Marginal Exceedances of LCS-TCA Tracking Form

atch ID: 180 7023 Date Analyzed: 7/11/18 sequence

·oject #: 18-0437 & 18-0476 Analyst: DB

nalytical Method ASB PROC 800 PFAS ~~Prep Method~~ — Cleanup NA Matrix Water

of analytes in LCS 45 (11-30 analytes 1 in ME; 31-50 analytes 2 in ME; 51-70 analytes 3 in ME; 71-90 analytes 4 in ME)

ampleID	Analyte	Recovery	L4SIG	LCL	UCL	U4SIG
307023-BS1	MPFBA	90.4	60.00	70.00	130.00	140.00
307023-BS1	PFBA	91.8	60.00	70.00	130.00	140.00
307023-BS1	M5PFPeA	103	60.00	70.00	130.00	140.00
307023-BS1	PFPeA	97.7	60.00	70.00	130.00	140.00
307023-BS1	M2-4:2FTS	129	60.00	70.00	130.00	140.00
307023-BS1	4:2FTS	98.1	60.00	70.00	130.00	140.00
307023-BS1	M5PFHxA	102	60.00	70.00	130.00	140.00
307023-BS1	PFHxA	104	60.00	70.00	130.00	140.00
307023-BS1	M3PFBS	93.7	60.00	70.00	130.00	140.00
307023-BS1	PFBS	108	60.00	70.00	130.00	140.00
307023-BS1	MHFPO-DA	128	60.00	70.00	130.00	140.00
307023-BS1	HFPO-DA	103	60.00	70.00	130.00	140.00
307023-BS1	M4PFHpA	106	60.00	70.00	130.00	140.00
307023-BS1	PFHpA	97.2	60.00	70.00	130.00	140.00
307023-BS1	M2-6:2FTS	107	60.00	70.00	130.00	140.00
307023-BS1	6:2FTS	94.6	60.00	70.00	130.00	140.00
307023-BS1	M8PFOA	105	60.00	70.00	130.00	140.00
307023-BS1	PFOA	102	60.00	70.00	130.00	140.00
307023-BS1	M3PFHxS	98.3	60.00	70.00	130.00	140.00
307023-BS1	PFPeS	89.3	60.00	70.00	130.00	140.00
307023-BS1	PFHxS	90.0	60.00	70.00	130.00	140.00
307023-BS1	PFHpS	90.9	60.00	70.00	130.00	140.00
307023-BS1	M9PFNA	99.6	60.00	70.00	130.00	140.00
307023-BS1	PFNA	97.3	60.00	70.00	130.00	140.00
307023-BS1	M2-8:2FTS	87.6	60.00	70.00	130.00	140.00
307023-BS1	8:2FTS	97.4	60.00	70.00	130.00	140.00
307023-BS1	***& M6PFDA***	**146**	60.00	70.00	130.00	140.00
307023-BS1	PFDA	110	60.00	70.00	130.00	140.00
307023-BS1	N-MeFOSAA-d3	124	60.00	70.00	130.00	140.00
307023-BS1	N-MeFOSAA	102	60.00	70.00	130.00	140.00
307023-BS1	M8PFOS	110	60.00	70.00	130.00	140.00
307023-BS1	PFOS	93.1	60.00	70.00	130.00	140.00
307023-BS1	PFNS	86.5	60.00	70.00	130.00	140.00
307023-BS1	PFDS	95.5	60.00	70.00	130.00	140.00
307023-BS1	N-EtFOSAA-d5	95.8	60.00	70.00	130.00	140.00
307023-BS1	N-EtFOSAA	99.2	60.00	70.00	130.00	140.00
307023-BS1	M7PFUdA	115	60.00	70.00	130.00	140.00
307023-BS1	PFUdA	102	60.00	70.00	130.00	140.00
307023-BS1	MPFDoA	102	60.00	70.00	130.00	140.00
307023-BS1	PFDoA	104	60.00	70.00	130.00	140.00
307023-BS1	***> PFTrDA***	**138**	60.00	70.00	130.00	140.00
307023-BS1	M8FOSA	97.0	60.00	70.00	130.00	140.00
307023-BS1	FOSA	92.8	60.00	70.00	130.00	140.00
307023-BS1	***& M2PFTeDA***	**179**	60.00	70.00	130.00	140.00
307023-BS1	***& PFTeDA***	**172**	60.00	70.00	130.00	140.00

ampleID	Analyte	Recovery	L4SIG	LCL	UCL	U4SIG

ctions/Notes taken (if any):

Some PFAS can be a mixture of isomers, dependent on the synthetic technique. Only a single peak can be automatically integrated by integration routines. Where present, all isomers have been manually integrated as a single peak. Automatic and manual integrations are shown.

Some PFAS have peak shoulders that sometimes are not integrated by the software. Where present, they have been manually integrated to include the entire peak including the shoulder. Both automatic and manual integrations are shown.

DMB 072318

JG 7/24/18

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ted: Wednesday, July 18, 2018 12:38:01 Eastern Daylight Time

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DB 071918
JG 7/24/18

ne: 1807023-BLK1, Date: 11-Jul-2018, Time: 20:50:53, Description: 1807023-BLK1, Instrument: ACQ-TQD#NotSet, User:
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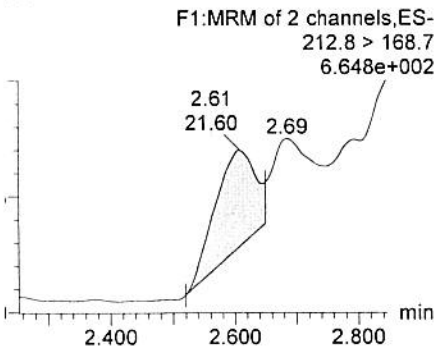
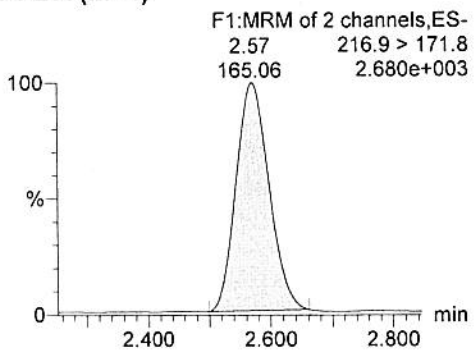
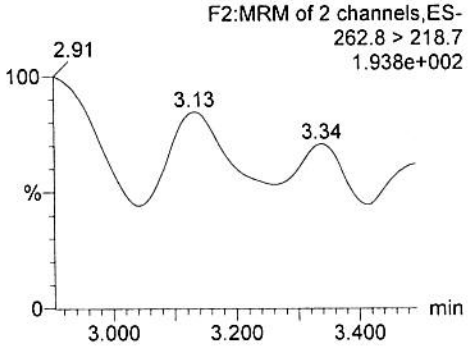
3A



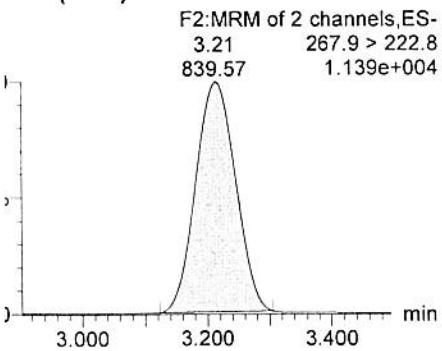
PFBA (M+4)



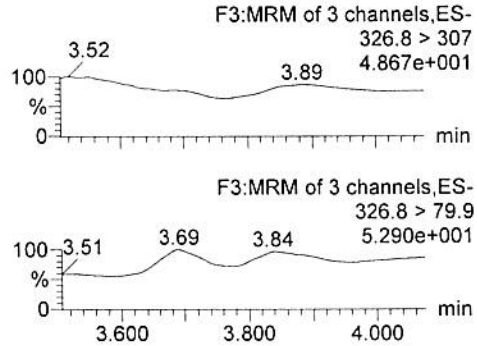
PFPeA



PeA (M+5)



4:2 FTS



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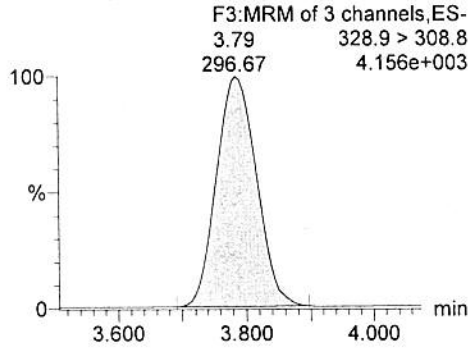

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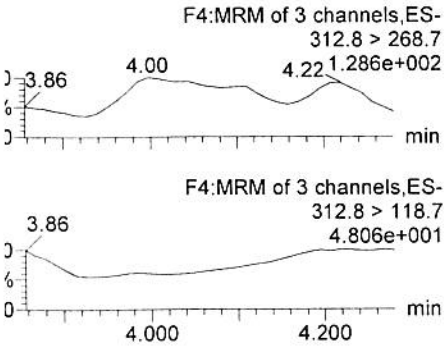

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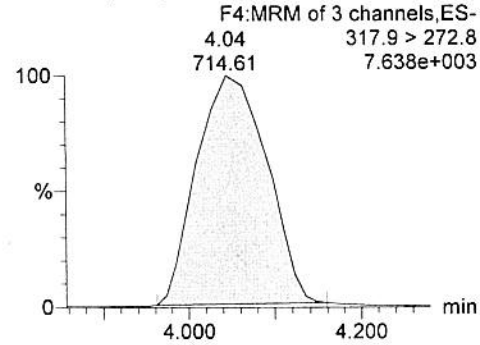
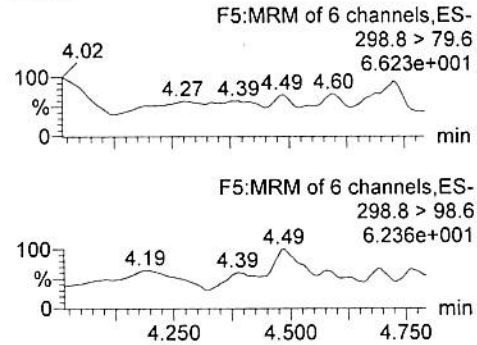
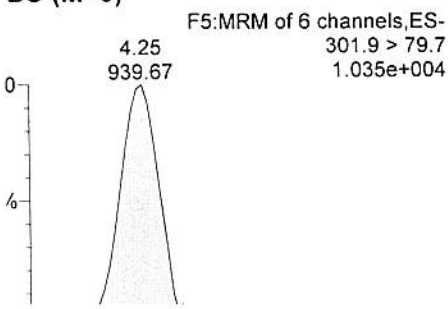


PFBS



BS (M+3)



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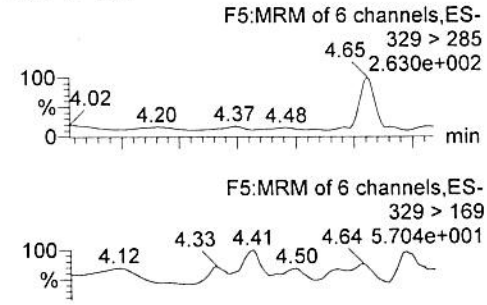

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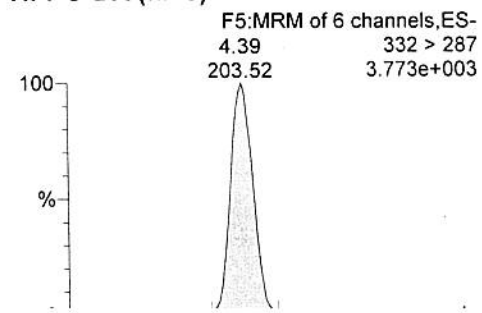

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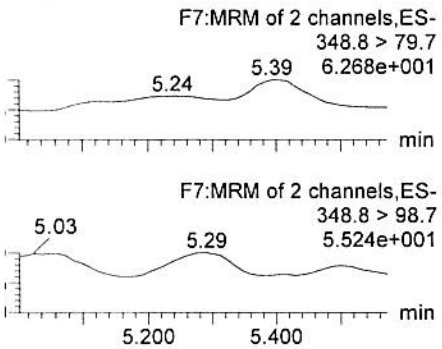
PeS



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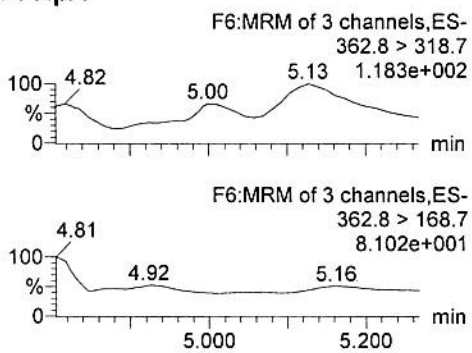

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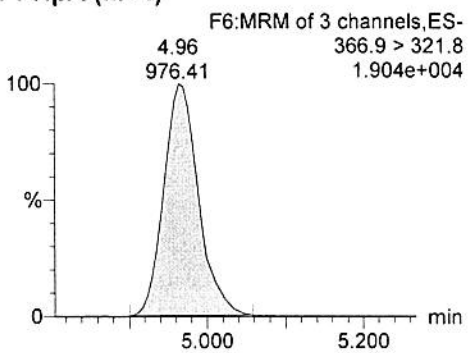
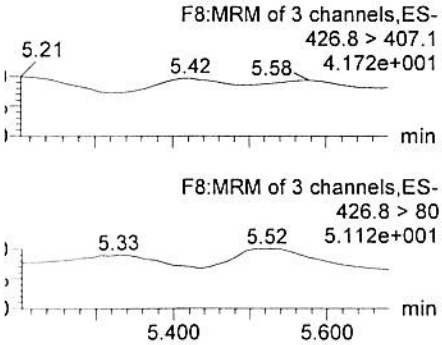


FTS



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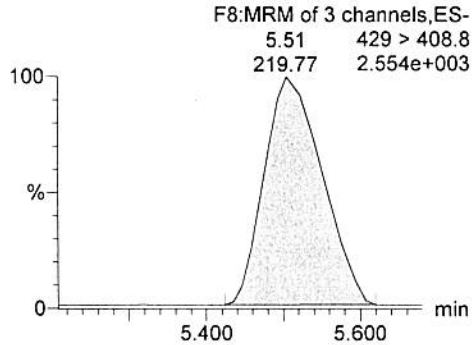
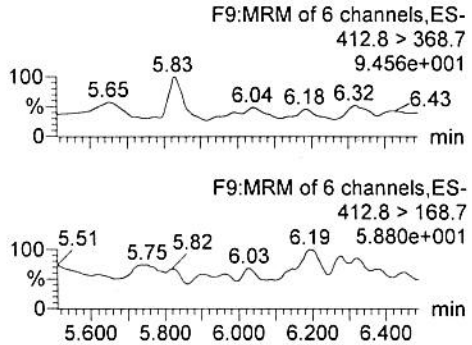
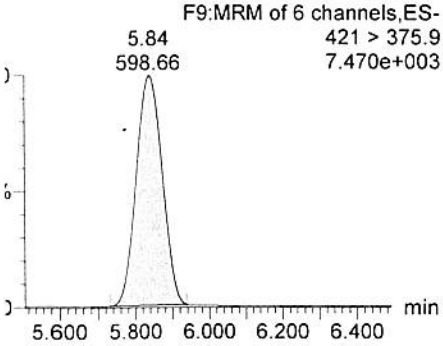


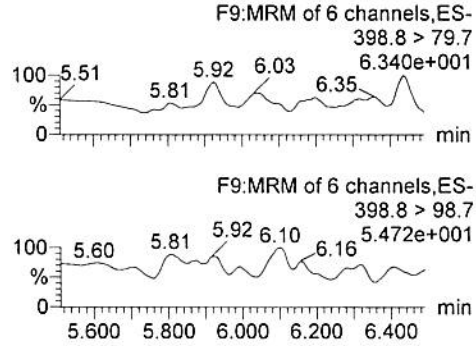
PFOA



OA (M+8)



PFHxS



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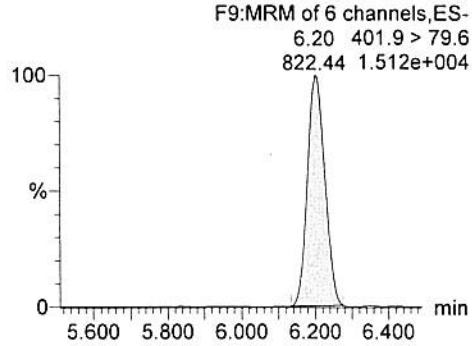

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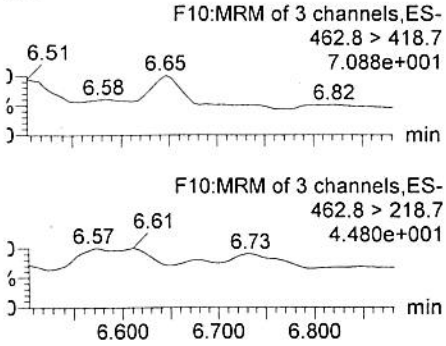

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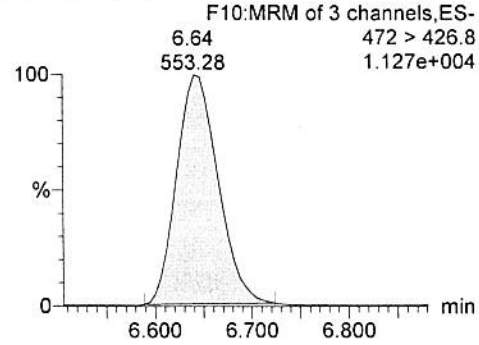
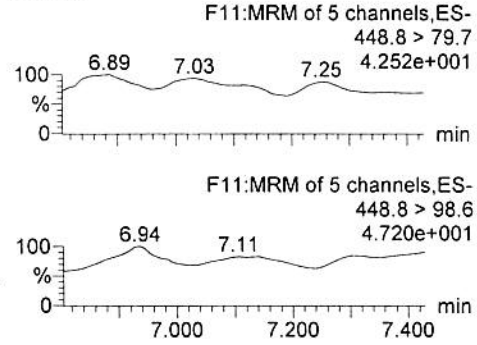


PFHpS



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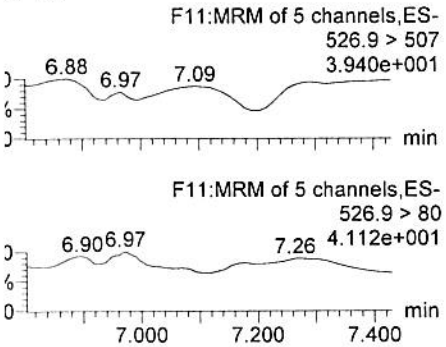
FTS



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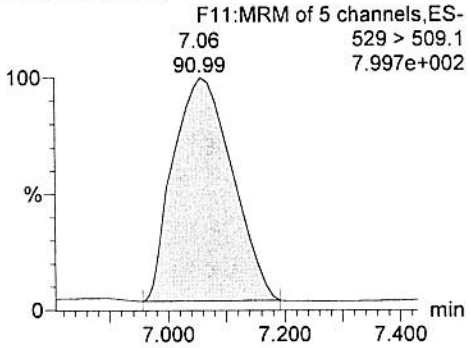

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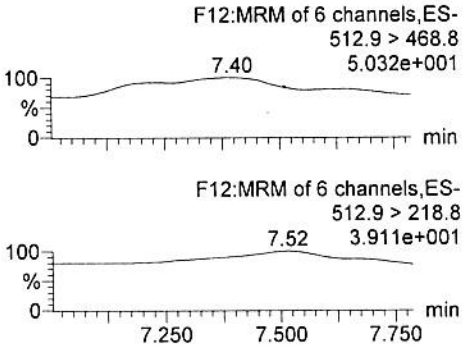

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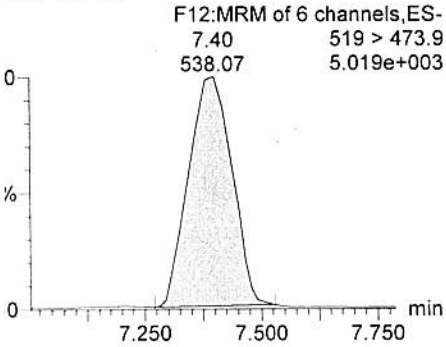

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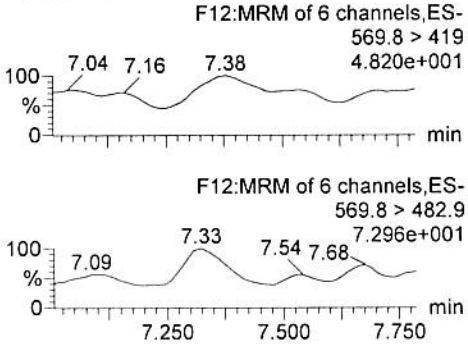

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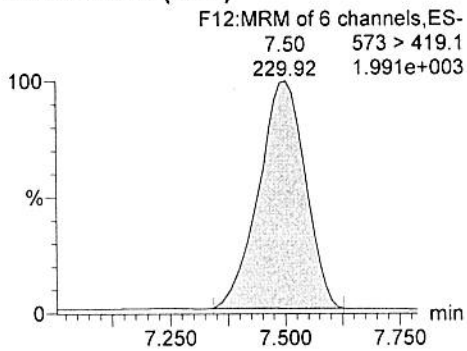

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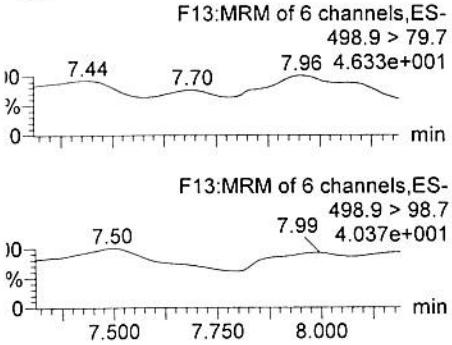

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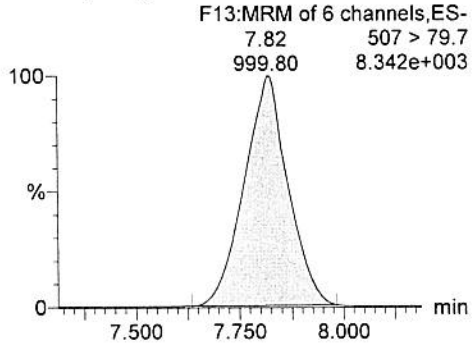

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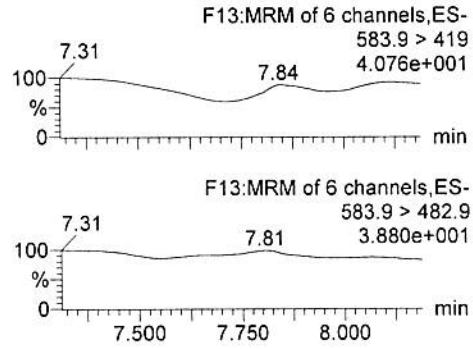

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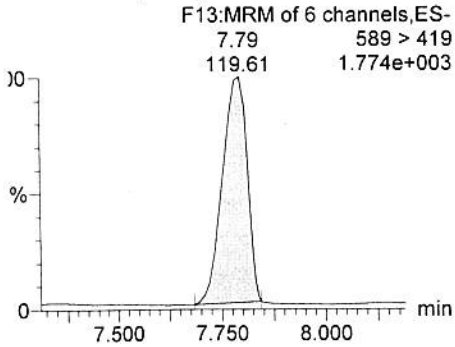

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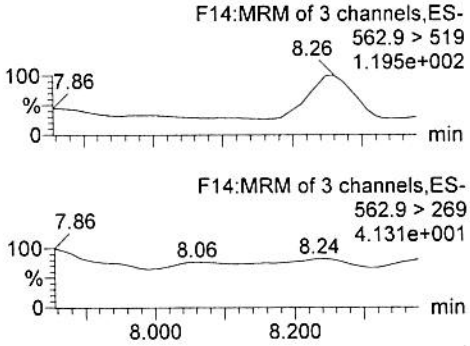

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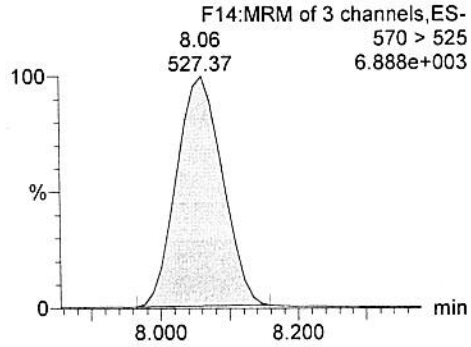

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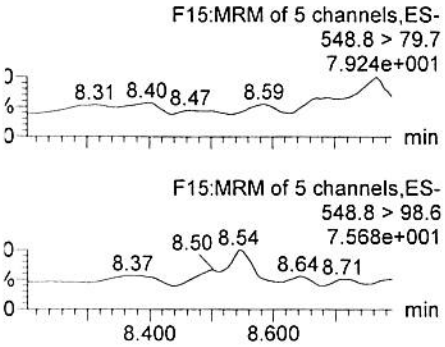
NS



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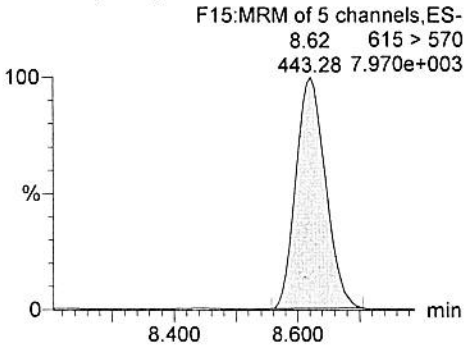

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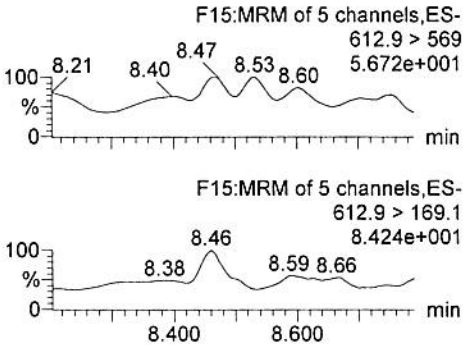

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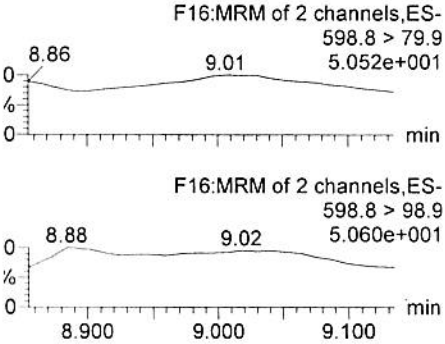
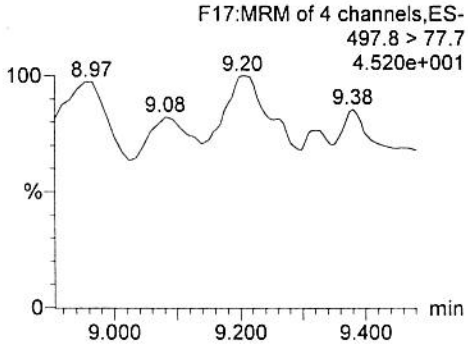


FOSA



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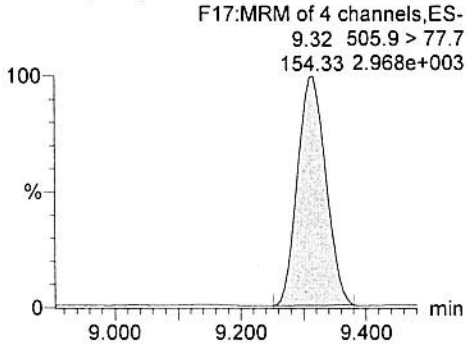
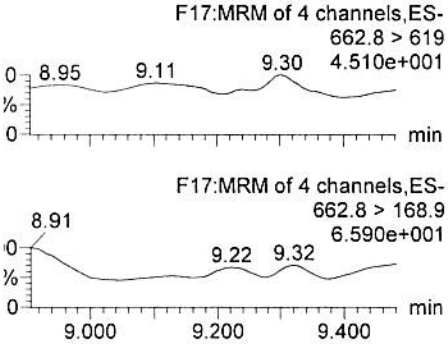
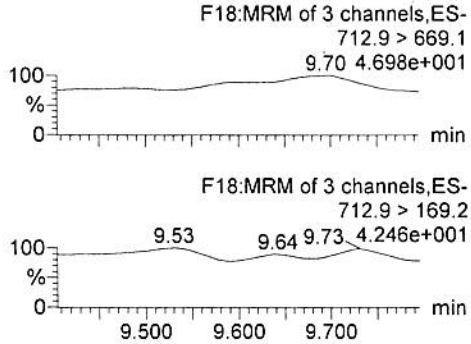


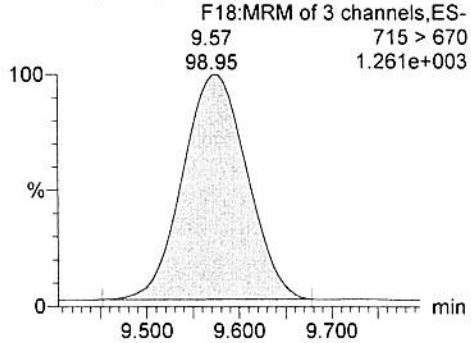
TrA



PFTeA



PFTeA (M+2)



ıantify Sample Report **MassLynx 4.1 SCN919**
ɜtrument Name: S ITHTQ User: DB
ıtaset: C:\MassLynx\PFAS_2016.PRO\20180711 BATCH 1807023.qld
st Altered: Wednesday, July 18, 2018 12:36:18 Eastern Daylight Time
nted: Wednesday, July 18, 2018 12:38:01 Eastern Daylight Time

ıme: 1807023-BLK1, Date: 11-Jul-2018, Time: 20:50:53, Description: 1807023-BLK1, Instrument: ACQ-TQD#NotSet, User: al: 1:27

ıme	Pred RT	Act RT	COD	Area	ng/L	%Dev	Response	Flags	PredRatio	ActRatio	RatioFail?
BA	2.57	2.61	0.998	21.6			21.600	bdl			
BA (M+4)	2.57	2.57	0.999	165.1	92.33		165.059	bb			
PeA	3.23		0.999								
PeA (M+5)	3.22	3.21	0.999	839.6	99.90		839.569	bb			
2 FTS	3.79		0.999						1.983		
2 FTS (M+2)	3.79	3.79	0.997	296.7	95.71		296.671	bb			
HxA	4.06		0.994						24.865		
HxA (M+5)	4.06	4.04	0.999	714.6	102.1		714.605	bb			
BS	4.25		0.999						2.577		
BS (M+3)	4.25	4.25	0.997	939.7	100.5		939.666	bb			
PO-DA	4.39		0.997						1.382		
PO-DA (M+3)	4.39	4.39	0.987	203.5	122.1		203.521	bb			
PeS	5.27		0.999						2.513		
HpA	4.97		0.999						2.802		
HpA (M+4)	4.97	4.96	0.999	976.4	102.2		976.407	bb			
2 FTS	5.50		0.989						1.422		
2 FTS (M+2)	5.50	5.51	0.997	219.8	112.0		219.771	bb			
OA	5.84		0.998						2.553		
OA (M+8)	5.84	5.84	0.999	598.7	90.24		598.656	bb			
HxS	6.21		0.998						2.084		
HxS (M+3)	6.20	6.20	0.999	822.4	98.14		822.439	bb			
NA	6.65		0.999						2.264		
NA (M+9)	6.65	6.64	0.999	553.3	103.3		553.285	bb			
HpS	7.06		0.996						2.055		
2 FTS	7.06		0.996						3.757		
2 FTS (M+2)	7.06	7.06	0.995	91.0	102.4		90.990	bb			
DA	7.40		0.991						3.240		
DA (M+6)	7.40	7.40	0.984	538.1	127.8		538.066	bb			
MeFOSAA	7.50		0.998						1.607		
MeFOSAA (M+3)	7.49	7.50	0.996	229.9	134.9		229.916	bb			
OS	7.82		0.999						2.385		
OS (M+8)	7.82	7.82	0.999	999.8	109.7		999.798	bb			
EtFOSAA	7.81		0.993						1.859		
EtFOSAA (M+5)	7.79	7.79	0.989	119.6	100.8		119.611	bb			
UnA	8.06		0.998						4.004		
UnA (M+7)	8.06	8.06	0.999	527.4	127.8		527.368	bb			
NS	8.47		0.997						2.325		
DoA (M+2)	8.62	8.62	0.996	443.3	111.9		443.283	bb			
DoA	8.63		0.995						4.892		
DS	9.01		1.000						1.011		
DSA	9.30		1.000								
DSA (M+8)	9.30	9.32	0.997	154.3	89.79		154.328	bb			
TrA	9.13		0.977						6.499		
TeA	9.58		0.992						3.647		
FTeA (M+2)	9.58	9.57	0.981	99.0	119.1		98.953	bb			

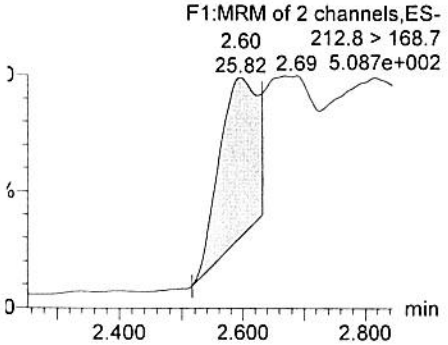
antify Sample Report **MassLynx 4.1 SCN919**
trument Name: S ITHTQ User: DB
:aset: C:\MassLynx\PFAS_2016.PRO\20180711 BATCH 1807023.qld
;t Altered: Wednesday, July 18, 2018 12:36:18 Eastern Daylight Time
nted: Wednesday, July 18, 2018 12:38:03 Eastern Daylight Time

thod: C:\MassLynx\PFAS_2016.PRO\MethDB\PFAS 07112018.mdb 11 Jul 2018 14:35:57
libration: C:\MassLynx\PFAS_2016.PRO\CurveDB\PFC 07112018.cdb 12 Jul 2018 10:09:26

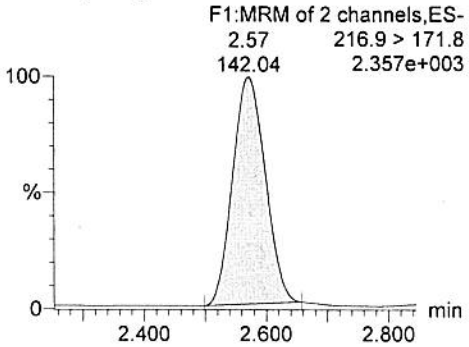
JB 071918
JG 7/24/18

me: 1807023-BLK2, Date: 11-Jul-2018, Time: 21:11:05, Description: 1807023-BLK2, Instrument: ACQ-TQD#NotSet, User:
ıl: 1:28

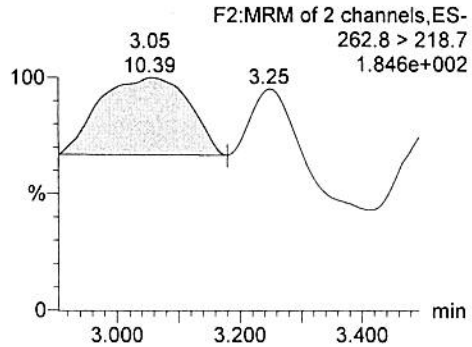
BA



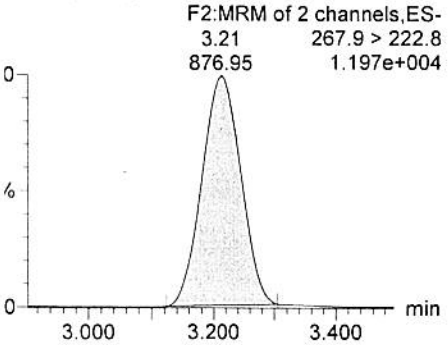
PFBA (M+4)



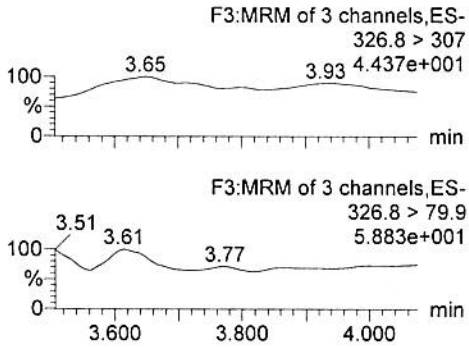
PFPeA



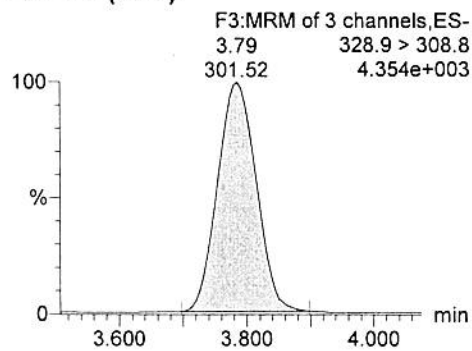
PeA (M+5)



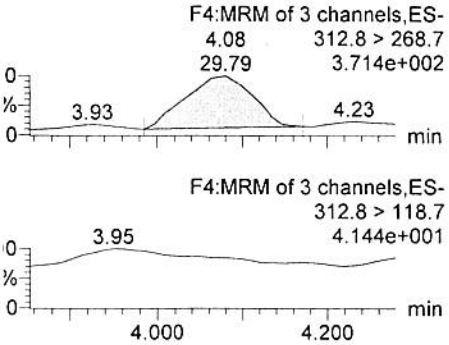
4:2 FTS



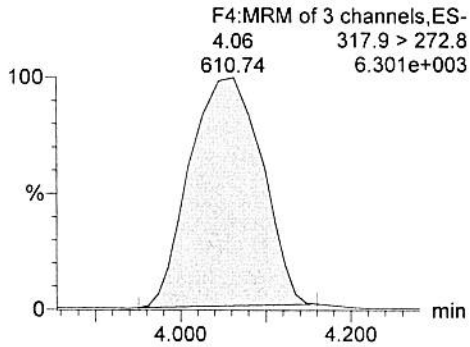
4:2 FTS (M+2)



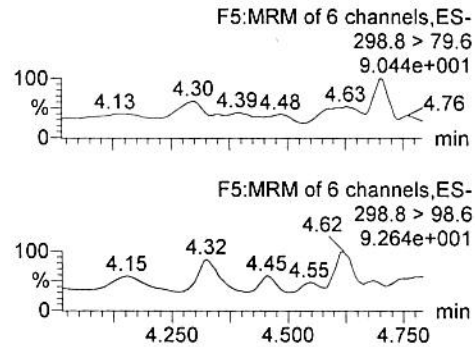
'HxA



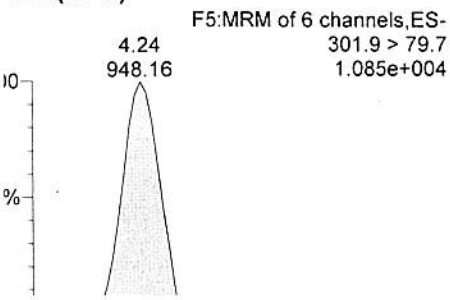
PFHxA (M+5)



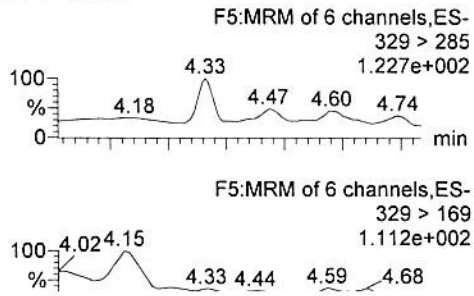
PFBS



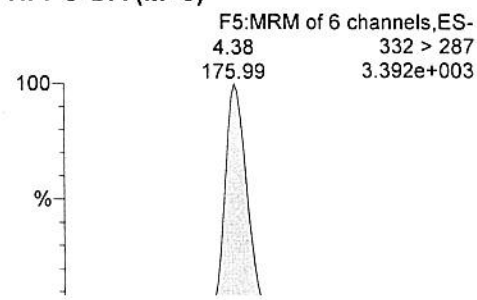
'BS (M+3)



HFPO-DA



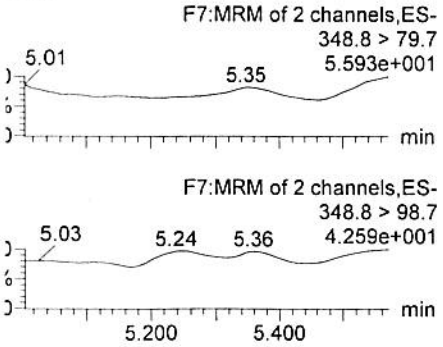
HFPO-DA (M+3)



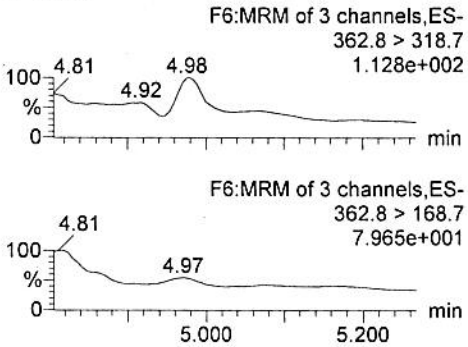
antify Sample Report **MassLynx 4.1 SCN919**
:rument Name: S ITHTQ User: DB
aset: C:\MassLynx\PFAS_2016.PRO\20180711 BATCH 1807023.qld
:t Altered: Wednesday, July 18, 2018 12:36:18 Eastern Daylight Time
ıted: Wednesday, July 18, 2018 12:38:03 Eastern Daylight Time

me: 1807023-BLK2, Date: 11-Jul-2018, Time: 21:11:05, Description: 1807023-BLK2, Instrument: ACQ-TQD#NotSet, User: l: 1:28

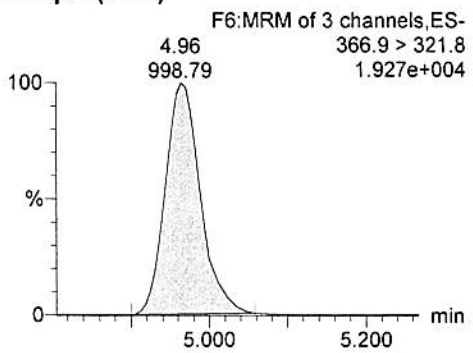
PeS



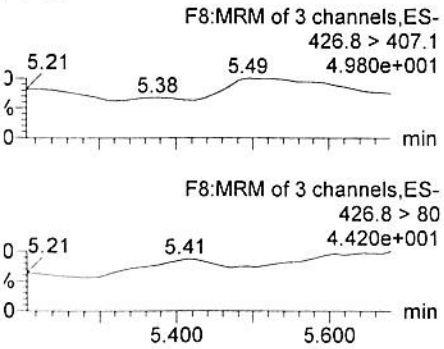
PFHpA



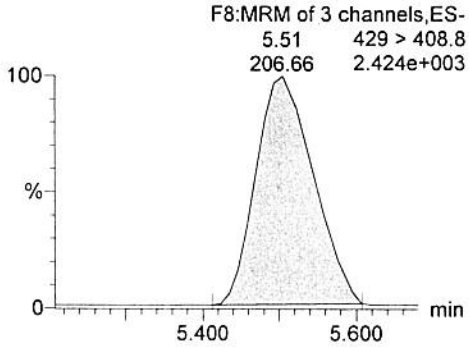
PFHpA (M+4)



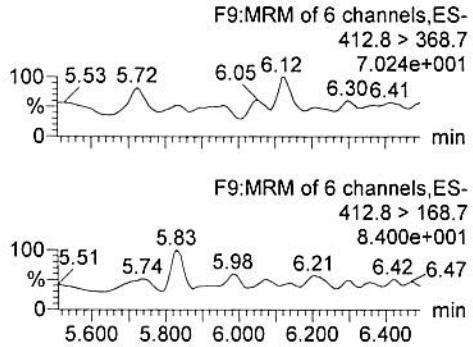
: FTS



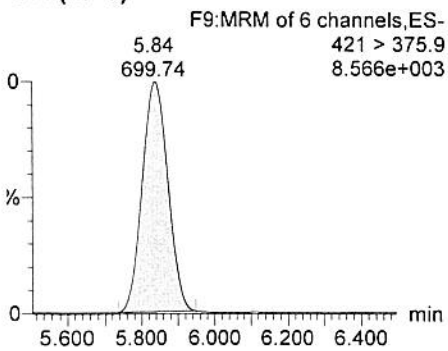
6:2 FTS (M+2)



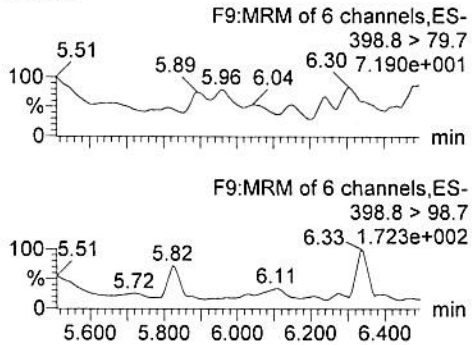
PFOA



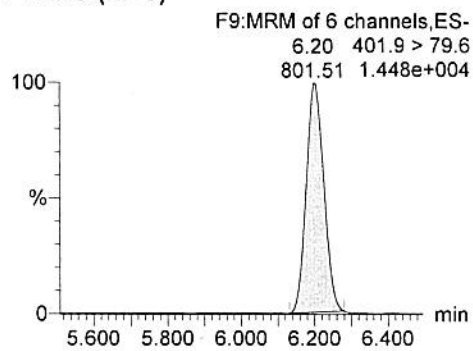
OA (M+8)



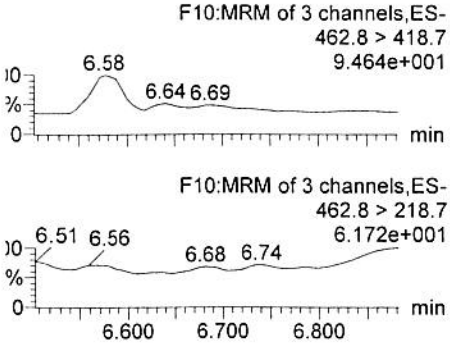
PFHxS



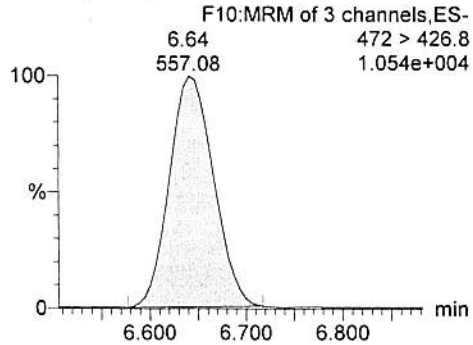
PFHxS (M+3)



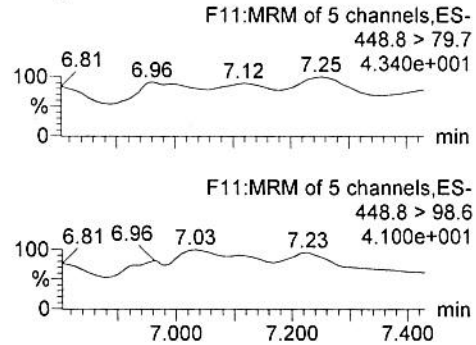
NA



PFNA (M+9)



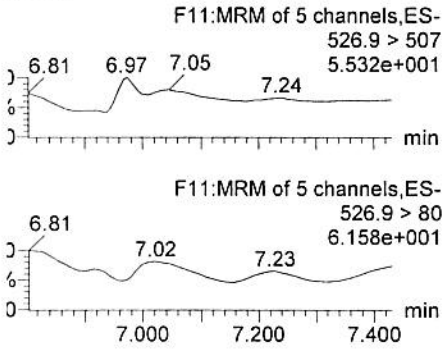
PFHpS



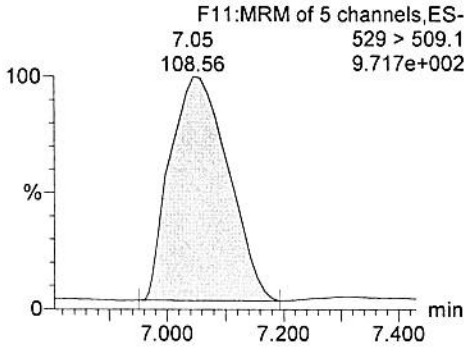
:rument Name: S ITHTQ User: DB
:aset: C:\MassLynx\PFAS_2016.PRO\20180711 BATCH 1807023.qld
;t Altered: Wednesday, July 18, 2018 12:36:18 Eastern Daylight Time
ıted: Wednesday, July 18, 2018 12:38:03 Eastern Daylight Time

me: 1807023-BLK2, Date: 11-Jul-2018, Time: 21:11:05, Description: 1807023-BLK2, Instrument: ACQ-TQD#NotSet, User: ıl: 1:28

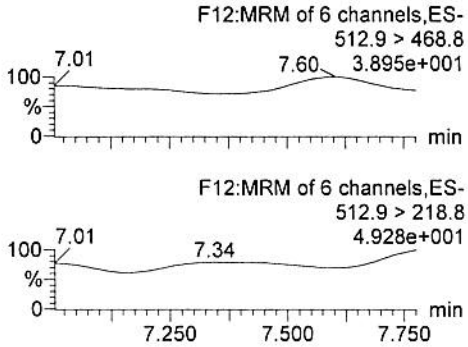
FTS



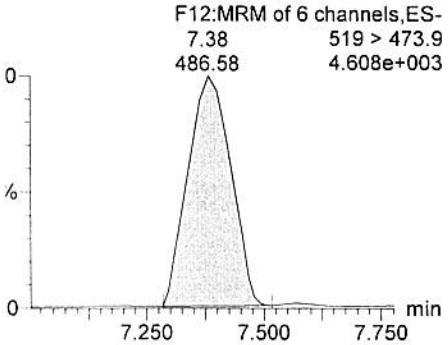
8:2 FTS (M+2)



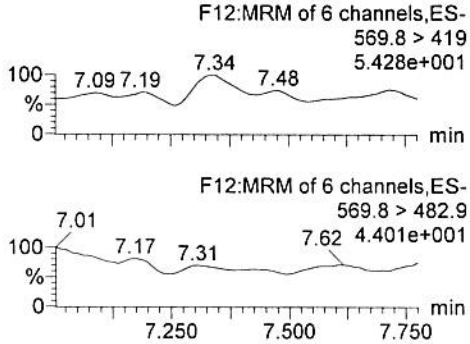
PFDA



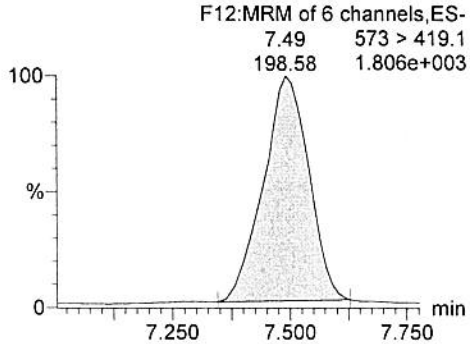
DA (M+6)



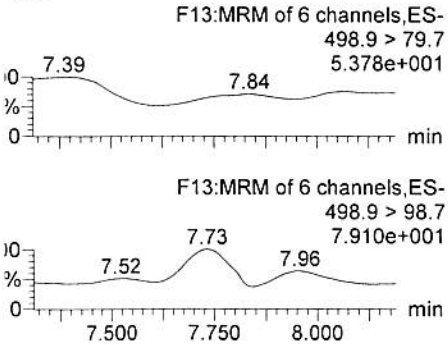
N-MeFOSAA



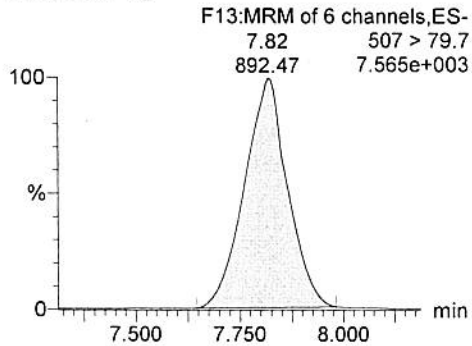
N-MeFOSAA (M+3)



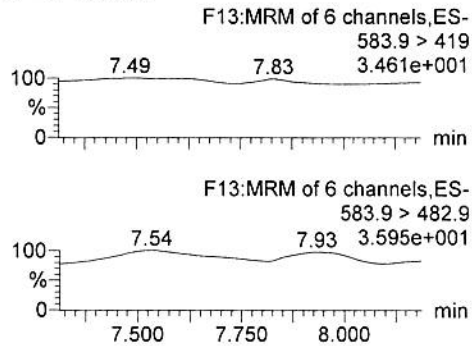
:OS



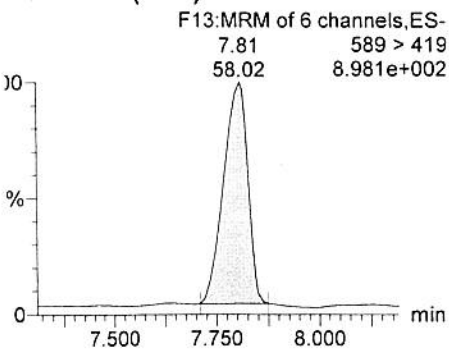
PFOS (M+8)



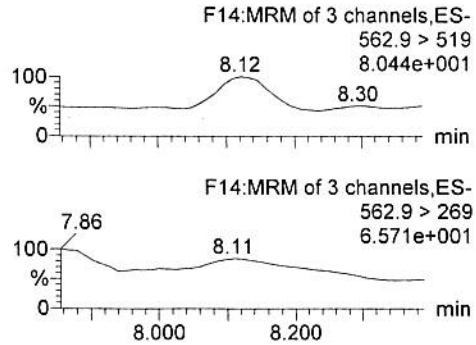
N-EtFOSAA



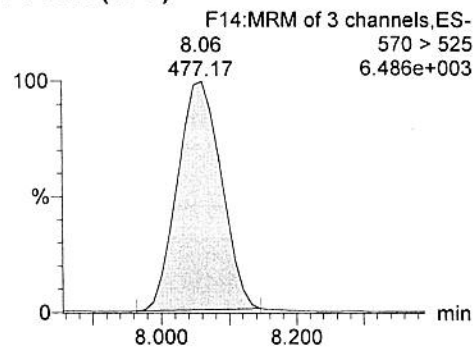
·EtFOSAA (M+5)



PFUnA



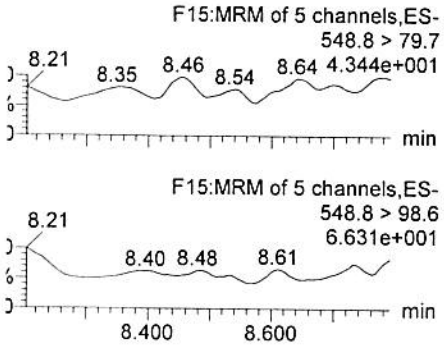
PFUnA (M+7)



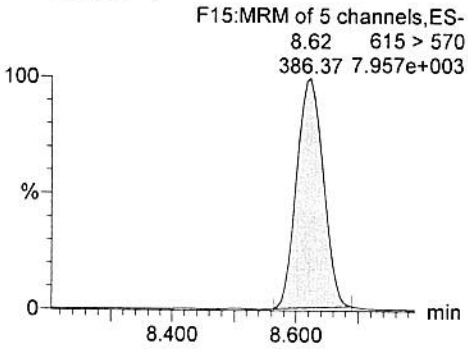
antify Sample Report **MassLynx 4.1 SCN919**
trument Name: S ITHTQ User: DB
taset: C:\MassLynx\PFAS_2016.PRO\20180711 BATCH 1807023.qld
st Altered: Wednesday, July 18, 2018 12:36:18 Eastern Daylight Time
nted: Wednesday, July 18, 2018 12:38:03 Eastern Daylight Time

me: 1807023-BLK2, Date: 11-Jul-2018, Time: 21:11:05, Description: 1807023-BLK2, Instrument: ACQ-TQD#NotSet, User: ıl: 1:28

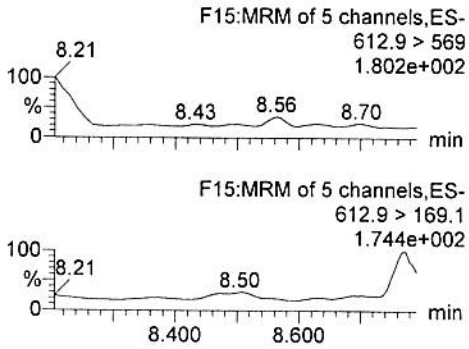
NS



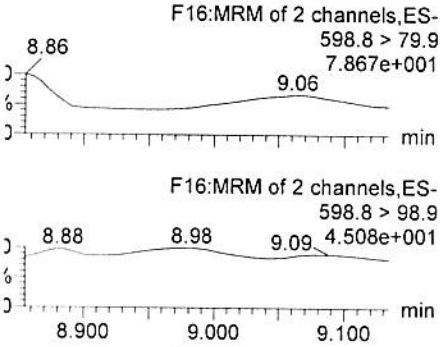
PFDoA (M+2)



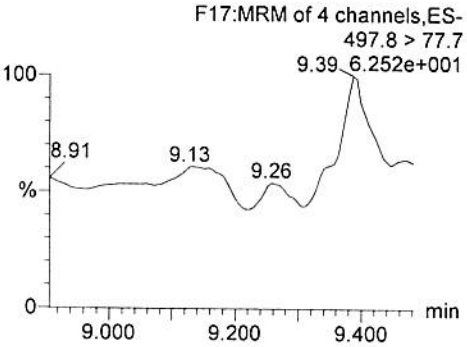
PFDoA



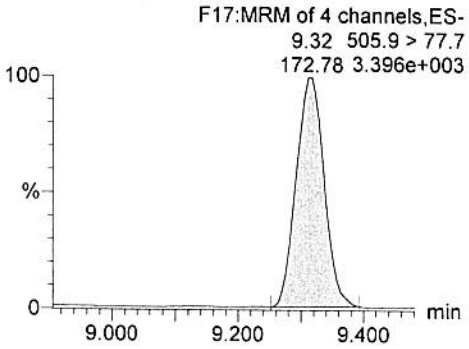
DS



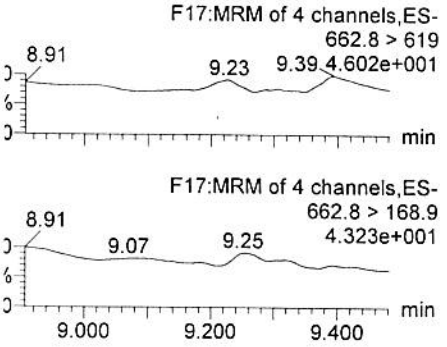
FOSA



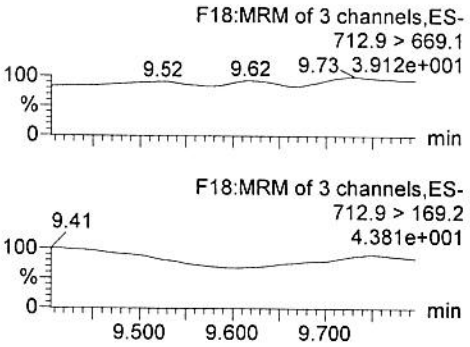
FOSA (M+8)



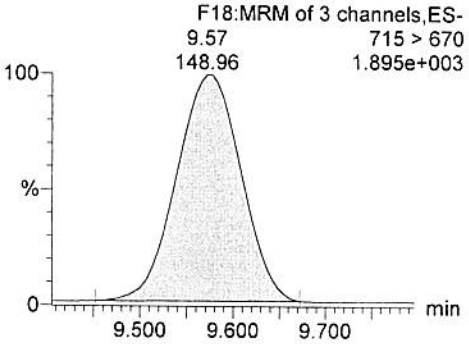
TrA



PFTeA



PFTeA (M+2)



ıantify Sample Report **MassLynx 4.1 SCN919**
:trument Name: S ITHTQ User: DB
taset: C:\MassLynx\PFAS_2016.PRO\20180711 BATCH 1807023.qld
st Altered: Wednesday, July 18, 2018 12:36:18 Eastern Daylight Time
nted: Wednesday, July 18, 2018 12:38:03 Eastern Daylight Time

me: 1807023-BLK2, Date: 11-Jul-2018, Time: 21:11:05, Description: 1807023-BLK2, Instrument: ACQ-TQD#NotSet, User: ıl: 1:28

me	Pred RT	Act RT	COD	Area	ng/L	%Dev	Response	Flags	PredRatio	ActRatio	RatioFail?
BA	2.57	2.60	0.998	25.8			25.815	bdl			
BA (M+4)	2.57	2.57	0.999	142.0	79.22		142.035	bb			
PeA	3.23	3.05	0.999	10.4	2.030 X Ft		10.390	bb			
PeA (M+5)	3.22	3.21	0.999	876.9	104.3		876.947	bb			
: FTS	3.79		0.999						1.983		
: FTS (M+2)	3.79	3.79	0.997	301.5	97.27		301.521	bb			
HxA	4.06	4.08	0.994	29.8	0.2592 X Ft		29.789	bb	24.865		
HxA (M+5)	4.06	4.06	0.999	610.7	87.71		610.736	bb			
BS	4.25		0.999						2.577		
BS (M+3)	4.25	4.24	0.997	948.2	101.4		948.157	bb			
PO-DA	4.39		0.997						1.382		
PO-DA (M+3)	4.39	4.38	0.987	176.0	106.1		175.990	bb			
PeS	5.27		0.999						2.513		
HpA	4.97		0.999						2.802		
HpA (M+4)	4.97	4.96	0.999	998.8	104.6		998.795	bb			
: FTS	5.50		0.989						1.422		
: FTS (M+2)	5.50	5.51	0.997	206.7	105.9		206.659	bb			
OA	5.84		0.998						2.553		
OA (M+8)	5.84	5.84	0.999	699.7	105.9		699.743	bb			
HxS	6.21		0.998						2.084		
HxS (M+3)	6.20	6.20	0.999	801.5	95.64		801.515	bb			
NA	6.65		0.999						2.264		
NA (M+9)	6.65	6.64	0.999	557.1	104.0		557.079	bb			
HpS	7.06		0.996						2.055		
: FTS	7.06		0.996						3.757		
: FTS (M+2)	7.06	7.05	0.995	108.6	119.6		108.564	bb			
DA	7.40		0.991						3.240		
DA (M+6)	7.40	7.38	0.984	486.6	117.4		486.581	bb			
MeFOSAA	7.50		0.998						1.607		
MeFOSAA (M+3)	7.49	7.49	0.996	198.6	117.8		198.577	bb			
OS	7.82		0.999						2.385		
OS (M+8)	7.82	7.82	0.999	892.5	98.51		892.471	bb			
EtFOSAA	7.81		0.993						1.859		
EtFOSAA (M+5)	7.79	7.81	0.989	58.0	51.72		58.017	bb			
UnA	8.06		0.998						4.004		
UnA (M+7)	8.06	8.06	0.999	477.2	116.0		477.171	bb			
NS	8.47		0.997						2.325		
DoA (M+2)	8.62	8.62	0.996	386.4	97.85		386.369	bb			
DoA	8.63		0.995						4.892		
DS	9.01		1.000						1.011		
ıSA	9.30		1.000								
ıSA (M+8)	9.30	9.32	0.997	172.8	100.1		172.775	bb			
TrA	9.13		0.977						6.499		
TeA	9.58		0.992						3.647		
TeA (M+2)	9.58	9.57	0.981	149.0	167.3		148.957	bb			

antify Sample Report **MassLynx 4.1 SCN919**
rument Name: S ITHTQ User: DB
aset: C:\MassLynx\PFAS_2016.PRO\20180711 BATCH 1807023.qld
t Altered: Wednesday, July 18, 2018 12:36:18 Eastern Daylight Time
ated: Wednesday, July 18, 2018 12:38:07 Eastern Daylight Time

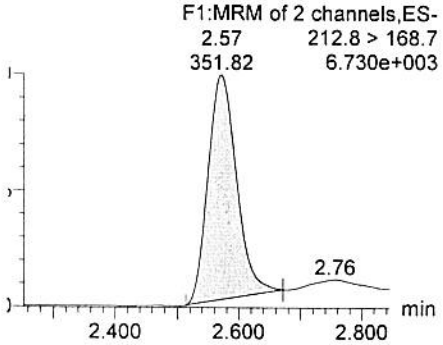
DMB 071918

J6 7/24/18

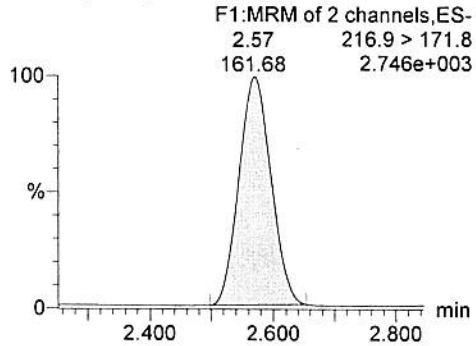
thod: C:\MassLynx\PFAS_2016.PRO\MethDB\PFAS 07112018.mdb 11 Jul 2018 14:35:57
ibration: C:\MassLynx\PFAS_2016.PRO\CurveDB\PFC 07112018.cdb 12 Jul 2018 10:09:26

ne: 1807023-BS1, Date: 11-Jul-2018, Time: 21:31:23, Description: 1807023-BS1, Instrument: ACQ-TQD#NotSet, User: , l: 1:29

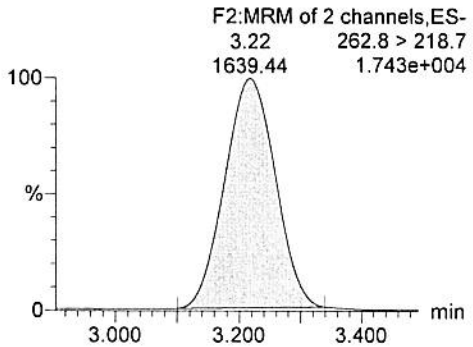
3A



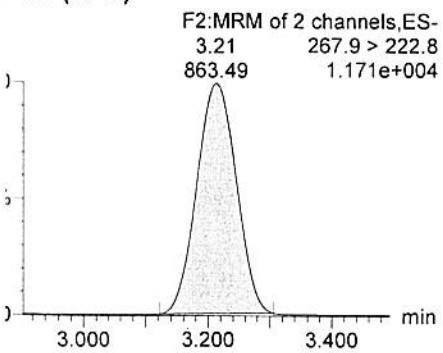
PFBA (M+4)



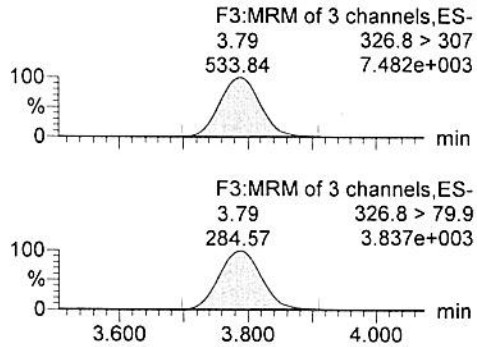
PFPeA



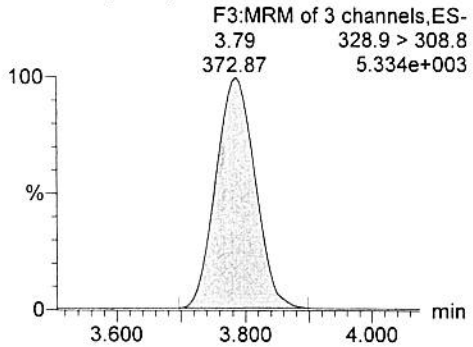
PeA (M+5)



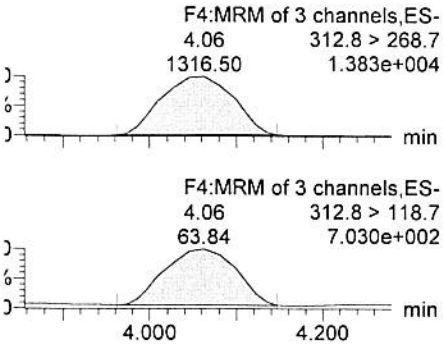
4:2 FTS



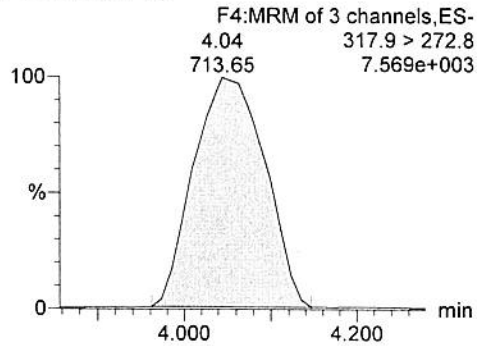
4:2 FTS (M+2)



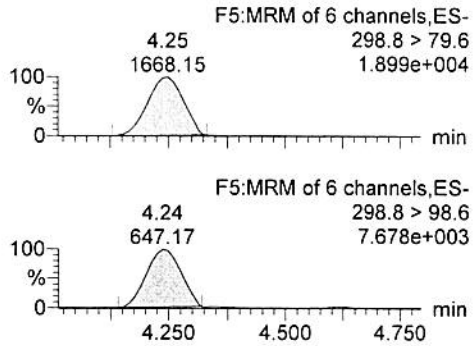
HxA



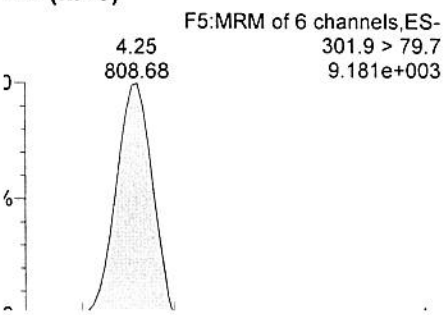
PFHxA (M+5)



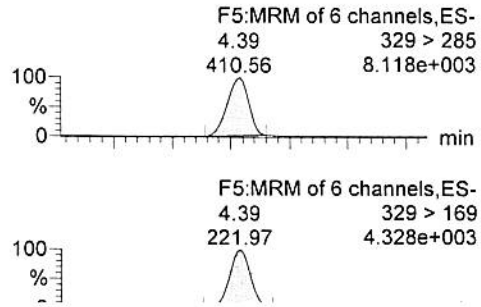
PFBS



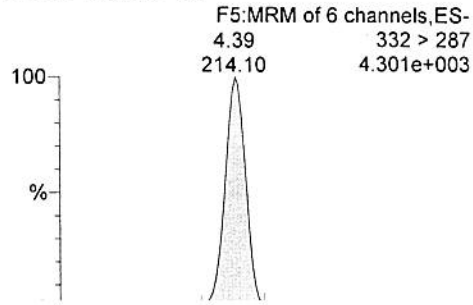
BS (M+3)



HFPO-DA



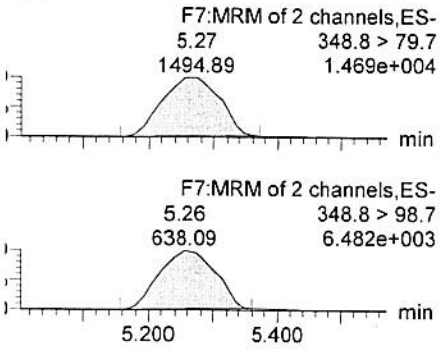
HFPO-DA (M+3)



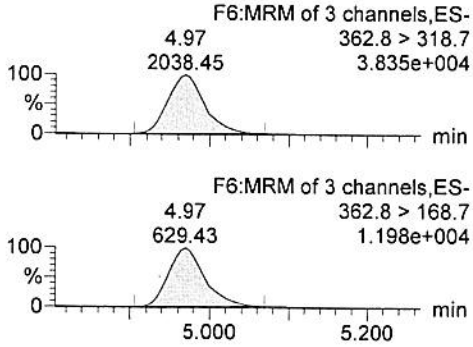
antify Sample Report **MassLynx 4.1 SCN919**
:rument Name: S ITHTQ User: DB
aset: C:\MassLynx\PFAS_2016.PRO\20180711 BATCH 1807023.qld
:t Altered: Wednesday, July 18, 2018 12:36:18 Eastern Daylight Time
ıted: Wednesday, July 18, 2018 12:38:07 Eastern Daylight Time

me: 1807023-BS1, Date: 11-Jul-2018, Time: 21:31:23, Description: 1807023-BS1, Instrument: ACQ-TQD#NotSet, User: , l: 1:29

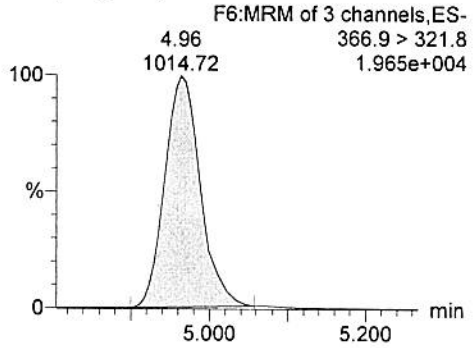
PeS



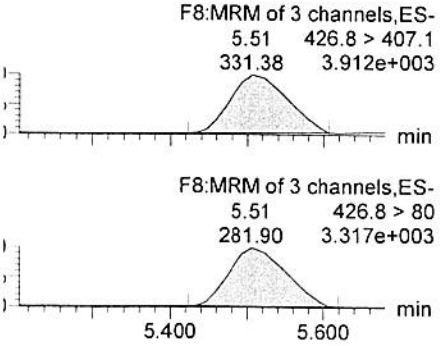
PFHpA



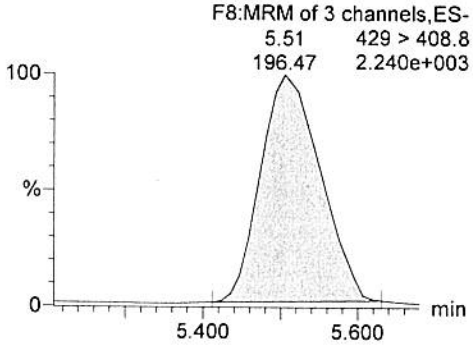
PFHpA (M+4)



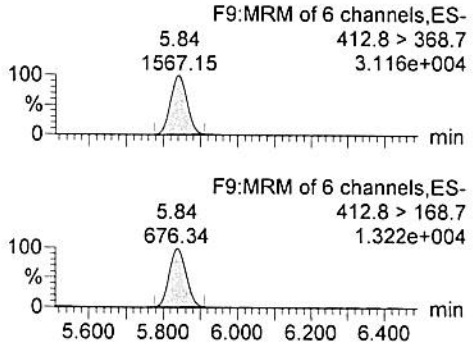
FTS



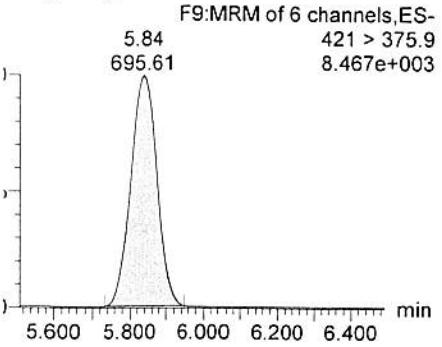
6:2 FTS (M+2)



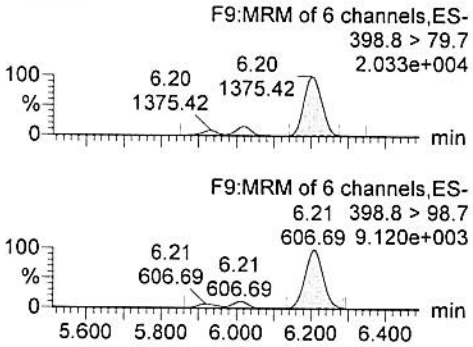
PFOA



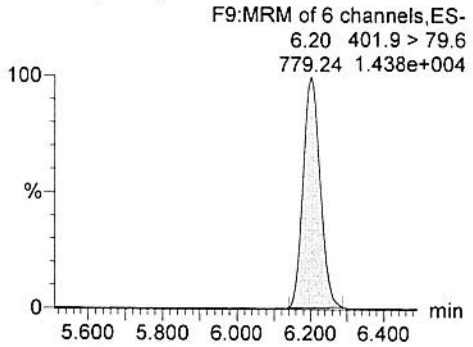
DA (M+8)



PFHxS



PFHxS (M+3)



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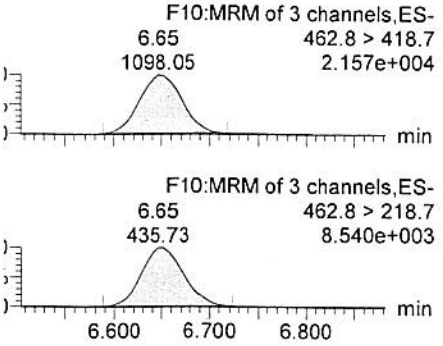
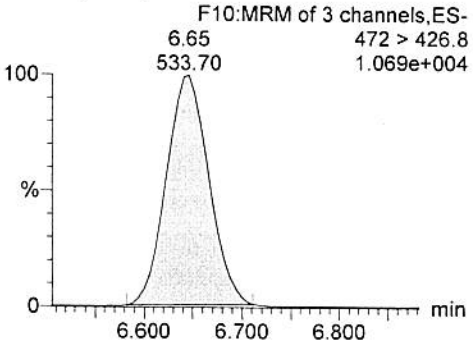
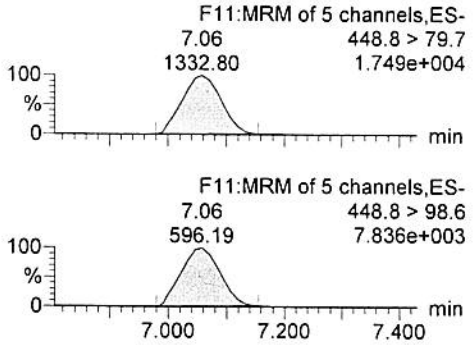


PFNA (M+9)



PFHpS