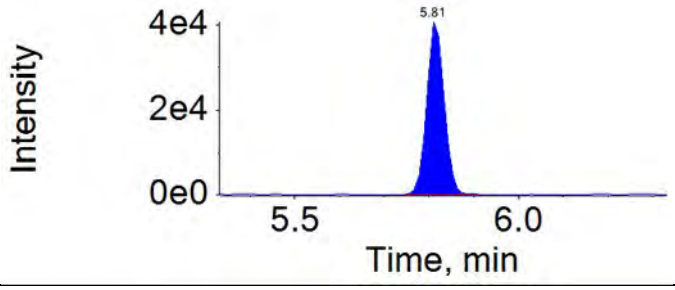
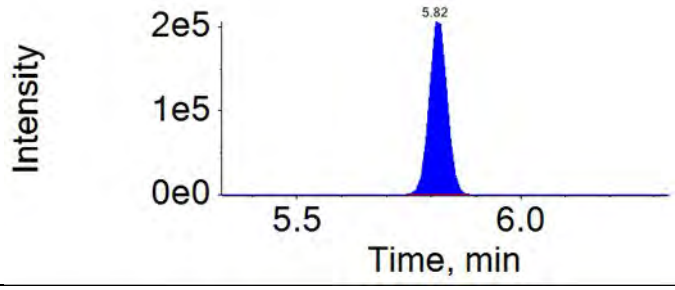
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFOSA	Extraction Standard: 13C8-PFOSA
498.0 / 78.0	506.0 / 78.0
	

Analyte: NMeFOSAA	Extraction Standard: d3-NMeFOSAA
570.0 / 419.0	573.0 / 419.0
	

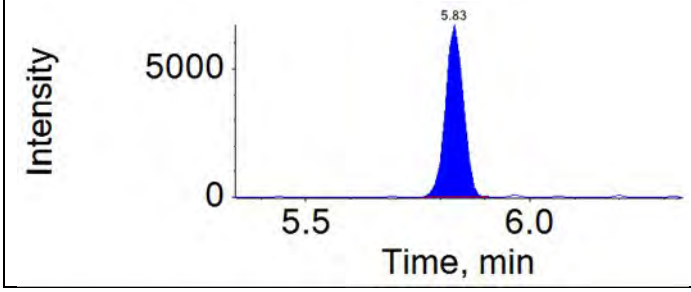
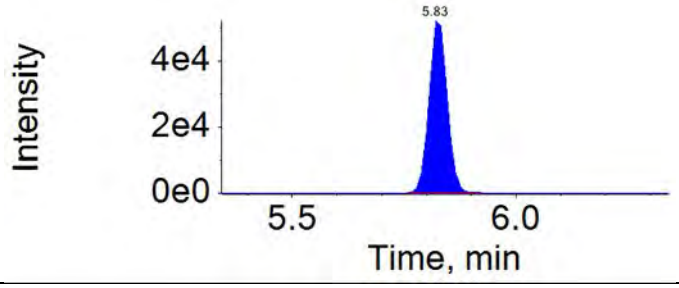
Analyte: PFDS	Extraction Standard: 13C8-PFOS
599.0 / 80.0	507.0 / 80.0
	

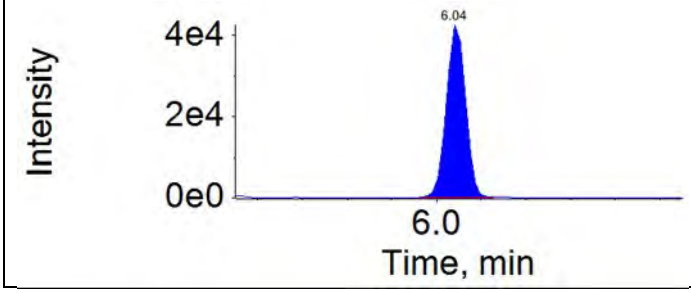
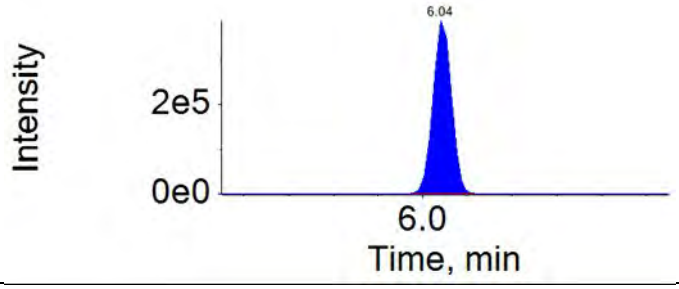
Analyte: PFUnDA	Extraction Standard: 13C7-PFUnDA
563.0 / 519.0	570.0 / 525.0
	

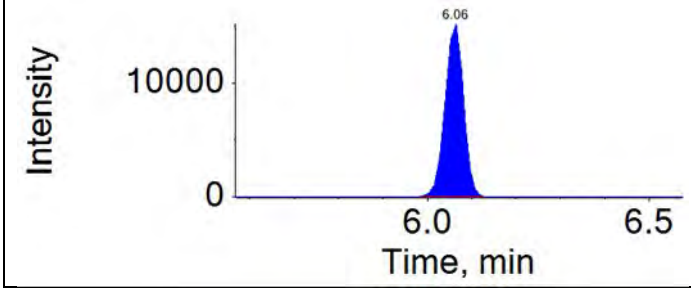
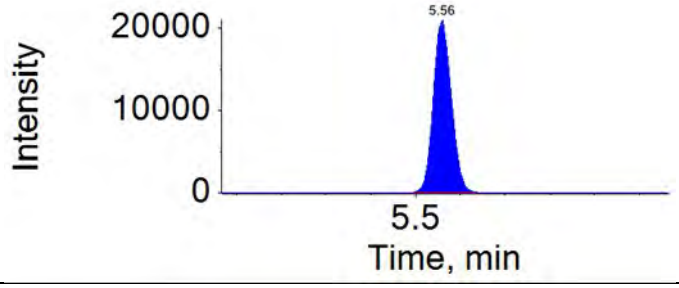
APPROVED
By MCD at 10:13 pm, 11/30/18

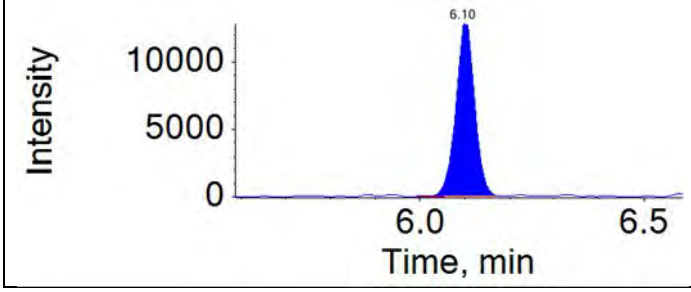
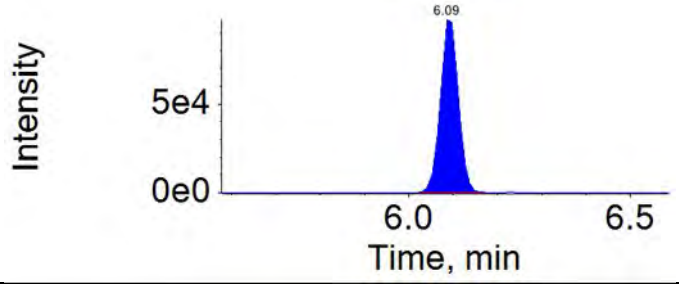
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: NEtFOSAA	Extraction Standard: d5-NEtFOSAA
584.0 / 419.0	589.0 / 419.0
	

Analyte: PFDoDA	Extraction Standard: 13C2-PFDoDA
613.0 / 569.0	615.0 / 570.0
	

Analyte: 10:2-FTS	Extraction Standard: 13C2-8:2-FTS
627.0 / 607.0	529.0 / 81.0
	

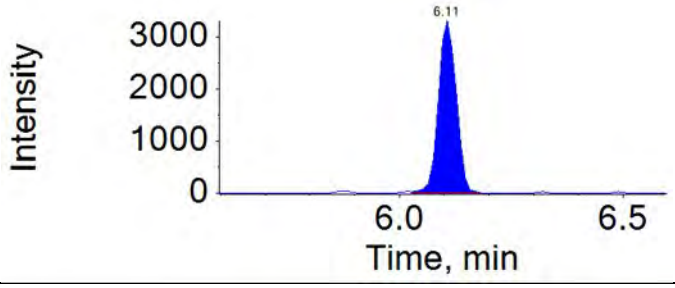
Analyte: NMePFOSAE	Extraction Standard: d7-NMePFOSAE
616.0 / 59.0	623.0 / 59.0
	

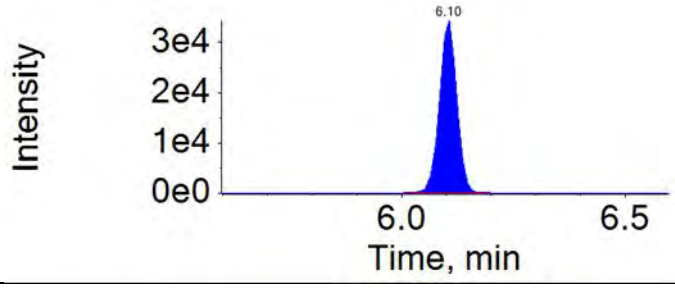
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

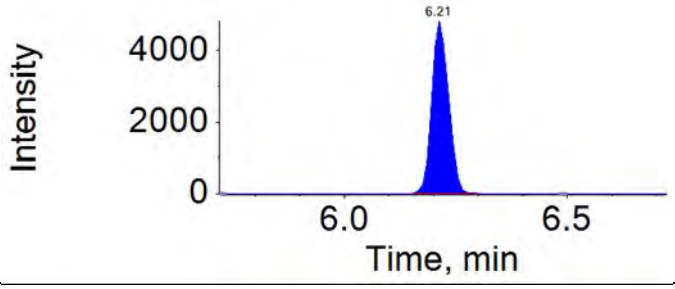
ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

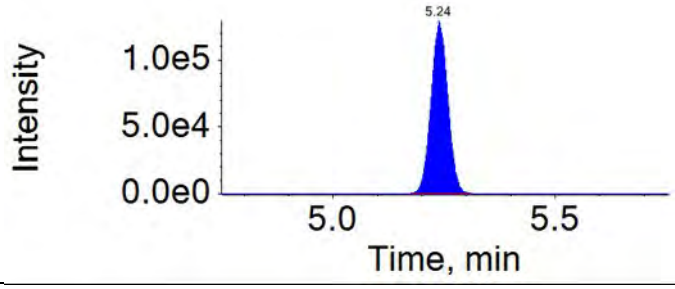
Analyte: NMePFOSA	Extraction Standard: d3-NMePFOSA
512.0 / 169.0	515.0 / 169.0



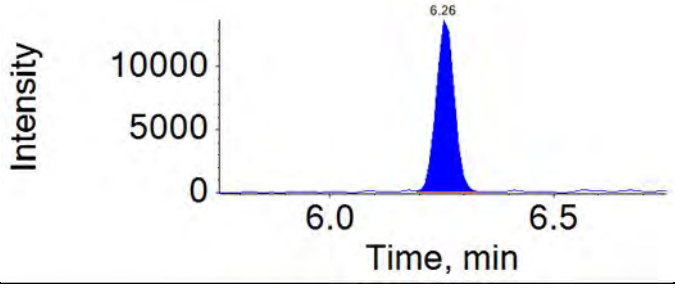


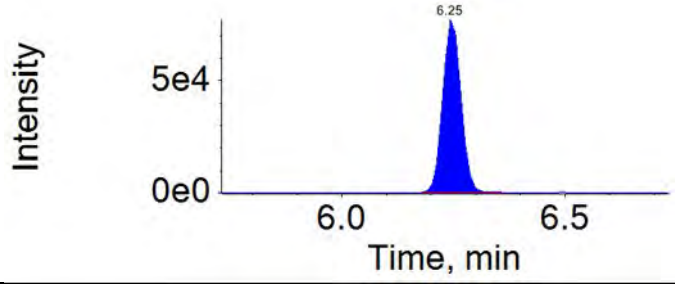
Analyte: PFDoS	Extraction Standard: 13C8-PFOS
699.0 / 80.0	507.0 / 80.0



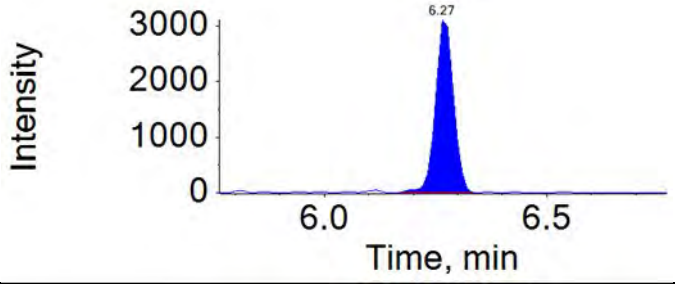


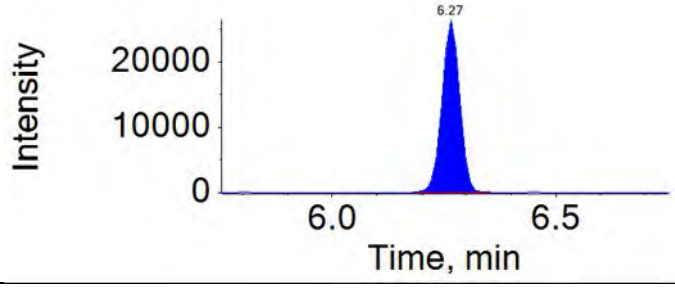
Analyte: NEtPFOSAE	Extraction Standard: d9-NEtPFOSAE
630.0 / 59.0	639.0 / 59.0





Analyte: NEtPFOSA	Extraction Standard: d5-NEtPFOSA
526.0 / 169.0	531.0 / 169.0

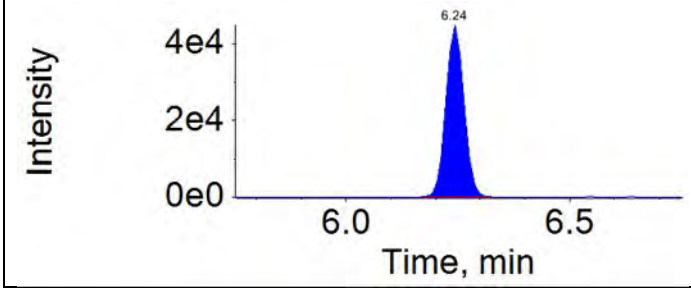
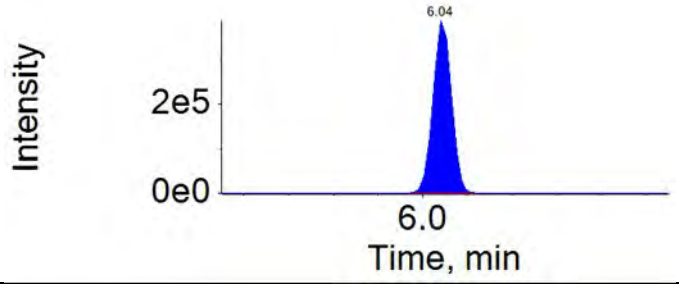


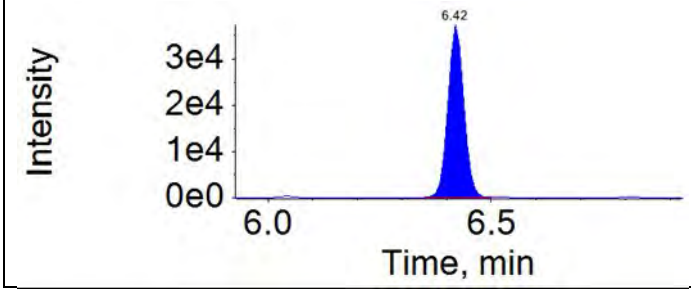
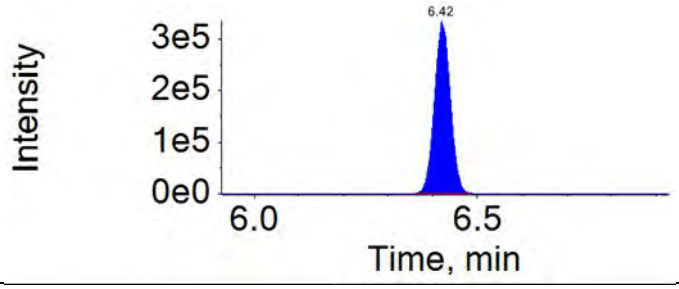


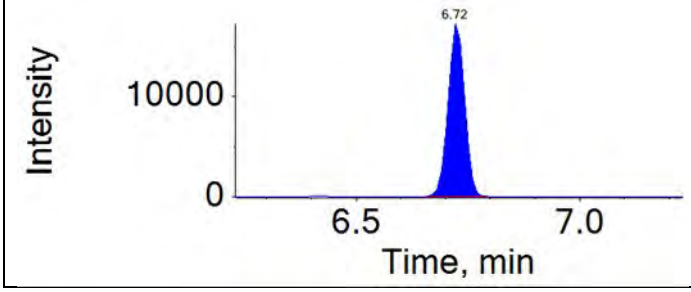
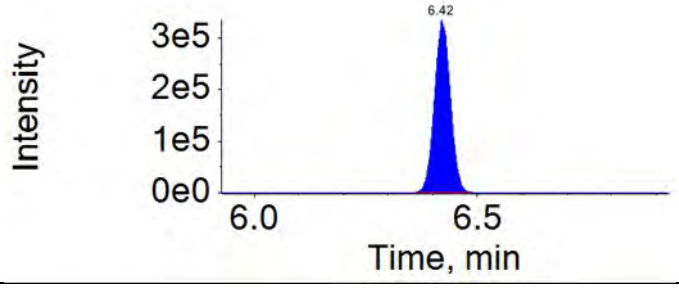
APPROVED
By MCD at 10:13 pm, 11/30/18

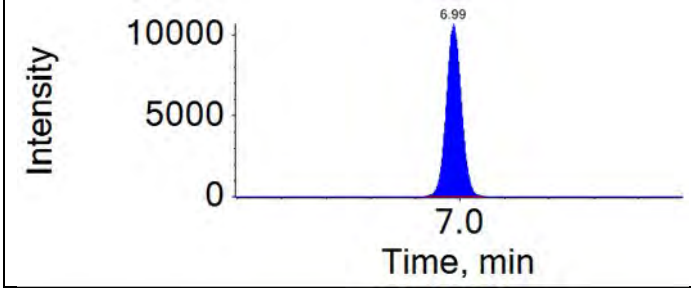
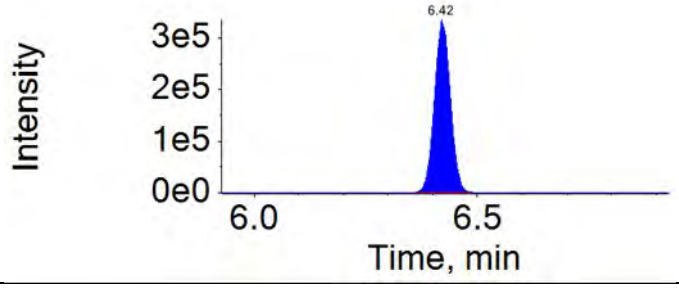
REVIEWED
By HMK at 2:27 pm, 12/6/18

ICAL Name: 18NOV28DCAL **Result Table:** 18332003 11/30/2018 9:58:40 PM
QMethod Name: 18AUG20QM **Acquisition Method:** 18AUG13_3uL.dam

Analyte: PFTrDA	Extraction Standard: 13C2-PFDoDA
663.0 / 619.0	615.0 / 570.0
	

Analyte: PFTeDA	Extraction Standard: 13C2-PFTeDA
713.0 / 669.0	715.0 / 670.0
	

Analyte: PFHxDA	Extraction Standard: 13C2-PFTeDA
813.0 / 769.0	715.0 / 670.0
	

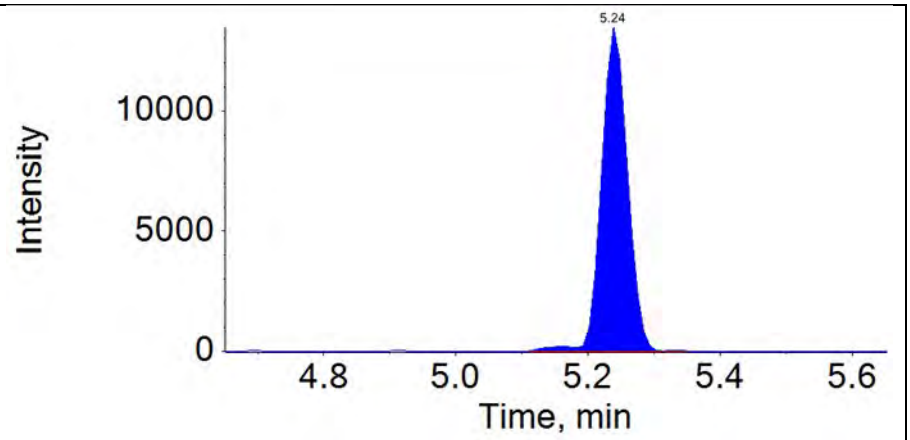
Analyte: PFODA	Extraction Standard: 13C2-PFTeDA
913.0 / 869.0	715.0 / 670.0
	

APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

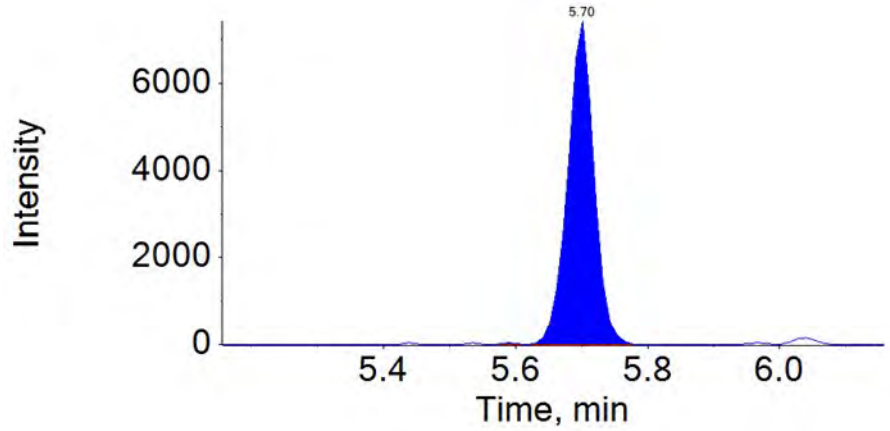
Results Table Name: 18332003
Results Table Date: 11/30/2018 9:58:40 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFOS
RT (min.):
5.24
Peak Area:
37087.7
Mass Range:
499.0 / 80.0
File Name:
18NOV29D-56.wiff
Sample Name:
LCS332003



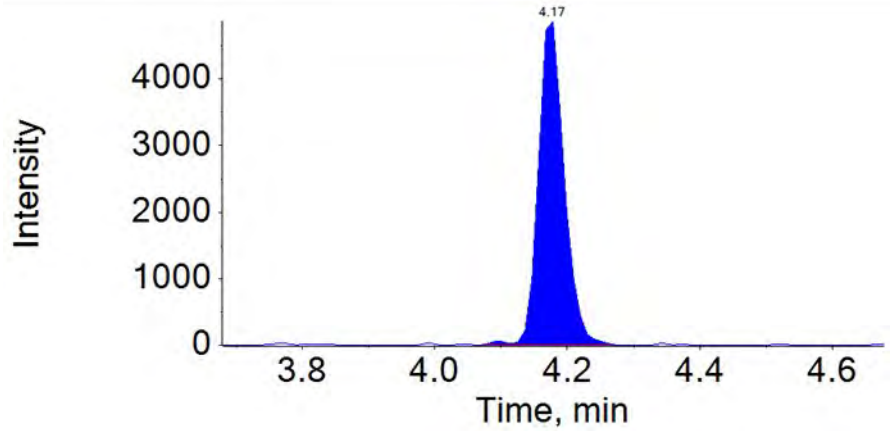
Integration Comment: incorrect integration

Component Name:
NMeFOSAA
RT (min.):
5.70
Peak Area:
20685.4
Mass Range:
570.0 / 419.0
File Name:
18NOV29D-56.wiff
Sample Name:
LCS332003



Integration Comment: incorrect integration

Component Name:
PFPeS_2
RT (min.):
4.17
Peak Area:
13270.2
Mass Range:
349.0 / 99.0
File Name:
18NOV29D-56.wiff
Sample Name:
LCS332003



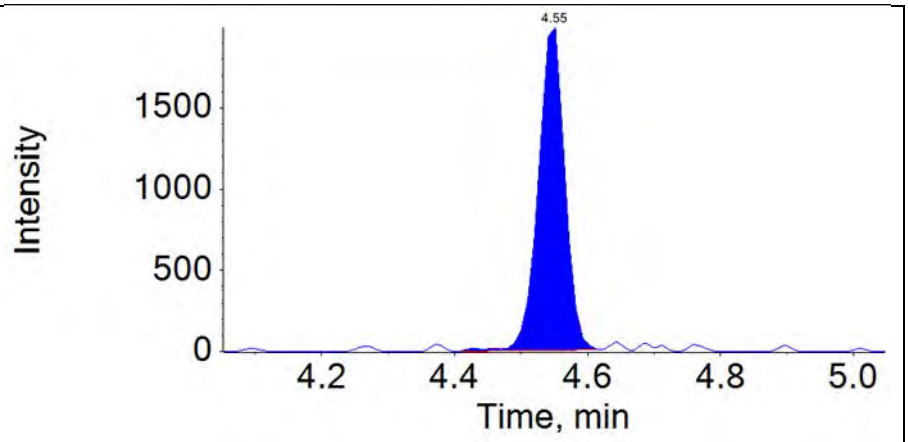
Integration Comment: incorrect integration

APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

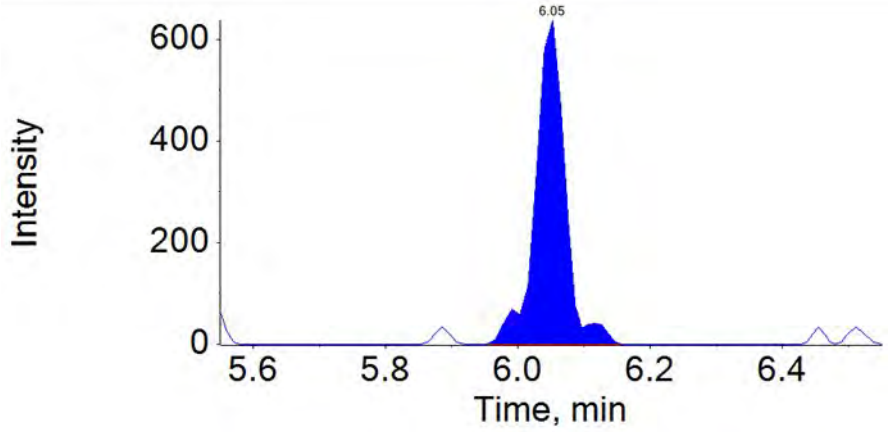
Results Table Name: 18332003
Results Table Date: 11/30/2018 9:58:40 PM
Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

Component Name:
PFHpA_2
RT (min.):
4.55
Peak Area:
5542.7
Mass Range:
363.0 / 169.0
File Name:
18NOV29D-56.wiff
Sample Name:
LCS332003



Integration Comment: incorrect integration

Component Name:
PFDoDA_2
RT (min.):
6.05
Peak Area:
2003.3
Mass Range:
613.0 / 169.0
File Name:
18NOV29D-56.wiff
Sample Name:
LCS332003



Integration Comment: incorrect integration

APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

Results Table Name: 18332003
Results Table Date: 11/30/2018 9:58:40 PM

Acquisition Method: 18AUG13_3uL.dam
QMethod File: 18AUG20QM

APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

Ion Ratio Report

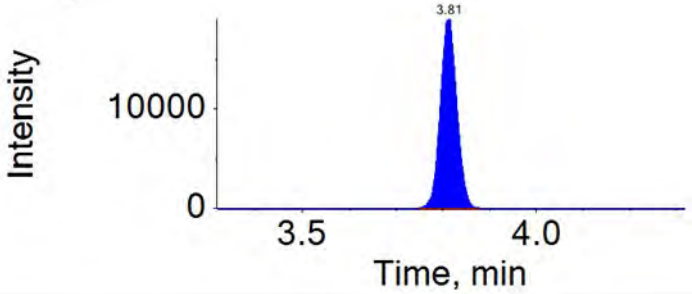
Sample Name: LCS332003 **Instrument Name:** LM27631 **File Name:** 18NOV29D-56.wiff

Component Name	RT	RRT	Analyte Area Response	Int Typ	Expected Ion Ratio	Ion Ratio	Ion Ratio % Diff	Ion Ratio Limit	Ion Ratio OOS
PFBS	3.81	1.00	47400.8	A	N/A	0.3586			
PFBS_2	3.81	1.00	16997.3	A	N/A	0.3586	-2	50	
4:2-FTS	4.12	1.00	44925.4	A	N/A	0.6447			
4:2-FTS_2	4.12	1.00	28964.9	A	N/A	0.6447	1	50	
PFHxA	4.15	1.00	108517.0	A	N/A	0.0183			
PFHxA_2	4.16	1.00	1982.3	A	N/A	0.0183	77	50	OOS
PFPeS	4.18	1.10	25275.2	A	N/A	0.5216			
PFPeS_2	4.17	1.10	13184.7	M	N/A	0.5216	5	50	
PFHpA	4.54	1.00	111132.4	A	N/A	0.0494			
PFHpA_2	4.55	1.00	5494.8	M	N/A	0.0494	-11	50	
PFHxS	4.54	1.00	38520.3	A	N/A	0.3690			
PFHxS_2	4.55	1.00	14213.1	A	N/A	0.3690	0	50	
6:2-FTS	4.90	1.00	43250.5	A	N/A	0.6442			
6:2-FTS_2	4.90	1.00	27861.0	A	N/A	0.6442	-3	50	
PFHpS	4.91	1.08	39014.5	A	N/A	0.3626			
PFHpS_2	4.90	1.08	14147.9	A	N/A	0.3626	-7	50	
PFOA	4.91	1.00	111412.0	A	N/A	0.0686			
PFOA_2	4.91	1.00	7643.3	A	N/A	0.0686	20	50	
PFOS	5.24	1.00	36350.5	M	N/A	0.3412			
PFOS_2	5.24	1.00	12401.6	A	N/A	0.3412	15	50	
PFNA	5.26	1.00	107498.4	A	N/A	0.0199			
PFNA_2	5.26	1.00	2137.9	A	N/A	0.0199	-1	50	
PFNS	5.53	1.06	25510.1	A	N/A	0.3980			
PFNS_2	5.54	1.06	10154.2	A	N/A	0.3980	-17	50	
PFDA	5.56	1.00	91367.7	A	N/A	0.0045			
PFDA_2	5.55	1.00	409.3	A	N/A	0.0045	-40	50	
8:2-FTS	5.56	1.00	47406.4	A	N/A	0.5834			
8:2-FTS_2	5.56	1.00	27658.0	A	N/A	0.5834	8	50	
NMeFOSAA	5.70	1.00	20635.0	M	N/A	0.2227			
NMeFOSAA_2	5.70	1.00	4596.1	A	N/A	0.2227	-3	50	
PFDS	5.79	1.10	22691.0	A	N/A	0.4089			
PFDS_2	5.79	1.10	9278.1	A	N/A	0.4089	-24	50	
PFUnDA	5.81	1.00	109727.5	A	N/A	0.0036			
PFUnDA_2	5.82	1.00	389.8	A	N/A	0.0036	-7	50	
NEtFOSAA	5.83	1.00	18556.9	A	N/A	0.5890			
NEtFOSAA_2	5.83	1.00	10930.7	A	N/A	0.5890	-20	50	
PFDoDA	6.04	1.00	127385.4	A	N/A	0.0150			
PFDoDA_2	6.05	1.00	1913.0	M	N/A	0.0150	15	50	
10:2-FTS	6.06	1.09	43892.0	A	N/A	0.7222			
10:2-FTS_2	6.06	1.09	31697.5	A	N/A	0.7222	3	50	
PFTrDA	6.24	1.03	125876.8	A	N/A	0.0108			
PFTrDA_2	6.25	1.03	1361.5	A	N/A	0.0108	20	50	
PFTeDA	6.42	1.00	91923.0	A	N/A	0.0066			
PFTeDA_2	6.41	1.00	603.6	A	N/A	0.0066	17	50	
PFHxDA	6.72	1.05	44242.6	A	N/A	0.0632			
PFHxDA_2	6.72	1.05	2795.6	A	N/A	0.0632	-2	50	
PFODA	6.99	1.09	24810.3	A	N/A	0.0237			
PFODA_2	6.98	1.09	588.6	A	N/A	0.0237	-10	50	

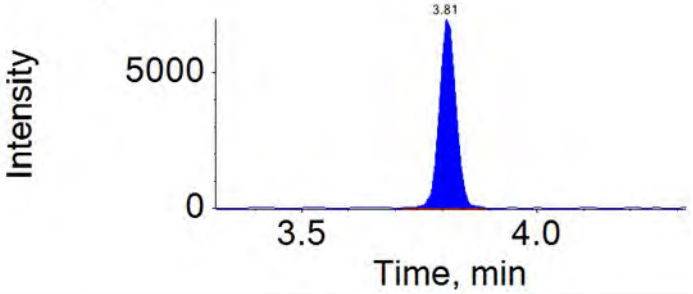
APPROVED
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REVIEWED
By HMK at 2:27 pm, 12/6/18

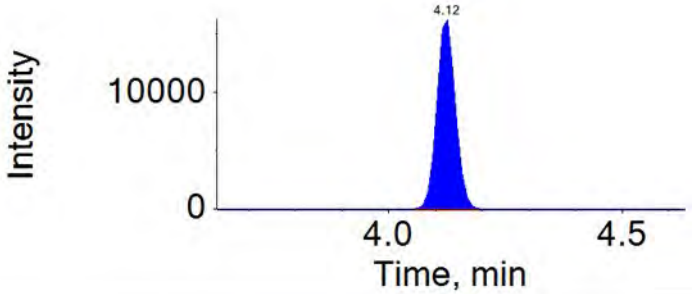
Component: PFBS
Primary Mass: 299.0 / 80.0



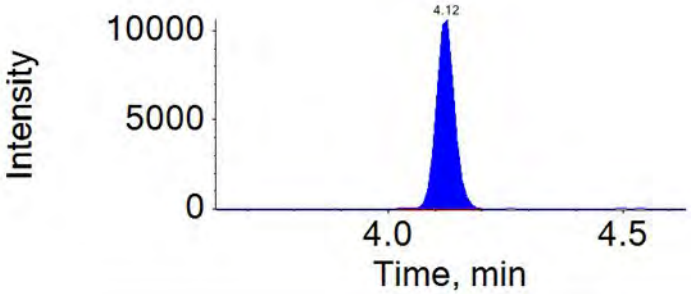
Component: PFBS_2
Secondary Mass: 299.0 / 99.0



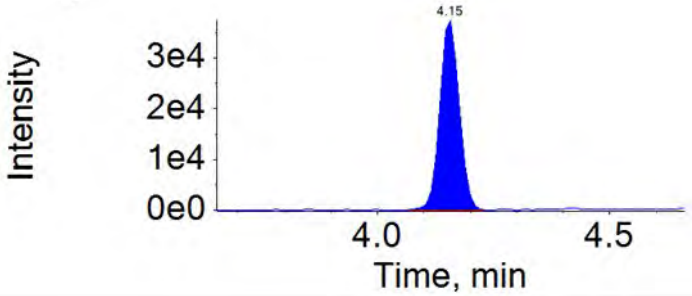
Component: 4:2-FTS
Primary Mass: 327.0 / 307.0



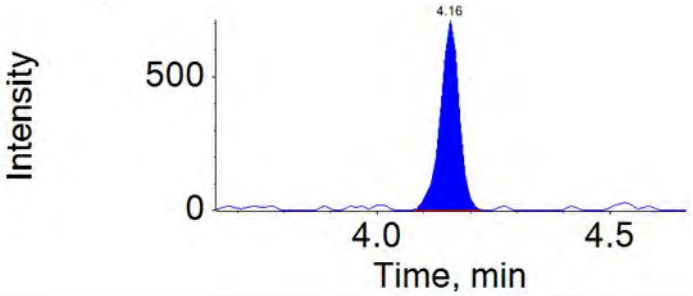
Component: 4:2-FTS_2
Secondary Mass: 327.0 / 81.0



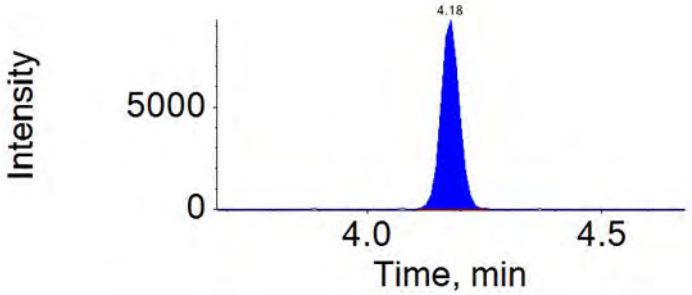
Component: PFHxA
Primary Mass: 313.0 / 269.0



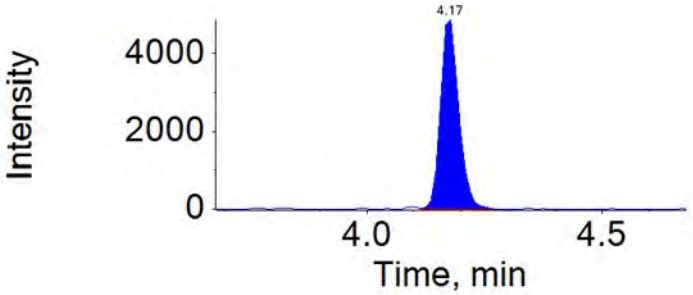
Component: PFHxA_2
Secondary Mass: 313.0 / 119.0



Component: PFPeS
Primary Mass: 349.0 / 80.0



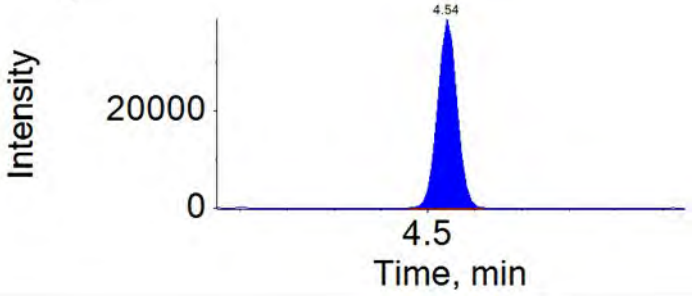
Component: PFPeS_2
Secondary Mass: 349.0 / 99.0



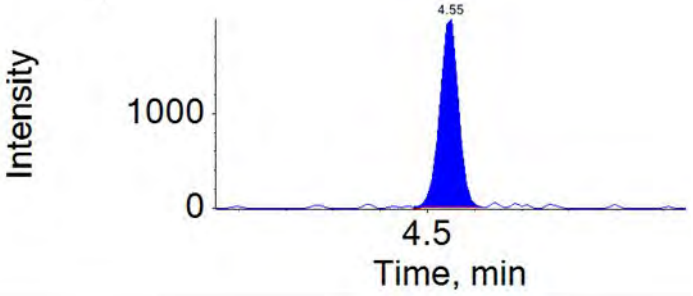
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

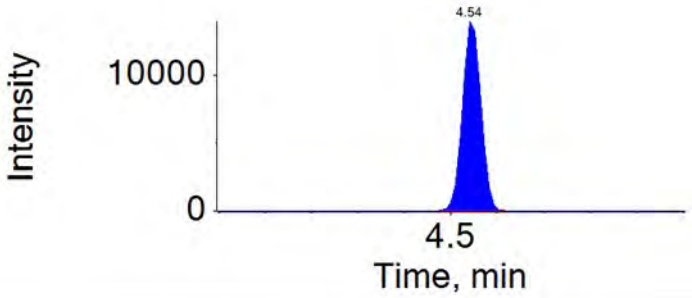
Component: PFHpA
Primary Mass: 363.0 / 319.0



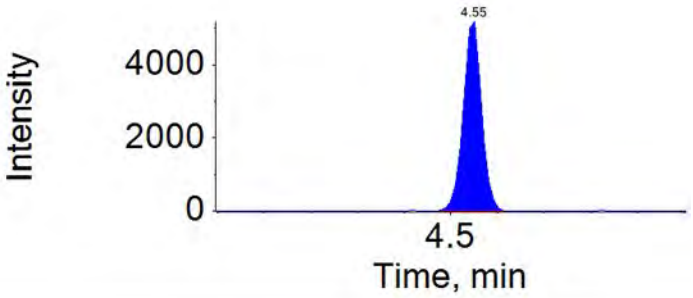
Component: PFHpA_2
Secondary Mass: 363.0 / 169.0



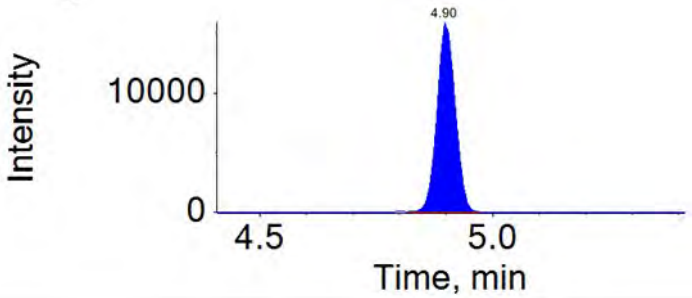
Component: PFHxS
Primary Mass: 399.0 / 80.0



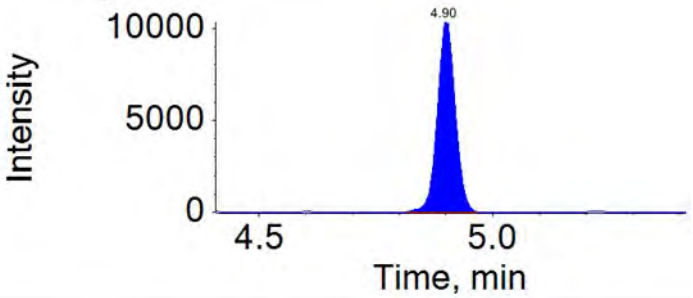
Component: PFHxS_2
Secondary Mass: 399.0 / 99.0



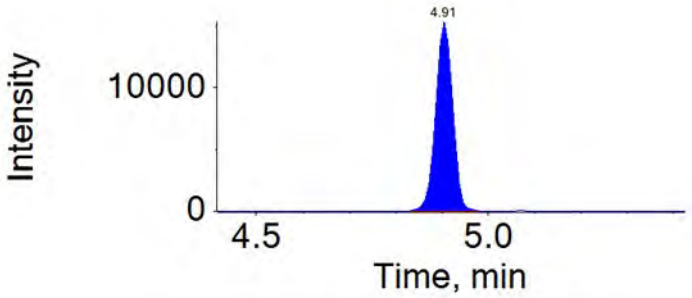
Component: 6:2-FTS
Primary Mass: 427.0 / 407.0



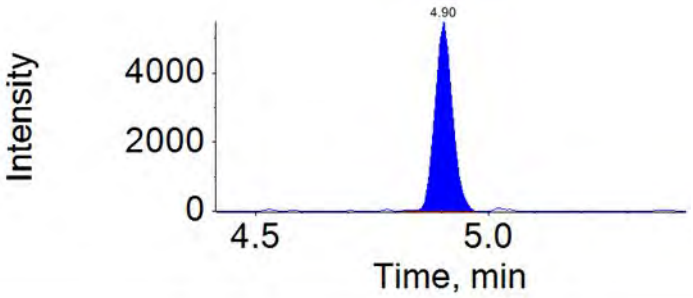
Component: 6:2-FTS_2
Secondary Mass: 427.0 / 81.0



Component: PFHpS
Primary Mass: 449.0 / 80.0



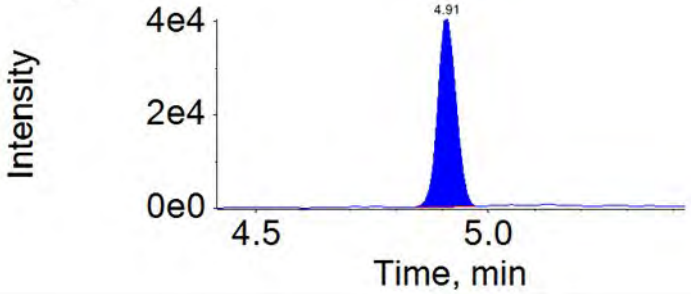
Component: PFHpS_2
Secondary Mass: 449.0 / 99.0



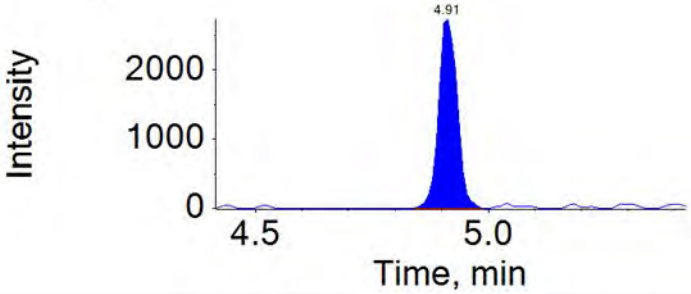
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

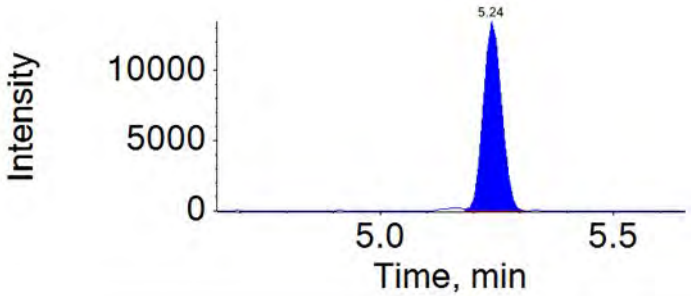
Component: PFOA
Primary Mass: 413.0 / 369.0



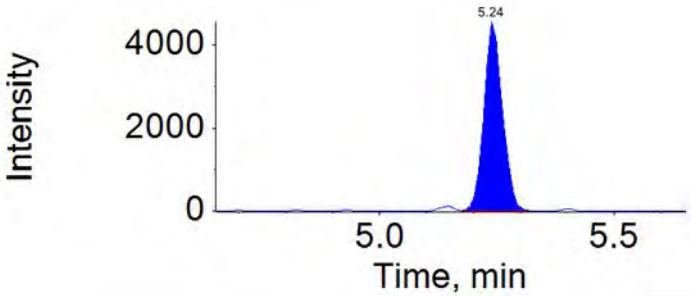
Component: PFOA_2
Secondary Mass: 413.0 / 169.0



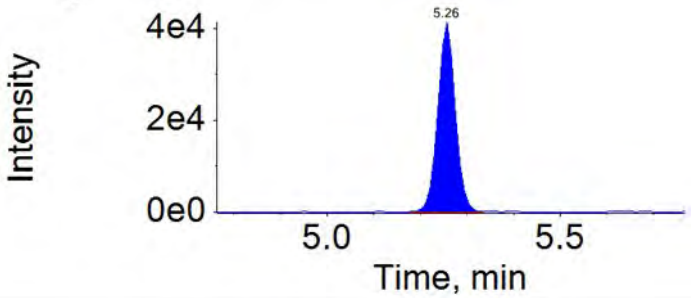
Component: PFOS
Primary Mass: 499.0 / 80.0



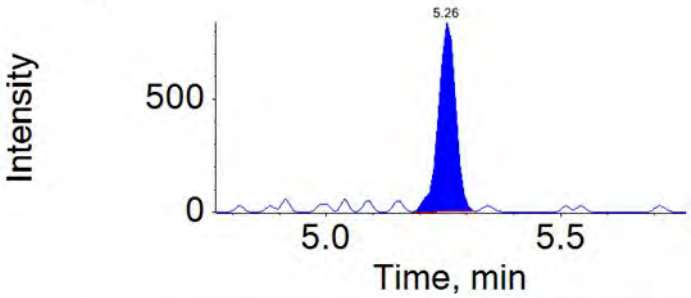
Component: PFOS_2
Secondary Mass: 499.0 / 99.0



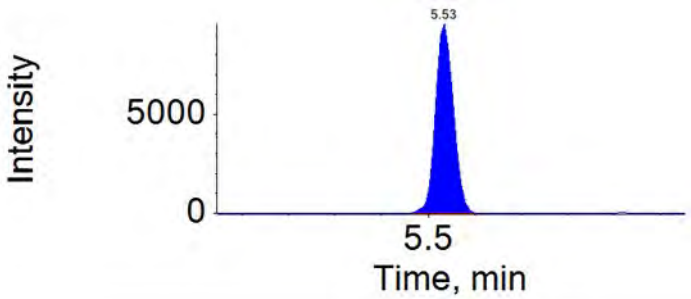
Component: PFNA
Primary Mass: 463.0 / 419.0



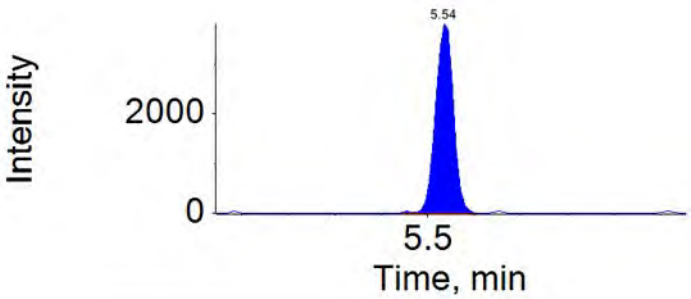
Component: PFNA_2
Secondary Mass: 463.0 / 169.0



Component: PFNS
Primary Mass: 549.0 / 80.0



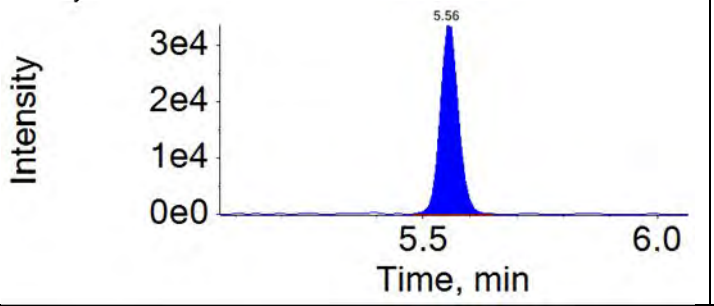
Component: PFNS_2
Secondary Mass: 549.0 / 99.0



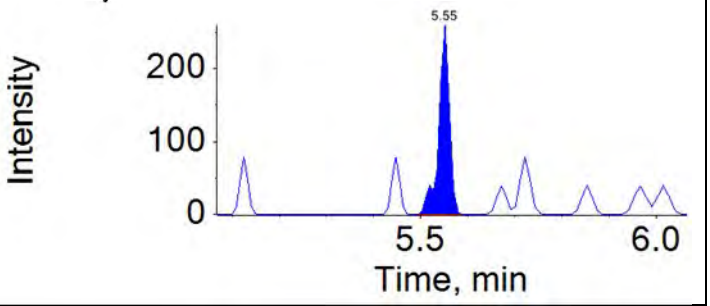
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

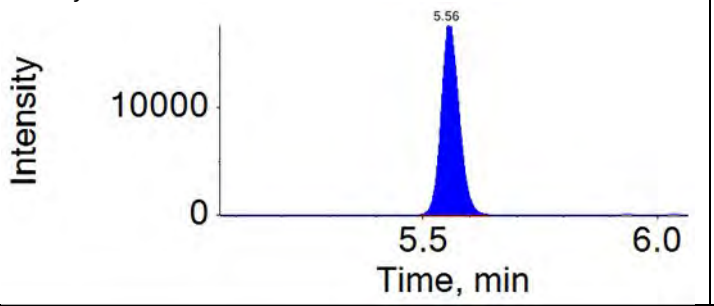
Component: PFDA
Primary Mass: 513.0 / 469.0



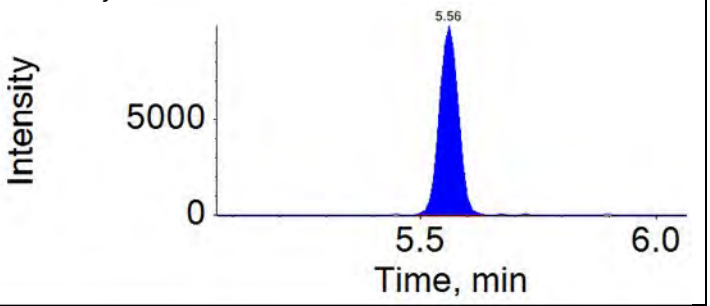
Component: PFDA_2
Secondary Mass: 513.0 / 169.0



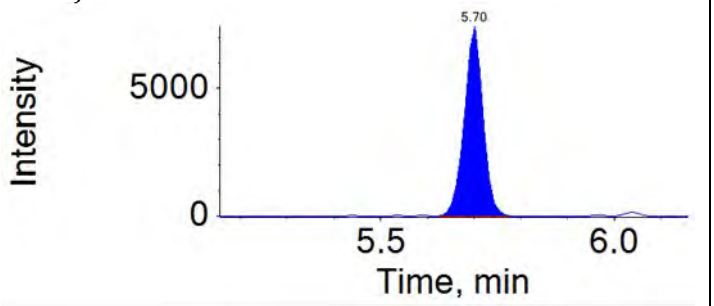
Component: 8:2-FTS
Primary Mass: 527.0 / 507.0



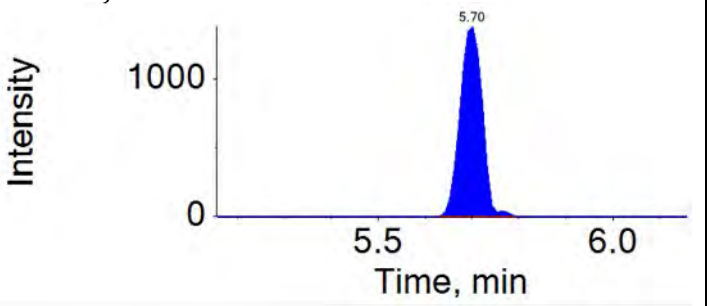
Component: 8:2-FTS_2
Secondary Mass: 527.0 / 81.0



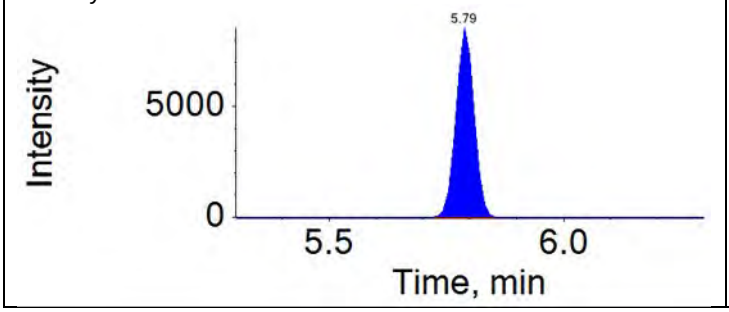
Component: NMeFOSAA
Primary Mass: 570.0 / 419.0



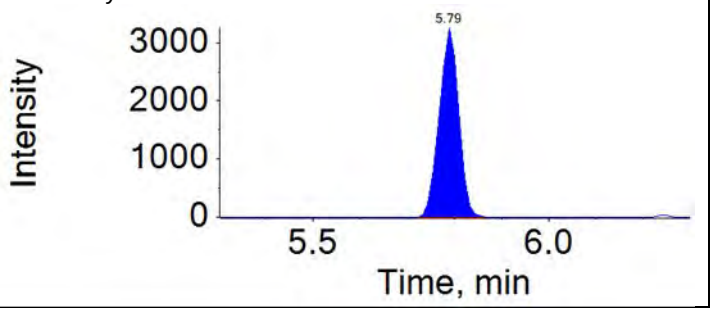
Component: NMeFOSAA_2
Secondary Mass: 570.0 / 483.0



Component: PFDS
Primary Mass: 599.0 / 80.0



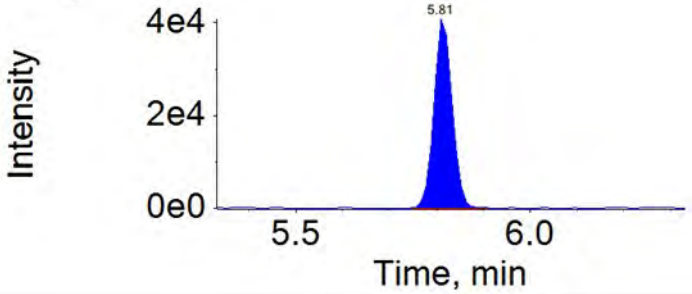
Component: PFDS_2
Secondary Mass: 599.0 / 99.0



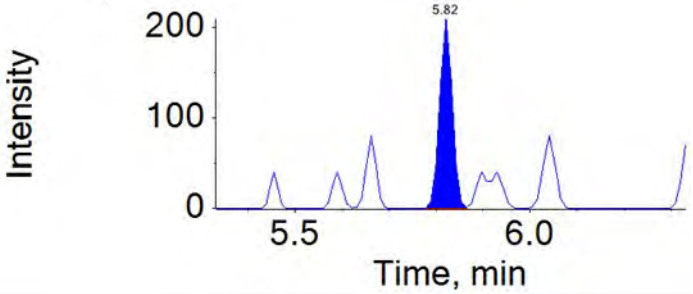
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

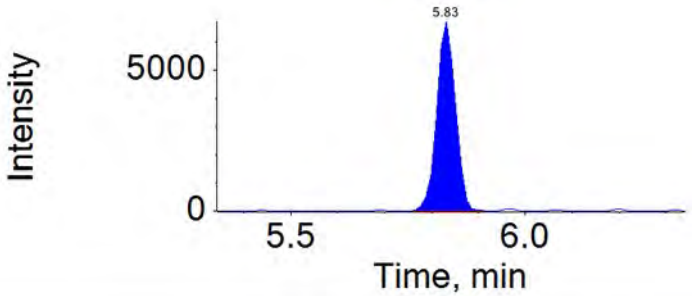
Component: PFUnDA
Primary Mass: 563.0 / 519.0



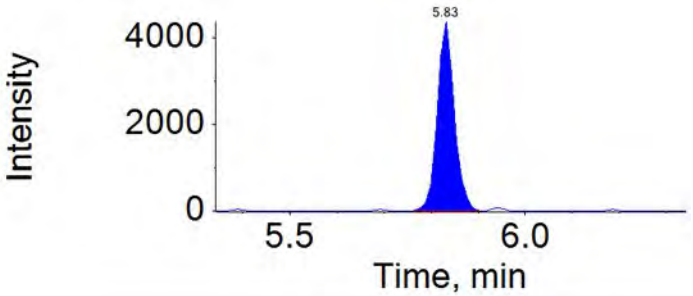
Component: PFUnDA_2
Secondary Mass: 563.0 / 169.0



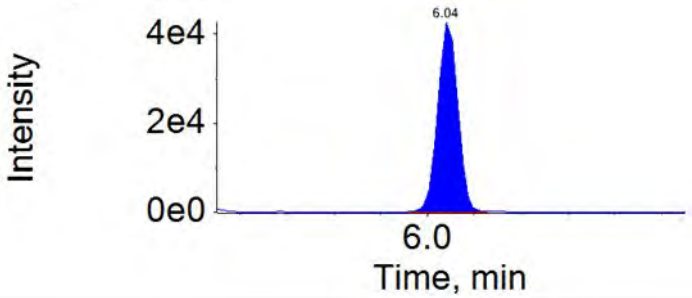
Component: NEtFOSAA
Primary Mass: 584.0 / 419.0



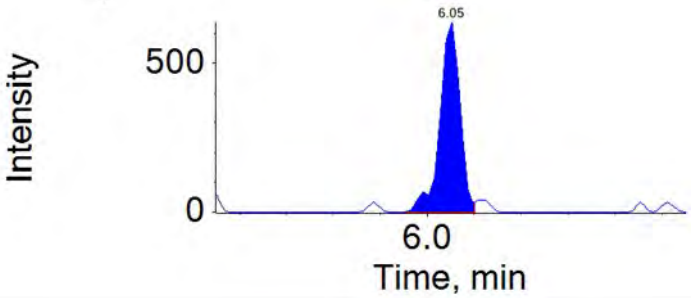
Component: NEtFOSAA_2
Secondary Mass: 584.0 / 526.0



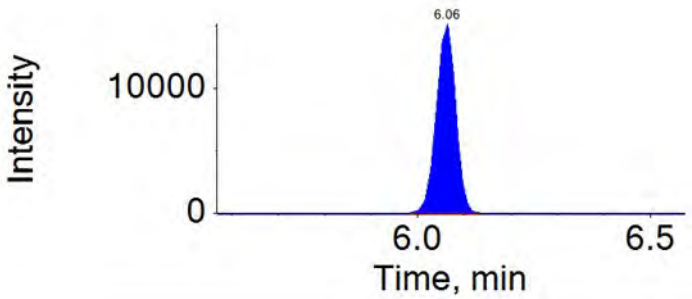
Component: PFDoDA
Primary Mass: 613.0 / 569.0



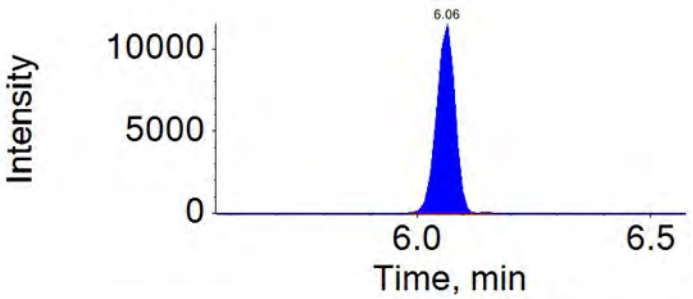
Component: PFDoDA_2
Secondary Mass: 613.0 / 169.0



Component: 10:2-FTS
Primary Mass: 627.0 / 607.0



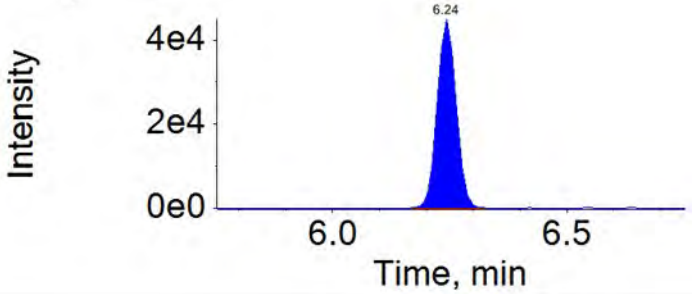
Component: 10:2-FTS_2
Secondary Mass: 627.0 / 81.0



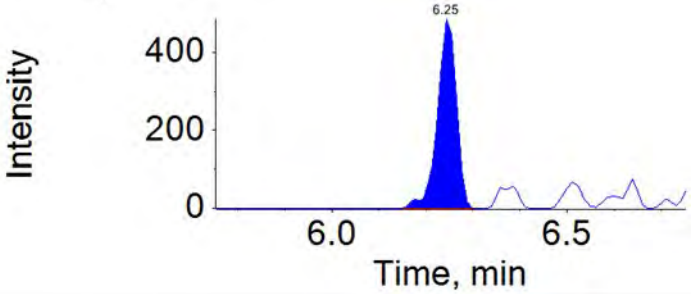
APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

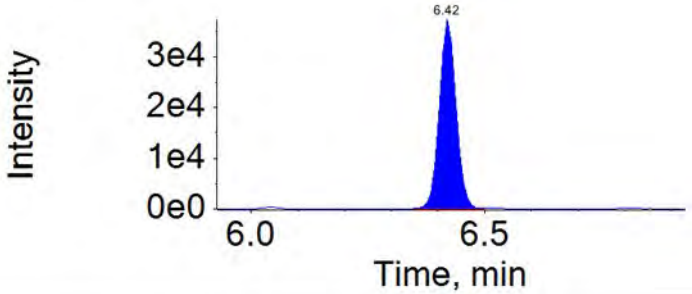
Component: PFTrDA
Primary Mass: 663.0 / 619.0



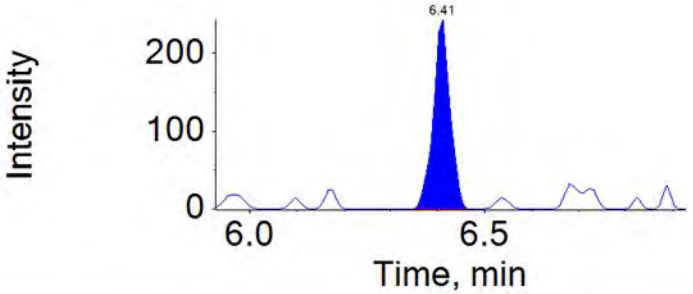
Component: PFTrDA_2
Secondary Mass: 663.0 / 169.0



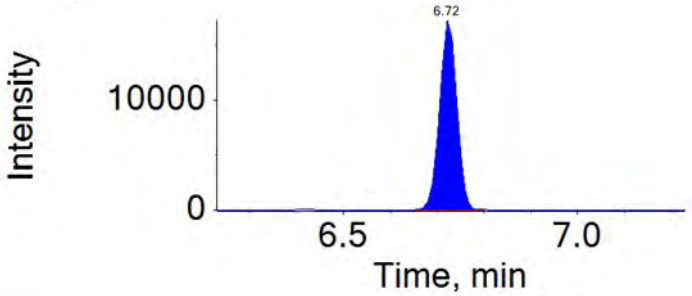
Component: PFTeDA
Primary Mass: 713.0 / 669.0



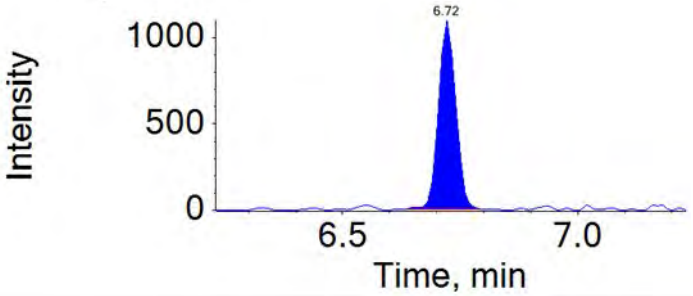
Component: PFTeDA_2
Secondary Mass: 713.0 / 169.0



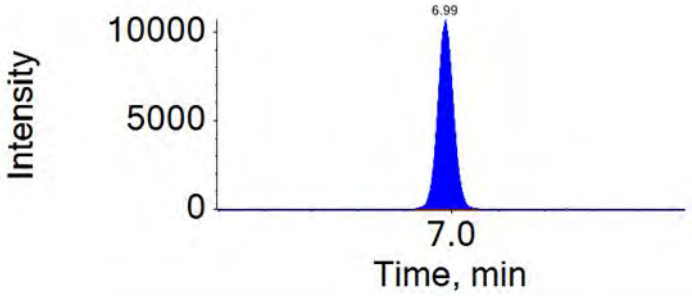
Component: PFHxDA
Primary Mass: 813.0 / 769.0



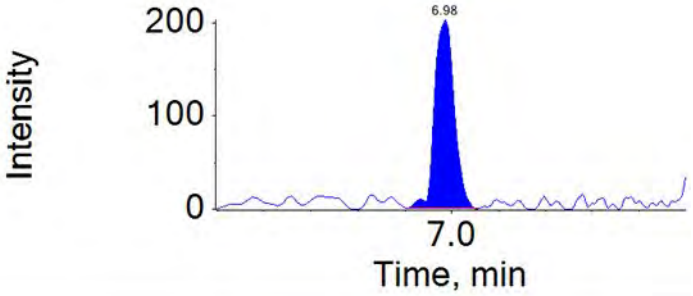
Component: PFHxDA_2
Secondary Mass: 813.0 / 169.0



Component: PFODA
Primary Mass: 913.0 / 869.0



Component: PFODA_2
Secondary Mass: 913.0 / 169.0



APPROVED
By MCD at 10:13 pm, 11/30/18

REVIEWED
By HMK at 2:27 pm, 12/6/18

Preparation Logs

PFAS by LC/MS/MS

Organic Extraction Batchlog Assigned to: 9213 Pamela Rothharpt Reviewed by: MCD 7824 Start Date: 11/8/18 Start time: 6:50

18312004 Tech 1: PJR9213 Tech 2: ACP26543

Analyses on Batch: PFAS in Water by LC/MS/MS-DoD

Dept: 33 Prep Analysis: 14465 PFAS Water Prep - DoD ③ mL PJR9213 11/8/18

Port#	QC	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV ③ (~~uL~~)	IS amt (uL)	BC	Comments
4	9884892MS	NS064	289.16	SSMODX1833BY	.025	MSMODX1833AQ	.04	1ml.	20	173a	
5	9884893MSD	NS064	285.27	SSMODX1833BY	.025	MSMODX1833AQ	.04	1ml.	20	173a	
1	BLANKA	BLK312004	250	SSMODX1833BY	.025	———	—	1ml.	20	Z	
2	LCSA	LCS312004	↓	SSMODX1833BY	.025	MSMODX1833AQ	.04	1ml.	20	Z	

Spike Solutions: Witness: RGB 1375 Instrument: LM27631

MSMODX1833AQ PFAS 537 Native Spike

SSMODX1833BY PFAS 537 Modified Extraction/Surrogate Spik Sequence: 18NOV07DOD/18NOV09D

Port#	Sample #	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	FV ③ (~~uL~~)	IS Amt (uL)	BC	Comments	Analyses	Due Date	Prio
3	1 9884891	BKG NS06	291.21	SSMODX1833BY	.025	1ml.	20	173a		14434	11/15/2018	N
6	2 9884894	NS08	266.41	SSMODX1833BY	.025	1ml.		173a		14434	11/15/2018	N
7	3 9884895	NS08	264.87	SSMODX1833BY	.025	1ml.		173a		14434	11/15/2018	N
8	4 9884896	NS08	254.37	SSMODX1833BY	.025	1ml.		173a		14434	11/15/2018	N
9	5 9884897	NS08	284.81	SSMODX1833BY	.025	1ml.		173a		14434	11/15/2018	N
10	6 9884898	NS09	276.14	SSMODX1833BY	.025	1ml		173a		14434	11/15/2018	N
11	7 9885109	EB 8225(	279.93	SSMODX1833BY	.025	1ml.	20	173a		14434	11/15/2018	N
12	8 9885110	BL 8225·	277.56	SSMODX1833BY	.025	1ml.	20	173a		14434	11/15/2018	N
1	9 9885139	8228:	288.78	SSMODX1833BY	.025	1ml.	20	173a		14434	11/15/2018	N
2	10 9885140	8228:	286.02	SSMODX1833BY	.025	1ml.	20	173a		14434	11/15/2018	N

NPA MCD 7824 11/19/18

18312004

Organic Extraction Batchlog **18312004**

Port#	Sample #	Sample Code	Amt ( )	SS/IS Sol.	Amt (mL)	FV (uL)	IS Amt (uL)	BC	Comments	Analyses	Due Date	Prio

Reagents used During Extraction

Reagent/Material/Equip	Lot No./ID No.
0.3% NH4OH:MeOH	26543110218338A
1:1 ACN:MeOH	26543110218338B
Auto-pipette (dilutions)	—
Auto-pipette (extract vialin	P1000-2
Envi-Carb	1075163
Internal Standard	IS1831233A
Methanol	DN013-US
Milli-Q H2O	HOUSE A372
SPE Cartridge #1	0424575-01
Syringe (IS)	PFAS 7
Syringe (MS)	PFAS 10
Syringe (SS)	PFAS 9
Tezma	—

NPA MCD 7824 11/19/18

Balance #	BL0971/4122	SPE Manifold	8,9	N-evap A	40 C

ACP26543 11/8/18

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

18312004

NPA MCD 7824 11/19/18

Batch 35721 09-25-18

Organic Extraction Batchlog Assigned to: 26543 Anthony Polaski Reviewed by: JPT12262 Start Date: 11/12/18 Start time: 16:00

18316028 Tech 1: ACP26543 Tech 2: —

Analyses on Batch: PFAS in Soil by LC/MS/MS-DoD

Dept: 33 Prep Analysis: 14510 PFAS Solid Prep - DoD (3) ml. ACP26543 11/12/18

Port #	QC	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (3) ~~(uL)~~	IS Amt (uL)	BC	Comments
—	9885143MS	82285	1.10	SSMODX1833CA	.05	MSMODX1833AQ	.04	1ml.	20	170a	
	9885144MSD	82285	1.05	SSMODX1833CA	.05	MSMODX1833AQ	.04	1ml.	↓	170a	
	BLANKA	BLK316028	1.00	SSMODX1833CA	~~.018~~ (8)	—	—	1ml.	↓	—	
—	LCSA	LCS316028	↓	SSMODX1833CA	05	MSMODX1833AQ	04	1ml.	↓	—	

(8) 0.05 ml DDM25478 11/12/18

Spike Solutions: Witness: DDM25478 Instrument: LM27631

MSMODX1833AQ PFAS 537 Native Spike

SSMODX1833CA PFAS 537 Modified Extraction/Surrogate Spik Sequence: 18NOV12DOD - 18NOV13D

Port#		Sample #	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	FV (3) ~~(uL)~~	IS Amt (uL)	BC	Comments	Analyses	Due	Pri
—	1	9885141	82284	1.10	SSMODX1833CA	.05	1ml.	20	170a		14478	11/15/2018	N
	2	9885142	BKG 82285	1.02	SSMODX1833CA	05	1ml.		170a		14478	11/15/2018	N
	3	9885145	82288	1.01	SSMODX1833CA	.05	1ml.		170a		14478	11/15/2018	N
	4	9885147	82290	1.03	SSMODX1833CA	.05	1ml.		170a		14478	11/15/2018	N
	5	9885148	82291	1.05	SSMODX1833CA	.05	1ml.		170a		14478	11/15/2018	N
	6	9885149	82286	1.00	SSMODX1833CA	.05	1ml.		170a		14478	11/15/2018	N
	7	9885150	82287	1.06	SSMODX1833CA	.05	1ml.		170a		14478	11/15/2018	N
	8	9885152	82293	1.04	SSMODX1833CA	.05	1ml.		170a		14478	11/15/2018	N
	9	9885153	82294	1.02	SSMODX1833CA	.05	1ml.		170a		14478	11/15/2018	N
	10	9885154	82295	1.03	SSMODX1833CA	.05	1ml.		170a		14478	11/15/2018	N
	11	9885155	82296	1.09	SSMODX1833CA	.05	1ml.		170a		14478	11/15/2018	N
	12	9885156	82297	1.04	SSMODX1833CA	.05	1ml.		170a		14478	11/15/2018	N
—	13	9885157	82298	1.03	SSMODX1833CA	.05	1ml.	↓	170a		14478	11/15/2018	N

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18316028

N/A JPT12262 11/14/18

Organic Extraction Batchlog **18316028**

Port#	Sample #	Sample Code	Amt ( )	SS/IS Sol.	Amt (mL)	FV (uL)	IS Amt (uL)	BC	Comments	Analyses	Due	Pri

Reagents used During Extraction

Reagent/Material/Equip	Lot No./ID No.
1:1 ACN:MEOH	375111121833B
Auto-pipette (dilutions)	N/A JPT1226Z 11/14/18
Auto-pipette (extract vialin	PW00-1
Envi-Carb	97224
Internal Standard	IS1831133A
Methanol	DV013-U5
Wand	MKBW7349V
Syringe (IS)	PFAS 11
Syringe (MS)	PFAS 10
Syringe (SS)	PFAS 13

N/A JPT1226Z 11/14/18

ACPZ6543 11/12/18

Balance #	B629764122	Sonic Bath ID	3800A	N-evap A	33C	SPE Manifold	NA

18316028

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

N/A JPT1226Z 11/14/18

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Organic Extraction Batchlog Assigned to: 12698 Courtney Fatta Reviewed by: JPT12262 Start Date: 11/15/18 Start time: 8:50

18319003 Tech 1: CF12698 Tech 2: CF12698

Analyses on Batch: PFAS in Soil by LC/MS/MS-DoD

(3) CF12698 11/15/18

Dept: 33 Prep Analysis: 14510 PFAS Solid Prep - DoD

(3) mL ~~CO~~ CF12698 11/15/18

Port #	QC	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV ~~(uL)~~	IS Amt (uL)	BC	Comments
Z	9885063MS	22013	1.06	SSMODX1833CB	.05	MSMODX1833AR	.04	1.0	20	170A	
	9885064MSD	22013	1.08	SSMODX1833CB	.05	MSMODX1833AR	.04	1.0	↓	170A	
	BLANKA	BLK319003	1.0	SSMODX1833CB	.05	N/A	N/A	1.0	↓	Z	
	LCSA	LCS319003	1.0	SSMODX1833CB	.05	MSMODX1833AR	.04	1.0	↓	Z	

Spike Solutions: Witness: PJR9213 Instrument: LM27631

MSMODX1833AR PFAS 537 Native Spike

SSMODX1833CB PFAS 537 Modified Extraction/Surrogate Spik Sequence: 18NOV12DOD - 18NOV15D

(3) mL

~~Port#~~ BS1		Sample #	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	FV ~~(uL)~~	IS Amt (uL)	BC	Comments	Analyses	Due	Pri
	1	9885056 R	22006	1.04	SSMODX1833CE	.05	1.0	20	170a		14478	11/15/2018	N
	2	9885057 R	22007	1.05	SSMODX1833CE	.05	1.0	↓	170a		14478	11/15/2018	N
	3	9885058 R	22008	1.07	SSMODX1833CE	.05	1.0		170a		14478	11/15/2018	N
	4	9885059 R	22009	1.09	SSMODX1833CE	.05	1.0		170a		14478	11/15/2018	N
	5	9885062 R	BKG 22013	1.03	SSMODX1833CE	.05	1.0		170a		14478	11/15/2018	N
	6	9885065 R	22014	1.02	SSMODX1833CE	.05	1.0		170a		14478	11/15/2018	N
	7	9885075 R	22049	1.08	SSMODX1833CE	.05	1.0		170a		14478	11/15/2018	N
	8	9885147 R	82290	1.03	SSMODX1833CE	.05	1.0		170a		14478	11/15/2018	N
	9	9885152 R	82293	1.08	SSMODX1833CE	.05	1.0	↓	170a		14478	11/15/2018	N

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N/A JPT12262 11/16/18

18319003

Organic Extraction Batchlog **18319003**

Port#	Sample #	Sample Code	Amt ( )	SS/IS Sol.	Amt (mL)	FV (uL)	IS Amt (uL)	BC	Comments	Analyses	Due	Pri

Reagents used During Extraction

Reagent/Material/Equip	Lot No./ID No.
1:1 ACN:MEOH	176981117.1833A
Auto-pipette (dilutions)	N/A JPT12262 11/16/18
Auto-pipette (extract vialin	P1000-1
Envi-Carb	1075563
Internal Standard	IS18318331
Methanol	DV013-US
Sand	MKBW7349V
Syringe (IS)	PFAS 11
Syringe (MS)	PFAS 10
Syringe (SS)	PFAS 13

N/A JPT12262 11/16/18

CF12698 11/15/18

Balance #	B629764122	Sonic Bath ID	3800A	N-evap	C	26°C	SPE Manifold	N/A

18319003

FV = Final Volume

Documented temps are NIST corrected.

N/A JPT12262 11/16/18

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Organic Extraction Batchlog

18332003

Assigned to: 12698 Courtney Fatta Reviewed by: MC07824 Start Date: 11/28/18 Start time: 9:45

Tech 1: CF12698 Tech 2: —

Analyses on Batch: PFAS in Soil by LC/MS/MS-DoD

mL CF12698 11/28/18

Dept: 33 Prep Analysis: 14510 PFAS Solid Prep - DoD

Port #	QC	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (uL) (3)	IS Amt (uL)	BC	Comments
	9883383MS	SI113	1.10	SSMODX1833CE	.05	MSMODX1833AU	.04	1.0	20	170A	pebbles
	9883384MSD	SI113	1.07	SSMODX1833CE	.05	MSMODX1833AU	.04	1.0		170A	pebbles
	BLANKA	BLK332003	1.0	SSMODX1833CE	.05	N/A	N/A	1.0		Z	
	LCSA	LCS332003	1.0	SSMODX1833CE	.05	MSMODX1833AU	.04	1.0			

Spike Solutions: Witness: PJR9213 Instrument: LM27631

MSMODX1833AU PFAS 537 Native Spike

SSMODX1833CE PFAS 537 Modified Extraction/Surrogate Spik Sequence: 18NOV28D0D/18NOV29D

(3) mL

BS1 67 Port#

	Sample #	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	FV (uL)	IS Amt (uL)	BC	Comments	Analyses	Due	Pri
1	9881542	MCLB7	1.02	SSMODX1833CE	.05	1.0	20	170a		14478	12/06/2018	N
2	9881543	MCLB8	1.04	SSMODX1833CE	.05	1.0		170a		14478	12/06/2018	N
3	9883382	BKG SI113	1.05	SSMODX1833CE	.05	1.0		170a	pebbles	14478	12/06/2018	N
4	9883385	SI114	1.01	SSMODX1833CE	.05	1.0		170a	pebbles	14478	12/06/2018	N
5	9883396	I1115	1.05	SSMODX1833CE	.05	1.0		170a		14478	12/06/2018	N
6	9883397	I1116	1.08	SSMODX1833CE	.05	1.0		170a		14478	12/06/2018	N
7	9885076	22050	1.07	SSMODX1833CE	.05	1.0		170a	Sand	14478	12/06/2018	N
8	9885077	22051	1.07	SSMODX1833CE	.05	1.0		170a	Sand	14478	12/06/2018	N
9	9885091	82215	1.10	SSMODX1833CE	.05	1.0		170a		14478	12/06/2018	N
10	9885133	82274	1.04	SSMODX1833CE	.05	1.0		170a	Sand	14478	12/06/2018	N
11	9885134	82275	1.02	SSMODX1833CE	.05	1.0		170a	Sand	14478	12/06/2018	N
12	9885151	82292	1.03	SSMODX1833CE	.05	1.0		170a		14478	12/06/2018	N

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MA MC07824 11/30/18

18332003

Organic Extraction Batchlog **18332003**

Port#	Sample #	Sample Code	Amt ( )	SS/IS Sol.	Amt (mL)	FV (uL)	IS Amt (uL)	BC	Comments	Analyses	Due	Pri

Reagents used During Extraction

Reagent/Material/Equip	Lot No./ID No.
1:1 ACN:MEOH	176981127183 3A
Auto-pipette (dilutions)	
Auto-pipette (extract vialin	P1000-3
Envi-Carb	107563
Internal Standard	IS18331337A
Methanol	DV136-US
Sand	MKBW7349V
Syringe (IS)	PFAS 11
Syringe (MS)	PFAS 10
Syringe (SS)	PFAS 13

NA MCD7824 11/30/18

CF12698 11/28/18

Balance #	B629764127	Sonic Bath ID	3800A	N-evap	A	30°C	SPE Manifold	N/A

18332003

D = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

NA MCD7824 11/30/18

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Moisture Data

MOISTURE

SAMPLE NUMBERS:

Sample #	Sample Code
9885141	82284
9885142	82285BKG
9885143	82285MS
9885144	82285MSD
9885145	82288
9885147	82290
9885148	82291
9885149	82286
9885150	82287
9885151	82292
9885152	82293
9885153	82294
9885154	82295
9885155	82296
9885156	82297
9885157	82298

COMMENTS:

Method defined actions are taken for any failed matrix QC.

Laboratory Compliance Quality Control

Analysis Name	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 18313820008A	Sample number(s): 9885141-9885145, 9885147-9885150, 9885152-9885157				
Moisture	100		99-101		
Moisture	100		99-101		
Moisture Duplicate	100		99-101		
Batch number: 18337820002B	Sample number(s): 9885151				
Moisture	100		99-101		

Sample Matrix Quality Control

Analysis Name	BKG Conc	DUP Conc	RPD	RPD Max
Batch number: 18313820008A	Sample number(s): 9885141-9885145, 9885147-9885150, 9885152-9885157			
Moisture	4.2	3.6	16*	5
Moisture	4.2	3.6	16*	5
Moisture Duplicate	4.2	3.6	16*	5
Batch number: 18337820002B	Sample number(s): 9885151			
Moisture	0.77	0.74	3 (1)	5

* - Outside of specification

(1) - The result for one or both determinations was less than five times the LOQ.

Moisture Data Report

Batch #: 18313820008

Sample ID	Batch ID	Analysis#	Tare Wt	Sample Wt	Dry Wt	%Moisture	Analysis Date (Emp#)	Verified Date (Emp#)
9885141	A	00111	1.0943	5.1392	5.9586	5.35	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885142BKG	A	00111	1.0725	5.7894	6.6206	4.17	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885143MS	A	00118				4.17	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885144MSD	A	00118				4.17	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885144MSD	A	00121	1.0896	5.7480	6.6326	3.57	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885145	A	00111	1.1123	5.1322	5.9762	5.23	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885147	A	00111	1.1103	5.8245	6.8465	1.52	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885148	A	00111	1.1130	5.6423	6.5976	2.79	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885149	A	00111	1.0905	5.1606	6.0155	4.57	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885150	A	00111	1.0889	5.4142	6.3992	1.92	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885152	A	00111	1.0962	5.3253	6.3694	0.98	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885153	A	00111	1.0902	5.5503	6.5138	2.28	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885154	A	00111	1.0839	5.3659	6.1695	5.22	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885155	A	00111	1.0904	5.2353	6.0972	4.36	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885156	A	00111	1.0916	5.3739	6.3054	2.98	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
9885157	A	00111	1.0886	5.3478	6.1488	5.38	11/ 9/18 (835/LEB)	11/12/18 (236/CW)
LCS 89.5% Std.		00111	1.0929	5.0292	1.6238	89.44	11/ 9/18 (835/LEB)	11/12/18 (236/CW)

Batch #: 18337820002

Sample ID	Batch ID	Analysis#	Tare Wt	Sample Wt	Dry Wt	%Moisture	Analysis Date (Emp#)	Verified Date (Emp#)
9885151	B	00111	1.0888	5.2260	5.7601	10.61	12/ 3/18 (835/LEB)	12/ 4/18 (236/CW)
P883382BKG	B	00111	1.0911	5.6597	6.7075	0.77	12/ 3/18 (835/LEB)	12/ 4/18 (236/CW)
P883382DUP	B	00111	1.0647	5.6624	6.6852	0.74	12/ 3/18 (835/LEB)	12/ 4/18 (236/CW)
LCS 89.5% Std.		00111	1.0740	5.0698	1.6127	89.37	12/ 3/18 (835/LEB)	12/ 4/18 (236/CW)

CONTRACT_ID DO_CTO_NUMBER PHASE INSTALLATION_ID SAMPLE_NAME ANALYTICAL_METHOD LAB_NAME CONTRACTOR_NAME LEACHATE_METHOD SAMPLE_BASIS EXTRACTION_METHOD RESULT_TYPE SAMPLE_MEDIUM CLEANUP_METHOD QC_LEVEL LEACHATE_DATE LEACHATE_TIME EXTRACTION_DATE EXTRACTION_TIME ANALYSIS_DATE ANALYSIS_TIME LAB_SAMPLE_ID LAB_REPORT_DATE LAB_REPORT_NUMBER FILTER_SIZE DILUTION RUN_NUMBER PERCENT_MOISTURE PERCENT_LIPID ANALYTE_ID ANALYTE_VALUE ORIGINAL_ANALYTE_VALUE RESULT_UNITS LAB_QUALIFIER VALIDATOR_QUALIFIER FINAL_QUALIFIER DETECTED GC_COLUMN_TYPE ANALYSIS_RESULT_TYPE RADIOLOGICAL_ERROR RESULT_NARRATIVE RETENTION_TIME QC_CONTROL_LIMIT_CODE QC_ACCURACY_UPPER QC_ACCURACY_LOWER CONTROL_LIMIT_DATE RELATIVE_PCT_DIFF QC_NARRATIVE MDL CDL IDL PQL CRQL DETECTION_LIMIT VALIDATOR_DET_LIMIT VALIDATOR_MDL DL LOD LOQ SDG LEACH_LOT METHOD_BATCH PREP_BATCH RUN_BATCH ANALYSIS_BATCH VALIDATOR_NAME VALIDATION_QC VAL_DATE REPORTABLE_RESULT

N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108 06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 335-67-1 1.0 0 NG_L U N TRG 0.43 0.43 0.43 1.0 1.7 BSI17 18312004 18312004 18312004 18312004 Y

N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108 06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 375-95-1 1.0 0 NG_L U N TRG 0.35 0.35 0.35 1.0 1.7 BSI17 18312004 18312004 18312004 18312004 Y

N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108 06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 335-76-2 1.0 0 NG_L U N TRG 0.43 0.43 0.43 1.0 1.7 BSI17 18312004 18312004 18312004 18312004 Y

N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108 06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 2058-94-8 1.0 0 NG_L U N TRG 0.43 0.43 0.43 1.0 1.7 BSI17 18312004 18312004 18312004 18312004 Y

N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108 06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 307-55-1 1.0 0 NG_L U N TRG 0.43 0.43 0.43 1.0 1.7 BSI17 18312004 18312004 18312004 18312004 Y

N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108 06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 72629-94-8 1.0 0 NG_L U N TRG 0.52 0.52 0.52 1.0 1.7 BSI17 18312004 18312004 18312004 18312004 Y

N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108 06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 376-06-7

1.0 0 NG_L U N TRG 0.52
0.52 0.52 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 307-24-4
1.0 0 NG_L U N TRG 0.43
0.43 0.43 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 375-85-9
1.0 0 NG_L U N TRG 0.35
0.35 0.35 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 375-73-5
0.95 0 NG_L U N TRG 0.26
0.26 0.26 0.95 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 355-46-4
0.95 0 NG_L U N TRG 0.35
0.35 0.35 0.95 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 1763-23-1
1.0 0 NG_L U N TRG 0.43
0.43 0.43 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 2991-50-6
2.1 0 NG_L U N TRG 0.87
0.87 0.87 2.1 2.6 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-01 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:10:00 9885139 20190118 2006160 0.00 1 1 2355-31-9
2.1 0 NG_L U N TRG 0.87
0.87 0.87 2.1 2.6 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:19:00 9885140 20190118 2006160 0.00 1 1 335-67-1
1.0 0 NG_L U N TRG 0.44
0.44 0.44 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:19:00 9885140 20190118 2006160 0.00 1 1 375-95-1

1.0 0 NG_L U N TRG 0.35
0.35 0.35 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:19:00 9885140 20190118 2006160 0.00 1 1 335-76-2
1.0 0 NG_L U N TRG 0.44
0.44 0.44 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:19:00 9885140 20190118 2006160 0.00 1 1 2058-94-8
1.0 0 NG_L U N TRG 0.44
0.44 0.44 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:19:00 9885140 20190118 2006160 0.00 1 1 307-55-1
1.0 0 NG_L U N TRG 0.44
0.44 0.44 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:19:00 9885140 20190118 2006160 0.00 1 1 72629-94-8
1.0 0 NG_L U N TRG 0.52
0.52 0.52 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:19:00 9885140 20190118 2006160 0.00 1 1 376-06-7
1.0 0 NG_L U N TRG 0.52
0.52 0.52 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:19:00 9885140 20190118 2006160 0.00 1 1 307-24-4
1.0 0 NG_L U N TRG 0.44
0.44 0.44 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:19:00 9885140 20190118 2006160 0.00 1 1 375-85-9
1.0 0 NG_L U N TRG 0.35
0.35 0.35 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:19:00 9885140 20190118 2006160 0.00 1 1 375-73-5
0.96 0 NG_L U N TRG 0.26
0.26 0.26 0.96 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:19:00 9885140 20190118 2006160 0.00 1 1 355-46-4

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0.35 0.35 0.96 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
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0.44 0.44 1.0 1.7 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
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0.87 0.87 2.1 2.6 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-W-01-02 537_MOD
EUROFINS BRADY GCE II NONE NA METHOD 000 WP UNK 20181108
06:50:00 20181109 15:19:00 9885140 20190118 2006160 0.00 1 1 2355-31-9
2.1 0 NG_L U N TRG 0.87
0.87 0.87 2.1 2.6 BSI17 18312004 18312004 18312004 18312004
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 Calculation
EUROFINS BRADY GCE II NONE Wet NONE 000 S UNK 20181109
12:50:00 9885141 20190118 2006160 0.00 1 1 5.3 -86 5.3 5.3 PCT Y
TRG 0.50 0.50 0.50 0.50 0.50
BSI17 18313820008A 18313820008A 18313820008A Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 335-67-1
0.65 0 NG_G U N TRG 0.19
0.19 0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 375-95-1
0.65 0 NG_G U N TRG 0.19
0.19 0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 335-76-2
0.65 0 NG_G U N TRG 0.29
0.29 0.29 0.65 0.96 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 2058-94-8
0.65 0 NG_G U N TRG 0.19
0.19 0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 307-55-1
0.65 0 NG_G U N TRG 0.19

0.19 0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 72629-94-8
0.65 0 NG_G U N TRG 0.19
0.19 0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 376-06-7
0.65 0 NG_G U N TRG 0.19
0.19 0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 307-24-4
0.65 0 NG_G U N TRG 0.19
0.19 0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 375-85-9
0.65 0 NG_G U N TRG 0.19
0.19 0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 375-73-5
0.58 0 NG_G U N TRG 0.19
0.19 0.19 0.58 0.77 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 355-46-4
0.61 0 NG_G U N TRG 0.19
0.19 0.19 0.61 0.77 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 1763-23-1
1.3 1.3 NG_G Y TRG 0.19
0.19 0.19 0.62 0.77 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 2991-50-6
1.9 0 NG_G U N TRG 0.48
0.48 0.48 1.9 2.9 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:37:00 9885141 20190118 2006160 0.00 1 1 5.3 2355-31-9
1.9 0 NG_G U N TRG 0.48

0.48 0.48 1.9 2.9 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 Calculation
EUROFINS BRADY GCE II NONE Wet NONE 000 S UNK 20181109
12:50:00 9885142 20190118 2006160 0.00 1 1 4.2 -86 4.2 4.2 PCT Y
TRG 0.50 0.50 0.50 0.50 0.50
BSI17 18313820008A 18313820008A 18313820008A Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 335-67-1
0.70 0 NG_G U N TRG 0.20
0.20 0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 375-95-1
0.70 0 NG_G U N TRG 0.20
0.20 0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 335-76-2
0.70 0 NG_G U N TRG 0.31
0.31 0.31 0.70 1.0 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 2058-94-8
0.70 0 NG_G U N TRG 0.20
0.20 0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 307-55-1
0.70 0 NG_G U N TRG 0.20
0.20 0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 72629-94-8 0.70 0
NG_G U N TRG 0.20 0.20
0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 376-06-7 0.70 0
NG_G U N TRG 0.20 0.20
0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 307-24-4 0.70 0
NG_G U N TRG 0.20 0.20
0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112

16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 375-85-9 0.70 0
NG_G U N TRG 0.20 0.20
0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 375-73-5 0.61 0
NG_G U N TRG 0.20 0.20
0.20 0.61 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 355-46-4 0.43 0.43
NG_G J Y TRG 0.20 0.20
0.20 0.65 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 1763-23-1 0.31 0.31
NG_G J Y TRG 0.20 0.20
0.20 0.67 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 2991-50-6 2.0 0
NG_G U N TRG 0.51 0.51
0.51 2.0 3.1 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 13:46:00 9885142 20190118 2006160 0.00 1 1 4.2 2355-31-9 2.0 0
NG_G U N TRG 0.51 0.51
0.51 2.0 3.1 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 Calculation
EUROFINS BRADY GCE II NONE Wet NONE 000 S UNK 20181109
12:50:00 9885145 20190118 2006160 0.00 1 1 5.2 -86 5.2 5.2 PCT Y TRG
0.50 0.50 0.50 0.50 0.50 BSI17 18313820008A 18313820008A
18313820008A Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 335-67-1 0.71 0
NG_G U N TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 375-95-1 0.71 0
NG_G U N TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 335-76-2 0.71 0
NG_G U N TRG 0.31 0.31
0.31 0.71 1.0 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 2058-94-8 0.71 0
NG_G U N TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD

EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 307-55-1 0.71 0
NG_G U N TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 72629-94-8 0.71 0
NG_G U N TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 376-06-7 0.71 0
NG_G U N TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 307-24-4 0.71 0
NG_G U N TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 375-85-9 0.71 0
NG_G U N TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 375-73-5 0.63 0
NG_G U N TRG 0.21 0.21
0.21 0.63 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 355-46-4 0.67 0
NG_G U N TRG 0.21 0.21
0.21 0.67 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 1763-23-1 0.68 0
NG_G U N TRG 0.21 0.21
0.21 0.68 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 2991-50-6 2.1 0
NG_G U N TRG 0.52 0.52
0.52 2.1 3.1 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-01-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:14:00 9885145 20190118 2006160 0.00 1 1 5.2 2355-31-9 2.1 0
NG_G U N TRG 0.52 0.52
0.52 2.1 3.1 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 Calculation
EUROFINS BRADY GCE II NONE Wet NONE 000 S UNK 20181109
12:50:00 9885147 20190118 2006160 0.00 1 1 1.5 -86 1.5 1.5 PCT Y TRG
0.50 0.50 0.50 0.50 0.50 BSI17 18313820008A 18313820008A
18313820008A Y

N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 335-67-1 0.67 0
NG_G U N TRG 0.20 0.20
0.20 0.67 0.79 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 375-95-1 0.67 0
NG_G U N TRG 0.20 0.20
0.20 0.67 0.79 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 335-76-2 0.51 0.51
NG_G J Y TRG 0.30 0.30
0.30 0.67 0.99 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 2058-94-8 0.67 0
NG_G U N TRG 0.20 0.20
0.20 0.67 0.79 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 307-55-1 0.67 0
NG_G U N TRG 0.20 0.20
0.20 0.67 0.79 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 72629-94-8 0.67 0
NG_G U N TRG 0.20 0.20
0.20 0.67 0.79 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 376-06-7 0.67 0
NG_G U N TRG 0.20 0.20
0.20 0.67 0.79 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 307-24-4 0.67 0
NG_G U N TRG 0.20 0.20
0.20 0.67 0.79 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 375-85-9 0.23 0.23
NG_G J Y TRG 0.20 0.20
0.20 0.67 0.79 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 375-73-5 0.59 0
NG_G U N TRG 0.20 0.20
0.20 0.59 0.79 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 355-46-4 0.63 0
NG_G U N TRG 0.20 0.20

0.20 0.63 0.79 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 1763-23-1 0.21 0.21
NG_G J Y TRG 0.20 0.20
0.20 0.64 0.79 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 2991-50-6 2.0 0
NG_G U N TRG 0.49 0.49
0.49 2.0 3.0 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181115
08:50:00 20181115 14:45:00 9885147 20190118 2006160 0.00 1 1 1.5 2355-31-9 2.0 0
NG_G U N TRG 0.49 0.49
0.49 2.0 3.0 BSI17 18319003 18319003 18319003 18319003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 Calculation
EUROFINS BRADY GCE II NONE Wet NONE 000 S UNK 20181109
12:50:00 9885148 20190118 2006160 0.00 1 1 2.8 -86 2.8 2.8 PCT Y TRG
0.50 0.50 0.50 0.50 0.50 BSI17 18313820008A 18313820008A
18313820008A Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 335-67-1 0.43 0.43
NG_G J Y TRG 0.20 0.20
0.20 0.67 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 375-95-1 0.45 0.45
NG_G J Y TRG 0.20 0.20
0.20 0.67 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 335-76-2 0.35 0.35
NG_G J Y TRG 0.29 0.29
0.29 0.67 0.98 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 2058-94-8 0.67 0
NG_G U N TRG 0.20 0.20
0.20 0.67 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 307-55-1 0.67 0
NG_G U N TRG 0.20 0.20
0.20 0.67 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 72629-94-8 0.67 0
NG_G U N TRG 0.20 0.20
0.20 0.67 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 376-06-7 0.67 0

NG_G U N TRG 0.20 0.20
0.20 0.67 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 307-24-4 0.23 0.23
NG_G J Y TRG 0.20 0.20
0.20 0.67 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 375-85-9 0.75 0.75
NG_G J Y TRG 0.20 0.20
0.20 0.67 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 375-73-5 0.59 0
NG_G U N TRG 0.20 0.20
0.20 0.59 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 355-46-4 0.63 0
NG_G U N TRG 0.20 0.20
0.20 0.63 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 1763-23-1 4.8 4.8
NG_G Y TRG 0.20 0.20
0.20 0.64 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 2991-50-6 2.0 0
NG_G U N TRG 0.49 0.49
0.49 2.0 2.9 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:32:00 9885148 20190118 2006160 0.00 1 1 2.8 2355-31-9 2.0 0
NG_G U N TRG 0.49 0.49
0.49 2.0 2.9 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 Calculation
EUROFINS BRADY GCE II NONE Wet NONE 000 S UNK 20181109
12:50:00 9885149 20190118 2006160 0.00 1 1 4.6 -86 4.6 4.6 PCT Y TRG
0.50 0.50 0.50 0.50 0.50 BSI17 18313820008A 18313820008A
18313820008A Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 335-67-1 1.7 1.7
NG_G Y TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 375-95-1 1.9 1.9
NG_G Y TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112

16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 335-76-2 0.71 0
NG_G U N TRG 0.31 0.31
0.31 0.71 1.0 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 2058-94-8 0.71 0
NG_G U N TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 307-55-1 0.71 0
NG_G U N TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 72629-94-8 0.71 0
NG_G U N TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 376-06-7 0.71 0
NG_G U N TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 307-24-4 0.25 0.25
NG_G J Y TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 375-85-9 1.5 1.5
NG_G Y TRG 0.21 0.21
0.21 0.71 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 375-73-5 0.63 0
NG_G U N TRG 0.21 0.21
0.21 0.63 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 355-46-4 0.79 0.79
NG_G J Y TRG 0.21 0.21
0.21 0.67 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 1763-23-1 21 21
NG_G Y TRG 0.21 0.21
0.21 0.68 0.84 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 2991-50-6 2.1 0
NG_G U N TRG 0.52 0.52
0.52 2.1 3.1 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-06 537_MOD

EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:41:00 9885149 20190118 2006160 0.00 1 1 4.6 2355-31-9 2.1 0
NG_G U N TRG 0.52 0.52
0.52 2.1 3.1 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 Calculation
EUROFINS BRADY GCE II NONE Wet NONE 000 S UNK 20181109
12:50:00 9885150 20190118 2006160 0.00 1 1 1.9 -86 1.9 1.9 PCT Y TRG
0.50 0.50 0.50 0.50 0.50 BSI17 18313820008A 18313820008A
18313820008A Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 335-67-1 0.69 0.69
NG_G J Y TRG 0.19 0.19
0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 375-95-1 0.65 0
NG_G U N TRG 0.19 0.19
0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 335-76-2 0.65 0
NG_G U N TRG 0.29 0.29
0.29 0.65 0.96 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 2058-94-8 0.65 0
NG_G U N TRG 0.19 0.19
0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 307-55-1 0.65 0
NG_G U N TRG 0.19 0.19
0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 72629-94-8 0.65 0
NG_G U N TRG 0.19 0.19
0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 376-06-7 0.65 0
NG_G U N TRG 0.19 0.19
0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 307-24-4 0.43 0.43
NG_G J Y TRG 0.19 0.19
0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 375-85-9 0.79 0.79
NG_G Y TRG 0.19 0.19
0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028 Y

N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 375-73-5 0.58 0
NG_G U N TRG 0.19 0.19
0.19 0.58 0.77 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 355-46-4 0.44 0.44
NG_G J Y TRG 0.19 0.19
0.19 0.62 0.77 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 1763-23-1 0.81 0.81
NG_G Y TRG 0.19 0.19
0.19 0.63 0.77 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 2991-50-6 1.9 0
NG_G U N TRG 0.48 0.48
0.48 1.9 2.9 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-08 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 14:59:00 9885150 20190118 2006160 0.00 1 1 1.9 2355-31-9 1.9 0
NG_G U N TRG 0.48 0.48
0.48 1.9 2.9 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 Calculation
EUROFINS BRADY GCE II NONE Wet NONE 000 S UNK 20181203
10:37:00 9885151 20190118 2006160 0.00 1 1 10.6 -86 10.6 10.6 PCT Y TRG
0.50 0.50 0.50 0.50 0.50 BSI17 18337820002B 18337820002B
18337820002B Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 335-67-1 0.52 0.52
NG_G J Y TRG 0.22 0.22
0.22 0.74 0.87 BSI17 18332003 18332003 18332003 18332003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 375-95-1 0.74 0
NG_G U N TRG 0.22 0.22
0.22 0.74 0.87 BSI17 18332003 18332003 18332003 18332003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 335-76-2 0.74 0
NG_G U N TRG 0.33 0.33
0.33 0.74 1.1 BSI17 18332003 18332003 18332003 18332003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 2058-94-8 0.74 0
NG_G U N TRG 0.22 0.22
0.22 0.74 0.87 BSI17 18332003 18332003 18332003 18332003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 307-55-1 0.74 0
NG_G U N TRG 0.22 0.22

0.22 0.74 0.87 BSI17 18332003 18332003 18332003 18332003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 72629-94-8 0.74 0
NG_G U N TRG 0.22 0.22
0.22 0.74 0.87 BSI17 18332003 18332003 18332003 18332003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 376-06-7 0.74 0
NG_G U N TRG 0.22 0.22
0.22 0.74 0.87 BSI17 18332003 18332003 18332003 18332003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 307-24-4 2.5 2.5
NG_G Y TRG 0.22 0.22
0.22 0.74 0.87 BSI17 18332003 18332003 18332003 18332003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 375-85-9 2.1 2.1
NG_G Y TRG 0.22 0.22
0.22 0.74 0.87 BSI17 18332003 18332003 18332003 18332003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 375-73-5 0.22 0.22
NG_G J Y TRG 0.22 0.22
0.22 0.65 0.87 BSI17 18332003 18332003 18332003 18332003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 355-46-4 1.2 1.2
NG_G Y TRG 0.22 0.22
0.22 0.70 0.87 BSI17 18332003 18332003 18332003 18332003 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 1763-23-1
0.71 0 NG_G U N TRG 0.22
0.22 0.22 0.71 0.87 BSI17 18332003 18332003 18332003 18332003
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 2991-50-6
2.2 0 NG_G U N TRG 0.54
0.54 0.54 2.2 3.3 BSI17 18332003 18332003 18332003 18332003
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-04-12 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181128
09:45:00 20181129 20:11:00 9885151 20190118 2006160 0.00 1 1 10.6 2355-31-9
2.2 0 NG_G U N TRG 0.54
0.54 0.54 2.2 3.3 BSI17 18332003 18332003 18332003 18332003
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 Calculation
EUROFINS BRADY GCE II NONE Wet NONE 000 S UNK 20181109
12:50:00 9885152 20190118 2006160 0.00 1 1 0.98 -86 0.98 0.98 PCT
Y TRG 0.50 0.50 0.50 0.50
0.50 BSI17 18313820008A 18313820008A 18313820008A Y

N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 335-67-1
0.92 0.92 NG_G Y TRG 0.19
0.19 0.19 0.66 0.78 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 375-95-1
0.82 0.82 NG_G Y TRG 0.19
0.19 0.19 0.66 0.78 BSI17 18316028 18316028 18316028 18316028
Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 335-76-2 0.82 0.82
NG_G J Y TRG 0.29 0.29
0.29 0.66 0.97 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 2058-94-8 0.66 0
NG_G U N TRG 0.19 0.19
0.19 0.66 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 307-55-1 0.66 0
NG_G U N TRG 0.19 0.19
0.19 0.66 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 72629-94-8 0.66 0
NG_G U N TRG 0.19 0.19
0.19 0.66 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 376-06-7 0.66 0
NG_G U N TRG 0.19 0.19
0.19 0.66 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 307-24-4 0.22 0.22
NG_G J Y TRG 0.19 0.19
0.19 0.66 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 375-85-9 0.66 0
NG_G U N TRG 0.19 0.19
0.19 0.66 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 375-73-5 0.58 0
NG_G U N TRG 0.19 0.19
0.19 0.58 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112

16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 355-46-4 0.28 0.28
NG_G J Y TRG 0.19 0.19
0.19 0.62 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 1763-23-1 14 14
NG_G Y TRG 0.19 0.19
0.19 0.63 0.78 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 2991-50-6 1.9 0
NG_G U N TRG 0.49 0.49
0.49 1.9 2.9 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:08:00 9885152 20190118 2006160 0.00 1 1 0.98 2355-31-9 1.9 0
NG_G U N TRG 0.49 0.49
0.49 1.9 2.9 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 Calculation
EUROFINS BRADY GCE II NONE Wet NONE 000 S UNK 20181109
12:50:00 9885153 20190118 2006160 0.00 1 1 2.3 -86 2.3 2.3 PCT Y TRG
0.50 0.50 0.50 0.50 0.50 BSI17 18313820008A 18313820008A
18313820008A Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 335-67-1 7.5 7.5
NG_G Y TRG 0.20 0.20
0.20 0.68 0.80 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 375-95-1 0.67 0.67
NG_G J Y TRG 0.20 0.20
0.20 0.68 0.80 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 335-76-2 0.64 0.64
NG_G J Y TRG 0.30 0.30
0.30 0.68 1.0 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 2058-94-8 0.68 0
NG_G U N TRG 0.20 0.20
0.20 0.68 0.80 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 307-55-1 0.68 0
NG_G U N TRG 0.20 0.20
0.20 0.68 0.80 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 72629-94-8 0.68 0
NG_G U N TRG 0.20 0.20
0.20 0.68 0.80 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD

EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 376-06-7 0.68 0
NG_G U N TRG 0.20 0.20
0.20 0.68 0.80 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 307-24-4 0.48 0.48
NG_G J Y TRG 0.20 0.20
0.20 0.68 0.80 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 375-85-9 0.57 0.57
NG_G J Y TRG 0.20 0.20
0.20 0.68 0.80 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 375-73-5 0.60 0
NG_G U N TRG 0.20 0.20
0.20 0.60 0.80 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 355-46-4 6.1 6.1
NG_G Y TRG 0.20 0.20
0.20 0.64 0.80 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 1763-23-1 66 66
NG_G Y TRG 0.20 0.20
0.20 0.65 0.80 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 2991-50-6 2.0 0
NG_G U N TRG 0.50 0.50
0.50 2.0 3.0 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg338-S-03-03 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:17:00 9885153 20190118 2006160 0.00 1 1 2.3 2355-31-9 2.0 0
NG_G U N TRG 0.50 0.50
0.50 2.0 3.0 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-01 Calculation
EUROFINS BRADY GCE II NONE Wet NONE 000 S UNK 20181109
12:50:00 9885154 20190118 2006160 0.00 1 1 5.2 -86 5.2 5.2 PCT Y TRG
0.50 0.50 0.50 0.50 0.50 BSI17 18313820008A 18313820008A
18313820008A Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:26:00 9885154 20190118 2006160 0.00 1 1 5.2 335-67-1 0.23 0.23
NG_G J Y TRG 0.20 0.20
0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:26:00 9885154 20190118 2006160 0.00 1 1 5.2 375-95-1 0.70 0
NG_G U N TRG 0.20 0.20
0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028 Y

N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:26:00 9885154 20190118 2006160 0.00 1 1 5.2 335-76-2 0.70 0
NG_G U N TRG 0.31 0.31
0.31 0.70 1.0 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:26:00 9885154 20190118 2006160 0.00 1 1 5.2 2058-94-8 0.70 0
NG_G U N TRG 0.20 0.20
0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:26:00 9885154 20190118 2006160 0.00 1 1 5.2 307-55-1 0.70 0
NG_G U N TRG 0.20 0.20
0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:26:00 9885154 20190118 2006160 0.00 1 1 5.2 72629-94-8 0.70 0
NG_G U N TRG 0.20 0.20
0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:26:00 9885154 20190118 2006160 0.00 1 1 5.2 376-06-7 0.70 0
NG_G U N TRG 0.20 0.20
0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
16:00:00 20181113 15:26:00 9885154 20190118 2006160 0.00 1 1 5.2 307-24-4 0.70 0
NG_G U N TRG 0.20 0.20
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N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-01 537_MOD
EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
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NG_G U N TRG 0.20 0.20
0.20 0.70 0.82 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-01 537_MOD
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NG_G U N TRG 0.20 0.20
0.20 0.61 0.82 BSI17 18316028 18316028 18316028 18316028 Y
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0.51 2.0 3.1 BSI17 18316028 18316028 18316028 18316028 Y
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N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-03 Calculation
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18313820008A Y
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EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
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NG_G U N TRG 0.19 0.19
0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028 Y
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NG_G U N TRG 0.19 0.19
0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028 Y
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NG_G U N TRG 0.19 0.19
0.19 0.65 0.77 BSI17 18316028 18316028 18316028 18316028 Y
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NG_G U N TRG 0.19 0.19
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NG_G U N TRG 0.19 0.19
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NG_G U N TRG 0.20 0.20
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NG_G U N TRG 0.20 0.20
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N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-05 537_MOD
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NG_G U N TRG 0.20 0.20
0.20 0.67 0.79 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-05 537_MOD
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NG_G U N TRG 0.20 0.20
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N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-05 537_MOD
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NG_G U N TRG 0.20 0.20
0.20 0.67 0.79 BSI17 18316028 18316028 18316028 18316028 Y
N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-05 537_MOD
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EUROFINS BRADY GCE II NONE Dry METHOD 000 S UNK 20181112
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NG_G U N TRG 0.50 0.50
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N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB OU1-Bldg53-S-01-08 Calculation
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0.21 0.66 0.82 BSI17 18316028 18316028 18316028 18316028 Y

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SAMPLE_NAME CONTRACT_ID DO_CTO_NUMBER PHASE INSTALLATION_ID SITE_NAME LOCATION_NAME SPECIMEN_NAME BIOLOGICAL_CLASS SEX AGE_CLASS EXCAVATION_NAME PARENT_SAMPLE_NAME SAMPLE_MATRIX SAMPLE_TYPE SAMPLING_EQUIPMENT PROJECT_PHASE COMPOSITE WATER_COLUMN COLLECT_DATE COLLECT_TIME DATUM_ELEV ELEV_UNITS DATUM_MLLW DATUM_DESC START_DEPTH END_DEPTH DEPTH_UNITS REMOVED REMOVED_DATE AMBIENT_BLANK EQUIPMENT_BLANK SOURCE_BLANK TRIP_BLANK SAMPLE_NARRATIVE

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OU1-Bldg338-S-01-03 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg338-S-01-03 SO N N 20181101 08:05:00 03 FT

OU1-Bldg338-S-01-03 MS N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg338-S-01-03 OU1-Bldg338-S-01-03 SO MS N 20181101 08:05:00 03 FT

OU1-Bldg338-S-01-03 MSD N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg338-S-01-03 OU1-Bldg338-S-01-03 SO SD N 20181101 08:05:00 03 FT

OU1-Bldg338-S-01-08 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg338-S-01-08 SO N N 20181101 08:20:00 08 FT

OU1-Bldg338-S-04-01 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg338-S-04-01 SO N N 20181101 09:05:00 01 FT

OU1-Bldg338-S-04-03 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg338-S-04-03 SO N N 20181101 09:25:00 03 FT

OU1-Bldg338-S-04-06 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg338-S-04-06 SO N N 20181101 09:33:00 06 FT

OU1-Bldg338-S-04-08 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg338-S-04-08 SO N N 20181101 09:39:00 08

FT
OU1-Bldg338-S-04-12 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg338-S-04-12 SO N N 20181101 09:45:00
FT
OU1-Bldg338-S-03-01 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg338-S-03-01 SO N N 20181101 10:11:00
FT
OU1-Bldg338-S-03-03 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg338-S-03-03 SO N N 20181101 10:36:00
FT
OU1-Bldg53-S-01-01 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg53-S-01-01 SO N N 20181101 11:58:00
FT
OU1-Bldg53-S-01-03 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg53-S-01-03 SO N N 20181101 12:09:00
FT
OU1-Bldg53-S-01-05 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg53-S-01-05 SO N N 20181101 12:17:00
FT
OU1-Bldg53-S-01-08 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 Bldg53-S-01-08 SO N N 20181101 12:20:00
FT
BLK18312004 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 WP LB N
LCS18312004 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 WP BS N
LCS18313820008A N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 SO BS N
DUP18313820008A N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 SO LR N 20181101 08:05:00
BLK18316028 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 SO LB N
LCS18316028 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 SO BS N
BLK18319003 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 SO LB N
LCS18319003 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 SO BS N
BLK18332003 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 SO LB N
LCS18332003 N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 SO BS N
LCS18337820002B N62473-14-D-1405 N6247317F4100 BARSTOW_MCLB 00000 SO BS N