



**Groundwater Sample Results,
Level 2 Laboratory Report, Level 4 Laboratory Report,
Electronic Data Deliverable, Data Validation Report,
and the Sample Location Report, SDG 18-0570**

*Naval Air Station Point Mugu
Point Mugu, California*

July 2019

CTO-4164 Naval Base Ventura County, California

Project No 100110125-01

PFAS by DoD QSM 5.1 Table B-15

SB, SS

Batch 18-0570

Package DP-18-0278

Submitted to:

CH2M

1100 NE Circle Blvd Suite 300

Corvallis, OR 97330 USA

Submitted by:

Battelle Norwell Operations

141 Longwater Drive Suite 202

Norwell, MA 02061

BATTELLE

It can be done

CTO-4164 Naval Base Ventura County, California
Project No 100110125-01
PFAS by DoD QSM 5.1 Table B-15
SB, SS
Batch 18-0570
Package DP-18-0278

Submitted to:
CH2M
1100 NE Circle Blvd Suite 300
Corvallis, OR 97330 USA

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

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

Analyst Approval:		schumitzd@battelle.org 2018.10.05 19:10:18 -04'00'
QC Chemist Approval:		Digitally signed by devinec@battelle.org DN: cn=devinec@battelle.org Date: 2018.10.18 22:10:30 -04'00'
Project Manager Approval:		Digitally signed by Jonathan Thorn Date: 2018.10.19 14:38:47 -04'00'

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CTO-4164 Naval Base Ventura County, California
Project No 100110125-01
PFAS by DoD QSM 5.1 Table B-15

SD

Batch 18-0570

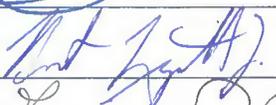
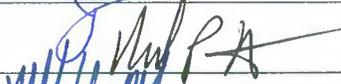
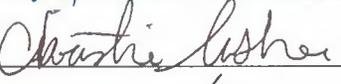
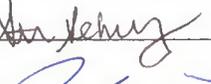
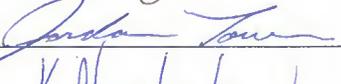
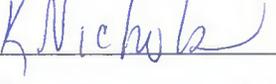
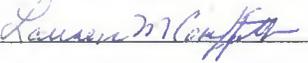
Package DP-18-0278

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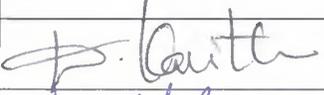
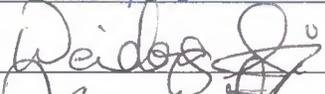
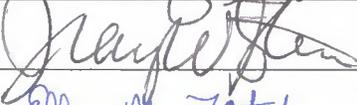
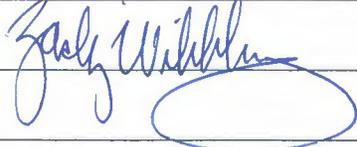
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Signature Page

Battelle 2018 (1 of 2) Signature Page			
Name (Printed)	Signature	Initials	Date
Jonathan Thorn		JRT	4/4/2018
Robert Lizotte, Jr.		BL	4-4-2018
FRANC PALA		FP	4-4-2018
Carla Devine		CRD	4/4/18
Denise Schumitz		DNS	4/4/18
Carolus Peummeay		CPM	4/4/2018
Rich Rostucci		RR	4/4/2018
Michael Mena		MM	4/4/2018
Christie Usher		CU	4/4/18
Kevin Matroney		KM	4/4/18
Stephanie Schmitz		SAS	4/4/18
Jordan Tower		JT	4/4/18
KRISTEN NICHOLS		KN	4/4/18
Quimiao H Brown		CB	4/4/18
Matt Schumitz		MS	4-4-18
Sam Guimaraes		SG	4-4-18
Lauren Griffith		LMG	4.4.18

Signature Page

Battelle 2018 (2 of 2)
Signature Page

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

Sample Summary

Client: CH2M

SDG: 18-0570

Project/Site: Naval Base Ventura County

CTO: 4164

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CR851PB-FS	180507-02: Ottawa Sand	SEDIMENT	9/26/2018	9/26/2018
CR852LCS-FS	180507-02: Ottawa Sand	SEDIMENT	9/26/2018	9/26/2018
J8229-FS	VC-PM649-SS01-000H	SS	9/18/2018	9/21/2018
J8230-FS	VC-PM649-SB01-0102	SB	9/18/2018	9/21/2018
J8231-FS	VC-PM649-SB01-0506	SB	9/18/2018	9/21/2018
J8232-FS	VC-PM649-SS02-000H	SS	9/18/2018	9/21/2018
J8233-FS	VC-PM649-SB02-0102	SB	9/18/2018	9/21/2018
J8234-FS	VC-PM649-SB02-0506	SB	9/18/2018	9/21/2018
J8235-FS	VC-PM649-SS03-000H	SS	9/18/2018	9/21/2018
J8236-FS	VC-PM649-SB03-0102	SB	9/18/2018	9/21/2018
J8237-FS	VC-PM649-SB03-0506	SB	9/18/2018	9/21/2018
J8238-FS	VC-PM649-SS04-000H	SS	9/18/2018	9/21/2018
J8239-FS	VC-PM649-SB04-0102	SB	9/18/2018	9/21/2018
J8240-FS	VC-PM649-SB04-0506	SB	9/18/2018	9/21/2018
J8248-FS	VC-PM365-SS01-000H	SS	9/19/2018	9/21/2018
J8249-FS	VC-PM365-SB01-0102	SB	9/19/2018	9/21/2018
J8250-FS	VC-PM365-SB01-0506	SB	9/19/2018	9/21/2018
J8251-FS	VC-PM365-SS02-000H	SS	9/19/2018	9/21/2018
J8252-FS	VC-PM365-SB02-0102	SB	9/19/2018	9/21/2018
J8253-FS	VC-PM365-SB02-0506	SB	9/19/2018	9/21/2018
J8257MS-FS	VC-PM365-SB02-0102-MS	SB	9/19/2018	9/21/2018
J8258MSD-FS	VC-PM365-SB02-0102-MSD	SB	9/19/2018	9/21/2018

Miscellaneous Documentation

**QA/QC Summary
Batch 18-0570**

Project:	CTO-4164 Naval Base Ventura County, California
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	SS, SB
Data Set:	DP-18-0278
Analytical SOP:	5-369
Method Reference:	PFAS to QSM 5.1 Table B-15

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
9/18-19/2018	9/21/2018	0.1, 0.9, and 0.3
Corrective Actions	None, however, clarifications were provided via email by the client (included in the final custody records).	
Sample Storage	The samples were stored refrigerated until extraction.	
Related samples	NA	

METHOD SUMMARIES	
Sample Preparation	Solid samples were aliquoted into extraction tubes and spiked with surrogates prior to the addition of solvent. The sediment was serially extracted on the Geno/Grinder with 0.4% NH ₃ in methanol. 1 mL of extract was refined using ENVI-carb SPE cartridges. Extracts were concentrated to dryness under nitrogen with a water bath set between 35 °C and 45 °C, reconstituted with 80:20 methanol/water (V/V) and fortified with internal standard. Extracts were transferred for LC-MS/MS analysis.
Prep comments	Sample J8231-FS (VC-PM649-SB01-0506), J8233-FS (VC-PM649-SB02-0102), J8235-FS (VC-PM649-SS03-000H), J8236-FS (VC-PM649-SB03-0102), J8248-FS (VC-PM365-SS01-000H) were very rocky in consistency. Sample J8231-FS (VC-PM649-SB01-0506) also contained shells and twigs.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/g concentrations.
Analysis Comments	<p>Samples analyzed on Sciex 5500 LC-MS/MS.</p> <p>The ion ratio for the following samples were above the 50% RPD criteria:</p> <ul style="list-style-type: none"> • PFOA in sample VC-PM365-SS02-000H extract J8251-FS(3) <p>The initial injection for sample extracts J8229-FS(3), J8239-FS(3), J8253-FS(3) and J8257MS-FS(3) all had bad injections on the instrument that were evident in the IS and SIS results. A fresh aliquot of each sample was taken and run against a freshly aliquoted calibration curve on the instrument. The quant reports from the original run of these samples can be found in the unused data section of this data package.</p>

QA/QC Summary
Batch 18-0570

Holding Times	Extraction Date(s)	Analysis Date(s)
	9/26/2018	10/2-3/2018
Procedural Blank (PB)	A PB was prepared with this analytical batch to ensure the sample extraction and analysis methods are free of contamination.	
$\leq \frac{1}{2}$ the LOQ	No exceedances noted.	
Samples >10x PB	No comments.	
Laboratory Control Spike (LCS)	A LCS was prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy.	
Laboratory derived control limits for recovery	No exceedances noted.	
	No comments.	
Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A MS/MSD was prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy.	
Laboratory derived control limits for recovery and <30% RPD	2 exceedances noted.	
	PFOS failed high in both the MS/MSD, the concentration of PFOS in the background sample was 5x higher than the amount fortified into the MS/MSD samples.	
Extracted Internal Standard Analytes	Labelled analog compounds were added prior to extraction. The recoveries are calculated to measure extraction efficiency.	
50-150% of true value	No exceedances noted.	
	No comments.	
Internal Standard Analytes	Labelled analog compounds were added prior to analysis.	
+/- 50% of the area of the L5 calibration point.	No exceedances noted.	
	L6 is used to evaluate the IS Areas for the SIS method since the L1 was dropped from the calibration.	
Initial Calibration (ICAL)	The LC-MS/MS was calibrated with multi-level calibration curve for all compounds using linear or quadratic curve fitting.	
+/- 30% of true value, $R^2 \geq 0.99$	No exceedances noted.	
	No comments.	
Independent Calibration Check (ICC)	The independent check was run after each initial calibration to verify the calibration. This standard is from a different source than the ICAL.	
+/- 30% of true value	No exceedances noted.	
	No comments.	

QA/QC Summary
Batch 18-0570

Continuing Calibration Verification (CCV)	Continuing calibration standards were run at the beginning and end of 10 injections and at the end of the sequence to ensure that initial calibration is still valid.
+/- 30% of true value	No exceedances noted.
	No comments.
Instrument Blank (IB)	Immediately following the highest standard analyzed and daily prior to sample analysis.
$\leq \frac{1}{2}$ the LOQ	No exceedances noted.
	No comments.



It can be done

Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project Number: 100110125-01
 Preparation Batch: 18-0570
 Data Set: DP-18-0278
 Test Code: Master_369

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	0	None
Laboratory Control Sample	0	None
Matrix Spike / Matrix Spike Duplicate Recovery	2	Concentration in the background were approximately 5 times higher than the fortification amount.
Matrix Spike / Matrix Spike Duplicate Precision	0	None
Extracted Internal Standard Analytes (Surrogates)	0	None
Instrument Calibration	0	None
Instrument Blank	0	None
Independent Calibration Check	0	None
Continuing Calibration Verification	0	None



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BATTELLE - NORWELL OPERATIONS MISCELLANEOUS DOCUMENTATION FORM

Project Title:	CTO-4164 Naval Base Ventura County,	Data Set Number:	DP-18-0278
Project Number:	100110125-01	Prep Batch Number:	18-0570
Entered By:	Denise Schumitz	Entered On:	10/05/2018
Test Code (Matrix Type):	Master_369(S)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE). DMS 10/5/2018

KA86 is not being used in both the SIS method and the BASE method. There is no impact on the data once this point is removed from the calibration.
DMS 10/5/2018

The ion ratio for the following samples were above the 50% RPD criteria:
- PFOA in sample J8251-FS(3).
DMS 10/5/2018

L6 is used to evaluate the IS Areas for the SIS method since the L1 was dropped from the calibration. DMS 10/15/2018

Samples J8229(3), J8239(3), J8253(3) and J8257MS(3) all had bad injection on the instrument that were evident in the IS and SIS results. A fresh aliquot of each sample was taken and run against a freshly aliquoted calibration curve on the instrument. The quant reports from the original run of these samples can be found in the unused data section of this data package.
DMS 10/5/2018

Task Leader Approval:

Supervisor Approval:

PM Approval:

Digitally signed by Jonathan Thorn
Date: 2018.10.06 17:21:38 -04'00'



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01
 Preparation Batch: 18-0570
 Data Set: DP-18-0278

		CR851PB-FS (180507-02: Ottawa Sand)	CR852LCS-FS (180507-02: Ottawa Sand)	J8257MS-FS (VC-PM365-SB02-0102-MS)	J8258MSD-FS (VC-PM365-SB02-0102-MSD)	J8229-FS (VC-PM649-SS01-000H)	J8230-FS (VC-PM649-SB01-0102)	J8231-FS (VC-PM649-SB01-0506)	J8232-FS (VC-PM649-SS02-000H)
PFHxA	307-24-4	-	L	L	L	L	L	L	-
PFHpA	375-85-9	-	L	L	L	L	L	L	-
PFOA	335-67-1	-	L	L	L	L	L	L	-
PFNA	375-95-1	-	L	L	L	L	L	-	-
PFDA	335-76-2	-	L	L	L	L	-	-	-
PFUnA	2058-94-8	-	L	L	L	-	-	-	-
PFDoA	307-55-1	-	L	L	L	-	-	-	-
PFTTrDA	72629-94-8	-	L	L	L	-	-	-	-
PFTeDA	376-06-7	-	L	L	L	-	-	-	-
NMeFOSAA	2355-31-9	-	L	L	L	-	-	-	-
NEtFOSAA	2991-50-6	-	L	L	L	-	-	-	-
PFBS	375-73-5	-	L	L	L	L	-	L	-
PFHxS	355-46-4	-	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br	-
PFOS	1763-23-1	-	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br

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



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01
 Preparation Batc
 Data Set: DP-18-1

	J8233-FS (VC-PM649-SB02-0102)	J8234-FS (VC-PM649-SB02-0506)	J8235-FS (VC-PM649-SS03-000H)	J8236-FS (VC-PM649-SB03-0102)	J8237-FS (VC-PM649-SB03-0506)	J8238-FS (VC-PM649-SS04-000H)	J8239-FS (VC-PM649-SB04-0102)	J8240-FS (VC-PM649-SB04-0506)
PFHxA	-	-	-	-	L	L	-	L
PFHpA	-	-	-	-	L	-	-	-
PFOA	-	-	-	-	L	-	-	-
PFNA	-	-	-	-	-	-	-	-
PFDA	-	-	-	-	-	-	-	-
PFUnA	-	-	-	-	-	-	-	-
PFDoA	-	-	-	-	-	-	-	-
PFTTrDA	-	-	-	-	-	-	-	-
PFTeDA	-	-	-	-	-	-	-	-
NMeFOSAA	-	-	-	-	-	-	-	-
NEtFOSAA	-	-	-	-	-	-	-	-
PFBS	-	-	-	-	L	-	-	-
PFHxS	L/Br							
PFOS	L/Br							

"L": Linear

"Br": branched

"L/Br": Linear/Branched

"-": Not detected



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01
 Preparation Batc
 Data Set: DP-18-1

	J8248-FS (VC-PM365-SS01-000H)	J8249-FS (VC-PM365-SB01-0102)	J8250-FS (VC-PM365-SB01-0506)	J8251-FS (VC-PM365-SS02-000H)	J8252-FS (VC-PM365-SB02-0102)	J8253-FS (VC-PM365-SB02-0506)
PFHxA	L	L	L	L	L	L
PFHpA	-	-	-	L	L	L
PFOA	-	-	-	L	L	L
PFNA	-	-	-	-	-	-
PFDA	-	-	-	-	-	-
PFUnA	-	-	-	-	-	-
PFDaA	-	-	-	-	-	-
PFTTrDA	-	-	-	-	-	-
PFTeDA	-	-	-	-	-	-
NMeFOSAA	-	-	-	-	-	-
NEtFOSAA	-	-	-	-	-	-
PFBS	L	L	-	L	L	L
PFHxS	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br
PFOS	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br

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

ACCREDITATIONS

Accrediting Authority	Laboratory ID
U.S. Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP)	91667
State of Florida Department of Health	E87856
State of New York Department of Health	12105
Commonwealth of Pennsylvania Department of Environmental Protection	68-05687
State of Washington Department of Ecology	C1050
State of California	3045
Commonwealth of Massachusetts	E87856

Current certificates and lists of accredited parameters are available upon request.



Custody Records

Sample Receipt Form

Approved: Authorized

Project Number: 695803 **Client:** CH2M
Received by: Schumitz, Matt **Date/Time Received:** Friday, September 21, 2018 10:00 AM
No. of Shipping Containers: 3

SHIPMENT

Method of Delivery: Commercial Carrier **Tracking Number:** 7828 5914 8695 (Master)
COC Forms: **Shipped with samples** **No Forms**

Cooler(s)/Box(es)

Cntr	Type	Tracking No.	Seal	Seal	Container	Therm.	Temp C	Smps
1 of 3	Cooler	7828 5914 8695	Custody Seals	Intact	Intact	Therm_1	0.1	13
2 of 3	Cooler	7828 5914 8700	Custody Seals	Intact	Intact	Therm_1	0.9	27
3 of 3	Cooler	7828 5914 8710	Custody Seals	Intact	Intact	Therm_1	0.3	37

Samples

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

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

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

Temperature upon receipt (°C): 0.9 Temperature Blank used Yes No
(Note: If temperature upon receipt differs from required conditions, see sample log comment field)

Samples Acidified: Yes No Unknown

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

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

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

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

Storage Location: Custody: Refrigerator - R0119 (NA) **BDO IDs Assigned:** J8201 - J8277

Samples logged in by: Schumitz, Matt **Date/Time:** 09/21/2018 10:00 AM

Approved By: Fitch, Ellyn **Approved On:** 9/28/2018 10:18:00 AM

Authorized By: _____ **Authorized On:** _____



It can be done

ShpNo SHP-180921-01

Battelle Project No: J110125-01

Sample Receipt Form Details

Approved: Authorized

Project Number: 695803 Client: CH2M

Received by: Schumitz, Matt Date/Time Received: Friday, September 21, 2018 10:00 AM

No. of Shipping Containers: 3

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
J8201	VC-PM3009-SS01-000H	09/17/18 14:15	09/20/18 15:38	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8202	VC-PM3009-SB01-0102	09/17/18 14:15	09/20/18 15:38	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8203	VC-PM3009-SB01-0506	09/17/18 14:15	09/20/18 15:39	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8204	VC-PM3009-SS02-000H	09/17/18 15:12	09/20/18 15:39	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8205	VC-PM3009-SB02-0102	09/17/18 15:13	09/20/18 15:39	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8206	VC-PM3009-SB02-0506	09/17/18 15:15	09/20/18 15:40	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8207	VC-PM3009-SS03-000H	09/17/18 16:16	09/20/18 15:40	1	SS	0.9	NA	NA	NA	R0119 (NA)			
J8208	VC-PM3009-SB03-0102	09/17/18 16:17	09/20/18 15:40	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8209	VC-PM3009-SB03-0506	09/17/18 16:18	09/20/18 15:41	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8210	VC-PM3009-DW01-0918	09/17/18 15:10	09/20/18 15:54	2	GW	0.3	NA	NA	NA	R0119 (NA)			
J8211	VC-PM3009-DW02-0918	09/17/18 16:23	09/20/18 15:54	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8212	VC-PM3009-DW02P-0918	09/17/18 16:27	09/20/18 15:55	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8213	VC-PM3009-DW03-0918	09/17/18 16:38	09/20/18 15:55	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8214	VC-PM372-DW01-0918	09/18/18 10:07	09/20/18 15:56	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8215	VC-PM372-DW02-0918	09/18/18 9:25	09/20/18 15:57	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8216	VC-PM372-DW02P-0918	09/18/18 9:27	09/20/18 15:57	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8217	VC-PM372-DW03-0918	09/18/18 11:49	09/20/18 15:57	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8218	VC-PM372-SS01-000H	09/18/18 9:36	09/20/18 15:58	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8219	VC-PM372-SB01-0102	09/18/18 9:37	09/20/18 16:00	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8220	VC-PM372-SB01-0506	09/18/18 9:43	09/20/18 16:00	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8221	VC-PM372-SS02-000H	09/18/18 8:57	09/20/18 16:00	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8222	VC-PM372-SB02-0102	09/18/18 9:03	09/20/18 16:01	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8223	VC-PM372-SB02-0506	09/18/18 9:06	09/20/18 16:01	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8224	VC-PM372-SS03-000H	09/18/18 10:46	09/20/18 16:01	1	SS	0.9	NA	NA	NA	R0119 (NA)			
J8225	VC-PM372-SB03-0102	09/18/18 10:47	09/20/18 16:02	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8226	VC-PM372-SB03-0506	09/18/18 10:49	09/20/18 16:02	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8227	VC-PM372-SS02-000H-MS	09/18/18 9:06	09/20/18 16:02	1	SS	0.9	NA	NA	NA	R0119 (NA)			
J8228	VC-PM372-SS02-000H-SD	09/18/18 9:06	09/20/18 16:03	1	SS	0.9	NA	NA	NA	R0119 (NA)			



It can be done

ShpNo SHP-180921-01

Battelle Project No: J110125-01

Sample Receipt Form Details

Approved: Authorized

Project Number: 695803 Client: CH2M

Received by: Schumitz, Matt Date/Time Received: Friday, September 21, 2018 10:00 AM

No. of Shipping Containers: 3

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
J8229	VC-PM649-SS01-000H	09/18/18 11:30	09/20/18 16:04	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8230	VC-PM649-SB01-0102	09/18/18 11:35	09/20/18 16:09	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8231	VC-PM649-SB01-0506	09/18/18 11:40	09/20/18 16:10	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8232	VC-PM649-SS02-000H	09/18/18 14:25	09/20/18 16:10	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8233	VC-PM649-SB02-0102	09/18/18 14:29	09/20/18 16:10	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8234	VC-PM649-SB02-0506	09/18/18 14:30	09/20/18 16:10	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8235	VC-PM649-SS03-000H	09/18/18 13:00	09/20/18 16:11	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8236	VC-PM649-SB03-0102	09/18/18 13:12	09/20/18 16:11	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8237	VC-PM649-SB03-0506	09/18/18 13:20	09/20/18 16:11	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8238	VC-PM649-SS04-000H	09/18/18 13:15	09/20/18 16:11	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8239	VC-PM649-SB04-0102	09/18/18 13:27	09/20/18 16:12	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8240	VC-PM649-SB04-0506	09/18/18 13:40	09/20/18 16:12	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8241	VC-PM649-DW01-0918	09/18/18 12:50	09/20/18 16:13	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8242	VC-PM649-DW01P-0918	09/18/18 12:55	09/20/18 16:14	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8243	VC-PM649-DW02-0918	09/18/18 15:35	09/20/18 16:14	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8244	VC-PM649-DW03-0918	09/18/18 14:02	09/20/18 16:14	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8245	VC-PM649-DW04-0918	09/18/18 14:02	09/20/18 16:14	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8246	VC-AQ-FB01-0918	09/18/18 13:30	09/20/18 16:15	2	AQ	0.1	NA	NA	NA	R0119 (NA)			
J8247	VC-AQ-EB01-0918	09/18/18 13:40	09/20/18 16:15	2	AQ	0.1	NA	NA	NA	R0119 (NA)			
J8248	VC-PM365-SS01-000H	09/19/18 10:28	09/20/18 16:16	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8249	VC-PM365-SB01-0102	09/19/18 10:30	09/20/18 16:16	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8250	VC-PM365-SB01-0506	09/19/18 10:37	09/20/18 16:17	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8251	VC-PM365-SS02-000H	09/19/18 11:30	09/20/18 16:17	1	SS	0.9	NA	NA	NA	R0119 (NA)			
J8252	VC-PM365-SB02-0102	09/19/18 11:32	09/20/18 16:17	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8253	VC-PM365-SB02-0506	09/19/18 11:40	09/20/18 16:18	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8254	VC-PM365-SS03-000H	09/19/18 10:26	09/20/18 16:18	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8255	VC-PM365-SB03-0102	09/19/18 10:27	09/20/18 16:18	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8256	VC-PM365-SB03-0506	09/19/18 10:32	09/20/18 16:19	1	SB	0.3	NA	NA	NA	R0119 (NA)			



It can be done

ShpNo SHP-180921-01

Battelle Project No: J110125-01

Sample Receipt Form Details

Approved: Authorized

Project Number: 695803 Client: CH2M

Received by: Schumitz, Matt Date/Time Received: Friday, September 21, 2018 10:00 AM

No. of Shipping Containers: 3

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
J8257	VC-PM365-SB02-0102-MS	09/19/18 11:32	09/20/18 16:19	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8258	VC-PM365-SB02-0102-MSD	09/19/18 11:32	09/20/18 16:20	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8259	VC-PM365-DW01-0918	09/19/18 11:10	09/20/18 16:20	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8260	VC-PM365-DW02-0918	09/19/18 12:10	09/20/18 16:21	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8261	VC-PM365-DW02P-0918	09/19/18 12:18	09/20/18 16:21	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8262	VC-PM365-DW03-0918	09/19/18 11:10	09/20/18 16:22	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8263	VC-PM553-SS01-000H	09/19/18 13:50	09/20/18 16:22	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8264	VC-PM553-SB01-0102	09/19/18 13:53	09/20/18 16:23	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8265	VC-PM553-SB01-0506	09/19/18 13:59	09/20/18 16:23	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8266	VC-PM553-SS02-000H	09/19/18 14:40	09/20/18 16:23	1	SS	0.9	NA	NA	NA	R0119 (NA)			
J8267	VC-PM553-SB02-0102	09/19/18 14:42	09/20/18 16:24	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8268	VC-PM553-SB02-0506	09/19/18 14:50	09/20/18 16:24	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8269	VC-PM553-SS03-000H	09/19/18 11:30	09/20/18 16:24	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8270	VC-PM553-SB03-0102	09/19/18 11:34	09/20/18 16:24	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8271	VC-PM553-SB03-0506	09/19/18 11:42	09/20/18 16:25	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8272	VC-PM553-DW01-0918	09/19/18 14:30	09/20/18 16:26	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8273	VC-PM553-DW01P-0918	09/19/18 14:45	09/20/18 16:26	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8274	VC-PM553-DW02-0918	09/19/18 15:15	09/20/18 16:27	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8275	VC-PM553-DW03-0918	09/19/18 12:06	09/20/18 16:28	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8276	VC-SO-FB02-0918	09/19/18 14:35	09/20/18 16:29	2	AQ	0.9	NA	NA	NA	R0119 (NA)			
J8277	VC-SO-EB02-0918	09/19/18 14:30	09/20/18 16:30	2	AQ	0.9	NA	NA	NA	R0119 (NA)			

Total Samples: 77

MEMORANDUM

CH2MHILL

Corrections to COCs

TO: Jonathan Thorn, Battelle

COPIES: File
Laboratory Package SDG: SHP 180921-01

FROM: Tiffany Hill
Project Chemist

DATE: September 24, 2018

This memo is to document corrections made to entries on the Chains of Custody (COC) and Logins for NB Ventura County, CTO-4164.

The corrections include changes to the sample IDs on the COC and Login:

Sample ID on Login	Correct Sample ID	Date Collected	Time Collected	SDG
FDT-AQ-FB01-0918	VC-AQ-FB01-0918	9/18/18	13:30	SHP-180921
FDT-AQ-EB01-0918	VC-AQ-EB01-0918	9/18/18	13:40	SHP-180921
FDT-SO-FB02-0918	VC-SO-FB02-0918	9/19/18	14:35	SHP-180921
FDT-SO-EB02-0918	VC-SO-EB02-0918	9/19/18	14:30	SHP-180921
VC-PM3009-SS02-000H	VC-PM3009-SS02-000H	9/17/18	15:12	SHP-180921
VC-PM3009-SB02-O102	VC-PM3009-SB02-0102	9/17/18	15:13	SHP-180921
VC-PM3009-SB02-O506	VC-PM3009-SB02-0506	9/17/18	15:15	SHP-180921
VC-PM3009-SS03-000H	VC-PM3009-SS03-000H	9/17/18	16:16	SHP-180921
VC-PM3009-SB03-O102	VC-PM3009-SB03-0102	9/17/18	16:17	SHP-180921
VC-PM3009-SB03-O506	VC-PM3009-SB03-0506	9/17/18	16:18	SHP-180921
VC-PM3009-DW01-0919	VC-PM3009-DW01-0918	9/17/18	15:10	SHP-180921
VC-PM3009-DW02-0919	VC-PM3009-DW02-0918	9/17/18	16:23	SHP-180921
VC-PM3009-DW02P-0919	VC-PM3009-DW02P-0918	9/17/18	16:27	SHP-180921
VC-PM365-DW01-0919	VC-PM365-DW01-0918	9/19/18	11:10	SHP-180921
VC-PM365-DW02-0919	VC-PM365-DW02-0918	9/19/18	12:10	SHP-180921
VC-PM365-DW02P-0919	VC-PM365-DW02P-0918	9/19/18	12:18	SHP-180921

VC-PM365-DW03-0919	VC-PM365-DW03-0918	9/19/18	11:10	SHP-180921
VC-PM553-DW01-0919	VC-PM553-DW01-0918	9/19/18	14:30	SHP-180921
VC-PM553-DW01P-0919	VC-PM553-DW01P-0918	9/19/18	14:45	SHP-180921
VC-PM553-DW02-0919	VC-PM553-DW02-0918	9/19/18	15:15	SHP-180921
VC-PM553-DW03-0919	VC-PM553-DW03-0918	9/19/18	12:06	SHP-180921

		Chain-of-Custody m.g. (u)																	
Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Killbert Phone: (724) 977-3628 Email: Victoria.Killbert@jacobs.com Turnaround Time (TAT) Requested:				Sampling Site: Hecrod PM 3009				Site Information:									
Project Name: NBVC Basewide SI Project No.: 695803		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/>				Preservative: NA				COC # 1									
Sample Identification		Sample Date		Sample Time		Sample Type	Matrix	Total # of Cont.	Analysis: PFA5 by Method 537 Mod	Page# 1 of 12									
VC-PM3009-SS01-000H		J8201 09.17.18		14:15		Grab	SS	1	X										
VC-PM3009-SB01-0102		02 09.17.18		14:15		Grab	SB	1	X										
VC-PM3009-SB01-0506		03 09.17.18		14:15		Grab	SB	1	X										
VC-PM3009-SS02-000H		04 09.17.18		15:12		Grab	SS	1	X										
VC-PM3009-SB02-0102		05 09.17.18		15:13		Grab	SB	1	X										
VC-PM3009-SB02-0506		06 09.17.18		15:15		Grab	SB	1	X										
VC-PM3009-SS03-000H		07 09.17.18		16:16		Grab	SS	1	X										
VC-PM3009-SB03-0102		08 09.17.18		16:17		Grab	SB	1	X										
VC-PM3009-SB03-0506		J8209 09.17.18		16:18		Grab	SB	1	X										
VC-PM3009-SD01-000H						Grab	SD	1	X										
VC-PM3009-SD01-0102						Grab	SD	1	X										
VC-PM3009-S-MS						Grab	MS	1	X										
Receipt Temperature: (°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No				Receipt Comments:									
Relinquished by (Print/Sign): Deandra Puss Deane		Company: JACOBS		Date/Time: 9/20/2018 07:30		Received by (Print/Sign): [Signature]		Company: Battelle		Date/Time: 9-21-18 945									
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:									
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:									
Comments:																			



Chain-of-Custody

<u>Client Contact Information</u> Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): <u>Victoria Gilbert</u> Phone: <u>(724) 977-3628</u> Email: <u>Victoria.Gilbert@jacobs.com</u> Turnaround Time (TAT) Requested:			Sampling Site: <u>Mugu PM 3009</u>			Site Information:		
Project Name: NBVC Basewide SI		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/>			Preservative NA			COC # <u>1</u>		
Project No.: <u>695903</u>		Time Zone: <u>PST</u>						Analysis PFAS by Method 517 Mod		
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.					
VC-PM3009-DW01- <u>0918 J 8210</u>	<u>9/17/18</u>	<u>15:10</u>	Grab	GW	<u>2</u>	X				
VC-PM3009-DW02- <u>0918 J 8211</u>	<u>9/17/18</u>	<u>16:23</u>	Grab	GW	<u>2</u>	X				
VC-PM3009-DW02F <u>0918 J 8212</u>	<u>9/17/18</u>	<u>16:27</u>	Grab	GW	<u>2</u>	X				
VC-PM3009-DW03- <u>0918 J 8213</u>	<u>9/17/18</u>	<u>16:38</u>	Grab	GW	<u>2</u>	X				
EDT AQ FB			Grab	AQ		X				
PDT AQ EB			Grab	AQ		X				
Receipt Temperature: (°C)		Samples Intact: Yes - No			Samples on Ice: Yes - No			Receipt Comments:		
Relinquished by (Print/Sign): <u>Deandra Cass/Deandra</u>	Company: <u>Jacobs</u>	Date/Time: <u>09/20/2018 07:30</u>		Received by (Print/Sign): <u>MJ</u>	Company: <u>Battelle</u>	Date/Time: <u>9-21-18 9:45</u>				
Relinquished by (Print/Sign):	Company:	Date/Time:		Received by (Print/Sign):	Company:	Date/Time:				
Relinquished by (Print/Sign):	Company:	Date/Time:		Received by (Print/Sign):	Company:	Date/Time:				
Comments:										



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:				Sampling Site: MUGL PM 372				Site Information: COC # 1											
Project Name: NBVC Basewide SI Project No.: 1595003		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/> Time Zone: PST				Preservative NA Analysis PFAS by Method 537 Mod				Page# 3 of 12											
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix					Total # of Cont.	X	X	X	X	X	X	X	X	X	X	X
VC-PM13-GW21				Grab	GW		X														
VC-PM372-DW01- 0918 J8214		9/18/18	10:07	Grab	GW	2	X														
VC-PM372-DW02- 0918 J8215		9/18/18	09:25	Grab	GW	2	X														
VC-PM372-DW02P- 0918 J8216		9/18/18	09:27	Grab	GW	2	X														
VC-PM372-DW03- 0918 J8217		9/18/18	11:49	Grab	GW	2	X														
FDE-AQ-FB				Grab	AQ		X														
FDE-AQ-FB				Grab	AQ		X														
										(VLD)											
Receipt Temperature: (°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No				Receipt Comments:											
Relinquished by (Print/Sign): Deandra Cass / Deandra		Company: Jacobs		Date/Time: 9/20/2018 07:30		Received by (Print/Sign): Ms		Company: Battelle		Date/Time: 9-21-18 945											
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:											
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:											
Comments:																					



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): <u>Victoria Kilbert</u> Phone: <u>(724) 977-3628</u> Email: <u>Victoria.Kilbert@jacobs.com</u>				Sampling Site: <u>Mugh PM 372</u>				Site Information:															
Project Name: NBVC Basewide SI Project No.: <u>695003</u>		Turnaround Time (TAT) Requested: Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/>				Preservative NA				COC # <u>1</u>															
Sample Identification		Time Zone: <u>PST</u>				Analysis PFAS by Method 537 Mod				Page# <u>4 of 12</u>															
Sample ID	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VC-PM372-SS01-000H <u>J8218</u>	<u>9/18/18</u>	<u>09:36</u>	Grab	SS	1	X																			
VC-PM372-SB01- <u>0102</u>	<u>19</u>	<u>9/18/18</u>	Grab	SB	1	X																			
VC-PM372-SB01- <u>0506</u>	<u>20</u>	<u>9/18/18</u>	Grab	SB	1	X																			
VC-PM372-SS02-000H	<u>21</u>	<u>9/18/18</u>	Grab	SS	1	X																			
VC-PM372-SB02- <u>0102</u>	<u>22</u>	<u>9/18/18</u>	Grab	SB	1	X																			
VC-PM372-SB02- <u>0506</u>	<u>23</u>	<u>9/18/18</u>	Grab	SB	1	X																			
VC-PM372-SS03-000H	<u>24</u>	<u>9/18/18</u>	Grab	SS	1	X																			
VC-PM372-SB03- <u>0102</u>	<u>25</u>	<u>9/18/18</u>	Grab	SB	1	X																			
VC-PM372-SB03- <u>0506</u> <u>J8226</u>	<u>9/18/18</u>	<u>10:49</u>	Grab	SB	1	X																			
VC-PM372-SD01-000H			Grab	SD		X																			
VC-PM372-SD01-0102			Grab	SD		X																			
<u>J8227</u> VC-PM372-S <u>502</u> - <u>000H</u> -MS	<u>9/18/18</u>	<u>09:06</u>	Grab	SS	1	X																			
Receipt Temperature: (°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No				Receipt Comments:															
Relinquished by (Print/Sign): <u>Deandra Ross Leandri</u>		Company: <u>Jacobs</u>		Date/Time: <u>9/20/2018 07:30</u>		Received by (Print/Sign): <u>MS</u>		Company: <u>Battelle</u>		Date/Time: <u>9-21-18</u>		<u>945</u>													
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:															
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:															
Comments:																									



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.Kilbert@jacobs.com				Sampling Site: MUQU DM 312		Site Information:							
Project Name: NBVC Basewide SI		Turnaround Time (TAT) Requested:				Preservative NA		COC # 1							
Project No.: 695803		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/>				Analysis PFAS by Method 517 Mod		Page# 5 of 12							
Time Zone: PST		Sample Date		Sample Time		Sample Type		Matrix		Total # of Cont.					
Sample Identification		VC-PM372-S 502 - 000 H -SD		9/18/18 09:00		Grab		SS		1		X			
FDT-SO-1B						Grab		AQ				X			
FDT-SO-EB						Grab		AQ				X			
Receipt Temperature:(°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No				Receipt Comments:					
Relinquished by (Print/Sign): Deandra Ross <i>Deandra Ross</i>		Company: Jacobs		Date/Time: 9/20/2018 07:30		Received by (Print/Sign): <i>MS</i>		Company: Battelle		Date/Time: 9-21-18		945			
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:					
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:					
Comments:															

18228



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): <u>Victoria Kilbert</u> Phone: <u>(721) 977-3628</u> Email: <u>Victoria.kilbert@jacobs.com</u>			Sampling Site: <u>Mygu PM 649</u>		Site Information:													
Project Name: NBVC Basewide SI Project No.: <u>645803</u>		Turnaround Time (TAT) Requested:			Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/>		COC # <u>1</u>													
Sample Identification		Time Zone: <u>PST</u>			Analysis		Page# <u>6 of 12</u>													
Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod															
VC-PM649-SS01-000H	<u>J8229</u> 9/18/18	<u>11:30</u>	Grab	SS	<u>1</u>	X														
VC-PM649-SB01-0102	<u>30</u> 9/18/18	<u>11:35</u>	Grab	SB	<u>1</u>	X														
VC-PM649-SB01-0506	<u>31</u> 9/18/18	<u>11:40</u>	Grab	SB	<u>1</u>	X														
VC-PM649-SS02-000H	<u>32</u> 9/18/18	<u>14:25</u>	Grab	SS	<u>1</u>	X														
VC-PM649-SB02-0102	<u>33</u> 9/18/18	<u>14:29</u>	Grab	SB	<u>1</u>	X														
VC-PM649-SB02-0506	<u>34</u> 9/18/18	<u>14:30</u>	Grab	SB	<u>1</u>	X														
VC-PM649-SS03-000H	<u>35</u> 9/18/18	<u>13:00</u>	Grab	SS	<u>1</u>	X														
VC-PM649-SB03-0102	<u>36</u> 9/18/18	<u>13:12</u>	Grab	SB	<u>1</u>	X														
VC-PM649-SB03-0506	<u>37</u> 9/18/18	<u>13:20</u>	Grab	SB	<u>1</u>	X														
VC-PM649-SS04-000H	<u>38</u> 9/18/18	<u>13:15</u>	Grab	SS	<u>1</u>	X														
VC-PM649-SB04-0102	<u>39</u> 9/18/18	<u>13:27</u>	Grab	SB	<u>1</u>	X														
VC-PM649-SB04-0506	<u>J8270</u> 9/18/18	<u>13:40</u>	Grab	SB	<u>1</u>	X														
Receipt Temperature: (°C)		Samples Intact: Yes - No			Samples on Ice: Yes - No						Receipt Comments:									
Relinquished by (Print/Sign): <u>Deandra Cass/Deandra</u>		Company: <u>JACOBS</u>		Date/Time: <u>9/20/2018 07:30</u>		Received by (Print/Sign): <u>MS</u>		Company: <u>Battelle</u>		Date/Time: <u>9-21-18 945</u>										
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:										
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:										
Comments:																				



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: victoria.kilbert@jacobson.com				Sampling Site: MUGH PM 649		Site Information: COC # 1										
Project Name: NBVC Basewide SI Project No.: 695803		Turnaround Time (TAT) Requested: Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/> Time Zone: PST				Analysis PFAS by Method 517 Mod		Page# 7 of 12										
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix			Total # of Cont.										
VC-PM649-DW01-0918		J8241	9/18/18	12:50	Grab	GW	2	X										
VC-PM649-DW01P-0918		J8242	9/18/18	12:55	Grab	GW	2	X										
VC-PM649-DW02-0918		J8243	9/18/18	15:35	Grab	GW	2	X										
VC-PM649-DW03-0918		J8244	9/18/18	14:02	Grab	GW	2	X										
VC-PM649-DW04-0918		J8245	9/18/18	14:02	Grab	GW	2	X										
FDT-AQ-FB01-0918		J8246	9/18/18	13:30	Grab	AQ	2	X										
FDT-AQ-EB01-0918		J8247	9/18/18	13:40	Grab	AQ	2	X										
Receipt Temperature: (°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No				Receipt Comments:								
Relinquished by (Print/Sign): <i>Danica Cass/Decker</i>		Company: Jacobs		Date/Time: 9/20/2018 07:30		Received by (Print/Sign): <i>My</i>		Company: Battelle		Date/Time: 9-21-18 945								
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:								
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:								
Comments:																		



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbuck Phone: 724-977-3628 Email: victoria.kilbuck@jacobs.com		Sampling Site: Mygan PM365J		Site Information:	
Project Name: NBVC Basewide SI		Turnaround Time (TAT) Requested:		Preservative: NA		COC #: 1	
Project No.: 695803		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/>		Analysis: PFAS by Method 537 Mod		Page#: 8 of 12	
Time Zone: PST		Sample Identification		Sample Date Sample Time Sample Type Matrix Total # of Cont.		(Grid columns)	
VC-PM365-SS01-000H J8248 9/19/18 1028 Grab SS 1 X		VC-PM365-SB01-0102 49 9/19/18 1030 Grab SB 1 X		VC-PM365-SB01-0506 50 9/19/18 1037 Grab SB 1 X		VC-PM365-SS02-000H 51 9/19/18 1130 Grab SS 1 X	
VC-PM365-SB02-0102 52 9/19/18 1132 Grab SB 1 X		VC-PM365-SB02-0506 53 9/19/18 1140 Grab SB 1 X		VC-PM365-SS03-000H 54 9/19/18 1026 Grab SS 1 X		VC-PM365-SB03-0102 55 9/19/18 1027 Grab SB 1 X	
VC-PM365-SB03-0506 J8256 9/19/18 1032 Grab SB 1 X		VC-PM365-SB02-0102-MS J8257 9/19/18 1132 Grab SB 1 X		VC-PM365-SB02-0102-MSD J8258 9/19/18 1132 Grab SB 1 X		EDT-SQ-FB Grab AQ X	
Receipt Temperature: (°C)		Samples Intact: Yes - No		Samples on Ice: Yes - No		Receipt Comments:	
Relinquished by (Print/Sign): Deandra Giss/Deandra		Company: Jacobs		Date/Time: 9/20/2018 07:30		Received by (Print/Sign): [Signature]	
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):	
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):	
Comments:							



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:			Sampling Site: Mugu Pm 305		Site Information:			
Project Name: NBVC Basewide SI Project No.: 695603		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/> Time Zone: PST			Preservative NA		COC # 1			
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Analysis PFAS by Method 537 Mod		Page# 9 of 12	
VC-PM365-DW01- 0919 J8257		9/19/19	1110	Grab	GW	2	X			
VC-PM365-DW02- 0919 J8260		9/19/18	1210	Grab	GW	2	X			
VC-PM365-DW02P- 0919 J8261		9/19/19	1218	Grab	GW	2	X			
VC-PM365-DW03- 0919 J8262		9/19/18	1110	Grab	GW	2	X			
PDT-AQ-FB				Grab	GW		X			
EDF-AQ-EB				Grab	GW		X			
									(VK)	
Receipt Temperature: (°C)		Samples Intact: Yes - No			Samples on Ice: Yes - No			Receipt Comments:		
Relinquished by (Print/Sign): Deandra Cass / Deandra		Company: Jacobs		Date/Time: 9/20/2019 07:30		Received by (Print/Sign): MS		Company: Battelle		Date/Time: 9-21-19 945
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:
Comments:										



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): <u>Victoria Kilbert</u> Phone: <u>724-977-3628</u> Email: <u>victoria.kilbert@ Jacobs.com</u>				Sampling Site: <u>muir PM553</u>				Site Information:			
Project Name: NBVC Basewide SI		Turnaround Time (TAT) Requested:				Preservative NA				COC # <u>1</u>			
Project No.: <u>695803</u>		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/>								Page# <u>10 of 12</u>			
Sample Identification		Time Zone: <u>PST</u>		Analysis PFAS by Method 517 Mod									
	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.								
VC-PM553-SS01-000H	<u>9/19/18</u>	<u>1350</u>	Grab	SS	1	X							
VC-PM553-SB01- <u>0102</u>	<u>9/19/18</u>	<u>1353</u>	Grab	SB	1	X							
VC-PM553-SB01- <u>0506</u>	<u>9/19/18</u>	<u>1359</u>	Grab	SB	1	X							
VC-PM553-SS02-000H	<u>9/19/18</u>	<u>1440</u>	Grab	SS	1	X							
VC-PM553-SB02- <u>0102</u>	<u>9/19/18</u>	<u>1442</u>	Grab	SB	1	X							
VC-PM553-SB02- <u>0506</u>	<u>9/19/18</u>	<u>1450</u>	Grab	SB	1	X							
VC-PM553-SS03-000H	<u>9/19/18</u>	<u>1130</u>	Grab	SS	1	X							
VC-PM553-SB03- <u>0102</u>	<u>9/19/18</u>	<u>1134</u>	Grab	SB	1	X							
VC-PM553-SB03- <u>0506</u>	<u>9/19/18</u>	<u>1142</u>	Grab	SB	1	X							
VC-PM553-SS04-000H			Grab	SS		X							
VC-PM553-SB04			Grab	SB		X							
VC-PM553-SB04			Grab	SB		X							
Receipt Temperature: (°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No				Receipt Comments:			
Relinquished by (Print/Sign): <u>Deandra Cross/Deandra</u>		Company: <u>Jacobs</u>		Date/Time: <u>9/20/2018 07:30</u>		Received by (Print/Sign): <u>NY</u>		Company: <u>Battelle</u>		Date/Time: <u>9-21-18 945</u>			
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:			
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:			
Comments:													



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbert Phone: 727-977-3628 Email: victoria.kilbert@epacobs.com			Sampling Site: M-16 RM 553		Site Information:			
Project Name: NBVC Basewide SI		Turnaround Time (TAT) Requested:			Preservative: NA		COC # 1			
Project No.: 695803		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/>			Analysis: PFAS by Method 517 Mod		Page# 11 of 12			
Sample Identification		Time Zone: PST								
Sample ID	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Analysis				
VC-PM553-GW0601A			Grab	GW		X				
VC-PM553-DW01-0919 J8272	9/19/18	1430	Grab	GW	2	X				
VC-PM553-DW01P-0919 J8273	9/19/18	1445	Grab	GW	2	X				
VC-PM553-DW02-0919 J8277	9/19/18	1515	Grab	GW	2	X				
VC-PM553-DW03-0919 J8275	9/19/18	1200	Grab	GW	2	X				
VC-PM553-DW04			Grab	GW		X				
EDT-AQ-FB			Grab	AQ		X				
EDT-AQ-EB			Grab	AQ		X				
Receipt Temperature:(°C)		Samples Intact: Yes - No			Samples on Ice: Yes - No			Receipt Comments:		
Relinquished by (Print/Sign): Deandra Cuss/Deandra		Company: Jacobs	Date/Time: 9/20/2018 07:30		Received by (Print/Sign): Ma		Company: Battelle	Date/Time: 9-21-18 945		
Relinquished by (Print/Sign):		Company:	Date/Time:		Received by (Print/Sign):		Company:	Date/Time:		
Relinquished by (Print/Sign):		Company:	Date/Time:		Received by (Print/Sign):		Company:	Date/Time:		
Comments:										



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Project Manager: Eric Davis		Sampling Site: <u>Muga PM553</u>					Site Information:					
	Sampler Information (print name): <u>Victoria Kilbax</u> Phone: <u>724-977-3628</u> Email: <u>vicki@kilbax.com</u>		Turnaround Time (TAT) Requested:	Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/>					COC # (
Project Name: NBVC Basewide SI	Time Zone: <u>PST</u>			Analysis PFAS by Method 517 Mod					Page# 12 of 12				
Project No.: <u>695803</u>													
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.								
VC-PM553-SD01-000H			Grab	SD		X							
VC-PM553-SD01-0102			Grab	SD		X							
VC-PM553-S-MS			Grab			X							
VC-PM553-S-SD			Grab			X							
FDT-SO-FB 02- <u>0919</u> <u>J8276</u>	<u>9/19/18</u>	<u>1435</u>	Grab	AQ	<u>2</u>	X							
FDT-SO-EB 02- <u>0919</u> <u>J8277</u>	<u>9/19/18</u>	<u>1430</u>	Grab	AQ	<u>2</u>	X							
(VF)													
Receipt Temperature:(°C)		Samples Intact: Yes - No			Samples on Ice: Yes - No					Receipt Comments:			
Relinquished by (Print/Sign): <u>Deandra Cass Deandeh</u>	Company: <u>Jacobs</u>	Date/Time: <u>9/20/2018 07:30</u>		Received by (Print/Sign): <u>MA</u>	Company: <u>Battelle</u>	Date/Time: <u>9-21-18</u>		<u>945</u>					
Relinquished by (Print/Sign):	Company:	Date/Time:		Received by (Print/Sign):	Company:	Date/Time:							
Relinquished by (Print/Sign):	Company:	Date/Time:		Received by (Print/Sign):	Company:	Date/Time:							
Comments:													

ORIGIN ID: OXRA (724) 977-3628
VICTORIA KILBERT
PROJECT #695803
402 W BROADWAY STE 1450

SAN DIEGO, CA 92101
UNITED STATES US

SHIP DATE: 20SEP18
ACTWGT: 59.30 LB
CAD: 6997666/SSF01904
DIMS: 26x14x15 IN

BILL THIRD PARTY

ORIGIN ID: OXRA (724) 977-3628
VICTORIA KILBERT
PROJECT #695803
402 W BROADWAY STE 1450

SAN DIEGO, CA 92101
UNITED STATES US

Page 30 of 57
SHIP DATE: 20SEP18
ACTWGT: 62.50 LB
CAD: 6997666/SSF01904
DIMS: 26x14x14 IN

BILL THIRD PARTY

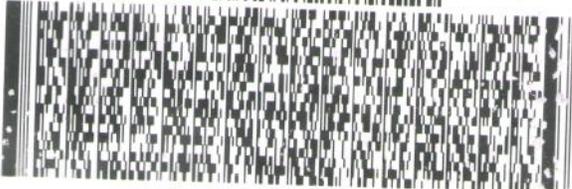
TO JONATHAN THORN

0.1 9:45
9-21-18 MOS
Therm-1

141 LONGWATER DR.
STE 202
NORWELL MA 02061

(781) 681-5565

REF: DEPT:



FedEx Express



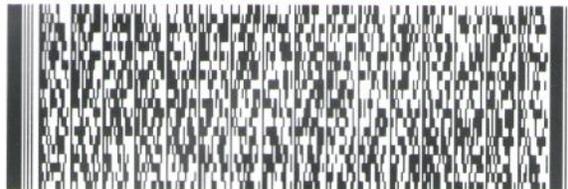
TO JONATHAN THORN

0.9 9:45
9-21-18 MOS
Therm-1

141 LONGWATER DR.
STE 202
NORWELL MA 02061

(781) 681-5565

REF: DEPT:



FedEx Express



1 of 3
TRK# 7828 5914 8695
0201
MASTER

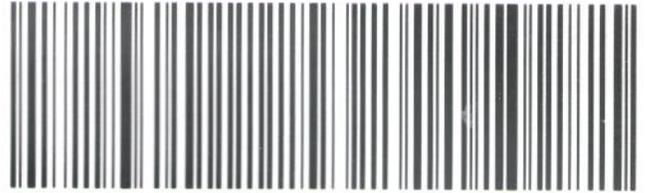
FRI - 21 SEP 10:30A
PRIORITY OVERNIGHT
DSR
02061
MA-US BOS

XE XPUA

2 of 3
MPS# 7828 5914 8700
0263
Mstr# 7828 5914 8695

FRI - 21 SEP 10:30A
PRIORITY OVERNIGHT
DSR
02061
MA-US BOS

XE XPUA



3 of 3
MPS# 7828 5914 8710
0263
Mstr# 7828 5914 8695

FRI - 21 SEP 10:30A
PRIORITY OVERNIGHT
DSR
02061
MA-US BOS

XE XPUA



FedEx Express

TO JONATHAN THORN
141 LONGWATER DR.
STE 202
NORWELL MA 02061

0.3 9:45
9-21-18 MOS
Therm-1

ORIGIN ID: OXRA (724) 977-3628
VICTORIA KILBERT
PROJECT #695803
402 W BROADWAY STE 1450
SAN DIEGO, CA 92101
UNITED STATES US

SHIP DATE: 20SEP18
ACTWGT: 69.70 LB
CAD: 6997666/SSF01904
DIMS: 26x14x14 IN
BILL THIRD PARTY

(781) 681-5565

REF: DEPT:

MA- US BOS

Data Tables



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SS01-000H				
Battelle ID	J8229-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/03/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	11.51				
Matrix	SS				
Sample Size	1.760				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	4.92 J	0.38	1.14	5.68
PFHpA	375-85-9	2.23 J	0.50	1.14	5.68
PFOA	335-67-1	5.68	0.57	1.14	5.68
PFNA	375-95-1	2.46 J	0.49	1.14	5.68
PFDA	335-76-2	2.10 J	0.31	1.14	5.68
PFUnA	2058-94-8	1.14 U	0.47	1.14	5.68
PFDaA	307-55-1	0.57 U	0.27	0.57	5.68
PFTeDA	72629-94-8	1.14 U	0.32	1.14	5.68
PFTeDA	376-06-7	2.27 U	0.72	2.27	5.68
NMeFOSAA	2355-31-9	2.84 U	1.27	2.84	5.68
NEtFOSAA	2991-50-6	2.27 U	0.65	2.27	5.68
PFBS	375-73-5	1.14 U	0.41	1.14	5.68
PFHxS	355-46-4	0.79 J	0.25	0.57	5.68
PFOS	1763-23-1	15.79	0.31	1.14	5.68

Surrogate Recoveries (%)

13C5-PFHxA	116
13C4-PFHpA	125
13C8-PFOA	115
13C9-PFNA	105
13C6-PFDA	110
13C7-PFUnA	120
13C2-PFDaA	131
13C2-PFTeDA	123
d3-MeFOSAA	76
d5-EtFOSAA	108
13C3-PFBS	119
13C3-PFHxS	112
13C8-PFOS	111



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB01-0102				
Battelle ID	J8230-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	14.47				
Matrix	SB				
Sample Size	1.710				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	8.86	0.39	1.17	5.85
PFHpA	375-85-9	2.20 J	0.51	1.17	5.85
PFOA	335-67-1	8.62	0.58	1.17	5.85
PFNA	375-95-1	2.58 J	0.50	1.17	5.85
PFDA	335-76-2	1.17 U	0.32	1.17	5.85
PFUnA	2058-94-8	1.17 U	0.48	1.17	5.85
PFDaA	307-55-1	0.58 U	0.28	0.58	5.85
PFTeDA	72629-94-8	1.17 U	0.33	1.17	5.85
PFTeDA	376-06-7	2.34 U	0.74	2.34	5.85
NMeFOSAA	2355-31-9	2.92 U	1.31	2.92	5.85
NEtFOSAA	2991-50-6	2.34 U	0.67	2.34	5.85
PFBS	375-73-5	1.17 U	0.42	1.17	5.85
PFHxS	355-46-4	0.66 J	0.26	0.58	5.85
PFOS	1763-23-1	15.77	0.32	1.17	5.85

Surrogate Recoveries (%)

13C5-PFHxA	110
13C4-PFHpA	120
13C8-PFOA	106
13C9-PFNA	109
13C6-PFDA	107
13C7-PFUnA	114
13C2-PFDaA	104
13C2-PFTeDA	104
d3-MeFOSAA	102
d5-EtFOSAA	116
13C3-PFBS	127
13C3-PFHxS	112
13C8-PFOS	108



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB01-0506				
Battelle ID	J8231-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	28.40				
Matrix	SB				
Sample Size	1.440				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	2.32 J	0.46	1.39	6.94
PFHpA	375-85-9	0.82 J	0.61	1.39	6.94
PFOA	335-67-1	2.23 J	0.69	1.39	6.94
PFNA	375-95-1	1.39 U	0.60	1.39	6.94
PFDA	335-76-2	1.39 U	0.38	1.39	6.94
PFUnA	2058-94-8	1.39 U	0.57	1.39	6.94
PFDaA	307-55-1	0.69 U	0.33	0.69	6.94
PFTeDA	72629-94-8	1.39 U	0.39	1.39	6.94
PFTeDA	376-06-7	2.78 U	0.88	2.78	6.94
NMeFOSAA	2355-31-9	3.47 U	1.56	3.47	6.94
NEtFOSAA	2991-50-6	2.78 U	0.79	2.78	6.94
PFBS	375-73-5	1.39 U	0.50	1.39	6.94
PFHxS	355-46-4	4.92 J	0.31	0.69	6.94
PFOS	1763-23-1	39.41	0.38	1.39	6.94

Surrogate Recoveries (%)

13C5-PFHxA	103
13C4-PFHpA	106
13C8-PFOA	107
13C9-PFNA	102
13C6-PFDA	113
13C7-PFUnA	114
13C2-PFDaA	105
13C2-PFTeDA	105
d3-MeFOSAA	97
d5-EtFOSAA	115
13C3-PFBS	100
13C3-PFHxS	106
13C8-PFOS	96



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SS02-000H				
Battelle ID	J8232-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	10.22				
Matrix	SS				
Sample Size	1.780				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.12 U	0.37	1.12	5.62
PFHpA	375-85-9	1.12 U	0.49	1.12	5.62
PFOA	335-67-1	1.12 U	0.56	1.12	5.62
PFNA	375-95-1	1.12 U	0.48	1.12	5.62
PFDA	335-76-2	1.12 U	0.30	1.12	5.62
PFUnA	2058-94-8	1.12 U	0.46	1.12	5.62
PFDaA	307-55-1	0.56 U	0.27	0.56	5.62
PFTeDA	72629-94-8	1.12 U	0.31	1.12	5.62
PFTeDA	376-06-7	2.25 U	0.71	2.25	5.62
NMeFOSAA	2355-31-9	2.81 U	1.26	2.81	5.62
NEtFOSAA	2991-50-6	2.25 U	0.64	2.25	5.62
PFBS	375-73-5	1.12 U	0.40	1.12	5.62
PFHxS	355-46-4	0.56 U	0.25	0.56	5.62
PFOS	1763-23-1	8.38	0.30	1.12	5.62

Surrogate Recoveries (%)

13C5-PFHxA	97
13C4-PFHpA	99
13C8-PFOA	105
13C9-PFNA	99
13C6-PFDA	104
13C7-PFUnA	107
13C2-PFDaA	99
13C2-PFTeDA	99
d3-MeFOSAA	52
d5-EtFOSAA	50
13C3-PFBS	102
13C3-PFHxS	105
13C8-PFOS	99



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB02-0102				
Battelle ID	J8233-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	8.58				
Matrix	SB				
Sample Size	1.830				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.09 U	0.36	1.09	5.46
PFHpA	375-85-9	1.09 U	0.48	1.09	5.46
PFOA	335-67-1	1.09 U	0.55	1.09	5.46
PFNA	375-95-1	1.09 U	0.47	1.09	5.46
PFDA	335-76-2	1.09 U	0.30	1.09	5.46
PFUnA	2058-94-8	1.09 U	0.45	1.09	5.46
PFDaA	307-55-1	0.55 U	0.26	0.55	5.46
PFTeDA	72629-94-8	1.09 U	0.31	1.09	5.46
PFTeDA	376-06-7	2.19 U	0.69	2.19	5.46
NMeFOSAA	2355-31-9	2.73 U	1.22	2.73	5.46
NEtFOSAA	2991-50-6	2.19 U	0.62	2.19	5.46
PFBS	375-73-5	1.09 U	0.39	1.09	5.46
PFHxS	355-46-4	0.37 J	0.24	0.55	5.46
PFOS	1763-23-1	3.62 J	0.30	1.09	5.46

Surrogate Recoveries (%)

13C5-PFHxA	88
13C4-PFHpA	91
13C8-PFOA	95
13C9-PFNA	92
13C6-PFDA	96
13C7-PFUnA	96
13C2-PFDaA	89
13C2-PFTeDA	89
d3-MeFOSAA	57
d5-EtFOSAA	73
13C3-PFBS	125
13C3-PFHxS	124
13C8-PFOS	120



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB02-0506				
Battelle ID	J8234-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	24.46				
Matrix	SB				
Sample Size	1.480				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.35 U	0.45	1.35	6.76
PFHpA	375-85-9	1.35 U	0.59	1.35	6.76
PFOA	335-67-1	1.35 U	0.68	1.35	6.76
PFNA	375-95-1	1.35 U	0.58	1.35	6.76
PFDA	335-76-2	1.35 U	0.36	1.35	6.76
PFUnA	2058-94-8	1.35 U	0.55	1.35	6.76
PFDaA	307-55-1	0.68 U	0.32	0.68	6.76
PFTeDA	72629-94-8	1.35 U	0.38	1.35	6.76
PFTeDA	376-06-7	2.70 U	0.85	2.70	6.76
NMeFOSAA	2355-31-9	3.38 U	1.51	3.38	6.76
NEtFOSAA	2991-50-6	2.70 U	0.77	2.70	6.76
PFBS	375-73-5	1.35 U	0.49	1.35	6.76
PFHxS	355-46-4	0.84 J	0.30	0.68	6.76
PFOS	1763-23-1	4.25 J	0.36	1.35	6.76

Surrogate Recoveries (%)

13C5-PFHxA	111
13C4-PFHpA	114
13C8-PFOA	121
13C9-PFNA	118
13C6-PFDA	112
13C7-PFUnA	127
13C2-PFDaA	113
13C2-PFTeDA	115
d3-MeFOSAA	93
d5-EtFOSAA	123
13C3-PFBS	113
13C3-PFHxS	112
13C8-PFOS	106



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SS03-000H				
Battelle ID	J8235-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	14.15				
Matrix	SS				
Sample Size	1.700				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.18 U	0.39	1.18	5.88
PFHpA	375-85-9	1.18 U	0.52	1.18	5.88
PFOA	335-67-1	1.18 U	0.59	1.18	5.88
PFNA	375-95-1	1.18 U	0.51	1.18	5.88
PFDA	335-76-2	1.18 U	0.32	1.18	5.88
PFUnA	2058-94-8	1.18 U	0.48	1.18	5.88
PFDaA	307-55-1	0.59 U	0.28	0.59	5.88
PFTeDA	72629-94-8	1.18 U	0.33	1.18	5.88
PFTeDA	376-06-7	2.35 U	0.74	2.35	5.88
NMeFOSAA	2355-31-9	2.94 U	1.32	2.94	5.88
NEtFOSAA	2991-50-6	2.35 U	0.67	2.35	5.88
PFBS	375-73-5	1.18 U	0.42	1.18	5.88
PFHxS	355-46-4	0.38 J	0.26	0.59	5.88
PFOS	1763-23-1	9.95	0.32	1.18	5.88

Surrogate Recoveries (%)

13C5-PFHxA	108
13C4-PFHpA	104
13C8-PFOA	107
13C9-PFNA	104
13C6-PFDA	111
13C7-PFUnA	118
13C2-PFDaA	107
13C2-PFTeDA	110
d3-MeFOSAA	87
d5-EtFOSAA	116
13C3-PFBS	108
13C3-PFHxS	107
13C8-PFOS	109



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB03-0102				
Battelle ID	J8236-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	11.27				
Matrix	SB				
Sample Size	1.770				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.13 U	0.37	1.13	5.65
PFHpA	375-85-9	1.13 U	0.50	1.13	5.65
PFOA	335-67-1	1.13 U	0.56	1.13	5.65
PFNA	375-95-1	1.13 U	0.49	1.13	5.65
PFDA	335-76-2	1.13 U	0.31	1.13	5.65
PFUnA	2058-94-8	1.13 U	0.46	1.13	5.65
PFDaA	307-55-1	0.56 U	0.27	0.56	5.65
PFTeDA	72629-94-8	1.13 U	0.32	1.13	5.65
PFTeDA	376-06-7	2.26 U	0.71	2.26	5.65
NMeFOSAA	2355-31-9	2.82 U	1.27	2.82	5.65
NEtFOSAA	2991-50-6	2.26 U	0.64	2.26	5.65
PFBS	375-73-5	1.13 U	0.41	1.13	5.65
PFHxS	355-46-4	0.71 J	0.25	0.56	5.65
PFOS	1763-23-1	6.15	0.31	1.13	5.65

Surrogate Recoveries (%)

13C5-PFHxA	104
13C4-PFHpA	112
13C8-PFOA	109
13C9-PFNA	101
13C6-PFDA	108
13C7-PFUnA	116
13C2-PFDaA	103
13C2-PFTeDA	107
d3-MeFOSAA	82
d5-EtFOSAA	97
13C3-PFBS	113
13C3-PFHxS	108
13C8-PFOS	99



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB03-0506				
Battelle ID	J8237-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	18.64				
Matrix	SB				
Sample Size	1.680				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	3.08 J	0.39	1.19	5.95
PFHpA	375-85-9	0.79 J	0.52	1.19	5.95
PFOA	335-67-1	0.77 J	0.60	1.19	5.95
PFNA	375-95-1	1.19 U	0.51	1.19	5.95
PFDA	335-76-2	1.19 U	0.32	1.19	5.95
PFUnA	2058-94-8	1.19 U	0.49	1.19	5.95
PFDaA	307-55-1	0.60 U	0.29	0.60	5.95
PFTeDA	72629-94-8	1.19 U	0.33	1.19	5.95
PFTeDA	376-06-7	2.38 U	0.75	2.38	5.95
NMeFOSAA	2355-31-9	2.98 U	1.33	2.98	5.95
NEtFOSAA	2991-50-6	2.38 U	0.68	2.38	5.95
PFBS	375-73-5	1.59 J	0.43	1.19	5.95
PFHxS	355-46-4	2.56 J	0.26	0.60	5.95
PFOS	1763-23-1	25.99	0.32	1.19	5.95

Surrogate Recoveries (%)

13C5-PFHxA	85
13C4-PFHpA	92
13C8-PFOA	95
13C9-PFNA	91
13C6-PFDA	96
13C7-PFUnA	109
13C2-PFDaA	95
13C2-PFTeDA	98
d3-MeFOSAA	93
d5-EtFOSAA	97
13C3-PFBS	94
13C3-PFHxS	94
13C8-PFOS	89



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SS04-000H				
Battelle ID	J8238-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	1.84				
Matrix	SS				
Sample Size	1.960				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.75 J	0.34	1.02	5.10
PFHpA	375-85-9	1.02 U	0.45	1.02	5.10
PFOA	335-67-1	1.02 U	0.51	1.02	5.10
PFNA	375-95-1	1.02 U	0.44	1.02	5.10
PFDA	335-76-2	1.02 U	0.28	1.02	5.10
PFUnA	2058-94-8	1.02 U	0.42	1.02	5.10
PFDaA	307-55-1	0.51 U	0.24	0.51	5.10
PFTeDA	72629-94-8	1.02 U	0.29	1.02	5.10
PFTeDA	376-06-7	2.04 U	0.64	2.04	5.10
NMeFOSAA	2355-31-9	2.55 U	1.14	2.55	5.10
NEtFOSAA	2991-50-6	2.04 U	0.58	2.04	5.10
PFBS	375-73-5	1.02 U	0.37	1.02	5.10
PFHxS	355-46-4	1.08 J	0.22	0.51	5.10
PFOS	1763-23-1	16.66	0.28	1.02	5.10

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	100
13C8-PFOA	104
13C9-PFNA	101
13C6-PFDA	110
13C7-PFUnA	117
13C2-PFDaA	107
13C2-PFTeDA	102
d3-MeFOSAA	95
d5-EtFOSAA	127
13C3-PFBS	115
13C3-PFHxS	111
13C8-PFOS	105



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB04-0102				
Battelle ID	J8239-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/03/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	7.02				
Matrix	SB				
Sample Size	1.900				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.05 U	0.35	1.05	5.26
PFHpA	375-85-9	1.05 U	0.46	1.05	5.26
PFOA	335-67-1	1.05 U	0.53	1.05	5.26
PFNA	375-95-1	1.05 U	0.45	1.05	5.26
PFDA	335-76-2	1.05 U	0.28	1.05	5.26
PFUnA	2058-94-8	1.05 U	0.43	1.05	5.26
PFDaA	307-55-1	0.53 U	0.25	0.53	5.26
PFTeDA	72629-94-8	1.05 U	0.29	1.05	5.26
PFTeDA	376-06-7	2.11 U	0.66	2.11	5.26
NMeFOSAA	2355-31-9	2.63 U	1.18	2.63	5.26
NEtFOSAA	2991-50-6	2.11 U	0.60	2.11	5.26
PFBS	375-73-5	1.05 U	0.38	1.05	5.26
PFHxS	355-46-4	0.68 J	0.23	0.53	5.26
PFOS	1763-23-1	10.95	0.28	1.05	5.26

Surrogate Recoveries (%)

13C5-PFHxA	100
13C4-PFHpA	101
13C8-PFOA	98
13C9-PFNA	90
13C6-PFDA	88
13C7-PFUnA	88
13C2-PFDaA	91
13C2-PFTeDA	89
d3-MeFOSAA	50
d5-EtFOSAA	63
13C3-PFBS	116
13C3-PFHxS	104
13C8-PFOS	97



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB04-0506				
Battelle ID	J8240-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	19.33				
Matrix	SB				
Sample Size	1.590				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.38 J	0.42	1.26	6.29
PFHpA	375-85-9	1.26 U	0.55	1.26	6.29
PFOA	335-67-1	1.26 U	0.63	1.26	6.29
PFNA	375-95-1	1.26 U	0.54	1.26	6.29
PFDA	335-76-2	1.26 U	0.34	1.26	6.29
PFUnA	2058-94-8	1.26 U	0.52	1.26	6.29
PFDaA	307-55-1	0.63 U	0.30	0.63	6.29
PFTeDA	72629-94-8	1.26 U	0.35	1.26	6.29
PFTeDA	376-06-7	2.52 U	0.79	2.52	6.29
NMeFOSAA	2355-31-9	3.14 U	1.41	3.14	6.29
NEtFOSAA	2991-50-6	2.52 U	0.72	2.52	6.29
PFBS	375-73-5	1.26 U	0.45	1.26	6.29
PFHxS	355-46-4	1.29 J	0.28	0.63	6.29
PFOS	1763-23-1	8.36	0.34	1.26	6.29

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	103
13C8-PFOA	109
13C9-PFNA	102
13C6-PFDA	103
13C7-PFUnA	118
13C2-PFDaA	103
13C2-PFTeDA	105
d3-MeFOSAA	88
d5-EtFOSAA	100
13C3-PFBS	101
13C3-PFHxS	98
13C8-PFOS	99



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SS01-000H				
Battelle ID	J8248-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	5.69				
Matrix	SS				
Sample Size	1.910				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.25 J	0.35	1.05	5.24
PFHpA	375-85-9	1.05 U	0.46	1.05	5.24
PFOA	335-67-1	1.05 U	0.52	1.05	5.24
PFNA	375-95-1	1.05 U	0.45	1.05	5.24
PFDA	335-76-2	1.05 U	0.28	1.05	5.24
PFUnA	2058-94-8	1.05 U	0.43	1.05	5.24
PFDaA	307-55-1	0.52 U	0.25	0.52	5.24
PFTeDA	72629-94-8	1.05 U	0.29	1.05	5.24
PFTeDA	376-06-7	2.09 U	0.66	2.09	5.24
NMeFOSAA	2355-31-9	2.62 U	1.17	2.62	5.24
NEtFOSAA	2991-50-6	2.09 U	0.60	2.09	5.24
PFBS	375-73-5	0.51 J	0.38	1.05	5.24
PFHxS	355-46-4	1.59 J	0.23	0.52	5.24
PFOS	1763-23-1	5.14 J	0.28	1.05	5.24

Surrogate Recoveries (%)

13C5-PFHxA	105
13C4-PFHpA	105
13C8-PFOA	109
13C9-PFNA	107
13C6-PFDA	106
13C7-PFUnA	111
13C2-PFDaA	111
13C2-PFTeDA	105
d3-MeFOSAA	97
d5-EtFOSAA	107
13C3-PFBS	112
13C3-PFHxS	108
13C8-PFOS	117



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SB01-0102				
Battelle ID	J8249-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	6.15				
Matrix	SB				
Sample Size	1.860				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.00 J	0.35	1.08	5.38
PFHpA	375-85-9	1.08 U	0.47	1.08	5.38
PFOA	335-67-1	1.08 U	0.54	1.08	5.38
PFNA	375-95-1	1.08 U	0.46	1.08	5.38
PFDA	335-76-2	1.08 U	0.29	1.08	5.38
PFUnA	2058-94-8	1.08 U	0.44	1.08	5.38
PFDaA	307-55-1	0.54 U	0.26	0.54	5.38
PFTeDA	72629-94-8	1.08 U	0.30	1.08	5.38
PFTeDA	376-06-7	2.15 U	0.68	2.15	5.38
NMeFOSAA	2355-31-9	2.69 U	1.20	2.69	5.38
NEtFOSAA	2991-50-6	2.15 U	0.61	2.15	5.38
PFBS	375-73-5	0.39 J	0.39	1.08	5.38
PFHxS	355-46-4	2.43 J	0.24	0.54	5.38
PFOS	1763-23-1	0.40 J	0.29	1.08	5.38

Surrogate Recoveries (%)

13C5-PFHxA	108
13C4-PFHpA	111
13C8-PFOA	109
13C9-PFNA	106
13C6-PFDA	111
13C7-PFUnA	116
13C2-PFDaA	105
13C2-PFTeDA	110
d3-MeFOSAA	96
d5-EtFOSAA	121
13C3-PFBS	118
13C3-PFHxS	117
13C8-PFOS	114



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SB01-0506				
Battelle ID	J8250-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	11.53				
Matrix	SB				
Sample Size	1.780				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	0.91 J	0.37	1.12	5.62
PFHpA	375-85-9	1.12 U	0.49	1.12	5.62
PFOA	335-67-1	1.12 U	0.56	1.12	5.62
PFNA	375-95-1	1.12 U	0.48	1.12	5.62
PFDA	335-76-2	1.12 U	0.30	1.12	5.62
PFUnA	2058-94-8	1.12 U	0.46	1.12	5.62
PFDaA	307-55-1	0.56 U	0.27	0.56	5.62
PFTeDA	72629-94-8	1.12 U	0.31	1.12	5.62
PFTeDA	376-06-7	2.25 U	0.71	2.25	5.62
NMeFOSAA	2355-31-9	2.81 U	1.26	2.81	5.62
NEtFOSAA	2991-50-6	2.25 U	0.64	2.25	5.62
PFBS	375-73-5	1.12 U	0.40	1.12	5.62
PFHxS	355-46-4	1.63 J	0.25	0.56	5.62
PFOS	1763-23-1	0.31 J	0.30	1.12	5.62

Surrogate Recoveries (%)

13C5-PFHxA	103
13C4-PFHpA	99
13C8-PFOA	107
13C9-PFNA	95
13C6-PFDA	115
13C7-PFUnA	112
13C2-PFDaA	114
13C2-PFTeDA	102
d3-MeFOSAA	102
d5-EtFOSAA	122
13C3-PFBS	99
13C3-PFHxS	100
13C8-PFOS	96



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SS02-000H				
Battelle ID	J8251-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	5.14				
Matrix	SS				
Sample Size	1.930				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	43.83	0.34	1.04	5.18
PFHpA	375-85-9	10.56	0.46	1.04	5.18
PFOA	335-67-1	15.10	0.52	1.04	5.18
PFNA	375-95-1	1.04 U	0.45	1.04	5.18
PFDA	335-76-2	1.04 U	0.28	1.04	5.18
PFUnA	2058-94-8	1.04 U	0.42	1.04	5.18
PFDaA	307-55-1	0.52 U	0.25	0.52	5.18
PFTeDA	72629-94-8	1.04 U	0.29	1.04	5.18
PFTeDA	376-06-7	2.07 U	0.65	2.07	5.18
NMeFOSAA	2355-31-9	2.59 U	1.16	2.59	5.18
NEtFOSAA	2991-50-6	2.07 U	0.59	2.07	5.18
PFBS	375-73-5	17.83	0.37	1.04	5.18
PFHxS	355-46-4	110.82 D	1.14	2.59	25.91
PFOS	1763-23-1	456.33 D	1.40	5.18	25.91

Surrogate Recoveries (%)

13C5-PFHxA	97
13C4-PFHpA	101
13C8-PFOA	95
13C9-PFNA	92
13C6-PFDA	94
13C7-PFUnA	97
13C2-PFDaA	95
13C2-PFTeDA	90
d3-MeFOSAA	83
d5-EtFOSAA	98
13C3-PFBS	137
13C3-PFHxS	128
13C8-PFOS	110



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SB02-0102				
Battelle ID	J8252-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/03/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	6.47				
Matrix	SB				
Sample Size	1.890				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	27.91	0.35	1.06	5.29
PFHpA	375-85-9	4.27 J	0.47	1.06	5.29
PFOA	335-67-1	3.83 J	0.53	1.06	5.29
PFNA	375-95-1	1.06 U	0.46	1.06	5.29
PFDA	335-76-2	1.06 U	0.29	1.06	5.29
PFUnA	2058-94-8	1.06 U	0.43	1.06	5.29
PFDaA	307-55-1	0.53 U	0.25	0.53	5.29
PFTeDA	72629-94-8	1.06 U	0.30	1.06	5.29
PFTeDA	376-06-7	2.12 U	0.67	2.12	5.29
NMeFOSAA	2355-31-9	2.65 U	1.19	2.65	5.29
NEtFOSAA	2991-50-6	2.12 U	0.60	2.12	5.29
PFBS	375-73-5	28.51	0.38	1.06	5.29
PFHxS	355-46-4	48.05	0.23	0.53	5.29
PFOS	1763-23-1	480.02 D	7.14	26.46	132.28

Surrogate Recoveries (%)

13C5-PFHxA	112
13C4-PFHpA	121
13C8-PFOA	108
13C9-PFNA	92
13C6-PFDA	108
13C7-PFUnA	97
13C2-PFDaA	102
13C2-PFTeDA	99
d3-MeFOSAA	126
d5-EtFOSAA	128
13C3-PFBS	150
13C3-PFHxS	130
13C8-PFOS	112



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SB02-0506				
Battelle ID	J8253-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	3.78				
Matrix	SB				
Sample Size	1.900				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	4.95 J	0.35	1.05	5.26
PFHpA	375-85-9	0.89 J	0.46	1.05	5.26
PFOA	335-67-1	5.69	0.53	1.05	5.26
PFNA	375-95-1	1.05 U	0.45	1.05	5.26
PFDA	335-76-2	1.05 U	0.28	1.05	5.26
PFUnA	2058-94-8	1.05 U	0.43	1.05	5.26
PFDaA	307-55-1	0.53 U	0.25	0.53	5.26
PFTeDA	72629-94-8	1.05 U	0.29	1.05	5.26
PFTeDA	376-06-7	2.11 U	0.66	2.11	5.26
NMeFOSAA	2355-31-9	2.63 U	1.18	2.63	5.26
NEtFOSAA	2991-50-6	2.11 U	0.60	2.11	5.26
PFBS	375-73-5	3.99 J	0.38	1.05	5.26
PFHxS	355-46-4	26.72	0.23	0.53	5.26
PFOS	1763-23-1	66.69	0.28	1.05	5.26

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	94
13C8-PFOA	104
13C9-PFNA	106
13C6-PFDA	110
13C7-PFUnA	117
13C2-PFDaA	104
13C2-PFTeDA	106
d3-MeFOSAA	99
d5-EtFOSAA	135
13C3-PFBS	93
13C3-PFHxS	107
13C8-PFOS	97



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	KB35 IB				
Battelle ID	KB35 IB_10/02/2018 (13:47)				
Sample Type	IB				
Collection Date	NA				
Extraction Date	NA				
Analysis Date	10/2/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	Solid				
Sample Size	2.00				
Size Unit-Basis	g				
Units	ng/g_Dry				
			MDL	LOD	LOQ
PFHxA	307-24-4	1.00 U	0.33	1.00	5.00
PFHpA	375-85-9	1.00 U	0.44	1.00	5.00
PFOA	335-67-1	1.00 U	0.50	1.00	5.00
PFNA	375-95-1	1.00 U	0.43	1.00	5.00
PFDA	335-76-2	1.00 U	0.27	1.00	5.00
PFUnA	2058-94-8	1.00 U	0.41	1.00	5.00
PFDaA	307-55-1	0.50 U	0.24	0.50	5.00
PFTrDA	72629-94-8	1.00 U	0.28	1.00	5.00
PFTeDA	376-06-7	2.00 U	0.63	2.00	5.00
NMeFOSAA	2355-31-9	2.50 U	1.12	2.50	5.00
NEtFOSAA	2991-50-6	2.00 U	0.57	2.00	5.00
PFBS	375-73-5	1.00 U	0.36	1.00	5.00
PFHxS	355-46-4	0.50 U	0.22	0.50	5.00
PFOS	1763-23-1	1.00 U	0.27	1.00	5.00

Surrogate Recoveries (%)

13C5-PFHxA	93
13C4-PFHpA	95
13C8-PFOA	105
13C9-PFNA	103
13C6-PFDA	103
13C7-PFUnA	104
13C2-PFDaA	94
13C2-PFTeDA	92
d3-MeFOSAA	90
d5-EtFOSAA	108
13C3-PFBS	92
13C3-PFHxS	98
13C8-PFOS	92



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	KB35 IB				
Battelle ID	KB35 IB_10/02/2018 (21:45)				
Sample Type	IB				
Collection Date	NA				
Extraction Date	NA				
Analysis Date	10/2/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	Solid				
Sample Size	2.00				
Size Unit-Basis	g				
Units	ng/g_Dry				
			MDL	LOD	LOQ
PFHxA	307-24-4	1.00 U	0.33	1.00	5.00
PFHpA	375-85-9	1.00 U	0.44	1.00	5.00
PFOA	335-67-1	1.00 U	0.50	1.00	5.00
PFNA	375-95-1	1.00 U	0.43	1.00	5.00
PFDA	335-76-2	1.00 U	0.27	1.00	5.00
PFUnA	2058-94-8	1.00 U	0.41	1.00	5.00
PFDaA	307-55-1	0.50 U	0.24	0.50	5.00
PFTeDA	72629-94-8	1.00 U	0.28	1.00	5.00
PFTeDA	376-06-7	2.00 U	0.63	2.00	5.00
NMeFOSAA	2355-31-9	2.50 U	1.12	2.50	5.00
NEtFOSAA	2991-50-6	2.00 U	0.57	2.00	5.00
PFBS	375-73-5	1.00 U	0.36	1.00	5.00
PFHxS	355-46-4	0.50 U	0.22	0.50	5.00
PFOS	1763-23-1	1.00 U	0.27	1.00	5.00

Surrogate Recoveries (%)

13C5-PFHxA	96
13C4-PFHpA	94
13C8-PFOA	104
13C9-PFNA	93
13C6-PFDA	98
13C7-PFUnA	100
13C2-PFDaA	97
13C2-PFTeDA	96
d3-MeFOSAA	102
d5-EtFOSAA	104
13C3-PFBS	94
13C3-PFHxS	101
13C8-PFOS	93



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	KB35 IB				
Battelle ID	KB35 IB_10/03/2018				
Sample Type	IB				
Collection Date	NA				
Extraction Date	NA				
Analysis Date	10/03/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	Solid				
Sample Size	2.00				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.00 U	0.33	1.00	5.00
PFHpA	375-85-9	1.00 U	0.44	1.00	5.00
PFOA	335-67-1	1.00 U	0.50	1.00	5.00
PFNA	375-95-1	1.00 U	0.43	1.00	5.00
PFDA	335-76-2	1.00 U	0.27	1.00	5.00
PFUnA	2058-94-8	1.00 U	0.41	1.00	5.00
PFDaA	307-55-1	0.50 U	0.24	0.50	5.00
PFTeDA	72629-94-8	1.00 U	0.28	1.00	5.00
PFTeDA	376-06-7	2.00 U	0.63	2.00	5.00
NMeFOSAA	2355-31-9	2.50 U	1.12	2.50	5.00
NEtFOSAA	2991-50-6	2.00 U	0.57	2.00	5.00
PFBS	375-73-5	1.00 U	0.36	1.00	5.00
PFHxS	355-46-4	0.50 U	0.22	0.50	5.00
PFOS	1763-23-1	1.00 U	0.27	1.00	5.00

Surrogate Recoveries (%)

13C5-PFHxA	107
13C4-PFHpA	114
13C8-PFOA	108
13C9-PFNA	98
13C6-PFDA	105
13C7-PFUnA	86
13C2-PFDaA	95
13C2-PFTeDA	94
d3-MeFOSAA	79
d5-EtFOSAA	85
13C3-PFBS	105
13C3-PFHxS	101
13C8-PFOS	108



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID 180507-02: Ottawa Sand

Battelle ID CR851PB-FS
 Sample Type PB
 Collection Date 09/26/2018
 Extraction Date 09/26/2018
 Analysis Date 10/02/2018
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture 0.00
 Matrix SEDIMENT
 Sample Size 2.010
 Size Unit-Basis g
 Units ng/g_Dry MDL LOD LOQ

			MDL	LOD	LOQ
PFHxA	307-24-4	1.00 U	0.33	1.00	4.98
PFHpA	375-85-9	1.00 U	0.44	1.00	4.98
PFOA	335-67-1	1.00 U	0.50	1.00	4.98
PFNA	375-95-1	1.00 U	0.43	1.00	4.98
PFDA	335-76-2	1.00 U	0.27	1.00	4.98
PFUnA	2058-94-8	1.00 U	0.41	1.00	4.98
PFDoA	307-55-1	0.50 U	0.24	0.50	4.98
PFTTrDA	72629-94-8	1.00 U	0.28	1.00	4.98
PFTeDA	376-06-7	1.99 U	0.63	1.99	4.98
NMeFOSAA	2355-31-9	2.49 U	1.11	2.49	4.98
NEtFOSAA	2991-50-6	1.99 U	0.57	1.99	4.98
PFBS	375-73-5	1.00 U	0.36	1.00	4.98
PFHxS	355-46-4	0.50 U	0.22	0.50	4.98
PFOS	1763-23-1	1.00 U	0.27	1.00	4.98

Surrogate Recoveries (%)

13C5-PFHxA	110
13C4-PFHpA	117
13C8-PFOA	112
13C9-PFNA	105
13C6-PFDA	124
13C7-PFUnA	114
13C2-PFDoA	117
13C2-PFTeDA	117
d3-MeFOSAA	118
d5-EtFOSAA	123
13C3-PFBS	109
13C3-PFHxS	112
13C8-PFOS	111



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID 180507-02: Ottawa Sand

Battelle ID	CR852LCS-FS					
Sample Type	LCS					
Collection Date	09/26/2018					
Extraction Date	09/26/2018					
Analysis Date	10/02/2018					
Analytical Instrument	Sciex 5500 LC/MS/MS					
% Moisture	0.00					
Matrix	SEDIMENT					
Sample Size	1.980					
Size Unit-Basis	g					
Units	ng/g_Dry	Target	Recovery	Qual	Control Limits	Upper
PFHxA	307-24-4	41.68	40.81	102	45	135
PFHpA	375-85-9	40.06	40.40	99	60	128
PFOA	335-67-1	38.02	40.40	94	56	136
PFNA	375-95-1	36.85	40.40	91	54	130
PFDA	335-76-2	37.11	40.40	92	55	141
PFUnA	2058-94-8	39.56	40.40	98	57	137
PFDaA	307-55-1	37.95	40.40	94	62	134
PFTrDA	72629-94-8	39.52	40.40	98	51	127
PFTeDA	376-06-7	39.76	40.40	98	34	162
NMeFOSAA	2355-31-9	46.40	40.40	115	52	146
NEtFOSAA	2991-50-6	41.86	40.40	104	54	124
PFBS	375-73-5	38.32	40.81	94	57	145
PFHxS	355-46-4	40.12	40.81	98	52	132
PFOS	1763-23-1	37.76	40.40	93	50	130

Surrogate Recoveries (%)

13C5-PFHxA	110
13C4-PFHpA	112
13C8-PFOA	115
13C9-PFNA	115
13C6-PFDA	115
13C7-PFUnA	117
13C2-PFDaA	121
13C2-PFTeDA	119
d3-MeFOSAA	110
d5-EtFOSAA	125
13C3-PFBS	136
13C3-PFHxS	123
13C8-PFOS	123



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID		VC-PM365-SB02-0102	VC-PM365-SB02-0102-MS					
Battelle ID		J8252-FS	J8257MS-FS					
Sample Type		SA	MS					
Collection Date		09/19/2018	09/19/2018					
Extraction Date		09/26/2018	09/26/2018					
Analysis Date		10/03/2018	10/03/2018					
Analytical Instrument		Sciex 5500 LC/MS/MS	Sciex 5500 LC/MS/MS					
% Moisture		6.47	5.70					
Matrix		SB	SB					
Sample Size		1.890	1.910					
Size Unit-Basis		g	g	Control Limits				
Units		ng/g_Dry	ng/g_Dry	Target	Recovery	Qual	Lower	Upper
PFHxA	307-24-4	27.91	103.57 D	84.61	89		45	135
PFHpA	375-85-9	4.27 J	83.52	83.77	95		60	128
PFOA	335-67-1	3.83 J	80.46	83.77	91		56	136
PFNA	375-95-1	1.06 U	74.28	83.77	89		54	130
PFDA	335-76-2	1.06 U	75.80	83.77	90		55	141
PFUnA	2058-94-8	1.06 U	78.74	83.77	94		57	137
PFDoA	307-55-1	0.53 U	79.71	83.77	95		62	134
PFTrDA	72629-94-8	1.06 U	75.26	83.77	90		51	127
PFTeDA	376-06-7	2.12 U	75.31	83.77	90		34	162
NMeFOSAA	2355-31-9	2.65 U	77.26	83.77	92		52	146
NEtFOSAA	2991-50-6	2.12 U	74.22	83.77	89		54	124
PFBS	375-73-5	28.51	103.30 D	84.61	88		57	145
PFHxS	355-46-4	48.05	140.11 D	84.61	109		52	132
PFOS	1763-23-1	480.02 D	681.06 D	83.77	240	N	50	130
Surrogate Recoveries (%)								
13C5-PFHxA		112	138					
13C4-PFHpA		121	133					
13C8-PFOA		108	115					
13C9-PFNA		92	100					
13C6-PFDA		108	109					
13C7-PFUnA		97	102					
13C2-PFDoA		102	116					
13C2-PFTeDA		99	127					
d3-MeFOSAA		126	131					
d5-EtFOSAA		128	108					
13C3-PFBS		150	148					
13C3-PFHxS		130	135					
13C8-PFOS		112	97					



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID VC-PM365-SB02-0102-MSD

Battelle ID J8258MSD-FS
 Sample Type MSD
 Collection Date 09/19/2018
 Extraction Date 09/26/2018
 Analysis Date 10/02/2018
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture 12.10
 Matrix SB
 Sample Size 1.760
 Size Unit-Basis g

Units	ng/g_Dry	Target	Recovery	Qual	Lower	Upper	RPD	Qual	RPD Limit
PFHxA	307-24-4	101.25	91.82	80	45	135	10.7		≤ 30
PFHpA	375-85-9	87.98	90.91	92	60	128	3.2		≤ 30
PFOA	335-67-1	87.25	90.91	92	56	136	1.1		≤ 30
PFNA	375-95-1	84.89	90.91	93	54	130	4.4		≤ 30
PFDA	335-76-2	80.81	90.91	89	55	141	1.1		≤ 30
PFUnA	2058-94-8	77.95	90.91	86	57	137	8.9		≤ 30
PFDoA	307-55-1	83.98	90.91	92	62	134	3.2		≤ 30
PFTeDA	72629-94-8	82.52	90.91	91	51	127	1.1		≤ 30
PFTeDA	376-06-7	82.98	90.91	91	34	162	1.1		≤ 30
NMeFOSAA	2355-31-9	97.99	90.91	108	52	146	16.0		≤ 30
NEtFOSAA	2991-50-6	93.40	90.91	103	54	124	14.6		≤ 30
PFBS	375-73-5	103.00	91.82	81	57	145	8.3		≤ 30
PFHxS	355-46-4	122.08 D	91.82	81	52	132	29.5		≤ 30
PFOS	1763-23-1	663.25 D	90.91	202	N	50	130	17.2	≤ 30

Surrogate Recoveries (%)

13C5-PFHxA	106
13C4-PFHpA	108
13C8-PFOA	102
13C9-PFNA	90
13C6-PFDA	94
13C7-PFUnA	111
13C2-PFDoA	106
13C2-PFTeDA	113
d3-MeFOSAA	143
d5-EtFOSAA	147
13C3-PFBS	135
13C3-PFHxS	129
13C8-PFOS	108



Glossary of Data Qualifiers

Flag: Application:

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

CTO-4164 Naval Base Ventura County, California

Project No 100110125-01

PFAS by DoD QSM 5.1 Table B-15

SB, SS

Batch 18-0570

Package DP-18-0278

Submitted to:

CH2M

1100 NE Circle Blvd Suite 300

Corvallis, OR 97330 USA

Submitted by:

Battelle Norwell Operations

141 Longwater Drive Suite 202

Norwell, MA 02061

BATTELLE

It can be done

CTO-4164 Naval Base Ventura County, California
Project No 100110125-01
PFAS by DoD QSM 5.1 Table B-15
SB, SS
Batch 18-0570
Package DP-18-0278

Submitted to:
CH2M
1100 NE Circle Blvd Suite 300
Corvallis, OR 97330 USA

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

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

Analyst Approval:		schumitzd@battelle.org 2018.10.05 19:10:18 -04'00'
QC Chemist Approval:		Digitally signed by devinec@battelle.org DN: cn=devinec@battelle.org Date: 2018.10.18 22:10:30 -04'00'
Project Manager Approval:		Digitally signed by Jonathan Thorn Date: 2018.10.19 14:38:47 -04'00'



CTO-4164 Naval Base Ventura County, California

Project No 100110125-01

PFAS by DoD QSM 5.1 Table B-15

SB, SS

Batch 18-0570

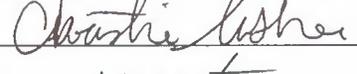
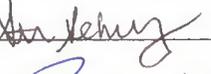
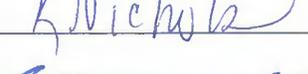
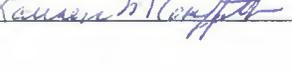
Package DP-18-0278

1	<i>Work Plan</i> Laboratory Work Plan, Addendums To Work Plan, Memos From Project Manager, Special Instructions, Chain-of-Custody Reports.	1
2	<i>Tables</i> Analytical Data Tables, Qualifier Definitions.	34
3	<i>Miscellaneous Documentation</i> Case Narrative, Miscellaneous Documentation Form, Quality Control Summary, Example Calculations, Internal Standard Recovery Report, Retention Time Window Report.	60
4	<i>Sample Preparation Records</i> Sample Preparation Records, Dilution Worksheets, Standard Preparation Records, Certificates Of Analysis, GPC Check Report.	210
5	<i>Analytical Calibrations</i> Analytical Sequence, Analytical Method, Tune Report, Initial Calibration, Pesticide Degradation Report, RF Summary, Calibration Verifications, Independent Calibration Verification Check.	239
6	<i>Analytical Data</i> Raw Data Quantification Reports.	447
7	<i>Chromatograms</i> Sample And Standard Chromatograms.	598
8	<i>Unused Data</i>	859

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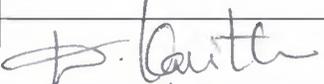
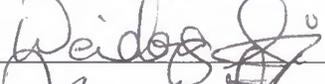
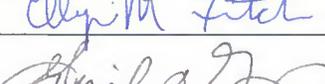
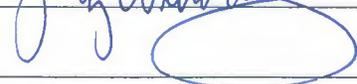
It can be done

Signature Page

Battelle 2018 (1 of 2) Signature Page			
Name (Printed)	Signature	Initials	Date
Jonathan Thorn		JRT	4/4/2018
Robert Lizotte, Jr.		BL	4-4-2018
FRANC PALA		FP	4-4-2018
Carla Devine		CRD	4/4/18
Denise Schumitz		DNS	4/4/18
Carol Ann McManis		CM	4/4/2018
Rich Rostucci		RR	4/4/2018
Michael Mena		MM	4/4/2018
Christie Usher		CU	4/4/18
Kevin Matroney		KM	4/4/18
Stephanie Schmitz		SAS	4/4/18
Jordan Tower		JT	4/4/18
KRISTEN NICHOLS		KN	4/4/18
Quimiao H Brown		CB	4/4/18
Matt Schumitz		MS	4-4-18
Sam Guimaraes		SG	4-4-18
Lauren Griffith		LG	4.4.18

Signature Page

Battelle 2018 (2 of 2)
Signature Page

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

Sample Summary

Client: CH2M

SDG: 18-0570

Project/Site: Naval Base Ventura County

CTO: 4164

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CR851PB-FS	180507-02: Ottawa Sand	SEDIMENT	9/26/2018	9/26/2018
CR852LCS-FS	180507-02: Ottawa Sand	SEDIMENT	9/26/2018	9/26/2018
J8229-FS	VC-PM649-SS01-000H	SS	9/18/2018	9/21/2018
J8230-FS	VC-PM649-SB01-0102	SB	9/18/2018	9/21/2018
J8231-FS	VC-PM649-SB01-0506	SB	9/18/2018	9/21/2018
J8232-FS	VC-PM649-SS02-000H	SS	9/18/2018	9/21/2018
J8233-FS	VC-PM649-SB02-0102	SB	9/18/2018	9/21/2018
J8234-FS	VC-PM649-SB02-0506	SB	9/18/2018	9/21/2018
J8235-FS	VC-PM649-SS03-000H	SS	9/18/2018	9/21/2018
J8236-FS	VC-PM649-SB03-0102	SB	9/18/2018	9/21/2018
J8237-FS	VC-PM649-SB03-0506	SB	9/18/2018	9/21/2018
J8238-FS	VC-PM649-SS04-000H	SS	9/18/2018	9/21/2018
J8239-FS	VC-PM649-SB04-0102	SB	9/18/2018	9/21/2018
J8240-FS	VC-PM649-SB04-0506	SB	9/18/2018	9/21/2018
J8248-FS	VC-PM365-SS01-000H	SS	9/19/2018	9/21/2018
J8249-FS	VC-PM365-SB01-0102	SB	9/19/2018	9/21/2018
J8250-FS	VC-PM365-SB01-0506	SB	9/19/2018	9/21/2018
J8251-FS	VC-PM365-SS02-000H	SS	9/19/2018	9/21/2018
J8252-FS	VC-PM365-SB02-0102	SB	9/19/2018	9/21/2018
J8253-FS	VC-PM365-SB02-0506	SB	9/19/2018	9/21/2018
J8257MS-FS	VC-PM365-SB02-0102-MS	SB	9/19/2018	9/21/2018
J8258MSD-FS	VC-PM365-SB02-0102-MSD	SB	9/19/2018	9/21/2018

Work Plan



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

1.0 GENERAL PROJECT INFORMATION

Project Title: CTO-4164: Analysis of Solids
Project Number: 100110125-01
Client: CH2M
 1100 NE Circle Blvd Suite 300
 Corvallis, OR 97330
 USA

Client Contact Information: Tiffany Hill
 Project Chemist
 (541) 768-3109(V)
 NA
 tiffany.hill@jacobs.com

Effective Date of QAPP: 9/17/2018
Version Number: 100110125-01(S)-01
Project Manager: Thorn, Jonathan
Laboratory Task Manager: Thorn, Jonathan
Deliverable Due Date: 10/19/2018

2.0 SCOPE OF WORK

Overview: Analysis of solid samples for PFAS compounds.
Matrix: Soil/Sediment

2.1 TECHNICAL APPROACH

2.1.1 Sample Receipt, Storage, and Handling

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

Storage Directions: Store all samples frozen upon arrival.
Sub_Sampling: None
Procedures: NA
Contact: NA
Comment: None
Archiving: Samples will be disposed of six months after submission of final data.
 Client will be informed prior to sample disposal.
Disposal: Dispose of samples and extracts in the appropriate waste streams.



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

2.1.2 Sample Preparation

None

Samples Expected:	Samples Per Batch:	Batches Expected:
212	20	11

Batch quality control samples are defined in Table 1.

Target samples are presented in Attachment 1.

Table 1: Quality Control Samples

Type:	Description:	Count:	Rgt:	Reference:	Comment:
PB	Laboratory control reagent blank.	1 per batch	--	180507-02: Ottawa Sand Lot:1DJ0861	
LCS	Laboratory Control Sample	1 per batch	Yes	180507-02: Ottawa Sand Lot:1DJ0861	
MS	Spiked field sample for determining method accuracy in the presence of matrix.	1 per batch	--	NA	MS/MSD will be identified on the COC.
MSD	Spiked field sample for determining method accuracy and precision in the presence of matrix.	1 per batch	--	NA	MS/MSD will be identified on the COC.

2.1.3 Extraction/Preparation

2.1.3.1 Extraction

SOP No.-Rev:	5-370-06
SOP Title:	<i>Extraction of Poly and Perfluoroalkyl Substances from Environmental Matrices</i>
Sample Size:	2 g
SIS and LCS/MS Compounds:	Defined in Table 2.
Deviations:	<ul style="list-style-type: none"> • no split post ENVI-Carb • PIV changed to 1 mL
Comments:	<ul style="list-style-type: none"> • All solids will be prescreened prior to extraction and analysis.

Table 2: SIS and LCS/MS Spiking Level

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	JY27 SIS	~ 2.50 ng	50 uL	NA



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WORK/QUALITY ASSURANCE PROJECT PLAN

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - DoD High Level Second Source LCS/MS Solution	KA84 LCS/MS	~ 20.0 ng	100 uL	LCS sample - vary between 100 µL and 400 µL for each batch.
PFAS - DoD High Level Second Source LCS/MS Solution	KA84 LCS/MS	~ 50 ng	250 uL	MS/MSD only - spike between 250 µL and 800 µL (vary per batch)

2.1.3.2 Cleanup

None.

RIS spiking levels are presented in Table 3.

Extract PIV (uL): 1000

Table 3: RIS Spiking Level

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - DoD Internal Standard Spiking Solution	JY26 RIS	~ 0.250 ng	50 uL	NA

2.1.4 Instrumental Analysis

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

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

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

Deviations: None

Comments: None

2.2. DELIVERABLES

Deliverables Due:	10/19/2018
LIMS Reports:	No
Histograms:	No
Excel Tables:	Yes
EICs:	No



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Chromatograms:	<i>No</i>
EDDs:	<i>Yes</i>
Comments:	<ul style="list-style-type: none"> • Individual data sets will be due 28 days after receipt of each sample set. • Full Level 4 data package (QSM 5.1 Table B-15 compliant) required. • SEDD file required. • weekly updates to client on status required.

3.0 QUALITY

The Method Quality Objectives are defined in Attachment 3.

4.0 ORGANIZATION AND COMMUNICATION

4.1 ORGANIZATION

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

Table 4: Project Team and Roles

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

4.2 COMMUNICATION

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

5.0 SCHEDULE

The project schedule is presented in Table 5.

Table 5. Schedule of Laboratory Activities

Activity:	Start Date:	End Date:	TAT (days):	Comment:
Sample Receipt	09/20/2018	09/20/2018	0	Schedule will vary as samples arrive over time.
Sample Preparation	09/20/2018	09/25/2018	5	NA



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Activity:	Start Date:	End Date:	TAT (days):	Comment:
Instrument Analysis	09/25/2018	10/09/2018	14	NA
Quality Control Review	10/09/2018	10/11/2018	2	NA
Quality Assurance Review	10/11/2018	10/12/2018	1	NA

6.0 BUDGET

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

Table 6. Labor Budget (Laboratory Analytical Task)

Labor Activity:	Hours/ Batch:	Batches:	Total Hours:	Comment:
Sample Receipt	2	10	20	Hours are per batch of 20 samples.
Sample Preparation	8	10	80	NA
Instrument Analysis	8	10	80	NA
Quality Control Review	3	10	30	NA
Quality Assurance Review	1	10	10	NA

7.0 STAFF DEVELOPMENT

None anticipated.



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 1: Target Samples

Shipment: SHP-180921-01
Status: Pending
Description: NBVC Basewide SI
Range: J8201-J8271
Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	J8201	VC-PM3009-SS01-000H	09/17/2018 2:15 pm	SS	R0119	(NA)		
2	J8202	VC-PM3009-SB01-0102	09/17/2018 2:15 pm	SB	R0119	(NA)		
3	J8203	VC-PM3009-SB01-0506	09/17/2018 2:15 pm	SB	R0119	(NA)		
4	J8204	VC-PM3009-SS02-000H	09/17/2018 3:12 pm	SS	R0119	(NA)		
5	J8205	VC-PM3009-SB02-0102	09/17/2018 3:13 pm	SB	R0119	(NA)		
6	J8206	VC-PM3009-SB02-0506	09/17/2018 3:15 pm	SB	R0119	(NA)		
7	J8207	VC-PM3009-SS03-000H	09/17/2018 4:16 pm	SS	R0119	(NA)		
8	J8208	VC-PM3009-SB03-0102	09/17/2018 4:17 pm	SB	R0119	(NA)		
9	J8209	VC-PM3009-SB03-0506	09/17/2018 4:18 pm	SB	R0119	(NA)		
10	J8218	VC-PM372-SS01-000H	09/18/2018 9:36 am	SS	R0119	(NA)		
11	J8219	VC-PM372-SB01-0102	09/18/2018 9:37 am	SB	R0119	(NA)		
12	J8220	VC-PM372-SB01-0506	09/18/2018 9:43 am	SB	R0119	(NA)		
13	J8221	VC-PM372-SS02-000H	09/18/2018 8:57 am	SS	R0119	(NA)		
14	J8222	VC-PM372-SB02-0102	09/18/2018 9:03 am	SB	R0119	(NA)		
15	J8223	VC-PM372-SB02-0506	09/18/2018 9:06 am	SB	R0119	(NA)		
16	J8224	VC-PM372-SS03-000H	09/18/2018 10:46 am	SS	R0119	(NA)		
17	J8225	VC-PM372-SB03-0102	09/18/2018 10:47 am	SB	R0119	(NA)		
18	J8226	VC-PM372-SB03-0506	09/18/2018 10:49 am	SB	R0119	(NA)		
19	J8229	VC-PM649-SS01-000H	09/18/2018 11:30 am	SS	R0119	(NA)		
20	J8230	VC-PM649-SB01-0102	09/18/2018 11:35 am	SB	R0119	(NA)		
21	J8231	VC-PM649-SB01-0506	09/18/2018 11:40 am	SB	R0119	(NA)		
22	J8232	VC-PM649-SS02-000H	09/18/2018 2:25 pm	SS	R0119	(NA)		
23	J8233	VC-PM649-SB02-0102	09/18/2018 2:29 pm	SB	R0119	(NA)		
24	J8234	VC-PM649-SB02-0506	09/18/2018 2:30 pm	SB	R0119	(NA)		
25	J8235	VC-PM649-SS03-000H	09/18/2018 1:00 pm	SS	R0119	(NA)		
26	J8236	VC-PM649-SB03-0102	09/18/2018 1:12 pm	SB	R0119	(NA)		
27	J8237	VC-PM649-SB03-0506	09/18/2018 1:20 pm	SB	R0119	(NA)		
28	J8238	VC-PM649-SS04-000H	09/18/2018 1:15 pm	SS	R0119	(NA)		
29	J8239	VC-PM649-SB04-0102	09/18/2018 1:27 pm	SB	R0119	(NA)		
30	J8240	VC-PM649-SB04-0506	09/18/2018 1:40 pm	SB	R0119	(NA)		
31	J8248	VC-PM365-SS01-000H	09/19/2018 10:28 am	SS	R0119	(NA)		
32	J8249	VC-PM365-SB01-0102	09/19/2018 10:30 am	SB	R0119	(NA)		
33	J8250	VC-PM365-SB01-0506	09/19/2018 10:37 am	SB	R0119	(NA)		
34	J8251	VC-PM365-SS02-000H	09/19/2018 11:30 am	SS	R0119	(NA)		
35	J8252	VC-PM365-SB02-0102	09/19/2018 11:32 am	SB	R0119	(NA)		
36	J8253	VC-PM365-SB02-0506	09/19/2018 11:40 am	SB	R0119	(NA)		
37	J8254	VC-PM365-SS03-000H	09/19/2018 10:26 am	SS	R0119	(NA)		
38	J8255	VC-PM365-SB03-0102	09/19/2018 10:27 am	SB	R0119	(NA)		
39	J8256	VC-PM365-SB03-0506	09/19/2018 10:32 am	SB	R0119	(NA)		
40	J8263	VC-PM553-SS01-000H	09/19/2018 1:50 pm	SS	R0119	(NA)		
41	J8264	VC-PM553-SB01-0102	09/19/2018 1:53 pm	SS	R0119	(NA)		



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WORK/QUALITY ASSURANCE PROJECT PLAN

Shipment: SHP-180921-01
Status: Pending
Description: NBVC Basewide SI
Range: J8201-J8271
Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
42	J8265	VC-PM553-SB01-0506	09/19/2018 1:59 pm	SB	R0119 (NA)			
43	J8266	VC-PM553-SS02-000H	09/19/2018 2:40 pm	SS	R0119 (NA)			
44	J8267	VC-PM553-SB02-0102	09/19/2018 2:42 pm	SB	R0119 (NA)			
45	J8268	VC-PM553-SB02-0506	09/19/2018 2:50 pm	SB	R0119 (NA)			
46	J8269	VC-PM553-SS03-000H	09/19/2018 11:30 am	SS	R0119 (NA)			
47	J8270	VC-PM553-SB03-0102	09/19/2018 11:34 am	SB	R0119 (NA)			
48	J8271	VC-PM553-SB03-0506	09/19/2018 11:42 am	SB	R0119 (NA)			

Shipment: SHP-180925-02
Status: Pending
Description: NBVC Basewide SI
Range: J8291-J8334
Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	J8291	VC-CS94-SS01-000H	09/21/2018 10:30 am	SS	R0119 (NA)			
2	J8292	VC-CS94-SB01-0102	09/21/2018 10:33 am	SB	R0119 (NA)			
3	J8293	VC-CS94-SB01-0506	09/21/2018 10:37 am	SB	R0119 (NA)			
4	J8294	VC-CS94-SS02-000H	09/21/2018 11:24 am	SS	R0119 (NA)			
5	J8295	VC-CS94-SB02-0102	09/21/2018 11:25 am	SB	R0119 (NA)			
6	J8296	VC-CS94-SB02-0506	09/21/2018 11:33 am	SB	R0119 (NA)			
7	J8297	VC-CS94-SS03-000H	09/21/2018 10:37 am	SS	R0119 (NA)			
8	J8298	VC-CS94-SB03-0102	09/21/2018 10:38 am	SB	R0119 (NA)			
9	J8299	VC-CS94-SB03-0506	09/21/2018 10:41 am	SB	R0119 (NA)			
10	J8300	VC-CS94-SS04-000H	09/21/2018 11:57 am	SS	R0119 (NA)			
11	J8301	VC-CS94-SB04-0102	09/21/2018 11:58 am	SB	R0119 (NA)			
12	J8302	VC-CS94-SB04-0506	09/21/2018 12:04 pm	SB	R0119 (NA)			
13	J8303	VC-CS94-SS05-000H	09/21/2018 12:04 pm	SS	R0119 (NA)			
14	J8304	VC-CS94-SB05-0102	09/21/2018 12:05 pm	SB	R0119 (NA)			
15	J8305	VC-CS94-SB05-0506	09/21/2018 12:10 pm	SB	R0119 (NA)			
16	J8310	VC-PM323-324-SS01-000H	09/20/2018 1:52 pm	SS	R0119 (NA)			
17	J8311	VC-PM323-324-SB01-0102	09/20/2018 1:55 pm	SB	R0119 (NA)			
18	J8312	VC-PM323-324-SB01-0506	09/20/2018 2:10 pm	SB	R0119 (NA)			
19	J8313	VC-PM323-324-SS02-000H	09/20/2018 11:00 am	SS	R0119 (NA)			
20	J8314	VC-PM323-324-SB02-0102	09/20/2018 11:05 am	SB	R0119 (NA)			
21	J8315	VC-PM323-324-SB02-0506	09/20/2018 11:15 am	SB	R0119 (NA)			
22	J8316	VC-PM323-324-SS03-000H	09/20/2018 10:15 am	SS	R0119 (NA)			



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Shipment: SHP-180925-02
Status: Pending
Description: NBVC Basewide SI
Range: J8291-J8334
Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
23	J8317	VC-PM323-324-SB03-0102	09/20/2018 10:17 am	SB	R0119	(NA)		
24	J8318	VC-PM323-324-SB03-0506	09/20/2018 10:22 am	SB	R0119	(NA)		
25	J8327	VC-PM323-SS02-000H	09/20/2018 2:43 pm	SS	R0119	(NA)		
26	J8328	VC-PM323-SB02-0102	09/20/2018 2:44 pm	SB	R0119	(NA)		
27	J8329	VC-PM323-SB02-0506	09/20/2018 2:48 pm	SB	R0119	(NA)		
28	J8332	VC-PM324-SS02-000H	09/20/2018 1:40 pm	SS	R0119	(NA)		
29	J8333	VC-PM324-SB02-0102	09/20/2018 1:45 pm	SB	R0119	(NA)		
30	J8334	VC-PM324-SB02-0506	09/20/2018 1:51 pm	SB	R0119	(NA)		



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

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

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

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



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_369

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

Total Analytes: 27

Subtract Peaks:

None

Sum Peaks:

None



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_369

ICAL Acceptance Criteria:

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

Continuing Calibration Verification Criteria:

CCV Name: 5-369

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

Independent Calibration Verification:

ICC Name: 5-369

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

Mass Discrimination Criteria:

None

Degradation Check Criteria:

None



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

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



It can be done

WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

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

Sample Receipt Form

Approved: Authorized

Project Number: 695803 **Client:** CH2M
Received by: Schumitz, Matt **Date/Time Received:** Friday, September 21, 2018 10:00 AM
No. of Shipping Containers: 3

SHIPMENT

Method of Delivery: Commercial Carrier **Tracking Number:** 7828 5914 8695 (Master)
COC Forms: **Shipped with samples** **No Forms**

Cooler(s)/Box(es)

Cntr	Type	Tracking No.	Seal	Seal	Container	Therm.	Temp C	Smps
1 of 3	Cooler	7828 5914 8695	Custody Seals	Intact	Intact	Therm_1	0.1	13
2 of 3	Cooler	7828 5914 8700	Custody Seals	Intact	Intact	Therm_1	0.9	27
3 of 3	Cooler	7828 5914 8710	Custody Seals	Intact	Intact	Therm_1	0.3	37

Samples

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

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

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

Temperature upon receipt (°C): 0.9 Temperature Blank used Yes No
(Note: If temperature upon receipt differs from required conditions, see sample log comment field)

Samples Acidified: Yes No Unknown

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

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

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

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

Storage Location: Custody: Refrigerator - R0119 (NA) **BDO IDs Assigned:** J8201 - J8277

Samples logged in by: Schumitz, Matt **Date/Time:** 09/21/2018 10:00 AM

Approved By: Fitch, Ellyn **Approved On:** 9/28/2018 10:18:00 AM

Authorized By: _____ **Authorized On:** _____



It can be done

ShpNo SHP-180921-01

Battelle Project No: 0110125-01

Sample Receipt Form Details

Approved: Authorized

Project Number: 695803 Client: CH2M

Received by: Schumitz, Matt Date/Time Received: Friday, September 21, 2018 10:00 AM

No. of Shipping Containers: 3

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
J8201	VC-PM3009-SS01-000H	09/17/18 14:15	09/20/18 15:38	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8202	VC-PM3009-SB01-0102	09/17/18 14:15	09/20/18 15:38	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8203	VC-PM3009-SB01-0506	09/17/18 14:15	09/20/18 15:39	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8204	VC-PM3009-SS02-000H	09/17/18 15:12	09/20/18 15:39	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8205	VC-PM3009-SB02-0102	09/17/18 15:13	09/20/18 15:39	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8206	VC-PM3009-SB02-0506	09/17/18 15:15	09/20/18 15:40	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8207	VC-PM3009-SS03-000H	09/17/18 16:16	09/20/18 15:40	1	SS	0.9	NA	NA	NA	R0119 (NA)			
J8208	VC-PM3009-SB03-0102	09/17/18 16:17	09/20/18 15:40	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8209	VC-PM3009-SB03-0506	09/17/18 16:18	09/20/18 15:41	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8210	VC-PM3009-DW01-0918	09/17/18 15:10	09/20/18 15:54	2	GW	0.3	NA	NA	NA	R0119 (NA)			
J8211	VC-PM3009-DW02-0918	09/17/18 16:23	09/20/18 15:54	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8212	VC-PM3009-DW02P-0918	09/17/18 16:27	09/20/18 15:55	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8213	VC-PM3009-DW03-0918	09/17/18 16:38	09/20/18 15:55	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8214	VC-PM372-DW01-0918	09/18/18 10:07	09/20/18 15:56	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8215	VC-PM372-DW02-0918	09/18/18 9:25	09/20/18 15:57	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8216	VC-PM372-DW02P-0918	09/18/18 9:27	09/20/18 15:57	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8217	VC-PM372-DW03-0918	09/18/18 11:49	09/20/18 15:57	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8218	VC-PM372-SS01-000H	09/18/18 9:36	09/20/18 15:58	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8219	VC-PM372-SB01-0102	09/18/18 9:37	09/20/18 16:00	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8220	VC-PM372-SB01-0506	09/18/18 9:43	09/20/18 16:00	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8221	VC-PM372-SS02-000H	09/18/18 8:57	09/20/18 16:00	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8222	VC-PM372-SB02-0102	09/18/18 9:03	09/20/18 16:01	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8223	VC-PM372-SB02-0506	09/18/18 9:06	09/20/18 16:01	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8224	VC-PM372-SS03-000H	09/18/18 10:46	09/20/18 16:01	1	SS	0.9	NA	NA	NA	R0119 (NA)			
J8225	VC-PM372-SB03-0102	09/18/18 10:47	09/20/18 16:02	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8226	VC-PM372-SB03-0506	09/18/18 10:49	09/20/18 16:02	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8227	VC-PM372-SS02-000H-MS	09/18/18 9:06	09/20/18 16:02	1	SS	0.9	NA	NA	NA	R0119 (NA)			
J8228	VC-PM372-SS02-000H-SD	09/18/18 9:06	09/20/18 16:03	1	SS	0.9	NA	NA	NA	R0119 (NA)			



It can be done

ShpNo SHP-180921-01

Battelle Project No: J110125-01

Sample Receipt Form Details

Approved: Authorized

Project Number: 695803 Client: CH2M

Received by: Schumitz, Matt Date/Time Received: Friday, September 21, 2018 10:00 AM

No. of Shipping Containers: 3

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
J8229	VC-PM649-SS01-000H	09/18/18 11:30	09/20/18 16:04	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8230	VC-PM649-SB01-0102	09/18/18 11:35	09/20/18 16:09	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8231	VC-PM649-SB01-0506	09/18/18 11:40	09/20/18 16:10	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8232	VC-PM649-SS02-000H	09/18/18 14:25	09/20/18 16:10	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8233	VC-PM649-SB02-0102	09/18/18 14:29	09/20/18 16:10	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8234	VC-PM649-SB02-0506	09/18/18 14:30	09/20/18 16:10	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8235	VC-PM649-SS03-000H	09/18/18 13:00	09/20/18 16:11	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8236	VC-PM649-SB03-0102	09/18/18 13:12	09/20/18 16:11	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8237	VC-PM649-SB03-0506	09/18/18 13:20	09/20/18 16:11	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8238	VC-PM649-SS04-000H	09/18/18 13:15	09/20/18 16:11	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8239	VC-PM649-SB04-0102	09/18/18 13:27	09/20/18 16:12	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8240	VC-PM649-SB04-0506	09/18/18 13:40	09/20/18 16:12	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8241	VC-PM649-DW01-0918	09/18/18 12:50	09/20/18 16:13	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8242	VC-PM649-DW01P-0918	09/18/18 12:55	09/20/18 16:14	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8243	VC-PM649-DW02-0918	09/18/18 15:35	09/20/18 16:14	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8244	VC-PM649-DW03-0918	09/18/18 14:02	09/20/18 16:14	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8245	VC-PM649-DW04-0918	09/18/18 14:02	09/20/18 16:14	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8246	VC-AQ-FB01-0918	09/18/18 13:30	09/20/18 16:15	2	AQ	0.1	NA	NA	NA	R0119 (NA)			
J8247	VC-AQ-EB01-0918	09/18/18 13:40	09/20/18 16:15	2	AQ	0.1	NA	NA	NA	R0119 (NA)			
J8248	VC-PM365-SS01-000H	09/19/18 10:28	09/20/18 16:16	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8249	VC-PM365-SB01-0102	09/19/18 10:30	09/20/18 16:16	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8250	VC-PM365-SB01-0506	09/19/18 10:37	09/20/18 16:17	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8251	VC-PM365-SS02-000H	09/19/18 11:30	09/20/18 16:17	1	SS	0.9	NA	NA	NA	R0119 (NA)			
J8252	VC-PM365-SB02-0102	09/19/18 11:32	09/20/18 16:17	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8253	VC-PM365-SB02-0506	09/19/18 11:40	09/20/18 16:18	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8254	VC-PM365-SS03-000H	09/19/18 10:26	09/20/18 16:18	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8255	VC-PM365-SB03-0102	09/19/18 10:27	09/20/18 16:18	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8256	VC-PM365-SB03-0506	09/19/18 10:32	09/20/18 16:19	1	SB	0.3	NA	NA	NA	R0119 (NA)			



It can be done

ShpNo SHP-180921-01

Battelle Project No: 0110125-01

Sample Receipt Form Details

Approved: Authorized

Project Number: 695803 Client: CH2M

Received by: Schumitz, Matt Date/Time Received: Friday, September 21, 2018 10:00 AM

No. of Shipping Containers: 3

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
J8257	VC-PM365-SB02-0102-MS	09/19/18 11:32	09/20/18 16:19	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8258	VC-PM365-SB02-0102-MSD	09/19/18 11:32	09/20/18 16:20	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8259	VC-PM365-DW01-0918	09/19/18 11:10	09/20/18 16:20	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8260	VC-PM365-DW02-0918	09/19/18 12:10	09/20/18 16:21	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8261	VC-PM365-DW02P-0918	09/19/18 12:18	09/20/18 16:21	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8262	VC-PM365-DW03-0918	09/19/18 11:10	09/20/18 16:22	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8263	VC-PM553-SS01-000H	09/19/18 13:50	09/20/18 16:22	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8264	VC-PM553-SB01-0102	09/19/18 13:53	09/20/18 16:23	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8265	VC-PM553-SB01-0506	09/19/18 13:59	09/20/18 16:23	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8266	VC-PM553-SS02-000H	09/19/18 14:40	09/20/18 16:23	1	SS	0.9	NA	NA	NA	R0119 (NA)			
J8267	VC-PM553-SB02-0102	09/19/18 14:42	09/20/18 16:24	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8268	VC-PM553-SB02-0506	09/19/18 14:50	09/20/18 16:24	1	SB	0.9	NA	NA	NA	R0119 (NA)			
J8269	VC-PM553-SS03-000H	09/19/18 11:30	09/20/18 16:24	1	SS	0.3	NA	NA	NA	R0119 (NA)			
J8270	VC-PM553-SB03-0102	09/19/18 11:34	09/20/18 16:24	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8271	VC-PM553-SB03-0506	09/19/18 11:42	09/20/18 16:25	1	SB	0.3	NA	NA	NA	R0119 (NA)			
J8272	VC-PM553-DW01-0918	09/19/18 14:30	09/20/18 16:26	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8273	VC-PM553-DW01P-0918	09/19/18 14:45	09/20/18 16:26	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8274	VC-PM553-DW02-0918	09/19/18 15:15	09/20/18 16:27	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8275	VC-PM553-DW03-0918	09/19/18 12:06	09/20/18 16:28	2	GW	0.1	NA	NA	NA	R0119 (NA)			
J8276	VC-SO-FB02-0918	09/19/18 14:35	09/20/18 16:29	2	AQ	0.9	NA	NA	NA	R0119 (NA)			
J8277	VC-SO-EB02-0918	09/19/18 14:30	09/20/18 16:30	2	AQ	0.9	NA	NA	NA	R0119 (NA)			

Total Samples: 77

MEMORANDUM

CH2MHILL

Corrections to COCs

TO: Jonathan Thorn, Battelle

COPIES: File
Laboratory Package SDG: SHP 180921-01

FROM: Tiffany Hill
Project Chemist

DATE: September 24, 2018

This memo is to document corrections made to entries on the Chains of Custody (COC) and Logins for NB Ventura County, CTO-4164.

The corrections include changes to the sample IDs on the COC and Login:

Sample ID on Login	Correct Sample ID	Date Collected	Time Collected	SDG
FDT-AQ-FB01-0918	VC-AQ-FB01-0918	9/18/18	13:30	SHP-180921
FDT-AQ-EB01-0918	VC-AQ-EB01-0918	9/18/18	13:40	SHP-180921
FDT-SO-FB02-0918	VC-SO-FB02-0918	9/19/18	14:35	SHP-180921
FDT-SO-EB02-0918	VC-SO-EB02-0918	9/19/18	14:30	SHP-180921
VC-PM3009-SS02-000H	VC-PM3009-SS02-000H	9/17/18	15:12	SHP-180921
VC-PM3009-SB02-O102	VC-PM3009-SB02-0102	9/17/18	15:13	SHP-180921
VC-PM3009-SB02-O506	VC-PM3009-SB02-0506	9/17/18	15:15	SHP-180921
VC-PM3009-SS03-000H	VC-PM3009-SS03-000H	9/17/18	16:16	SHP-180921
VC-PM3009-SB03-O102	VC-PM3009-SB03-0102	9/17/18	16:17	SHP-180921
VC-PM3009-SB03-O506	VC-PM3009-SB03-0506	9/17/18	16:18	SHP-180921
VC-PM3009-DW01-0919	VC-PM3009-DW01-0918	9/17/18	15:10	SHP-180921
VC-PM3009-DW02-0919	VC-PM3009-DW02-0918	9/17/18	16:23	SHP-180921
VC-PM3009-DW02P-0919	VC-PM3009-DW02P-0918	9/17/18	16:27	SHP-180921
VC-PM365-DW01-0919	VC-PM365-DW01-0918	9/19/18	11:10	SHP-180921
VC-PM365-DW02-0919	VC-PM365-DW02-0918	9/19/18	12:10	SHP-180921
VC-PM365-DW02P-0919	VC-PM365-DW02P-0918	9/19/18	12:18	SHP-180921

VC-PM365-DW03-0919	VC-PM365-DW03-0918	9/19/18	11:10	SHP-180921
VC-PM553-DW01-0919	VC-PM553-DW01-0918	9/19/18	14:30	SHP-180921
VC-PM553-DW01P-0919	VC-PM553-DW01P-0918	9/19/18	14:45	SHP-180921
VC-PM553-DW02-0919	VC-PM553-DW02-0918	9/19/18	15:15	SHP-180921
VC-PM553-DW03-0919	VC-PM553-DW03-0918	9/19/18	12:06	SHP-180921

 Chain-of-Custody							
Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Killbert Phone: (724) 977-3628 Email: victoria.killbert@jacobs.com Turnaround Time (TAT) Requested:		Sampling Site: Hecrod PM 3009		Site Information:	
Project Name: NBVC Basewide SI Project No.: 695803		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/> Time Zone: PST		Preservative: NA Analysis: PFAS by Method 537 Mod		COC # 1 Page# 1 of 12	
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.		
VC-PM3009-SS01-000H	J8201	09.17.18 14:15	Grab	SS	1	X	
VC-PM3009-SB01-0102	02	09.17.18 14:15	Grab	SB	1	X	
VC-PM3009-SB01-0506	03	09.17.18 14:15	Grab	SB	1	X	
VC-PM3009-SS02-000H	04	09.17.18 15:12	Grab	SS	1	X	
VC-PM3009-SB02-0102	05	09.17.18 15:13	Grab	SB	1	X	
VC-PM3009-SB02-0506	06	09.17.18 15:15	Grab	SB	1	X	
VC-PM3009-SS03-000H	07	09.17.18 16:16	Grab	SS	1	X	
VC-PM3009-SB03-0102	08	09.17.18 16:17	Grab	SB	1	X	
VC-PM3009-SB03-0506	J8209	09.17.18 16:18	Grab	SB	1	X	
VC-PM3009-SD01-000H			Grab	SD		X	
VC-PM3009-SD01-0102			Grab	SD		X	
VC-PM3009-S			Grab			X	
Receipt Temperature: (°C)		Samples Intact: Yes - No		Samples on Ice: Yes - No		Receipt Comments:	
Relinquished by (Print/Sign): Deandra Puss Deane		Company: JACOBS Date/Time: 9/20/2018 07:30		Received by (Print/Sign): [Signature]		Company: Battelle Date/Time: 9-21-18 945	
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):	
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):	
Comments:							



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): <u>Victoria Gilbert</u> Phone: <u>(724) 977-3628</u> Email: <u>Victoria.Gilbert@jacobs.com</u> Turnaround Time (TAT) Requested:				Sampling Site: <u>Mugu PM 3009</u>		Site Information:							
Project Name: NBVC Basewide SI Project No.: <u>695903</u>		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/> Time Zone: <u>PST</u>				Preservative NA		COC # <u>1</u>							
Project No.: <u>695903</u>		Analysis PFAS by Method 517 Mod				Page# <u>2 of 12</u>									
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.									
VC-PM3009-DW01-	<u>0918 J 8210</u>	<u>9/17/18</u>	<u>15:10</u>	Grab	GW	<u>2</u>	X								
VC-PM3009-DW02-	<u>0918 J 8211</u>	<u>9/17/18</u>	<u>16:23</u>	Grab	GW	<u>2</u>	X								
VC-PM3009-DW02F	<u>0918 J 8212</u>	<u>9/17/18</u>	<u>16:27</u>	Grab	GW	<u>2</u>	X								
VC-PM3009-DW03-	<u>0918 J 8213</u>	<u>9/17/18</u>	<u>16:38</u>	Grab	GW	<u>2</u>	X								
EDT AQ FB				Grab	AQ		X								
PDT AQ EB				Grab	AQ		X								
Receipt Temperature: (°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No				Receipt Comments:					
Relinquished by (Print/Sign): <u>Deandra Cass/Deandra</u>		Company: <u>Jacobs</u>		Date/Time: <u>09/20/2018 07:30</u>		Received by (Print/Sign): <u>Mj</u>		Company: <u>Battelle</u>		Date/Time: <u>9-21-18 9:45</u>					
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:					
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:					
Comments:															

		Chain-of-Custody													
Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:				Sampling Site: MUGL PM 372			Site Information:						
Project Name: NBVC Basewide SI Project No.: 1595003		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/> Time Zone: PST				Preservative NA			COC # 1						
Sample Identification		Sample Date		Sample Time		Sample Type	Matrix	Total # of Cont.	Analysis PFAS by Method 537 Mod				Page# 3 of 12		
VC-PM13-GW21						Grab	GW	2	X						
VC-PM372-DW01-0918 J8214		9/18/18		10:07		Grab	GW	2	X						
VC-PM372-DW02-0918 J8215		9/18/18		09:25		Grab	GW	2	X						
VC-PM372-DW02P-0918 J8216		9/18/18		09:27		Grab	GW	2	X						
VC-PM372-DW03-0918 J8217		9/18/18		11:49		Grab	GW	2	X						
FDE-AQ-FB						Grab	AQ		X						
FDE-AQ-FB						Grab	AQ		X						
													(VLO)		
Receipt Temperature: (°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No				Receipt Comments:					
Relinquished by (Print/Sign): Deandra Cass / Deandra		Company: Jacobs		Date/Time: 9/20/2018 07:30		Received by (Print/Sign): [Signature]		Company: Battelle		Date/Time: 9-21-18 945					
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:					
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:					
Comments:															



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.Kilbert@jacobs.com				Sampling Site: Mugh PM 372				Site Information:																																																																
Project Name: NBVC Basewide SI Project No.: 695003		Turnaround Time (TAT) Requested: Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/> Time Zone: PST				Preservative NA Analysis PFAS by Method 537 Mod				COC # 1																																																																
Sample Identification		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type</th> <th>Matrix</th> <th>Total # of Cont.</th> </tr> </thead> <tbody> <tr><td>9/18/18</td><td>09:36</td><td>Grab</td><td>SS</td><td>1</td></tr> <tr><td>9/18/18</td><td>09:37</td><td>Grab</td><td>SB</td><td>1</td></tr> <tr><td>9/18/18</td><td>09:43</td><td>Grab</td><td>SB</td><td>1</td></tr> <tr><td>9/18/18</td><td>08:57</td><td>Grab</td><td>SS</td><td>1</td></tr> <tr><td>9/18/18</td><td>09:03</td><td>Grab</td><td>SB</td><td>1</td></tr> <tr><td>9/18/18</td><td>09:06</td><td>Grab</td><td>SB</td><td>1</td></tr> <tr><td>9/18/18</td><td>10:46</td><td>Grab</td><td>SS</td><td>1</td></tr> <tr><td>9/18/18</td><td>10:47</td><td>Grab</td><td>SB</td><td>1</td></tr> <tr><td>9/18/18</td><td>10:49</td><td>Grab</td><td>SB</td><td>1</td></tr> <tr><td>9/18/18</td><td></td><td>Grab</td><td>SD</td><td></td></tr> <tr><td>9/18/18</td><td></td><td>Grab</td><td>SD</td><td></td></tr> <tr><td>9/18/18</td><td>09:06</td><td>Grab</td><td>SS</td><td>1</td></tr> </tbody> </table>								Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	9/18/18	09:36	Grab	SS	1	9/18/18	09:37	Grab	SB	1	9/18/18	09:43	Grab	SB	1	9/18/18	08:57	Grab	SS	1	9/18/18	09:03	Grab	SB	1	9/18/18	09:06	Grab	SB	1	9/18/18	10:46	Grab	SS	1	9/18/18	10:47	Grab	SB	1	9/18/18	10:49	Grab	SB	1	9/18/18		Grab	SD		9/18/18		Grab	SD		9/18/18	09:06	Grab	SS	1
Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.																																																																						
9/18/18	09:36	Grab	SS	1																																																																						
9/18/18	09:37	Grab	SB	1																																																																						
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9/18/18	08:57	Grab	SS	1																																																																						
9/18/18	09:03	Grab	SB	1																																																																						
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9/18/18		Grab	SD																																																																							
9/18/18		Grab	SD																																																																							
9/18/18	09:06	Grab	SS	1																																																																						
Receipt Temperature: (°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No				Receipt Comments:																																																																
Relinquished by (Print/Sign): Deandra Cass Leandul		Company: Jacobs		Date/Time: 9/20/2018 07:30		Received by (Print/Sign): MS		Company: Battelle		Date/Time: 9-21-18 945																																																																
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:																																																																
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:																																																																
Comments:																																																																										

J8227



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis				Sampling Site: MUGH DM 312		Site Information:			
Project Name: NBVC Basewide SI		Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.Kilbert@jacobs.com				Preservative NA		COC # 1			
Project No.: 695803		Turnaround Time (TAT) Requested: Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/>									
Sample Identification		Time Zone: PST		Analysis PFAS by Method 517 Mod		PFAS by Method 517 Mod		Page# 5 of 12			
		Sample Date	Sample Time	Sample Type	Matrix						
18228 VC-PM372-S 502 - 000 H -SD		9/18/18	09:00	Grab	SS	1	X				
FDT-SO-1B				Grab	AQ		X				
FDT-SO-EB				Grab	AQ		X				
Receipt Temperature:(°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No				Receipt Comments:	
Relinquished by (Print/Sign): Deandra Ross		Company: Jacobs		Date/Time: 9/20/2018 07:30		Received by (Print/Sign): MS		Company: Battelle		Date/Time: 9-21-18 945	
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:	
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:	
Comments:											

		Chain-of-Custody																							
Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbert Phone: (721) 977-3628 Email: Victoria.kilbert@jacobs.com				Sampling Site: Mygu PM 649			Site Information:																
Project Name: NBVC Basewide SI Project No.: 645803		Turnaround Time (TAT) Requested: Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/>				Preservative NA			COC # 1																
Sample Identification		Time Zone: PST				Analysis PFAS by Method 537 Mod			Page# 6 of 12																
Sample ID	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VC-PM649-SS01-000H	J8229	9/18/18	11:30	Grab	SS	1	X																		
VC-PM649-SB01-0102	30	9/18/18	11:35	Grab	SB	1	X																		
VC-PM649-SB01-0506	31	9/18/18	11:40	Grab	SB	1	X																		
VC-PM649-SS02-000H	32	9/18/18	14:25	Grab	SS	1	X																		
VC-PM649-SB02-0102	33	9/18/18	14:29	Grab	SB	1	X																		
VC-PM649-SB02-0506	34	9/18/18	14:30	Grab	SB	1	X																		
VC-PM649-SS03-000H	35	9/18/18	13:00	Grab	SS	1	X																		
VC-PM649-SB03-0102	36	9/18/18	13:12	Grab	SB	1	X																		
VC-PM649-SB03-0506	37	9/18/18	13:20	Grab	SB	1	X																		
VC-PM649-SS04-000H	38	9/18/18	13:15	Grab	SS	1	X																		
VC-PM649-SB04-0102	39	9/18/18	13:27	Grab	SB	1	X																		
VC-PM649-SB04-0506	J8270	9/18/18	13:40	Grab	SB	1	X																		
Receipt Temperature: (°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No						Receipt Comments:													
Relinquished by (Print/Sign): Deandra Cass/Deandra		Company: JACOBS		Date/Time: 9/20/2018 07:30		Received by (Print/Sign): MS			Company: Battelle			Date/Time: 9-21-18 945													
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):			Company:			Date/Time:													
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):			Company:			Date/Time:													
Comments:																									



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:				Sampling Site: M494 PM 649		Site Information: COC # 1												
Project Name: NBVC Basewide SI Project No.: 695803		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/> Time Zone: PST				Analysis PFAS by Method 517 Mod		Page# 7 of 12												
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix			Total # of Cont.	X											
VC-PM649-DW01-0918		J8241	9/18/18	12:50	Grab	GW	2	X												
VC-PM649-DW01P-0918		J8242	9/18/18	12:55	Grab	GW	2	X												
VC-PM649-DW02-0918		J8243	9/18/18	15:35	Grab	GW	2	X												
VC-PM649-DW03-0918		J8244	9/18/18	14:02	Grab	GW	2	X												
VC-PM649-DW04-0918		J8245	9/18/18	14:02	Grab	GW	2	X												
FDT-AQ-FB-01-0918		J8246	9/18/18	13:30	Grab	AQ	2	X												
FDT-AQ-EB-01-0918		J8247	9/18/18	13:40	Grab	AQ	2	X												
Receipt Temperature: (°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No				Receipt Comments:										
Relinquished by (Print/Sign): Draucha Cass / Draucha		Company: Jacobs		Date/Time: 9/20/2018 07:30		Received by (Print/Sign): [Signature]		Company: Battelle		Date/Time: 9-21-18 945										
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:										
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:										
Comments:																				



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbuck Phone: 724-977-3628 Email: victoria.kilbuck@jacobs.com			Sampling Site: Mygan PM365J		Site Information:									
Project Name: NBVC Basewide SI Project No.: 695803		Turnaround Time (TAT) Requested: Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/> Time Zone: PST			Preservative NA		COC # 1									
Sample Identification		Analysis PFAS by Method 537 Mod										Page# 8 of 12				
Sample ID	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS										
VC-PM365-SS01-000H	9/19/18	1028	Grab	SS	1	X										
VC-PM365-SB01-0102	9/19/18	1030	Grab	SB	1	X										
VC-PM365-SB01-0506	9/19/18	1037	Grab	SB	1	X										
VC-PM365-SS02-000H	9/19/18	1130	Grab	SS	1	X										
VC-PM365-SB02-0102	9/19/18	1132	Grab	SB	1	X										
VC-PM365-SB02-0506	9/19/18	1140	Grab	SB	1	X										
VC-PM365-SS03-000H	9/19/18	1026	Grab	SS	1	X										
VC-PM365-SB03-0102	9/19/18	1027	Grab	SB	1	X										
VC-PM365-SB03-0506	9/19/18	1032	Grab	SB	1	X										
VC-PM365-SB02-0102-MS	9/19/18	1132	Grab	SB	1	X										
VC-PM365-SB02-0102-MSD	9/19/18	1132	Grab	SB	1	X										
EDT-SQ-FB			Grab	AQ		X										
Receipt Temperature: (°C)		Samples Intact: Yes - No			Samples on Ice: Yes - No			Receipt Comments:								
Relinquished by (Print/Sign): Deandra Giss/Deandra		Company: Jacobs		Date/Time: 9/20/2018 07:30		Received by (Print/Sign): MS		Company: Battelle		Date/Time: 9-21-18		945				
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:						
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:						
Comments:																

J8257
J8258



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): <u>Victoria Kilbert</u> Phone: <u>724-977-3628</u> Email: <u>victoria.kilbert@jacobs.com</u> Turnaround Time (TAT) Requested:			Sampling Site: <u>Mugu Pm 305</u>		Site Information:				
Project Name: NBVC Basewide SI		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/>			Preservation NA		COC # <u>1</u>				
Project No.: <u>695603</u>		Time Zone: <u>PST</u>									Analysis PFAS by Method 537 Mod
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.					
VC-PM365-DW01- <u>0919</u> <u>J8257</u>		<u>9/19/19</u>	<u>1110</u>	Grab	GW	<u>2</u>	X				
VC-PM365-DW02- <u>0919</u> <u>J8260</u>		<u>9/19/18</u>	<u>1210</u>	Grab	GW	<u>2</u>	X				
VC-PM365-DW02P- <u>0919</u> <u>J8261</u>		<u>9/19/18</u>	<u>1218</u>	Grab	GW	<u>2</u>	X				
VC-PM365-DW03- <u>0919</u> <u>J8262</u>		<u>9/19/18</u>	<u>1110</u>	Grab	GW	<u>2</u>	X				
PDT-AQ-FB				Grab	GW		X				
EDF-AQ-EB				Grab	GW		X				
Receipt Temperature:(°C)		Samples Intact: Yes - No			Samples on Ice: Yes - No			Receipt Comments:			
Relinquished by (Print/Sign): <u>Deandra Cass/Deandra</u>		Company: <u>JACOBS</u>		Date/Time: <u>9/20/2018 07:30</u>		Received by (Print/Sign): <u>[Signature]</u>		Company: <u>Battelle</u>		Date/Time: <u>9-21-18 945</u>	
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:	
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:	
Comments:											



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@batelle.com Turnaround Time (TAT) Requested:			Sampling Site: <i>muir pass</i>		Site Information:					
Project Name: NBVC Basewide SI Project No.: 695803		Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/> Time Zone: PST			Preservation NA		COC # 1					
Sample Identification		Analysis PFAS by Method 517 Mod					Page# 10 of 12					
Sample ID		Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.						
VC-PM553-SS01-000H <i>J8263</i>		9/19/18	1350	Grab	SS	1	X					
VC-PM553-SB01-0102 <i>64</i>		9/19/18	1353	Grab	SB	1	X					
VC-PM553-SB01-0506 <i>65</i>		9/19/18	1359	Grab	SB	1	X					
VC-PM553-SS02-000H <i>66</i>		9/19/18	1440	Grab	SS	1	X					
VC-PM553-SB02-0102 <i>67</i>		9/19/18	1442	Grab	SB	1	X					
VC-PM553-SB02-0506 <i>68</i>		9/19/18	1450	Grab	SB	1	X					
VC-PM553-SS03-000H <i>69</i>		9/19/18	1130	Grab	SS	1	X					
VC-PM553-SB03-0102 <i>70</i>		9/19/18	1134	Grab	SB	1	X					
VC-PM553-SB03-0506 <i>J8271</i>		9/19/18	1142	Grab	SB	1	X					
VC-PM553-SS04-000H				Grab	SS		X					
VC-PM553-SB04				Grab	SB		X					
VC-PM553-SB04				Grab	SB		X					
Receipt Temperature: (°C)		Samples Intact: Yes - No			Samples on Ice: Yes - No			Receipt Comments:				
Relinquished by (Print/Sign): <i>Deandra Cross/Deandra</i>		Company: <i>Jacobs</i>		Date/Time: <i>9/20/2018 07:30</i>		Received by (Print/Sign): <i>NY</i>		Company: <i>Battelle</i>		Date/Time: <i>9-21-18 945</i>		
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:		
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:		
Comments:												



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@epacobs.com				Sampling Site: M-16 RM 553		Site Information:			
Project Name: NBVC Basewide SI Project No.: 695803		Turnaround Time (TAT) Requested: Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/> Time Zone: PST				Preservative NA		COC # 1			
Sample Identification		Analysis PFAS by Method 517 Mod		Page# 11 of 12							
		Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.					
VC-PM553-GW0601A				Grab	GW	2	X				
VC-PM553-DW01- 0919 J8272		9/19/18	1430	Grab	GW	2	X				
VC-PM553-DW01P- 0919 J8273		9/19/18	1445	Grab	GW	2	X				
VC-PM553-DW02- 0919 J8274		9/19/18	1515	Grab	GW	2	X				
VC-PM553-DW03- 0919 J8275		9/19/18	1206	Grab	GW	2	X				
VC-PM553-DW04				Grab	GW		X				
EDT-AQ-FB				Grab	AQ		X				
EDT-AQ-EB				Grab	AQ		X				
										(V) P	
Receipt Temperature:(°C)		Samples Intact: Yes - No				Samples on Ice: Yes - No				Receipt Comments:	
Relinquished by (Print/Sign): Deandra Coss/Deandra		Company: Jacobs		Date/Time: 9/20/2018 07:30		Received by (Print/Sign): Ma		Company: Battelle		Date/Time: 9-21-18 945	
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:	
Relinquished by (Print/Sign):		Company:		Date/Time:		Received by (Print/Sign):		Company:		Date/Time:	
Comments:											



Chain-of-Custody

Client Contact Information Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330		Project Manager: Eric Davis Sampler Information (print name): <u>Victoria Kilbax</u> Phone: <u>724-977-3628</u> Email: <u>victoria.kilbax@jacobs.com</u>			Sampling Site: <u>Muga PM553</u>		Site Information:					
Project Name: NBVC Basewide SI Project No.: <u>695803</u>		Turnaround Time (TAT) Requested: Normal <input checked="" type="checkbox"/> Priority <input type="checkbox"/> RUSH <input type="checkbox"/> Time Zone: <u>PST</u>			Preservative NA		COC # Page# <u>12 of 12</u>					
Sample Identification		Sample Date Sample Time Sample Type Matrix Total # of Cont.										Analysis PFAS by Method 537 Mod
VC-PM553-SD01-000H VC-PM553-SD01-0102 VC-PM553-S-MS VC-PM553-S-SD FDT-SO-FB 02- <u>0919</u> <u>J8276</u> <u>9/19/18</u> <u>1435</u> Grab AQ <u>2</u> FDT-SO-EB 02- <u>0919</u> <u>J8277</u> <u>9/19/18</u> <u>1430</u> Grab AQ <u>2</u>		Sample Date Sample Time Sample Type Matrix Total # of Cont.			Analysis PFAS by Method 537 Mod							
Receipt Temperature: (°C)		Samples Intact: Yes - No					Samples on Ice: Yes - No		Receipt Comments:			
Relinquished by (Print/Sign): <u>Deandra Cass Deandeh</u>		Company: <u>Jacobs</u>	Date/Time: <u>9/20/2018 07:30</u>		Received by (Print/Sign): <u>MA</u>		Company: <u>Battelle</u>	Date/Time: <u>9-21-18 945</u>				
Relinquished by (Print/Sign):		Company:	Date/Time:		Received by (Print/Sign):		Company:	Date/Time:				
Relinquished by (Print/Sign):		Company:	Date/Time:		Received by (Print/Sign):		Company:	Date/Time:				
Comments:												

ORIGIN ID:OXRA (724) 977-3628
VICTORIA KILBERT
PROJECT #695803
402 W BROADWAY STE 1450

SAN DIEGO, CA 92101
UNITED STATES US

SHIP DATE: 20SEP18
ACTWGT: 59.30 LB
CAD: 6997666/SSFO1904
DIMS: 26x14x15 IN

BILL THIRD PARTY

ORIGIN ID:OXRA (724) 977-3628
VICTORIA KILBERT
PROJECT #695803
402 W BROADWAY STE 1450

SAN DIEGO, CA 92101
UNITED STATES US

SHIP DATE: 20SEP18
ACTWGT: 62.50 LB
CAD: 6997666/SSFO1904
DIMS: 26x14x14 IN

BILL THIRD PARTY

TO JONATHAN THORN
141 LONGWATER DR.
STE 202
NORWELL MA 02061

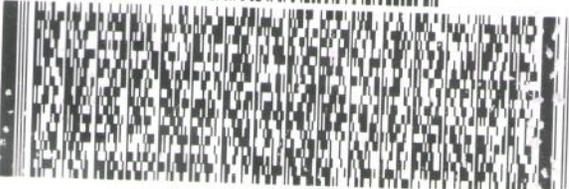
(781) 681-5565

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Therm-1

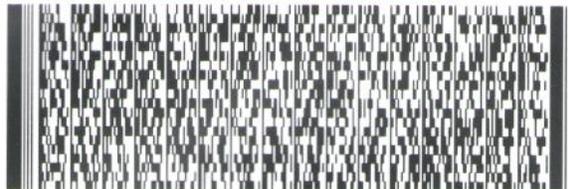
TO JONATHAN THORN
141 LONGWATER DR.
STE 202
NORWELL MA 02061

(781) 681-5565

0.9 9:45
9-21-18 MOS
Therm-1



FedEx Express



FedEx Express



1 of 3
TRK# 7828 5914 8695
MASTER

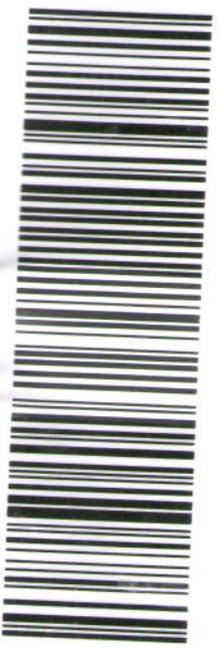
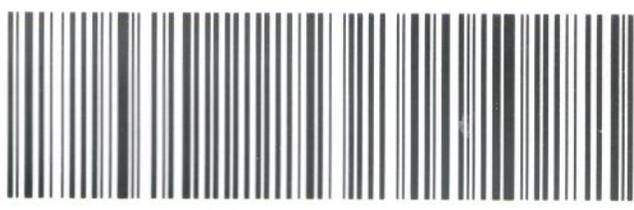
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PRIORITY OVERNIGHT
DSR
02061
MA-US BOS

XE XPUA

2 of 3
MPS# 7828 5914 8700
Mstr# 7828 5914 8695

FRI - 21 SEP 10:30A
PRIORITY OVERNIGHT
DSR
02061
MA-US BOS

XE XPUA



3 of 3
MPS# 7828 5914 8710
Mstr# 7828 5914 8695

FRI - 21 SEP 10:30A
PRIORITY OVERNIGHT
DSR
02061
MA-US BOS

0201

XE XPUA



FedEx Express

TO JONATHAN THORN
141 LONGWATER DR.
STE 202
NORWELL MA 02061

(781) 681-5565

0.3 9:45
9-21-18 MOS
Therm-1

ORIGIN ID:OXRA (724) 977-3628
VICTORIA KILBERT
PROJECT #695803
402 W BROADWAY STE 1450
SAN DIEGO, CA 92101
UNITED STATES US

SHIP DATE: 20SEP18
ACTWGT: 69.70 LB
CAD: 6997666/SSFO1904
DIMS: 26x14x14 IN
BILL THIRD PARTY



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SS01-000H				
Battelle ID	J8229-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/03/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	11.51				
Matrix	SS				
Sample Size	1.760				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	4.92 J	0.38	1.14	5.68
PFHpA	375-85-9	2.23 J	0.50	1.14	5.68
PFOA	335-67-1	5.68	0.57	1.14	5.68
PFNA	375-95-1	2.46 J	0.49	1.14	5.68
PFDA	335-76-2	2.10 J	0.31	1.14	5.68
PFUnA	2058-94-8	1.14 U	0.47	1.14	5.68
PFDaA	307-55-1	0.57 U	0.27	0.57	5.68
PFTeDA	72629-94-8	1.14 U	0.32	1.14	5.68
PFTeDA	376-06-7	2.27 U	0.72	2.27	5.68
NMeFOSAA	2355-31-9	2.84 U	1.27	2.84	5.68
NEtFOSAA	2991-50-6	2.27 U	0.65	2.27	5.68
PFBS	375-73-5	1.14 U	0.41	1.14	5.68
PFHxS	355-46-4	0.79 J	0.25	0.57	5.68
PFOS	1763-23-1	15.79	0.31	1.14	5.68

Surrogate Recoveries (%)

13C5-PFHxA	116
13C4-PFHpA	125
13C8-PFOA	115
13C9-PFNA	105
13C6-PFDA	110
13C7-PFUnA	120
13C2-PFDaA	131
13C2-PFTeDA	123
d3-MeFOSAA	76
d5-EtFOSAA	108
13C3-PFBS	119
13C3-PFHxS	112
13C8-PFOS	111



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB01-0102				
Battelle ID	J8230-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	14.47				
Matrix	SB				
Sample Size	1.710				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	8.86	0.39	1.17	5.85
PFHpA	375-85-9	2.20 J	0.51	1.17	5.85
PFOA	335-67-1	8.62	0.58	1.17	5.85
PFNA	375-95-1	2.58 J	0.50	1.17	5.85
PFDA	335-76-2	1.17 U	0.32	1.17	5.85
PFUnA	2058-94-8	1.17 U	0.48	1.17	5.85
PFDaA	307-55-1	0.58 U	0.28	0.58	5.85
PFTeDA	72629-94-8	1.17 U	0.33	1.17	5.85
PFTeDA	376-06-7	2.34 U	0.74	2.34	5.85
NMeFOSAA	2355-31-9	2.92 U	1.31	2.92	5.85
NEtFOSAA	2991-50-6	2.34 U	0.67	2.34	5.85
PFBS	375-73-5	1.17 U	0.42	1.17	5.85
PFHxS	355-46-4	0.66 J	0.26	0.58	5.85
PFOS	1763-23-1	15.77	0.32	1.17	5.85

Surrogate Recoveries (%)

13C5-PFHxA	110
13C4-PFHpA	120
13C8-PFOA	106
13C9-PFNA	109
13C6-PFDA	107
13C7-PFUnA	114
13C2-PFDaA	104
13C2-PFTeDA	104
d3-MeFOSAA	102
d5-EtFOSAA	116
13C3-PFBS	127
13C3-PFHxS	112
13C8-PFOS	108



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB01-0506				
Battelle ID	J8231-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	28.40				
Matrix	SB				
Sample Size	1.440				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	2.32 J	0.46	1.39	6.94
PFHpA	375-85-9	0.82 J	0.61	1.39	6.94
PFOA	335-67-1	2.23 J	0.69	1.39	6.94
PFNA	375-95-1	1.39 U	0.60	1.39	6.94
PFDA	335-76-2	1.39 U	0.38	1.39	6.94
PFUnA	2058-94-8	1.39 U	0.57	1.39	6.94
PFDaA	307-55-1	0.69 U	0.33	0.69	6.94
PFTeDA	72629-94-8	1.39 U	0.39	1.39	6.94
PFTeDA	376-06-7	2.78 U	0.88	2.78	6.94
NMeFOSAA	2355-31-9	3.47 U	1.56	3.47	6.94
NEtFOSAA	2991-50-6	2.78 U	0.79	2.78	6.94
PFBS	375-73-5	1.39 U	0.50	1.39	6.94
PFHxS	355-46-4	4.92 J	0.31	0.69	6.94
PFOS	1763-23-1	39.41	0.38	1.39	6.94

Surrogate Recoveries (%)

13C5-PFHxA	103
13C4-PFHpA	106
13C8-PFOA	107
13C9-PFNA	102
13C6-PFDA	113
13C7-PFUnA	114
13C2-PFDaA	105
13C2-PFTeDA	105
d3-MeFOSAA	97
d5-EtFOSAA	115
13C3-PFBS	100
13C3-PFHxS	106
13C8-PFOS	96



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SS02-000H				
Battelle ID	J8232-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	10.22				
Matrix	SS				
Sample Size	1.780				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.12 U	0.37	1.12	5.62
PFHpA	375-85-9	1.12 U	0.49	1.12	5.62
PFOA	335-67-1	1.12 U	0.56	1.12	5.62
PFNA	375-95-1	1.12 U	0.48	1.12	5.62
PFDA	335-76-2	1.12 U	0.30	1.12	5.62
PFUnA	2058-94-8	1.12 U	0.46	1.12	5.62
PFDaA	307-55-1	0.56 U	0.27	0.56	5.62
PFTeDA	72629-94-8	1.12 U	0.31	1.12	5.62
PFTeDA	376-06-7	2.25 U	0.71	2.25	5.62
NMeFOSAA	2355-31-9	2.81 U	1.26	2.81	5.62
NEtFOSAA	2991-50-6	2.25 U	0.64	2.25	5.62
PFBS	375-73-5	1.12 U	0.40	1.12	5.62
PFHxS	355-46-4	0.56 U	0.25	0.56	5.62
PFOS	1763-23-1	8.38	0.30	1.12	5.62

Surrogate Recoveries (%)

13C5-PFHxA	97
13C4-PFHpA	99
13C8-PFOA	105
13C9-PFNA	99
13C6-PFDA	104
13C7-PFUnA	107
13C2-PFDaA	99
13C2-PFTeDA	99
d3-MeFOSAA	52
d5-EtFOSAA	50
13C3-PFBS	102
13C3-PFHxS	105
13C8-PFOS	99



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB02-0102				
Battelle ID	J8233-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	8.58				
Matrix	SB				
Sample Size	1.830				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.09 U	0.36	1.09	5.46
PFHpA	375-85-9	1.09 U	0.48	1.09	5.46
PFOA	335-67-1	1.09 U	0.55	1.09	5.46
PFNA	375-95-1	1.09 U	0.47	1.09	5.46
PFDA	335-76-2	1.09 U	0.30	1.09	5.46
PFUnA	2058-94-8	1.09 U	0.45	1.09	5.46
PFDaA	307-55-1	0.55 U	0.26	0.55	5.46
PFTeDA	72629-94-8	1.09 U	0.31	1.09	5.46
PFTeDA	376-06-7	2.19 U	0.69	2.19	5.46
NMeFOSAA	2355-31-9	2.73 U	1.22	2.73	5.46
NEtFOSAA	2991-50-6	2.19 U	0.62	2.19	5.46
PFBS	375-73-5	1.09 U	0.39	1.09	5.46
PFHxS	355-46-4	0.37 J	0.24	0.55	5.46
PFOS	1763-23-1	3.62 J	0.30	1.09	5.46

Surrogate Recoveries (%)

13C5-PFHxA	88
13C4-PFHpA	91
13C8-PFOA	95
13C9-PFNA	92
13C6-PFDA	96
13C7-PFUnA	96
13C2-PFDaA	89
13C2-PFTeDA	89
d3-MeFOSAA	57
d5-EtFOSAA	73
13C3-PFBS	125
13C3-PFHxS	124
13C8-PFOS	120



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB02-0506				
Battelle ID	J8234-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	24.46				
Matrix	SB				
Sample Size	1.480				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.35 U	0.45	1.35	6.76
PFHpA	375-85-9	1.35 U	0.59	1.35	6.76
PFOA	335-67-1	1.35 U	0.68	1.35	6.76
PFNA	375-95-1	1.35 U	0.58	1.35	6.76
PFDA	335-76-2	1.35 U	0.36	1.35	6.76
PFUnA	2058-94-8	1.35 U	0.55	1.35	6.76
PFDaA	307-55-1	0.68 U	0.32	0.68	6.76
PFTeDA	72629-94-8	1.35 U	0.38	1.35	6.76
PFTeDA	376-06-7	2.70 U	0.85	2.70	6.76
NMeFOSAA	2355-31-9	3.38 U	1.51	3.38	6.76
NEtFOSAA	2991-50-6	2.70 U	0.77	2.70	6.76
PFBS	375-73-5	1.35 U	0.49	1.35	6.76
PFHxS	355-46-4	0.84 J	0.30	0.68	6.76
PFOS	1763-23-1	4.25 J	0.36	1.35	6.76

Surrogate Recoveries (%)

13C5-PFHxA	111
13C4-PFHpA	114
13C8-PFOA	121
13C9-PFNA	118
13C6-PFDA	112
13C7-PFUnA	127
13C2-PFDaA	113
13C2-PFTeDA	115
d3-MeFOSAA	93
d5-EtFOSAA	123
13C3-PFBS	113
13C3-PFHxS	112
13C8-PFOS	106



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SS03-000H				
Battelle ID	J8235-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	14.15				
Matrix	SS				
Sample Size	1.700				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.18 U	0.39	1.18	5.88
PFHpA	375-85-9	1.18 U	0.52	1.18	5.88
PFOA	335-67-1	1.18 U	0.59	1.18	5.88
PFNA	375-95-1	1.18 U	0.51	1.18	5.88
PFDA	335-76-2	1.18 U	0.32	1.18	5.88
PFUnA	2058-94-8	1.18 U	0.48	1.18	5.88
PFDaA	307-55-1	0.59 U	0.28	0.59	5.88
PFTeDA	72629-94-8	1.18 U	0.33	1.18	5.88
PFTeDA	376-06-7	2.35 U	0.74	2.35	5.88
NMeFOSAA	2355-31-9	2.94 U	1.32	2.94	5.88
NEtFOSAA	2991-50-6	2.35 U	0.67	2.35	5.88
PFBS	375-73-5	1.18 U	0.42	1.18	5.88
PFHxS	355-46-4	0.38 J	0.26	0.59	5.88
PFOS	1763-23-1	9.95	0.32	1.18	5.88

Surrogate Recoveries (%)

13C5-PFHxA	108
13C4-PFHpA	104
13C8-PFOA	107
13C9-PFNA	104
13C6-PFDA	111
13C7-PFUnA	118
13C2-PFDaA	107
13C2-PFTeDA	110
d3-MeFOSAA	87
d5-EtFOSAA	116
13C3-PFBS	108
13C3-PFHxS	107
13C8-PFOS	109



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID VC-PM649-SB03-0102

Battelle ID J8236-FS
 Sample Type SA
 Collection Date 09/18/2018
 Extraction Date 09/26/2018
 Analysis Date 10/02/2018
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture 11.27
 Matrix SB
 Sample Size 1.770
 Size Unit-Basis g
 Units ng/g_Dry MDL LOD LOQ

			MDL	LOD	LOQ
PFHxA	307-24-4	1.13 U	0.37	1.13	5.65
PFHpA	375-85-9	1.13 U	0.50	1.13	5.65
PFOA	335-67-1	1.13 U	0.56	1.13	5.65
PFNA	375-95-1	1.13 U	0.49	1.13	5.65
PFDA	335-76-2	1.13 U	0.31	1.13	5.65
PFUnA	2058-94-8	1.13 U	0.46	1.13	5.65
PFDaA	307-55-1	0.56 U	0.27	0.56	5.65
PFTeDA	72629-94-8	1.13 U	0.32	1.13	5.65
PFTeDA	376-06-7	2.26 U	0.71	2.26	5.65
NMeFOSAA	2355-31-9	2.82 U	1.27	2.82	5.65
NEtFOSAA	2991-50-6	2.26 U	0.64	2.26	5.65
PFBS	375-73-5	1.13 U	0.41	1.13	5.65
PFHxS	355-46-4	0.71 J	0.25	0.56	5.65
PFOS	1763-23-1	6.15	0.31	1.13	5.65

Surrogate Recoveries (%)

13C5-PFHxA	104
13C4-PFHpA	112
13C8-PFOA	109
13C9-PFNA	101
13C6-PFDA	108
13C7-PFUnA	116
13C2-PFDaA	103
13C2-PFTeDA	107
d3-MeFOSAA	82
d5-EtFOSAA	97
13C3-PFBS	113
13C3-PFHxS	108
13C8-PFOS	99



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB03-0506				
Battelle ID	J8237-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	18.64				
Matrix	SB				
Sample Size	1.680				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	3.08 J	0.39	1.19	5.95
PFHpA	375-85-9	0.79 J	0.52	1.19	5.95
PFOA	335-67-1	0.77 J	0.60	1.19	5.95
PFNA	375-95-1	1.19 U	0.51	1.19	5.95
PFDA	335-76-2	1.19 U	0.32	1.19	5.95
PFUnA	2058-94-8	1.19 U	0.49	1.19	5.95
PFDaA	307-55-1	0.60 U	0.29	0.60	5.95
PFTeDA	72629-94-8	1.19 U	0.33	1.19	5.95
PFTeDA	376-06-7	2.38 U	0.75	2.38	5.95
NMeFOSAA	2355-31-9	2.98 U	1.33	2.98	5.95
NEtFOSAA	2991-50-6	2.38 U	0.68	2.38	5.95
PFBS	375-73-5	1.59 J	0.43	1.19	5.95
PFHxS	355-46-4	2.56 J	0.26	0.60	5.95
PFOS	1763-23-1	25.99	0.32	1.19	5.95

Surrogate Recoveries (%)

13C5-PFHxA	85
13C4-PFHpA	92
13C8-PFOA	95
13C9-PFNA	91
13C6-PFDA	96
13C7-PFUnA	109
13C2-PFDaA	95
13C2-PFTeDA	98
d3-MeFOSAA	93
d5-EtFOSAA	97
13C3-PFBS	94
13C3-PFHxS	94
13C8-PFOS	89



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SS04-000H				
Battelle ID	J8238-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	1.84				
Matrix	SS				
Sample Size	1.960				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.75 J	0.34	1.02	5.10
PFHpA	375-85-9	1.02 U	0.45	1.02	5.10
PFOA	335-67-1	1.02 U	0.51	1.02	5.10
PFNA	375-95-1	1.02 U	0.44	1.02	5.10
PFDA	335-76-2	1.02 U	0.28	1.02	5.10
PFUnA	2058-94-8	1.02 U	0.42	1.02	5.10
PFDaA	307-55-1	0.51 U	0.24	0.51	5.10
PFTeDA	72629-94-8	1.02 U	0.29	1.02	5.10
PFTeDA	376-06-7	2.04 U	0.64	2.04	5.10
NMeFOSAA	2355-31-9	2.55 U	1.14	2.55	5.10
NEtFOSAA	2991-50-6	2.04 U	0.58	2.04	5.10
PFBS	375-73-5	1.02 U	0.37	1.02	5.10
PFHxS	355-46-4	1.08 J	0.22	0.51	5.10
PFOS	1763-23-1	16.66	0.28	1.02	5.10

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	100
13C8-PFOA	104
13C9-PFNA	101
13C6-PFDA	110
13C7-PFUnA	117
13C2-PFDaA	107
13C2-PFTeDA	102
d3-MeFOSAA	95
d5-EtFOSAA	127
13C3-PFBS	115
13C3-PFHxS	111
13C8-PFOS	105



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB04-0102				
Battelle ID	J8239-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/03/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	7.02				
Matrix	SB				
Sample Size	1.900				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.05 U	0.35	1.05	5.26
PFHpA	375-85-9	1.05 U	0.46	1.05	5.26
PFOA	335-67-1	1.05 U	0.53	1.05	5.26
PFNA	375-95-1	1.05 U	0.45	1.05	5.26
PFDA	335-76-2	1.05 U	0.28	1.05	5.26
PFUnA	2058-94-8	1.05 U	0.43	1.05	5.26
PFDaA	307-55-1	0.53 U	0.25	0.53	5.26
PFTeDA	72629-94-8	1.05 U	0.29	1.05	5.26
PFTeDA	376-06-7	2.11 U	0.66	2.11	5.26
NMeFOSAA	2355-31-9	2.63 U	1.18	2.63	5.26
NEtFOSAA	2991-50-6	2.11 U	0.60	2.11	5.26
PFBS	375-73-5	1.05 U	0.38	1.05	5.26
PFHxS	355-46-4	0.68 J	0.23	0.53	5.26
PFOS	1763-23-1	10.95	0.28	1.05	5.26

Surrogate Recoveries (%)

13C5-PFHxA	100
13C4-PFHpA	101
13C8-PFOA	98
13C9-PFNA	90
13C6-PFDA	88
13C7-PFUnA	88
13C2-PFDaA	91
13C2-PFTeDA	89
d3-MeFOSAA	50
d5-EtFOSAA	63
13C3-PFBS	116
13C3-PFHxS	104
13C8-PFOS	97



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB04-0506				
Battelle ID	J8240-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	19.33				
Matrix	SB				
Sample Size	1.590				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.38 J	0.42	1.26	6.29
PFHpA	375-85-9	1.26 U	0.55	1.26	6.29
PFOA	335-67-1	1.26 U	0.63	1.26	6.29
PFNA	375-95-1	1.26 U	0.54	1.26	6.29
PFDA	335-76-2	1.26 U	0.34	1.26	6.29
PFUnA	2058-94-8	1.26 U	0.52	1.26	6.29
PFDaA	307-55-1	0.63 U	0.30	0.63	6.29
PFTeDA	72629-94-8	1.26 U	0.35	1.26	6.29
PFTeDA	376-06-7	2.52 U	0.79	2.52	6.29
NMeFOSAA	2355-31-9	3.14 U	1.41	3.14	6.29
NEtFOSAA	2991-50-6	2.52 U	0.72	2.52	6.29
PFBS	375-73-5	1.26 U	0.45	1.26	6.29
PFHxS	355-46-4	1.29 J	0.28	0.63	6.29
PFOS	1763-23-1	8.36	0.34	1.26	6.29

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	103
13C8-PFOA	109
13C9-PFNA	102
13C6-PFDA	103
13C7-PFUnA	118
13C2-PFDaA	103
13C2-PFTeDA	105
d3-MeFOSAA	88
d5-EtFOSAA	100
13C3-PFBS	101
13C3-PFHxS	98
13C8-PFOS	99



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SS01-000H				
Battelle ID	J8248-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	5.69				
Matrix	SS				
Sample Size	1.910				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.25 J	0.35	1.05	5.24
PFHpA	375-85-9	1.05 U	0.46	1.05	5.24
PFOA	335-67-1	1.05 U	0.52	1.05	5.24
PFNA	375-95-1	1.05 U	0.45	1.05	5.24
PFDA	335-76-2	1.05 U	0.28	1.05	5.24
PFUnA	2058-94-8	1.05 U	0.43	1.05	5.24
PFDaA	307-55-1	0.52 U	0.25	0.52	5.24
PFTeDA	72629-94-8	1.05 U	0.29	1.05	5.24
PFTeDA	376-06-7	2.09 U	0.66	2.09	5.24
NMeFOSAA	2355-31-9	2.62 U	1.17	2.62	5.24
NEtFOSAA	2991-50-6	2.09 U	0.60	2.09	5.24
PFBS	375-73-5	0.51 J	0.38	1.05	5.24
PFHxS	355-46-4	1.59 J	0.23	0.52	5.24
PFOS	1763-23-1	5.14 J	0.28	1.05	5.24

Surrogate Recoveries (%)

13C5-PFHxA	105
13C4-PFHpA	105
13C8-PFOA	109
13C9-PFNA	107
13C6-PFDA	106
13C7-PFUnA	111
13C2-PFDaA	111
13C2-PFTeDA	105
d3-MeFOSAA	97
d5-EtFOSAA	107
13C3-PFBS	112
13C3-PFHxS	108
13C8-PFOS	117



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SB01-0102				
Battelle ID	J8249-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	6.15				
Matrix	SB				
Sample Size	1.860				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.00 J	0.35	1.08	5.38
PFHpA	375-85-9	1.08 U	0.47	1.08	5.38
PFOA	335-67-1	1.08 U	0.54	1.08	5.38
PFNA	375-95-1	1.08 U	0.46	1.08	5.38
PFDA	335-76-2	1.08 U	0.29	1.08	5.38
PFUnA	2058-94-8	1.08 U	0.44	1.08	5.38
PFDaA	307-55-1	0.54 U	0.26	0.54	5.38
PFTeDA	72629-94-8	1.08 U	0.30	1.08	5.38
PFTeDA	376-06-7	2.15 U	0.68	2.15	5.38
NMeFOSAA	2355-31-9	2.69 U	1.20	2.69	5.38
NEtFOSAA	2991-50-6	2.15 U	0.61	2.15	5.38
PFBS	375-73-5	0.39 J	0.39	1.08	5.38
PFHxS	355-46-4	2.43 J	0.24	0.54	5.38
PFOS	1763-23-1	0.40 J	0.29	1.08	5.38

Surrogate Recoveries (%)

13C5-PFHxA	108
13C4-PFHpA	111
13C8-PFOA	109
13C9-PFNA	106
13C6-PFDA	111
13C7-PFUnA	116
13C2-PFDaA	105
13C2-PFTeDA	110
d3-MeFOSAA	96
d5-EtFOSAA	121
13C3-PFBS	118
13C3-PFHxS	117
13C8-PFOS	114



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SB01-0506				
Battelle ID	J8250-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	11.53				
Matrix	SB				
Sample Size	1.780				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	0.91 J	0.37	1.12	5.62
PFHpA	375-85-9	1.12 U	0.49	1.12	5.62
PFOA	335-67-1	1.12 U	0.56	1.12	5.62
PFNA	375-95-1	1.12 U	0.48	1.12	5.62
PFDA	335-76-2	1.12 U	0.30	1.12	5.62
PFUnA	2058-94-8	1.12 U	0.46	1.12	5.62
PFDaA	307-55-1	0.56 U	0.27	0.56	5.62
PFTeDA	72629-94-8	1.12 U	0.31	1.12	5.62
PFTeDA	376-06-7	2.25 U	0.71	2.25	5.62
NMeFOSAA	2355-31-9	2.81 U	1.26	2.81	5.62
NEtFOSAA	2991-50-6	2.25 U	0.64	2.25	5.62
PFBS	375-73-5	1.12 U	0.40	1.12	5.62
PFHxS	355-46-4	1.63 J	0.25	0.56	5.62
PFOS	1763-23-1	0.31 J	0.30	1.12	5.62

Surrogate Recoveries (%)

13C5-PFHxA	103
13C4-PFHpA	99
13C8-PFOA	107
13C9-PFNA	95
13C6-PFDA	115
13C7-PFUnA	112
13C2-PFDaA	114
13C2-PFTeDA	102
d3-MeFOSAA	102
d5-EtFOSAA	122
13C3-PFBS	99
13C3-PFHxS	100
13C8-PFOS	96



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SS02-000H				
Battelle ID	J8251-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	5.14				
Matrix	SS				
Sample Size	1.930				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	43.83	0.34	1.04	5.18
PFHpA	375-85-9	10.56	0.46	1.04	5.18
PFOA	335-67-1	15.10	0.52	1.04	5.18
PFNA	375-95-1	1.04 U	0.45	1.04	5.18
PFDA	335-76-2	1.04 U	0.28	1.04	5.18
PFUnA	2058-94-8	1.04 U	0.42	1.04	5.18
PFDaA	307-55-1	0.52 U	0.25	0.52	5.18
PFTeDA	72629-94-8	1.04 U	0.29	1.04	5.18
PFTeDA	376-06-7	2.07 U	0.65	2.07	5.18
NMeFOSAA	2355-31-9	2.59 U	1.16	2.59	5.18
NEtFOSAA	2991-50-6	2.07 U	0.59	2.07	5.18
PFBS	375-73-5	17.83	0.37	1.04	5.18
PFHxS	355-46-4	110.82 D	1.14	2.59	25.91
PFOS	1763-23-1	456.33 D	1.40	5.18	25.91

Surrogate Recoveries (%)

13C5-PFHxA	97
13C4-PFHpA	101
13C8-PFOA	95
13C9-PFNA	92
13C6-PFDA	94
13C7-PFUnA	97
13C2-PFDaA	95
13C2-PFTeDA	90
d3-MeFOSAA	83
d5-EtFOSAA	98
13C3-PFBS	137
13C3-PFHxS	128
13C8-PFOS	110



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SB02-0102				
Battelle ID	J8252-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/03/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	6.47				
Matrix	SB				
Sample Size	1.890				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	27.91	0.35	1.06	5.29
PFHpA	375-85-9	4.27 J	0.47	1.06	5.29
PFOA	335-67-1	3.83 J	0.53	1.06	5.29
PFNA	375-95-1	1.06 U	0.46	1.06	5.29
PFDA	335-76-2	1.06 U	0.29	1.06	5.29
PFUnA	2058-94-8	1.06 U	0.43	1.06	5.29
PFDaA	307-55-1	0.53 U	0.25	0.53	5.29
PFTeDA	72629-94-8	1.06 U	0.30	1.06	5.29
PFTeDA	376-06-7	2.12 U	0.67	2.12	5.29
NMeFOSAA	2355-31-9	2.65 U	1.19	2.65	5.29
NEtFOSAA	2991-50-6	2.12 U	0.60	2.12	5.29
PFBS	375-73-5	28.51	0.38	1.06	5.29
PFHxS	355-46-4	48.05	0.23	0.53	5.29
PFOS	1763-23-1	480.02 D	7.14	26.46	132.28

Surrogate Recoveries (%)

13C5-PFHxA	112
13C4-PFHpA	121
13C8-PFOA	108
13C9-PFNA	92
13C6-PFDA	108
13C7-PFUnA	97
13C2-PFDaA	102
13C2-PFTeDA	99
d3-MeFOSAA	126
d5-EtFOSAA	128
13C3-PFBS	150
13C3-PFHxS	130
13C8-PFOS	112



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SB02-0506				
Battelle ID	J8253-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	3.78				
Matrix	SB				
Sample Size	1.900				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	4.95 J	0.35	1.05	5.26
PFHpA	375-85-9	0.89 J	0.46	1.05	5.26
PFOA	335-67-1	5.69	0.53	1.05	5.26
PFNA	375-95-1	1.05 U	0.45	1.05	5.26
PFDA	335-76-2	1.05 U	0.28	1.05	5.26
PFUnA	2058-94-8	1.05 U	0.43	1.05	5.26
PFDaA	307-55-1	0.53 U	0.25	0.53	5.26
PFTeDA	72629-94-8	1.05 U	0.29	1.05	5.26
PFTeDA	376-06-7	2.11 U	0.66	2.11	5.26
NMeFOSAA	2355-31-9	2.63 U	1.18	2.63	5.26
NEtFOSAA	2991-50-6	2.11 U	0.60	2.11	5.26
PFBS	375-73-5	3.99 J	0.38	1.05	5.26
PFHxS	355-46-4	26.72	0.23	0.53	5.26
PFOS	1763-23-1	66.69	0.28	1.05	5.26

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	94
13C8-PFOA	104
13C9-PFNA	106
13C6-PFDA	110
13C7-PFUnA	117
13C2-PFDaA	104
13C2-PFTeDA	106
d3-MeFOSAA	99
d5-EtFOSAA	135
13C3-PFBS	93
13C3-PFHxS	107
13C8-PFOS	97



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	KB35 IB				
Battelle ID	KB35 IB_10/02/2018 (13:47)				
Sample Type	IB				
Collection Date	NA				
Extraction Date	NA				
Analysis Date	10/2/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	Solid				
Sample Size	2.00				
Size Unit-Basis	g				
Units	ng/g_Dry				
			MDL	LOD	LOQ
PFHxA	307-24-4	1.00 U	0.33	1.00	5.00
PFHpA	375-85-9	1.00 U	0.44	1.00	5.00
PFOA	335-67-1	1.00 U	0.50	1.00	5.00
PFNA	375-95-1	1.00 U	0.43	1.00	5.00
PFDA	335-76-2	1.00 U	0.27	1.00	5.00
PFUnA	2058-94-8	1.00 U	0.41	1.00	5.00
PFDoA	307-55-1	0.50 U	0.24	0.50	5.00
PFTeDA	72629-94-8	1.00 U	0.28	1.00	5.00
PFTeDA	376-06-7	2.00 U	0.63	2.00	5.00
NMeFOSAA	2355-31-9	2.50 U	1.12	2.50	5.00
NEtFOSAA	2991-50-6	2.00 U	0.57	2.00	5.00
PFBS	375-73-5	1.00 U	0.36	1.00	5.00
PFHxS	355-46-4	0.50 U	0.22	0.50	5.00
PFOS	1763-23-1	1.00 U	0.27	1.00	5.00

Surrogate Recoveries (%)

13C5-PFHxA	93
13C4-PFHpA	95
13C8-PFOA	105
13C9-PFNA	103
13C6-PFDA	103
13C7-PFUnA	104
13C2-PFDoA	94
13C2-PFTeDA	92
d3-MeFOSAA	90
d5-EtFOSAA	108
13C3-PFBS	92
13C3-PFHxS	98
13C8-PFOS	92



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	KB35 IB				
Battelle ID	KB35 IB_10/02/2018 (21:45)				
Sample Type	IB				
Collection Date	NA				
Extraction Date	NA				
Analysis Date	10/2/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	Solid				
Sample Size	2.00				
Size Unit-Basis	g				
Units	ng/g_Dry				
			MDL	LOD	LOQ
PFHxA	307-24-4	1.00 U	0.33	1.00	5.00
PFHpA	375-85-9	1.00 U	0.44	1.00	5.00
PFOA	335-67-1	1.00 U	0.50	1.00	5.00
PFNA	375-95-1	1.00 U	0.43	1.00	5.00
PFDA	335-76-2	1.00 U	0.27	1.00	5.00
PFUnA	2058-94-8	1.00 U	0.41	1.00	5.00
PFDaA	307-55-1	0.50 U	0.24	0.50	5.00
PFTrDA	72629-94-8	1.00 U	0.28	1.00	5.00
PFTeDA	376-06-7	2.00 U	0.63	2.00	5.00
NMeFOSAA	2355-31-9	2.50 U	1.12	2.50	5.00
NEtFOSAA	2991-50-6	2.00 U	0.57	2.00	5.00
PFBS	375-73-5	1.00 U	0.36	1.00	5.00
PFHxS	355-46-4	0.50 U	0.22	0.50	5.00
PFOS	1763-23-1	1.00 U	0.27	1.00	5.00

Surrogate Recoveries (%)

13C5-PFHxA	96
13C4-PFHpA	94
13C8-PFOA	104
13C9-PFNA	93
13C6-PFDA	98
13C7-PFUnA	100
13C2-PFDaA	97
13C2-PFTeDA	96
d3-MeFOSAA	102
d5-EtFOSAA	104
13C3-PFBS	94
13C3-PFHxS	101
13C8-PFOS	93



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	KB35 IB				
Battelle ID	KB35 IB_10/03/2018				
Sample Type	IB				
Collection Date	NA				
Extraction Date	NA				
Analysis Date	10/03/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	Solid				
Sample Size	2.00				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.00 U	0.33	1.00	5.00
PFHpA	375-85-9	1.00 U	0.44	1.00	5.00
PFOA	335-67-1	1.00 U	0.50	1.00	5.00
PFNA	375-95-1	1.00 U	0.43	1.00	5.00
PFDA	335-76-2	1.00 U	0.27	1.00	5.00
PFUnA	2058-94-8	1.00 U	0.41	1.00	5.00
PFDaA	307-55-1	0.50 U	0.24	0.50	5.00
PFTeDA	72629-94-8	1.00 U	0.28	1.00	5.00
PFTeDA	376-06-7	2.00 U	0.63	2.00	5.00
NMeFOSAA	2355-31-9	2.50 U	1.12	2.50	5.00
NEtFOSAA	2991-50-6	2.00 U	0.57	2.00	5.00
PFBS	375-73-5	1.00 U	0.36	1.00	5.00
PFHxS	355-46-4	0.50 U	0.22	0.50	5.00
PFOS	1763-23-1	1.00 U	0.27	1.00	5.00

Surrogate Recoveries (%)

13C5-PFHxA	107
13C4-PFHpA	114
13C8-PFOA	108
13C9-PFNA	98
13C6-PFDA	105
13C7-PFUnA	86
13C2-PFDaA	95
13C2-PFTeDA	94
d3-MeFOSAA	79
d5-EtFOSAA	85
13C3-PFBS	105
13C3-PFHxS	101
13C8-PFOS	108



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID 180507-02: Ottawa Sand

Battelle ID CR851PB-FS
 Sample Type PB
 Collection Date 09/26/2018
 Extraction Date 09/26/2018
 Analysis Date 10/02/2018
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture 0.00
 Matrix SEDIMENT
 Sample Size 2.010
 Size Unit-Basis g
 Units ng/g_Dry MDL LOD LOQ

			MDL	LOD	LOQ
PFHxA	307-24-4	1.00 U	0.33	1.00	4.98
PFHpA	375-85-9	1.00 U	0.44	1.00	4.98
PFOA	335-67-1	1.00 U	0.50	1.00	4.98
PFNA	375-95-1	1.00 U	0.43	1.00	4.98
PFDA	335-76-2	1.00 U	0.27	1.00	4.98
PFUnA	2058-94-8	1.00 U	0.41	1.00	4.98
PFDoA	307-55-1	0.50 U	0.24	0.50	4.98
PFTeDA	72629-94-8	1.00 U	0.28	1.00	4.98
PFTeDA	376-06-7	1.99 U	0.63	1.99	4.98
NMeFOSAA	2355-31-9	2.49 U	1.11	2.49	4.98
NEtFOSAA	2991-50-6	1.99 U	0.57	1.99	4.98
PFBS	375-73-5	1.00 U	0.36	1.00	4.98
PFHxS	355-46-4	0.50 U	0.22	0.50	4.98
PFOS	1763-23-1	1.00 U	0.27	1.00	4.98

Surrogate Recoveries (%)

13C5-PFHxA	110
13C4-PFHpA	117
13C8-PFOA	112
13C9-PFNA	105
13C6-PFDA	124
13C7-PFUnA	114
13C2-PFDoA	117
13C2-PFTeDA	117
d3-MeFOSAA	118
d5-EtFOSAA	123
13C3-PFBS	109
13C3-PFHxS	112
13C8-PFOS	111



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID 180507-02: Ottawa Sand

Battelle ID	CR852LCS-FS					
Sample Type	LCS					
Collection Date	09/26/2018					
Extraction Date	09/26/2018					
Analysis Date	10/02/2018					
Analytical Instrument	Sciex 5500 LC/MS/MS					
% Moisture	0.00					
Matrix	SEDIMENT					
Sample Size	1.980					
Size Unit-Basis	g					
Units	ng/g_Dry	Target	Recovery	Qual	Control Limits	Upper
PFHxA	307-24-4	41.68	40.81	102	45	135
PFHpA	375-85-9	40.06	40.40	99	60	128
PFOA	335-67-1	38.02	40.40	94	56	136
PFNA	375-95-1	36.85	40.40	91	54	130
PFDA	335-76-2	37.11	40.40	92	55	141
PFUnA	2058-94-8	39.56	40.40	98	57	137
PFDoA	307-55-1	37.95	40.40	94	62	134
PFTTrDA	72629-94-8	39.52	40.40	98	51	127
PFTeDA	376-06-7	39.76	40.40	98	34	162
NMeFOSAA	2355-31-9	46.40	40.40	115	52	146
NEtFOSAA	2991-50-6	41.86	40.40	104	54	124
PFBS	375-73-5	38.32	40.81	94	57	145
PFHxS	355-46-4	40.12	40.81	98	52	132
PFOS	1763-23-1	37.76	40.40	93	50	130

Surrogate Recoveries (%)

13C5-PFHxA	110
13C4-PFHpA	112
13C8-PFOA	115
13C9-PFNA	115
13C6-PFDA	115
13C7-PFUnA	117
13C2-PFDoA	121
13C2-PFTeDA	119
d3-MeFOSAA	110
d5-EtFOSAA	125
13C3-PFBS	136
13C3-PFHxS	123
13C8-PFOS	123



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID		VC-PM365-SB02-0102	VC-PM365-SB02-0102-MS					
Battelle ID		J8252-FS	J8257MS-FS					
Sample Type		SA	MS					
Collection Date		09/19/2018	09/19/2018					
Extraction Date		09/26/2018	09/26/2018					
Analysis Date		10/03/2018	10/03/2018					
Analytical Instrument		Sciex 5500 LC/MS/MS	Sciex 5500 LC/MS/MS					
% Moisture		6.47	5.70					
Matrix		SB	SB					
Sample Size		1.890	1.910					
Size Unit-Basis		g	g	Control Limits				
Units		ng/g_Dry	ng/g_Dry	Target	Recovery	Qual	Lower	Upper
PFHxA	307-24-4	27.91	103.57 D	84.61	89		45	135
PFHpA	375-85-9	4.27 J	83.52	83.77	95		60	128
PFOA	335-67-1	3.83 J	80.46	83.77	91		56	136
PFNA	375-95-1	1.06 U	74.28	83.77	89		54	130
PFDA	335-76-2	1.06 U	75.80	83.77	90		55	141
PFUnA	2058-94-8	1.06 U	78.74	83.77	94		57	137
PFDoA	307-55-1	0.53 U	79.71	83.77	95		62	134
PFTrDA	72629-94-8	1.06 U	75.26	83.77	90		51	127
PFTeDA	376-06-7	2.12 U	75.31	83.77	90		34	162
NMeFOSAA	2355-31-9	2.65 U	77.26	83.77	92		52	146
NEtFOSAA	2991-50-6	2.12 U	74.22	83.77	89		54	124
PFBS	375-73-5	28.51	103.30 D	84.61	88		57	145
PFHxS	355-46-4	48.05	140.11 D	84.61	109		52	132
PFOS	1763-23-1	480.02 D	681.06 D	83.77	240	N	50	130
Surrogate Recoveries (%)								
13C5-PFHxA		112	138					
13C4-PFHpA		121	133					
13C8-PFOA		108	115					
13C9-PFNA		92	100					
13C6-PFDA		108	109					
13C7-PFUnA		97	102					
13C2-PFDoA		102	116					
13C2-PFTeDA		99	127					
d3-MeFOSAA		126	131					
d5-EtFOSAA		128	108					
13C3-PFBS		150	148					
13C3-PFHxS		130	135					
13C8-PFOS		112	97					



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID VC-PM365-SB02-0102-MSD

Battelle ID J8258MSD-FS
 Sample Type MSD
 Collection Date 09/19/2018
 Extraction Date 09/26/2018
 Analysis Date 10/02/2018
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture 12.10
 Matrix SB
 Sample Size 1.760
 Size Unit-Basis g

Units	ng/g_Dry	Target	Recovery	Qual	Lower	Upper	RPD	Qual	RPD	Limit
PFHxA	307-24-4	101.25	91.82	80	45	135	10.7			≤ 30
PFHpA	375-85-9	87.98	90.91	92	60	128	3.2			≤ 30
PFOA	335-67-1	87.25	90.91	92	56	136	1.1			≤ 30
PFNA	375-95-1	84.89	90.91	93	54	130	4.4			≤ 30
PFDA	335-76-2	80.81	90.91	89	55	141	1.1			≤ 30
PFUnA	2058-94-8	77.95	90.91	86	57	137	8.9			≤ 30
PFDoA	307-55-1	83.98	90.91	92	62	134	3.2			≤ 30
PFTDA	72629-94-8	82.52	90.91	91	51	127	1.1			≤ 30
PFTeDA	376-06-7	82.98	90.91	91	34	162	1.1			≤ 30
NMeFOSAA	2355-31-9	97.99	90.91	108	52	146	16.0			≤ 30
NEtFOSAA	2991-50-6	93.40	90.91	103	54	124	14.6			≤ 30
PFBS	375-73-5	103.00	91.82	81	57	145	8.3			≤ 30
PFHxS	355-46-4	122.08 D	91.82	81	52	132	29.5			≤ 30
PFOS	1763-23-1	663.25 D	90.91	202	N	50	130	17.2		≤ 30

Surrogate Recoveries (%)

13C5-PFHxA	106
13C4-PFHpA	108
13C8-PFOA	102
13C9-PFNA	90
13C6-PFDA	94
13C7-PFUnA	111
13C2-PFDoA	106
13C2-PFTeDA	113
d3-MeFOSAA	143
d5-EtFOSAA	147
13C3-PFBS	135
13C3-PFHxS	129
13C8-PFOS	108



Glossary of Data Qualifiers

Flag: Application:

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

Miscellaneous Documentation

QA/QC Summary
Batch 18-0570

Project:	CTO-4164 Naval Base Ventura County, California
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	SS, SB
Data Set:	DP-18-0278
Analytical SOP:	5-369
Method Reference:	PFAS to QSM 5.1 Table B-15

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
9/18-19/2018	9/21/2018	0.1, 0.9, and 0.3
Corrective Actions	None, however, clarifications were provided via email by the client (included in the final custody records).	
Sample Storage	The samples were stored refrigerated until extraction.	
Related samples	NA	

METHOD SUMMARIES	
Sample Preparation	Solid samples were aliquoted into extraction tubes and spiked with surrogates prior to the addition of solvent. The sediment was serially extracted on the Geno/Grinder with 0.4% NH ₃ in methanol. 1 mL of extract was refined using ENVI-carb SPE cartridges. Extracts were concentrated to dryness under nitrogen with a water bath set between 35 °C and 45 °C, reconstituted with 80:20 methanol/water (V/V) and fortified with internal standard. Extracts were transferred for LC-MS/MS analysis.
Prep comments	Sample J8231-FS (VC-PM649-SB01-0506), J8233-FS (VC-PM649-SB02-0102), J8235-FS (VC-PM649-SS03-000H), J8236-FS (VC-PM649-SB03-0102), J8248-FS (VC-PM365-SS01-000H) were very rocky in consistency. Sample J8231-FS (VC-PM649-SB01-0506) also contained shells and twigs.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/g concentrations.
Analysis Comments	<p>Samples analyzed on Sciex 5500 LC-MS/MS.</p> <p>The ion ratio for the following samples were above the 50% RPD criteria:</p> <ul style="list-style-type: none"> • PFOA in sample VC-PM365-SS02-000H extract J8251-FS(3) <p>The initial injection for sample extracts J8229-FS(3), J8239-FS(3), J8253-FS(3) and J8257MS-FS(3) all had bad injections on the instrument that were evident in the IS and SIS results. A fresh aliquot of each sample was taken and run against a freshly aliquoted calibration curve on the instrument. The quant reports from the original run of these samples can be found in the unused data section of this data package.</p>

QA/QC Summary
Batch 18-0570

Holding Times	Extraction Date(s)	Analysis Date(s)
	9/26/2018	10/2-3/2018
Procedural Blank (PB)	A PB was prepared with this analytical batch to ensure the sample extraction and analysis methods are free of contamination.	
≤ ½ the LOQ Samples >10x PB	No exceedances noted.	
	No comments.	
Laboratory Control Spike (LCS)	A LCS was prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy.	
Laboratory derived control limits for recovery	No exceedances noted.	
	No comments.	
Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A MS/MSD was prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy.	
Laboratory derived control limits for recovery and <30% RPD	2 exceedances noted.	
	PFOS failed high in both the MS/MSD, the concentration of PFOS in the background sample was 5x higher than the amount fortified into the MS/MSD samples.	
Extracted Internal Standard Analytes	Labelled analog compounds were added prior to extraction. The recoveries are calculated to measure extraction efficiency.	
50-150% of true value	No exceedances noted.	
	No comments.	
Internal Standard Analytes	Labelled analog compounds were added prior to analysis.	
+/- 50% of the area of the L5 calibration point.	No exceedances noted.	
	L6 is used to evaluate the IS Areas for the SIS method since the L1 was dropped from the calibration.	
Initial Calibration (ICAL)	The LC-MS/MS was calibrated with multi-level calibration curve for all compounds using linear or quadratic curve fitting.	
+/- 30% of true value, R ² ≥0.99	No exceedances noted.	
	No comments.	
Independent Calibration Check (ICC)	The independent check was run after each initial calibration to verify the calibration. This standard is from a different source than the ICAL.	
+/- 30% of true value	No exceedances noted.	
	No comments.	

**QA/QC Summary
Batch 18-0570**

Continuing Calibration Verification (CCV)	Continuing calibration standards were run at the beginning and end of 10 injections and at the end of the sequence to ensure that initial calibration is still valid.
+/- 30% of true value	No exceedances noted.
	No comments.
Instrument Blank (IB)	Immediately following the highest standard analyzed and daily prior to sample analysis.
$\leq \frac{1}{2}$ the LOQ	No exceedances noted.
	No comments.



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project Number: 100110125-01
 Preparation Batch: 18-0570
 Data Set: DP-18-0278
 Test Code: Master_369

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	0	None
Laboratory Control Sample	0	None
Matrix Spike / Matrix Spike Duplicate Recovery	2	Concentration in the background were approximately 5 times higher than the fortification amount.
Matrix Spike / Matrix Spike Duplicate Precision	0	None
Extracted Internal Standard Analytes (Surrogates)	0	None
Instrument Calibration	0	None
Instrument Blank	0	None
Independent Calibration Check	0	None
Continuing Calibration Verification	0	None



It can be done

BATTELLE - NORWELL OPERATIONS MISCELLANEOUS DOCUMENTATION FORM

Project Title:	CTO-4164 Naval Base Ventura County,	Data Set Number:	DP-18-0278
Project Number:	100110125-01	Prep Batch Number:	18-0570
Entered By:	Denise Schumitz	Entered On:	10/05/2018
Test Code (Matrix Type):	Master_369(S)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE). DMS 10/5/2018

KA86 is not being used in both the SIS method and the BASE method. There is no impact on the data once this point is removed from the calibration.
DMS 10/5/2018

The ion ratio for the following samples were above the 50% RPD criteria:
- PFOA in sample J8251-FS(3).
DMS 10/5/2018

L6 is used to evaluate the IS Areas for the SIS method since the L1 was dropped from the calibration. DMS 10/15/2018

Samples J8229(3), J8239(3), J8253(3) and J8257MS(3) all had bad injection on the instrument that were evident in the IS and SIS results. A fresh aliquot of each sample was taken and run against a freshly aliquoted calibration curve on the instrument. The quant reports from the original run of these samples can be found in the unused data section of this data package.
DMS 10/5/2018

Task Leader Approval:

Supervisor Approval:

PM Approval:

Digitally signed by Jonathan Thorn
Date: 2018.10.06 17:21:38 -04'00'



Example Calculation for PFAS

Calculation of final concentration from area:

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

Where:

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

Sample ID: J8235-FS(3)
 Client Sample ID: VC-PM649-SS03-000H
 Sample Size: 1.7
 Units: g
 Dilution Factor: 10.000
 PIV (L): 0.001
 Target Analyte: PFOS
 MRM Transition: 499.0 / 80.0
 Data file: 10022018_18-0570.wiff
 Result table: 18-0570_BASE
 Area: 1,222,421.93
 IS Name: 13C8-PFOS
 IS Area: 39,536.79
 IS Amount (ng/L): 239.25
 y-intercept: -0.26213
 slope: 4.41033

$$\text{Concentration} = \frac{[(1222421.93/39536.79) - 0.26213]}{4.41033} * 239.25 * 0.001 * 10 / 1.7$$

$$\text{ng/g} = 9.95$$

*Final concentration may vary based on rounding.



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01
 Preparation Batch: 18-0570
 Data Set: DP-18-0278

		CR851PB-FS (180507-02: Ottawa Sand)	CR852LCS-FS (180507-02: Ottawa Sand)	J8257MS-FS (VC-PM365-SB02-0102-MS)	J8258MSD-FS (VC-PM365-SB02-0102-MSD)	J8229-FS (VC-PM649-SS01-000H)	J8230-FS (VC-PM649-SB01-0102)	J8231-FS (VC-PM649-SB01-0506)	J8232-FS (VC-PM649-SS02-000H)
PFHxA	307-24-4	-	L	L	L	L	L	L	-
PFHpA	375-85-9	-	L	L	L	L	L	L	-
PFOA	335-67-1	-	L	L	L	L	L	L	-
PFNA	375-95-1	-	L	L	L	L	L	-	-
PFDA	335-76-2	-	L	L	L	L	-	-	-
PFUnA	2058-94-8	-	L	L	L	-	-	-	-
PFDoA	307-55-1	-	L	L	L	-	-	-	-
PFTTrDA	72629-94-8	-	L	L	L	-	-	-	-
PFTeDA	376-06-7	-	L	L	L	-	-	-	-
NMeFOSAA	2355-31-9	-	L	L	L	-	-	-	-
NEtFOSAA	2991-50-6	-	L	L	L	-	-	-	-
PFBS	375-73-5	-	L	L	L	L	-	L	-
PFHxS	355-46-4	-	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br	-
PFOS	1763-23-1	-	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br

"L": Linear

"Br": branched

"L/Br": Linear/Branched

"-": Not detected



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01
 Preparation Batc
 Data Set: DP-18-l

	J8233-FS (VC-PM649-SB02-0102)	J8234-FS (VC-PM649-SB02-0506)	J8235-FS (VC-PM649-SS03-000H)	J8236-FS (VC-PM649-SB03-0102)	J8237-FS (VC-PM649-SB03-0506)	J8238-FS (VC-PM649-SS04-000H)	J8239-FS (VC-PM649-SB04-0102)	J8240-FS (VC-PM649-SB04-0506)
PFHxA	-	-	-	-	L	L	-	L
PFHpA	-	-	-	-	L	-	-	-
PFOA	-	-	-	-	L	-	-	-
PFNA	-	-	-	-	-	-	-	-
PFDA	-	-	-	-	-	-	-	-
PFUnA	-	-	-	-	-	-	-	-
PFDaA	-	-	-	-	-	-	-	-
PFTTrDA	-	-	-	-	-	-	-	-
PFTeDA	-	-	-	-	-	-	-	-
NMeFOSAA	-	-	-	-	-	-	-	-
NEtFOSAA	-	-	-	-	-	-	-	-
PFBS	-	-	-	-	L	-	-	-
PFHxS	L/Br							
PFOS	L/Br							

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



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01
 Preparation Batc
 Data Set: DP-18-1

	J8248-FS (VC-PM365-SS01-000H)	J8249-FS (VC-PM365-SB01-0102)	J8250-FS (VC-PM365-SB01-0506)	J8251-FS (VC-PM365-SS02-000H)	J8252-FS (VC-PM365-SB02-0102)	J8253-FS (VC-PM365-SB02-0506)
PFHxA	L	L	L	L	L	L
PFHpA	-	-	-	L	L	L
PFOA	-	-	-	L	L	L
PFNA	-	-	-	-	-	-
PFDA	-	-	-	-	-	-
PFUnA	-	-	-	-	-	-
PFDaA	-	-	-	-	-	-
PFTTrDA	-	-	-	-	-	-
PFTeDA	-	-	-	-	-	-
NMeFOSAA	-	-	-	-	-	-
NEtFOSAA	-	-	-	-	-	-
PFBS	L	L	-	L	L	L
PFHxS	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br
PFOS	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br

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

Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
KB64	L6	10/2/18 13:25	13C2-PFOA	74,025.47	37,012.74	111,038.21

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KA87	L2	10/2/18 12:42	13C2-PFOA	100,060.68	37,012.74	111,038.21	
KA88	L3	10/2/18 12:53	13C2-PFOA	87,181.02	37,012.74	111,038.21	
KB85	L4	10/2/18 13:04	13C2-PFOA	85,312.76	37,012.74	111,038.21	
KB69	L5	10/2/18 13:14	13C2-PFOA	57,777.40	37,012.74	111,038.21	
KB64	L6	10/2/18 13:25	13C2-PFOA	74,025.47	37,012.74	111,038.21	
KB65	L7	10/2/18 13:36	13C2-PFOA	92,931.38	37,012.74	111,038.21	
KB35 IB	Instrument Blank	10/2/18 13:47	13C2-PFOA	86,538.29	37,012.74	111,038.21	
KB36 ICC	ICC	10/2/18 13:58	13C2-PFOA	75,848.24	37,012.74	111,038.21	
CR851PB-FS(3)	Procedural Blank	10/2/18 14:30	13C2-PFOA	106,056.18	37,012.74	111,038.21	
CR852LCS-FS(3)	Laboratory Control Sample	10/2/18 14:41	13C2-PFOA	86,050.06	37,012.74	111,038.21	
J8229-FS(3)	VC-PM649-SS01-000H	10/2/18 14:52	13C2-PFOA	122,390.38	37,012.74	111,038.21	N
J8230-FS(3)	VC-PM649-SB01-0102	10/2/18 15:03	13C2-PFOA	96,263.24	37,012.74	111,038.21	
J8231-FS(3)	VC-PM649-SB01-0506	10/2/18 15:14	13C2-PFOA	89,910.91	37,012.74	111,038.21	
J8232-FS(3)	VC-PM649-SS02-000H	10/2/18 15:25	13C2-PFOA	90,541.04	37,012.74	111,038.21	
J8233-FS(3)	VC-PM649-SB02-0102	10/2/18 15:36	13C2-PFOA	104,890.26	37,012.74	111,038.21	
J8234-FS(3)	VC-PM649-SB02-0506	10/2/18 15:46	13C2-PFOA	93,527.03	37,012.74	111,038.21	
J8235-FS(3)	VC-PM649-SS03-000H	10/2/18 15:57	13C2-PFOA	103,553.66	37,012.74	111,038.21	
J8236-FS(3)	VC-PM649-SB03-0102	10/2/18 16:08	13C2-PFOA	103,030.12	37,012.74	111,038.21	
KB85 CCV	CCV	10/2/18 16:19	13C2-PFOA	87,132.22	37,012.74	111,038.21	
J8237-FS(3)	VC-PM649-SB03-0506	10/2/18 16:41	13C2-PFOA	93,380.42	37,012.74	111,038.21	
J8238-FS(3)	VC-PM649-SS04-000H	10/2/18 16:52	13C2-PFOA	109,337.46	37,012.74	111,038.21	
J8239-FS(3)	VC-PM649-SB04-0102	10/2/18 17:03	13C2-PFOA	120,901.95	37,012.74	111,038.21	N
J8240-FS(3)	VC-PM649-SB04-0506	10/2/18 17:13	13C2-PFOA	104,290.49	37,012.74	111,038.21	
J8248-FS(3)	VC-PM365-SS01-000H	10/2/18 17:24	13C2-PFOA	102,020.79	37,012.74	111,038.21	
J8249-FS(3)	VC-PM365-SB01-0102	10/2/18 17:35	13C2-PFOA	103,878.22	37,012.74	111,038.21	
J8250-FS(3)	VC-PM365-SB01-0506	10/2/18 17:46	13C2-PFOA	108,851.48	37,012.74	111,038.21	
J8251-FS(3)	VC-PM365-SS02-000H	10/2/18 17:57	13C2-PFOA	92,916.38	37,012.74	111,038.21	
J8251-FS-D(5)	VC-PM365-SS02-000H	10/2/18 18:08	13C2-PFOA	95,390.40	37,012.74	111,038.21	
KB69 CCV	CCV	10/2/18 18:19	13C2-PFOA	91,849.93	37,012.74	111,038.21	
J8252-FS(3)	VC-PM365-SB02-0102	10/2/18 18:40	13C2-PFOA	104,519.72	37,012.74	111,038.21	
J8252-FS-D(5)	VC-PM365-SB02-0102	10/2/18 18:51	13C2-PFOA	91,024.37	37,012.74	111,038.21	
J8253-FS(3)	VC-PM365-SB02-0506	10/2/18 19:02	13C2-PFOA	97,803.28	37,012.74	111,038.21	
J8257MS-FS(3)	VC-PM365-SB02-0102-MS	10/2/18 19:13	13C2-PFOA	95,773.88	37,012.74	111,038.21	
J8257MS-D(5)	VC-PM365-SB02-0102-MS	10/2/18 19:24	13C2-PFOA	98,802.88	37,012.74	111,038.21	
J8258MSD-FS(3)	VC-PM365-SB02-0102-MSD	10/2/18 19:35	13C2-PFOA	89,346.83	37,012.74	111,038.21	
J8258MSD-FS-D(5)	VC-PM365-SB02-0102-MSD	10/2/18 19:45	13C2-PFOA	80,291.43	37,012.74	111,038.21	
KB85 CCV	CCV	10/2/18 19:56	13C2-PFOA	93,001.63	37,012.74	111,038.21	

Project Client: CH2M

Project Name: CTO-4164 Naval Base Ventura County, California

Project No.: 100110125-01



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
KB64	L6	10/2/18 13:25	13C2-PFDA	81,926.94	40,963.47	122,890.41

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KA87	L2	10/2/18 12:42	13C2-PFDA	95,570.59	40,963.47	122,890.41	
KA88	L3	10/2/18 12:53	13C2-PFDA	98,445.72	40,963.47	122,890.41	
KB85	L4	10/2/18 13:04	13C2-PFDA	88,898.26	40,963.47	122,890.41	
KB69	L5	10/2/18 13:14	13C2-PFDA	67,442.24	40,963.47	122,890.41	
KB64	L6	10/2/18 13:25	13C2-PFDA	81,926.94	40,963.47	122,890.41	
KB65	L7	10/2/18 13:36	13C2-PFDA	104,042.34	40,963.47	122,890.41	
KB35 IB	Instrument Blank	10/2/18 13:47	13C2-PFDA	97,255.02	40,963.47	122,890.41	
KB36 ICC	ICC	10/2/18 13:58	13C2-PFDA	83,564.83	40,963.47	122,890.41	
CR851PB-FS(3)	Procedural Blank	10/2/18 14:30	13C2-PFDA	114,775.95	40,963.47	122,890.41	
CR852LCS-FS(3)	Laboratory Control Sample	10/2/18 14:41	13C2-PFDA	96,646.17	40,963.47	122,890.41	
J8229-FS(3)	VC-PM649-SS01-000H	10/2/18 14:52	13C2-PFDA	114,154.66	40,963.47	122,890.41	
J8230-FS(3)	VC-PM649-SB01-0102	10/2/18 15:03	13C2-PFDA	113,448.03	40,963.47	122,890.41	
J8231-FS(3)	VC-PM649-SB01-0506	10/2/18 15:14	13C2-PFDA	97,631.72	40,963.47	122,890.41	
J8232-FS(3)	VC-PM649-SS02-000H	10/2/18 15:25	13C2-PFDA	99,940.30	40,963.47	122,890.41	
J8233-FS(3)	VC-PM649-SB02-0102	10/2/18 15:36	13C2-PFDA	118,998.18	40,963.47	122,890.41	
J8234-FS(3)	VC-PM649-SB02-0506	10/2/18 15:46	13C2-PFDA	103,264.30	40,963.47	122,890.41	
J8235-FS(3)	VC-PM649-SS03-000H	10/2/18 15:57	13C2-PFDA	114,193.56	40,963.47	122,890.41	
J8236-FS(3)	VC-PM649-SB03-0102	10/2/18 16:08	13C2-PFDA	116,526.84	40,963.47	122,890.41	
KB85 CCV	CCV	10/2/18 16:19	13C2-PFDA	95,843.31	40,963.47	122,890.41	
J8237-FS(3)	VC-PM649-SB03-0506	10/2/18 16:41	13C2-PFDA	98,236.63	40,963.47	122,890.41	
J8238-FS(3)	VC-PM649-SS04-000H	10/2/18 16:52	13C2-PFDA	115,782.27	40,963.47	122,890.41	
J8239-FS(3)	VC-PM649-SB04-0102	10/2/18 17:03	13C2-PFDA	132,392.11	40,963.47	122,890.41	N
J8240-FS(3)	VC-PM649-SB04-0506	10/2/18 17:13	13C2-PFDA	115,953.25	40,963.47	122,890.41	
J8248-FS(3)	VC-PM365-SS01-000H	10/2/18 17:24	13C2-PFDA	113,166.60	40,963.47	122,890.41	
J8249-FS(3)	VC-PM365-SB01-0102	10/2/18 17:35	13C2-PFDA	114,925.93	40,963.47	122,890.41	
J8250-FS(3)	VC-PM365-SB01-0506	10/2/18 17:46	13C2-PFDA	114,662.24	40,963.47	122,890.41	
J8251-FS(3)	VC-PM365-SS02-000H	10/2/18 17:57	13C2-PFDA	111,894.62	40,963.47	122,890.41	
J8251-FS-D(5)	VC-PM365-SS02-000H	10/2/18 18:08	13C2-PFDA	102,979.73	40,963.47	122,890.41	
KB69 CCV	CCV	10/2/18 18:19	13C2-PFDA	104,030.06	40,963.47	122,890.41	
J8252-FS(3)	VC-PM365-SB02-0102	10/2/18 18:40	13C2-PFDA	120,565.96	40,963.47	122,890.41	
J8252-FS-D(5)	VC-PM365-SB02-0102	10/2/18 18:51	13C2-PFDA	105,324.38	40,963.47	122,890.41	
J8253-FS(3)	VC-PM365-SB02-0506	10/2/18 19:02	13C2-PFDA	114,003.76	40,963.47	122,890.41	
J8257MS-FS(3)	VC-PM365-SB02-0102-MS	10/2/18 19:13	13C2-PFDA	114,895.58	40,963.47	122,890.41	
J8257MS-D(5)	VC-PM365-SB02-0102-MS	10/2/18 19:24	13C2-PFDA	112,869.09	40,963.47	122,890.41	
J8258MSD-FS(3)	VC-PM365-SB02-0102-MSD	10/2/18 19:35	13C2-PFDA	112,157.06	40,963.47	122,890.41	
J8258MSD-FS-D(5)	VC-PM365-SB02-0102-MSD	10/2/18 19:45	13C2-PFDA	89,081.69	40,963.47	122,890.41	
KB85 CCV	CCV	10/2/18 19:56	13C2-PFDA	100,993.75	40,963.47	122,890.41	

Project Client: CH2M

Project Name: CTO-4164 Naval Base Ventura County, California

Project No.: 100110125-01



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
KB64	L6	10/2/18 13:25	13C4-PFOS	28,417.54	14,208.77	42,626.31

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KA87	L2	10/2/18 12:42	13C4-PFOS	35,583.60	14,208.77	42,626.31	
KA88	L3	10/2/18 12:53	13C4-PFOS	33,491.53	14,208.77	42,626.31	
KB85	L4	10/2/18 13:04	13C4-PFOS	28,606.91	14,208.77	42,626.31	
KB69	L5	10/2/18 13:14	13C4-PFOS	19,437.56	14,208.77	42,626.31	
KB64	L6	10/2/18 13:25	13C4-PFOS	28,417.54	14,208.77	42,626.31	
KB65	L7	10/2/18 13:36	13C4-PFOS	31,309.72	14,208.77	42,626.31	
KB35 IB	Instrument Blank	10/2/18 13:47	13C4-PFOS	32,709.48	14,208.77	42,626.31	
KB36 ICC	ICC	10/2/18 13:58	13C4-PFOS	26,399.80	14,208.77	42,626.31	
CR851PB-FS(3)	Procedural Blank	10/2/18 14:30	13C4-PFOS	38,933.10	14,208.77	42,626.31	
CR852LCS-FS(3)	Laboratory Control Sample	10/2/18 14:41	13C4-PFOS	28,998.30	14,208.77	42,626.31	
J8229-FS(3)	VC-PM649-SS01-000H	10/2/18 14:52	13C4-PFOS	43,210.62	14,208.77	42,626.31	N
J8230-FS(3)	VC-PM649-SB01-0102	10/2/18 15:03	13C4-PFOS	32,406.83	14,208.77	42,626.31	
J8231-FS(3)	VC-PM649-SB01-0506	10/2/18 15:14	13C4-PFOS	32,712.56	14,208.77	42,626.31	
J8232-FS(3)	VC-PM649-SS02-000H	10/2/18 15:25	13C4-PFOS	32,236.27	14,208.77	42,626.31	
J8233-FS(3)	VC-PM649-SB02-0102	10/2/18 15:36	13C4-PFOS	31,581.74	14,208.77	42,626.31	
J8234-FS(3)	VC-PM649-SB02-0506	10/2/18 15:46	13C4-PFOS	34,700.63	14,208.77	42,626.31	
J8235-FS(3)	VC-PM649-SS03-000H	10/2/18 15:57	13C4-PFOS	36,325.22	14,208.77	42,626.31	
J8236-FS(3)	VC-PM649-SB03-0102	10/2/18 16:08	13C4-PFOS	37,573.18	14,208.77	42,626.31	
KB85 CCV	CCV	10/2/18 16:19	13C4-PFOS	29,858.89	14,208.77	42,626.31	
J8237-FS(3)	VC-PM649-SB03-0506	10/2/18 16:41	13C4-PFOS	31,781.28	14,208.77	42,626.31	
J8238-FS(3)	VC-PM649-SS04-000H	10/2/18 16:52	13C4-PFOS	36,107.87	14,208.77	42,626.31	
J8239-FS(3)	VC-PM649-SB04-0102	10/2/18 17:03	13C4-PFOS	44,403.67	14,208.77	42,626.31	N
J8240-FS(3)	VC-PM649-SB04-0506	10/2/18 17:13	13C4-PFOS	38,458.56	14,208.77	42,626.31	
J8248-FS(3)	VC-PM365-SS01-000H	10/2/18 17:24	13C4-PFOS	34,467.38	14,208.77	42,626.31	
J8249-FS(3)	VC-PM365-SB01-0102	10/2/18 17:35	13C4-PFOS	34,052.86	14,208.77	42,626.31	
J8250-FS(3)	VC-PM365-SB01-0506	10/2/18 17:46	13C4-PFOS	37,424.41	14,208.77	42,626.31	
J8251-FS(3)	VC-PM365-SS02-000H	10/2/18 17:57	13C4-PFOS	28,008.98	14,208.77	42,626.31	
J8251-FS-D(5)	VC-PM365-SS02-000H	10/2/18 18:08	13C4-PFOS	29,781.26	14,208.77	42,626.31	
KB69 CCV	CCV	10/2/18 18:19	13C4-PFOS	33,276.11	14,208.77	42,626.31	
J8252-FS(3)	VC-PM365-SB02-0102	10/2/18 18:40	13C4-PFOS	25,105.20	14,208.77	42,626.31	
J8252-FS-D(5)	VC-PM365-SB02-0102	10/2/18 18:51	13C4-PFOS	27,709.74	14,208.77	42,626.31	
J8253-FS(3)	VC-PM365-SB02-0506	10/2/18 19:02	13C4-PFOS	35,652.15	14,208.77	42,626.31	
J8257MS-FS(3)	VC-PM365-SB02-0102-MS	10/2/18 19:13	13C4-PFOS	27,798.65	14,208.77	42,626.31	
J8257MS-D(5)	VC-PM365-SB02-0102-MS	10/2/18 19:24	13C4-PFOS	33,062.40	14,208.77	42,626.31	
J8258MSD-FS(3)	VC-PM365-SB02-0102-MSD	10/2/18 19:35	13C4-PFOS	26,477.88	14,208.77	42,626.31	
J8258MSD-FS-D(5)	VC-PM365-SB02-0102-MSD	10/2/18 19:45	13C4-PFOS	26,392.26	14,208.77	42,626.31	
KB85 CCV	CCV	10/2/18 19:56	13C4-PFOS	32,800.55	14,208.77	42,626.31	

Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
KB69	L5	10/2/18 21:12	13C2-PFOA	87,666.86	43,833.43	131,500.29

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KA86	L1	10/2/18 20:29	13C2-PFOA	86,508.05	43,833.43	131,500.29	
KA87	L2	10/2/18 20:40	13C2-PFOA	92,232.15	43,833.43	131,500.29	
KA88	L3	10/2/18 20:51	13C2-PFOA	92,713.17	43,833.43	131,500.29	
KB85	L4	10/2/18 21:02	13C2-PFOA	93,478.25	43,833.43	131,500.29	
KB69	L5	10/2/18 21:12	13C2-PFOA	87,666.86	43,833.43	131,500.29	
KB64	L6	10/2/18 21:23	13C2-PFOA	79,822.03	43,833.43	131,500.29	
KB65	L7	10/2/18 21:34	13C2-PFOA	85,385.75	43,833.43	131,500.29	
KB35 IB	Instrument Blank	10/2/18 21:45	13C2-PFOA	85,462.81	43,833.43	131,500.29	
KB36 ICC	ICC	10/2/18 21:56	13C2-PFOA	82,611.52	43,833.43	131,500.29	
KA88 ISC	Instrument Sensitivity Check	10/3/18 15:57	13C2-PFOA	94,823.08	43,833.43	131,500.29	
KB35 IB	Instrument Blank	10/3/18 16:08	13C2-PFOA	90,829.29	43,833.43	131,500.29	
KB69 CCV	CCV	10/3/18 17:24	13C2-PFOA	95,253.31	43,833.43	131,500.29	
J8252-FS(3)	VC-PM365-SB02-0102	10/3/18 17:45	13C2-PFOA	99,138.38	43,833.43	131,500.29	
J8252-FS-D(7)	VC-PM365-SB02-0102	10/3/18 17:56	13C2-PFOA	81,777.85	43,833.43	131,500.29	
J8257MS-FS(3)	VC-PM365-SB02-0102-MS	10/3/18 18:07	13C2-PFOA	84,663.48	43,833.43	131,500.29	
J8229-FS(3)	VC-PM649-SS01-000H	10/3/18 18:18	13C2-PFOA	80,423.76	43,833.43	131,500.29	
J8239-FS(3)	VC-PM649-SB04-0102	10/3/18 18:29	13C2-PFOA	99,494.34	43,833.43	131,500.29	
KB85 CCV	CCV	10/3/18 18:51	13C2-PFOA	79,676.34	43,833.43	131,500.29	

Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
KB69	L5	10/2/18 21:12	13C2-PFDA	111,005.28	55,502.64	166,507.92

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KA86	L1	10/2/18 20:29	13C2-PFDA	97,981.25	55,502.64	166,507.92	
KA87	L2	10/2/18 20:40	13C2-PFDA	109,800.44	55,502.64	166,507.92	
KA88	L3	10/2/18 20:51	13C2-PFDA	108,731.85	55,502.64	166,507.92	
KB85	L4	10/2/18 21:02	13C2-PFDA	102,202.45	55,502.64	166,507.92	
KB69	L5	10/2/18 21:12	13C2-PFDA	111,005.28	55,502.64	166,507.92	
KB64	L6	10/2/18 21:23	13C2-PFDA	92,879.31	55,502.64	166,507.92	
KB65	L7	10/2/18 21:34	13C2-PFDA	101,908.02	55,502.64	166,507.92	
KB35 IB	Instrument Blank	10/2/18 21:45	13C2-PFDA	95,996.97	55,502.64	166,507.92	
KB36 ICC	ICC	10/2/18 21:56	13C2-PFDA	102,089.78	55,502.64	166,507.92	
KA88 ISC	Instrument Sensitivity Check	10/3/18 15:57	13C2-PFDA	105,322.83	55,502.64	166,507.92	
KB35 IB	Instrument Blank	10/3/18 16:08	13C2-PFDA	102,173.31	55,502.64	166,507.92	
KB69 CCV	CCV	10/3/18 17:24	13C2-PFDA	98,055.52	55,502.64	166,507.92	
J8252-FS(3)	VC-PM365-SB02-0102	10/3/18 17:45	13C2-PFDA	113,468.27	55,502.64	166,507.92	
J8252-FS-D(7)	VC-PM365-SB02-0102	10/3/18 17:56	13C2-PFDA	86,049.81	55,502.64	166,507.92	
J8257MS-FS(3)	VC-PM365-SB02-0102-MS	10/3/18 18:07	13C2-PFDA	102,623.45	55,502.64	166,507.92	
J8229-FS(3)	VC-PM649-SS01-000H	10/3/18 18:18	13C2-PFDA	78,499.80	55,502.64	166,507.92	
J8239-FS(3)	VC-PM649-SB04-0102	10/3/18 18:29	13C2-PFDA	115,347.81	55,502.64	166,507.92	
KB85 CCV	CCV	10/3/18 18:51	13C2-PFDA	90,853.96	55,502.64	166,507.92	

Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
KB69	L5	10/2/18 21:12	13C4-PFOS	31,119.81	15,559.91	46,679.72

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KA86	L1	10/2/18 20:29	13C4-PFOS	28,375.99	15,559.91	46,679.72	
KA87	L2	10/2/18 20:40	13C4-PFOS	26,984.45	15,559.91	46,679.72	
KA88	L3	10/2/18 20:51	13C4-PFOS	32,849.86	15,559.91	46,679.72	
KB85	L4	10/2/18 21:02	13C4-PFOS	30,017.37	15,559.91	46,679.72	
KB69	L5	10/2/18 21:12	13C4-PFOS	31,119.81	15,559.91	46,679.72	
KB64	L6	10/2/18 21:23	13C4-PFOS	25,887.81	15,559.91	46,679.72	
KB65	L7	10/2/18 21:34	13C4-PFOS	28,245.72	15,559.91	46,679.72	
KB35 IB	Instrument Blank	10/2/18 21:45	13C4-PFOS	27,620.32	15,559.91	46,679.72	
KB36 ICC	ICC	10/2/18 21:56	13C4-PFOS	29,054.61	15,559.91	46,679.72	
KA88 ISC	Instrument Sensitivity Check	10/3/18 15:57	13C4-PFOS	34,413.67	15,559.91	46,679.72	
KB35 IB	Instrument Blank	10/3/18 16:08	13C4-PFOS	29,991.29	15,559.91	46,679.72	
KB69 CCV	CCV	10/3/18 17:24	13C4-PFOS	31,842.36	15,559.91	46,679.72	
J8252-FS(3)	VC-PM365-SB02-0102	10/3/18 17:45	13C4-PFOS	25,827.53	15,559.91	46,679.72	
J8252-FS-D(7)	VC-PM365-SB02-0102	10/3/18 17:56	13C4-PFOS	24,846.73	15,559.91	46,679.72	
J8257MS-FS(3)	VC-PM365-SB02-0102-MS	10/3/18 18:07	13C4-PFOS	26,103.48	15,559.91	46,679.72	
J8229-FS(3)	VC-PM649-SS01-000H	10/3/18 18:18	13C4-PFOS	26,306.59	15,559.91	46,679.72	
J8239-FS(3)	VC-PM649-SB04-0102	10/3/18 18:29	13C4-PFOS	30,821.99	15,559.91	46,679.72	
KB85 CCV	CCV	10/3/18 18:51	13C4-PFOS	30,104.02	15,559.91	46,679.72	

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 1:36:39 PM	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.54	23	>10
PFBS_2	298.9 / 99.0	1.54	24	>10
PFHxA_1	313.0 / 269.0	1.86	24	>10
PFHxA_2	313.0 / 119.0	1.86	23	>10
PFHpA_1	363.0 / 319.0	2.27	30	>10
PFHpA_2	363.0 / 169.0	2.27	31	>10
PFHxS_1	399.0 / 80.0	2.29	53	>10
PFHxS_2	399.0 / 99.0	2.29	57	>10
PFOA_1	413.0 / 369.0	2.68	38	>10
PFOA_2	413.0 / 169.0	2.68	38	>10
PFNA_1	463.0 / 419.0	3.08	30	>10
PFNA_2	463.0 / 219.0	3.08	40	>10
PFOS_1	499.0 / 80.0	3.08	40	>10
PFOS_2	499.0 / 99.0	3.08	49	>10
PFDA_1	513.0 / 469.0	3.44	47	>10
PFDA_2	513.0 / 219.0	3.44	47	>10
PFUnA_1	563.0 / 519.0	3.76	65	>10
PFUnA_2	563.0 / 269.0	3.76	35	>10
PFDoA_1	613.0 / 569.0	4.05	67	>10
PFDoA_2	613.0 / 319.0	4.05	67	>10
PFTTrDA_1	663.0 / 619.0	4.29	70	>10
PFTTrDA_2	663.0 / 169.0	4.29	56	>10
PFTeDA_1	713.0 / 669.0	4.51	95	>10
PFTeDA_2	713.0 / 169.0	4.51	60	>10
NMeFOSAA_1	570.0 / 419.0	3.59	40	>10
NMeFOSAA_2	570.0 / 512.0	3.59	41	>10
NEtFOSAA_1	584.0 / 419.0	3.76	48	>10
NEtFOSAA_2	584.0 / 483.0	3.76	36	>10

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 1:36:39 PM	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C2-PFDoA	615.0 / 570.0	4.03	38	>10
d3-MeFOSAA	573.0 / 419.0	3.59	25	>10
d5-EtFOSAA	589.0 / 419.0	3.75	21	>10
13C5-PFHxA	318.0 / 273.0	1.85	38	>10
13C4-PFHpA	367.0 / 322.0	2.26	43	>10
13C8-PFOA	421.0 / 376.0	2.67	41	>10
13C9-PFNA	472.0 / 427.0	3.07	23	>10
13C6-PFDA	519.0 / 474.0	3.42	33	>10
13C7-PFUnA	570.0 / 525.0	3.75	30	>10
13C2-PFTeDA	715.0 / 670.0	4.50	37	>10
13C3-PFBS	302.0 / 99.0	1.53	26	>10
13C3-PFHxS	402.0 / 99.0	2.28	22	>10
13C8-PFOS	507.0 / 99.0	3.06	29	>10

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 9:34:34 PM	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.53	24	>10
PFBS_2	298.9 / 99.0	1.53	24	>10
PFHxA_1	313.0 / 269.0	1.85	24	>10
PFHxA_2	313.0 / 119.0	1.85	23	>10
PFHpA_1	363.0 / 319.0	2.26	30	>10
PFHpA_2	363.0 / 169.0	2.26	35	>10
PFHxS_1	399.0 / 80.0	2.28	35	>10
PFHxS_2	399.0 / 99.0	2.28	45	>10
PFOA_1	413.0 / 369.0	2.67	36	>10
PFOA_2	413.0 / 169.0	2.66	41	>10
PFNA_1	463.0 / 419.0	3.06	30	>10
PFNA_2	463.0 / 219.0	3.06	42	>10
PFOS_1	499.0 / 80.0	3.06	40	>10
PFOS_2	499.0 / 99.0	3.06	38	>10
PFDA_1	513.0 / 469.0	3.42	52	>10
PFDA_2	513.0 / 219.0	3.42	47	>10
PFUnA_1	563.0 / 519.0	3.73	60	>10
PFUnA_2	563.0 / 269.0	3.73	51	>10
PFDoA_1	613.0 / 569.0	4.01	67	>10
PFDoA_2	613.0 / 319.0	4.01	71	>10
PFTTrDA_1	663.0 / 619.0	4.26	94	>10
PFTTrDA_2	663.0 / 169.0	4.26	43	>10
PFTeDA_1	713.0 / 669.0	4.47	109	>10
PFTeDA_2	713.0 / 169.0	4.47	62	>10
NMeFOSAA_1	570.0 / 419.0	3.57	44	>10
NMeFOSAA_2	570.0 / 512.0	3.57	38	>10
NEtFOSAA_1	584.0 / 419.0	3.73	48	>10
NEtFOSAA_2	584.0 / 483.0	3.73	24	>10

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 9:34:34 PM	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C2-PFDoA	615.0 / 570.0	4.00	30	>10
d3-MeFOSAA	573.0 / 419.0	3.56	29	>10
d5-EtFOSAA	589.0 / 419.0	3.72	24	>10
13C5-PFHxA	318.0 / 273.0	1.84	34	>10
13C4-PFHpA	367.0 / 322.0	2.24	49	>10
13C8-PFOA	421.0 / 376.0	2.66	36	>10
13C9-PFNA	472.0 / 427.0	3.05	26	>10
13C6-PFDA	519.0 / 474.0	3.40	41	>10
13C7-PFUnA	570.0 / 525.0	3.72	35	>10
13C2-PFTeDA	715.0 / 670.0	4.47	48	>10
13C3-PFBS	302.0 / 99.0	1.52	31	>10
13C3-PFHxS	402.0 / 99.0	2.27	35	>10
13C8-PFOS	507.0 / 99.0	3.05	33	>10



Precision and Bias at the LOQ for PFAS in Solids

Analyte	CAS No.	Average (ng/g)	ST DEV	2 Sigma	n
PFBA	375-22-4	11.08	1.57	3.14	20
PFPeA	2706-90-3	10.94	1.44	2.88	20
PFHxA	307-24-4	11.15	2.17	4.34	24
PFHpA	375-85-9	11.15	1.9	3.8	24
PFOA	335-67-1	11.27	1.9	3.8	24
PFNA	375-95-1	10.99	1.68	3.36	24
PFDA	335-76-2	11.72	2.13	4.26	24
PFUnA	2058-94-8	11.5	1.88	3.76	24
PFDoA	307-55-1	11.61	1.58	3.16	24
PFTTrDA	72629-94-8	10.87	1.32	2.64	24
PFTeDA	376-06-7	11.92	2.25	4.5	24
NMeFOSAA	2355-31-9	11.65	1.6	3.2	24
NEtFOSAA	2991-50-6	10.73	1.5	3	24
PFOSA	754-91-6	10.75	1.63	3.26	4
PFBS	375-73-5	11.63	1.75	3.5	24
PFPeS	BDO-2114	11.67	1.22	2.44	4
PFHxS	355-46-4	11.24	1.78	3.56	24
PFHpS	375-99-6	11.05	1.68	3.36	20
PFOS	1763-23-1	10.99	1.61	3.22	24
PFNS	98789-57-2	10.67	1.01	2.02	4
PFDS	2806-15-7	11.84	2.23	4.46	20
4:2FTS	BDO-2205	12.03	1.86	3.72	20
6:2FTS	27619-97-2	12.48	1.33	2.66	12
8:2FTS	39108-34-4	12.08	2.01	4.02	20

BATTELLE DETECTION LIMITS FOR PFAS IN SOLIDS (SEDIMENT/SOIL)

Analytical SOP 5-369
Extraction SOP 5-370

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

Analyte	CAS No.	MDL (ng/g)	LOD (ng/g)	LOQ (ng/g)
PFBA	375-22-4	0.36	1.0	5.0
PFPeA	2706-90-3	0.39	1.0	5.0
PFHxA	307-24-4	0.33	1.0	5.0
PFHpA	375-85-9	0.44	1.0	5.0
PFOA	335-67-1	0.50	1.0	5.0
PFNA	375-95-1	0.43	1.0	5.0
PFDA	335-76-2	0.27	1.0	5.0
PFUnA	2058-94-8	0.41	1.0	5.0
PFDoA	307-55-1	0.24	0.5	5.0
PFTTrDA	72629-94-8	0.28	1.0	5.0
PFTeDA	376-06-7	0.63	2.0	5.0
NMeFOSAA	2355-31-9	1.12	2.5	5.0
NEtFOSAA	2991-50-6	0.57	2.0	5.0
PFOSA	754-91-6	0.39	1.0	5.0
PFBS	375-73-5	0.36	1.0	5.0
PFPeS	BDO-2114	0.57	2.0	5.0
PFHxS	355-46-4	0.22	0.5	5.0
PFHpS	375-99-6	0.34	1.0	5.0
PFOS	1763-23-1	0.27	1.0	5.0
PFNS	98789-57-2	0.74	2.0	5.0
PFDS	2806-15-7	0.19	0.5	5.0
4:2FTS	BDO-2205	0.29	1.0	5.0
6:2FTS	27619-97-2	2.31	2.5	5.0
8:2FTS	39108-34-4	0.59	2.0	5.0

Analytes on NELAP and ELAP QSM 5.1 Scope of accreditation

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

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

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

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

¹ – extracted internal standard (surrogate)

² – injection internal standard



Solids Calibration to Sample Equivalents

ICAL (ng/L)	PIV (mL)	DF ¹	Sample Size (g)	Sample Equivalent (ng/g) ²
25	1	10	2.0	0.1
50	1	10	2.0	0.3
100	1	10	2.0	0.5
250	1	10	2.0	1.3
500	1	10	2.0	2.5
1,000	1	10	2.0	5.0
2,500	1	10	2.0	12.5
10,000	1	10	2.0	50.0
20,000	1	10	2.0	100.0

¹ - base level dilution as part of the extraction procedure

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



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QTRAP 5500
LC/MS/MS Detector System
 Appendix ZEFPM003-2L

QTRAP 5500
Preventive Maintenance Checklist

Preventive Maintenance Date:	12-June-2018
Request ID:	9749
Company Name:	Battelle Memorial Institute
Instrument ID:	X60666
Instrument Model:	QTRAP 5500
Instrument Serial Number:	AU23051004

PASS **FAIL**

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

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

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

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

Performed By: _____ **Date:** _____

Approved By : _____ **Date:** _____

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QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

PRE PM PPG PERFORMANCE EVALUATION:

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

CAD Settings	Vacuum Reading (x 10 ⁻⁵ Torr)	Acceptance Criteria
<input checked="" type="checkbox"/> CAD 0	0.6	0.4 to 1.1 x10 ⁻⁵ Torr
<input checked="" type="checkbox"/> CAD Low	1.3	Read Only
<input checked="" type="checkbox"/> CAD Medium	2.7	Read Only
<input checked="" type="checkbox"/> CAD High	3.7	Read Only
<input checked="" type="checkbox"/> CAD 12	3.7	2.4 to 4.5 x10 ⁻⁵ Torr

- Check for Front end contamination symptoms. Run Q1 POS PPG using PPG 2e-7for a few minutes and check for any TIC signal degradation or huge sensitivity drop where the sensitivity result can't pass specification
 - No degradation or Sensitivity drop
- Check for Q3 contamination symptoms. Run Q3 POS PPG using PPG 2e-7for a few minutes and check for any TIC signal degradation or huge sensitivity drop where the sensitivity result can't pass specification
 - No degradation or Sensitivity drop

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

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

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

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

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

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QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

Perform MSMS POS in Product Ion scan with 609.3 parent and record daughter 195.1 using Reserpine 0.167 pmol/ul at the scan rate of 10 Da/s for 10 MCA. Calculate transmission efficiency comparing Q1POS 609 intensity. Transmission Efficiency: : 28.87% (Read Only)

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

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

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

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

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

Perform Product Ion scan using NEG PPG 3e-5M. Record 10 mca.

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

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QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

PREVENTIVE MAINTENANCE CHECKLIST:

- Check Cooling Fans for Turbo Pumps while MS is ON.
- Check QJet and QPS tuning voltage for reference.
- Record AC input Voltage while MS is OFF: _____(200-240VAC).
If Out-of-Range, notify customer.
- Clean Interface
 - Curtain Plate
 - Orifice Plate
 - QJet
 - Q0 Rods.
- Replace Roughing Pump Oil.
- Inspect Oil Exhaust Filter, if Applicable. N/A
- Clean and inspect built-in divert valve if used. N/A
- Check Multiplier Voltage, optimize if necessary.
- Replace four Air Filters at the bottom of the mass spectrometer.
- Pump down overnight if possible. N/A
- Perform Maintenance on Turbo V source.
- Replace Electrode, if necessary. N/A
- Check Turbo heaters resistances.
- Check if Temperature is reached at 500C with TIS Probe installed.
- Check if Temperature is reached at 500C with APCI Probe installed. N/A

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QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

POST PM PPG PERFORMANCE TESTS:

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

CAD Settings	Vacuum Reading (x 10 ⁻⁵ Torr)	Acceptance Criteria
<input checked="" type="checkbox"/> CAD 0	0.7	0.4 to 1.1 x10 ⁻⁵ Torr
<input checked="" type="checkbox"/> CAD Low	1.3	Read Only
<input checked="" type="checkbox"/> CAD Medium	2.7	Read Only
<input checked="" type="checkbox"/> CAD High	3.7	Read Only
<input checked="" type="checkbox"/> CAD 12	3.7	2.4 to 4.5 x10 ⁻⁵ Torr

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

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

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

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

- Perform "Product of 609.3" POS and record product ion 195.1 using Reserpine 0.167pmol/uL. Record 10 mca. Calculate Transmission efficiency comparing Q1POS 609 intensity.

Transmission Efficiency: 21.10% (≥ 10.0%)

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

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QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

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

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

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

Mass	Scan Rate	Mca	Q3 Intensity		Q3 Width Value	Width Specs
			Value	Spec		
Q3 933.636	10	10	2.15 e7	$\geq 8.0^{e6}$	0.7492	0.6 to 0.8
Q3 933.636	1000	50	8.33 e7	$\geq 4.0^{e7}$	0.7299	0.6 to 0.8

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

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

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

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

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

Mass	Fill Time (ms)	ER Intensity		ER Width Value	Width Specs
		Value	Spec		
ScanRate : 1000 Da/s ; 50 Mca					
ER 431.982	0.05	1.81 e8	$\geq 4.4^{e7}$	0.1862	<0.35
ER 601.978	0.05	1.70 e8	$\geq 5.6^{e7}$	0.1809	<0.35
ScanRate : 10000 Da/s ; 50 Mca					
ER 431.982	0.05	5.72 e8	$\geq 1.2^{e8}$	0.5102	<0.65
ER 601.978	0.05	4.52 e8	$\geq 1.6^{e8}$	0.6187	<0.65

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QTRAP 5500**LC/MS/MS Detector System**

Appendix ZEFPM003-2L

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

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

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

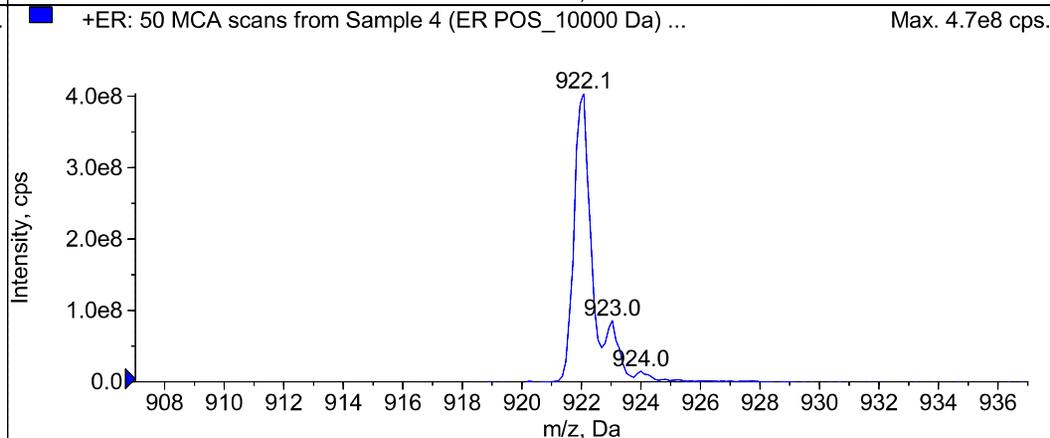
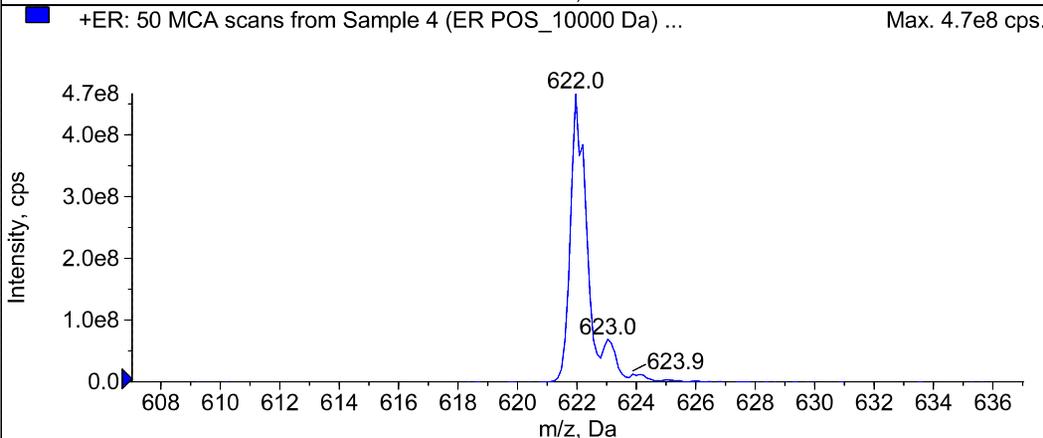
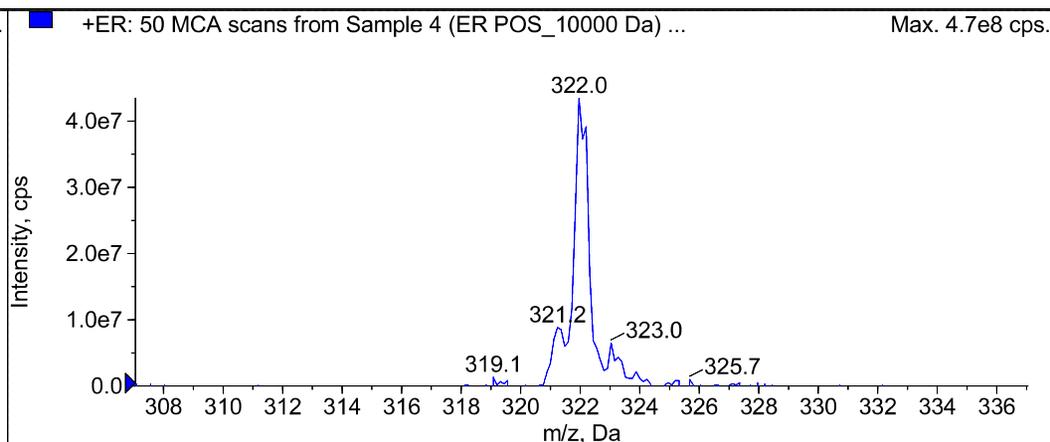
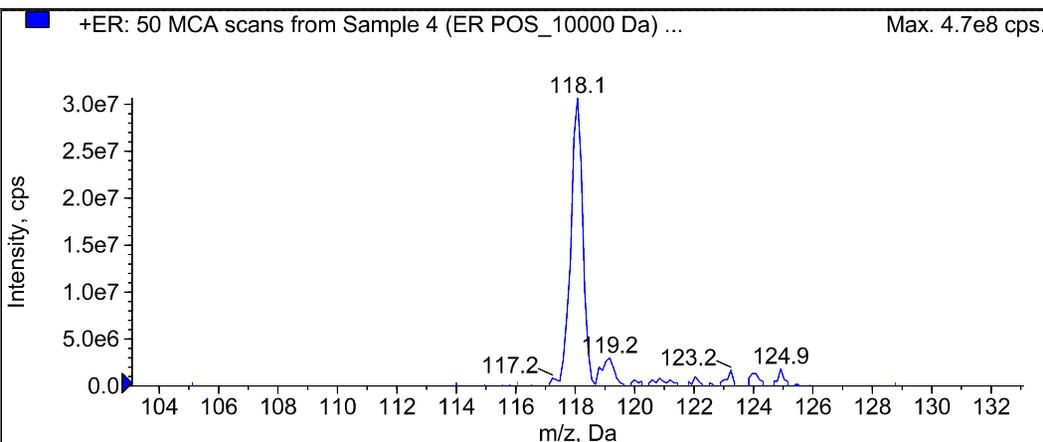
Mass	Scan Rate (Da/s)	Fragamentation OFF		Fragmentation ON	
		Intensity	Spec	Intensity	Spec
MS3 397.2	1000	Yes	Contains only 397.2	N/A	N/A
<input type="checkbox"/> 236 OR <input checked="" type="checkbox"/> 365	1000	Yes	Fragment Intensity	> 2.0 e6	≥1.6x 10 ^{e6}

REVIEW:

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

END OF PREVENTIVE MAINTENANCE CHECKLIST**Document history:**

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



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

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

Battelle Standard ID	Description	Intermediate Solutions	Battelle Reagent ID (purchased solutions)
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	-	180726-05
KA84	PFAS - DoD High Level Second Source LCS/MS Solution	-	170724-01
KB33	PFAS - DoD Low Level Labelled Extracted Internal Standards (SIS)	JY27	180726-05
KB34	PFAS - DoD Internal Standard Spiking Solution	JY25	180726-04
KA29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-02
KA29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-03
KA29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-04
KA29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-06
KA29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-07
KA86	PFAS - DoD Calibration L1	JY27	180726-05
KA86	PFAS - DoD Calibration L1	JY23	180705-02
KA86	PFAS - DoD Calibration L1	JY25	180726-04
KA87	PFAS - DoD Calibration L2	JY25	180726-04
KA87	PFAS - DoD Calibration L2	JY23	180705-02
KA87	PFAS - DoD Calibration L2	JY27	180726-05
KA88	PFAS - DoD Calibration L3	JY27	180726-05
KA88	PFAS - DoD Calibration L3	KA85	180705-02
KA88	PFAS - DoD Calibration L3	JY25	180726-04
KB85	PFAS - DoD Calibration L4	JY27	180726-05
KB85	PFAS - DoD Calibration L4	JY25	180726-04
KB85	PFAS - DoD Calibration L4	KA85	180705-02
KB69	PFAS - DoD Calibration L5	KA85	180705-02
KB69	PFAS - DoD Calibration L5	JY25	180726-04
KB69	PFAS - DoD Calibration L5	JY27	180726-05
KB64	PFAS - DoD Calibration L6	JY27	180726-05
KB64	PFAS - DoD Calibration L6	KA85	180705-02
KB64	PFAS - DoD Calibration L6	JY25	180726-04
KB65	PFAS - DoD Calibration L7	JY25	180726-04
KB65	PFAS - DoD Calibration L7	JY27	180726-05
KB65	PFAS - DoD Calibration L7	KA85	180705-02
KB36	PFAS - DoD ICC	JY25	180726-04
KB36	PFAS - DoD ICC	JY27	180726-05
KB36	PFAS - DoD ICC	JZ88	170724-01
KB35	PFAS - DoD Instrument Blank	JY27	180726-05
KB35	PFAS - DoD Instrument Blank	JY25	180726-04

It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JX28

Description: PFAS Branched Standard Stock

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
180618-02	Branched NEtFOSAA Standard (50 µg/mL)	Neat	~50.0000 00	01/17/23	---	---	100 uL	1	10	~0.5000
180618-03	Branched NMeFOSAA Standard (50 µg/mL)	Neat	~50.0000 00	01/17/23	---	---	100 uL	1	10	~0.5000
180618-04	PFOA - Technical Mix	Neat	~50.0000 00	02/16/22	---	---	100 uL	1	10	~0.5000
180618-06	Branched PFHxS Standard (50 µg/mL)	Neat	~50.0000 00	01/04/22	---	---	100 uL	1	10	~0.5000
180618-07	Branched PFOS Standard (50 µg/mL)	Neat	~50.0000 00	01/12/22	---	---	100 uL	1	10	~0.5000

Solution Prepared By: Schultz, Stephanie	Date Prepared: 6/18/2018	Expiration Date: 6/18/2019
Solution Volume 25 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Balance ID:	Solvent:	Lot:
Comment:	Methanol (HPLC)	179315

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

It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JX28

Description: PFAS Branched Standard Stock

Stock Id: 180618-02

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

Stock Id: 180618-03

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

Stock Id: 180618-04

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

Stock Id: 180618-06

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

Stock Id: 180618-07

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

Final Concentrations:

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

Syringes/Pipettes:

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

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

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

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

It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
180705-02	PFOA - DOD	Neat	~1.00000 0	06/19/23	---	---	500 uL	1	100	~0.0050

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

Balance ID: _____

Comment: 96/4 Methanol/milli-q water

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



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

Stock Id: 180705-02

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

Final Concentrations:

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

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

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

Comment: 96/4 Methanol/milli-q water

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



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

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

Syringes/Pipettes:

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

Solution Prepared By: Schultz, Stephanie	Date Prepared: 7/16/2018	Expiration Date: 7/16/2019
Solution Volume 40 mL X 4 Vials Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107		
Comment: 96/4 Methanol/milli-q water		

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

It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: **JY25**

Description: PFAS - DoD Internal Standard Stock Solution

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
180726-04	Mass-labelled PFAS injection standards	Neat	~2.00000 0	05/02/22	---	---	625 uL	1	25	~0.0500

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

Balance ID: _____

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

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



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY25

Description: PFAS - DoD Internal Standard Stock Solution

Stock ID: 180726-04

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

Final Concentrations:

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

Syringes/Pipettes:

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

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

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

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

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



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY27

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

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
180726-05	Mass-labelled PFAS Extraction Standard Solution	Neat	~1.00000 0	02/07/23	---	---	1000 uL	1	20	~0.0500

Solution Prepared By: Schultz, Stephanie

Date Prepared: 7/16/2018

Expiration Date: 7/16/2019

Solution Volume 40 mL X 1 Vials

Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Balance ID: _____

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

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY27

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

Stock Id: 180726-05

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

Final Concentrations:

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

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

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

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

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY27

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

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

Syringes/Pipettes:

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

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

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

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

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



It can be done

Standard Solution Prep Form II

Approved: Standard Laboratory ID Number: **JZ88**

Description: PFAS - DoD Second Source LCS/MS Solution

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
170724-01	PFOA- 2nd Source	Neat	~1.00000 0	03/22/22	---	---	1000 uL	1	20	~0.0500

Solution Prepared By: Schultz, Stephanie	Date Prepared: 8/20/2018	Expiration Date: 8/20/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Thorn, Jonathan Date: 8/21/2018 7:17:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **JZ88**

Description: PFAS - DoD Second Source LCS/MS Solution

Stock Id: **170724-01**

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 8/20/2018 Expiration Date: 8/20/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Thorn, Jonathan Date: 8/21/2018 7:17:00 AM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JZ88

Description: PFAS - DoD Second Source LCS/MS Solution

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
170724-01	Pipette	C0982448K

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 8/20/2018 **Expiration Date:** 8/20/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Thorn, Jonathan **Date:** 8/21/2018 7:17:00 AM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: KA29

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

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

Solution Prepared By	Schultz, Stephanie	Date Prepared:	8/31/2018	Expiration Date	6/18/2019
Solution Volume	40 mL X 1 Vials	Refrigerator/Freezer No:	LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/6/2018 2:49:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KA29**

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

Stock Id: **JX28**

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

Final Concentrations:

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JX28	Pipette	B814659662

Solution Prepared By: Schultz, Stephanie Date Prepared: 8/31/2018 Expiration Date: 6/18/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/6/2018 2:49:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: KA84

Description: PFAS - DoD High Level Second Source LCS/MS Solution

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
170724-01	PFOA- 2nd Source	Neat	~1.00000 0	03/22/22	---	---	1000 uL	1	5	~0.2000

Solution Prepared By	Schultz, Stephanie	Date Prepared:	9/12/2018	Expiration Date	9/12/2019
Solution Volume	40 mL X 1 Vials	Refrigerator/Freezer No:	LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 80/20 methanol/milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA84

Description: PFAS - DoD High Level Second Source LCS/MS Solution

Stock Id: 170724-01

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	1000	1.01	1	100.000	1	5	0.20200
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	1000	1.00	1	100.000	1	5	0.20000
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	1000	1.00	1	100.000	1	5	0.20000
(Na) Perfluoro-1-decanesulfonate	1000	1.01	1	100.000	1	5	0.20200
(NA) Perfluoro-1-heptanesulfonate	1000	1.00	1	100.000	1	5	0.20000
(Na) Perfluoro-1-nonanesulfonate	1000	1.01	1	100.000	1	5	0.20200
N-ethylperfluoro-octanesulfonamidoacetic acid	1000	1.00	1	100.000	1	5	0.20000
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	1.00	1	100.000	1	5	0.20000
Perfluoro-1-butanefulfonate	1000	1.01	1	100.000	1	5	0.20200
Perfluoro-1-hexanesulfonate	1000	1.01	1	100.000	1	5	0.20200
Perfluoro-1-octanesulfonamide	1000	1.00	1	100.000	1	5	0.20000
Perfluoro-1-octanesulfonate	1000	1.00	1	100.000	1	5	0.20000
Perfluoro-n-butanoic Acid	1000	1.00	1	100.000	1	5	0.20000
Perfluoro-n-decanoic Acid	1000	1.00	1	100.000	1	5	0.20000
Perfluoro-n-dodecanoic acid	1000	1.00	1	100.000	1	5	0.20000
Perfluoro-n-heptanoic Acid	1000	1.00	1	100.000	1	5	0.20000
Perfluoro-n-hexanoic acid	1000	1.01	1	100.000	1	5	0.20200
Perfluoro-n-octanoic Acid	1000	1.00	1	100.000	1	5	0.20000
Perfluorononanoic Acid	1000	1.00	1	100.000	1	5	0.20000
Perfluoro-n-pentanoic acid	1000	1.00	1	100.000	1	5	0.20000
Perfluoro-n-tetradecanoic acid	1000	1.00	1	100.000	1	5	0.20000
Perfluoro-n-tridecanoic acid	1000	1.00	1	100.000	1	5	0.20000
Perfluoro-n-undecanoic acid	1000	1.00	1	100.000	1	5	0.20000
Sodium perfluoro-1-pentanesulfonate	1000	1.00	1	100.000	1	5	0.20000

Final Concentrations:

Analyte:	Conc (ug/mL):
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	.20200
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	.20000
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.20000
(Na) Perfluoro-1-decanesulfonate	.20200
(NA) Perfluoro-1-heptanesulfonate	.20000
(Na) Perfluoro-1-nonanesulfonate	.20200
N-ethylperfluoro-octanesulfonamidoacetic acid	.20000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.20000
Perfluoro-1-butanefulfonate	.20200

Solution Prepared By: Schultz, Stephanie	Date Prepared: 9/12/2018	Expiration Date: 9/12/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Comment: 80/20 methanol/milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA84

Description: PFAS - DoD High Level Second Source LCS/MS Solution

Perfluoro-1-hexanesulfonate	.20200
Perfluoro-1-octanesulfonamide	.20000
Perfluoro-1-octanesulfonate	.20000
Perfluoro-n-butanoic Acid	.20000
Perfluoro-n-decanoic Acid	.20000
Perfluoro-n-dodecanoic acid	.20000
Perfluoro-n-heptanoic Acid	.20000
Perfluoro-n-hexanoic acid	.20200
Perfluoro-n-octanoic Acid	.20000
Perfluorononanoic Acid	.20000
Perfluoro-n-pentanoic acid	.20000
Perfluoro-n-tetradecanoic acid	.20000
Perfluoro-n-tridecanoic acid	.20000
Perfluoro-n-undecanoic acid	.20000

Syringes/Pipettes:

Solution Prepared By: Schultz, Stephanie	Date Prepared: 9/12/2018	Expiration Date: 9/12/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	
Comment: 80/20 methanol/milli-q water		

Approved By: Schumitz, Denise **Date:** 9/14/2018 2:27:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: KA85

Description: PFAS - DoD High ICAL Stock

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
180705-02	PFOA - DOD	Neat	~1.00000 0	06/19/23	---	---	500 uL	1	10	~0.0500

Solution Prepared By	Schultz, Stephanie	Date Prepared:	9/13/2018	Expiration Date	9/13/2019
Solution Volume	40 mL X 1 Vials	Refrigerator/Freezer No:	LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 96/4 methanol/milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA85

Description: PFAS - DoD High ICAL Stock

Stock Id: 180705-02

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie	Date Prepared: 9/13/2018	Expiration Date: 9/13/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Comment: 96/4 methanol/milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA85

Description: PFAS - DoD High ICAL Stock

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

Syringes/Pipettes:

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

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 9/13/2018 **Expiration Date:** 9/13/2019

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

Comment: 96/4 methanol/milli-q water

Approved By: Schumitz, Denise **Date:** 9/14/2018 2:27:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: KA86

Description: PFAS - DoD Calibration L1

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

Solution Prepared By	Schultz, Stephanie	Date Prepared:	9/13/2018	Expiration Date	7/16/2019
Solution Volume	40 mL X 1 Vials	Refrigerator/Freezer No:	LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 80/20 methanol/milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA86

Description: PFAS - DoD Calibration L1

Stock Id: JY23

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

Stock Id: JY25

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

Stock Id: JY27

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 9/13/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 methanol/milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA86

Description: PFAS - DoD Calibration L1

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 9/13/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 methanol/milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA86

Description: PFAS - DoD Calibration L1

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY23	Pipette	B814657482
JY25	Pipette	B814659662
JY27	Pipette	B814659662

Solution Prepared By: Schultz, Stephanie Date Prepared: 9/13/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 methanol/milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: KA87

Description: PFAS - DoD Calibration L2

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

Solution Prepared By	Schultz, Stephanie	Date Prepared:	9/13/2018	Expiration Date	7/16/2019
Solution Volume	40 mL X 1 Vials	Refrigerator/Freezer No:	LC Laboratory: Refrigerator - R0107		

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA87

Description: PFAS - DoD Calibration L2

Stock Id: JY23

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

Stock Id: JY25

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

Stock Id: JY27

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 9/13/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA87

Description: PFAS - DoD Calibration L2

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 9/13/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA87

Description: PFAS - DoD Calibration L2

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY23	Pipette	B820865811
JY25	Pipette	B814659662
JY27	Pipette	B814659662

Solution Prepared By: Schultz, Stephanie Date Prepared: 9/13/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: KA88

Description: PFAS - DoD Calibration L3

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
KA85	PFAS - DoD High ICAL Stock	Solution	~0	09/13/19	---	---	100 uL	1	10	~0.0000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By Schultz, Stephanie	Date Prepared: 9/13/2018	Expiration Date 7/16/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA88

Description: PFAS - DoD Calibration L3

Stock Id: JY25

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

Stock Id: JY27

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

Stock Id: KA85

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	100	0.05	---	---	1	10	0.00051
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	100	0.05	---	---	1	10	0.00051
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	100	0.05	---	---	1	10	0.00050
(Na) Perfluoro-1-decanesulfonate	100	0.05	---	---	1	10	0.00051
(NA) Perfluoro-1-heptanesulfonate	100	0.05	---	---	1	10	0.00050
(Na) Perfluoro-1-nonanesulfonate	100	0.05	---	---	1	10	0.00051

Solution Prepared By: Schultz, Stephanie Date Prepared: 9/13/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA88

Description: PFAS - DoD Calibration L3

N-ethylperfluoro-octanesulfonamidoacetic acid	100	0.05	---	---	1	10	0.00050
N-methylperfluoro-1-octanesulfonamidoacetic acid	100	0.05	---	---	1	10	0.00050
Perfluoro-1-butanefluoride	100	0.05	---	---	1	10	0.00051
Perfluoro-1-hexanesulfonate	100	0.05	---	---	1	10	0.00051
Perfluoro-1-octanesulfonamide	100	0.05	---	---	1	10	0.00050
Perfluoro-1-octanesulfonate	100	0.05	---	---	1	10	0.00050
Perfluoro-n-butanoic Acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-decanoic Acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-dodecanoic acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-heptanoic Acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-hexanoic acid	100	0.05	---	---	1	10	0.00051
Perfluoro-n-octanoic Acid	100	0.05	---	---	1	10	0.00050
Perfluorononanoic Acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-pentanoic acid	100	0.05	---	---	1	10	0.00051
Perfluoro-n-tetradecanoic acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-tridecanoic acid	100	0.05	---	---	1	10	0.00050
Perfluoro-n-undecanoic acid	100	0.05	---	---	1	10	0.00050
Sodium perfluoro-1-pentanesulfonate	100	0.05	---	---	1	10	0.00050

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 9/13/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/14/2018 2:27:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KA88

Description: PFAS - DoD Calibration L3

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814659662
JY27	Pipette	B814659662
KA85	Pipette	B814659662

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 9/13/2018 **Expiration Date:** 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 9/14/2018 2:27:00 PM



It can be done

Standard Solution Prep Form II

Approved: Standard Laboratory ID Number: **KB33**

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

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

Solution Prepared By Schultz, Stephanie	Date Prepared: 9/24/2018	Expiration Date 7/16/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Balance ID: _____

Comment: 96/4 Methanol/Milli-q water

Approved By: Thorn, Jonathan Date: 9/24/2018 3:46:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB33**

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

Stock Id: **JY27**

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 9/24/2018 Expiration Date: 7/16/2019

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

Comment: 96/4 Methanol/Milli-q water

Approved By: Thorn, Jonathan Date: 9/24/2018 3:46:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KB33

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

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY27	Pipette	OU16914

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 9/24/2018 **Expiration Date:** 7/16/2019

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

Comment: 96/4 Methanol/Milli-q water

Approved By: Thorn, Jonathan **Date:** 9/24/2018 3:46:00 PM



It can be done

Standard Solution Prep Form II

Approved: Standard Laboratory ID Number: **KB34**

Description: PFAS - DoD Internal Standard Spiking Solution

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

Solution Prepared By	Schultz, Stephanie	Date Prepared:	9/24/2018	Expiration Date	7/16/2019
Solution Volume	40 mL X 1 Vials	Refrigerator/Freezer No:	LC Laboratory: Refrigerator - R0107		

Balance ID: _____

 Comment:

96/4 Methanol/Milli-q water

Approved By: Thorn, Jonathan Date: 9/24/2018 3:46:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB34**

Description: PFAS - DoD Internal Standard Spiking Solution

Stock Id: **JY25**

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

Final Concentrations:

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	OU16914

Solution Prepared By: Schultz, Stephanie	Date Prepared: 9/24/2018	Expiration Date: 7/16/2019
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Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107
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Comment: 96/4 Methanol/Milli-q water

Approved By: Thorn, Jonathan Date: 9/24/2018 3:46:00 PM



It can be done

Standard Solution Prep Form II

Approved: Standard Laboratory ID Number: **KB35**

Description: PFAS - DoD Instrument Blank

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

Solution Prepared By Schultz, Stephanie	Date Prepared: 9/24/2018	Expiration Date 7/16/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: _____ Date: _____



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB35**

Description: PFAS - DoD Instrument Blank

Stock Id: JY25

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

Stock Id: JY27

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 9/24/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: _____ Date: _____



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KB35

Description: PFAS - DoD Instrument Blank

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814659662
JY27	Pipette	B814659662

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 9/24/2018 **Expiration Date:** 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: _____ **Date:** _____



It can be done

Standard Solution Prep Form II

Approved: Standard Laboratory ID Number: **KB36**

Description: PFAS - DoD ICC

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JZ88	PFAS - DoD Second Source LCS/MS Solution	Solution	~0	08/20/19	---	---	200 uL	1	10	~0.0000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By Schultz, Stephanie	Date Prepared: 9/24/2018	Expiration Date 7/16/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/26/2018 10:24:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB36**

Description: PFAS - DoD ICC

Stock Id: JY25

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

Stock Id: JY27

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

Stock Id: JZ88

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 9/24/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/26/2018 10:24:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB36**

Description: PFAS - DoD ICC

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 9/24/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/26/2018 10:24:00 AM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KB36

Description: PFAS - DoD ICC

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00100
Perfluoro-1-butanefulfonate	.00101
Perfluoro-1-hexanesulfonate	.00101
Perfluoro-1-octanesulfonamide	.00100
Perfluoro-1-octanesulfonate	.00100
Perfluoro-n-butanefulfonic Acid	.00100
Perfluoro-n-decanefulfonic Acid	.00100
Perfluoro-n-dodecanefulfonic acid	.00100
Perfluoro-n-heptanefulfonic Acid	.00100
Perfluoro-n-hexanefulfonic acid	.00101
Perfluoro-n-octanefulfonic Acid	.00100
Perfluorononanefulfonic Acid	.00100
Perfluoro-n-pentanefulfonic acid	.00100
Perfluoro-n-tetradecanefulfonic acid	.00100
Perfluoro-n-tridecanefulfonic acid	.00100
Perfluoro-n-undecanefulfonic acid	.00100
Sodium perfluoro-1-pentanesulfonate	.00100

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814659662
JY27	Pipette	B814659662
JZ88	Pipette	B814657482

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 9/24/2018 **Expiration Date:** 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 9/26/2018 10:24:00 AM



It can be done

Standard Solution Prep Form II

Approved: Standard Laboratory ID Number: **KB64**

Description: PFAS - DoD Calibration L6

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
KA85	PFAS - DoD High ICAL Stock	Solution	~0	09/13/19	---	---	1000 uL	1	5	~0.0000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	25 uL	1	5	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	25 uL	1	5	~0.0000

Solution Prepared By: Griffith, Lauren	Date Prepared: 9/28/2018	Expiration Date: 7/16/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/28/2018 2:46:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB64**

Description: PFAS - DoD Calibration L6

Stock Id: JY25

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

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	25	0.05	---	---	1	5	0.00023
13C2-6:2FTS	25	0.05	---	---	1	5	0.00024
13C2-8:2FTS	25	0.05	---	---	1	5	0.00024
13C2-PFDoA	25	0.05	---	---	1	5	0.00025
13C2-PFTeDA	25	0.05	---	---	1	5	0.00025
13C3-PFBS	25	0.05	---	---	1	5	0.00023
13C3-PFHxS	25	0.05	---	---	1	5	0.00024
13C4-PFBA	25	0.05	---	---	1	5	0.00025
13C4-PFHpA	25	0.05	---	---	1	5	0.00025
13C5-PFHxA	25	0.05	---	---	1	5	0.00025
13C5-PFPeA	25	0.05	---	---	1	5	0.00025
13C6-PFDA	25	0.05	---	---	1	5	0.00025
13C7-PFUnA	25	0.05	---	---	1	5	0.00025
13C8-FOSA	25	0.05	---	---	1	5	0.00025
13C8-PFOA	25	0.05	---	---	1	5	0.00025
13C8-PFOS	25	0.05	---	---	1	5	0.00024
13C9-PFNA	25	0.05	---	---	1	5	0.00025
d3-MeFOSAA	25	0.05	---	---	1	5	0.00025
d5-EtFOSAA	25	0.05	---	---	1	5	0.00025

Stock Id: KA85

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	1000	0.05	---	---	1	5	0.01010
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	1000	0.05	---	---	1	5	0.01010
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	1000	0.05	---	---	1	5	0.01000
(Na) Perfluoro-1-decanesulfonate	1000	0.05	---	---	1	5	0.01010
(NA) Perfluoro-1-heptanesulfonate	1000	0.05	---	---	1	5	0.01000
(Na) Perfluoro-1-nonanesulfonate	1000	0.05	---	---	1	5	0.01010

Solution Prepared By: Griffith, Lauren Date Prepared: 9/28/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/28/2018 2:46:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB64**

Description: PFAS - DoD Calibration L6

N-ethylperfluoro-octanesulfonamidoacetic acid	1000	0.05	---	---	1	5	0.01000
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-1-butanedisulfonate	1000	0.05	---	---	1	5	0.01010
Perfluoro-1-hexanesulfonate	1000	0.05	---	---	1	5	0.01010
Perfluoro-1-octanesulfonamide	1000	0.05	---	---	1	5	0.01000
Perfluoro-1-octanesulfonate	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-butanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-decanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-dodecanoic acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-heptanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-hexanoic acid	1000	0.05	---	---	1	5	0.01010
Perfluoro-n-octanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluorononanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-pentanoic acid	1000	0.05	---	---	1	5	0.01010
Perfluoro-n-tetradecanoic acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-tridecanoic acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-undecanoic acid	1000	0.05	---	---	1	5	0.01000
Sodium perfluoro-1-pentanesulfonate	1000	0.05	---	---	1	5	0.01000

Final Concentrations:

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

Solution Prepared By: Griffith, Lauren Date Prepared: 9/28/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/28/2018 2:46:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB64**

Description: PFAS - DoD Calibration L6

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814659662
JY27	Pipette	B814659662
KA85	Pipette	B820865811

Solution Prepared By: Griffith, Lauren Date Prepared: 9/28/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/28/2018 2:46:00 PM



It can be done

Standard Solution Prep Form II

Approved: Standard Laboratory ID Number: **KB65**

Description: PFAS - DoD Calibration L7

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
KA85	PFAS - DoD High ICAL Stock	Solution	~0	09/13/19	---	---	2000 uL	1	5	~0.0000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	25 uL	1	5	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	25 uL	1	5	~0.0000

Solution Prepared By: Griffith, Lauren	Date Prepared: 9/28/2018	Expiration Date: 7/16/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/28/2018 2:46:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB65**

Description: PFAS - DoD Calibration L7

Stock Id: JY25

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

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	25	0.05	---	---	1	5	0.00023
13C2-6:2FTS	25	0.05	---	---	1	5	0.00024
13C2-8:2FTS	25	0.05	---	---	1	5	0.00024
13C2-PFDoA	25	0.05	---	---	1	5	0.00025
13C2-PFTeDA	25	0.05	---	---	1	5	0.00025
13C3-PFBS	25	0.05	---	---	1	5	0.00023
13C3-PFHxS	25	0.05	---	---	1	5	0.00024
13C4-PFBA	25	0.05	---	---	1	5	0.00025
13C4-PFHpA	25	0.05	---	---	1	5	0.00025
13C5-PFHxA	25	0.05	---	---	1	5	0.00025
13C5-PFPeA	25	0.05	---	---	1	5	0.00025
13C6-PFDA	25	0.05	---	---	1	5	0.00025
13C7-PFUnA	25	0.05	---	---	1	5	0.00025
13C8-FOSA	25	0.05	---	---	1	5	0.00025
13C8-PFOA	25	0.05	---	---	1	5	0.00025
13C8-PFOS	25	0.05	---	---	1	5	0.00024
13C9-PFNA	25	0.05	---	---	1	5	0.00025
d3-MeFOSAA	25	0.05	---	---	1	5	0.00025
d5-EtFOSAA	25	0.05	---	---	1	5	0.00025

Stock Id: KA85

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	2000	0.05	---	---	1	5	0.02020
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	2000	0.05	---	---	1	5	0.02020
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	2000	0.05	---	---	1	5	0.02000
(Na) Perfluoro-1-decanesulfonate	2000	0.05	---	---	1	5	0.02020
(NA) Perfluoro-1-heptanesulfonate	2000	0.05	---	---	1	5	0.02000
(Na) Perfluoro-1-nonanesulfonate	2000	0.05	---	---	1	5	0.02020

Solution Prepared By: Griffith, Lauren Date Prepared: 9/28/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/28/2018 2:46:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB65**

Description: PFAS - DoD Calibration L7

N-ethylperfluoro-octanesulfonamidoacetic acid	2000	0.05	---	---	1	5	0.02000
N-methylperfluoro-1-octanesulfonamidoacetic acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-1-butanedisulfonate	2000	0.05	---	---	1	5	0.02020
Perfluoro-1-hexanesulfonate	2000	0.05	---	---	1	5	0.02020
Perfluoro-1-octanesulfonamide	2000	0.05	---	---	1	5	0.02000
Perfluoro-1-octanesulfonate	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-butanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-decanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-dodecanoic acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-heptanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-hexanoic acid	2000	0.05	---	---	1	5	0.02020
Perfluoro-n-octanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluorononanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-pentanoic acid	2000	0.05	---	---	1	5	0.02020
Perfluoro-n-tetradecanoic acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-tridecanoic acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-undecanoic acid	2000	0.05	---	---	1	5	0.02000
Sodium perfluoro-1-pentanesulfonate	2000	0.05	---	---	1	5	0.02000

Final Concentrations:

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

Solution Prepared By: Griffith, Lauren Date Prepared: 9/28/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/28/2018 2:46:00 PM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB65**

Description: PFAS - DoD Calibration L7

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814659662
JY27	Pipette	B814659662
KA85	Pipette	B814658143

Solution Prepared By: Griffith, Lauren Date Prepared: 9/28/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 9/28/2018 2:46:00 PM



It can be done

Standard Solution Prep Form II

Approved: Standard Laboratory ID Number: **KB69**

Description: PFAS - DoD Calibration L5

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
KA85	PFAS - DoD High ICAL Stock	Solution	~0	09/13/19	---	---	500 uL	1	10	~0.0000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By Schultz, Stephanie	Date Prepared: 10/1/2018	Expiration Date 7/16/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Balance ID: _____

Comment: 80/20 methanol/milli-q water (old surrogate)

Approved By: Schumitz, Denise Date: 10/3/2018 8:55:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB69**

Description: PFAS - DoD Calibration L5

Stock Id: JY25

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

Stock Id: JY27

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

Stock Id: KA85

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	500	0.05	---	---	1	10	0.00253
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	500	0.05	---	---	1	10	0.00253
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	500	0.05	---	---	1	10	0.00250
(Na) Perfluoro-1-decanesulfonate	500	0.05	---	---	1	10	0.00253
(NA) Perfluoro-1-heptanesulfonate	500	0.05	---	---	1	10	0.00250
(Na) Perfluoro-1-nonanesulfonate	500	0.05	---	---	1	10	0.00253

Solution Prepared By: Schultz, Stephanie Date Prepared: 10/1/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 methanol/milli-q water (old surrogate)

Approved By: Schumitz, Denise Date: 10/3/2018 8:55:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB69**

Description: PFAS - DoD Calibration L5

N-ethylperfluoro-octanesulfonamidoacetic acid	500	0.05	---	---	1	10	0.00250
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-1-butanedisulfonate	500	0.05	---	---	1	10	0.00253
Perfluoro-1-hexanesulfonate	500	0.05	---	---	1	10	0.00253
Perfluoro-1-octanesulfonamide	500	0.05	---	---	1	10	0.00250
Perfluoro-1-octanesulfonate	500	0.05	---	---	1	10	0.00250
Perfluoro-n-butanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-decanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-dodecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-heptanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-hexanoic acid	500	0.05	---	---	1	10	0.00253
Perfluoro-n-octanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluorononanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-pentanoic acid	500	0.05	---	---	1	10	0.00253
Perfluoro-n-tetradecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-tridecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-undecanoic acid	500	0.05	---	---	1	10	0.00250
Sodium perfluoro-1-pentanesulfonate	500	0.05	---	---	1	10	0.00250

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 10/1/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 methanol/milli-q water (old surrogate)

Approved By: Schumitz, Denise Date: 10/3/2018 8:55:00 AM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KB69

Description: PFAS - DoD Calibration L5

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814659662
JY27	Pipette	B814659662
KA85	Pipette	B820865811

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 10/1/2018 **Expiration Date:** 7/16/2019

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

Comment: 80/20 methanol/milli-q water (old surrogate)

Approved By: Schumitz, Denise **Date:** 10/3/2018 8:55:00 AM



It can be done

Standard Solution Prep Form II

Approved: Standard Laboratory ID Number: **KB85**

Description: PFAS - DoD Calibration L4

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
KA85	PFAS - DoD High ICAL Stock	Solution	~0	09/13/19	---	---	200 uL	1	10	~0.0000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By Schultz, Stephanie	Date Prepared: 10/2/2018	Expiration Date 7/16/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107	

Balance ID: _____

Comment: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise Date: 10/3/2018 8:53:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB85**

Description: PFAS - DoD Calibration L4

Stock Id: JY25

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

Stock Id: JY27

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

Stock Id: KA85

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 10/2/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise Date: 10/3/2018 8:53:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **KB85**

Description: PFAS - DoD Calibration L4

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 10/2/2018 Expiration Date: 7/16/2019

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

Comment: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise Date: 10/3/2018 8:53:00 AM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: KB85

Description: PFAS - DoD Calibration L4

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00100
Perfluoro-1-butanefulfonate	.00101
Perfluoro-1-hexanesulfonate	.00101
Perfluoro-1-octanesulfonamide	.00100
Perfluoro-1-octanesulfonate	.00100
Perfluoro-n-butanefulfonic Acid	.00100
Perfluoro-n-decanefulfonic Acid	.00100
Perfluoro-n-dodecanefulfonic acid	.00100
Perfluoro-n-heptanefulfonic Acid	.00100
Perfluoro-n-hexanefulfonic acid	.00101
Perfluoro-n-octanefulfonic Acid	.00100
Perfluorononanefulfonic Acid	.00100
Perfluoro-n-pentanefulfonic acid	.00101
Perfluoro-n-tetradecanefulfonic acid	.00100
Perfluoro-n-tridecanefulfonic acid	.00100
Perfluoro-n-undecanefulfonic acid	.00100
Sodium perfluoro-1-pentanesulfonate	.00100

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814659662
JY27	Pipette	B814659662
KA85	Pipette	B814657482

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 10/2/2018 **Expiration Date:** 7/16/2019

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

Comment: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise **Date:** 10/3/2018 8:53:00 AM



It can be done

BDO Id: 170724-01

Reagent Receipt Report

 Approved: Authorized:

Name: <u>PFOA- 2nd Source</u>	Received: <u>7/24/2017</u>
Vendor: <u>ABSOLUTE STANDARDS</u>	Custodian: <u>Schumitz, Matt</u>
Catalogue No: <u>99207</u>	Expires: <u>3/22/2022</u>
Type: <u>Solution</u>	Consumed: _____
Lot No: <u>032217</u>	Stored In: <u>LC Laboratory - F0111</u>
Quantity: <u>5 ea</u> mL % Moisture: _____	
Description: <u>PFOA - 2nd Source</u>	

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
(Na) 1H,1H,2H,2H-Perfluorodecane	39108-34-4	1.0100	100.00	--	--	<input type="checkbox"/>			
(Na) 1H,1H,2H,2H-Perfluorohexane s	414911-30-1	1.0000	100.00	--	--	<input type="checkbox"/>			
(Na) 1H,1H,2H,2H-Perfluorooctane s	27619-97-2	1.0000	100.00	--	--	<input type="checkbox"/>			
(Na) Perfluoro-1-decanesulfonate	2806-15-7	1.0100	100.00	--	--	<input type="checkbox"/>			
(NA) Perfluoro-1-heptanesulfonate	375-92-8	1.0000	100.00	--	--	<input type="checkbox"/>			
(Na) Perfluoro-1-nonanesulfonate	98789-57-2	1.0100	100.00	--	--	<input type="checkbox"/>			
N-ethylperfluoro-octanesulfonamidoa	2991-50-6	1.0000	100.00	--	--	<input type="checkbox"/>			
N-methylperfluoro-1-octanesulfonami	2355-31-9	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-butanefulfonate	375-73-5	1.0100	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-hexanesulfonate	355-46-4	1.0100	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-octanesulfonamide	754-91-6	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-octanesulfonate	1763-23-1	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-butanoic Acid	375-22-4	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-decanoic Acid	335-76-2	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-dodecanoic acid	307-55-1	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-heptanoic Acid	375-85-9	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-hexanoic acid	307-24-4	1.0100	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-octanoic Acid	335-67-1	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluorononanoic Acid	375-95-1	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-pentanoic acid	2706-90-3	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tetradecanoic acid	376-06-7	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tridecanoic acid	72629-94-8	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-undecanoic acid	2058-94-8	1.0000	100.00	--	--	<input type="checkbox"/>			
Sodium perfluoro-1-pentanesulfonate	2706-91-4	1.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 24

Notes:

Approved by: _____	Approved on: _____
Authorized by: _____	Authorized on: _____



CERTIFIED WEIGHT REPORT

170784-01

Part Number: 99207
Lot Number: 032217
Description: PFOA - DOD
24 components
Expiration Date: 032222
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 1.0
NIST Test ID#: 822-275872-11

Solvent(s): Methanol (1 mM KOH)
2-Propanol

Lot# 031317 (98%)
23214 (2%)

<i>Paul Barron</i>		032217
Formulated By:	Paul Barron	DATE
<i>Pedro L. Rentas</i>		032217
Reviewed By:	Pedro L. Rentas	DATE

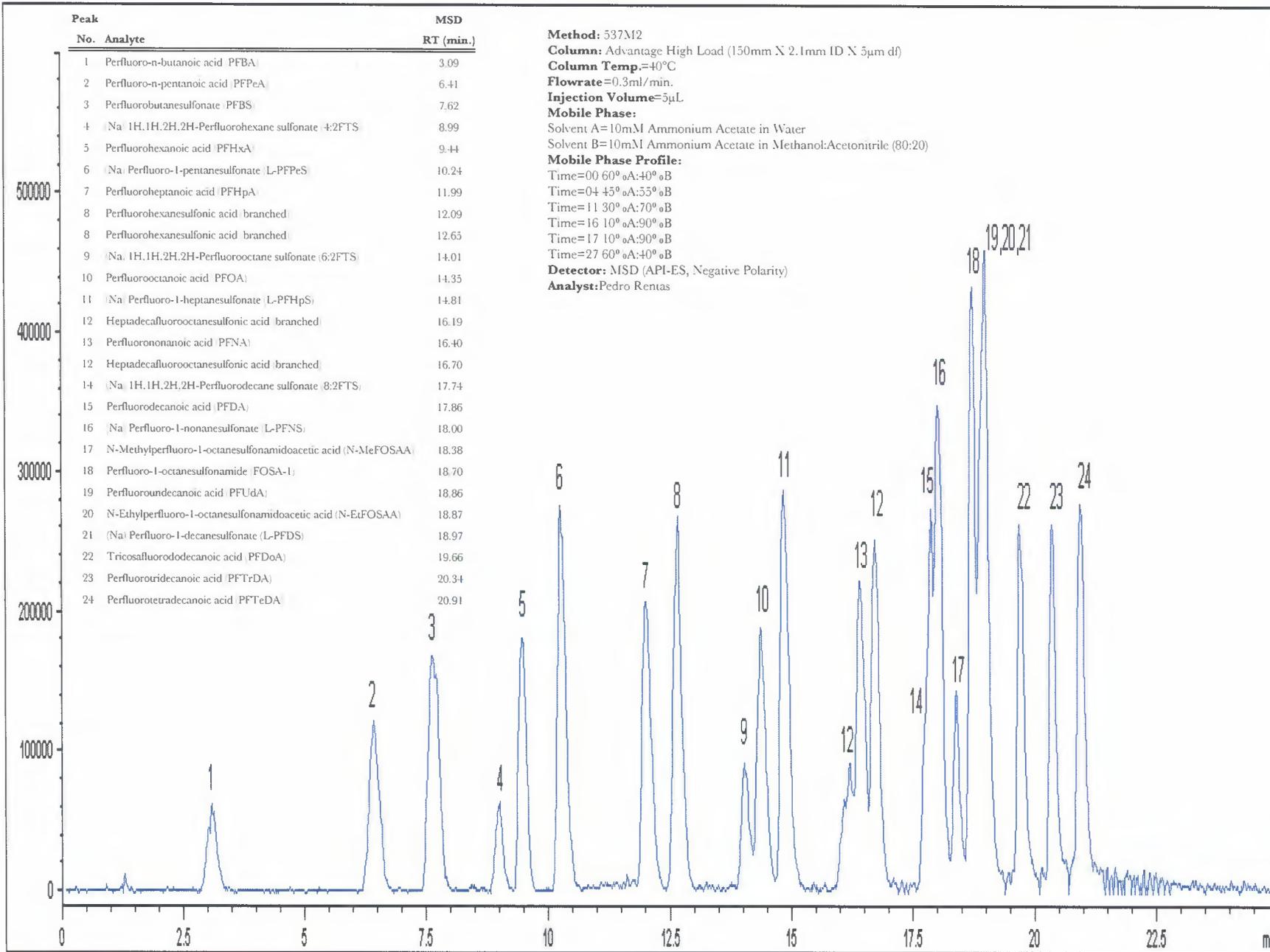
Volume(s) shown below were combined and diluted to (mL):

50.0 5E-05 Balance Uncertainty
0.007 Flask Uncertainty

Note: All assigned values are anion concentrations.

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)		
									CAS#	OSHA PEL (TWA)	LD50
1. Perfluoro-n-butanoic acid	3670	PFBA0516	0.02	1.00	0.004	50.0	1.00	0.01	375-22-4	N/A	N/A
2. Perfluoro-n-pentanoic acid	3669	PFPeA0516	0.02	1.00	0.004	50.0	1.00	0.01	2706-90-3	N/A	N/A
3. Perfluorohexanoic acid	99199	030617	0.02	1.00	0.004	50.3	1.01	0.01	307-24-4	N/A	N/A
4. Perfluoroheptanoic acid	99197	030517	0.02	1.00	0.004	50.1	1.00	0.01	375-85-9	N/A	N/A
5. Perfluorooctanoic acid	99202	030617	0.02	1.00	0.004	50.2	1.00	0.01	335-67-1	N/A	ipr-rat 189mg/kg
6. Perfluorononanoic acid	99200	030617	0.02	1.00	0.004	50.1	1.00	0.01	375-95-1	N/A	N/A
7. Perfluorodecanoic acid	99195	030617	0.02	1.00	0.004	50.1	1.00	0.01	335-76-2	N/A	ori-rat 57mg/kg
8. Perfluoroundecanoic acid	99205	030617	0.02	1.00	0.004	50.1	1.00	0.01	2058-94-8	N/A	N/A
9. Tricosafluorododecanoic acid	99196	030617	0.02	1.00	0.004	50.1	1.00	0.01	307-55-1	N/A	N/A
10. Perfluorotridecanoic acid	99204	030617	0.02	1.00	0.004	50.1	1.00	0.01	72629-94-8	N/A	N/A
11. Perfluorotetradecanoic acid	99203	030617	0.02	1.00	0.004	50.1	1.00	0.01	376-06-7	N/A	N/A
12. Perfluoro-1-octanesulfonamide	3677	FOSA0916I	0.02	1.00	0.004	50.0	1.00	0.01	754-91-6	N/A	N/A
13. N-Methylperfluoro-1-octanesulfonamidoacetic acid	3667	NMeFOSAA0117	0.02	1.00	0.004	50.0	1.00	0.01	2355-31-9	N/A	N/A
14. N-Ethylperfluoro-1-octanesulfonamidoacetic acid	3664	NEFOSAA0117	0.02	1.00	0.004	50.0	1.00	0.01	2991-50-6	N/A	N/A
15. Perfluorobutanesulfonic acid	99194	031017	0.02	1.00	0.004	50.7	1.01	0.01	375-73-5	N/A	N/A
16. Perfluoro-1-pentanesulfonic acid	3956	LFPFeS0117	0.0214	1.07	0.004	46.9	1.00	0.01	00-00-0	N/A	N/A
17. Perfluorohexanesulfonic acid (branched)	99198	030617	0.02	1.00	0.004	50.6	1.01	0.01	3871-99-6	N/A	N/A
18. Perfluoro-1-heptanesulfonic acid	3672	LPFHpS1016	0.021	1.05	0.004	47.6	1.00	0.01	375-92-8	N/A	N/A
19. Heptafluorooctanesulfonic acid (branched)	99201	030617	0.02	1.00	0.004	50.2	1.00	0.01	1763-23-1	N/A	N/A
20. Perfluoro-1-nonanesulfonic acid	3957	LPFNS0516	0.021	1.05	0.004	48.0	1.01	0.01	98789-57-2	N/A	N/A
21. Perfluoro-1-decanesulfonic acid	3671	LPFDS0217	0.021	1.05	0.004	48.2	1.01	0.01	2806-15-7	N/A	N/A
22. 1H,1H,2H,2H-Perfluorohexane sulfonic acid	3955	42FTS1216	0.0214	1.07	0.004	46.7	1.00	0.01	00-00-0	N/A	N/A
23. 1H,1H,2H,2H-Perfluorooctane sulfonic acid	3661	62FTS0616	0.021	1.05	0.004	47.4	1.00	0.01	27619-97-2	N/A	N/A
24. 1H,1H,2H,2H-Perfluorodecane sulfonic acid	3662	82FTS1216	0.021	1.05	0.004	47.9	1.01	0.01	39108-34-4	N/A	N/A

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



BATTELLE

It can be done

BDO Id: 180618-02**Reagent Receipt Report**Approved: Authorized:

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

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

Approved by: _____ Approved on: _____
Authorized by: _____ Authorized on: _____

180618-02

**WELLINGTON**
LABORATORIES**CERTIFICATE OF ANALYSIS**
DOCUMENTATION**br-NEtFOSAA****N-Ethylperfluorooctanesulfonamidoacetic
Acid Solution/Mixture of Linear and
Branched Isomers**

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HANDLING:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

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

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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

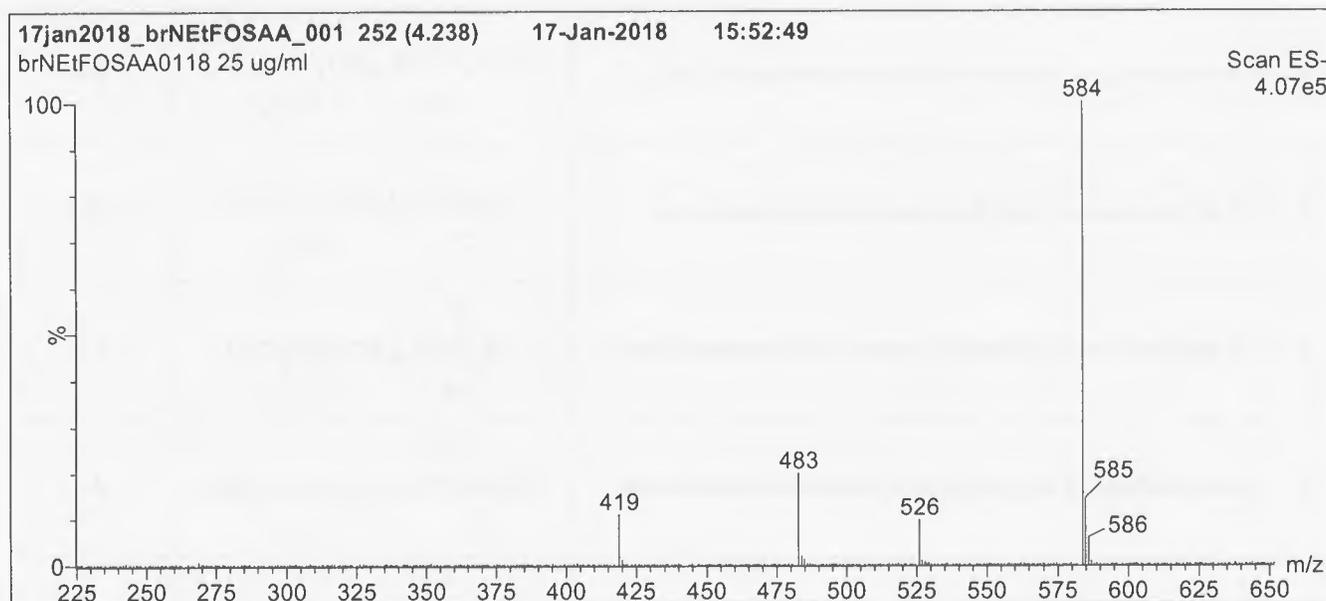
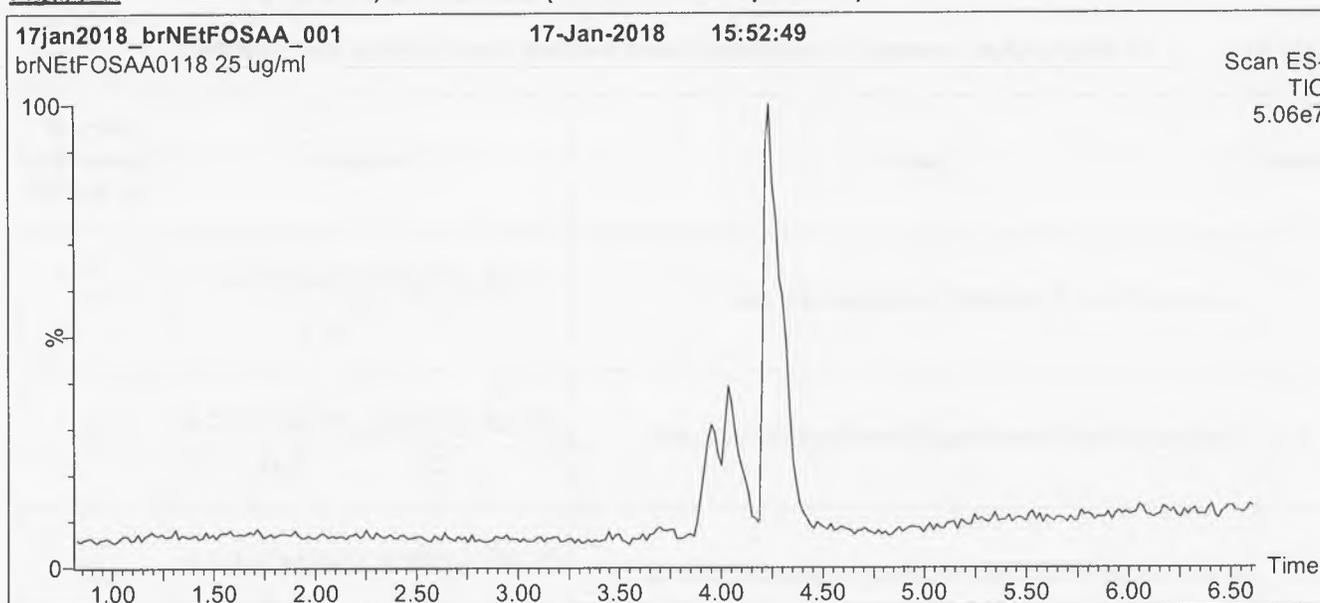
Table A: br-NEtFOSAA; Isomeric Components and Percent Composition (by ¹⁹F-NMR)*

Isomer	Name	Structure	Percent Composition by ¹⁹ F-NMR
1	N-ethylperfluoro-1-octanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_7\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ C ₂ H ₅	77.5
2	N-ethylperfluoro-3-methylheptanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_3\text{CF}(\text{CF}_2)_2\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ CF ₃ C ₂ H ₅	2.3
3	N-ethylperfluoro-4-methylheptanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_2\text{CF}(\text{CF}_2)_3\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ CF ₃ C ₂ H ₅	2.2
4	N-ethylperfluoro-5-methylheptanesulfonamidoacetic acid	$\text{CF}_3\text{CF}_2\text{CF}(\text{CF}_2)_4\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ CF ₃ C ₂ H ₅	5.4
5	N-ethylperfluoro-6-methylheptanesulfonamidoacetic acid	$\text{CF}_3\text{CF}(\text{CF}_2)_5\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ CF ₃ C ₂ H ₅	10.4
6	N-ethylperfluoro-5,5-dimethylhexanesulfonamidoacetic acid	$\text{CF}_3\text{C}(\text{CF}_2)_4\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ CF ₃ CF ₃ C ₂ H ₅	0.3
7	N-ethylperfluoro-4,5-dimethylhexanesulfonamidoacetic acid	$\text{CF}_3\text{CF}(\text{CF}_2)_3\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ CF ₃ CF ₃ C ₂ H ₅	0.3
8	N-ethylperfluoro-3,5-dimethylhexanesulfonamidoacetic acid	$\text{CF}_3\text{CF}(\text{CF}_2)_2\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ CF ₃ CF ₃ C ₂ H ₅	0.3
9	Other Unidentified Isomers		1.3

* Percent of total N-ethylperfluorooctanesulfonamidoacetic acid isomers only.

Certified By: 
B.G. Chittim, General Manager

Date: 03/22/2018
(mm/dd/yyyy)

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈,
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.

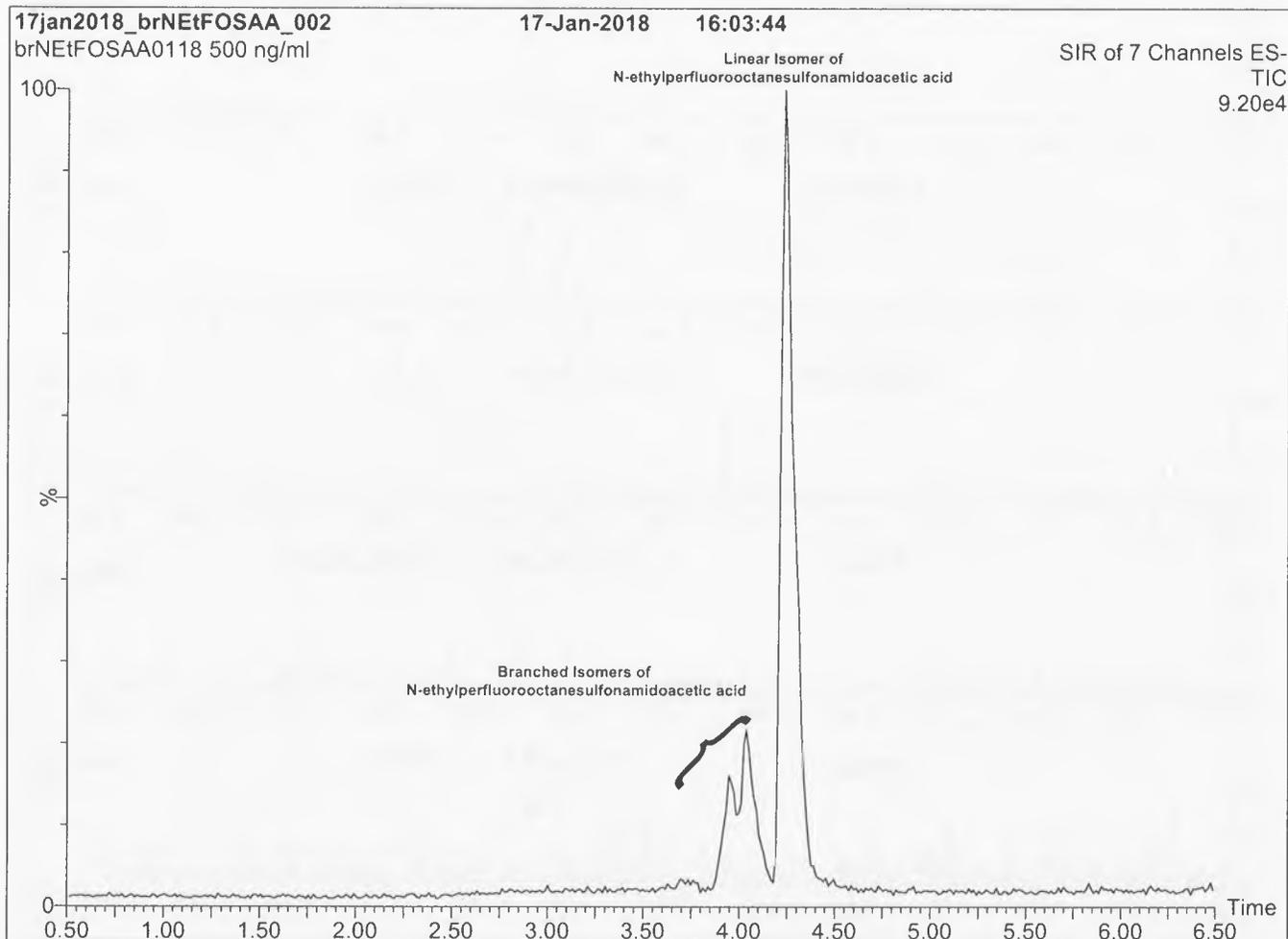
Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.

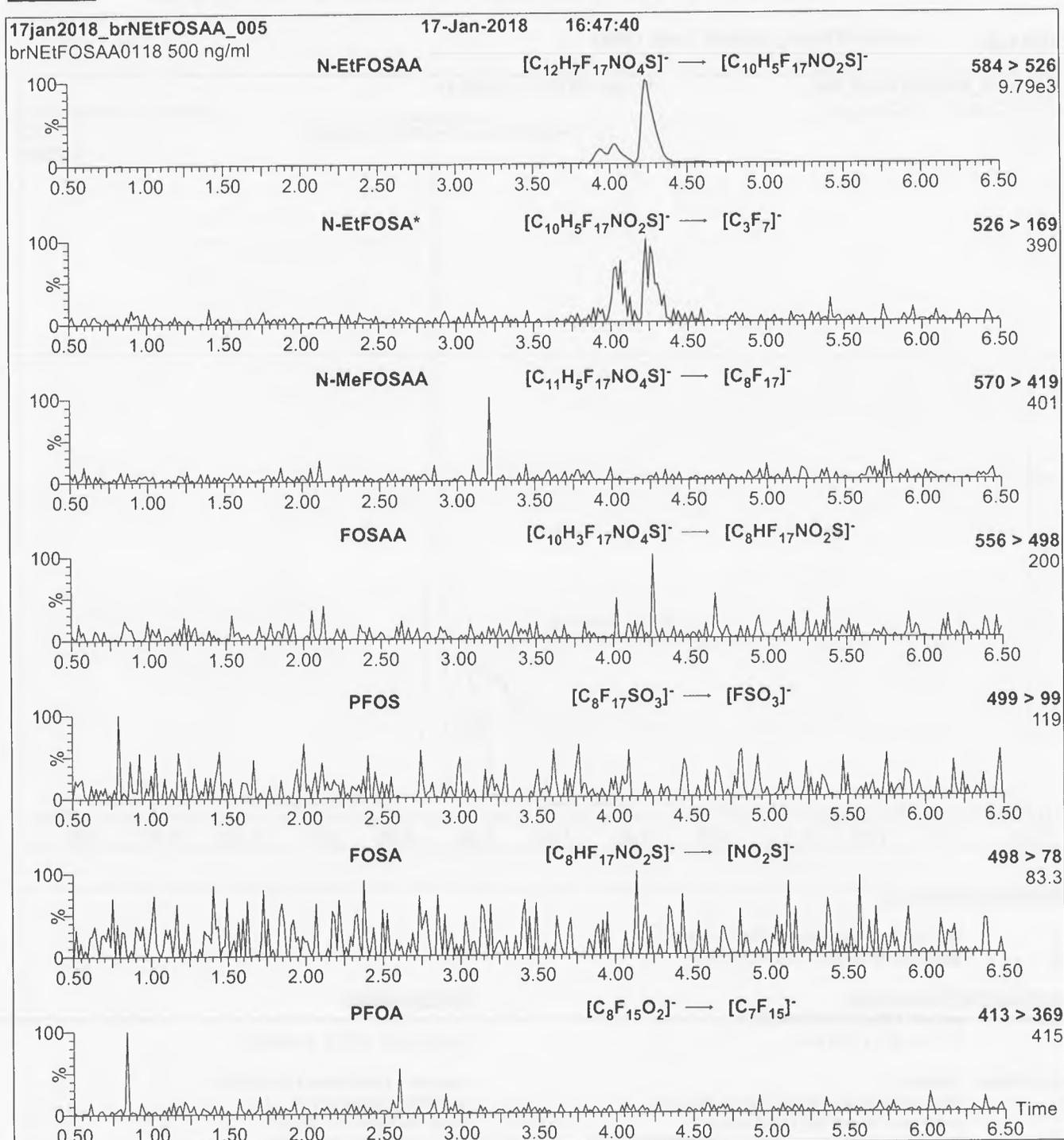
Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: SIR (7 channels)

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

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

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

Conditions for Figure 3:

Injection: On-column

MS Parameters

Mobile phase: Same as Figure 2

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

Flow: 300 μ l/min



It can be done

BDO Id: 180618-03

Reagent Receipt Report

 Approved: Authorized:

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

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

Approved by:	<u></u>	Approved on:	<u></u>
Authorized by:	<u></u>	Authorized on:	<u></u>

180618-03



WELLINGTON
LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

br-NMeFOSAA

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

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HANDLING:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

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

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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

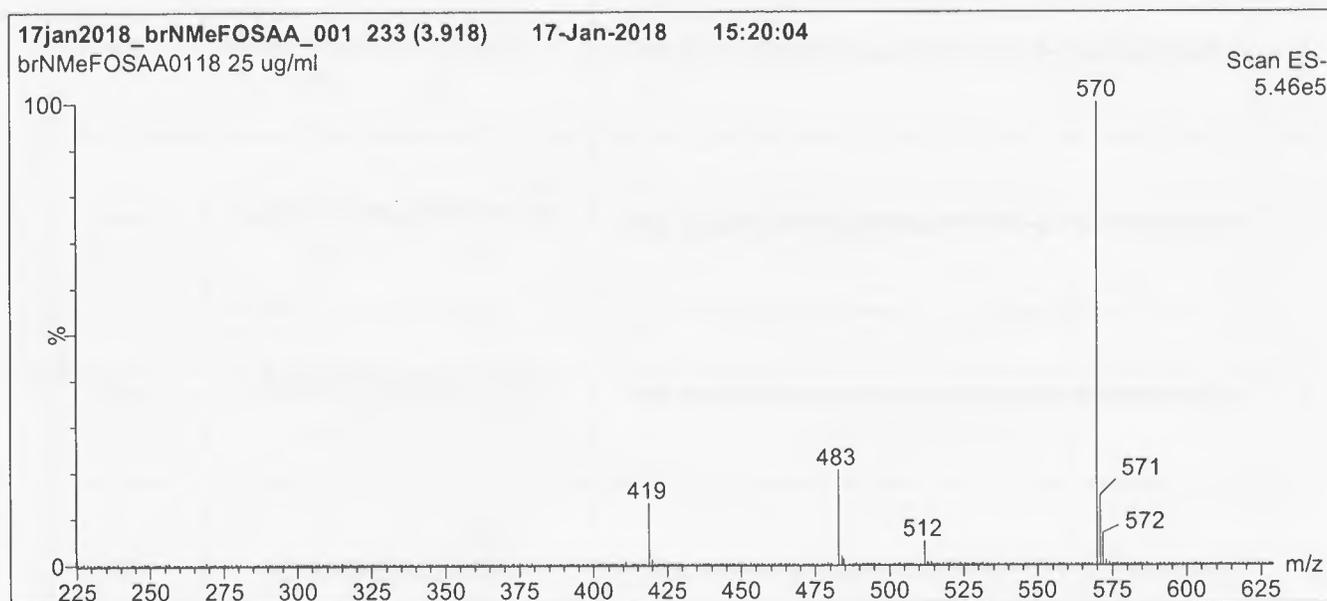
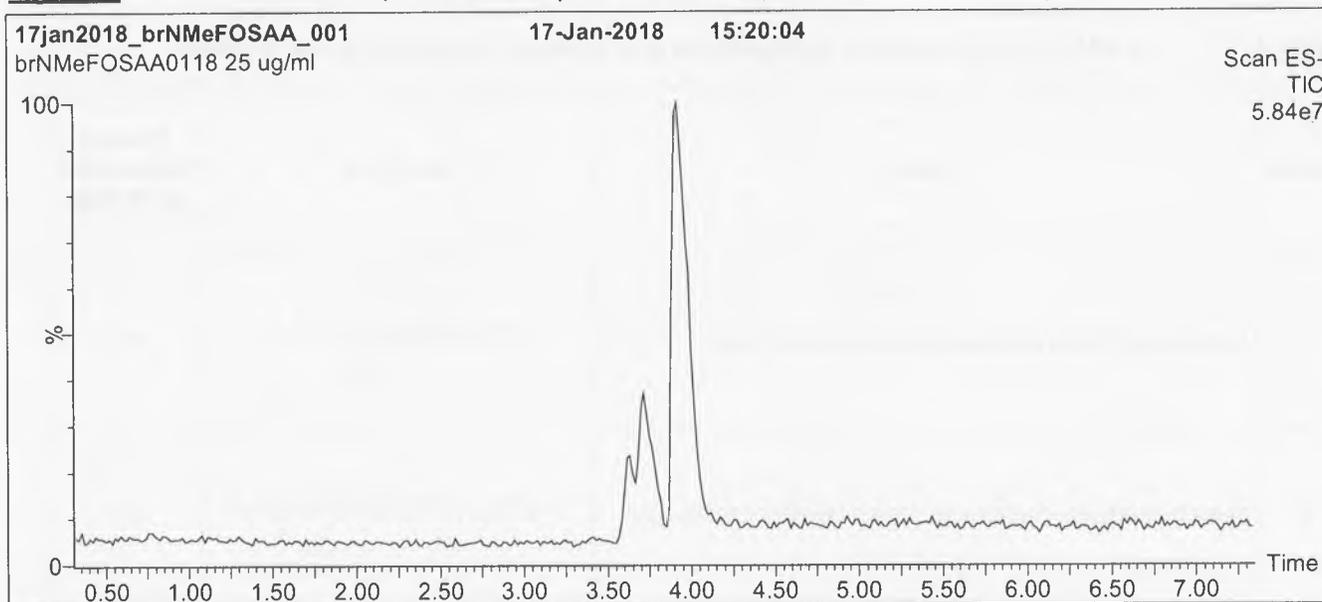
Table A: br-NMeFOSAA; Isomeric Components and Percent Composition (by ¹⁹F-NMR)*

Isomer	Name	Structure	Percent Composition by ¹⁹ F-NMR
1	N-methylperfluoro-1-octanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_7\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$	76.0
2	N-methylperfluoro-3-methylheptanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_3\underset{\text{CF}_3}{\text{CF}}(\text{CF}_2)_2\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$	0.7
3	N-methylperfluoro-4-methylheptanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_2\underset{\text{CF}_3}{\text{CF}}(\text{CF}_2)_3\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$	2.0
4	N-methylperfluoro-5-methylheptanesulfonamidoacetic acid	$\text{CF}_3\text{CF}_2\underset{\text{CF}_3}{\text{CF}}(\text{CF}_2)_4\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$	6.0
5	N-methylperfluoro-6-methylheptanesulfonamidoacetic acid	$\text{CF}_3\underset{\text{CF}_3}{\text{CF}}(\text{CF}_2)_5\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$	14.0
6	N-methylperfluoro-5,5-dimethylhexanesulfonamidoacetic acid	$\begin{array}{c} \text{CF}_3 \\ \\ \text{CF}_3\text{C}(\text{CF}_2)_4\text{SO}_2\text{NCH}_2\text{CO}_2\text{H} \\ \\ \text{CF}_3 \end{array}$	0.2
7	Other Unidentified Isomers		1.1

* Percent of total N-methylperfluorooctanesulfonamidoacetic acid isomers only.

Certified By: 
B.G. Chittim, General Manager

Date: 03/22/2018
(mm/dd/yyyy)

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.

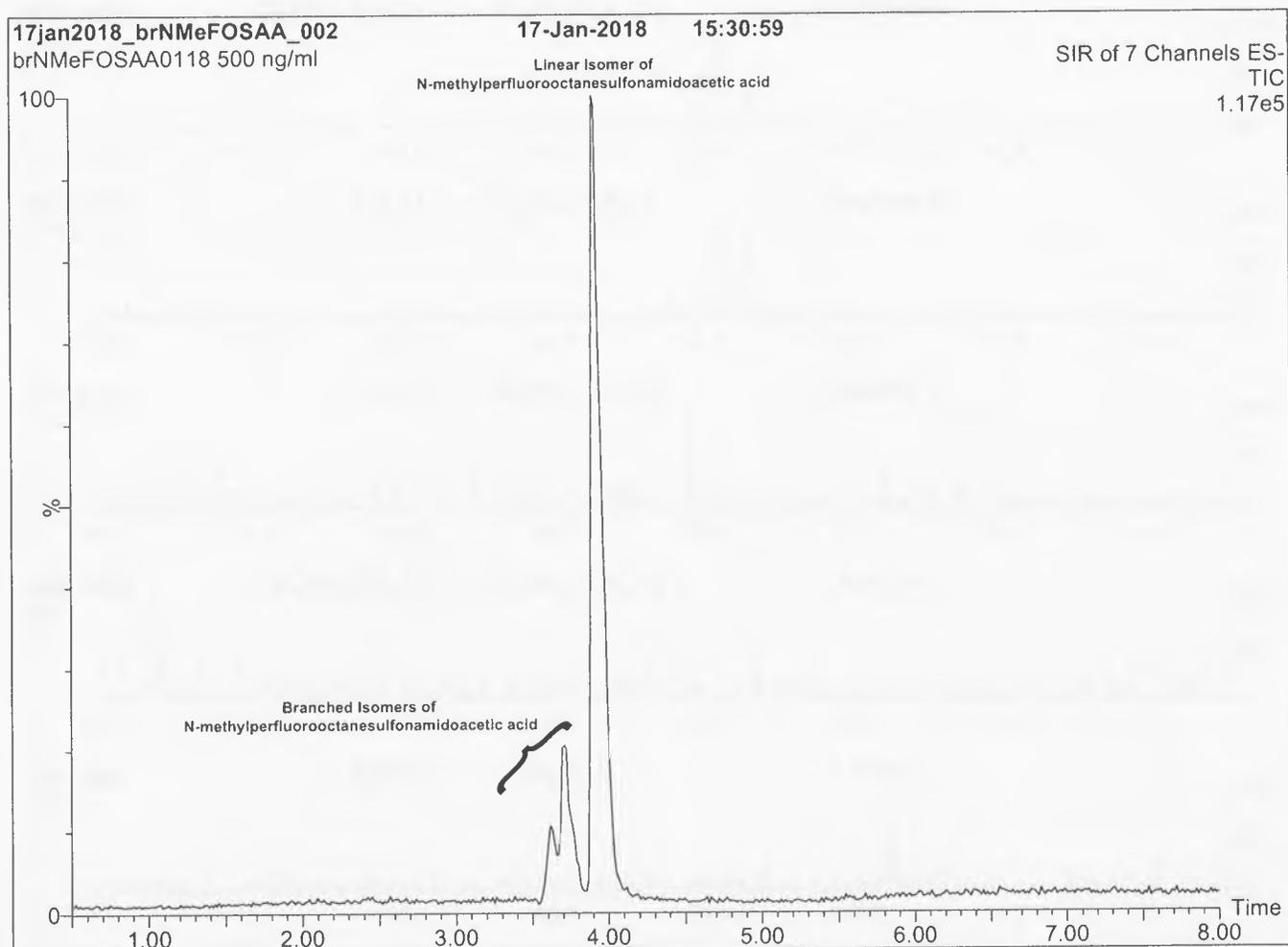
Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.

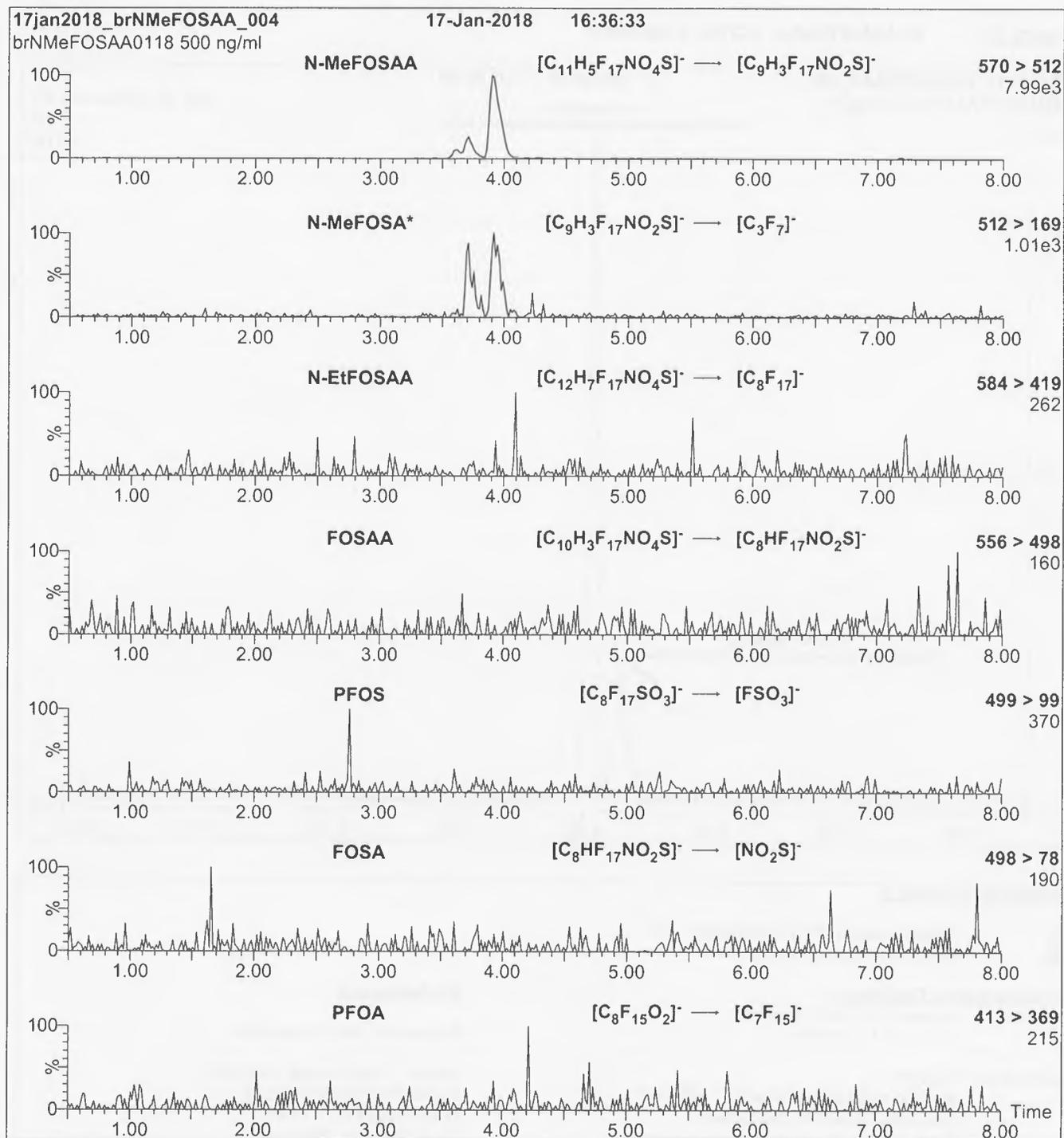
MS Parameters

Experiment: SIR (7 channels)

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

Time: 10 min

Flow: 300 μ l/min

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

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

Conditions for Figure 3:

Injection: On-column

MS Parameters

Mobile phase: Same as Figure 2

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

Flow: 300 μ l/min

BATTELLE

It can be done

BDO Id: 180618-04**Reagent Receipt Report**Approved: Authorized:

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

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

Approved by:	<u></u>	Approved on:	<u></u>
Authorized by:	<u></u>	Authorized on:	<u></u>

180618-04



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

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

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

MOLECULAR FORMULA: C₈F₁₅O₂NH₄
CONCENTRATION: 50 ± 2.5 µg/ml (gravimetric)
CHEMICAL PURITY: Technical material
SOLVENT(S): Methanol/Water (<1%)
LAST TESTED: (mm/dd/yyyy) 02/16/2017
EXPIRY DATE: (mm/dd/yyyy) 02/16/2022
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: _____

B.G. Chittim

Date: 02/22/2017

(mm/dd/yyyy)

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

INTENDED USE:

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

HAZARDS:

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

CHARACTERIZATION / HOMOGENEITY:

This product is a technical mixture obtained from an industrial manufacturer. It has been characterized as to its content and components using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Testing of samples in solution has shown it to be homogeneous. As this product is a technical mixture, it should not be used to quantitate any of the listed components.

UNCERTAINTY:

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

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

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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



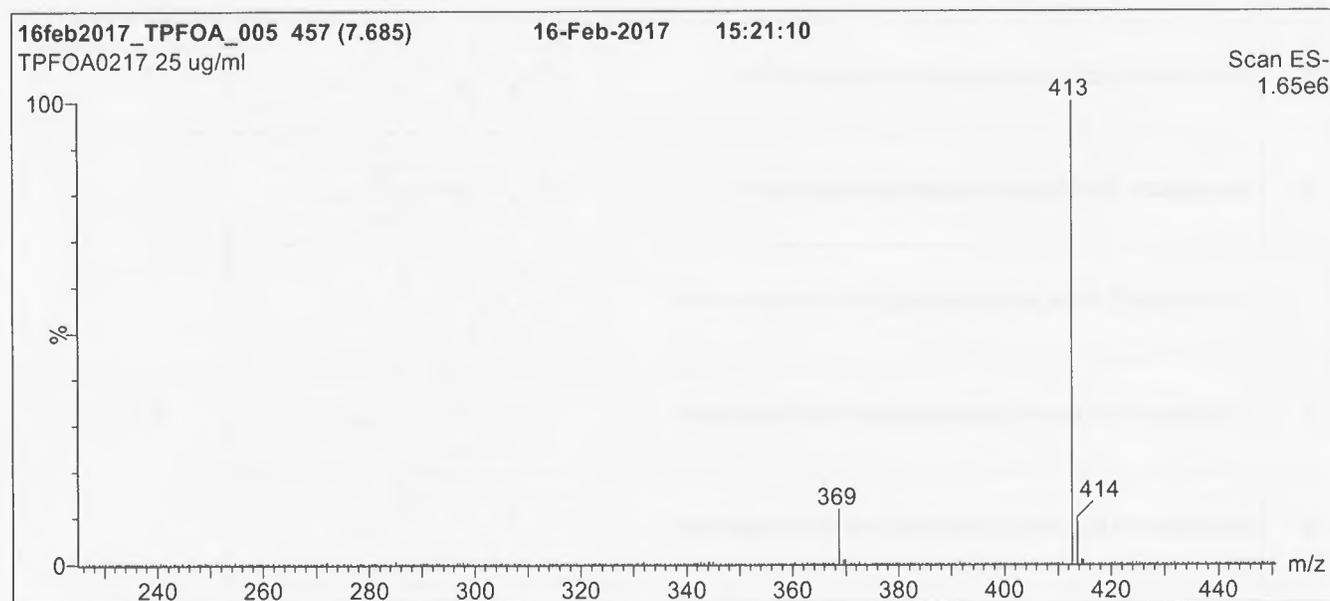
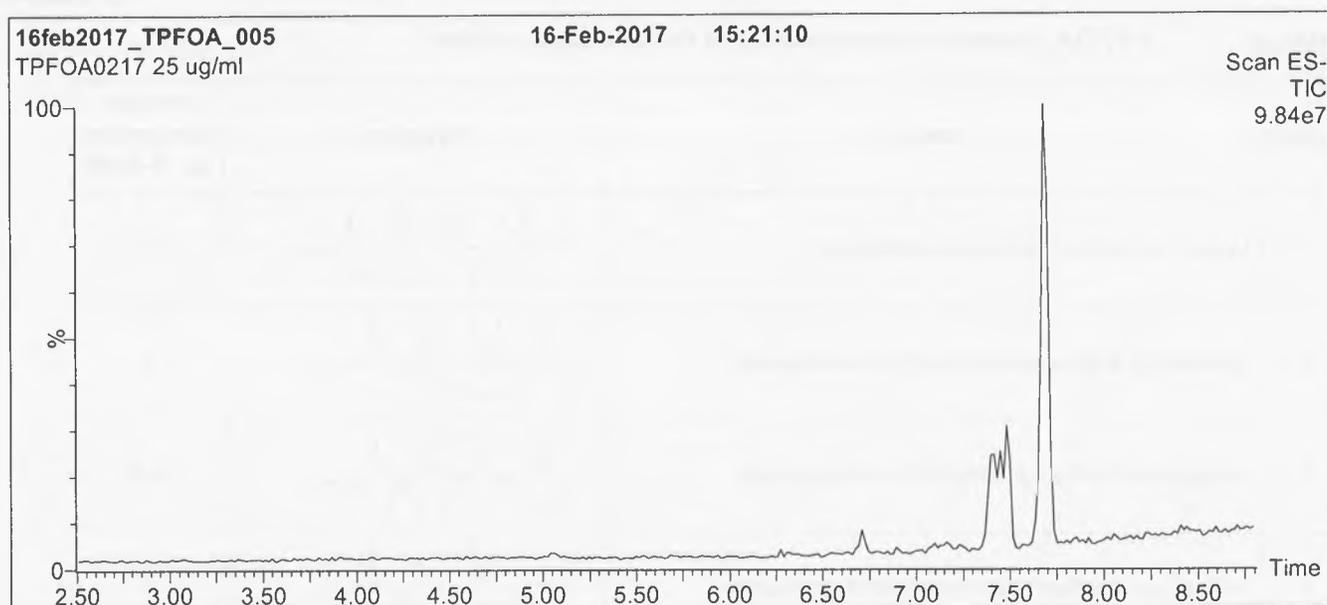
For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

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

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

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

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

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

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

Chromatographic Conditions:

Column: Kinetex PFP
2.6 μ m, 4.6 x 100 mm

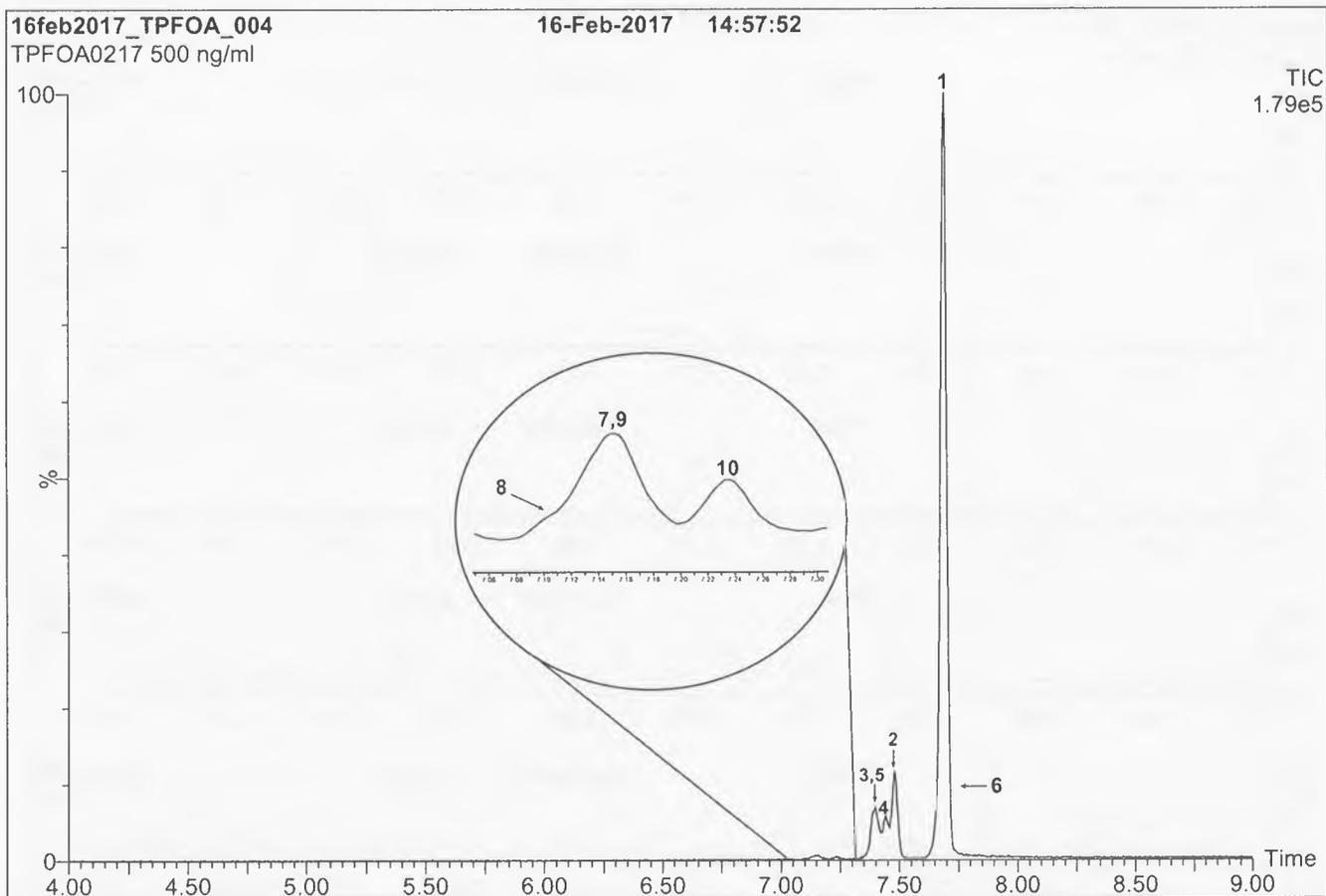
Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 50% organic over 5 min. Ramp to
90% organic over 5 min and hold for 1.5 min.
Return to initial conditions over 0.5 min.
Time: 13 min

Flow: 1.0 ml/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

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

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

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

Chromatographic Conditions:

Column: Kinetex PFP
2.6 μ m, 4.6 x 100 mm

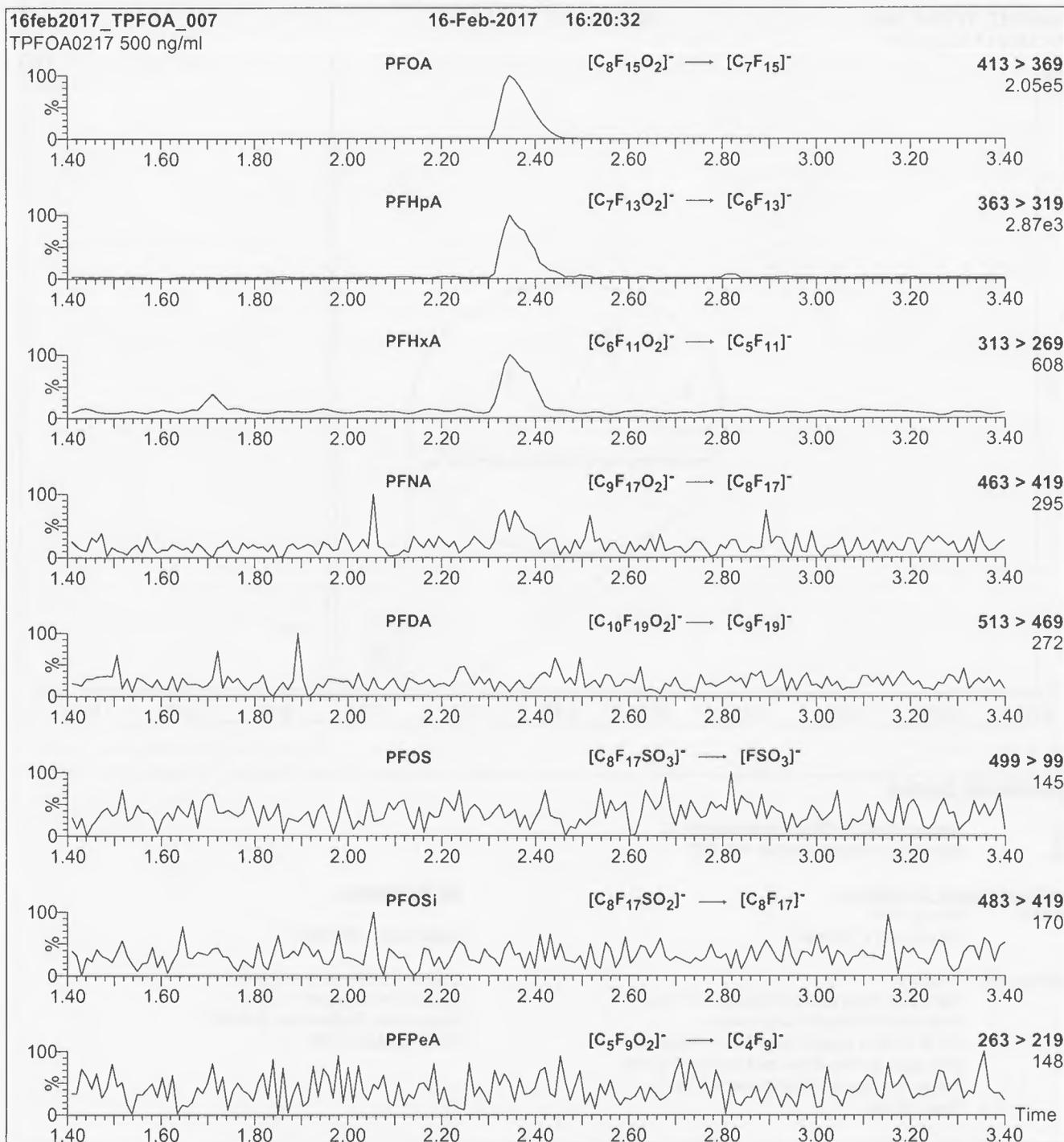
Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 50% organic over 5 min. Ramp to
90% organic over 5 min and hold for 1.5 min.
Return to initial conditions over 0.5 min.
Time: 13 min

Flow: 1.0 ml/min

MS Parameters:

Experiment: SIR (ES)

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

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

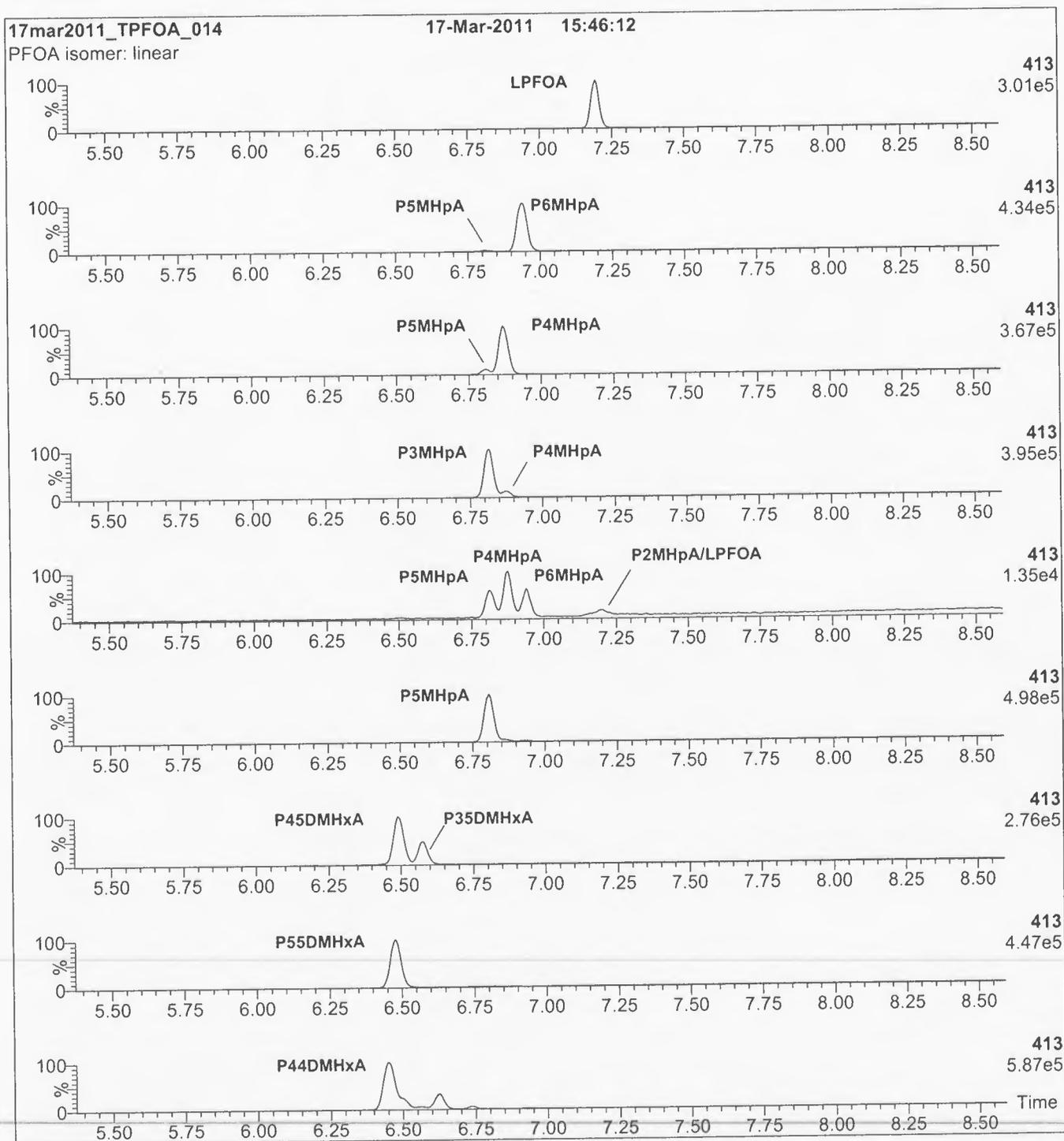
Injection: Direct loop injection
10 μ l (500 ng/ml T-PFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

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

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

Same as Figure 2.

BATTELLE

It can be done

BDO Id: 180618-06**Reagent Receipt Report**Approved: Authorized:

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

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

Approved by:	<u></u>	Approved on:	<u></u>
Authorized by:	<u></u>	Authorized on:	<u></u>

180618-06



WELLINGTON
LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

br-PFHxSK

**Potassium Perfluorohexanesulfonate
Solution/Mixture of Linear and
Branched Isomers**

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HAZARDS:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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



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

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

Isomer	Name	Structure	Percent Composition by ^{19}F -NMR
1	Potassium perfluoro-1-hexanesulfonate	$\text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+$	81.1
2	Potassium 1-trifluoromethylperfluoropentanesulfonate**	$\text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}(\text{SO}_3\text{K}^+)\text{CF}_3$	2.9
3	Potassium 2-trifluoromethylperfluoropentanesulfonate	$\text{CF}_3\text{CF}_2\text{CF}_2\text{CF}(\text{CF}_3)\text{CF}_2\text{SO}_3\text{K}^+$	1.4
4	Potassium 3-trifluoromethylperfluoropentanesulfonate	$\text{CF}_3\text{CF}_2\text{CF}(\text{CF}_3)\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+$	5.0
5	Potassium 4-trifluoromethylperfluoropentanesulfonate	$\text{CF}_3\text{CF}(\text{CF}_3)\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+$	8.9
6	Potassium 3,3-di(trifluoromethyl)perfluorobutanesulfonate	$\text{CF}_3\text{C}(\text{CF}_3)_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+$	0.2
7	Other Unidentified Isomers		0.5

* Percent of total perfluorohexanesulfonate isomers only.

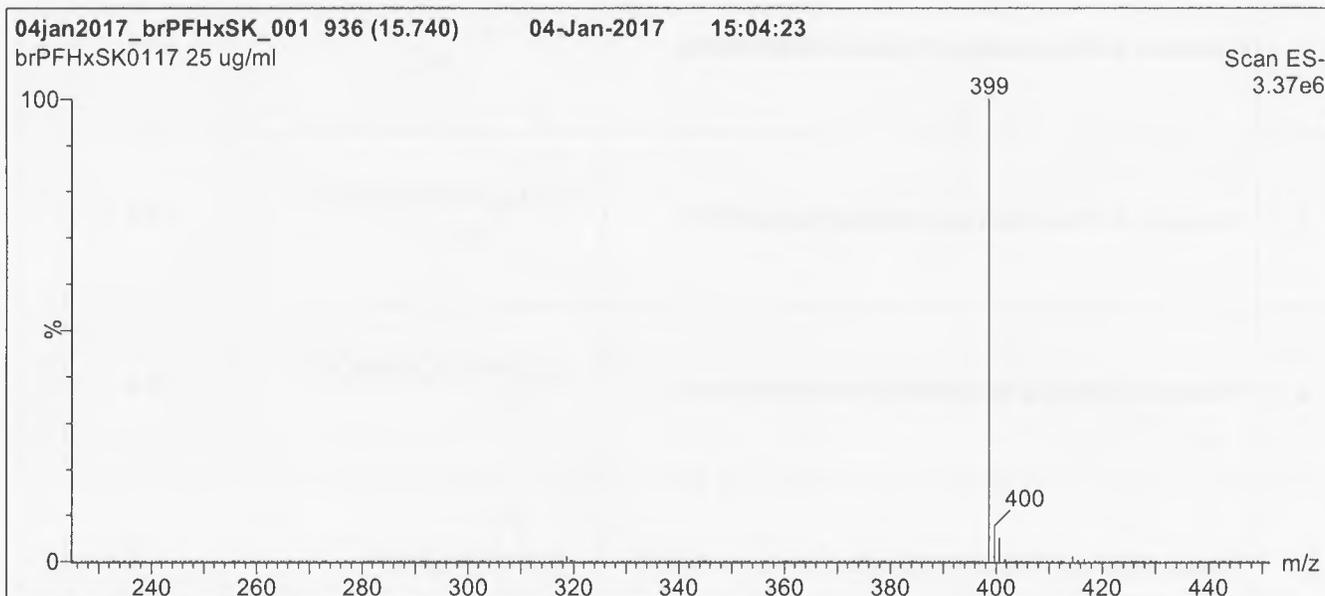
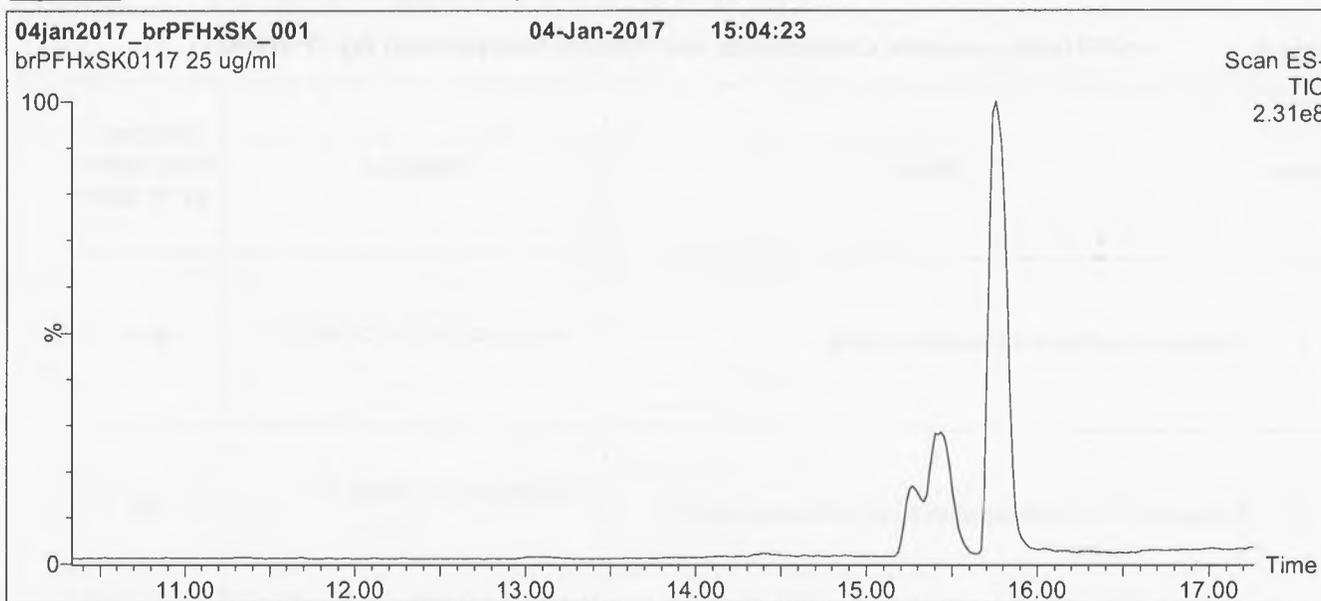
** Systematic Name: Potassium perfluorohexane-2-sulfonate.

Certified By:


 B.G. Chittim

Date: 01/20/2017

(mm/dd/yyyy)

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

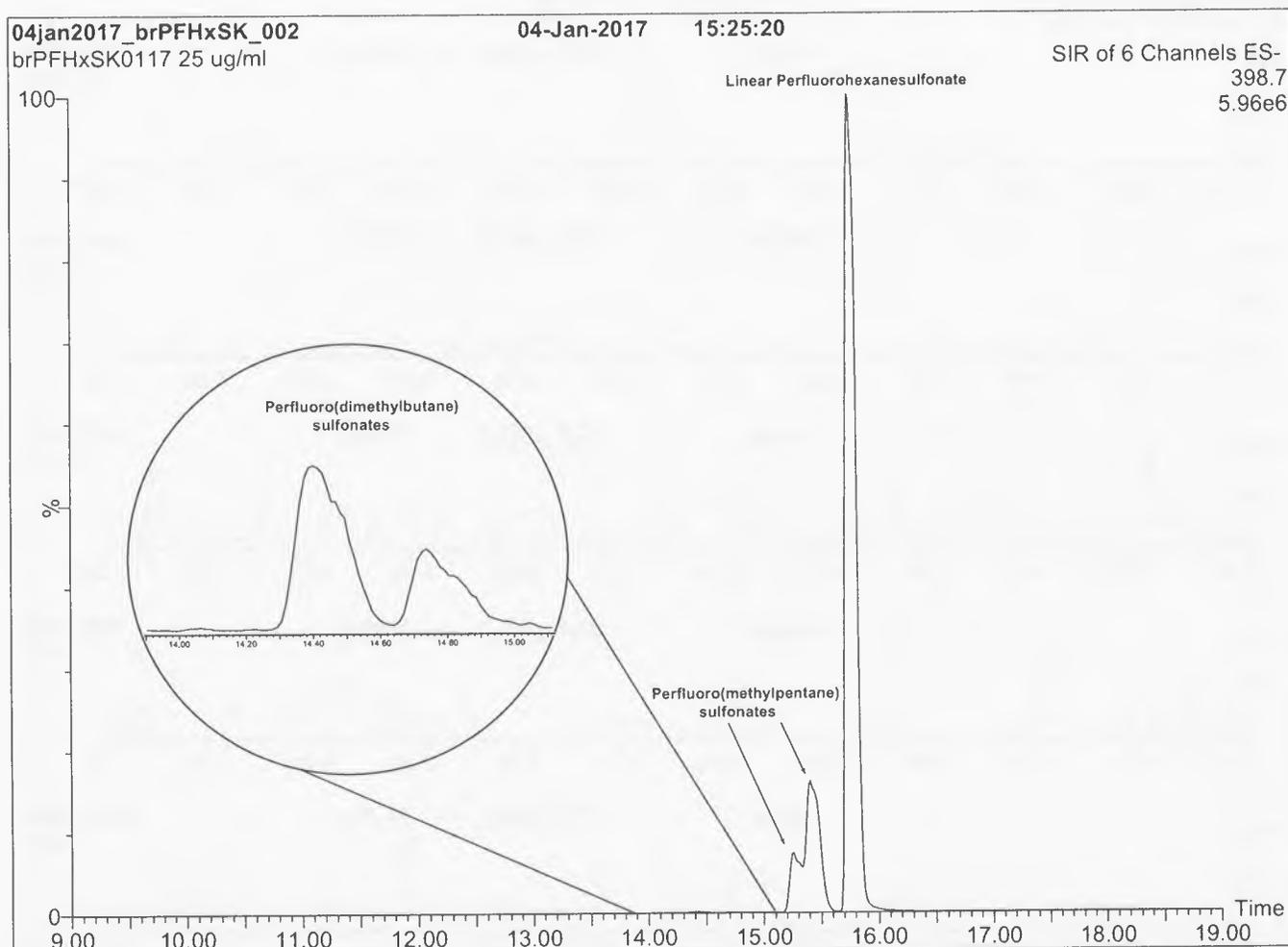
Mobile phase: Gradient
Start: 20% (80:20 MeOH:ACN) / 80% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 50% organic over 14 min. Ramp to
90% organic over 3 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 20 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

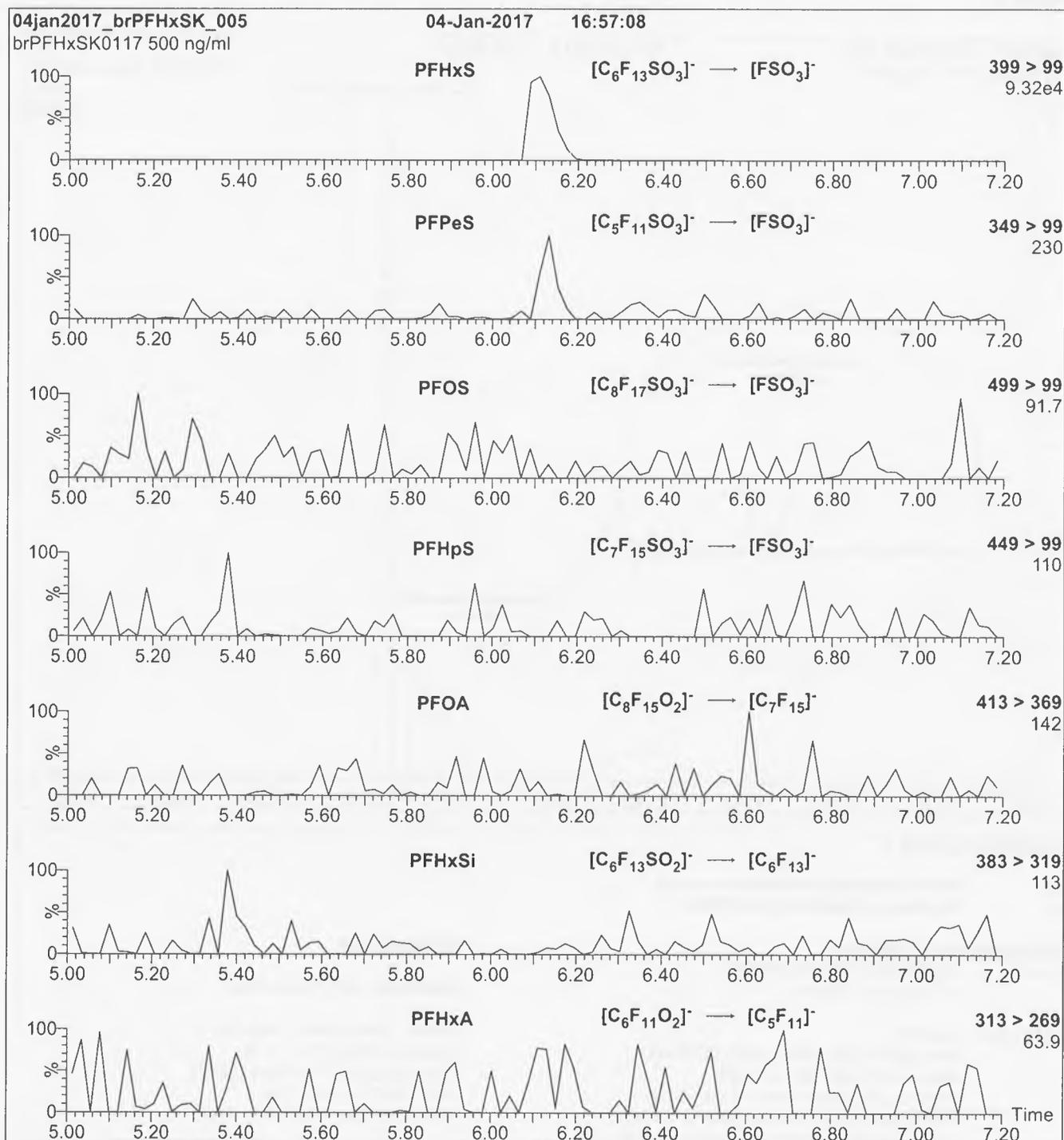
Mobile phase: Gradient
Start: 20% (80:20 MeOH:ACN) / 80% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 50% organic over 14 min. Ramp to
90% organic over 3 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 20 min

Flow: 300 μ l/min

MS Parameters

Experiment: SIR (6 channels)

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

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

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

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

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

BATTELLE

It can be done

BDO Id: 180618-07**Reagent Receipt Report**Approved: Authorized

Name: Branched PFOS Standard (50 µg/mL) Received: 6/18/2018

Vendor: Wellington Laboratories Custodian: Thorn, Jonathan

Catalogue No: br-PFOSK Expires: 1/12/2022

Type: Solution Consumed: _____

Lot No: brPFOSK0117 Stored In: Sample Preparation - C0103

Quantity: 1 ea mL % Moisture: 0

Description: Branched PFOS Standard (50 µg/mL)

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

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-07



WELLINGTON
LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

br-PFOSK

**Potassium Perfluorooctanesulfonate
Solution/Mixture of Linear and
Branched Isomers**

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HAZARDS:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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



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

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

Isomer	Name	Structure	Percent Composition by ¹⁹ F-NMR
1	Potassium perfluoro-1-octanesulfonate	CF ₃ CF ₂ SO ₃ ⁻ K ⁺	78.8
2	Potassium 1-trifluoromethylperfluoroheptanesulfonate**	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	1.2
3	Potassium 2-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	0.6
4	Potassium 3-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	1.9
5	Potassium 4-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	2.2
6	Potassium 5-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	4.5
7	Potassium 6-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	10.0
8	Potassium 5,5-di(trifluoromethyl)perfluorohexanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃ CF ₃	0.2
9	Potassium 4,4-di(trifluoromethyl)perfluorohexanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃ CF ₃	0.03
10	Potassium 4,5-di(trifluoromethyl)perfluorohexanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃ CF ₃	0.4
11	Potassium 3,5-di(trifluoromethyl)perfluorohexanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃ CF ₃	0.07

* Percent of total perfluorooctanesulfonate isomers only. Isomers are labelled in Figure 2.

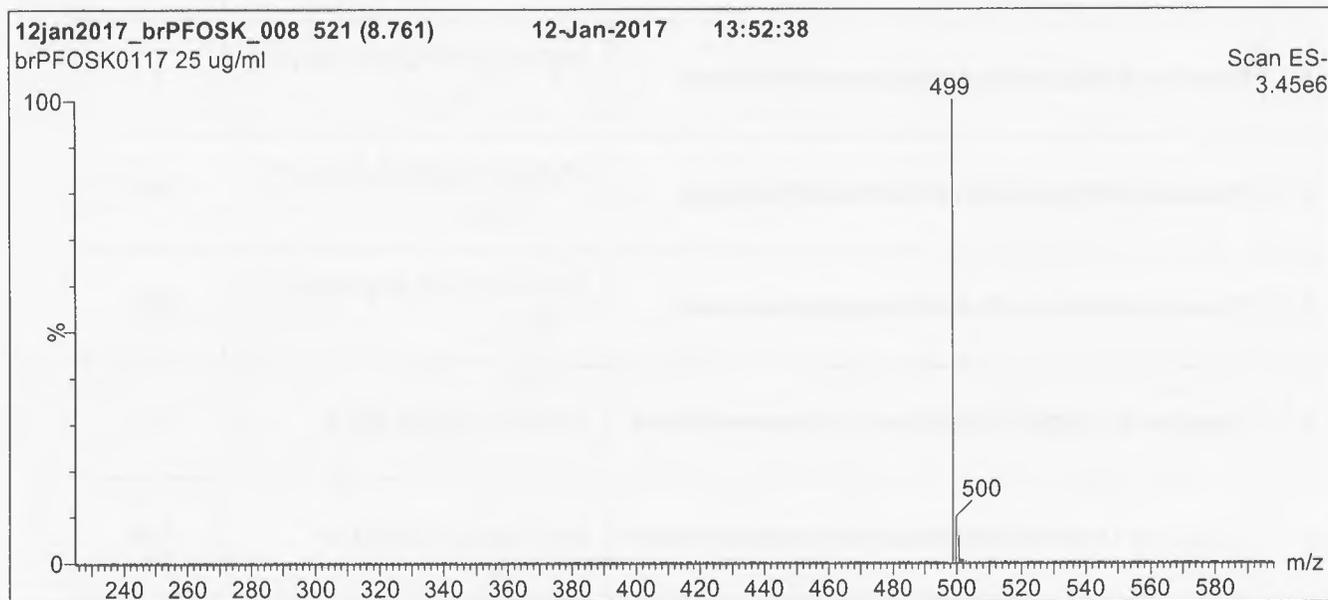
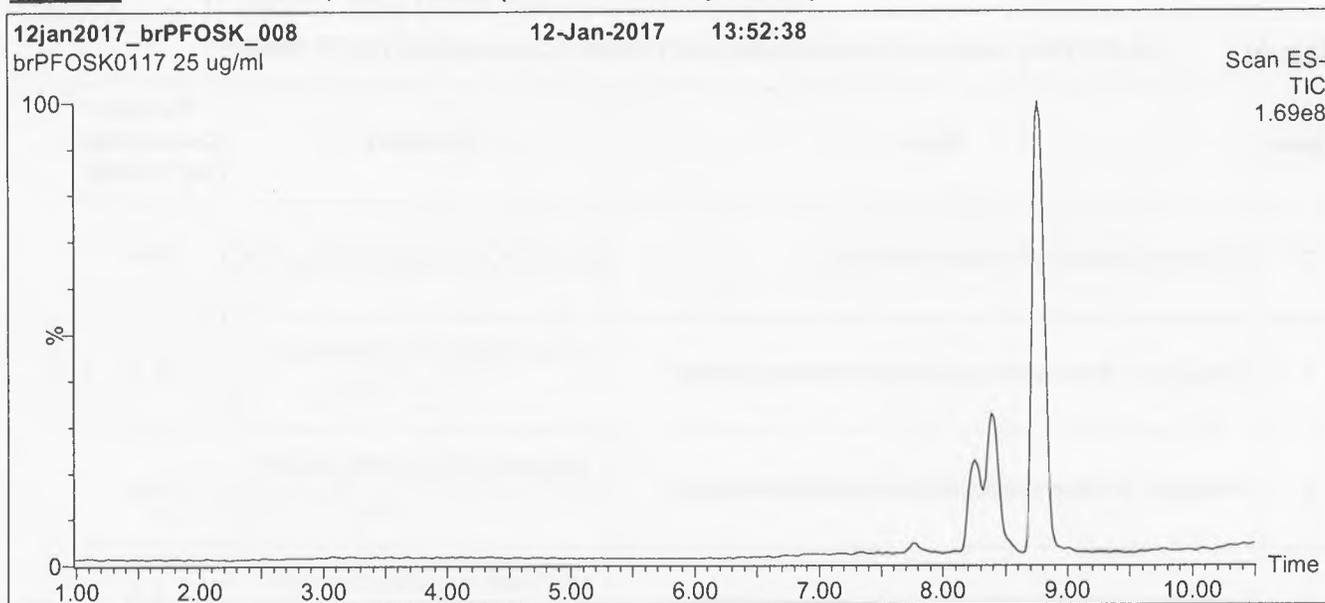
** Systematic Name: Potassium perfluorooctane-2-sulfonate.

Certified By:


 B.G. Chittim

Date: 01/20/2017

(mm/dd/yyyy)

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

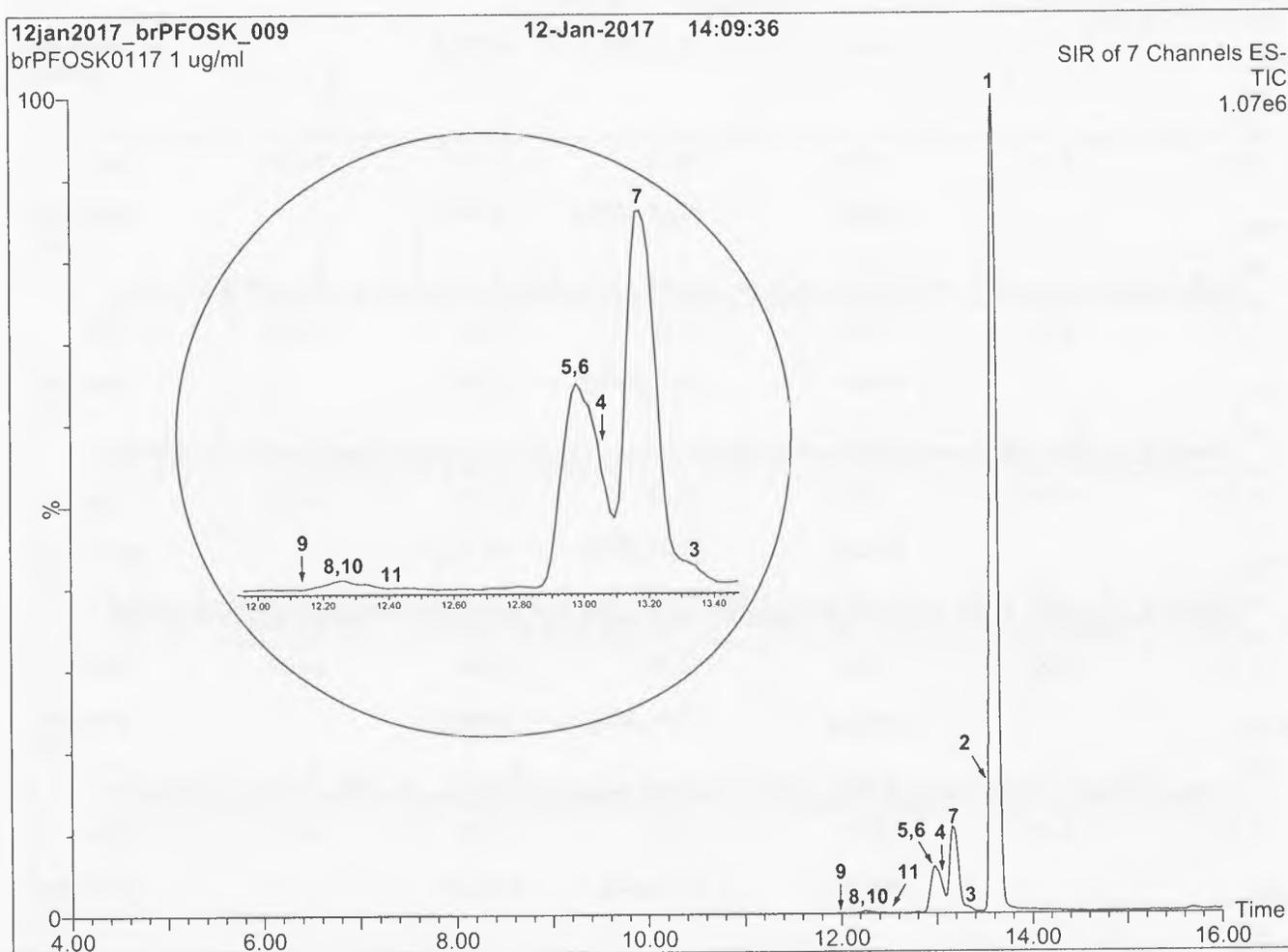
Mobile phase: Gradient
Start: 45% (80:20 MeOH:ACN) / 55% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 12 min and hold for 2 min.
Return to initial conditions over 0.5 min.
Time: 16 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: br-PFOSK; LC/MS Data (SIR)**Conditions for Figure 2:**

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

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈ (1.7 μ m, 2.1 x 100 mm)

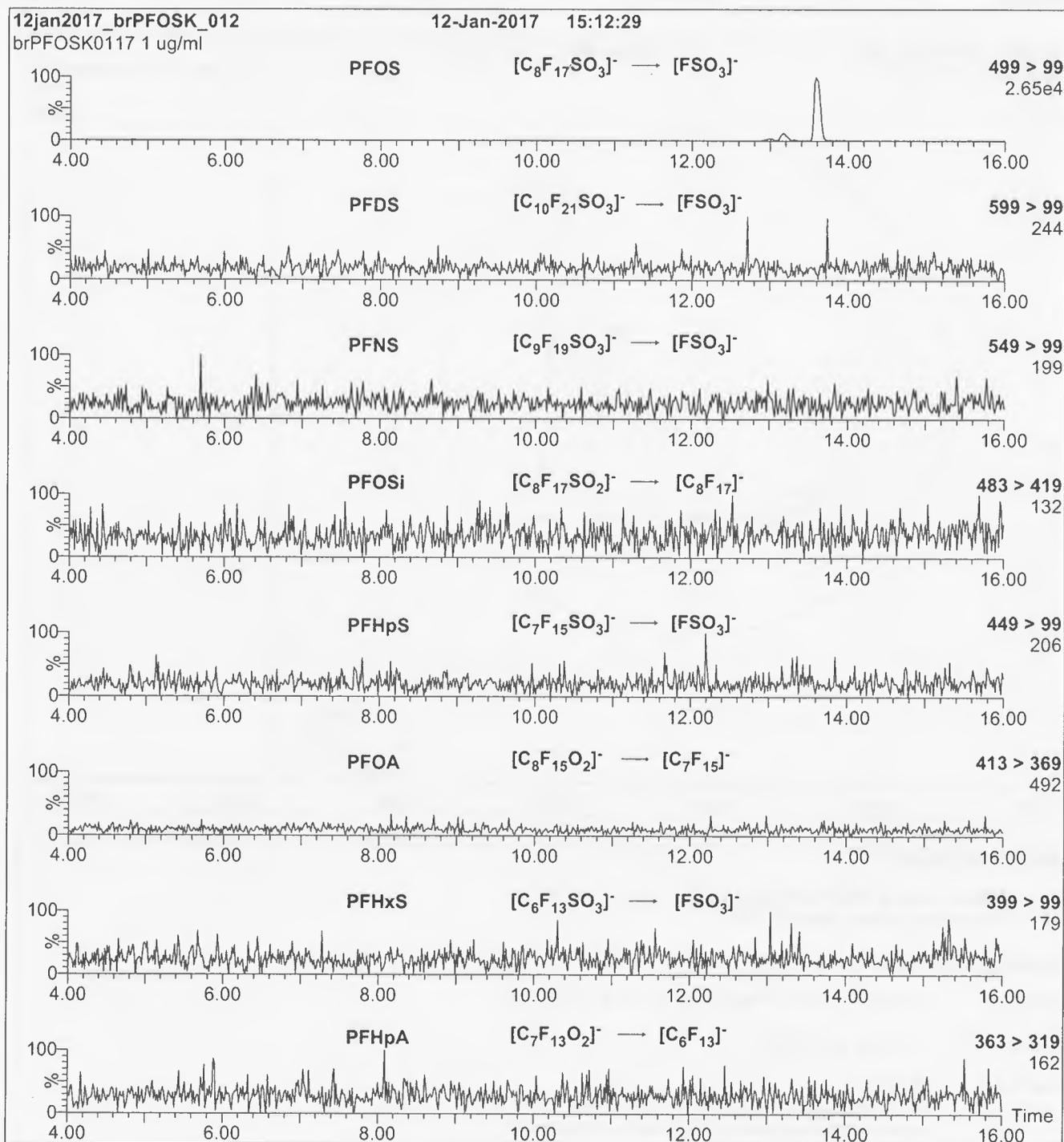
Injection: 1.0 μ g/ml of br-PFOSK

Mobile Phase: Gradient
45% (80:20 MeOH:ACN) / 55% H₂O (both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 15 min and hold for 3 min.
Return to initial conditions over 1 min.
Time: 20 min

Flow: 300 μ l/min

MS Conditions:

SIR (ES)
Source = 110 °C
Desolvation = 325 °C
Cone Voltage = 60V

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

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 μ l/min**MS Parameters**

Collision Gas (mbar) = 3.31e-3

Collision Energy (eV) = 11-50 (variable)



CERTIFIED WEIGHT REPORT

Part Number: 99207
Lot Number: 061918
Description: PFOA - DOD
24 components
Expiration Date: 061923
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 1.0
NIST Test ID#: 2684186

Solvent(s): Methanol (1 mM KOH)
2-Propanol
Lot# 061918 (98%)
23214 (2%)

		061918
Formulated By:	Mario Luis	DATE
		061918
Reviewed By:	Pedro L. Rentas	DATE

Volume(s) shown below were combined and diluted to (mL):

Note: All assigned values are anion concentrations.

50.0 5E-05 Balance Uncertainty
0.007 Flask Uncertainty

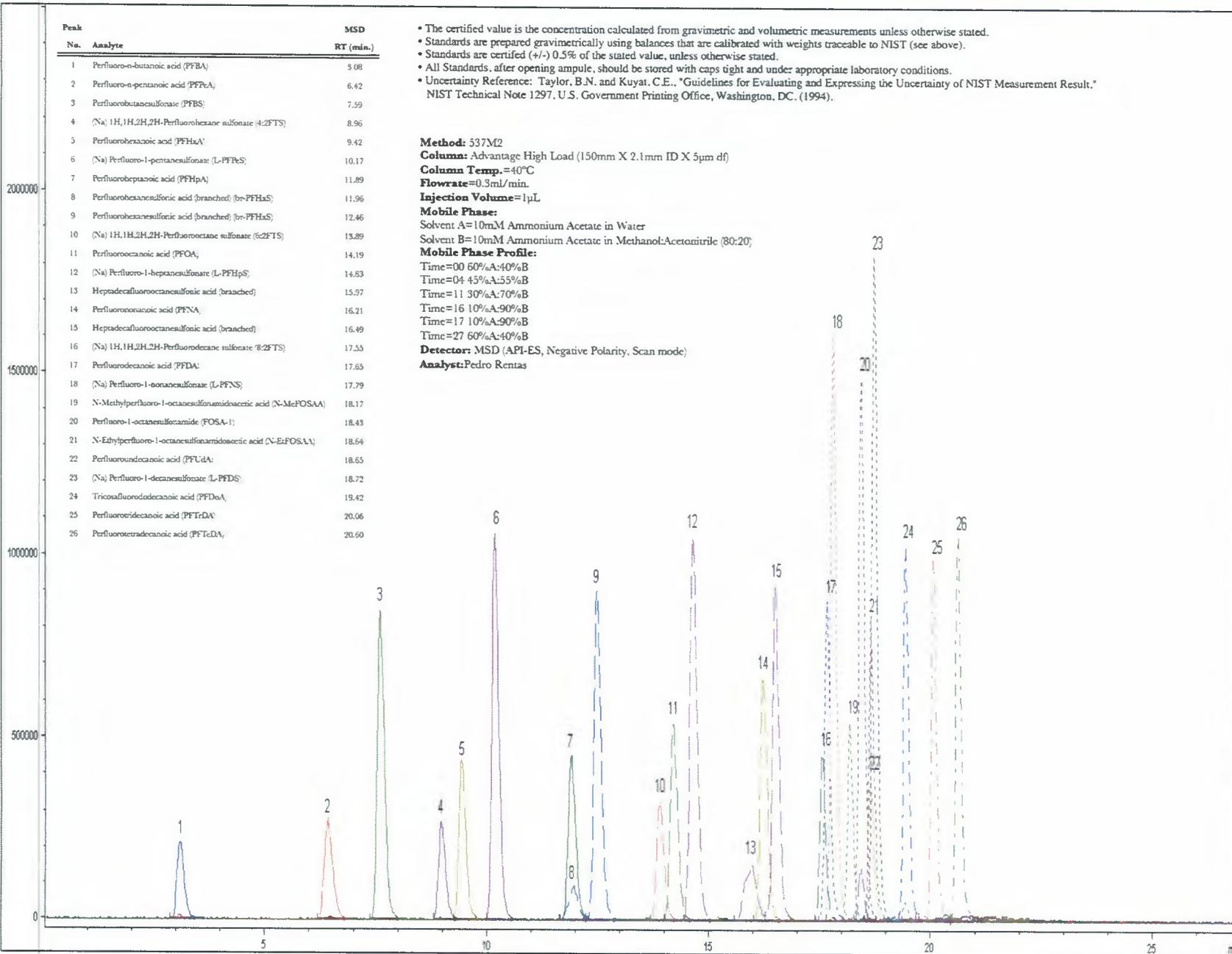
Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)		
									CAS#	OSHA PEL (TWA)	LD50
1. Perfluoro-n-butanoic acid (linear) -	99542	110317	0.02	1.00	0.004	50.2	1.00	0.01	375-22-4	N/A	N/A
2. Perfluoro-n-pentanoic acid -	99543	110317	0.02	1.00	0.004	50.7	1.01	0.01	2706-90-3	N/A	N/A
3. Perfluorohexanoic acid -	99199	030617	0.02	1.00	0.004	50.3	1.01	0.01	307-24-4	N/A	N/A
4. Perfluoroheptanoic acid -	99197	030517	0.02	1.00	0.004	50.1	1.00	0.01	375-85-9	N/A	N/A
5. Perfluorooctanoic acid -	99202	030617	0.02	1.00	0.004	50.2	1.00	0.01	335-67-1	N/A	ipr-rat 189mg/kg
6. Perfluorononanoic acid -	99200	030617	0.02	1.00	0.004	50.1	1.00	0.01	375-95-1	N/A	N/A
7. Perfluorodecanoic acid -	99195	030617	0.02	1.00	0.004	50.1	1.00	0.01	335-76-2	N/A	ort-rat 57mg/kg
8. Perfluoroundecanoic acid -	99205	030617	0.02	1.00	0.004	50.1	1.00	0.01	2058-94-8	N/A	N/A
9. Tricosafuorododecanoic acid -	99196	030617	0.02	1.00	0.004	50.1	1.00	0.01	307-55-1	N/A	N/A
10. Perfluorotridecanoic acid -	99204	030617	0.02	1.00	0.004	50.1	1.00	0.01	72629-94-8	N/A	N/A
11. Perfluorotetradecanoic acid -	99203	030617	0.02	1.00	0.004	50.1	1.00	0.01	376-06-7	N/A	N/A
12. Perfluoro-1-octanesulfonamide -	3677	FOSA0817I	0.02	1.00	0.004	50.0	1.00	0.01	754-91-6	N/A	N/A
13. N-Methylperfluoro-1-octanesulfonamidoacetic acid -	3667	NMeFOSAA0118	0.02	1.00	0.004	50.0	1.00	0.01	2355-31-9	N/A	N/A
14. N-Ethylperfluoro-1-octanesulfonamidoacetic acid -	3664	NEtFOSAA0118	0.02	1.00	0.004	50.0	1.00	0.01	2991-50-6	N/A	N/A
15. Perfluorobutanesulfonic acid -	99194	031017	0.02	1.00	0.004	50.7	1.01	0.01	375-73-5	N/A	N/A
16. Perfluoro-1-pentanesulfonate -	99544	111017	0.02	0.98	0.004	51.3	1.00	0.01	630402-22-1	N/A	N/A
17. Perfluorohexanesulfonic acid (branched) -	99198	030617	0.02	1.00	0.004	50.6	1.01	0.01	3871-99-6	N/A	N/A
18. Perfluoro-1-heptanesulfonic acid -	3672	LPFHpS0817	0.021	1.05	0.004	47.6	1.00	0.01	375-92-8	N/A	N/A
19. Heptadecafluorooctanesulfonic acid (branched) -	99201	030617	0.02	1.00	0.004	50.2	1.00	0.01	1763-23-1	N/A	N/A
20. Perfluoro-1-nonanesulfonic acid -	3957	LPFNS0917	0.021	1.05	0.004	48.0	1.01	0.01	98789-57-2	N/A	N/A
21. Perfluoro-1-decanesulfonic acid -	3671	LPFDS0217	0.021	1.05	0.004	48.2	1.01	0.01	2806-15-7	N/A	N/A
22. 1H,1H,2H,2H-Perfluorohexane sulfonic acid	3955	42FTS1216	0.0214	1.07	0.004	46.7	1.00	0.01	00-00-0	N/A	N/A
23. 1H,1H,2H,2H-Perfluorooctane sulfonic acid -	3661	62FTS0616	0.021	1.05	0.004	47.4	1.00	0.01	27619-97-2	N/A	N/A
24. 1H,1H,2H,2H-Perfluorodecane sulfonic acid -	3662	82FTS1216	0.021	1.05	0.004	47.9	1.01	0.01	39108-34-4	N/A	N/A



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

Method: 537M2
Column: Advantage High Load (150mm X 2.1mm ID X 5µm df)
Column Temp. = 40°C
Flowrate = 0.3ml/min.
Injection Volume = 1µL
Mobile Phase:
 Solvent A = 10mM Ammonium Acetate in Water
 Solvent B = 10mM Ammonium Acetate in Methanol:Acetonitrile (80:20)
Mobile Phase Profile:
 Time = 00 60%A:40%B
 Time = 04 45%A:55%B
 Time = 11 30%A:70%B
 Time = 16 10%A:90%B
 Time = 17 10%A:90%B
 Time = 27 60%A:40%B
Detector: MSD (API-ES, Negative Polarity, Scan mode)
Analyst: Pedro Rentas

Peak No.	Analyte	MSD RT (min.)
1	Perfluoro-n-butanoic acid (PFBA)	3.08
2	Perfluoro-n-pentanoic acid (PFPeA)	6.42
3	Perfluorobutanesulfonate (PFBS)	7.59
4	(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate (4:2FTS)	8.96
5	Perfluorohexanoic acid (PFHxA)	9.42
6	(Na) Perfluoro-1-pentanesulfonate (L-PFPeS)	10.17
7	Perfluorooheptanoic acid (PFHpA)	11.89
8	Perfluorohexanesulfonic acid (branched) (br-PFHxS)	11.96
9	Perfluorohexanesulfonic acid (branched) (br-PFHxS)	12.46
10	(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate (8:2FTS)	13.89
11	Perfluorooctanoic acid (PFOA)	14.19
12	(Na) Perfluoro-1-heptanesulfonate (L-PFPoS)	14.63
13	Heptafluorooctanesulfonic acid (branched)	15.97
14	Perfluorononanoic acid (PFNA)	16.21
15	Heptafluorooctanesulfonic acid (branched)	16.49
16	(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate (8:2FTS)	17.55
17	Perfluorodecanoic acid (PFDA)	17.65
18	(Na) Perfluoro-1-nonanesulfonate (L-PFNS)	17.79
19	N-Methylperfluoro-1-octanesulfonamidoacetic acid (N-MeFOSAA)	18.17
20	Perfluoro-1-octanesulfonamide (FOSA-1)	18.43
21	N-Ethylperfluoro-1-octanesulfonamidoacetic acid (N-EtFOSAA)	18.64
22	Perfluoroundecanoic acid (PFUDA)	18.65
23	(Na) Perfluoro-1-decenesulfonate (L-PFDS)	18.72
24	Tricosafluorododecanoic acid (PFDoA)	19.42
25	Perfluorotridecanoic acid (PFTrDA)	20.06
26	Perfluorotetradecanoic acid (PFTeDA)	20.60



It can be done

BDO Id: 180726-04

Reagent Receipt Report

Approved: Authorized

Name: Mass-labelled PFAS injection standar Received: 7/26/2018
Vendor: Wellington Laboratories Custodian: Thorn, Jonathan
Catalogue No: MPFAC-C-IS Expires: 5/2/2022
Type: Solution Consumed: _____
Lot No: MPFACCIS0516 Stored In: LC Laboratory - R0107
Quantity: 2 ea 1.2 mL % Moisture: 0
Description: Mass-labelled PFAS injection standards

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert Val:	Lower Limit:	Upper Limit:
13C2-PFDA	BDO-2110	2.0000	100.00	--	--	<input type="checkbox"/>		
13C2-PFOA	BDO-2107	2.0000	100.00	--	--	<input type="checkbox"/>		
13C3-PFBA	BDO-2231	2.0000	100.00	--	--	<input type="checkbox"/>		
13C4-PFOS	BDO-2121	1.9140	100.00	--	--	<input type="checkbox"/>		

Total Analytes: 4

Notes:

Approved by: Lizotte Jr, Robert Approved on: 7/27/2018 11:10:00 AM
Authorized by: _____ Authorized on: _____

**WELLINGTON**
LABORATORIES**CERTIFICATE OF ANALYSIS**
DOCUMENTATION**MPFAC-C-IS****Mass-Labelled Perfluorinated
Compound Injection Standards Solution**

PRODUCT CODE: MPFAC-C-IS
LOT NUMBER: MPFACCIS0516
SOLVENT(S): Methanol / Water (<1%)
DATE PREPARED: (mm/dd/yyyy) 05/24/2016
LAST TESTED: (mm/dd/yyyy) 05/02/2017
EXPIRY DATE: (mm/dd/yyyy) 05/02/2022
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DESCRIPTION:

MPFAC-C-IS is a solution/mixture of mass-labelled (¹³C) perfluoroalkylcarboxylic acids and a mass-labelled (¹³C) perfluoroalkylsulfonate. The components and their concentrations are given in Table A.

MPFAC-C-IS was designed for, and prepared to be used with, PFC-CVS-C.

The individual mass-labelled perfluoroalkylcarboxylic acids and mass-labelled perfluoroalkylsulfonate all have chemical purities of >98% and isotopic purities of ≥99%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The mass-labelled perfluoroalkylsulfonate compound concentration is reported as the salt.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HAZARDS:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

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

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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

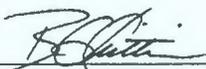


For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

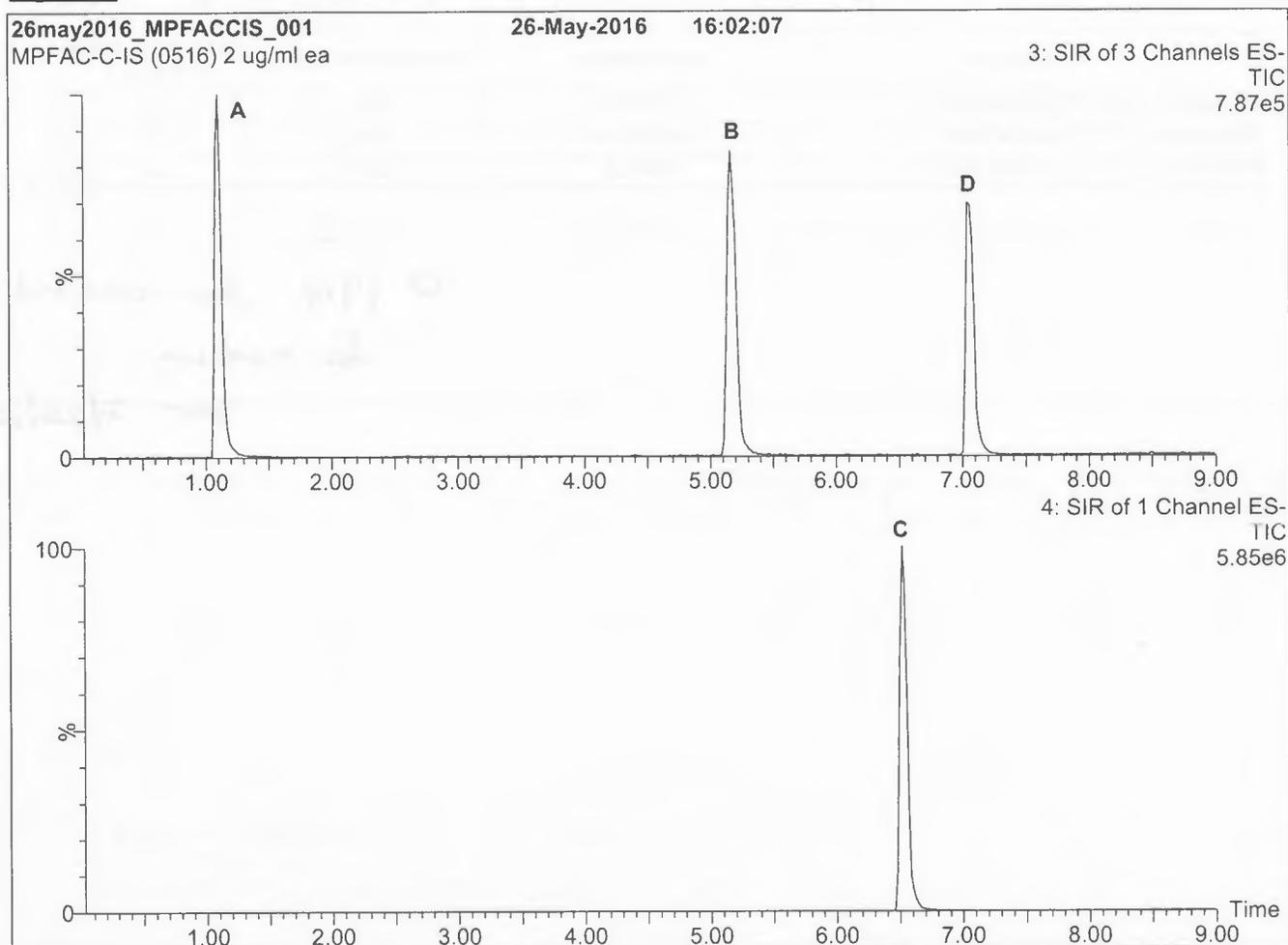
Table A: MPFAC-C-IS; Components and Concentrations (ng/ml; \pm 5% in Methanol / Water (<1%))

Compound	Abbreviation	Concentration (ng/ml)	Peak Assignment in Figure 1
Perfluoro-n-[2,3,4- $^{13}\text{C}_3$]butanoic acid	M3PFBA	2000	A
Perfluoro-n-[1,2- $^{13}\text{C}_2$]octanoic acid	M2PFOA	2000	B
Perfluoro-n-[1,2- $^{13}\text{C}_2$]decanoic acid	MPFDA	2000	D
Sodium perfluoro-1-[1,2,3,4- $^{13}\text{C}_4$]octanesulfonate	MPFOS	2000 ^(N)	C

⊙ 1914 when corrected
for sodium
JMS 7/26/2017

Certified By: 
B.G. Chittim, General Manager

Date: 05/04/2017
(mm/dd/yyyy)

Figure 1: MPFAC-C-IS; LC/MS Data (Total Ion Current Chromatogram; SIR)**Conditions for Figure 1:**

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

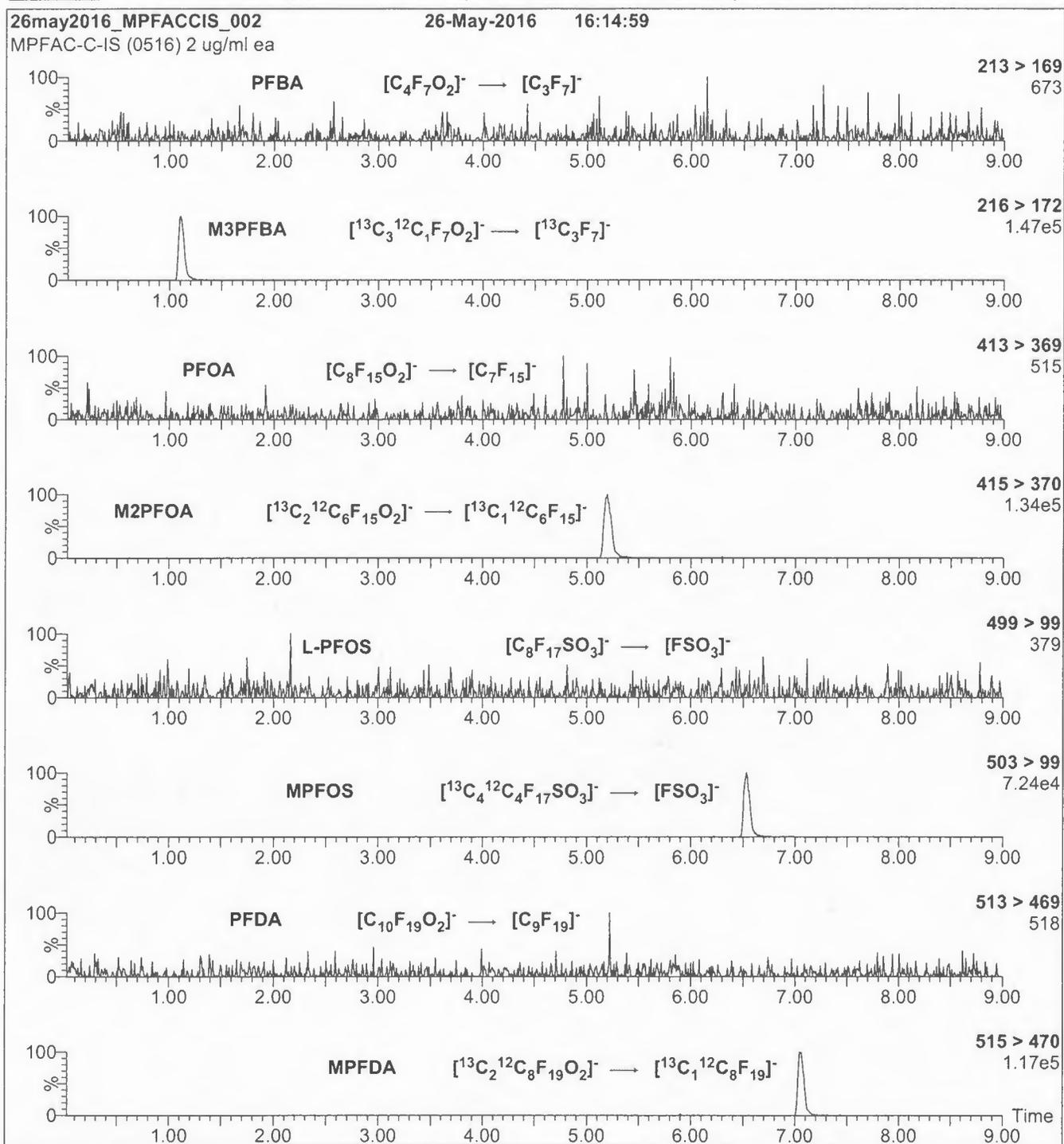
Mobile phase: Gradient
 Start: 50% (80:20 MeOH:ACN) / 50% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 8 min
 and hold for 2 min before returning
 to initial conditions in 1 min.
 Time: 12 min

Flow: 300 μ l/min

MS Parameters

Experiment: SIR

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = variable (10-80)
 Cone Gas Flow (l/hr) = 50
 Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFAC-C-IS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (MPFAC-C-IS)

Mobile phase: Same as Figure 1

Flow: 300 μ l/min**MS Parameters**

Collision Gas (mbar) = 3.50e-3

Collision Energy (eV) = 8-50 (variable)

It can be done

BDO Id: 180726-05

Reagent Receipt Report

Approved: Authorized

Name: Mass-labelled PFAS Extraction Stand Received: 7/26/2018
Vendor: Wellington Laboratories Custodian: Thorn, Jonathan
Catalogue No: MPFAC-24ES Expires: 2/7/2023
Type: Solution Consumed: _____
Lot No: MPFAC24ES0218 Stored In: LC Laboratory - R0107
Quantity: 2 ea 1.2 mL % Moisture: 0
Description: Mass-labelled PFAS Extraction Standard Solution

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
13C2-4:2FTS	BDO-2229	0.9350	100.00	--	--	<input type="checkbox"/>			
13C2-6:2FTS	BDO-2230	0.9490	100.00	--	--	<input type="checkbox"/>			
13C2-8:2FTS	BDO-2220	0.9580	100.00	--	--	<input type="checkbox"/>			
13C2-PFDoA	BDO-2112	1.0000	100.00	--	--	<input type="checkbox"/>			
13C2-PFTeDA	BDO-2224	1.0000	100.00	--	--	<input type="checkbox"/>			
13C3-PFBS	BDO-2226	0.9290	100.00	--	--	<input type="checkbox"/>			
13C3-PFHxS	BDO-2227	0.9460	100.00	--	--	<input type="checkbox"/>			
13C4-PFBA	BDO-2105	1.0000	100.00	--	--	<input type="checkbox"/>			
13C4-PFHpA	BDO-2218	1.0000	100.00	--	--	<input type="checkbox"/>			
13C5-PFHxA	BDO-2217	1.0000	100.00	--	--	<input type="checkbox"/>			
13C5-PFPeA	BDO-2216	1.0000	100.00	--	--	<input type="checkbox"/>			
13C6-PFDA	BDO-2222	1.0000	100.00	--	--	<input type="checkbox"/>			
13C7-PFUnA	BDO-2223	1.0000	100.00	--	--	<input type="checkbox"/>			
13C8-FOSA	BDO-2225	1.0000	100.00	--	--	<input type="checkbox"/>			
13C8-PFOA	BDO-2219	1.0000	100.00	--	--	<input type="checkbox"/>			
13C8-PFOS	BDO-2228	0.9570	100.00	--	--	<input type="checkbox"/>			
13C9-PFNA	BDO-2221	1.0000	100.00	--	--	<input type="checkbox"/>			
d3-MeFOSAA	BDO-1838	1.0000	100.00	--	--	<input type="checkbox"/>			
d5-EtFOSAA	BDO-1839	1.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 19

Notes:

Approved by: Lizotte Jr, Robert Approved on: 7/27/2018 11:10:00 AM
Authorized by: _____ Authorized on: _____

**WELLINGTON**
LABORATORIES**CERTIFICATE OF ANALYSIS**
DOCUMENTATION**MPFAC-24ES****Mass-Labelled Per- and Poly-fluoroalkyl Substance
Extraction Standard Solution**

PRODUCT CODE: MPFAC-24ES
LOT NUMBER: MPFAC24ES0218
SOLVENT(S): Methanol / Isopropanol (2%) / Water (<1%)
DATE PREPARED: (mm/dd/yyyy) 02/07/2018
LAST TESTED: (mm/dd/yyyy) 02/07/2018
EXPIRY DATE: (mm/dd/yyyy) 02/07/2023
RECOMMENDED STORAGE: Refrigerate ampoule

DESCRIPTION:

MPFAC-24ES is a solution/mixture of ten mass-labelled (¹³C) perfluoroalkylcarboxylic acids (C₄-C₁₂ and C₁₄), three mass-labelled (¹³C) perfluoroalkylsulfonates (C₄, C₆, and C₈), three mass-labelled (¹³C) telomer sulfonates (4:2, 6:2, and 8:2), two mass-labelled (²H) perfluorooctanesulfonamidoacetic acids, and perfluoro-1-[¹³C₈]octanesulfonamide. The components and their concentrations are given in Table A.

The individual mass-labelled perfluoroalkylcarboxylic acids, mass-labelled perfluoroalkylsulfonates, mass-labelled telomer sulfonates, and perfluoro-1-[¹³C₈]octanesulfonamide all have chemical purities of >98% and isotopic purities of ≥99%. The individual mass-labelled perfluorooctanesulfonamidoacetic acids all have chemical purities of >98% and isotopic purities of ≥98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture

Figure 1: LC/MS Data (SIR)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HANDLING:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

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

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

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



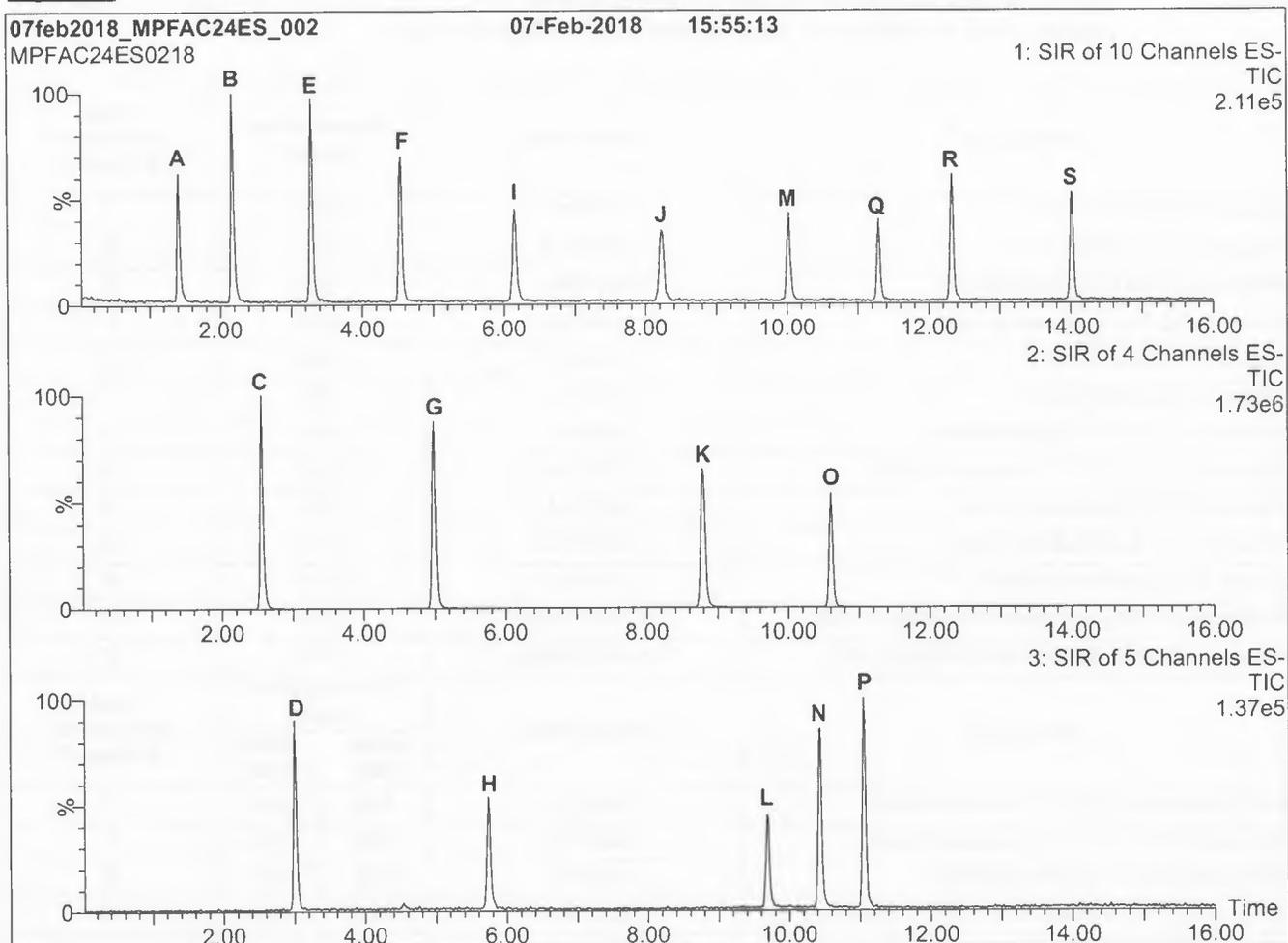
For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: MPFAC-24ES; Components and Concentrations
(ng/ml, \pm 5% in Methanol / Isopropanol (2%) / Water (<1%))

Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Perfluoro-n-[$^{13}\text{C}_4$]butanoic acid	MPFBA	1000		A
Perfluoro-n-[$^{13}\text{C}_5$]pentanoic acid	M5PFPeA	1000		B
Perfluoro-n-[1,2,3,4,6- $^{13}\text{C}_5$]hexanoic acid	M5PFHxA	1000		E
Perfluoro-n-[1,2,3,4- $^{13}\text{C}_4$]heptanoic acid	M4PFHpA	1000		F
Perfluoro-n-[$^{13}\text{C}_6$]octanoic acid	M8PFOA	1000		I
Perfluoro-n-[$^{13}\text{C}_7$]nonanoic acid	M9PFNA	1000		J
Perfluoro-n-[1,2,3,4,5,6- $^{13}\text{C}_6$]decanoic acid	M6PFDA	1000		M
Perfluoro-n-[1,2,3,4,5,6,7- $^{13}\text{C}_7$]undecanoic acid	M7PFUdA	1000		Q
Perfluoro-n-[1,2- $^{13}\text{C}_2$]dodecanoic acid	MPFDoA	1000		R
Perfluoro-n-[1,2- $^{13}\text{C}_2$]tetradecanoic acid	M2PFTeDA	1000		S
Perfluoro-1-[$^{13}\text{C}_8$]octanesulfonamide	M8FOSA	1000		O
N-methyl- d_3 -perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	1000		N
N-ethyl- d_5 -perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	1000		P
Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Sodium perfluoro-1-[2,3,4- $^{13}\text{C}_3$]butanesulfonate	M3PFBS	1000	929	C
Sodium perfluoro-1-[1,2,3- $^{13}\text{C}_3$]hexanesulfonate	M3PFHxS	1000	946	G
Sodium perfluoro-1-[$^{13}\text{C}_8$]octanesulfonate	M8PFOS	1000	957	K
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- $^{13}\text{C}_2$]hexanesulfonate	M2-4:2FTS	1000	935	D
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- $^{13}\text{C}_2$]octanesulfonate	M2-6:2FTS	1000	949	H
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- $^{13}\text{C}_2$]decanesulfonate	M2-8:2FTS	1000	958	L

Certified By: 
B.G. Chittim, General Manager

Date: 02/09/2018
(mm/dd/yyyy)

Figure 1: MPFAC-24ES; LC/MS Data (Total Ion Current Chromatogram; SIR)**Conditions for Figure 1:**

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 40% (80:20 MeOH:ACN) / 60% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 55% organic over 3.5 min.
 Ramp to 70% organic over 6.5 min.
 Ramp to 85% organic over 5 min and hold for
 1 min before returning to initial conditions in 0.5 min.
 Time: 17 min

Flow: 300 μ l/min

MS Parameters

Experiment: SIR

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = variable (10-60)
 Cone Gas Flow (l/hr) = 100
 Desolvation Gas Flow (l/hr) = 750

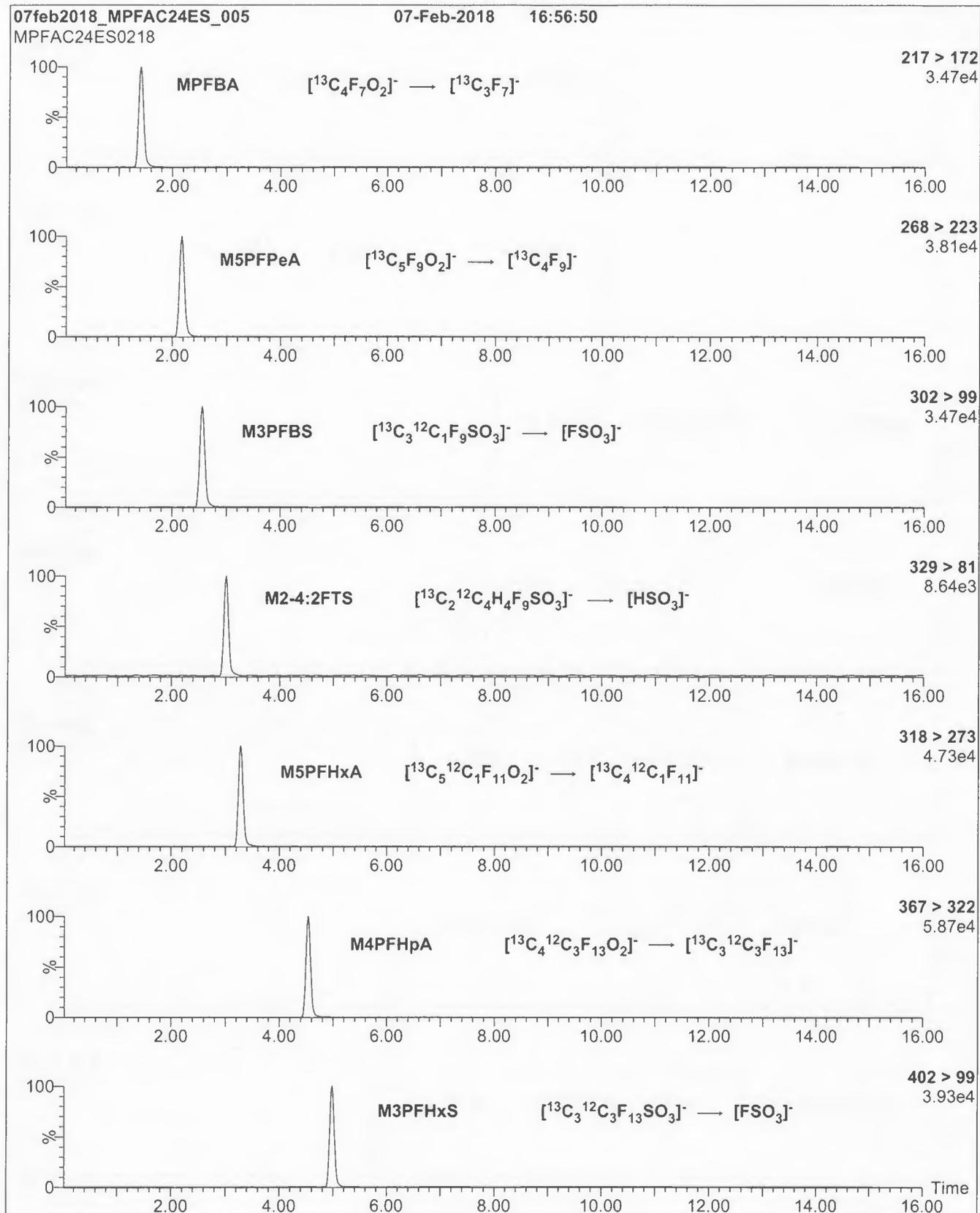
Figure 2: MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)

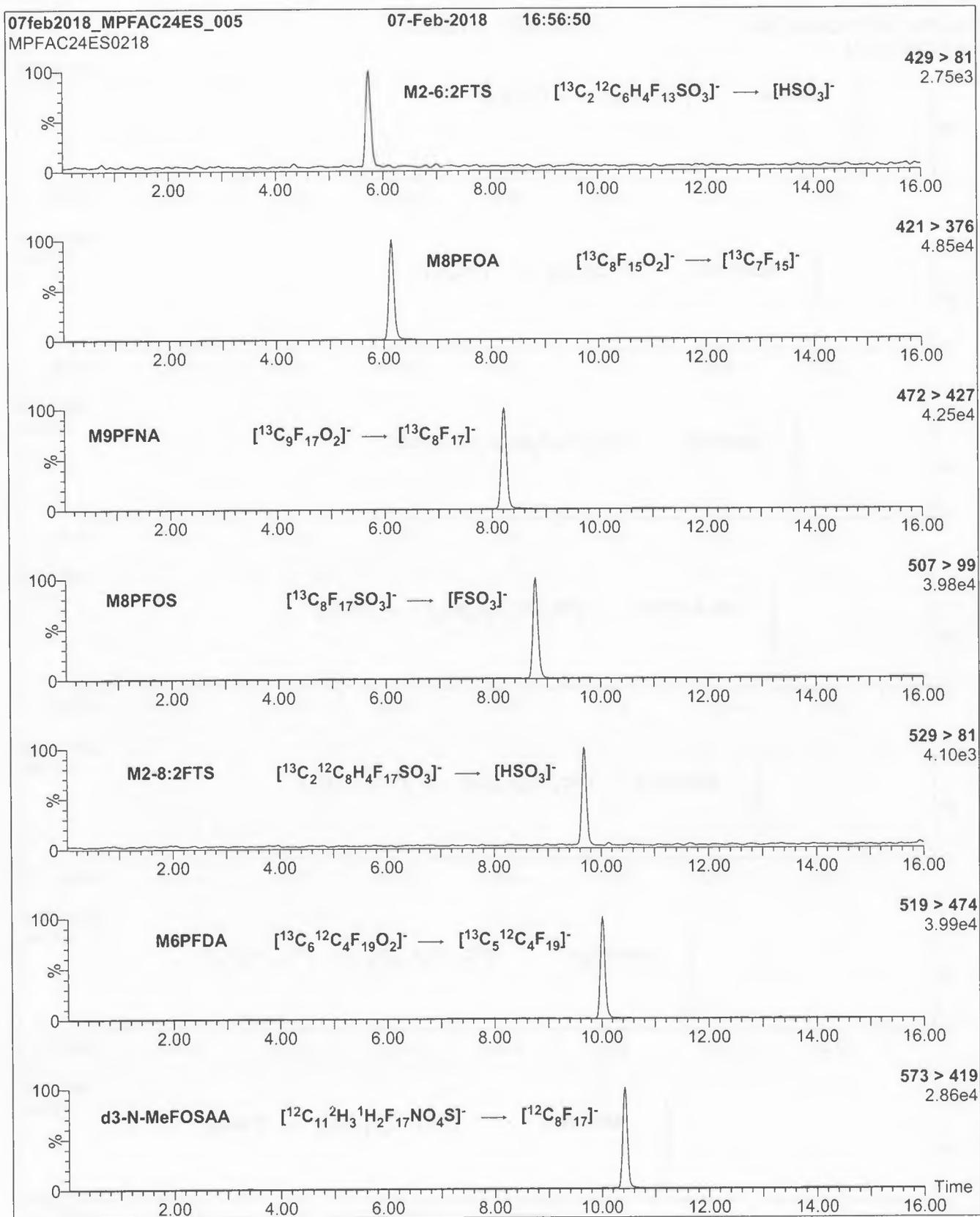
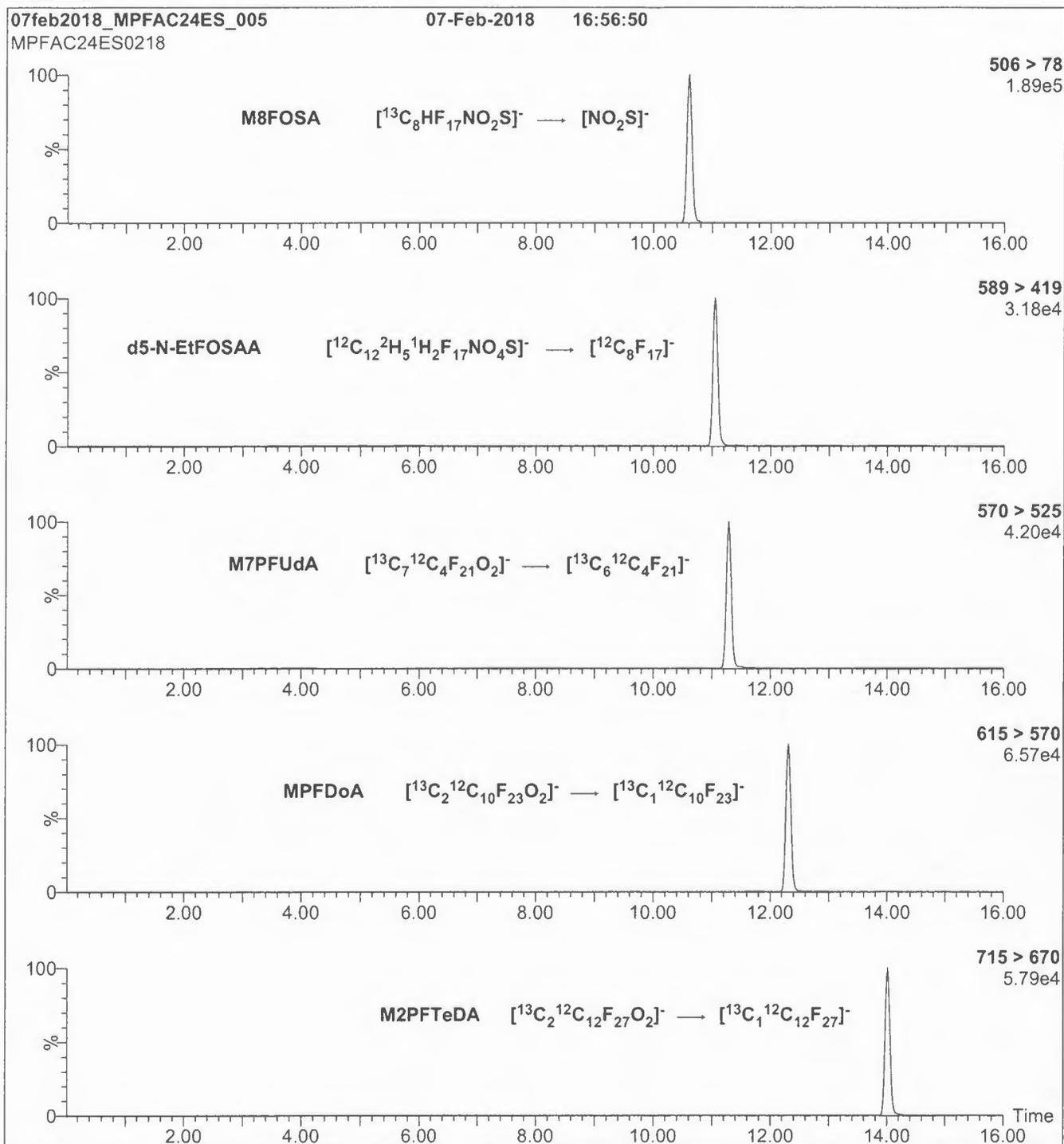
Figure 2: MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)

Figure 2: MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (MPFAC-24ES)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{l}/\text{min}$ **MS Parameters**

Collision Gas (mbar) = 3.28e-3

Collision Energy (eV) = 8-40 (variable)

Sample Preparation



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE PREPARATION RECORDS

<u>Project Title(s)</u>	<u>Project No.(s)</u>
CTO-4164 Naval Base Ventura County, California	100110125-01
18-0570	
CTO-4164: Analysis of Solids	
SB, SS	
SOP Numbers (see workplan for modifications)	
ExtractionSOP No.	5-370

This Batch Contains The Following Samples:			
CR851PB-FS	J8233-FS	J8239-FS	J8252-FS
CR852LCS-FS	J8234-FS	J8240-FS	J8253-FS
J8229-FS	J8235-FS	J8248-FS	J8257MS-FS
J8230-FS	J8236-FS	J8249-FS	J8258MSD-FS
J8231-FS	J8237-FS	J8250-FS	
J8232-FS	J8238-FS	J8251-FS	

Laboratory Preparation Records
COMPLETE AND VALIDATED

Prep Task Leader: Stephanie Schultz

Approved By:	Date	Initials
Denise Schumitz	10/02/2018	DMS



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE IDENTIFICATION PAGE**

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570

CTO-4164: Analysis of Solids

SB, SS

Sample ID	Description
CR851PB-FS	Procedural Blank - Ottawa Sand (180507-02)
CR852LCS-FS	Laboratory Control Sample - Ottawa Sand (180507-02)
J8229-FS	VC-PM649-SS01-000H
J8230-FS	VC-PM649-SB01-0102
J8231-FS	VC-PM649-SB01-0506
J8232-FS	VC-PM649-SS02-000H
J8233-FS	VC-PM649-SB02-0102
J8234-FS	VC-PM649-SB02-0506
J8235-FS	VC-PM649-SS03-000H
J8236-FS	VC-PM649-SB03-0102
J8237-FS	VC-PM649-SB03-0506
J8238-FS	VC-PM649-SS04-000H
J8239-FS	VC-PM649-SB04-0102
J8240-FS	VC-PM649-SB04-0506
J8248-FS	VC-PM365-SS01-000H
J8249-FS	VC-PM365-SB01-0102
J8250-FS	VC-PM365-SB01-0506
J8251-FS	VC-PM365-SS02-000H
J8252-FS	VC-PM365-SB02-0102
J8253-FS	VC-PM365-SB02-0506
J8257MS-FS	Matrix Spike of VC-PM365-SB02-0102-MS

Samples Assigned By:

Jonathan Thorn

Date : September 21, 2018

Comments:



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE IDENTIFICATION PAGE**

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570

CTO-4164: Analysis of Solids

SB, SS

Sample ID	Description
J8258MSD-FS	Matrix Spike Duplicate of VC-PM365-SB02-0102-MSD

Samples Assigned By:

Jonathan Thorn

Date : September 21, 2018

Comments:



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE CUSTODY LOG

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Requested On/By: 09/25/2018 SAS	Purpose: Sample Preparation
Relinquished On/By: 09/25/2018 MDS	Last Activity: Return
Accepted On/By: 09/25/2018 SAS	Returned On/To: 09/25/2018 MDS
Stored In Facility: Sample Preparation	Returned To Facility: Custody: NA
Stored Until: 09/25/2018	Returned Comment: NA
Stored Comment: NA	

No.	BDO-ID:	Ctrs	*	Condition:	Custody Comment:
1	J8229	1	--	Intact	NA
2	J8230	1	--	Intact	NA
3	J8231	1	--	Intact	NA
4	J8232	1	--	Intact	NA
5	J8233	1	--	Intact	NA
6	J8234	1	--	Intact	NA
7	J8235	1	--	Intact	NA
8	J8236	1	--	Intact	NA
9	J8237	1	--	Intact	NA
10	J8238	1	--	Intact	NA
11	J8239	1	--	Intact	NA
12	J8240	1	--	Intact	NA
13	J8248	1	--	Intact	NA
14	J8249	1	--	Intact	NA
15	J8250	1	--	Intact	NA
16	J8251	1	--	Intact	NA
17	J8252	1	--	Intact	NA
18	J8253	1	--	Intact	NA

Total Samples 18 * "C" = Consumed Container



It can be done

BATTELLE - NORWELL OPERATIONS ELECTRONIC DRY WEIGHT DETERMINATION

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Sample ID:	Ctrs.	*	Tare Wt. (g)	Aliquot Wt. (g)	Dry Wt. (g)	Sample Wet Wt. (g)	% Dry Wt.	% Moisture	Sample Dry Wt. (g)
CR851PB-FS	NA	--	NA	NA	NA	2.01	100.00	0.00	2.01
CR852LCS-FS	NA	--	NA	NA	NA	1.98	100.00	0.00	1.98
J8229-FS	1	--	1.09	6.39	5.78	1.99	88.49	11.51	1.76
J8230-FS	1	--	1.10	5.66	5.00	2.00	85.53	14.47	1.71
J8231-FS	1	--	1.07	7.55	5.71	2.01	71.60	28.40	1.44
J8232-FS	1	--	1.04	5.93	5.43	1.98	89.78	10.22	1.78
J8233-FS	1	--	1.12	6.60	6.13	2.00	91.42	8.58	1.83
J8234-FS	1	--	1.09	6.16	4.92	1.96	75.54	24.46	1.48
J8235-FS	1	--	1.06	7.21	6.34	1.98	85.85	14.15	1.70
J8236-FS	1	--	1.10	7.58	6.85	1.99	88.73	11.27	1.77
J8237-FS	1	--	1.11	6.10	5.17	2.06	81.36	18.64	1.68
J8238-FS	1	--	1.05	7.02	6.91	2.00	98.16	1.84	1.96
J8239-FS	1	--	1.10	6.80	6.40	2.04	92.98	7.02	1.90
J8240-FS	1	--	1.10	5.55	4.69	1.97	80.67	19.33	1.59
J8248-FS	1	--	1.10	6.72	6.40	2.02	94.31	5.69	1.91
J8249-FS	1	--	1.09	6.62	6.28	1.98	93.85	6.15	1.86
J8250-FS	1	--	1.10	7.52	6.78	2.01	88.47	11.53	1.78
J8251-FS	1	--	1.12	7.15	6.84	2.03	94.86	5.14	1.93
J8252-FS	1	--	1.10	8.67	8.18	2.02	93.53	6.47	1.89
J8253-FS	1	--	1.07	8.22	7.95	1.97	96.22	3.78	1.90
J8257MS-FS	1	--	1.06	8.08	7.68	2.03	94.30	5.70	1.91
J8258MSD-FS	1	--	1.11	8.88	7.94	2.00	87.90	12.10	1.76

Percent Dry Wt (%) = [(Sample Dry Wt. (g) - Tare Wt. (g))/(Aliquot Wet Wt. (g) - Tare Wt. (g))] * 100

Sample Dry Wt. (%) = [(Sample Wet Wt. (g) * (Percent Dry Wt./100)]

* "C" = Sample Container Is Consumed



It can be done

**BATTELLE - NORWELL OPERATIONS
ELECTRONIC DRY WEIGHT DETERMINATION**

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570

CTO-4164: Analysis of Solids

SB, SS

Sample ID:	Ctrs.	*	Tare Wt. (g)	Aliquot Wt. (g)	Dry Wt. (g)	Sample Wet Wt. (g)	% Dry Wt.	% Moisture	Sample Dry Wt. (g)
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Task: **Wet Weight**

BNO-ID:	Date/Initials:	Battelle-ID:
CR851PB-FS	09/26/2018 SAS	BAL-015
CR852LCS-FS	09/26/2018 SAS	BAL-015
J8229-FS	09/25/2018 SAS	BAL-015
J8230-FS	09/25/2018 SAS	BAL-015
J8231-FS	09/25/2018 SAS	BAL-015
J8232-FS	09/25/2018 SAS	BAL-015
J8233-FS	09/25/2018 SAS	BAL-015
J8234-FS	09/25/2018 SAS	BAL-015
J8235-FS	09/25/2018 SAS	BAL-015
J8236-FS	09/25/2018 SAS	BAL-015
J8237-FS	09/25/2018 SAS	BAL-015
J8238-FS	09/25/2018 SAS	BAL-015
J8239-FS	09/25/2018 SAS	BAL-015
J8240-FS	09/25/2018 SAS	BAL-015
J8248-FS	09/25/2018 SAS	BAL-015
J8249-FS	09/25/2018 SAS	BAL-015
J8250-FS	09/25/2018 SAS	BAL-015
J8251-FS	09/25/2018 SAS	BAL-015
J8252-FS	09/25/2018 SAS	BAL-015
J8253-FS	09/25/2018 SAS	BAL-015
J8257MS-FS	09/25/2018 SAS	BAL-015
J8258MSD-FS	09/25/2018 SAS	BAL-015

Percent Dry Wt (%) = [(Sample Dry Wt. (g) - Tare Wt. (g))/(Aliquot Wet Wt. (g) - Tare Wt. (g))] * 100

Sample Dry Wt. (%) = [(Sample Wet Wt. (g) * (Percent Dry Wt./100)]

* "C" = Sample Container Is Consumed



It can be done

**BATTELLE - NORWELL OPERATIONS
ELECTRONIC DRY WEIGHT DETERMINATION**

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570

CTO-4164: Analysis of Solids

SB, SS

Sample ID:	Ctrs.	*	Tare Wt. (g)	Aliquot Wt. (g)	Dry Wt. (g)	Sample Wet Wt. (g)	% Dry Wt.	% Moisture	Sample Dry Wt. (g)
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Task: **Tare Weight**

BNO-ID:	Date/Initials:	Battelle-ID:
CR851PB-FS	--	--
CR852LCS-FS	--	--
J8229-FS	09/25/2018 SAS	BAL-015
J8230-FS	09/25/2018 SAS	BAL-015
J8231-FS	09/25/2018 SAS	BAL-015
J8232-FS	09/25/2018 SAS	BAL-015
J8233-FS	09/25/2018 SAS	BAL-015
J8234-FS	09/25/2018 SAS	BAL-015
J8235-FS	09/25/2018 SAS	BAL-015
J8236-FS	09/25/2018 SAS	BAL-015
J8237-FS	09/25/2018 SAS	BAL-015
J8238-FS	09/25/2018 SAS	BAL-015
J8239-FS	09/25/2018 SAS	BAL-015
J8240-FS	09/25/2018 SAS	BAL-015
J8248-FS	09/25/2018 SAS	BAL-015
J8249-FS	09/25/2018 SAS	BAL-015
J8250-FS	09/25/2018 SAS	BAL-015
J8251-FS	09/25/2018 SAS	BAL-015
J8252-FS	09/25/2018 SAS	BAL-015
J8253-FS	09/25/2018 SAS	BAL-015
J8257MS-FS	09/25/2018 SAS	BAL-015
J8258MSD-FS	09/25/2018 SAS	BAL-015

Percent Dry Wt (%) = [(Sample Dry Wt. (g) - Tare Wt. (g))/(Aliquot Wet Wt. (g) - Tare Wt. (g))] * 100

Sample Dry Wt. (%) = [(Sample Wet Wt. (g) * (Percent Dry Wt./100)]

* "C" = Sample Container Is Consumed



It can be done

**BATTELLE - NORWELL OPERATIONS
ELECTRONIC DRY WEIGHT DETERMINATION**

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570

CTO-4164: Analysis of Solids

SB, SS

Sample ID:	Ctrs.	*	Tare Wt. (g)	Aliquot Wt. (g)	Dry Wt. (g)	Sample Wet Wt. (g)	% Dry Wt.	% Moisture	Sample Dry Wt. (g)
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Task: **Aliquot Wet Weight**

BNO-ID:	Date/Initials:	Battelle-ID:
CR851PB-FS	--	--
CR852LCS-FS	--	--
J8229-FS	09/25/2018 SAS	BAL-015
J8230-FS	09/25/2018 SAS	BAL-015
J8231-FS	09/25/2018 SAS	BAL-015
J8232-FS	09/25/2018 SAS	BAL-015
J8233-FS	09/25/2018 SAS	BAL-015
J8234-FS	09/25/2018 SAS	BAL-015
J8235-FS	09/25/2018 SAS	BAL-015
J8236-FS	09/25/2018 SAS	BAL-015
J8237-FS	09/25/2018 SAS	BAL-015
J8238-FS	09/25/2018 SAS	BAL-015
J8239-FS	09/25/2018 SAS	BAL-015
J8240-FS	09/25/2018 SAS	BAL-015
J8248-FS	09/25/2018 SAS	BAL-015
J8249-FS	09/25/2018 SAS	BAL-015
J8250-FS	09/25/2018 SAS	BAL-015
J8251-FS	09/25/2018 SAS	BAL-015
J8252-FS	09/25/2018 SAS	BAL-015
J8253-FS	09/25/2018 SAS	BAL-015
J8257MS-FS	09/25/2018 SAS	BAL-015
J8258MSD-FS	09/25/2018 SAS	BAL-015

Percent Dry Wt (%) = [(Sample Dry Wt. (g) - Tare Wt. (g))/(Aliquot Wet Wt. (g) - Tare Wt. (g))] * 100

Sample Dry Wt. (%) = [(Sample Wet Wt. (g) * (Percent Dry Wt./100)]

* "C" = Sample Container Is Consumed



It can be done

**BATTELLE - NORWELL OPERATIONS
ELECTRONIC DRY WEIGHT DETERMINATION**

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570

CTO-4164: Analysis of Solids

SB, SS

Sample ID:	Ctrs.	*	Tare Wt. (g)	Aliquot Wt. (g)	Dry Wt. (g)	Sample Wet Wt. (g)	% Dry Wt.	% Moisture	Sample Dry Wt. (g)
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Task: **Aliquot Dry Weight**

BNO-ID:	Date/Initials:	Battelle-ID:
CR851PB-FS	--	--
CR852LCS-FS	--	--
J8229-FS	09/26/2018 SAS	BAL-015
J8230-FS	09/26/2018 SAS	BAL-015
J8231-FS	09/26/2018 SAS	BAL-015
J8232-FS	09/26/2018 SAS	BAL-015
J8233-FS	09/26/2018 SAS	BAL-015
J8234-FS	09/26/2018 SAS	BAL-015
J8235-FS	09/26/2018 SAS	BAL-015
J8236-FS	09/26/2018 SAS	BAL-015
J8237-FS	09/26/2018 SAS	BAL-015
J8238-FS	09/26/2018 SAS	BAL-015
J8239-FS	09/26/2018 SAS	BAL-015
J8240-FS	09/26/2018 SAS	BAL-015
J8248-FS	09/26/2018 SAS	BAL-015
J8249-FS	09/26/2018 SAS	BAL-015
J8250-FS	09/26/2018 SAS	BAL-015
J8251-FS	09/26/2018 SAS	BAL-015
J8252-FS	09/26/2018 SAS	BAL-015
J8253-FS	09/26/2018 SAS	BAL-015
J8257MS-FS	09/26/2018 SAS	BAL-015
J8258MSD-FS	09/26/2018 SAS	BAL-015

Percent Dry Wt (%) = [(Sample Dry Wt. (g) - Tare Wt. (g))/(Aliquot Wet Wt. (g) - Tare Wt. (g))] * 100

Sample Dry Wt. (%) = [(Sample Wet Wt. (g) * (Percent Dry Wt./100)]

* "C" = Sample Container Is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS SURROGATE SPIKE FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment
CR851PB-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
CR852LCS-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
CR852LCS-FS	KA84	LCS/MS	1	400	09/26/18 SAS	LMG	NA
J8229-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8230-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8231-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8232-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8233-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8234-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8235-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8236-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8237-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8238-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8239-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8240-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8248-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8249-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8250-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8251-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8252-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8253-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8257MS-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8257MS-FS	KA84	LCS/MS	1	800	09/26/18 SAS	LMG	NA
J8258MSD-FS	JY27	SIS	1	50	09/26/18 SAS	LMG	NA
J8258MSD-FS	KA84	LCS/MS	1	800	09/26/18 SAS	LMG	NA



It can be done

**BATTELLE - NORWELL OPERATIONS
SURROGATE SPIKE FORM**

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570

CTO-4164: Analysis of Solids

SB, SS

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment
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Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
JY27	Pipette	B814659662
KA84	Pipette	B820865811



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE EXTRACTION FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Sample ID	1st Extraction	2nd Extraction	3rd Extraction	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comment
CR851PB-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
CR852LCS-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8229-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8230-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8231-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8232-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8233-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8234-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8235-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8236-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8237-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8238-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8239-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8240-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8248-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8249-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8250-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8251-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8252-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8253-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8257MS-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA
J8258MSD-FS	09/26/18 SAS	09/26/18 SAS	NA	NA	NA	NA	NA	NA



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE EXTRACTION FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Sample ID	1st Extraction	2nd Extraction	3rd Extraction	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comment
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Solvents/Reagent Preparations:

Name	ID	Expires	Lot No	Procedure	Comments
0.4% NH3 in Methanol	RP-180926-1	09/26/18	SHBJ0412	Per 100 mL, 3.5 mL ammonia solution brought to 100 mL with methanol	
0.4% NH3 in Methanol	RP-180926-1	09/26/18	182674	Per 100 mL, 3.5 mL ammonia solution brought to 100 mL with methanol	

Solvents/Reagents:



It can be done

**BATTELLE - NORWELL OPERATIONS
COLUMN FRACTIONATION FORM**

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570

CTO-4164: Analysis of Solids

SB, SS

Extract Id	Date	Init.	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comments
CR851PB-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
CR852LCS-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8229-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8230-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8231-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8232-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8233-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8234-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8235-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8236-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8237-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8238-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8239-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8240-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8248-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8249-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8250-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8251-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8252-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8253-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA



It can be done

BATTELLE - NORWELL OPERATIONS COLUMN FRACTIONATION FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Extract Id	Date	Init.	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comments
J8257MS-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA
J8258MSD-FS(3)	09/27/18	SAS	NA	NA	NA	NA	NA

Column Diameter: 13 mm **Procedure Comment:** First half of batch(CR851PB-FS through J8237-FS) columns done by Ellyn Fitch.
Elution Volume: 10 mL

Solvents**Reagents**

Reagent Prep	Weight g	Name	Expires	Lot No	Procedure
RP-180927-1	Not Measured	0.4% NH3 in Methanol	09/27/18	SHBJ0412	Per 100 mL, 3.5 mL am brought to 100 mL with
RP-180927-1	Not Measured	0.4% NH3 in Methanol	09/27/18	182674	Per 100 mL, 3.5 mL am brought to 100 mL with
RP-180927-8	0.50	ENVI-CARB SPE	09/27/18	10215411	Rinse SPE cartridge wi

Fractions



It can be done

BATTELLE - NORWELL OPERATIONS INTERNAL STANDARD SPIKING FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS****(N/A Fraction)**

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm . (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution*	Date Spiked/ Spiked By	Witn'd By
CR851PB-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
CR852LCS-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8229-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8230-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8231-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8232-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8233-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8234-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8235-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8236-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8237-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8238-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8239-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8240-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8248-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8249-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8250-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8251-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8251-FS-D(5)	960	40	KB34	50	1	1000	50.000	09/28/18 SAS	EMF

* - Final Dilution is any HPLC, dilutions, or other manipulation

^ - Pre Injection Volume (PIV) includes any RIS spikes.



It can be done

BATTELLE - NORWELL OPERATIONS INTERNAL STANDARD SPIKING FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS****(N/A Fraction)**

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm . (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution*	Date Spiked/ Spiked By	Witn'd By
J8252-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8252-FS-D(5)	960	40	KB34	50	1	1000	50.000	09/28/18 SAS	EMF
J8252-FS-D(7)	960	40	KB34	50	1	1000	250.000	10/03/18 LMG	SAS
J8253-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8257MS-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8257MS-FS-D(5)	955	45	KB34	50	1	1000	100.000	09/28/18 SAS	EMF
J8258MSD-FS(3)	950	50	KB34	50	1	1000	10.000	09/28/18 SAS	EMF
J8258MSD-FS-D(5)	955	45	KB34	50	1	1000	100.000	09/28/18 SAS	EMF

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KB33	Pipette	B814659662
KB34	Pipette	B814659662

* - Final Dilution is any HPLC, dilutions, or other manipulation

^ - Pre Injection Volume (PIV) includes any RIS spikes.



It can be done

BATTELLE - NORWELL OPERATIONS EXTRACT SPIKE FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Extract Id	DF	Std. ID	Type	Vial No.	Vol. Added (uL)	Conc (ug/mL)	Added (ng)	Date Spiked/ Spiked By	Witn'd By
J8251-FS-D(5)	50	KB33	SIS	1	40	0	0	09/28/18 SAS	EMF
J8252-FS-D(5)	50	KB33	SIS	1	40	0	0	09/28/18 SAS	EMF
J8252-FS-D(7)	250	KB33	SIS	1	40	0	0	10/03/18 LMG	SAS
J8257MS-FS-D(5)	100	KB33	SIS	1	45	0	0	09/28/18 SAS	EMF
J8258MSD-FS-D(5)	100	KB33	SIS	1	45	0	0	09/28/18 SAS	EMF

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KB33	Pipette	B814659662
KB34	Pipette	B814659662



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
CR851PB-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
CR851PB-FS	2	--	9/27/2018 11:38:00 AM	CR851PB-FS	0	10000	9000	1.111	1.111	09/27/18 EMF
CR851PB-FS	3	--	9/27/2018 11:38:00 AM	CR851PB-FS	0	10000	1000	10.000	10.000	09/27/18 EMF
CR852LCS-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
CR852LCS-FS	2	--	9/27/2018 11:38:00 AM	CR852LCS-FS	0	10000	9000	1.111	1.111	09/27/18 EMF
CR852LCS-FS	3	--	9/27/2018 11:38:00 AM	CR852LCS-FS	0	10000	1000	10.000	10.000	09/27/18 EMF
J8229-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8229-FS	2	--	9/27/2018 11:38:00 AM	J8229-FS	0	10000	9000	1.111	1.111	09/27/18 EMF
J8229-FS	3	--	9/27/2018 11:38:00 AM	J8229-FS	0	10000	1000	10.000	10.000	09/27/18 EMF
J8230-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8230-FS	2	--	9/27/2018 11:38:00 AM	J8230-FS	0	10000	9000	1.111	1.111	09/27/18 EMF
J8230-FS	3	--	9/27/2018 11:38:00 AM	J8230-FS	0	10000	1000	10.000	10.000	09/27/18 EMF
J8231-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8231-FS	2	--	9/27/2018 11:38:00 AM	J8231-FS	0	10000	9000	1.111	1.111	09/27/18 EMF

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8231-FS	3	--	9/27/2018 11:38:00 AM	J8231-FS	0	10000	1000	10.000	10.000	09/27/18 EMF
J8232-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8232-FS	2	--	9/27/2018 11:38:00 AM	J8232-FS	0	10000	9000	1.111	1.111	09/27/18 EMF
J8232-FS	3	--	9/27/2018 11:38:00 AM	J8232-FS	0	10000	1000	10.000	10.000	09/27/18 EMF
J8233-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8233-FS	2	--	9/27/2018 11:38:00 AM	J8233-FS	0	10000	9000	1.111	1.111	09/27/18 EMF
J8233-FS	3	--	9/27/2018 11:38:00 AM	J8233-FS	0	10000	1000	10.000	10.000	09/27/18 EMF
J8234-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8234-FS	2	--	9/27/2018 11:38:00 AM	J8234-FS	0	10000	9000	1.111	1.111	09/27/18 EMF
J8234-FS	3	--	9/27/2018 11:38:00 AM	J8234-FS	0	10000	1000	10.000	10.000	09/27/18 EMF
J8235-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8235-FS	2	--	9/27/2018 11:38:00 AM	J8235-FS	0	10000	9000	1.111	1.111	09/27/18 EMF
J8235-FS	3	--	9/27/2018 11:38:00 AM	J8235-FS	0	10000	1000	10.000	10.000	09/27/18 EMF
J8236-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8236-FS	2	--	9/27/2018 11:38:00 AM	J8236-FS	0	10000	9000	1.111	1.111	09/27/18 EMF
J8236-FS	3	--	9/27/2018 11:38:00 AM	J8236-FS	0	10000	1000	10.000	10.000	09/27/18 EMF
J8237-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8237-FS	2	--	9/27/2018 11:38:00 AM	J8237-FS	0	10000	9000	1.111	1.111	09/27/18 EMF
J8237-FS	3	--	9/27/2018 11:38:00 AM	J8237-FS	0	10000	1000	10.000	10.000	09/27/18 EMF
J8238-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8238-FS	2	--	9/27/2018 11:38:00 AM	J8238-FS	0	10000	9000	1.111	1.111	09/27/18 SAS
J8238-FS	3	--	9/27/2018 11:38:00 AM	J8238-FS	0	10000	1000	10.000	10.000	09/27/18 SAS
J8239-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8239-FS	2	--	9/27/2018 11:38:00 AM	J8239-FS	0	10000	9000	1.111	1.111	09/27/18 SAS
J8239-FS	3	--	9/27/2018 11:38:00 AM	J8239-FS	0	10000	1000	10.000	10.000	09/27/18 SAS
J8240-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8240-FS	2	--	9/27/2018 11:38:00 AM	J8240-FS	0	10000	9000	1.111	1.111	09/27/18 SAS
J8240-FS	3	--	9/27/2018 11:38:00 AM	J8240-FS	0	10000	1000	10.000	10.000	09/27/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8248-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8248-FS	2	--	9/27/2018 11:38:00 AM	J8248-FS	0	10000	9000	1.111	1.111	09/27/18 SAS
J8248-FS	3	--	9/27/2018 11:38:00 AM	J8248-FS	0	10000	1000	10.000	10.000	09/27/18 SAS
J8249-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8249-FS	2	--	9/27/2018 11:38:00 AM	J8249-FS	0	10000	9000	1.111	1.111	09/27/18 SAS
J8249-FS	3	--	9/27/2018 11:38:00 AM	J8249-FS	0	10000	1000	10.000	10.000	09/27/18 SAS
J8250-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8250-FS	2	--	9/27/2018 11:38:00 AM	J8250-FS	0	10000	9000	1.111	1.111	09/27/18 SAS
J8250-FS	3	--	9/27/2018 11:38:00 AM	J8250-FS	0	10000	1000	10.000	10.000	09/27/18 SAS
J8251-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8251-FS	2	--	9/27/2018 11:38:00 AM	J8251-FS	0	10000	9000	1.111	1.111	09/27/18 SAS
J8251-FS	3	C	9/27/2018 11:38:00 AM	J8251-FS	0	10000	1000	10.000	10.000	09/27/18 SAS
J8251-FS	4	--	9/28/2018 10:56:00 AM	J8251-FS	3	1000	800	1.250	12.500	09/28/18 SAS
J8251-FS-D	5	--	9/28/2018 10:56:00 AM	J8251-FS	3	1000	200	5.000	50.000	09/28/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8252-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8252-FS	2	--	9/27/2018 11:38:00 AM	J8252-FS	0	10000	9000	1.111	1.111	09/27/18 SAS
J8252-FS	3	C	9/27/2018 11:38:00 AM	J8252-FS	0	10000	1000	10.000	10.000	09/27/18 SAS
J8252-FS	4	--	9/28/2018 10:56:00 AM	J8252-FS	3	1000	800	1.250	12.500	09/28/18 SAS
J8252-FS-D	5	C	9/28/2018 10:56:00 AM	J8252-FS	3	1000	200	5.000	50.000	09/28/18 SAS
J8252-FS-D	6	--	10/3/2018 2:33:00 PM	J8252-FS-D	5	1000	800	1.250	62.500	10/03/18 LMG
J8252-FS-D	7	--	10/3/2018 2:33:00 PM	J8252-FS-D	5	1000	200	5.000	250.000	10/03/18 LMG
J8253-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8253-FS	2	--	9/27/2018 11:38:00 AM	J8253-FS	0	10000	9000	1.111	1.111	09/27/18 SAS
J8253-FS	3	--	9/27/2018 11:38:00 AM	J8253-FS	0	10000	1000	10.000	10.000	09/27/18 SAS
J8257MS-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8257MS-FS	2	--	9/27/2018 11:38:00 AM	J8257MS-FS	0	10000	9000	1.111	1.111	09/27/18 SAS
J8257MS-FS	3	C	9/27/2018 11:38:00 AM	J8257MS-FS	0	10000	1000	10.000	10.000	09/27/18 SAS
J8257MS-FS	4	--	9/28/2018 10:58:00 AM	J8257MS-FS	3	1000	900	1.111	11.111	09/28/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8257MS-FS-D	5	--	9/28/2018 10:58:00 AM	J8257MS-FS	3	1000	100	10.000	100.000	09/28/18 SAS
J8258MSD-FS	0	C	9/26/2018 11:24:00 AM	NA		NA	NA	1.000	1.000	09/26/18 SAS
J8258MSD-FS	2	--	9/27/2018 11:38:00 AM	J8258MSD-FS	0	10000	9000	1.111	1.111	09/27/18 SAS
J8258MSD-FS	3	C	9/27/2018 11:38:00 AM	J8258MSD-FS	0	10000	1000	10.000	10.000	09/27/18 SAS
J8258MSD-FS	4	--	9/28/2018 10:58:00 AM	J8258MSD-FS	3	1000	900	1.111	11.111	09/28/18 SAS
J8258MSD-FS-D	5	--	9/28/2018 10:58:00 AM	J8258MSD-FS	3	1000	100	10.000	100.000	09/28/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570**CTO-4164: Analysis of Solids****SB, SS**

Purpose: LC-MS/MS TRANSFER		Last Activity: Prep->Inst	
Relinquished On/By: Oct 1 2018 4:52PM LMG		Received On/By: Oct 1 2018 6:46PM DMS	
Relinquished From: Sample Preparation: NA		Received Location: LC Laboratory: NA	
Relinquish Comment: NA		Received Comment: NA	

No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	CR851PB-FS(3)	1000	10	Intact	NA
2	CR852LCS-FS(3)	1000	10	Intact	NA
3	J8229-FS(3)	1000	10	Intact	NA
4	J8230-FS(3)	1000	10	Intact	NA
5	J8231-FS(3)	1000	10	Intact	NA
6	J8232-FS(3)	1000	10	Intact	NA
7	J8233-FS(3)	1000	10	Intact	NA
8	J8234-FS(3)	1000	10	Intact	NA
9	J8235-FS(3)	1000	10	Intact	NA
10	J8236-FS(3)	1000	10	Intact	NA
11	J8237-FS(3)	1000	10	Intact	NA
12	J8238-FS(3)	1000	10	Intact	NA
13	J8239-FS(3)	1000	10	Intact	NA
14	J8240-FS(3)	1000	10	Intact	NA
15	J8248-FS(3)	1000	10	Intact	NA
16	J8249-FS(3)	1000	10	Intact	NA
17	J8250-FS(3)	1000	10	Intact	NA
18	J8251-FS(3)	1000	10	Intact	NA
19	J8251-FS-D(5)	1000	50	Intact	NA
20	J8252-FS(3)	1000	10	Intact	NA
21	J8252-FS-D(5)	1000	50	Intact	NA
22	J8253-FS(3)	1000	10	Intact	NA
23	J8257MS-FS(3)	1000	10	Intact	NA
24	J8257MS-FS-D(5)	1000	100	Intact	NA
25	J8258MSD-FS(3)	1000	10	Intact	NA
26	J8258MSD-FS-D(5)	1000	100	Intact	NA

Total Extracts: 26



It can be done

**BATTELLE - NORWELL OPERATIONS
EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE**

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570

CTO-4164: Analysis of Solids

SB, SS

Purpose:	LC-MS/MS TRANSFER	Last Activity:	Prep->Inst		
Relinquished On/By:	Oct 3 2018 3:15PM LMG	Received On/By:	Oct 3 2018 3:16PM LMG		
Relinquished From:	Sample Preparation: NA	Received Location:	LC Laboratory: NA		
Relinquish Comment:	NA	Received Comment:	NA		
No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	J8229-FS(3)	1000	10	Intact	NA
2	J8239-FS(3)	1000	10	Intact	NA
3	J8252-FS(3)	1000	10	Intact	NA
4	J8252-FS-D(7)	1000	250	Intact	NA
5	J8257MS-FS(3)	1000	10	Intact	NA
Total Extracts:		5			



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE SPECIFIC COMMENTS**

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570

CTO-4164: Analysis of Solids

SB, SS

Sample ID:	Comment:	Date/Initials:
CR851PB-FS	NA	NA
CR852LCS-FS	NA	NA
J8229-FS	NA	NA
J8230-FS	NA	NA
J8231-FS	Sample contained rocks, shells, and twigs	09/25/18 SAS
J8232-FS	NA	NA
J8233-FS	Sample contained rocks.	09/25/18 SAS
J8234-FS	NA	NA
J8235-FS	Sample contained rocks.	09/25/18 SAS
J8236-FS	Sample contained rocks.	09/25/18 SAS
J8237-FS	NA	NA
J8238-FS	NA	NA
J8239-FS	NA	NA
J8240-FS	NA	NA
J8248-FS	Sample contained rocks.	09/25/18 SAS
J8249-FS	NA	NA
J8250-FS	NA	NA
J8251-FS	NA	NA
J8252-FS	NA	NA
J8253-FS	NA	NA
J8257MS-FS	NA	NA
J8258MSD-FS	NA	NA



It can be done

**BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM**

Project Title(s)

CTO-4164 Naval Base Ventura County, California

Project No.(s)

100110125-01

18-0570

CTO-4164: Analysis of Solids

SB, SS

Entered By:

On:

Task Leader Approval:

On:

SupervisorApproval:

On:

PM Approval:

On:

Analytical Calibrations

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
1	MeOH		10/2/2018 12:20:31 PM	5-0369.dam	10022018_18-0570.wiff
2	KA86	L1	10/2/2018 12:31:23 PM	5-0369.dam	10022018_18-0570.wiff
3	KA87	L2	10/2/2018 12:42:17 PM	5-0369.dam	10022018_18-0570.wiff
4	KA88	L3	10/2/2018 12:53:10 PM	5-0369.dam	10022018_18-0570.wiff
5	KB85	L4	10/2/2018 1:04:02 PM	5-0369.dam	10022018_18-0570.wiff
6	KB69	L5	10/2/2018 1:14:55 PM	5-0369.dam	10022018_18-0570.wiff
7	KB64	L6	10/2/2018 1:25:46 PM	5-0369.dam	10022018_18-0570.wiff
8	KB65	L7	10/2/2018 1:36:39 PM	5-0369.dam	10022018_18-0570.wiff
9	KB35 IB	Instrument Blank	10/2/2018 1:47:30 PM	5-0369.dam	10022018_18-0570.wiff
10	KB36 ICC	ICC	10/2/2018 1:58:23 PM	5-0369.dam	10022018_18-0570.wiff
11	KA29 Branch	Branch Standard	10/2/2018 2:09:15 PM	5-0369.dam	10022018_18-0570.wiff
12	MeOH		10/2/2018 2:20:07 PM	5-0369.dam	10022018_18-0570.wiff
13	CR851PB-FS(3)	Procedural Blank	10/2/2018 2:30:59 PM	5-0369.dam	10022018_18-0570.wiff
14	CR852LCS-FS(3)	Laboratory Control Sample	10/2/2018 2:41:51 PM	5-0369.dam	10022018_18-0570.wiff
15	J8229-FS(3)	VC-PM649-SS01-000H	10/2/2018 2:52:42 PM	5-0369.dam	10022018_18-0570.wiff
16	J8230-FS(3)	VC-PM649-SB01-0102	10/2/2018 3:03:33 PM	5-0369.dam	10022018_18-0570.wiff
17	J8231-FS(3)	VC-PM649-SB01-0506	10/2/2018 3:14:23 PM	5-0369.dam	10022018_18-0570.wiff
18	J8232-FS(3)	VC-PM649-SS02-000H	10/2/2018 3:25:14 PM	5-0369.dam	10022018_18-0570.wiff
19	J8233-FS(3)	VC-PM649-SB02-0102	10/2/2018 3:36:06 PM	5-0369.dam	10022018_18-0570.wiff
20	J8234-FS(3)	VC-PM649-SB02-0506	10/2/2018 3:46:58 PM	5-0369.dam	10022018_18-0570.wiff
21	J8235-FS(3)	VC-PM649-SS03-000H	10/2/2018 3:57:50 PM	5-0369.dam	10022018_18-0570.wiff
22	J8236-FS(3)	VC-PM649-SB03-0102	10/2/2018 4:08:42 PM	5-0369.dam	10022018_18-0570.wiff
23	KB85 CCV	CCV	10/2/2018 4:19:34 PM	5-0369.dam	10022018_18-0570.wiff
24	MeOH		10/2/2018 4:30:27 PM	5-0369.dam	10022018_18-0570.wiff
25	J8237-FS(3)	VC-PM649-SB03-0506	10/2/2018 4:41:18 PM	5-0369.dam	10022018_18-0570.wiff
26	J8238-FS(3)	VC-PM649-SS04-000H	10/2/2018 4:52:09 PM	5-0369.dam	10022018_18-0570.wiff
27	J8239-FS(3)	VC-PM649-SB04-	10/2/2018 5:03:00	5-0369.dam	10022018_18-0570.wiff

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2

1 Not being used in this calibration. DMS 10/5/2018

2 Sample realoquoted and rerun. DMS 10/5/2018

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
		0102	PM		
28	J8240-FS(3)	VC-PM649-SB04-0506	10/2/2018 5:13:51 PM	5-0369.dam	10022018_18-0570.wiff
29	J8248-FS(3)	VC-PM365-SS01-000H	10/2/2018 5:24:43 PM	5-0369.dam	10022018_18-0570.wiff
30	J8249-FS(3)	VC-PM365-SB01-0102	10/2/2018 5:35:35 PM	5-0369.dam	10022018_18-0570.wiff
31	J8250-FS(3)	VC-PM365-SB01-0506	10/2/2018 5:46:27 PM	5-0369.dam	10022018_18-0570.wiff
32	J8251-FS(3)	VC-PM365-SS02-000H	10/2/2018 5:57:18 PM	5-0369.dam	10022018_18-0570.wiff
33	J8251-FS-D(5)	VC-PM365-SS02-000H	10/2/2018 6:08:09 PM	5-0369.dam	10022018_18-0570.wiff
34	KB69 CCV	CCV	10/2/2018 6:19:01 PM	5-0369.dam	10022018_18-0570.wiff
35	MeOH		10/2/2018 6:29:53 PM	5-0369.dam	10022018_18-0570.wiff
36	J8252-FS(3)	VC-PM365-SB02-0102	10/2/2018 6:40:45 PM	5-0369.dam	10022018_18-0570.wiff
37	J8252-FS-D(5)	VC-PM365-SB02-0102	10/2/2018 6:51:37 PM	5-0369.dam	10022018_18-0570.wiff
38	J8253-FS(3)	VC-PM365-SB02-0506	10/2/2018 7:02:28 PM	5-0369.dam	10022018_18-0570.wiff
39	J8257MS-FS(3)	VC-PM365-SB02-0102-MS	10/2/2018 7:13:20 PM	5-0369.dam	10022018_18-0570.wiff
40	J8257MS-D(5)	VC-PM365-SB02-0102-MS	10/2/2018 7:24:13 PM	5-0369.dam	10022018_18-0570.wiff
41	J8258MSD-FS(3)	VC-PM365-SB02-0102-MSD	10/2/2018 7:35:05 PM	5-0369.dam	10022018_18-0570.wiff
42	J8258MSD-FS-D(5)	VC-PM365-SB02-0102-MSD	10/2/2018 7:45:56 PM	5-0369.dam	10022018_18-0570.wiff
43	KB85 CCV	CCV	10/2/2018 7:56:48 PM	5-0369.dam	10022018_18-0570.wiff

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1 Sample realquoted and rerun. DMS 10/5/2018

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
1	MeOH		10/2/2018 8:18:32 PM	5-0369.dam	18-0567.wiff
2	KA86	L1	10/2/2018 8:29:24 PM	5-0369.dam	18-0567.wiff
3	KA87	L2	10/2/2018 8:40:16 PM	5-0369.dam	18-0567.wiff
4	KA88	L3	10/2/2018 8:51:08 PM	5-0369.dam	18-0567.wiff
5	KB85	L4	10/2/2018 9:02:00 PM	5-0369.dam	18-0567.wiff
6	KB69	L5	10/2/2018 9:12:52 PM	5-0369.dam	18-0567.wiff
7	KB64	L6	10/2/2018 9:23:43 PM	5-0369.dam	18-0567.wiff
8	KB65	L7	10/2/2018 9:34:34 PM	5-0369.dam	18-0567.wiff
9	KB35 IB	Instrument Blank	10/2/2018 9:45:25 PM	5-0369.dam	18-0567.wiff
10	KB36 ICC	ICC	10/2/2018 9:56:17 PM	5-0369.dam	18-0567.wiff
11	KA29 Branch	Branch Standard	10/2/2018 10:07:10 PM	5-0369.dam	18-0567.wiff
1	KA88 ISC	Instrument Sensitivity Check	10/3/2018 3:57:14 PM	5-0369.dam	18-0567.wiff
2	KB35 IB	Instrument Blank	10/3/2018 4:08:06 PM	5-0369.dam	18-0567.wiff
8	MeOH		10/3/2018 5:13:22 PM	5-0369.dam	18-0567.wiff
9	KB69 CCV	CCV	10/3/2018 5:24:13 PM	5-0369.dam	18-0567.wiff
10	MeOH		10/3/2018 5:35:06 PM	5-0369.dam	18-0567.wiff
11	J8252-FS(3)	VC-PM365-SB02-0102	10/3/2018 5:45:59 PM	5-0369.dam	18-0567.wiff
12	J8252-FS-D(7)	VC-PM365-SB02-0102	10/3/2018 5:56:52 PM	5-0369.dam	18-0567.wiff
13	J8257MS-FS(3)	VC-PM365-SB02-0102-MS	10/3/2018 6:07:46 PM	5-0369.dam	18-0567.wiff
14	J8229-FS(3)	VC-PM649-SS01-000H	10/3/2018 6:18:39 PM	5-0369.dam	18-0567.wiff
15	J8239-FS(3)	VC-PM649-SB04-0102	10/3/2018 6:29:32 PM	5-0369.dam	18-0567.wiff
16	MeOH		10/3/2018 6:40:25 PM	5-0369.dam	18-0567.wiff
17	KB85 CCV	CCV	10/3/2018 6:51:17 PM	5-0369.dam	18-0567.wiff



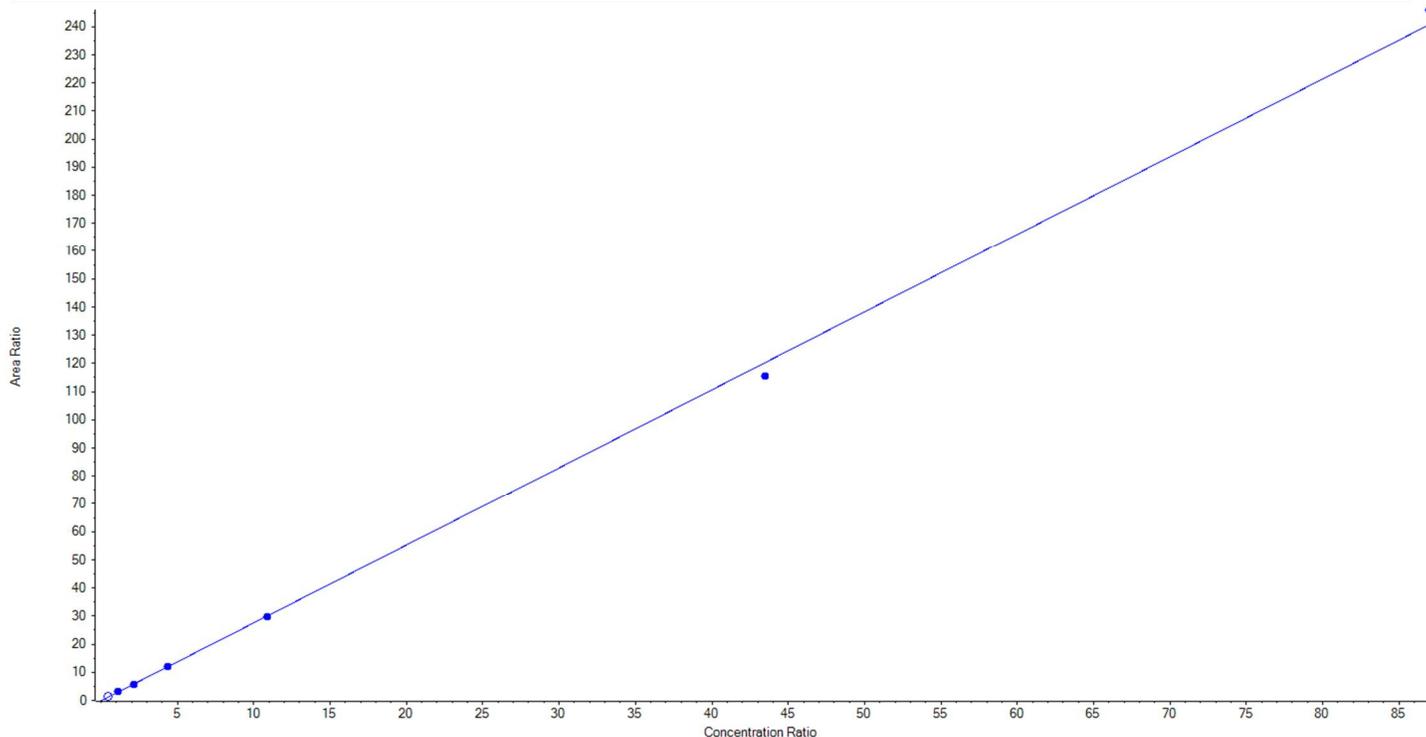
Calibration Summary Report

Created with Analyst Reporter
Printed: 11/10/2018 2:25:52 PM

Analyte Name	PFBS_1	Data File	10022018_18-0570.wiff
MRM Transition	298.9 / 80.0	Result Table	18-0570_BASE
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 2.76866x + -0.11946$ ($r = 0.99952$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	101.00	123.586277	122.4
3	KA87	L2	True	252.50	267.871930	106.1
4	KA88	L3	True	505.00	485.080824	96.1
5	KB85	L4	True	1010.00	1020.662234	101.1
6	KB69	L5	True	2525.00	2492.530426	98.7
7	KB64	L6	True	10100.00	9687.169975	95.9
8	KB65	L7	True	20200.00	20639.184611	102.2





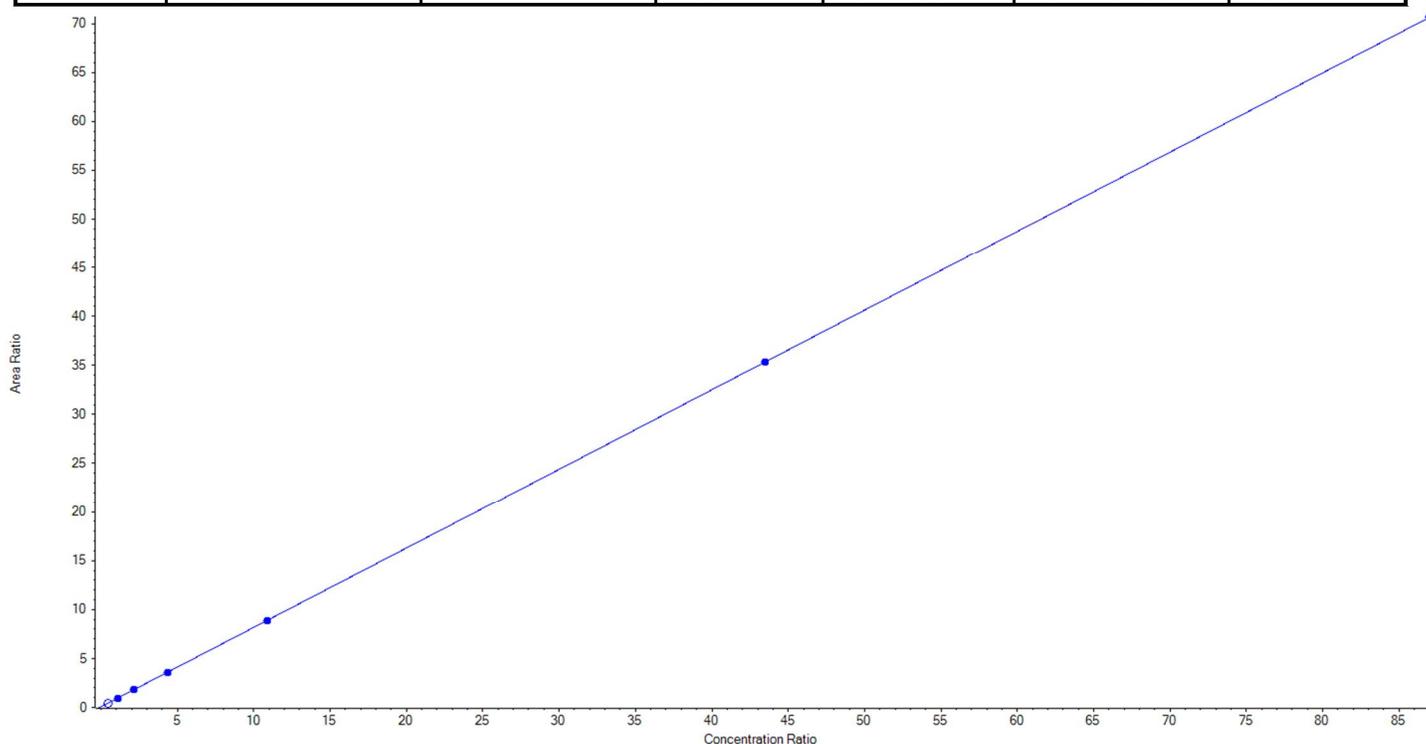
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Created with Analyst Reporter
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Analyte Name	PFBS_2	Data File	10022018_18-0570.wiff
MRM Transition	298.9 / 99.0	Result Table	18-0570_BASE
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.81115x + 0.06787$ ($r = 0.99999$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	101.00	109.226400	108.1
3	KA87	L2	True	252.50	257.071549	101.8
4	KA88	L3	True	505.00	506.363522	100.3
5	KB85	L4	True	1010.00	992.123932	98.2
6	KB69	L5	True	2525.00	2512.899193	99.5
7	KB64	L6	True	10100.00	10110.021214	100.1
8	KB65	L7	True	20200.00	20214.020590	100.1





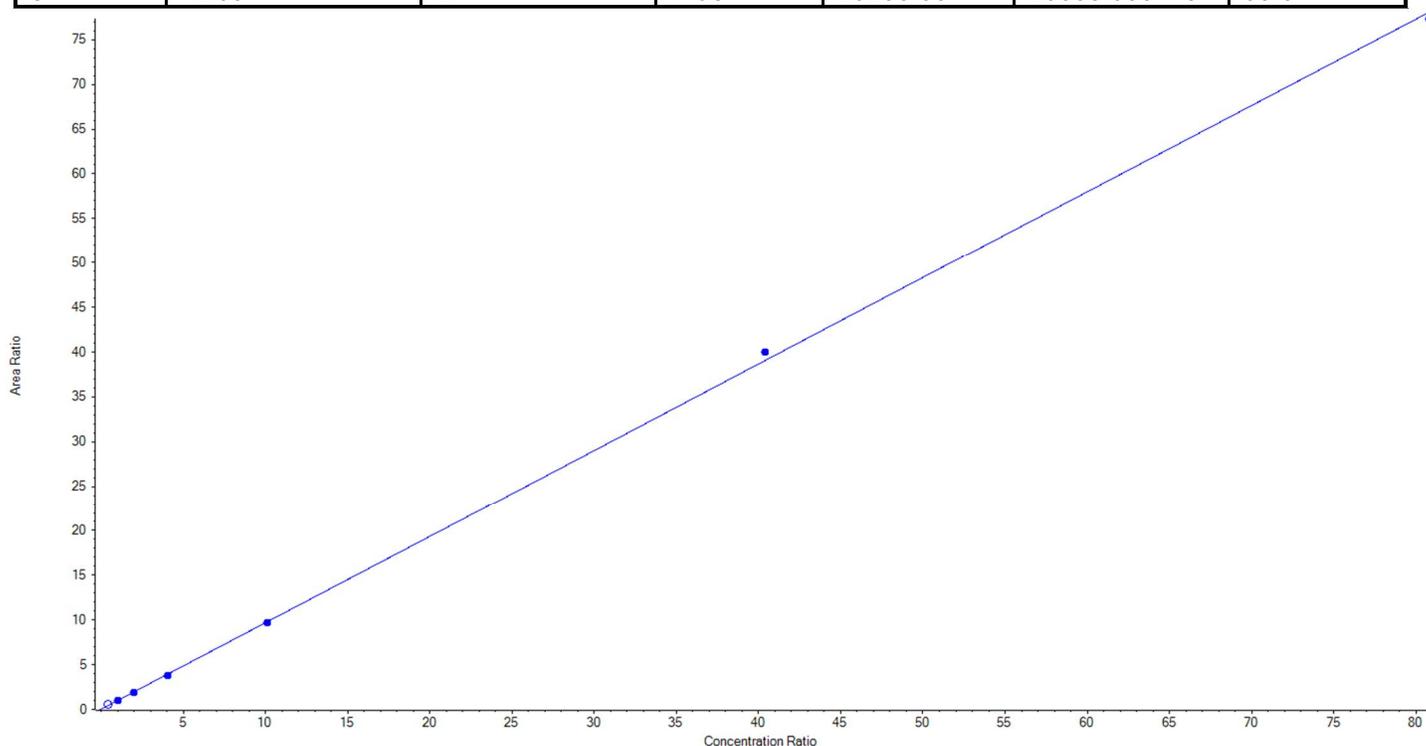
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Created with Analyst Reporter
Printed: 11/10/2018 2:25:52 PM

Analyte Name	PFHxA_1	Data File	10022018_18-0570.wiff
MRM Transition	313.0 / 269.0	Result Table	18-0570_BASE
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.96594 x + 0.02883$ ($r = 0.99985$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	101.00	126.391426	125.1
3	KA87	L2	True	252.50	262.853012	104.1
4	KA88	L3	True	505.00	494.120490	97.9
5	KB85	L4	True	1010.00	981.914222	97.2
6	KB69	L5	True	2525.00	2510.743986	99.4
7	KB64	L6	True	10100.00	10339.834815	102.4
8	KB65	L7	True	20200.00	20003.033475	99.0





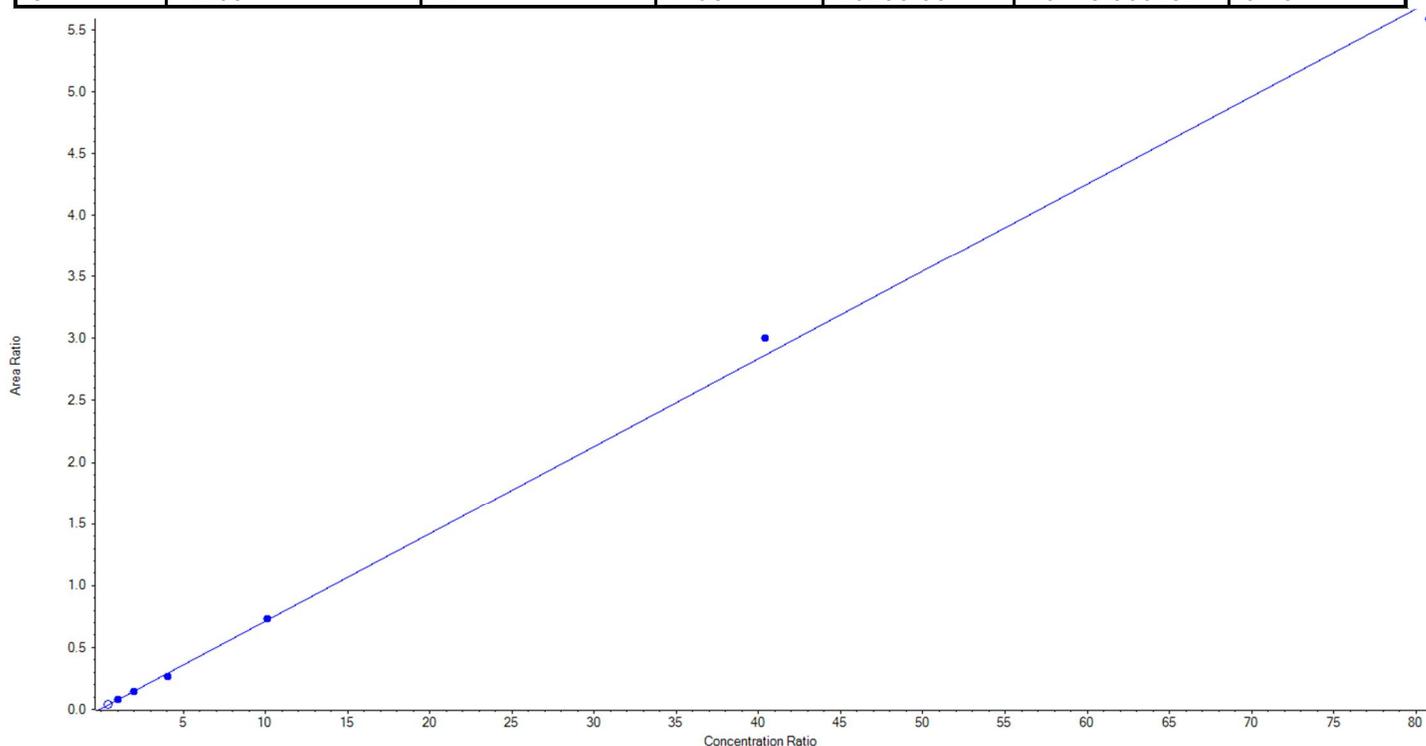
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Analyte Name	PFHxA_2	Data File	10022018_18-0570.wiff
MRM Transition	313.0 / 119.0	Result Table	18-0570_BASE
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.07080x + 0.00520$ ($r = 0.99927$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	101.00	120.513120	119.3
3	KA87	L2	True	252.50	258.887189	102.5
4	KA88	L3	True	505.00	506.424565	100.3
5	KB85	L4	True	1010.00	932.935780	92.4
6	KB69	L5	True	2525.00	2583.031344	102.3
7	KB64	L6	True	10100.00	10597.854831	104.9
8	KB65	L7	True	20200.00	19713.366292	97.6





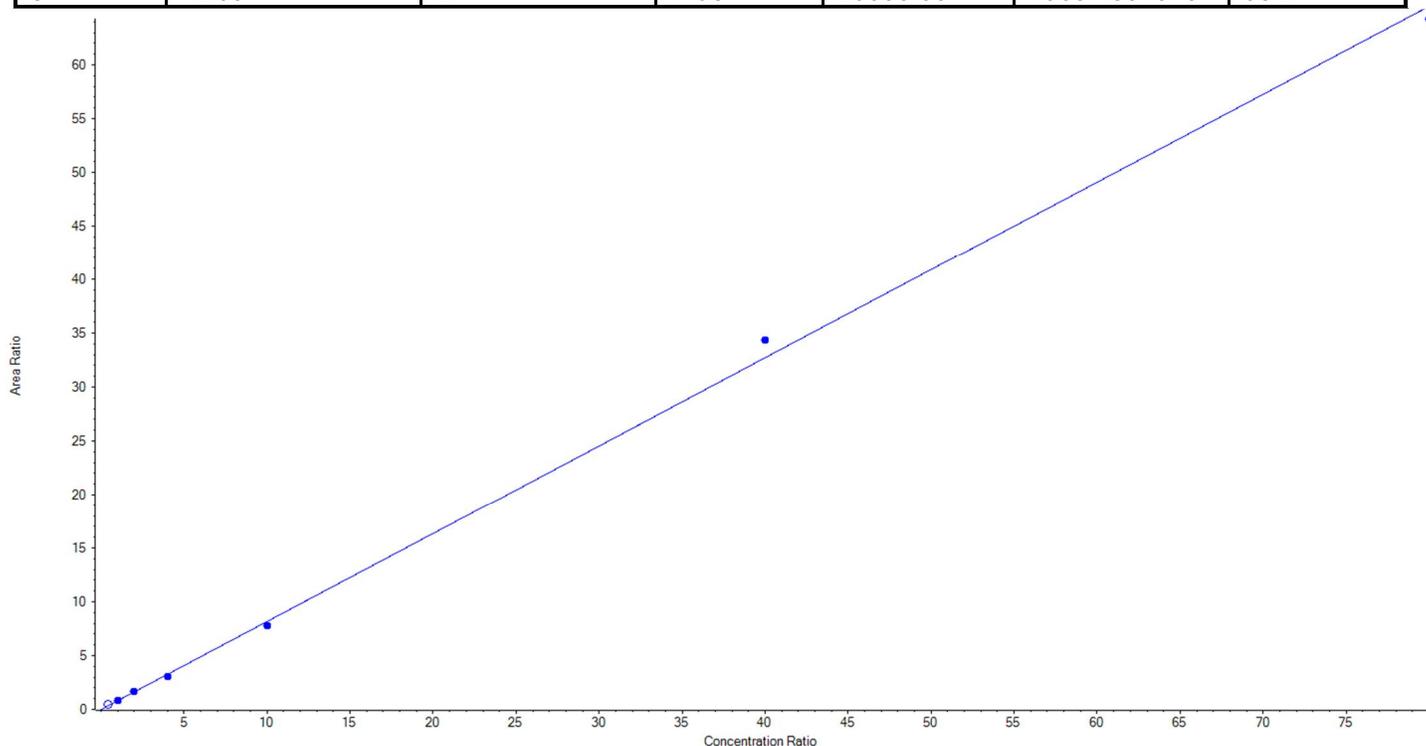
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Analyte Name	PFHpA_1	Data File	10022018_18-0570.wiff
MRM Transition	363.0 / 319.0	Result Table	18-0570_BASE
Internal Standard	13C4-PFHpA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.81821 x + -0.01286$ ($r = 0.99931$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	139.202749	139.2
3	KA87	L2	True	250.00	262.636185	105.1
4	KA88	L3	True	500.00	506.904358	101.4
5	KB85	L4	True	1000.00	947.857111	94.8
6	KB69	L5	True	2500.00	2388.069276	95.5
7	KB64	L6	True	10000.00	10506.701394	105.1
8	KB65	L7	True	20000.00	19637.831676	98.2





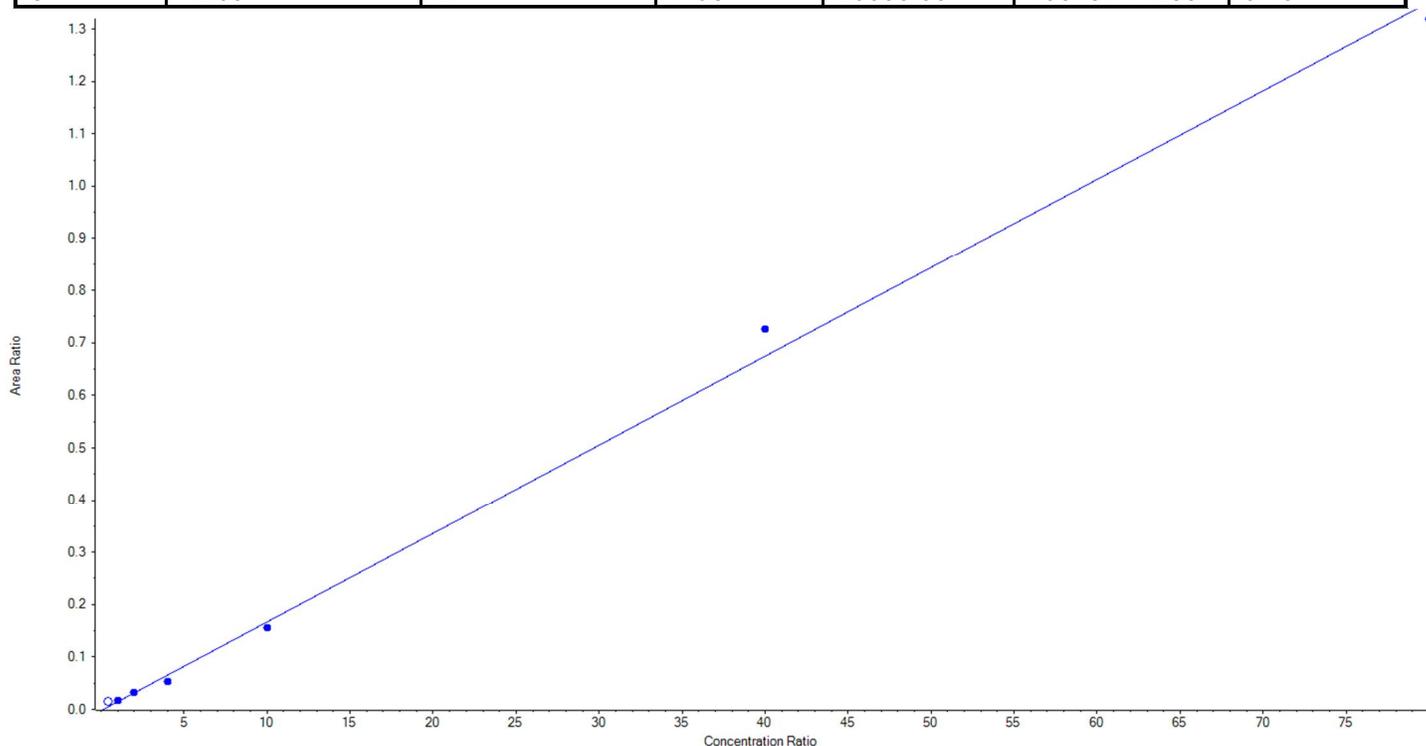
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Analyte Name	PFHpA_2	Data File	10022018_18-0570.wiff
MRM Transition	363.0 / 169.0	Result Table	18-0570_BASE
Internal Standard	13C4-PFHpA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.01692x + -0.00240$ ($r = 0.99788$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	255.212827	255.2
3	KA87	L2	True	250.00	294.655681	117.9
4	KA88	L3	True	500.00	510.553213	102.1
5	KB85	L4	True	1000.00	812.405416	81.2
6	KB69	L5	True	2500.00	2336.052437	93.4
7	KB64	L6	True	10000.00	10772.555968	107.7
8	KB65	L7	True	20000.00	19523.777285	97.6





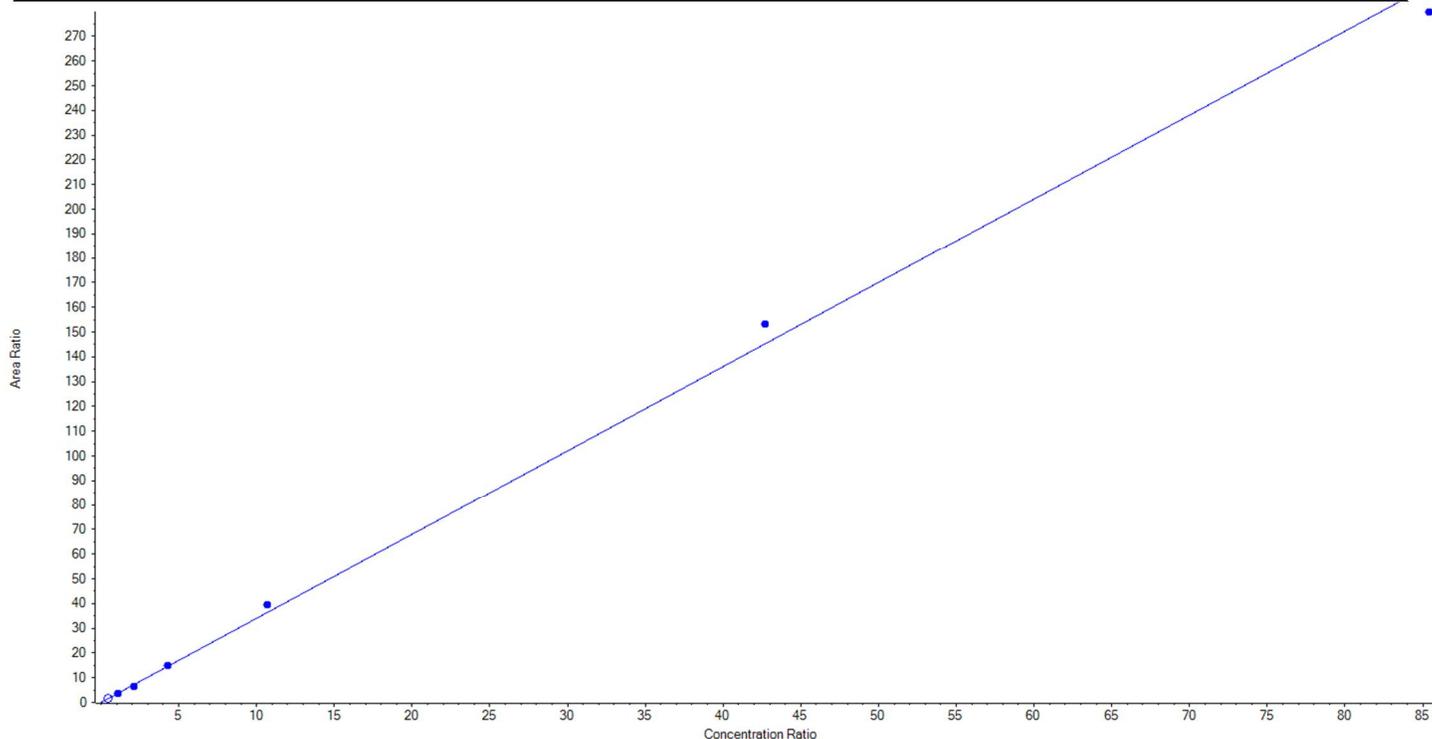
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Analyte Name	PFHxS_1	Data File	10022018_18-0570.wiff
MRM Transition	399.0 / 80.0	Result Table	18-0570_BASE
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 3.40141 x + 0.00550$ (r = 0.99859) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	101.00	112.477441	111.4
3	KA87	L2	True	252.50	245.892237	97.4
4	KA88	L3	True	505.00	450.710088	89.3
5	KB85	L4	True	1010.00	1037.639541	102.7
6	KB69	L5	True	2525.00	2748.214379	108.8
7	KB64	L6	True	10100.00	10651.667903	105.5
8	KB65	L7	True	20200.00	19458.375852	96.3





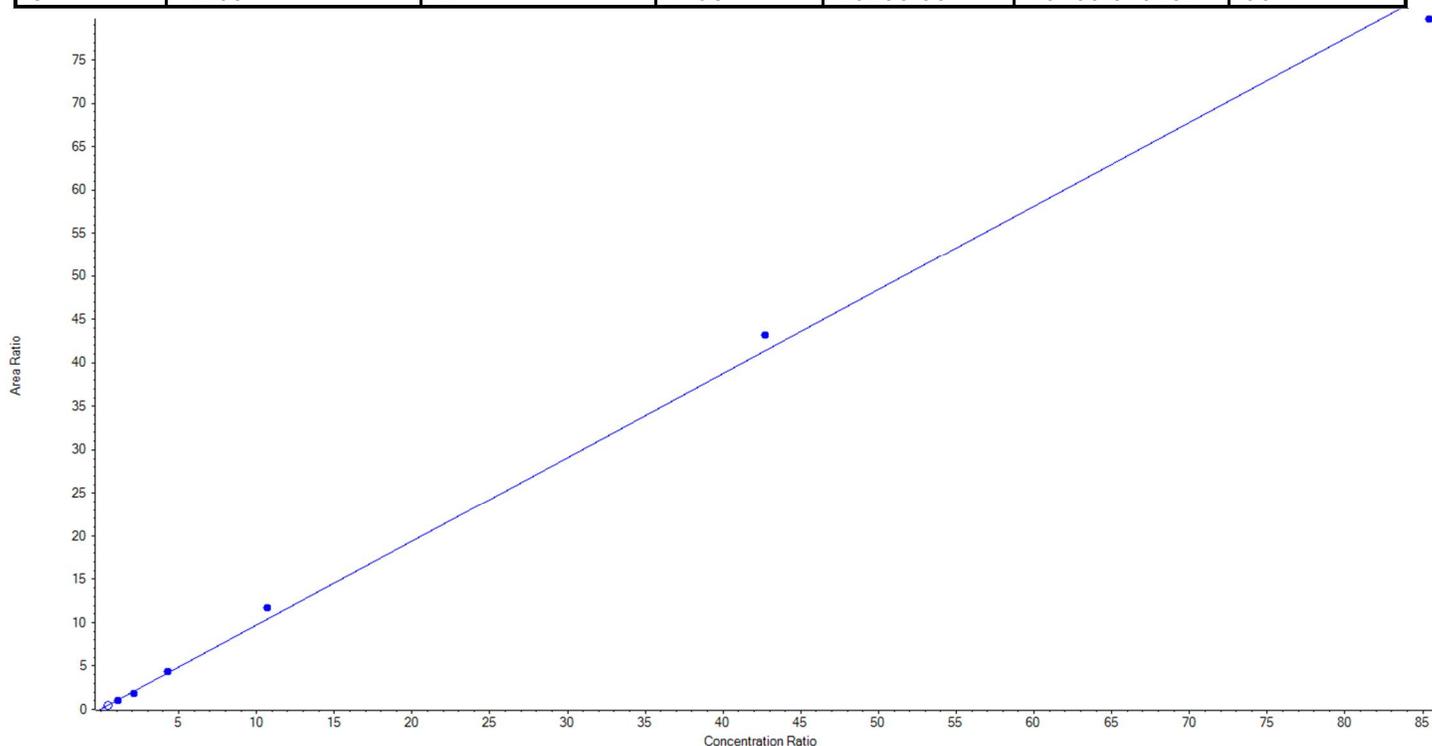
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Analyte Name	PFHxS_2	Data File	10022018_18-0570.wiff
MRM Transition	399.0 / 99.0	Result Table	18-0570_BASE
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.96780x + 0.05097$ ($r = 0.99836$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	101.00	101.991801	101.0
3	KA87	L2	True	252.50	237.563188	94.1
4	KA88	L3	True	505.00	448.146301	88.7
5	KB85	L4	True	1010.00	1042.487904	103.2
6	KB69	L5	True	2525.00	2860.013146	113.3
7	KB64	L6	True	10100.00	10534.940229	104.3
8	KB65	L7	True	20200.00	19469.349232	96.4





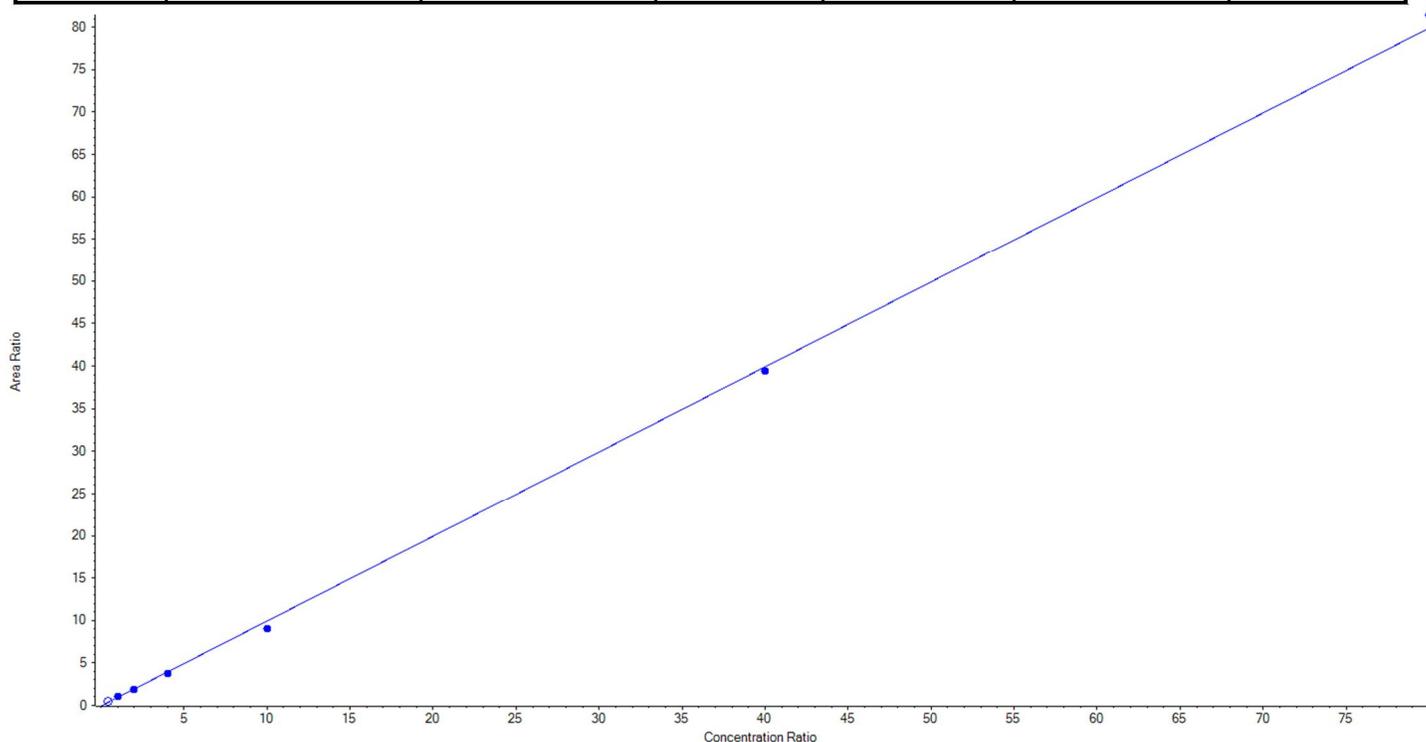
Calibration Summary Report

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Analyte Name	PFOA_1	Data File	10022018_18-0570.wiff
MRM Transition	413.0 / 369.0	Result Table	18-0570_BASE
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.99939x + -0.06415$ ($r = 0.99932$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	133.033112	133.0
3	KA87	L2	True	250.00	289.634064	115.9
4	KA88	L3	True	500.00	492.899672	98.6
5	KB85	L4	True	1000.00	941.889550	94.2
6	KB69	L5	True	2500.00	2268.203636	90.7
7	KB64	L6	True	10000.00	9872.494798	98.7
8	KB65	L7	True	20000.00	20384.878279	101.9





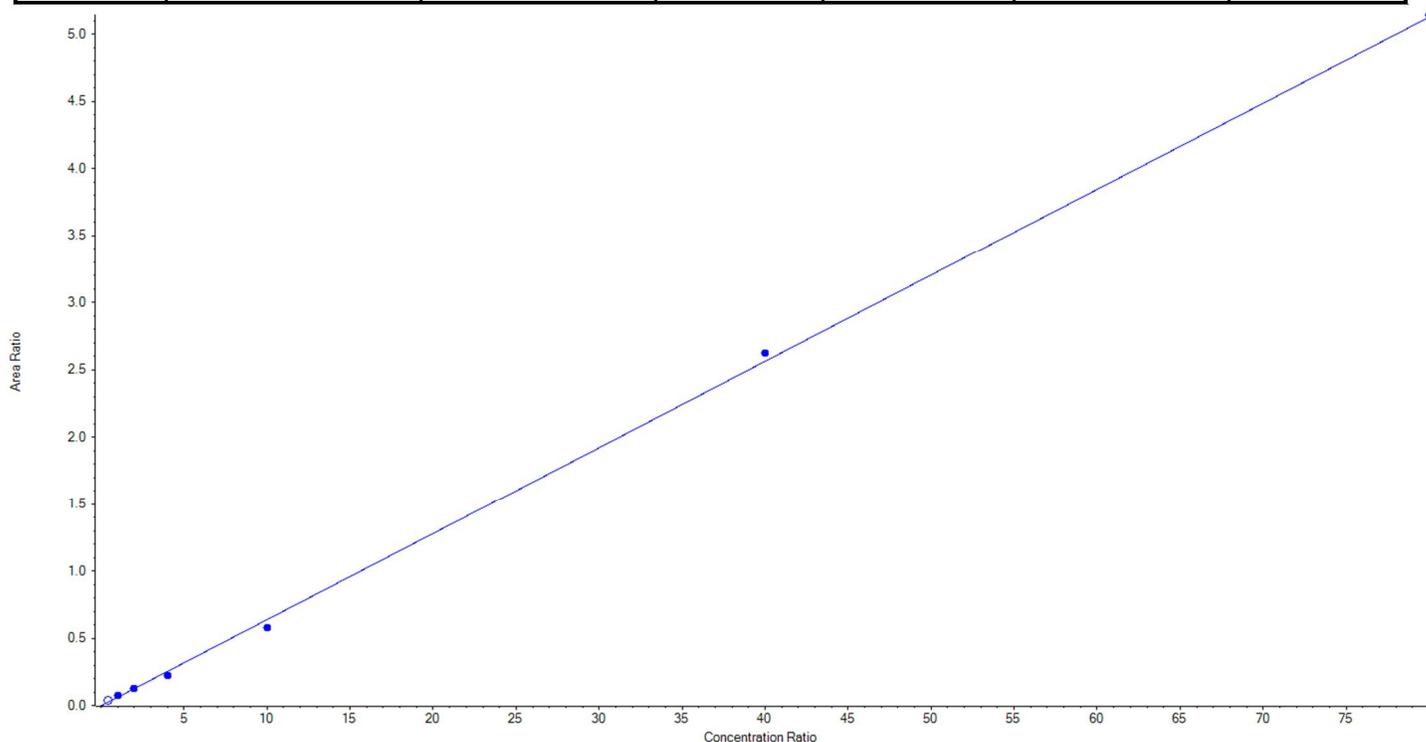
Calibration Summary Report

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Analyte Name	PFOA_2	Data File	10022018_18-0570.wiff
MRM Transition	413.0 / 169.0	Result Table	18-0570_BASE
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06414 x + -0.00360$ ($r = 0.99917$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	162.925881	162.9
3	KA87	L2	True	250.00	294.809188	117.9
4	KA88	L3	True	500.00	502.126868	100.4
5	KB85	L4	True	1000.00	880.937398	88.1
6	KB69	L5	True	2500.00	2271.075206	90.8
7	KB64	L6	True	10000.00	10241.789320	102.4
8	KB65	L7	True	20000.00	20059.262020	100.3





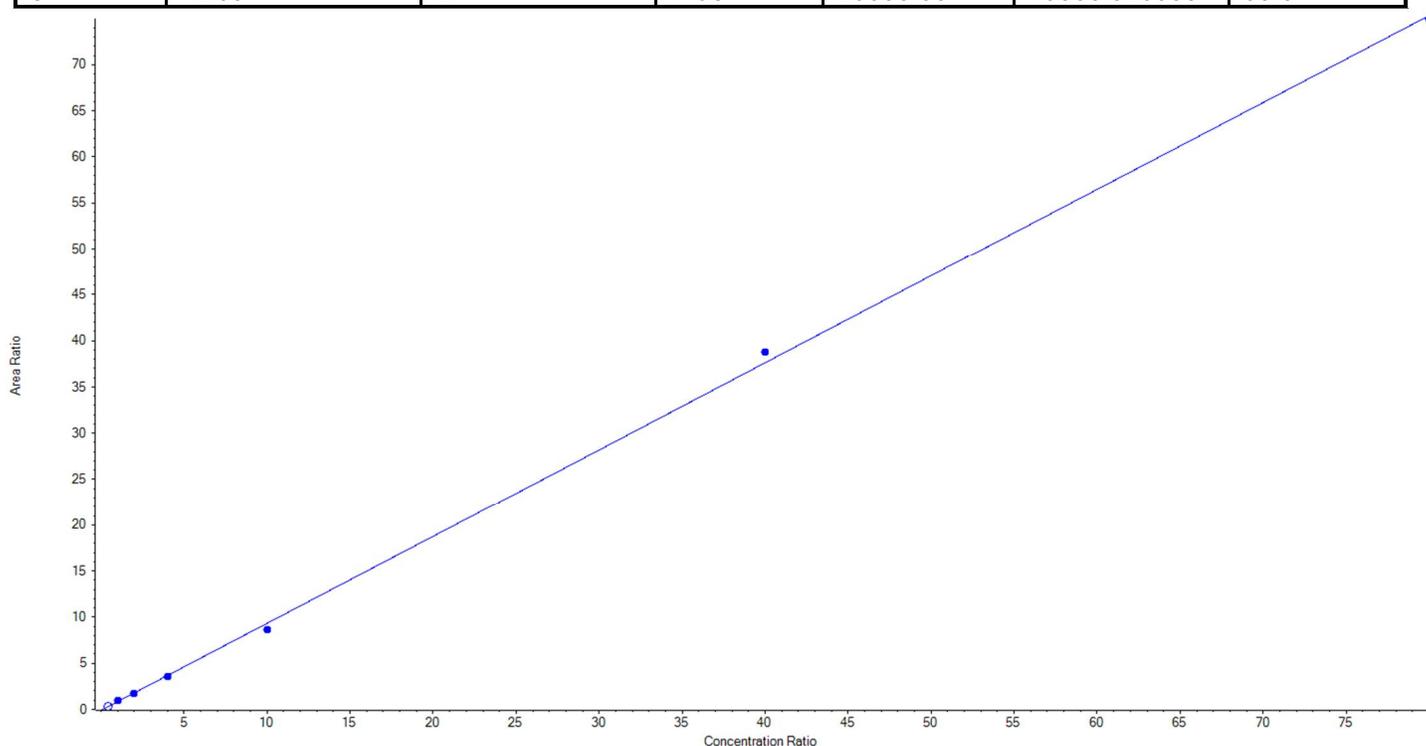
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Analyte Name	PFNA_1	Data File	10022018_18-0570.wiff
MRM Transition	463.0 / 419.0	Result Table	18-0570_BASE
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.94268x + -0.09556$ ($r = 0.99954$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	123.197977	123.2
3	KA87	L2	True	250.00	277.153159	110.9
4	KA88	L3	True	500.00	482.157353	96.4
5	KB85	L4	True	1000.00	976.023594	97.6
6	KB69	L5	True	2500.00	2315.428259	92.6
7	KB64	L6	True	10000.00	10298.317580	103.0
8	KB65	L7	True	20000.00	19900.920055	99.5





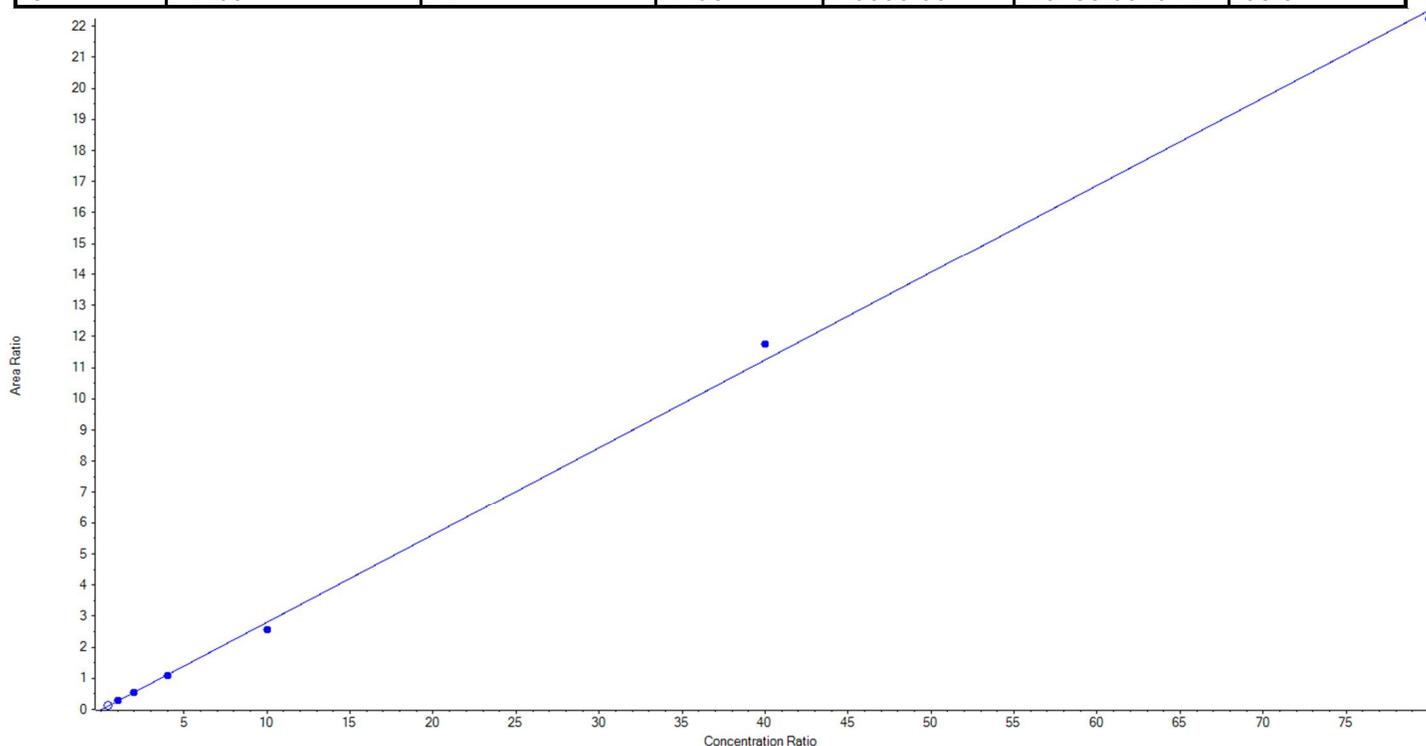
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Analyte Name	PFNA_2	Data File	10022018_18-0570.wiff
MRM Transition	463.0 / 219.0	Result Table	18-0570_BASE
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.28151 x + -0.01356$ ($r = 0.99927$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	128.989346	129.0
3	KA87	L2	True	250.00	269.919368	108.0
4	KA88	L3	True	500.00	488.824655	97.8
5	KB85	L4	True	1000.00	993.115666	99.3
6	KB69	L5	True	2500.00	2291.326906	91.7
7	KB64	L6	True	10000.00	10453.722363	104.5
8	KB65	L7	True	20000.00	19753.091042	98.8





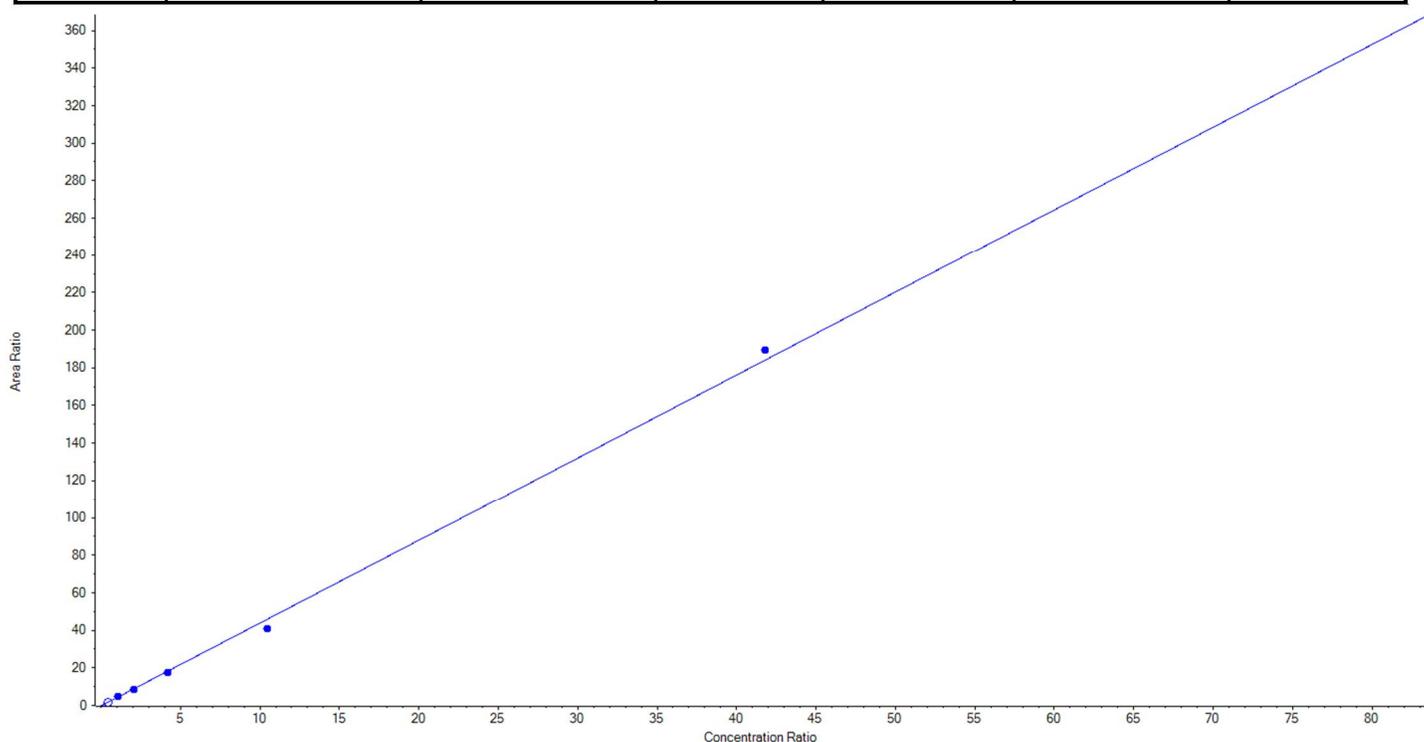
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Analyte Name	PFOS_1	Data File	10022018_18-0570.wiff
MRM Transition	499.0 / 80.0	Result Table	18-0570_BASE
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 4.41033 x + -0.26213$ (r = 0.99929) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	113.301358	113.3
3	KA87	L2	True	250.00	284.526001	113.8
4	KA88	L3	True	500.00	486.830299	97.4
5	KB85	L4	True	1000.00	965.076962	96.5
6	KB69	L5	True	2500.00	2237.748306	89.5
7	KB64	L6	True	10000.00	10285.363819	102.9
8	KB65	L7	True	20000.00	19990.454613	100.0





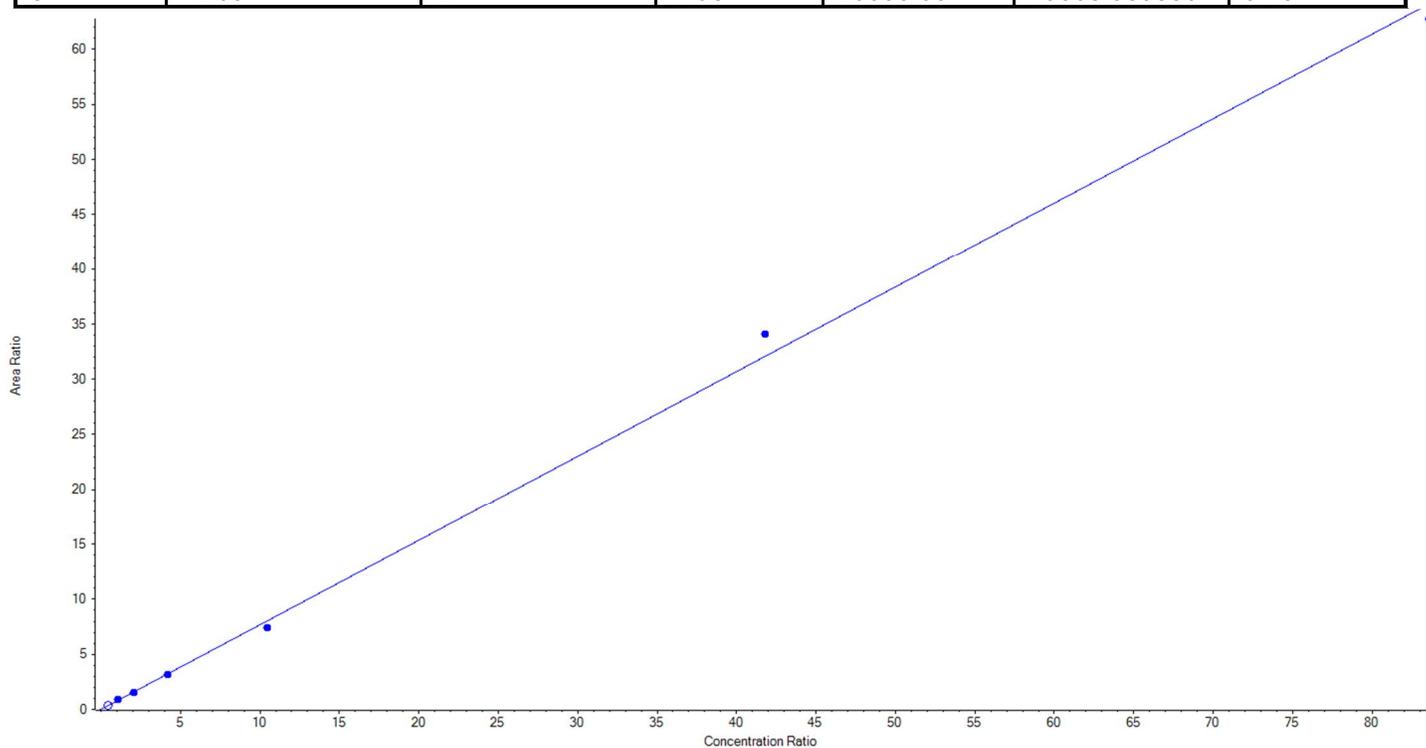
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	PFOS_2	Data File	10022018_18-0570.wiff
MRM Transition	499.0 / 99.0	Result Table	18-0570_BASE
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.76702 x + 0.00841$ ($r = 0.99893$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	104.383804	104.4
3	KA87	L2	True	250.00	269.933338	108.0
4	KA88	L3	True	500.00	483.709367	96.7
5	KB85	L4	True	1000.00	983.676032	98.4
6	KB69	L5	True	2500.00	2321.177503	92.9
7	KB64	L6	True	10000.00	10622.513912	106.2
8	KB65	L7	True	20000.00	19568.989850	97.8





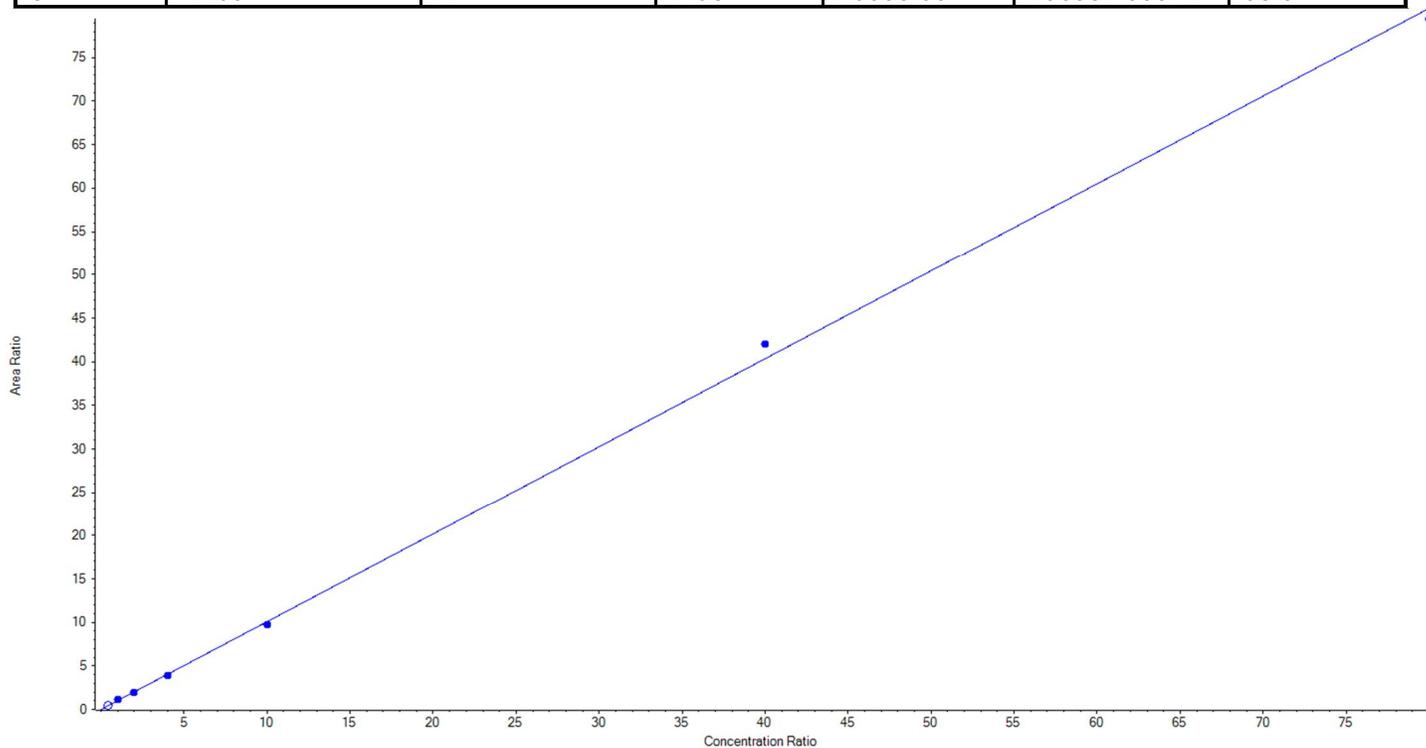
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	PFDA_1	Data File	10022018_18-0570.wiff
MRM Transition	513.0 / 469.0	Result Table	18-0570_BASE
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.00844 x + -0.00370$ ($r = 0.99950$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	113.990598	114.0
3	KA87	L2	True	250.00	270.991785	108.4
4	KA88	L3	True	500.00	475.180717	95.0
5	KB85	L4	True	1000.00	974.071202	97.4
6	KB69	L5	True	2500.00	2411.315927	96.5
7	KB64	L6	True	10000.00	10423.036697	104.2
8	KB65	L7	True	20000.00	19695.403672	98.5





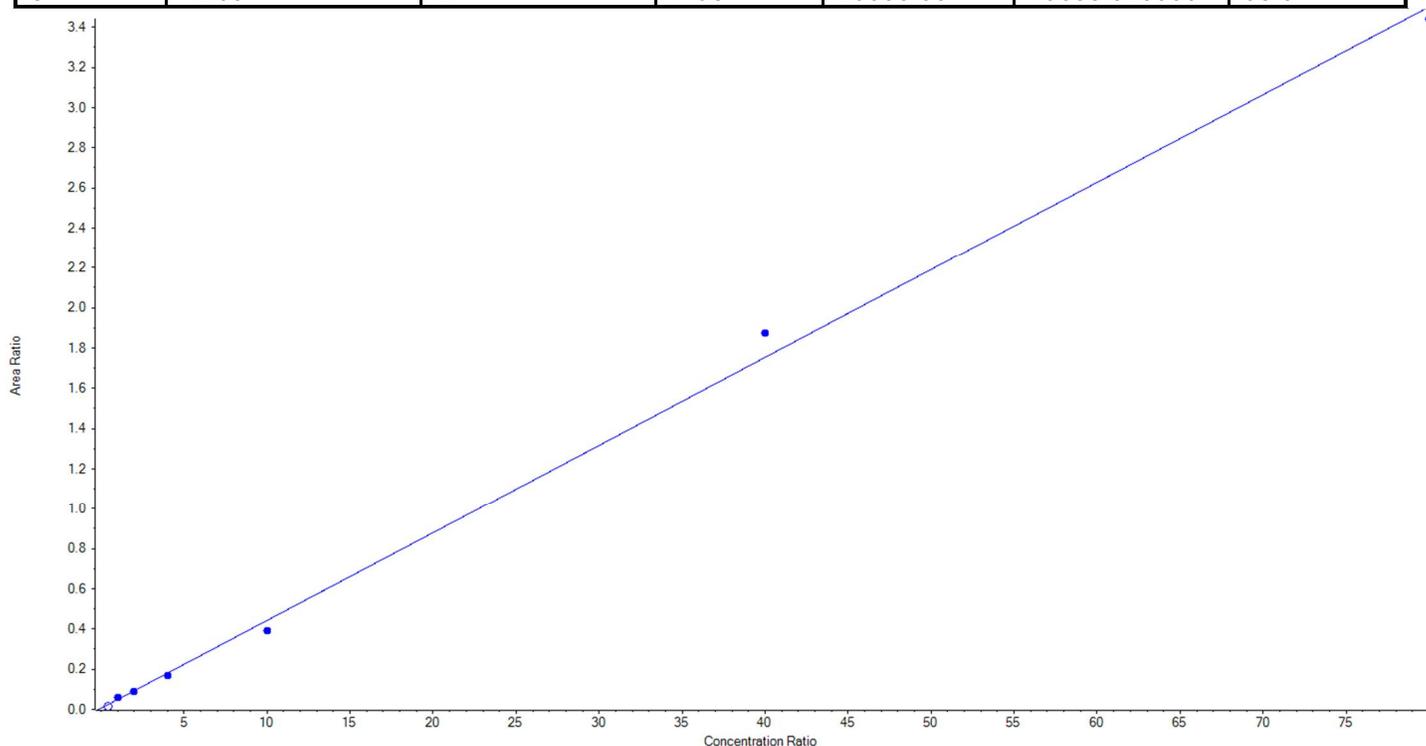
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Analyte Name	PFDA_2	Data File	10022018_18-0570.wiff
MRM Transition	513.0 / 219.0	Result Table	18-0570_BASE
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.04369x + 0.00579$ ($r = 0.99827$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	64.567278	64.6
3	KA87	L2	True	250.00	295.113639	118.1
4	KA88	L3	True	500.00	472.331696	94.5
5	KB85	L4	True	1000.00	943.935332	94.4
6	KB69	L5	True	2500.00	2199.203117	88.0
7	KB64	L6	True	10000.00	10685.893215	106.9
8	KB65	L7	True	20000.00	19653.523000	98.3





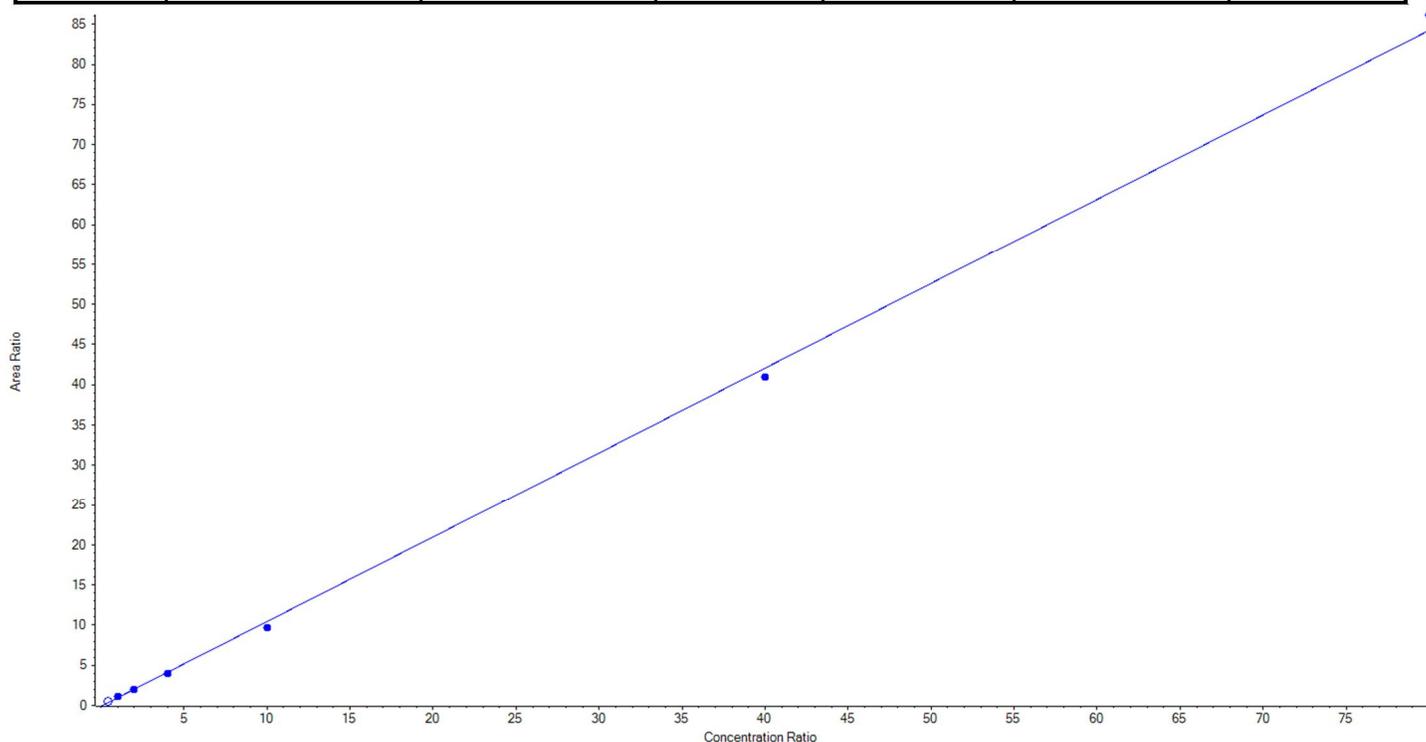
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Analyte Name	PFUnA_1	Data File	10022018_18-0570.wiff
MRM Transition	563.0 / 519.0	Result Table	18-0570_BASE
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.05406 x + -0.08984$ ($r = 0.99937$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	138.677460	138.7
3	KA87	L2	True	250.00	286.591530	114.6
4	KA88	L3	True	500.00	482.904821	96.6
5	KB85	L4	True	1000.00	962.964897	96.3
6	KB69	L5	True	2500.00	2319.251941	92.8
7	KB64	L6	True	10000.00	9744.884462	97.5
8	KB65	L7	True	20000.00	20453.402349	102.3





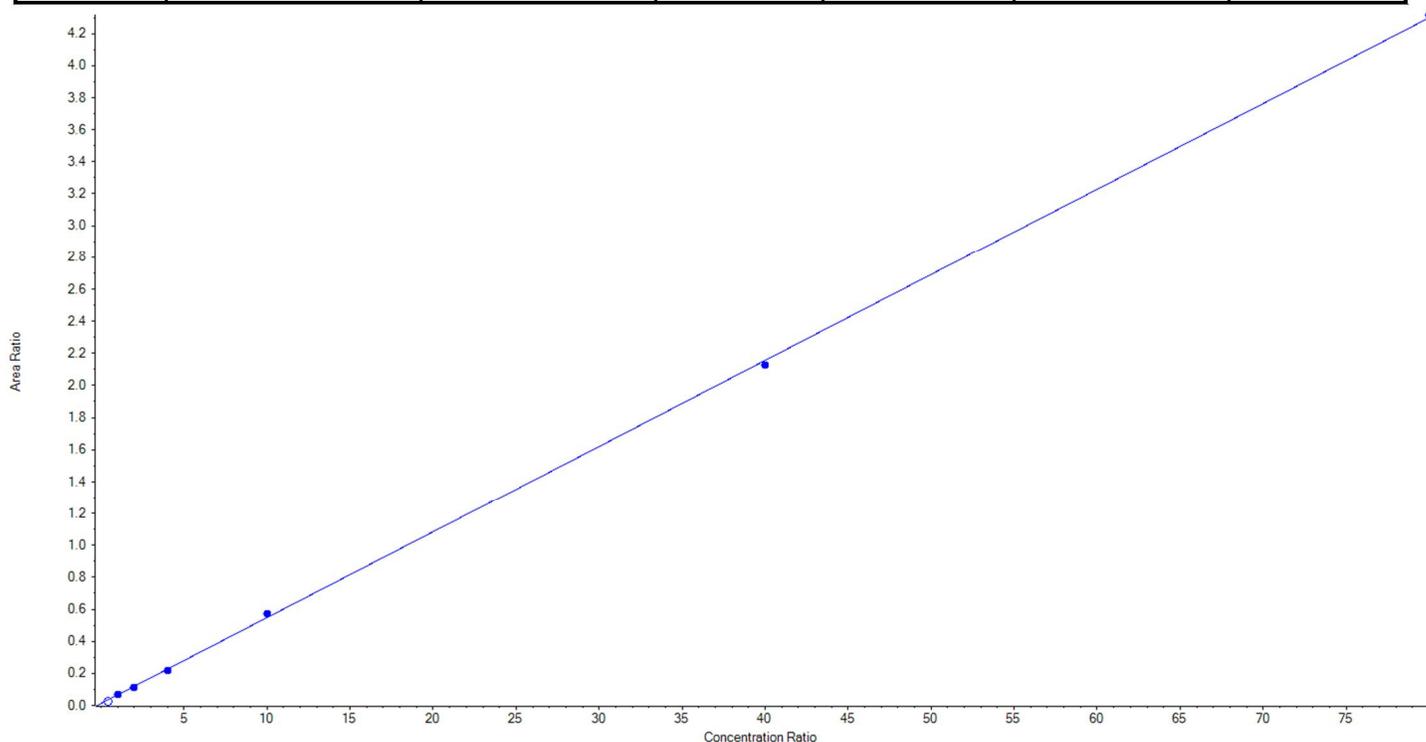
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Analyte Name	PFUnA_2	Data File	10022018_18-0570.wiff
MRM Transition	563.0 / 269.0	Result Table	18-0570_BASE
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05358 x + 0.01243$ (r = 0.99978) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	69.165495	69.2
3	KA87	L2	True	250.00	265.527693	106.2
4	KA88	L3	True	500.00	472.697940	94.5
5	KB85	L4	True	1000.00	953.594606	95.4
6	KB69	L5	True	2500.00	2623.444932	104.9
7	KB64	L6	True	10000.00	9855.680554	98.6
8	KB65	L7	True	20000.00	20079.054275	100.4





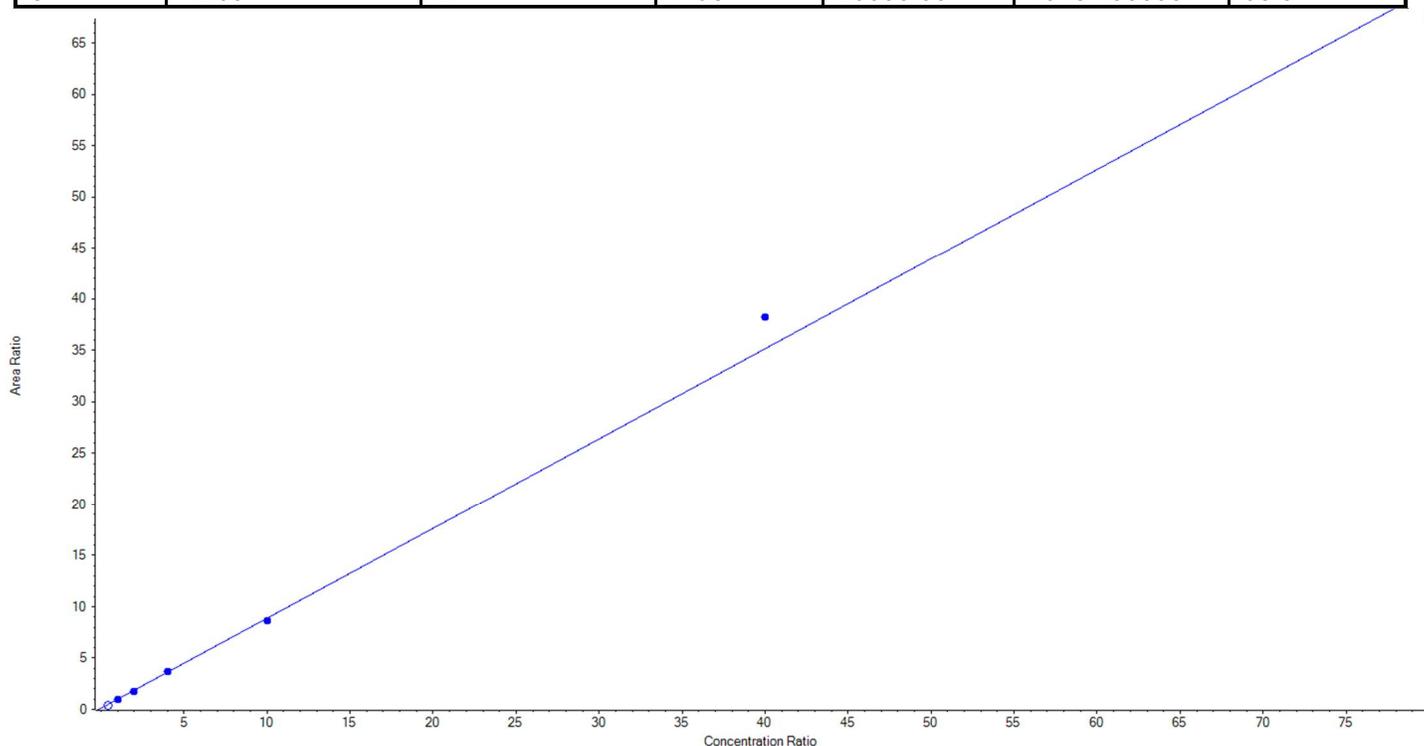
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	PFD _o A_1	Data File	10022018_18-0570.wiff
MRM Transition	613.0 / 569.0	Result Table	18-0570_BASE
Internal Standard	13C2-PFD _o A	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.87606 x + 0.12018$ ($r = 0.99804$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	78.552964	78.6
3	KA87	L2	True	250.00	253.792449	101.5
4	KA88	L3	True	500.00	473.303258	94.7
5	KB85	L4	True	1000.00	1017.251639	101.7
6	KB69	L5	True	2500.00	2432.181539	97.3
7	KB64	L6	True	10000.00	10888.517558	108.9
8	KB65	L7	True	20000.00	19184.953557	95.9





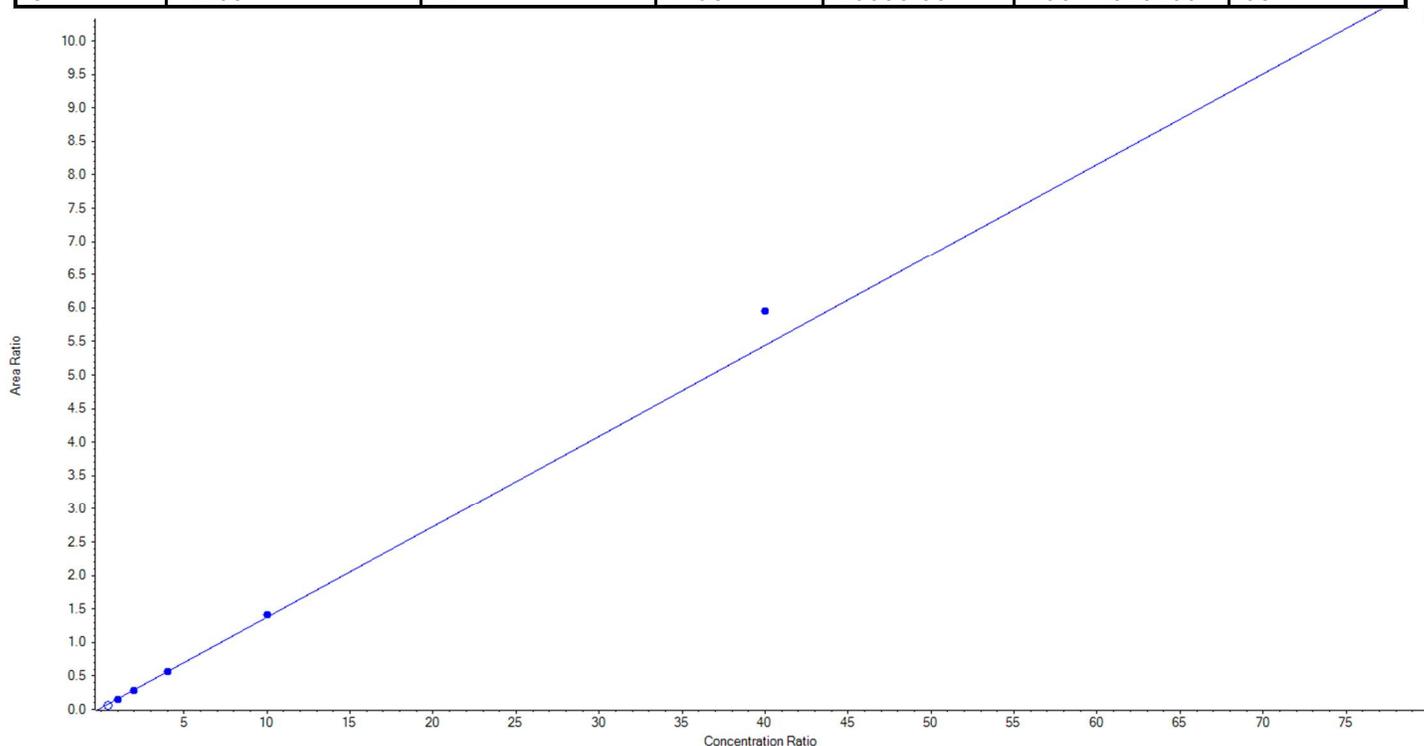
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Analyte Name	PFDaA_2	Data File	10022018_18-0570.wiff
MRM Transition	613.0 / 319.0	Result Table	18-0570_BASE
Internal Standard	13C2-PFDaA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.13550 x + 0.02183$ ($r = 0.99761$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	71.387868	71.4
3	KA87	L2	True	250.00	239.769529	95.9
4	KA88	L3	True	500.00	485.086635	97.0
5	KB85	L4	True	1000.00	998.428822	99.8
6	KB69	L5	True	2500.00	2567.414842	102.7
7	KB64	L6	True	10000.00	10947.776912	109.5
8	KB65	L7	True	20000.00	19011.523260	95.1





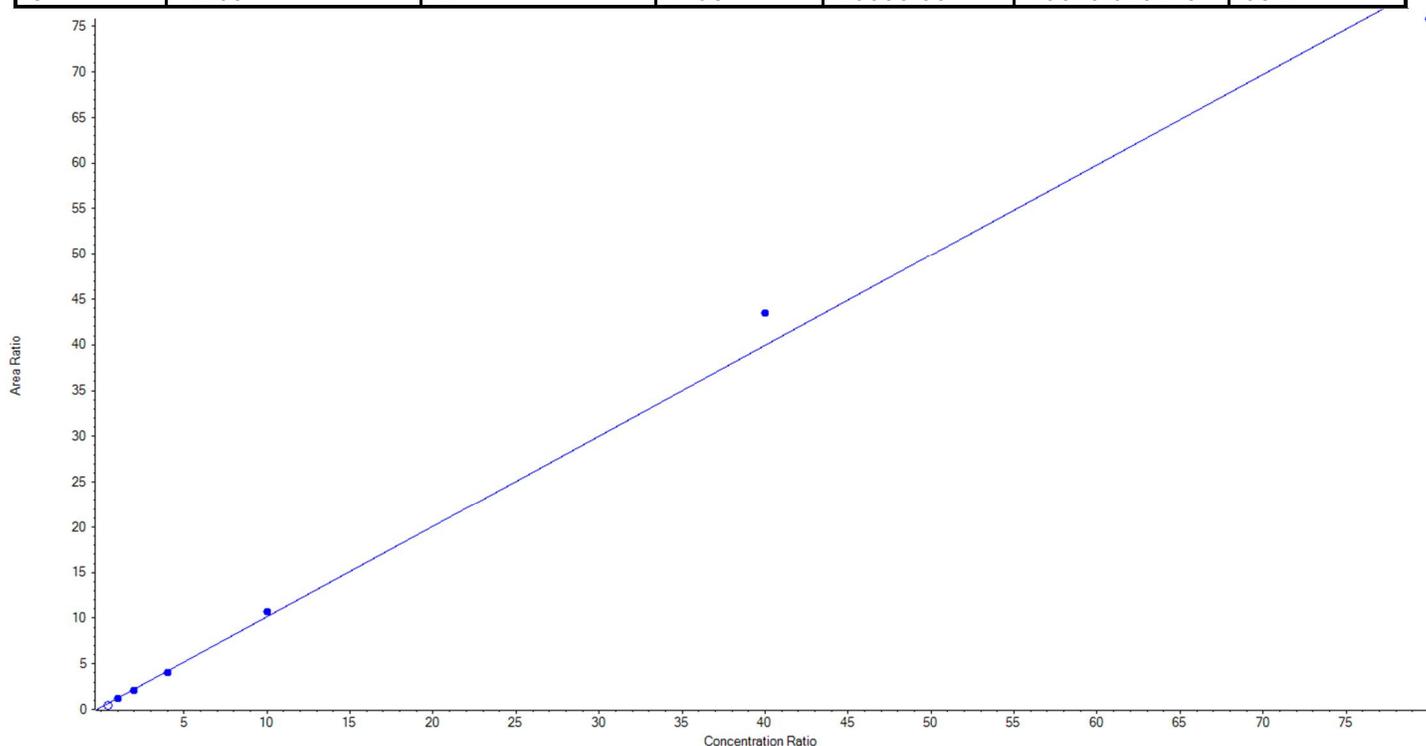
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Analyte Name	PFTrDA_1	Data File	10022018_18-0570.wiff
MRM Transition	663.0 / 619.0	Result Table	18-0570_BASE
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.99278x + 0.23486$ ($r = 0.99767$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	59.104894	59.1
3	KA87	L2	True	250.00	247.127795	98.9
4	KA88	L3	True	500.00	475.312605	95.1
5	KB85	L4	True	1000.00	960.923250	96.1
6	KB69	L5	True	2500.00	2649.092962	106.0
7	KB64	L6	True	10000.00	10888.520115	108.9
8	KB65	L7	True	20000.00	19029.023273	95.2





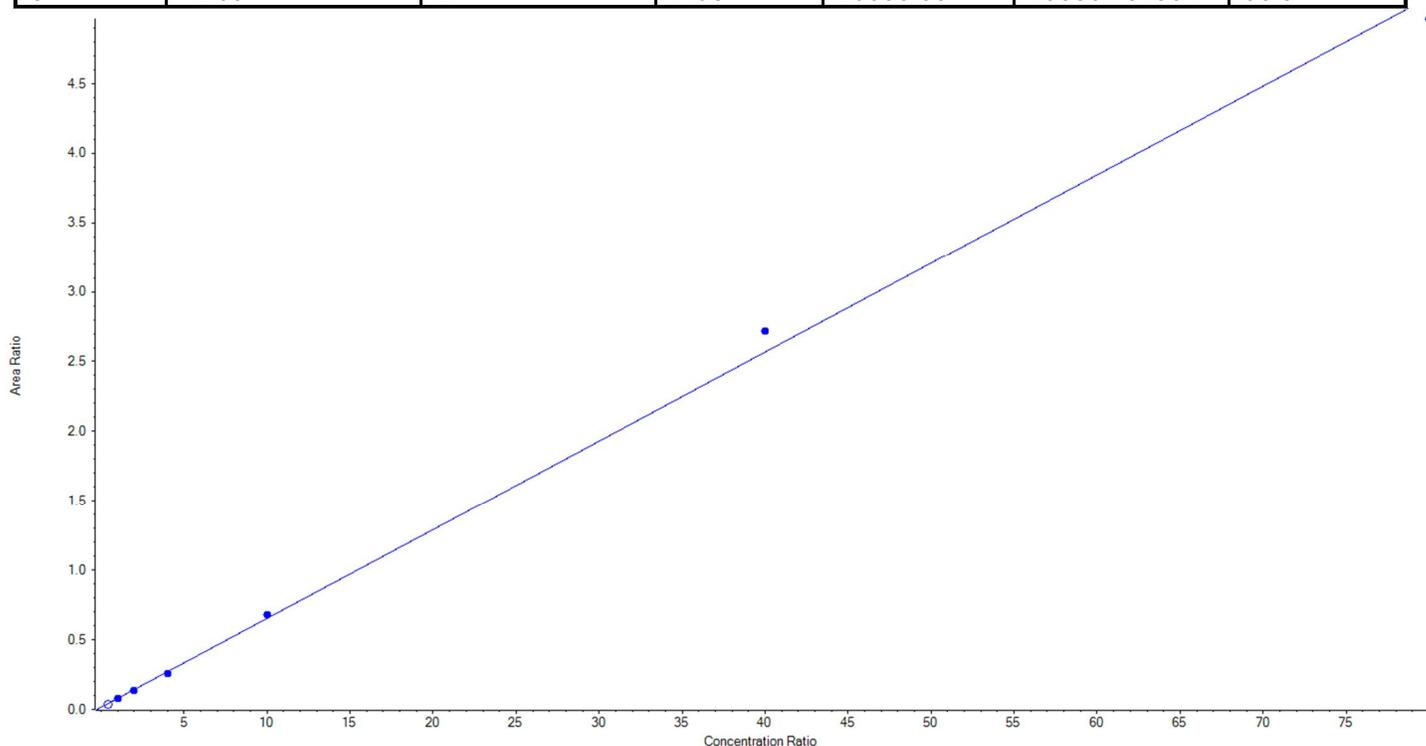
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Analyte Name	PFTTrDA_2	Data File	10022018_18-0570.wiff
MRM Transition	663.0 / 169.0	Result Table	18-0570_BASE
Internal Standard	13C2-PFTTeDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06382 x + 0.01520$ ($r = 0.99895$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	93.536935	93.5
3	KA87	L2	True	250.00	261.878262	104.8
4	KA88	L3	True	500.00	469.086419	93.8
5	KB85	L4	True	1000.00	948.578257	94.9
6	KB69	L5	True	2500.00	2593.422981	103.7
7	KB64	L6	True	10000.00	10590.299175	105.9
8	KB65	L7	True	20000.00	19386.734904	96.9





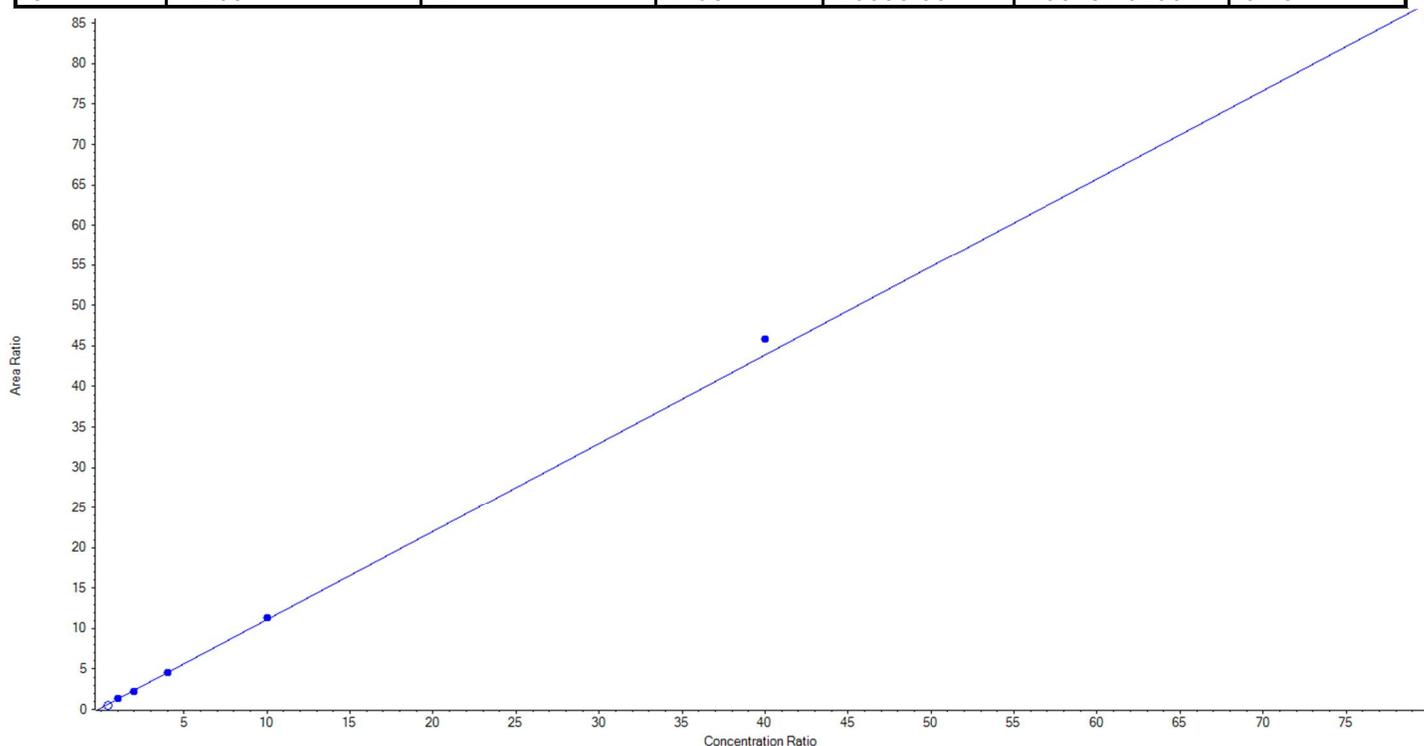
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Analyte Name	PFTeDA_1	Data File	10022018_18-0570.wiff
MRM Transition	713.0 / 669.0	Result Table	18-0570_BASE
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.09260x + 0.18199$ ($r = 0.99941$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	80.361408	80.4
3	KA87	L2	True	250.00	256.779548	102.7
4	KA88	L3	True	500.00	465.602999	93.1
5	KB85	L4	True	1000.00	997.431893	99.7
6	KB69	L5	True	2500.00	2558.826549	102.4
7	KB64	L6	True	10000.00	10442.906951	104.4
8	KB65	L7	True	20000.00	19528.452061	97.6





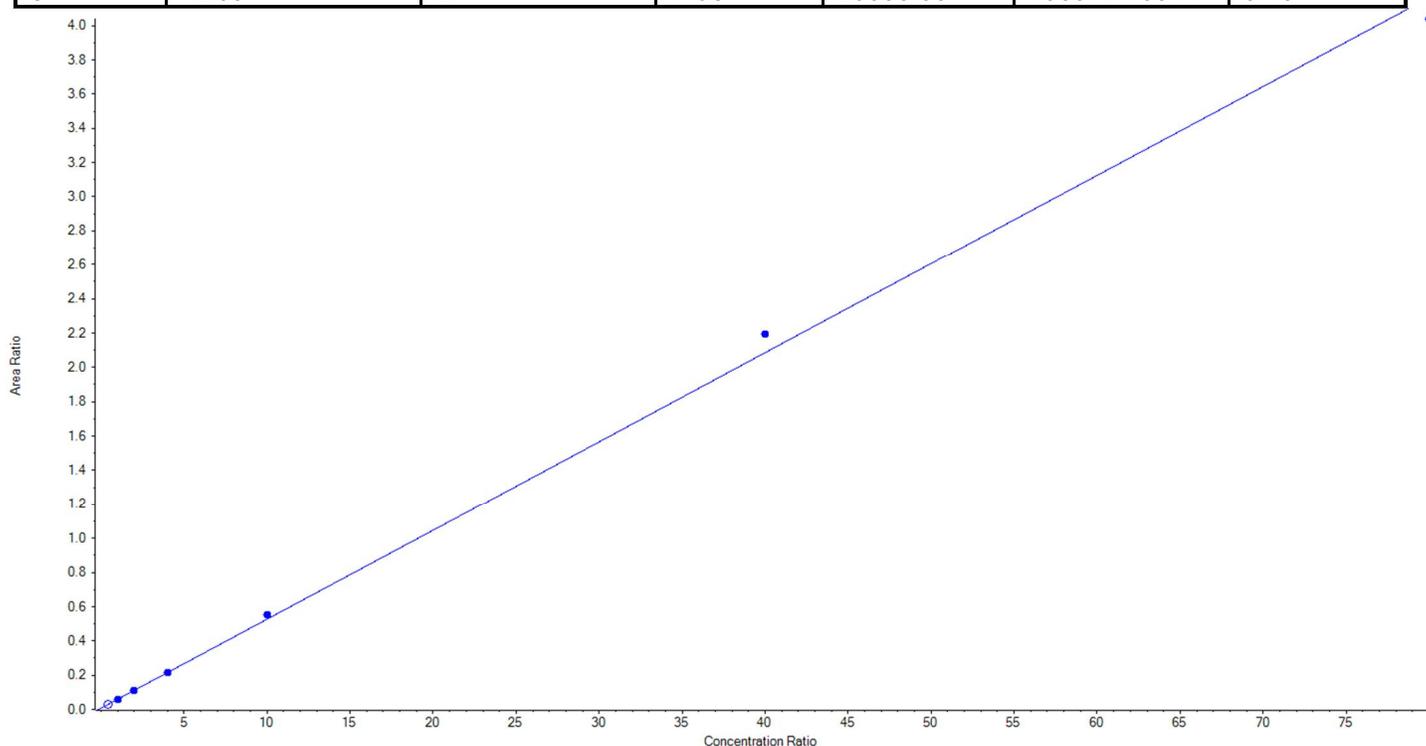
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Analyte Name	PFTeDA_2	Data File	10022018_18-0570.wiff
MRM Transition	713.0 / 169.0	Result Table	18-0570_BASE
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05195x + 0.00742$ ($r = 0.99915$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	99.779675	99.8
3	KA87	L2	True	250.00	235.864762	94.4
4	KA88	L3	True	500.00	498.594242	99.7
5	KB85	L4	True	1000.00	993.123927	99.3
6	KB69	L5	True	2500.00	2612.813888	104.5
7	KB64	L6	True	10000.00	10512.456537	105.1
8	KB65	L7	True	20000.00	19397.146644	97.0





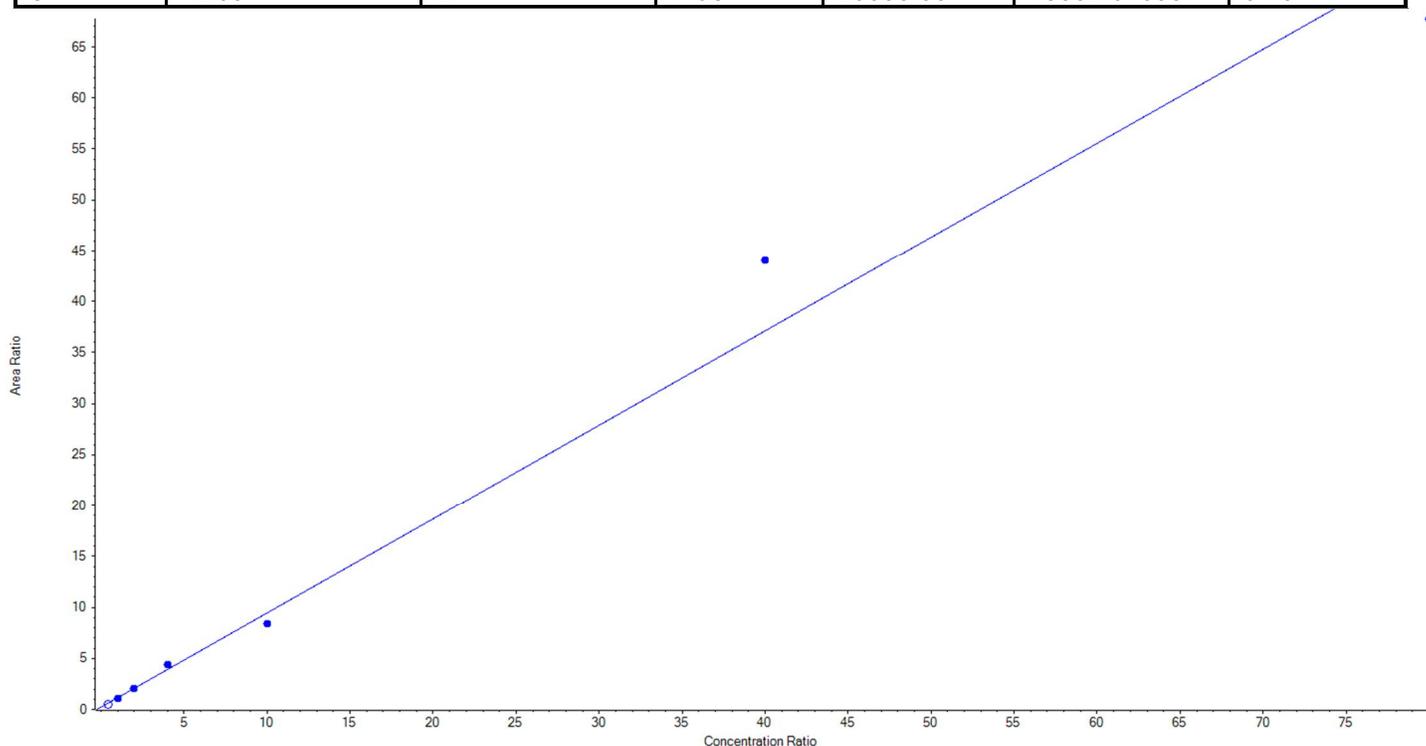
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Created with Analyst Reporter
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Analyte Name	NMeFOSAA_1	Data File	10022018_18-0570.wiff
MRM Transition	570.0 / 419.0	Result Table	18-0570_BASE
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.92207 x + 0.22271$ (r = 0.99072) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	74.579264	74.6
3	KA87	L2	True	250.00	224.006444	89.6
4	KA88	L3	True	500.00	488.205871	97.6
5	KB85	L4	True	1000.00	1139.304981	113.9
6	KB69	L5	True	2500.00	2211.805162	88.5
7	KB64	L6	True	10000.00	11884.031206	118.8
8	KB65	L7	True	20000.00	18302.646337	91.5





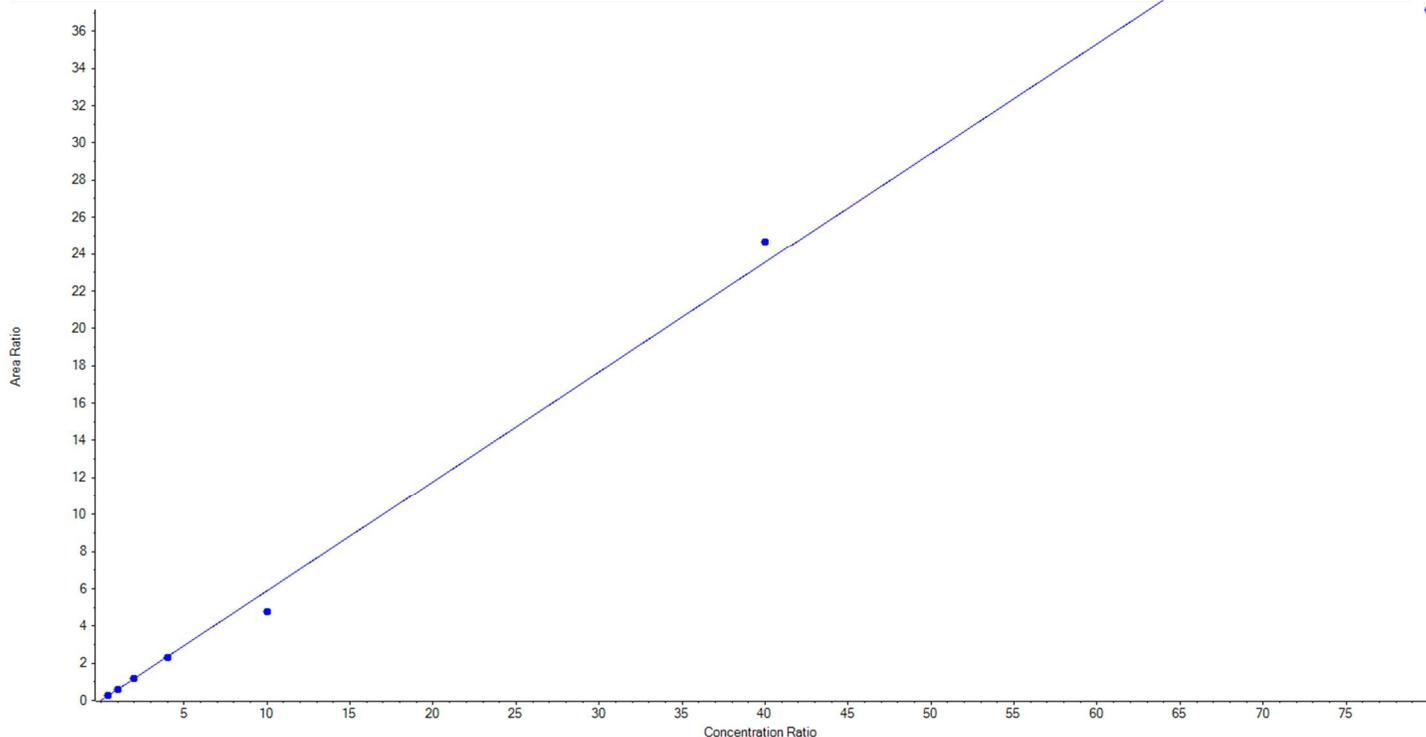
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Analyte Name	NMeFOSAA_2	Data File	10022018_18-0570.wiff
MRM Transition	570.0 / 512.0	Result Table	18-0570_BASE
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.58877 x + -3.02002e-4$ (r = 0.99515) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	113.888561	113.9
3	KA87	L2	True	250.00	258.177895	103.3
4	KA88	L3	True	500.00	495.395874	99.1
5	KB85	L4	True	1000.00	983.191558	98.3
6	KB69	L5	True	2500.00	2014.949632	80.6
7	KB64	L6	True	10000.00	10484.396480	104.8
8	KB65	L7	False	20000.00	15770.949743	78.9





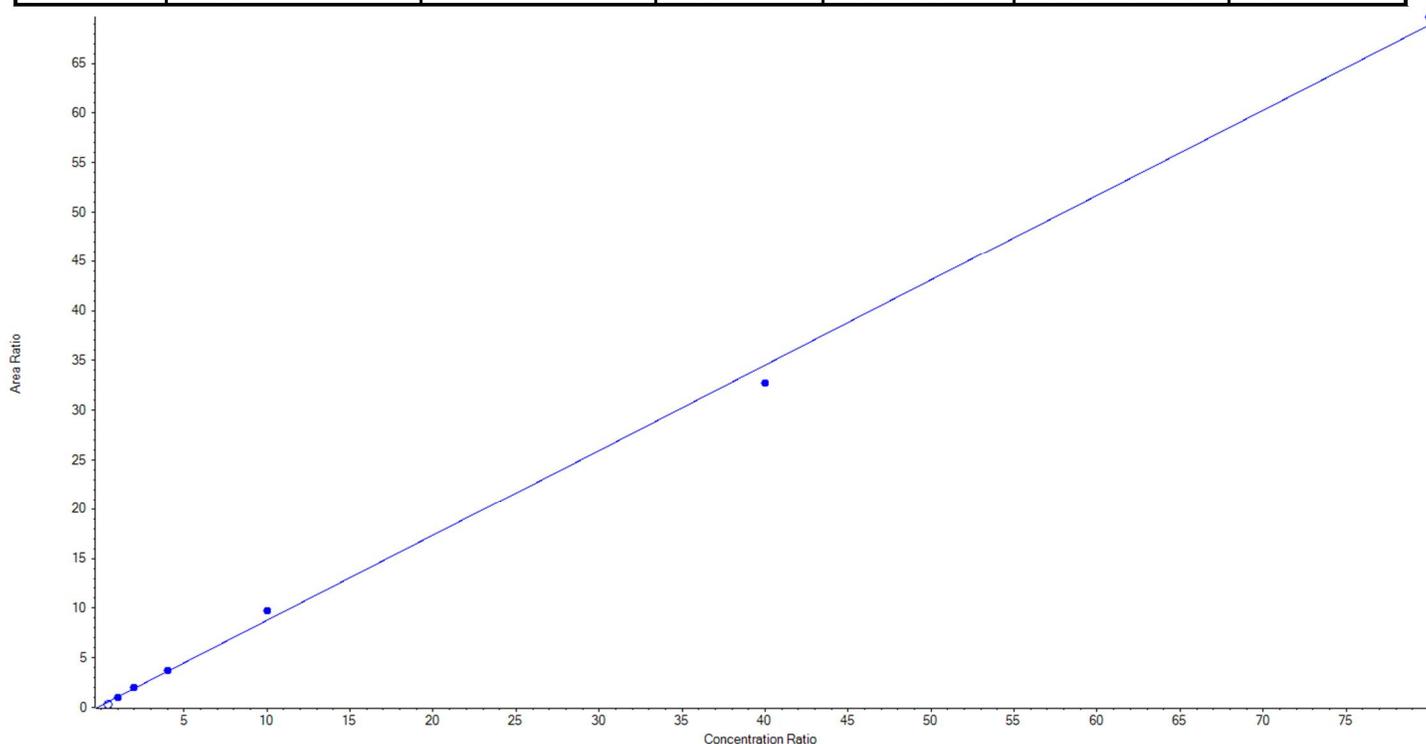
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Analyte Name	NEtFOSAA_1	Data File	10022018_18-0570.wiff
MRM Transition	584.0 / 419.0	Result Table	18-0570_BASE
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.85828x + 0.19595$ ($r = 0.99892$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	40.128303	40.1
3	KA87	L2	True	250.00	221.174498	88.5
4	KA88	L3	True	500.00	513.851241	102.8
5	KB85	L4	True	1000.00	1016.627908	101.7
6	KB69	L5	True	2500.00	2776.740639	111.1
7	KB64	L6	True	10000.00	9483.901545	94.8
8	KB65	L7	True	20000.00	20237.704169	101.2





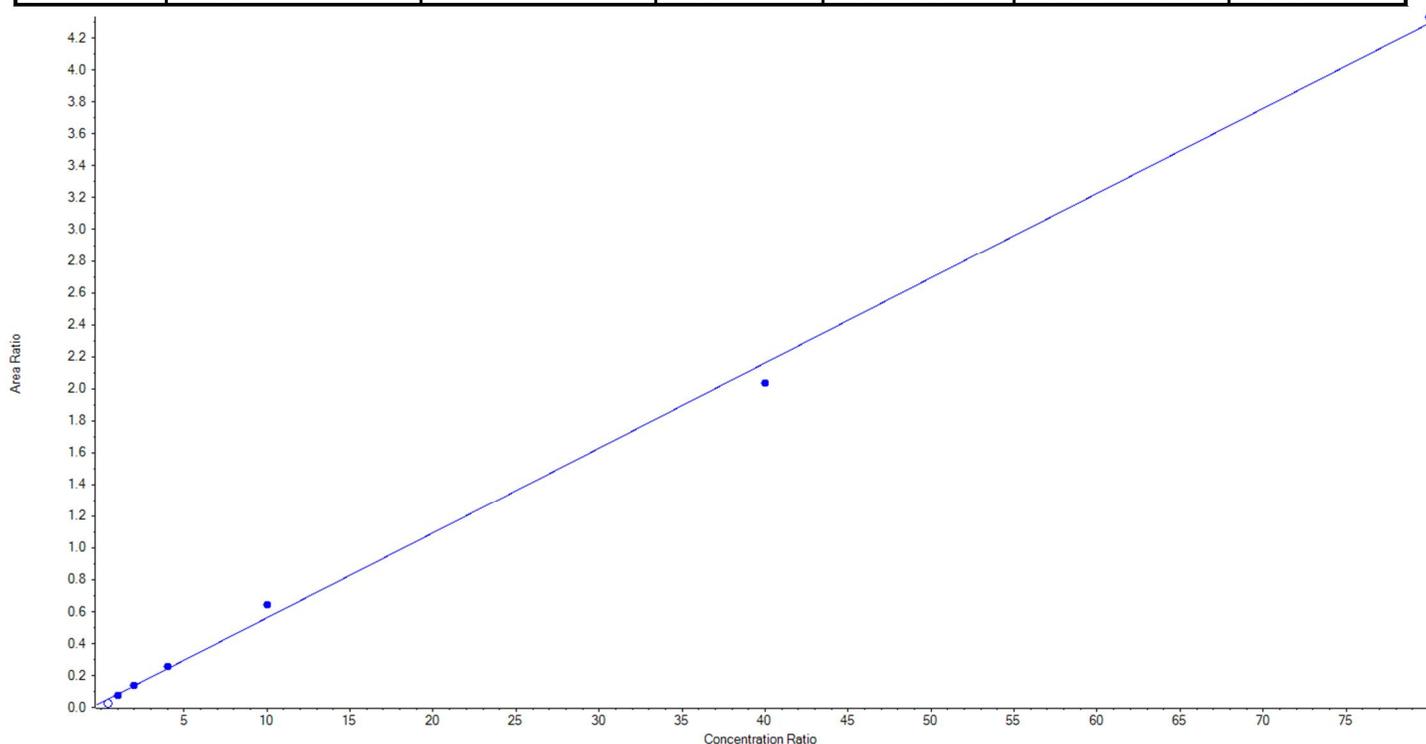
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Analyte Name	NEtFOSAA_2	Data File	10022018_18-0570.wiff
MRM Transition	584.0 / 483.0	Result Table	18-0570_BASE
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05331 x + 0.02861$ (r = 0.99816) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	100.00	< 0	N/A
3	KA87	L2	True	250.00	205.901577	82.4
4	KA88	L3	True	500.00	499.304717	99.9
5	KB85	L4	True	1000.00	1076.234706	107.6
6	KB69	L5	True	2500.00	2880.016685	115.2
7	KB64	L6	True	10000.00	9402.315246	94.0
8	KB65	L7	True	20000.00	20186.227068	100.9





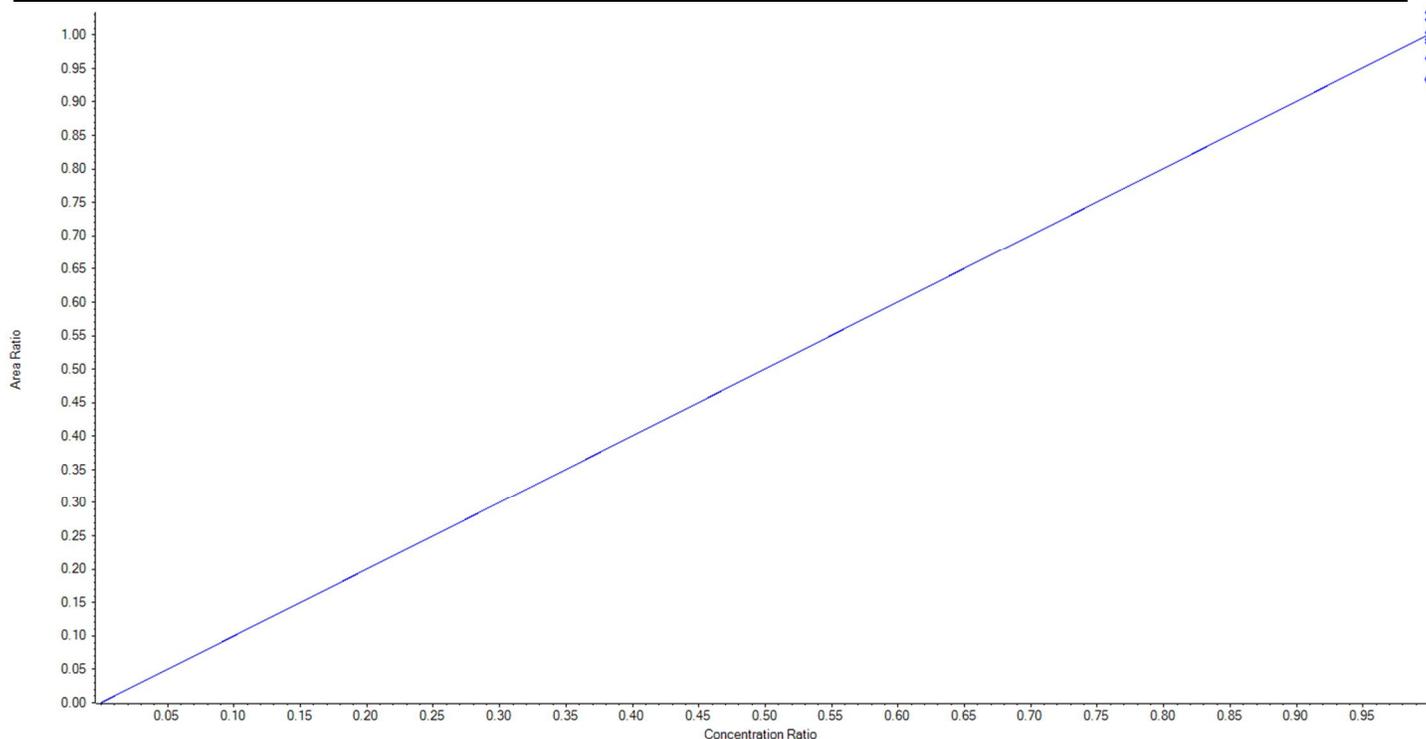
Calibration Summary Report

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Analyte Name	13C2-PFDoA	Data File	10022018_18-0570.wiff
MRM Transition	615.0 / 570.0	Result Table	18-0570_SIS
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.00120 x$ (std. dev. = 0.02438) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	250.00	233.229695	93.3
3	KA87	L2	True	250.00	246.972203	98.8
4	KA88	L3	True	250.00	241.076846	96.4
5	KB85	L4	True	250.00	255.264190	102.1
6	KB69	L5	True	250.00	247.941472	99.2
7	KB64	L6	True	250.00	250.744652	100.3
8	KB65	L7	True	250.00	258.000638	103.2





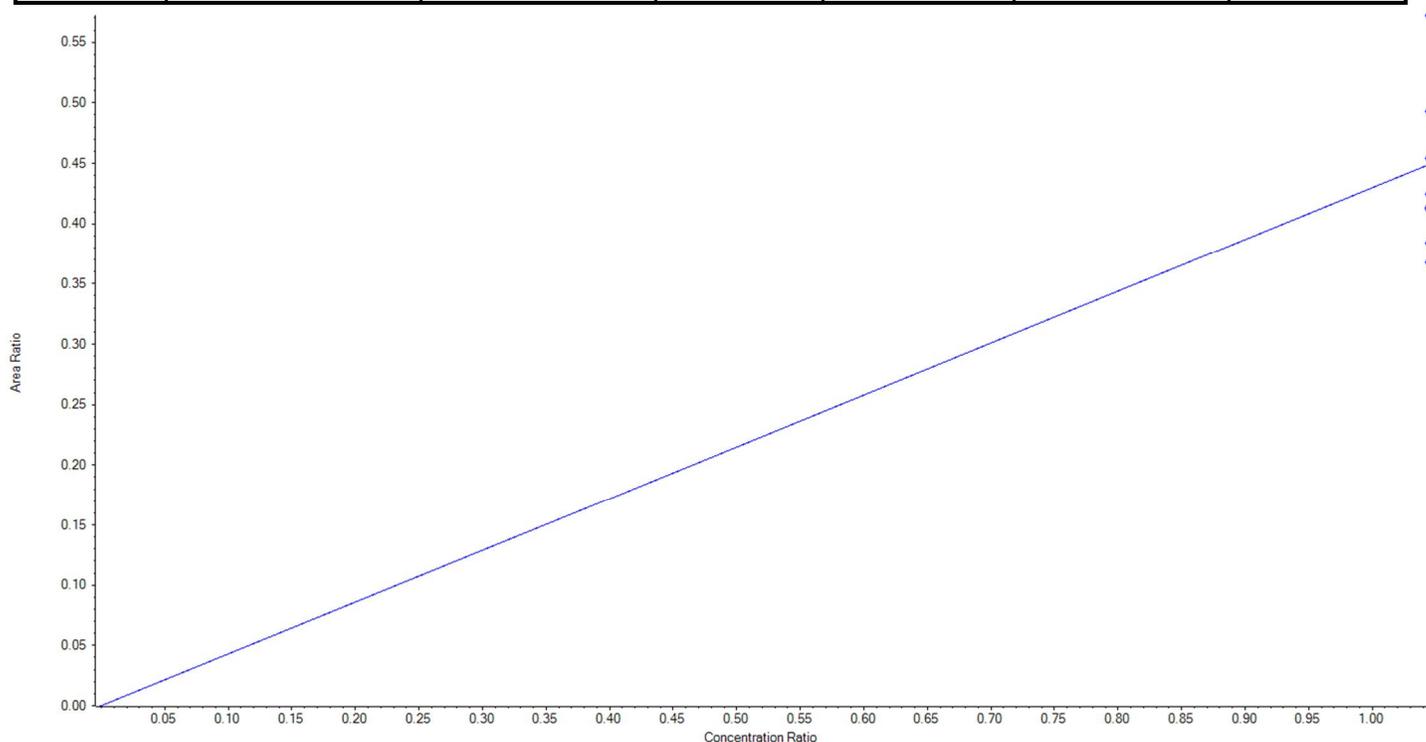
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	d3-MeFOSAA	Data File	10022018_18-0570.wiff
MRM Transition	573.0 / 419.0	Result Table	18-0570_SIS
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.42983 x$ (std. dev. = 0.07228) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	250.00	229.802236	91.9
3	KA87	L2	True	250.00	236.231309	94.5
4	KA88	L3	True	250.00	213.769741	85.5
5	KB85	L4	True	250.00	252.615050	101.1
6	KB69	L5	True	250.00	318.354205	127.3
7	KB64	L6	True	250.00	204.624051	81.9
8	KB65	L7	True	250.00	274.405644	109.8





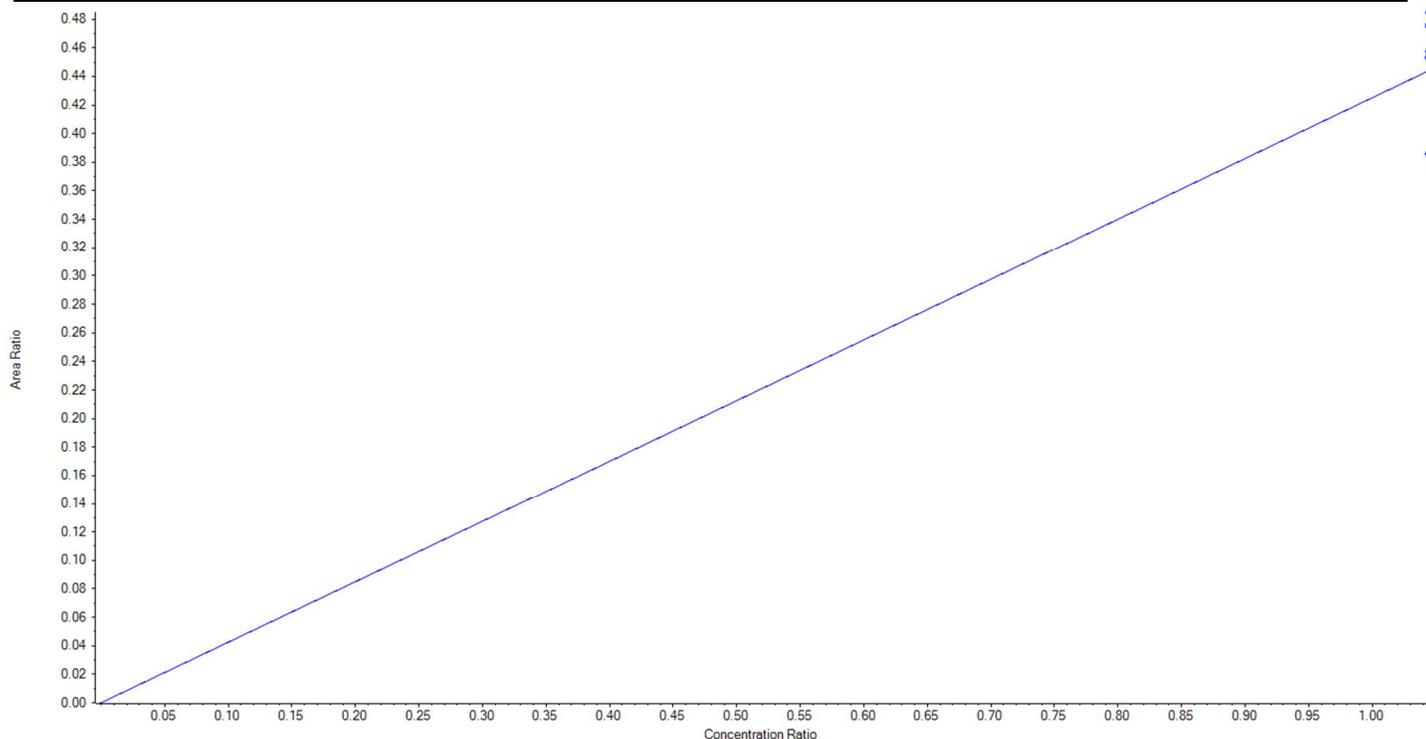
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	d5-EtFOSAA	Data File	10022018_18-0570.wiff
MRM Transition	589.0 / 419.0	Result Table	18-0570_SIS
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.42507 x$ (std. dev. = 0.04402) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	250.00	255.125658	102.1
3	KA87	L2	True	250.00	217.265010	86.9
4	KA88	L3	True	250.00	217.108349	86.8
5	KB85	L4	True	250.00	272.760090	109.1
6	KB69	L5	True	250.00	267.860895	107.1
7	KB64	L6	True	250.00	267.435711	107.0
8	KB65	L7	True	250.00	257.569944	103.0





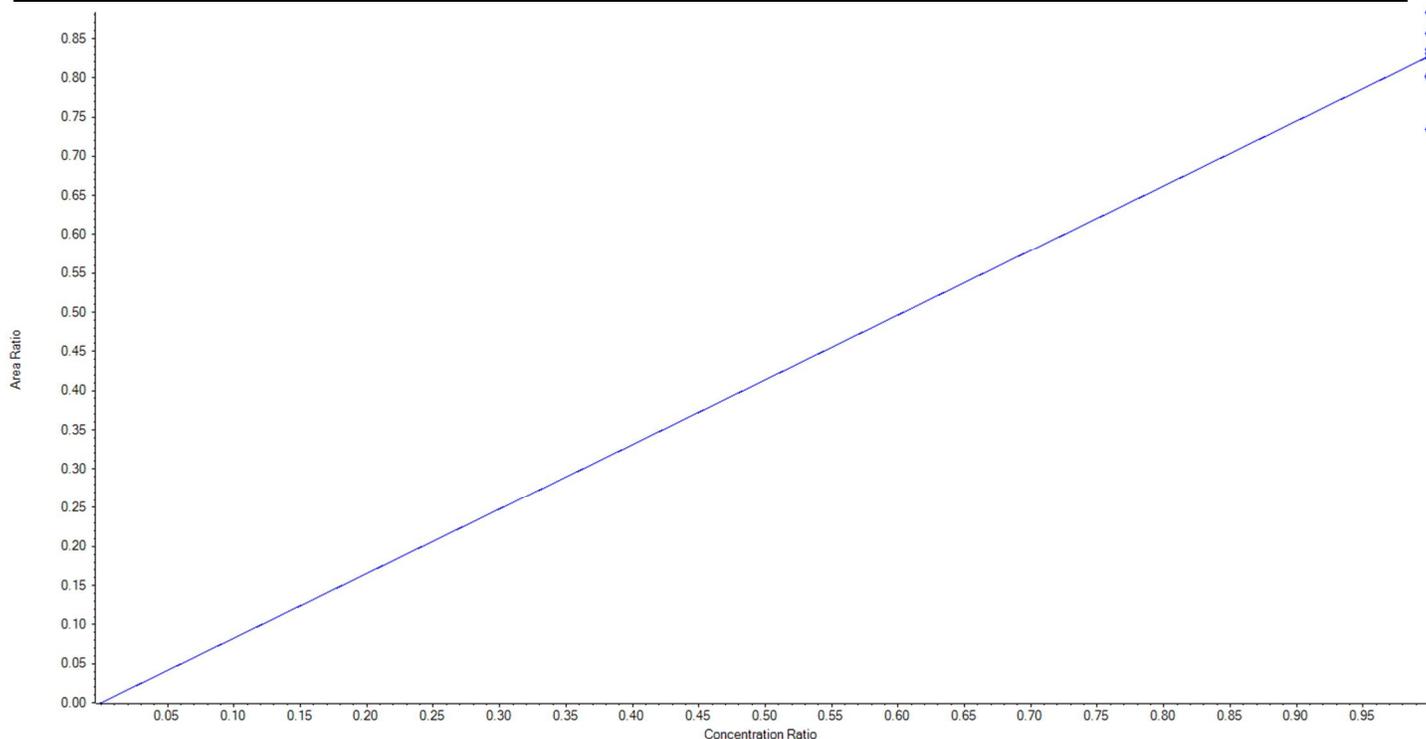
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	13C5-PFHxA	Data File	10022018_18-0570.wiff
MRM Transition	318.0 / 273.0	Result Table	18-0570_SIS
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.82754 x$ (std. dev. = 0.05061) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	250.00	242.083305	96.8
3	KA87	L2	True	250.00	221.655114	88.7
4	KA88	L3	True	250.00	249.256787	99.7
5	KB85	L4	True	250.00	251.032853	100.4
6	KB69	L5	True	250.00	258.795523	103.5
7	KB64	L6	True	250.00	266.740062	106.7
8	KB65	L7	True	250.00	252.519661	101.0





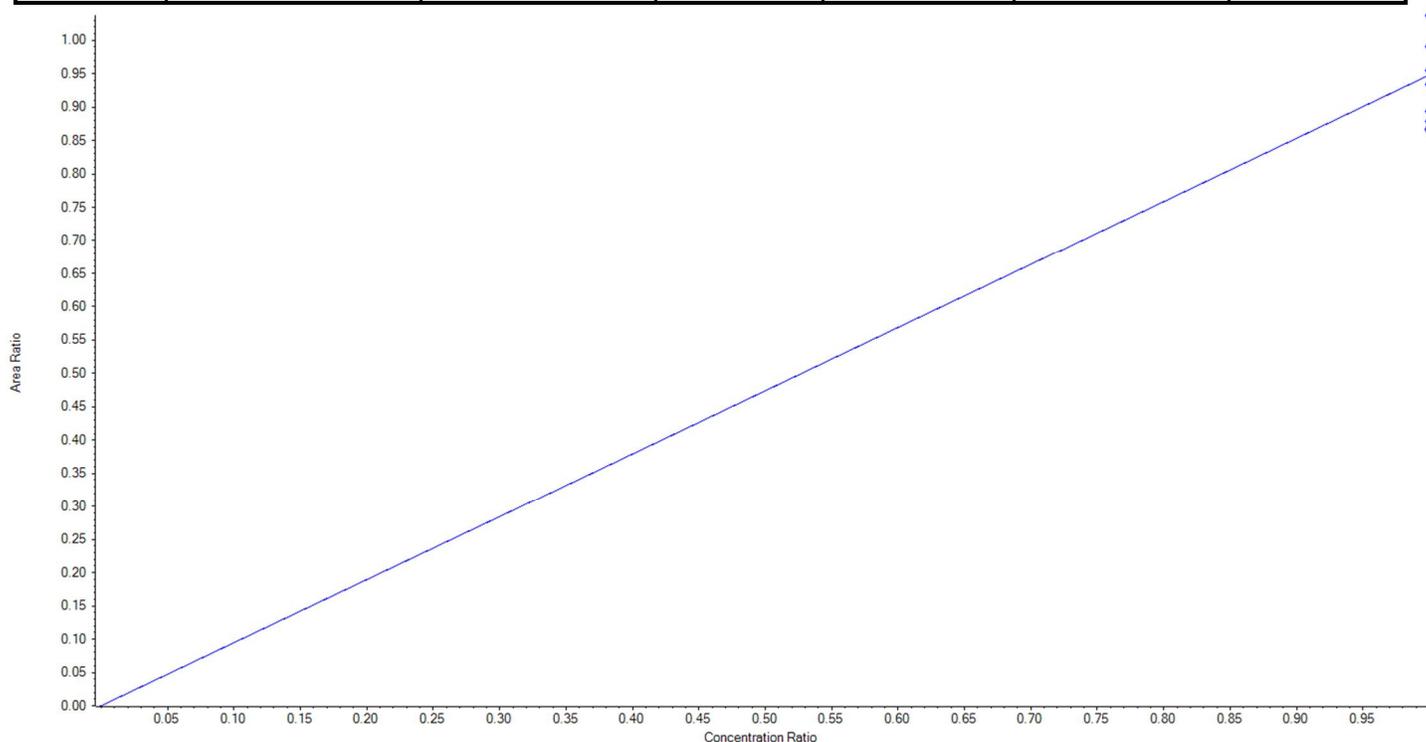
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Analyte Name	13C4-PFHpA	Data File	10022018_18-0570.wiff
MRM Transition	367.0 / 322.0	Result Table	18-0570_SIS
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.94800 x$ (std. dev. = 0.05975) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	250.00	228.662784	91.5
3	KA87	L2	True	250.00	231.579170	92.6
4	KA88	L3	True	250.00	235.642712	94.3
5	KB85	L4	True	250.00	261.368863	104.6
6	KB69	L5	True	250.00	273.428147	109.4
7	KB64	L6	True	250.00	251.808059	100.7
8	KB65	L7	True	250.00	246.173049	98.5





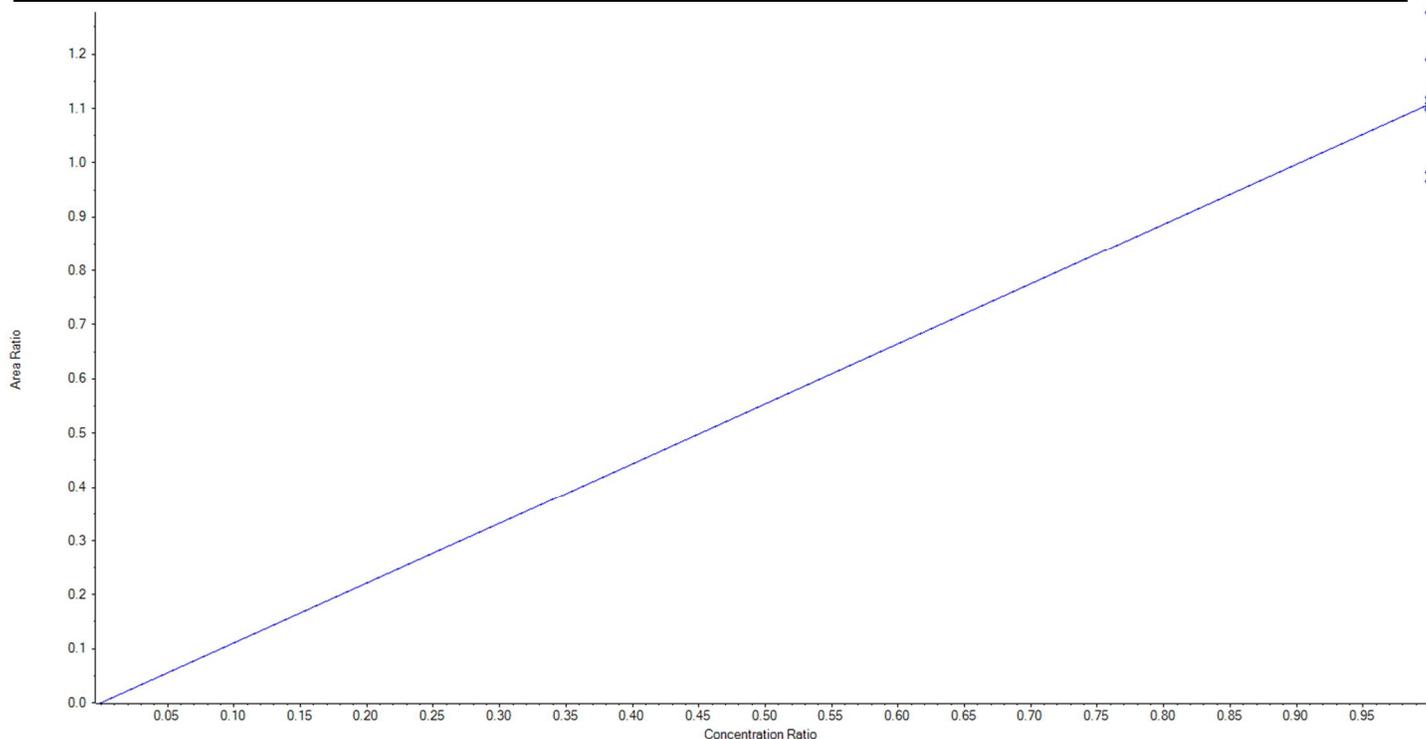
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Analyte Name	13C8-PFOA	Data File	10022018_18-0570.wiff
MRM Transition	421.0 / 376.0	Result Table	18-0570_SIS
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.10789 x$ (std. dev. = 0.11909) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	250.00	247.777136	99.1
3	KA87	L2	True	250.00	221.853291	88.7
4	KA88	L3	True	250.00	252.964122	101.2
5	KB85	L4	True	250.00	268.532179	107.4
6	KB69	L5	True	250.00	288.080586	115.2
7	KB64	L6	True	250.00	250.442041	100.2
8	KB65	L7	True	250.00	218.127781	87.3





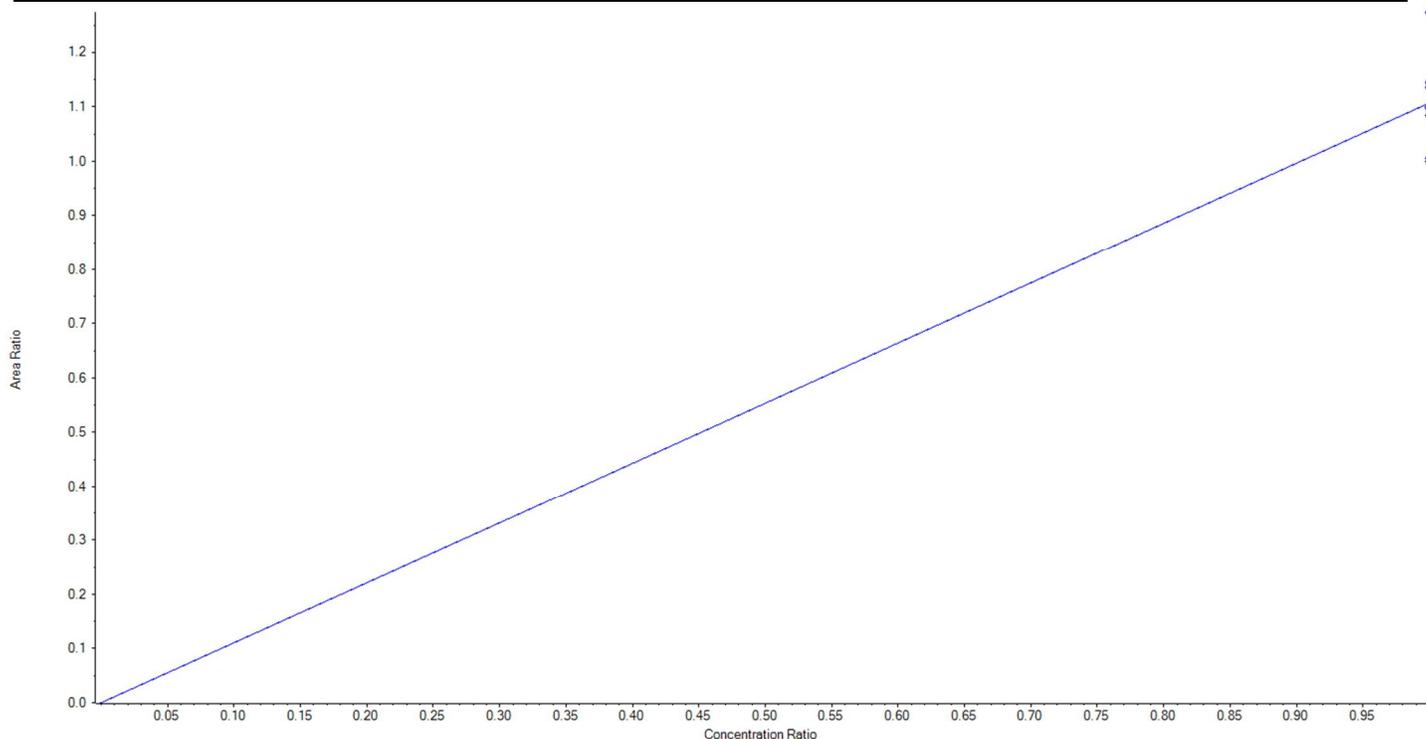
Calibration Summary Report

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Analyte Name	13C9-PFNA	Data File	10022018_18-0570.wiff
MRM Transition	472.0 / 427.0	Result Table	18-0570_SIS
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.10714 x$ (std. dev. = 0.10208) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	250.00	248.036523	99.2
3	KA87	L2	True	250.00	225.819827	90.3
4	KA88	L3	True	250.00	258.545994	103.4
5	KB85	L4	True	250.00	256.338617	102.5
6	KB69	L5	True	250.00	287.483414	115.0
7	KB64	L6	True	250.00	244.744176	97.9
8	KB65	L7	True	250.00	227.067973	90.8





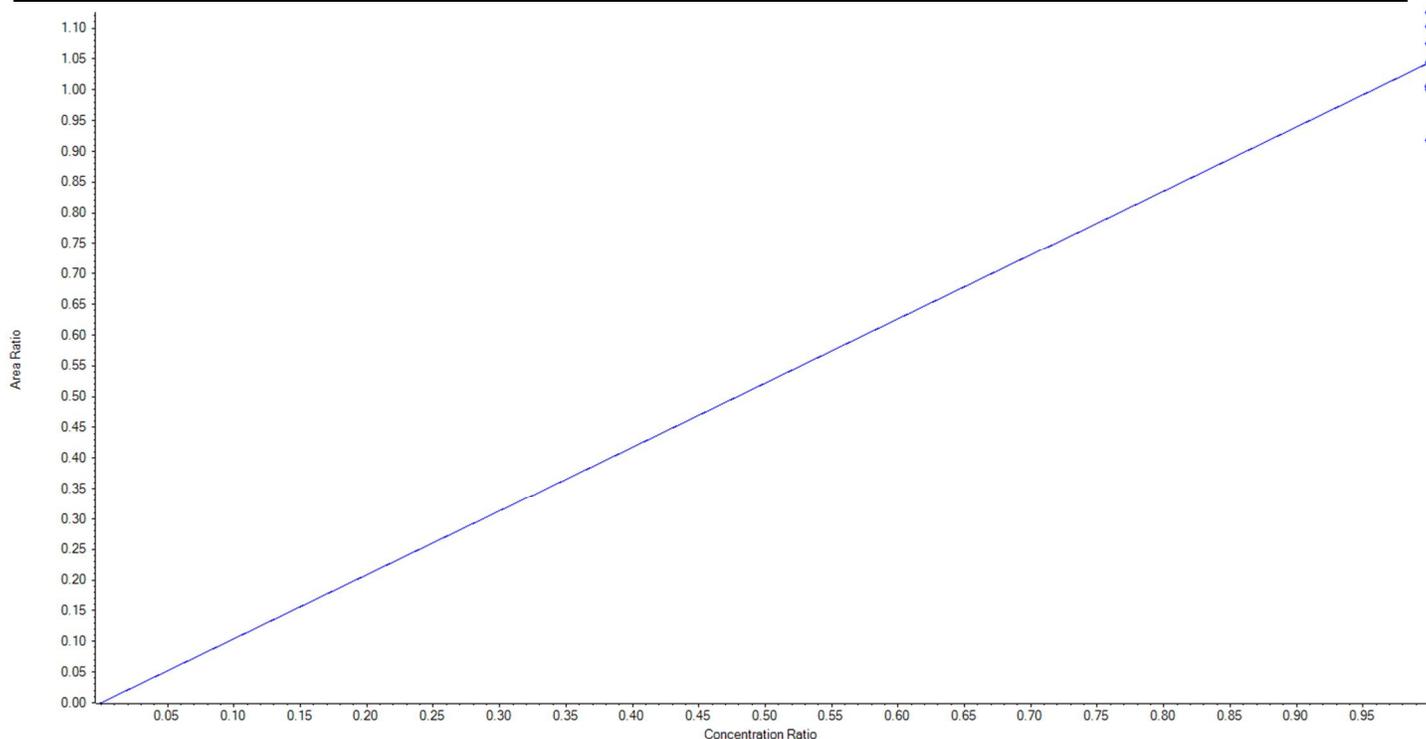
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	13C6-PFDA	Data File	10022018_18-0570.wiff
MRM Transition	519.0 / 474.0	Result Table	18-0570_SIS
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.04399 x$ (std. dev. = 0.07562) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	250.00	240.720261	96.3
3	KA87	L2	True	250.00	263.909639	105.6
4	KA88	L3	True	250.00	250.001875	100.0
5	KB85	L4	True	250.00	269.440613	107.8
6	KB69	L5	True	250.00	257.229727	102.9
7	KB64	L6	True	250.00	239.514932	95.8
8	KB65	L7	True	250.00	219.903214	88.0





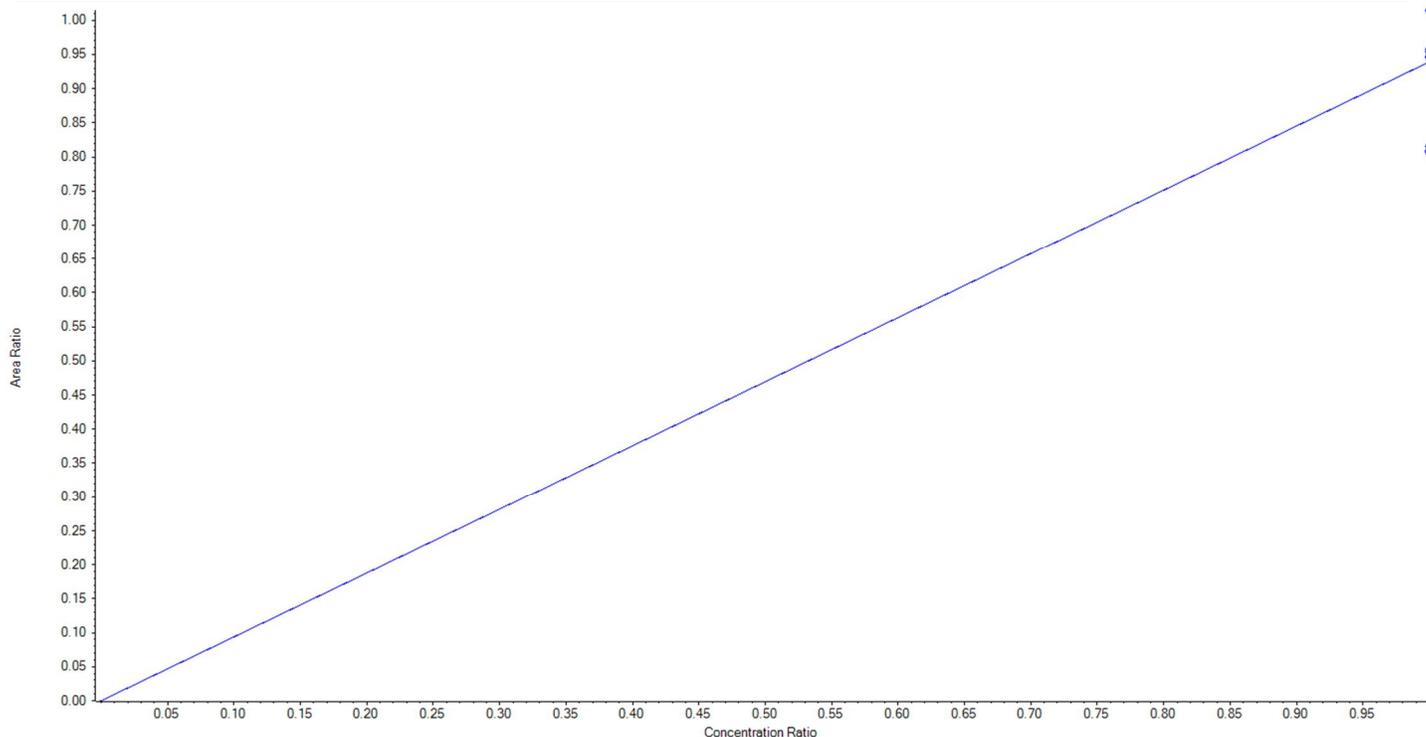
Calibration Summary Report

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Analyte Name	13C7-PFUnA	Data File	10022018_18-0570.wiff
MRM Transition	570.0 / 525.0	Result Table	18-0570_SIS
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.93913 x$ (std. dev. = 0.06549) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	250.00	214.940507	86.0
3	KA87	L2	True	250.00	251.978404	100.8
4	KA88	L3	True	250.00	254.919240	102.0
5	KB85	L4	True	250.00	269.956726	108.0
6	KB69	L5	True	250.00	251.739175	100.7
7	KB64	L6	True	250.00	254.159559	101.7
8	KB65	L7	True	250.00	217.246897	86.9





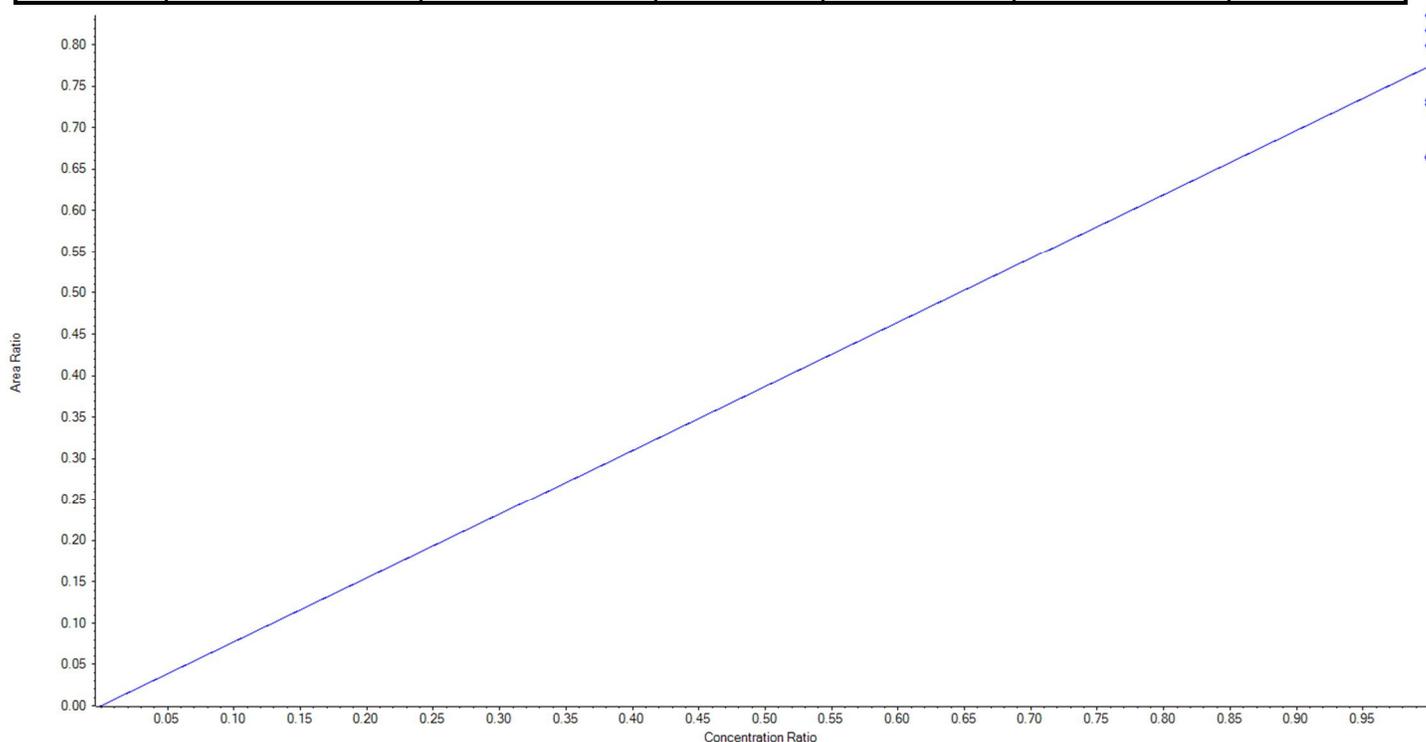
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	13C2-PFTeDA	Data File	10022018_18-0570.wiff
MRM Transition	715.0 / 670.0	Result Table	18-0570_SIS
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.77403 x$ (std. dev. = 0.04837) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	250.00	214.383707	85.8
3	KA87	L2	True	250.00	236.553863	94.6
4	KA88	L3	True	250.00	235.242401	94.1
5	KB85	L4	True	250.00	263.889130	105.6
6	KB69	L5	True	250.00	236.674286	94.7
7	KB64	L6	True	250.00	257.926310	103.2
8	KB65	L7	True	250.00	269.714011	107.9





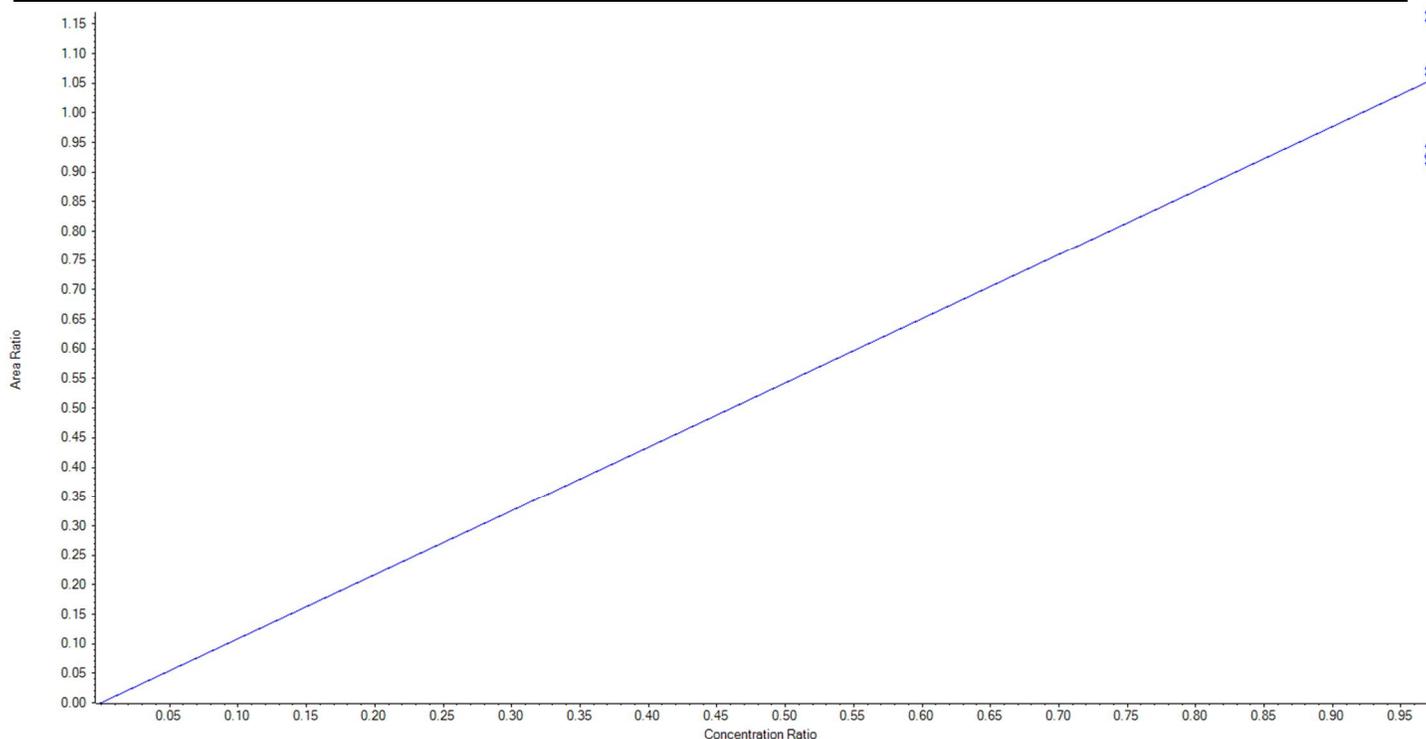
Calibration Summary Report

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Analyte Name	13C3-PFBS	Data File	10022018_18-0570.wiff
MRM Transition	302.0 / 99.0	Result Table	18-0570_SIS
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.08538 x$ (std. dev. = 0.10911) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	232.25	204.157181	87.9
3	KA87	L2	True	232.25	201.464756	86.7
4	KA88	L3	True	232.25	207.886932	89.5
5	KB85	L4	True	232.25	234.742862	101.1
6	KB69	L5	True	232.25	254.817953	109.7
7	KB64	L6	True	232.25	236.903716	102.0
8	KB65	L7	True	232.25	257.683780	111.0





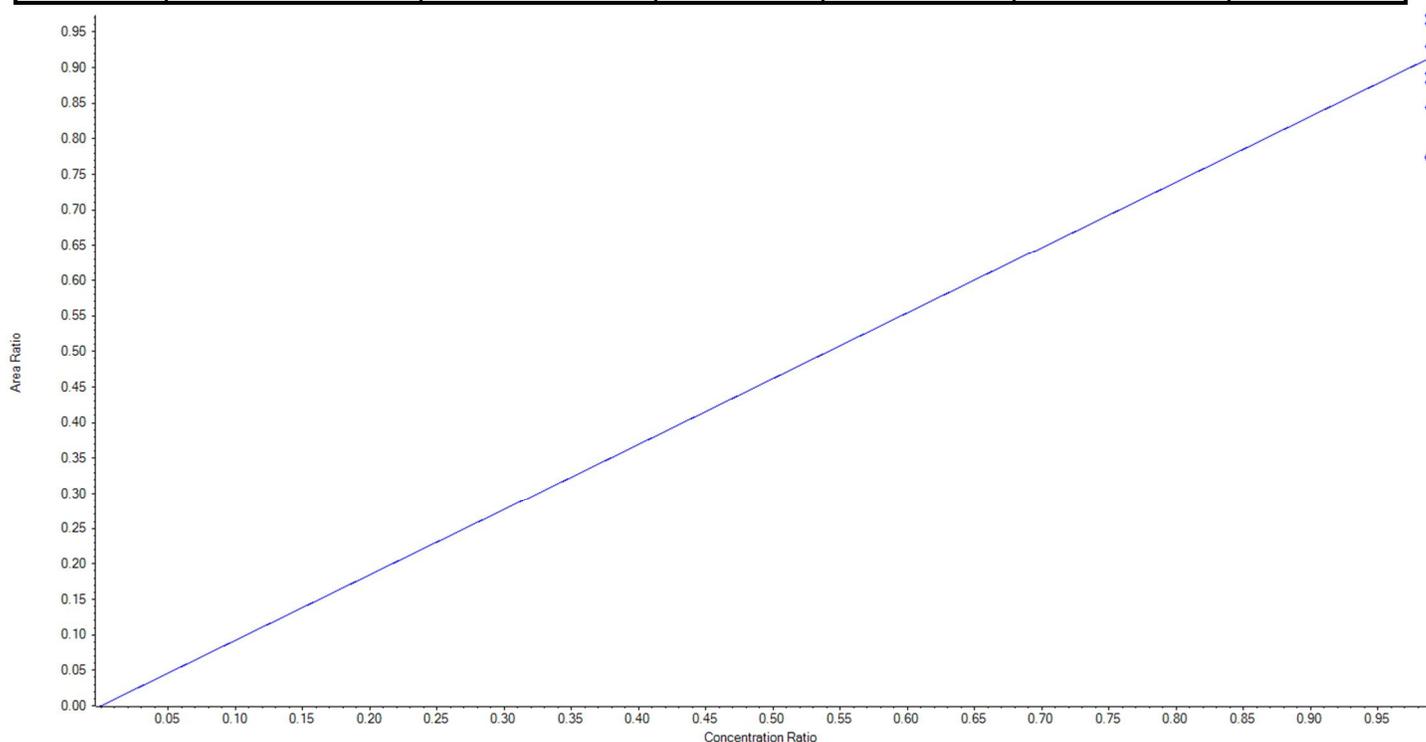
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	13C3-PFHxS	Data File	10022018_18-0570.wiff
MRM Transition	402.0 / 99.0	Result Table	18-0570_SIS
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.92357 x$ (std. dev. = 0.05089) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	236.50	200.361190	84.7
3	KA87	L2	True	236.50	227.648275	96.3
4	KA88	L3	True	236.50	230.887861	97.6
5	KB85	L4	True	236.50	251.989656	106.6
6	KB69	L5	True	236.50	240.853778	101.8
7	KB64	L6	True	236.50	218.548735	92.4
8	KB65	L7	True	236.50	249.071695	105.3





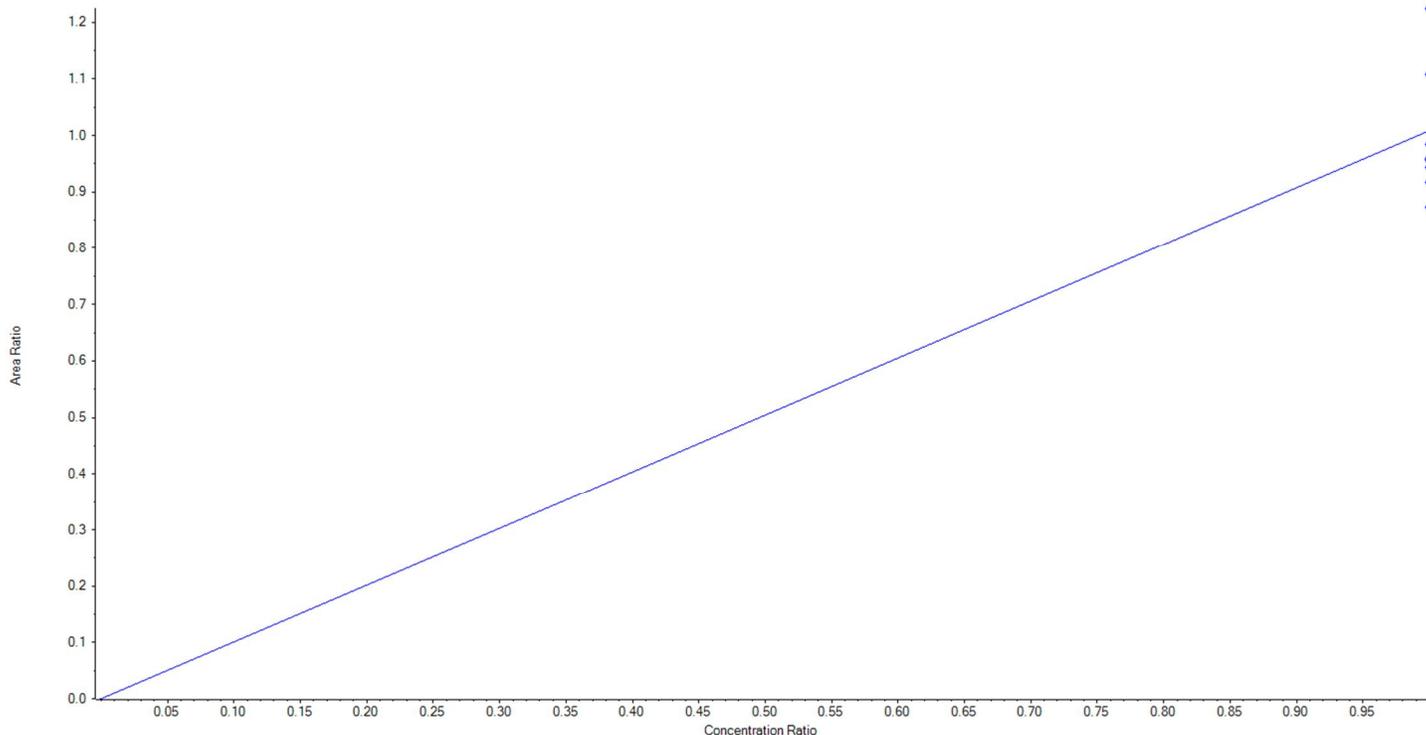
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	13C8-PFOS	Data File	10022018_18-0570.wiff
MRM Transition	507.0 / 99.0	Result Table	18-0570_SIS
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 12:20:31 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.00854 x$ (std. dev. = 0.13252) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	False	239.25	227.412422	95.1
3	KA87	L2	True	239.25	207.009441	86.5
4	KA88	L3	True	239.25	224.063094	93.7
5	KB85	L4	True	239.25	262.779624	109.8
6	KB69	L5	True	239.25	290.407066	121.4
7	KB64	L6	True	239.25	217.587916	91.0
8	KB65	L7	True	239.25	233.652860	97.7





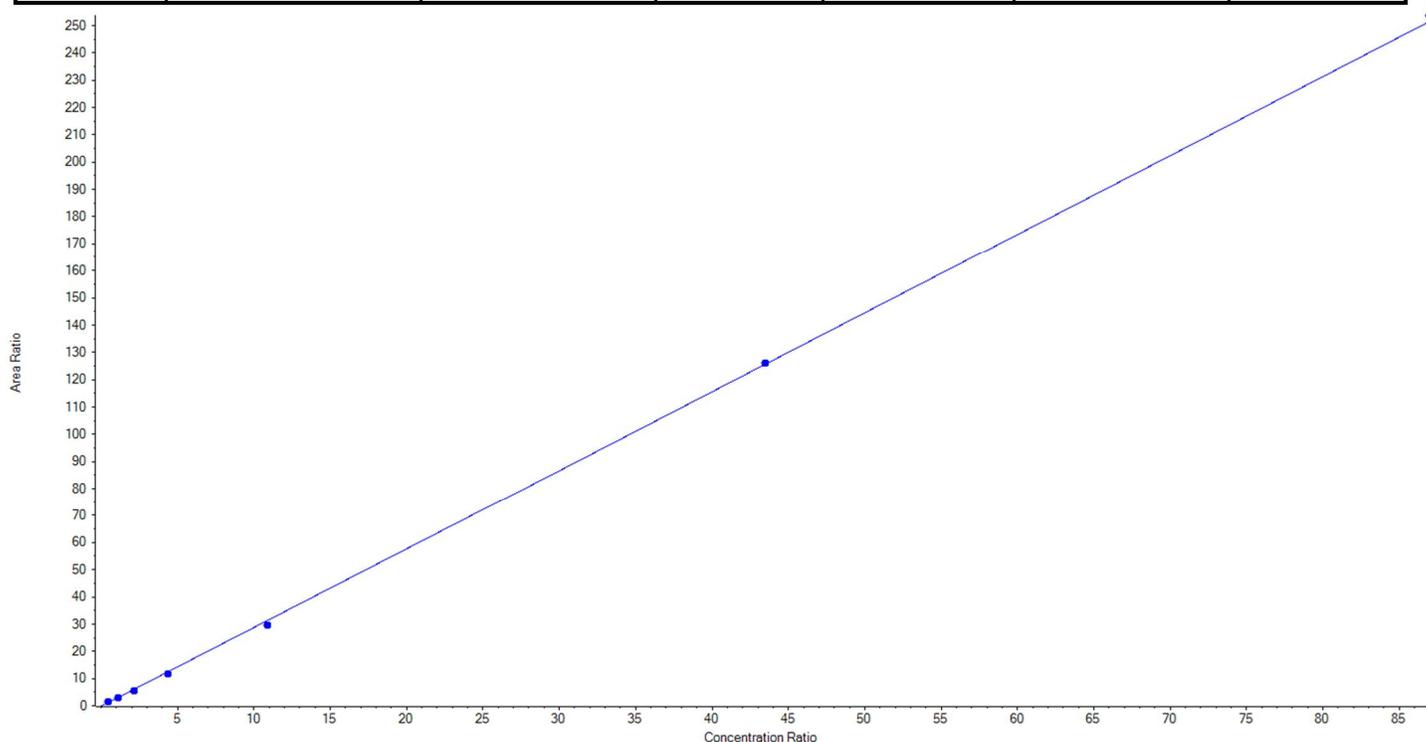
Calibration Summary Report

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Analyte Name	PFBS_1	Data File	18-0567.wiff
MRM Transition	298.9 / 80.0	Result Table	18-0570_BASE_A
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 2.89292 x + -0.16084$ ($r = 0.99972$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	101.00	118.242850	117.1
3	KA87	L2	True	252.50	252.515531	100.0
4	KA88	L3	True	505.00	463.842650	91.9
5	KB85	L4	True	1010.00	962.352090	95.3
6	KB69	L5	True	2525.00	2388.436582	94.6
7	KB64	L6	True	10100.00	10133.836648	100.3
8	KB65	L7	True	20200.00	20374.273647	100.9





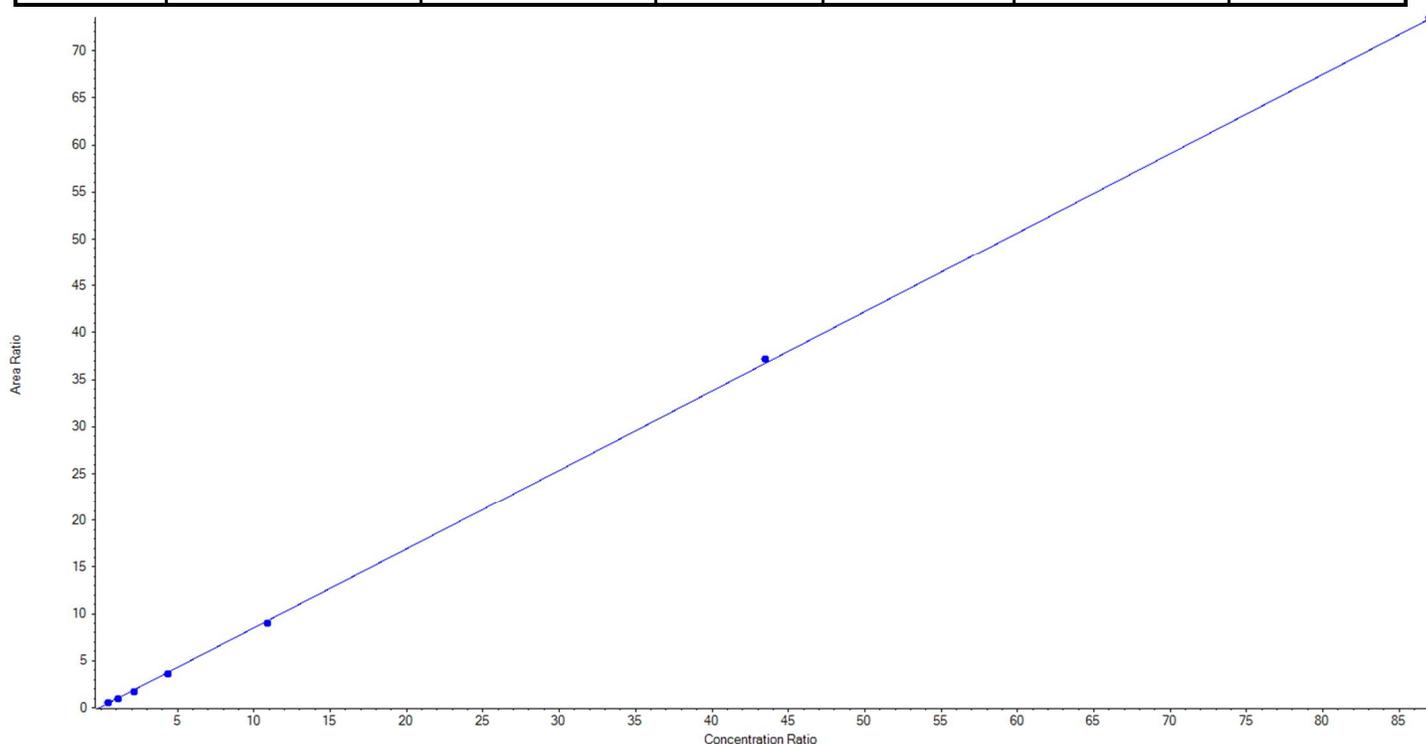
Calibration Summary Report

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Analyte Name	PFBS_2	Data File	18-0567.wiff
MRM Transition	298.9 / 99.0	Result Table	18-0570_BASE_A
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.84252 x + 0.08846$ ($r = 0.99963$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	101.00	127.941924	126.7
3	KA87	L2	True	252.50	234.849528	93.0
4	KA88	L3	True	505.00	436.780354	86.5
5	KB85	L4	True	1010.00	955.659161	94.6
6	KB69	L5	True	2525.00	2467.152233	97.7
7	KB64	L6	True	10100.00	10230.920973	101.3
8	KB65	L7	True	20200.00	20240.195826	100.2





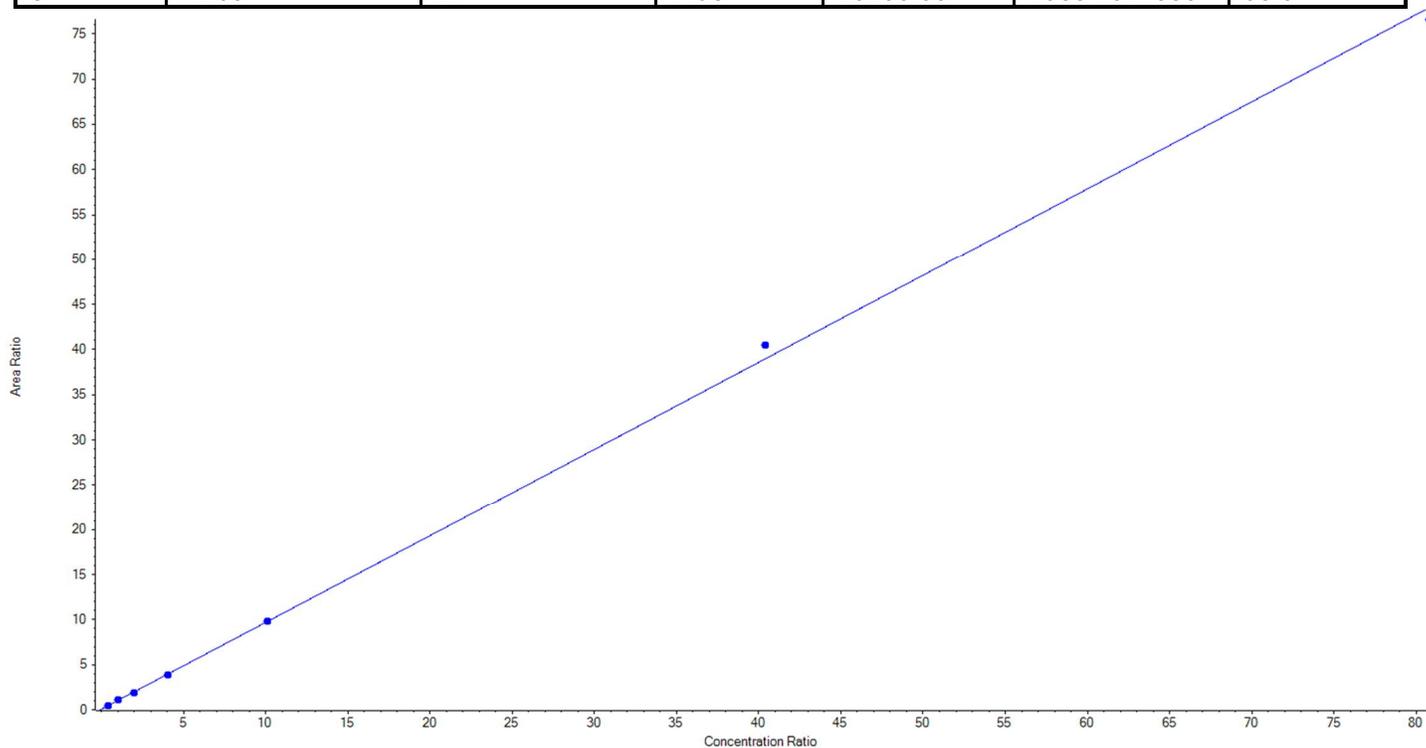
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Analyte Name	PFHxA_1	Data File	18-0567.wiff
MRM Transition	313.0 / 269.0	Result Table	18-0570_BASE_A
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.96350x + 0.04994$ ($r = 0.99960$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	101.00	103.436543	102.4
3	KA87	L2	True	252.50	265.363796	105.1
4	KA88	L3	True	505.00	473.609923	93.8
5	KB85	L4	True	1010.00	974.984492	96.5
6	KB69	L5	True	2525.00	2523.702577	100.0
7	KB64	L6	True	10100.00	10497.477669	103.9
8	KB65	L7	True	20200.00	19854.924999	98.3





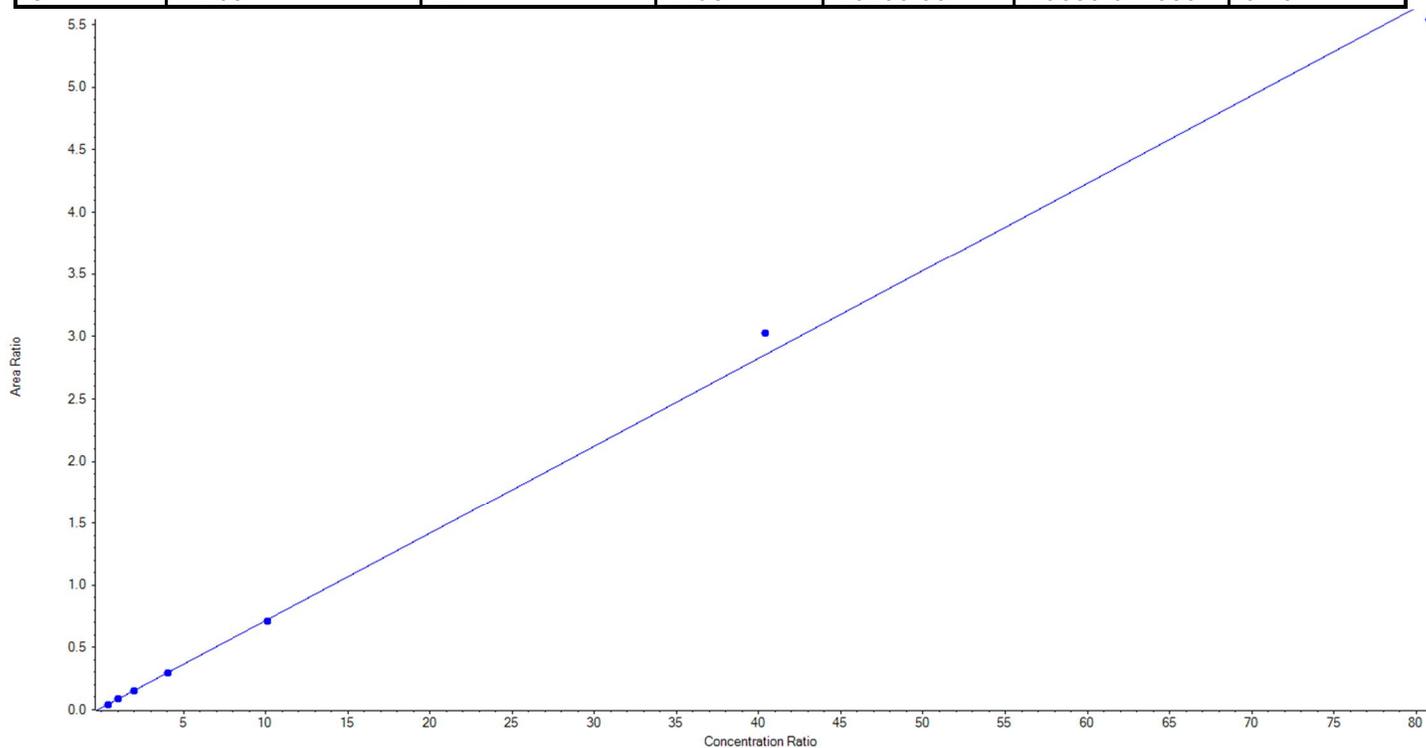
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Analyte Name	PFHxA_2	Data File	18-0567.wiff
MRM Transition	313.0 / 119.0	Result Table	18-0570_BASE_A
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.07031 x + 0.01307$ ($r = 0.99911$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	101.00	94.090202	93.2
3	KA87	L2	True	252.50	278.935665	110.5
4	KA88	L3	True	505.00	490.077726	97.1
5	KB85	L4	True	1010.00	991.873026	98.2
6	KB69	L5	True	2525.00	2468.194621	97.8
7	KB64	L6	True	10100.00	10710.651070	106.1
8	KB65	L7	True	20200.00	19659.677689	97.3





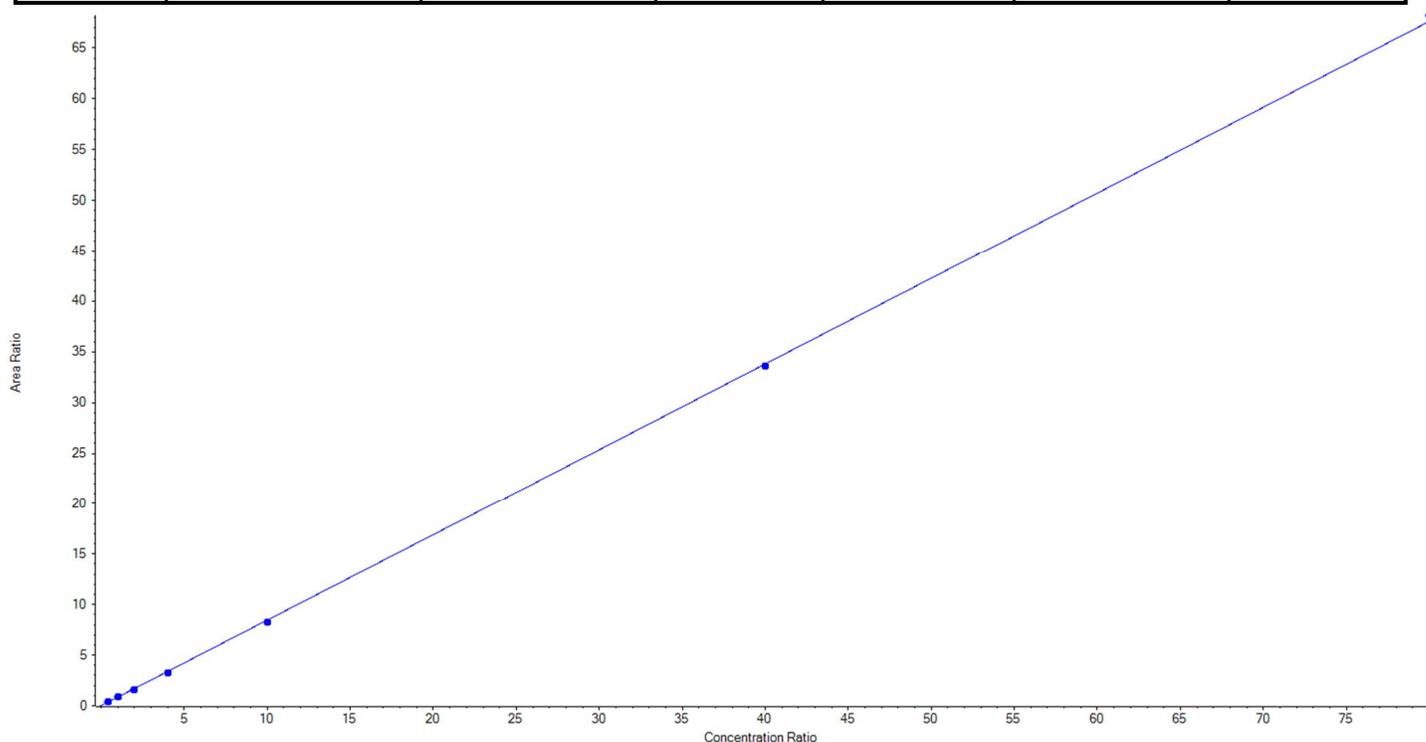
Calibration Summary Report

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Analyte Name	PFHpA_1	Data File	18-0567.wiff
MRM Transition	363.0 / 319.0	Result Table	18-0570_BASE_A
Internal Standard	13C4-PFHpA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.84497x + 0.00897$ ($r = 0.99986$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	105.076110	105.1
3	KA87	L2	True	250.00	268.383904	107.4
4	KA88	L3	True	500.00	469.034853	93.8
5	KB85	L4	True	1000.00	961.786160	96.2
6	KB69	L5	True	2500.00	2432.324450	97.3
7	KB64	L6	True	10000.00	9944.958168	99.5
8	KB65	L7	True	20000.00	20168.436354	100.8





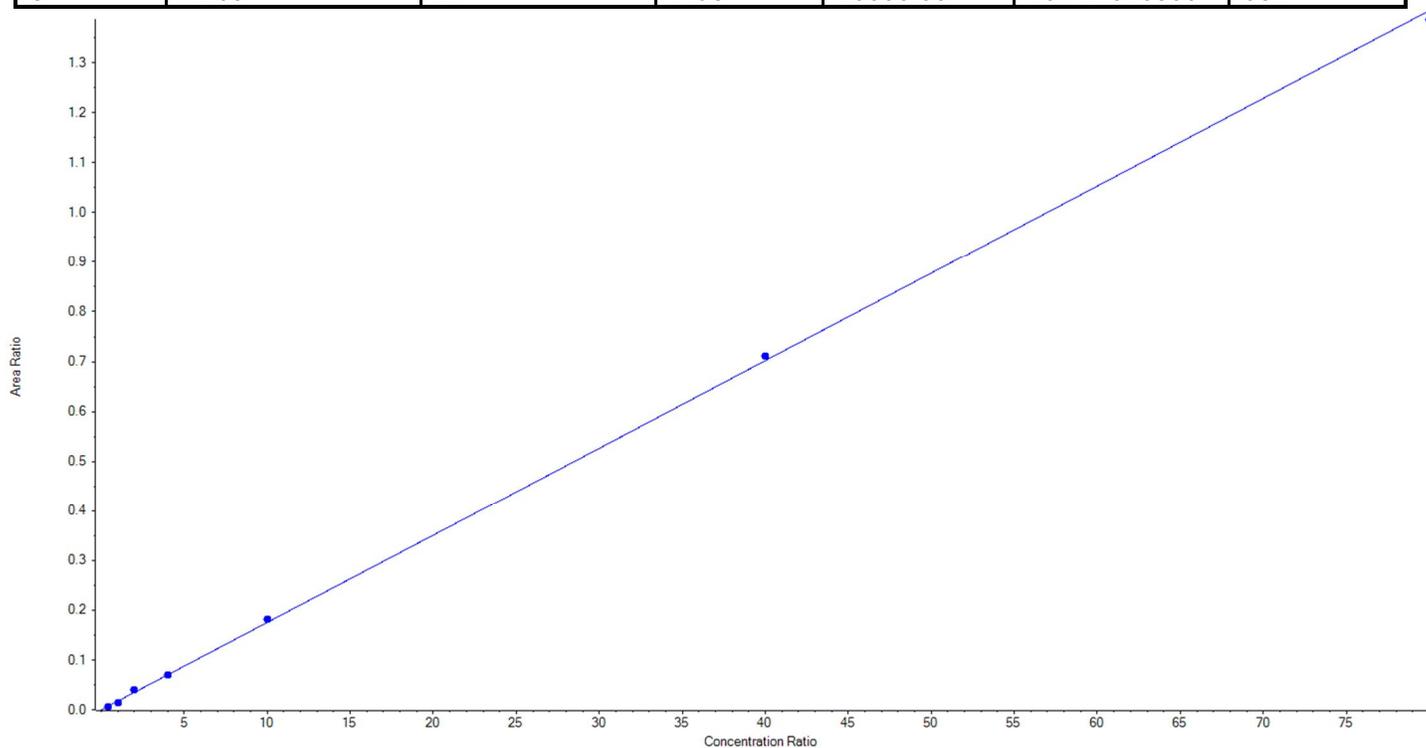
Calibration Summary Report

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Analyte Name	PFHpA_2	Data File	18-0567.wiff
MRM Transition	363.0 / 169.0	Result Table	18-0570_BASE_A
Internal Standard	13C4-PFHpA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.01756 x + -2.25389e-4$ (r = 0.99959) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	99.234762	99.2
3	KA87	L2	True	250.00	207.752804	83.1
4	KA88	L3	True	500.00	570.051877	114.0
5	KB85	L4	True	1000.00	996.510414	99.7
6	KB69	L5	True	2500.00	2598.436082	103.9
7	KB64	L6	True	10000.00	10135.037262	101.4
8	KB65	L7	True	20000.00	19742.976800	98.7





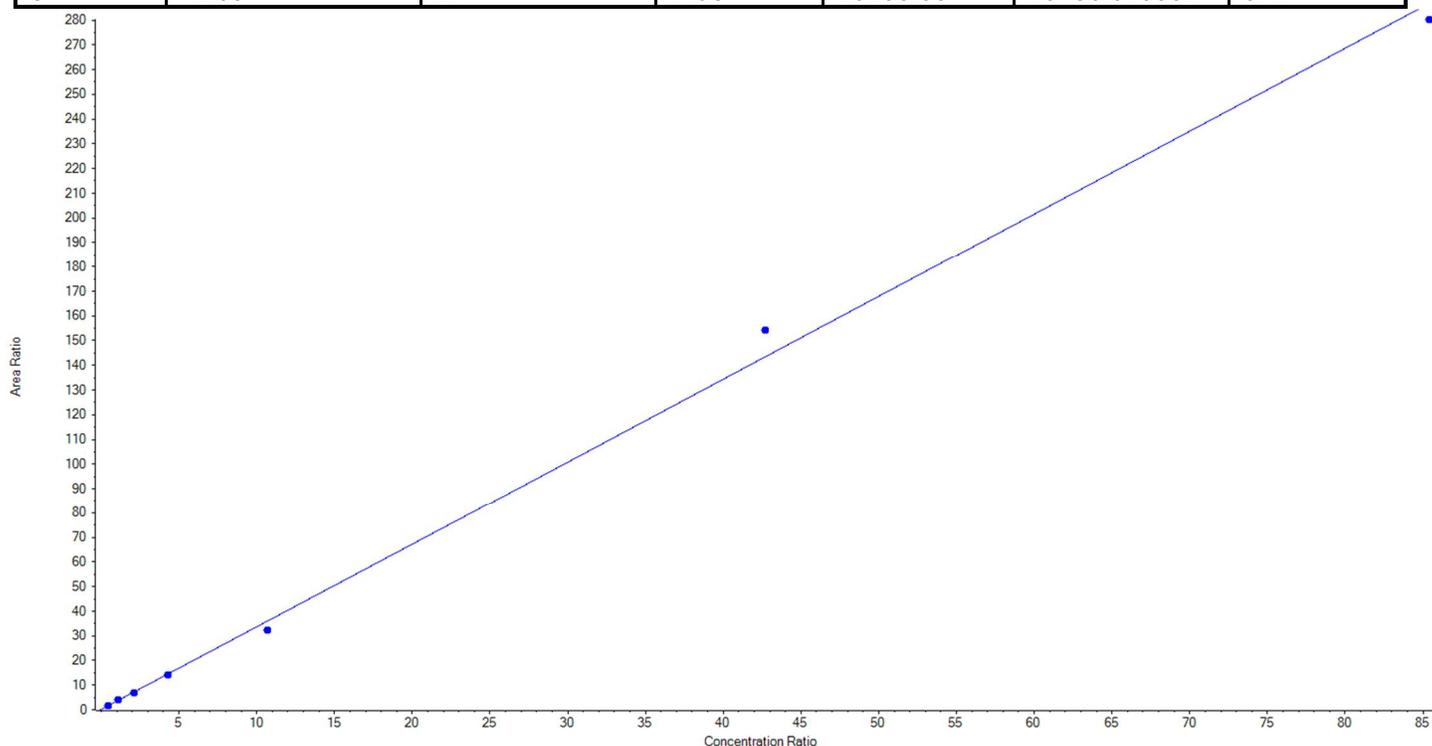
Calibration Summary Report

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Printed: 05/10/2018 6:23:27 PM

Analyte Name	PFHxS_1	Data File	18-0567.wiff
MRM Transition	399.0 / 80.0	Result Table	18-0570_BASE_A
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 3.35643x + 0.10921$ ($r = 0.99843$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	101.00	108.237125	107.2
3	KA87	L2	True	252.50	272.323086	107.9
4	KA88	L3	True	505.00	471.051343	93.3
5	KB85	L4	True	1010.00	977.033184	96.7
6	KB69	L5	True	2525.00	2265.053300	89.7
7	KB64	L6	True	10100.00	10863.782462	107.6
8	KB65	L7	True	20200.00	19736.019502	97.7





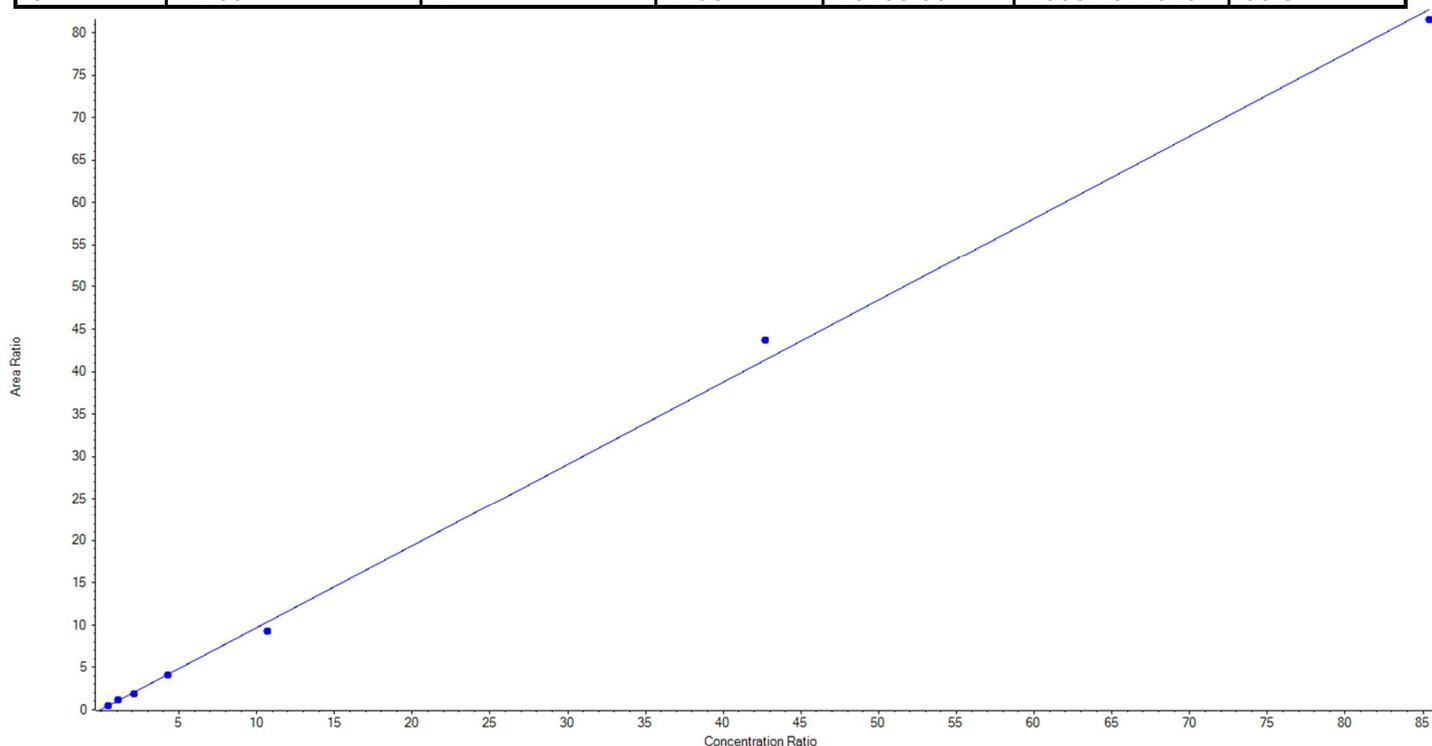
Calibration Summary Report

Created with Analyst Reporter
Printed: 05/10/2018 6:23:27 PM

Analyte Name	PFHxS_2	Data File	18-0567.wiff
MRM Transition	399.0 / 99.0	Result Table	18-0570_BASE_A
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.96845x + 0.01259$ ($r = 0.99877$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	101.00	104.699018	103.7
3	KA87	L2	True	252.50	294.347378	116.6
4	KA88	L3	True	505.00	441.703024	87.5
5	KB85	L4	True	1010.00	989.614030	98.0
6	KB69	L5	True	2525.00	2272.262593	90.0
7	KB64	L6	True	10100.00	10683.029937	105.8
8	KB65	L7	True	20200.00	19907.844020	98.6





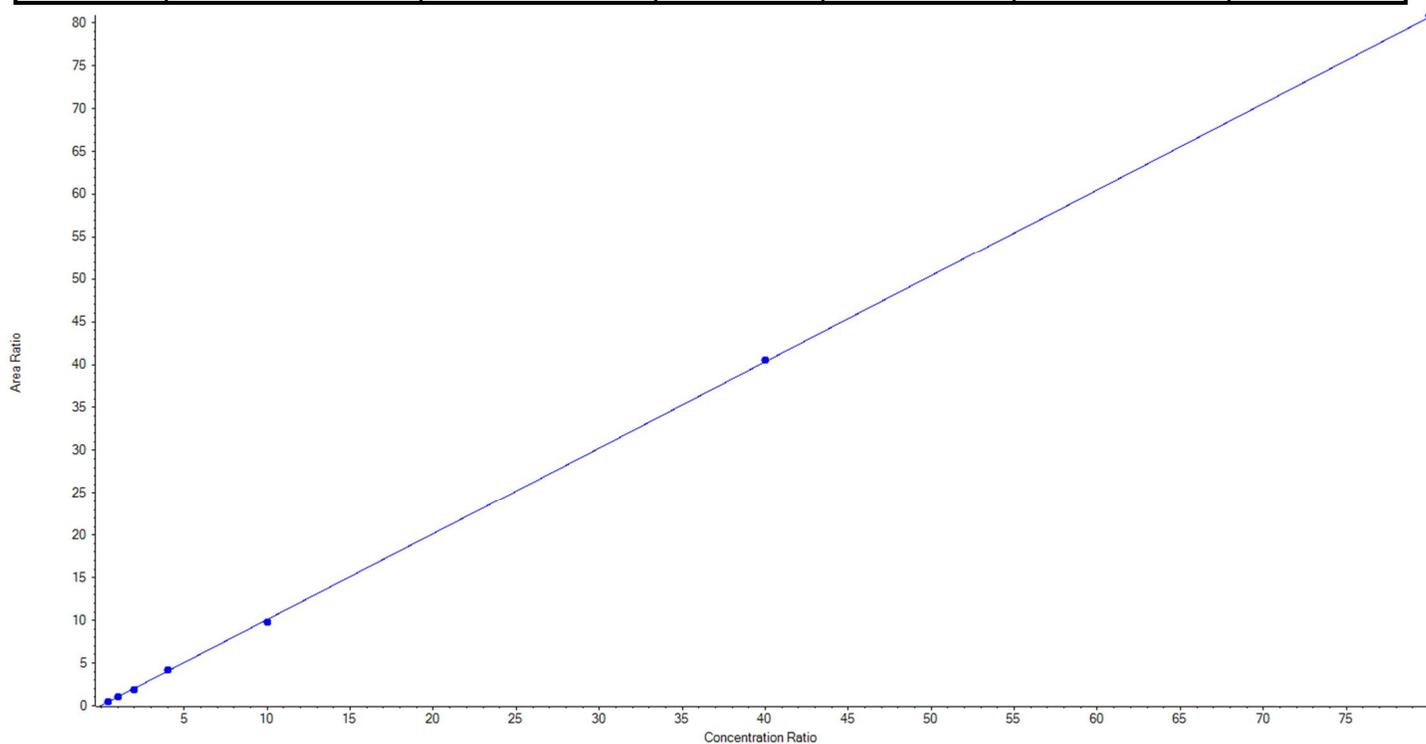
Calibration Summary Report

Created with Analyst Reporter
Printed: 05/10/2018 6:23:27 PM

Analyte Name	PFOA_1	Data File	18-0567.wiff
MRM Transition	413.0 / 369.0	Result Table	18-0570_BASE_A
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.00778x + 0.01994$ (r = 0.99988) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	103.059565	103.1
3	KA87	L2	True	250.00	259.712734	103.9
4	KA88	L3	True	500.00	464.403086	92.9
5	KB85	L4	True	1000.00	1032.344173	103.2
6	KB69	L5	True	2500.00	2408.845401	96.4
7	KB64	L6	True	10000.00	10035.663035	100.4
8	KB65	L7	True	20000.00	20045.972006	100.2





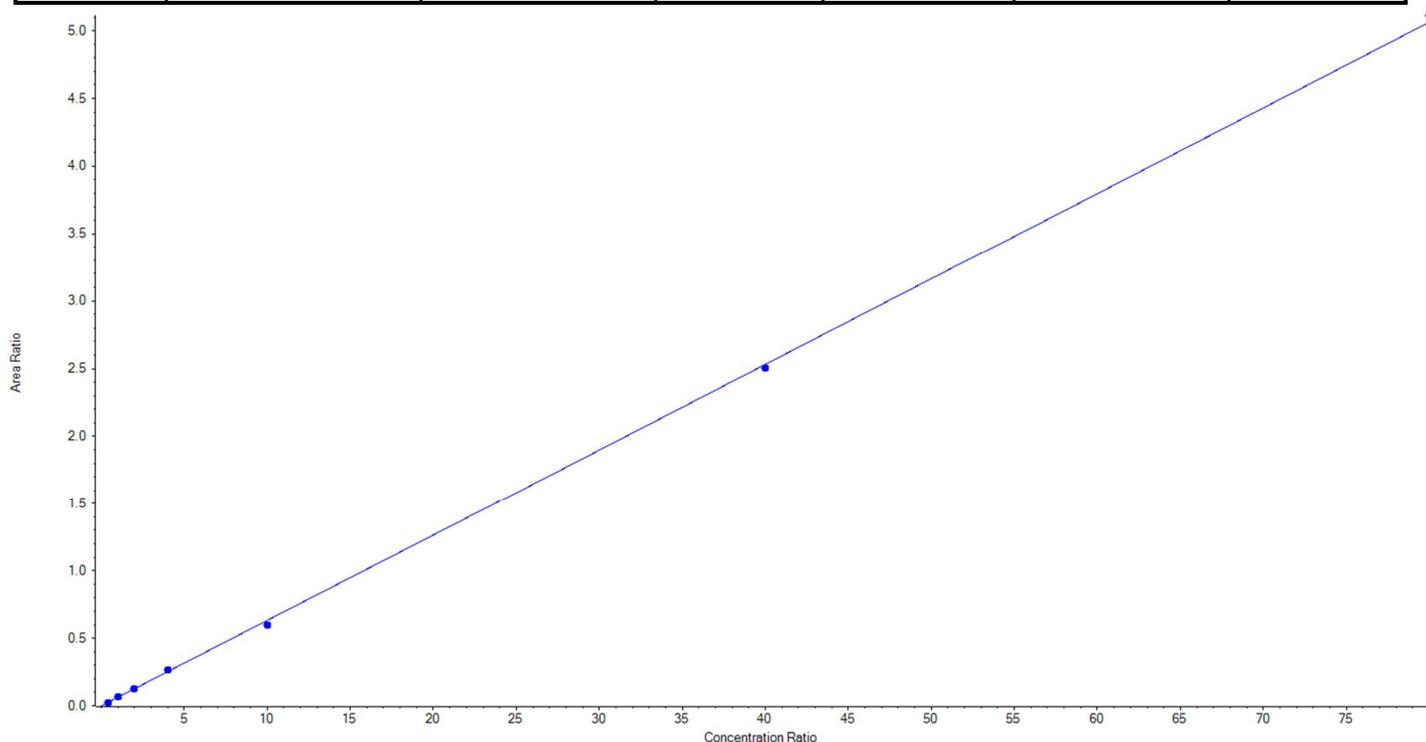
Calibration Summary Report

Created with Analyst Reporter
Printed: 05/10/2018 6:23:27 PM

Analyte Name	PFOA_2	Data File	18-0567.wiff
MRM Transition	413.0 / 169.0	Result Table	18-0570_BASE_A
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06330 x + -9.26640e-4$ (r = 0.99978) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	97.339733	97.3
3	KA87	L2	True	250.00	263.764801	105.5
4	KA88	L3	True	500.00	490.273598	98.1
5	KB85	L4	True	1000.00	1047.963770	104.8
6	KB69	L5	True	2500.00	2358.191004	94.3
7	KB64	L6	True	10000.00	9902.654900	99.0
8	KB65	L7	True	20000.00	20189.812195	101.0





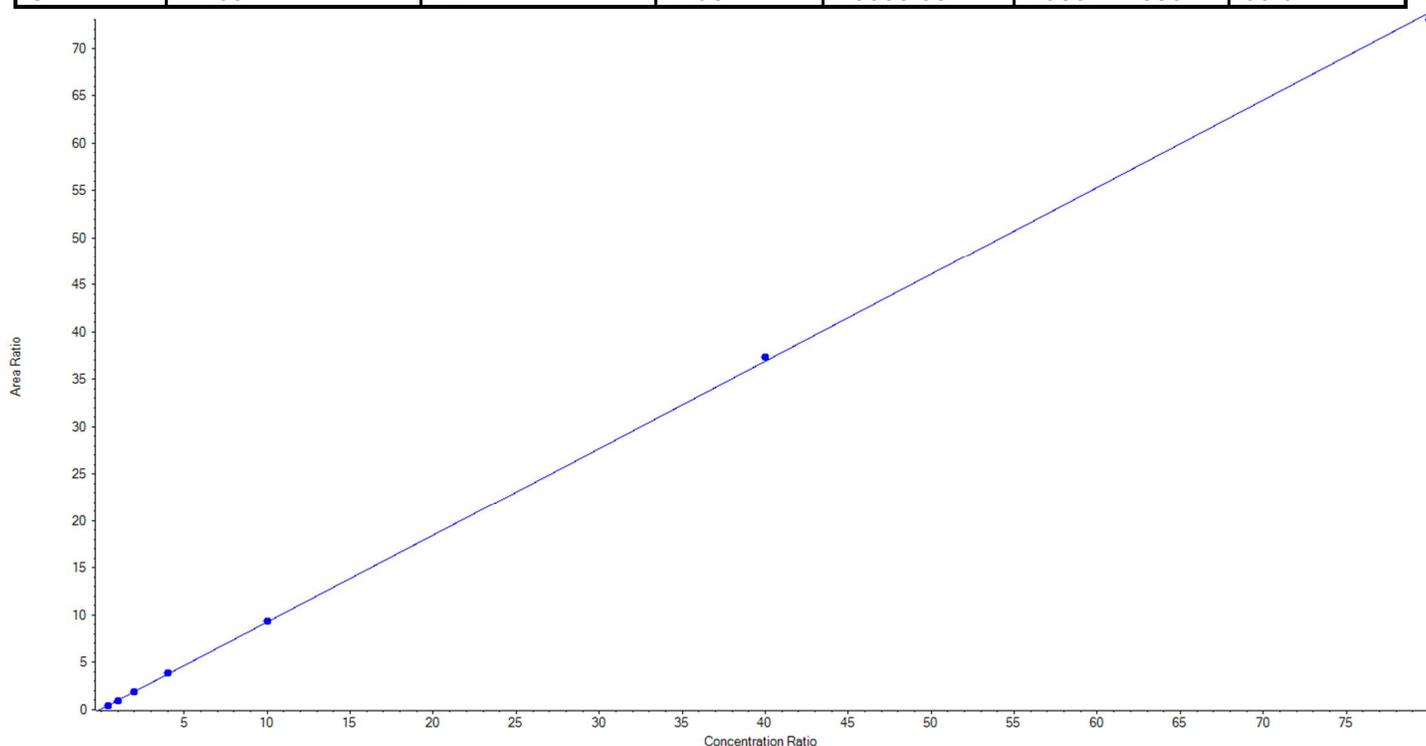
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	PFNA_1	Data File	18-0567.wiff
MRM Transition	463.0 / 419.0	Result Table	18-0570_BASE_A
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.92124 x + 0.07140$ ($r = 0.99989$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	96.157405	96.2
3	KA87	L2	True	250.00	249.031439	99.6
4	KA88	L3	True	500.00	488.087483	97.6
5	KB85	L4	True	1000.00	1048.447832	104.8
6	KB69	L5	True	2500.00	2536.519181	101.5
7	KB64	L6	True	10000.00	10129.637799	101.3
8	KB65	L7	True	20000.00	19802.118861	99.0





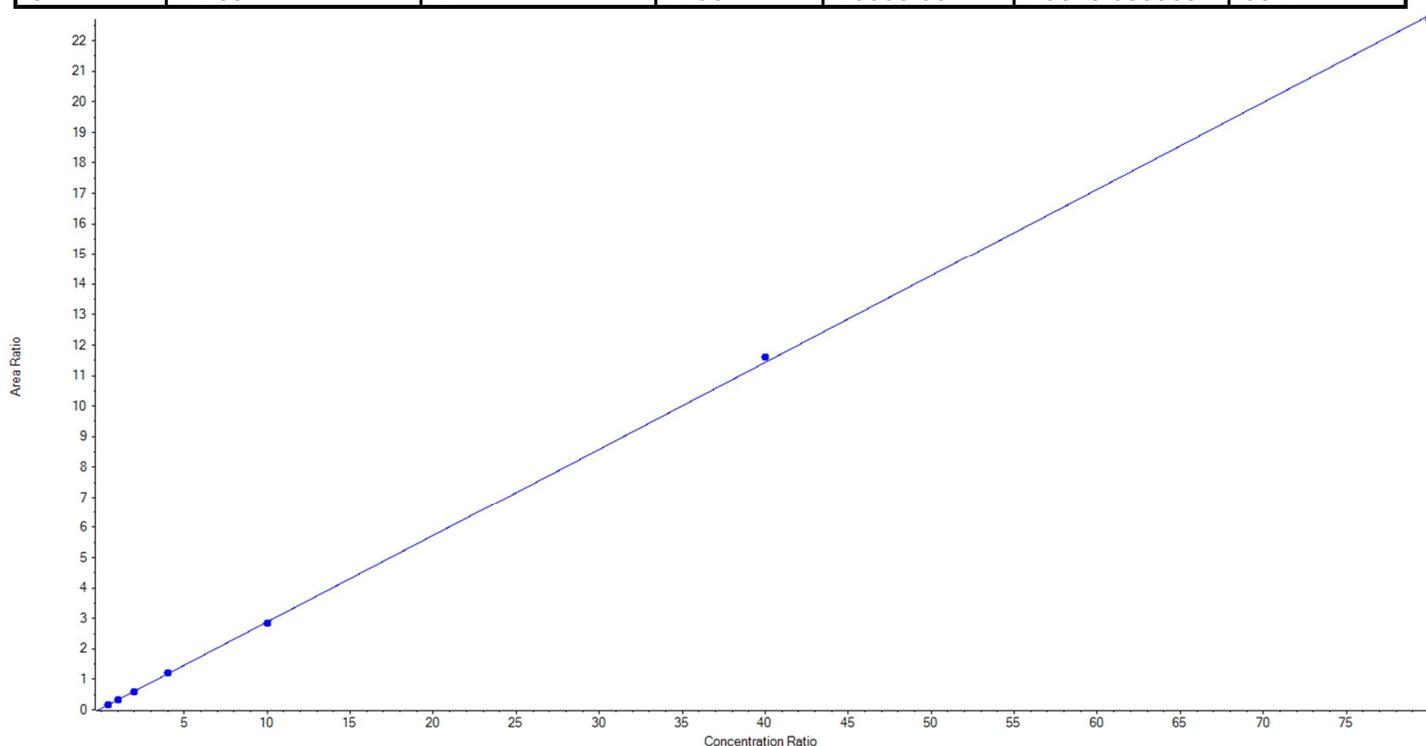
Calibration Summary Report

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Analyte Name	PFNA_2	Data File	18-0567.wiff
MRM Transition	463.0 / 219.0	Result Table	18-0570_BASE_A
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.28489x + 0.03888$ ($r = 0.99989$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	102.468768	102.5
3	KA87	L2	True	250.00	252.395569	101.0
4	KA88	L3	True	500.00	468.306817	93.7
5	KB85	L4	True	1000.00	1035.566728	103.6
6	KB69	L5	True	2500.00	2461.192991	98.5
7	KB64	L6	True	10000.00	10151.380563	101.5
8	KB65	L7	True	20000.00	19878.688563	99.4





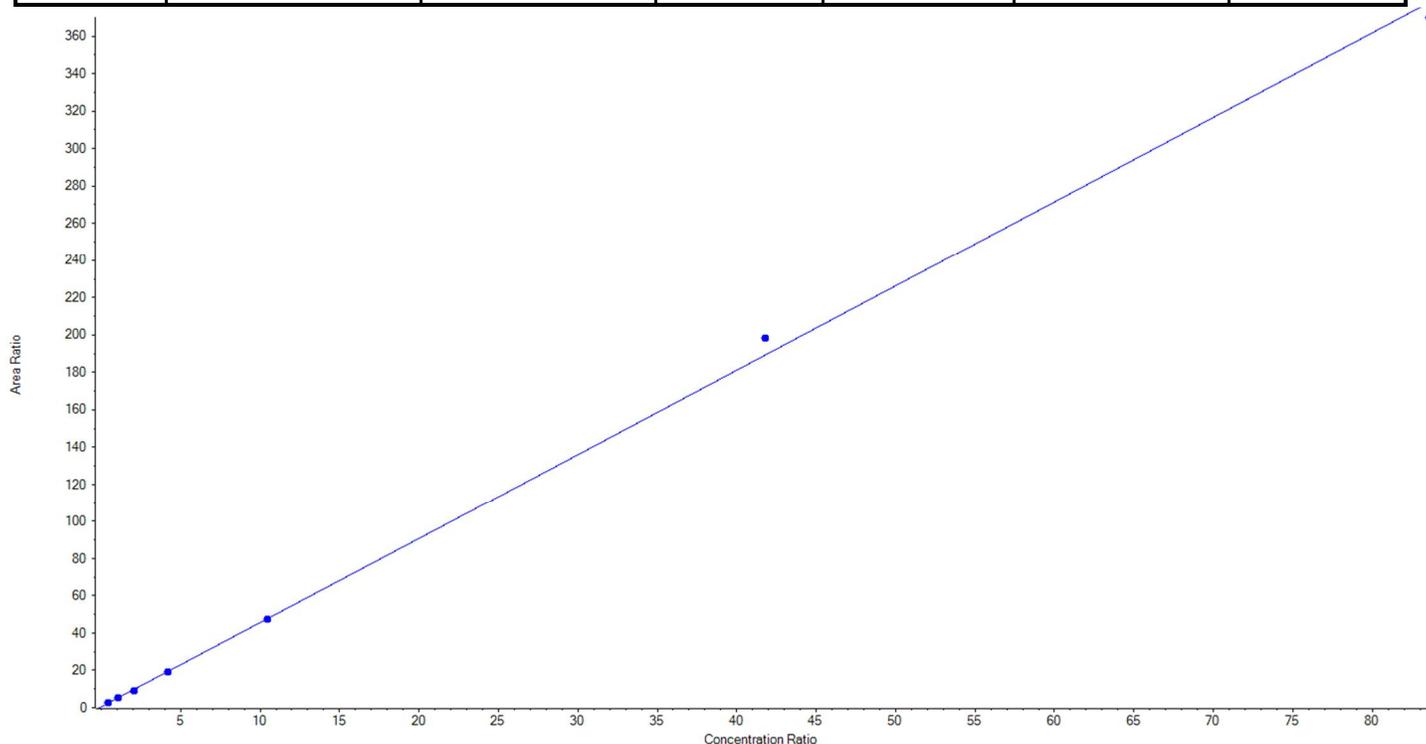
Calibration Summary Report

Created with Analyst Reporter
Printed: 05/10/2018 6:23:27 PM

Analyte Name	PFOS_1	Data File	18-0567.wiff
MRM Transition	499.0 / 80.0	Result Table	18-0570_BASE_A
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 4.51667x + 0.47263$ ($r = 0.99942$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	103.769423	103.8
3	KA87	L2	True	250.00	257.277249	102.9
4	KA88	L3	True	500.00	459.528466	91.9
5	KB85	L4	True	1000.00	997.260536	99.7
6	KB69	L5	True	2500.00	2474.021804	99.0
7	KB64	L6	True	10000.00	10487.269169	104.9
8	KB65	L7	True	20000.00	19570.873353	97.9





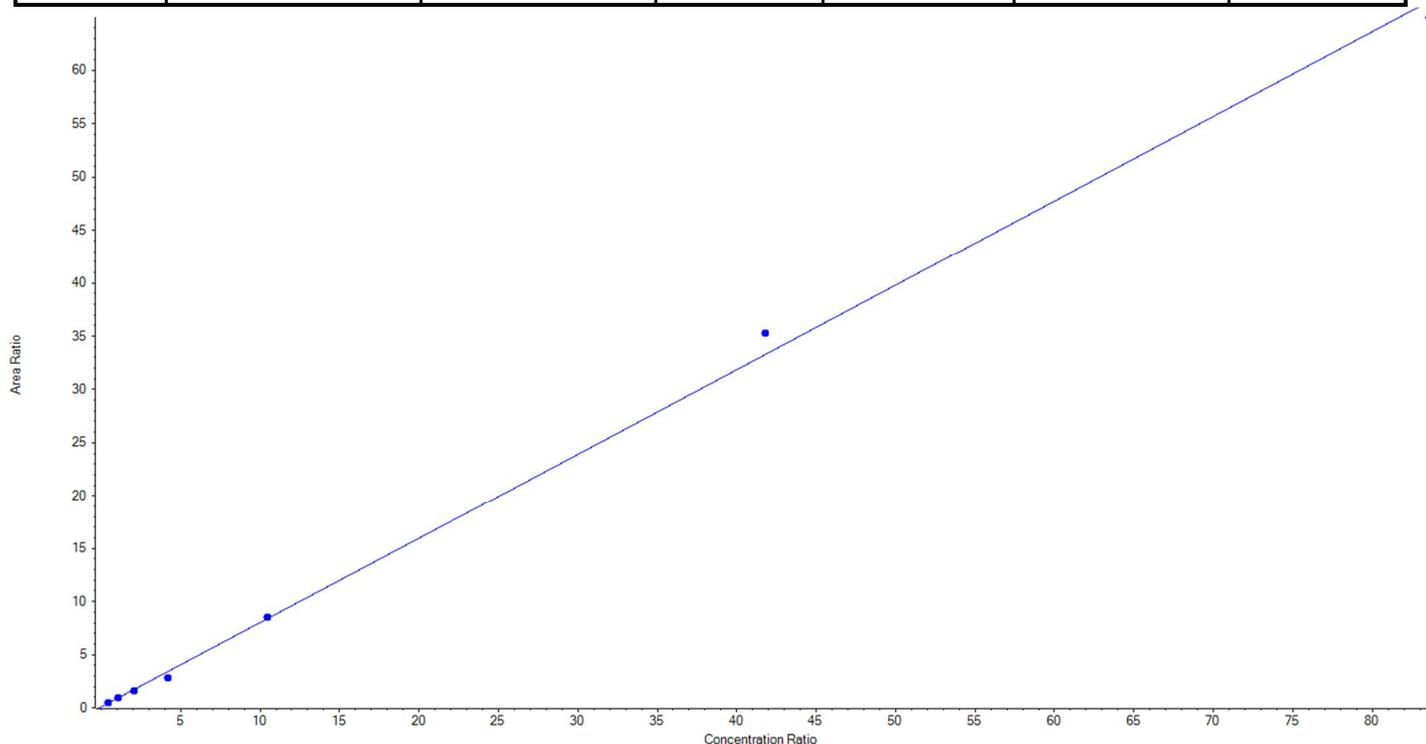
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Analyte Name	PFOS_2	Data File	18-0567.wiff
MRM Transition	499.0 / 99.0	Result Table	18-0570_BASE_A
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.79442x + 0.07329$ ($r = 0.99861$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	116.579914	116.6
3	KA87	L2	True	250.00	259.917357	104.0
4	KA88	L3	True	500.00	459.286260	91.9
5	KB85	L4	True	1000.00	820.322992	82.0
6	KB69	L5	True	2500.00	2543.792355	101.8
7	KB64	L6	True	10000.00	10612.278502	106.1
8	KB65	L7	True	20000.00	19537.822619	97.7





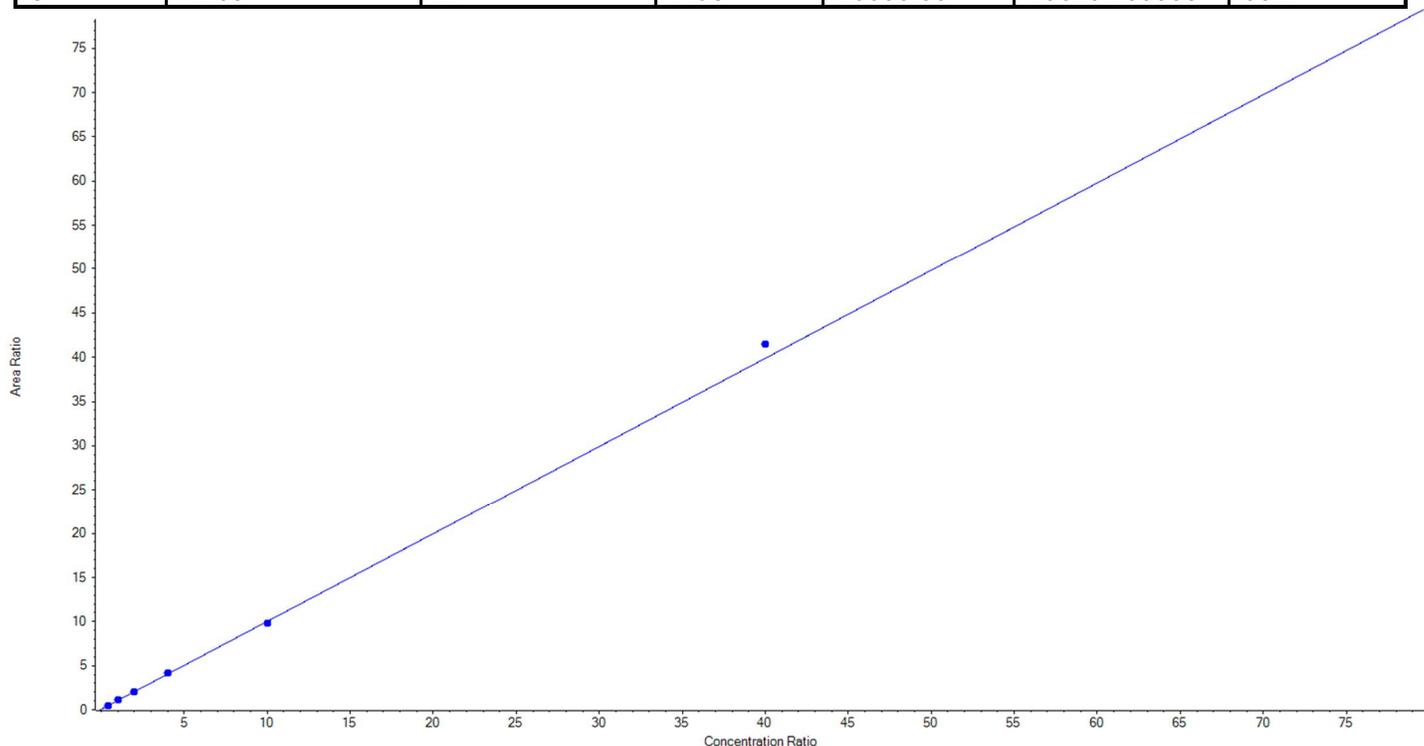
Calibration Summary Report

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Analyte Name	PFDA_1	Data File	18-0567.wiff
MRM Transition	513.0 / 469.0	Result Table	18-0570_BASE_A
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.99570 x + 0.05245$ (r = 0.99960) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	93.212142	93.2
3	KA87	L2	True	250.00	264.139879	105.7
4	KA88	L3	True	500.00	494.075704	98.8
5	KB85	L4	True	1000.00	1020.809243	102.1
6	KB69	L5	True	2500.00	2453.490287	98.1
7	KB64	L6	True	10000.00	10394.973207	104.0
8	KB65	L7	True	20000.00	19629.299538	98.2





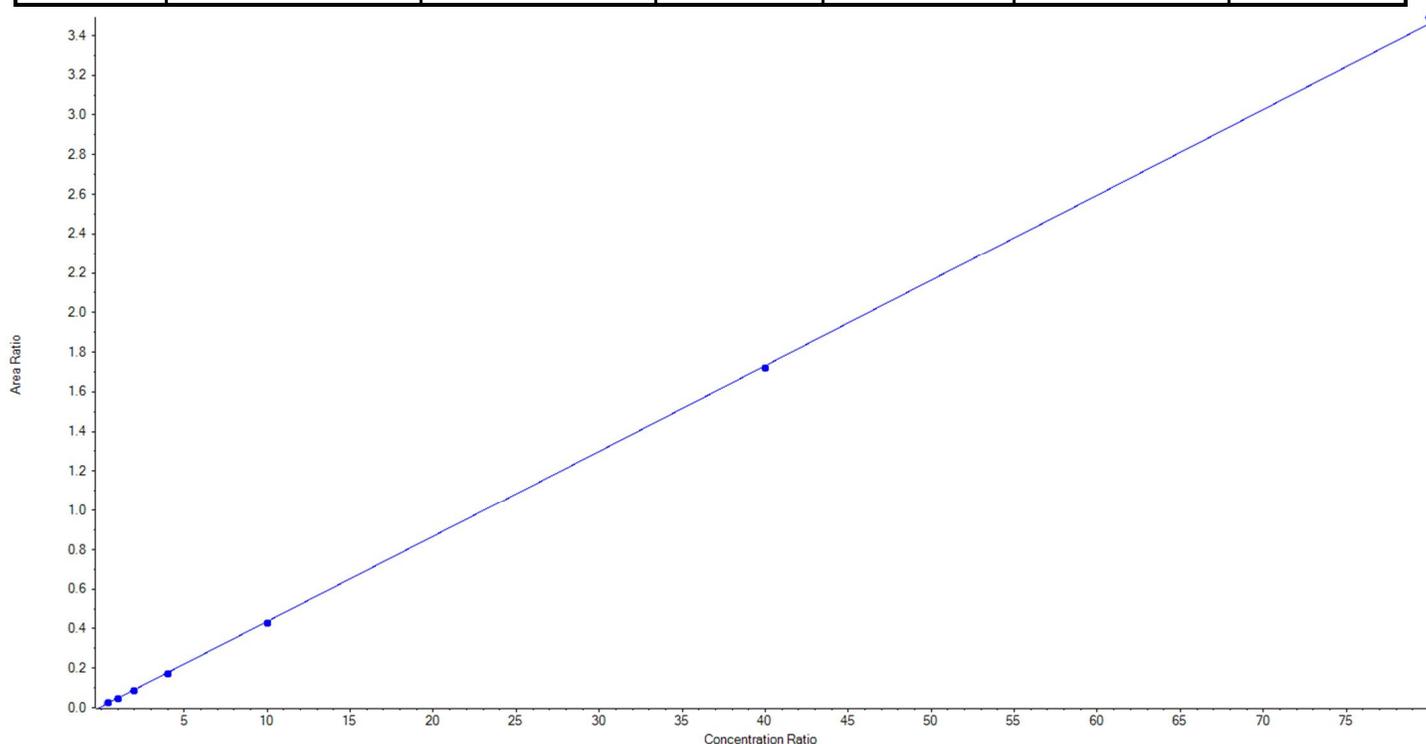
Calibration Summary Report

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Analyte Name	PFDA_2	Data File	18-0567.wiff
MRM Transition	513.0 / 219.0	Result Table	18-0570_BASE_A
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.04318 x + 0.00479$ (r = 0.99979) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	120.997412	121.0
3	KA87	L2	True	250.00	227.131528	90.9
4	KA88	L3	True	500.00	463.377769	92.7
5	KB85	L4	True	1000.00	972.688339	97.3
6	KB69	L5	True	2500.00	2448.177670	97.9
7	KB64	L6	True	10000.00	9938.069190	99.4
8	KB65	L7	True	20000.00	20179.558092	100.9





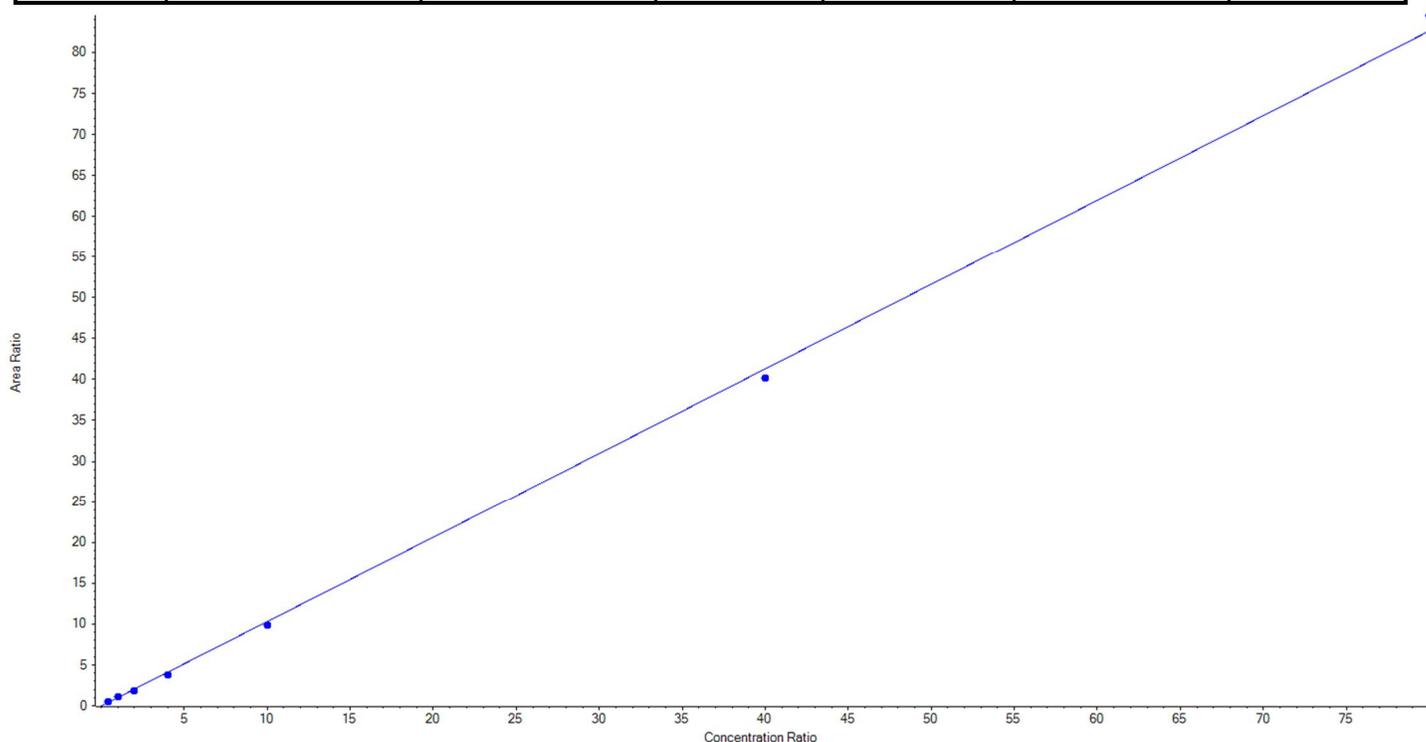
Calibration Summary Report

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Analyte Name	PFUnA_1	Data File	18-0567.wiff
MRM Transition	563.0 / 519.0	Result Table	18-0570_BASE_A
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.03304 x + -0.02786$ ($r = 0.99946$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	115.774594	115.8
3	KA87	L2	True	250.00	263.442924	105.4
4	KA88	L3	True	500.00	454.446863	90.9
5	KB85	L4	True	1000.00	921.368543	92.1
6	KB69	L5	True	2500.00	2404.546580	96.2
7	KB64	L6	True	10000.00	9737.608647	97.4
8	KB65	L7	True	20000.00	20452.811849	102.3





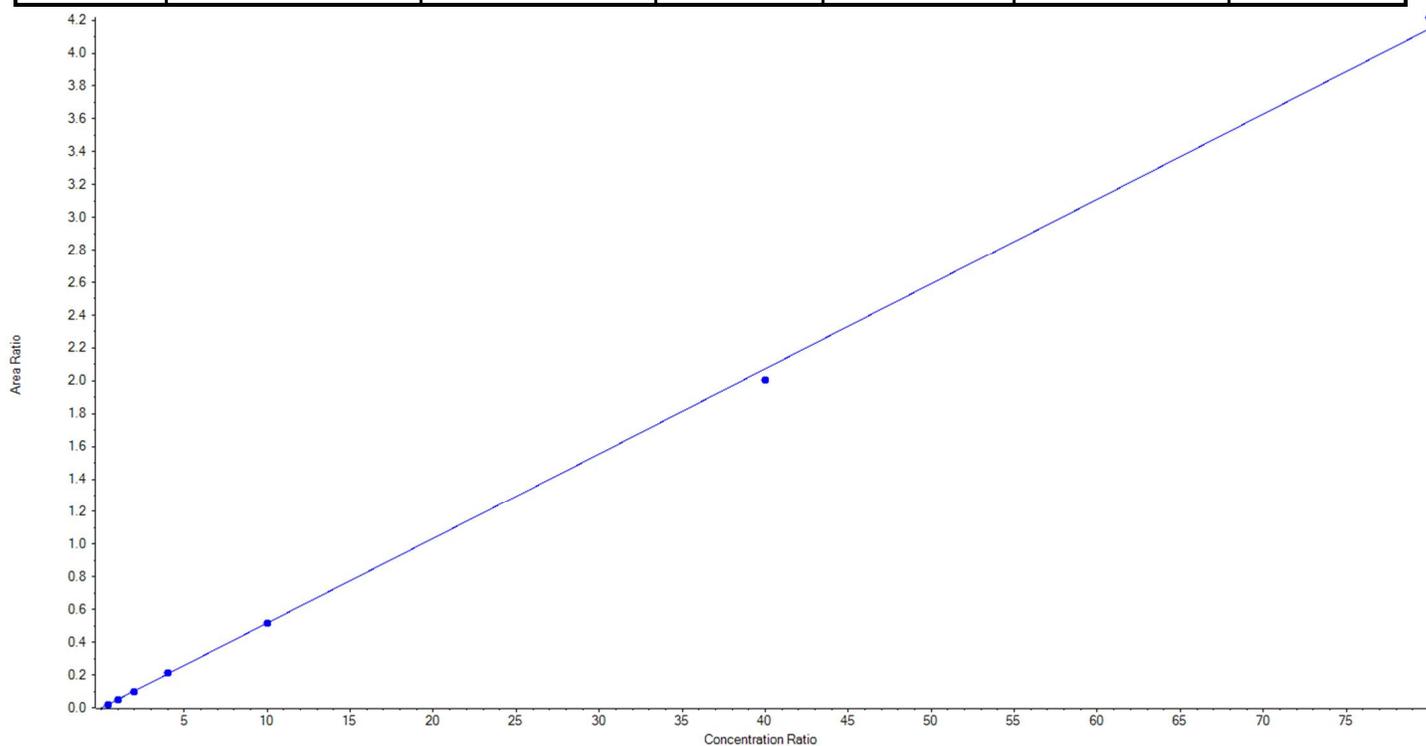
Calibration Summary Report

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Analyte Name	PFUnA_2	Data File	18-0567.wiff
MRM Transition	563.0 / 269.0	Result Table	18-0570_BASE_A
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05187x + -0.00139$ ($r = 0.99973$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	102.737163	102.7
3	KA87	L2	True	250.00	253.560608	101.4
4	KA88	L3	True	500.00	479.177876	95.8
5	KB85	L4	True	1000.00	1020.878941	102.1
6	KB69	L5	True	2500.00	2487.420630	99.5
7	KB64	L6	True	10000.00	9677.435016	96.8
8	KB65	L7	True	20000.00	20328.789765	101.6





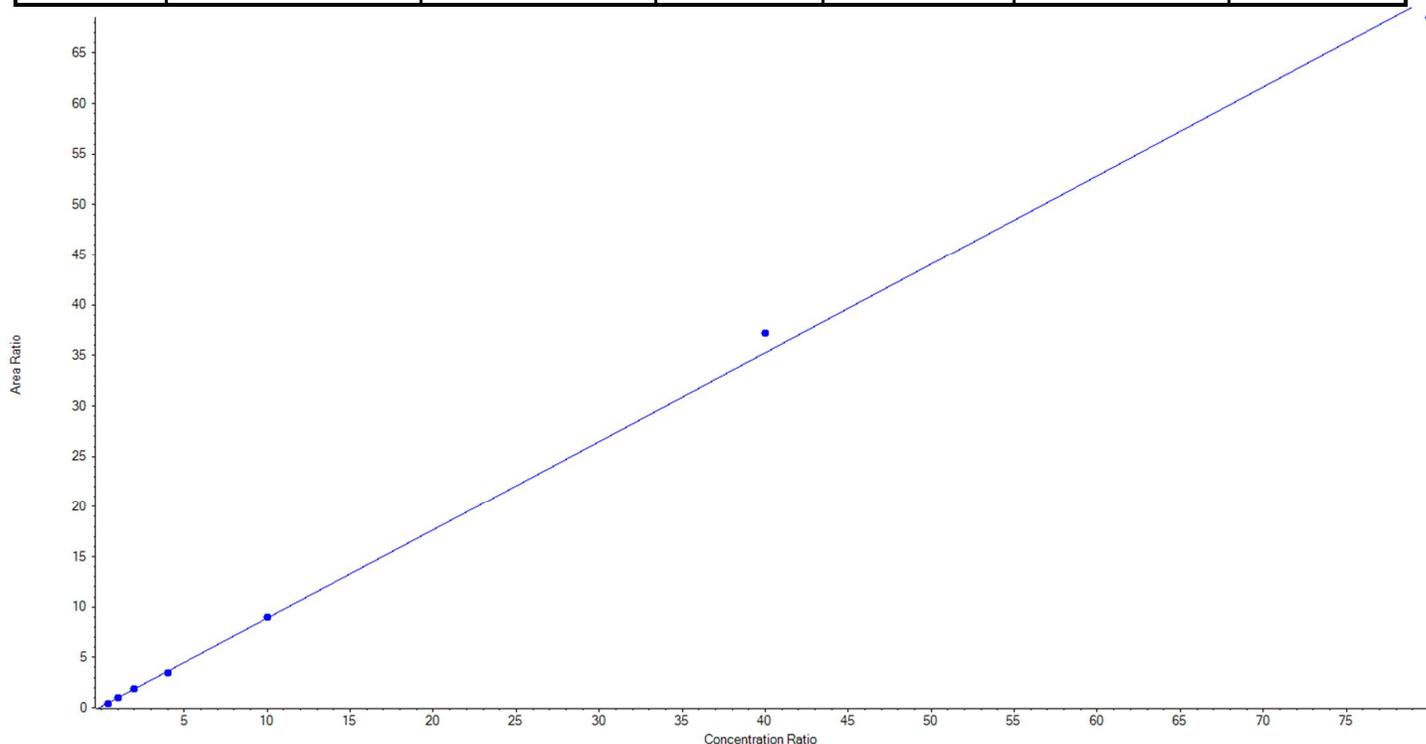
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Analyte Name	PFDaA_1	Data File	18-0567.wiff
MRM Transition	613.0 / 569.0	Result Table	18-0570_BASE_A
Internal Standard	13C2-PFDaA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.87923x + 0.10009$ ($r = 0.99922$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	95.403570	95.4
3	KA87	L2	True	250.00	261.500465	104.6
4	KA88	L3	True	500.00	500.253433	100.1
5	KB85	L4	True	1000.00	963.898635	96.4
6	KB69	L5	True	2500.00	2516.797284	100.7
7	KB64	L6	True	10000.00	10564.613909	105.7
8	KB65	L7	True	20000.00	19447.532704	97.2





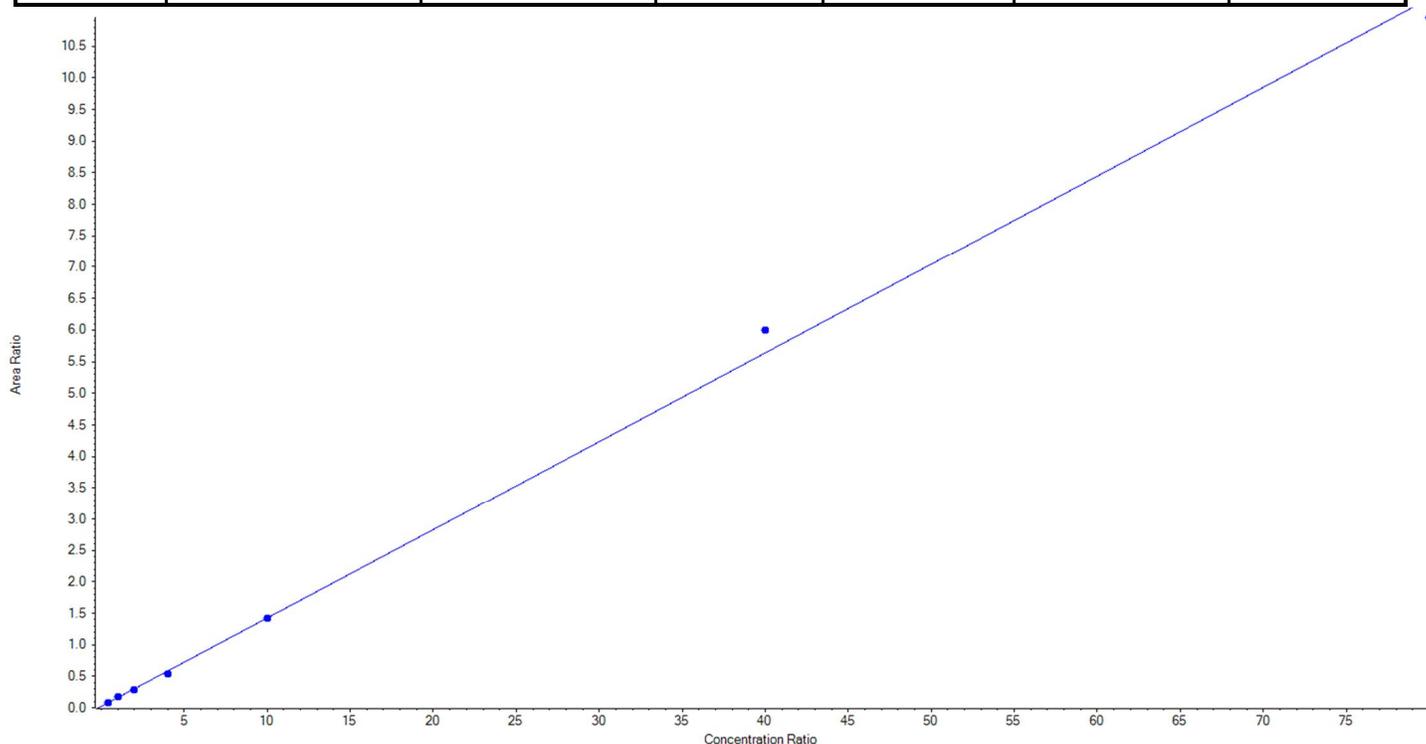
Calibration Summary Report

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Analyte Name	PFD _o A_2	Data File	18-0567.wiff
MRM Transition	613.0 / 319.0	Result Table	18-0570_BASE_A
Internal Standard	13C2-PFD _o A	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.14045x + 0.02017$ ($r = 0.99902$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	104.404315	104.4
3	KA87	L2	True	250.00	259.108140	103.6
4	KA88	L3	True	500.00	483.151548	96.6
5	KB85	L4	True	1000.00	920.650141	92.1
6	KB69	L5	True	2500.00	2491.211226	99.7
7	KB64	L6	True	10000.00	10630.256598	106.3
8	KB65	L7	True	20000.00	19461.218032	97.3





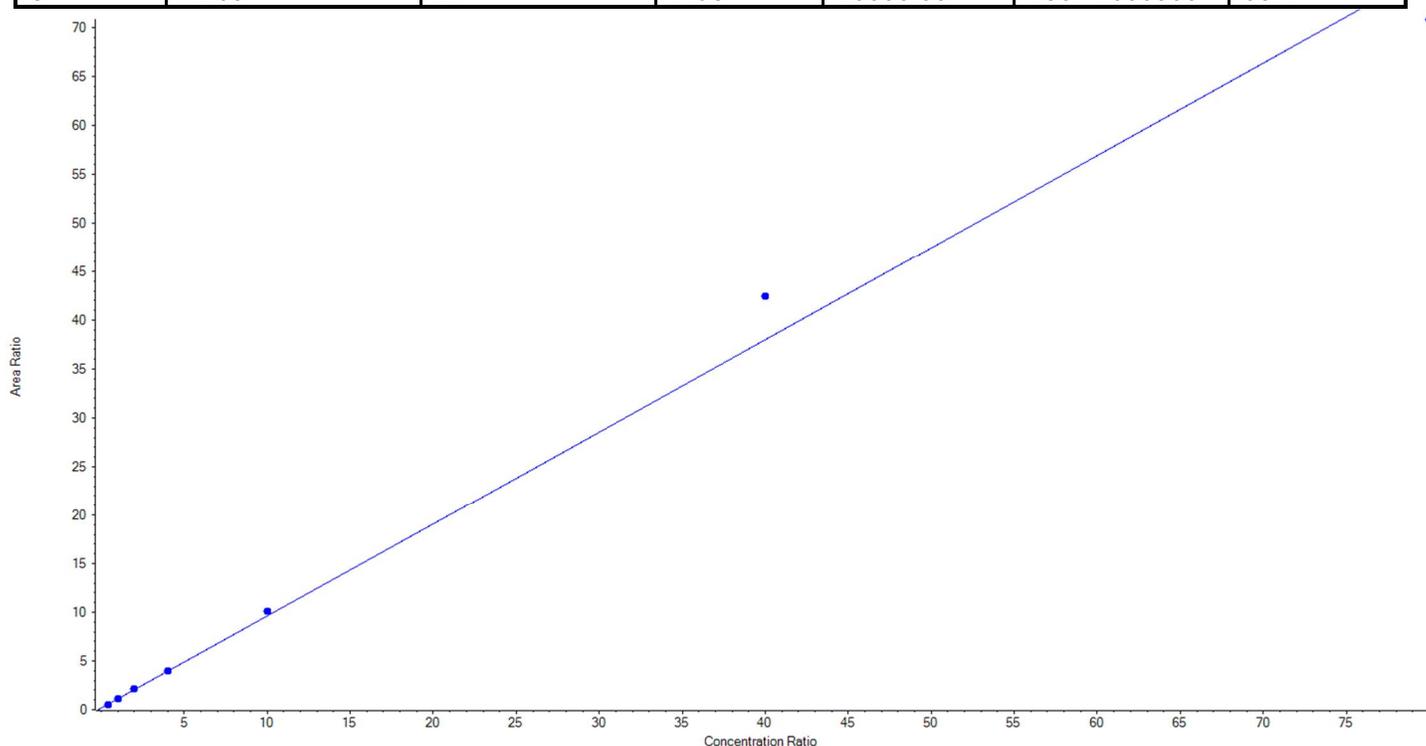
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Analyte Name	PFTTrDA_1	Data File	18-0567.wiff
MRM Transition	663.0 / 619.0	Result Table	18-0570_BASE_A
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.94582x + 0.16567$ (r = 0.99628) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	81.240003	81.2
3	KA87	L2	True	250.00	255.639239	102.3
4	KA88	L3	True	500.00	522.325434	104.5
5	KB85	L4	True	1000.00	1015.089313	101.5
6	KB69	L5	True	2500.00	2638.115881	105.5
7	KB64	L6	True	10000.00	11163.539565	111.6
8	KB65	L7	True	20000.00	18674.050566	93.4





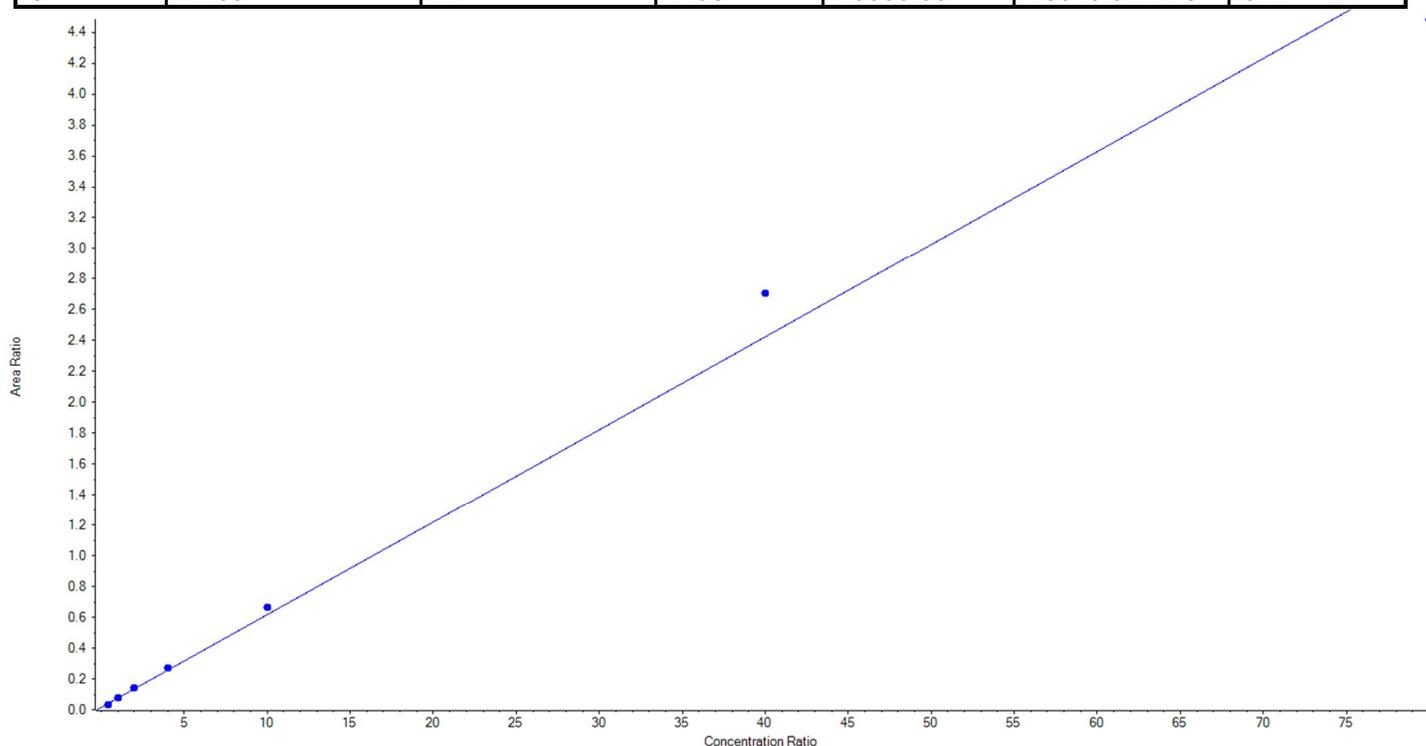
Calibration Summary Report

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Analyte Name	PFTrDA_2	Data File	18-0567.wiff
MRM Transition	663.0 / 169.0	Result Table	18-0570_BASE_A
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06022 x + 0.01525$ ($r = 0.99564$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	70.767758	70.8
3	KA87	L2	True	250.00	259.515453	103.8
4	KA88	L3	True	500.00	537.266313	107.5
5	KB85	L4	True	1000.00	1052.773614	105.3
6	KB69	L5	True	2500.00	2703.951073	108.2
7	KB64	L6	True	10000.00	11181.753016	111.8
8	KB65	L7	True	20000.00	18543.972773	92.7





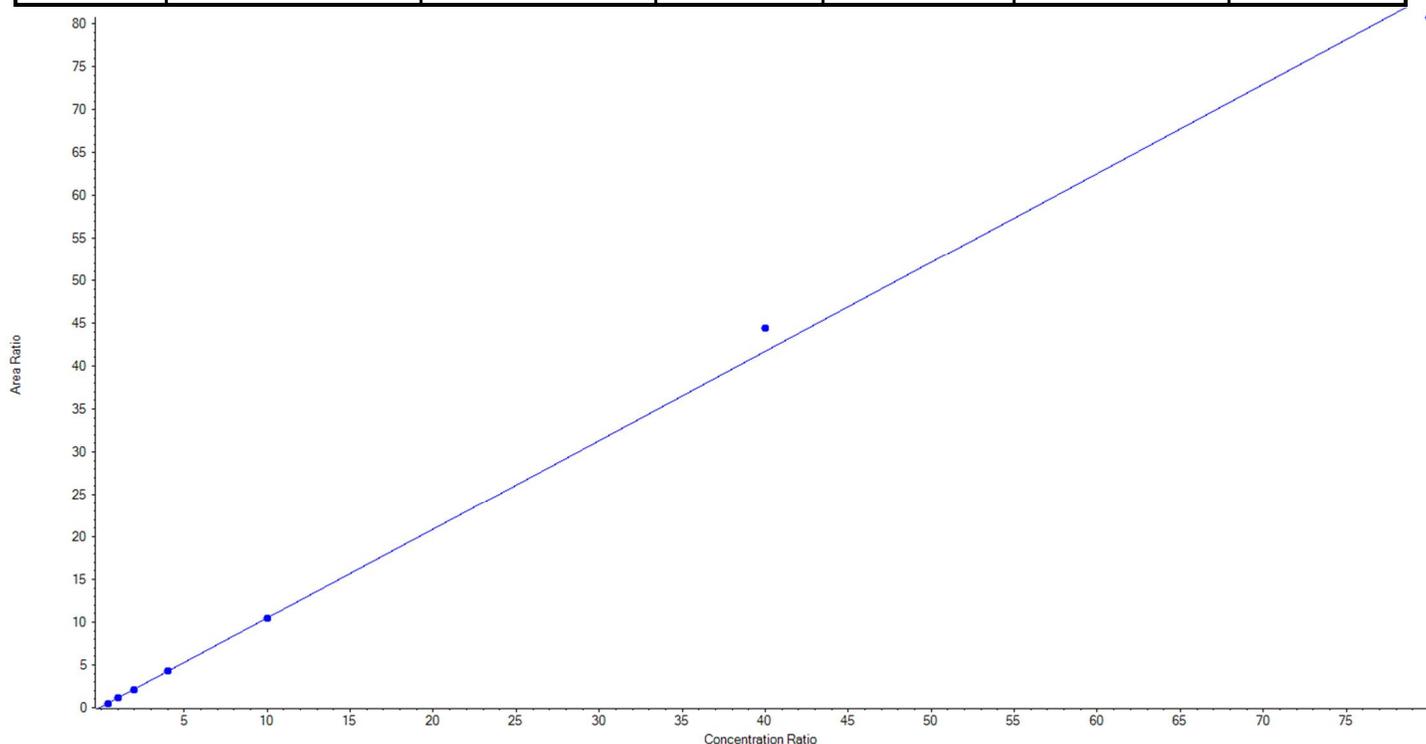
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Analyte Name	PFTeDA_1	Data File	18-0567.wiff
MRM Transition	713.0 / 669.0	Result Table	18-0570_BASE_A
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.04083x + 0.09468$ ($r = 0.99899$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	92.980422	93.0
3	KA87	L2	True	250.00	263.837058	105.5
4	KA88	L3	True	500.00	488.990341	97.8
5	KB85	L4	True	1000.00	1010.740241	101.1
6	KB69	L5	True	2500.00	2483.370637	99.3
7	KB64	L6	True	10000.00	10645.486031	106.5
8	KB65	L7	True	20000.00	19364.595269	96.8





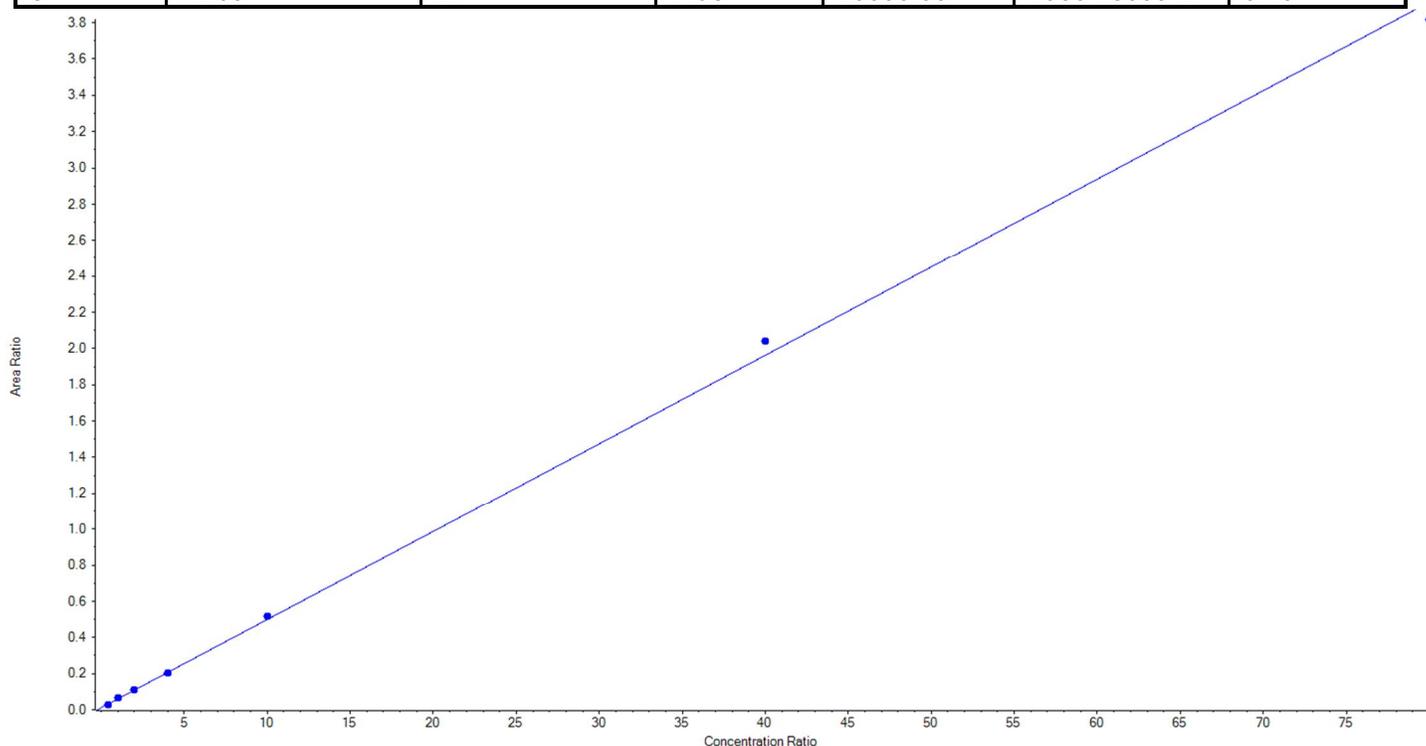
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Analyte Name	PFTeDA_2	Data File	18-0567.wiff
MRM Transition	713.0 / 169.0	Result Table	18-0570_BASE_A
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.04878x + 0.01115$ ($r = 0.99939$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	83.119412	83.1
3	KA87	L2	True	250.00	281.830474	112.7
4	KA88	L3	True	500.00	500.749052	100.2
5	KB85	L4	True	1000.00	991.919167	99.2
6	KB69	L5	True	2500.00	2580.229288	103.2
7	KB64	L6	True	10000.00	10407.347295	104.1
8	KB65	L7	True	20000.00	19504.805312	97.5





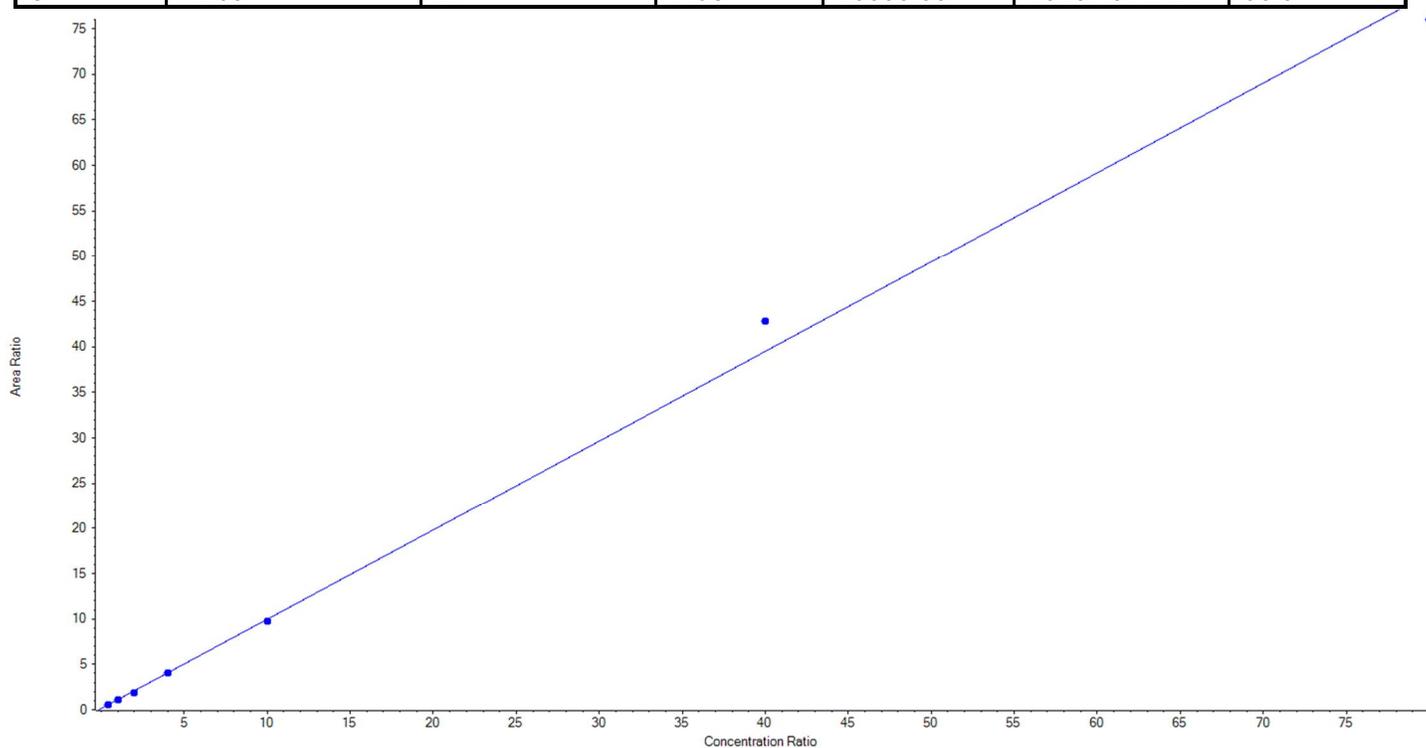
Calibration Summary Report

Created with Analyst Reporter
Printed: 05/10/2018 6:23:27 PM

Analyte Name	NMeFOSAA_1	Data File	18-0567.wiff
MRM Transition	570.0 / 419.0	Result Table	18-0570_BASE_A
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.98458x + 0.12138$ ($r = 0.99836$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	112.720731	112.7
3	KA87	L2	True	250.00	236.848965	94.7
4	KA88	L3	True	500.00	449.839076	90.0
5	KB85	L4	True	1000.00	996.970463	99.7
6	KB69	L5	True	2500.00	2455.872434	98.2
7	KB64	L6	True	10000.00	10830.236610	108.3
8	KB65	L7	True	20000.00	19267.511721	96.3





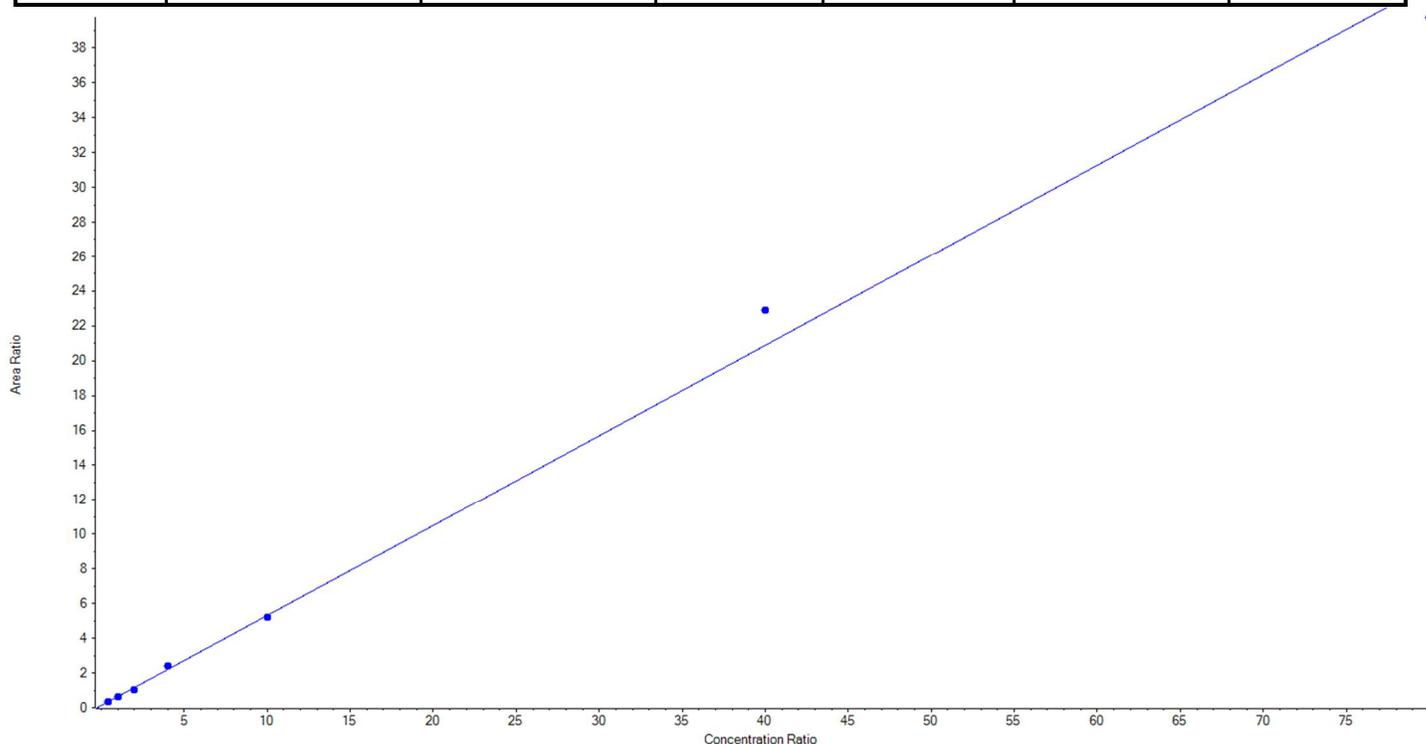
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Analyte Name	NMeFOSAA_2	Data File	18-0567.wiff
MRM Transition	570.0 / 512.0	Result Table	18-0570_BASE_A
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.51909x + 0.12229$ ($r = 0.99753$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	109.027906	109.0
3	KA87	L2	True	250.00	231.562191	92.6
4	KA88	L3	True	500.00	431.662499	86.3
5	KB85	L4	True	1000.00	1092.591022	109.3
6	KB69	L5	True	2500.00	2443.220526	97.7
7	KB64	L6	True	10000.00	10963.422980	109.6
8	KB65	L7	True	20000.00	19078.512876	95.4





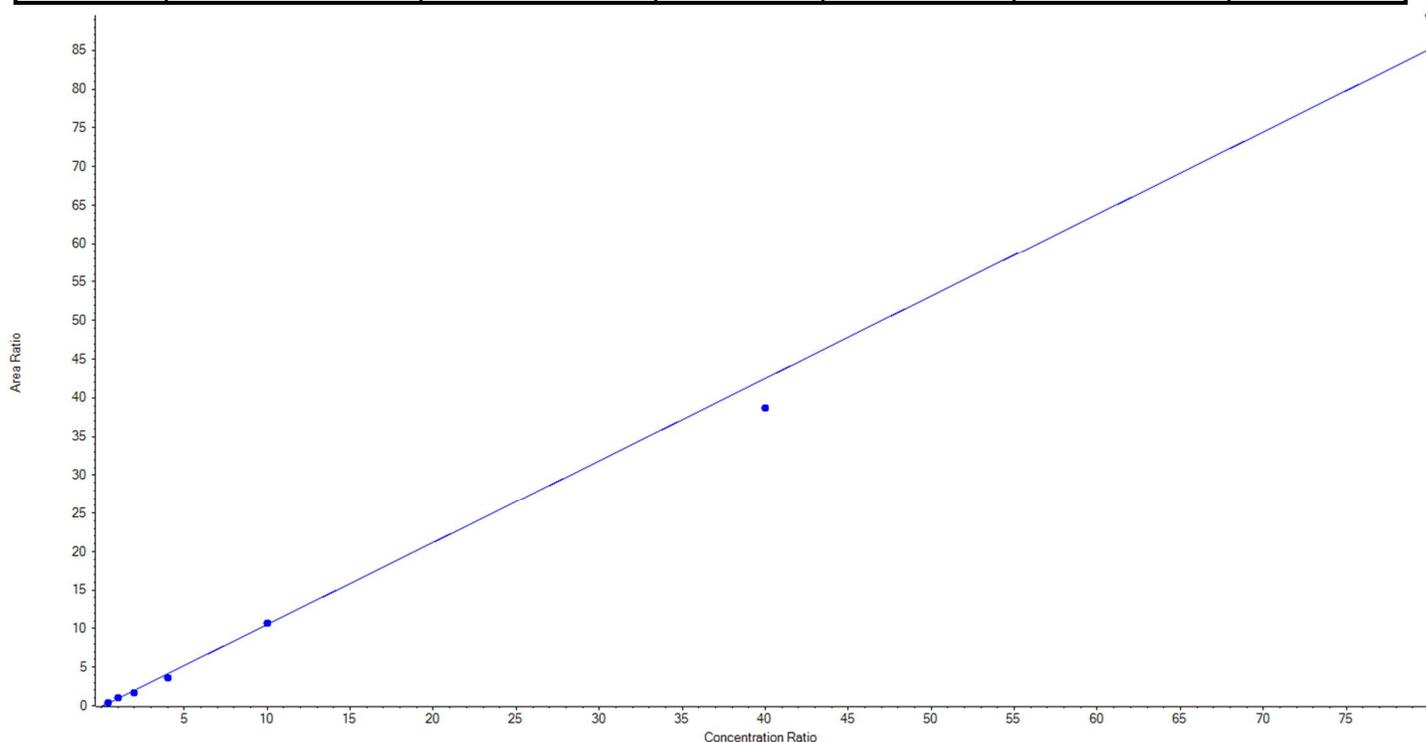
Calibration Summary Report

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Analyte Name	NEtFOSAA_1	Data File	18-0567.wiff
MRM Transition	584.0 / 419.0	Result Table	18-0570_BASE_A
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.06571 x + -0.12485$ ($r = 0.99730$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	116.464062	116.5
3	KA87	L2	True	250.00	283.951479	113.6
4	KA88	L3	True	500.00	427.149860	85.4
5	KB85	L4	True	1000.00	868.892933	86.9
6	KB69	L5	True	2500.00	2540.503274	101.6
7	KB64	L6	True	10000.00	9090.151574	90.9
8	KB65	L7	True	20000.00	21022.886817	105.1





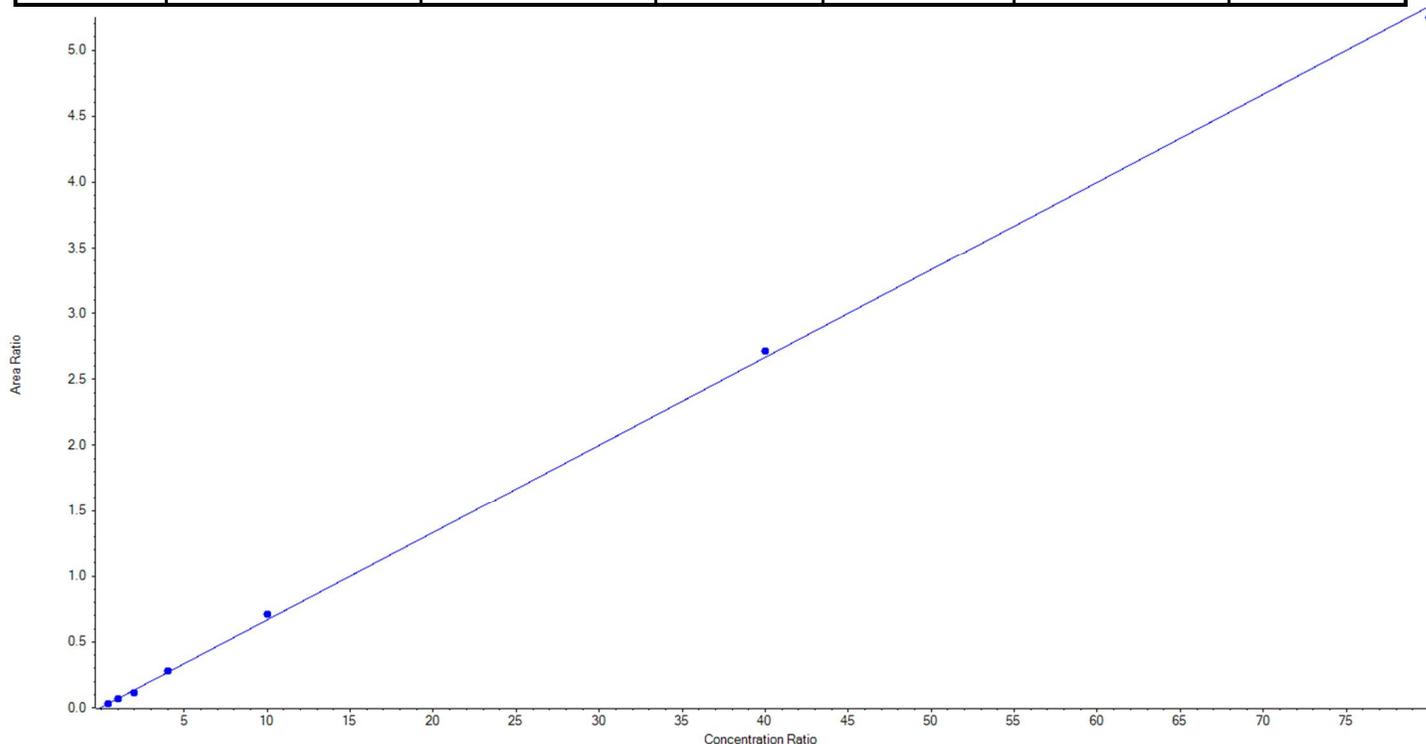
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Analyte Name	NEtFOSAA_2	Data File	18-0567.wiff
MRM Transition	584.0 / 483.0	Result Table	18-0570_BASE_A
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:29:24 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06662 x + 0.00191$ ($r = 0.99947$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	100.00	104.838624	104.8
3	KA87	L2	True	250.00	248.003138	99.2
4	KA88	L3	True	500.00	422.136515	84.4
5	KB85	L4	True	1000.00	1048.924795	104.9
6	KB69	L5	True	2500.00	2659.178334	106.4
7	KB64	L6	True	10000.00	10187.722278	101.9
8	KB65	L7	True	20000.00	19679.196315	98.4





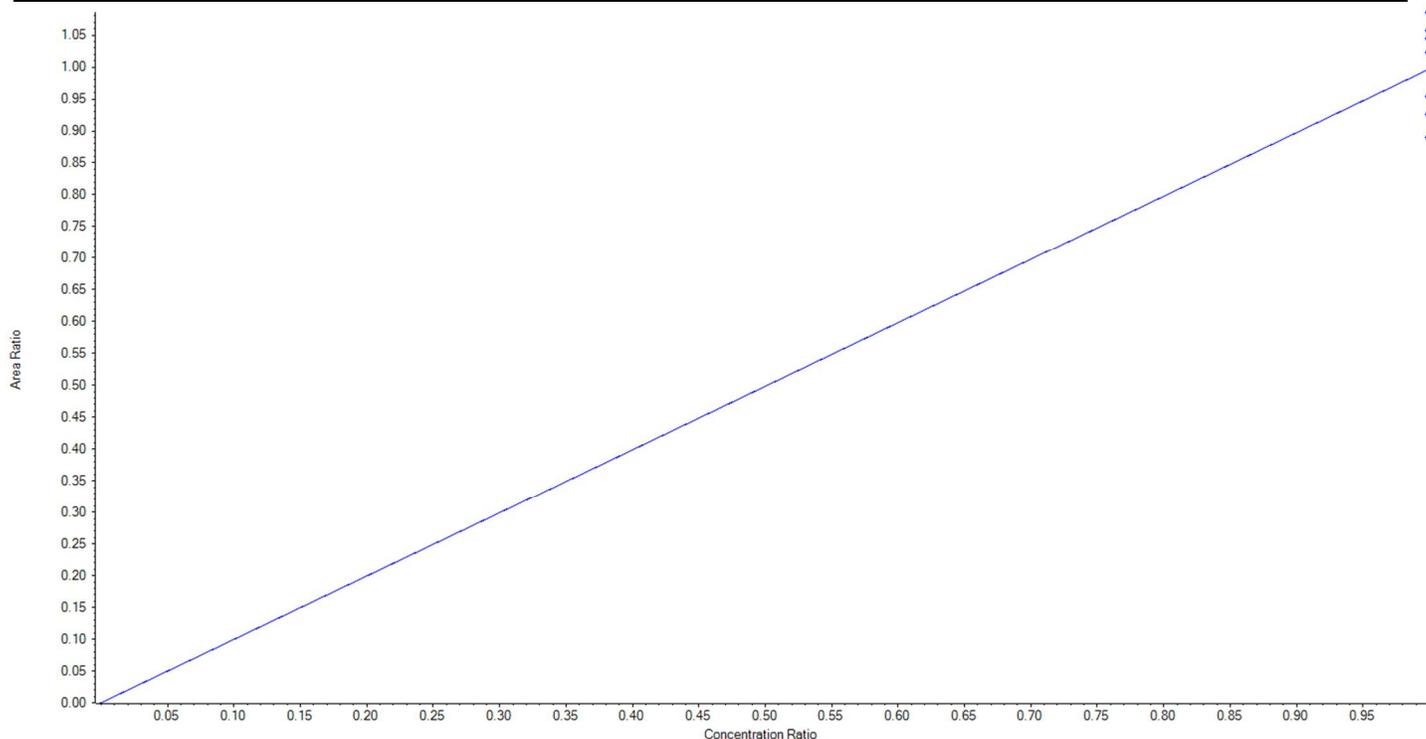
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Analyte Name	13C2-PFDoA	Data File	18-0567.wiff
MRM Transition	615.0 / 570.0	Result Table	18-0570_SIS_A
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.99701 x$ (std. dev. = 0.07394) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	250.00	222.993102	89.2
3	KA87	L2	True	250.00	232.144197	92.9
4	KA88	L3	True	250.00	239.352683	95.7
5	KB85	L4	True	250.00	272.146343	108.9
6	KB69	L5	True	250.00	256.275982	102.5
7	KB64	L6	True	250.00	262.051782	104.8
8	KB65	L7	True	250.00	265.035911	106.0





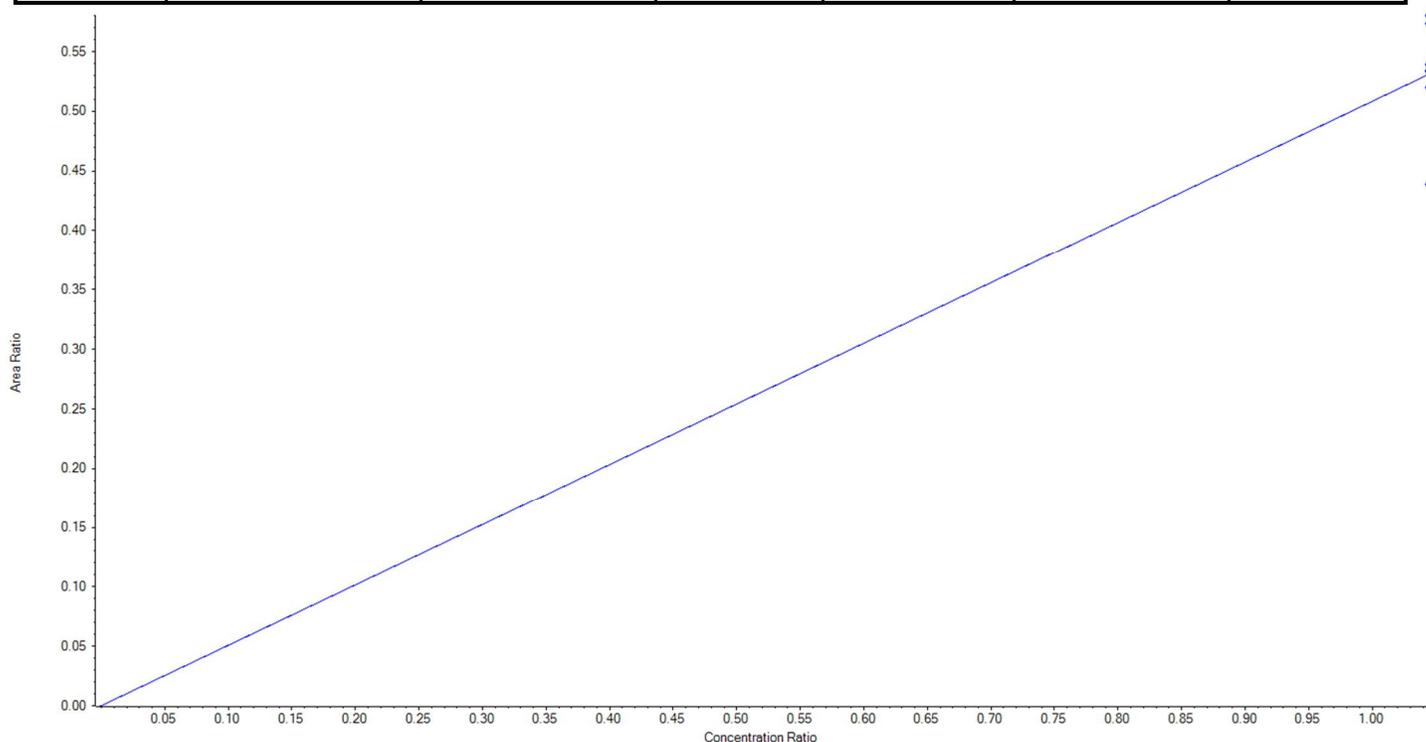
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Analyte Name	d3-MeFOSAA	Data File	18-0567.wiff
MRM Transition	573.0 / 419.0	Result Table	18-0570_SIS_A
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.50836 x$ (std. dev. = 0.04441) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	250.00	206.505940	82.6
3	KA87	L2	True	250.00	273.020949	109.2
4	KA88	L3	True	250.00	251.259049	100.5
5	KB85	L4	True	250.00	244.678915	97.9
6	KB69	L5	True	250.00	253.635275	101.5
7	KB64	L6	True	250.00	251.003804	100.4
8	KB65	L7	True	250.00	269.896069	108.0





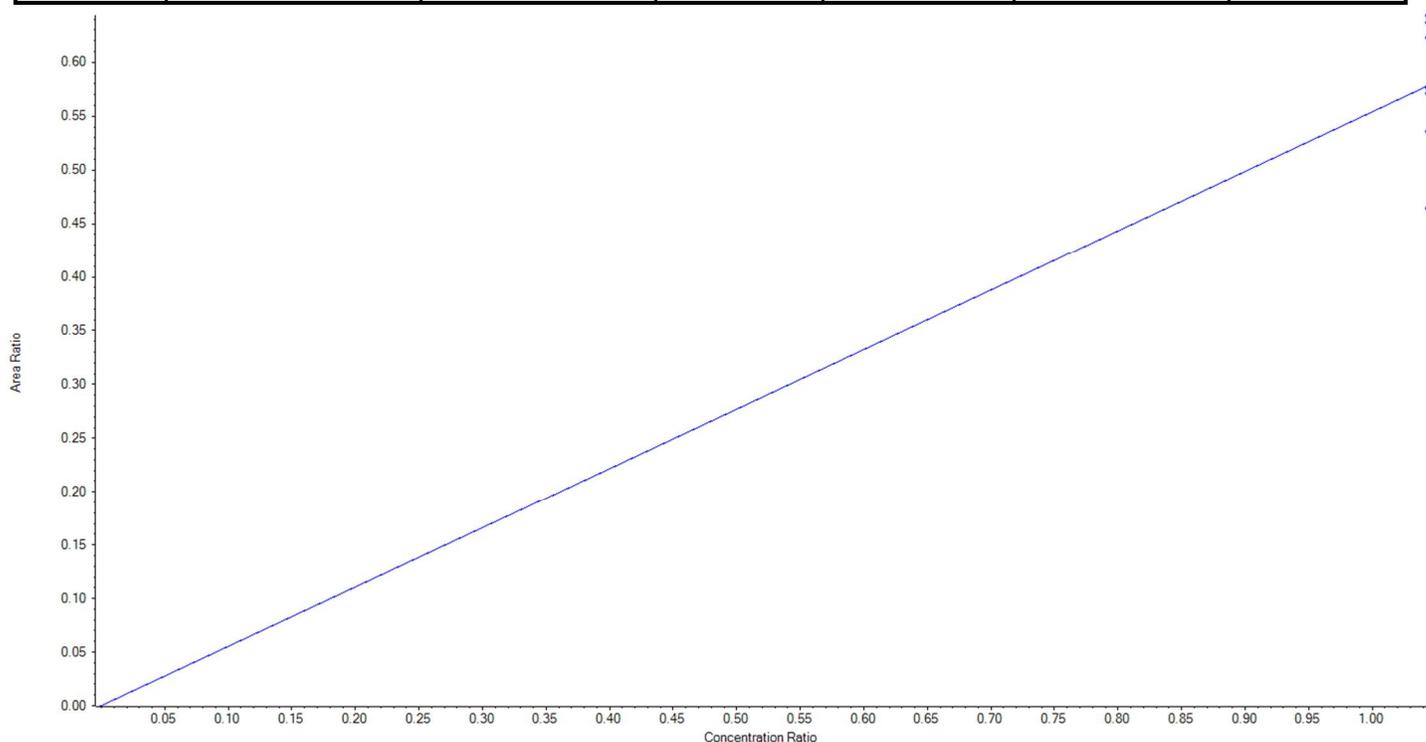
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Analyte Name	d5-EtFOSAA	Data File	18-0567.wiff
MRM Transition	589.0 / 419.0	Result Table	18-0570_SIS_A
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.55406 x$ (std. dev. = 0.06122) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	250.00	269.203065	107.7
3	KA87	L2	True	250.00	277.823722	111.1
4	KA88	L3	True	250.00	246.790864	98.7
5	KB85	L4	True	250.00	275.109507	110.0
6	KB69	L5	True	250.00	231.394913	92.6
7	KB64	L6	True	250.00	249.145681	99.7
8	KB65	L7	True	250.00	200.532248	80.2





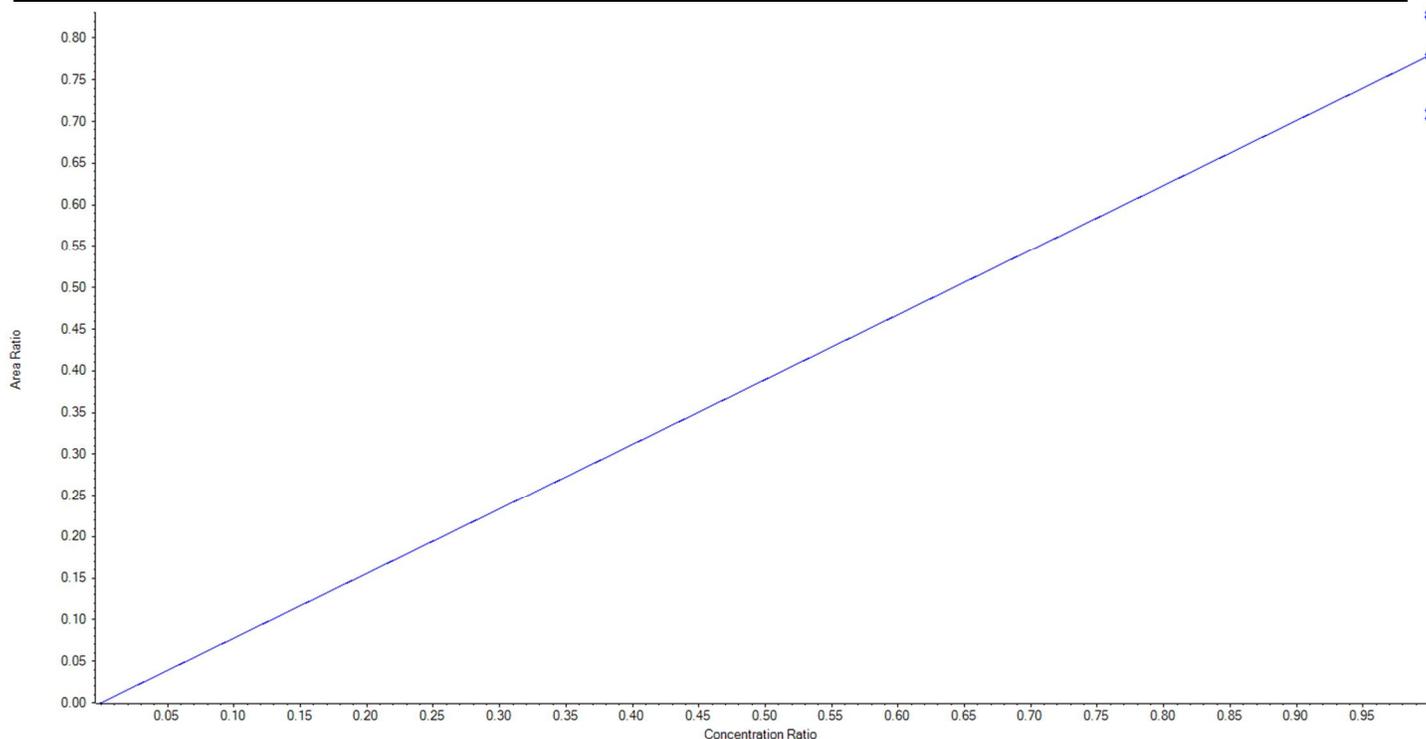
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Created with Analyst Reporter
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Analyte Name	13C5-PFHxA	Data File	18-0567.wiff
MRM Transition	318.0 / 273.0	Result Table	18-0570_SIS_A
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.77905 x$ (std. dev. = 0.05296) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	250.00	225.684604	90.3
3	KA87	L2	True	250.00	229.042579	91.6
4	KA88	L3	True	250.00	249.114229	99.7
5	KB85	L4	True	250.00	250.358652	100.1
6	KB69	L5	True	250.00	264.770246	105.9
7	KB64	L6	True	250.00	264.535782	105.8
8	KB65	L7	True	250.00	266.493908	106.6





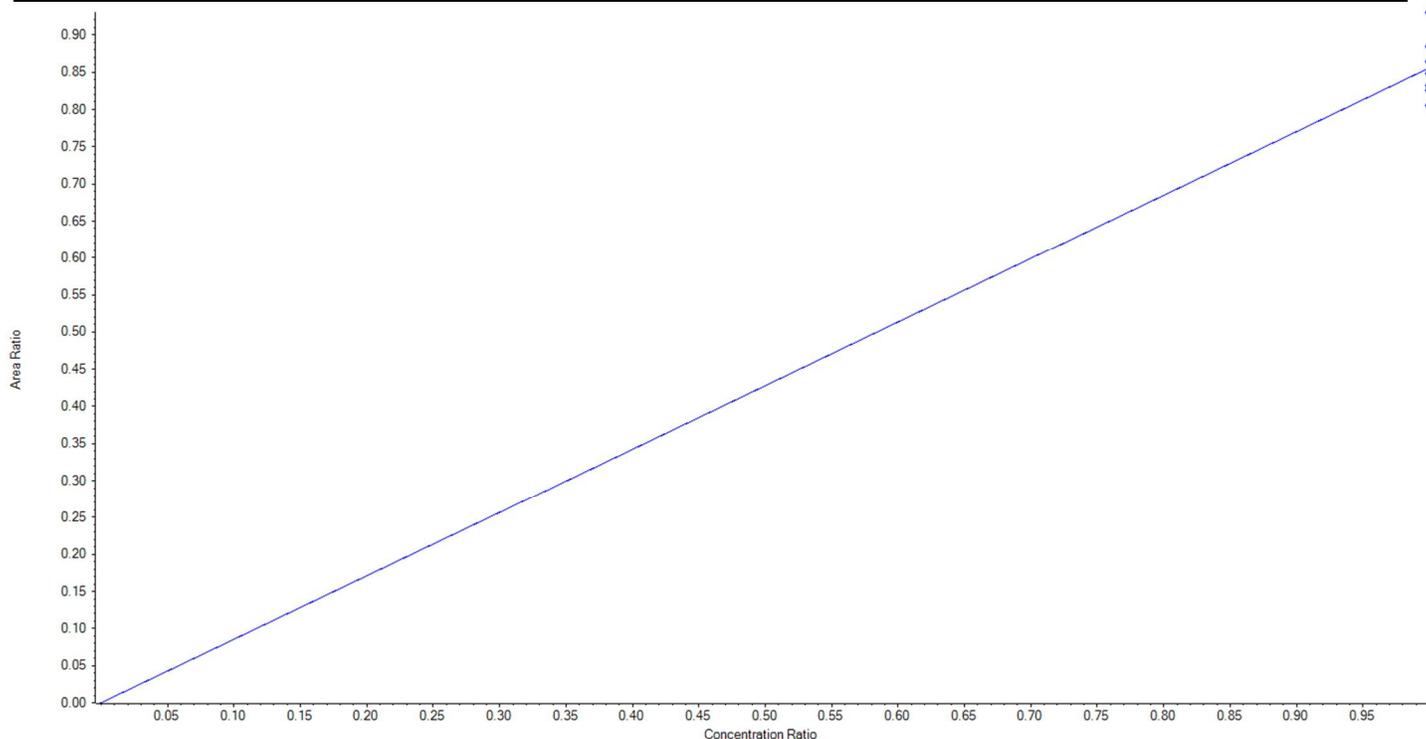
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Analyte Name	13C4-PFHpA	Data File	18-0567.wiff
MRM Transition	367.0 / 322.0	Result Table	18-0570_SIS_A
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.85580 x$ (std. dev. = 0.04165) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	250.00	235.383017	94.2
3	KA87	L2	True	250.00	241.146230	96.5
4	KA88	L3	True	250.00	252.368870	101.0
5	KB85	L4	True	250.00	247.755009	99.1
6	KB69	L5	True	250.00	271.648557	108.7
7	KB64	L6	True	250.00	258.439710	103.4
8	KB65	L7	True	250.00	243.258608	97.3





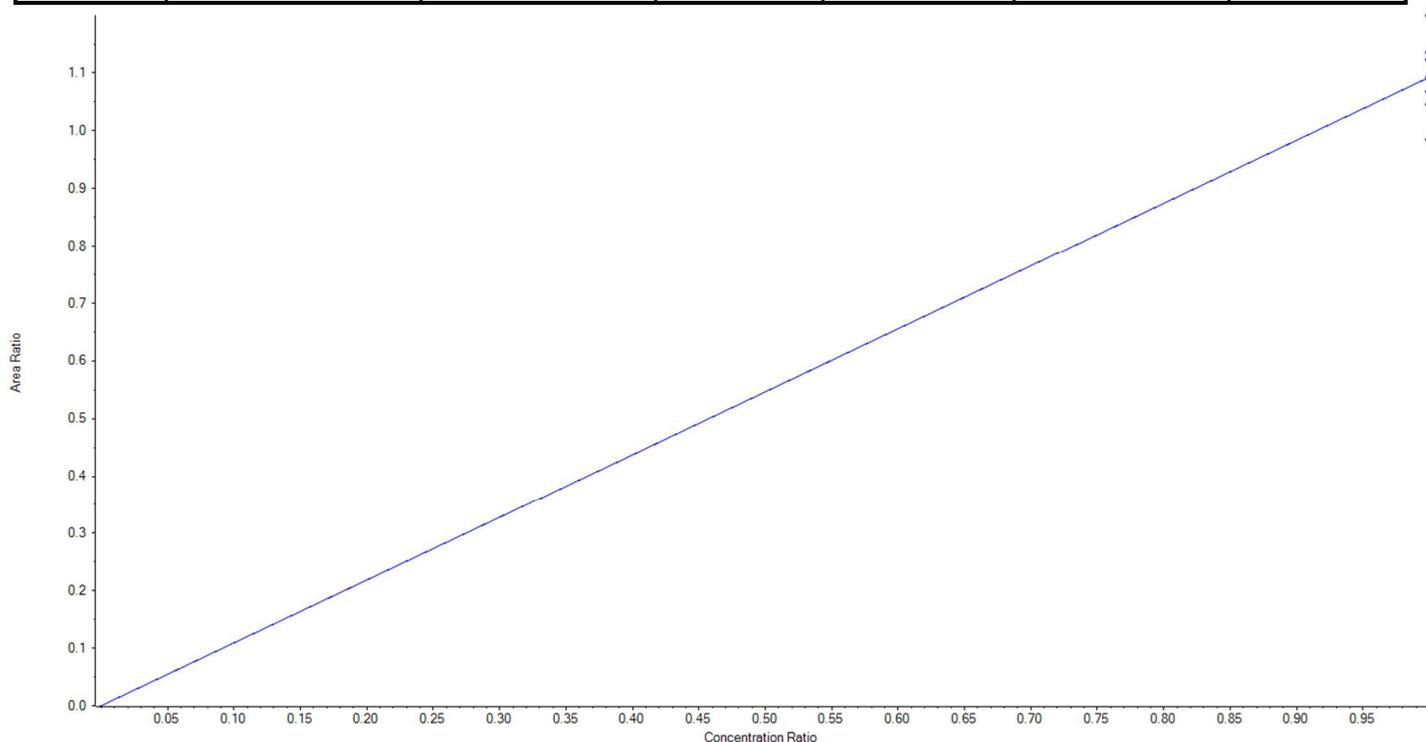
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Analyte Name	13C8-PFOA	Data File	18-0567.wiff
MRM Transition	421.0 / 376.0	Result Table	18-0570_SIS_A
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.09271 x$ (std. dev. = 0.06894) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	250.00	239.295265	95.7
3	KA87	L2	True	250.00	249.883229	100.0
4	KA88	L3	True	250.00	256.822183	102.7
5	KB85	L4	True	250.00	244.473023	97.8
6	KB69	L5	True	250.00	274.376736	109.8
7	KB64	L6	True	250.00	259.841156	103.9
8	KB65	L7	True	250.00	225.308408	90.1





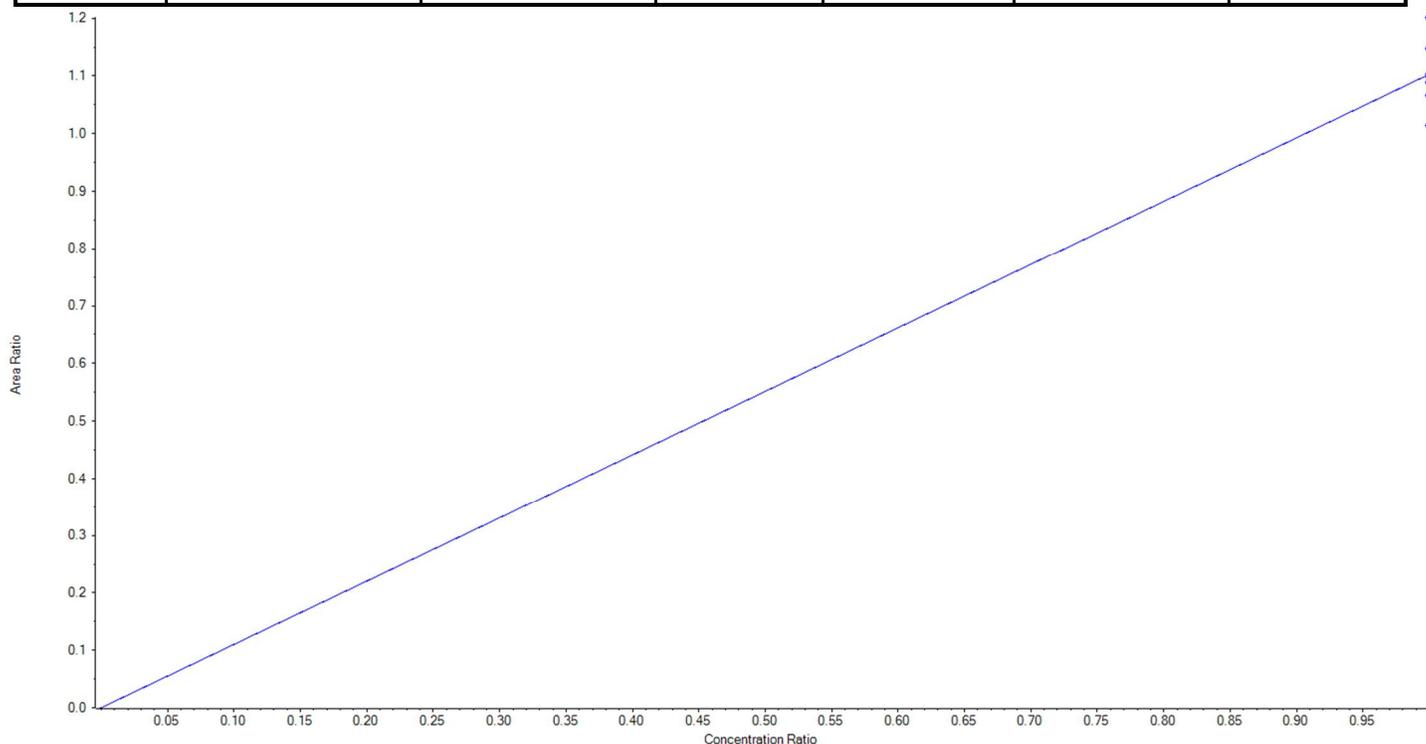
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Analyte Name	13C9-PFNA	Data File	18-0567.wiff
MRM Transition	472.0 / 427.0	Result Table	18-0570_SIS_A
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.10306 x$ (std. dev. = 0.05923) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	250.00	229.879110	92.0
3	KA87	L2	True	250.00	241.726052	96.7
4	KA88	L3	True	250.00	250.059960	100.0
5	KB85	L4	True	250.00	246.769249	98.7
6	KB69	L5	True	250.00	272.237952	108.9
7	KB64	L6	True	250.00	260.116514	104.1
8	KB65	L7	True	250.00	249.211163	99.7





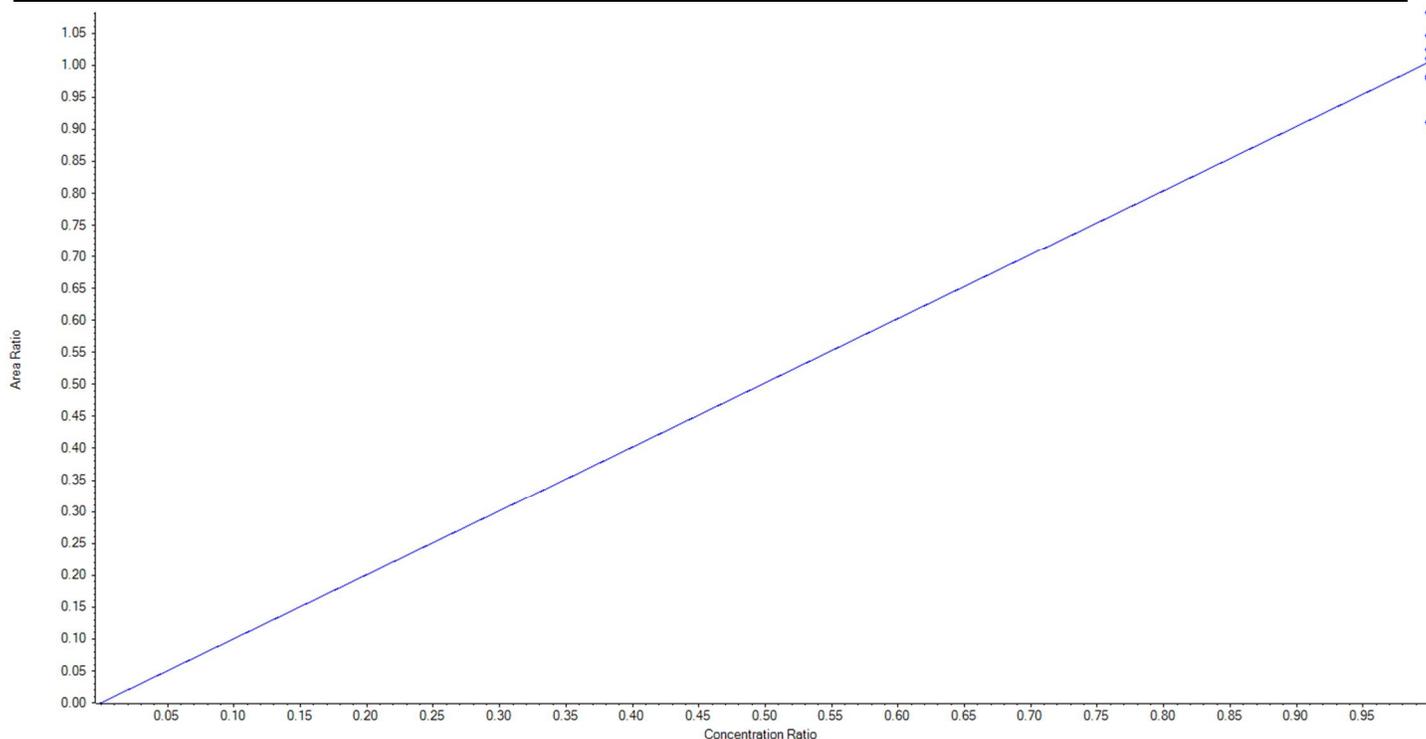
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Analyte Name	13C6-PFDA	Data File	18-0567.wiff
MRM Transition	519.0 / 474.0	Result Table	18-0570_SIS_A
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.00495 x$ (std. dev. = 0.05511) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	250.00	243.534625	97.4
3	KA87	L2	True	250.00	244.338776	97.7
4	KA88	L3	True	250.00	251.494903	100.6
5	KB85	L4	True	250.00	269.197256	107.7
6	KB69	L5	True	250.00	260.292954	104.1
7	KB64	L6	True	250.00	254.704342	101.9
8	KB65	L7	True	250.00	226.437143	90.6





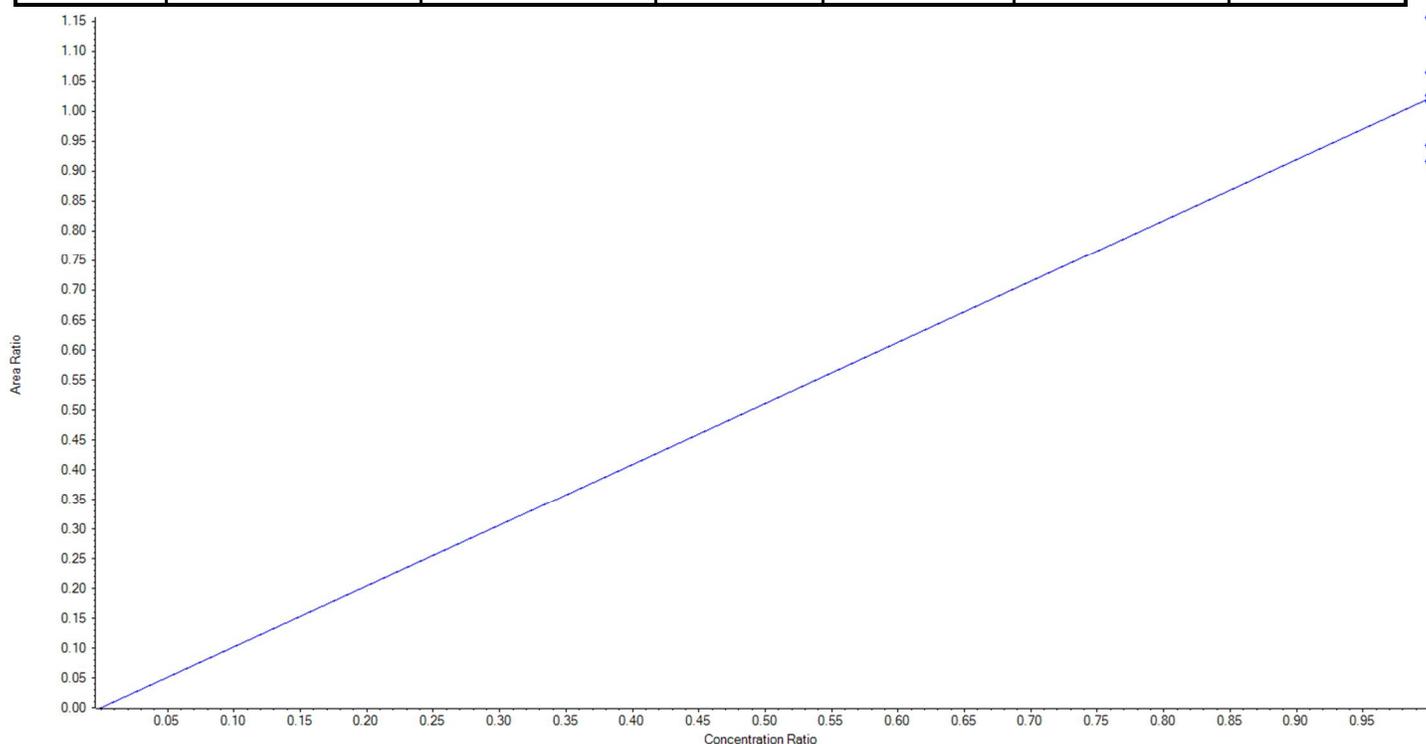
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Analyte Name	13C7-PFUnA	Data File	18-0567.wiff
MRM Transition	570.0 / 525.0	Result Table	18-0570_SIS_A
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.02152 x$ (std. dev. = 0.07915) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	250.00	230.679287	92.3
3	KA87	L2	True	250.00	248.941819	99.6
4	KA88	L3	True	250.00	260.658926	104.3
5	KB85	L4	True	250.00	282.991780	113.2
6	KB69	L5	True	250.00	251.334443	100.5
7	KB64	L6	True	250.00	251.307802	100.5
8	KB65	L7	True	250.00	224.085944	89.6





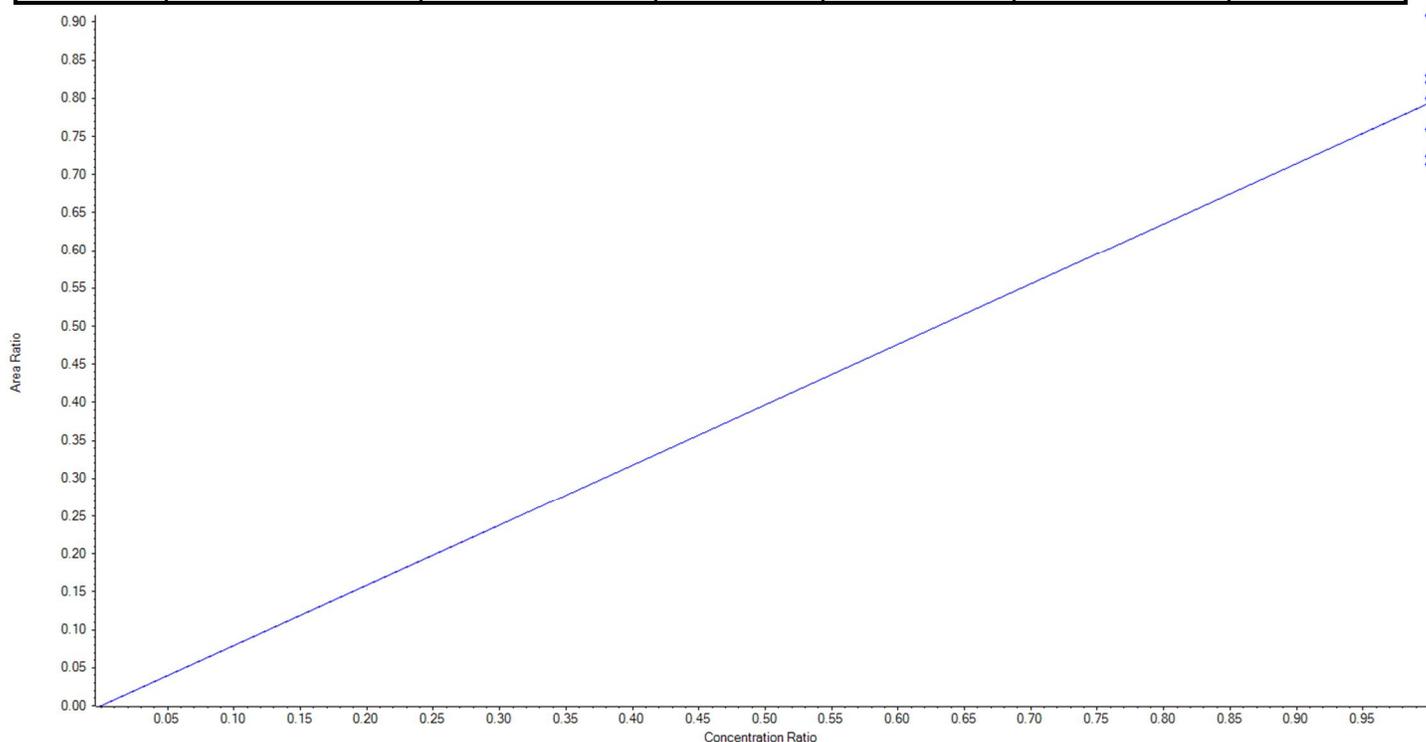
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Analyte Name	13C2-PFTeDA	Data File	18-0567.wiff
MRM Transition	715.0 / 670.0	Result Table	18-0570_SIS_A
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.79366 x$ (std. dev. = 0.06788) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	250.00	228.114321	91.3
3	KA87	L2	True	250.00	224.809448	89.9
4	KA88	L3	True	250.00	239.182575	95.7
5	KB85	L4	True	250.00	258.607584	103.4
6	KB69	L5	True	250.00	251.717559	100.7
7	KB64	L6	True	250.00	261.459132	104.6
8	KB65	L7	True	250.00	286.109380	114.4





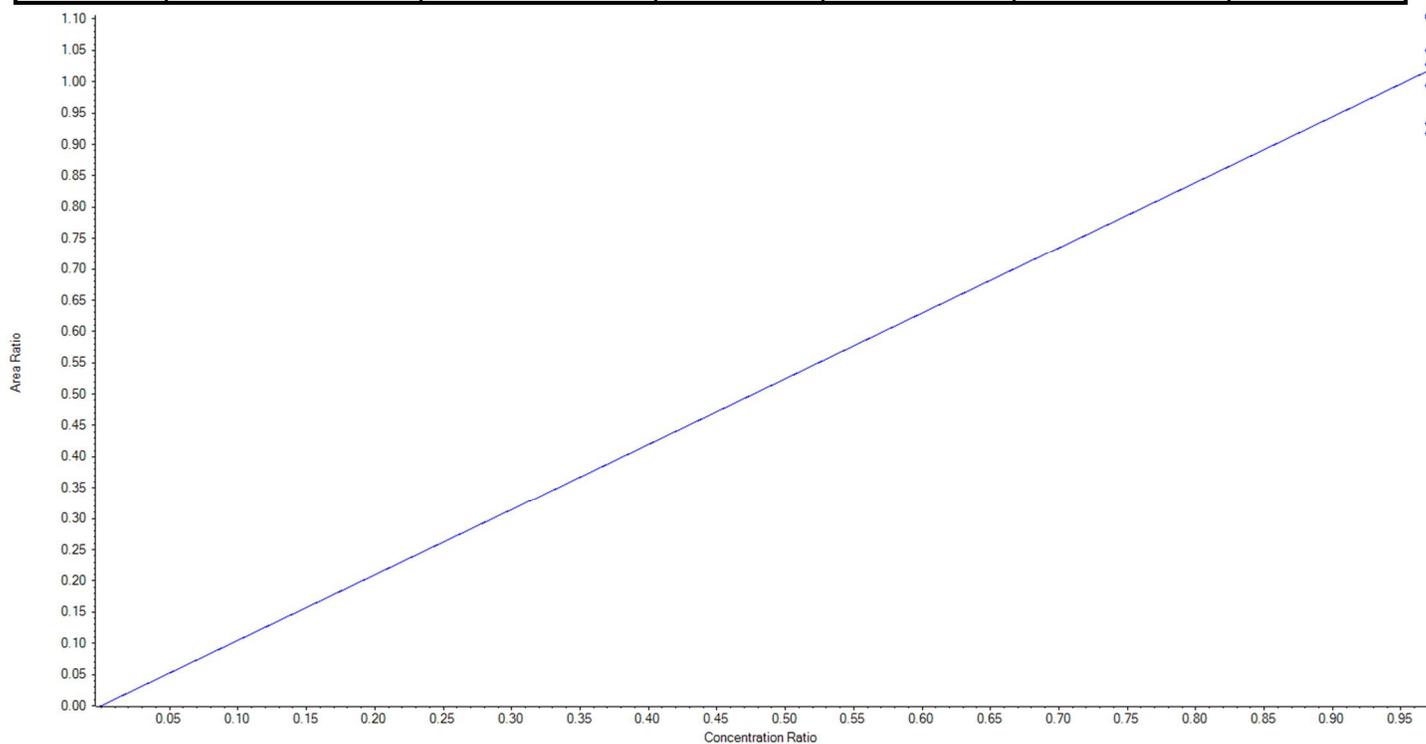
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Analyte Name	13C3-PFBS	Data File	18-0567.wiff
MRM Transition	302.0 / 99.0	Result Table	18-0570_SIS_A
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.04903 x$ (std. dev. = 0.07729) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	232.25	209.134662	90.1
3	KA87	L2	True	232.25	239.465007	103.1
4	KA88	L3	True	232.25	212.758403	91.6
5	KB85	L4	True	232.25	234.156867	100.8
6	KB69	L5	True	232.25	226.825509	97.7
7	KB64	L6	True	232.25	251.296193	108.2
8	KB65	L7	True	232.25	252.113359	108.6





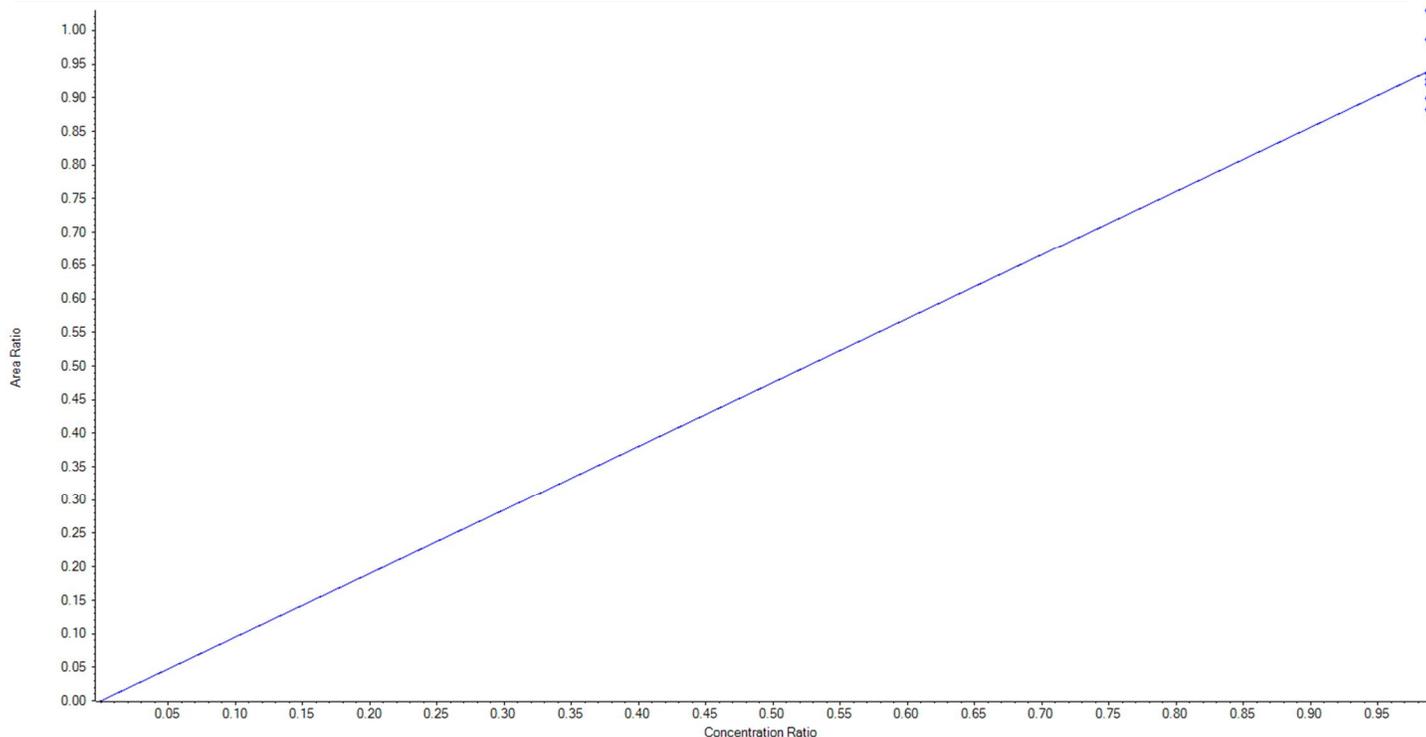
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Analyte Name	13C3-PFHxS	Data File	18-0567.wiff
MRM Transition	402.0 / 99.0	Result Table	18-0570_SIS_A
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.95105 x$ (std. dev. = 0.05160) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	236.50	231.209691	97.8
3	KA87	L2	True	236.50	248.055330	104.9
4	KA88	L3	True	236.50	222.207278	94.0
5	KB85	L4	True	236.50	233.267050	98.6
6	KB69	L5	True	236.50	258.978090	109.5
7	KB64	L6	True	236.50	235.550467	99.6
8	KB65	L7	True	236.50	226.232094	95.7





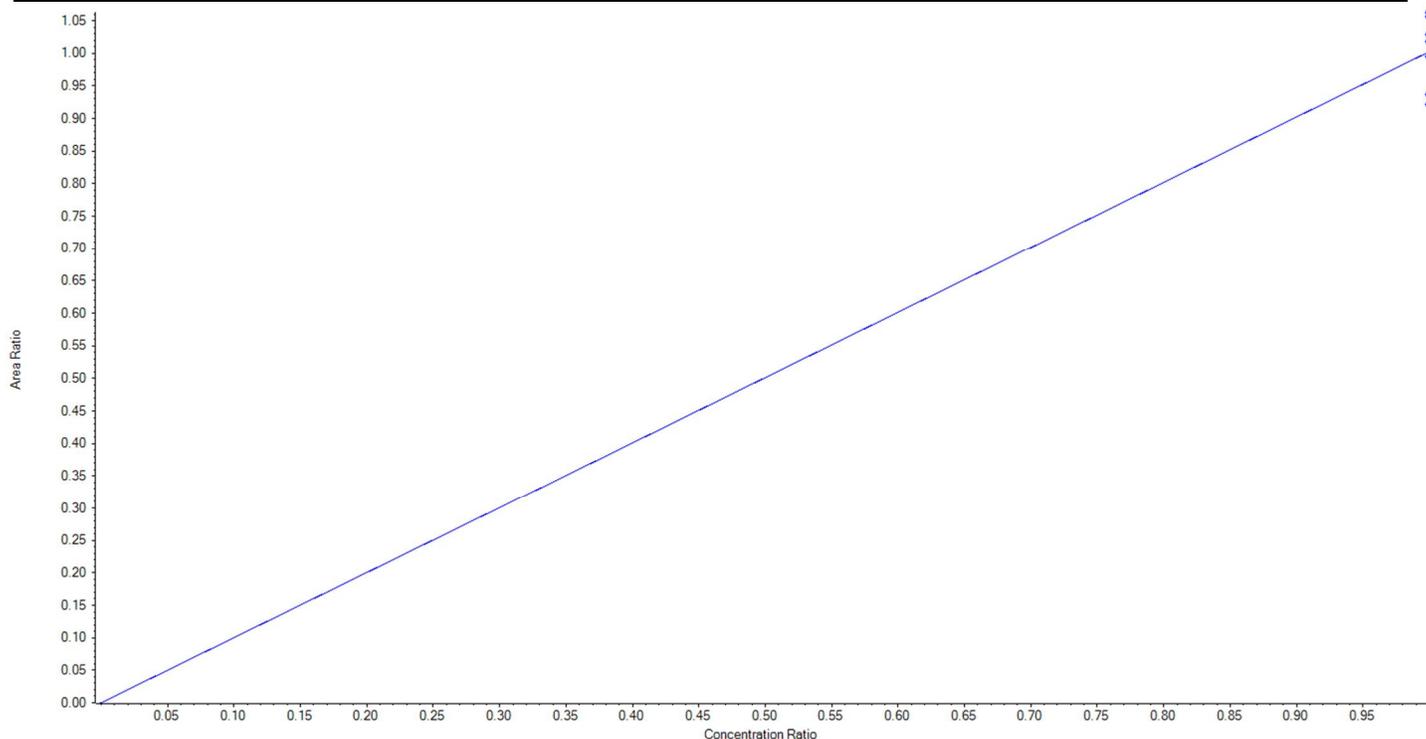
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Analyte Name	13C8-PFOS	Data File	18-0567.wiff
MRM Transition	507.0 / 99.0	Result Table	18-0570_SIS_A
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	10/2/2018 8:18:32 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.00258 x$ (std. dev. = 0.05542) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KA86	L1	True	239.25	219.859192	91.9
3	KA87	L2	True	239.25	252.163967	105.4
4	KA88	L3	True	239.25	223.489878	93.4
5	KB85	L4	True	239.25	237.394498	99.2
6	KB69	L5	True	239.25	245.381403	102.6
7	KB64	L6	True	239.25	253.522421	106.0
8	KB65	L7	True	239.25	242.938641	101.5



Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:42:17	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	99967.83	267.871930	158.2	false
PFBS_2	298.9 / 99.0	1.55	31406.83	257.071549	112.2	false
PFHxA_1	313.0 / 269.0	1.87	76677.93	262.853012	17.1	false
PFHxA_2	313.0 / 119.0	1.87	5763.86	258.887189	12.6	false
PFHpA_1	363.0 / 319.0	2.28	74398.13	262.636185	61.8	false
PFHpA_2	363.0 / 169.0	2.28	1541.17	294.655681	50.0	false
PFHxS_1	399.0 / 80.0	2.30	108868.34	245.892237	153.0	false
PFHxS_2	399.0 / 99.0	2.30	31446.86	237.563188	175.0	false
PFOA_1	413.0 / 369.0	2.69	107590.54	289.634064	128.6	false
PFOA_2	413.0 / 169.0	2.69	7085.58	294.809188	125.0	false
PFNA_1	463.0 / 419.0	3.09	95013.24	277.153159	154.2	false
PFNA_2	463.0 / 219.0	3.10	29056.79	269.919368	140.0	true
PFOS_1	499.0 / 80.0	3.09	153770.69	284.526001	75.9	false
PFOS_2	499.0 / 99.0	3.09	26965.64	269.933338	162.2	false
PFDA_1	513.0 / 469.0	3.45	114744.15	270.991785	188.2	false
PFDA_2	513.0 / 219.0	3.45	6042.14	295.113639	78.8	false
PFUnA_1	563.0 / 519.0	3.78	101184.27	286.591530	126.5	false
PFUnA_2	563.0 / 269.0	3.77	6273.26	265.527693	73.0	false
PFDoA_1	613.0 / 569.0	4.06	95428.03	253.792449	216.7	true
PFDoA_2	613.0 / 319.0	4.06	14348.33	239.769529	169.6	false
PFTrDA_1	663.0 / 619.0	4.31	85131.43	247.127795	344.5	false
PFTrDA_2	663.0 / 169.0	4.31	5742.93	261.878262	172.5	false
PFTeDA_1	713.0 / 669.0	4.53	91290.51	256.779548	701.0	false
PFTeDA_2	713.0 / 169.0	4.53	3950.14	235.864762	256.4	false
NMeFOSAA_1	570.0 / 419.0	3.61	15511.55	224.006444	254.7	false
NMeFOSAA_2	570.0 / 512.0	3.61	8987.18	258.177895	195.1	false
NEtFOSAA_1	584.0 / 419.0	3.77	13400.63	221.174498	210.6	false
NEtFOSAA_2	584.0 / 483.0	3.76	1017.31	205.901577	40.0	false

Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:53:10	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	178876.40	485.080824	179.8	false
PFBS_2	298.9 / 99.0	1.54	58003.35	506.363522	196.6	false
PFHxA_1	313.0 / 269.0	1.87	139402.75	494.120490	25.3	false
PFHxA_2	313.0 / 119.0	1.87	10689.54	506.424565	20.2	false
PFHpA_1	363.0 / 319.0	2.28	128237.08	506.904358	68.0	false
PFHpA_2	363.0 / 169.0	2.27	2504.64	510.553213	47.4	false
PFHxS_1	399.0 / 80.0	2.30	193193.86	450.710088	151.2	false
PFHxS_2	399.0 / 99.0	2.30	56127.69	448.146301	235.6	false
PFOA_1	413.0 / 369.0	2.69	186300.74	492.899672	203.5	false
PFOA_2	413.0 / 169.0	2.69	12237.19	502.126868	156.0	false
PFNA_1	463.0 / 419.0	3.09	171943.31	482.157353	204.7	false
PFNA_2	463.0 / 219.0	3.09	53590.91	488.824655	172.5	true
PFOS_1	499.0 / 80.0	3.08	279667.36	486.830299	94.0	false
PFOS_2	499.0 / 99.0	3.09	50050.40	483.709367	219.7	false
PFDA_1	513.0 / 469.0	3.44	196619.97	475.180717	264.2	false
PFDA_2	513.0 / 219.0	3.44	9079.35	472.331696	117.7	false
PFUnA_1	563.0 / 519.0	3.77	183475.20	482.904821	169.0	false
PFUnA_2	563.0 / 269.0	3.77	10723.44	472.697940	110.6	false
PFDaA_1	613.0 / 569.0	4.06	169063.74	473.303258	260.2	true
PFDaA_2	613.0 / 319.0	4.05	27065.02	485.086635	198.6	false
PFTrDA_1	663.0 / 619.0	4.30	152179.04	475.312605	368.7	false
PFTrDA_2	663.0 / 169.0	4.30	9675.60	469.086419	220.8	false
PFTeDA_1	713.0 / 669.0	4.52	158953.83	465.602999	860.0	false
PFTeDA_2	713.0 / 169.0	4.52	7961.29	498.594242	381.2	false
NMeFOSAA_1	570.0 / 419.0	3.60	26528.19	488.205871	345.8	true
NMeFOSAA_2	570.0 / 512.0	3.60	15292.54	495.395874	247.1	false
NEtFOSAA_1	584.0 / 419.0	3.77	25826.00	513.851241	280.1	false
NEtFOSAA_2	584.0 / 483.0	3.76	1779.86	499.304717	63.0	false

Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:04:02	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	367031.29	1020.662234	459.2	false
PFBS_2	298.9 / 99.0	1.54	107628.48	992.123932	332.0	false
PFHxA_1	313.0 / 269.0	1.87	270998.33	981.914222	37.8	false
PFHxA_2	313.0 / 119.0	1.87	19097.27	932.935780	28.1	false
PFHpA_1	363.0 / 319.0	2.28	261214.83	947.857111	104.6	false
PFHpA_2	363.0 / 169.0	2.28	4445.94	812.405416	82.2	false
PFHxS_1	399.0 / 80.0	2.30	399821.41	1037.639541	291.0	false
PFHxS_2	399.0 / 99.0	2.30	115614.69	1042.487904	489.6	false
PFOA_1	413.0 / 369.0	2.69	375748.36	941.889550	338.3	false
PFOA_2	413.0 / 169.0	2.69	22578.02	880.937398	246.0	false
PFNA_1	463.0 / 419.0	3.09	347175.18	976.023594	321.1	false
PFNA_2	463.0 / 219.0	3.09	106989.67	993.115666	270.6	true
PFOS_1	499.0 / 80.0	3.09	556566.29	965.076962	151.0	false
PFOS_2	499.0 / 99.0	3.08	100402.74	983.676032	338.8	false
PFDA_1	513.0 / 469.0	3.44	392650.39	974.071202	303.5	false
PFDA_2	513.0 / 219.0	3.44	17081.14	943.935332	169.1	false
PFUnA_1	563.0 / 519.0	3.77	357927.63	962.964897	285.8	false
PFUnA_2	563.0 / 269.0	3.77	19546.82	953.594606	170.4	false
PFDoA_1	613.0 / 569.0	4.05	334879.72	1017.251639	320.5	false
PFDoA_2	613.0 / 319.0	4.05	51164.66	998.428822	307.2	false
PFTrDA_1	663.0 / 619.0	4.30	294221.49	960.923250	458.9	false
PFTrDA_2	663.0 / 169.0	4.30	18691.70	948.578257	284.3	false
PFTeDA_1	713.0 / 669.0	4.52	329838.76	997.431893	1101.8	false
PFTeDA_2	713.0 / 169.0	4.51	15529.19	993.123927	526.8	false
NMeFOSAA_1	570.0 / 419.0	3.60	53565.44	1139.304981	371.1	true
NMeFOSAA_2	570.0 / 512.0	3.60	28027.05	983.191558	312.2	false
NEtFOSAA_1	584.0 / 419.0	3.76	51221.04	1016.627908	466.4	false
NEtFOSAA_2	584.0 / 483.0	3.76	3586.48	1076.234706	123.1	false

Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:14:55	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	664975.17	2492.530426	553.7	false
PFBS_2	298.9 / 99.0	1.55	198731.22	2512.899193	421.3	false
PFHxA_1	313.0 / 269.0	1.87	481578.40	2510.743986	55.6	false
PFHxA_2	313.0 / 119.0	1.87	36461.39	2583.031344	46.6	false
PFHpA_1	363.0 / 319.0	2.28	467438.24	2388.069276	154.1	false
PFHpA_2	363.0 / 169.0	2.28	9327.40	2336.052437	132.0	false
PFHxS_1	399.0 / 80.0	2.30	689350.08	2748.214379	312.3	false
PFHxS_2	399.0 / 99.0	2.30	204978.70	2860.013146	541.3	false
PFOA_1	413.0 / 369.0	2.69	664079.91	2268.203636	456.5	false
PFOA_2	413.0 / 169.0	2.69	42709.21	2271.075206	341.0	false
PFNA_1	463.0 / 419.0	3.09	635197.26	2315.428259	374.5	false
PFNA_2	463.0 / 219.0	3.09	188791.44	2291.326906	328.2	true
PFOS_1	499.0 / 80.0	3.09	989990.40	2237.748306	194.8	false
PFOS_2	499.0 / 99.0	3.08	179937.67	2321.177503	385.7	false
PFDA_1	513.0 / 469.0	3.44	704385.42	2411.315927	385.6	false
PFDA_2	513.0 / 219.0	3.44	28265.42	2199.203117	192.0	false
PFUnA_1	563.0 / 519.0	3.77	617927.22	2319.251941	273.5	false
PFUnA_2	563.0 / 269.0	3.77	36654.76	2623.444932	232.8	false
PFDoA_1	613.0 / 569.0	4.05	578808.41	2432.181539	401.7	false
PFDoA_2	613.0 / 319.0	4.05	94652.21	2567.414842	374.0	false
PFTrDA_1	663.0 / 619.0	4.30	531497.39	2649.092962	658.6	false
PFTrDA_2	663.0 / 169.0	4.30	33468.86	2593.422981	384.7	false
PFTeDA_1	713.0 / 669.0	4.51	561661.94	2558.826549	1159.7	false
PFTeDA_2	713.0 / 169.0	4.51	27200.68	2612.813888	689.0	false
NMeFOSAA_1	570.0 / 419.0	3.60	93643.75	2211.805162	483.2	false
NMeFOSAA_2	570.0 / 512.0	3.60	53021.34	2014.949632	463.2	false
NEtFOSAA_1	584.0 / 419.0	3.76	89192.64	2776.740639	591.4	false
NEtFOSAA_2	584.0 / 483.0	3.76	5892.45	2880.016685	281.9	false

Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:25:46	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	3523291.38	9687.169975	1410.7	false
PFBS_2	298.9 / 99.0	1.55	1080483.49	10110.021214	1024.0	false
PFHxA_1	313.0 / 269.0	1.86	2613108.66	10339.834815	131.5	false
PFHxA_2	313.0 / 119.0	1.86	196495.44	10597.854831	119.8	false
PFHpA_1	363.0 / 319.0	2.27	2429662.78	10506.701394	324.3	false
PFHpA_2	363.0 / 169.0	2.27	51364.52	10772.555968	302.3	false
PFHxS_1	399.0 / 80.0	2.29	3672968.00	10651.667903	426.6	false
PFHxS_2	399.0 / 99.0	2.29	1034794.07	10534.940229	719.6	false
PFOA_1	413.0 / 369.0	2.69	3237118.74	9872.494798	828.5	false
PFOA_2	413.0 / 169.0	2.69	215566.48	10241.789320	753.0	false
PFNA_1	463.0 / 419.0	3.08	3107964.01	10298.317580	805.3	false
PFNA_2	463.0 / 219.0	3.08	943359.47	10453.722363	774.9	true
PFOS_1	499.0 / 80.0	3.08	5012428.04	10285.363819	421.4	false
PFOS_2	499.0 / 99.0	3.08	901775.93	10622.513912	783.0	false
PFDA_1	513.0 / 469.0	3.44	3444956.90	10423.036697	648.0	false
PFDA_2	513.0 / 219.0	3.44	153518.87	10685.893215	505.3	false
PFUnA_1	563.0 / 519.0	3.77	3206817.99	9744.884462	592.5	false
PFUnA_2	563.0 / 269.0	3.76	166205.42	9855.680554	374.7	false
PFDoA_1	613.0 / 569.0	4.05	3148975.66	10888.517558	932.2	false
PFDoA_2	613.0 / 319.0	4.05	489972.86	10947.776912	661.5	false
PFTrDA_1	663.0 / 619.0	4.29	2844300.75	10888.520115	1082.8	false
PFTrDA_2	663.0 / 169.0	4.29	177866.43	10590.299175	794.6	false
PFTeDA_1	713.0 / 669.0	4.51	2997867.05	10442.906951	1592.4	false
PFTeDA_2	713.0 / 169.0	4.51	143414.89	10512.456537	1209.8	false
NMeFOSAA_1	570.0 / 419.0	3.60	472496.86	11884.031206	962.0	true
NMeFOSAA_2	570.0 / 512.0	3.60	264820.71	10484.396480	881.9	false
NEtFOSAA_1	584.0 / 419.0	3.76	460104.89	9483.901545	1157.7	false
NEtFOSAA_2	584.0 / 483.0	3.76	28563.97	9402.315246	477.3	false

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:36:39	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	9000996.73	20639.184611	2402.5	false
PFBS_2	298.9 / 99.0	1.54	2586485.00	20214.020590	1961.4	false
PFHxA_1	313.0 / 269.0	1.86	6005879.32	20003.033475	247.1	false
PFHxA_2	313.0 / 119.0	1.86	434046.38	19713.366292	196.9	false
PFHpA_1	363.0 / 319.0	2.27	5574434.13	19637.831676	538.4	false
PFHpA_2	363.0 / 169.0	2.27	114420.43	19523.777285	422.9	false
PFHxS_1	399.0 / 80.0	2.29	8341297.43	19458.375852	627.5	false
PFHxS_2	399.0 / 99.0	2.29	2376142.28	19469.349232	753.8	false
PFOA_1	413.0 / 369.0	2.68	7314578.26	20384.878279	1338.9	false
PFOA_2	413.0 / 169.0	2.68	461952.38	20059.262020	807.2	false
PFNA_1	463.0 / 419.0	3.08	7003647.19	19900.920055	1236.6	false
PFNA_2	463.0 / 219.0	3.08	2077312.50	19753.091042	1111.9	true
PFOS_1	499.0 / 80.0	3.08	11633574.73	19990.454613	493.3	false
PFOS_2	499.0 / 99.0	3.08	1982261.34	19568.989850	1081.5	false
PFDA_1	513.0 / 469.0	3.44	7590227.80	19695.403672	937.5	false
PFDA_2	513.0 / 219.0	3.44	328746.62	19653.523000	678.7	false
PFUnA_1	563.0 / 519.0	3.76	7314618.88	20453.402349	766.0	false
PFUnA_2	563.0 / 269.0	3.76	366468.33	20079.054275	582.7	false
PFDoA_1	613.0 / 569.0	4.05	7240085.59	19184.953557	943.2	false
PFDoA_2	613.0 / 319.0	4.05	1110093.87	19011.523260	676.9	false
PFTrDA_1	663.0 / 619.0	4.29	6585815.96	19029.023273	1219.6	false
PFTrDA_2	663.0 / 169.0	4.29	431299.46	19386.734904	948.7	false
PFTeDA_1	713.0 / 669.0	4.51	7430991.88	19528.452061	1831.2	false
PFTeDA_2	713.0 / 169.0	4.51	350869.40	19397.146644	1781.7	false
NMeFOSAA_1	570.0 / 419.0	3.59	1095806.36	18302.646337	863.4	false
NMeFOSAA_2	570.0 / 512.0	3.59	600929.56	15770.949743	916.6	false
NEtFOSAA_1	584.0 / 419.0	3.76	1047563.50	20237.704169	970.6	false
NEtFOSAA_2	584.0 / 483.0	3.76	65146.91	20186.227068	694.5	false

Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:42:17	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.05	94526.54	246.972203	891.3	false
d3-MeFOSAA	573.0 / 419.0	3.60	15102.09	236.231309	131.0	false
d5-EtFOSAA	589.0 / 419.0	3.76	13735.56	217.265010	186.1	false
13C5-PFHxA	318.0 / 273.0	1.86	73416.20	221.655114	552.9	false
13C4-PFHpA	367.0 / 322.0	2.27	87867.93	231.579170	637.8	false
13C8-PFOA	421.0 / 376.0	2.68	98375.24	221.853291	1224.5	false
13C9-PFNA	472.0 / 427.0	3.08	100066.14	225.819827	1270.7	false
13C6-PFDA	519.0 / 474.0	3.44	105326.20	263.909639	1105.8	false
13C7-PFUnA	570.0 / 525.0	3.76	90463.92	251.978404	831.2	false
13C2-PFTeDA	715.0 / 670.0	4.52	69996.19	236.553863	1703.6	false
13C3-PFBS	302.0 / 99.0	1.53	32522.06	201.464756	447.4	false
13C3-PFHxS	402.0 / 99.0	2.29	31270.34	227.648275	317.9	false
13C8-PFOS	507.0 / 99.0	3.08	31051.49	207.009441	205.3	false

Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:53:10	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.04	95045.98	241.076846	778.3	false
d3-MeFOSAA	573.0 / 419.0	3.59	12862.66	213.769741	148.9	false
d5-EtFOSAA	589.0 / 419.0	3.75	12918.68	217.108349	154.2	false
13C5-PFHxA	318.0 / 273.0	1.85	71931.59	249.256787	554.0	false
13C4-PFHpA	367.0 / 322.0	2.26	77901.07	235.642712	669.7	false
13C8-PFOA	421.0 / 376.0	2.68	97732.13	252.964122	252.7	false
13C9-PFNA	472.0 / 427.0	3.07	99820.89	258.545994	902.0	false
13C6-PFDA	519.0 / 474.0	3.43	102777.24	250.001875	1109.4	false
13C7-PFUnA	570.0 / 525.0	3.75	94272.98	254.919240	803.7	false
13C2-PFTeDA	715.0 / 670.0	4.51	71702.20	235.242401	1730.5	false
13C3-PFBS	302.0 / 99.0	1.53	31585.75	207.886932	423.2	false
13C3-PFHxS	402.0 / 99.0	2.29	29850.69	230.887861	263.5	false
13C8-PFOS	507.0 / 99.0	3.07	31633.53	224.063094	187.5	false

Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:04:02	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.04	90879.22	255.264190	985.2	false
d3-MeFOSAA	573.0 / 419.0	3.59	12983.14	252.615050	149.6	false
d5-EtFOSAA	589.0 / 419.0	3.75	13863.04	272.760090	133.7	false
13C5-PFHxA	318.0 / 273.0	1.85	70891.68	251.032853	628.7	false
13C4-PFHpA	367.0 / 322.0	2.27	84554.23	261.368863	779.4	false
13C8-PFOA	421.0 / 376.0	2.68	101523.55	268.532179	935.4	false
13C9-PFNA	472.0 / 427.0	3.07	96847.78	256.338617	722.2	false
13C6-PFDA	519.0 / 474.0	3.43	100026.07	269.440613	1003.8	false
13C7-PFUnA	570.0 / 525.0	3.75	90151.97	269.956726	655.8	false
13C2-PFTeDA	715.0 / 670.0	4.51	72633.14	263.889130	2454.3	false
13C3-PFBS	302.0 / 99.0	1.53	30464.38	234.742862	497.8	false
13C3-PFHxS	402.0 / 99.0	2.29	27827.36	251.989656	303.9	false
13C8-PFOS	507.0 / 99.0	3.07	31688.74	262.779624	246.4	false

Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:14:55	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.04	66967.27	247.941472	754.4	false
d3-MeFOSAA	573.0 / 419.0	3.59	11117.37	318.354205	122.9	false
d5-EtFOSAA	589.0 / 419.0	3.76	9250.34	267.860895	107.7	false
13C5-PFHxA	318.0 / 273.0	1.86	49495.48	258.795523	404.5	false
13C4-PFHpA	367.0 / 322.0	2.27	59905.78	273.428147	651.6	false
13C8-PFOA	421.0 / 376.0	2.68	73761.29	288.080586	2057.2	false
13C9-PFNA	472.0 / 427.0	3.07	73558.43	287.483414	31949.0	false
13C6-PFDA	519.0 / 474.0	3.43	72445.26	257.229727	1529.3	false
13C7-PFUnA	570.0 / 525.0	3.75	63777.95	251.739175	547.1	false
13C2-PFTeDA	715.0 / 670.0	4.51	49420.04	236.674286	2074.2	false
13C3-PFBS	302.0 / 99.0	1.53	22469.88	254.817953	483.1	false
13C3-PFHxS	402.0 / 99.0	2.29	18072.30	240.853778	218.1	false
13C8-PFOS	507.0 / 99.0	3.07	23795.31	290.407066	237.9	false

Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:25:46	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.04	82269.68	250.744652	587.8	false
d3-MeFOSAA	573.0 / 419.0	3.59	10447.03	204.624051	78.7	false
d5-EtFOSAA	589.0 / 419.0	3.75	13502.45	267.435711	136.8	false
13C5-PFHxA	318.0 / 273.0	1.85	65361.22	266.740062	685.9	false
13C4-PFHpA	367.0 / 322.0	2.26	70683.54	251.808059	682.3	false
13C8-PFOA	421.0 / 376.0	2.68	82157.06	250.442041	2057.7	false
13C9-PFNA	472.0 / 427.0	3.07	80233.40	244.744176	793.0	false
13C6-PFDA	519.0 / 474.0	3.43	81943.82	239.514932	599.5	false
13C7-PFUnA	570.0 / 525.0	3.75	78220.57	254.159559	689.4	false
13C2-PFTeDA	715.0 / 670.0	4.50	65424.80	257.926310	1302.4	false
13C3-PFBS	302.0 / 99.0	1.53	30541.29	236.903716	448.3	false
13C3-PFHxS	402.0 / 99.0	2.28	23974.70	218.548735	240.0	false
13C8-PFOS	507.0 / 99.0	3.07	26065.35	217.587916	194.7	false

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:36:39	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	107500.96	258.000638	595.9	false
d3-MeFOSAA	573.0 / 419.0	3.59	15435.54	274.405644	92.9	false
d5-EtFOSAA	589.0 / 419.0	3.75	14327.85	257.569944	130.3	false
13C5-PFHxA	318.0 / 273.0	1.85	77679.84	252.519661	624.3	false
13C4-PFHpA	367.0 / 322.0	2.26	86750.18	246.173049	622.1	false
13C8-PFOA	421.0 / 376.0	2.67	89831.75	218.127781	5566.9	false
13C9-PFNA	472.0 / 427.0	3.07	93450.14	227.067973	568.7	false
13C6-PFDA	519.0 / 474.0	3.42	95542.93	219.903214	782.8	false
13C7-PFUnA	570.0 / 525.0	3.75	84908.56	217.246897	1598.0	false
13C2-PFTeDA	715.0 / 670.0	4.50	86882.78	269.714011	1330.5	false
13C3-PFBS	302.0 / 99.0	1.53	36601.19	257.683780	787.3	false
13C3-PFHxS	402.0 / 99.0	2.28	30103.83	249.071695	243.6	false
13C8-PFOS	507.0 / 99.0	3.06	30838.45	233.652860	229.0	false

Sample Name	KA86	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:29:24	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS 1	298.9 / 80.0	1.54	34138.78	118.242850	78.9	true
PFBS 2	298.9 / 99.0	1.84	14378.40	127.941924	76.1	false
PFHxA 1	313.0 / 269.0	1.85	27291.71	103.436543	7.5	false
PFHxA 2	313.0 / 119.0	1.85	2405.00	94.090202	5.9	false
PFHpA 1	363.0 / 319.0	2.26	25380.62	105.076110	24.2	false
PFHpA 2	363.0 / 169.0	2.25	470.03	99.234762	14.9	false
PFHxS 1	399.0 / 80.0	2.28	42621.73	108.237125	79.3	false
PFHxS 2	399.0 / 99.0	2.28	11432.38	104.699018	76.3	false
PFOA 1	413.0 / 369.0	2.67	39394.19	103.059565	63.9	false
PFOA 2	413.0 / 169.0	2.67	2146.19	97.339733	48.1	false
PFNA 1	463.0 / 419.0	3.06	37355.99	96.157405	81.9	false
PFNA 2	463.0 / 219.0	3.06	13657.34	102.468768	142.8	false
PFOS 1	499.0 / 80.0	3.06	64583.06	103.769423	70.2	false
PFOS 2	499.0 / 99.0	3.07	12227.79	116.579914	103.3	false
PFDA 1	513.0 / 469.0	3.41	40640.63	93.212142	128.4	false
PFDA 2	513.0 / 219.0	3.42	2464.41	120.997412	63.0	true
PFUnA 1	563.0 / 519.0	3.74	41609.93	115.774594	112.7	false
PFUnA 2	563.0 / 269.0	3.74	1840.45	102.737163	45.1	false
PFDoA 1	613.0 / 569.0	4.02	37957.30	95.403570	150.8	false
PFDoA 2	613.0 / 319.0	4.02	6868.66	104.404315	118.2	false
PFTTrDA 1	663.0 / 619.0	4.27	33563.78	81.240003	256.8	false
PFTTrDA 2	663.0 / 169.0	4.27	2291.73	70.767758	100.8	true
PFTeDA 1	713.0 / 669.0	4.48	34185.97	92.980422	416.4	false
PFTeDA 2	713.0 / 169.0	4.48	1942.05	83.119412	147.1	false
NMeFOSAA 1	570.0 / 419.0	3.57	7093.35	112.720731	130.4	false
NMeFOSAA 2	570.0 / 512.0	3.58	4375.07	109.027906	115.3	false
NEtFOSAA 1	584.0 / 419.0	3.73	6664.21	116.464062	130.6	false
NEtFOSAA 2	584.0 / 483.0	3.79	535.23	104.838624	29.0	false

Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:40:16	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS 1	298.9 / 80.0	1.53	84560.15	252.515531	150.9	false
PFBS 2	298.9 / 99.0	1.53	26644.45	234.849528	122.1	false
PFHxA 1	313.0 / 269.0	1.85	70613.07	265.363796	18.0	false
PFHxA 2	313.0 / 119.0	1.85	6024.39	278.935665	12.6	false
PFHpA 1	363.0 / 319.0	2.26	69746.80	268.383904	55.2	false
PFHpA 2	363.0 / 169.0	2.26	1093.58	207.752804	29.4	false
PFHxS 1	399.0 / 80.0	2.28	102954.90	272.323086	138.8	false
PFHxS 2	399.0 / 99.0	2.28	31552.43	294.347378	194.5	false
PFOA 1	413.0 / 369.0	2.67	107472.81	259.712734	127.2	false
PFOA 2	413.0 / 169.0	2.67	6634.37	263.764801	93.9	false
PFNA 1	463.0 / 419.0	3.06	97295.99	249.031439	142.5	false
PFNA 2	463.0 / 219.0	3.06	32118.11	252.395569	172.2	false
PFOS 1	499.0 / 80.0	3.06	156565.44	257.277249	122.1	false
PFOS 2	499.0 / 99.0	3.06	27506.35	259.917357	230.2	false
PFDA 1	513.0 / 469.0	3.42	119110.85	264.139879	247.9	false
PFDA 2	513.0 / 219.0	3.42	4747.70	227.131528	95.4	false
PFUnA 1	563.0 / 519.0	3.74	118472.48	263.442924	167.5	false
PFUnA 2	563.0 / 269.0	3.74	5720.51	253.560608	76.4	false
PFDoA 1	613.0 / 569.0	4.02	103661.78	261.500465	224.3	false
PFDoA 2	613.0 / 319.0	4.02	16847.96	259.108140	196.1	false
PFTrDA 1	663.0 / 619.0	4.26	88771.86	255.639239	387.1	false
PFTrDA 2	663.0 / 169.0	4.26	6093.62	259.515453	180.7	false
PFTeDA 1	713.0 / 669.0	4.48	93497.24	263.837058	589.0	false
PFTeDA 2	713.0 / 169.0	4.48	5183.06	281.830474	329.9	false
NMeFOSAA 1	570.0 / 419.0	3.57	16629.54	236.848965	189.6	false
NMeFOSAA 2	570.0 / 512.0	3.57	9513.98	231.562191	181.4	false
NEtFOSAA 1	584.0 / 419.0	3.73	18764.54	283.951479	317.0	false
NEtFOSAA 2	584.0 / 483.0	3.73	1175.36	248.003138	41.6	false

Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:51:08	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS 1	298.9 / 80.0	1.53	172126.38	463.842650	272.2	false
PFBS 2	298.9 / 99.0	1.53	51266.78	436.780354	174.3	false
PFHxA 1	313.0 / 269.0	1.85	134965.47	473.609923	28.2	false
PFHxA 2	313.0 / 119.0	1.84	10860.16	490.077726	19.9	false
PFHpA 1	363.0 / 319.0	2.26	127692.01	469.034853	72.3	false
PFHpA 2	363.0 / 169.0	2.26	3188.19	570.051877	59.0	false
PFHxS 1	399.0 / 80.0	2.28	194888.51	471.051343	203.4	false
PFHxS 2	399.0 / 99.0	2.28	52242.38	441.703024	238.2	false
PFOA 1	413.0 / 369.0	2.66	196907.45	464.403086	187.3	false
PFOA 2	413.0 / 169.0	2.67	12823.00	490.273598	166.6	false
PFNA 1	463.0 / 419.0	3.06	191286.46	488.087483	243.0	false
PFNA 2	463.0 / 219.0	3.06	58567.23	468.306817	213.4	false
PFOS 1	499.0 / 80.0	3.06	287652.69	459.528466	148.7	false
PFOS 2	499.0 / 99.0	3.06	50259.74	459.286260	277.2	false
PFDA 1	513.0 / 469.0	3.41	222072.24	494.075704	324.3	false
PFDA 2	513.0 / 219.0	3.41	9324.40	463.377769	183.1	false
PFUnA 1	563.0 / 519.0	3.74	214244.17	454.446863	207.2	false
PFUnA 2	563.0 / 269.0	3.73	11352.09	479.177876	169.4	false
PFDoA 1	613.0 / 569.0	4.02	192989.46	500.253433	274.5	false
PFDoA 2	613.0 / 319.0	4.02	30265.73	483.151548	231.7	false
PFTrDA 1	663.0 / 619.0	4.26	176829.31	522.325434	416.4	false
PFTrDA 2	663.0 / 169.0	4.26	11943.61	537.266313	247.2	false
PFTeDA 1	713.0 / 669.0	4.48	175899.71	488.990341	770.6	false
PFTeDA 2	713.0 / 169.0	4.48	8987.37	500.749052	403.2	false
NMeFOSAA 1	570.0 / 419.0	3.57	33689.20	449.839076	370.8	false
NMeFOSAA 2	570.0 / 512.0	3.57	18127.64	431.662499	249.8	false
NEtFOSAA 1	584.0 / 419.0	3.73	32694.89	427.149860	359.1	false
NEtFOSAA 2	584.0 / 483.0	3.73	2205.42	422.136515	139.7	false

Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:02:00	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS 1	298.9 / 80.0	1.53	364472.65	962.352090	414.7	false
PFBS 2	298.9 / 99.0	1.53	109568.30	955.659161	397.9	false
PFHxA 1	313.0 / 269.0	1.85	277679.62	974.984492	40.1	false
PFHxA 2	313.0 / 119.0	1.84	21296.13	991.873026	30.2	false
PFHpA 1	363.0 / 319.0	2.25	258427.56	961.786160	101.5	false
PFHpA 2	363.0 / 169.0	2.26	5529.91	996.510414	74.9	false
PFHxS 1	399.0 / 80.0	2.28	386078.56	977.033184	198.2	false
PFHxS 2	399.0 / 99.0	2.28	112298.01	989.614030	299.7	false
PFOA 1	413.0 / 369.0	2.66	417670.18	1032.344173	299.0	false
PFOA 2	413.0 / 169.0	2.66	26411.90	1047.963770	249.6	false
PFNA 1	463.0 / 419.0	3.06	400492.72	1048.447832	330.5	false
PFNA 2	463.0 / 219.0	3.06	124066.55	1035.566728	360.0	false
PFOS 1	499.0 / 80.0	3.06	591632.53	997.260536	188.5	false
PFOS 2	499.0 / 99.0	3.06	85748.28	820.322992	494.1	false
PFDA 1	513.0 / 469.0	3.41	455442.89	1020.809243	458.8	false
PFDA 2	513.0 / 219.0	3.42	19109.90	972.688339	235.2	false
PFUnA 1	563.0 / 519.0	3.74	446649.17	921.368543	287.0	false
PFUnA 2	563.0 / 269.0	3.74	24865.98	1020.878941	216.0	false
PFDoA 1	613.0 / 569.0	4.02	387124.56	963.898635	387.8	false
PFDoA 2	613.0 / 319.0	4.02	59609.23	920.650141	361.8	false
PFTrDA 1	663.0 / 619.0	4.26	336133.81	1015.089313	546.8	false
PFTrDA 2	663.0 / 169.0	4.26	22556.73	1052.773614	323.3	false
PFTeDA 1	713.0 / 669.0	4.48	361028.65	1010.740241	881.1	false
PFTeDA 2	713.0 / 169.0	4.47	17174.95	991.919167	640.3	false
NMeFOSAA 1	570.0 / 419.0	3.57	61930.63	996.970463	597.1	false
NMeFOSAA 2	570.0 / 512.0	3.57	36581.14	1092.591022	413.3	false
NEtFOSAA 1	584.0 / 419.0	3.73	66734.21	868.892933	465.2	false
NEtFOSAA 2	584.0 / 483.0	3.73	5247.62	1048.924795	196.5	false

Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:12:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS 1	298.9 / 80.0	1.53	915811.86	2388.436582	718.8	false
PFBS 2	298.9 / 99.0	1.53	279741.02	2467.152233	589.1	false
PFHxA 1	313.0 / 269.0	1.85	707141.13	2523.702577	67.8	false
PFHxA 2	313.0 / 119.0	1.85	51152.96	2468.194621	58.4	false
PFHpA 1	363.0 / 319.0	2.26	670916.18	2432.324450	163.6	false
PFHpA 2	363.0 / 169.0	2.26	14856.71	2598.436082	163.1	false
PFHxS 1	399.0 / 80.0	2.28	1020506.95	2265.053300	433.5	false
PFHxS 2	399.0 / 99.0	2.28	294788.33	2272.262593	574.9	false
PFOA 1	413.0 / 369.0	2.66	1022995.94	2408.845401	477.3	false
PFOA 2	413.0 / 169.0	2.66	62678.48	2358.191004	324.5	false
PFNA 1	463.0 / 419.0	3.06	991791.35	2536.519181	565.7	false
PFNA 2	463.0 / 219.0	3.06	299437.20	2461.192991	546.7	false
PFOS 1	499.0 / 80.0	3.06	1544192.47	2474.021804	351.8	false
PFOS 2	499.0 / 99.0	3.06	278864.36	2543.792355	679.9	false
PFDA 1	513.0 / 469.0	3.41	1141052.73	2453.490287	666.0	false
PFDA 2	513.0 / 219.0	3.41	49668.14	2448.177670	329.4	false
PFUnA 1	563.0 / 519.0	3.74	1129527.81	2404.546580	412.0	false
PFUnA 2	563.0 / 269.0	3.74	58671.16	2487.420630	377.4	false
PFDoA 1	613.0 / 569.0	4.01	1015550.65	2516.797284	576.4	false
PFDoA 2	613.0 / 319.0	4.01	161070.23	2491.211226	419.5	false
PFTrDA 1	663.0 / 619.0	4.26	900044.60	2638.115881	829.0	false
PFTrDA 2	663.0 / 169.0	4.26	59126.37	2703.951073	526.3	false
PFTeDA 1	713.0 / 669.0	4.47	925537.29	2483.370637	1672.5	false
PFTeDA 2	713.0 / 169.0	4.47	45647.54	2580.229288	988.7	false
NMeFOSAA 1	570.0 / 419.0	3.57	170104.48	2455.872434	787.6	false
NMeFOSAA 2	570.0 / 512.0	3.57	90239.90	2443.220526	483.3	false
NEtFOSAA 1	584.0 / 419.0	3.73	175581.20	2540.503274	713.5	false
NEtFOSAA 2	584.0 / 483.0	3.73	11654.69	2659.178334	588.2	false

Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:23:43	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS 1	298.9 / 80.0	1.54	3595997.48	10133.836648	1674.6	false
PFBS 2	298.9 / 99.0	1.54	1061182.09	10230.920973	1478.2	false
PFHxA 1	313.0 / 269.0	1.85	2665428.43	10497.477669	127.0	false
PFHxA 2	313.0 / 119.0	1.85	199062.27	10710.651070	109.4	false
PFHpA 1	363.0 / 319.0	2.26	2374275.26	9944.958168	350.2	false
PFHpA 2	363.0 / 169.0	2.26	50242.88	10135.037262	289.3	false
PFHxS 1	399.0 / 80.0	2.28	3687517.19	10863.782462	865.5	false
PFHxS 2	399.0 / 99.0	2.28	1045839.20	10683.029937	1167.4	false
PFOA 1	413.0 / 369.0	2.67	3669290.41	10035.663035	993.9	false
PFOA 2	413.0 / 169.0	2.67	227223.41	9902.654900	675.6	false
PFNA 1	463.0 / 419.0	3.06	3426159.61	10129.637799	937.6	false
PFNA 2	463.0 / 219.0	3.06	1063334.16	10151.380563	962.3	false
PFOS 1	499.0 / 80.0	3.06	5505778.74	10487.269169	463.4	false
PFOS 2	499.0 / 99.0	3.06	979638.45	10612.278502	867.7	false
PFDA 1	513.0 / 469.0	3.42	3942021.70	10394.973207	1035.9	false
PFDA 2	513.0 / 219.0	3.42	163682.02	9938.069190	822.4	false
PFUnA 1	563.0 / 519.0	3.74	3834987.35	9737.608647	744.5	false
PFUnA 2	563.0 / 269.0	3.74	191352.10	9677.435016	558.1	false
PFDoA 1	613.0 / 569.0	4.02	3616150.66	10564.613909	807.6	false
PFDoA 2	613.0 / 319.0	4.02	581637.28	10630.256598	596.8	false
PFTrDA 1	663.0 / 619.0	4.26	3268800.34	11163.539565	1186.1	false
PFTrDA 2	663.0 / 169.0	4.26	208812.82	11181.753016	816.4	false
PFTeDA 1	713.0 / 669.0	4.48	3424138.62	10645.486031	1835.2	false
PFTeDA 2	713.0 / 169.0	4.47	157408.52	10407.347295	1386.4	false
NMeFOSAA 1	570.0 / 419.0	3.57	601833.32	10830.236610	967.2	false
NMeFOSAA 2	570.0 / 512.0	3.57	322013.89	10963.422980	1030.0	false
NEtFOSAA 1	584.0 / 419.0	3.73	580697.83	9090.151574	1018.3	false
NEtFOSAA 2	584.0 / 483.0	3.73	40846.50	10187.722278	671.2	false

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:34:34	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS 1	298.9 / 80.0	1.53	7776661.58	20374.273647	2802.3	false
PFBS 2	298.9 / 99.0	1.53	2254063.36	20240.195826	2213.2	false
PFHxA 1	313.0 / 269.0	1.85	5429544.24	19854.924999	217.9	false
PFHxA 2	313.0 / 119.0	1.85	392970.60	19659.677689	160.7	false
PFHpA 1	363.0 / 319.0	2.26	4847448.10	20168.436354	453.7	false
PFHpA 2	363.0 / 169.0	2.26	98559.91	19742.976800	375.1	false
PFHxS 1	399.0 / 80.0	2.28	7103339.83	19736.019502	805.6	false
PFHxS 2	399.0 / 99.0	2.28	2066926.60	19907.844020	1424.1	false
PFOA 1	413.0 / 369.0	2.67	6796547.31	20045.972006	1027.9	false
PFOA 2	413.0 / 169.0	2.66	429781.36	20189.812195	868.0	false
PFNA 1	463.0 / 419.0	3.06	6857760.52	19802.118861	1399.3	false
PFNA 2	463.0 / 219.0	3.06	2130502.77	19878.688563	1231.5	false
PFOS 1	499.0 / 80.0	3.06	10618243.71	19570.873353	567.8	false
PFOS 2	499.0 / 99.0	3.06	1864179.88	19537.822619	911.0	false
PFDA 1	513.0 / 469.0	3.42	7256756.54	19629.299538	1036.3	false
PFDA 2	513.0 / 219.0	3.42	323740.44	20179.558092	561.8	false
PFUnA 1	563.0 / 519.0	3.73	7883521.82	20452.811849	792.7	false
PFUnA 2	563.0 / 269.0	3.73	393404.85	20328.789765	628.5	false
PFDoA 1	613.0 / 569.0	4.01	7377871.95	19447.532704	882.5	false
PFDoA 2	613.0 / 319.0	4.01	1179835.66	19461.218032	726.6	false
PFTrDA 1	663.0 / 619.0	4.26	6554803.40	18674.050566	1118.5	false
PFTrDA 2	663.0 / 169.0	4.26	414854.39	18543.972773	959.2	false
PFTeDA 1	713.0 / 669.0	4.47	7471277.79	19364.595269	1952.4	false
PFTeDA 2	713.0 / 169.0	4.47	353296.79	19504.805312	1614.5	false
NMeFOSAA 1	570.0 / 419.0	3.57	1224746.58	19267.511721	1879.1	false
NMeFOSAA 2	570.0 / 512.0	3.57	640334.78	19078.512876	997.9	false
NEtFOSAA 1	584.0 / 419.0	3.73	1166481.40	21022.886817	1216.6	false
NEtFOSAA 2	584.0 / 483.0	3.73	68383.04	19679.196315	928.3	false

Sample Name	KA86	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:29:24	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	87134.88	222.993102	807.4	false
d3-MeFOSAA	573.0 / 419.0	3.56	12450.90	206.505940	161.6	false
d5-EtFOSAA	589.0 / 419.0	3.72	17690.30	269.203065	186.0	false
13C5-PFHxA	318.0 / 273.0	1.84	60839.35	225.684604	546.2	false
13C4-PFHpA	367.0 / 322.0	2.25	69704.66	235.383017	578.3	false
13C8-PFOA	421.0 / 376.0	2.66	90480.96	239.295265	129525.4	false
13C9-PFNA	472.0 / 427.0	3.05	87743.93	229.879110	881.8	false
13C6-PFDA	519.0 / 474.0	3.40	95919.39	243.534625	886.1	false
13C7-PFUnA	570.0 / 525.0	3.72	92354.90	230.679287	926.7	false
13C2-PFTeDA	715.0 / 670.0	4.48	70956.42	228.114321	1652.1	false
13C3-PFBS	302.0 / 99.0	1.52	26020.43	209.134662	390.7	false
13C3-PFHxS	402.0 / 99.0	2.27	26080.02	231.209691	305.6	false
13C8-PFOS	507.0 / 99.0	3.05	26143.42	219.859192	220.2	false

Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:40:16	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	101652.85	232.144197	1312.0	false
d3-MeFOSAA	573.0 / 419.0	3.56	15654.06	273.020949	180.7	false
d5-EtFOSAA	589.0 / 419.0	3.72	17361.49	277.823722	196.6	false
13C5-PFHxA	318.0 / 273.0	1.84	65830.12	229.042579	744.8	false
13C4-PFHpA	367.0 / 322.0	2.25	76136.52	241.146230	550.9	false
13C8-PFOA	421.0 / 376.0	2.66	100736.31	249.883229	1109.6	false
13C9-PFNA	472.0 / 427.0	3.05	98370.95	241.726052	1066.6	false
13C6-PFDA	519.0 / 474.0	3.40	107844.80	244.338776	736.0	false
13C7-PFUnA	570.0 / 525.0	3.72	111688.97	248.941819	566.4	false
13C2-PFTeDA	715.0 / 670.0	4.47	78363.68	224.809448	1367.2	false
13C3-PFBS	302.0 / 99.0	1.52	28333.04	239.465007	454.3	false
13C3-PFHxS	402.0 / 99.0	2.27	26608.05	248.055330	301.3	false
13C8-PFOS	507.0 / 99.0	3.05	28514.34	252.163967	219.1	false

Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:51:08	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	103789.33	239.352683	569.8	false
d3-MeFOSAA	573.0 / 419.0	3.56	17537.70	251.259049	215.6	false
d5-EtFOSAA	589.0 / 419.0	3.72	18774.43	246.790864	185.2	false
13C5-PFHxA	318.0 / 273.0	1.84	71972.42	249.114229	561.7	false
13C4-PFHpA	367.0 / 322.0	2.25	80095.37	252.368870	1060.5	false
13C8-PFOA	421.0 / 376.0	2.65	104073.60	256.822183	1720.7	false
13C9-PFNA	472.0 / 427.0	3.04	102293.18	250.059960	991.7	false
13C6-PFDA	519.0 / 474.0	3.40	109923.03	251.494903	999.0	false
13C7-PFUnA	570.0 / 525.0	3.72	115807.78	260.658926	1086.9	false
13C2-PFTeDA	715.0 / 670.0	4.47	82562.43	239.182575	1683.4	false
13C3-PFBS	302.0 / 99.0	1.51	30644.87	212.758403	455.5	false
13C3-PFHxS	402.0 / 99.0	2.27	29016.34	222.207278	367.0	false
13C8-PFOS	507.0 / 99.0	3.04	30765.09	223.489878	235.0	false

Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:02:00	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	110922.95	272.146343	1122.7	false
d3-MeFOSAA	573.0 / 419.0	3.56	15605.82	244.678915	158.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	19124.16	275.109507	156.3	false
13C5-PFHxA	318.0 / 273.0	1.83	72928.84	250.358652	585.7	false
13C4-PFHpA	367.0 / 322.0	2.24	79279.92	247.755009	566.5	false
13C8-PFOA	421.0 / 376.0	2.65	99886.80	244.473023	1061.9	false
13C9-PFNA	472.0 / 427.0	3.04	101780.06	246.769249	2533.0	false
13C6-PFDA	519.0 / 474.0	3.40	110594.78	269.197256	997.1	false
13C7-PFUnA	570.0 / 525.0	3.72	118179.86	282.991780	649.1	false
13C2-PFTeDA	715.0 / 670.0	4.47	83907.10	258.607584	1939.8	false
13C3-PFBS	302.0 / 99.0	1.51	30818.90	234.156867	514.9	false
13C3-PFHxS	402.0 / 99.0	2.27	27834.09	233.267050	394.3	false
13C8-PFOS	507.0 / 99.0	3.04	29861.40	237.394498	231.4	false

Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:12:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	113451.22	256.275982	1078.1	false
d3-MeFOSAA	573.0 / 419.0	3.56	16771.19	253.635275	143.8	false
d5-EtFOSAA	589.0 / 419.0	3.72	16676.11	231.394913	178.6	false
13C5-PFHxA	318.0 / 273.0	1.84	72332.04	264.770246	750.7	false
13C4-PFHpA	367.0 / 322.0	2.24	81521.67	271.648557	991.2	false
13C8-PFOA	421.0 / 376.0	2.65	105135.49	274.376736	213.7	false
13C9-PFNA	472.0 / 427.0	3.05	105304.08	272.237952	972.3	false
13C6-PFDA	519.0 / 474.0	3.40	116147.20	260.292954	886.1	false
13C7-PFUnA	570.0 / 525.0	3.72	113999.77	251.334443	588.2	false
13C2-PFTeDA	715.0 / 670.0	4.47	88706.06	251.717559	1521.4	false
13C3-PFBS	302.0 / 99.0	1.51	30950.40	226.825509	532.0	false
13C3-PFHxS	402.0 / 99.0	2.27	32036.92	258.978090	494.0	false
13C8-PFOS	507.0 / 99.0	3.04	31999.66	245.381403	200.3	false

Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:23:43	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	97065.24	262.051782	1304.8	false
d3-MeFOSAA	573.0 / 419.0	3.56	13806.79	251.003804	97.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	14936.63	249.145681	171.5	false
13C5-PFHxA	318.0 / 273.0	1.84	65801.13	264.535782	571.0	false
13C4-PFHpA	367.0 / 322.0	2.25	70617.48	258.439710	652.0	false
13C8-PFOA	421.0 / 376.0	2.66	90656.16	259.841156	1113.0	false
13C9-PFNA	472.0 / 427.0	3.05	91611.88	260.116514	934.1	false
13C6-PFDA	519.0 / 474.0	3.40	95095.08	254.704342	668.8	false
13C7-PFUnA	570.0 / 525.0	3.72	95374.73	251.307802	609.5	false
13C2-PFTeDA	715.0 / 670.0	4.47	77093.72	261.459132	1668.1	false
13C3-PFBS	302.0 / 99.0	1.52	28524.54	251.296193	563.6	false
13C3-PFHxS	402.0 / 99.0	2.27	24239.86	235.550467	278.0	false
13C8-PFOS	507.0 / 99.0	3.04	27502.89	253.522421	233.1	false

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:34:34	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	107713.65	265.035911	935.7	false
d3-MeFOSAA	573.0 / 419.0	3.56	16198.19	269.896069	101.9	false
d5-EtFOSAA	589.0 / 419.0	3.72	13117.20	200.532248	160.9	false
13C5-PFHxA	318.0 / 273.0	1.84	70908.58	266.493908	518.8	false
13C4-PFHpA	367.0 / 322.0	2.24	71102.33	243.258608	891.4	false
13C8-PFOA	421.0 / 376.0	2.66	84087.10	225.308408	1829.7	false
13C9-PFNA	472.0 / 427.0	3.05	93888.84	249.211163	952.7	false
13C6-PFDA	519.0 / 474.0	3.40	92759.58	226.437143	783.8	false
13C7-PFUnA	570.0 / 525.0	3.72	93310.68	224.085944	790.5	false
13C2-PFTeDA	715.0 / 670.0	4.47	92562.83	286.109380	1936.3	false
13C3-PFBS	302.0 / 99.0	1.52	31223.82	252.113359	460.5	true
13C3-PFHxS	402.0 / 99.0	2.27	25401.41	226.232094	375.8	false
13C8-PFOS	507.0 / 99.0	3.05	28755.18	242.938641	214.9	false

Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:42:17	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.310	0.304	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.080	0.074	ü
PFHpA_1	363.0 / 319.0	2.28	PFHpA			
PFHpA_2	363.0 / 169.0	2.28	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.290	0.289	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.69	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.09	PFNA			
PFNA_2	463.0 / 219.0	3.10	PFNA	0.310	0.304	ü
PFOS_1	499.0 / 80.0	3.09	PFOS			
PFOS_2	499.0 / 99.0	3.09	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.45	PFDA			
PFDA_2	513.0 / 219.0	3.45	PFDA	0.050	0.045	ü
PFUnA_1	563.0 / 519.0	3.78	PFUnA			
PFUnA_2	563.0 / 269.0	3.77	PFUnA	0.060	0.056	ü
PFDaA_1	613.0 / 569.0	4.06	PFDaA			
PFDaA_2	613.0 / 319.0	4.06	PFDaA	0.150	0.156	ü
PFTrDA_1	663.0 / 619.0	4.31	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.31	PFTrDA	0.070	0.064	ü
PFTeDA_1	713.0 / 669.0	4.53	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.53	PFTeDA	0.040	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.61	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.61	NMeFOSAA	0.580	0.557	ü
NEtFOSAA_1	584.0 / 419.0	3.77	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.76	NEtFOSAA	0.080	0.068	ü

Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:53:10	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.320	0.304	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.080	0.074	ü
PFHpA_1	363.0 / 319.0	2.28	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.290	0.289	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.69	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.09	PFNA			
PFNA_2	463.0 / 219.0	3.09	PFNA	0.310	0.304	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.09	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	3.44	PFDA	0.050	0.045	ü
PFUnA_1	563.0 / 519.0	3.77	PFUnA			
PFUnA_2	563.0 / 269.0	3.77	PFUnA	0.060	0.056	ü
PFDaA_1	613.0 / 569.0	4.06	PFDaA			
PFDaA_2	613.0 / 319.0	4.05	PFDaA	0.160	0.156	ü
PFTrDA_1	663.0 / 619.0	4.30	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.30	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.52	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.52	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.60	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.60	NMeFOSAA	0.580	0.557	ü
NEtFOSAA_1	584.0 / 419.0	3.77	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.76	NEtFOSAA	0.070	0.068	ü

Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:04:02	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.290	0.304	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	2.28	PFHpA			
PFHpA_2	363.0 / 169.0	2.28	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.290	0.289	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.69	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.09	PFNA			
PFNA_2	463.0 / 219.0	3.09	PFNA	0.310	0.304	ü
PFOS_1	499.0 / 80.0	3.09	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	3.44	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.77	PFUnA			
PFUnA_2	563.0 / 269.0	3.77	PFUnA	0.050	0.056	ü
PFDaA_1	613.0 / 569.0	4.05	PFDaA			
PFDaA_2	613.0 / 319.0	4.05	PFDaA	0.150	0.156	ü
PFTTrDA_1	663.0 / 619.0	4.30	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.30	PFTTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.52	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.51	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.60	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.60	NMeFOSAA	0.520	0.557	ü
NEtFOSAA_1	584.0 / 419.0	3.76	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.76	NEtFOSAA	0.070	0.068	ü

Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:14:55	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.300	0.304	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.080	0.074	ü
PFHpA_1	363.0 / 319.0	2.28	PFHpA			
PFHpA_2	363.0 / 169.0	2.28	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.300	0.289	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.69	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.09	PFNA			
PFNA_2	463.0 / 219.0	3.09	PFNA	0.300	0.304	ü
PFOS_1	499.0 / 80.0	3.09	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	3.44	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.77	PFUnA			
PFUnA_2	563.0 / 269.0	3.77	PFUnA	0.060	0.056	ü
PFDaA_1	613.0 / 569.0	4.05	PFDaA			
PFDaA_2	613.0 / 319.0	4.05	PFDaA	0.160	0.156	ü
PFTrDA_1	663.0 / 619.0	4.30	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.30	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.51	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.51	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.60	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.60	NMeFOSAA	0.570	0.557	ü
NEtFOSAA_1	584.0 / 419.0	3.76	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.76	NEtFOSAA	0.070	0.068	ü

Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:25:46	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.310	0.304	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.080	0.074	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.280	0.289	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.69	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.300	0.304	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	3.44	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.77	PFUnA			
PFUnA_2	563.0 / 269.0	3.76	PFUnA	0.050	0.056	ü
PFDaA_1	613.0 / 569.0	4.05	PFDaA			
PFDaA_2	613.0 / 319.0	4.05	PFDaA	0.160	0.156	ü
PFTrDA_1	663.0 / 619.0	4.29	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.29	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.51	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.51	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.60	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.60	NMeFOSAA	0.560	0.557	ü
NEtFOSAA_1	584.0 / 419.0	3.76	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.76	NEtFOSAA	0.060	0.068	ü

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:36:39	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.290	0.304	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.280	0.289	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.300	0.304	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	3.44	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	3.76	PFUnA	0.050	0.056	ü
PFDaA_1	613.0 / 569.0	4.05	PFDaA			
PFDaA_2	613.0 / 319.0	4.05	PFDaA	0.150	0.156	ü
PFTrDA_1	663.0 / 619.0	4.29	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.29	PFTrDA	0.070	0.064	ü
PFTeDA_1	713.0 / 669.0	4.51	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.51	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.59	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.59	NMeFOSAA	0.550	0.557	ü
NEtFOSAA_1	584.0 / 419.0	3.76	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.76	NEtFOSAA	0.060	0.068	ü

Sample Name	KA86	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:29:24	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.84	PFBS	0.420	0.318	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.090	0.079	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.270	0.285	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.050	0.062	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.370	0.319	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.060	0.045	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.040	0.050	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.180	0.162	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.060	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	NMeFOSAA	0.620	0.558	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.79	NEtFOSAA	0.080	0.069	ü

Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:40:16	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.320	0.318	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.090	0.079	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.310	0.285	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.062	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.330	0.319	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.050	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.060	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.570	0.558	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.060	0.069	ü

Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:51:08	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.318	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.080	0.079	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.270	0.285	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.070	0.062	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.310	0.319	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.050	0.050	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.050	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.540	0.558	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.070	0.069	ü

Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:02:00	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.318	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.080	0.079	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.285	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.062	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.310	0.319	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.140	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.060	0.050	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.150	0.162	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.590	0.558	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.080	0.069	ü

Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:12:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.310	0.318	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.079	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.285	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.062	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.300	0.319	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.050	ü
PFDaA_1	613.0 / 569.0	4.01	PFDaA			
PFDaA_2	613.0 / 319.0	4.01	PFDaA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.530	0.558	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.070	0.069	ü

Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:23:43	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.300	0.318	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.079	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.285	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.062	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.310	0.319	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.050	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.160	0.162	ü
PFTTrDA_1	663.0 / 619.0	4.26	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.26	PFTTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.540	0.558	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.070	0.069	ü

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:34:34	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.318	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.079	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.285	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.062	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.310	0.319	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.050	0.050	ü
PFDaA_1	613.0 / 569.0	4.01	PFDaA			
PFDaA_2	613.0 / 319.0	4.01	PFDaA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.520	0.558	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.060	0.069	ü

Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:42:17	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	32522.06	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	32522.06	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	73416.20	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	73416.20	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	87867.93	250.00
PFHpA_2	363.0 / 169.0	2.28	13C4-PFHpA	367.0 / 322.0	87867.93	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	30736.39	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	30736.39	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	98375.24	250.00
PFOA_2	413.0 / 169.0	2.69	13C8-PFOA	421.0 / 376.0	98375.24	250.00
PFNA_1	463.0 / 419.0	3.09	13C9-PFNA	472.0 / 427.0	100066.14	250.00
PFNA_2	463.0 / 219.0	3.10	13C9-PFNA	472.0 / 427.0	100066.14	250.00
PFOS_1	499.0 / 80.0	3.09	13C8-PFOS	507.0 / 99.0	30860.15	239.25
PFOS_2	499.0 / 99.0	3.09	13C8-PFOS	507.0 / 99.0	30860.15	239.25
PFDA_1	513.0 / 469.0	3.45	13C6-PFDA	519.0 / 474.0	105326.20	250.00
PFDA_2	513.0 / 219.0	3.45	13C6-PFDA	519.0 / 474.0	105326.20	250.00
PFOA_1	563.0 / 519.0	3.78	13C7-PFOA	570.0 / 525.0	90463.92	250.00
PFOA_2	563.0 / 269.0	3.77	13C7-PFOA	570.0 / 525.0	90463.92	250.00
PFDaA_1	613.0 / 569.0	4.06	13C2-PFDaA	615.0 / 570.0	94526.54	250.00
PFDaA_2	613.0 / 319.0	4.06	13C2-PFDaA	615.0 / 570.0	94526.54	250.00
PFTeDA_1	663.0 / 619.0	4.31	13C2-PFTeDA	715.0 / 670.0	69996.19	250.00
PFTeDA_2	663.0 / 169.0	4.31	13C2-PFTeDA	715.0 / 670.0	69996.19	250.00
PFTeDA_1	713.0 / 669.0	4.53	13C2-PFTeDA	715.0 / 670.0	69996.19	250.00
PFTeDA_2	713.0 / 169.0	4.53	13C2-PFTeDA	715.0 / 670.0	69996.19	250.00
NMeFOSAA_1	570.0 / 419.0	3.61	d3-MeFOSAA	573.0 / 419.0	14788.23	250.00
NMeFOSAA_2	570.0 / 512.0	3.61	d3-MeFOSAA	573.0 / 419.0	14788.23	250.00
NEtFOSAA_1	584.0 / 419.0	3.77	d5-EtFOSAA	589.0 / 419.0	14028.13	250.00
NEtFOSAA_2	584.0 / 483.0	3.76	d5-EtFOSAA	589.0 / 419.0	14028.13	250.00

Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:53:10	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	31585.75	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	31585.75	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	71931.59	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	71931.59	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	77901.07	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	77901.07	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	29778.24	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	29778.24	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	97732.13	250.00
PFOA_2	413.0 / 169.0	2.69	13C8-PFOA	421.0 / 376.0	97732.13	250.00
PFNA_1	463.0 / 419.0	3.09	13C9-PFNA	472.0 / 427.0	99820.89	250.00
PFNA_2	463.0 / 219.0	3.09	13C9-PFNA	472.0 / 427.0	99820.89	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	32101.03	239.25
PFOS_2	499.0 / 99.0	3.09	13C8-PFOS	507.0 / 99.0	32101.03	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	102777.24	250.00
PFDA_2	513.0 / 219.0	3.44	13C6-PFDA	519.0 / 474.0	102777.24	250.00
PFOA_1	563.0 / 519.0	3.77	13C7-PFOA	570.0 / 525.0	94272.98	250.00
PFOA_2	563.0 / 269.0	3.77	13C7-PFOA	570.0 / 525.0	94272.98	250.00
PFDaA_1	613.0 / 569.0	4.06	13C2-PFDaA	615.0 / 570.0	95045.98	250.00
PFDaA_2	613.0 / 319.0	4.05	13C2-PFDaA	615.0 / 570.0	95045.98	250.00
PFTeDA_1	663.0 / 619.0	4.30	13C2-PFTeDA	715.0 / 670.0	71702.20	250.00
PFTeDA_2	663.0 / 169.0	4.30	13C2-PFTeDA	715.0 / 670.0	71702.20	250.00
PFTeDA_1	713.0 / 669.0	4.52	13C2-PFTeDA	715.0 / 670.0	71702.20	250.00
PFTeDA_2	713.0 / 169.0	4.52	13C2-PFTeDA	715.0 / 670.0	71702.20	250.00
NMeFOSAA_1	570.0 / 419.0	3.60	d3-MeFOSAA	573.0 / 419.0	13111.00	250.00
NMeFOSAA_2	570.0 / 512.0	3.60	d3-MeFOSAA	573.0 / 419.0	13111.00	250.00
NEtFOSAA_1	584.0 / 419.0	3.77	d5-EtFOSAA	589.0 / 419.0	13176.13	250.00
NEtFOSAA_2	584.0 / 483.0	3.76	d5-EtFOSAA	589.0 / 419.0	13176.13	250.00

Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:04:02	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	30464.38	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	30464.38	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	70891.68	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	70891.68	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	84554.23	250.00
PFHpA_2	363.0 / 169.0	2.28	13C4-PFHpA	367.0 / 322.0	84554.23	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	26781.26	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	26781.26	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	101523.55	250.00
PFOA_2	413.0 / 169.0	2.69	13C8-PFOA	421.0 / 376.0	101523.55	250.00
PFNA_1	463.0 / 419.0	3.09	13C9-PFNA	472.0 / 427.0	96847.78	250.00
PFNA_2	463.0 / 219.0	3.09	13C9-PFNA	472.0 / 427.0	96847.78	250.00
PFOS_1	499.0 / 80.0	3.09	13C8-PFOS	507.0 / 99.0	31752.82	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	31752.82	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	100026.07	250.00
PFDA_2	513.0 / 219.0	3.44	13C6-PFDA	519.0 / 474.0	100026.07	250.00
PFOA_1	563.0 / 519.0	3.77	13C7-PFOA	570.0 / 525.0	90151.97	250.00
PFOA_2	563.0 / 269.0	3.77	13C7-PFOA	570.0 / 525.0	90151.97	250.00
PFOA_3	613.0 / 569.0	4.05	13C2-PFOA	615.0 / 570.0	90879.22	250.00
PFOA_4	613.0 / 319.0	4.05	13C2-PFOA	615.0 / 570.0	90879.22	250.00
PFTeDA_1	663.0 / 619.0	4.30	13C2-PFTeDA	715.0 / 670.0	72633.14	250.00
PFTeDA_2	663.0 / 169.0	4.30	13C2-PFTeDA	715.0 / 670.0	72633.14	250.00
PFTeDA_3	713.0 / 669.0	4.52	13C2-PFTeDA	715.0 / 670.0	72633.14	250.00
PFTeDA_4	713.0 / 169.0	4.51	13C2-PFTeDA	715.0 / 670.0	72633.14	250.00
NMeFOSAA_1	570.0 / 419.0	3.60	d3-MeFOSAA	573.0 / 419.0	12105.76	250.00
NMeFOSAA_2	570.0 / 512.0	3.60	d3-MeFOSAA	573.0 / 419.0	12105.76	250.00
NEtFOSAA_1	584.0 / 419.0	3.76	d5-EtFOSAA	589.0 / 419.0	13895.56	250.00
NEtFOSAA_2	584.0 / 483.0	3.76	d5-EtFOSAA	589.0 / 419.0	13895.56	250.00

Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:14:55	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	22469.88	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	22469.88	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	49495.48	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	49495.48	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	59905.78	250.00
PFHpA_2	363.0 / 169.0	2.28	13C4-PFHpA	367.0 / 322.0	59905.78	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	17438.15	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	17438.15	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	73761.29	250.00
PFOA_2	413.0 / 169.0	2.69	13C8-PFOA	421.0 / 376.0	73761.29	250.00
PFNA_1	463.0 / 419.0	3.09	13C9-PFNA	472.0 / 427.0	73558.43	250.00
PFNA_2	463.0 / 219.0	3.09	13C9-PFNA	472.0 / 427.0	73558.43	250.00
PFOS_1	499.0 / 80.0	3.09	13C8-PFOS	507.0 / 99.0	24152.88	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	24152.88	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	72445.26	250.00
PFDA_2	513.0 / 219.0	3.44	13C6-PFDA	519.0 / 474.0	72445.26	250.00
PFOA_1	563.0 / 519.0	3.77	13C7-PFOA	570.0 / 525.0	63777.95	250.00
PFOA_2	563.0 / 269.0	3.77	13C7-PFOA	570.0 / 525.0	63777.95	250.00
PFDaA_1	613.0 / 569.0	4.05	13C2-PFDaA	615.0 / 570.0	66967.27	250.00
PFDaA_2	613.0 / 319.0	4.05	13C2-PFDaA	615.0 / 570.0	66967.27	250.00
PFTeDA_1	663.0 / 619.0	4.30	13C2-PFTeDA	715.0 / 670.0	49420.04	250.00
PFTeDA_2	663.0 / 169.0	4.30	13C2-PFTeDA	715.0 / 670.0	49420.04	250.00
PFTeDA_1	713.0 / 669.0	4.51	13C2-PFTeDA	715.0 / 670.0	49420.04	250.00
PFTeDA_2	713.0 / 169.0	4.51	13C2-PFTeDA	715.0 / 670.0	49420.04	250.00
NMeFOSAA_1	570.0 / 419.0	3.60	d3-MeFOSAA	573.0 / 419.0	11174.04	250.00
NMeFOSAA_2	570.0 / 512.0	3.60	d3-MeFOSAA	573.0 / 419.0	11174.04	250.00
NEtFOSAA_1	584.0 / 419.0	3.76	d5-EtFOSAA	589.0 / 419.0	9167.90	250.00
NEtFOSAA_2	584.0 / 483.0	3.76	d5-EtFOSAA	589.0 / 419.0	9167.90	250.00

Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:25:46	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	30541.29	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	30541.29	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	65361.22	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	65361.22	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	70683.54	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	70683.54	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	23974.83	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	23974.83	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	82157.06	250.00
PFOA_2	413.0 / 169.0	2.69	13C8-PFOA	421.0 / 376.0	82157.06	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	80233.40	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	80233.40	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	26473.42	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	26473.42	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	81943.82	250.00
PFDA_2	513.0 / 219.0	3.44	13C6-PFDA	519.0 / 474.0	81943.82	250.00
PFUnA_1	563.0 / 519.0	3.77	13C7-PFUnA	570.0 / 525.0	78220.57	250.00
PFUnA_2	563.0 / 269.0	3.76	13C7-PFUnA	570.0 / 525.0	78220.57	250.00
PFDaA_1	613.0 / 569.0	4.05	13C2-PFDaA	615.0 / 570.0	82269.68	250.00
PFDaA_2	613.0 / 319.0	4.05	13C2-PFDaA	615.0 / 570.0	82269.68	250.00
PFTrDA_1	663.0 / 619.0	4.29	13C2-PFTeDA	715.0 / 670.0	65424.80	250.00
PFTrDA_2	663.0 / 169.0	4.29	13C2-PFTeDA	715.0 / 670.0	65424.80	250.00
PFTeDA_1	713.0 / 669.0	4.51	13C2-PFTeDA	715.0 / 670.0	65424.80	250.00
PFTeDA_2	713.0 / 169.0	4.51	13C2-PFTeDA	715.0 / 670.0	65424.80	250.00
NMeFOSAA_1	570.0 / 419.0	3.60	d3-MeFOSAA	573.0 / 419.0	10725.31	250.00
NMeFOSAA_2	570.0 / 512.0	3.60	d3-MeFOSAA	573.0 / 419.0	10725.31	250.00
NEtFOSAA_1	584.0 / 419.0	3.76	d5-EtFOSAA	589.0 / 419.0	14046.78	250.00
NEtFOSAA_2	584.0 / 483.0	3.76	d5-EtFOSAA	589.0 / 419.0	14046.78	250.00

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:36:39	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	36601.19	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	36601.19	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	77679.84	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	77679.84	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	86750.18	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	86750.18	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	29805.07	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	29805.07	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	89831.75	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	89831.75	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	93450.14	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	93450.14	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	31592.23	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	31592.23	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	95542.93	250.00
PFDA_2	513.0 / 219.0	3.44	13C6-PFDA	519.0 / 474.0	95542.93	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	84908.56	250.00
PFUnA_2	563.0 / 269.0	3.76	13C7-PFUnA	570.0 / 525.0	84908.56	250.00
PFDaA_1	613.0 / 569.0	4.05	13C2-PFDaA	615.0 / 570.0	107500.96	250.00
PFDaA_2	613.0 / 319.0	4.05	13C2-PFDaA	615.0 / 570.0	107500.96	250.00
PFTrDA_1	663.0 / 619.0	4.29	13C2-PFTeDA	715.0 / 670.0	86882.78	250.00
PFTrDA_2	663.0 / 169.0	4.29	13C2-PFTeDA	715.0 / 670.0	86882.78	250.00
PFTeDA_1	713.0 / 669.0	4.51	13C2-PFTeDA	715.0 / 670.0	86882.78	250.00
PFTeDA_2	713.0 / 169.0	4.51	13C2-PFTeDA	715.0 / 670.0	86882.78	250.00
NMeFOSAA_1	570.0 / 419.0	3.59	d3-MeFOSAA	573.0 / 419.0	16179.51	250.00
NMeFOSAA_2	570.0 / 512.0	3.59	d3-MeFOSAA	573.0 / 419.0	16179.51	250.00
NEtFOSAA_1	584.0 / 419.0	3.76	d5-EtFOSAA	589.0 / 419.0	15035.19	250.00
NEtFOSAA_2	584.0 / 483.0	3.76	d5-EtFOSAA	589.0 / 419.0	15035.19	250.00

Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:42:17	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.05	13C2-PFDA	515.0 / 470.0	95570.59	250.00
d3-MeFOSAA	573.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	35583.60	239.25
d5-EtFOSAA	589.0 / 419.0	3.76	13C4-PFOS	503.0 / 99.0	35583.60	239.25
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	100060.68	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	100060.68	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	100060.68	250.00
13C9-PFNA	472.0 / 427.0	3.08	13C2-PFOA	415.0 / 370.0	100060.68	250.00
13C6-PFDA	519.0 / 474.0	3.44	13C2-PFDA	515.0 / 470.0	95570.59	250.00
13C7-PFUnA	570.0 / 525.0	3.76	13C2-PFDA	515.0 / 470.0	95570.59	250.00
13C2-PFTeDA	715.0 / 670.0	4.52	13C2-PFDA	515.0 / 470.0	95570.59	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	35583.60	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	35583.60	239.25
13C8-PFOS	507.0 / 99.0	3.08	13C4-PFOS	503.0 / 99.0	35583.60	239.25

Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:53:10	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.04	13C2-PFDA	515.0 / 470.0	98445.72	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	33491.53	239.25
d5-EtFOSAA	589.0 / 419.0	3.75	13C4-PFOS	503.0 / 99.0	33491.53	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	87181.02	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	87181.02	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	87181.02	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	87181.02	250.00
13C6-PFDA	519.0 / 474.0	3.43	13C2-PFDA	515.0 / 470.0	98445.72	250.00
13C7-PFUnA	570.0 / 525.0	3.75	13C2-PFDA	515.0 / 470.0	98445.72	250.00
13C2-PFTeDA	715.0 / 670.0	4.51	13C2-PFDA	515.0 / 470.0	98445.72	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	33491.53	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	33491.53	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	33491.53	239.25

Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:04:02	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.04	13C2-PFDA	515.0 / 470.0	88898.26	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	28606.91	239.25
d5-EtFOSAA	589.0 / 419.0	3.75	13C4-PFOS	503.0 / 99.0	28606.91	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	85312.76	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	85312.76	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	85312.76	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	85312.76	250.00
13C6-PFDA	519.0 / 474.0	3.43	13C2-PFDA	515.0 / 470.0	88898.26	250.00
13C7-PFUnA	570.0 / 525.0	3.75	13C2-PFDA	515.0 / 470.0	88898.26	250.00
13C2-PFTeDA	715.0 / 670.0	4.51	13C2-PFDA	515.0 / 470.0	88898.26	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	28606.91	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	28606.91	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	28606.91	239.25

Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:14:55	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.04	13C2-PFDA	515.0 / 470.0	67442.24	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	19437.56	239.25
d5-EtFOSAA	589.0 / 419.0	3.76	13C4-PFOS	503.0 / 99.0	19437.56	239.25
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	57777.40	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	57777.40	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	57777.40	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	57777.40	250.00
13C6-PFDA	519.0 / 474.0	3.43	13C2-PFDA	515.0 / 470.0	67442.24	250.00
13C7-PFUnA	570.0 / 525.0	3.75	13C2-PFDA	515.0 / 470.0	67442.24	250.00
13C2-PFTeDA	715.0 / 670.0	4.51	13C2-PFDA	515.0 / 470.0	67442.24	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	19437.56	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	19437.56	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	19437.56	239.25

Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:25:46	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.04	13C2-PFDA	515.0 / 470.0	81926.94	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	28417.54	239.25
d5-EtFOSAA	589.0 / 419.0	3.75	13C4-PFOS	503.0 / 99.0	28417.54	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	74025.47	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	74025.47	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	74025.47	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	74025.47	250.00
13C6-PFDA	519.0 / 474.0	3.43	13C2-PFDA	515.0 / 470.0	81926.94	250.00
13C7-PFUnA	570.0 / 525.0	3.75	13C2-PFDA	515.0 / 470.0	81926.94	250.00
13C2-PFTeDA	715.0 / 670.0	4.50	13C2-PFDA	515.0 / 470.0	81926.94	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	28417.54	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	28417.54	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	28417.54	239.25

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:36:39	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	104042.34	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	31309.72	239.25
d5-EtFOSAA	589.0 / 419.0	3.75	13C4-PFOS	503.0 / 99.0	31309.72	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	92931.38	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	92931.38	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	92931.38	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	92931.38	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	104042.34	250.00
13C7-PFUnA	570.0 / 525.0	3.75	13C2-PFDA	515.0 / 470.0	104042.34	250.00
13C2-PFTeDA	715.0 / 670.0	4.50	13C2-PFDA	515.0 / 470.0	104042.34	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	31309.72	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	31309.72	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	31309.72	239.25

Sample Name	KA86	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:29:24	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS 1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	26020.43	232.25
PFBS 2	298.9 / 99.0	1.84	13C3-PFBS	302.0 / 99.0	26020.43	232.25
PFHxA 1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	60839.35	250.00
PFHxA 2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	60839.35	250.00
PFHpA 1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	69704.66	250.00
PFHpA 2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	69704.66	250.00
PFHxS 1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25904.86	236.50
PFHxS 2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25904.86	236.50
PFOA 1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	90480.96	250.00
PFOA 2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	90480.96	250.00
PFNA 1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	87743.93	250.00
PFNA 2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	87743.93	250.00
PFOS 1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	26559.53	239.25
PFOS 2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	26559.53	239.25
PFDA 1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	95919.39	250.00
PFDA 2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	95919.39	250.00
PFUnA 1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	92354.90	250.00
PFUnA 2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	92354.90	250.00
PFDoA 1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	87134.88	250.00
PFDoA 2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	87134.88	250.00
PFTrDA 1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	70956.42	250.00
PFTrDA 2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	70956.42	250.00
PFTeDA 1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	70956.42	250.00
PFTeDA 2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	70956.42	250.00
NMeFOSAA 1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	12547.82	250.00
NMeFOSAA 2	570.0 / 512.0	3.58	d3-MeFOSAA	573.0 / 419.0	12547.82	250.00
NEtFOSAA 1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	17932.99	250.00
NEtFOSAA 2	584.0 / 483.0	3.79	d5-EtFOSAA	589.0 / 419.0	17932.99	250.00

Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:40:16	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS 1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	28333.04	232.25
PFBS 2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	28333.04	232.25
PFHxA 1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	65830.12	250.00
PFHxA 2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	65830.12	250.00
PFHpA 1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	76136.52	250.00
PFHpA 2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	76136.52	250.00
PFHxS 1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25906.84	236.50
PFHxS 2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25906.84	236.50
PFOA 1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	100736.31	250.00
PFOA 2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	100736.31	250.00
PFNA 1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	98370.95	250.00
PFNA 2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	98370.95	250.00
PFOS 1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	29376.46	239.25
PFOS 2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	29376.46	239.25
PFDA 1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	107844.80	250.00
PFDA 2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	107844.80	250.00
PFUnA 1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	111688.97	250.00
PFUnA 2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	111688.97	250.00
PFDoA 1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	101652.85	250.00
PFDoA 2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	101652.85	250.00
PFTeDA 1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	78363.68	250.00
PFTeDA 2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	78363.68	250.00
PFTeDA 1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	78363.68	250.00
PFTeDA 2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	78363.68	250.00
NMeFOSAA 1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	15775.16	250.00
NMeFOSAA 2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	15775.16	250.00
NEtFOSAA 1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	17285.08	250.00
NEtFOSAA 2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	17285.08	250.00

Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:51:08	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS 1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	30644.87	232.25
PFBS 2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	30644.87	232.25
PFHxA 1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	71972.42	250.00
PFHxA 2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	71972.42	250.00
PFHpA 1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	80095.37	250.00
PFHpA 2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	80095.37	250.00
PFHxS 1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	28683.64	236.50
PFHxS 2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	28683.64	236.50
PFOA 1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	104073.60	250.00
PFOA 2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	104073.60	250.00
PFNA 1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	102293.18	250.00
PFNA 2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	102293.18	250.00
PFOS 1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	31444.97	239.25
PFOS 2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	31444.97	239.25
PFDA 1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	109923.03	250.00
PFDA 2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	109923.03	250.00
PFUnA 1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	115807.78	250.00
PFUnA 2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	115807.78	250.00
PFDoA 1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	103789.33	250.00
PFDoA 2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	103789.33	250.00
PFTeDA 1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	82562.43	250.00
PFTeDA 2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	82562.43	250.00
PFTeDA 1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	82562.43	250.00
PFTeDA 2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	82562.43	250.00
NMeFOSAA 1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	17796.92	250.00
NMeFOSAA 2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	17796.92	250.00
NEtFOSAA 1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	19277.36	250.00
NEtFOSAA 2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	19277.36	250.00

Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:02:00	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS 1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	30818.90	232.25
PFBS 2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	30818.90	232.25
PFHxA 1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	72928.84	250.00
PFHxA 2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	72928.84	250.00
PFHpA 1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	79279.92	250.00
PFHpA 2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	79279.92	250.00
PFHxS 1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	27625.66	236.50
PFHxS 2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	27625.66	236.50
PFOA 1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	99886.80	250.00
PFOA 2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	99886.80	250.00
PFNA 1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	101780.06	250.00
PFNA 2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	101780.06	250.00
PFOS 1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	30655.55	239.25
PFOS 2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	30655.55	239.25
PFDA 1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	110594.78	250.00
PFDA 2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	110594.78	250.00
PFUnA 1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	118179.86	250.00
PFUnA 2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	118179.86	250.00
PFDoA 1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	110922.95	250.00
PFDoA 2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	110922.95	250.00
PFTTrDA 1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	83907.10	250.00
PFTTrDA 2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	83907.10	250.00
PFTeDA 1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	83907.10	250.00
PFTeDA 2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	83907.10	250.00
NMeFOSAA 1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	15300.02	250.00
NMeFOSAA 2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	15300.02	250.00
NEtFOSAA 1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	18645.47	250.00
NEtFOSAA 2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	18645.47	250.00

Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:12:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS 1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	30950.40	232.25
PFBS 2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	30950.40	232.25
PFHxA 1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	72332.04	250.00
PFHxA 2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	72332.04	250.00
PFHpA 1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	81521.67	250.00
PFHpA 2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	81521.67	250.00
PFHxS 1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	31638.65	236.50
PFHxS 2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	31638.65	236.50
PFOA 1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	105135.49	250.00
PFOA 2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	105135.49	250.00
PFNA 1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	105304.08	250.00
PFNA 2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	105304.08	250.00
PFOS 1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	32730.98	239.25
PFOS 2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	32730.98	239.25
PFDA 1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	116147.20	250.00
PFDA 2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	116147.20	250.00
PFUnA 1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	113999.77	250.00
PFUnA 2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	113999.77	250.00
PFDoA 1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	113451.22	250.00
PFDoA 2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	113451.22	250.00
PFTeDA 1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	88706.06	250.00
PFTeDA 2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	88706.06	250.00
PFTeDA 1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	88706.06	250.00
PFTeDA 2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	88706.06	250.00
NMeFOSAA 1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	17369.40	250.00
NMeFOSAA 2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	17369.40	250.00
NEtFOSAA 1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	16401.88	250.00
NEtFOSAA 2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	16401.88	250.00

Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:23:43	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS 1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	28524.54	232.25
PFBS 2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	28524.54	232.25
PFHxA 1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	65801.13	250.00
PFHxA 2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	65801.13	250.00
PFHpA 1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	70617.48	250.00
PFHpA 2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	70617.48	250.00
PFHxS 1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	23900.05	236.50
PFHxS 2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	23900.05	236.50
PFOA 1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	90656.16	250.00
PFOA 2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	90656.16	250.00
PFNA 1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	91611.88	250.00
PFNA 2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	91611.88	250.00
PFOS 1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	27743.07	239.25
PFOS 2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	27743.07	239.25
PFDA 1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	95095.08	250.00
PFDA 2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	95095.08	250.00
PFUnA 1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	95374.73	250.00
PFUnA 2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	95374.73	250.00
PFDoA 1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	97065.24	250.00
PFDoA 2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	97065.24	250.00
PFTrDA 1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	77093.72	250.00
PFTrDA 2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	77093.72	250.00
PFTeDA 1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	77093.72	250.00
PFTeDA 2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	77093.72	250.00
NMeFOSAA 1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	14070.03	250.00
NMeFOSAA 2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	14070.03	250.00
NEtFOSAA 1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	15034.20	250.00
NEtFOSAA 2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	15034.20	250.00

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:34:34	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS 1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	30662.38	232.25
PFBS 2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	30662.38	232.25
PFHxA 1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	70908.58	250.00
PFHxA 2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	70908.58	250.00
PFHpA 1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	71102.33	250.00
PFHpA 2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	71102.33	250.00
PFHxS 1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25350.53	236.50
PFHxS 2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25350.53	236.50
PFOA 1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	84087.10	250.00
PFOA 2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	84087.10	250.00
PFNA 1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	93888.84	250.00
PFNA 2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	93888.84	250.00
PFOS 1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	28702.58	239.25
PFOS 2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	28702.58	239.25
PFDA 1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	92759.58	250.00
PFDA 2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	92759.58	250.00
PFUnA 1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	93310.68	250.00
PFUnA 2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	93310.68	250.00
PFDoA 1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	107713.65	250.00
PFDoA 2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	107713.65	250.00
PFTTrDA 1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	92562.83	250.00
PFTTrDA 2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	92562.83	250.00
PFTeDA 1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	92562.83	250.00
PFTeDA 2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	92562.83	250.00
NMeFOSAA 1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	16114.52	250.00
NMeFOSAA 2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	16114.52	250.00
NEtFOSAA 1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	13034.38	250.00
NEtFOSAA 2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	13034.38	250.00

Sample Name	KA86	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:29:24	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	97981.25	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	28375.99	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	28375.99	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	86508.05	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	86508.05	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	86508.05	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	86508.05	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	97981.25	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	97981.25	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	97981.25	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	28375.99	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	28375.99	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	28375.99	239.25

Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:40:16	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	109800.44	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	26984.45	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	26984.45	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	92232.15	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	92232.15	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	92232.15	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	92232.15	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	109800.44	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	109800.44	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	109800.44	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	26984.45	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	26984.45	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	26984.45	239.25

Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:51:08	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	108731.85	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	32849.86	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	32849.86	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	92713.17	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	92713.17	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	92713.17	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	92713.17	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	108731.85	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	108731.85	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	108731.85	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	32849.86	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	32849.86	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	32849.86	239.25

Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:02:00	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	102202.45	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	30017.37	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	30017.37	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	93478.25	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	93478.25	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	93478.25	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	93478.25	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	102202.45	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	102202.45	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	102202.45	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	30017.37	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	30017.37	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	30017.37	239.25

Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:12:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.00	13C2-PFDA	515.0 / 470.0	111005.28	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	31119.81	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	31119.81	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	87666.86	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	87666.86	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	87666.86	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	87666.86	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	111005.28	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	111005.28	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	111005.28	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	31119.81	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	31119.81	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	31119.81	239.25

Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:23:43	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	92879.31	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	25887.81	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	25887.81	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	79822.03	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	79822.03	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	79822.03	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	79822.03	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	92879.31	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	92879.31	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	92879.31	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	25887.81	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	25887.81	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	25887.81	239.25

Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:34:34	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.00	13C2-PFDA	515.0 / 470.0	101908.02	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	28245.72	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	28245.72	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	85385.75	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	85385.75	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	85385.75	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	85385.75	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	101908.02	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	101908.02	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	101908.02	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	28245.72	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	28245.72	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	28245.72	239.25

Sample Name	KB85 CCV	Injection Vial	23
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:19:34	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	930.269022	1010.00	92.11
PFBS_2	298.9 / 99.0	1.54	940.293224	1010.00	93.10
PFHxA_1	313.0 / 269.0	1.86	1016.517391	1010.00	100.65
PFHxA_2	313.0 / 119.0	1.86	1009.832048	1010.00	99.98
PFHpA_1	363.0 / 319.0	2.26	961.176489	1000.00	96.12
PFHpA_2	363.0 / 169.0	2.26	1142.761911	1000.00	114.28
PFHxS_1	399.0 / 80.0	2.29	865.885408	1010.00	85.73
PFHxS_2	399.0 / 99.0	2.29	913.625815	1010.00	90.46
PFOA_1	413.0 / 369.0	2.68	941.942069	1000.00	94.19
PFOA_2	413.0 / 169.0	2.67	1005.926272	1000.00	100.59
PFNA_1	463.0 / 419.0	3.07	1022.335606	1000.00	102.23
PFNA_2	463.0 / 219.0	3.07	917.306841	1000.00	91.73
PFOS_1	499.0 / 80.0	3.07	951.790878	1000.00	95.18
PFOS_2	499.0 / 99.0	3.07	922.788008	1000.00	92.28
PFDA_1	513.0 / 469.0	3.43	929.664203	1000.00	92.97
PFDA_2	513.0 / 219.0	3.43	906.894550	1000.00	90.69
PFOA_1	563.0 / 519.0	3.75	948.292023	1000.00	94.83
PFOA_2	563.0 / 269.0	3.74	957.782979	1000.00	95.78
PFDoA_1	613.0 / 569.0	4.03	1004.722470	1000.00	100.47
PFDoA_2	613.0 / 319.0	4.03	1014.283543	1000.00	101.43
PFTTrDA_1	663.0 / 619.0	4.27	995.015617	1000.00	99.50
PFTTrDA_2	663.0 / 169.0	4.27	1016.025843	1000.00	101.60
PFTeDA_1	713.0 / 669.0	4.49	972.242651	1000.00	97.22
PFTeDA_2	713.0 / 169.0	4.49	1008.455288	1000.00	100.85
NMeFOSAA_1	570.0 / 419.0	3.58	950.172333	1000.00	95.02
NMeFOSAA_2	570.0 / 512.0	3.58	945.024907	1000.00	94.50
NEtFOSAA_1	584.0 / 419.0	3.74	1045.963550	1000.00	104.60
NEtFOSAA_2	584.0 / 483.0	3.74	863.316534	1000.00	86.33

Sample Name	KB69 CCV	Injection Vial	34
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:19:01	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	2501.872063	2525.00	99.08
PFBS_2	298.9 / 99.0	1.54	2441.687873	2525.00	96.70
PFHxA_1	313.0 / 269.0	1.85	2373.193237	2525.00	93.99
PFHxA_2	313.0 / 119.0	1.85	2426.098436	2525.00	96.08
PFHpA_1	363.0 / 319.0	2.26	2368.172136	2500.00	94.73
PFHpA_2	363.0 / 169.0	2.26	2216.314584	2500.00	88.65
PFHxS_1	399.0 / 80.0	2.28	2439.764519	2525.00	96.62
PFHxS_2	399.0 / 99.0	2.28	2460.446209	2525.00	97.44
PFOA_1	413.0 / 369.0	2.67	2581.045848	2500.00	103.24
PFOA_2	413.0 / 169.0	2.67	2338.588092	2500.00	93.54
PFNA_1	463.0 / 419.0	3.07	2610.046135	2500.00	104.40
PFNA_2	463.0 / 219.0	3.06	2617.941937	2500.00	104.72
PFOS_1	499.0 / 80.0	3.06	2355.397973	2500.00	94.22
PFOS_2	499.0 / 99.0	3.06	2439.556139	2500.00	97.58
PFDA_1	513.0 / 469.0	3.42	2453.759406	2500.00	98.15
PFDA_2	513.0 / 219.0	3.42	2506.399293	2500.00	100.26
PFOA_1	563.0 / 519.0	3.74	2179.900886	2500.00	87.20
PFOA_2	563.0 / 269.0	3.74	2182.146566	2500.00	87.29
PFDoA_1	613.0 / 569.0	4.02	2361.269590	2500.00	94.45
PFDoA_2	613.0 / 319.0	4.02	2349.933994	2500.00	94.00
PFTTrDA_1	663.0 / 619.0	4.27	2670.242334	2500.00	106.81
PFTTrDA_2	663.0 / 169.0	4.27	2666.828486	2500.00	106.67
PFTeDA_1	713.0 / 669.0	4.48	2488.248844	2500.00	99.53
PFTeDA_2	713.0 / 169.0	4.48	2491.875195	2500.00	99.68
NMeFOSAA_1	570.0 / 419.0	3.58	2276.538394	2500.00	91.06
NMeFOSAA_2	570.0 / 512.0	3.57	2005.411503	2500.00	80.22
NEtFOSAA_1	584.0 / 419.0	3.74	2839.522249	2500.00	113.58
NEtFOSAA_2	584.0 / 483.0	3.74	2874.520768	2500.00	114.98

Sample Name	KB85 CCV	Injection Vial	43
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:56:48	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	980.842179	1010.00	97.11
PFBS_2	298.9 / 99.0	1.54	957.104300	1010.00	94.76
PFHxA_1	313.0 / 269.0	1.85	1012.638028	1010.00	100.26
PFHxA_2	313.0 / 119.0	1.85	903.348940	1010.00	89.44
PFHpA_1	363.0 / 319.0	2.26	997.905635	1000.00	99.79
PFHpA_2	363.0 / 169.0	2.26	915.256849	1000.00	91.53
PFHxS_1	399.0 / 80.0	2.28	953.266665	1010.00	94.38
PFHxS_2	399.0 / 99.0	2.28	893.203906	1010.00	88.44
PFOA_1	413.0 / 369.0	2.67	1068.223140	1000.00	106.82
PFOA_2	413.0 / 169.0	2.67	920.169108	1000.00	92.02
PFNA_1	463.0 / 419.0	3.06	1113.935714	1000.00	111.39
PFNA_2	463.0 / 219.0	3.06	1090.005267	1000.00	109.00
PFOS_1	499.0 / 80.0	3.06	1107.637083	1000.00	110.76
PFOS_2	499.0 / 99.0	3.06	1227.608709	1000.00	122.76
PFDA_1	513.0 / 469.0	3.42	997.678365	1000.00	99.77
PFDA_2	513.0 / 219.0	3.42	908.864633	1000.00	90.89
PFOA_1	563.0 / 519.0	3.74	1030.235798	1000.00	103.02
PFOA_2	563.0 / 269.0	3.74	1115.099259	1000.00	111.51
PFDoA_1	613.0 / 569.0	4.02	1034.557444	1000.00	103.46
PFDoA_2	613.0 / 319.0	4.02	1033.854849	1000.00	103.39
PFTTrDA_1	663.0 / 619.0	4.27	966.999050	1000.00	96.70
PFTTrDA_2	663.0 / 169.0	4.27	959.473650	1000.00	95.95
PFTTeDA_1	713.0 / 669.0	4.48	931.261004	1000.00	93.13
PFTTeDA_2	713.0 / 169.0	4.48	941.121484	1000.00	94.11
NMeFOSAA_1	570.0 / 419.0	3.57	975.191633	1000.00	97.52
NMeFOSAA_2	570.0 / 512.0	3.57	919.700281	1000.00	91.97
NEtFOSAA_1	584.0 / 419.0	3.74	892.765336	1000.00	89.28
NEtFOSAA_2	584.0 / 483.0	3.74	859.653260	1000.00	85.97

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:58:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	996.033793	1010.00	98.62
PFBS_2	298.9 / 99.0	1.54	1038.639722	1010.00	102.84
PFHxA_1	313.0 / 269.0	1.86	1022.705874	1010.00	101.26
PFHxA_2	313.0 / 119.0	1.86	1025.343301	1010.00	101.52
PFHpA_1	363.0 / 319.0	2.27	1066.908529	1000.00	106.69
PFHpA_2	363.0 / 169.0	2.27	1244.475252	1000.00	124.45
PFHxS_1	399.0 / 80.0	2.29	1066.823732	1010.00	105.63
PFHxS_2	399.0 / 99.0	2.29	1056.539999	1010.00	104.61
PFOA_1	413.0 / 369.0	2.68	1001.969219	1000.00	100.20
PFOA_2	413.0 / 169.0	2.68	1039.484763	1000.00	103.95
PFNA_1	463.0 / 419.0	3.08	1034.120174	1000.00	103.41
PFNA_2	463.0 / 219.0	3.08	1067.408047	1000.00	106.74
PFOS_1	499.0 / 80.0	3.08	1050.009438	1000.00	105.00
PFOS_2	499.0 / 99.0	3.08	1066.149660	1000.00	106.61
PFDA_1	513.0 / 469.0	3.43	1035.862230	1000.00	103.59
PFDA_2	513.0 / 219.0	3.43	1080.978085	1000.00	108.10
PFUnA_1	563.0 / 519.0	3.76	1013.360835	1000.00	101.34
PFUnA_2	563.0 / 269.0	3.76	1080.912812	1000.00	108.09
PFDoA_1	613.0 / 569.0	4.04	1092.275500	1000.00	109.23
PFDoA_2	613.0 / 319.0	4.04	1043.810630	1000.00	104.38
PFTrDA_1	663.0 / 619.0	4.29	1065.694333	1000.00	106.57
PFTrDA_2	663.0 / 169.0	4.29	1061.590702	1000.00	106.16
PFTeDA_1	713.0 / 669.0	4.50	1048.477497	1000.00	104.85
PFTeDA_2	713.0 / 169.0	4.50	1101.469576	1000.00	110.15
NMeFOSAA_1	570.0 / 419.0	3.59	1089.396638	1000.00	108.94
NMeFOSAA_2	570.0 / 512.0	3.59	996.028088	1000.00	99.60
NEtFOSAA_1	584.0 / 419.0	3.75	907.592427	1000.00	90.76
NEtFOSAA_2	584.0 / 483.0	3.76	988.040078	1000.00	98.80

Sample Name	KB85 CCV	Injection Vial	23
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:19:34	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.02	251.261403	250.00	100.50
d3-MeFOSAA	573.0 / 419.0	3.57	249.314069	250.00	99.73
d5-EtFOSAA	589.0 / 419.0	3.73	260.422758	250.00	104.17
13C5-PFHxA	318.0 / 273.0	1.84	244.890087	250.00	97.96
13C4-PFHpA	367.0 / 322.0	2.25	256.595384	250.00	102.64
13C8-PFOA	421.0 / 376.0	2.67	274.715440	250.00	109.89
13C9-PFNA	472.0 / 427.0	3.06	255.378578	250.00	102.15
13C6-PFDA	519.0 / 474.0	3.41	266.371474	250.00	106.55
13C7-PFUnA	570.0 / 525.0	3.73	276.045332	250.00	110.42
13C2-PFTeDA	715.0 / 670.0	4.49	247.314713	250.00	98.93
13C3-PFBS	302.0 / 99.0	1.52	243.340075	232.25	104.78
13C3-PFHxS	402.0 / 99.0	2.27	282.011090	236.50	119.24
13C8-PFOS	507.0 / 99.0	3.06	253.473713	239.25	105.95

Sample Name	KB69 CCV	Injection Vial	34
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:19:01	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.01	267.669760	250.00	107.07
d3-MeFOSAA	573.0 / 419.0	3.57	264.204731	250.00	105.68
d5-EtFOSAA	589.0 / 419.0	3.73	237.630665	250.00	95.05
13C5-PFHxA	318.0 / 273.0	1.84	258.465522	250.00	103.39
13C4-PFHpA	367.0 / 322.0	2.25	257.469681	250.00	102.99
13C8-PFOA	421.0 / 376.0	2.66	254.737452	250.00	101.89
13C9-PFNA	472.0 / 427.0	3.05	242.541509	250.00	97.02
13C6-PFDA	519.0 / 474.0	3.41	255.525607	250.00	102.21
13C7-PFUnA	570.0 / 525.0	3.73	285.391687	250.00	114.16
13C2-PFTeDA	715.0 / 670.0	4.48	247.171762	250.00	98.87
13C3-PFBS	302.0 / 99.0	1.52	231.855101	232.25	99.83
13C3-PFHxS	402.0 / 99.0	2.27	238.479481	236.50	100.84
13C8-PFOS	507.0 / 99.0	3.05	258.084724	239.25	107.87

Sample Name	KB85 CCV	Injection Vial	43
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:56:48	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.01	268.685997	250.00	107.47
d3-MeFOSAA	573.0 / 419.0	3.57	299.644714	250.00	119.86
d5-EtFOSAA	589.0 / 419.0	3.73	323.703604	250.00	129.48
13C5-PFHxA	318.0 / 273.0	1.84	243.521043	250.00	97.41
13C4-PFHpA	367.0 / 322.0	2.25	238.820831	250.00	95.53
13C8-PFOA	421.0 / 376.0	2.66	244.841223	250.00	97.94
13C9-PFNA	472.0 / 427.0	3.05	235.919111	250.00	94.37
13C6-PFDA	519.0 / 474.0	3.41	274.720574	250.00	109.89
13C7-PFUnA	570.0 / 525.0	3.73	277.494023	250.00	111.00
13C2-PFTeDA	715.0 / 670.0	4.48	284.423390	250.00	113.77
13C3-PFBS	302.0 / 99.0	1.52	215.376717	232.25	92.73
13C3-PFHxS	402.0 / 99.0	2.27	246.458627	236.50	104.21
13C8-PFOS	507.0 / 99.0	3.05	221.335720	239.25	92.51

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:58:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.03	243.136720	250.00	97.25
d3-MeFOSAA	573.0 / 419.0	3.58	238.524822	250.00	95.41
d5-EtFOSAA	589.0 / 419.0	3.74	307.163285	250.00	122.87
13C5-PFHxA	318.0 / 273.0	1.85	243.506931	250.00	97.40
13C4-PFHpA	367.0 / 322.0	2.26	238.926924	250.00	95.57
13C8-PFOA	421.0 / 376.0	2.67	267.299039	250.00	106.92
13C9-PFNA	472.0 / 427.0	3.06	252.221932	250.00	100.89
13C6-PFDA	519.0 / 474.0	3.42	255.509112	250.00	102.20
13C7-PFUnA	570.0 / 525.0	3.74	266.812385	250.00	106.72
13C2-PFTeDA	715.0 / 670.0	4.50	243.480744	250.00	97.39
13C3-PFBS	302.0 / 99.0	1.53	241.286239	232.25	103.89
13C3-PFHxS	402.0 / 99.0	2.28	250.331004	236.50	105.85
13C8-PFOS	507.0 / 99.0	3.06	250.111946	239.25	104.54

Sample Name	KA88 ISC	Injection Vial	1
Sample ID	Instrument Sensitivity Check	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T15:57:14	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	489.436186	505.00	96.92
PFBS_2	298.9 / 99.0	1.55	458.243627	505.00	90.74
PFHxA_1	313.0 / 269.0	1.88	483.909337	505.00	95.82
PFHxA_2	313.0 / 119.0	1.88	447.754668	505.00	88.66
PFHpA_1	363.0 / 319.0	2.29	471.289869	500.00	94.26
PFHpA_2	363.0 / 169.0	2.29	553.640124	500.00	110.73
PFHxS_1	399.0 / 80.0	2.31	471.437606	505.00	93.35
PFHxS_2	399.0 / 99.0	2.31	492.473158	505.00	97.52
PFOA_1	413.0 / 369.0	2.70	423.491987	500.00	84.70
PFOA_2	413.0 / 169.0	2.70	472.260547	500.00	94.45
PFNA_1	463.0 / 419.0	3.10	448.963072	500.00	89.79
PFNA_2	463.0 / 219.0	3.10	434.468450	500.00	86.89
PFOS_1	499.0 / 80.0	3.10	456.514213	500.00	91.30
PFOS_2	499.0 / 99.0	3.10	428.674944	500.00	85.73
PFDA_1	513.0 / 469.0	3.46	476.000730	500.00	95.20
PFDA_2	513.0 / 219.0	3.46	470.324262	500.00	94.06
PFUnA_1	563.0 / 519.0	3.79	459.920180	500.00	91.98
PFUnA_2	563.0 / 269.0	3.79	504.536663	500.00	100.91
PFDoA_1	613.0 / 569.0	4.07	497.959770	500.00	99.59
PFDoA_2	613.0 / 319.0	4.07	449.053234	500.00	89.81
PFTTrDA_1	663.0 / 619.0	4.32	523.974864	500.00	104.79
PFTTrDA_2	663.0 / 169.0	4.31	503.345338	500.00	100.67
PFTeDA_1	713.0 / 669.0	4.53	535.459076	500.00	107.09
PFTeDA_2	713.0 / 169.0	4.53	529.695177	500.00	105.94
NMeFOSAA_1	570.0 / 419.0	3.61	432.353128	500.00	86.47
NMeFOSAA_2	570.0 / 512.0	3.61	448.002980	500.00	89.60
NEtFOSAA_1	584.0 / 419.0	3.78	456.454541	500.00	91.29
NEtFOSAA_2	584.0 / 483.0	3.79	417.773374	500.00	83.55

Sample Name	KB69 CCV	Injection Vial	9
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:24:13	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	2297.109559	2525.00	90.97
PFBS_2	298.9 / 99.0	1.54	2346.375129	2525.00	92.93
PFHxA_1	313.0 / 269.0	1.86	2345.326040	2525.00	92.88
PFHxA_2	313.0 / 119.0	1.86	2421.631046	2525.00	95.91
PFHpA_1	363.0 / 319.0	2.27	2416.650343	2500.00	96.67
PFHpA_2	363.0 / 169.0	2.26	2367.823341	2500.00	94.71
PFHxS_1	399.0 / 80.0	2.29	2366.945024	2525.00	93.74
PFHxS_2	399.0 / 99.0	2.29	2437.899848	2525.00	96.55
PFOA_1	413.0 / 369.0	2.68	2251.658623	2500.00	90.07
PFOA_2	413.0 / 169.0	2.67	2442.133421	2500.00	97.69
PFNA_1	463.0 / 419.0	3.07	2512.426674	2500.00	100.50
PFNA_2	463.0 / 219.0	3.07	2522.394526	2500.00	100.90
PFOS_1	499.0 / 80.0	3.07	2387.064223	2500.00	95.48
PFOS_2	499.0 / 99.0	3.07	2408.194557	2500.00	96.33
PFDA_1	513.0 / 469.0	3.43	2494.816191	2500.00	99.79
PFDA_2	513.0 / 219.0	3.43	2372.069604	2500.00	94.88
PFUnA_1	563.0 / 519.0	3.75	2463.627165	2500.00	98.55
PFUnA_2	563.0 / 269.0	3.75	2483.782598	2500.00	99.35
PFDoA_1	613.0 / 569.0	4.03	2688.794354	2500.00	107.55
PFDoA_2	613.0 / 319.0	4.03	2734.133998	2500.00	109.37
PFTTrDA_1	663.0 / 619.0	4.28	2696.934278	2500.00	107.88
PFTTrDA_2	663.0 / 169.0	4.28	2688.382620	2500.00	107.54
PFTeDA_1	713.0 / 669.0	4.49	2614.644786	2500.00	104.59
PFTeDA_2	713.0 / 169.0	4.49	2562.442817	2500.00	102.50
NMeFOSAA_1	570.0 / 419.0	3.58	2349.645563	2500.00	93.99
NMeFOSAA_2	570.0 / 512.0	3.58	2335.974119	2500.00	93.44
NEtFOSAA_1	584.0 / 419.0	3.74	2340.626456	2500.00	93.63
NEtFOSAA_2	584.0 / 483.0	3.74	2531.065112	2500.00	101.24

Sample Name	KB85 CCV	Injection Vial	17
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:51:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	903.845006	1010.00	89.49
PFBS_2	298.9 / 99.0	1.53	896.895146	1010.00	88.80
PFHxA_1	313.0 / 269.0	1.85	1011.469093	1010.00	100.15
PFHxA_2	313.0 / 119.0	1.85	884.233700	1010.00	87.55
PFHpA_1	363.0 / 319.0	2.26	977.686332	1000.00	97.77
PFHpA_2	363.0 / 169.0	2.26	775.647730	1000.00	77.56
PFHxS_1	399.0 / 80.0	2.28	937.155043	1010.00	92.79
PFHxS_2	399.0 / 99.0	2.28	895.174558	1010.00	88.63
PFOA_1	413.0 / 369.0	2.67	971.668342	1000.00	97.17
PFOA_2	413.0 / 169.0	2.66	1020.760472	1000.00	102.08
PFNA_1	463.0 / 419.0	3.06	982.389902	1000.00	98.24
PFNA_2	463.0 / 219.0	3.06	962.858686	1000.00	96.29
PFOS_1	499.0 / 80.0	3.06	890.937155	1000.00	89.09
PFOS_2	499.0 / 99.0	3.06	936.112524	1000.00	93.61
PFDA_1	513.0 / 469.0	3.41	951.981761	1000.00	95.20
PFDA_2	513.0 / 219.0	3.41	955.132361	1000.00	95.51
PFUnA_1	563.0 / 519.0	3.74	921.045695	1000.00	92.10
PFUnA_2	563.0 / 269.0	3.74	986.081291	1000.00	98.61
PFDoA_1	613.0 / 569.0	4.02	1032.298218	1000.00	103.23
PFDoA_2	613.0 / 319.0	4.02	1019.851829	1000.00	101.99
PFTrDA_1	663.0 / 619.0	4.27	1047.750577	1000.00	104.78
PFTrDA_2	663.0 / 169.0	4.26	1025.648699	1000.00	102.56
PFTeDA_1	713.0 / 669.0	4.48	1059.367340	1000.00	105.94
PFTeDA_2	713.0 / 169.0	4.48	1016.523365	1000.00	101.65
NMeFOSAA_1	570.0 / 419.0	3.57	980.191998	1000.00	98.02
NMeFOSAA_2	570.0 / 512.0	3.57	878.117526	1000.00	87.81
NEtFOSAA_1	584.0 / 419.0	3.73	769.053729	1000.00	76.91
NEtFOSAA_2	584.0 / 483.0	3.73	722.566806	1000.00	72.26

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:56:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	943.217052	1010.00	93.39
PFBS_2	298.9 / 99.0	1.53	940.827813	1010.00	93.15
PFHxA_1	313.0 / 269.0	1.85	981.190263	1010.00	97.15
PFHxA_2	313.0 / 119.0	1.84	898.721556	1010.00	88.98
PFHpA_1	363.0 / 319.0	2.25	969.971052	1000.00	97.00
PFHpA_2	363.0 / 169.0	2.25	898.209351	1000.00	89.82
PFHxS_1	399.0 / 80.0	2.28	1078.568246	1010.00	106.79
PFHxS_2	399.0 / 99.0	2.28	1107.980285	1010.00	109.70
PFOA_1	413.0 / 369.0	2.66	960.425221	1000.00	96.04
PFOA_2	413.0 / 169.0	2.66	952.137082	1000.00	95.21
PFNA_1	463.0 / 419.0	3.06	945.313778	1000.00	94.53
PFNA_2	463.0 / 219.0	3.06	1010.303434	1000.00	101.03
PFOS_1	499.0 / 80.0	3.06	976.719387	1000.00	97.67
PFOS_2	499.0 / 99.0	3.06	947.874070	1000.00	94.79
PFDA_1	513.0 / 469.0	3.41	1005.163803	1000.00	100.52
PFDA_2	513.0 / 219.0	3.42	908.930885	1000.00	90.89
PFUnA_1	563.0 / 519.0	3.74	1082.119027	1000.00	108.21
PFUnA_2	563.0 / 269.0	3.74	1096.476169	1000.00	109.65
PFDoA_1	613.0 / 569.0	4.02	1070.389815	1000.00	107.04
PFDoA_2	613.0 / 319.0	4.02	1064.577516	1000.00	106.46
PFTrDA_1	663.0 / 619.0	4.26	1171.293378	1000.00	117.13
PFTrDA_2	663.0 / 169.0	4.26	1141.191691	1000.00	114.12
PFTeDA_1	713.0 / 669.0	4.48	1084.306311	1000.00	108.43
PFTeDA_2	713.0 / 169.0	4.47	1027.637802	1000.00	102.76
NMeFOSAA_1	570.0 / 419.0	3.57	1028.552195	1000.00	102.86
NMeFOSAA_2	570.0 / 512.0	3.57	996.595754	1000.00	99.66
NEtFOSAA_1	584.0 / 419.0	3.73	929.602169	1000.00	92.96
NEtFOSAA_2	584.0 / 483.0	3.73	907.711593	1000.00	90.77

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:56:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.01	238.289349	250.00	95.32
d3-MeFOSAA	573.0 / 419.0	3.56	248.160940	250.00	99.26
d5-EtFOSAA	589.0 / 419.0	3.72	262.442849	250.00	104.98
13C5-PFHxA	318.0 / 273.0	1.83	261.385543	250.00	104.55
13C4-PFHpA	367.0 / 322.0	2.24	259.284727	250.00	103.71
13C8-PFOA	421.0 / 376.0	2.65	264.560193	250.00	105.82
13C9-PFNA	472.0 / 427.0	3.04	278.983309	250.00	111.59
13C6-PFDA	519.0 / 474.0	3.40	260.220892	250.00	104.09
13C7-PFUnA	570.0 / 525.0	3.72	237.393054	250.00	94.96
13C2-PFTeDA	715.0 / 670.0	4.47	228.395541	250.00	91.36
13C3-PFBS	302.0 / 99.0	1.51	230.109626	232.25	99.08
13C3-PFHxS	402.0 / 99.0	2.27	230.155771	236.50	97.32
13C8-PFOS	507.0 / 99.0	3.04	241.253639	239.25	100.84

Sample Name	KA88 ISC	Injection Vial	1
Sample ID	Instrument Sensitivity Check	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T15:57:14	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.06	254.868764	250.00	101.95
d3-MeFOSAA	573.0 / 419.0	3.61	227.832633	250.00	91.13
d5-EtFOSAA	589.0 / 419.0	3.77	208.808627	250.00	83.52
13C5-PFHxA	318.0 / 273.0	1.86	275.497402	250.00	110.20
13C4-PFHpA	367.0 / 322.0	2.28	285.811203	250.00	114.32
13C8-PFOA	421.0 / 376.0	2.69	267.263784	250.00	106.91
13C9-PFNA	472.0 / 427.0	3.09	259.116368	250.00	103.65
13C6-PFDA	519.0 / 474.0	3.45	247.417762	250.00	98.97
13C7-PFUnA	570.0 / 525.0	3.77	231.303002	250.00	92.52
13C2-PFTeDA	715.0 / 670.0	4.53	234.445590	250.00	93.78
13C3-PFBS	302.0 / 99.0	1.54	225.258119	232.25	96.99
13C3-PFHxS	402.0 / 99.0	2.30	227.592149	236.50	96.23
13C8-PFOS	507.0 / 99.0	3.08	219.270325	239.25	91.65

Sample Name	KB69 CCV	Injection Vial	9
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:24:13	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.02	268.199087	250.00	107.28
d3-MeFOSAA	573.0 / 419.0	3.57	261.658619	250.00	104.66
d5-EtFOSAA	589.0 / 419.0	3.73	217.385191	250.00	86.95
13C5-PFHxA	318.0 / 273.0	1.84	295.286975	250.00	118.11
13C4-PFHpA	367.0 / 322.0	2.25	283.405722	250.00	113.36
13C8-PFOA	421.0 / 376.0	2.67	267.922290	250.00	107.17
13C9-PFNA	472.0 / 427.0	3.06	239.515574	250.00	95.81
13C6-PFDA	519.0 / 474.0	3.41	291.231028	250.00	116.49
13C7-PFUnA	570.0 / 525.0	3.73	260.049500	250.00	104.02
13C2-PFTeDA	715.0 / 670.0	4.49	281.832341	250.00	112.73
13C3-PFBS	302.0 / 99.0	1.52	260.457835	232.25	112.15
13C3-PFHxS	402.0 / 99.0	2.28	251.624299	236.50	106.40
13C8-PFOS	507.0 / 99.0	3.06	243.340632	239.25	101.71

Sample Name	KB85 CCV	Injection Vial	17
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:51:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.01	267.598297	250.00	107.04
d3-MeFOSAA	573.0 / 419.0	3.56	238.136575	250.00	95.25
d5-EtFOSAA	589.0 / 419.0	3.72	278.086740	250.00	111.23
13C5-PFHxA	318.0 / 273.0	1.84	291.511737	250.00	116.60
13C4-PFHpA	367.0 / 322.0	2.25	296.949958	250.00	118.78
13C8-PFOA	421.0 / 376.0	2.66	280.821812	250.00	112.33
13C9-PFNA	472.0 / 427.0	3.05	275.701447	250.00	110.28
13C6-PFDA	519.0 / 474.0	3.40	286.126591	250.00	114.45
13C7-PFUnA	570.0 / 525.0	3.72	275.313541	250.00	110.13
13C2-PFTeDA	715.0 / 670.0	4.47	258.387840	250.00	103.36
13C3-PFBS	302.0 / 99.0	1.52	237.550544	232.25	102.28
13C3-PFHxS	402.0 / 99.0	2.27	242.228845	236.50	102.42
13C8-PFOS	507.0 / 99.0	3.04	238.397105	239.25	99.64

Sample Name	KB85 CCV	Injection Vial	23
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:19:34	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	361605.39	930.269022	360.0	false
PFBS_2	298.9 / 99.0	1.54	110486.22	940.293224	282.9	false
PFHxA_1	313.0 / 269.0	1.86	279448.53	1016.517391	39.7	false
PFHxA_2	313.0 / 119.0	1.86	20565.32	1009.832048	29.8	false
PFHpA_1	363.0 / 319.0	2.26	265609.10	961.176489	96.9	false
PFHpA_2	363.0 / 169.0	2.26	6353.38	1142.761911	125.4	false
PFHxS_1	399.0 / 80.0	2.29	386035.04	865.885408	188.4	false
PFHxS_2	399.0 / 99.0	2.29	117421.59	913.625815	350.1	false
PFOA_1	413.0 / 369.0	2.68	392620.76	941.942069	397.8	false
PFOA_2	413.0 / 169.0	2.67	26991.83	1005.926272	253.6	false
PFNA_1	463.0 / 419.0	3.07	370459.91	1022.335606	321.1	false
PFNA_2	463.0 / 219.0	3.07	100450.25	917.306841	218.9	true
PFOS_1	499.0 / 80.0	3.07	566870.20	951.790878	158.0	false
PFOS_2	499.0 / 99.0	3.07	97308.21	922.788008	323.7	false
PFDA_1	513.0 / 469.0	3.43	399406.42	929.664203	338.9	false
PFDA_2	513.0 / 219.0	3.43	17515.61	906.894550	165.8	false
PFUnA_1	563.0 / 519.0	3.75	388445.02	948.292023	282.9	false
PFUnA_2	563.0 / 269.0	3.74	21638.41	957.782979	190.5	false
PFDaA_1	613.0 / 569.0	4.03	351145.87	1004.722470	382.0	false
PFDaA_2	613.0 / 319.0	4.03	55125.61	1014.283543	366.6	false
PFTrDA_1	663.0 / 619.0	4.27	307219.63	995.015617	557.5	false
PFTrDA_2	663.0 / 169.0	4.27	20149.85	1016.025843	311.4	false
PFTeDA_1	713.0 / 669.0	4.49	325192.70	972.242651	1062.6	false
PFTeDA_2	713.0 / 169.0	4.49	15924.64	1008.455288	590.3	false
NMeFOSAA_1	570.0 / 419.0	3.58	51259.58	950.172333	374.6	false
NMeFOSAA_2	570.0 / 512.0	3.58	30069.25	945.024907	290.7	false
NEtFOSAA_1	584.0 / 419.0	3.74	53106.01	1045.963550	484.2	false
NEtFOSAA_2	584.0 / 483.0	3.74	2982.88	863.316534	99.6	false

Sample Name	KB69 CCV	Injection Vial	34
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:19:01	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	1039714.31	2501.872063	623.4	false
PFBS_2	298.9 / 99.0	1.54	300853.99	2441.687873	526.4	false
PFHxA_1	313.0 / 269.0	1.85	722834.54	2373.193237	64.3	false
PFHxA_2	313.0 / 119.0	1.85	54397.22	2426.098436	54.2	false
PFHpA_1	363.0 / 319.0	2.26	693886.19	2368.172136	173.0	false
PFHpA_2	363.0 / 169.0	2.26	13235.82	2216.314584	158.3	false
PFHxS_1	399.0 / 80.0	2.28	1049448.40	2439.764519	414.9	false
PFHxS_2	399.0 / 99.0	2.28	302605.34	2460.446209	731.0	false
PFOA_1	413.0 / 369.0	2.67	1063184.27	2581.045848	512.7	false
PFOA_2	413.0 / 169.0	2.67	61833.15	2338.588092	354.7	false
PFNA_1	463.0 / 419.0	3.07	961527.54	2610.046135	478.1	false
PFNA_2	463.0 / 219.0	3.06	289491.34	2617.941937	432.9	true
PFOS_1	499.0 / 80.0	3.06	1583414.55	2355.397973	240.7	false
PFOS_2	499.0 / 99.0	3.06	287258.34	2439.556139	494.6	false
PFDA_1	513.0 / 469.0	3.42	1098325.94	2453.759406	464.6	false
PFDA_2	513.0 / 219.0	3.42	49270.90	2506.399293	215.1	false
PFUnA_1	563.0 / 519.0	3.74	1015046.74	2179.900886	389.6	false
PFUnA_2	563.0 / 269.0	3.74	53549.53	2182.146566	251.0	false
PFDaA_1	613.0 / 569.0	4.02	936144.22	2361.269590	580.6	false
PFDaA_2	613.0 / 319.0	4.02	144473.38	2349.933994	393.8	false
PFTrDA_1	663.0 / 619.0	4.27	862887.45	2670.242334	724.2	false
PFTrDA_2	663.0 / 169.0	4.27	55407.56	2666.828486	549.0	false
PFTeDA_1	713.0 / 669.0	4.48	880237.45	2488.248844	1115.2	false
PFTeDA_2	713.0 / 169.0	4.48	41817.33	2491.875195	757.6	false
NMeFOSAA_1	570.0 / 419.0	3.58	141475.43	2276.538394	692.0	false
NMeFOSAA_2	570.0 / 512.0	3.57	77173.41	2005.411503	559.4	false
NEtFOSAA_1	584.0 / 419.0	3.74	141007.58	2839.522249	633.9	false
NEtFOSAA_2	584.0 / 483.0	3.74	9097.04	2874.520768	233.3	false

Sample Name	KB85 CCV	Injection Vial	43
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:56:48	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	370904.30	980.842179	415.6	false
PFBS_2	298.9 / 99.0	1.54	109305.55	957.104300	324.3	false
PFHxA_1	313.0 / 269.0	1.85	295481.61	1012.638028	42.9	false
PFHxA_2	313.0 / 119.0	1.85	19567.35	903.348940	30.7	false
PFHpA_1	363.0 / 319.0	2.26	273987.06	997.905635	102.1	false
PFHpA_2	363.0 / 169.0	2.26	5014.79	915.256849	91.3	false
PFHxS_1	399.0 / 80.0	2.28	425395.67	953.266665	339.6	false
PFHxS_2	399.0 / 99.0	2.28	114945.95	893.203906	411.6	false
PFOA_1	413.0 / 369.0	2.67	424436.99	1068.223140	320.0	false
PFOA_2	413.0 / 169.0	2.67	23457.05	920.169108	245.3	false
PFNA_1	463.0 / 419.0	3.06	398845.93	1113.935714	323.2	false
PFNA_2	463.0 / 219.0	3.06	117942.40	1090.005267	334.7	true
PFOS_1	499.0 / 80.0	3.06	627755.75	1107.637083	207.1	false
PFOS_2	499.0 / 99.0	3.06	122836.35	1227.608709	390.2	false
PFDA_1	513.0 / 469.0	3.42	465848.76	997.678365	485.8	false
PFDA_2	513.0 / 219.0	3.42	19075.27	908.864633	153.8	false
PFUnA_1	563.0 / 519.0	3.74	447840.47	1030.235798	282.3	false
PFUnA_2	563.0 / 269.0	3.74	26470.63	1115.099259	205.1	false
PFDaA_1	613.0 / 569.0	4.02	407037.50	1034.557444	448.1	false
PFDaA_2	613.0 / 319.0	4.02	63269.07	1033.854849	376.8	false
PFTrDA_1	663.0 / 619.0	4.27	362408.64	966.999050	576.8	false
PFTrDA_2	663.0 / 169.0	4.27	23134.63	959.473650	358.6	false
PFTeDA_1	713.0 / 669.0	4.48	378155.02	931.261004	897.6	false
PFTeDA_2	713.0 / 169.0	4.48	18053.76	941.121484	652.7	false
NMeFOSAA_1	570.0 / 419.0	3.57	68668.08	975.191633	653.6	false
NMeFOSAA_2	570.0 / 512.0	3.57	38228.04	919.700281	350.0	false
NEtFOSAA_1	584.0 / 419.0	3.74	63933.38	892.765336	577.4	false
NEtFOSAA_2	584.0 / 483.0	3.74	4154.91	859.653260	1146.4	false

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:58:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	339671.04	996.033793	425.2	false
PFBS_2	298.9 / 99.0	1.54	106787.96	1038.639722	345.9	false
PFHxA_1	313.0 / 269.0	1.86	243346.70	1022.705874	36.4	false
PFHxA_2	313.0 / 119.0	1.86	18069.46	1025.343301	29.8	false
PFHpA_1	363.0 / 319.0	2.27	239070.83	1066.908529	101.0	false
PFHpA_2	363.0 / 169.0	2.27	5622.83	1244.475252	72.8	true
PFHxS_1	399.0 / 80.0	2.29	383184.90	1066.823732	166.3	false
PFHxS_2	399.0 / 99.0	2.29	109209.48	1056.539999	278.3	false
PFOA_1	413.0 / 369.0	2.68	354107.56	1001.969219	258.6	false
PFOA_2	413.0 / 169.0	2.68	23635.45	1039.484763	282.3	false
PFNA_1	463.0 / 419.0	3.08	322262.39	1034.120174	282.4	false
PFNA_2	463.0 / 219.0	3.08	100680.13	1067.408047	297.6	true
PFOS_1	499.0 / 80.0	3.08	525365.25	1050.009438	161.3	false
PFOS_2	499.0 / 99.0	3.08	94278.01	1066.149660	317.4	false
PFDA_1	513.0 / 469.0	3.43	372233.41	1035.862230	381.9	false
PFDA_2	513.0 / 219.0	3.43	17361.83	1080.978085	166.7	false
PFUnA_1	563.0 / 519.0	3.76	350331.68	1013.360835	293.6	false
PFUnA_2	563.0 / 269.0	3.76	20445.68	1080.912812	186.6	false
PFDaA_1	613.0 / 569.0	4.04	321225.15	1092.275500	332.5	false
PFDaA_2	613.0 / 319.0	4.04	47811.54	1043.810630	234.9	false
PFTrDA_1	663.0 / 619.0	4.29	281390.32	1065.694333	496.1	false
PFTrDA_2	663.0 / 169.0	4.29	18028.83	1061.590702	341.6	false
PFTeDA_1	713.0 / 669.0	4.50	300125.38	1048.477497	1061.9	false
PFTeDA_2	713.0 / 169.0	4.50	14886.98	1101.469576	604.0	false
NMeFOSAA_1	570.0 / 419.0	3.59	49668.94	1089.396638	473.6	false
NMeFOSAA_2	570.0 / 512.0	3.59	27025.13	996.028088	284.9	false
NEtFOSAA_1	584.0 / 419.0	3.75	49299.42	907.592427	515.7	false
NEtFOSAA_2	584.0 / 483.0	3.76	3562.15	988.040078	108.7	false

Sample Name	KB85 CCV	Injection Vial	23
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:19:34	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	96442.62	251.261403	599.9	false
d3-MeFOSAA	573.0 / 419.0	3.57	13374.27	249.314069	159.8	false
d5-EtFOSAA	589.0 / 419.0	3.73	13815.27	260.422758	129.2	false
13C5-PFHxA	318.0 / 273.0	1.84	70631.87	244.890087	479.1	false
13C4-PFHpA	367.0 / 322.0	2.25	84780.33	256.595384	728.5	false
13C8-PFOA	421.0 / 376.0	2.67	106076.29	274.715440	1086.3	false
13C9-PFNA	472.0 / 427.0	3.06	98542.80	255.378578	22326.9	false
13C6-PFDA	519.0 / 474.0	3.41	106612.07	266.371474	1041.1	false
13C7-PFUnA	570.0 / 525.0	3.73	99387.09	276.045332	829.7	false
13C2-PFTeDA	715.0 / 670.0	4.49	73389.14	247.314713	1286.3	false
13C3-PFBS	302.0 / 99.0	1.52	32962.21	243.340075	413.6	false
13C3-PFHxS	402.0 / 99.0	2.27	32505.60	282.011090	295.0	false
13C8-PFOS	507.0 / 99.0	3.06	31904.28	253.473713	218.7	false

Sample Name	KB69 CCV	Injection Vial	34
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:19:01	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	111516.62	267.669760	936.3	false
d3-MeFOSAA	573.0 / 419.0	3.57	15795.11	264.204731	116.0	false
d5-EtFOSAA	589.0 / 419.0	3.73	14048.88	237.630665	141.3	false
13C5-PFHxA	318.0 / 273.0	1.84	78583.64	258.465522	665.5	false
13C4-PFHpA	367.0 / 322.0	2.25	89675.21	257.469681	818.1	false
13C8-PFOA	421.0 / 376.0	2.66	103687.91	254.737452	326548.7	false
13C9-PFNA	472.0 / 427.0	3.05	98656.69	242.541509	30906.3	false
13C6-PFDA	519.0 / 474.0	3.41	111006.95	255.525607	908.7	false
13C7-PFUnA	570.0 / 525.0	3.73	111529.04	285.391687	798.8	false
13C2-PFTeDA	715.0 / 670.0	4.48	79611.86	247.171762	1887.5	false
13C3-PFBS	302.0 / 99.0	1.52	35000.82	231.855101	413.0	false
13C3-PFHxS	402.0 / 99.0	2.27	30633.87	238.479481	289.8	false
13C8-PFOS	507.0 / 99.0	3.05	36202.39	258.084724	186.0	false

Sample Name	KB85 CCV	Injection Vial	43
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:56:48	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	108672.83	268.685997	939.6	false
d3-MeFOSAA	573.0 / 419.0	3.57	17657.83	299.644714	150.8	false
d5-EtFOSAA	589.0 / 419.0	3.73	18864.07	323.703604	156.0	true
13C5-PFHxA	318.0 / 273.0	1.84	74968.32	243.521043	570.4	false
13C4-PFHpA	367.0 / 322.0	2.25	84222.91	238.820831	627.5	false
13C8-PFOA	421.0 / 376.0	2.66	100909.39	244.841223	1351.9	false
13C9-PFNA	472.0 / 427.0	3.05	97166.23	235.919111	1129.3	false
13C6-PFDA	519.0 / 474.0	3.41	115862.41	274.720574	844.7	false
13C7-PFUnA	570.0 / 525.0	3.73	105277.59	277.494023	952.4	false
13C2-PFTeDA	715.0 / 670.0	4.48	88936.47	284.423390	1437.0	false
13C3-PFBS	302.0 / 99.0	1.52	32048.59	215.376717	547.7	false
13C3-PFHxS	402.0 / 99.0	2.27	31206.39	246.458627	309.5	false
13C8-PFOS	507.0 / 99.0	3.05	30603.78	221.335720	232.6	false

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:58:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	81368.35	243.136720	780.2	false
d3-MeFOSAA	573.0 / 419.0	3.58	11313.16	238.524822	164.6	false
d5-EtFOSAA	589.0 / 419.0	3.74	14407.10	307.163285	174.8	false
13C5-PFHxA	318.0 / 273.0	1.85	61137.48	243.506931	573.9	false
13C4-PFHpA	367.0 / 322.0	2.26	68719.20	238.926924	925.1	false
13C8-PFOA	421.0 / 376.0	2.67	89846.13	267.299039	1028.6	false
13C9-PFNA	472.0 / 427.0	3.06	84720.79	252.221932	877.7	false
13C6-PFDA	519.0 / 474.0	3.42	89163.43	255.509112	874.3	false
13C7-PFUnA	570.0 / 525.0	3.74	83756.26	266.812385	799.0	false
13C2-PFTeDA	715.0 / 670.0	4.50	62995.31	243.480744	1900.7	false
13C3-PFBS	302.0 / 99.0	1.53	28897.63	241.286239	472.5	false
13C3-PFHxS	402.0 / 99.0	2.28	25511.36	250.331004	238.4	false
13C8-PFOS	507.0 / 99.0	3.06	27834.12	250.111946	214.5	false

Sample Name	KA88 ISC	Injection Vial	1
Sample ID	Instrument Sensitivity Check	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T15:57:14	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS 1	298.9 / 80.0	1.55	201750.13	489.436186	220.1	false
PFBS 2	298.9 / 99.0	1.55	59509.14	458.243627	185.5	false
PFHxA 1	313.0 / 269.0	1.88	155887.48	483.909337	17.5	false
PFHxA 2	313.0 / 119.0	1.88	11314.72	447.754668	16.5	false
PFHpA 1	363.0 / 319.0	2.29	148611.05	471.289869	69.1	false
PFHpA 2	363.0 / 169.0	2.29	3585.92	553.640124	59.9	false
PFHxS 1	399.0 / 80.0	2.31	207646.85	471.437606	136.6	false
PFHxS 2	399.0 / 99.0	2.31	61966.15	492.473158	195.4	false
PFOA 1	413.0 / 369.0	2.70	191308.57	423.491987	190.4	false
PFOA 2	413.0 / 169.0	2.70	13142.82	472.260547	145.7	false
PFNA 1	463.0 / 419.0	3.10	187095.43	448.963072	240.5	false
PFNA 2	463.0 / 219.0	3.10	57889.09	434.468450	179.3	false
PFOS 1	499.0 / 80.0	3.10	287989.67	456.514213	113.6	false
PFOS 2	499.0 / 99.0	3.10	47413.62	428.674944	274.1	false
PFDA 1	513.0 / 469.0	3.46	204081.56	476.000730	267.6	false
PFDA 2	513.0 / 219.0	3.46	9011.31	470.324262	121.6	false
PFUnA 1	563.0 / 519.0	3.79	186406.31	459.920180	195.4	false
PFUnA 2	563.0 / 269.0	3.79	10281.46	504.536663	108.7	false
PFDaA 1	613.0 / 569.0	4.07	198193.54	497.959770	347.3	false
PFDaA 2	613.0 / 319.0	4.07	29166.55	449.053234	283.6	false
PFTrDA 1	663.0 / 619.0	4.32	168382.15	523.974864	400.2	false
PFTrDA 2	663.0 / 169.0	4.31	10699.54	503.345338	226.2	false
PFTeDA 1	713.0 / 669.0	4.53	182176.03	535.459076	694.5	false
PFTeDA 2	713.0 / 169.0	4.53	8975.91	529.695177	425.0	false
NMeFOSAA 1	570.0 / 419.0	3.61	31490.67	432.353128	235.8	false
NMeFOSAA 2	570.0 / 512.0	3.61	18170.08	448.002980	259.7	false
NEtFOSAA 1	584.0 / 419.0	3.78	30198.41	456.454541	382.7	false
NEtFOSAA 2	584.0 / 483.0	3.79	1878.00	417.773374	278.5	false

Sample Name	KB69 CCV	Injection Vial	9
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:24:13	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS 1	298.9 / 80.0	1.54	1034651.96	2297.109559	675.6	false
PFBS 2	298.9 / 99.0	1.54	312744.93	2346.375129	636.2	false
PFHxA 1	313.0 / 269.0	1.86	796635.38	2345.326040	63.3	false
PFHxA 2	313.0 / 119.0	1.86	60837.78	2421.631046	57.5	false
PFHpA 1	363.0 / 319.0	2.27	755630.52	2416.650343	146.9	false
PFHpA 2	363.0 / 169.0	2.26	15344.53	2367.823341	129.3	false
PFHxS 1	399.0 / 80.0	2.29	1061067.22	2366.945024	303.1	false
PFHxS 2	399.0 / 99.0	2.29	314708.34	2437.899848	531.3	false
PFOA 1	413.0 / 369.0	2.68	1014695.76	2251.658623	529.3	false
PFOA 2	413.0 / 169.0	2.67	68871.29	2442.133421	469.3	false
PFNA 1	463.0 / 419.0	3.07	939154.07	2512.426674	523.7	false
PFNA 2	463.0 / 219.0	3.07	293263.97	2522.394526	438.3	false
PFOS 1	499.0 / 80.0	3.07	1489473.16	2387.064223	272.6	false
PFOS 2	499.0 / 99.0	3.07	263952.30	2408.194557	590.3	false
PFDA 1	513.0 / 469.0	3.43	1146634.90	2494.816191	661.0	false
PFDA 2	513.0 / 219.0	3.43	47579.75	2372.069604	301.4	false
PFUnA 1	563.0 / 519.0	3.75	1057792.36	2463.627165	425.4	false
PFUnA 2	563.0 / 269.0	3.75	53545.10	2483.782598	322.2	false
PFDaA 1	613.0 / 569.0	4.03	1002254.46	2688.794354	488.8	false
PFDaA 2	613.0 / 319.0	4.03	163212.60	2734.133998	453.4	false
PFTTrDA 1	663.0 / 619.0	4.28	909686.13	2696.934278	770.8	false
PFTTrDA 2	663.0 / 169.0	4.28	58148.26	2688.382620	456.4	false
PFTeDA 1	713.0 / 669.0	4.49	963325.13	2614.644786	1269.7	false
PFTeDA 2	713.0 / 169.0	4.49	44841.93	2562.442817	943.4	false
NMeFOSAA 1	570.0 / 419.0	3.58	171555.44	2349.645563	983.2	false
NMeFOSAA 2	570.0 / 512.0	3.58	90995.92	2335.974119	561.7	false
NEtFOSAA 1	584.0 / 419.0	3.74	159587.51	2340.626456	574.6	false
NEtFOSAA 2	584.0 / 483.0	3.74	10956.12	2531.065112	285.8	false

Sample Name	KB85 CCV	Injection Vial	17
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:51:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS 1	298.9 / 80.0	1.54	347971.24	903.845006	340.8	false
PFBS 2	298.9 / 99.0	1.53	104792.91	896.895146	333.4	false
PFHxA 1	313.0 / 269.0	1.85	285762.76	1011.469093	35.1	false
PFHxA 2	313.0 / 119.0	1.85	18944.52	884.233700	26.4	false
PFHpA 1	363.0 / 319.0	2.26	268361.38	977.686332	78.9	false
PFHpA 2	363.0 / 169.0	2.26	4393.20	775.647730	52.8	false
PFHxS 1	399.0 / 80.0	2.28	379058.28	937.155043	201.6	false
PFHxS 2	399.0 / 99.0	2.28	103977.55	895.174558	334.7	false
PFOA 1	413.0 / 369.0	2.67	385012.67	971.668342	259.1	false
PFOA 2	413.0 / 169.0	2.66	25185.78	1020.760472	280.8	false
PFNA 1	463.0 / 419.0	3.06	357789.91	982.389902	335.5	false
PFNA 2	463.0 / 219.0	3.06	110116.09	962.858686	295.8	false
PFOS 1	499.0 / 80.0	3.06	526309.44	890.937155	162.7	false
PFOS 2	499.0 / 99.0	3.06	96837.17	936.112524	465.3	false
PFDA 1	513.0 / 469.0	3.41	401687.05	951.981761	394.3	false
PFDA 2	513.0 / 219.0	3.41	17739.44	955.132361	192.9	false
PFUnA 1	563.0 / 519.0	3.74	386144.19	921.045695	248.9	false
PFUnA 2	563.0 / 269.0	3.74	20767.27	986.081291	258.7	false
PFDaA 1	613.0 / 569.0	4.02	361711.13	1032.298218	422.1	false
PFDaA 2	613.0 / 319.0	4.02	57508.31	1019.851829	325.0	false
PFTrDA 1	663.0 / 619.0	4.27	307764.82	1047.750577	606.3	false
PFTrDA 2	663.0 / 169.0	4.26	19548.08	1025.648699	313.1	false
PFTeDA 1	713.0 / 669.0	4.48	335755.52	1059.367340	814.3	false
PFTeDA 2	713.0 / 169.0	4.48	15612.66	1016.523365	631.3	false
NMeFOSAA 1	570.0 / 419.0	3.57	59348.38	980.191998	400.7	false
NMeFOSAA 2	570.0 / 512.0	3.57	28999.84	878.117526	303.8	false
NEtFOSAA 1	584.0 / 419.0	3.73	60746.18	769.053729	374.6	false
NEtFOSAA 2	584.0 / 483.0	3.73	3746.06	722.566806	298.8	false

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:56:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS 1	298.9 / 80.0	1.53	339698.04	943.217052	443.2	false
PFBS 2	298.9 / 99.0	1.53	102643.78	940.827813	309.2	false
PFHxA 1	313.0 / 269.0	1.85	257817.55	981.190263	37.7	false
PFHxA 2	313.0 / 119.0	1.84	17886.64	898.721556	27.9	false
PFHpA 1	363.0 / 319.0	2.25	241042.43	969.971052	97.1	false
PFHpA 2	363.0 / 169.0	2.25	4608.35	898.209351	86.8	false
PFHxS 1	399.0 / 80.0	2.28	391842.57	1078.568246	215.6	false
PFHxS 2	399.0 / 99.0	2.28	115640.98	1107.980285	301.3	false
PFOA 1	413.0 / 369.0	2.66	371750.16	960.425221	298.6	false
PFOA 2	413.0 / 169.0	2.66	22941.58	952.137082	200.0	false
PFNA 1	463.0 / 419.0	3.06	361493.04	945.313778	295.5	false
PFNA 2	463.0 / 219.0	3.06	121029.69	1010.303434	279.4	false
PFOS 1	499.0 / 80.0	3.06	581992.66	976.719387	228.9	false
PFOS 2	499.0 / 99.0	3.06	99114.66	947.874070	344.3	false
PFDA 1	513.0 / 469.0	3.41	433116.52	1005.163803	440.1	false
PFDA 2	513.0 / 219.0	3.42	17276.37	908.930885	228.2	false
PFUnA 1	563.0 / 519.0	3.74	440046.53	1082.119027	282.8	false
PFUnA 2	563.0 / 269.0	3.74	22389.42	1096.476169	222.6	false
PFDaA 1	613.0 / 569.0	4.02	374924.23	1070.389815	383.4	false
PFDaA 2	613.0 / 319.0	4.02	59980.42	1064.577516	304.7	false
PFTrDA 1	663.0 / 619.0	4.26	340282.15	1171.293378	544.7	false
PFTrDA 2	663.0 / 169.0	4.26	21476.02	1141.191691	317.8	false
PFTeDA 1	713.0 / 669.0	4.48	341171.35	1084.306311	1013.9	false
PFTeDA 2	713.0 / 169.0	4.47	15667.64	1027.637802	674.0	false
NMeFOSAA 1	570.0 / 419.0	3.57	64269.39	1028.552195	1140.8	false
NMeFOSAA 2	570.0 / 512.0	3.57	33760.41	996.595754	470.7	false
NEtFOSAA 1	584.0 / 419.0	3.73	67951.53	929.602169	450.0	false
NEtFOSAA 2	584.0 / 483.0	3.73	4316.73	907.711593	225.8	false

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:56:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	97016.25	238.289349	1190.2	false
d3-MeFOSAA	573.0 / 419.0	3.56	15320.25	248.160940	142.5	false
d5-EtFOSAA	589.0 / 419.0	3.72	17658.51	262.442849	194.8	false
13C5-PFHxA	318.0 / 273.0	1.83	67289.65	261.385543	668.0	false
13C4-PFHpA	367.0 / 322.0	2.24	73324.27	259.284727	636.6	false
13C8-PFOA	421.0 / 376.0	2.65	95528.22	264.560193	892.5	false
13C9-PFNA	472.0 / 427.0	3.04	101690.39	278.983309	985.1	false
13C6-PFDA	519.0 / 474.0	3.40	106789.15	260.220892	1822.8	false
13C7-PFUnA	570.0 / 525.0	3.72	99028.13	237.393054	826.5	false
13C2-PFTeDA	715.0 / 670.0	4.47	74022.89	228.395541	1912.9	false
13C3-PFBS	302.0 / 99.0	1.51	29314.83	230.109626	393.6	false
13C3-PFHxS	402.0 / 99.0	2.27	26582.01	230.155771	312.1	false
13C8-PFOS	507.0 / 99.0	3.04	29373.50	241.253639	216.9	false

Sample Name	KA88 ISC	Injection Vial	1
Sample ID	Instrument Sensitivity Check	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T15:57:14	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.06	107052.49	254.868764	795.7	false
d3-MeFOSAA	573.0 / 419.0	3.61	16659.59	227.832633	153.7	false
d5-EtFOSAA	589.0 / 419.0	3.77	16641.16	208.808627	180.7	false
13C5-PFHxA	318.0 / 273.0	1.86	81406.23	275.497402	683.8	false
13C4-PFHpA	367.0 / 322.0	2.28	92773.40	285.811203	735.4	false
13C8-PFOA	421.0 / 376.0	2.69	110769.64	267.263784	1072.8	false
13C9-PFNA	472.0 / 427.0	3.09	108410.16	259.116368	947.5	false
13C6-PFDA	519.0 / 474.0	3.45	104750.50	247.417762	849.2	false
13C7-PFUnA	570.0 / 525.0	3.77	99543.33	231.303002	740.1	false
13C2-PFTeDA	715.0 / 670.0	4.53	78390.02	234.445590	2306.7	false
13C3-PFBS	302.0 / 99.0	1.54	33989.82	225.258119	434.6	false
13C3-PFHxS	402.0 / 99.0	2.30	31134.30	227.592149	286.2	false
13C8-PFOS	507.0 / 99.0	3.08	31621.14	219.270325	335.5	false

Sample Name	KB69 CCV	Injection Vial	9
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:24:13	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	104878.62	268.199087	816.4	false
d3-MeFOSAA	573.0 / 419.0	3.57	17703.44	261.658619	159.5	false
d5-EtFOSAA	589.0 / 419.0	3.73	16030.22	217.385191	179.1	false
13C5-PFHxA	318.0 / 273.0	1.84	87649.71	295.286975	617.3	false
13C4-PFHpA	367.0 / 322.0	2.25	92409.98	283.405722	769.7	false
13C8-PFOA	421.0 / 376.0	2.67	111546.39	267.922290	1170.9	false
13C9-PFNA	472.0 / 427.0	3.06	100664.17	239.515574	1316.4	false
13C6-PFDA	519.0 / 474.0	3.41	114792.21	291.231028	1010.2	false
13C7-PFUnA	570.0 / 525.0	3.73	104192.49	260.049500	719.9	false
13C2-PFTeDA	715.0 / 670.0	4.49	87732.20	281.832341	1973.6	false
13C3-PFBS	302.0 / 99.0	1.52	36364.72	260.457835	590.2	false
13C3-PFHxS	402.0 / 99.0	2.28	31849.95	251.624299	442.8	false
13C8-PFOS	507.0 / 99.0	3.06	32470.33	243.340632	231.6	false

Sample Name	KB85 CCV	Injection Vial	17
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:51:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	96958.26	267.598297	876.2	false
d3-MeFOSAA	573.0 / 419.0	3.56	15232.39	238.136575	180.9	false
d5-EtFOSAA	589.0 / 419.0	3.72	19386.93	278.086740	194.0	false
13C5-PFHxA	318.0 / 273.0	1.84	72378.82	291.511737	461.3	false
13C4-PFHpA	367.0 / 322.0	2.25	80992.13	296.949958	561.9	false
13C8-PFOA	421.0 / 376.0	2.66	97797.29	280.821812	1029.9	false
13C9-PFNA	472.0 / 427.0	3.05	96923.59	275.701447	733.7	false
13C6-PFDA	519.0 / 474.0	3.40	104497.23	286.126591	842.3	false
13C7-PFUnA	570.0 / 525.0	3.72	102206.79	275.313541	915.2	false
13C2-PFTeDA	715.0 / 670.0	4.47	74526.73	258.387840	1346.0	false
13C3-PFBS	302.0 / 99.0	1.52	31355.81	237.550544	707.5	false
13C3-PFHxS	402.0 / 99.0	2.27	28986.87	242.228845	322.8	false
13C8-PFOS	507.0 / 99.0	3.04	30074.07	238.397105	277.1	false

Sample Name	KB85 CCV	Injection Vial	23
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:19:34	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.310	0.304	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.300	0.289	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.270	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.060	0.056	ü
PFDaA_1	613.0 / 569.0	4.03	PFDaA			
PFDaA_2	613.0 / 319.0	4.03	PFDaA	0.160	0.156	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.070	0.064	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.49	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	NMeFOSAA	0.590	0.561	ü
NEtFOSAA_1	584.0 / 419.0	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.060	0.068	ü

Sample Name	KB69 CCV	Injection Vial	34
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:19:01	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.290	0.304	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.074	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.300	0.304	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.056	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.150	0.156	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.550	0.561	ü
NEtFOSAA_1	584.0 / 419.0	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.060	0.068	ü

Sample Name	KB85 CCV	Injection Vial	43
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:56:48	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.290	0.304	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.270	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.300	0.304	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.200	0.178	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.060	0.056	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.160	0.156	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.560	0.561	ü
NEtFOSAA_1	584.0 / 419.0	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.060	0.068	ü

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:58:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.310	0.304	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.290	0.289	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.310	0.304	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.050	0.045	ü
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	3.76	PFUnA	0.060	0.056	ü
PFDaA_1	613.0 / 569.0	4.04	PFDaA			
PFDaA_2	613.0 / 319.0	4.04	PFDaA	0.150	0.156	ü
PFTrDA_1	663.0 / 619.0	4.29	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.29	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.50	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.50	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.59	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.59	NMeFOSAA	0.540	0.561	ü
NEtFOSAA_1	584.0 / 419.0	3.75	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.76	NEtFOSAA	0.070	0.068	ü

Sample Name	KA88 ISC	Injection Vial	1
Sample ID	Instrument Sensitivity Check	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T15:57:14	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.290	0.318	ü
PFHxA_1	313.0 / 269.0	1.88	PFHxA			
PFHxA_2	313.0 / 119.0	1.88	PFHxA	0.070	0.079	ü
PFHpA_1	363.0 / 319.0	2.29	PFHpA			
PFHpA_2	363.0 / 169.0	2.29	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.31	PFHxS			
PFHxS_2	399.0 / 99.0	2.31	PFHxS	0.300	0.285	ü
PFOA_1	413.0 / 369.0	2.70	PFOA			
PFOA_2	413.0 / 169.0	2.70	PFOA	0.070	0.062	ü
PFNA_1	463.0 / 419.0	3.10	PFNA			
PFNA_2	463.0 / 219.0	3.10	PFNA	0.310	0.319	ü
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.10	PFOS	0.160	0.174	ü
PFDA_1	513.0 / 469.0	3.46	PFDA			
PFDA_2	513.0 / 219.0	3.46	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.79	PFUnA			
PFUnA_2	563.0 / 269.0	3.79	PFUnA	0.060	0.050	ü
PFDaA_1	613.0 / 569.0	4.07	PFDaA			
PFDaA_2	613.0 / 319.0	4.07	PFDaA	0.150	0.162	ü
PFTrDA_1	663.0 / 619.0	4.32	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.31	PFTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.53	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.53	PFTeDA	0.050	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.61	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.61	NMeFOSAA	0.580	0.558	ü
NEtFOSAA_1	584.0 / 419.0	3.78	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.79	NEtFOSAA	0.060	0.069	ü

Sample Name	KB69 CCV	Injection Vial	9
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:24:13	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.300	0.318	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.080	0.079	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.300	0.285	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.070	0.062	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.310	0.319	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	3.75	PFUnA	0.050	0.050	ü
PFDaA_1	613.0 / 569.0	4.03	PFDaA			
PFDaA_2	613.0 / 319.0	4.03	PFDaA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.28	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.28	PFTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.49	PFTeDA	0.050	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	NMeFOSAA	0.530	0.558	ü
NEtFOSAA_1	584.0 / 419.0	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.070	0.069	ü

Sample Name	KB85 CCV	Injection Vial	17
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:51:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.318	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.079	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.270	0.285	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.070	0.062	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.310	0.319	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.050	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.050	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.490	0.558	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.060	0.069	ü

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:56:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.318	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.079	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.300	0.285	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.062	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.330	0.319	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.050	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.160	0.162	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.530	0.558	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.060	0.069	ü

Sample Name	KB85 CCV	Injection Vial	23
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:19:34	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	32962.21	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	32962.21	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	70631.87	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	70631.87	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	84780.33	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	84780.33	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	30984.61	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	30984.61	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	106076.29	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	106076.29	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	98542.80	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	98542.80	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	32798.96	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	32798.96	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	106612.07	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	106612.07	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	99387.09	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	99387.09	250.00
PFDaA_1	613.0 / 569.0	4.03	13C2-PFDaA	615.0 / 570.0	96442.62	250.00
PFDaA_2	613.0 / 319.0	4.03	13C2-PFDaA	615.0 / 570.0	96442.62	250.00
PFTTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	73389.14	250.00
PFTTrDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	73389.14	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	73389.14	250.00
PFTeDA_2	713.0 / 169.0	4.49	13C2-PFTeDA	715.0 / 670.0	73389.14	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	13752.78	250.00
NMeFOSAA_2	570.0 / 512.0	3.58	d3-MeFOSAA	573.0 / 419.0	13752.78	250.00
NEtFOSAA_1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	14023.77	250.00
NEtFOSAA_2	584.0 / 483.0	3.74	d5-EtFOSAA	589.0 / 419.0	14023.77	250.00

Sample Name	KB69 CCV	Injection Vial	34
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:19:01	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	35000.82	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	35000.82	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	78583.64	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	78583.64	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	89675.21	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	89675.21	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	29903.13	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	29903.13	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	103687.91	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	103687.91	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	98656.69	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	98656.69	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	36689.42	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	36689.42	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	111006.95	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	111006.95	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	111529.04	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	111529.04	250.00
PFDaA_1	613.0 / 569.0	4.02	13C2-PFDaA	615.0 / 570.0	111516.62	250.00
PFDaA_2	613.0 / 319.0	4.02	13C2-PFDaA	615.0 / 570.0	111516.62	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	79611.86	250.00
PFTrDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	79611.86	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	79611.86	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	79611.86	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	16413.93	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	16413.93	250.00
NEtFOSAA_1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	14179.69	250.00
NEtFOSAA_2	584.0 / 483.0	3.74	d5-EtFOSAA	589.0 / 419.0	14179.69	250.00

Sample Name	KB85 CCV	Injection Vial	43
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:56:48	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	32048.59	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	32048.59	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	74968.32	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	74968.32	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	84222.91	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	84222.91	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	31015.30	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	31015.30	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	100909.39	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	100909.39	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	97166.23	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	97166.23	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	31144.79	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	31144.79	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	115862.41	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	115862.41	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	105277.59	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	105277.59	250.00
PFDaA_1	613.0 / 569.0	4.02	13C2-PFDaA	615.0 / 570.0	108672.83	250.00
PFDaA_2	613.0 / 319.0	4.02	13C2-PFDaA	615.0 / 570.0	108672.83	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	88936.47	250.00
PFTrDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	88936.47	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	88936.47	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	88936.47	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	17978.32	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	17978.32	250.00
NEtFOSAA_1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	19605.99	250.00
NEtFOSAA_2	584.0 / 483.0	3.74	d5-EtFOSAA	589.0 / 419.0	19605.99	250.00

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:58:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	28897.63	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	28897.63	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	61137.48	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	61137.48	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	68719.20	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	68719.20	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	24965.00	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	24965.00	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	89846.13	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	89846.13	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	84720.79	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	84720.79	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	27515.06	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	27515.06	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	89163.43	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	89163.43	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	83756.26	250.00
PFUnA_2	563.0 / 269.0	3.76	13C7-PFUnA	570.0 / 525.0	83756.26	250.00
PFDaA_1	613.0 / 569.0	4.04	13C2-PFDaA	615.0 / 570.0	81368.35	250.00
PFDaA_2	613.0 / 319.0	4.04	13C2-PFDaA	615.0 / 570.0	81368.35	250.00
PFTrDA_1	663.0 / 619.0	4.29	13C2-PFTeDA	715.0 / 670.0	62995.31	250.00
PFTrDA_2	663.0 / 169.0	4.29	13C2-PFTeDA	715.0 / 670.0	62995.31	250.00
PFTeDA_1	713.0 / 669.0	4.50	13C2-PFTeDA	715.0 / 670.0	62995.31	250.00
PFTeDA_2	713.0 / 169.0	4.50	13C2-PFTeDA	715.0 / 670.0	62995.31	250.00
NMeFOSAA_1	570.0 / 419.0	3.59	d3-MeFOSAA	573.0 / 419.0	11712.40	250.00
NMeFOSAA_2	570.0 / 512.0	3.59	d3-MeFOSAA	573.0 / 419.0	11712.40	250.00
NEtFOSAA_1	584.0 / 419.0	3.75	d5-EtFOSAA	589.0 / 419.0	14885.93	250.00
NEtFOSAA_2	584.0 / 483.0	3.76	d5-EtFOSAA	589.0 / 419.0	14885.93	250.00

Sample Name	KB85 CCV	Injection Vial	23
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:19:34	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	95843.31	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	29858.89	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	29858.89	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	87132.22	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	87132.22	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	87132.22	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	87132.22	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	95843.31	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	95843.31	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	95843.31	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	29858.89	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	29858.89	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	29858.89	239.25

Sample Name	KB69 CCV	Injection Vial	34
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:19:01	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	104030.06	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	33276.11	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	33276.11	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	91849.93	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	91849.93	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	91849.93	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	91849.93	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	104030.06	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	104030.06	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	104030.06	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	33276.11	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	33276.11	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	33276.11	239.25

Sample Name	KB85 CCV	Injection Vial	43
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:56:48	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	100993.75	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	32800.55	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	32800.55	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	93001.63	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	93001.63	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	93001.63	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	93001.63	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	100993.75	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	100993.75	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	100993.75	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	32800.55	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	32800.55	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	32800.55	239.25

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:58:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	83564.83	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	26399.80	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	26399.80	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	75848.24	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	75848.24	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	75848.24	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	75848.24	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	83564.83	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	83564.83	250.00
13C2-PFTeDA	715.0 / 670.0	4.50	13C2-PFDA	515.0 / 470.0	83564.83	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	26399.80	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	26399.80	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	26399.80	239.25

Sample Name	KB69 CCV	Injection Vial	9
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:24:13	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS 1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	36364.72	232.25
PFBS 2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	36364.72	232.25
PFHxA 1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	87649.71	250.00
PFHxA 2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	87649.71	250.00
PFHpA 1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	92409.98	250.00
PFHpA 2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	92409.98	250.00
PFHxS 1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	31484.62	236.50
PFHxS 2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	31484.62	236.50
PFOA 1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	111546.39	250.00
PFOA 2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	111546.39	250.00
PFNA 1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	100664.17	250.00
PFNA 2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	100664.17	250.00
PFOS 1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	32709.29	239.25
PFOS 2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	32709.29	239.25
PFDA 1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	114792.21	250.00
PFDA 2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	114792.21	250.00
PFUnA 1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	104192.49	250.00
PFUnA 2	563.0 / 269.0	3.75	13C7-PFUnA	570.0 / 525.0	104192.49	250.00
PFDoA 1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	104878.62	250.00
PFDoA 2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	104878.62	250.00
PFTeDA 1	663.0 / 619.0	4.28	13C2-PFTeDA	715.0 / 670.0	87732.20	250.00
PFTeDA 2	663.0 / 169.0	4.28	13C2-PFTeDA	715.0 / 670.0	87732.20	250.00
PFTeDA 1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	87732.20	250.00
PFTeDA 2	713.0 / 169.0	4.49	13C2-PFTeDA	715.0 / 670.0	87732.20	250.00
NMeFOSAA 1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	18299.26	250.00
NMeFOSAA 2	570.0 / 512.0	3.58	d3-MeFOSAA	573.0 / 419.0	18299.26	250.00
NEtFOSAA 1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	16197.01	250.00
NEtFOSAA 2	584.0 / 483.0	3.74	d5-EtFOSAA	589.0 / 419.0	16197.01	250.00

Sample Name	KA88 ISC	Injection Vial	1
Sample ID	Instrument Sensitivity Check	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T15:57:14	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS 1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	33989.82	232.25
PFBS 2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	33989.82	232.25
PFHxA 1	313.0 / 269.0	1.88	13C5-PFHxA	318.0 / 273.0	81406.23	250.00
PFHxA 2	313.0 / 119.0	1.88	13C5-PFHxA	318.0 / 273.0	81406.23	250.00
PFHpA 1	363.0 / 319.0	2.29	13C4-PFHpA	367.0 / 322.0	92773.40	250.00
PFHpA 2	363.0 / 169.0	2.29	13C4-PFHpA	367.0 / 322.0	92773.40	250.00
PFHxS 1	399.0 / 80.0	2.31	13C3-PFHxS	402.0 / 99.0	30536.77	236.50
PFHxS 2	399.0 / 99.0	2.31	13C3-PFHxS	402.0 / 99.0	30536.77	236.50
PFOA 1	413.0 / 369.0	2.70	13C8-PFOA	421.0 / 376.0	110769.64	250.00
PFOA 2	413.0 / 169.0	2.70	13C8-PFOA	421.0 / 376.0	110769.64	250.00
PFNA 1	463.0 / 419.0	3.10	13C9-PFNA	472.0 / 427.0	108410.16	250.00
PFNA 2	463.0 / 219.0	3.10	13C9-PFNA	472.0 / 427.0	108410.16	250.00
PFOS 1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	31678.87	239.25
PFOS 2	499.0 / 99.0	3.10	13C8-PFOS	507.0 / 99.0	31678.87	239.25
PFDA 1	513.0 / 469.0	3.46	13C6-PFDA	519.0 / 474.0	104750.50	250.00
PFDA 2	513.0 / 219.0	3.46	13C6-PFDA	519.0 / 474.0	104750.50	250.00
PFUnA 1	563.0 / 519.0	3.79	13C7-PFUnA	570.0 / 525.0	99543.33	250.00
PFUnA 2	563.0 / 269.0	3.79	13C7-PFUnA	570.0 / 525.0	99543.33	250.00
PFDoA 1	613.0 / 569.0	4.07	13C2-PFDoA	615.0 / 570.0	107052.49	250.00
PFDoA 2	613.0 / 319.0	4.07	13C2-PFDoA	615.0 / 570.0	107052.49	250.00
PFTeDA 1	663.0 / 619.0	4.32	13C2-PFTeDA	715.0 / 670.0	78390.02	250.00
PFTeDA 2	663.0 / 169.0	4.31	13C2-PFTeDA	715.0 / 670.0	78390.02	250.00
PFTeDA 1	713.0 / 669.0	4.53	13C2-PFTeDA	715.0 / 670.0	78390.02	250.00
PFTeDA 2	713.0 / 169.0	4.53	13C2-PFTeDA	715.0 / 670.0	78390.02	250.00
NMeFOSAA 1	570.0 / 419.0	3.61	d3-MeFOSAA	573.0 / 419.0	17263.54	250.00
NMeFOSAA 2	570.0 / 512.0	3.61	d3-MeFOSAA	573.0 / 419.0	17263.54	250.00
NEtFOSAA 1	584.0 / 419.0	3.78	d5-EtFOSAA	589.0 / 419.0	16583.91	250.00
NEtFOSAA 2	584.0 / 483.0	3.79	d5-EtFOSAA	589.0 / 419.0	16583.91	250.00

Sample Name	KB85 CCV	Injection Vial	17
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:51:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS 1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	31355.81	232.25
PFBS 2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	31355.81	232.25
PFHxA 1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	72378.82	250.00
PFHxA 2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	72378.82	250.00
PFHpA 1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	80992.13	250.00
PFHpA 2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	80992.13	250.00
PFHxS 1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	28268.09	236.50
PFHxS 2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	28268.09	236.50
PFOA 1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	97797.29	250.00
PFOA 2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	97797.29	250.00
PFNA 1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	96923.59	250.00
PFNA 2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	96923.59	250.00
PFOS 1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	30436.34	239.25
PFOS 2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	30436.34	239.25
PFDA 1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	104497.23	250.00
PFDA 2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	104497.23	250.00
PFUnA 1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	102206.79	250.00
PFUnA 2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	102206.79	250.00
PFDoA 1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	96958.26	250.00
PFDoA 2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	96958.26	250.00
PFTeDA 1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	74526.73	250.00
PFTeDA 2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	74526.73	250.00
PFTeDA 1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	74526.73	250.00
PFTeDA 2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	74526.73	250.00
NMeFOSAA 1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	14905.40	250.00
NMeFOSAA 2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	14905.40	250.00
NEtFOSAA 1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	19263.03	250.00
NEtFOSAA 2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	19263.03	250.00

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:56:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS 1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	29314.83	232.25
PFBS 2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	29314.83	232.25
PFHxA 1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	67289.65	250.00
PFHxA 2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	67289.65	250.00
PFHpA 1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	73324.27	250.00
PFHpA 2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	73324.27	250.00
PFHxS 1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25417.33	236.50
PFHxS 2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25417.33	236.50
PFOA 1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	95528.22	250.00
PFOA 2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	95528.22	250.00
PFNA 1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	101690.39	250.00
PFNA 2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	101690.39	250.00
PFOS 1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	30774.42	239.25
PFOS 2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	30774.42	239.25
PFDA 1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	106789.15	250.00
PFDA 2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	106789.15	250.00
PFUnA 1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	99028.13	250.00
PFUnA 2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	99028.13	250.00
PFDoA 1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	97016.25	250.00
PFDoA 2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	97016.25	250.00
PFTrDA 1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	74022.89	250.00
PFTrDA 2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	74022.89	250.00
PFTeDA 1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	74022.89	250.00
PFTeDA 2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	74022.89	250.00
NMeFOSAA 1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	15404.47	250.00
NMeFOSAA 2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	15404.47	250.00
NEtFOSAA 1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	17705.36	250.00
NEtFOSAA 2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	17705.36	250.00

Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:56:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	102089.78	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	29054.61	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	29054.61	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	82611.52	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	82611.52	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	82611.52	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	82611.52	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	102089.78	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	102089.78	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	102089.78	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	29054.61	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	29054.61	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	29054.61	239.25

Sample Name	KA88 ISC	Injection Vial	1
Sample ID	Instrument Sensitivity Check	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T15:57:14	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.06	13C2-PFDA	515.0 / 470.0	105322.83	250.00
d3-MeFOSAA	573.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	34413.67	239.25
d5-EtFOSAA	589.0 / 419.0	3.77	13C4-PFOS	503.0 / 99.0	34413.67	239.25
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	94823.08	250.00
13C4-PFHpA	367.0 / 322.0	2.28	13C2-PFOA	415.0 / 370.0	94823.08	250.00
13C8-PFOA	421.0 / 376.0	2.69	13C2-PFOA	415.0 / 370.0	94823.08	250.00
13C9-PFNA	472.0 / 427.0	3.09	13C2-PFOA	415.0 / 370.0	94823.08	250.00
13C6-PFDA	519.0 / 474.0	3.45	13C2-PFDA	515.0 / 470.0	105322.83	250.00
13C7-PFUnA	570.0 / 525.0	3.77	13C2-PFDA	515.0 / 470.0	105322.83	250.00
13C2-PFTeDA	715.0 / 670.0	4.53	13C2-PFDA	515.0 / 470.0	105322.83	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	34413.67	239.25
13C3-PFHxS	402.0 / 99.0	2.30	13C4-PFOS	503.0 / 99.0	34413.67	239.25
13C8-PFOS	507.0 / 99.0	3.08	13C4-PFOS	503.0 / 99.0	34413.67	239.25

Sample Name	KB69 CCV	Injection Vial	9
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:24:13	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	98055.52	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	31842.36	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	31842.36	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	95253.31	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	95253.31	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	95253.31	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	95253.31	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	98055.52	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	98055.52	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	98055.52	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	31842.36	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	31842.36	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	31842.36	239.25

Sample Name	KB85 CCV	Injection Vial	17
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:51:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	90853.96	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	30104.02	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	30104.02	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	79676.34	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	79676.34	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	79676.34	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	79676.34	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	90853.96	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	90853.96	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	90853.96	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	30104.02	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	30104.02	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	30104.02	239.25

Raw Analytical Data

Sample Name	CR852LCS-FS(3)	Injection Vial	14
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:41:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	3742148.42	7587.163970	1250.9	false
PFBS_2	298.9 / 99.0	1.54	1098146.40	7570.077583	1059.7	false
PFHxA_1	313.0 / 269.0	1.86	2504505.90	8253.195237	119.1	false
PFHxA_2	313.0 / 119.0	1.86	181666.26	8157.145886	111.3	false
PFHpA_1	363.0 / 319.0	2.27	2380317.97	7931.927309	387.2	false
PFHpA_2	363.0 / 169.0	2.27	48644.36	7870.249973	394.7	false
PFHxS_1	399.0 / 80.0	2.29	3639266.43	7944.603505	420.5	false
PFHxS_2	399.0 / 99.0	2.29	1014943.92	7775.018096	629.7	false
PFOA_1	413.0 / 369.0	2.68	3300170.94	7527.154904	875.1	false
PFOA_2	413.0 / 169.0	2.68	207727.41	7381.174523	735.4	false
PFNA_1	463.0 / 419.0	3.08	3010646.58	7297.134517	826.5	false
PFNA_2	463.0 / 219.0	3.08	918632.92	7442.175736	790.4	true
PFOS_1	499.0 / 80.0	3.08	5028894.37	7476.292820	422.9	false
PFOS_2	499.0 / 99.0	3.08	902263.18	7695.510186	844.8	false
PFDA_1	513.0 / 469.0	3.43	3434131.02	7347.545482	708.4	false
PFDA_2	513.0 / 219.0	3.43	146176.25	7184.085761	531.2	false
PFUnA_1	563.0 / 519.0	3.75	3493889.29	7832.965032	577.9	false
PFUnA_2	563.0 / 269.0	3.75	171947.05	7504.520911	446.0	false
PFDoA_1	613.0 / 569.0	4.04	3092309.76	7513.278414	691.6	false
PFDoA_2	613.0 / 319.0	4.03	480354.88	7539.738584	632.0	false
PFTTrDA_1	663.0 / 619.0	4.28	2787937.38	7825.781763	1182.0	false
PFTTrDA_2	663.0 / 169.0	4.28	178454.96	7791.849423	752.3	false
PFTeDA_1	713.0 / 669.0	4.50	3079778.59	7872.894419	1568.6	false
PFTeDA_2	713.0 / 169.0	4.49	143248.42	7706.080608	1103.0	false
NMeFOSAA_1	570.0 / 419.0	3.59	510622.31	9188.136474	1209.0	false
NMeFOSAA_2	570.0 / 512.0	3.58	269324.86	7608.176462	1133.2	false
NEtFOSAA_1	584.0 / 419.0	3.75	469211.21	8287.728821	846.0	false
NEtFOSAA_2	584.0 / 483.0	3.75	28731.57	8092.815005	480.4	false

Sample Name	J8230-FS(3)	Injection Vial	16
Sample ID	VC-PM649-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:03:33	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	1.86	515296.15	1515.454846	55.1	false
PFHxA_2	313.0 / 119.0	1.86	39060.80	1556.743488	50.7	false
PFHpA_1	363.0 / 319.0	2.27	133357.91	376.897974	75.3	false
PFHpA_2	363.0 / 169.0	2.27	2885.82	425.788977	55.6	false
PFHxS_1	399.0 / 80.0	2.29	51468.93	112.810537	71.6	false
PFHxS_2	399.0 / 99.0	2.29	15917.94	110.582744	101.3	false
PFOA_1	413.0 / 369.0	2.68	656854.07	1474.074340	386.3	false
PFOA_2	413.0 / 169.0	2.68	43152.10	1506.622316	375.1	false
PFNA_1	463.0 / 419.0	3.08	182609.03	441.483990	220.8	false
PFNA_2	463.0 / 219.0	3.08	55125.05	432.712785	178.2	true
PFOS_1	499.0 / 80.0	3.08	1784792.89	2695.959303	385.4	false
PFOS_2	499.0 / 99.0	3.08	347091.44	2996.109603	782.5	false
PFDA_1	513.0 / 469.0	3.43	13717.64	27.753279	42.2	true
PFDA_2	513.0 / 219.0	3.41	752.05	0.849781	18.9	true
PFUnA_1	563.0 / 519.0	3.76	13798.28	48.355890	46.2	true
PFUnA_2	563.0 / 269.0	3.77	1565.44	2.351714	32.0	true
PFDoA_1	613.0 / 569.0	4.05	4148.01	< 0	38.6	false
PFDoA_2	613.0 / 319.0	4.03	656.19	< 0	18.0	true
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8231-FS(3)	Injection Vial	17
Sample ID	VC-PM649-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:14:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	9005.53	31.982888	17.7	false
PFBS_2	298.9 / 99.0	1.54	4488.85	17.932364	20.4	true
PFHxA_1	313.0 / 269.0	1.86	101448.68	334.756707	17.3	false
PFHxA_2	313.0 / 119.0	1.86	6706.68	290.326948	12.8	false
PFHpA_1	363.0 / 319.0	2.27	33840.53	118.284522	31.3	false
PFHpA_2	363.0 / 169.0	2.26	761.25	159.896729	18.6	false
PFHxS_1	399.0 / 80.0	2.29	319655.68	708.323103	167.1	false
PFHxS_2	399.0 / 99.0	2.29	96249.19	737.535861	222.7	false
PFOA_1	413.0 / 369.0	2.68	130407.54	320.720769	139.9	false
PFOA_2	413.0 / 169.0	2.68	10952.68	412.789640	90.9	false
PFNA_1	463.0 / 419.0	3.08	14218.95	62.428972	39.4	true
PFNA_2	463.0 / 219.0	3.08	4919.70	55.012922	41.3	true
PFOS_1	499.0 / 80.0	3.08	3410796.80	5675.707583	361.4	false
PFOS_2	499.0 / 99.0	3.08	608388.69	5803.965407	769.6	false
PFDA_1	513.0 / 469.0	3.43	5209.14	12.127484	28.7	true
PFDA_2	513.0 / 219.0	3.42	274.48	< 0	7.3	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8232-FS(3)	Injection Vial	18
Sample ID	VC-PM649-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:25:14	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.30	9936.39	22.654112	24.1	false
PFHxS_2	399.0 / 99.0	2.29	1971.85	3.612521	19.9	false
PFOA_1	413.0 / 369.0	2.67	11013.46	42.204460	20.4	true
PFOA_2	413.0 / 169.0	2.73	819.23	44.368907	15.4	true
PFNA_1	463.0 / 419.0	3.07	3272.87	34.122726	14.7	true
PFNA_2	463.0 / 219.0	3.09	1085.19	21.792482	13.6	true
PFOS_1	499.0 / 80.0	3.08	920575.16	1492.307837	255.3	false
PFOS_2	499.0 / 99.0	3.08	183622.29	1692.617735	456.0	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8233-FS(3)	Injection Vial	19
Sample ID	VC-PM649-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:36:06	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.29	33306.89	68.361435	52.6	false
PFHxS_2	399.0 / 99.0	2.29	8982.64	52.705198	45.4	false
PFOA_1	413.0 / 369.0	2.67	17187.10	54.984412	37.3	true
PFOA_2	413.0 / 169.0	2.64	1330.81	61.030391	15.7	true
PFNA_1	463.0 / 419.0	3.08	3447.91	33.870414	15.4	true
PFNA_2	463.0 / 219.0	3.04	2502.06	32.765499	19.3	true
PFOS_1	499.0 / 80.0	3.08	468944.73	662.091703	123.4	false
PFOS_2	499.0 / 99.0	3.08	75989.26	601.025261	254.2	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8234-FS(3)	Injection Vial	20
Sample ID	VC-PM649-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:46:58	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.29	62644.43	124.595034	84.1	false
PFHxS_2	399.0 / 99.0	2.29	18161.10	114.886025	119.4	false
PFOA_1	413.0 / 369.0	2.68	15425.91	46.765951	37.3	true
PFOA_2	413.0 / 169.0	2.63	1179.95	50.664856	15.3	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	false
PFOS_1	499.0 / 80.0	3.07	407650.66	629.103346	191.9	false
PFOS_2	499.0 / 99.0	3.07	85782.21	741.365805	273.6	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8235-FS(3)	Injection Vial	21
Sample ID	VC-PM649-SS03-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:57:50	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.29	33167.69	65.196427	55.4	false
PFHxS_2	399.0 / 99.0	2.29	8394.55	45.879413	73.1	false
PFOA_1	413.0 / 369.0	2.68	19999.01	56.883693	42.1	true
PFOA_2	413.0 / 169.0	2.63	1270.84	54.486227	22.1	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	false
PFOS_1	499.0 / 80.0	3.08	1222421.93	1691.479766	267.6	false
PFOS_2	499.0 / 99.0	3.08	239750.15	1888.862829	553.6	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8236-FS(3)	Injection Vial	22
Sample ID	VC-PM649-SB03-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:08:42	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	65994.11	125.997029	77.4	false
PFHxS_2	399.0 / 99.0	2.29	19970.00	121.953364	119.3	false
PFOA_1	413.0 / 369.0	2.67	22930.34	62.210347	42.7	true
PFOA_2	413.0 / 169.0	2.63	2232.05	84.070852	29.2	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	false
PFOS_1	499.0 / 80.0	3.07	763264.30	1088.413425	185.8	false
PFOS_2	499.0 / 99.0	3.07	148795.98	1201.479904	437.5	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8237-FS(3)	Injection Vial	25
Sample ID	VC-PM649-SB03-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:41:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	96000.75	266.563628	131.4	false
PFBS_2	298.9 / 99.0	1.54	31677.49	269.505436	116.7	false
PFHxA_1	313.0 / 269.0	1.86	133880.04	517.421013	21.3	false
PFHxA_2	313.0 / 119.0	1.86	8393.22	430.619832	16.0	false
PFHpA_1	363.0 / 319.0	2.27	34260.85	132.351276	31.5	false
PFHpA_2	363.0 / 169.0	2.27	982.41	213.573722	27.1	true
PFHxS_1	399.0 / 80.0	2.29	163107.40	429.682044	102.5	false
PFHxS_2	399.0 / 99.0	2.29	48236.95	434.553178	182.8	false
PFOA_1	413.0 / 369.0	2.67	44933.61	130.010489	82.5	false
PFOA_2	413.0 / 169.0	2.67	4105.41	176.300958	70.0	false
PFNA_1	463.0 / 419.0	3.08	5770.76	41.567258	22.7	true
PFNA_2	463.0 / 219.0	3.07	2027.66	31.133827	19.3	true
PFOS_1	499.0 / 80.0	3.07	2237385.14	4366.491772	375.1	false
PFOS_2	499.0 / 99.0	3.07	438775.09	4905.126672	671.0	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8238-FS(3)	Injection Vial	26
Sample ID	VC-PM649-SS04-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:52:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	1.86	121062.59	343.326924	22.0	false
PFHxA_2	313.0 / 119.0	1.86	8550.82	319.702098	16.0	false
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.29	109344.68	211.445546	101.0	false
PFHxS_2	399.0 / 99.0	2.29	29884.14	191.016080	183.2	false
PFOA_1	413.0 / 369.0	2.67	34797.90	84.958052	63.7	true
PFOA_2	413.0 / 169.0	2.63	2332.24	86.019086	36.1	true
PFNA_1	463.0 / 419.0	3.07	4761.03	35.700856	18.9	true
PFNA_2	463.0 / 219.0	3.08	1760.02	24.866163	17.7	true
PFOS_1	499.0 / 80.0	3.07	2330126.09	3265.278625	384.2	false
PFOS_2	499.0 / 99.0	3.07	452324.12	3626.153924	674.3	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8240-FS(3)	Injection Vial	28
Sample ID	VC-PM649-SB04-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:13:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	5591.64	21.451170	16.0	false
PFBS_2	298.9 / 99.0	1.52	3043.20	1.800416	15.4	true
PFHxA_1	313.0 / 269.0	1.85	75016.69	220.183802	15.4	false
PFHxA_2	313.0 / 119.0	1.87	4885.86	183.941430	9.8	false
PFHpA_1	363.0 / 319.0	2.26	21640.45	68.676061	23.2	false
PFHpA_2	363.0 / 169.0	2.24	553.56	115.590476	17.1	false
PFHxS_1	399.0 / 80.0	2.28	100859.53	205.399530	119.6	false
PFHxS_2	399.0 / 99.0	2.29	29460.66	198.801008	157.9	false
PFOA_1	413.0 / 369.0	2.67	37660.58	90.678839	65.8	false
PFOA_2	413.0 / 169.0	2.64	3936.67	135.613275	67.4	false
PFNA_1	463.0 / 419.0	3.06	2588.15	31.179651	10.9	true
PFNA_2	463.0 / 219.0	3.08	595.75	16.543216	9.0	true
PFOS_1	499.0 / 80.0	3.07	930520.14	1328.607892	237.5	false
PFOS_2	499.0 / 99.0	3.07	183036.47	1483.998268	506.9	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8248-FS(3)	Injection Vial	29
Sample ID	VC-PM365-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:24:43	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	42407.25	97.841718	61.4	false
PFBS_2	298.9 / 99.0	1.53	13512.47	76.080047	53.7	true
PFHxA_1	313.0 / 269.0	1.85	84733.62	238.822587	13.3	false
PFHxA_2	313.0 / 119.0	1.86	4760.38	170.430603	11.2	false
PFHpA_1	363.0 / 319.0	2.26	22110.84	70.663315	20.4	false
PFHpA_2	363.0 / 169.0	2.26	586.62	121.117129	13.0	false
PFHxS_1	399.0 / 80.0	2.28	146699.47	303.424669	122.5	false
PFHxS_2	399.0 / 99.0	2.28	44222.96	309.424371	181.1	false
PFOA_1	413.0 / 369.0	2.67	11497.09	39.440180	25.0	true
PFOA_2	413.0 / 169.0	2.56	1553.14	63.293047	23.2	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	false
PFOS_1	499.0 / 80.0	3.07	721837.94	982.405132	147.1	false
PFOS_2	499.0 / 99.0	3.07	133610.05	1027.816754	318.3	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8249-FS(3)	Injection Vial	30
Sample ID	VC-PM365-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:35:35	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	31979.10	73.263603	54.3	false
PFBS_2	298.9 / 99.0	1.53	8993.96	41.277906	42.5	true
PFHxA_1	313.0 / 269.0	1.85	69193.71	186.170032	13.7	false
PFHxA_2	313.0 / 119.0	1.85	4807.35	165.198127	10.7	false
PFHpA_1	363.0 / 319.0	2.26	26512.14	78.154007	26.7	false
PFHpA_2	363.0 / 169.0	2.29	489.66	101.792367	14.2	false
PFHxS_1	399.0 / 80.0	2.28	236260.58	451.664019	150.9	false
PFHxS_2	399.0 / 99.0	2.28	73679.45	483.010971	312.9	false
PFOA_1	413.0 / 369.0	2.65	6895.61	29.749742	13.5	true
PFOA_2	413.0 / 169.0	2.58	635.42	33.725825	10.0	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	false
PFOS_1	499.0 / 80.0	3.07	44588.44	75.018444	37.1	false
PFOS_2	499.0 / 99.0	3.07	10177.28	77.169326	66.0	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8250-FS(3)	Injection Vial	31
Sample ID	VC-PM365-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:46:27	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	13176.74	38.293934	29.7	false
PFBS_2	298.9 / 99.0	1.53	5263.52	19.115964	29.3	true
PFHxA_1	313.0 / 269.0	1.85	60881.07	162.240216	12.5	false
PFHxA_2	313.0 / 119.0	1.85	4381.39	148.278563	9.8	false
PFHpA_1	363.0 / 319.0	2.26	13299.95	43.705253	15.6	false
PFHpA_2	363.0 / 169.0	2.29	218.99	67.170369	7.7	true
PFHxS_1	399.0 / 80.0	2.29	145143.93	290.262842	132.8	false
PFHxS_2	399.0 / 99.0	2.29	42939.92	289.749980	169.4	false
PFOA_1	413.0 / 369.0	2.67	42341.11	98.085421	80.9	false
PFOA_2	413.0 / 169.0	2.64	4814.91	159.421548	71.8	false
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	false
PFOS_1	499.0 / 80.0	3.07	28402.23	55.931126	23.8	false
PFOS_2	499.0 / 99.0	3.06	4933.40	39.034998	48.8	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8251-FS(3)	Injection Vial	32
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:57:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	1652491.69	3440.849439	893.2	false
PFBS_2	298.9 / 99.0	1.54	535410.05	3774.724171	628.7	false
PFHxA_1	313.0 / 269.0	1.85	2447170.42	8458.270168	117.3	false
PFHxA_2	313.0 / 119.0	1.86	161453.30	7602.343997	88.7	false
PFHpA_1	363.0 / 319.0	2.26	594771.68	2038.686817	148.8	false
PFHpA_2	363.0 / 169.0	2.26	15161.37	2543.715658	172.5	false
PFHxS_1	399.0 / 80.0	2.29	9744539.28	21352.868700	691.6	false
PFHxS_2	399.0 / 99.0	2.29	3159611.53	24321.438459	778.6	false
PFOA_1	413.0 / 369.0	2.67	1138843.04	2914.187766	476.5	false
PFOA_2	413.0 / 169.0	2.62	115468.22	4592.881660	288.3	false
PFNA_1	463.0 / 419.0	3.07	10405.40	54.516798	33.7	true
PFNA_2	463.0 / 219.0	3.07	3849.63	48.187242	29.0	true
PFOS_1	499.0 / 80.0	3.07	51717306.10	88482.835849	520.7	false
PFOS_2	499.0 / 99.0	3.07	9302043.82	91492.300675	1538.1	false
PFDA_1	513.0 / 469.0	3.42	23192.80	53.480665	61.1	true
PFDA_2	513.0 / 219.0	3.43	1265.40	33.082493	29.9	false
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8251-FS-D(5)	Injection Vial	33
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:08:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.29	1859281.91	4277.828457	368.0	false
PFHxS_2	399.0 / 99.0	2.29	608242.38	4906.455008	686.5	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	false
PFOS_1	499.0 / 80.0	3.07	10860939.69	17614.382921	448.4	true
PFOS_2	499.0 / 99.0	3.07	1996024.38	18595.982586	1304.8	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8252-FS-D(5)	Injection Vial	37
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:51:37	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	false
PFOS_1	499.0 / 80.0	3.07	12752514.32	20302.609333	1292.1	true
PFOS_2	499.0 / 99.0	3.07	2521867.01	23066.930849	1926.0	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8253-FS(3)	Injection Vial	38
Sample ID	VC-PM365-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:02:28	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	310349.97	758.058792	377.8	false
PFBS_2	298.9 / 99.0	1.53	93078.77	746.325376	243.3	false
PFHxA_1	313.0 / 269.0	1.85	293481.90	941.043022	41.8	false
PFHxA_2	313.0 / 119.0	1.85	18379.41	792.115255	29.5	false
PFHpA_1	363.0 / 319.0	2.26	47025.44	169.444635	36.3	false
PFHpA_2	363.0 / 169.0	2.23	2106.92	394.106085	34.5	false
PFHxS_1	399.0 / 80.0	2.28	2514094.79	5076.976726	691.5	false
PFHxS_2	399.0 / 99.0	2.28	755341.53	5348.903498	1121.4	false
PFOA_1	413.0 / 369.0	2.67	480573.77	1080.326311	339.9	false
PFOA_2	413.0 / 169.0	2.65	40833.78	1423.182410	259.5	false
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	false
PFOS_1	499.0 / 80.0	3.06	8146986.13	12671.742000	377.4	false
PFOS_2	499.0 / 99.0	3.06	1396001.99	12468.426260	1058.4	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDaA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDaA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8257MS-FS-D(5)	Injection Vial	40
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:24:13	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	859104.99	1972.978282	669.9	false
PFBS_2	298.9 / 99.0	1.54	261400.41	2019.204429	529.2	false
PFHxA_1	313.0 / 269.0	1.86	615141.91	1978.166280	59.4	false
PFHxA_2	313.0 / 119.0	1.86	43482.60	1896.718997	45.2	false
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	1177471.07	2676.103465	429.5	true
PFHxS_2	399.0 / 99.0	2.28	381228.09	3033.159245	691.6	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.07	8943672.79	13008.199883	990.0	false
PFOS_2	499.0 / 99.0	3.07	1640656.16	13703.325991	2315.3	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8258MSD-FS(3)	Injection Vial	41
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:35:05	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	8105542.04	18127.586591	2569.8	false
PFBS_2	298.9 / 99.0	1.54	2381831.40	18152.362199	1309.7	false
PFHxA_1	313.0 / 269.0	1.85	5381229.19	17819.743182	210.6	false
PFHxA_2	313.0 / 119.0	1.85	402304.80	18166.279443	163.2	false
PFHpA_1	363.0 / 319.0	2.26	4649145.37	15484.703986	535.8	false
PFHpA_2	363.0 / 169.0	2.26	90615.45	14626.526628	412.2	false
PFHxS_1	399.0 / 80.0	2.28	9225168.38	20878.391354	970.3	false
PFHxS_2	399.0 / 99.0	2.28	2778969.32	22092.500996	1307.0	false
PFOA_1	413.0 / 369.0	2.67	6193929.46	15355.216552	1202.7	false
PFOA_2	413.0 / 169.0	2.67	419552.23	16204.475087	739.6	false
PFNA_1	463.0 / 419.0	3.07	4988965.63	14941.068428	1225.9	false
PFNA_2	463.0 / 219.0	3.06	1490470.61	14934.151000	1082.9	true
PFOS_1	499.0 / 80.0	3.06	60562549.87	112055.548865	1054.8	false
PFOS_2	499.0 / 99.0	3.06	11992609.81	127568.707574	1767.0	false
PFDA_1	513.0 / 469.0	3.42	6338078.17	14222.641024	803.4	false
PFDA_2	513.0 / 219.0	3.42	268980.19	13896.382328	529.3	false
PFUnA_1	563.0 / 519.0	3.74	6724284.67	13719.349803	787.8	false
PFUnA_2	563.0 / 269.0	3.74	343646.02	13712.886163	564.2	false
PFDaA_1	613.0 / 569.0	4.02	6182505.36	14780.895814	761.5	false
PFDaA_2	613.0 / 319.0	4.02	1014253.06	15673.213844	838.8	false
PFTrDA_1	663.0 / 619.0	4.27	5678240.86	14523.147171	1378.3	false
PFTrDA_2	663.0 / 169.0	4.26	368678.29	14669.094563	905.3	false
PFTeDA_1	713.0 / 669.0	4.48	6276172.40	14603.658376	1648.9	false
PFTeDA_2	713.0 / 169.0	4.48	302271.06	14797.841109	1667.0	false
NMeFOSAA_1	570.0 / 419.0	3.58	1069761.13	17245.573697	993.2	false
NMeFOSAA_2	570.0 / 512.0	3.57	595217.41	14995.460801	934.8	false
NEtFOSAA_1	584.0 / 419.0	3.74	1032260.04	16438.778433	1169.6	false
NEtFOSAA_2	584.0 / 483.0	3.74	65612.20	16747.079223	916.1	false

Sample Name	J8258MSD-FS-D(5)	Injection Vial	42
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:45:56	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	569961.05	1844.794276	612.5	false
PFBS_2	298.9 / 99.0	1.54	171939.27	1869.782192	417.7	false
PFHxA_1	313.0 / 269.0	1.85	418747.76	1713.130969	53.0	false
PFHxA_2	313.0 / 119.0	1.85	31324.80	1737.793738	39.2	false
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	787315.73	2148.606268	368.3	true
PFHxS_2	399.0 / 99.0	2.28	225383.21	2149.676298	545.4	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	false
PFOS_1	499.0 / 80.0	3.06	6314818.84	11673.264725	850.0	false
PFOS_2	499.0 / 99.0	3.06	1203364.35	12772.481482	1457.0	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:47:30	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	7251.36	29.124350	16.6	false
PFBS_2	298.9 / 99.0	1.54	2301.83	1.265651	17.6	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.30	8193.29	19.913414	17.0	false
PFHxS_2	399.0 / 99.0	2.30	2050.84	5.400280	20.9	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	3.08	4914.14	38.559495	24.8	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	true
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.05	6147.66	< 0	51.5	false
PFDoA_2	613.0 / 319.0	4.03	802.19	< 0	20.2	false
PFTTrDA_1	663.0 / 619.0	4.29	5397.83	< 0	102.9	false
PFTTrDA_2	663.0 / 169.0	4.30	523.52	< 0	15.5	false
PFTeDA_1	713.0 / 669.0	4.50	6561.10	< 0	148.9	false
PFTeDA_2	713.0 / 169.0	4.51	442.58	< 0	39.2	false
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	CR851PB-FS(3)	Injection Vial	13
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:30:59	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	false
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	true
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	CR852LCS-FS(3)	Injection Vial	14
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:41:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	116917.79	302.074818	1171.3	false
d3-MeFOSAA	573.0 / 419.0	3.58	14314.31	274.756755	96.2	false
d5-EtFOSAA	589.0 / 419.0	3.74	16091.73	312.337075	156.5	false
13C5-PFHxA	318.0 / 273.0	1.85	78468.81	275.483238	501.6	false
13C4-PFHpA	367.0 / 322.0	2.26	91737.66	281.144137	701.1	false
13C8-PFOA	421.0 / 376.0	2.67	109910.49	288.224896	1519.6	false
13C9-PFNA	472.0 / 427.0	3.06	109797.84	288.125029	924.0	false
13C6-PFDA	519.0 / 474.0	3.42	115882.34	287.128109	2693.4	false
13C7-PFUnA	570.0 / 525.0	3.74	106081.26	292.190571	614.0	false
13C2-PFTeDA	715.0 / 670.0	4.49	89037.68	297.556258	1518.5	false
13C3-PFBS	302.0 / 99.0	1.53	41428.75	314.919952	549.5	false
13C3-PFHxS	402.0 / 99.0	2.28	32650.47	291.674579	289.0	false
13C8-PFOS	507.0 / 99.0	3.06	36086.61	295.210039	199.6	false

Sample Name	J8230-FS(3)	Injection Vial	16
Sample ID	VC-PM649-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:03:33	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	117923.33	259.550188	868.0	false
d3-MeFOSAA	573.0 / 419.0	3.58	14790.89	254.043570	162.2	false
d5-EtFOSAA	589.0 / 419.0	3.74	16673.15	289.583873	196.0	false
13C5-PFHxA	318.0 / 273.0	1.85	87573.08	274.827012	525.1	false
13C4-PFHpA	367.0 / 322.0	2.26	109250.33	299.291780	824.5	false
13C8-PFOA	421.0 / 376.0	2.67	112696.39	264.175813	4746.6	false
13C9-PFNA	472.0 / 427.0	3.06	116374.46	272.982969	1092.4	false
13C6-PFDA	519.0 / 474.0	3.42	126724.51	267.489534	688.6	false
13C7-PFUnA	570.0 / 525.0	3.74	120994.05	283.909086	802.7	false
13C2-PFTeDA	715.0 / 670.0	4.49	91626.47	260.857873	2048.0	false
13C3-PFBS	302.0 / 99.0	1.53	43352.10	294.879512	473.2	false
13C3-PFHxS	402.0 / 99.0	2.28	33211.00	265.477166	269.6	false
13C8-PFOS	507.0 / 99.0	3.06	35416.55	259.255166	200.7	false

Sample Name	J8231-FS(3)	Injection Vial	17
Sample ID	VC-PM649-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:14:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	102400.81	261.897284	1069.3	false
d3-MeFOSAA	573.0 / 419.0	3.58	14280.54	242.985517	147.4	false
d5-EtFOSAA	589.0 / 419.0	3.74	16650.34	286.485028	172.2	false
13C5-PFHxA	318.0 / 273.0	1.85	76724.47	257.792793	527.8	false
13C4-PFHpA	367.0 / 322.0	2.26	90418.59	265.202634	878.6	false
13C8-PFOA	421.0 / 376.0	2.67	107071.74	268.723694	1365.6	false
13C9-PFNA	472.0 / 427.0	3.06	101680.82	255.367124	680.7	false
13C6-PFDA	519.0 / 474.0	3.42	115203.51	282.564693	1037.2	false
13C7-PFUnA	570.0 / 525.0	3.74	104867.02	285.930285	854.3	false
13C2-PFTeDA	715.0 / 670.0	4.49	79451.07	262.838349	1553.7	false
13C3-PFBS	302.0 / 99.0	1.53	34397.62	231.784730	434.7	false
13C3-PFHxS	402.0 / 99.0	2.28	31649.02	250.626729	223.6	false
13C8-PFOS	507.0 / 99.0	3.06	31818.57	230.740464	194.5	false

Sample Name	J8232-FS(3)	Injection Vial	18
Sample ID	VC-PM649-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:25:14	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	99374.77	248.287048	640.8	false
d3-MeFOSAA	573.0 / 419.0	3.58	7459.82	128.805326	142.6	true
d5-EtFOSAA	589.0 / 419.0	3.74	7229.76	126.232917	104.7	false
13C5-PFHxA	318.0 / 273.0	1.85	72923.56	243.316569	438.4	false
13C4-PFHpA	367.0 / 322.0	2.26	85326.24	248.524759	714.7	false
13C8-PFOA	421.0 / 376.0	2.67	105327.26	262.505744	948.1	false
13C9-PFNA	472.0 / 427.0	3.06	98866.02	246.569828	906.3	false
13C6-PFDA	519.0 / 474.0	3.42	108702.35	260.460220	925.8	false
13C7-PFUnA	570.0 / 525.0	3.74	100333.06	267.248718	566.4	false
13C2-PFTeDA	715.0 / 670.0	4.49	76522.18	247.301431	1317.0	false
13C3-PFBS	302.0 / 99.0	1.53	34616.17	236.703837	425.0	false
13C3-PFHxS	402.0 / 99.0	2.28	30815.51	247.631703	225.6	false
13C8-PFOS	507.0 / 99.0	3.06	32148.74	236.579366	189.1	false

Sample Name	J8233-FS(3)	Injection Vial	19
Sample ID	VC-PM649-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:36:06	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	106530.69	223.538845	1290.1	false
d3-MeFOSAA	573.0 / 419.0	3.58	8150.84	143.653732	93.4	false
d5-EtFOSAA	589.0 / 419.0	3.74	10171.73	181.280881	122.8	false
13C5-PFHxA	318.0 / 273.0	1.85	76662.96	220.800313	525.2	false
13C4-PFHpA	367.0 / 322.0	2.25	90027.39	226.345578	616.7	false
13C8-PFOA	421.0 / 376.0	2.67	110419.61	237.549746	1136.3	false
13C9-PFNA	472.0 / 427.0	3.06	107235.54	230.856387	846.4	false
13C6-PFDA	519.0 / 474.0	3.42	119710.13	240.898287	880.0	false
13C7-PFUnA	570.0 / 525.0	3.73	107548.89	240.590124	820.4	false
13C2-PFTeDA	715.0 / 670.0	4.49	82421.25	223.706607	1449.5	false
13C3-PFBS	302.0 / 99.0	1.52	41631.38	290.573337	578.1	false
13C3-PFHxS	402.0 / 99.0	2.28	35779.21	293.478516	300.8	false
13C8-PFOS	507.0 / 99.0	3.06	38323.80	287.865880	195.8	false

Sample Name	J8234-FS(3)	Injection Vial	20
Sample ID	VC-PM649-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:46:58	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	116602.16	281.951860	827.3	false
d3-MeFOSAA	573.0 / 419.0	3.57	14498.98	232.568247	189.9	false
d5-EtFOSAA	589.0 / 419.0	3.74	18959.56	307.527795	157.8	false
13C5-PFHxA	318.0 / 273.0	1.84	86276.84	278.680351	446.5	false
13C4-PFHpA	367.0 / 322.0	2.25	100880.62	284.448143	515.3	false
13C8-PFOA	421.0 / 376.0	2.67	125619.30	303.083820	2081.3	false
13C9-PFNA	472.0 / 427.0	3.06	122058.99	294.693777	907.8	false
13C6-PFDA	519.0 / 474.0	3.41	120641.76	279.763205	739.3	false
13C7-PFUnA	570.0 / 525.0	3.73	123311.67	317.882178	668.7	false
13C2-PFTeDA	715.0 / 670.0	4.49	91800.29	287.126835	1479.7	false
13C3-PFBS	302.0 / 99.0	1.52	41335.07	262.574391	356.4	false
13C3-PFHxS	402.0 / 99.0	2.28	35424.71	264.454355	359.6	false
13C8-PFOS	507.0 / 99.0	3.06	37226.08	254.488203	228.0	false

Sample Name	J8235-FS(3)	Injection Vial	21
Sample ID	VC-PM649-SS03-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:57:50	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	122850.91	268.630500	861.4	false
d3-MeFOSAA	573.0 / 419.0	3.58	14236.93	218.151713	147.6	false
d5-EtFOSAA	589.0 / 419.0	3.74	18732.50	290.255840	167.1	false
13C5-PFHxA	318.0 / 273.0	1.85	92280.26	269.210907	605.5	false
13C4-PFHpA	367.0 / 322.0	2.26	102173.14	260.197920	607.2	false
13C8-PFOA	421.0 / 376.0	2.67	122509.16	266.960282	3561.3	false
13C9-PFNA	472.0 / 427.0	3.06	119148.86	259.814129	1315.7	false
13C6-PFDA	519.0 / 474.0	3.41	132818.67	278.522733	811.0	false
13C7-PFUnA	570.0 / 525.0	3.73	126773.88	295.529187	812.0	false
13C2-PFTeDA	715.0 / 670.0	4.49	97281.89	275.150509	1966.3	false
13C3-PFBS	302.0 / 99.0	1.53	41395.86	251.200049	408.6	false
13C3-PFHxS	402.0 / 99.0	2.28	35648.70	254.224347	250.5	false
13C8-PFOS	507.0 / 99.0	3.06	39959.74	260.958883	236.4	false

Sample Name	J8236-FS(3)	Injection Vial	22
Sample ID	VC-PM649-SB03-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:08:42	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	120406.69	258.013966	842.3	false
d3-MeFOSAA	573.0 / 419.0	3.57	13834.51	204.944434	172.7	false
d5-EtFOSAA	589.0 / 419.0	3.73	16132.36	241.664669	162.8	false
13C5-PFHxA	318.0 / 273.0	1.84	88409.40	259.228948	507.4	false
13C4-PFHpA	367.0 / 322.0	2.25	109802.82	281.048836	648.2	false
13C8-PFOA	421.0 / 376.0	2.66	124257.71	272.146424	1690.7	false
13C9-PFNA	472.0 / 427.0	3.06	115067.51	252.189410	1149.8	false
13C6-PFDA	519.0 / 474.0	3.41	131601.77	270.444966	1145.9	false
13C7-PFUnA	570.0 / 525.0	3.73	126961.19	290.039542	811.1	false
13C2-PFTeDA	715.0 / 670.0	4.48	96659.96	267.917198	1677.3	false
13C3-PFBS	302.0 / 99.0	1.52	44605.97	261.689305	399.3	false
13C3-PFHxS	402.0 / 99.0	2.27	37120.55	255.928190	319.0	false
13C8-PFOS	507.0 / 99.0	3.05	37359.85	235.876558	280.4	false

Sample Name	J8237-FS(3)	Injection Vial	25
Sample ID	VC-PM649-SB03-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:41:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	92999.63	236.388499	1428.5	false
d3-MeFOSAA	573.0 / 419.0	3.58	13303.32	232.990978	183.5	false
d5-EtFOSAA	589.0 / 419.0	3.73	13721.59	243.011171	197.3	false
13C5-PFHxA	318.0 / 273.0	1.85	66015.20	213.568598	568.6	false
13C4-PFHpA	367.0 / 322.0	2.26	81514.57	230.203494	470.7	false
13C8-PFOA	421.0 / 376.0	2.67	98631.05	238.342412	2042.0	false
13C9-PFNA	472.0 / 427.0	3.06	94331.46	228.107240	737.5	false
13C6-PFDA	519.0 / 474.0	3.41	98411.35	239.891517	1163.2	false
13C7-PFUnA	570.0 / 525.0	3.73	100737.92	272.980564	499.0	false
13C2-PFTeDA	715.0 / 670.0	4.49	74263.93	244.165571	1698.4	false
13C3-PFBS	302.0 / 99.0	1.53	31390.74	217.721417	409.8	false
13C3-PFHxS	402.0 / 99.0	2.28	27296.37	222.492431	289.8	false
13C8-PFOS	507.0 / 99.0	3.06	28442.04	212.298533	214.5	false

Sample Name	J8238-FS(3)	Injection Vial	26
Sample ID	VC-PM649-SS04-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:52:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	124024.96	267.476478	1022.7	false
d3-MeFOSAA	573.0 / 419.0	3.58	15479.83	238.624340	182.7	false
d5-EtFOSAA	589.0 / 419.0	3.73	20312.86	316.637560	211.0	false
13C5-PFHxA	318.0 / 273.0	1.84	89321.35	246.794558	717.9	false
13C4-PFHpA	367.0 / 322.0	2.25	103336.97	249.240867	564.8	false
13C8-PFOA	421.0 / 376.0	2.67	126320.31	260.704007	1695.9	false
13C9-PFNA	472.0 / 427.0	3.06	121906.57	251.765630	1042.0	false
13C6-PFDA	519.0 / 474.0	3.41	132534.33	274.112879	883.3	false
13C7-PFUnA	570.0 / 525.0	3.73	127486.88	293.113381	603.5	false
13C2-PFTeDA	715.0 / 670.0	4.48	91468.98	255.159469	2342.5	false
13C3-PFBS	302.0 / 99.0	1.52	43750.38	267.085850	539.7	false
13C3-PFHxS	402.0 / 99.0	2.28	36628.02	262.780595	280.9	false
13C8-PFOS	507.0 / 99.0	3.06	38250.33	251.299090	197.7	false

Sample Name	J8240-FS(3)	Injection Vial	28
Sample ID	VC-PM649-SB04-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:13:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	119386.04	257.092368	675.4	false
d3-MeFOSAA	573.0 / 419.0	3.57	15212.00	220.162671	159.7	false
d5-EtFOSAA	589.0 / 419.0	3.73	17096.31	250.208945	143.4	false
13C5-PFHxA	318.0 / 273.0	1.84	85288.48	247.055736	476.3	false
13C4-PFHpA	367.0 / 322.0	2.25	102123.33	258.233632	739.1	false
13C8-PFOA	421.0 / 376.0	2.66	126232.64	273.130688	1201.2	false
13C9-PFNA	472.0 / 427.0	3.05	117608.42	254.643194	1023.0	false
13C6-PFDA	519.0 / 474.0	3.41	124650.17	257.426385	762.3	false
13C7-PFUnA	570.0 / 525.0	3.73	128682.70	295.426495	619.0	false
13C2-PFTeDA	715.0 / 670.0	4.48	94569.97	263.420920	1814.9	false
13C3-PFBS	302.0 / 99.0	1.52	41037.24	235.210195	352.8	false
13C3-PFHxS	402.0 / 99.0	2.28	34439.35	231.976350	311.6	false
13C8-PFOS	507.0 / 99.0	3.05	38393.86	236.824400	213.7	false

Sample Name	J8248-FS(3)	Injection Vial	29
Sample ID	VC-PM365-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:24:43	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	125568.40	277.064361	798.5	false
d3-MeFOSAA	573.0 / 419.0	3.57	15028.68	242.696152	190.1	false
d5-EtFOSAA	589.0 / 419.0	3.73	16454.22	268.696722	215.6	false
13C5-PFHxA	318.0 / 273.0	1.84	89045.18	263.676233	447.4	false
13C4-PFHpA	367.0 / 322.0	2.25	101235.92	261.684768	592.3	false
13C8-PFOA	421.0 / 376.0	2.66	122945.38	271.936213	1238.6	false
13C9-PFNA	472.0 / 427.0	3.06	120728.65	267.214474	760.3	false
13C6-PFDA	519.0 / 474.0	3.41	125698.43	265.983512	950.8	false
13C7-PFUnA	570.0 / 525.0	3.73	118259.22	278.181959	789.6	false
13C2-PFTeDA	715.0 / 670.0	4.48	92234.21	263.241098	1358.9	false
13C3-PFBS	302.0 / 99.0	1.52	40506.99	259.055475	396.7	false
13C3-PFHxS	402.0 / 99.0	2.27	34046.16	255.883111	265.9	false
13C8-PFOS	507.0 / 99.0	3.06	40532.44	278.966555	192.1	false

Sample Name	J8249-FS(3)	Injection Vial	30
Sample ID	VC-PM365-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:35:35	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	120993.77	262.883625	1056.5	false
d3-MeFOSAA	573.0 / 419.0	3.57	14643.76	239.358836	192.2	false
d5-EtFOSAA	589.0 / 419.0	3.73	18293.37	302.366426	164.0	false
13C5-PFHxA	318.0 / 273.0	1.84	92487.26	268.971757	507.9	false
13C4-PFHpA	367.0 / 322.0	2.25	109137.22	277.064499	590.8	false
13C8-PFOA	421.0 / 376.0	2.66	125887.83	273.465632	1468.3	false
13C9-PFNA	472.0 / 427.0	3.06	122033.71	265.273349	1136.7	false
13C6-PFDA	519.0 / 474.0	3.41	132741.48	276.586993	695.2	false
13C7-PFUnA	570.0 / 525.0	3.73	124883.93	289.268217	1030.3	false
13C2-PFTeDA	715.0 / 670.0	4.48	97947.47	275.267628	2390.9	false
13C3-PFBS	302.0 / 99.0	1.52	42417.36	274.575070	506.8	false
13C3-PFHxS	402.0 / 99.0	2.27	36419.12	277.049647	305.2	false
13C8-PFOS	507.0 / 99.0	3.06	39173.11	272.892831	220.6	false

Sample Name	J8250-FS(3)	Injection Vial	31
Sample ID	VC-PM365-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:46:27	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	131095.55	285.486860	785.6	false
d3-MeFOSAA	573.0 / 419.0	3.57	17152.02	255.100191	218.1	false
d5-EtFOSAA	589.0 / 419.0	3.73	20249.31	304.543061	199.8	false
13C5-PFHxA	318.0 / 273.0	1.84	92851.24	257.693012	675.2	false
13C4-PFHpA	367.0 / 322.0	2.25	102166.03	247.516810	771.8	false
13C8-PFOA	421.0 / 376.0	2.66	129108.13	267.647232	1029.9	false
13C9-PFNA	472.0 / 427.0	3.06	115058.74	238.684162	789.3	false
13C6-PFDA	519.0 / 474.0	3.41	137117.34	286.361805	1612.8	false
13C7-PFUnA	570.0 / 525.0	3.73	120632.30	280.062780	690.5	false
13C2-PFTeDA	715.0 / 670.0	4.48	90731.38	255.574229	2758.7	false
13C3-PFBS	302.0 / 99.0	1.52	39095.38	230.272193	529.3	false
13C3-PFHxS	402.0 / 99.0	2.28	34112.81	236.126254	258.3	false
13C8-PFOS	507.0 / 99.0	3.05	36069.24	228.633399	206.5	false

Sample Name	J8251-FS(3)	Injection Vial	32
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:57:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	105956.96	236.449750	942.0	false
d3-MeFOSAA	573.0 / 419.0	3.58	10493.60	208.534411	123.5	false
d5-EtFOSAA	589.0 / 419.0	3.73	12152.51	244.209150	122.4	false
13C5-PFHxA	318.0 / 273.0	1.85	74815.10	243.246322	619.3	false
13C4-PFHpA	367.0 / 322.0	2.25	89312.83	253.486067	547.3	false
13C8-PFOA	421.0 / 376.0	2.67	98299.46	238.727450	1258.3	false
13C9-PFNA	472.0 / 427.0	3.06	94590.75	229.876584	722.4	false
13C6-PFDA	519.0 / 474.0	3.41	109386.47	234.097903	951.6	false
13C7-PFUnA	570.0 / 525.0	3.73	102127.43	242.965937	841.7	false
13C2-PFTeDA	715.0 / 670.0	4.48	78072.97	225.357189	1548.9	false
13C3-PFBS	302.0 / 99.0	1.53	40404.20	317.980328	575.1	false
13C3-PFHxS	402.0 / 99.0	2.28	32631.46	301.801195	279.8	false
13C8-PFOS	507.0 / 99.0	3.06	30999.74	262.553859	195.3	false

Sample Name	J8251-FS-D(5)	Injection Vial	33
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:08:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	N/A	N/A	N/A	N/A	true
d3-MeFOSAA	573.0 / 419.0	N/A	N/A	N/A	N/A	true
d5-EtFOSAA	589.0 / 419.0	N/A	N/A	N/A	N/A	true
13C5-PFHxA	318.0 / 273.0	N/A	N/A	N/A	N/A	true
13C4-PFHpA	367.0 / 322.0	N/A	N/A	N/A	N/A	true
13C8-PFOA	421.0 / 376.0	N/A	N/A	N/A	N/A	true
13C9-PFNA	472.0 / 427.0	N/A	N/A	N/A	N/A	true
13C6-PFDA	519.0 / 474.0	N/A	N/A	N/A	N/A	true
13C7-PFUnA	570.0 / 525.0	N/A	N/A	N/A	N/A	true
13C2-PFTeDA	715.0 / 670.0	N/A	N/A	N/A	N/A	true
13C3-PFBS	302.0 / 99.0	N/A	N/A	N/A	N/A	true
13C3-PFHxS	402.0 / 99.0	N/A	N/A	N/A	N/A	true
13C8-PFOS	507.0 / 99.0	N/A	N/A	N/A	N/A	true

Sample Name	J8252-FS-D(5)	Injection Vial	37
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:51:37	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	N/A	N/A	N/A	N/A	true
d3-MeFOSAA	573.0 / 419.0	N/A	N/A	N/A	N/A	true
d5-EtFOSAA	589.0 / 419.0	N/A	N/A	N/A	N/A	true
13C5-PFHxA	318.0 / 273.0	N/A	N/A	N/A	N/A	true
13C4-PFHpA	367.0 / 322.0	N/A	N/A	N/A	N/A	true
13C8-PFOA	421.0 / 376.0	N/A	N/A	N/A	N/A	true
13C9-PFNA	472.0 / 427.0	N/A	N/A	N/A	N/A	true
13C6-PFDA	519.0 / 474.0	N/A	N/A	N/A	N/A	true
13C7-PFUnA	570.0 / 525.0	N/A	N/A	N/A	N/A	true
13C2-PFTeDA	715.0 / 670.0	N/A	N/A	N/A	N/A	true
13C3-PFBS	302.0 / 99.0	N/A	N/A	N/A	N/A	true
13C3-PFHxS	402.0 / 99.0	N/A	N/A	N/A	N/A	true
13C8-PFOS	507.0 / 99.0	N/A	N/A	N/A	N/A	true

Sample Name	J8253-FS(3)	Injection Vial	38
Sample ID	VC-PM365-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:02:28	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	118575.15	259.712646	818.8	false
d3-MeFOSAA	573.0 / 419.0	3.57	15877.89	247.889127	173.0	false
d5-EtFOSAA	589.0 / 419.0	3.73	21314.77	336.502509	175.8	false
13C5-PFHxA	318.0 / 273.0	1.84	80081.43	247.358999	683.8	false
13C4-PFHpA	367.0 / 322.0	2.25	86810.26	234.072385	944.0	false
13C8-PFOA	421.0 / 376.0	2.66	112956.51	260.616186	1115865.2	false
13C9-PFNA	472.0 / 427.0	3.05	114357.35	264.027416	716.2	false
13C6-PFDA	519.0 / 474.0	3.41	131359.35	275.921136	749.4	false
13C7-PFUnA	570.0 / 525.0	3.73	125116.30	292.150703	886.3	false
13C2-PFTeDA	715.0 / 670.0	4.47	93617.72	265.227688	1439.1	false
13C3-PFBS	302.0 / 99.0	1.52	34802.83	215.178930	408.9	false
13C3-PFHxS	402.0 / 99.0	2.27	34742.35	252.438210	301.3	false
13C8-PFOS	507.0 / 99.0	3.05	35013.19	232.971953	231.8	false

Sample Name	J8257MS-D(5)	Injection Vial	40
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:24:13	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	N/A	N/A	N/A	N/A	true
d3-MeFOSAA	573.0 / 419.0	N/A	N/A	N/A	N/A	true
d5-EtFOSAA	589.0 / 419.0	N/A	N/A	N/A	N/A	true
13C5-PFHxA	318.0 / 273.0	N/A	N/A	N/A	N/A	true
13C4-PFHpA	367.0 / 322.0	N/A	N/A	N/A	N/A	true
13C8-PFOA	421.0 / 376.0	N/A	N/A	N/A	N/A	true
13C9-PFNA	472.0 / 427.0	N/A	N/A	N/A	N/A	true
13C6-PFDA	519.0 / 474.0	N/A	N/A	N/A	N/A	true
13C7-PFUnA	570.0 / 525.0	N/A	N/A	N/A	N/A	true
13C2-PFTeDA	715.0 / 670.0	N/A	N/A	N/A	N/A	true
13C3-PFBS	302.0 / 99.0	N/A	N/A	N/A	N/A	true
13C3-PFHxS	402.0 / 99.0	N/A	N/A	N/A	N/A	true
13C8-PFOS	507.0 / 99.0	N/A	N/A	N/A	N/A	true

Sample Name	J8258MSD-FS(3)	Injection Vial	41
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:35:05	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	119086.43	265.127176	992.7	false
d3-MeFOSAA	573.0 / 419.0	3.57	17021.93	357.829304	106.4	false
d5-EtFOSAA	589.0 / 419.0	3.73	17298.43	367.719560	152.0	true
13C5-PFHxA	318.0 / 273.0	1.84	78124.60	264.154446	592.0	false
13C4-PFHpA	367.0 / 322.0	2.25	91760.69	270.838274	547.0	false
13C8-PFOA	421.0 / 376.0	2.66	101011.56	255.114691	1228.1	false
13C9-PFNA	472.0 / 427.0	3.05	88703.66	224.182011	861.8	false
13C6-PFDA	519.0 / 474.0	3.41	110482.57	235.890422	1047.2	false
13C7-PFUnA	570.0 / 525.0	3.73	116428.76	276.341361	1081.0	false
13C2-PFTeDA	715.0 / 670.0	4.47	98056.50	282.377269	1324.0	false
13C3-PFBS	302.0 / 99.0	1.52	37529.13	312.432484	460.8	false
13C3-PFHxS	402.0 / 99.0	2.27	31134.81	304.610325	357.6	false
13C8-PFOS	507.0 / 99.0	3.05	28768.13	257.742478	202.8	false

Sample Name	J8258MSD-FS-D(5)	Injection Vial	42
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:45:56	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	N/A	N/A	N/A	N/A	true
d3-MeFOSAA	573.0 / 419.0	N/A	N/A	N/A	N/A	true
d5-EtFOSAA	589.0 / 419.0	N/A	N/A	N/A	N/A	true
13C5-PFHxA	318.0 / 273.0	N/A	N/A	N/A	N/A	true
13C4-PFHpA	367.0 / 322.0	N/A	N/A	N/A	N/A	true
13C8-PFOA	421.0 / 376.0	N/A	N/A	N/A	N/A	true
13C9-PFNA	472.0 / 427.0	N/A	N/A	N/A	N/A	true
13C6-PFDA	519.0 / 474.0	N/A	N/A	N/A	N/A	true
13C7-PFUnA	570.0 / 525.0	N/A	N/A	N/A	N/A	true
13C2-PFTeDA	715.0 / 670.0	N/A	N/A	N/A	N/A	true
13C3-PFBS	302.0 / 99.0	N/A	N/A	N/A	N/A	true
13C3-PFHxS	402.0 / 99.0	N/A	N/A	N/A	N/A	true
13C8-PFOS	507.0 / 99.0	N/A	N/A	N/A	N/A	true

Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:47:30	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	91708.22	235.458728	653.9	false
d3-MeFOSAA	573.0 / 419.0	3.59	13240.16	225.304619	156.7	false
d5-EtFOSAA	589.0 / 419.0	3.75	15630.41	268.961418	168.3	false
13C5-PFHxA	318.0 / 273.0	1.85	66285.32	231.397325	522.5	false
13C4-PFHpA	367.0 / 322.0	2.26	77850.59	237.239000	617.6	false
13C8-PFOA	421.0 / 376.0	2.67	100220.12	261.330502	1014.8	false
13C9-PFNA	472.0 / 427.0	3.07	98610.52	257.307988	849.5	false
13C6-PFDA	519.0 / 474.0	3.42	104995.14	258.523640	955.8	false
13C7-PFUnA	570.0 / 525.0	3.74	94589.12	258.905531	662.4	false
13C2-PFTeDA	715.0 / 670.0	4.50	69413.06	230.520236	1322.6	false
13C3-PFBS	302.0 / 99.0	1.53	31841.92	214.583609	426.9	false
13C3-PFHxS	402.0 / 99.0	2.28	29201.63	231.267786	280.1	false
13C8-PFOS	507.0 / 99.0	3.07	30505.11	221.236407	178.7	false

Sample Name	CR851PB-FS(3)	Injection Vial	13
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:30:59	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	134249.31	292.065135	1090.8	false
d3-MeFOSAA	573.0 / 419.0	3.58	20582.80	294.263130	211.8	false
d5-EtFOSAA	589.0 / 419.0	3.74	21355.04	308.727142	197.9	false
13C5-PFHxA	318.0 / 273.0	1.85	96706.08	275.465402	734.7	false
13C4-PFHpA	367.0 / 322.0	2.26	117526.36	292.234723	947.2	false
13C8-PFOA	421.0 / 376.0	2.67	131829.47	280.491706	1297.4	false
13C9-PFNA	472.0 / 427.0	3.06	123806.17	263.599539	182554.5	false
13C6-PFDA	519.0 / 474.0	3.42	148139.37	309.074179	2064.6	false
13C7-PFUnA	570.0 / 525.0	3.73	122645.91	284.455532	543.6	false
13C2-PFTeDA	715.0 / 670.0	4.49	103856.07	292.254306	2151.1	false
13C3-PFBS	302.0 / 99.0	1.53	44849.66	253.928370	559.2	false
13C3-PFHxS	402.0 / 99.0	2.28	39856.42	265.192374	319.1	false
13C8-PFOS	507.0 / 99.0	3.06	43516.40	265.150005	238.1	false

Sample Name	KB35 IB	Injection Vial	2
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T16:08:06	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	true
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8252-FS(3)	Injection Vial	11
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:45:59	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	2786804.59	5388.427790	1002.0	false
PFBS_2	298.9 / 99.0	1.54	893173.51	5891.331693	898.1	false
PFHxA_1	313.0 / 269.0	1.85	1766172.59	5274.613008	78.2	false
PFHxA_2	313.0 / 119.0	1.86	108680.32	4412.425169	65.6	false
PFHpA_1	363.0 / 319.0	2.25	281175.16	807.635011	85.1	false
PFHpA_2	363.0 / 169.0	2.22	9621.73	1337.782545	60.9	false
PFHxS_1	399.0 / 80.0	2.28	4027195.44	9081.926514	463.0	false
PFHxS_2	399.0 / 99.0	2.28	1459526.53	11414.006120	768.5	false
PFOA_1	413.0 / 369.0	2.66	341939.52	723.069612	238.7	false
PFOA_2	413.0 / 169.0	2.56	20098.69	684.930373	219.2	false
PFNA_1	463.0 / 419.0	3.07	7910.22	1.879882	29.6	false
PFNA_2	463.0 / 219.0	3.07	3587.84	< 0	26.0	false
PFOS_1	499.0 / 80.0	3.07	54112950.20	97757.282100	1589.6	false
PFOS_2	499.0 / 99.0	3.07	10857463.08	111523.788709	3028.6	false
PFDA_1	513.0 / 469.0	3.42	10685.34	8.575932	39.4	false
PFDA_2	513.0 / 219.0	3.43	991.71	18.780384	20.6	false
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8252-FS-D(7)	Injection Vial	12
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:56:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.07	2100163.94	3628.929777	389.9	false
PFOS_2	499.0 / 99.0	3.07	408901.62	4022.717956	789.4	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8257MS-FS(3)	Injection Vial	13
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:07:46	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	9912384.42	19033.724193	2184.7	false
PFBS_2	298.9 / 99.0	1.54	2996417.91	19718.526235	1821.5	false
PFHxA_1	313.0 / 269.0	1.86	6601058.23	18743.146883	180.9	false
PFHxA_2	313.0 / 119.0	1.86	485430.34	18855.604105	145.6	false
PFHpA_1	363.0 / 319.0	2.26	5207316.19	15953.027476	353.9	false
PFHpA_2	363.0 / 169.0	2.26	102779.41	15160.899746	362.2	false
PFHxS_1	399.0 / 80.0	2.29	10621364.36	23237.467740	837.8	false
PFHxS_2	399.0 / 99.0	2.29	3297146.62	25005.590563	1132.3	false
PFOA_1	413.0 / 369.0	2.67	6571427.63	15367.481535	1197.7	false
PFOA_2	413.0 / 169.0	2.67	420573.70	15667.018454	704.7	false
PFNA_1	463.0 / 419.0	3.07	4897653.52	14188.209254	1132.5	false
PFNA_2	463.0 / 219.0	3.07	1518704.37	14212.170466	994.1	false
PFOS_1	499.0 / 80.0	3.07	63838191.92	129091.833037	1268.5	false
PFOS_2	499.0 / 99.0	3.07	12865360.04	147919.536062	2756.8	false
PFDA_1	513.0 / 469.0	3.42	6480521.74	14477.638675	847.0	false
PFDA_2	513.0 / 219.0	3.42	268722.33	13828.455001	571.3	false
PFUnA_1	563.0 / 519.0	3.75	6627093.84	15038.957742	845.0	false
PFUnA_2	563.0 / 269.0	3.75	330975.94	14959.938347	599.2	false
PFDoA_1	613.0 / 569.0	4.03	6347860.87	15223.736953	715.8	false
PFDoA_2	613.0 / 319.0	4.03	964245.78	14467.609120	800.5	false
PFTrDA_1	663.0 / 619.0	4.27	5653265.59	14374.364242	1384.5	false
PFTrDA_2	663.0 / 169.0	4.27	359788.71	14349.508234	977.6	false
PFTeDA_1	713.0 / 669.0	4.49	6216332.14	14384.196265	1942.7	false
PFTeDA_2	713.0 / 169.0	4.49	294438.09	14503.498939	1653.7	false
NMeFOSAA_1	570.0 / 419.0	3.58	1053140.52	14757.340774	1048.9	false
NMeFOSAA_2	570.0 / 512.0	3.58	587659.69	15592.614598	1701.8	false
NEtFOSAA_1	584.0 / 419.0	3.74	973012.42	14175.427433	1000.4	false
NEtFOSAA_2	584.0 / 483.0	3.74	57108.25	13273.703949	706.6	false

Sample Name	J8229-FS(3)	Injection Vial	14
Sample ID	VC-PM649-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:18:39	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	11830.75	42.652283	19.8	true
PFBS_2	298.9 / 99.0	1.54	3607.99	6.758145	21.9	true
PFHxA_1	313.0 / 269.0	1.86	246264.09	866.722227	27.9	false
PFHxA_2	313.0 / 119.0	1.86	19411.75	903.786316	31.5	false
PFHpA_1	363.0 / 319.0	2.26	114740.86	393.071020	62.5	false
PFHpA_2	363.0 / 169.0	2.27	2293.86	383.984634	35.2	false
PFHxS_1	399.0 / 80.0	2.29	56653.71	138.773147	75.6	false
PFHxS_2	399.0 / 99.0	2.29	16583.54	145.517070	94.7	false
PFOA_1	413.0 / 369.0	2.67	408082.05	1000.112022	277.8	false
PFOA_2	413.0 / 169.0	2.67	24083.63	947.994550	257.1	false
PFNA_1	463.0 / 419.0	3.07	155779.51	432.794822	189.1	false
PFNA_2	463.0 / 219.0	3.07	45079.24	389.002970	168.8	false
PFOS_1	499.0 / 80.0	3.06	1575024.06	2778.554780	299.4	false
PFOS_2	499.0 / 99.0	3.06	312362.07	3139.124916	605.2	false
PFDA_1	513.0 / 469.0	3.42	132100.62	370.334293	208.9	false
PFDA_2	513.0 / 219.0	3.42	6028.04	375.792366	103.8	false
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.03	6456.50	< 0	52.3	false
PFDoA_2	613.0 / 319.0	4.03	1297.83	< 0	33.5	false
PFTrDA_1	663.0 / 619.0	4.27	4864.97	< 0	95.9	false
PFTrDA_2	663.0 / 169.0	4.28	527.25	< 0	23.4	false
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	3.57	1460.43	2.862582	38.1	false
NMeFOSAA_2	570.0 / 512.0	3.58	332.63	< 0	13.1	false
NEtFOSAA_1	584.0 / 419.0	3.73	1891.64	56.552695	56.7	false
NEtFOSAA_2	584.0 / 483.0	3.70	159.34	29.581131	6.5	false

Sample Name	J8239-FS(3)	Injection Vial	15
Sample ID	VC-PM649-SB04-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:29:32	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	58203.76	129.982083	92.1	false
PFHxS_2	399.0 / 99.0	2.28	17862.95	143.367559	117.5	false
PFOA_1	413.0 / 369.0	2.67	27081.72	58.252294	49.9	false
PFOA_2	413.0 / 169.0	2.66	2910.94	111.810316	38.2	false
PFNA_1	463.0 / 419.0	3.07	5607.10	< 0	19.0	false
PFNA_2	463.0 / 219.0	3.07	2045.19	< 0	15.9	false
PFOS_1	499.0 / 80.0	3.07	1230395.85	2080.528801	284.8	false
PFOS_2	499.0 / 99.0	3.06	238064.88	2294.174926	475.3	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:45:25	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	6443.78	32.581702	26.6	true
PFBS_2	298.9 / 99.0	1.54	2348.39	0.229533	19.9	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.29	4746.48	5.211195	26.4	false
PFHxS_2	399.0 / 99.0	2.29	1783.69	13.735315	20.6	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	3.07	7426.51	3.664084	25.4	false
PFNA_2	463.0 / 219.0	3.07	1497.96	< 0	19.1	true
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	true
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.02	6483.71	< 0	57.9	false
PFDoA_2	613.0 / 319.0	4.01	757.73	< 0	24.8	false
PFTTrDA_1	663.0 / 619.0	4.26	5399.72	< 0	105.2	false
PFTTrDA_2	663.0 / 169.0	4.25	729.76	< 0	36.0	false
PFTeDA_1	713.0 / 669.0	4.47	6122.44	< 0	163.4	false
PFTeDA_2	713.0 / 169.0	4.47	271.93	< 0	32.4	false
NMeFOSAA_1	570.0 / 419.0	3.57	1366.80	< 0	71.5	false
NMeFOSAA_2	570.0 / 512.0	3.57	845.17	< 0	30.5	false
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	KB35 IB	Injection Vial	2
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T16:08:06	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.05	96355.48	236.472869	876.1	false
d3-MeFOSAA	573.0 / 419.0	3.60	12507.63	196.273979	180.5	false
d5-EtFOSAA	589.0 / 419.0	3.76	14818.92	213.362077	146.4	false
13C5-PFHxA	318.0 / 273.0	1.86	75674.84	267.361879	455.3	false
13C4-PFHpA	367.0 / 322.0	2.27	88597.98	284.949353	782.4	false
13C8-PFOA	421.0 / 376.0	2.68	107050.59	269.647571	1203.7	false
13C9-PFNA	472.0 / 427.0	3.08	98486.04	245.746679	975.3	false
13C6-PFDA	519.0 / 474.0	3.43	108143.11	263.304754	1396.1	false
13C7-PFUnA	570.0 / 525.0	3.76	90257.26	216.190377	467.0	false
13C2-PFTeDA	715.0 / 670.0	4.52	75999.59	234.302888	1462.6	false
13C3-PFBS	302.0 / 99.0	1.53	31936.16	242.856680	468.9	false
13C3-PFHxS	402.0 / 99.0	2.30	28439.56	238.548556	416.0	false
13C8-PFOS	507.0 / 99.0	3.07	32533.60	258.863122	237.9	false

Sample Name	J8252-FS(3)	Injection Vial	11
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:45:59	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	115610.18	255.484171	753.4	false
d3-MeFOSAA	573.0 / 419.0	3.57	17233.67	314.034654	192.2	false
d5-EtFOSAA	589.0 / 419.0	3.74	19079.56	318.993018	197.8	false
13C5-PFHxA	318.0 / 273.0	1.84	86669.03	280.540781	501.2	false
13C4-PFHpA	367.0 / 322.0	2.25	102668.36	302.527318	607.8	false
13C8-PFOA	421.0 / 376.0	2.66	116515.40	268.890162	51557.8	false
13C9-PFNA	472.0 / 427.0	3.06	100985.12	230.863082	1197.7	false
13C6-PFDA	519.0 / 474.0	3.41	123377.04	270.493723	828.6	false
13C7-PFUnA	570.0 / 525.0	3.73	112561.08	242.775833	556.8	false
13C2-PFTeDA	715.0 / 670.0	4.48	89599.40	248.733618	1769.2	false
13C3-PFBS	302.0 / 99.0	1.52	39331.46	347.311804	447.9	true
13C3-PFHxS	402.0 / 99.0	2.28	31494.15	306.758120	367.6	false
13C8-PFOS	507.0 / 99.0	3.06	29038.79	268.305038	181.1	false

Sample Name	J8252-FS-D(7)	Injection Vial	12
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:56:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	N/A	N/A	N/A	N/A	true
d3-MeFOSAA	573.0 / 419.0	N/A	N/A	N/A	N/A	true
d5-EtFOSAA	589.0 / 419.0	N/A	N/A	N/A	N/A	true
13C5-PFHxA	318.0 / 273.0	N/A	N/A	N/A	N/A	true
13C4-PFHpA	367.0 / 322.0	N/A	N/A	N/A	N/A	true
13C8-PFOA	421.0 / 376.0	N/A	N/A	N/A	N/A	true
13C9-PFNA	472.0 / 427.0	N/A	N/A	N/A	N/A	true
13C6-PFDA	519.0 / 474.0	N/A	N/A	N/A	N/A	true
13C7-PFUnA	570.0 / 525.0	N/A	N/A	N/A	N/A	true
13C2-PFTeDA	715.0 / 670.0	N/A	N/A	N/A	N/A	true
13C3-PFBS	302.0 / 99.0	N/A	N/A	N/A	N/A	true
13C3-PFHxS	402.0 / 99.0	N/A	N/A	N/A	N/A	true
13C8-PFOS	507.0 / 99.0	N/A	N/A	N/A	N/A	true

Sample Name	J8257MS-FS(3)	Injection Vial	13
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:07:46	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	118340.72	289.154518	835.0	false
d3-MeFOSAA	573.0 / 419.0	3.57	18190.22	327.960883	136.5	false
d5-EtFOSAA	589.0 / 419.0	3.74	16287.03	269.425859	182.3	false
13C5-PFHxA	318.0 / 273.0	1.84	91318.32	346.127181	569.1	false
13C4-PFHpA	367.0 / 322.0	2.25	96560.30	333.174921	971.6	false
13C8-PFOA	421.0 / 376.0	2.66	106045.58	286.569440	1145.9	false
13C9-PFNA	472.0 / 427.0	3.06	93548.29	250.425559	857.5	false
13C6-PFDA	519.0 / 474.0	3.41	112287.04	272.195115	976.4	false
13C7-PFUnA	570.0 / 525.0	3.73	106689.34	254.428684	731.7	false
13C2-PFTeDA	715.0 / 670.0	4.48	103638.82	318.111718	1891.3	false
13C3-PFBS	302.0 / 99.0	1.52	39418.67	344.402239	495.2	true
13C3-PFHxS	402.0 / 99.0	2.28	33168.41	319.650454	362.2	false
13C8-PFOS	507.0 / 99.0	3.05	25308.90	231.370467	216.7	false

Sample Name	J8229-FS(3)	Injection Vial	14
Sample ID	VC-PM649-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:18:39	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	102840.52	328.502048	748.1	false
d3-MeFOSAA	573.0 / 419.0	3.57	10564.71	189.006150	124.9	false
d5-EtFOSAA	589.0 / 419.0	3.73	16403.42	269.256195	163.7	false
13C5-PFHxA	318.0 / 273.0	1.84	72637.89	289.836254	521.3	false
13C4-PFHpA	367.0 / 322.0	2.25	85787.45	311.608416	540.8	false
13C8-PFOA	421.0 / 376.0	2.66	100723.60	286.536714	1260.3	false
13C9-PFNA	472.0 / 427.0	3.05	93492.10	263.468965	569.9	false
13C6-PFDA	519.0 / 474.0	3.41	86486.35	274.079363	791.4	false
13C7-PFUnA	570.0 / 525.0	3.73	96398.64	300.534290	642.5	false
13C2-PFTeDA	715.0 / 670.0	4.48	76934.37	308.713568	1501.6	false
13C3-PFBS	302.0 / 99.0	1.52	31937.15	276.881616	438.7	false
13C3-PFHxS	402.0 / 99.0	2.27	27751.99	265.386429	368.1	false
13C8-PFOS	507.0 / 99.0	3.05	29344.16	266.189145	235.8	false

Sample Name	J8239-FS(3)	Injection Vial	15
Sample ID	VC-PM649-SB04-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:29:32	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	104957.87	228.164473	712.6	false
d3-MeFOSAA	573.0 / 419.0	3.57	8236.14	125.760850	132.2	true
d5-EtFOSAA	589.0 / 419.0	3.73	11232.80	157.370404	154.6	false
13C5-PFHxA	318.0 / 273.0	1.84	77127.94	248.763824	484.9	false
13C4-PFHpA	367.0 / 322.0	2.25	86120.89	252.859879	630.9	false
13C8-PFOA	421.0 / 376.0	2.66	106301.45	244.441095	1574.8	false
13C9-PFNA	472.0 / 427.0	3.05	98922.05	225.337595	896.7	false
13C6-PFDA	519.0 / 474.0	3.41	102266.08	220.556332	956.8	false
13C7-PFUnA	570.0 / 525.0	3.72	104042.93	220.747042	840.9	false
13C2-PFTeDA	715.0 / 670.0	4.48	81052.01	221.339168	1869.0	false
13C3-PFBS	302.0 / 99.0	1.52	36418.64	269.479391	487.5	false
13C3-PFHxS	402.0 / 99.0	2.27	30135.33	245.959891	315.3	false
13C8-PFOS	507.0 / 99.0	3.05	30028.50	232.491044	244.5	false

Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:45:25	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	92546.73	241.738558	1050.3	false
d3-MeFOSAA	573.0 / 419.0	3.56	14938.65	254.545450	154.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	16702.68	261.127831	168.5	false
13C5-PFHxA	318.0 / 273.0	1.84	63762.03	239.419150	685.4	false
13C4-PFHpA	367.0 / 322.0	2.25	68855.85	235.360448	1030.9	false
13C8-PFOA	421.0 / 376.0	2.66	97193.51	260.191762	7067.3	false
13C9-PFNA	472.0 / 427.0	3.05	87468.15	231.959255	863.7	false
13C6-PFDA	519.0 / 474.0	3.40	95009.51	246.210668	928.9	false
13C7-PFUnA	570.0 / 525.0	3.72	98518.94	251.161978	620.2	false
13C2-PFTeDA	715.0 / 670.0	4.47	73048.82	239.695300	1866.6	false
13C3-PFBS	302.0 / 99.0	1.52	26301.26	217.175254	454.5	false
13C3-PFHxS	402.0 / 99.0	2.27	26329.82	239.810525	297.1	false
13C8-PFOS	507.0 / 99.0	3.04	25646.15	221.578017	206.0	false

Sample Name	CR852LCS-FS(3)	Injection Vial	14
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:41:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.290	0.304	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.280	0.289	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.310	0.304	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	3.75	PFUnA	0.050	0.056	ü
PFDaA_1	613.0 / 569.0	4.04	PFDaA			
PFDaA_2	613.0 / 319.0	4.03	PFDaA	0.160	0.156	ü
PFTrDA_1	663.0 / 619.0	4.28	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.28	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.50	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.49	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.59	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	NMeFOSAA	0.530	0.561	ü
NEtFOSAA_1	584.0 / 419.0	3.75	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.75	NEtFOSAA	0.060	0.068	ü

Sample Name	J8230-FS(3)	Injection Vial	16
Sample ID	VC-PM649-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:03:33	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.304	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.080	0.074	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.310	0.289	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.300	0.304	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.190	0.178	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.050	0.045	ü
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	3.77	PFUnA	0.110	0.056	
PFDaA_1	613.0 / 569.0	4.05	PFDaA			
PFDaA_2	613.0 / 319.0	4.03	PFDaA	0.160	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8231-FS(3)	Injection Vial	17
Sample ID	VC-PM649-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:14:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.500	0.304	
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.300	0.289	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.080	0.064	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.350	0.304	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.050	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8232-FS(3)	Injection Vial	18
Sample ID	VC-PM649-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:25:14	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.304	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.074	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.200	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.73	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.09	PFNA	0.330	0.304	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.200	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8233-FS(3)	Injection Vial	19
Sample ID	VC-PM649-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:36:06	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.304	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.074	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.270	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.080	0.064	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.730	0.304	
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.160	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8234-FS(3)	Injection Vial	20
Sample ID	VC-PM649-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:46:58	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.304	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.074	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.290	0.289	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.63	PFOA	0.080	0.064	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.210	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8235-FS(3)	Injection Vial	21
Sample ID	VC-PM649-SS03-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:57:50	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.304	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.074	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.250	0.289	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.63	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.200	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8236-FS(3)	Injection Vial	22
Sample ID	VC-PM649-SB03-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:08:42	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.304	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.074	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.300	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.63	PFOA	0.100	0.064	
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.190	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8237-FS(3)	Injection Vial	25
Sample ID	VC-PM649-SB03-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:41:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.330	0.304	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.060	0.074	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.030	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.300	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.090	0.064	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.350	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.200	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8238-FS(3)	Injection Vial	26
Sample ID	VC-PM649-SS04-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:52:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.304	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.270	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.63	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.370	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.190	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8240-FS(3)	Injection Vial	28
Sample ID	VC-PM649-SB04-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:13:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.52	PFBS	0.540	0.304	
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.030	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.290	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.100	0.064	
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.230	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.200	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTTrDA_1	663.0 / 619.0	N/A	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	PFTTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8248-FS(3)	Injection Vial	29
Sample ID	VC-PM365-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:24:43	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.320	0.304	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.060	0.074	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.030	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.300	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.56	PFOA	0.140	0.064	
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.190	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8249-FS(3)	Injection Vial	30
Sample ID	VC-PM365-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:35:35	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.280	0.304	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.29	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.310	0.289	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.58	PFOA	0.090	0.064	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.230	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8250-FS(3)	Injection Vial	31
Sample ID	VC-PM365-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:46:27	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.400	0.304	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.29	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.300	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.110	0.064	
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8251-FS(3)	Injection Vial	32
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:57:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.320	0.304	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.030	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.320	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.62	PFOA	0.100	0.064	
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.370	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.050	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8251-FS-D(5)	Injection Vial	33
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:08:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.304	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.074	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.330	0.289	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.064	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8252-FS-D(5)	Injection Vial	37
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:51:37	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.304	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.074	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.289	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.064	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.200	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8253-FS(3)	Injection Vial	38
Sample ID	VC-PM365-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:02:28	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.304	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	0.074	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.23	PFHpA	0.040	0.020	
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.300	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.080	0.064	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8257MS-FS-D(5)	Injection Vial	40
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:24:13	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.300	0.304	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.320	0.289	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.064	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	J8258MSD-FS(3)	Injection Vial	41
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:35:05	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.290	0.304	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.300	0.289	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.300	0.304	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.200	0.178	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.056	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.160	0.156	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.560	0.561	ü
NEtFOSAA_1	584.0 / 419.0	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.060	0.068	ü

Sample Name	J8258MSD-FS-D(5)	Injection Vial	42
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:45:56	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.300	0.304	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.074	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.289	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.064	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.190	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:47:30	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.320	0.304	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.074	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.250	0.289	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.064	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	
PFOS_1	499.0 / 80.0	N/A	PFOS			
PFOS_2	499.0 / 99.0	N/A	PFOS	N/A	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	4.05	PFDaA			
PFDaA_2	613.0 / 319.0	4.03	PFDaA	0.130	0.156	ü
PFTrDA_1	663.0 / 619.0	4.29	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.30	PFTrDA	0.100	0.064	
PFTeDA_1	713.0 / 669.0	4.50	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.51	PFTeDA	0.070	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	CR851PB-FS(3)	Injection Vial	13
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:30:59	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.304	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.074	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.289	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.064	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.304	ü
PFOS_1	499.0 / 80.0	N/A	PFOS			
PFOS_2	499.0 / 99.0	N/A	PFOS	N/A	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.056	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.156	ü
PFTTrDA_1	663.0 / 619.0	N/A	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	PFTTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.561	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.068	ü

Sample Name	KB35 IB	Injection Vial	2
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T16:08:06	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.318	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.079	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.021	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.285	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.062	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.319	ü
PFOS_1	499.0 / 80.0	N/A	PFOS			
PFOS_2	499.0 / 99.0	N/A	PFOS	N/A	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.050	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.162	ü
PFTTrDA_1	663.0 / 619.0	N/A	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	PFTTrDA	N/A	0.066	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.051	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.558	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.069	ü

Sample Name	J8252-FS(3)	Injection Vial	11
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:45:59	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.320	0.318	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.060	0.079	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	PFHpA	0.030	0.021	
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.360	0.285	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.56	PFOA	0.060	0.062	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.450	0.319	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.200	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.090	0.045	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.050	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.051	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.558	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.069	ü

Sample Name	J8252-FS-D(7)	Injection Vial	12
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:56:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.318	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.079	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.021	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.285	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.062	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.319	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.050	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.051	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.558	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.069	ü

Sample Name	J8257MS-FS(3)	Injection Vial	13
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:07:46	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.300	0.318	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.079	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.310	0.285	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.062	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.310	0.319	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.200	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.045	ü
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	3.75	PFUnA	0.050	0.050	ü
PFDaA_1	613.0 / 569.0	4.03	PFDaA			
PFDaA_2	613.0 / 319.0	4.03	PFDaA	0.150	0.162	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.49	PFTeDA	0.050	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	NMeFOSAA	0.560	0.558	ü
NEtFOSAA_1	584.0 / 419.0	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.060	0.069	ü

Sample Name	J8229-FS(3)	Injection Vial	14
Sample ID	VC-PM649-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:18:39	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.300	0.318	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.080	0.079	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.021	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.290	0.285	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.062	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.290	0.319	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.200	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.050	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.050	ü
PFDaA_1	613.0 / 569.0	4.03	PFDaA			
PFDaA_2	613.0 / 319.0	4.03	PFDaA	0.200	0.162	ü
PFTTrDA_1	663.0 / 619.0	4.27	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	4.28	PFTTrDA	0.110	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	NMeFOSAA	0.230	0.558	
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.70	NEtFOSAA	0.080	0.069	ü

Sample Name	J8239-FS(3)	Injection Vial	15
Sample ID	VC-PM649-SB04-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:29:32	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.318	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.079	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.021	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.310	0.285	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.110	0.062	
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.360	0.319	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.050	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.051	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.558	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.069	ü

Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:45:25	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.360	0.318	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.079	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.021	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.380	0.285	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.062	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.200	0.319	ü
PFOS_1	499.0 / 80.0	N/A	PFOS			
PFOS_2	499.0 / 99.0	N/A	PFOS	N/A	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.045	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.050	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.01	PFDaA	0.120	0.162	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.140	0.066	
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.040	0.051	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.620	0.558	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.069	ü

Sample Name	CR852LCS-FS(3)	Injection Vial	14
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:41:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	41428.75	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	41428.75	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	78468.81	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	78468.81	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	91737.66	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	91737.66	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	31848.74	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	31848.74	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	109910.49	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	109910.49	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	109797.84	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	109797.84	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	36558.95	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	36558.95	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	115882.34	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	115882.34	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	106081.26	250.00
PFUnA_2	563.0 / 269.0	3.75	13C7-PFUnA	570.0 / 525.0	106081.26	250.00
PFDoA_1	613.0 / 569.0	4.04	13C2-PFDoA	615.0 / 570.0	116917.79	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	116917.79	250.00
PFTeDA_1	663.0 / 619.0	4.28	13C2-PFTeDA	715.0 / 670.0	89037.68	250.00
PFTeDA_2	663.0 / 169.0	4.28	13C2-PFTeDA	715.0 / 670.0	89037.68	250.00
PFTeDA_1	713.0 / 669.0	4.50	13C2-PFTeDA	715.0 / 670.0	89037.68	250.00
PFTeDA_2	713.0 / 169.0	4.49	13C2-PFTeDA	715.0 / 670.0	89037.68	250.00
NMeFOSAA_1	570.0 / 419.0	3.59	d3-MeFOSAA	573.0 / 419.0	14969.37	250.00
NMeFOSAA_2	570.0 / 512.0	3.58	d3-MeFOSAA	573.0 / 419.0	14969.37	250.00
NEtFOSAA_1	584.0 / 419.0	3.75	d5-EtFOSAA	589.0 / 419.0	16378.15	250.00
NEtFOSAA_2	584.0 / 483.0	3.75	d5-EtFOSAA	589.0 / 419.0	16378.15	250.00

Sample Name	J8230-FS(3)	Injection Vial	16
Sample ID	VC-PM649-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:03:33	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	43352.10	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	43352.10	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	87573.08	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	87573.08	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	109250.33	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	109250.33	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	31615.21	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	31615.21	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	112696.39	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	112696.39	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	116374.46	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	116374.46	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	36103.72	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	36103.72	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	126724.51	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	126724.51	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	120994.05	250.00
PFUnA_2	563.0 / 269.0	3.77	13C7-PFUnA	570.0 / 525.0	120994.05	250.00
PFDoA_1	613.0 / 569.0	4.05	13C2-PFDoA	615.0 / 570.0	117923.33	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	117923.33	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	91626.47	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	91626.47	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	91626.47	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	91626.47	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15005.93	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15005.93	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	16915.78	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	16915.78	250.00

Sample Name	J8231-FS(3)	Injection Vial	17
Sample ID	VC-PM649-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:14:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	34397.62	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	34397.62	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	76724.47	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	76724.47	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	90418.59	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	90418.59	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	31360.86	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	31360.86	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	107071.74	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	107071.74	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	101680.82	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	101680.82	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	32681.80	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	32681.80	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	115203.51	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	115203.51	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	104867.02	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	104867.02	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	102400.81	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	102400.81	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	79451.07	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79451.07	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	79451.07	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79451.07	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14958.65	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14958.65	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17257.30	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17257.30	250.00

Sample Name	J8232-FS(3)	Injection Vial	18
Sample ID	VC-PM649-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:25:14	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	34616.17	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	34616.17	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	72923.56	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	72923.56	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	85326.24	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	85326.24	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	29990.01	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	29990.01	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	105327.26	250.00
PFOA_2	413.0 / 169.0	2.73	13C8-PFOA	421.0 / 376.0	105327.26	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	98866.02	250.00
PFNA_2	463.0 / 219.0	3.09	13C9-PFNA	472.0 / 427.0	98866.02	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	33786.22	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	33786.22	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	108702.35	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	108702.35	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	100333.06	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	100333.06	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	99374.77	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	99374.77	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	76522.18	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	76522.18	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	76522.18	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	76522.18	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	7580.43	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	7580.43	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	7434.53	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	7434.53	250.00

Sample Name	J8233-FS(3)	Injection Vial	19
Sample ID	VC-PM649-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:36:06	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	41631.38	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	41631.38	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	76662.96	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	76662.96	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	90027.39	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	90027.39	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	33687.56	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	33687.56	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	110419.61	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	110419.61	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	107235.54	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	107235.54	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	39265.68	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	39265.68	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	119710.13	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	119710.13	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	107548.89	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	107548.89	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	106530.69	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	106530.69	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	82421.25	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	82421.25	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	82421.25	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	82421.25	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	8633.67	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	8633.67	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	10405.78	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	10405.78	250.00

Sample Name	J8234-FS(3)	Injection Vial	20
Sample ID	VC-PM649-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:46:58	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	41335.07	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	41335.07	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	86276.84	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	86276.84	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	100880.62	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	100880.62	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	34851.48	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	34851.48	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	125619.30	250.00
PFOA_2	413.0 / 169.0	2.63	13C8-PFOA	421.0 / 376.0	125619.30	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	122058.99	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	122058.99	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	35964.65	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	35964.65	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	120641.76	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	120641.76	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	123311.67	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	123311.67	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	116602.16	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	116602.16	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	91800.29	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	91800.29	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	91800.29	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	91800.29	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14982.18	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14982.18	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18911.77	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18911.77	250.00

Sample Name	J8235-FS(3)	Injection Vial	21
Sample ID	VC-PM649-SS03-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:57:50	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	41395.86	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	41395.86	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	92280.26	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	92280.26	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	102173.14	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	102173.14	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	35165.82	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	35165.82	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	122509.16	250.00
PFOA_2	413.0 / 169.0	2.63	13C8-PFOA	421.0 / 376.0	122509.16	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	119148.86	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	119148.86	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	39536.79	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	39536.79	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	132818.67	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	132818.67	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	126773.88	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	126773.88	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	122850.91	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	122850.91	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	97281.89	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	97281.89	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	97281.89	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	97281.89	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14607.97	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14607.97	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19523.34	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19523.34	250.00

Sample Name	J8236-FS(3)	Injection Vial	22
Sample ID	VC-PM649-SB03-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:08:42	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	44605.97	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	44605.97	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	88409.40	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	88409.40	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	109802.82	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	109802.82	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	36307.74	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	36307.74	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	124257.71	250.00
PFOA_2	413.0 / 169.0	2.63	13C8-PFOA	421.0 / 376.0	124257.71	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	115067.51	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	115067.51	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	38545.44	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	38545.44	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	131601.77	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	131601.77	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	126961.19	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	126961.19	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	120406.69	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	120406.69	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	96659.96	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	96659.96	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	96659.96	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	96659.96	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14219.63	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14219.63	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	16176.02	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	16176.02	250.00

Sample Name	J8237-FS(3)	Injection Vial	25
Sample ID	VC-PM649-SB03-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:41:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	31390.74	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	31390.74	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	66015.20	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	66015.20	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	81514.57	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	81514.57	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	26370.08	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	26370.08	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	98631.05	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	98631.05	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	94331.46	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	94331.46	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	27887.23	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	27887.23	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	98411.35	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	98411.35	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	100737.92	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	100737.92	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	92999.63	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	92999.63	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	74263.93	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	74263.93	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	74263.93	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	74263.93	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	13535.22	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	13535.22	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	13928.14	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	13928.14	250.00

Sample Name	J8238-FS(3)	Injection Vial	26
Sample ID	VC-PM649-SS04-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:52:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	43750.38	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	43750.38	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	89321.35	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	89321.35	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	103336.97	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	103336.97	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	35890.98	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	35890.98	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	126320.31	250.00
PFOA_2	413.0 / 169.0	2.63	13C8-PFOA	421.0 / 376.0	126320.31	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	121906.57	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	121906.57	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	38880.81	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	38880.81	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	132534.33	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	132534.33	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	127486.88	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	127486.88	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	124024.96	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	124024.96	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	91468.98	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	91468.98	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	91468.98	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	91468.98	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16012.03	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16012.03	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19138.96	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19138.96	250.00

Sample Name	J8240-FS(3)	Injection Vial	28
Sample ID	VC-PM649-SB04-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:13:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	41037.24	232.25
PFBS_2	298.9 / 99.0	1.52	13C3-PFBS	302.0 / 99.0	41037.24	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	85288.48	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	85288.48	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	102123.33	250.00
PFHpA_2	363.0 / 169.0	2.24	13C4-PFHpA	367.0 / 322.0	102123.33	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	34078.51	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	34078.51	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	126232.64	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	126232.64	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	117608.42	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	117608.42	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	38404.56	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	38404.56	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	124650.17	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	124650.17	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	128682.70	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	128682.70	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	119386.04	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	119386.04	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	94569.97	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	94569.97	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	94569.97	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	94569.97	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15770.61	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15770.61	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17669.52	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17669.52	250.00

Sample Name	J8248-FS(3)	Injection Vial	29
Sample ID	VC-PM365-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:24:43	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	40506.99	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	40506.99	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	89045.18	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	89045.18	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	101235.92	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	101235.92	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	33573.90	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	33573.90	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	122945.38	250.00
PFOA_2	413.0 / 169.0	2.56	13C8-PFOA	421.0 / 376.0	122945.38	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	120728.65	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	120728.65	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	40444.72	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	40444.72	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	125698.43	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	125698.43	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	118259.22	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	118259.22	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	125568.40	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	125568.40	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	92234.21	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	92234.21	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	92234.21	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	92234.21	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14862.12	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14862.12	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	16304.56	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	16304.56	250.00

Sample Name	J8249-FS(3)	Injection Vial	30
Sample ID	VC-PM365-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:35:35	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	42417.36	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	42417.36	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	92487.26	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	92487.26	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	109137.22	250.00
PFHpA_2	363.0 / 169.0	2.29	13C4-PFHpA	367.0 / 322.0	109137.22	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	36339.55	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	36339.55	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	125887.83	250.00
PFOA_2	413.0 / 169.0	2.58	13C8-PFOA	421.0 / 376.0	125887.83	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	122033.71	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	122033.71	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	39783.99	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	39783.99	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	132741.48	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	132741.48	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	124883.93	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	124883.93	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	120993.77	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	120993.77	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	97947.47	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	97947.47	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	97947.47	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	97947.47	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14775.31	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14775.31	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18741.95	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18741.95	250.00

Sample Name	J8250-FS(3)	Injection Vial	31
Sample ID	VC-PM365-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:46:27	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	39095.38	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	39095.38	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	92851.24	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	92851.24	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	102166.03	250.00
PFHpA_2	363.0 / 169.0	2.29	13C4-PFHpA	367.0 / 322.0	102166.03	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	34722.16	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	34722.16	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	129108.13	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	129108.13	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	115058.74	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	115058.74	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	36938.40	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	36938.40	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	137117.34	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	137117.34	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	120632.30	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	120632.30	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	131095.55	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	131095.55	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	90731.38	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	90731.38	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	90731.38	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	90731.38	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17433.33	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17433.33	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20196.10	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20196.10	250.00

Sample Name	J8251-FS(3)	Injection Vial	32
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:57:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	40404.20	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	40404.20	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	74815.10	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	74815.10	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	89312.83	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	89312.83	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	31729.92	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	31729.92	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	98299.46	250.00
PFOA_2	413.0 / 169.0	2.62	13C8-PFOA	421.0 / 376.0	98299.46	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	94590.75	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	94590.75	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	31712.27	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	31712.27	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	109386.47	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	109386.47	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	102127.43	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	102127.43	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	105956.96	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	105956.96	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	78072.97	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	78072.97	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	78072.97	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	78072.97	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	10453.79	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	10453.79	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	12533.50	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	12533.50	250.00

Sample Name	J8251-FS-D(5)	Injection Vial	33
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:08:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	35049.63	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	35049.63	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	77504.14	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	77504.14	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	94855.92	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	94855.92	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	30217.23	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	30217.23	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	107914.18	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	107914.18	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	106138.72	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	106138.72	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	33475.83	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	33475.83	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	113621.30	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	113621.30	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	101202.67	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	101202.67	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	101315.86	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	101315.86	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	77983.39	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	77983.39	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	77983.39	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	77983.39	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14070.98	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14070.98	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17166.24	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17166.24	250.00

Sample Name	J8252-FS-D(5)	Injection Vial	37
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:51:37	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	34757.47	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	34757.47	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	69562.71	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	69562.71	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	89276.50	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	89276.50	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	30273.12	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	30273.12	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	108378.13	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	108378.13	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	107801.61	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	107801.61	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	34098.00	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	34098.00	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	123125.77	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	123125.77	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	111023.42	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	111023.42	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	114006.69	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	114006.69	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	89667.94	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89667.94	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	89667.94	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89667.94	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17685.99	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17685.99	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18823.09	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18823.09	250.00

Sample Name	J8253-FS(3)	Injection Vial	38
Sample ID	VC-PM365-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:02:28	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	34802.83	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	34802.83	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	80081.43	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	80081.43	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	86810.26	250.00
PFHpA_2	363.0 / 169.0	2.23	13C4-PFHpA	367.0 / 322.0	86810.26	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	34428.28	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	34428.28	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	112956.51	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	112956.51	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	114357.35	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	114357.35	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	34916.36	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	34916.36	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	131359.35	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	131359.35	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	125116.30	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	125116.30	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	118575.15	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	118575.15	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	93617.72	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	93617.72	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	93617.72	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	93617.72	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16515.25	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16515.25	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	21762.88	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	21762.88	250.00

Sample Name	J8257MS-FS-D(5)	Injection Vial	40
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:24:13	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	36713.15	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	36713.15	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	80180.21	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	80180.21	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	87944.23	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	87944.23	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	30588.41	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	30588.41	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	113117.15	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	113117.15	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	116499.76	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	116499.76	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	37338.29	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	37338.29	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	128636.48	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	128636.48	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	127363.08	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	127363.08	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	121834.87	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	121834.87	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	99455.22	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	99455.22	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	99455.22	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	99455.22	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17821.99	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17821.99	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	23076.52	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	23076.52	250.00

Sample Name	J8258MSD-FS(3)	Injection Vial	41
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:35:05	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	37529.13	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	37529.13	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	78124.60	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	78124.60	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	91760.69	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	91760.69	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	30721.39	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	30721.39	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	101011.56	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	101011.56	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	88703.66	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	88703.66	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	29322.88	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	29322.88	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	110482.57	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	110482.57	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	116428.76	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	116428.76	250.00
PFDaA_1	613.0 / 569.0	4.02	13C2-PFDaA	615.0 / 570.0	119086.43	250.00
PFDaA_2	613.0 / 319.0	4.02	13C2-PFDaA	615.0 / 570.0	119086.43	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	98056.50	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	98056.50	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	98056.50	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	98056.50	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	16759.73	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	16759.73	250.00
NEtFOSAA_1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	18227.50	250.00
NEtFOSAA_2	584.0 / 483.0	3.74	d5-EtFOSAA	589.0 / 419.0	18227.50	250.00

Sample Name	J8258MSD-FS-D(5)	Injection Vial	42
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:45:56	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	26058.48	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	26058.48	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	62988.93	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	62988.93	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	68370.16	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	68370.16	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25473.37	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25473.37	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	92484.91	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	92484.91	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	91175.54	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	91175.54	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	29381.81	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	29381.81	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	96540.51	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	96540.51	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	96380.86	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	96380.86	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	94788.44	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	94788.44	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	73059.89	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	73059.89	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	73059.89	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	73059.89	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14327.48	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14327.48	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17049.33	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17049.33	250.00

Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:47:30	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	31841.92	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	31841.92	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	66285.32	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	66285.32	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	77850.59	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	77850.59	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	28068.26	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	28068.26	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	100220.12	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	100220.12	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	98610.52	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	98610.52	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	30470.90	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	30470.90	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	104995.14	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	104995.14	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	94589.12	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	94589.12	250.00
PFDoA_1	613.0 / 569.0	4.05	13C2-PFDoA	615.0 / 570.0	91708.22	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	91708.22	250.00
PFTeDA_1	663.0 / 619.0	4.29	13C2-PFTeDA	715.0 / 670.0	69413.06	250.00
PFTeDA_2	663.0 / 169.0	4.30	13C2-PFTeDA	715.0 / 670.0	69413.06	250.00
PFTeDA_1	713.0 / 669.0	4.50	13C2-PFTeDA	715.0 / 670.0	69413.06	250.00
PFTeDA_2	713.0 / 169.0	4.51	13C2-PFTeDA	715.0 / 670.0	69413.06	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	13555.28	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	13555.28	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	15783.42	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	15783.42	250.00

Sample Name	CR851PB-FS(3)	Injection Vial	13
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:30:59	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	44849.66	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	44849.66	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	96706.08	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	96706.08	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	117526.36	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	117526.36	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	39817.41	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	39817.41	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	131829.47	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	131829.47	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	123806.17	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	123806.17	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	43952.08	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	43952.08	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	148139.37	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	148139.37	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	122645.91	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	122645.91	250.00
PFDaA_1	613.0 / 569.0	N/A	13C2-PFDaA	615.0 / 570.0	134249.31	250.00
PFDaA_2	613.0 / 319.0	N/A	13C2-PFDaA	615.0 / 570.0	134249.31	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	103856.07	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	103856.07	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	103856.07	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	103856.07	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	20726.59	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	20726.59	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	22010.66	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	22010.66	250.00

Sample Name	CR852LCS-FS(3)	Injection Vial	14
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:41:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	96646.17	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	28998.30	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	28998.30	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	86050.06	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	86050.06	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	86050.06	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	86050.06	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	96646.17	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	96646.17	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	96646.17	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	28998.30	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	28998.30	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	28998.30	239.25

Sample Name	J8230-FS(3)	Injection Vial	16
Sample ID	VC-PM649-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:03:33	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	113448.03	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	32406.83	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	32406.83	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	96263.24	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	96263.24	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	96263.24	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	96263.24	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	113448.03	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	113448.03	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	113448.03	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	32406.83	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	32406.83	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	32406.83	239.25

Sample Name	J8231-FS(3)	Injection Vial	17
Sample ID	VC-PM649-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:14:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	97631.72	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	32712.56	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	32712.56	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	89910.91	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	89910.91	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	89910.91	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	89910.91	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	97631.72	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	97631.72	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	97631.72	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	32712.56	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	32712.56	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	32712.56	239.25

Sample Name	J8232-FS(3)	Injection Vial	18
Sample ID	VC-PM649-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:25:14	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	99940.30	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	32236.27	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	32236.27	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	90541.04	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	90541.04	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	90541.04	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	90541.04	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	99940.30	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	99940.30	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	99940.30	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	32236.27	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	32236.27	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	32236.27	239.25

Sample Name	J8233-FS(3)	Injection Vial	19
Sample ID	VC-PM649-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:36:06	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	118998.18	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	31581.74	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	31581.74	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	104890.26	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	104890.26	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	104890.26	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	104890.26	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	118998.18	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	118998.18	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	118998.18	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	31581.74	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	31581.74	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	31581.74	239.25

Sample Name	J8234-FS(3)	Injection Vial	20
Sample ID	VC-PM649-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:46:58	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	103264.30	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	34700.63	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	34700.63	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	93527.03	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	93527.03	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	93527.03	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	93527.03	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	103264.30	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	103264.30	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	103264.30	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	34700.63	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	34700.63	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	34700.63	239.25

Sample Name	J8235-FS(3)	Injection Vial	21
Sample ID	VC-PM649-SS03-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:57:50	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	114193.56	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	36325.22	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	36325.22	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	103553.66	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	103553.66	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	103553.66	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	103553.66	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	114193.56	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	114193.56	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	114193.56	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	36325.22	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	36325.22	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	36325.22	239.25

Sample Name	J8236-FS(3)	Injection Vial	22
Sample ID	VC-PM649-SB03-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:08:42	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	116526.84	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	37573.18	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	37573.18	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	103030.12	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	103030.12	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	103030.12	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	103030.12	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	116526.84	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	116526.84	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	116526.84	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	37573.18	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	37573.18	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	37573.18	239.25

Sample Name	J8237-FS(3)	Injection Vial	25
Sample ID	VC-PM649-SB03-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:41:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	98236.63	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	31781.28	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	31781.28	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	93380.42	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	93380.42	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	93380.42	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	93380.42	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	98236.63	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	98236.63	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	98236.63	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	31781.28	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	31781.28	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	31781.28	239.25

Sample Name	J8238-FS(3)	Injection Vial	26
Sample ID	VC-PM649-SS04-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:52:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	115782.27	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	36107.87	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	36107.87	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	109337.46	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	109337.46	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	109337.46	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	109337.46	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	115782.27	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	115782.27	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	115782.27	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	36107.87	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	36107.87	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	36107.87	239.25

Sample Name	J8240-FS(3)	Injection Vial	28
Sample ID	VC-PM649-SB04-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:13:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	115953.25	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	38458.56	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	38458.56	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	104290.49	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	104290.49	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	104290.49	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	104290.49	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	115953.25	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	115953.25	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	115953.25	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	38458.56	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	38458.56	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	38458.56	239.25

Sample Name	J8248-FS(3)	Injection Vial	29
Sample ID	VC-PM365-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:24:43	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	113166.60	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	34467.38	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	34467.38	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	102020.79	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	102020.79	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	102020.79	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	102020.79	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	113166.60	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	113166.60	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	113166.60	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	34467.38	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	34467.38	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	34467.38	239.25

Sample Name	J8249-FS(3)	Injection Vial	30
Sample ID	VC-PM365-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:35:35	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	114925.93	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	34052.86	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	34052.86	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	103878.22	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	103878.22	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	103878.22	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	103878.22	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	114925.93	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	114925.93	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	114925.93	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	34052.86	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	34052.86	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	34052.86	239.25

Sample Name	J8250-FS(3)	Injection Vial	31
Sample ID	VC-PM365-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:46:27	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	114662.24	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	37424.41	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	37424.41	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	108851.48	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	108851.48	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	108851.48	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	108851.48	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	114662.24	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	114662.24	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	114662.24	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	37424.41	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	37424.41	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	37424.41	239.25

Sample Name	J8251-FS(3)	Injection Vial	32
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:57:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	111894.62	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	28008.98	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	28008.98	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	92916.38	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	92916.38	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	92916.38	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	92916.38	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	111894.62	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	111894.62	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	111894.62	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	28008.98	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	28008.98	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	28008.98	239.25

Sample Name	J8251-FS-D(5)	Injection Vial	33
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:08:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	N/A	13C2-PFDA	515.0 / 470.0	102979.73	250.00
d3-MeFOSAA	573.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	29781.26	239.25
d5-EtFOSAA	589.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	29781.26	239.25
13C5-PFHxA	318.0 / 273.0	N/A	13C2-PFOA	415.0 / 370.0	95390.40	250.00
13C4-PFHpA	367.0 / 322.0	N/A	13C2-PFOA	415.0 / 370.0	95390.40	250.00
13C8-PFOA	421.0 / 376.0	N/A	13C2-PFOA	415.0 / 370.0	95390.40	250.00
13C9-PFNA	472.0 / 427.0	N/A	13C2-PFOA	415.0 / 370.0	95390.40	250.00
13C6-PFDA	519.0 / 474.0	N/A	13C2-PFDA	515.0 / 470.0	102979.73	250.00
13C7-PFUnA	570.0 / 525.0	N/A	13C2-PFDA	515.0 / 470.0	102979.73	250.00
13C2-PFTeDA	715.0 / 670.0	N/A	13C2-PFDA	515.0 / 470.0	102979.73	250.00
13C3-PFBS	302.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	29781.26	239.25
13C3-PFHxS	402.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	29781.26	239.25
13C8-PFOS	507.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	29781.26	239.25

Sample Name	J8252-FS-D(5)	Injection Vial	37
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:51:37	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	N/A	13C2-PFDA	515.0 / 470.0	105324.38	250.00
d3-MeFOSAA	573.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	27709.74	239.25
d5-EtFOSAA	589.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	27709.74	239.25
13C5-PFHxA	318.0 / 273.0	N/A	13C2-PFOA	415.0 / 370.0	91024.37	250.00
13C4-PFHpA	367.0 / 322.0	N/A	13C2-PFOA	415.0 / 370.0	91024.37	250.00
13C8-PFOA	421.0 / 376.0	N/A	13C2-PFOA	415.0 / 370.0	91024.37	250.00
13C9-PFNA	472.0 / 427.0	N/A	13C2-PFOA	415.0 / 370.0	91024.37	250.00
13C6-PFDA	519.0 / 474.0	N/A	13C2-PFDA	515.0 / 470.0	105324.38	250.00
13C7-PFUnA	570.0 / 525.0	N/A	13C2-PFDA	515.0 / 470.0	105324.38	250.00
13C2-PFTeDA	715.0 / 670.0	N/A	13C2-PFDA	515.0 / 470.0	105324.38	250.00
13C3-PFBS	302.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	27709.74	239.25
13C3-PFHxS	402.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	27709.74	239.25
13C8-PFOS	507.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	27709.74	239.25

Sample Name	J8253-FS(3)	Injection Vial	38
Sample ID	VC-PM365-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:02:28	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	114003.76	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	35652.15	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	35652.15	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	97803.28	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	97803.28	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	97803.28	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	97803.28	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	114003.76	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	114003.76	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	114003.76	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	35652.15	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	35652.15	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	35652.15	239.25

Sample Name	J8257MS-D(5)	Injection Vial	40
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:24:13	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	N/A	13C2-PFDA	515.0 / 470.0	112869.09	250.00
d3-MeFOSAA	573.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	33062.40	239.25
d5-EtFOSAA	589.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	33062.40	239.25
13C5-PFHxA	318.0 / 273.0	N/A	13C2-PFOA	415.0 / 370.0	98802.88	250.00
13C4-PFHpA	367.0 / 322.0	N/A	13C2-PFOA	415.0 / 370.0	98802.88	250.00
13C8-PFOA	421.0 / 376.0	N/A	13C2-PFOA	415.0 / 370.0	98802.88	250.00
13C9-PFNA	472.0 / 427.0	N/A	13C2-PFOA	415.0 / 370.0	98802.88	250.00
13C6-PFDA	519.0 / 474.0	N/A	13C2-PFDA	515.0 / 470.0	112869.09	250.00
13C7-PFUnA	570.0 / 525.0	N/A	13C2-PFDA	515.0 / 470.0	112869.09	250.00
13C2-PFTeDA	715.0 / 670.0	N/A	13C2-PFDA	515.0 / 470.0	112869.09	250.00
13C3-PFBS	302.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	33062.40	239.25
13C3-PFHxS	402.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	33062.40	239.25
13C8-PFOS	507.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	33062.40	239.25

Sample Name	J8258MSD-FS(3)	Injection Vial	41
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:35:05	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	112157.06	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	26477.88	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	26477.88	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	89346.83	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	89346.83	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	89346.83	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	89346.83	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	112157.06	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	112157.06	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	112157.06	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	26477.88	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	26477.88	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	26477.88	239.25

Sample Name	J8258MSD-FS-D(5)	Injection Vial	42
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:45:56	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	N/A	13C2-PFDA	515.0 / 470.0	89081.69	250.00
d3-MeFOSAA	573.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	26392.26	239.25
d5-EtFOSAA	589.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	26392.26	239.25
13C5-PFHxA	318.0 / 273.0	N/A	13C2-PFOA	415.0 / 370.0	80291.43	250.00
13C4-PFHpA	367.0 / 322.0	N/A	13C2-PFOA	415.0 / 370.0	80291.43	250.00
13C8-PFOA	421.0 / 376.0	N/A	13C2-PFOA	415.0 / 370.0	80291.43	250.00
13C9-PFNA	472.0 / 427.0	N/A	13C2-PFOA	415.0 / 370.0	80291.43	250.00
13C6-PFDA	519.0 / 474.0	N/A	13C2-PFDA	515.0 / 470.0	89081.69	250.00
13C7-PFUnA	570.0 / 525.0	N/A	13C2-PFDA	515.0 / 470.0	89081.69	250.00
13C2-PFTeDA	715.0 / 670.0	N/A	13C2-PFDA	515.0 / 470.0	89081.69	250.00
13C3-PFBS	302.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	26392.26	239.25
13C3-PFHxS	402.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	26392.26	239.25
13C8-PFOS	507.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	26392.26	239.25

Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:47:30	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	97255.02	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	32709.48	239.25
d5-EtFOSAA	589.0 / 419.0	3.75	13C4-PFOS	503.0 / 99.0	32709.48	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	86538.29	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	86538.29	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	86538.29	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	86538.29	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	97255.02	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	97255.02	250.00
13C2-PFTeDA	715.0 / 670.0	4.50	13C2-PFDA	515.0 / 470.0	97255.02	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	32709.48	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	32709.48	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	32709.48	239.25

Sample Name	CR851PB-FS(3)	Injection Vial	13
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:30:59	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	114775.95	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	38933.10	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	38933.10	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	106056.18	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	106056.18	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	106056.18	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	106056.18	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	114775.95	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	114775.95	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	114775.95	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	38933.10	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	38933.10	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	38933.10	239.25

Sample Name	KB35 IB	Injection Vial	2
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T16:08:06	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	31936.16	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	31936.16	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	75674.84	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	75674.84	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	88597.98	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	88597.98	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	28259.60	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	28259.60	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	107050.59	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	107050.59	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	98486.04	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	98486.04	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	33212.40	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	33212.40	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	108143.11	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	108143.11	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	90257.26	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	90257.26	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	96355.48	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	96355.48	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	75999.59	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	75999.59	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	75999.59	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	75999.59	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	12715.49	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	12715.49	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	15547.71	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	15547.71	250.00

Sample Name	J8252-FS(3)	Injection Vial	11
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:45:59	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	41620.36	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	41620.36	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	86669.03	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	86669.03	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	102668.36	250.00
PFHpA_2	363.0 / 169.0	2.22	13C4-PFHpA	367.0 / 322.0	102668.36	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	31218.37	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	31218.37	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	116515.40	250.00
PFOA_2	413.0 / 169.0	2.56	13C8-PFOA	421.0 / 376.0	116515.40	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	100985.12	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	100985.12	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	29313.97	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	29313.97	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	123377.04	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	123377.04	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	112561.08	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	112561.08	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	115610.18	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	115610.18	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	89599.40	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89599.40	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	89599.40	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89599.40	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17389.43	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17389.43	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19127.39	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19127.39	250.00

Sample Name	J8252-FS-D(7)	Injection Vial	12
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:56:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	31072.66	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	31072.66	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	67715.82	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	67715.82	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	80006.73	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	80006.73	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	24427.71	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	24427.71	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	93661.25	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	93661.25	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	90202.46	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	90202.46	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	30445.46	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	30445.46	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	95572.62	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	95572.62	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	94836.27	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	94836.27	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	88461.24	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	88461.24	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	72631.01	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	72631.01	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	72631.01	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	72631.01	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	13294.89	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	13294.89	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17308.68	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17308.68	250.00

Sample Name	J8257MS-FS(3)	Injection Vial	13
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:07:46	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	41837.77	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	41837.77	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	91318.32	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	91318.32	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	96560.30	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	96560.30	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	32195.94	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	32195.94	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	106045.58	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	106045.58	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	93548.29	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	93548.29	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	26189.75	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	26189.75	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	112287.04	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	112287.04	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	106689.34	250.00
PFUnA_2	563.0 / 269.0	3.75	13C7-PFUnA	570.0 / 525.0	106689.34	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	118340.72	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	118340.72	250.00
PFTeDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	103638.82	250.00
PFTeDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	103638.82	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	103638.82	250.00
PFTeDA_2	713.0 / 169.0	4.49	13C2-PFTeDA	715.0 / 670.0	103638.82	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	18082.70	250.00
NMeFOSAA_2	570.0 / 512.0	3.58	d3-MeFOSAA	573.0 / 419.0	18082.70	250.00
NEtFOSAA_1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	16135.41	250.00
NEtFOSAA_2	584.0 / 483.0	3.74	d5-EtFOSAA	589.0 / 419.0	16135.41	250.00

Sample Name	J8229-FS(3)	Injection Vial	14
Sample ID	VC-PM649-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:18:39	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	31937.15	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	31937.15	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	72637.89	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	72637.89	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	85787.45	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	85787.45	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	27254.55	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	27254.55	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	100723.60	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	100723.60	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	93492.10	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	93492.10	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	29758.18	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	29758.18	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	86486.35	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	86486.35	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	96398.64	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	96398.64	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	102840.52	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	102840.52	250.00
PFTeDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	76934.37	250.00
PFTeDA_2	663.0 / 169.0	4.28	13C2-PFTeDA	715.0 / 670.0	76934.37	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	76934.37	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	76934.37	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	11009.55	250.00
NMeFOSAA_2	570.0 / 512.0	3.58	d3-MeFOSAA	573.0 / 419.0	11009.55	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	16275.85	250.00
NEtFOSAA_2	584.0 / 483.0	3.70	d5-EtFOSAA	589.0 / 419.0	16275.85	250.00

Sample Name	J8239-FS(3)	Injection Vial	15
Sample ID	VC-PM649-SB04-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:29:32	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	36418.64	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	36418.64	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	77127.94	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	77127.94	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	86120.89	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	86120.89	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	29788.13	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	29788.13	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	106301.45	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	106301.45	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	98922.05	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	98922.05	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	30953.52	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	30953.52	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	102266.08	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	102266.08	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	104042.93	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	104042.93	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	104957.87	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	104957.87	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	81052.01	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	81052.01	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	81052.01	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	81052.01	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	8404.12	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	8404.12	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	11157.07	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	11157.07	250.00

Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:45:25	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	26301.26	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	26301.26	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	63762.03	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	63762.03	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	68855.85	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	68855.85	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	25913.83	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	25913.83	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	97193.51	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	97193.51	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	87468.15	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	87468.15	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	26470.49	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	26470.49	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	95009.51	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	95009.51	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	98518.94	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	98518.94	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	92546.73	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	92546.73	250.00
PFTeDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	73048.82	250.00
PFTeDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	73048.82	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	73048.82	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	73048.82	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	15260.48	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	15260.48	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	16867.00	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	16867.00	250.00

Sample Name	KB35 IB	Injection Vial	2
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T16:08:06	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.05	13C2-PFDA	515.0 / 470.0	102173.31	250.00
d3-MeFOSAA	573.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	29991.29	239.25
d5-EtFOSAA	589.0 / 419.0	3.76	13C4-PFOS	503.0 / 99.0	29991.29	239.25
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	90829.29	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	90829.29	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	90829.29	250.00
13C9-PFNA	472.0 / 427.0	3.08	13C2-PFOA	415.0 / 370.0	90829.29	250.00
13C6-PFDA	519.0 / 474.0	3.43	13C2-PFDA	515.0 / 470.0	102173.31	250.00
13C7-PFUnA	570.0 / 525.0	3.76	13C2-PFDA	515.0 / 470.0	102173.31	250.00
13C2-PFTeDA	715.0 / 670.0	4.52	13C2-PFDA	515.0 / 470.0	102173.31	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	29991.29	239.25
13C3-PFHxS	402.0 / 99.0	2.30	13C4-PFOS	503.0 / 99.0	29991.29	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	29991.29	239.25

Sample Name	J8252-FS(3)	Injection Vial	11
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:45:59	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	113468.27	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	25827.53	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	25827.53	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	99138.38	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	99138.38	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	99138.38	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	99138.38	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	113468.27	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	113468.27	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	113468.27	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	25827.53	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	25827.53	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	25827.53	239.25

Sample Name	J8252-FS-D(7)	Injection Vial	12
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:56:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	N/A	13C2-PFDA	515.0 / 470.0	86049.81	250.00
d3-MeFOSAA	573.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	24846.73	239.25
d5-EtFOSAA	589.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	24846.73	239.25
13C5-PFHxA	318.0 / 273.0	N/A	13C2-PFOA	415.0 / 370.0	81777.85	250.00
13C4-PFHpA	367.0 / 322.0	N/A	13C2-PFOA	415.0 / 370.0	81777.85	250.00
13C8-PFOA	421.0 / 376.0	N/A	13C2-PFOA	415.0 / 370.0	81777.85	250.00
13C9-PFNA	472.0 / 427.0	N/A	13C2-PFOA	415.0 / 370.0	81777.85	250.00
13C6-PFDA	519.0 / 474.0	N/A	13C2-PFDA	515.0 / 470.0	86049.81	250.00
13C7-PFUnA	570.0 / 525.0	N/A	13C2-PFDA	515.0 / 470.0	86049.81	250.00
13C2-PFTeDA	715.0 / 670.0	N/A	13C2-PFDA	515.0 / 470.0	86049.81	250.00
13C3-PFBS	302.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	24846.73	239.25
13C3-PFHxS	402.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	24846.73	239.25
13C8-PFOS	507.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	24846.73	239.25

Sample Name	J8257MS-FS(3)	Injection Vial	13
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:07:46	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	102623.45	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	26103.48	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	26103.48	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	84663.48	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	84663.48	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	84663.48	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	84663.48	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	102623.45	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	102623.45	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	102623.45	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	26103.48	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	26103.48	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	26103.48	239.25

Sample Name	J8229-FS(3)	Injection Vial	14
Sample ID	VC-PM649-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:18:39	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	78499.80	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	26306.59	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	26306.59	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	80423.76	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	80423.76	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	80423.76	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	80423.76	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	78499.80	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	78499.80	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	78499.80	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	26306.59	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	26306.59	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	26306.59	239.25

Sample Name	J8239-FS(3)	Injection Vial	15
Sample ID	VC-PM649-SB04-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:29:32	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	115347.81	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	30821.99	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	30821.99	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	99494.34	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	99494.34	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	99494.34	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	99494.34	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	115347.81	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	115347.81	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	115347.81	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	30821.99	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	30821.99	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	30821.99	239.25

Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:45:25	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Results Summary

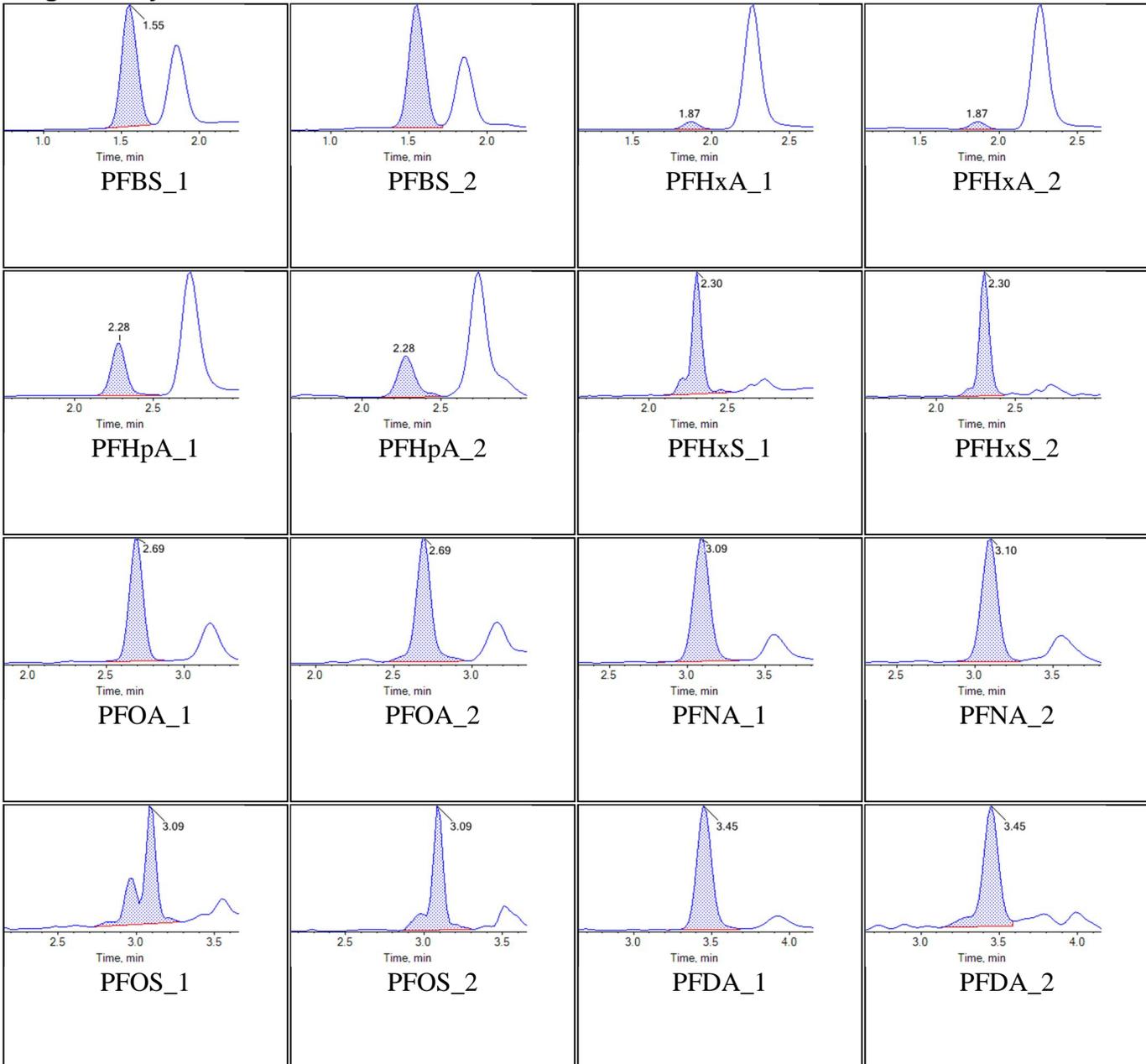
Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.00	13C2-PFDA	515.0 / 470.0	95996.97	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	27620.32	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	27620.32	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	85462.81	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	85462.81	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	85462.81	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	85462.81	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	95996.97	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	95996.97	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	95996.97	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	27620.32	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	27620.32	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	27620.32	239.25

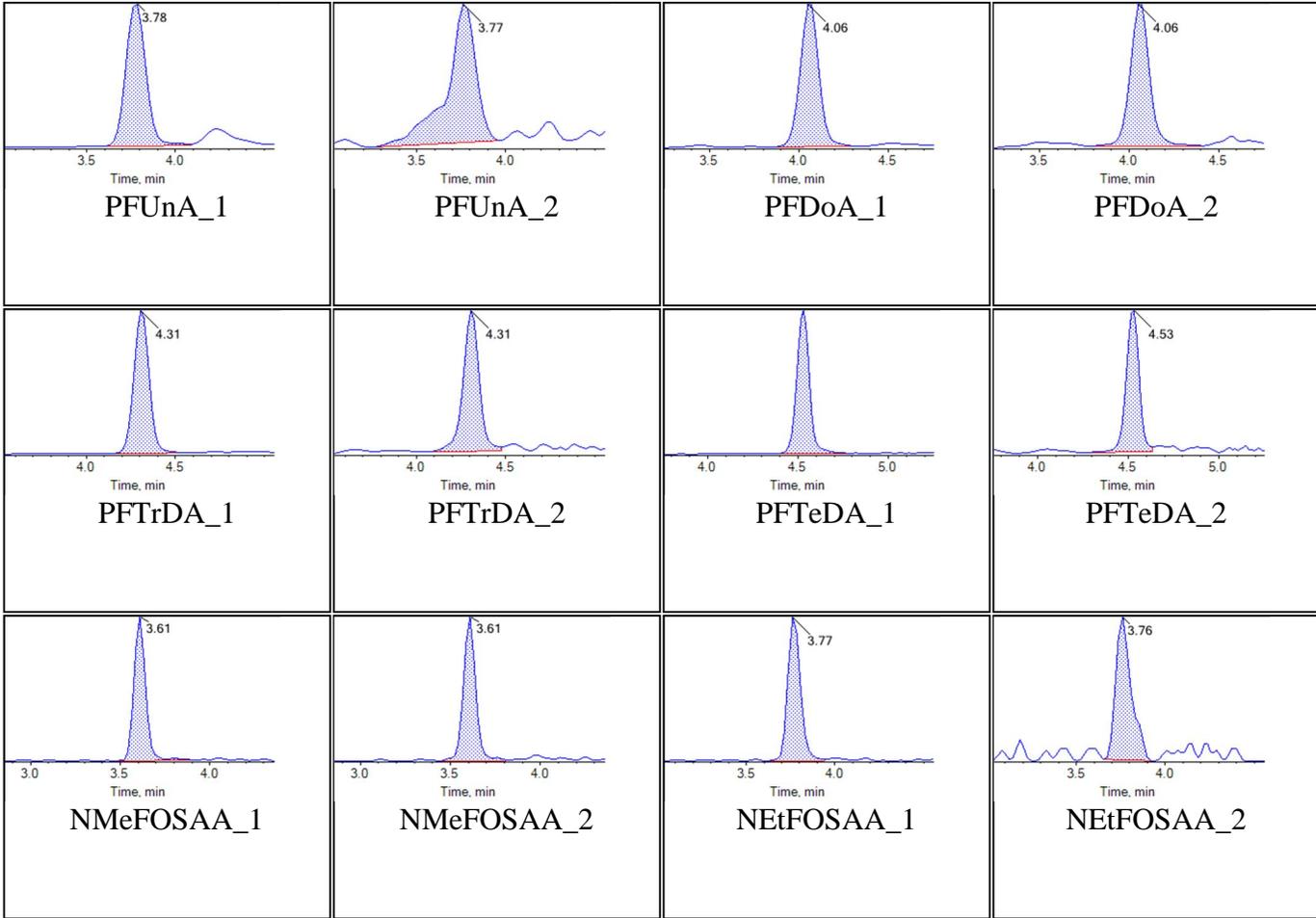
Chromatograms

Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:42:17	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

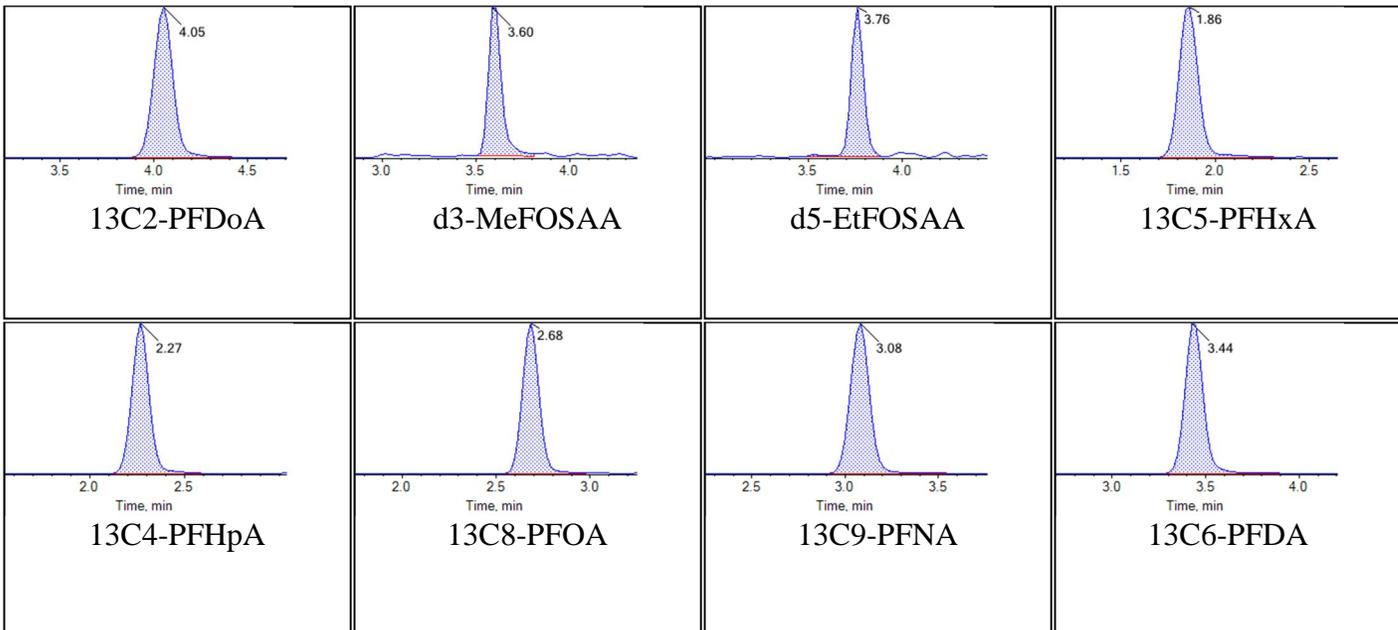
Chromatograms

Target Analytes:



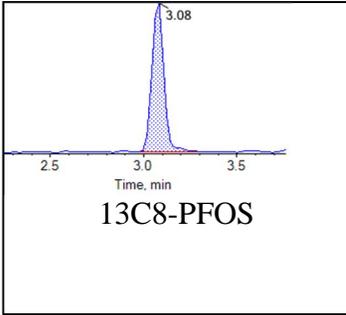
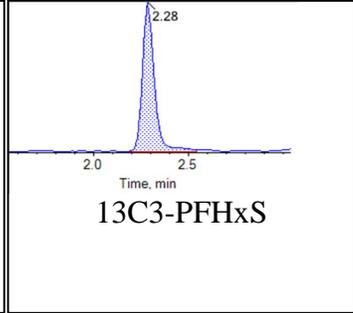
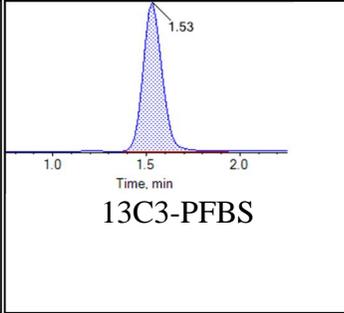
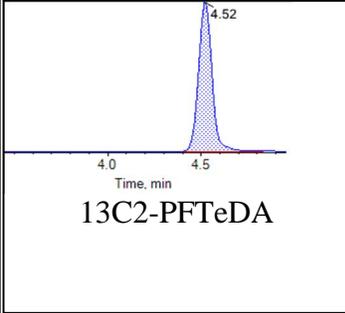
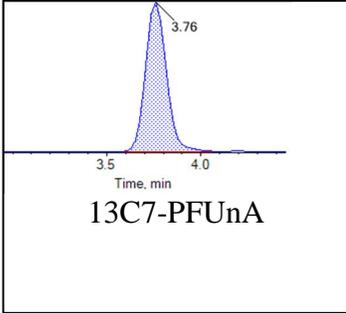


Internal Standards:



Chromatogram Report

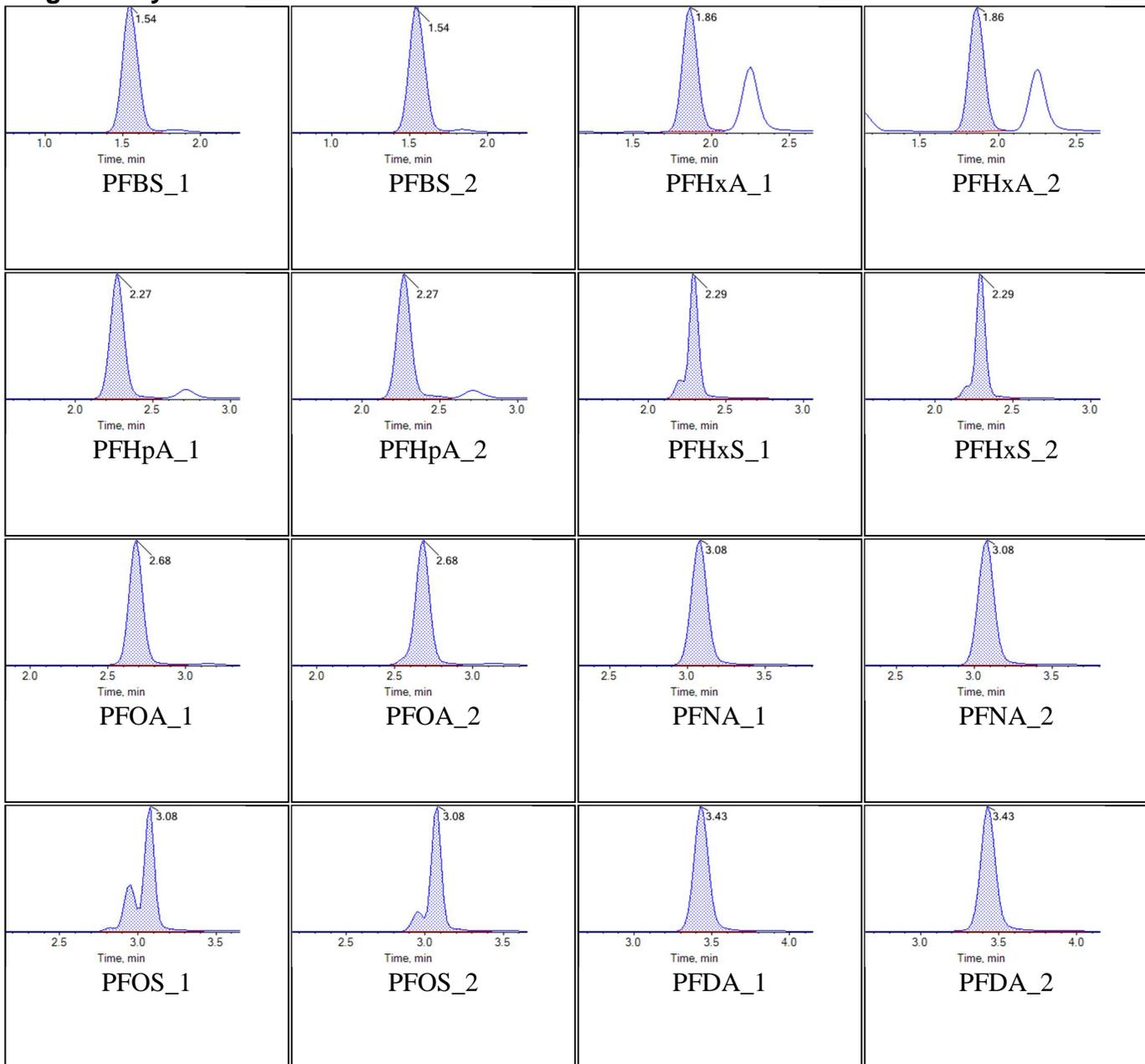
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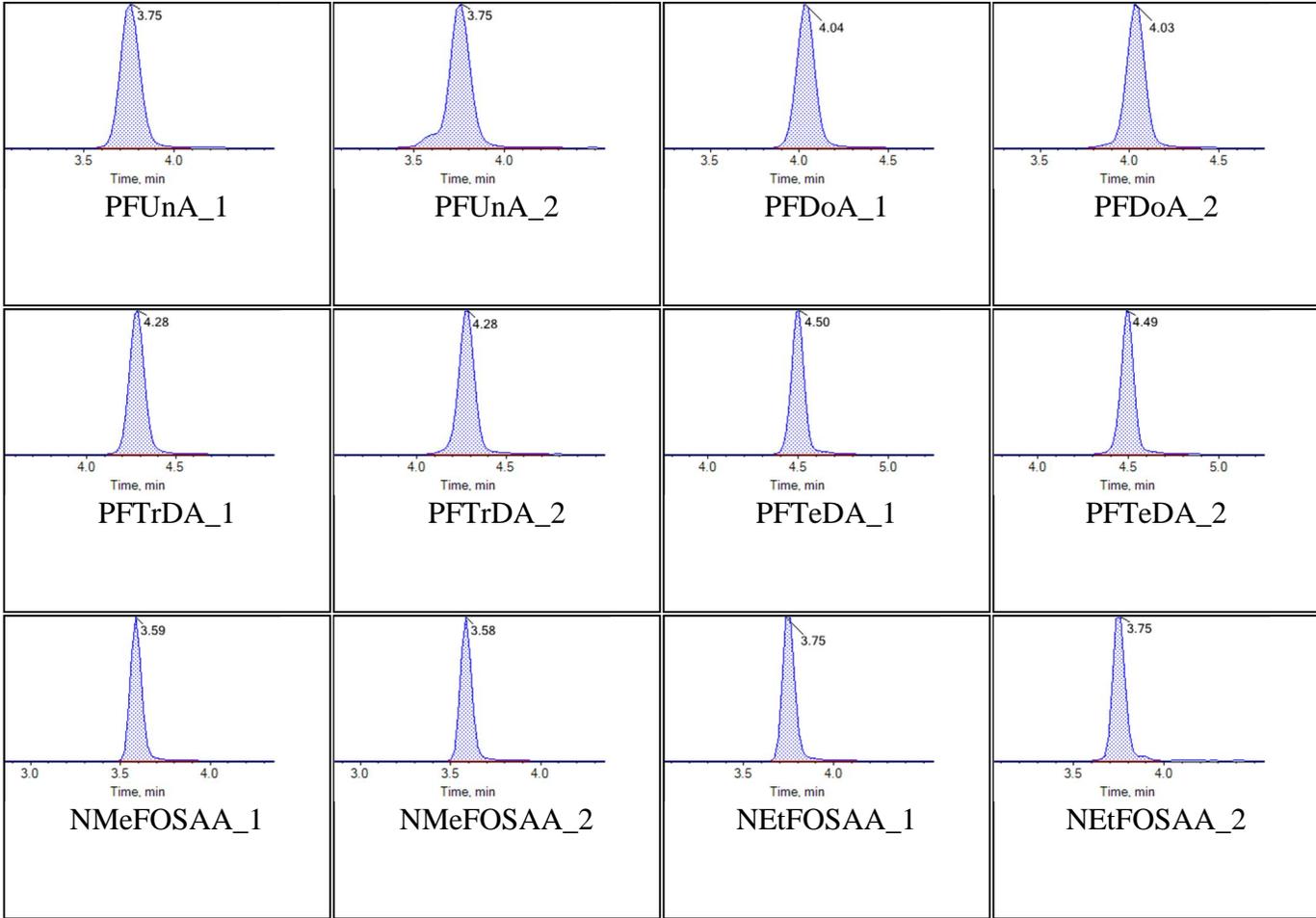


Sample Name	CR852LCS-FS(3)	Injection Vial	14
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:41:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

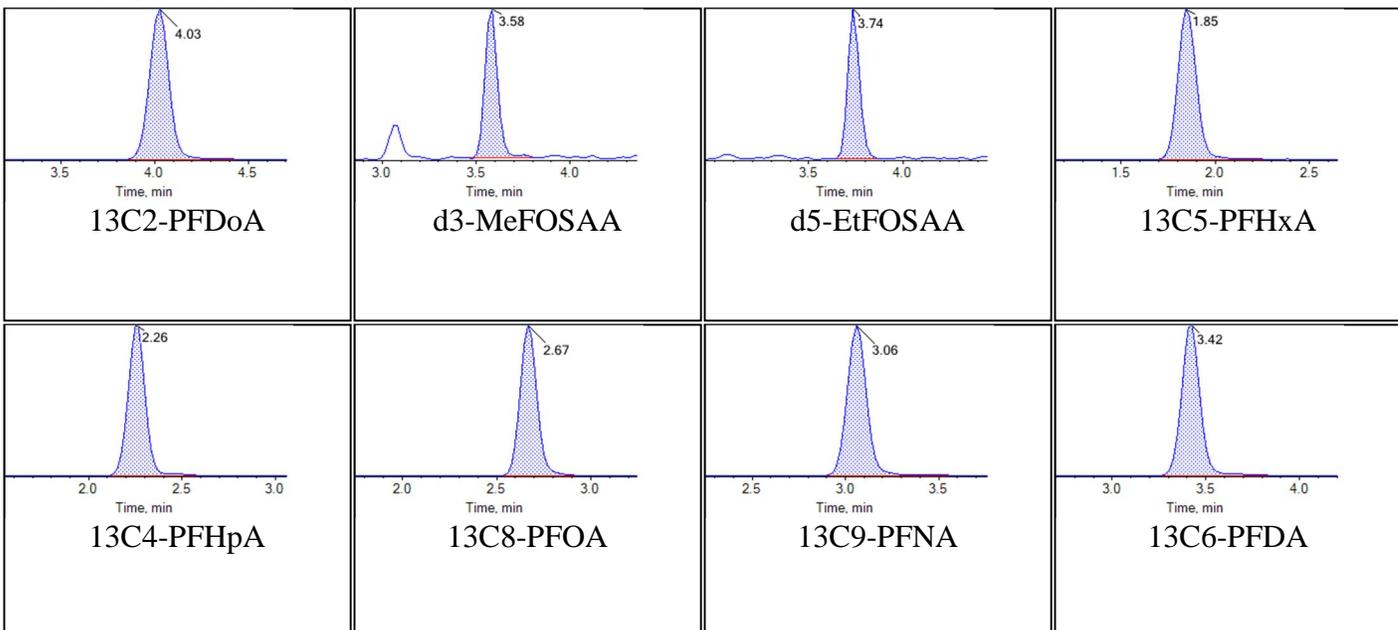
Chromatograms

Target Analytes:



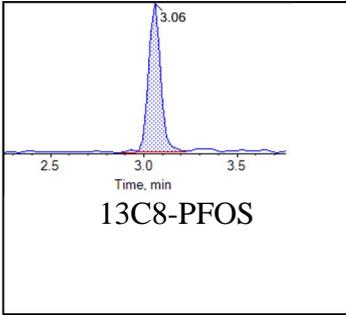
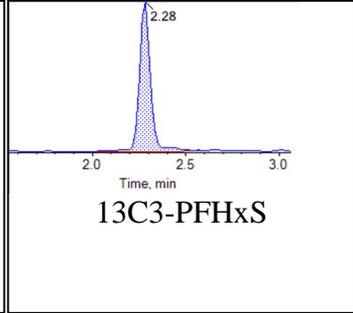
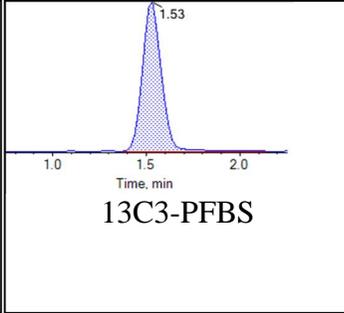
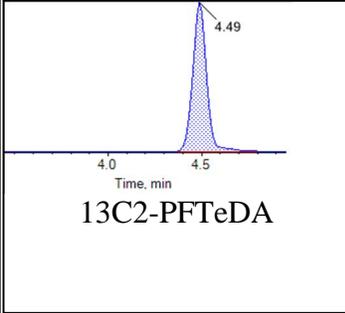
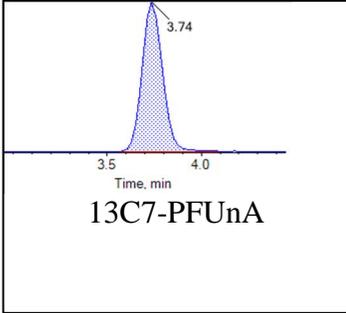


Internal Standards:



Chromatogram Report

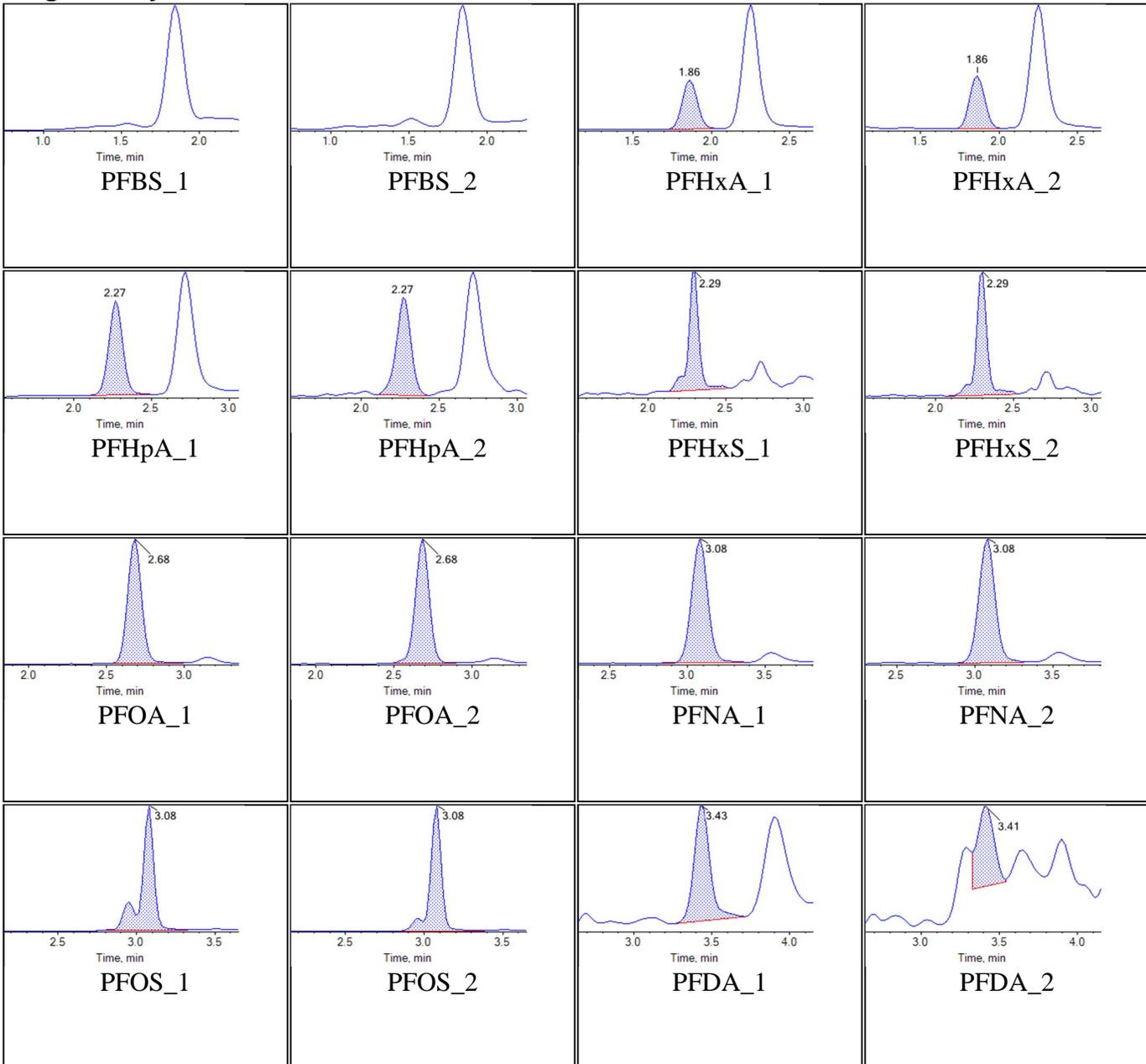
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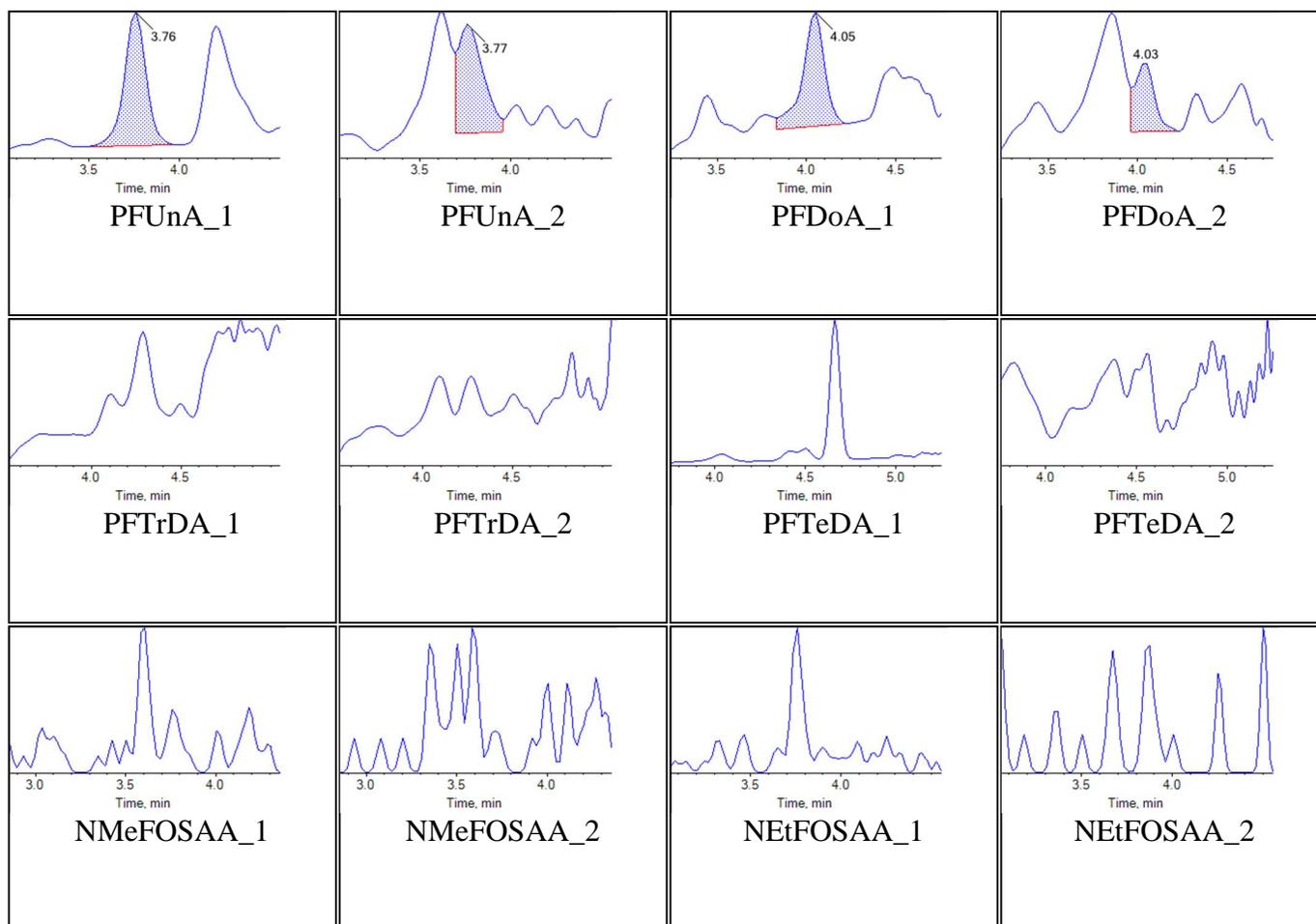
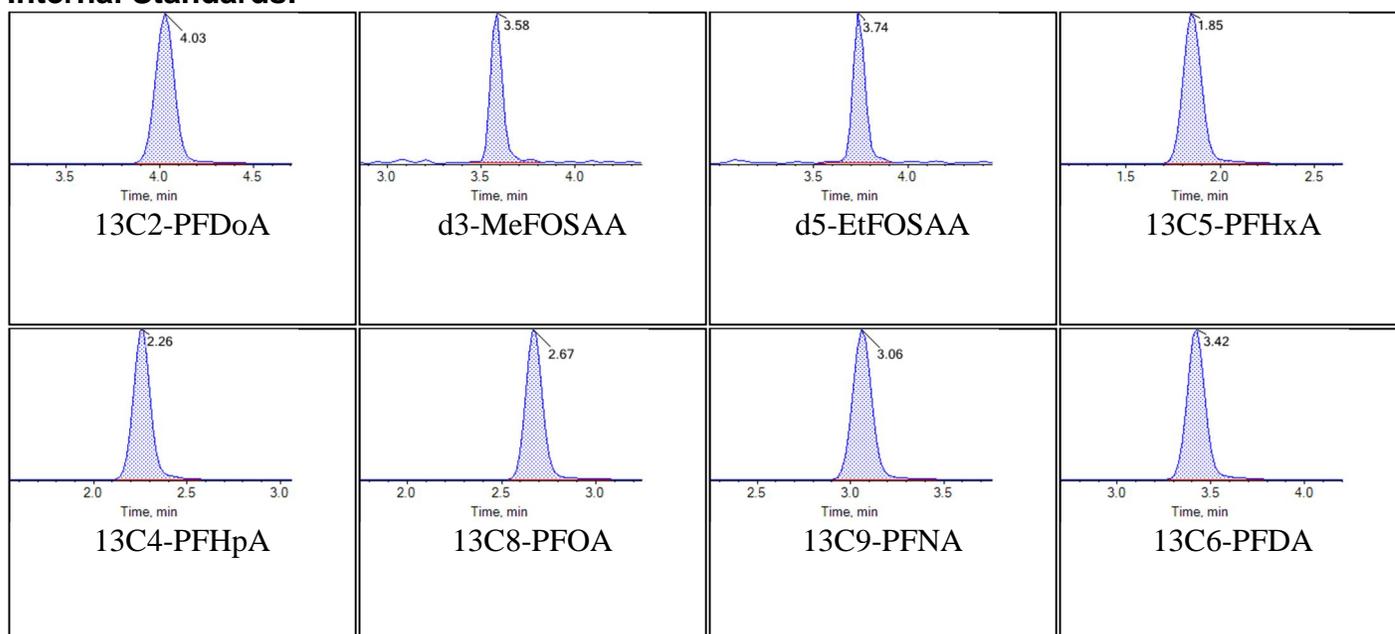


Sample Name	J8230-FS(3)	Injection Vial	16
Sample ID	VC-PM649-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:03:33	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Chromatograms

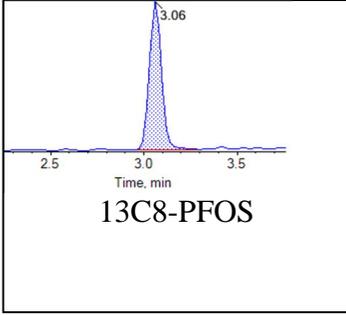
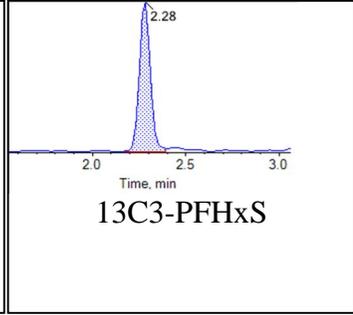
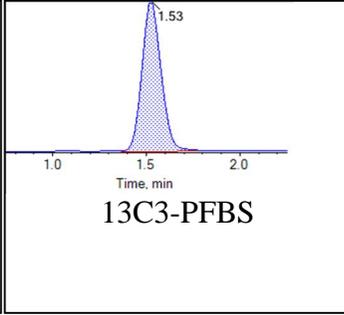
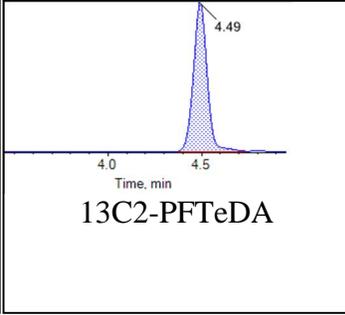
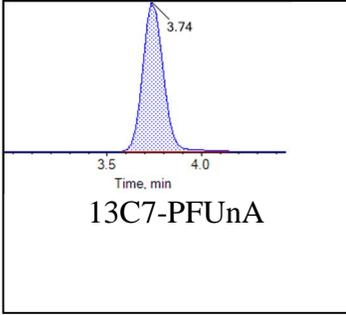
Target Analytes:



**Internal Standards:**

Chromatogram Report

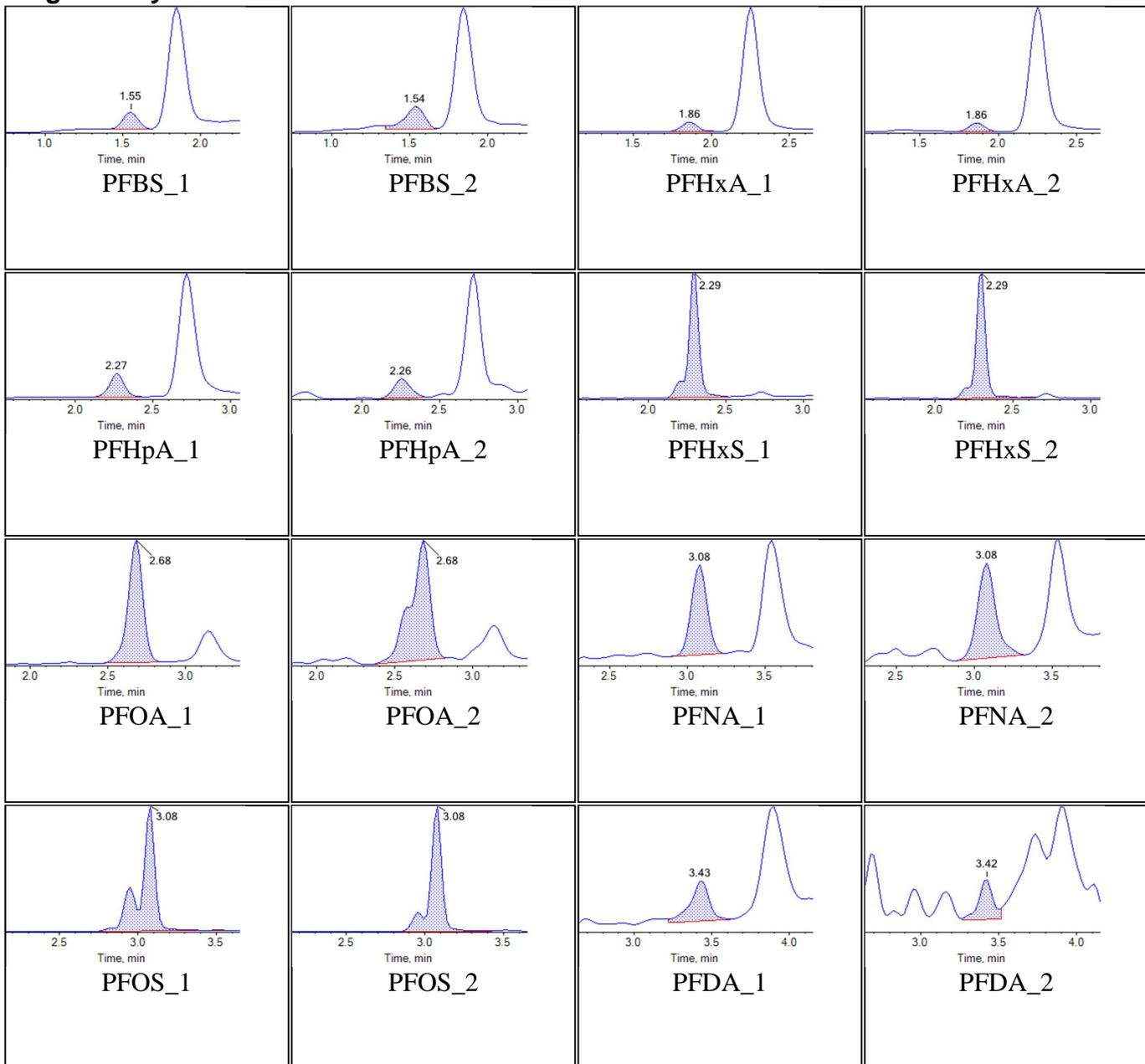
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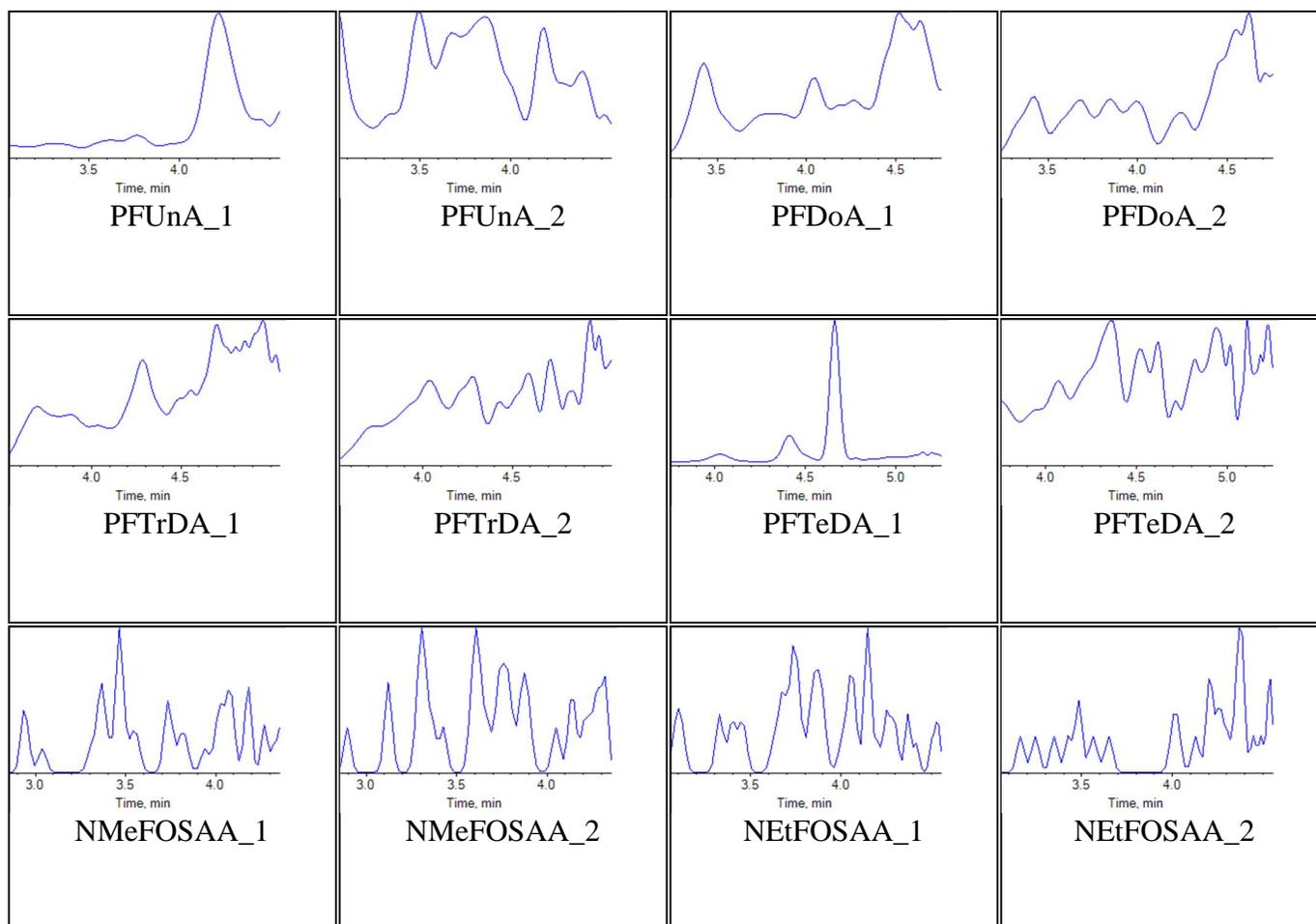
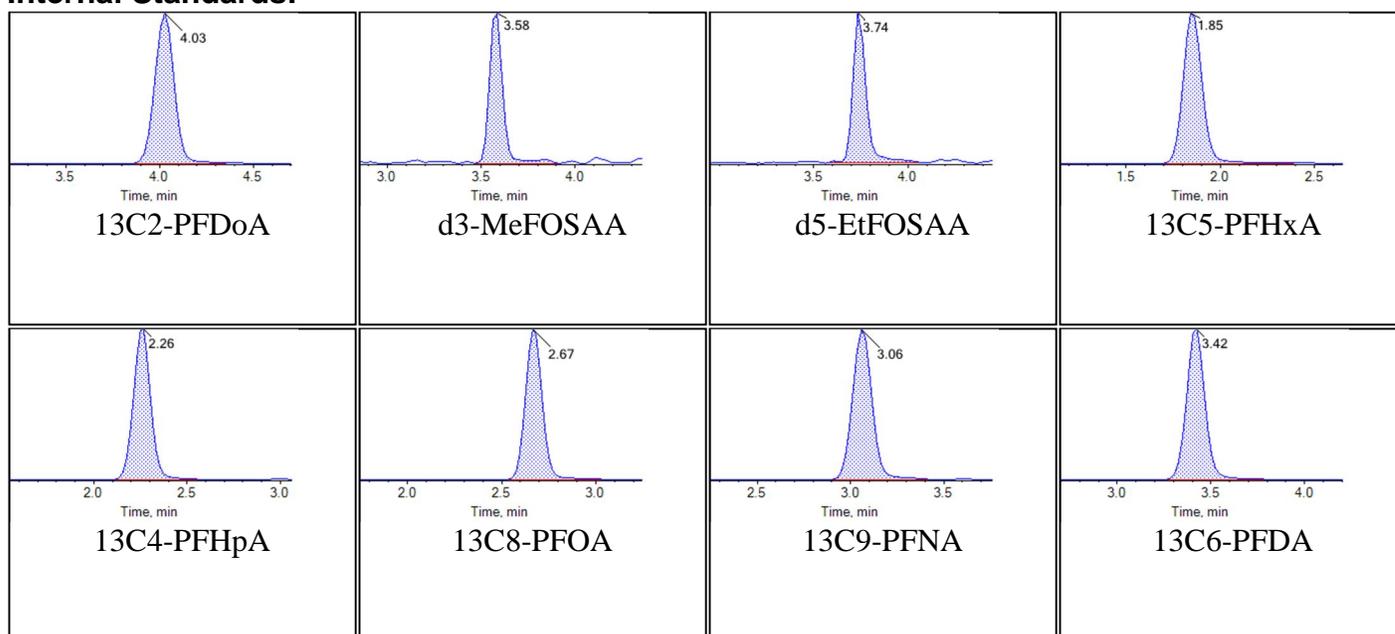


Sample Name	J8231-FS(3)	Injection Vial	17
Sample ID	VC-PM649-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:14:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Chromatograms

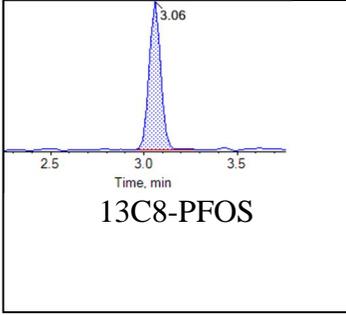
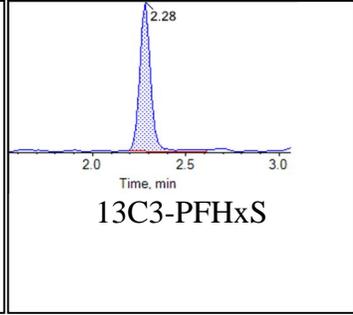
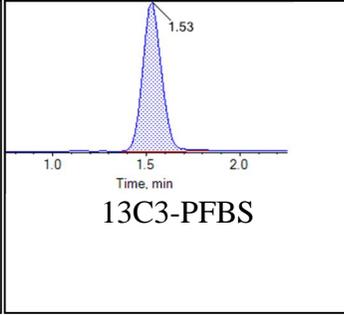
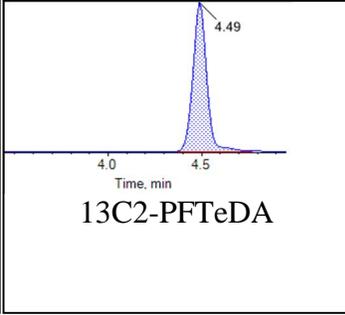
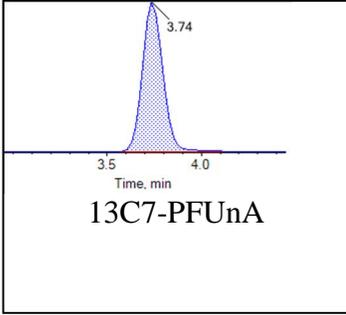
Target Analytes:



**Internal Standards:**

Chromatogram Report

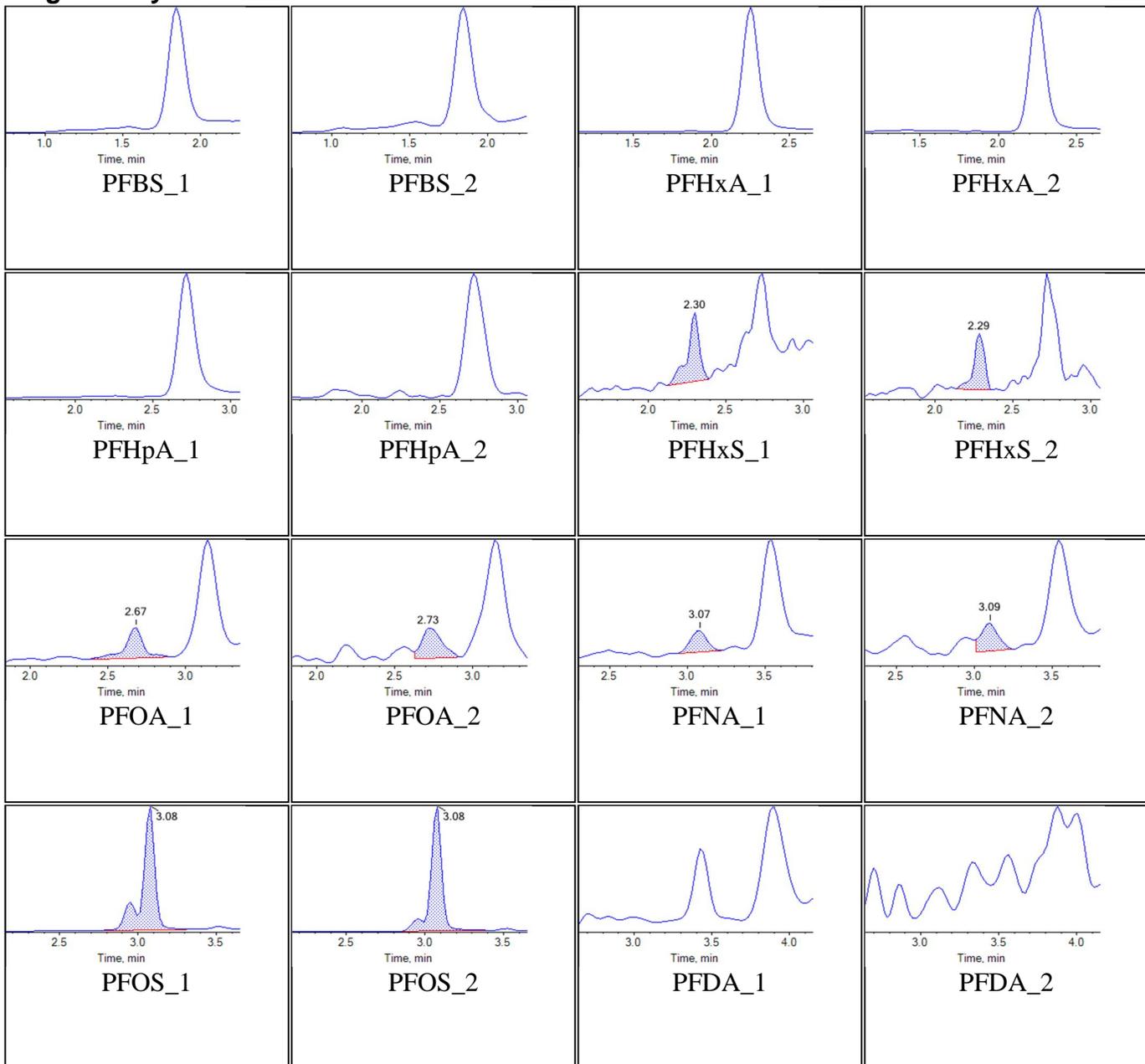
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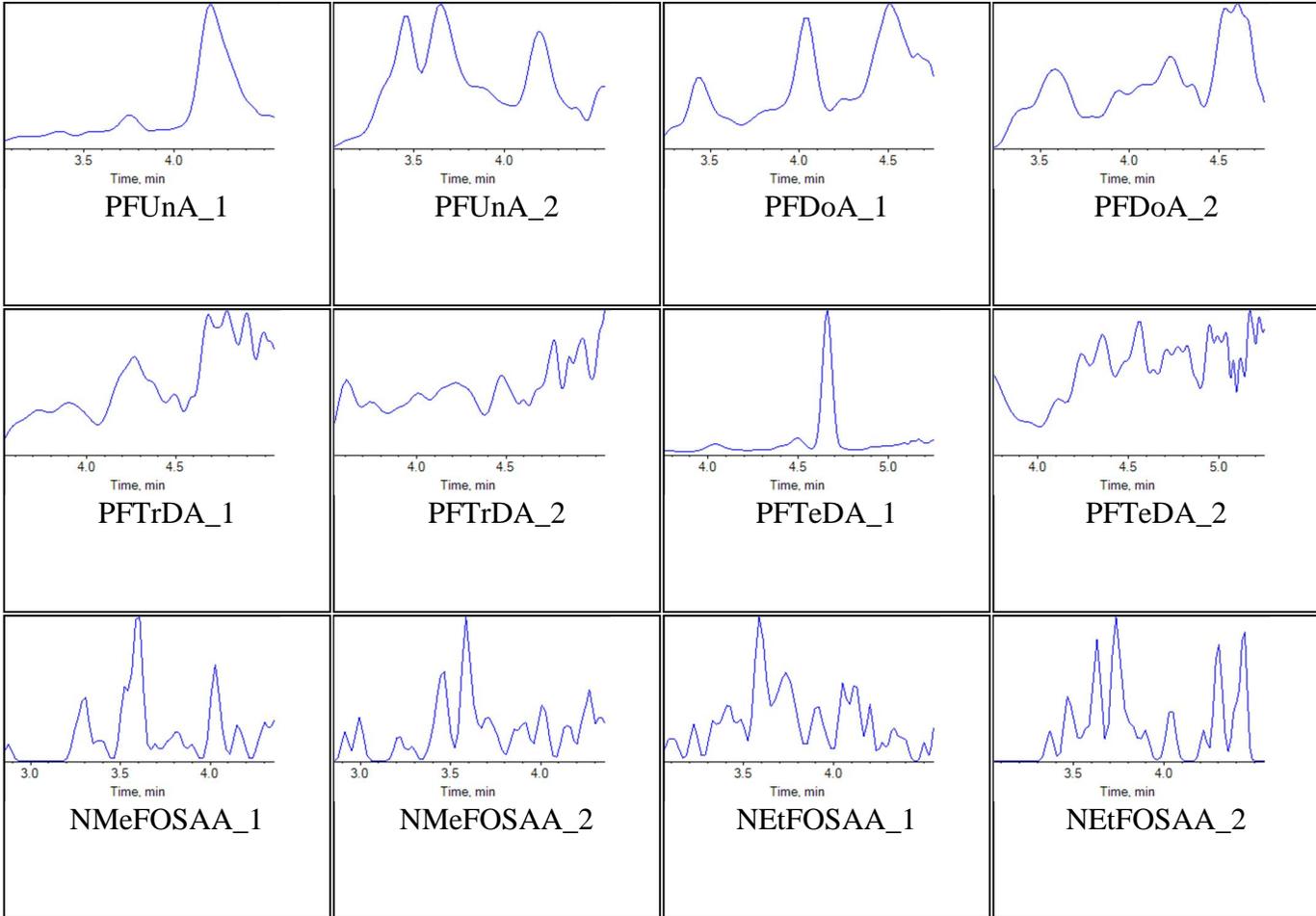


Sample Name	J8232-FS(3)	Injection Vial	18
Sample ID	VC-PM649-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:25:14	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

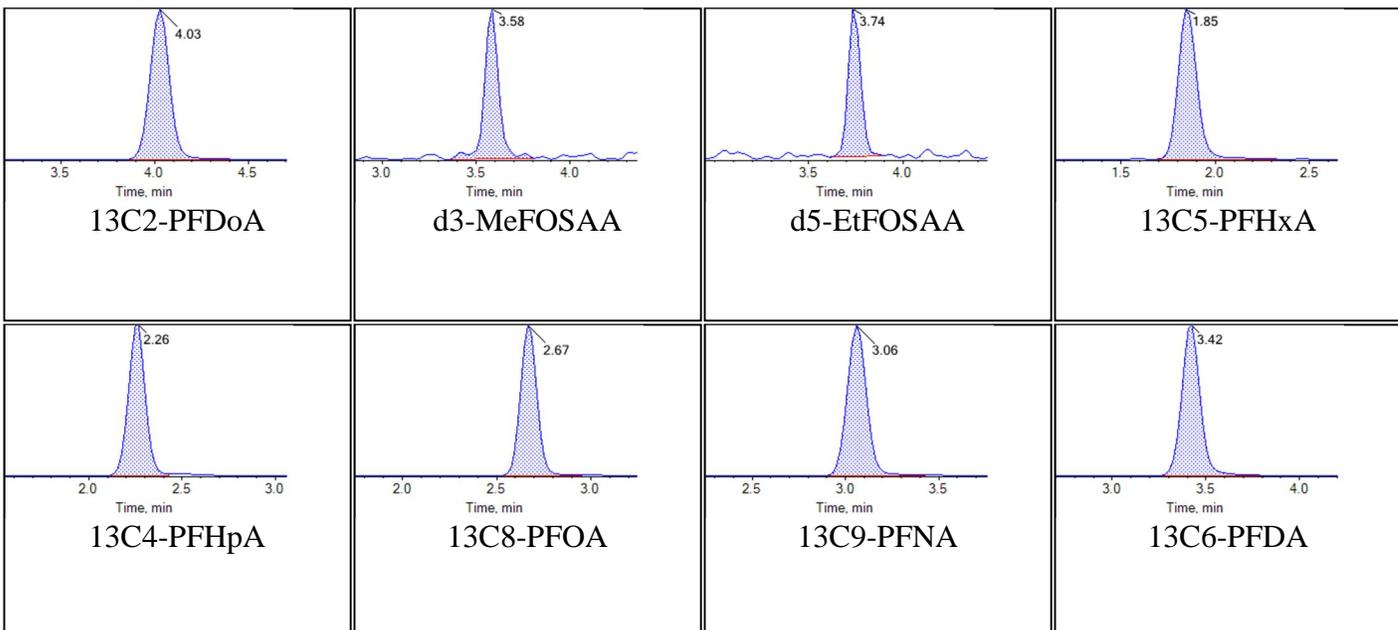
Chromatograms

Target Analytes:



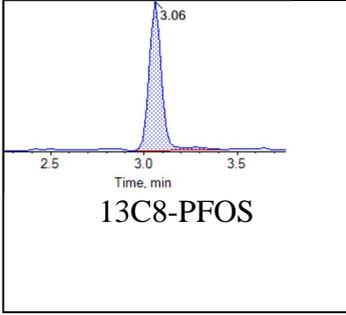
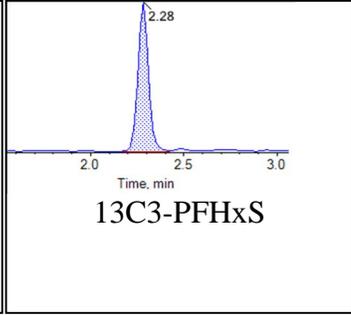
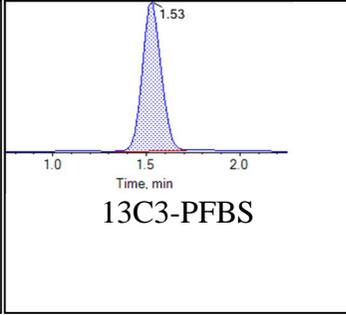
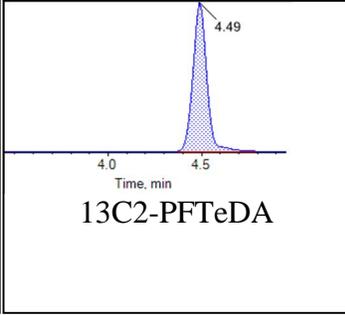
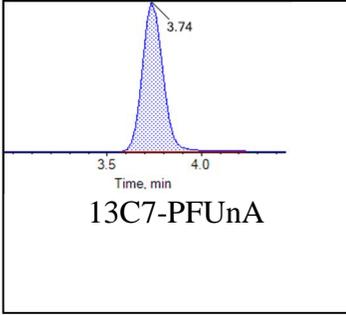


Internal Standards:



Chromatogram Report

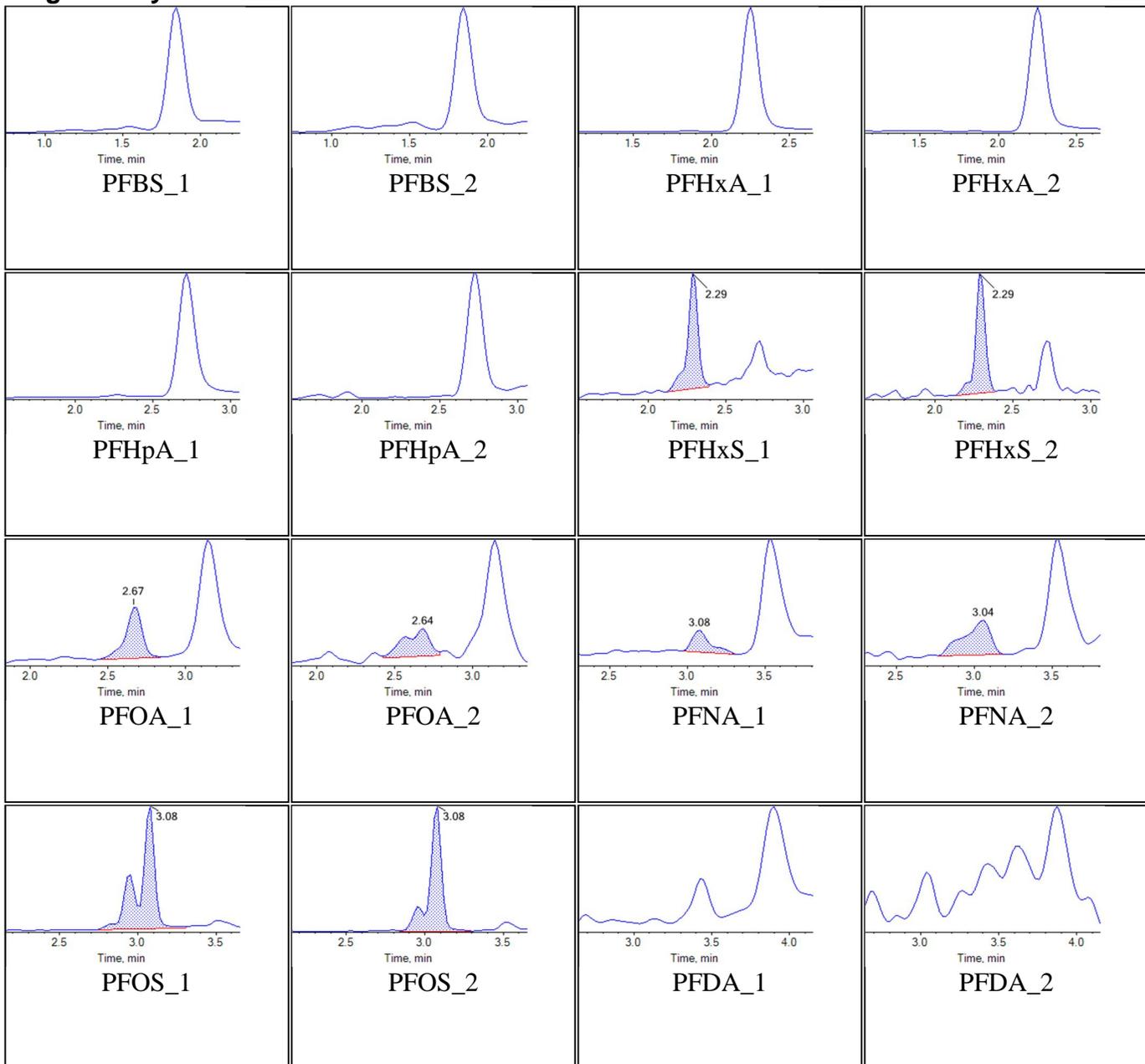
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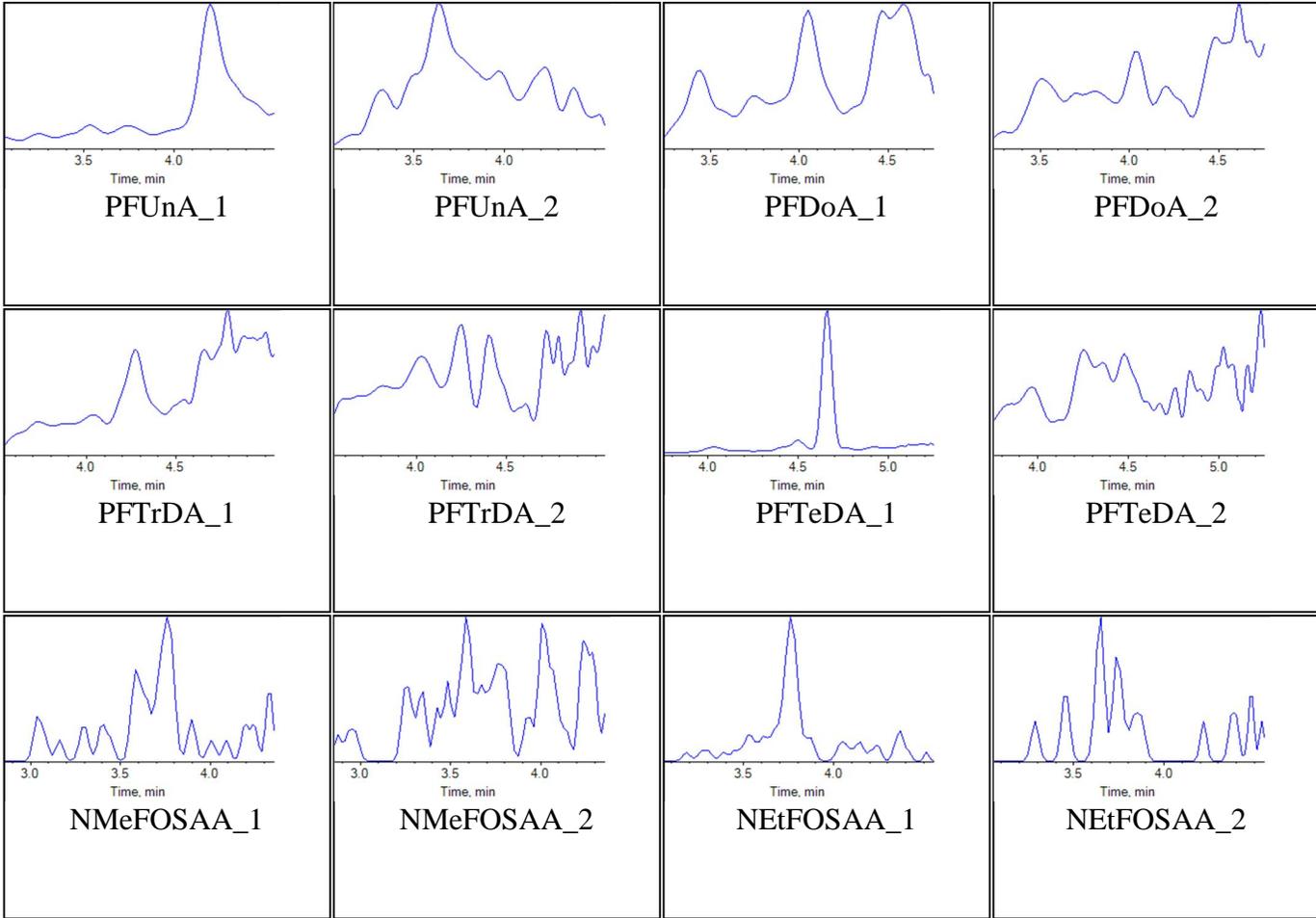


Sample Name	J8233-FS(3)	Injection Vial	19
Sample ID	VC-PM649-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
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Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

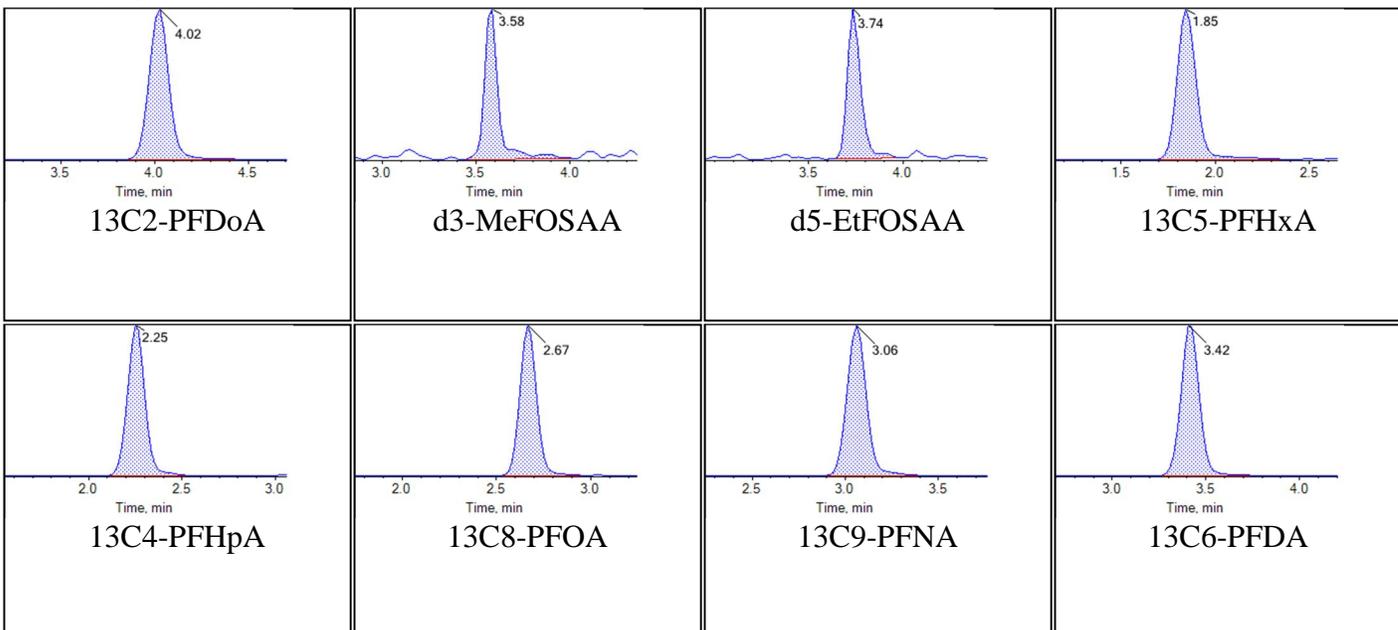
Chromatograms

Target Analytes:



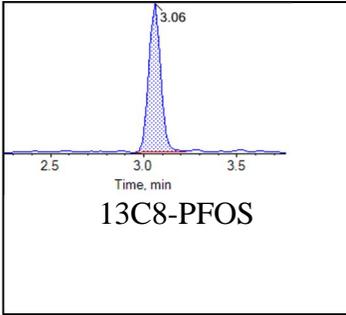
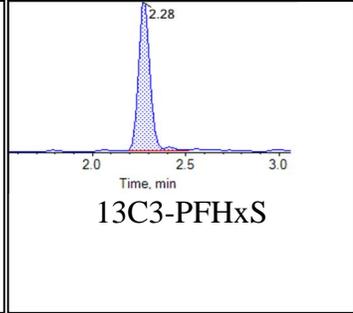
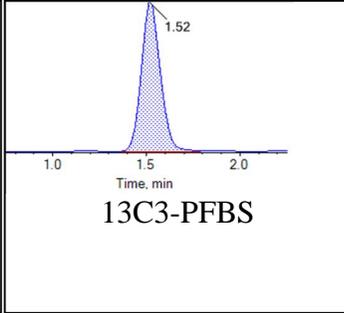
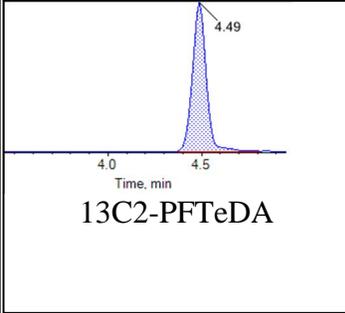
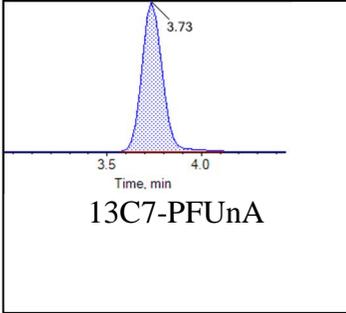


Internal Standards:



Chromatogram Report

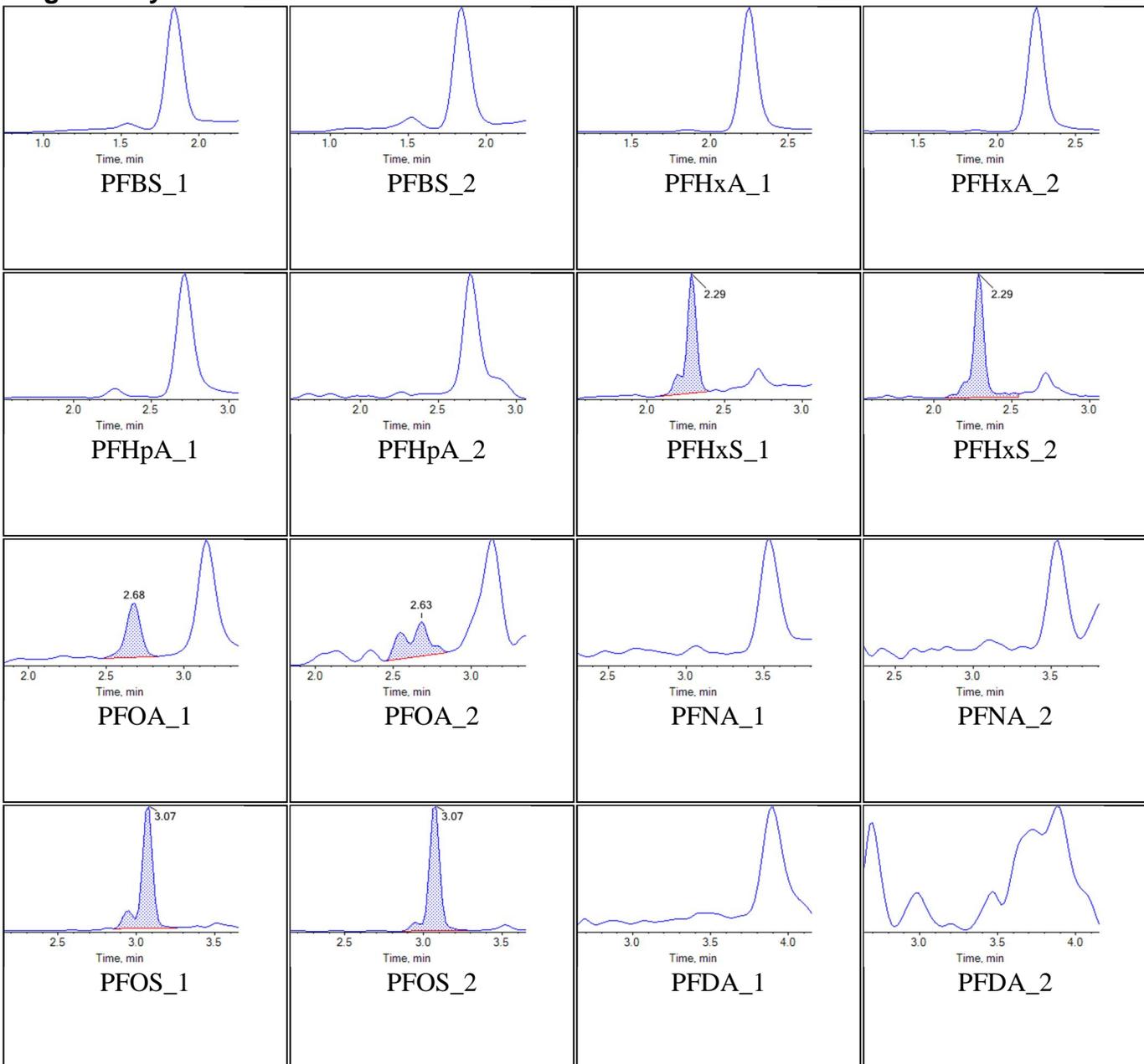
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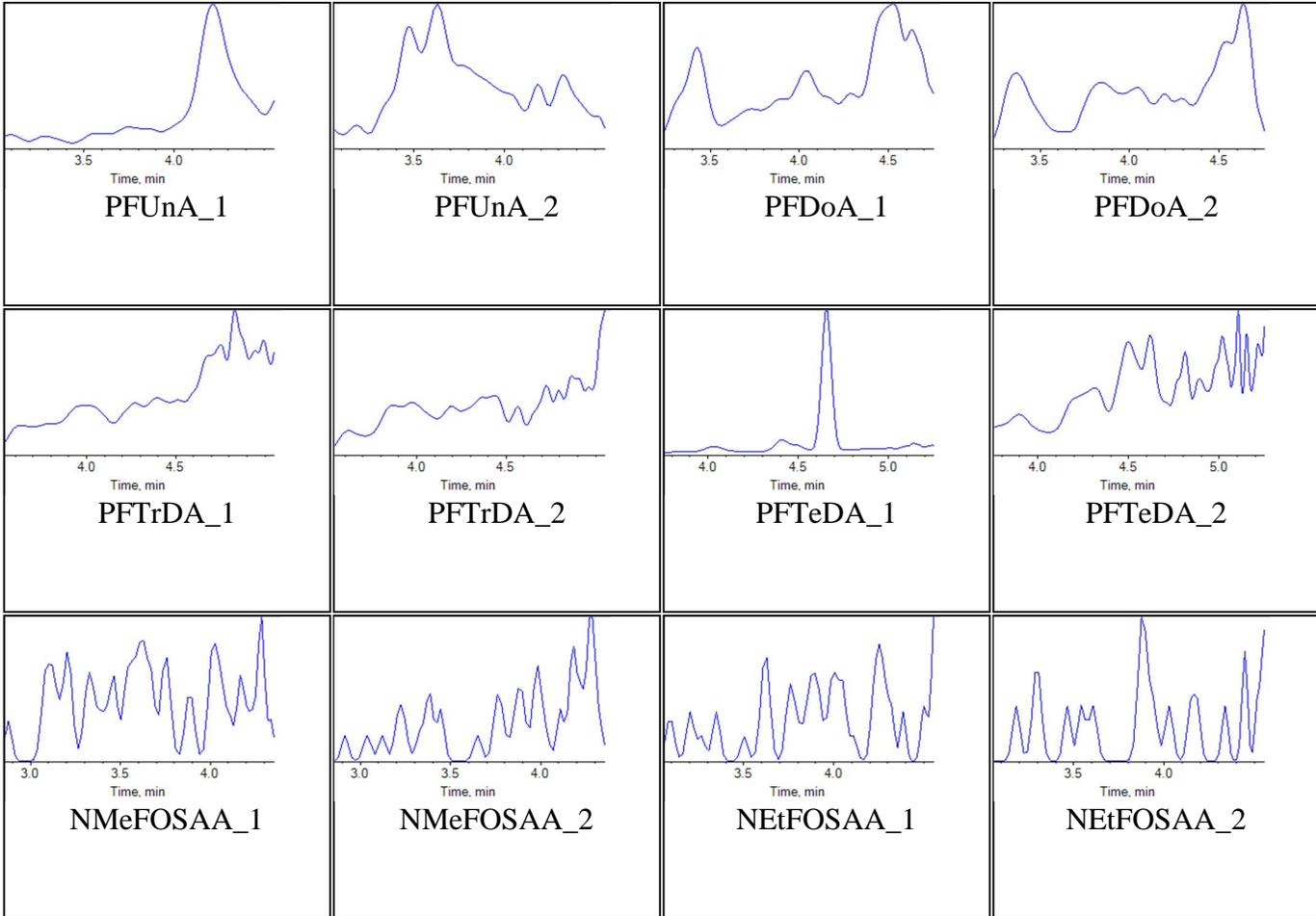


Sample Name	J8234-FS(3)	Injection Vial	20
Sample ID	VC-PM649-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
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Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

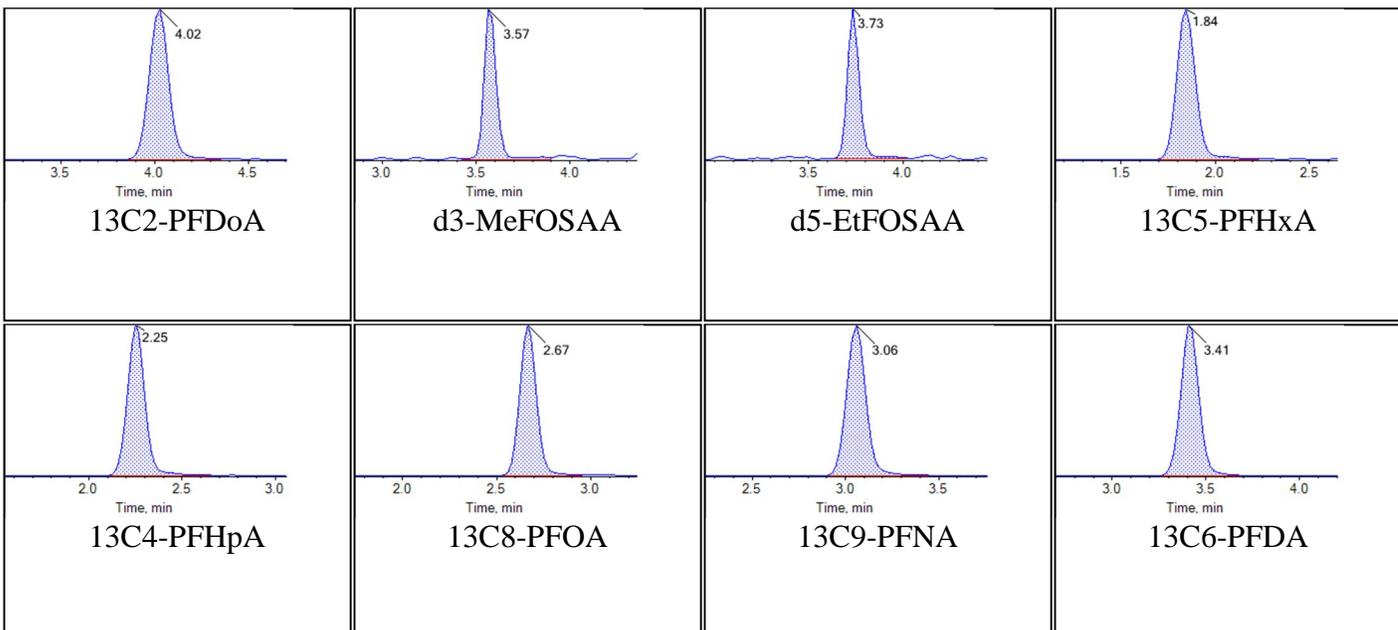
Chromatograms

Target Analytes:



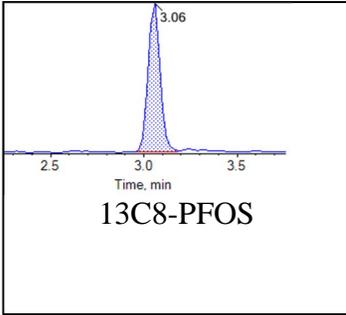
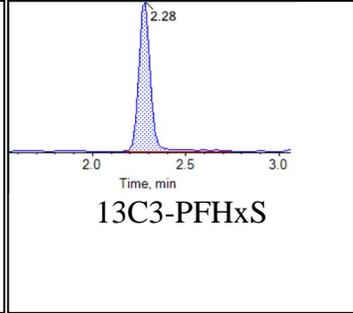
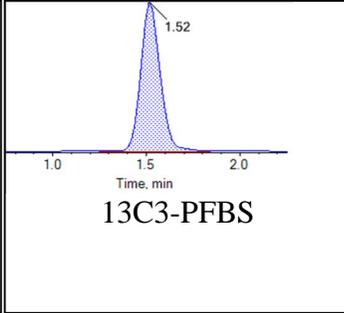
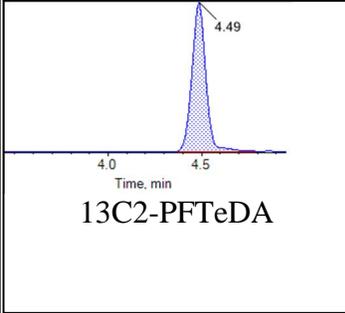
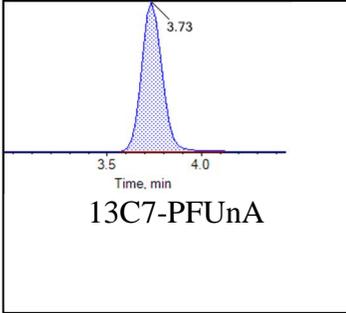


Internal Standards:



Chromatogram Report

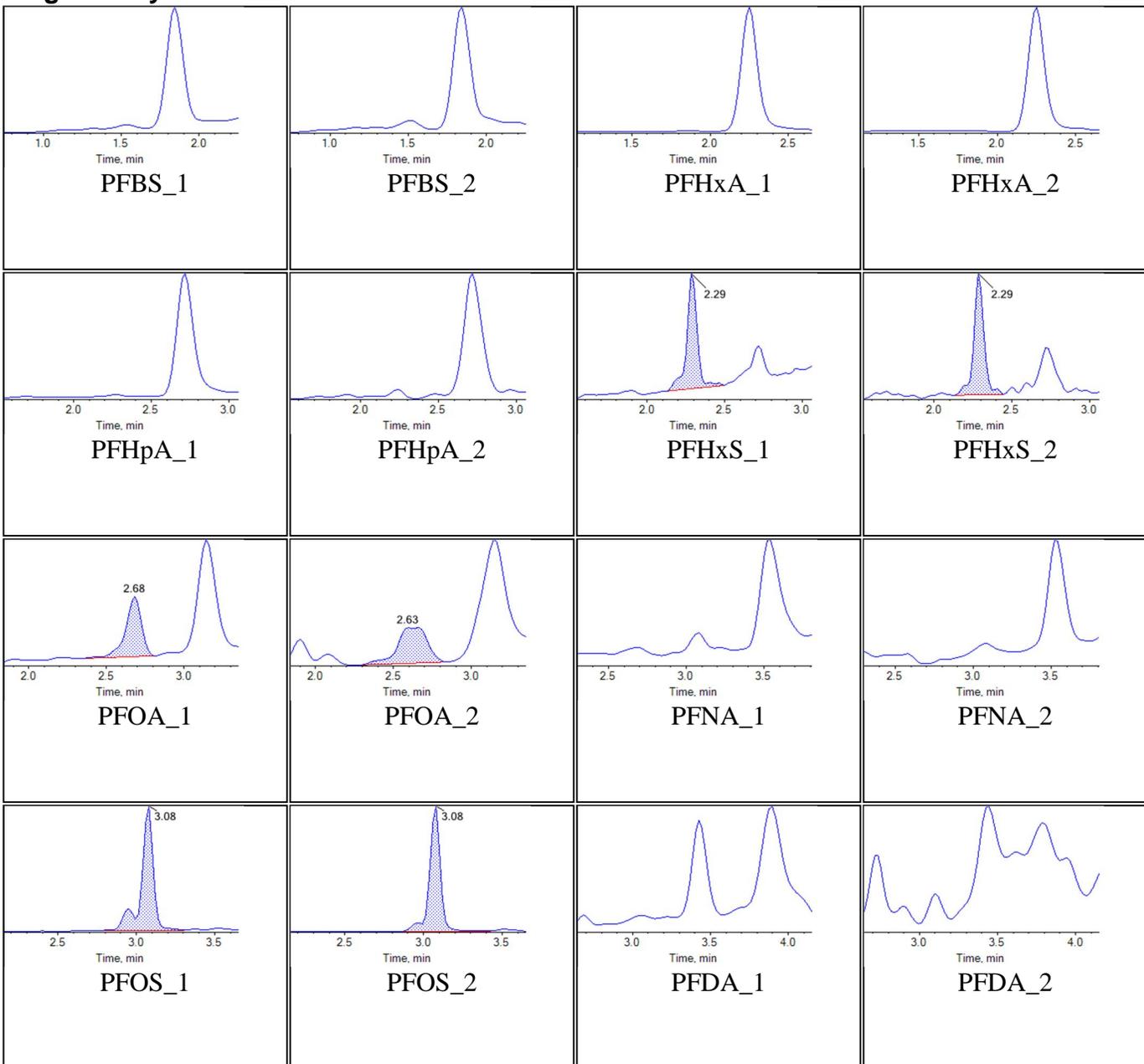
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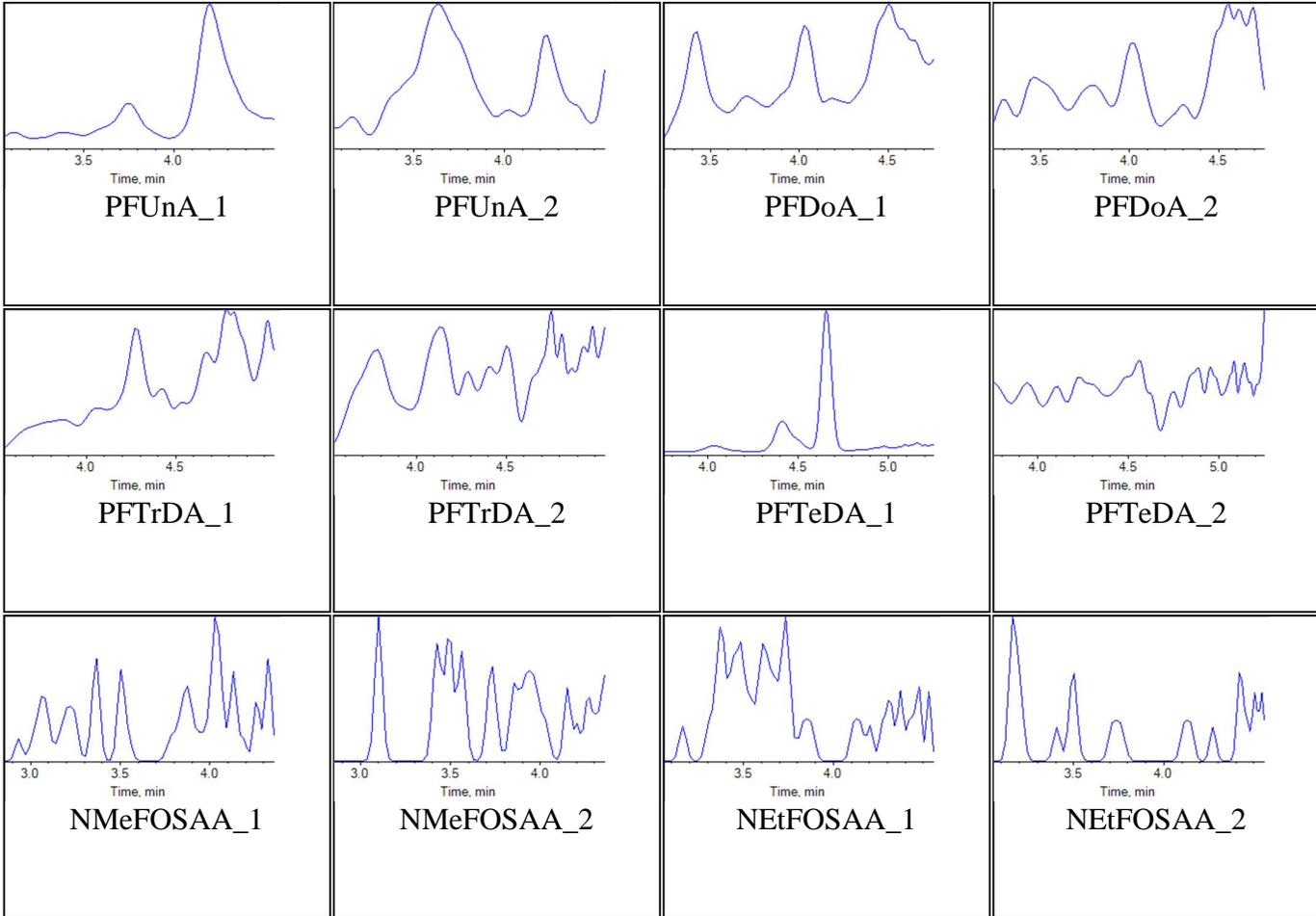


Sample Name	J8235-FS(3)	Injection Vial	21
Sample ID	VC-PM649-SS03-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:57:50	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

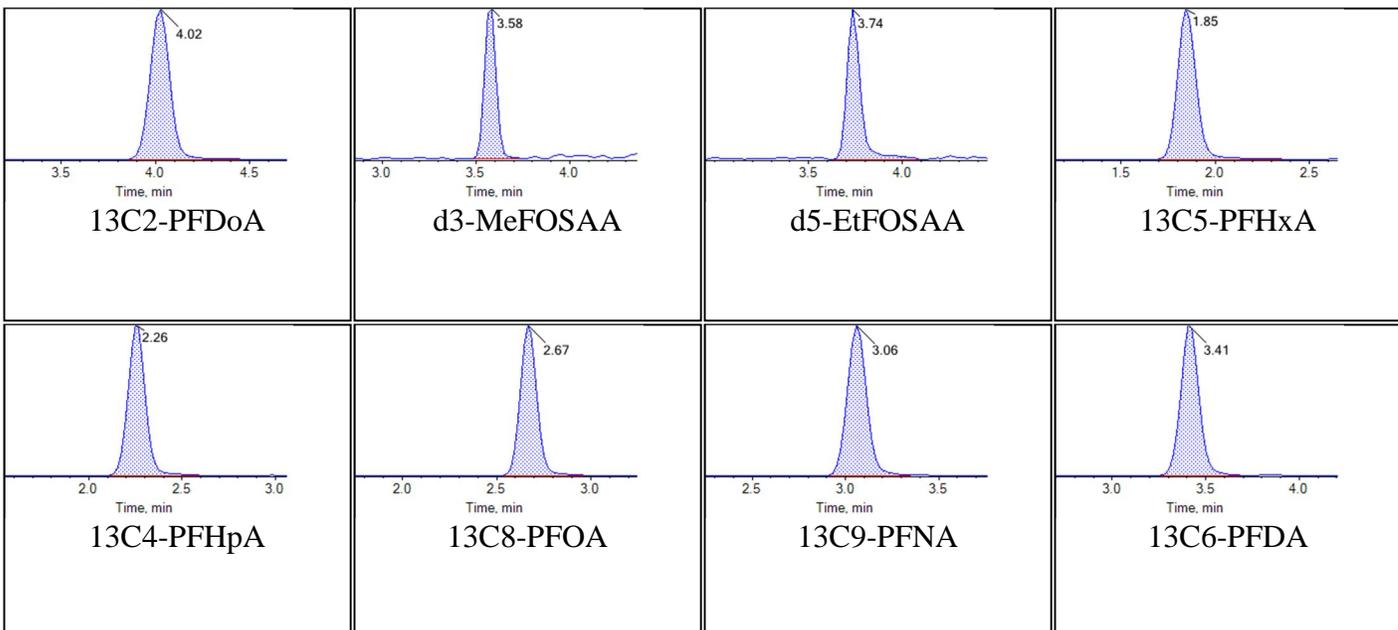
Chromatograms

Target Analytes:



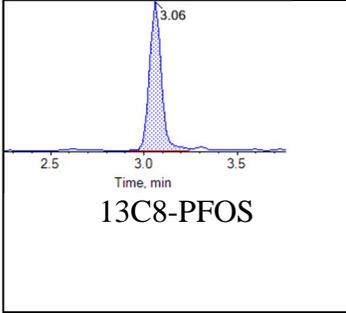
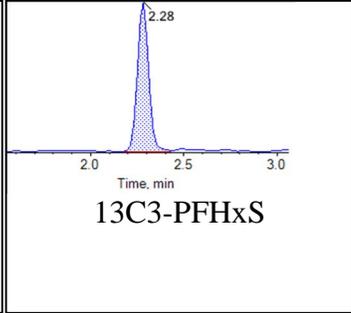
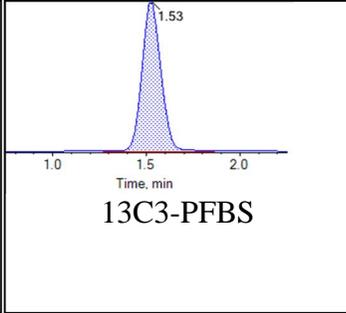
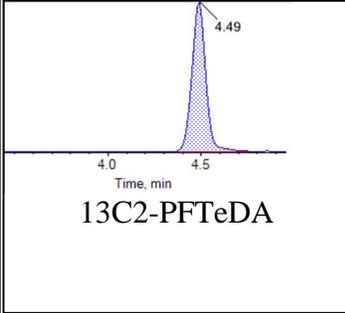
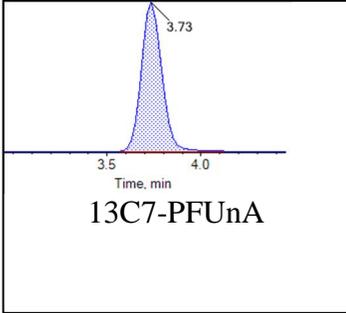


Internal Standards:



Chromatogram Report

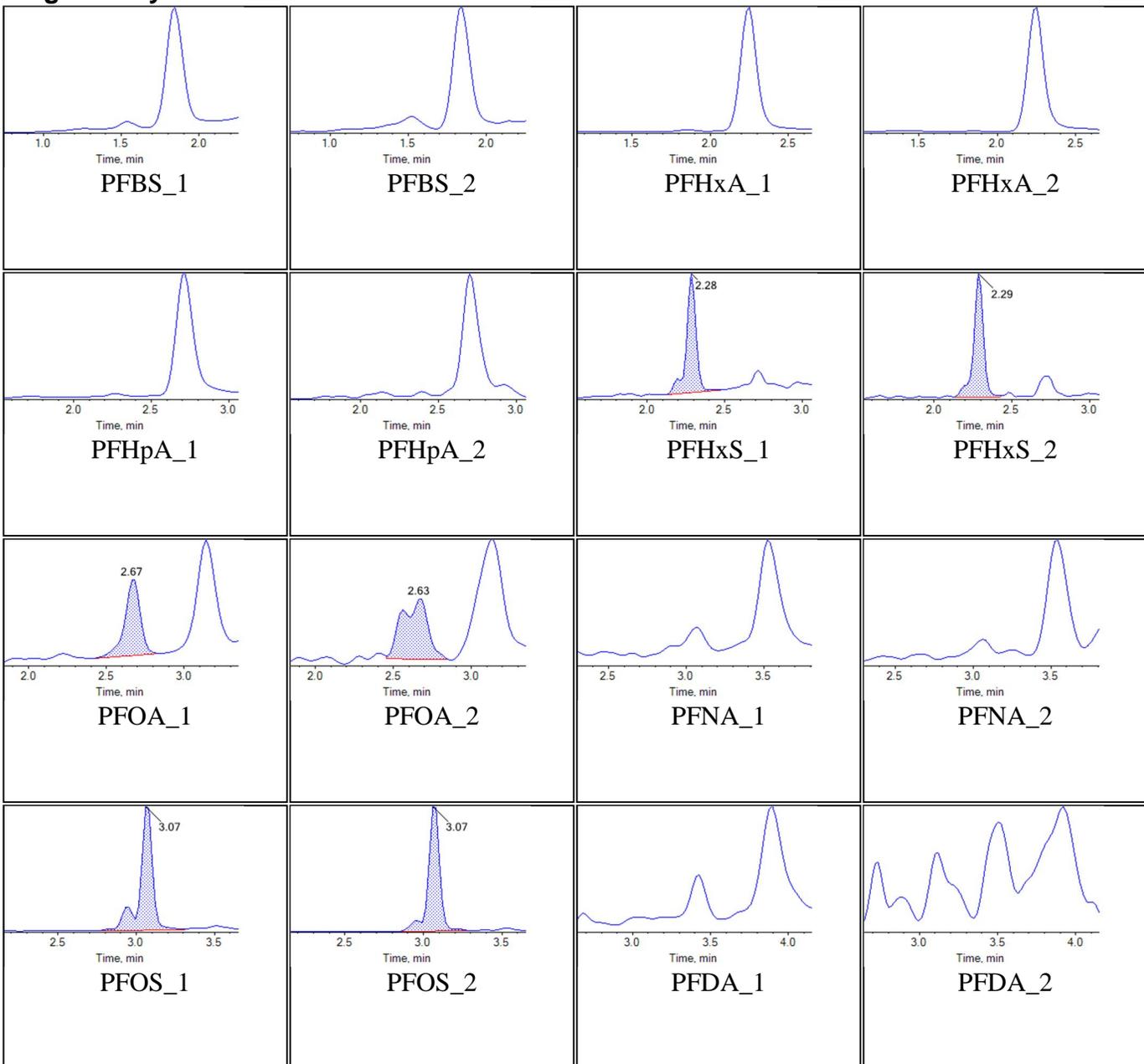
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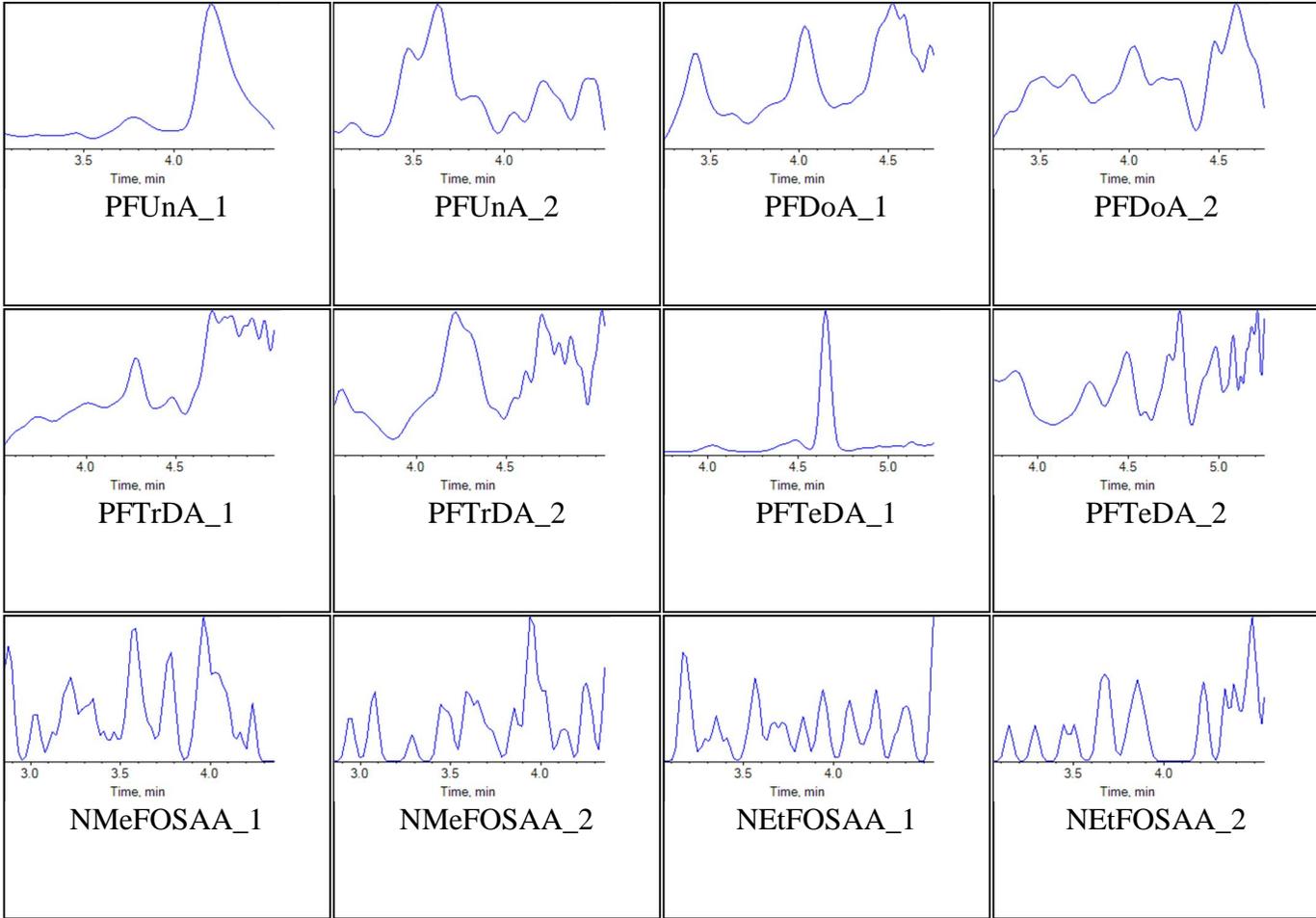


Sample Name	J8236-FS(3)	Injection Vial	22
Sample ID	VC-PM649-SB03-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:08:42	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

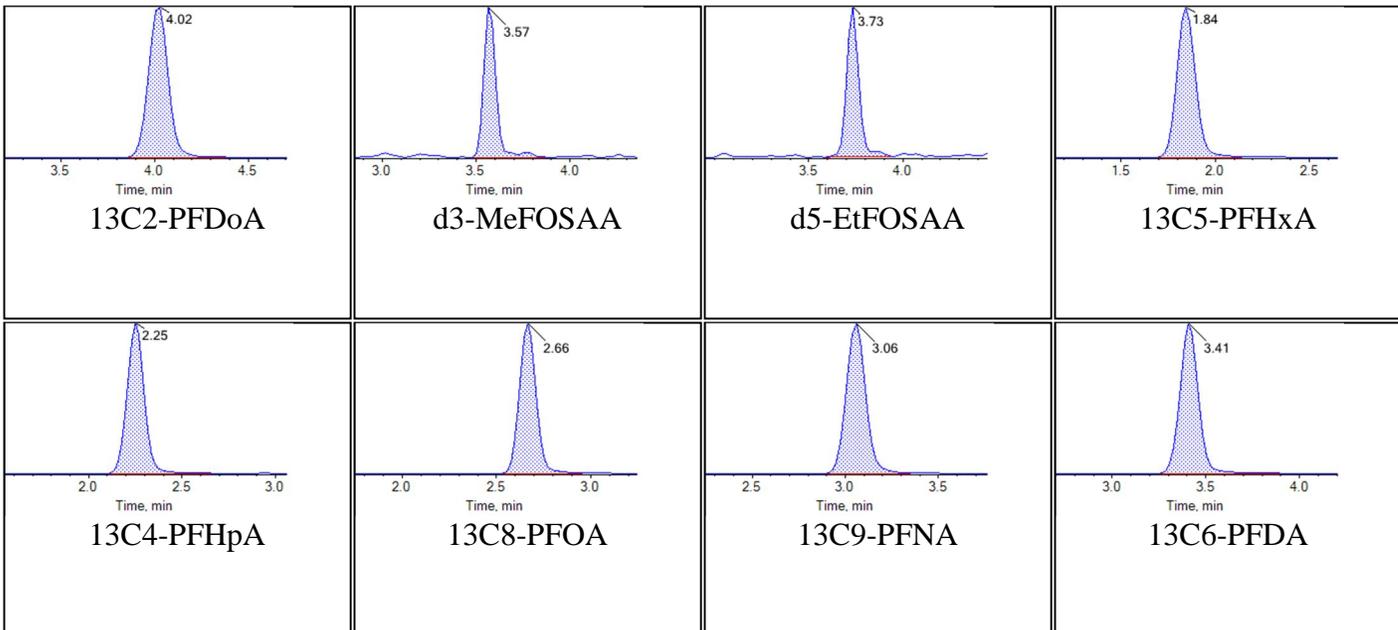
Chromatograms

Target Analytes:



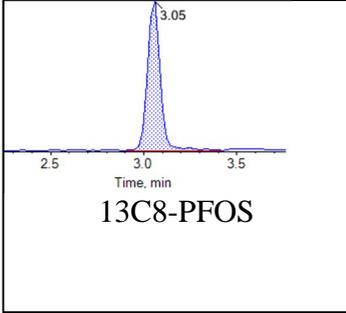
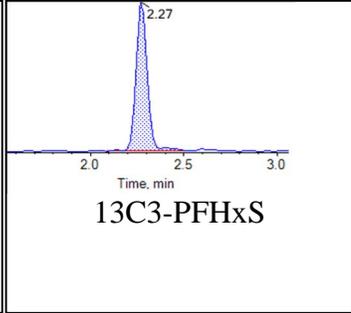
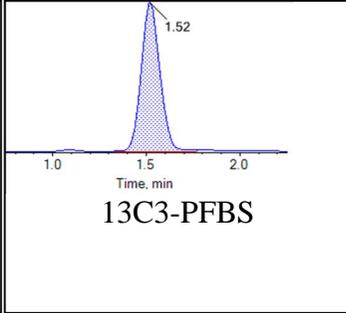
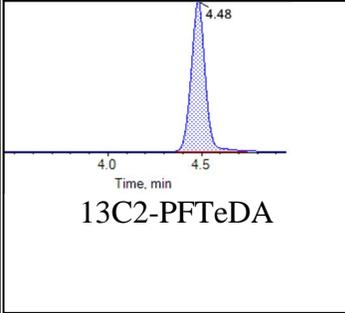
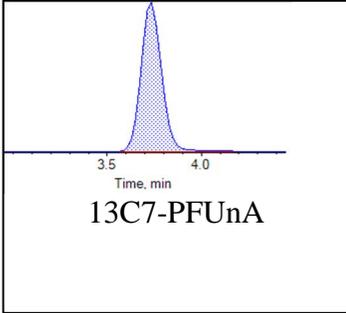


Internal Standards:



Chromatogram Report

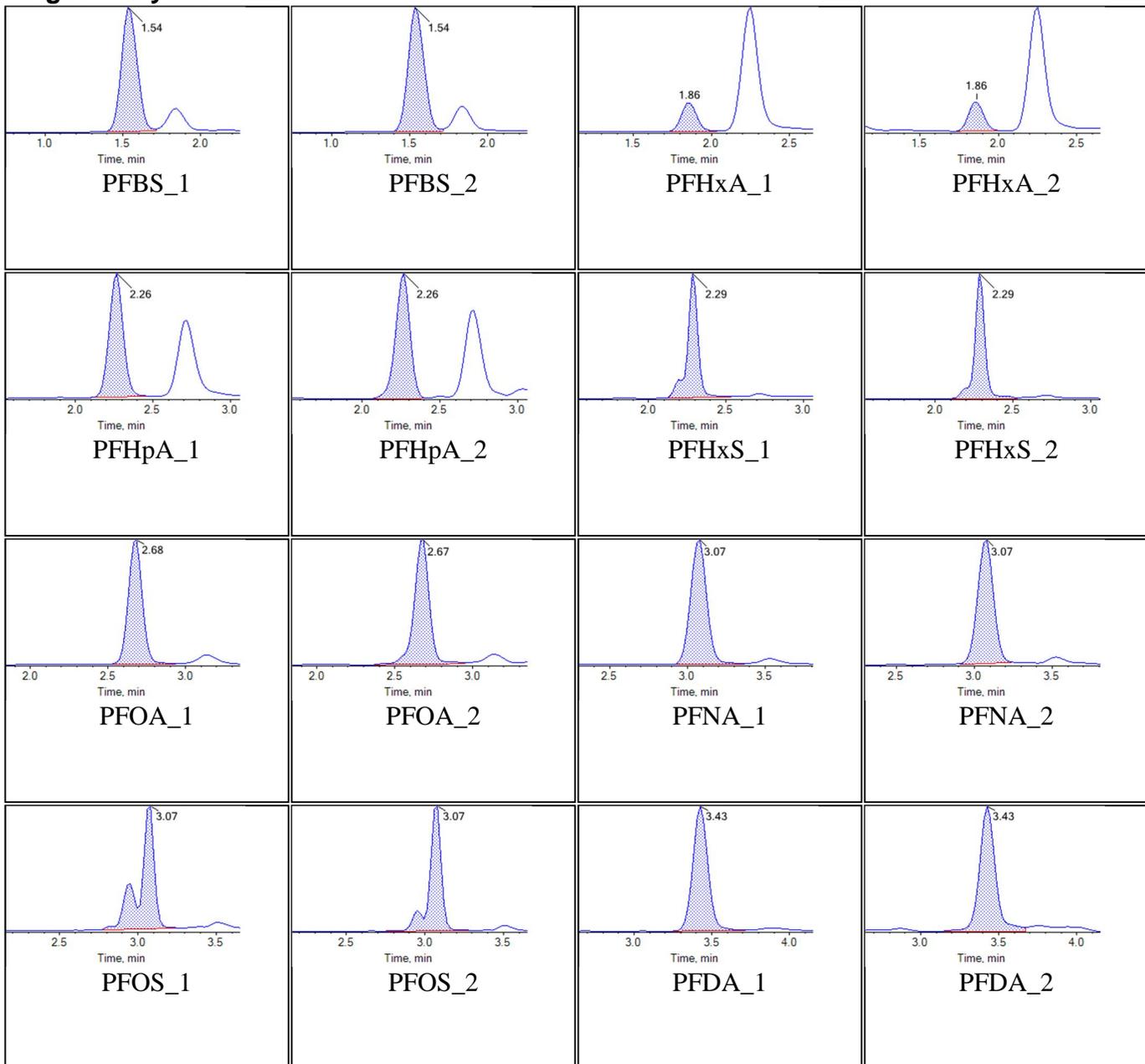
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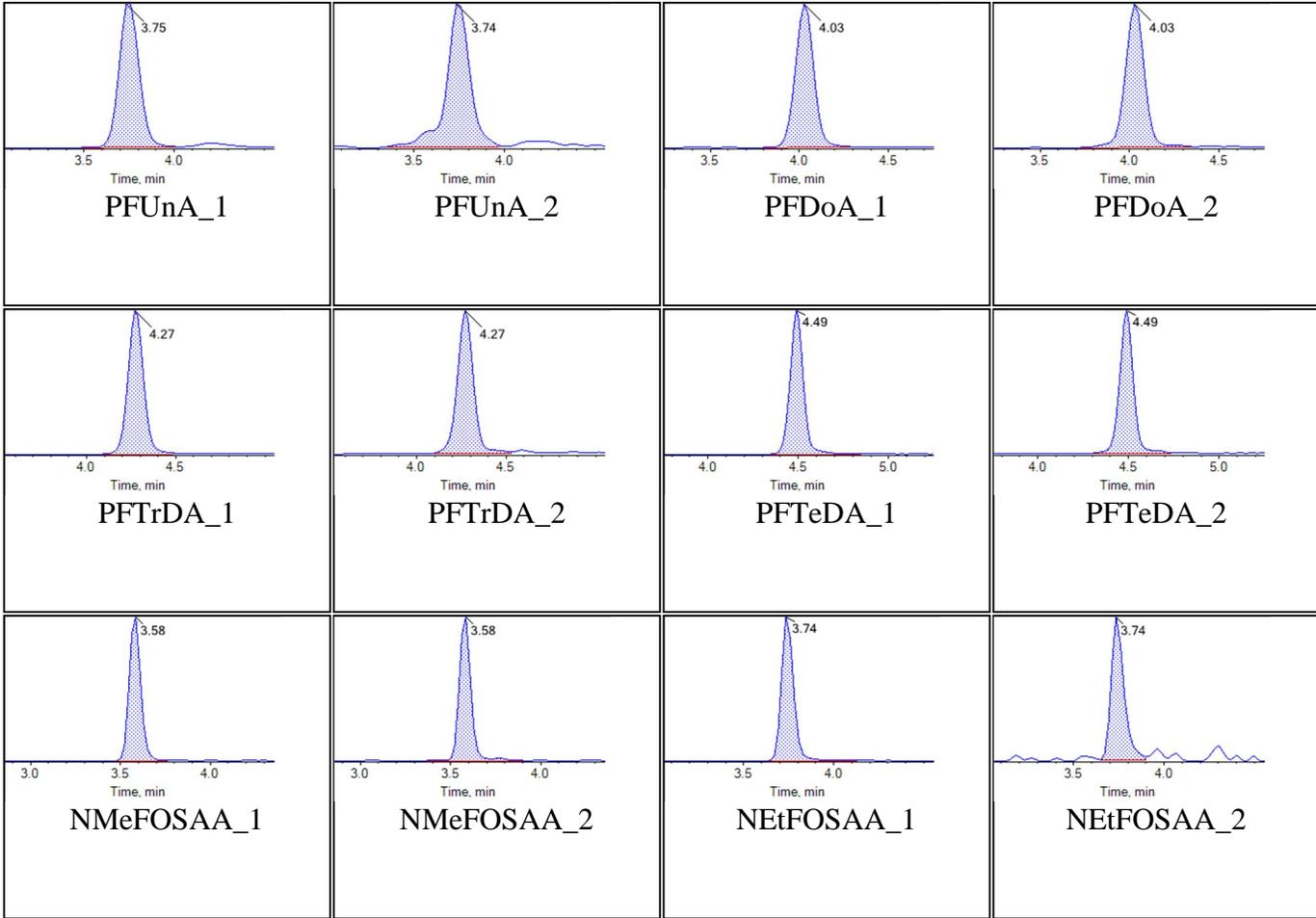


Sample Name	KB85 CCV	Injection Vial	23
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:19:34	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

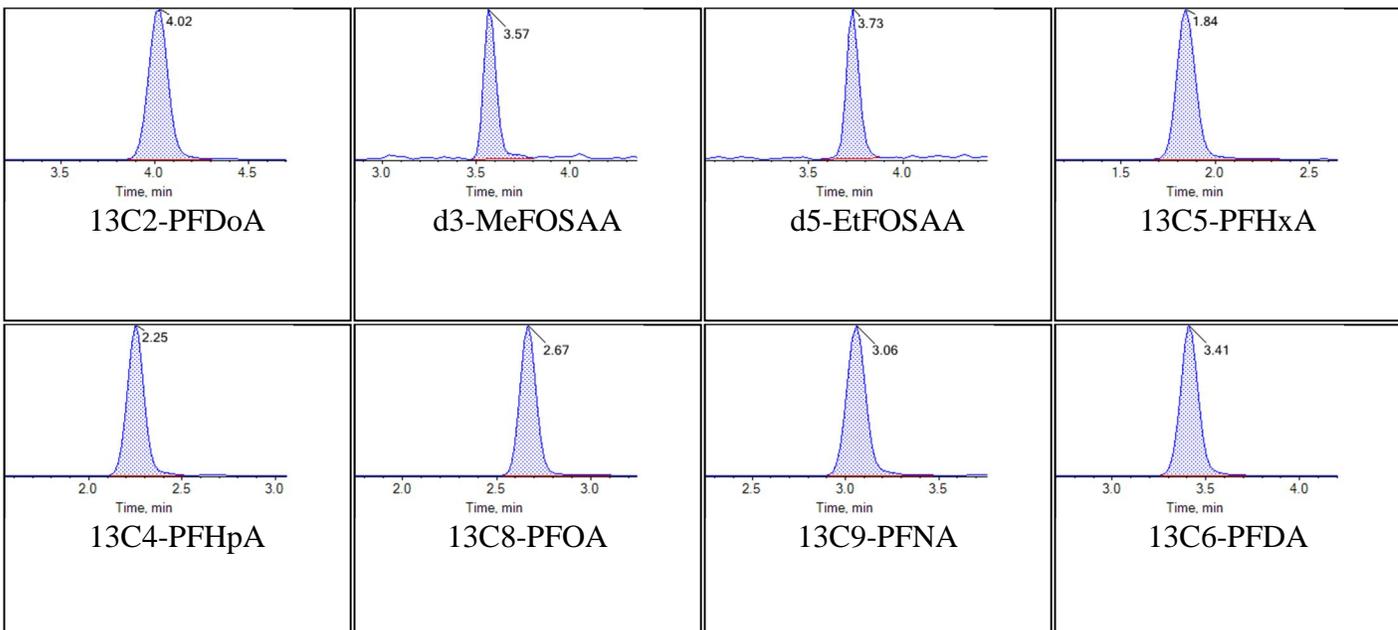
Chromatograms

Target Analytes:



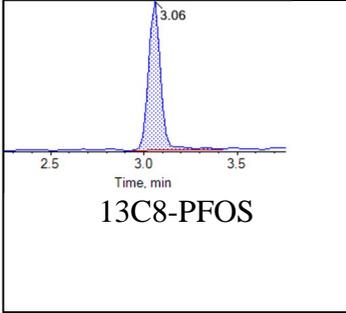
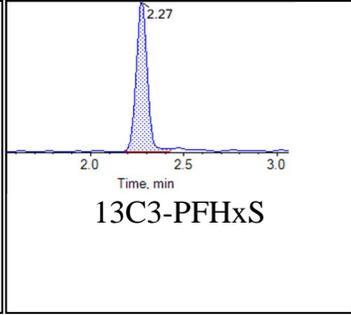
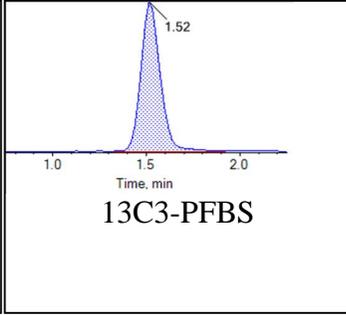
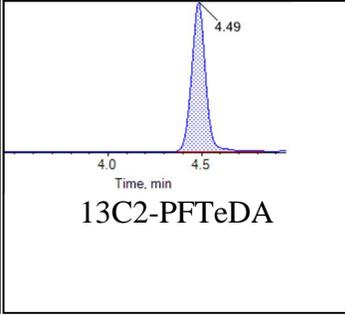
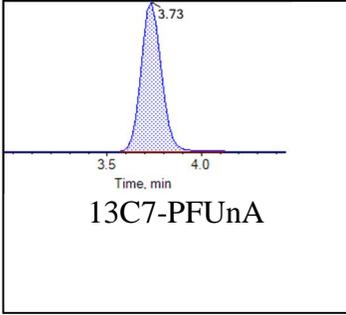


Internal Standards:



Chromatogram Report

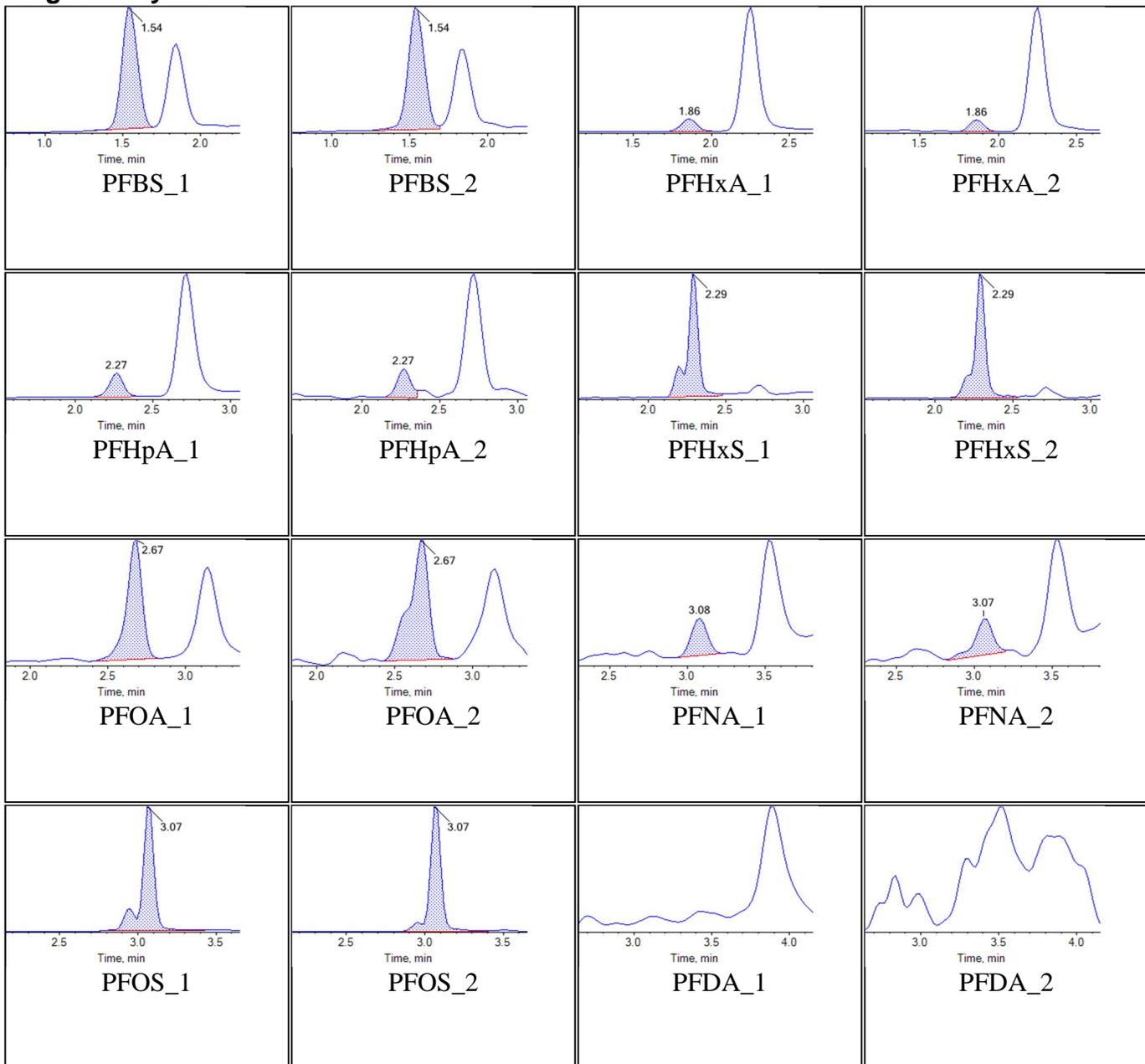
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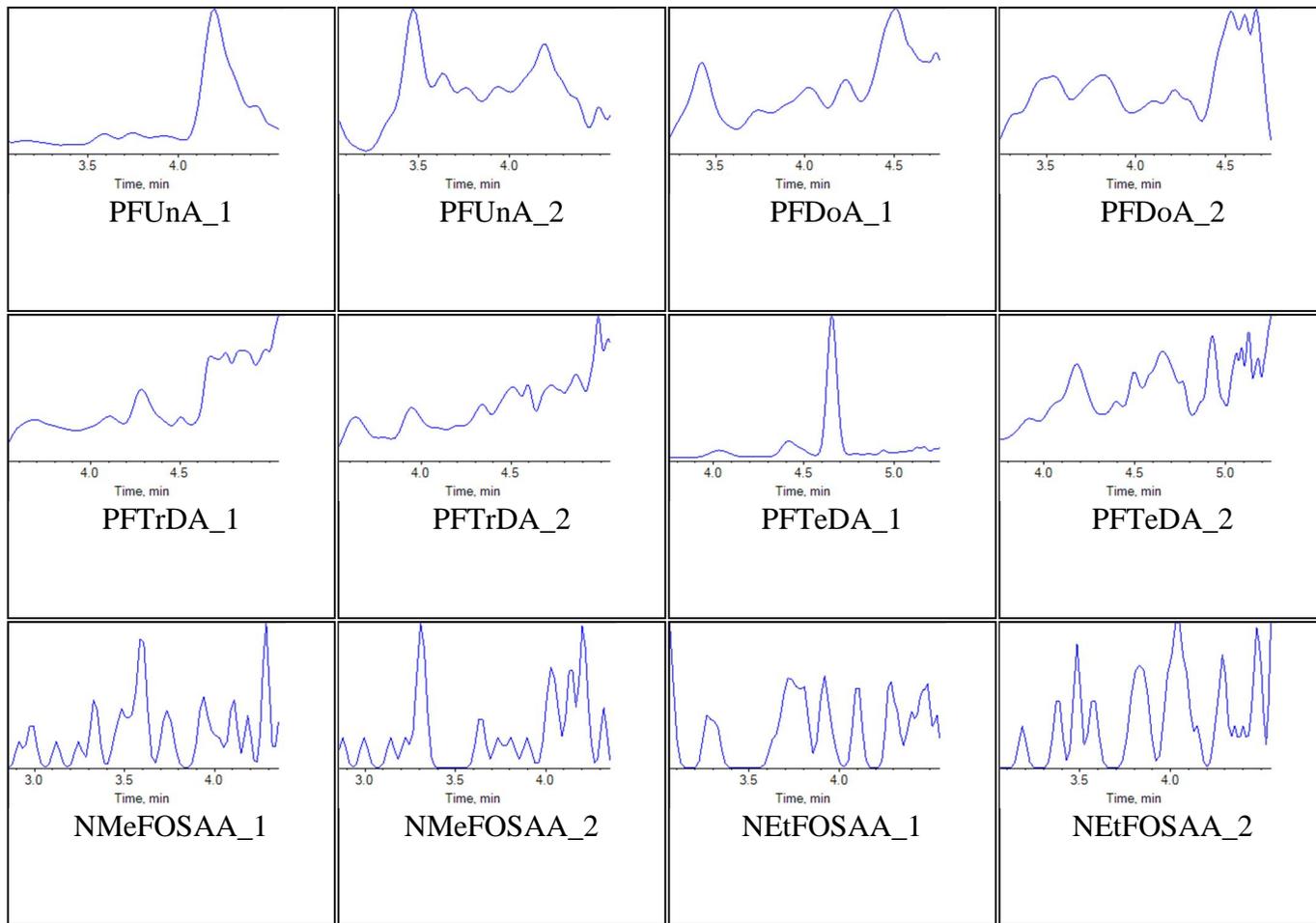


Sample Name	J8237-FS(3)	Injection Vial	25
Sample ID	VC-PM649-SB03-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:41:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

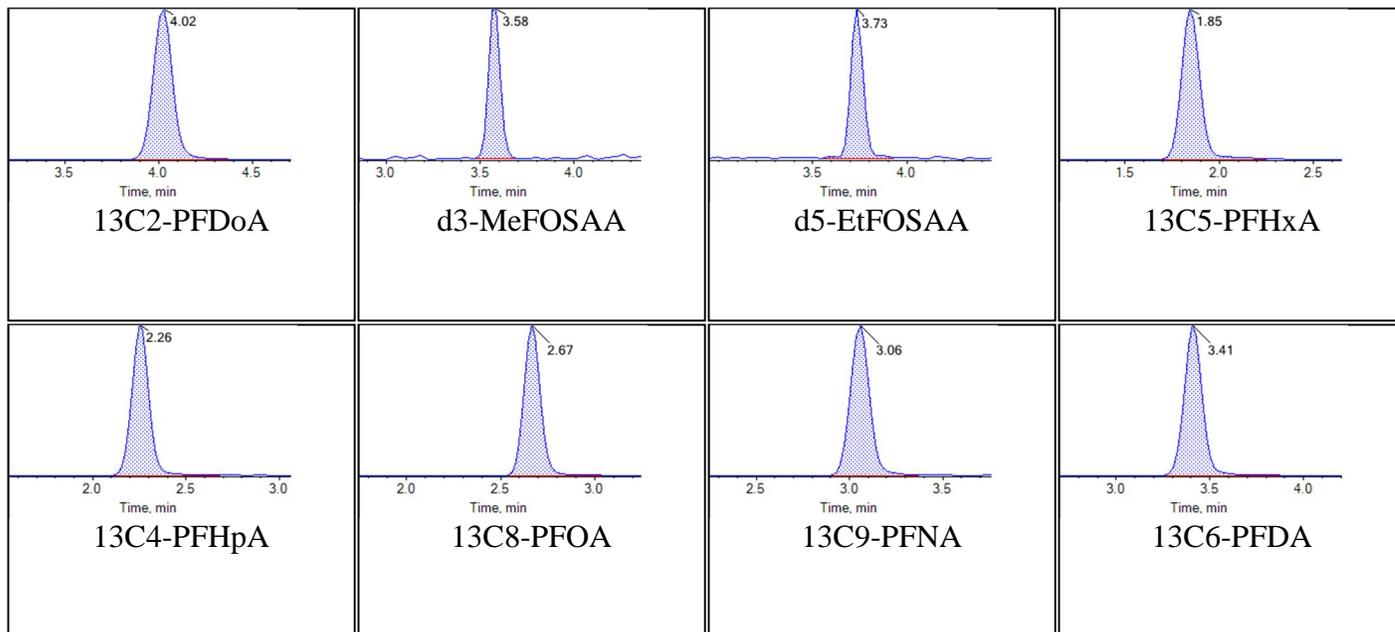
Chromatograms

Target Analytes:



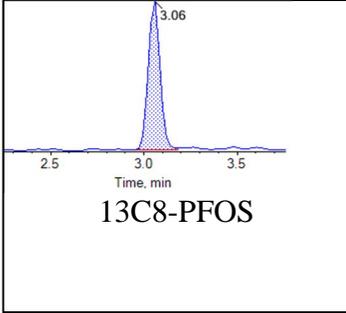
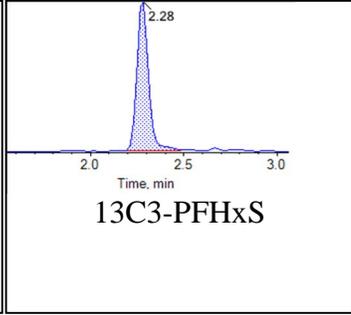
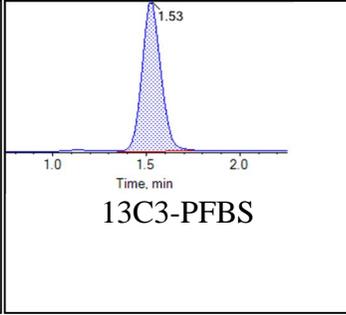
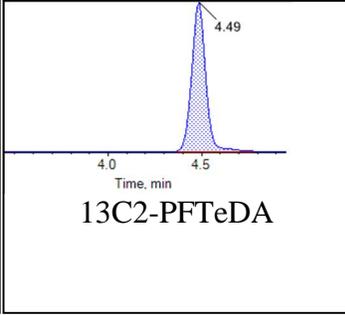
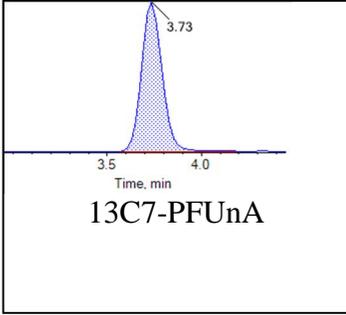


Internal Standards:



Chromatogram Report

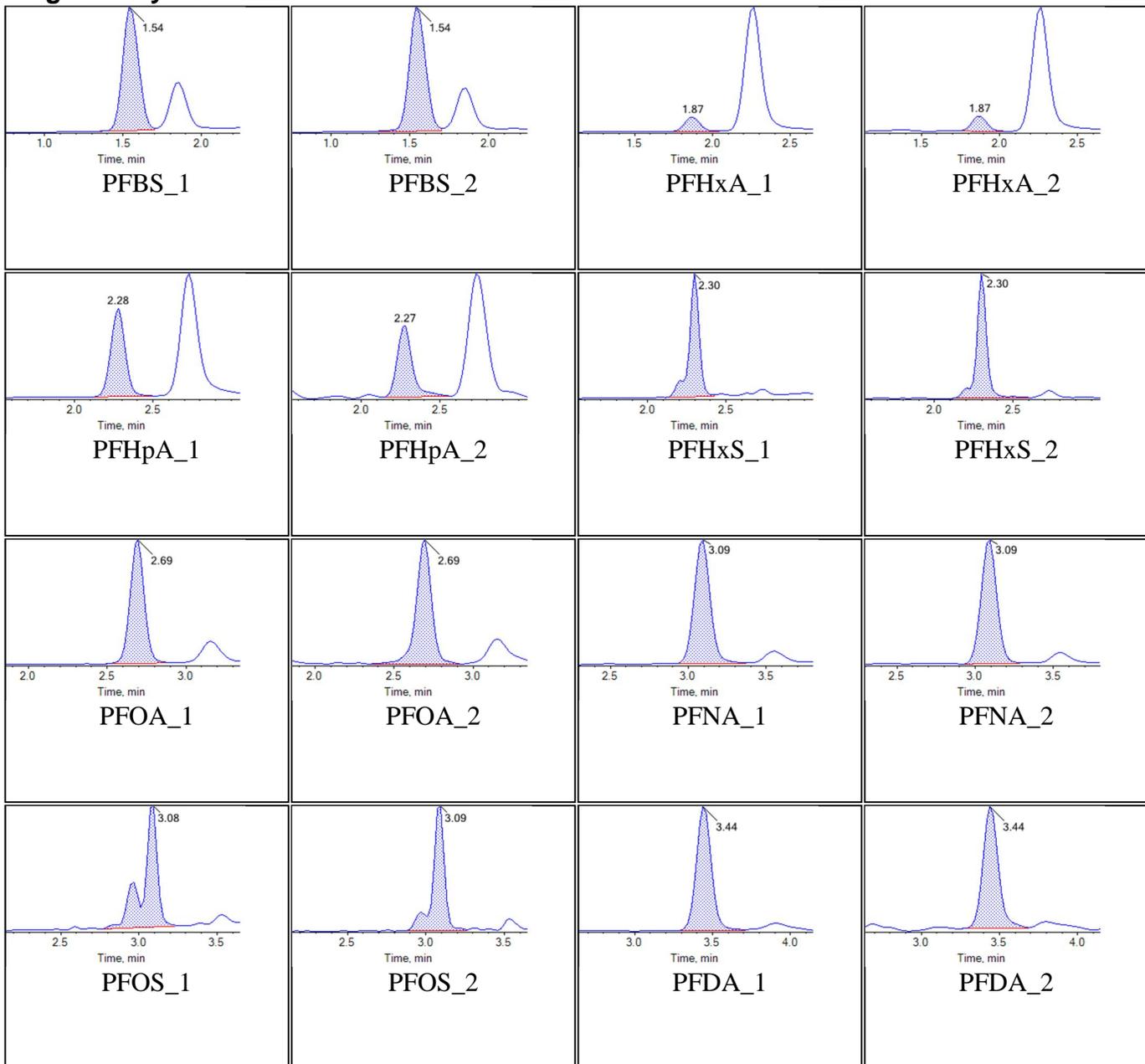
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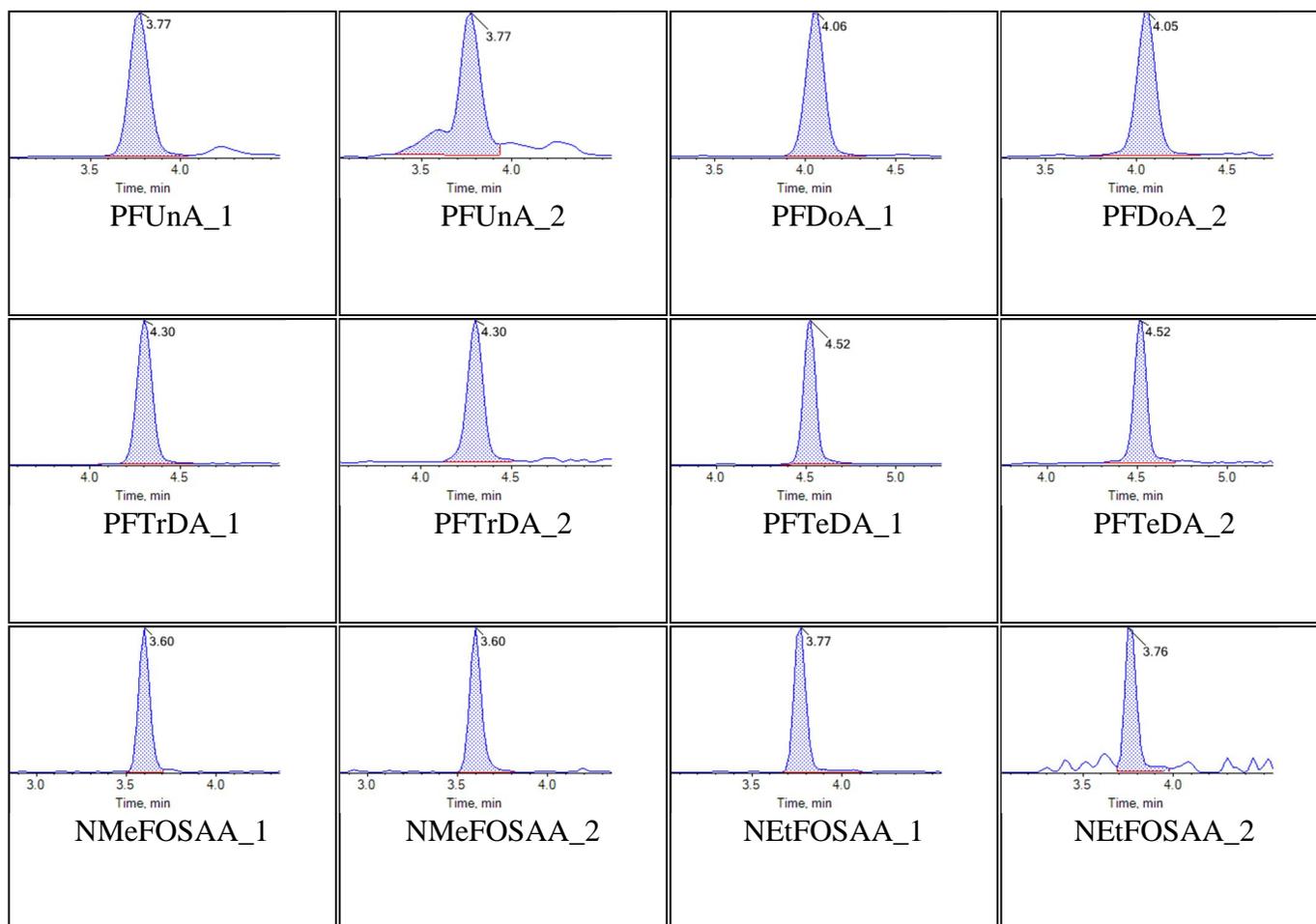
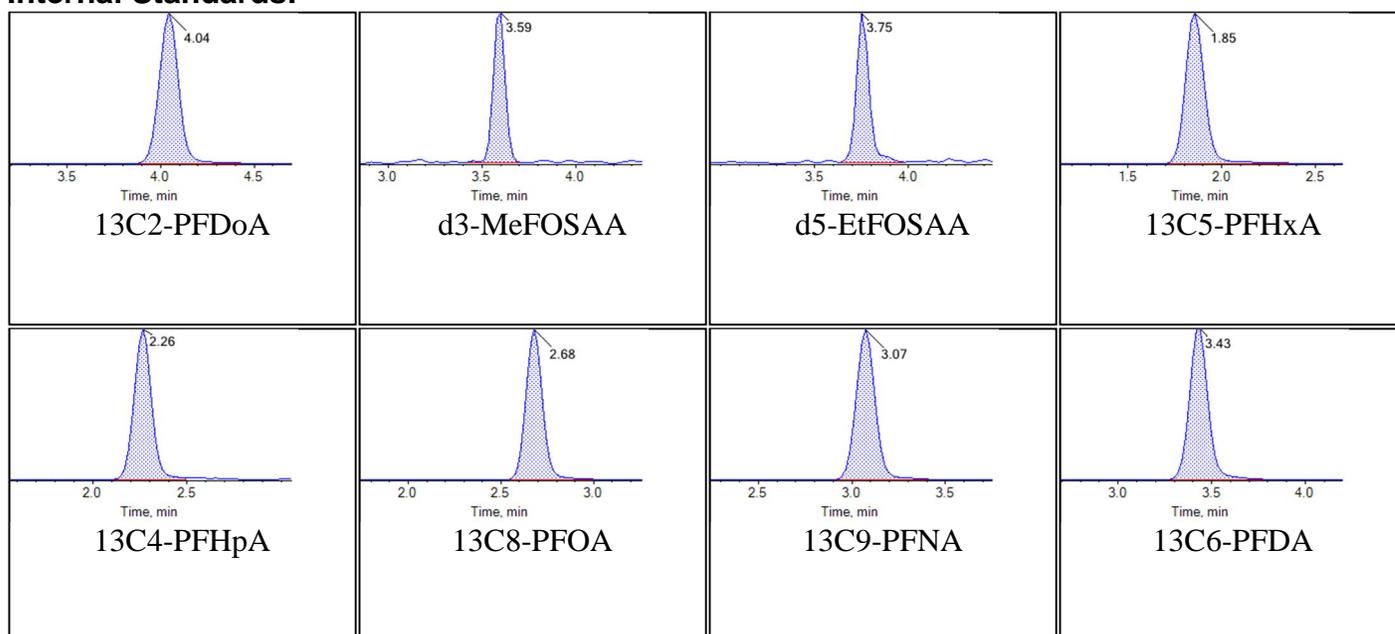


Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:53:10	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Chromatograms

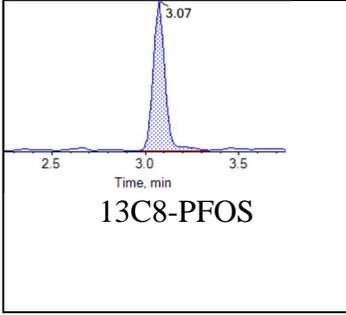
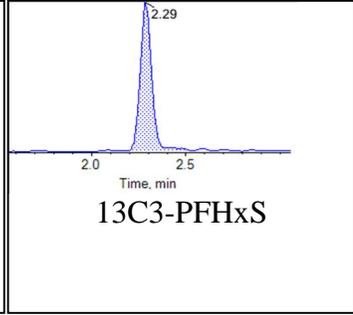
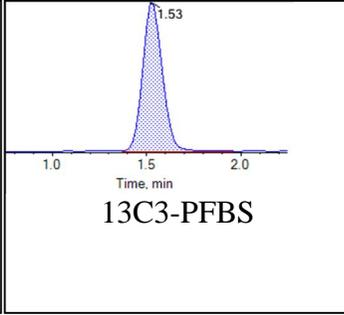
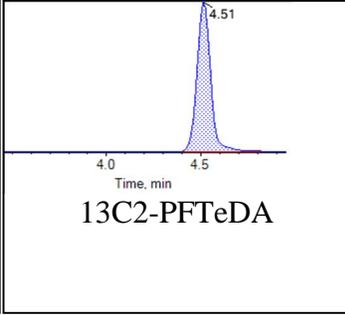
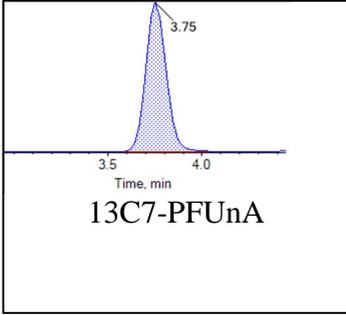
Target Analytes:



**Internal Standards:**

Chromatogram Report

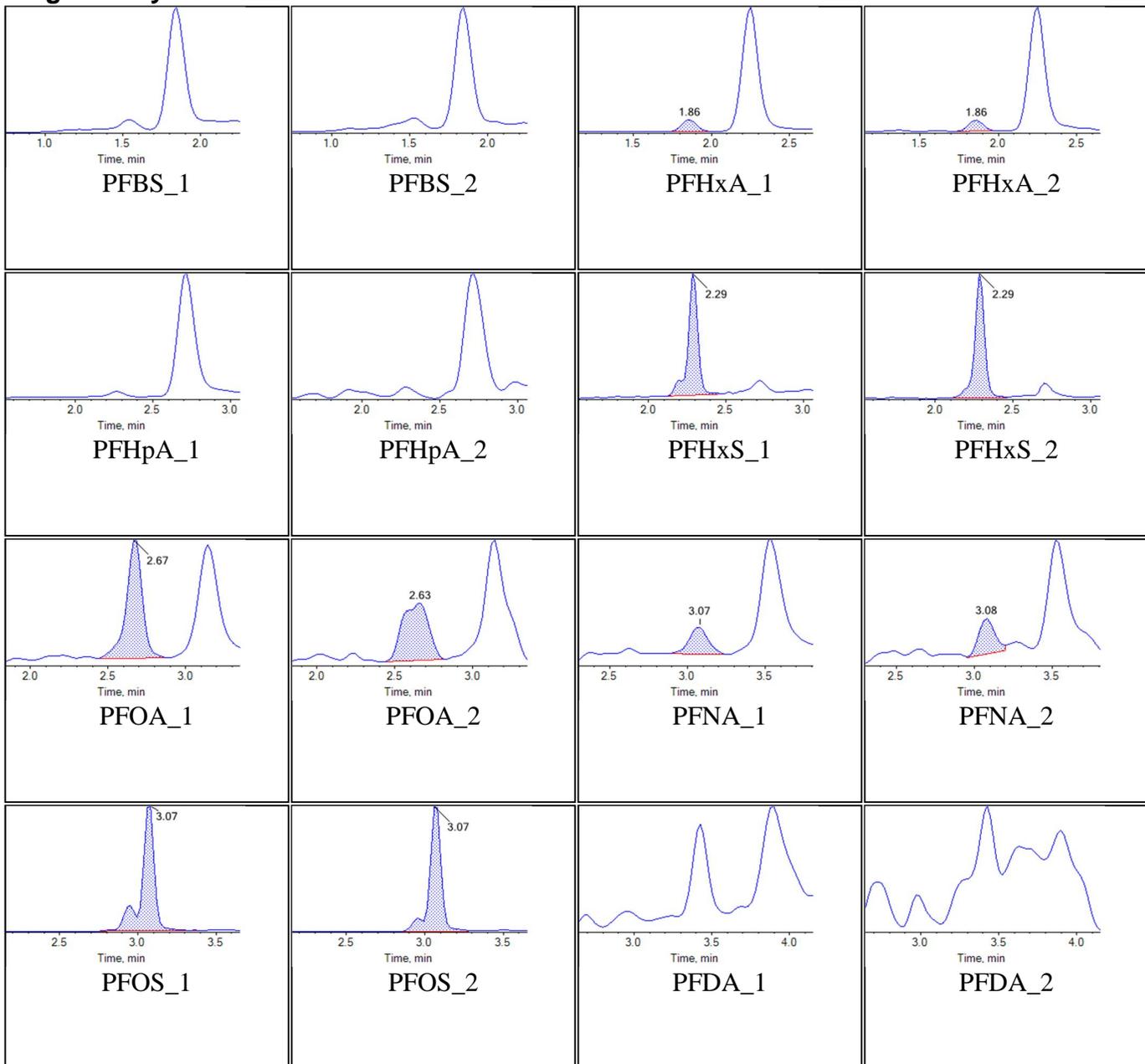
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Sample Name	J8238-FS(3)	Injection Vial	26
Sample ID	VC-PM649-SS04-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:52:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Chromatograms

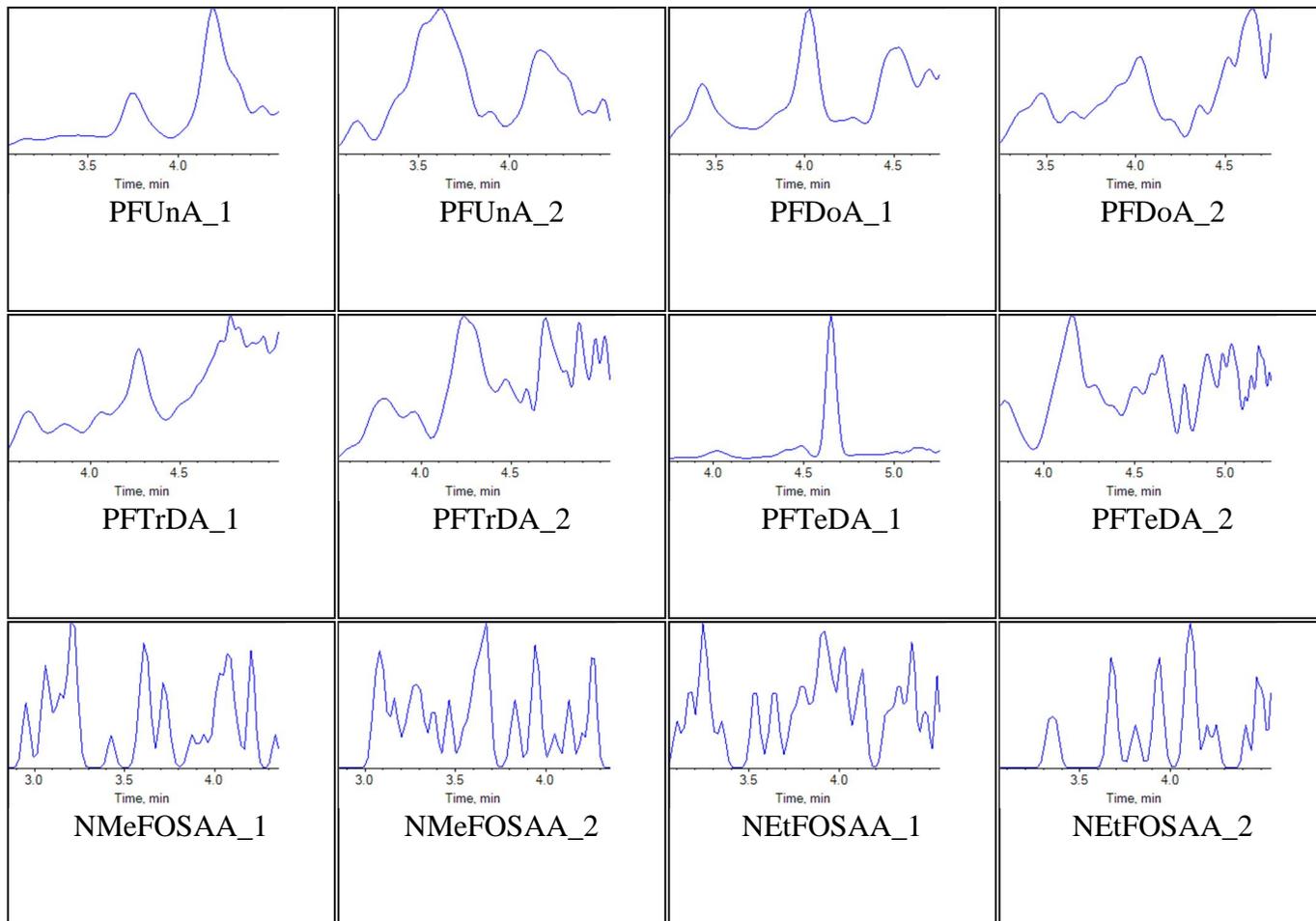
Target Analytes:



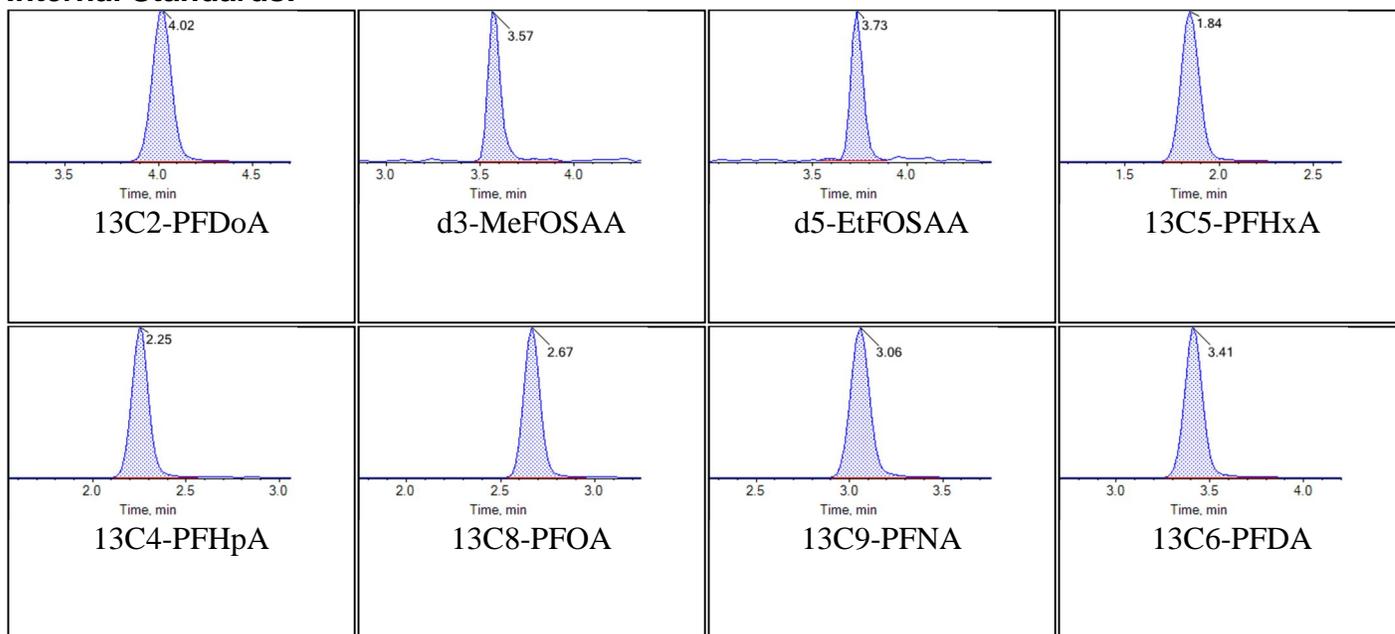


Chromatogram Report

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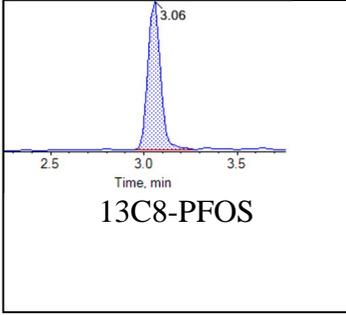
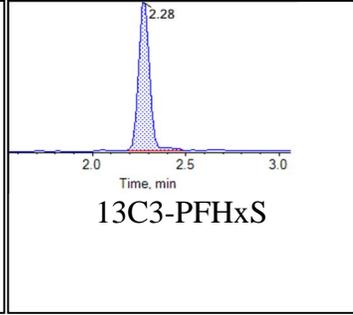
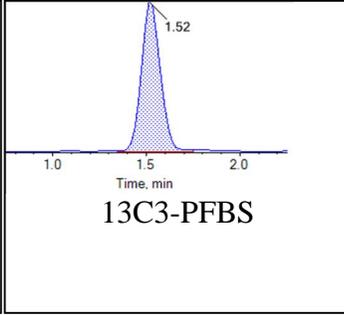
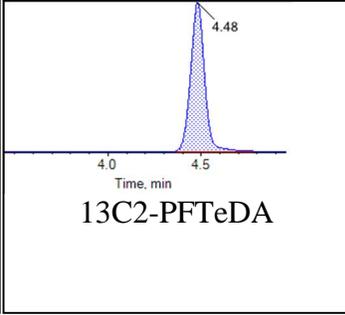
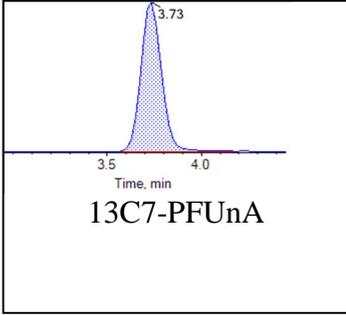


Internal Standards:



Chromatogram Report

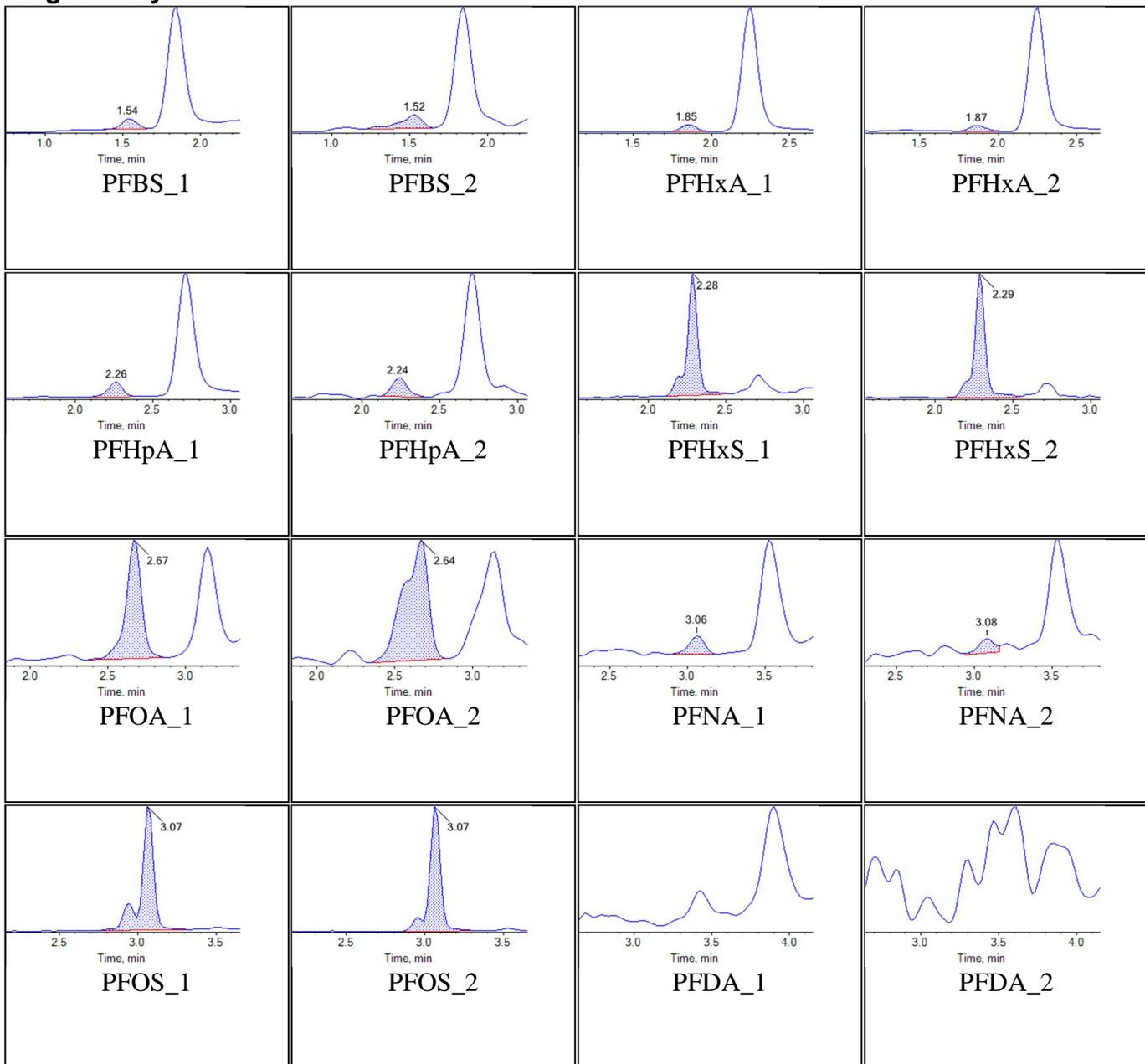
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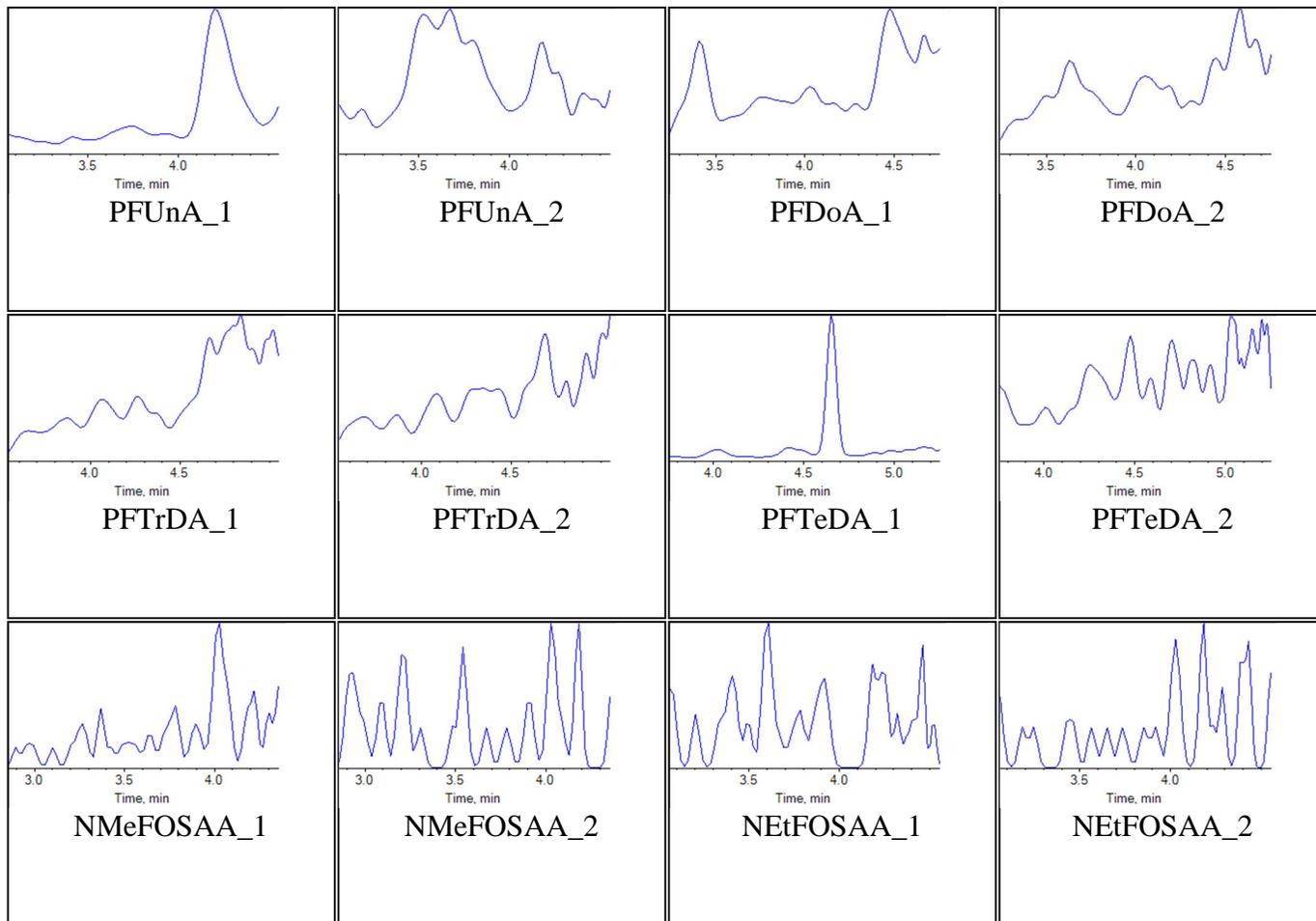


Sample Name	J8240-FS(3)	Injection Vial	28
Sample ID	VC-PM649-SB04-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
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Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

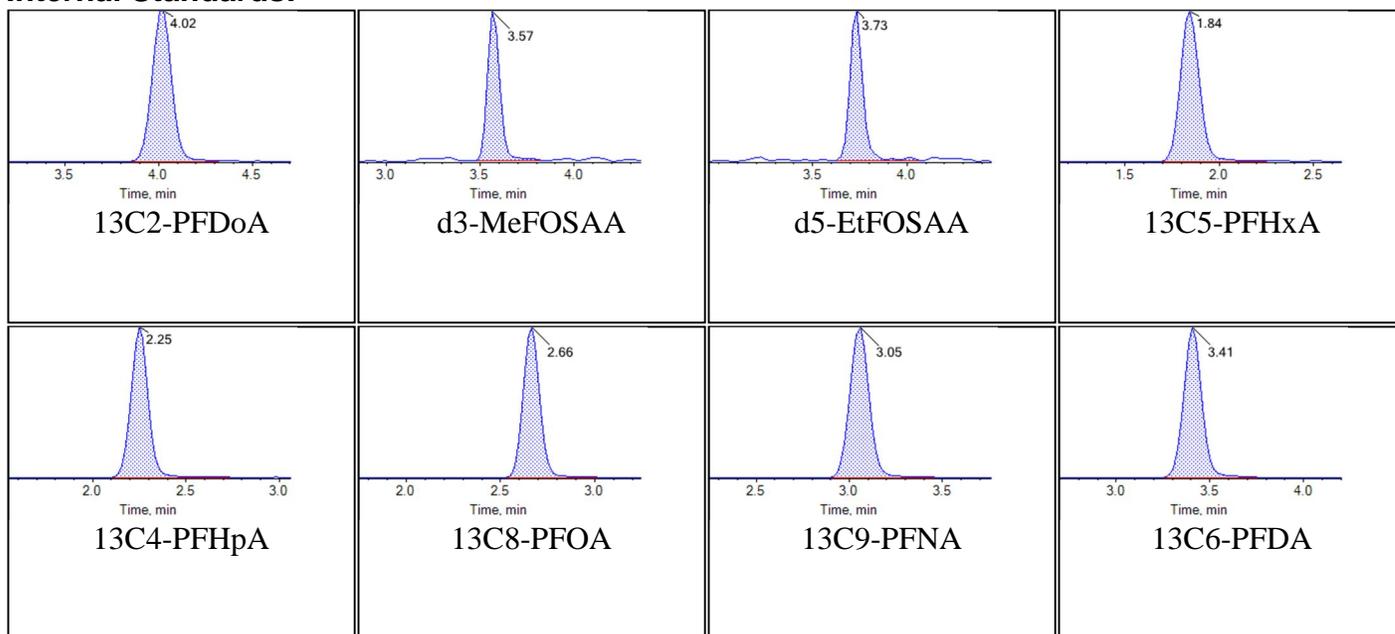
Chromatograms

Target Analytes:



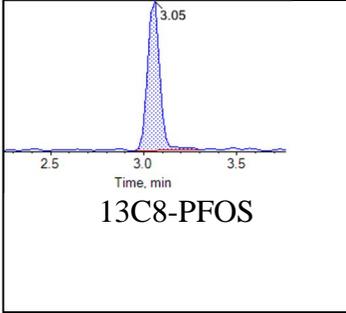
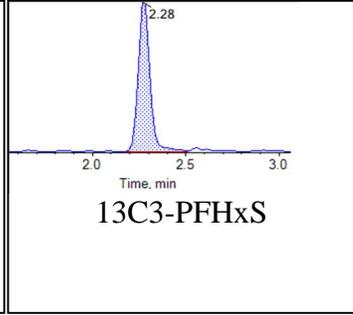
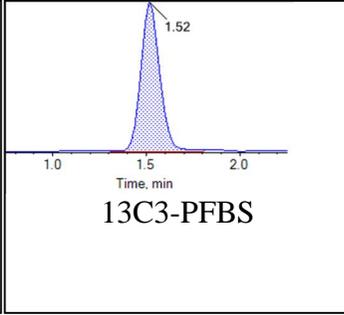
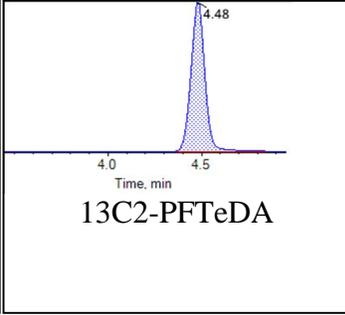
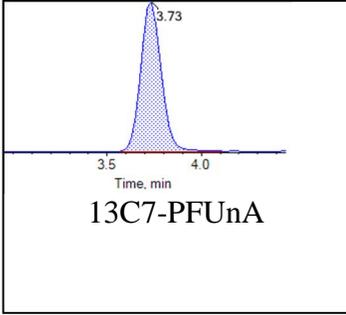


Internal Standards:



Chromatogram Report

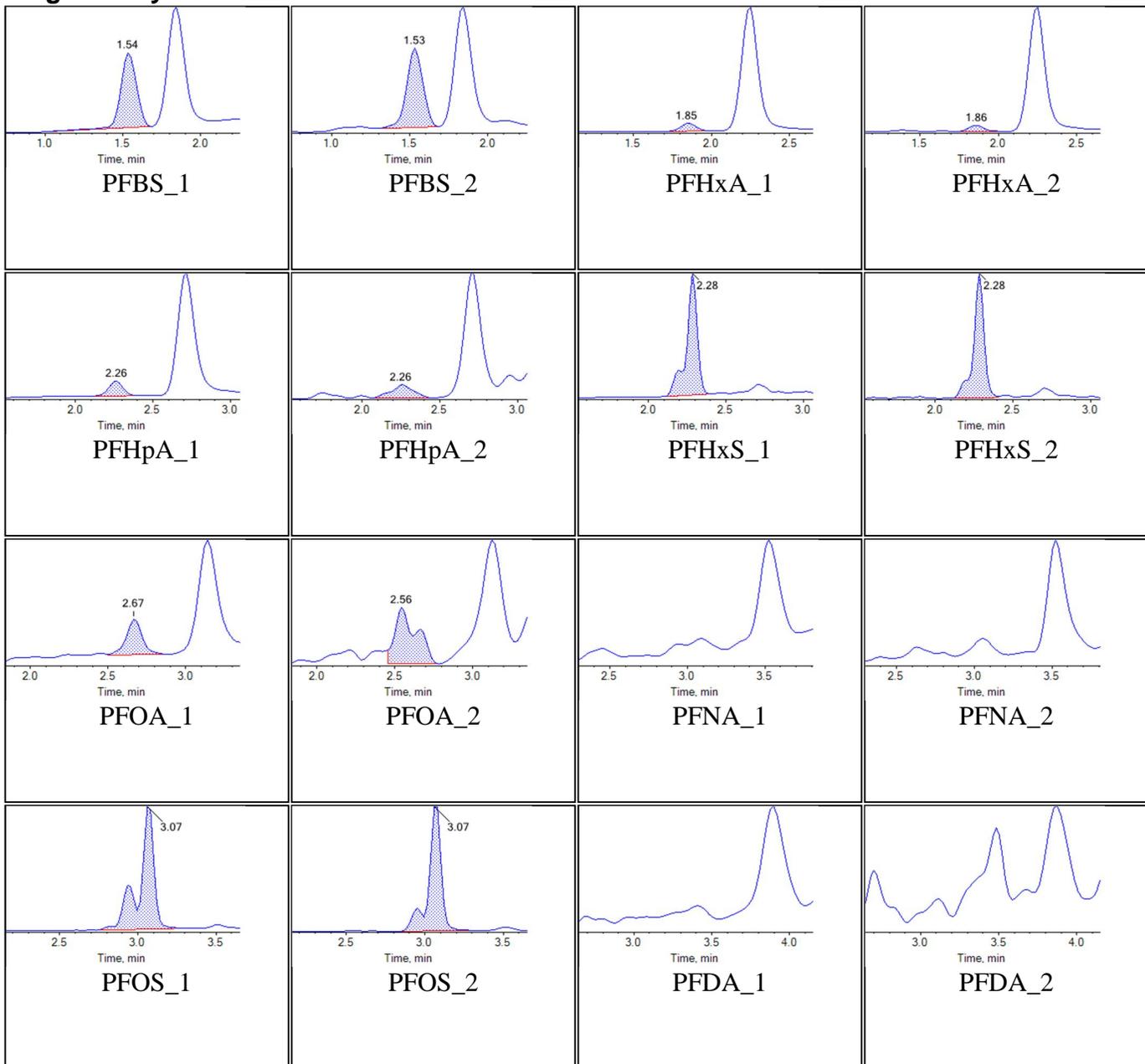
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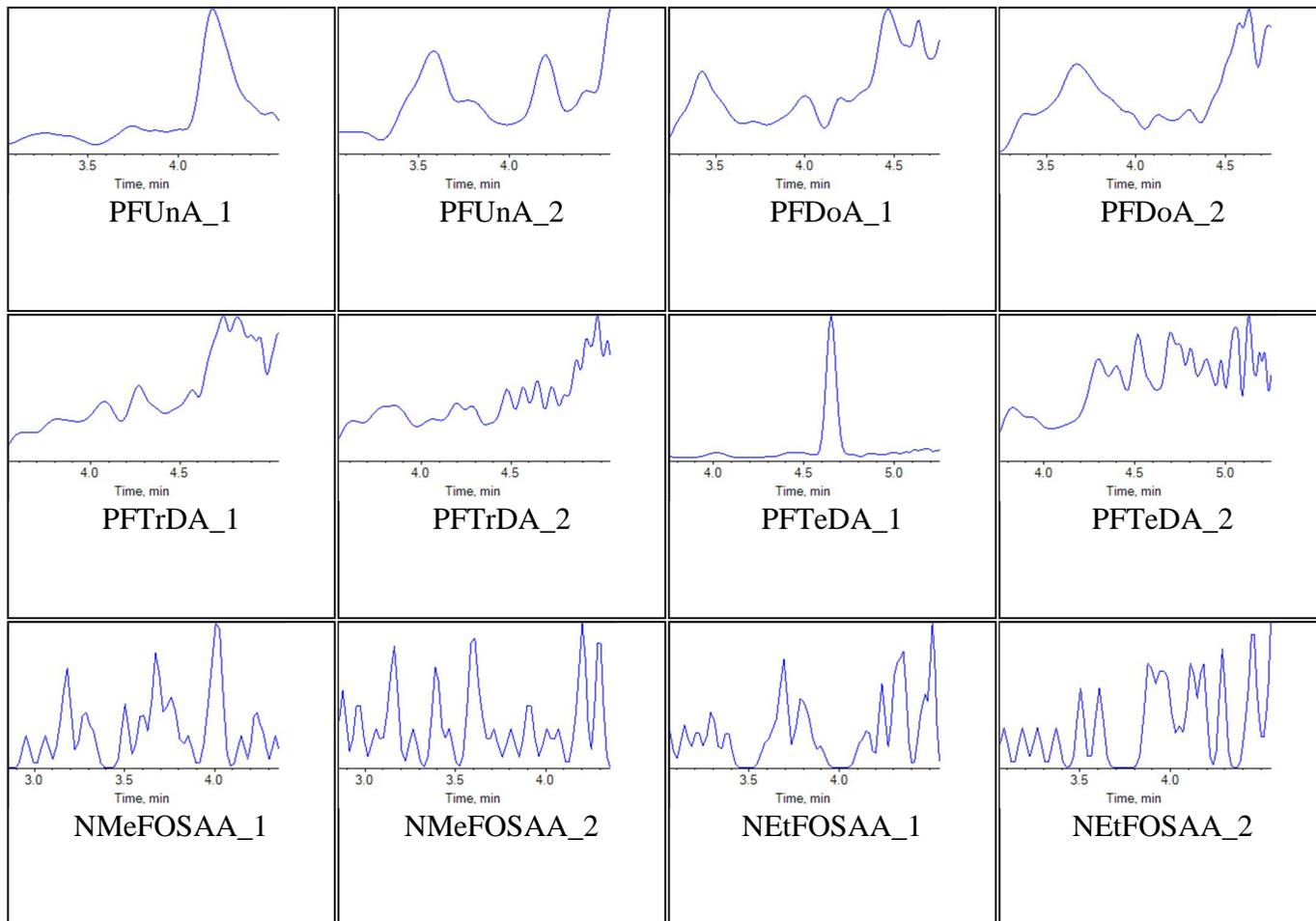
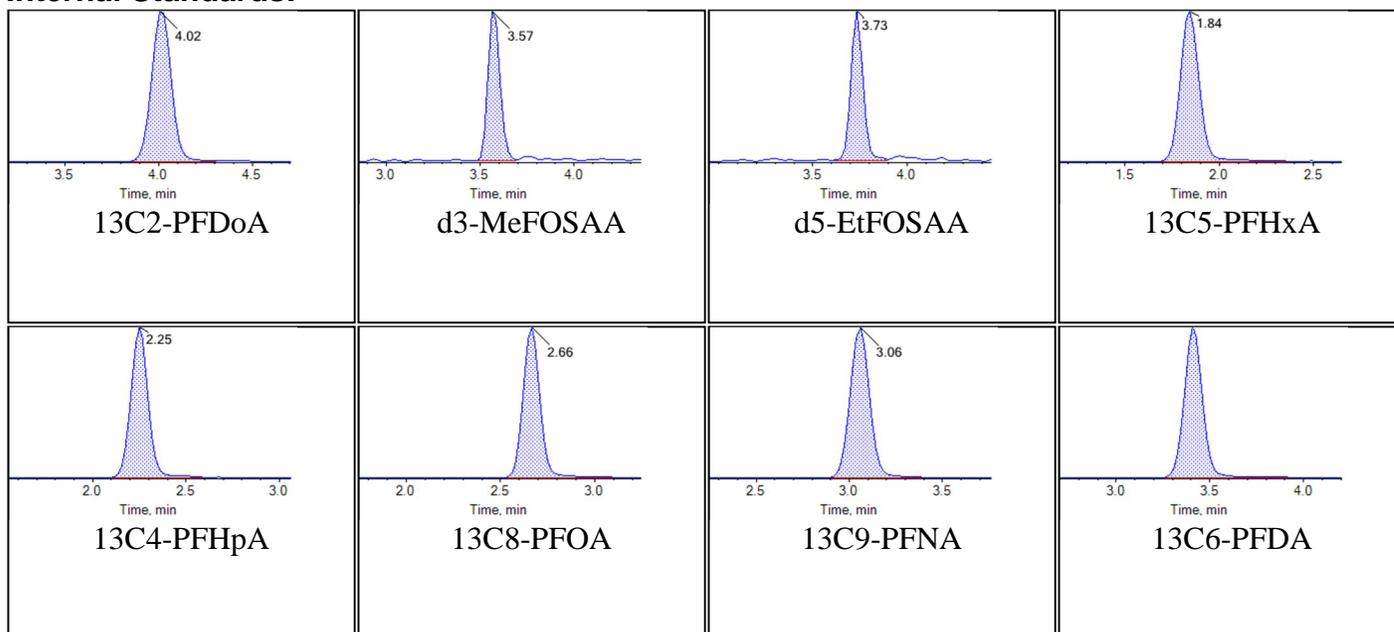


Sample Name	J8248-FS(3)	Injection Vial	29
Sample ID	VC-PM365-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:24:43	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Chromatograms

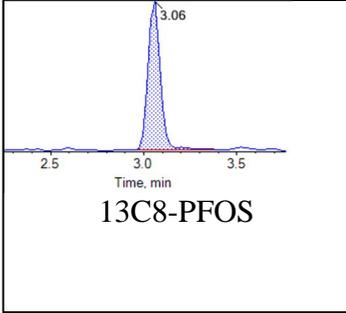
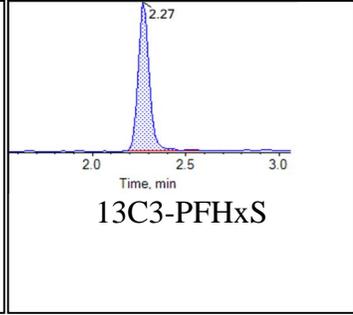
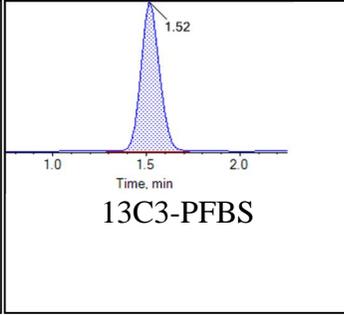
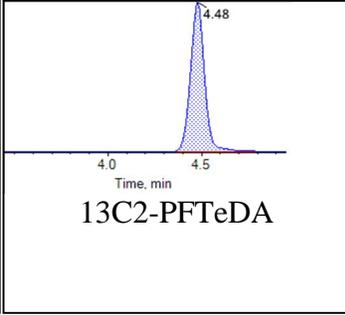
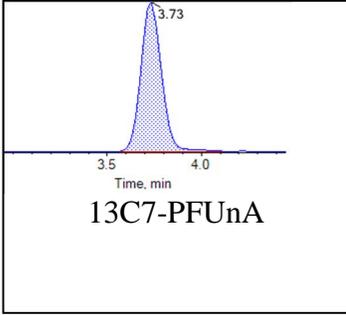
Target Analytes:



**Internal Standards:**

Chromatogram Report

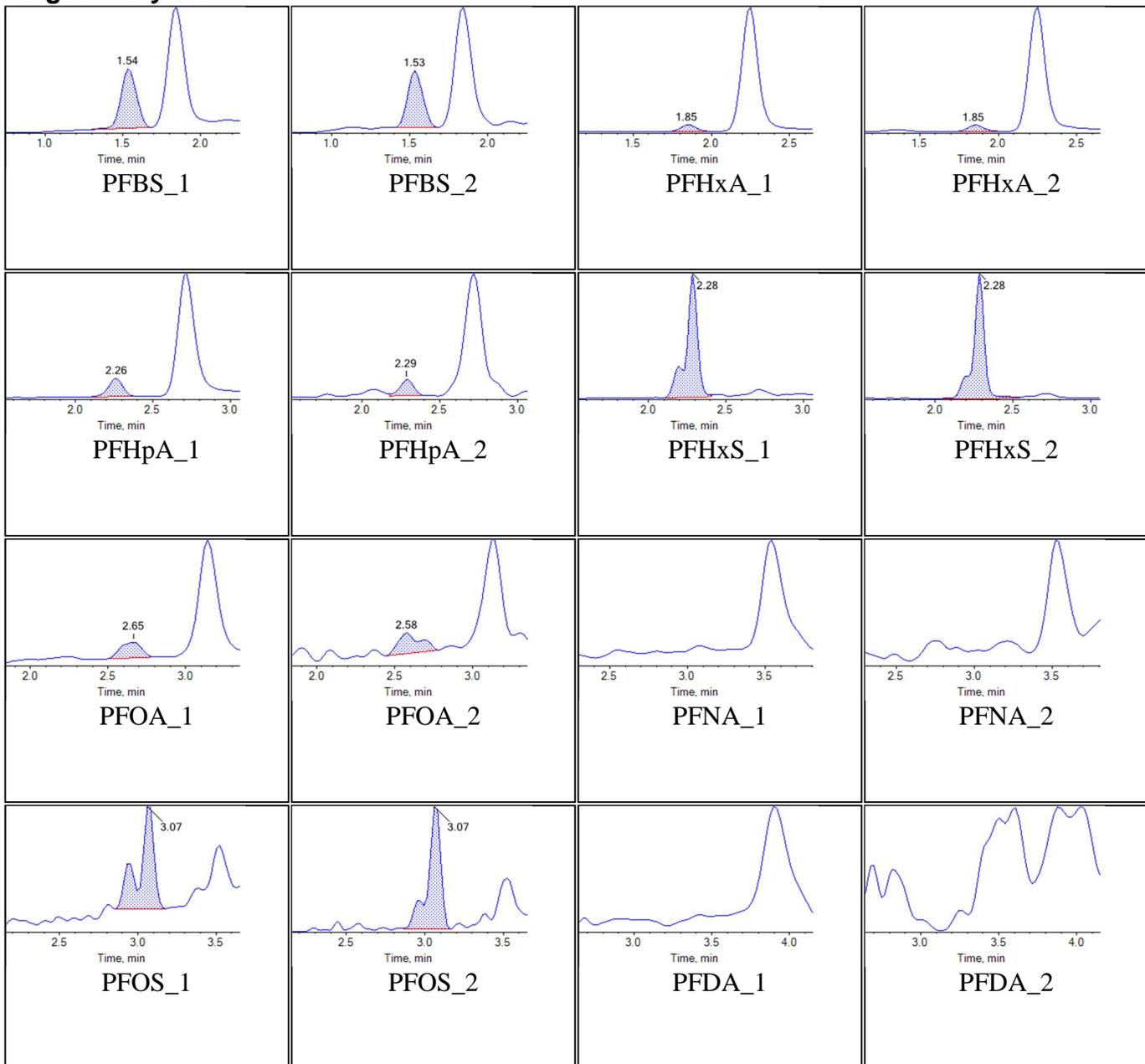
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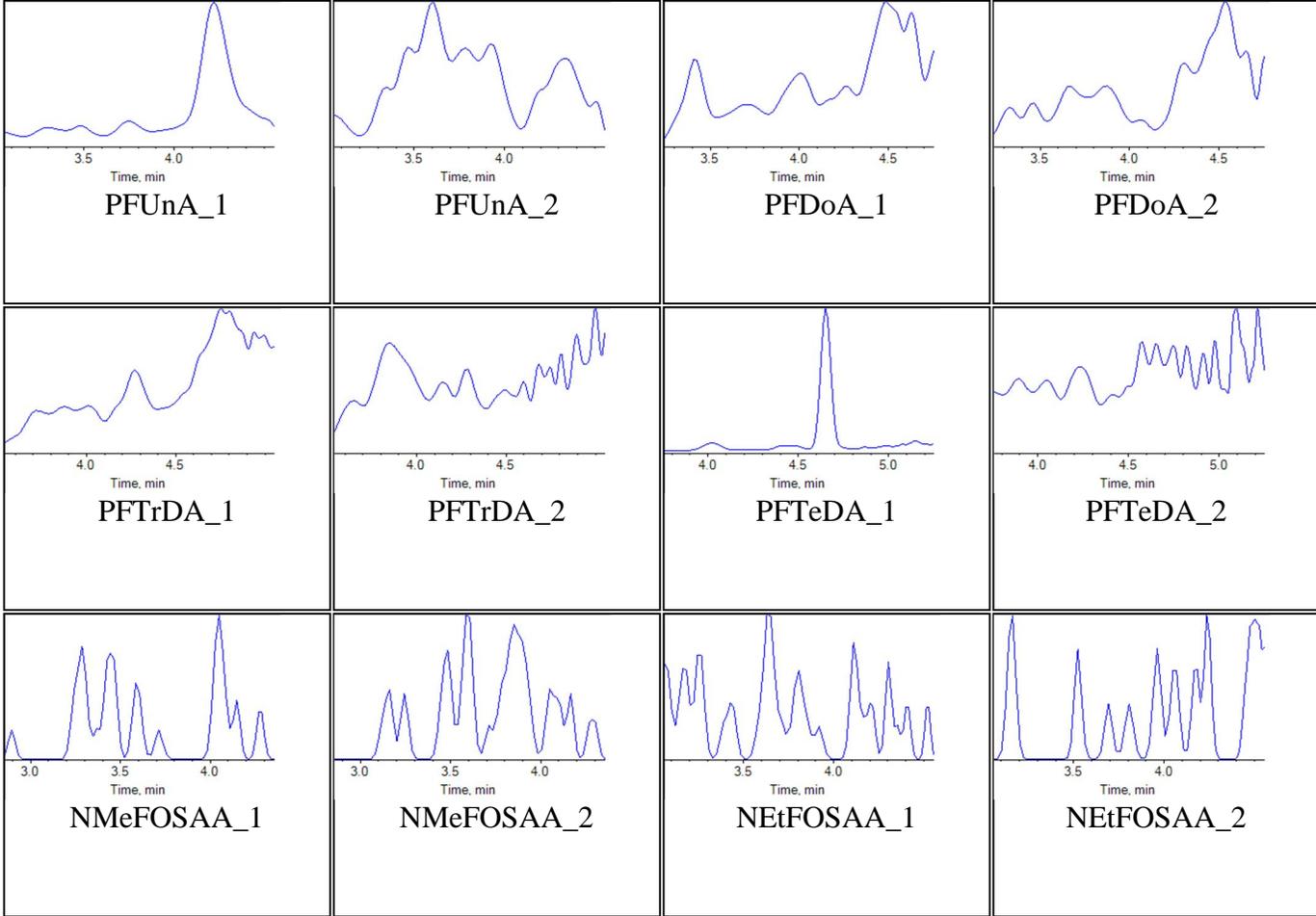
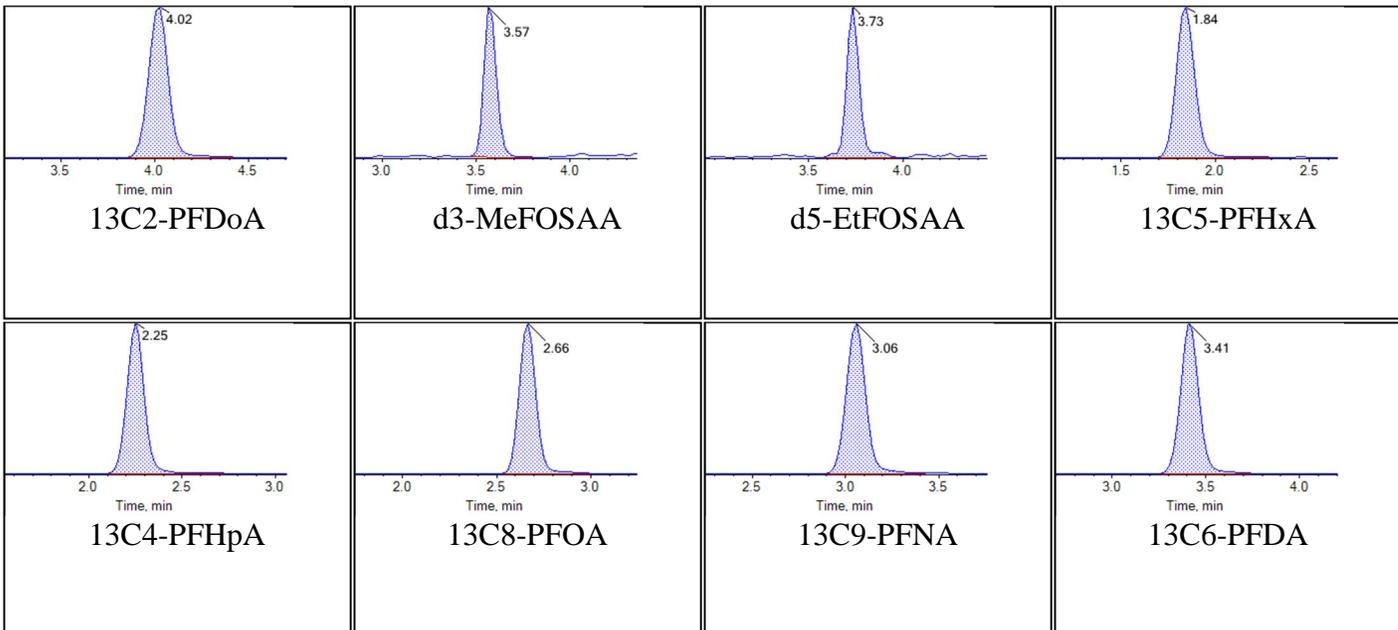


Sample Name	J8249-FS(3)	Injection Vial	30
Sample ID	VC-PM365-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:35:35	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Chromatograms

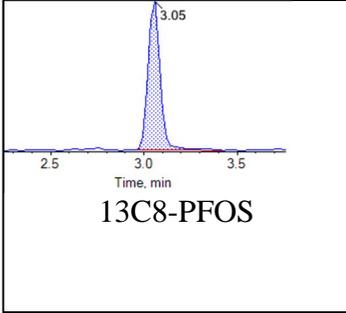
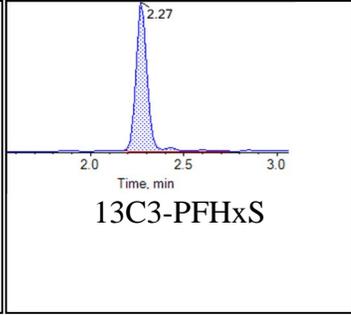
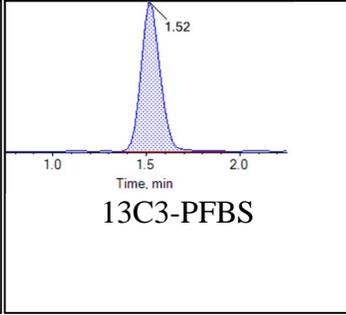
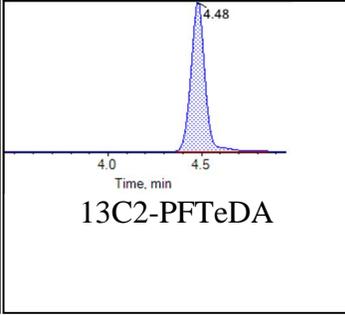
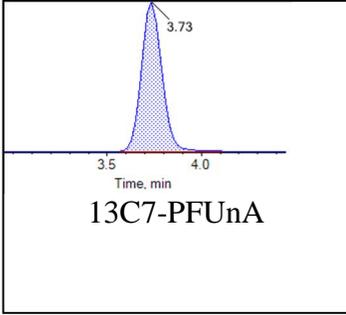
Target Analytes:



**Internal Standards:**

Chromatogram Report

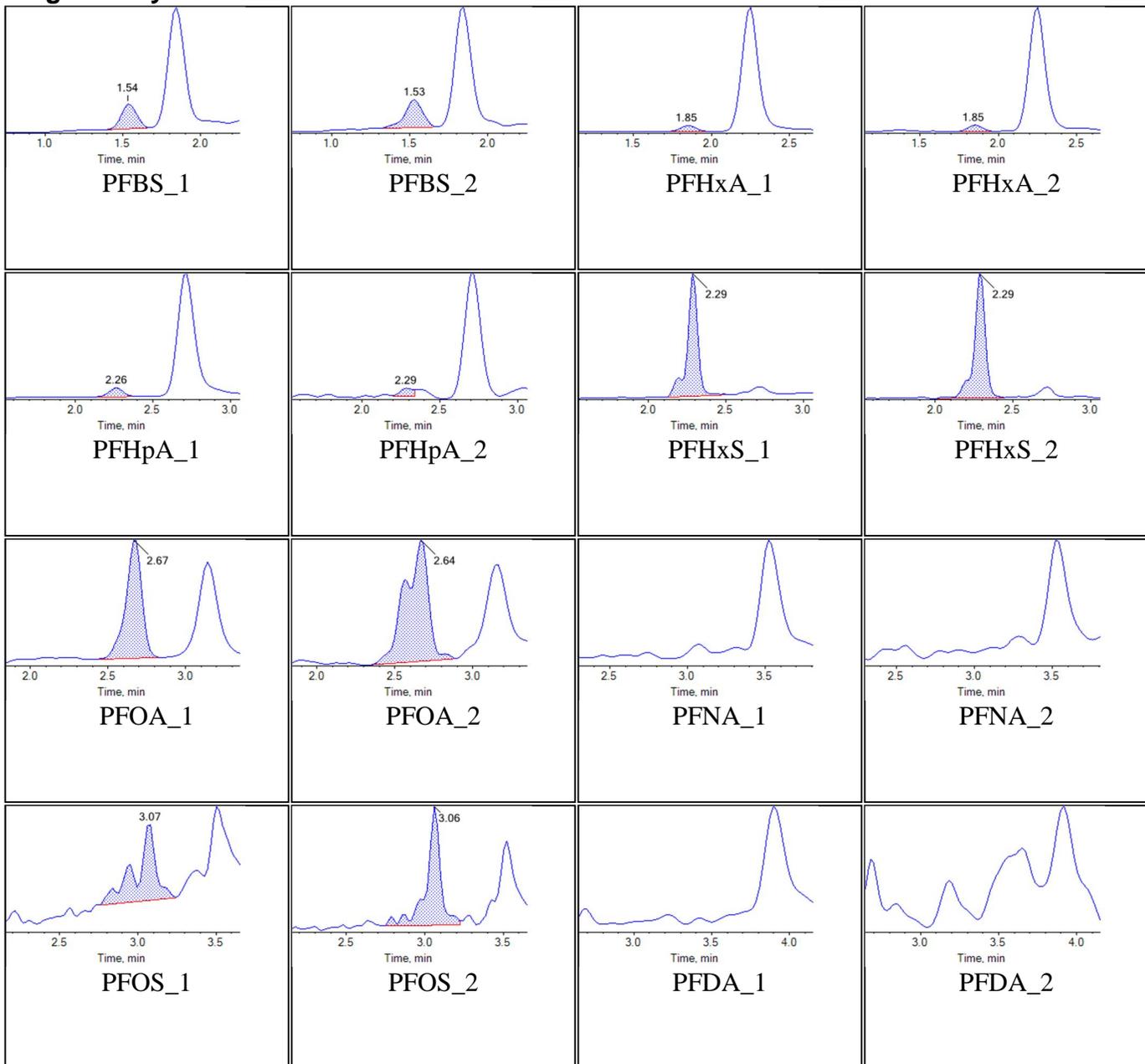
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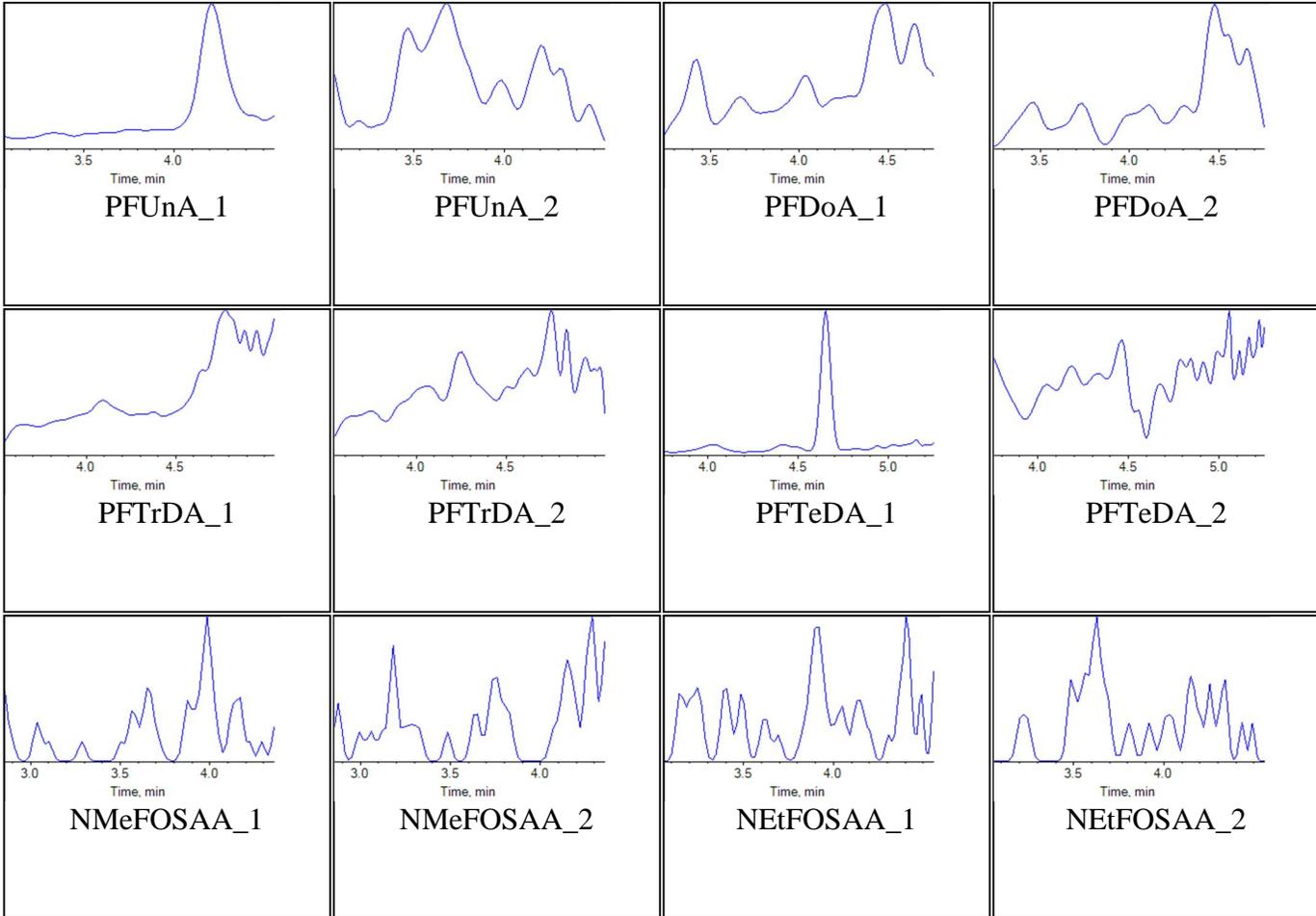


Sample Name	J8250-FS(3)	Injection Vial	31
Sample ID	VC-PM365-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:46:27	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

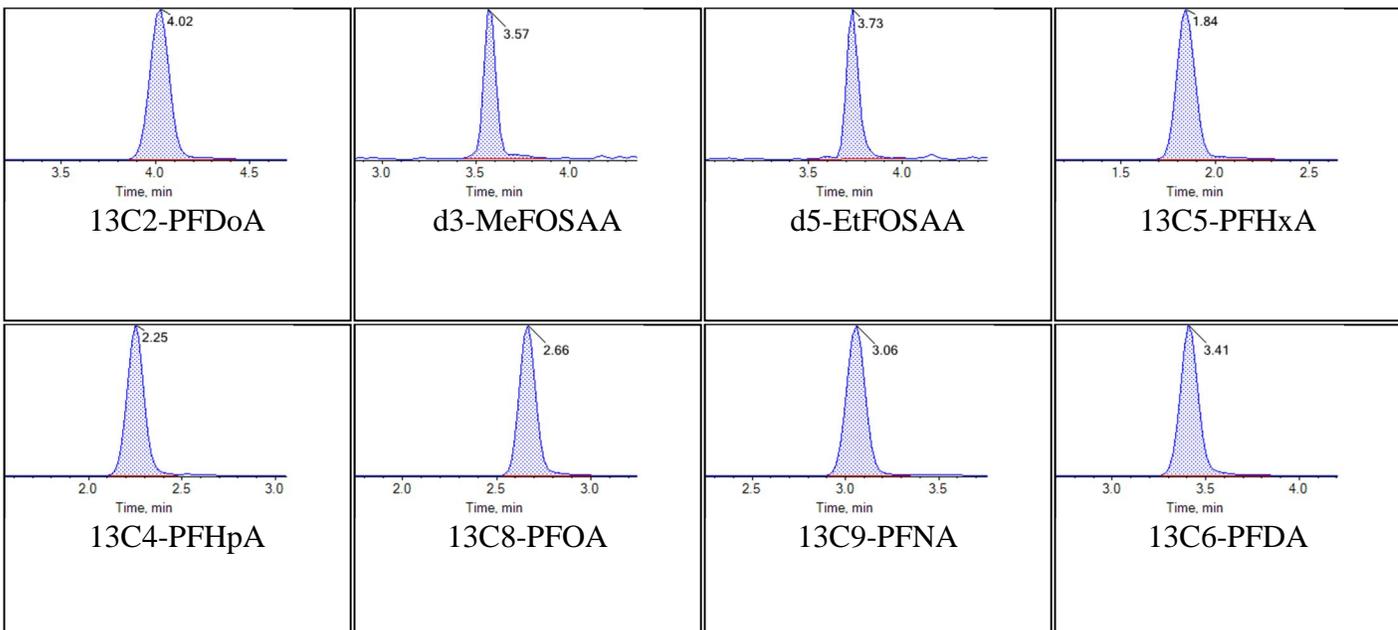
Chromatograms

Target Analytes:



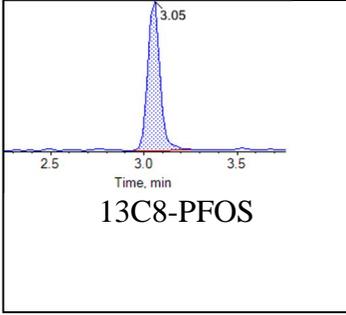
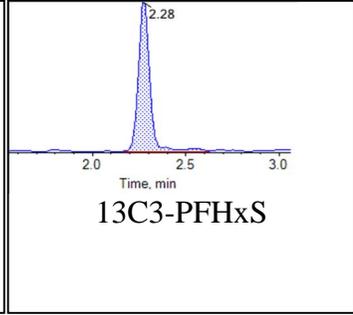
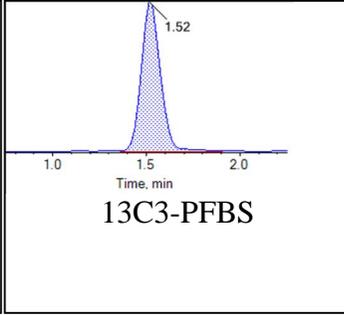
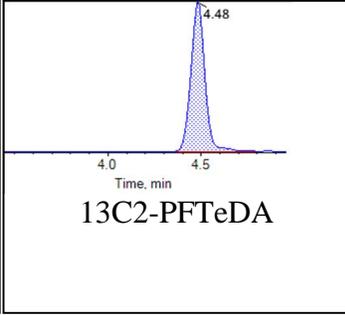
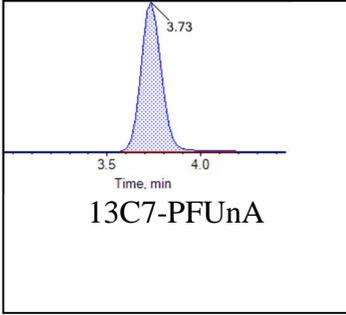


Internal Standards:



Chromatogram Report

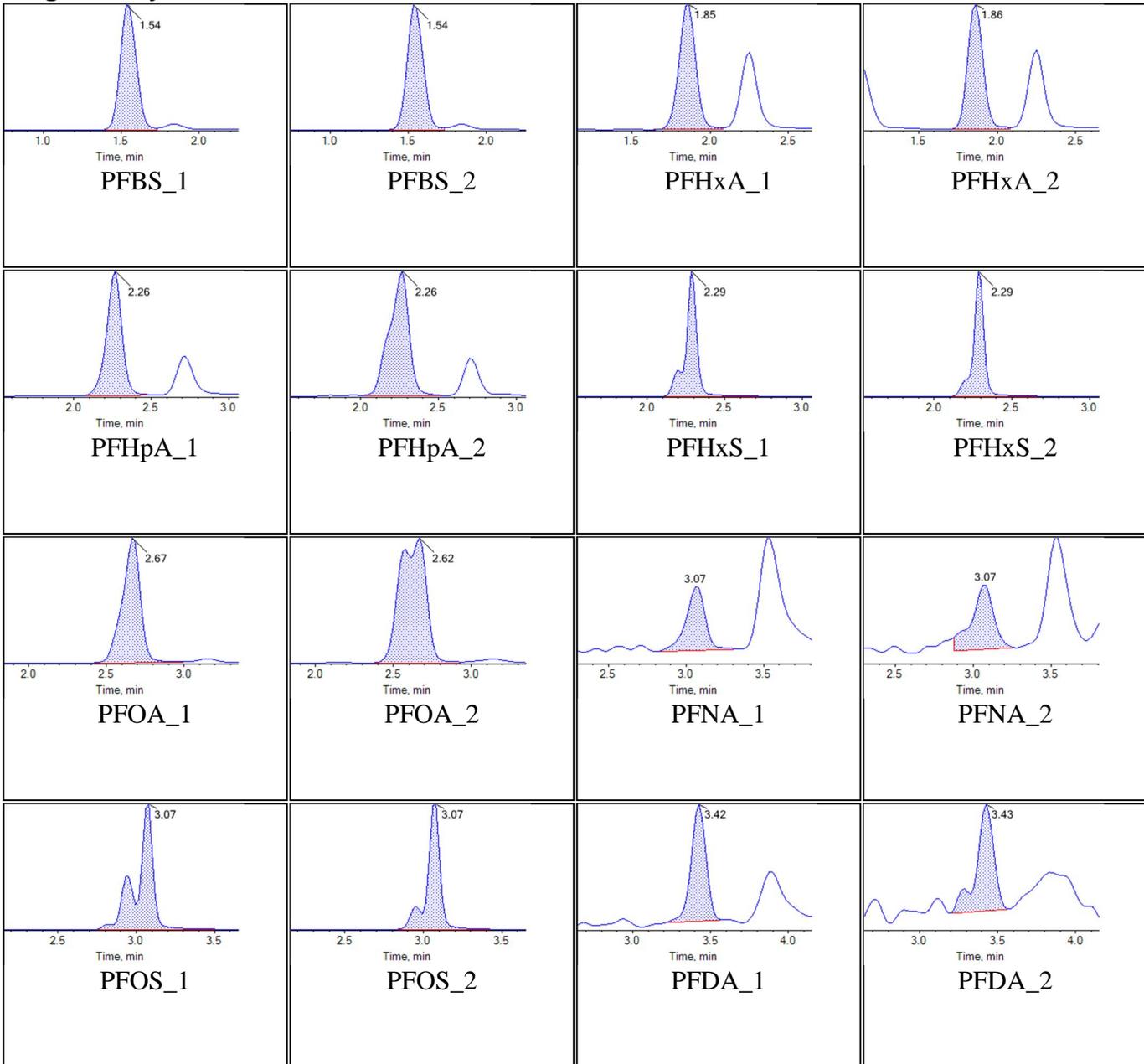
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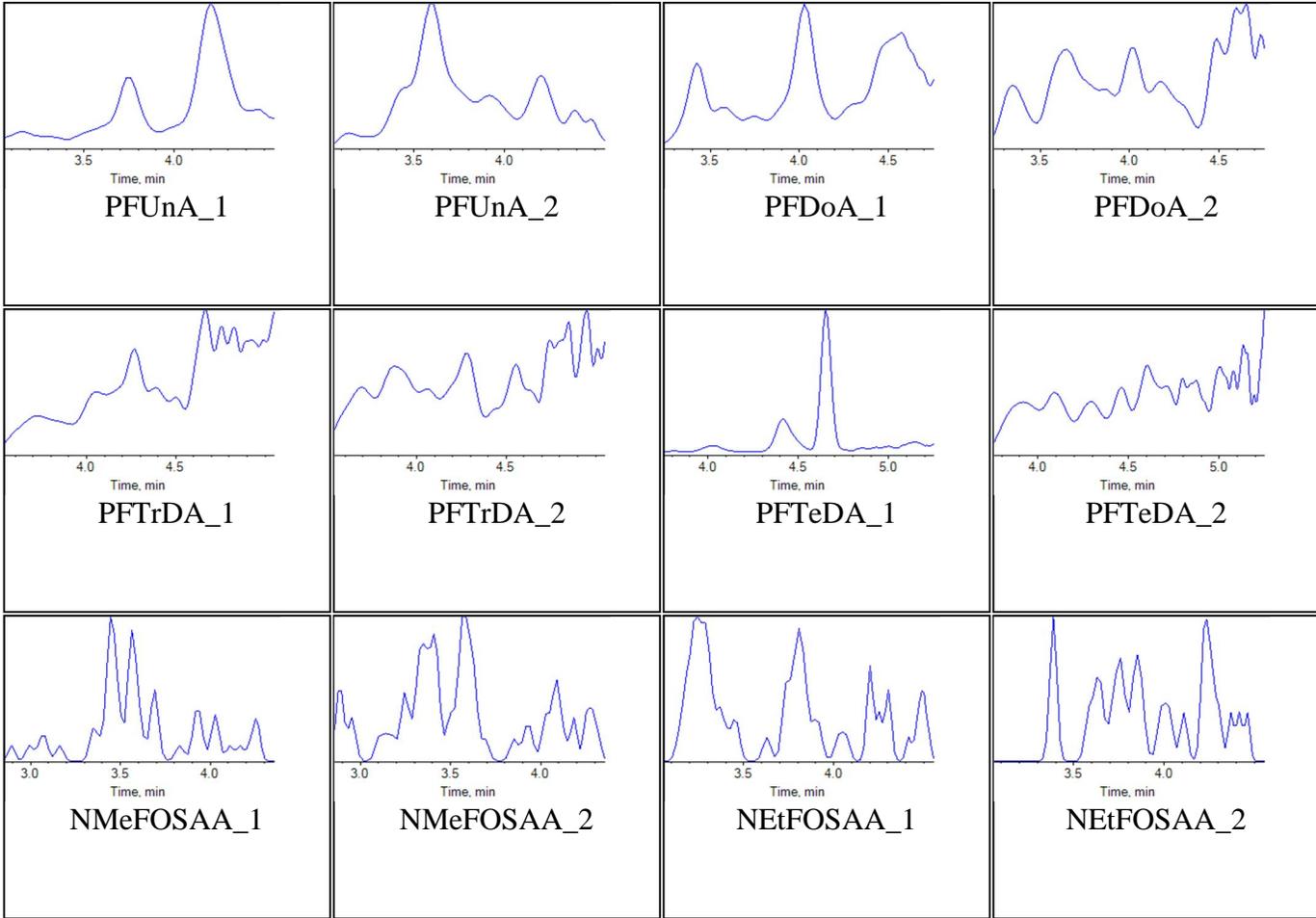


Sample Name	J8251-FS(3)	Injection Vial	32
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:57:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

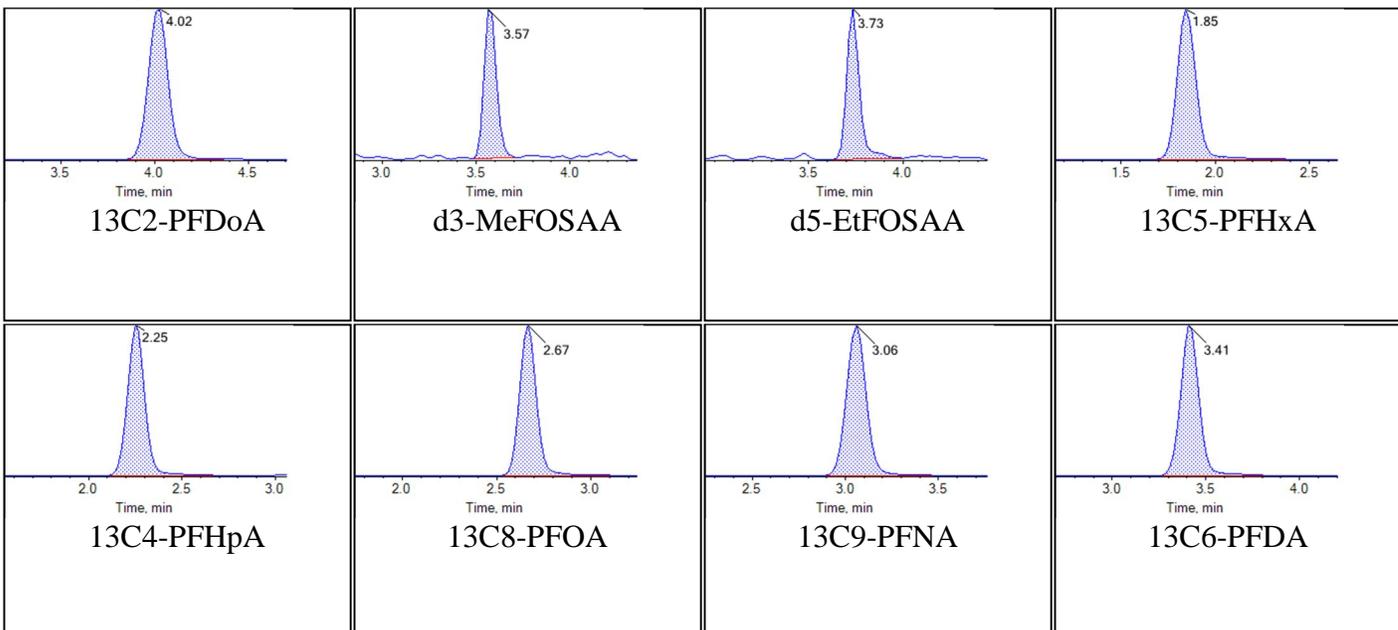
Chromatograms

Target Analytes:



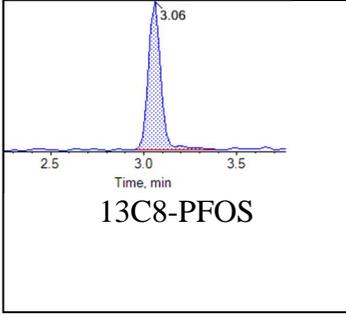
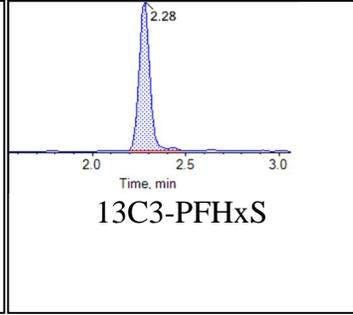
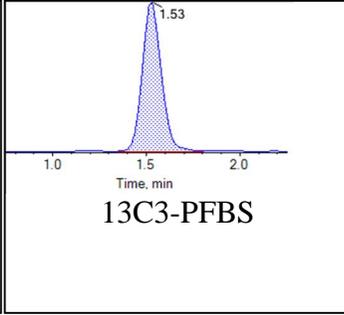
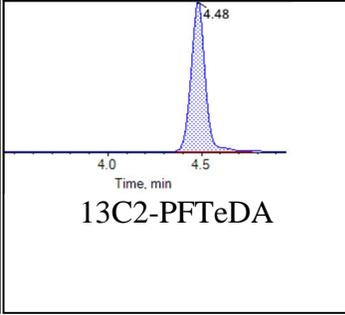
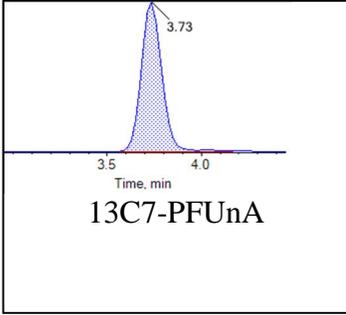


Internal Standards:



Chromatogram Report

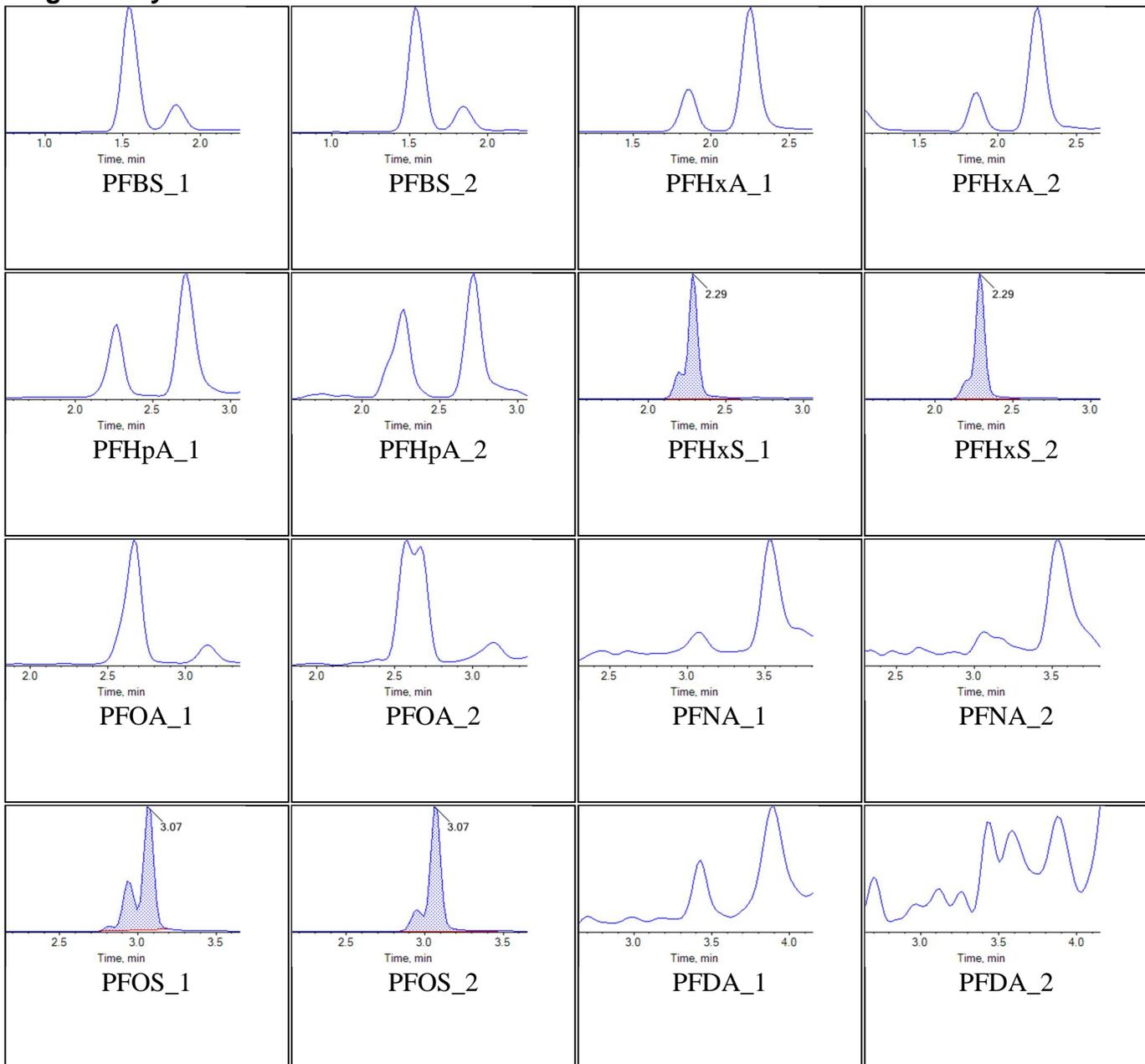
Created with Analyst Reporter
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Sample Name	J8251-FS-D(5)	Injection Vial	33
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:08:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Chromatograms

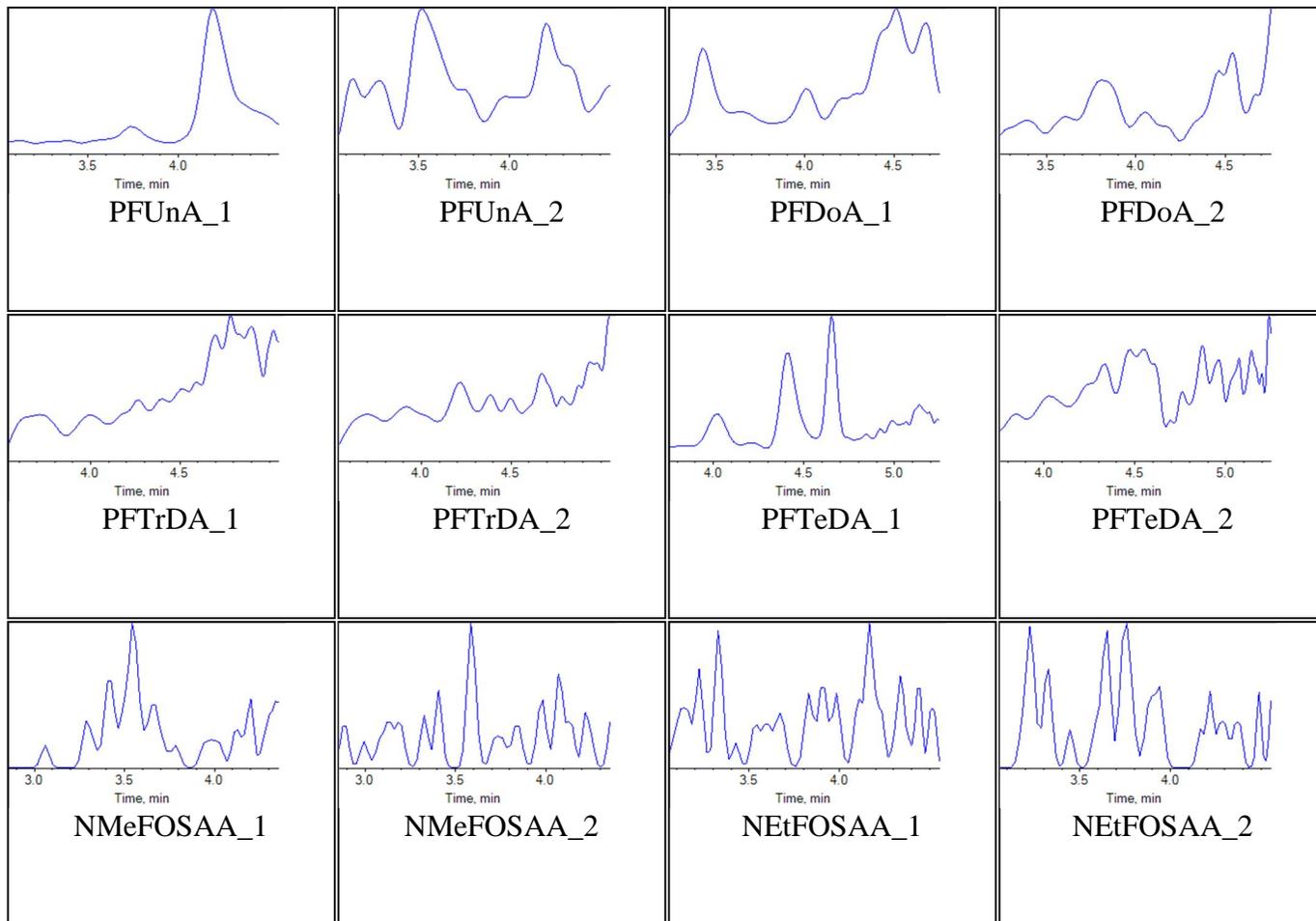
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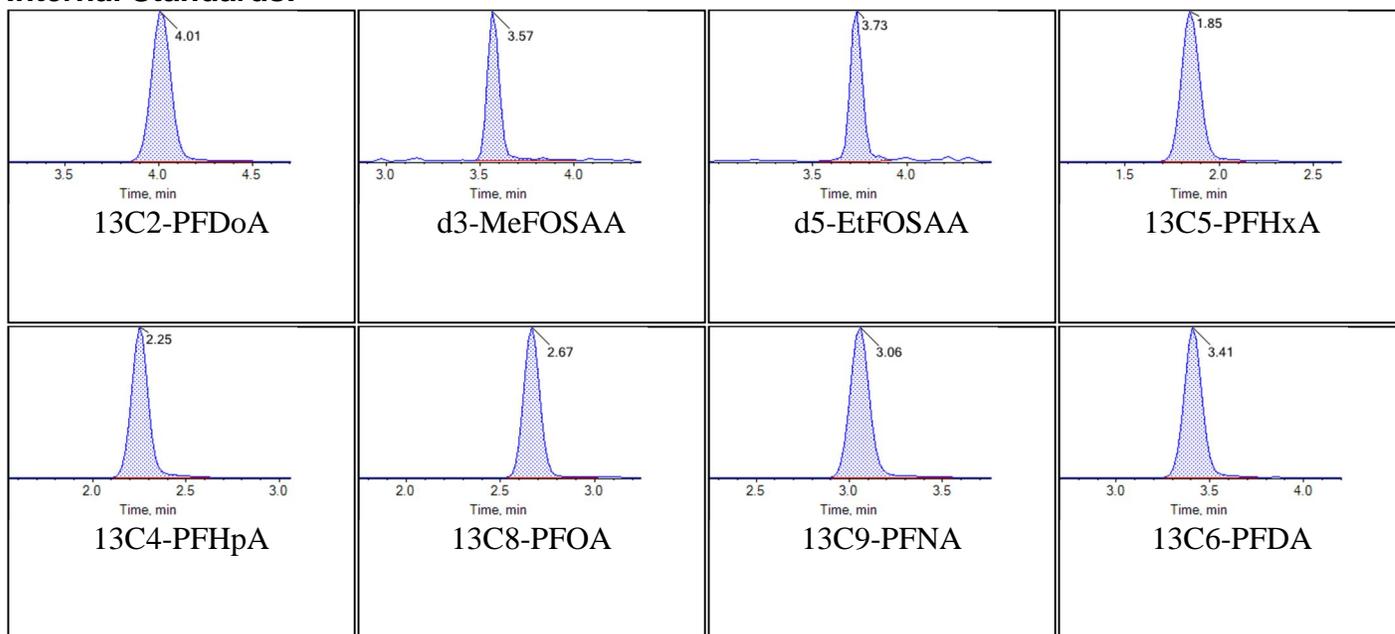


Chromatogram Report

Created with Analyst Reporter
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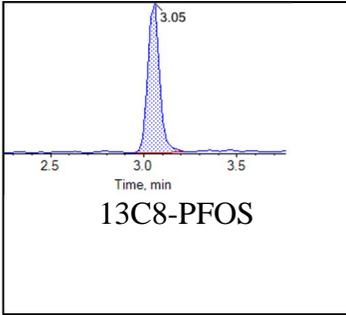
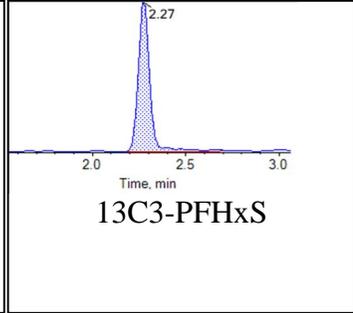
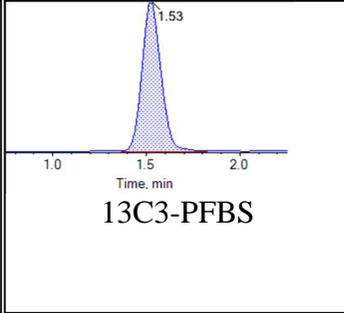
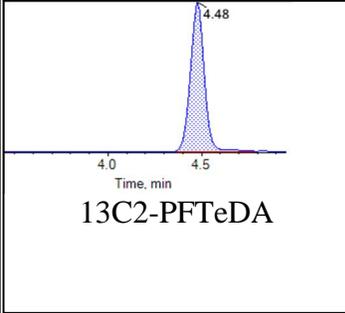
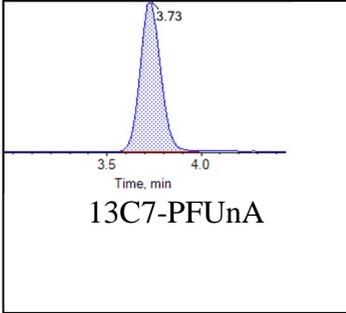


Internal Standards:



Chromatogram Report

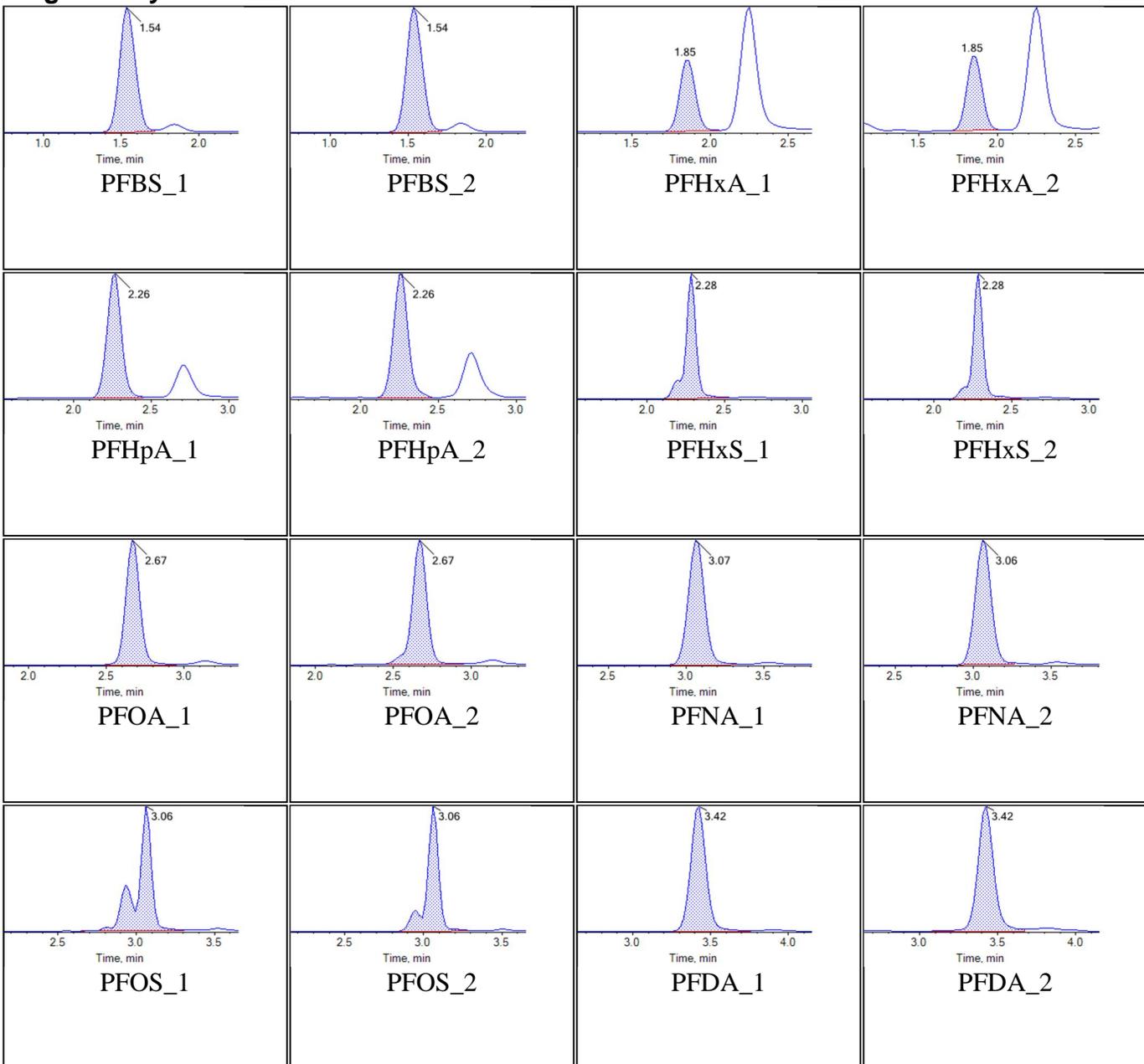
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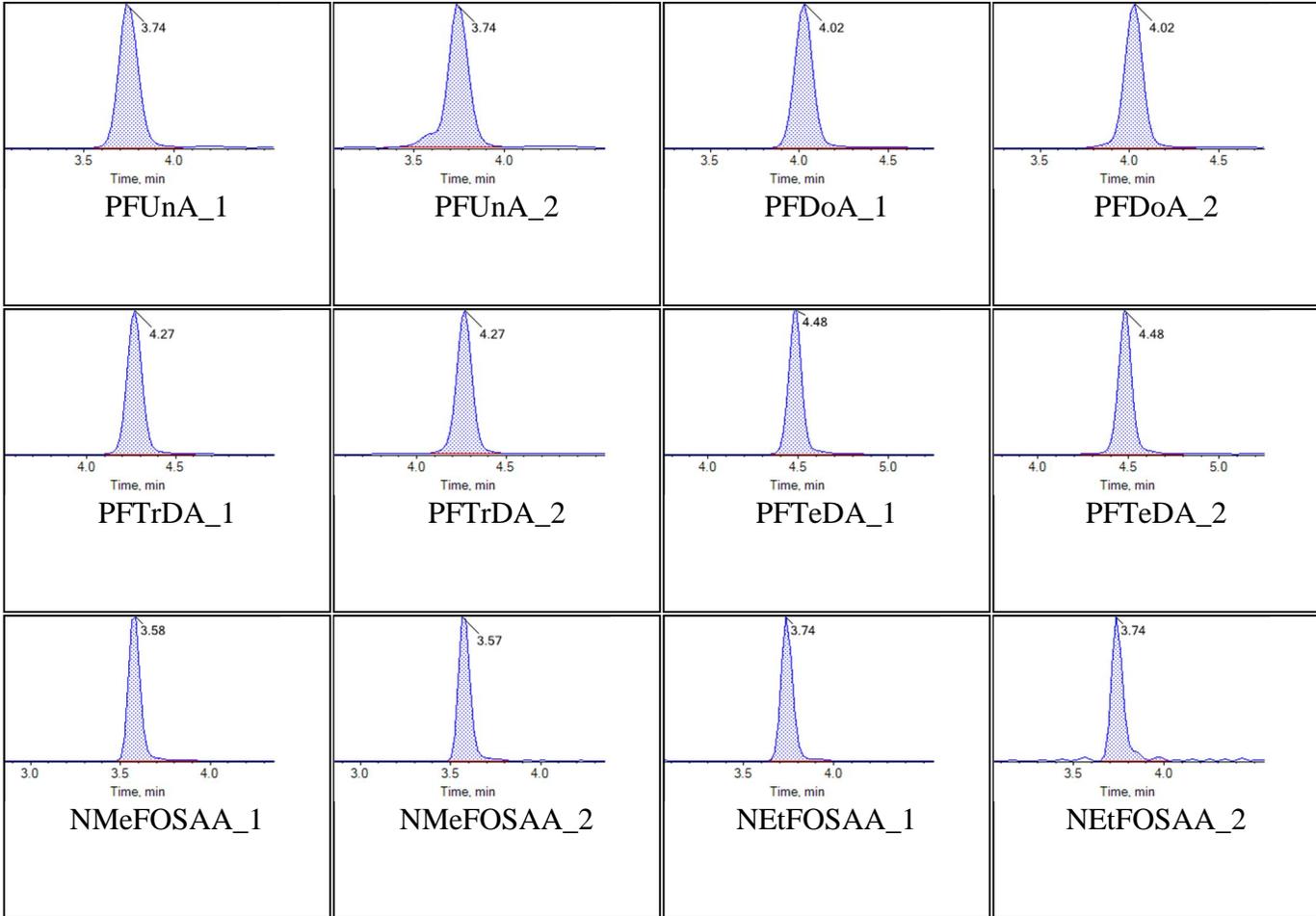


Sample Name	KB69 CCV	Injection Vial	34
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:19:01	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

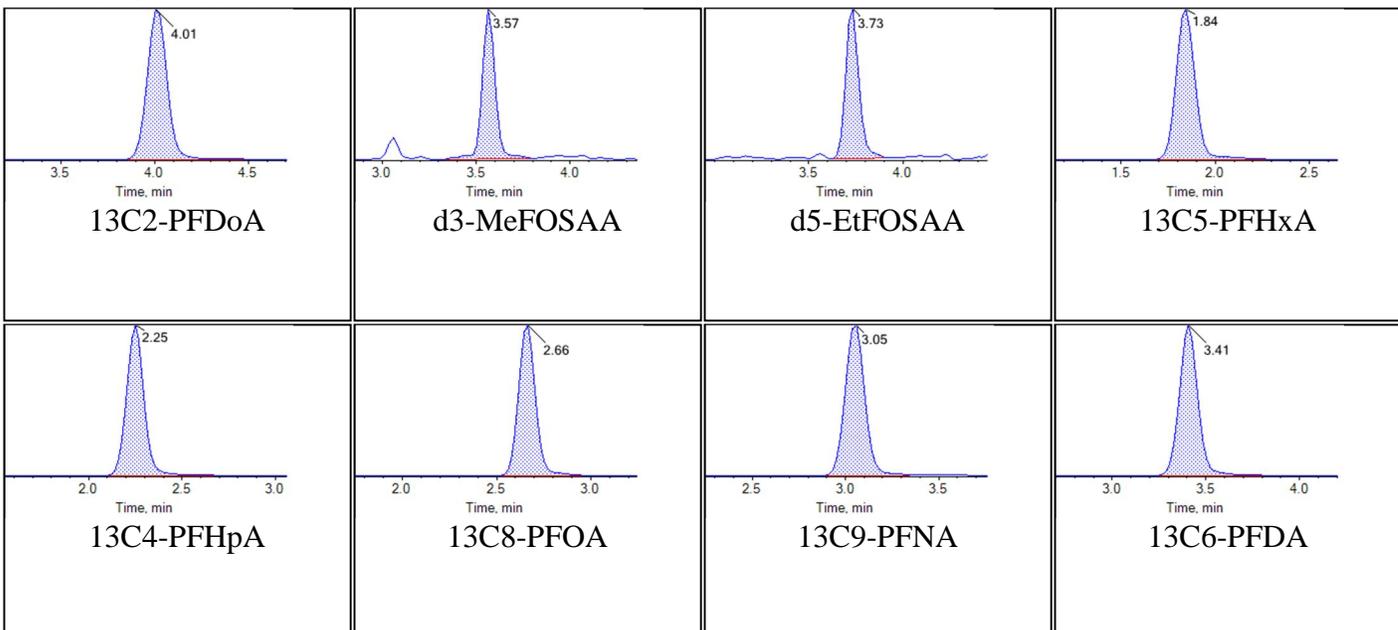
Chromatograms

Target Analytes:



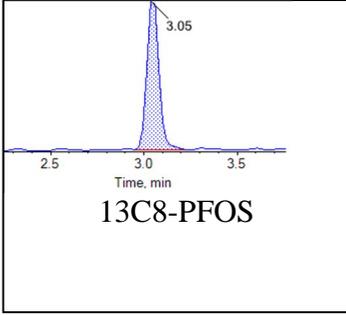
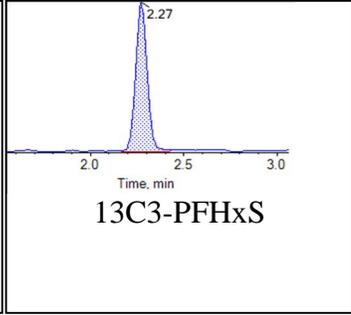
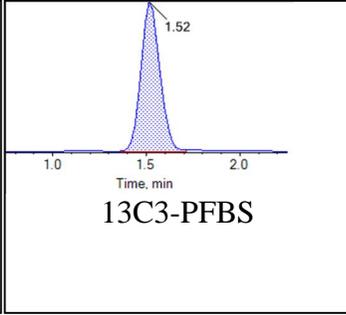
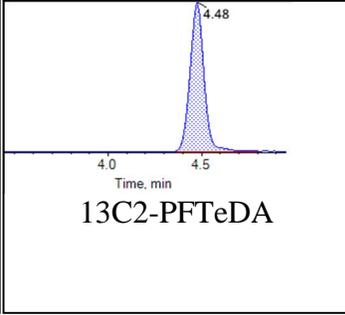
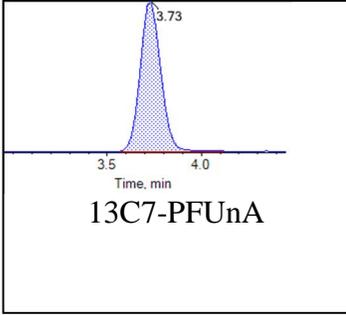


Internal Standards:



Chromatogram Report

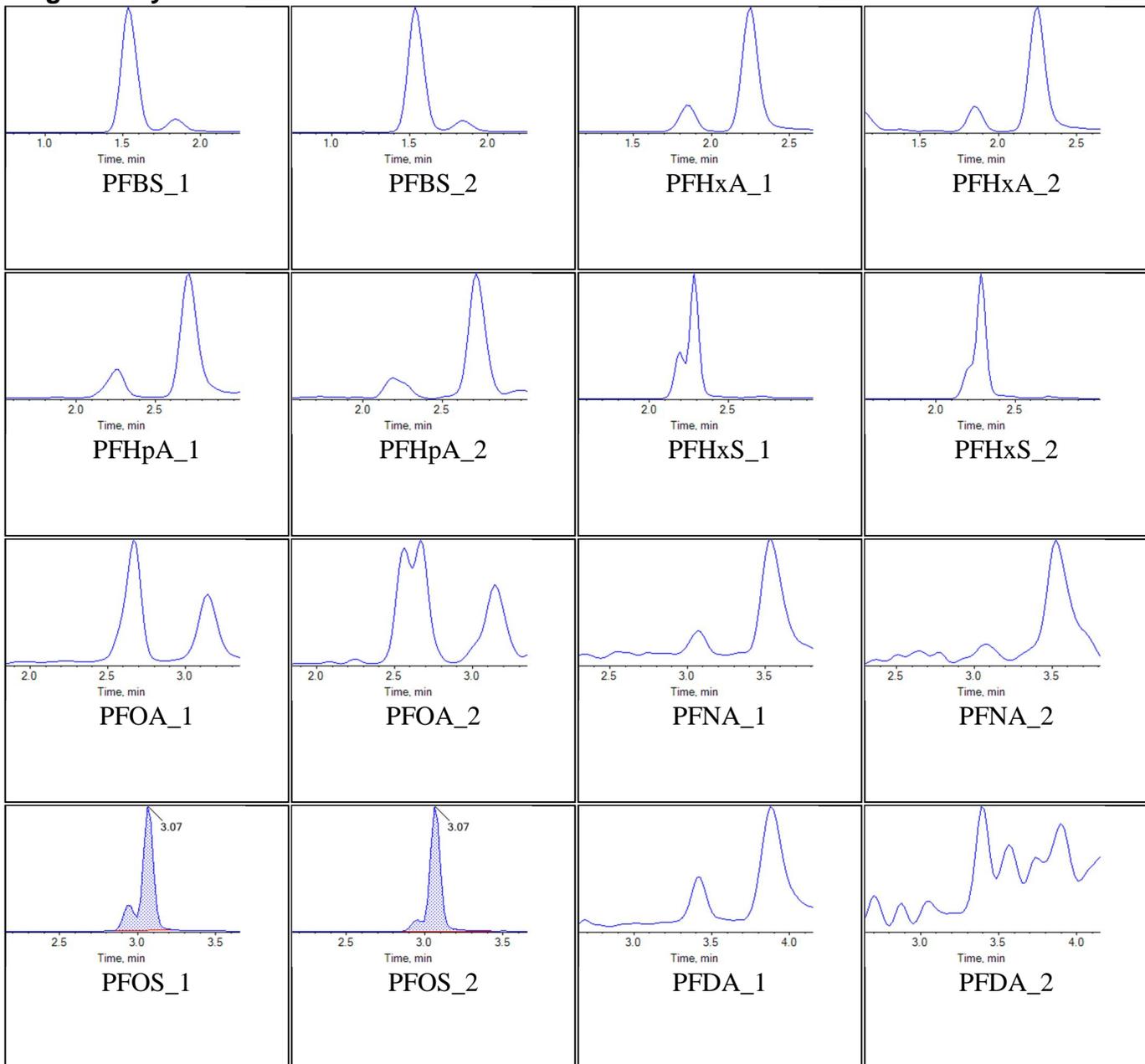
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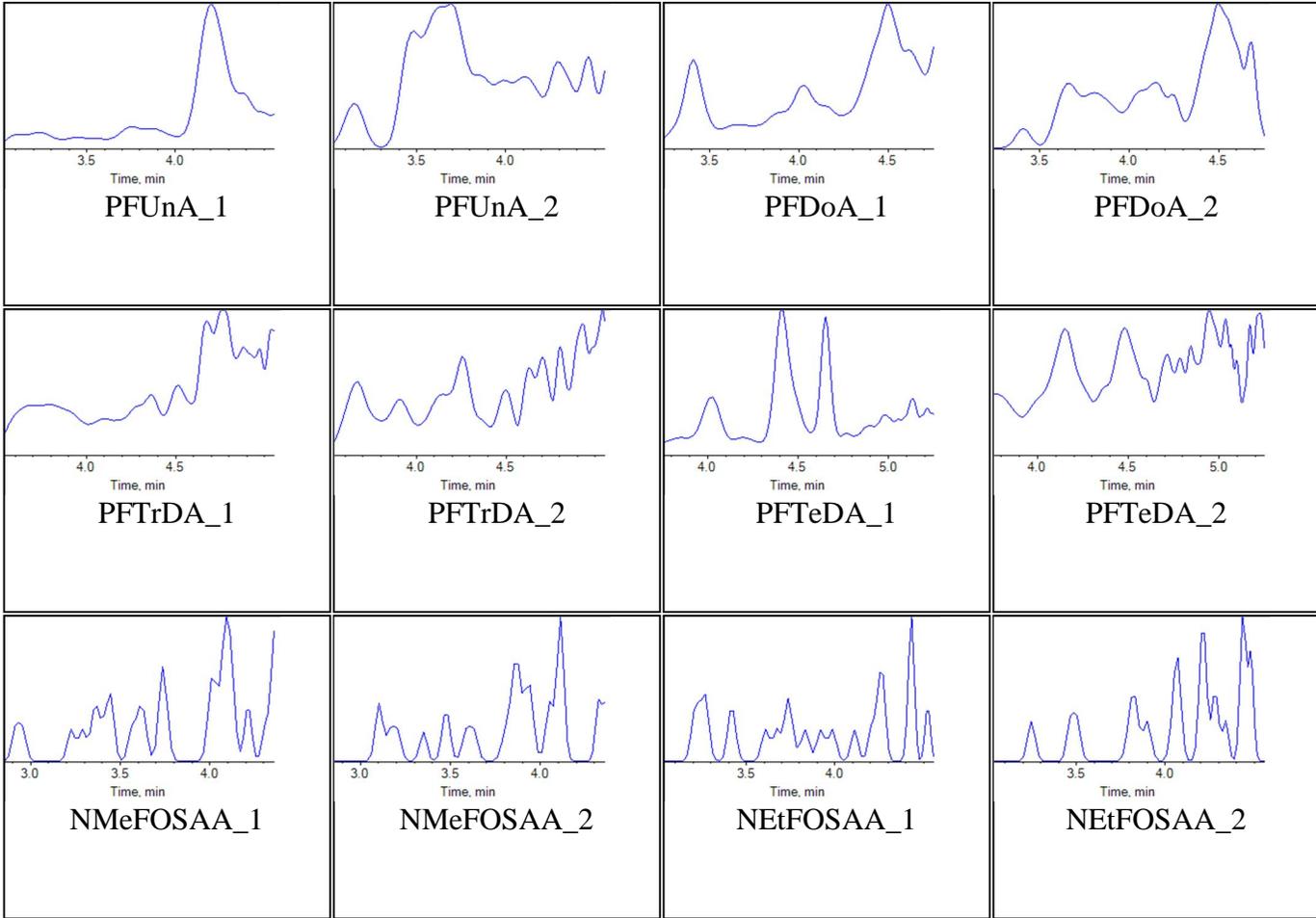


Sample Name	J8252-FS-D(5)	Injection Vial	37
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:51:37	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

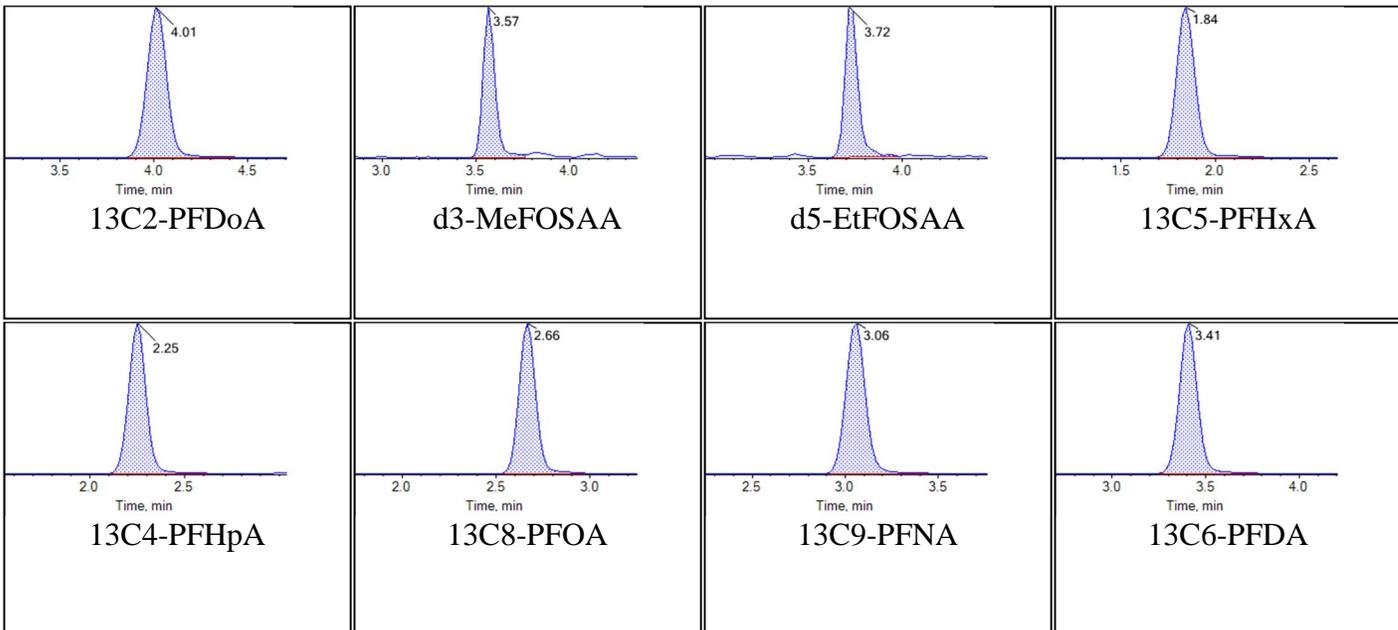
Chromatograms

Target Analytes:



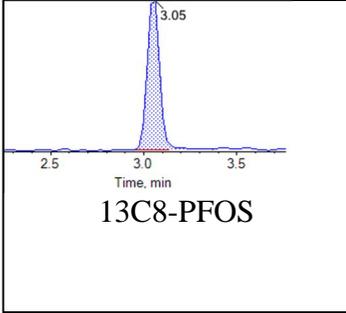
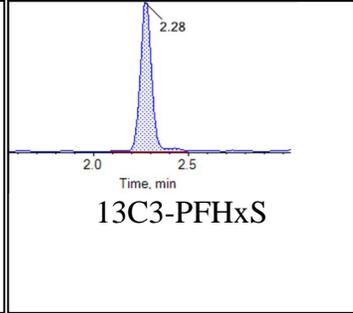
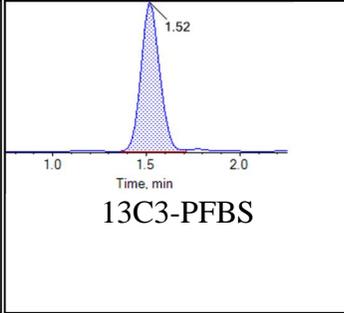
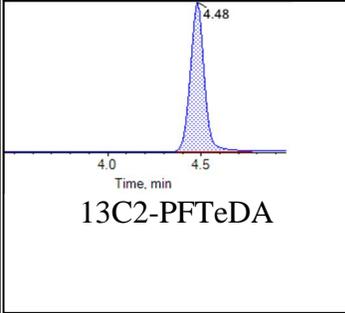
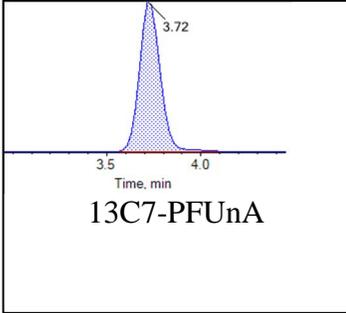


Internal Standards:



Chromatogram Report

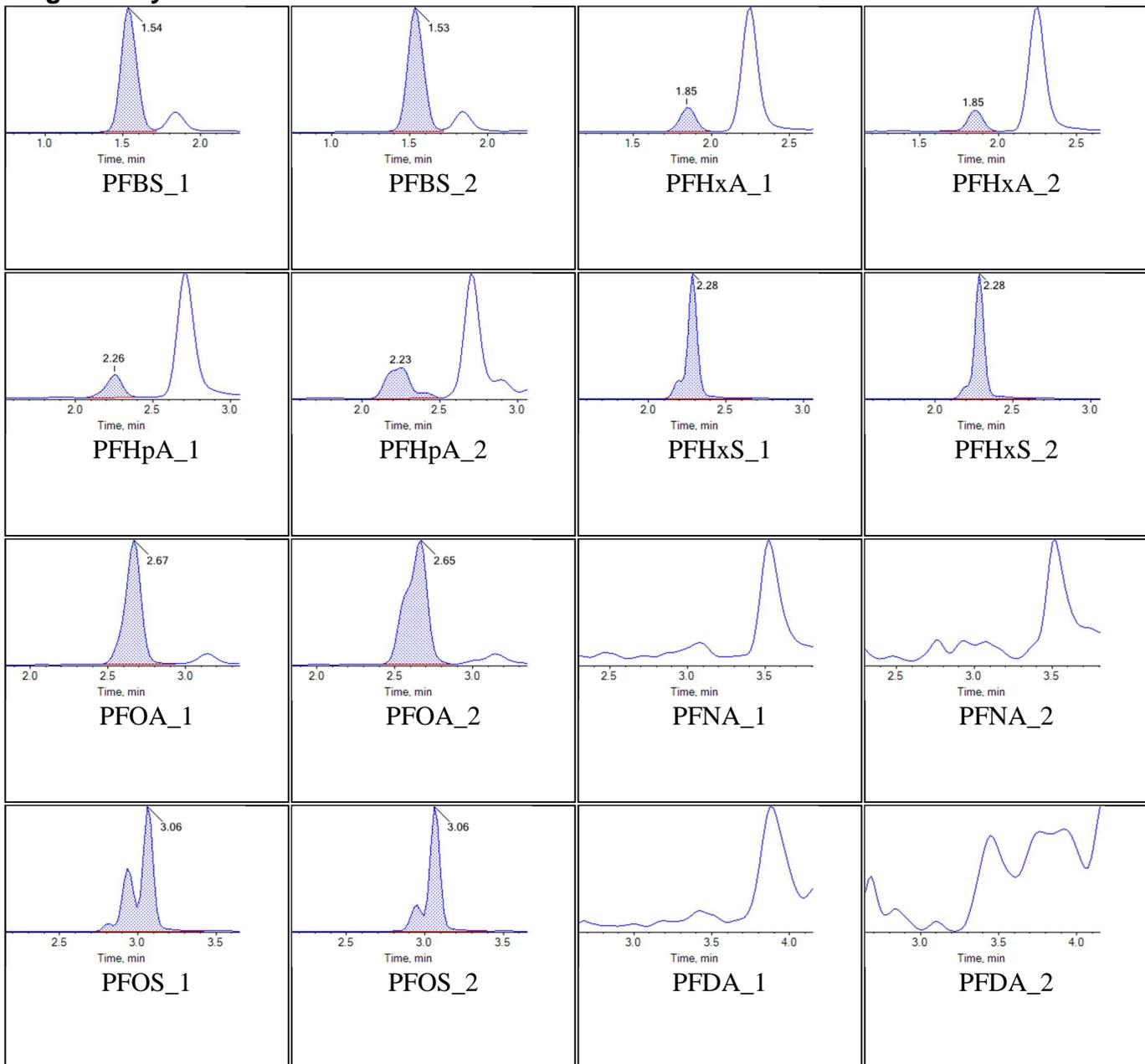
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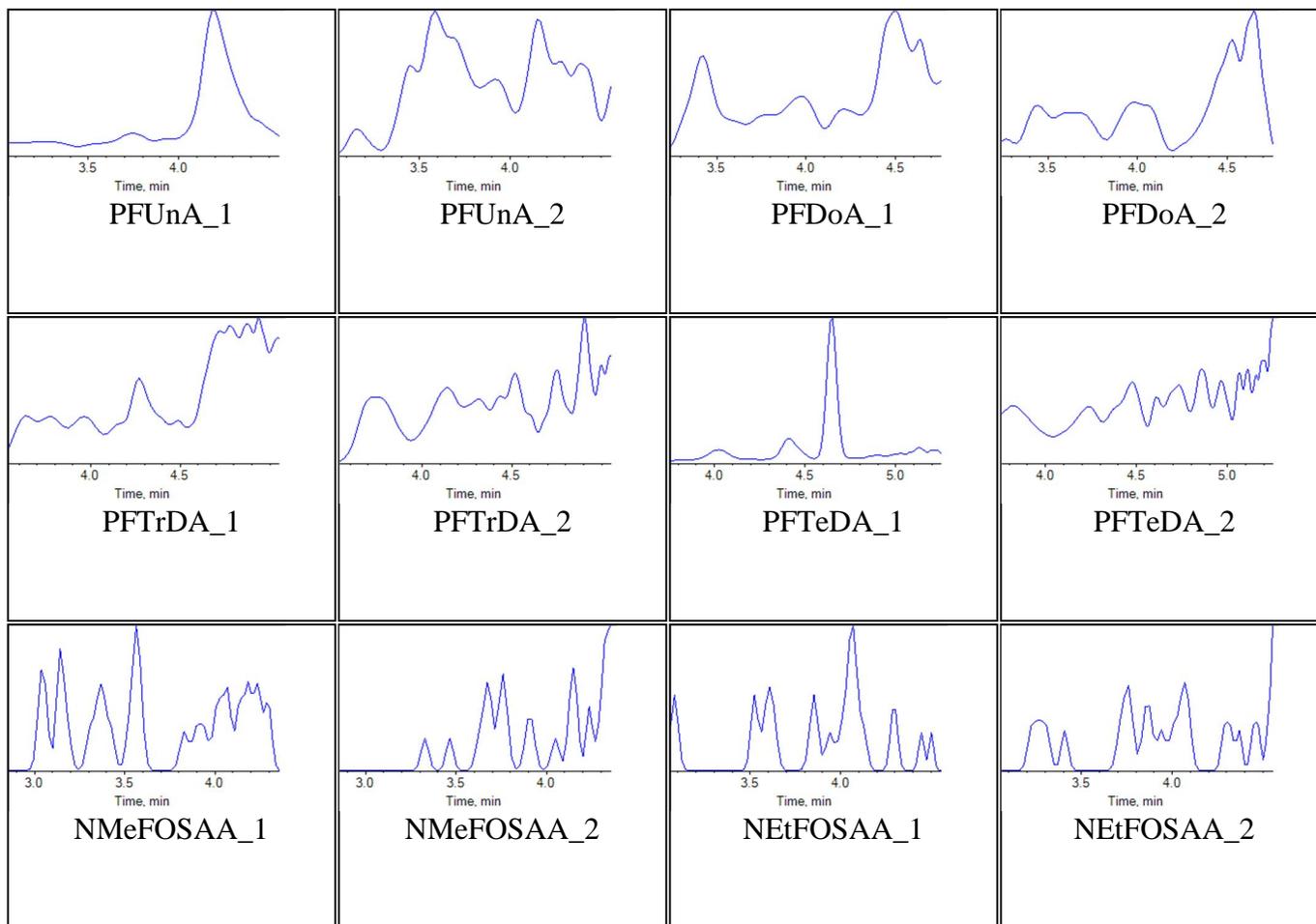
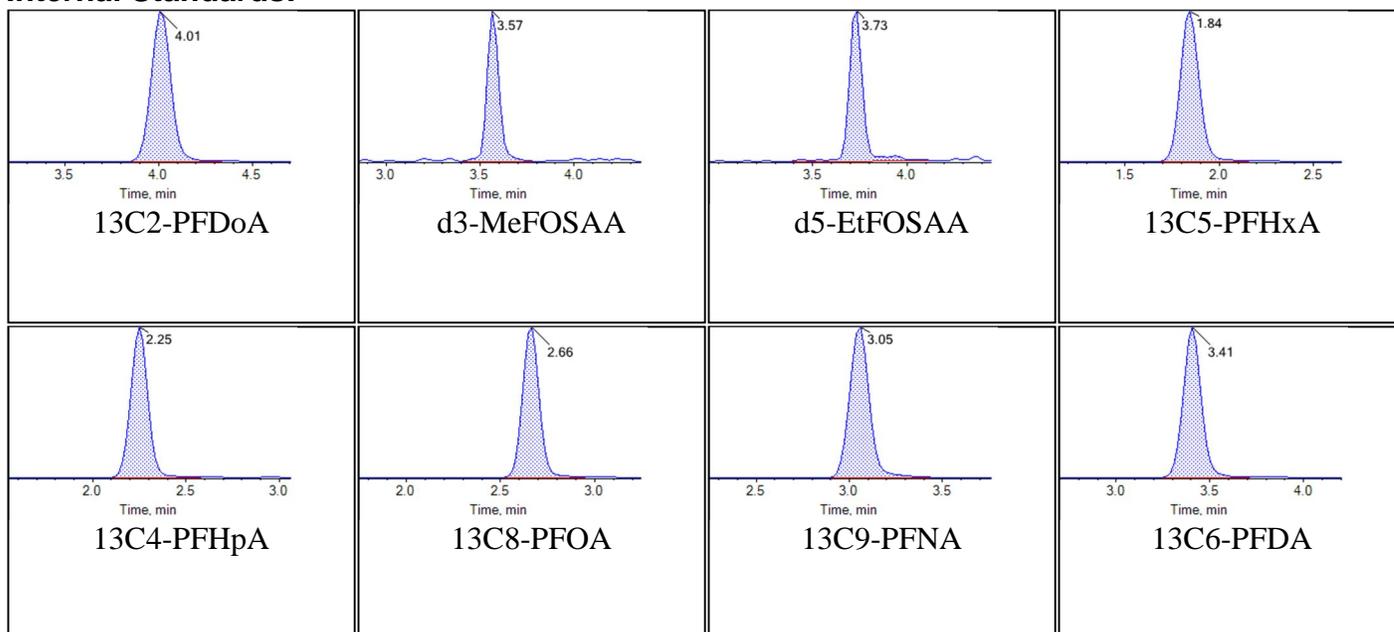


Sample Name	J8253-FS(3)	Injection Vial	38
Sample ID	VC-PM365-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:02:28	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Chromatograms

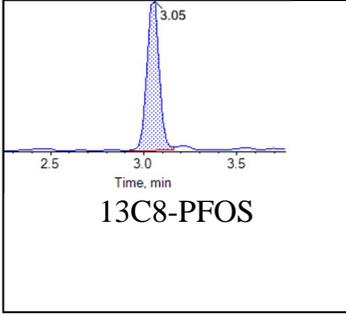
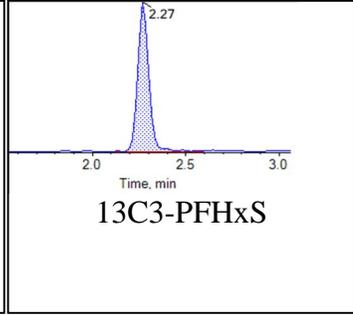
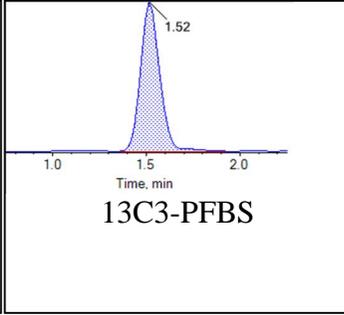
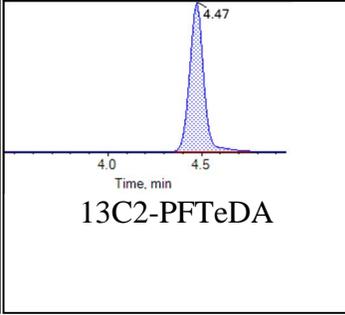
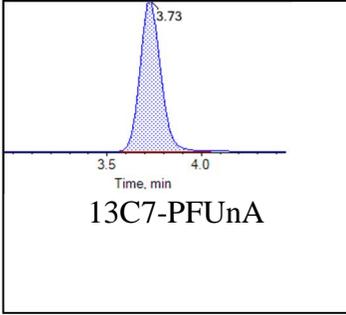
Target Analytes:



**Internal Standards:**

Chromatogram Report

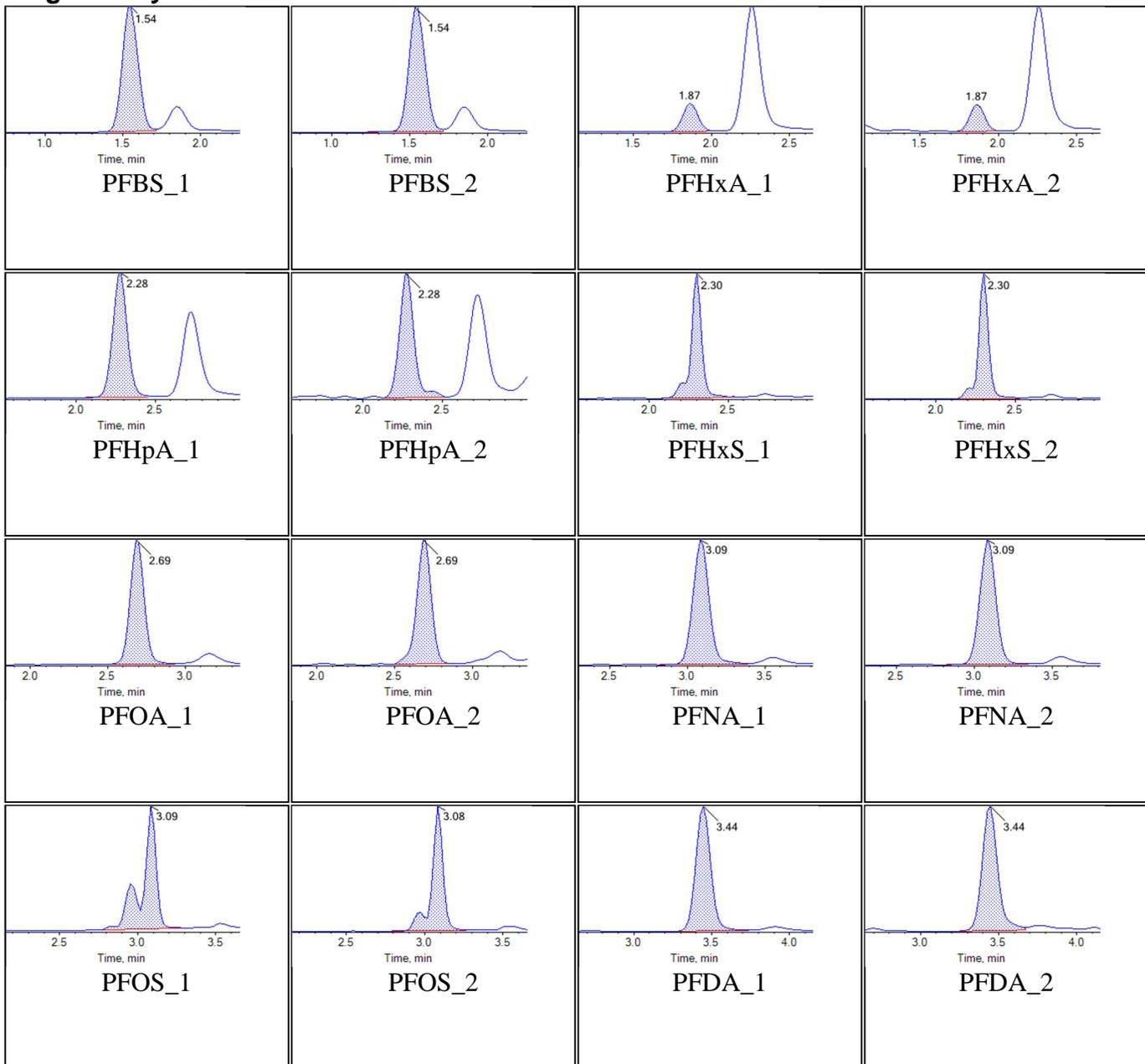
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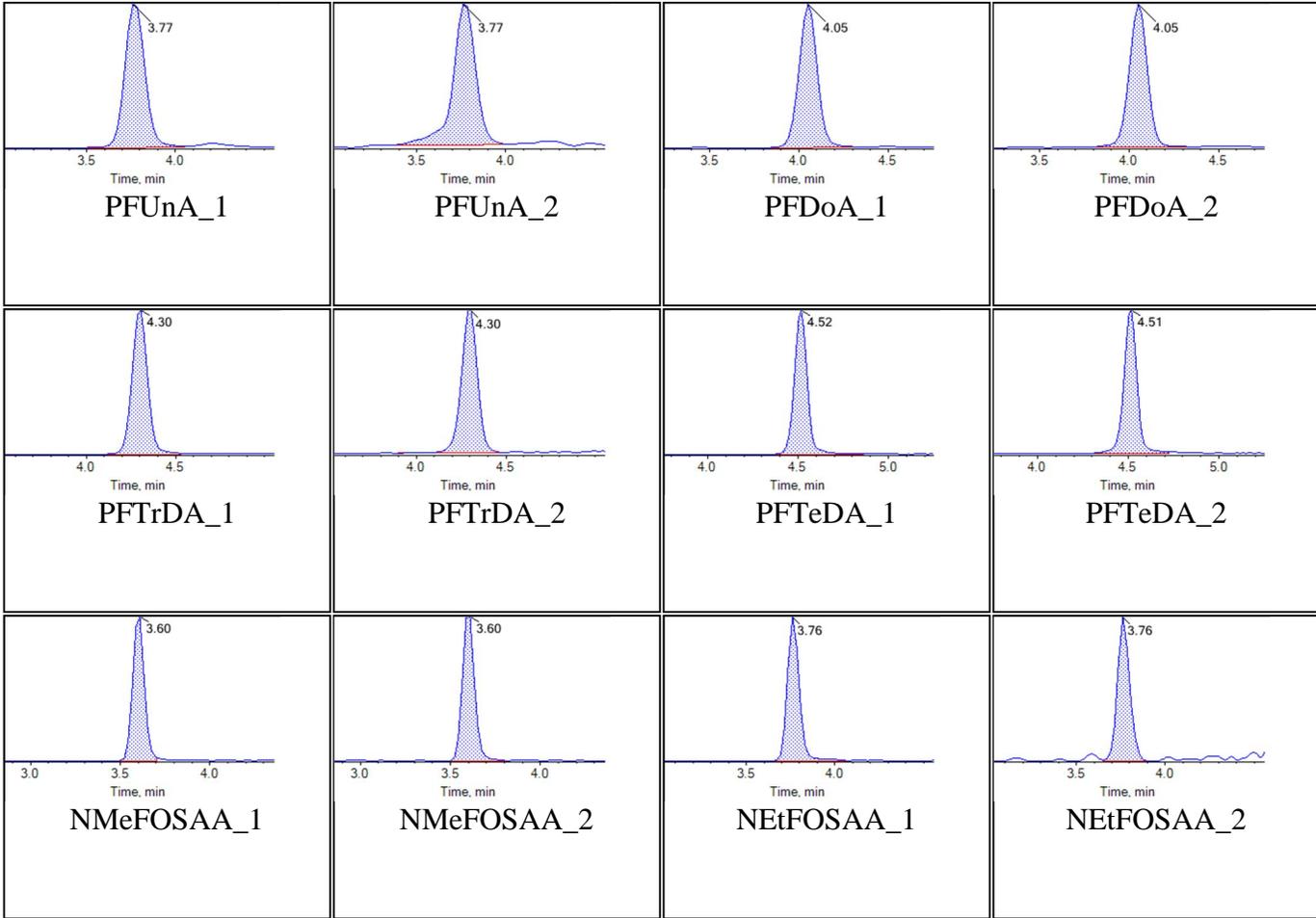


Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:04:02	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

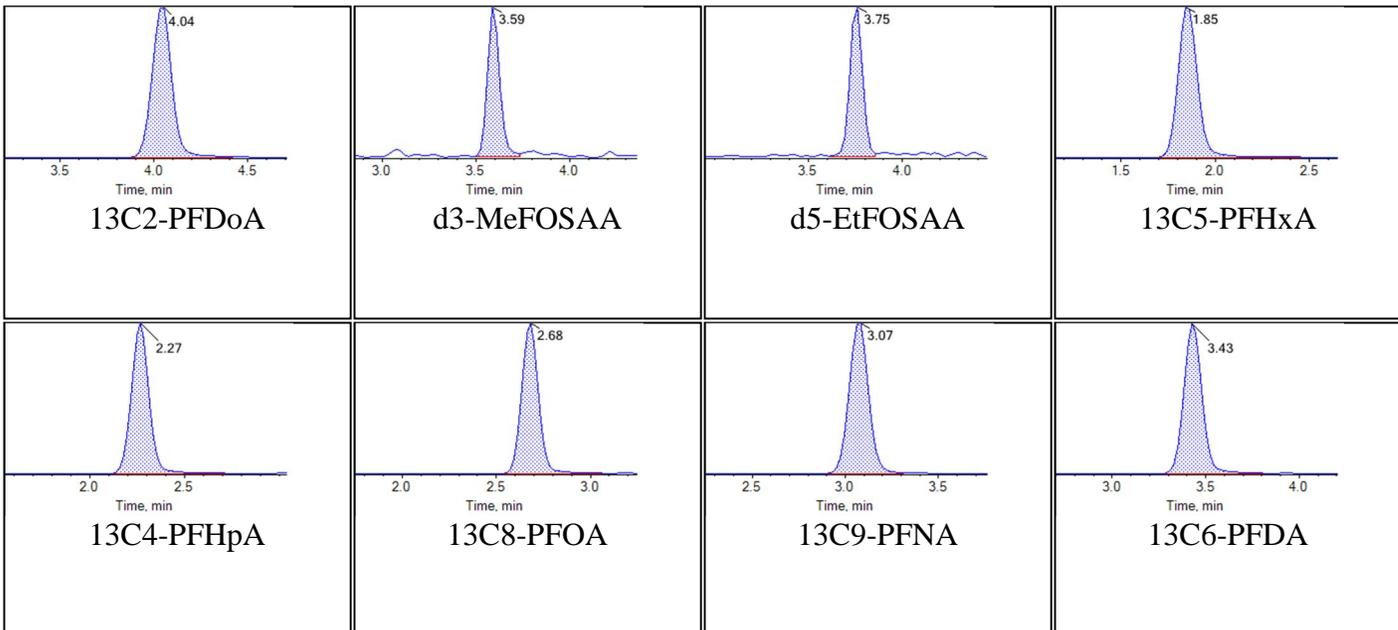
Chromatograms

Target Analytes:



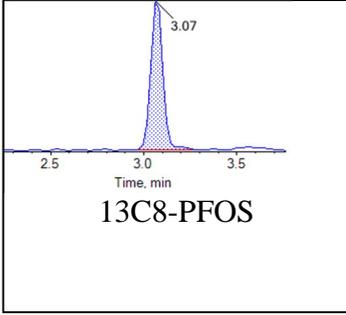
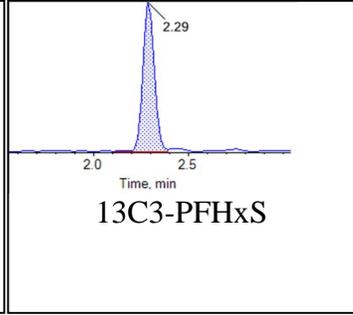
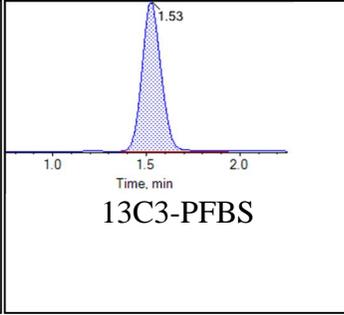
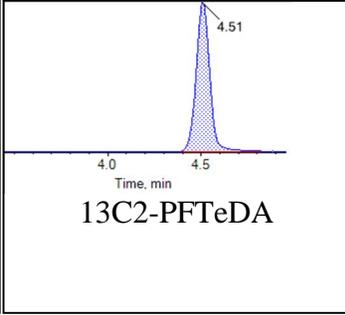
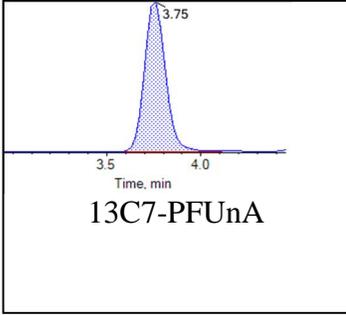


Internal Standards:



Chromatogram Report

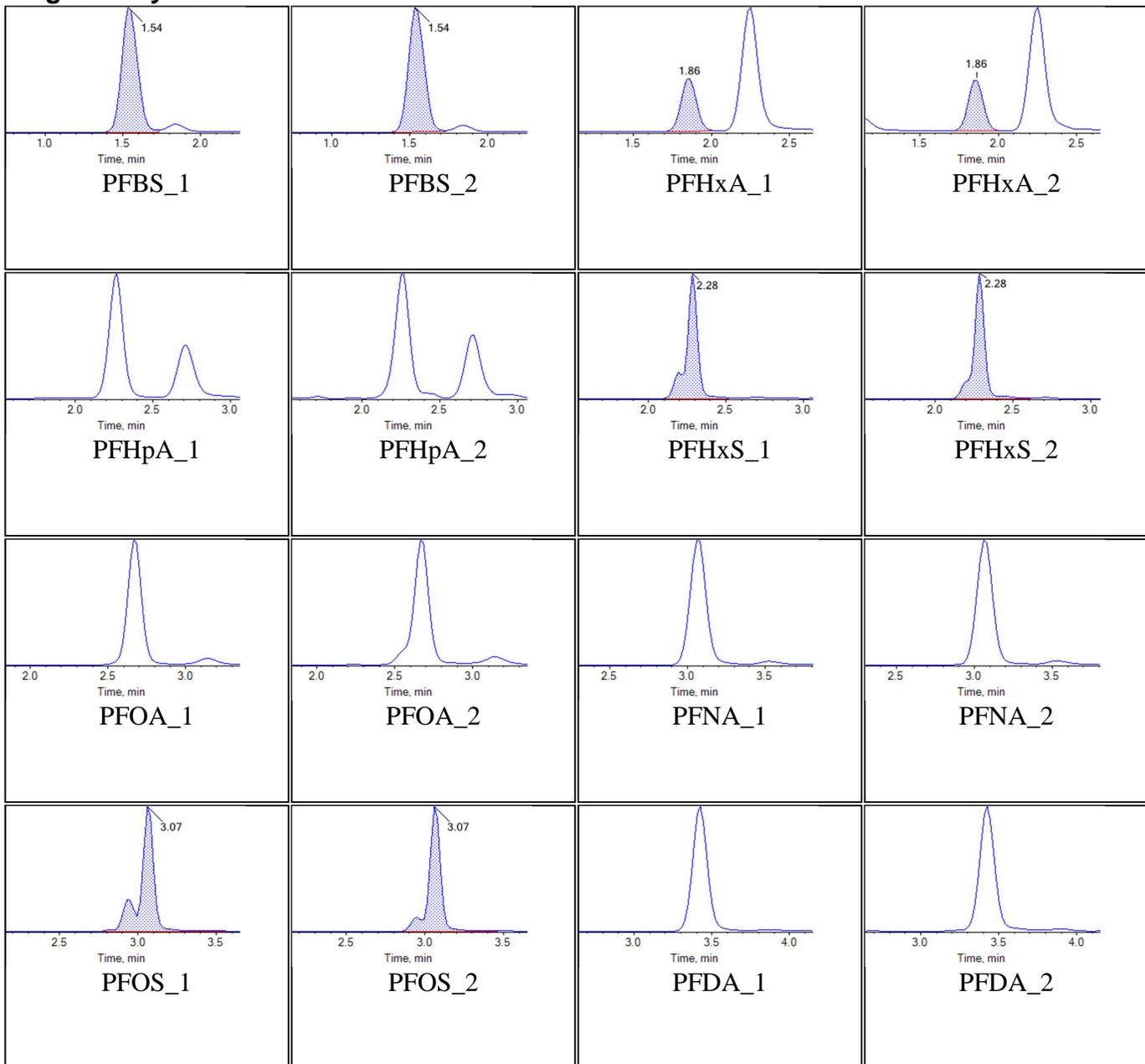
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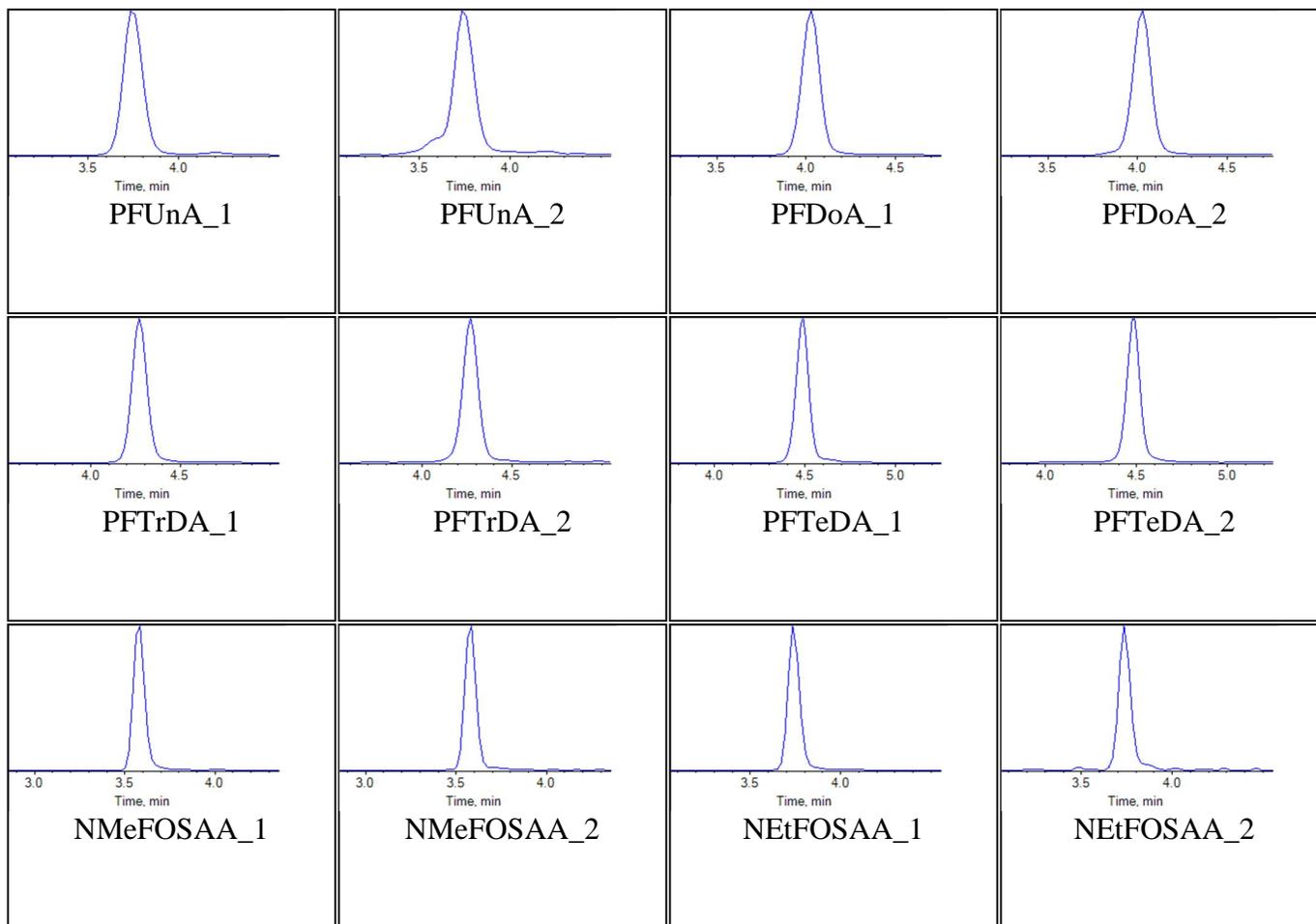
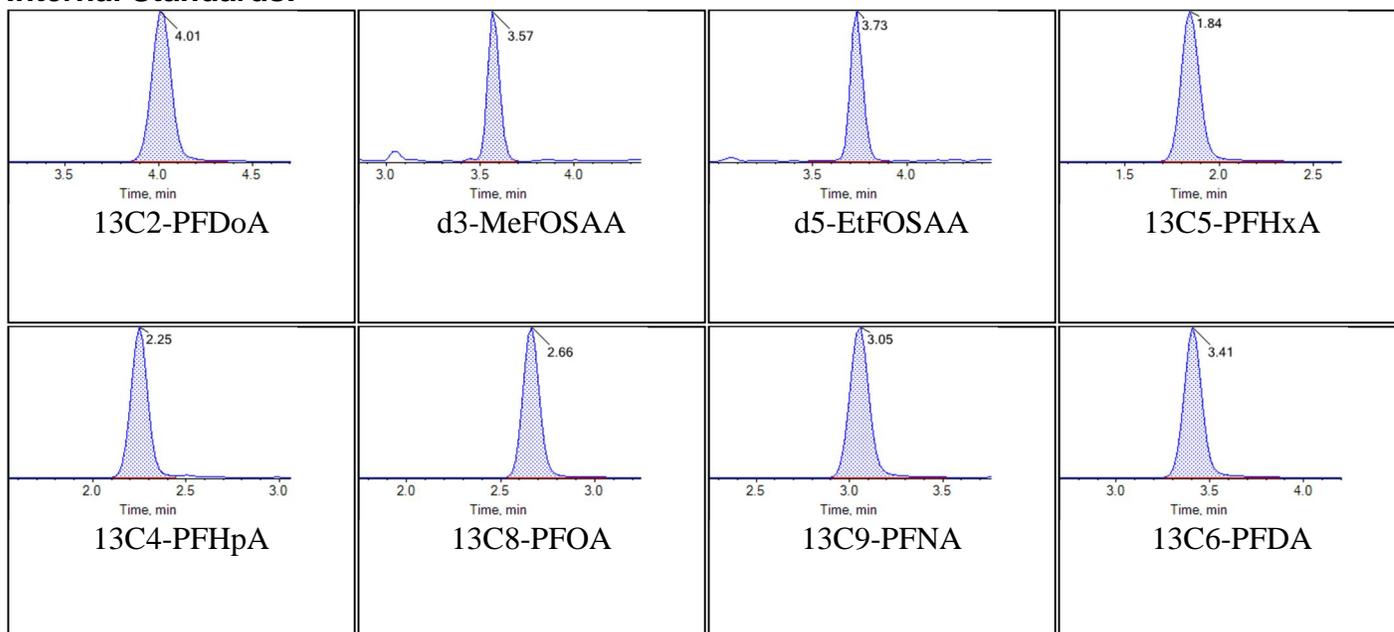


Sample Name	J8257MS-FS-D(5)	Injection Vial	40
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:24:13	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Chromatograms

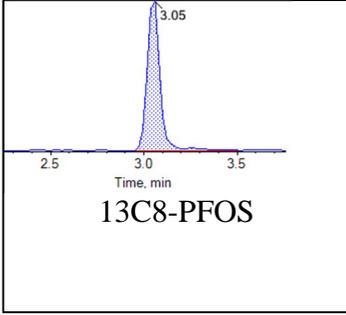
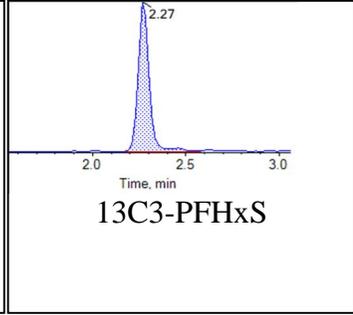
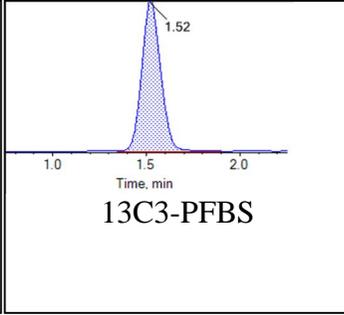
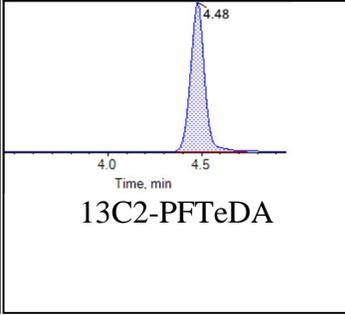
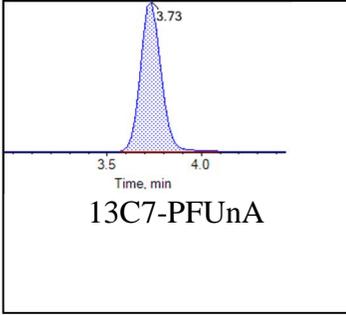
Target Analytes:



**Internal Standards:**

Chromatogram Report

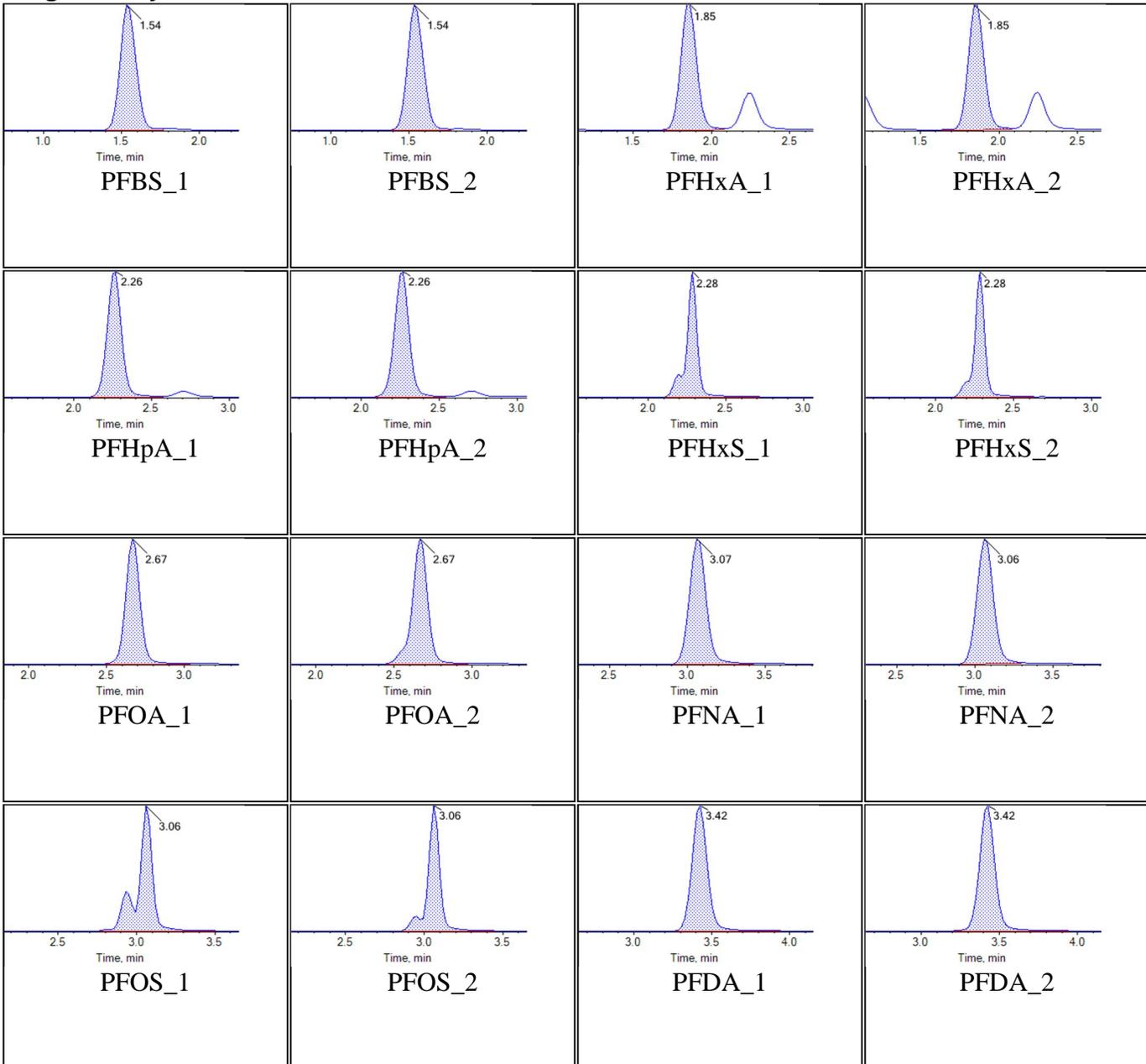
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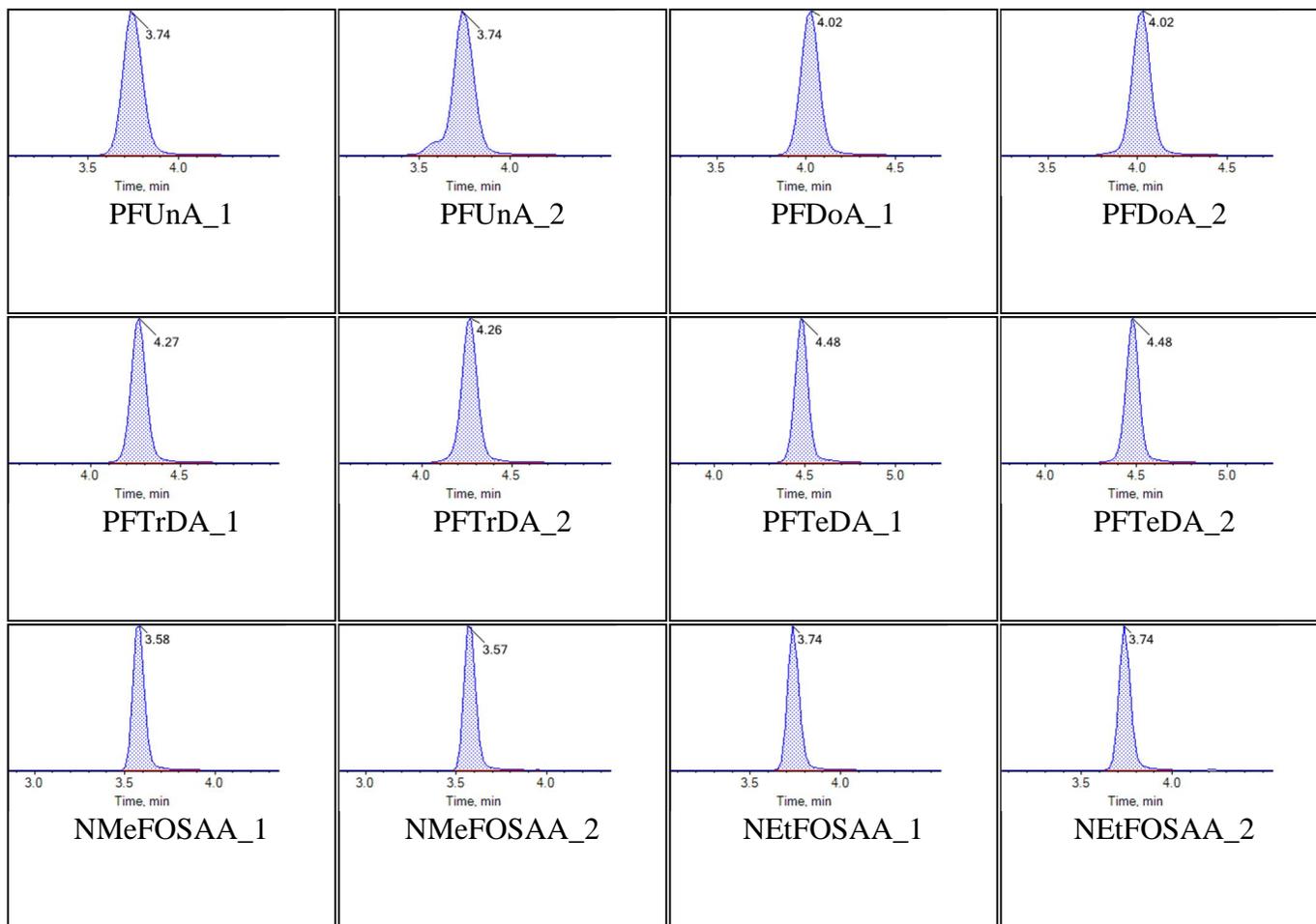
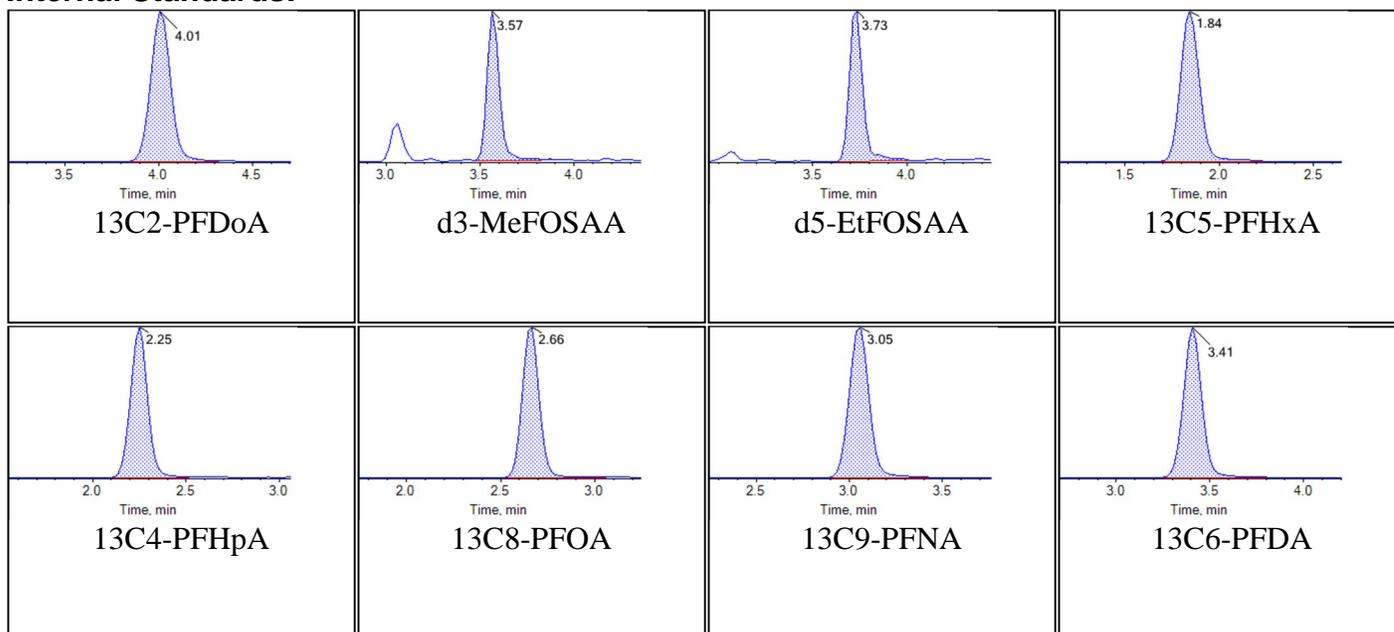


Sample Name	J8258MSD-FS(3)	Injection Vial	41
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:35:05	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Chromatograms

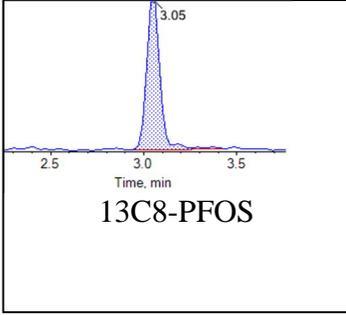
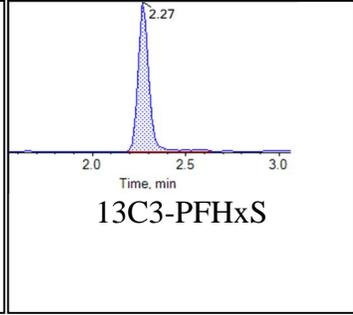
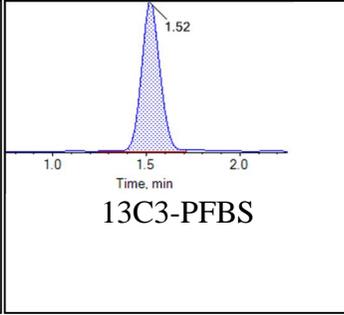
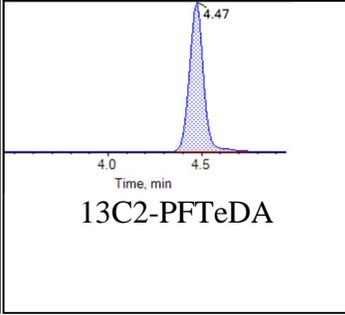
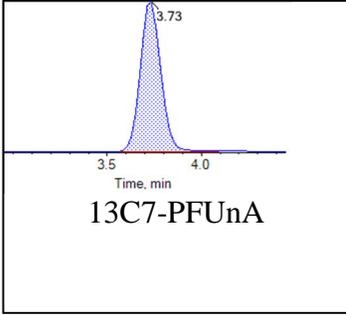
Target Analytes:



**Internal Standards:**

Chromatogram Report

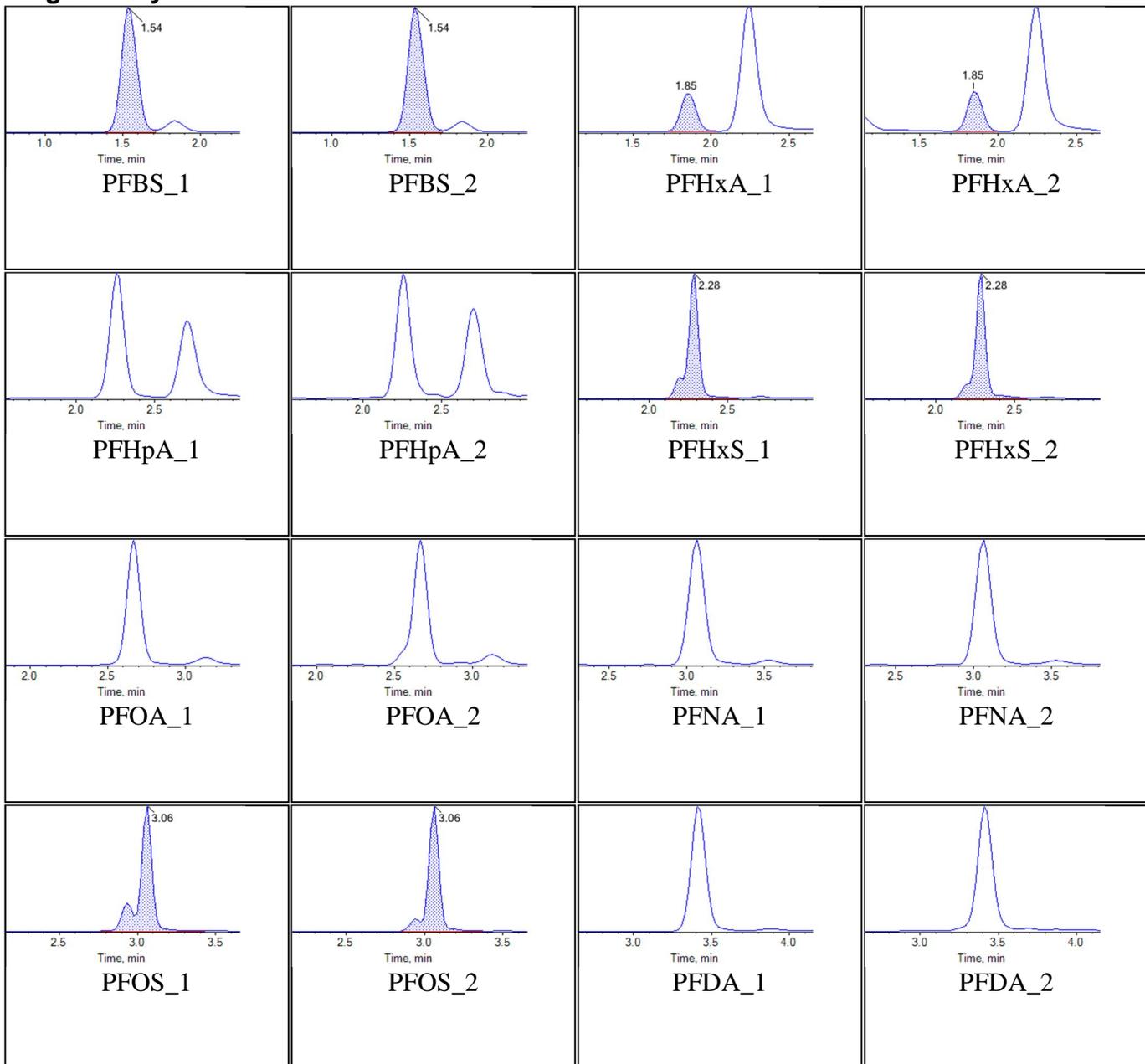
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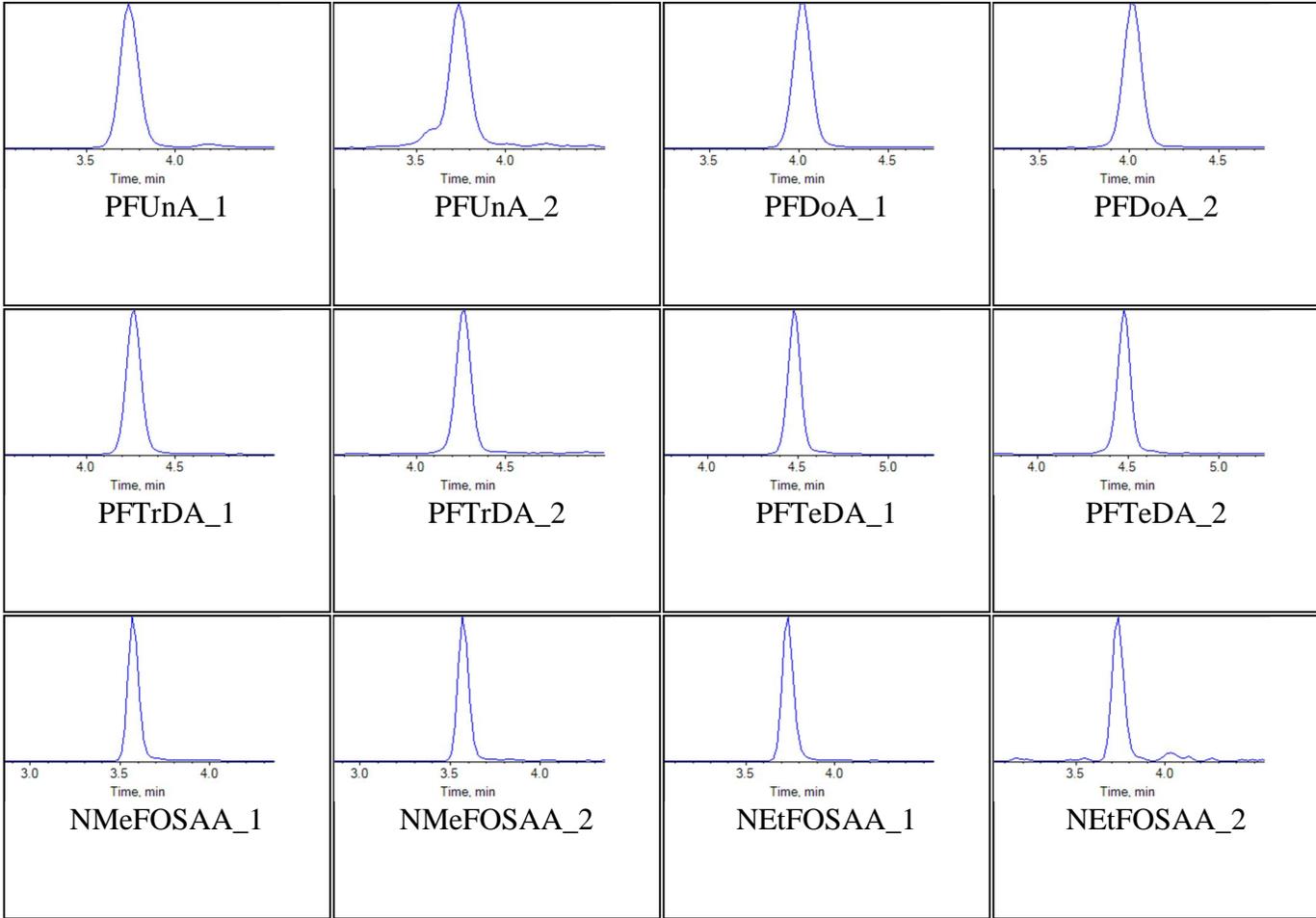


Sample Name	J8258MSD-FS-D(5)	Injection Vial	42
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:45:56	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

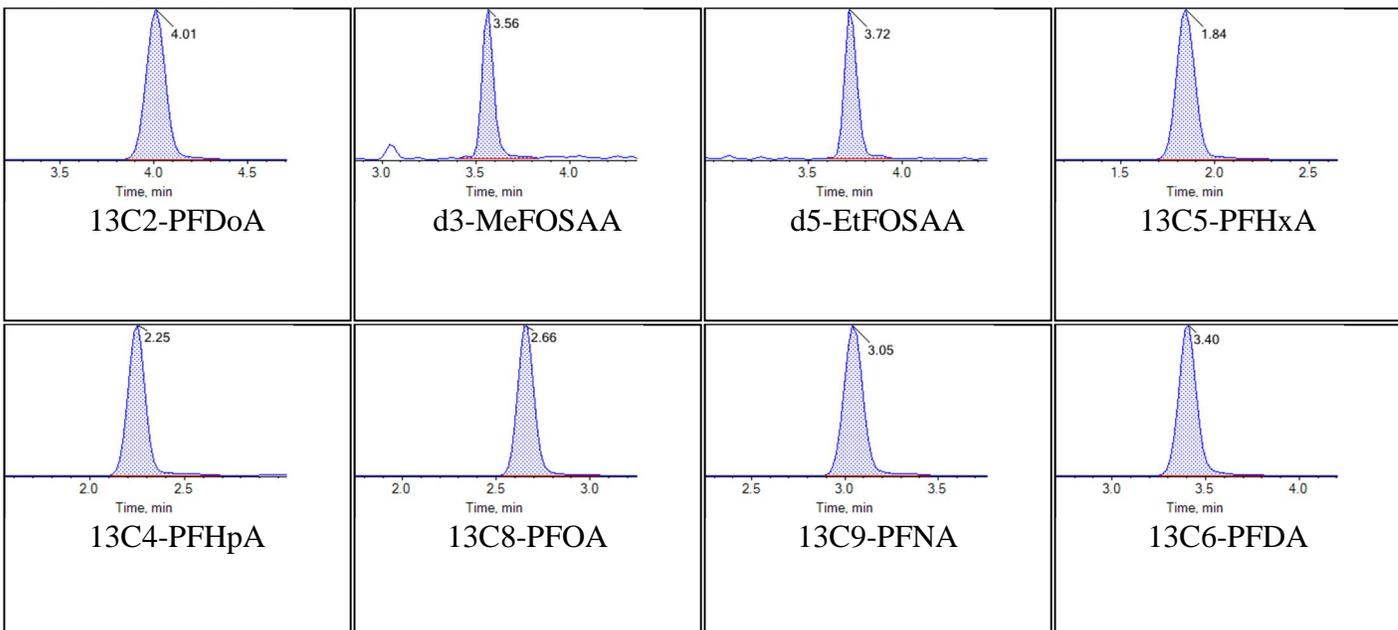
Chromatograms

Target Analytes:



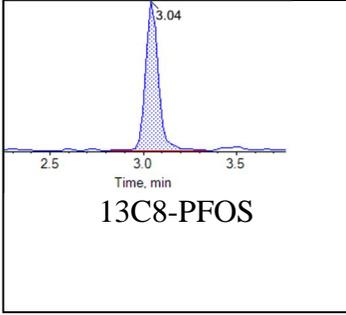
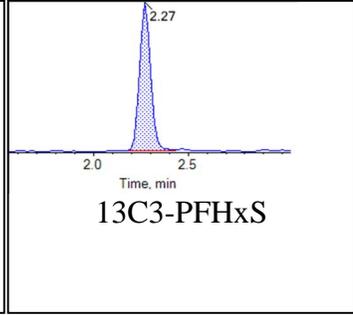
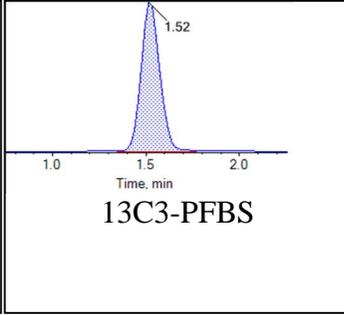
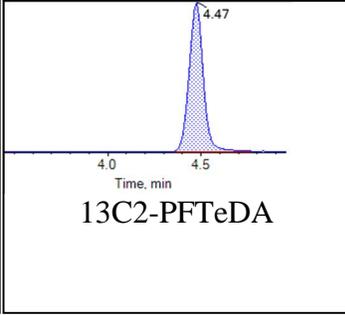
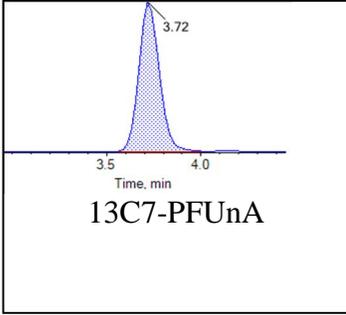


Internal Standards:



Chromatogram Report

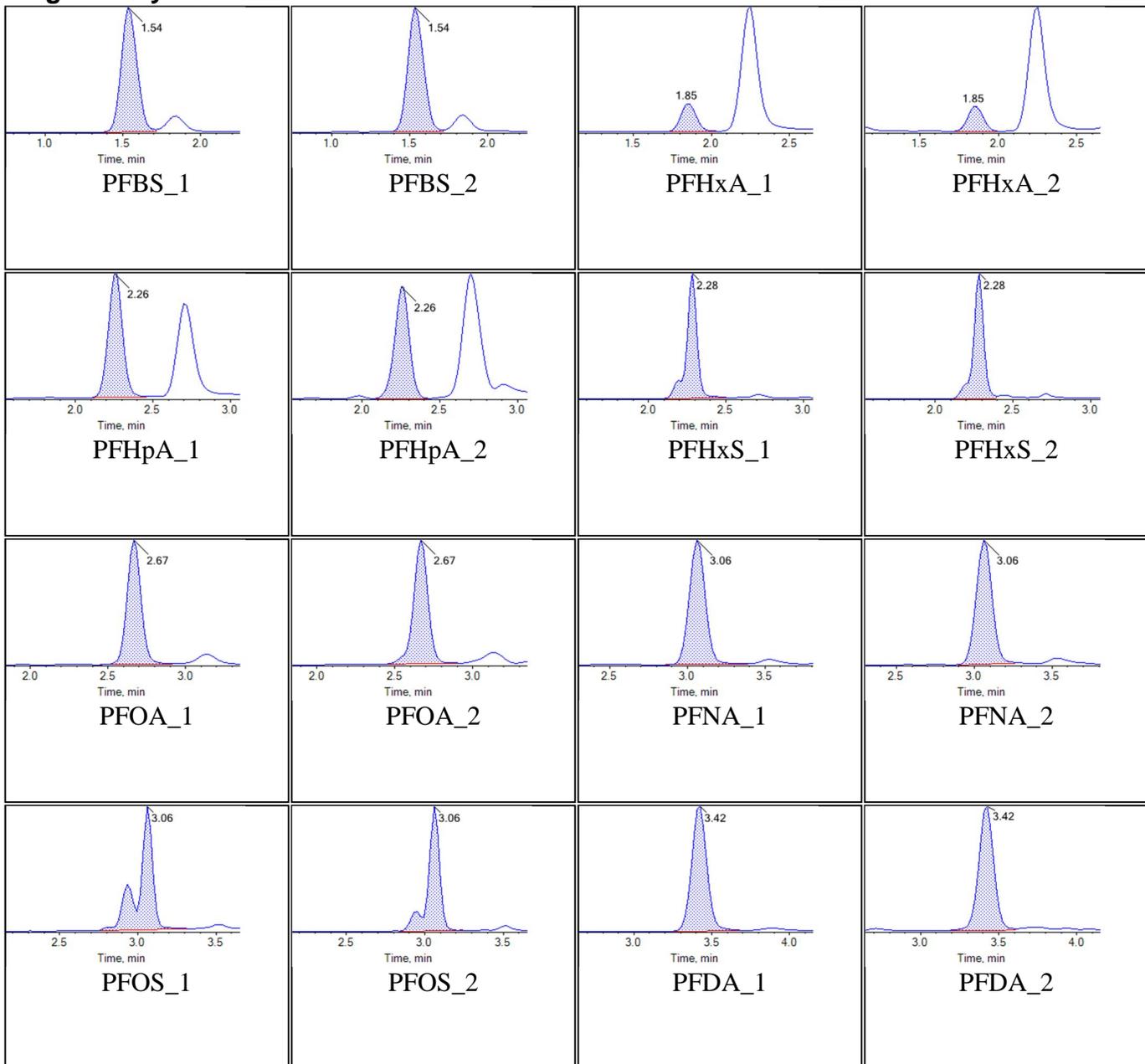
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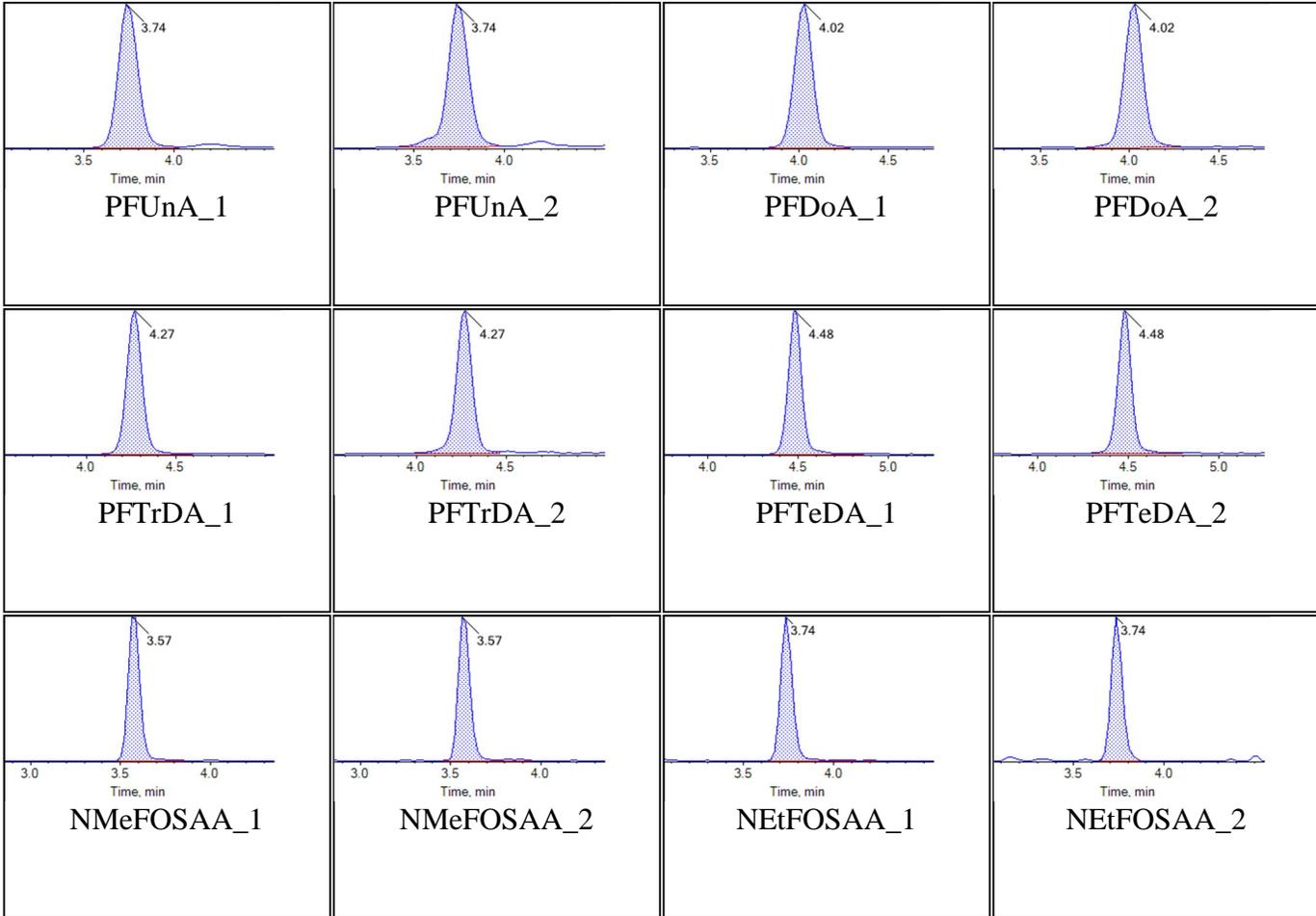


Sample Name	KB85 CCV	Injection Vial	43
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:56:48	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

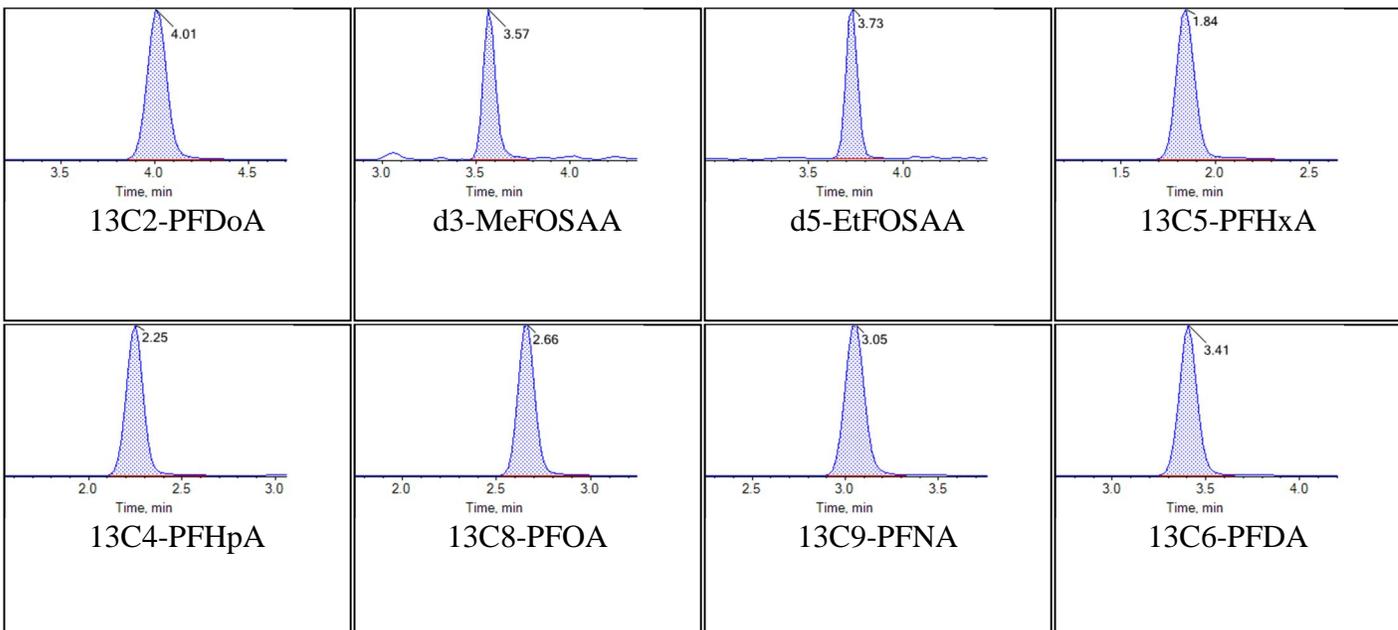
Chromatograms

Target Analytes:



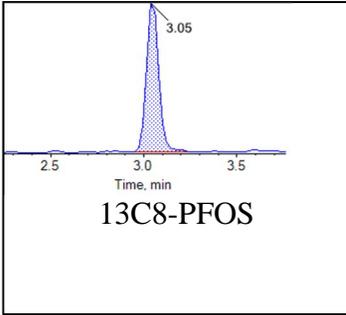
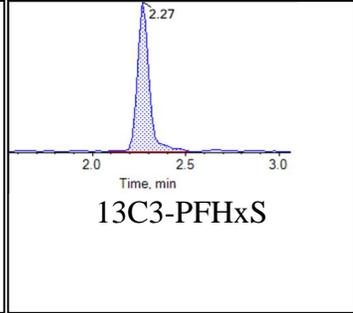
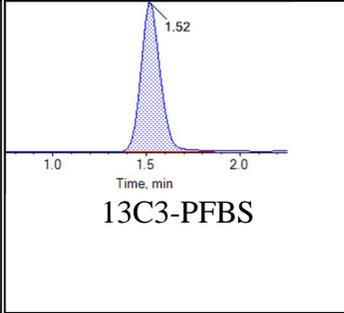
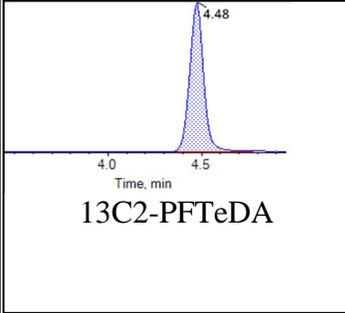
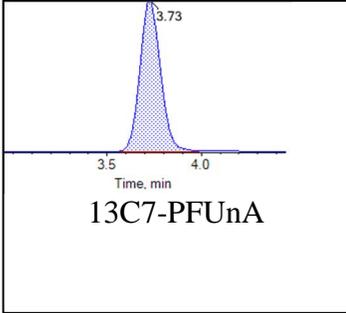


Internal Standards:



Chromatogram Report

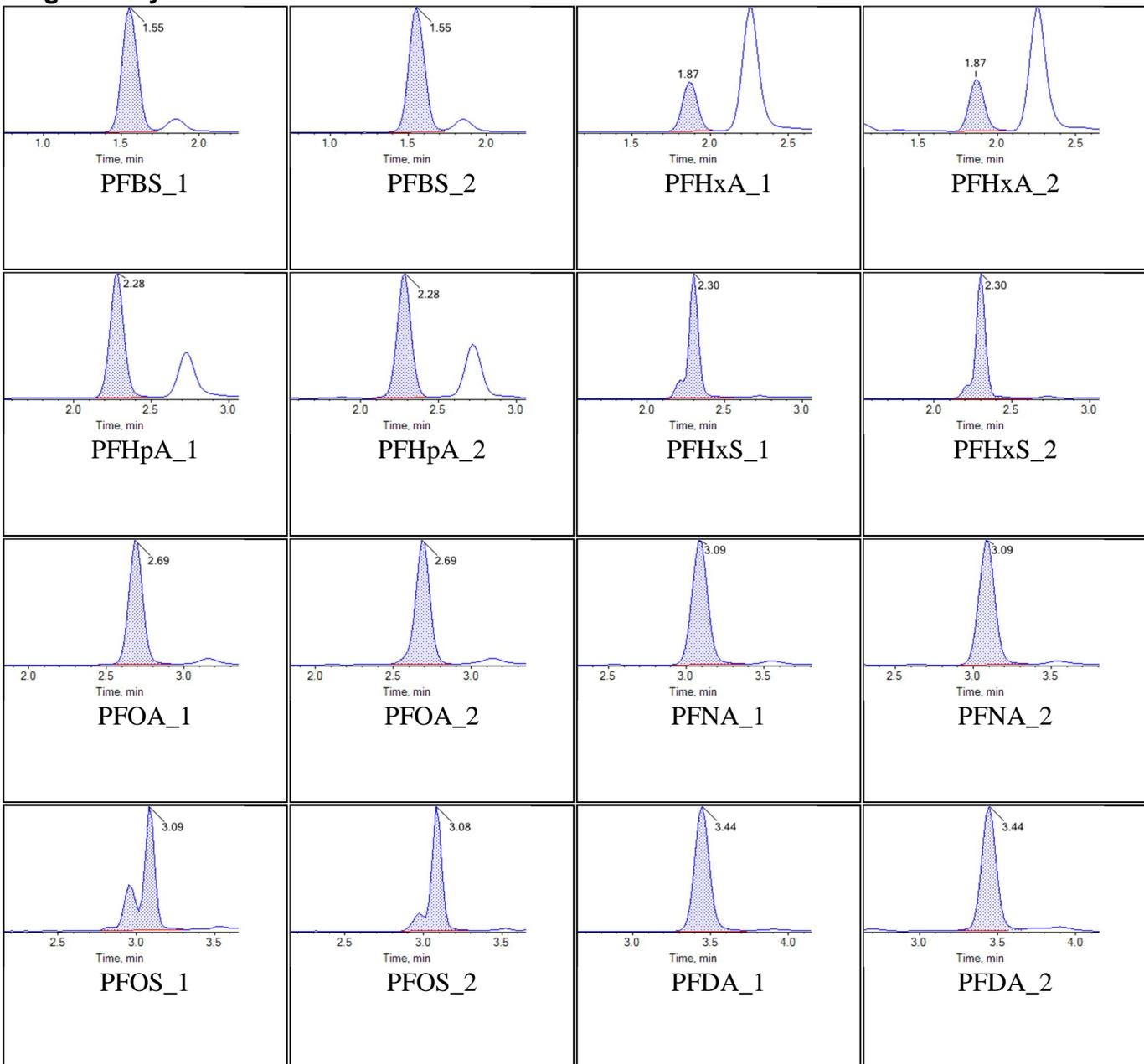
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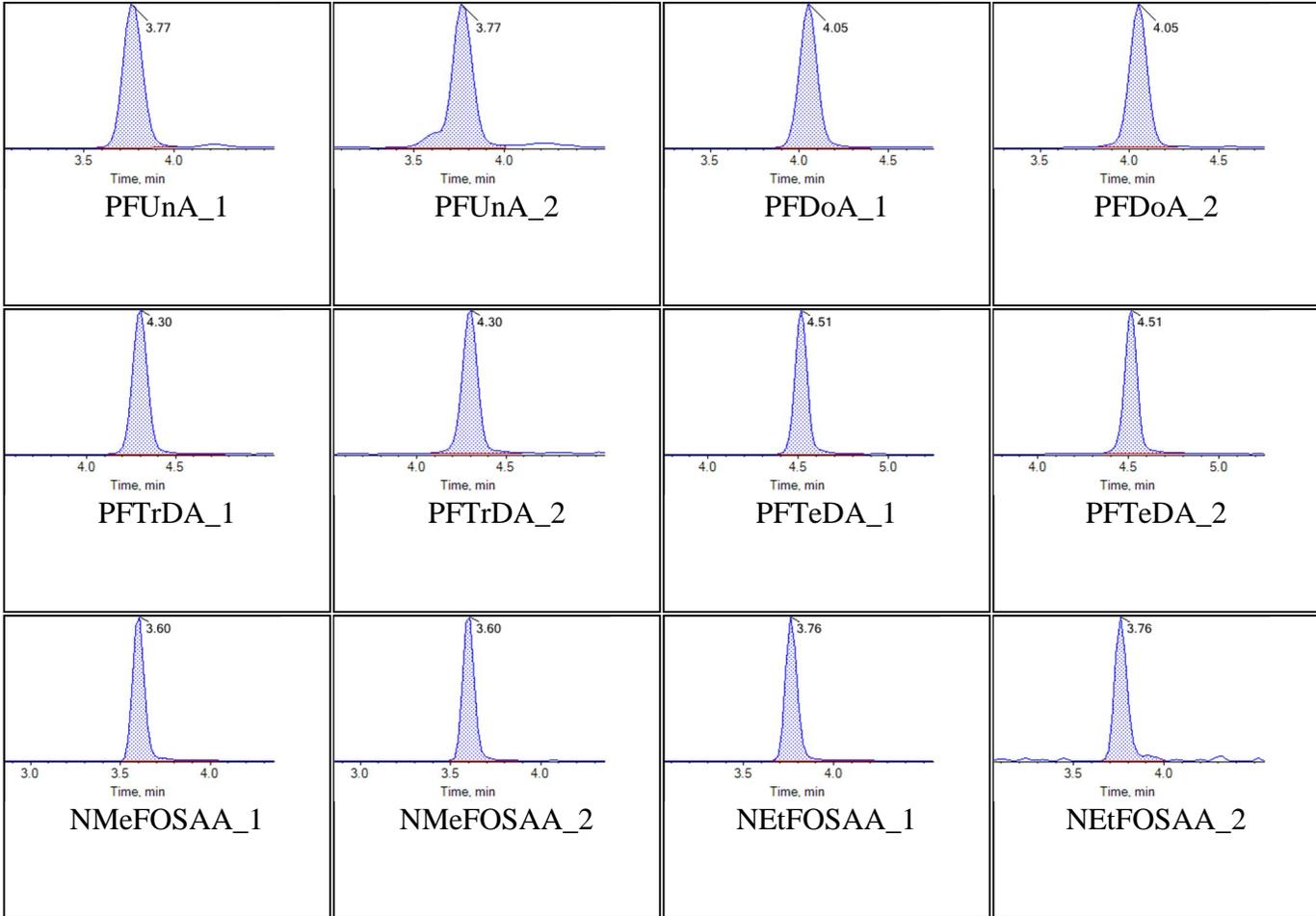


Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:14:55	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

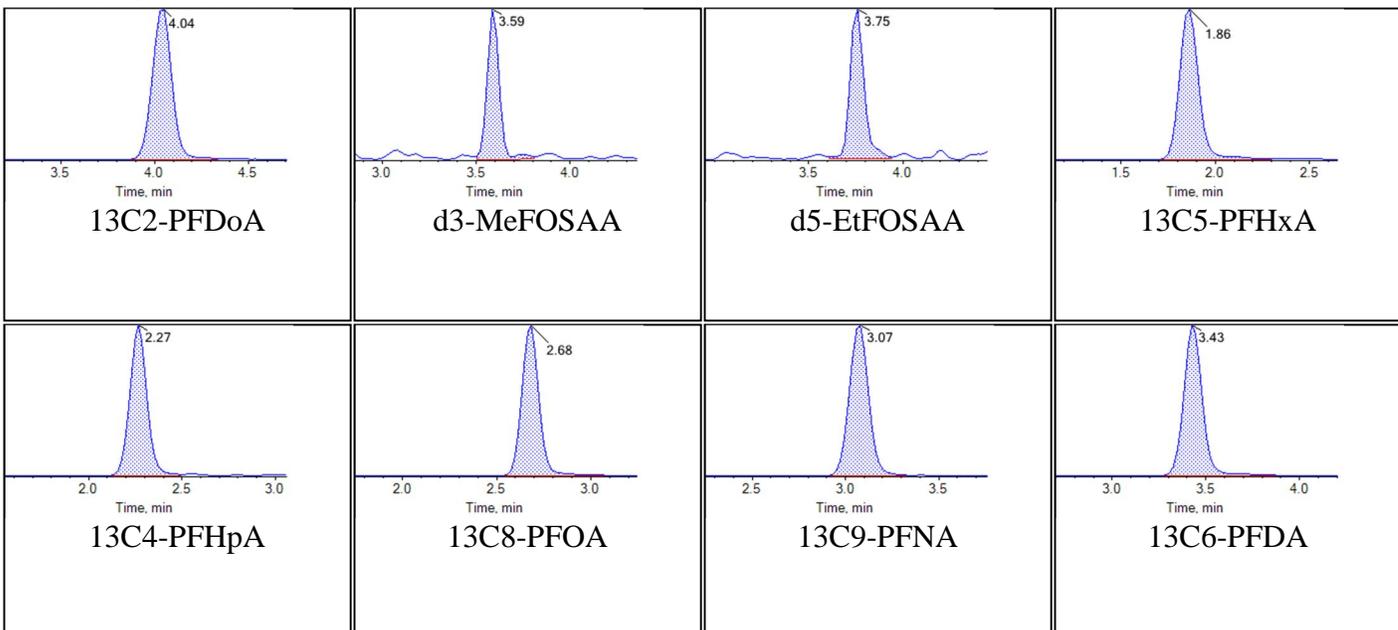
Chromatograms

Target Analytes:



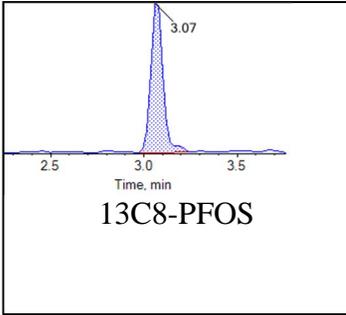
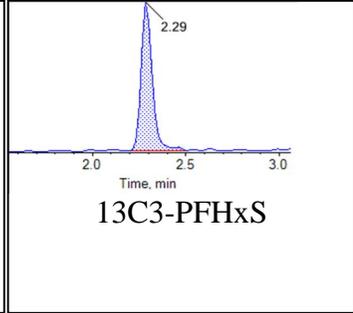
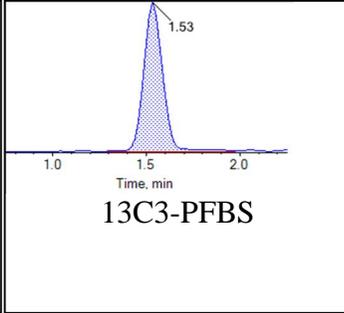
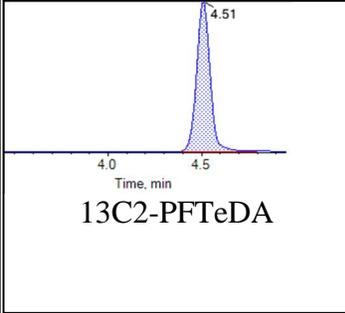
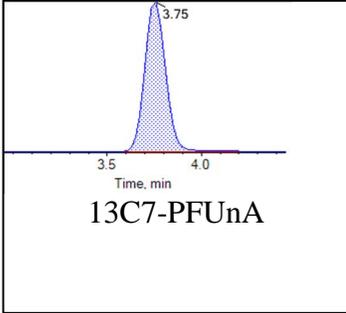


Internal Standards:



Chromatogram Report

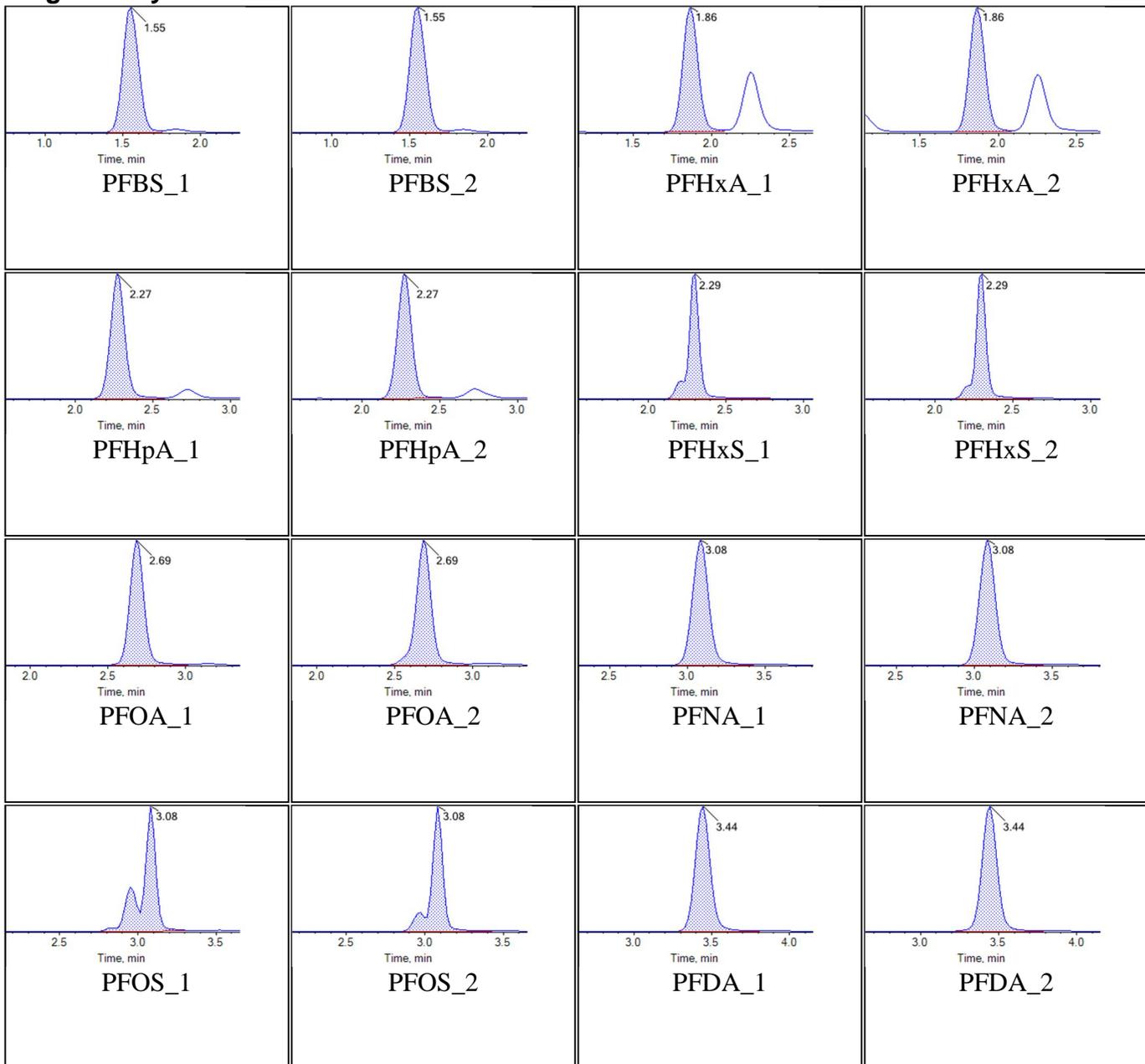
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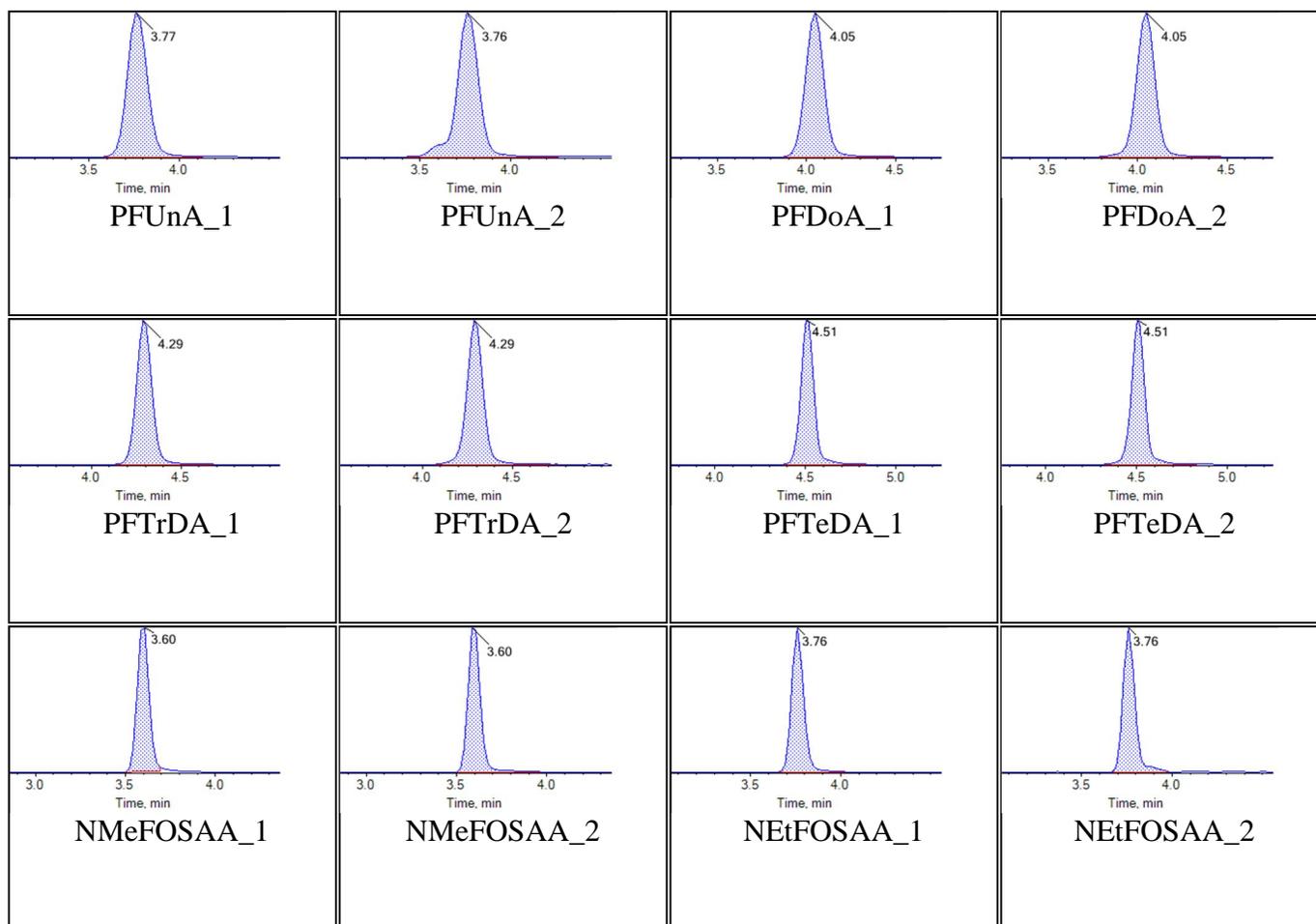
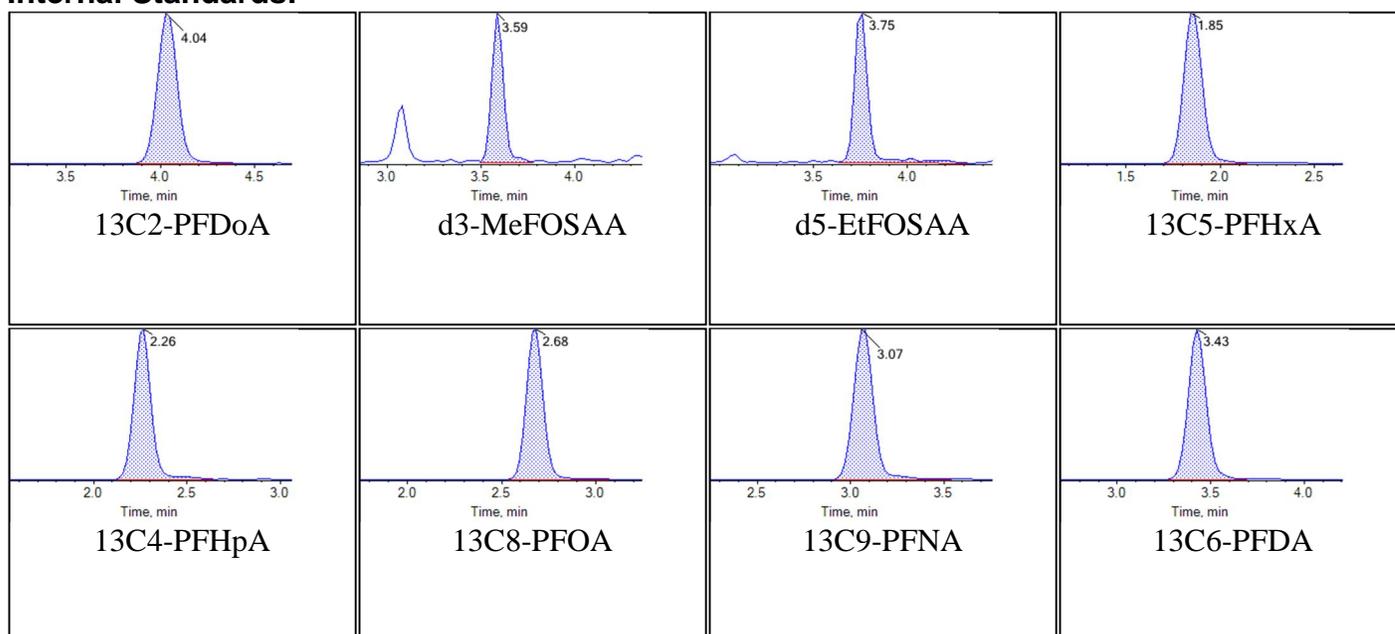


Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:25:46	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Chromatograms

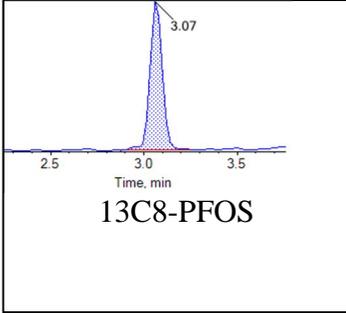
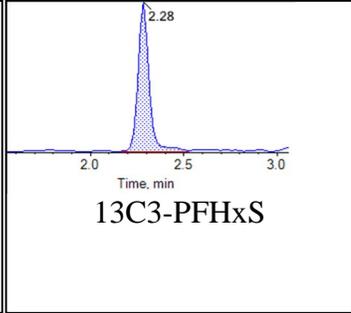
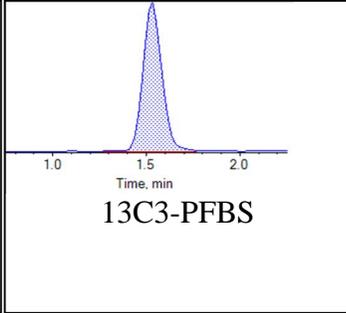
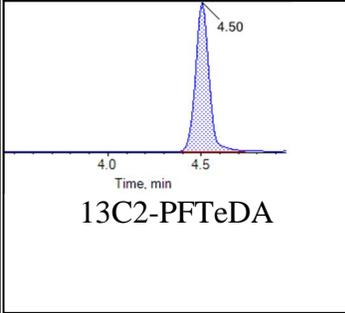
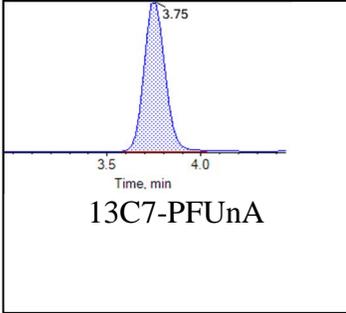
Target Analytes:



**Internal Standards:**

Chromatogram Report

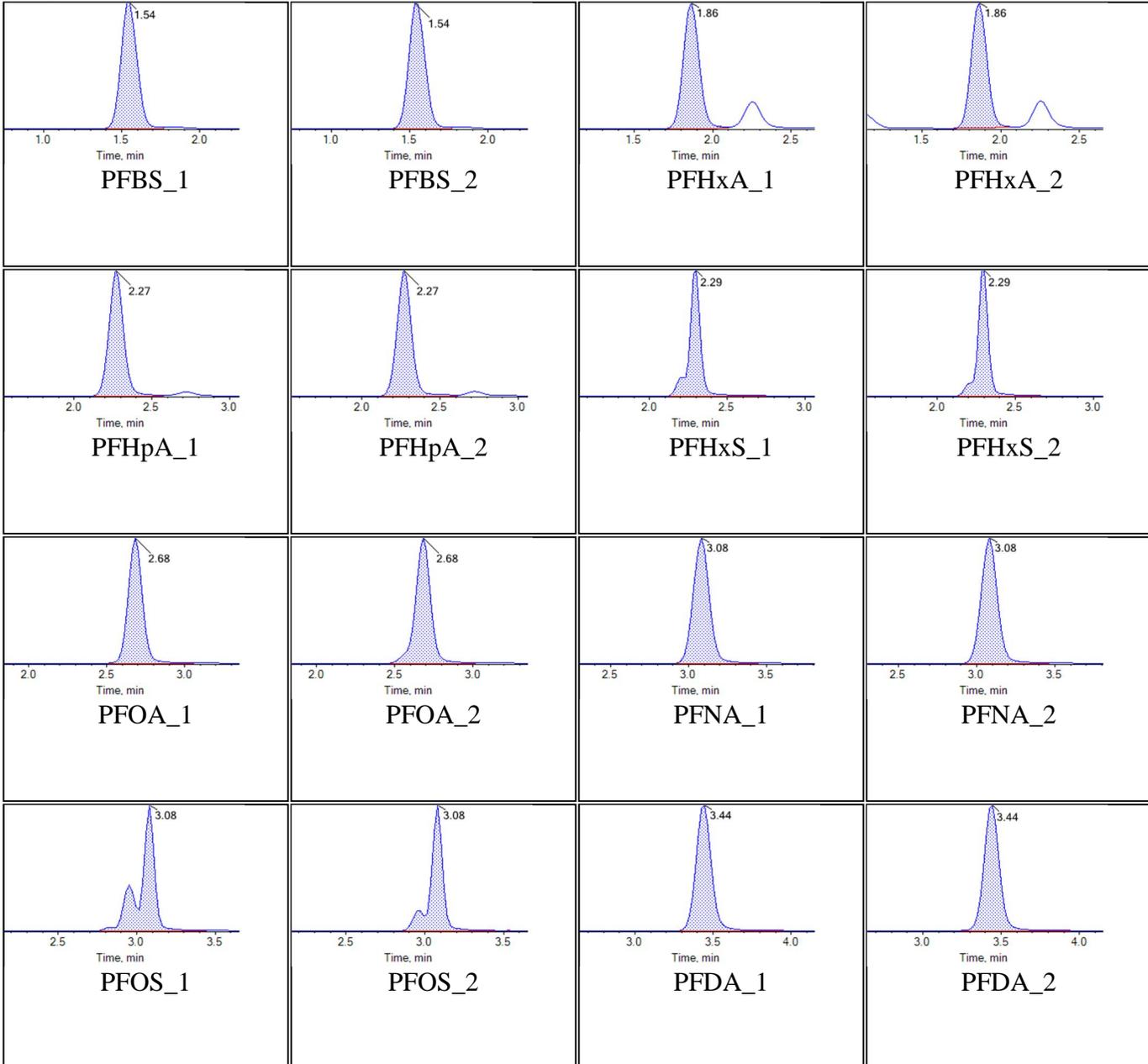
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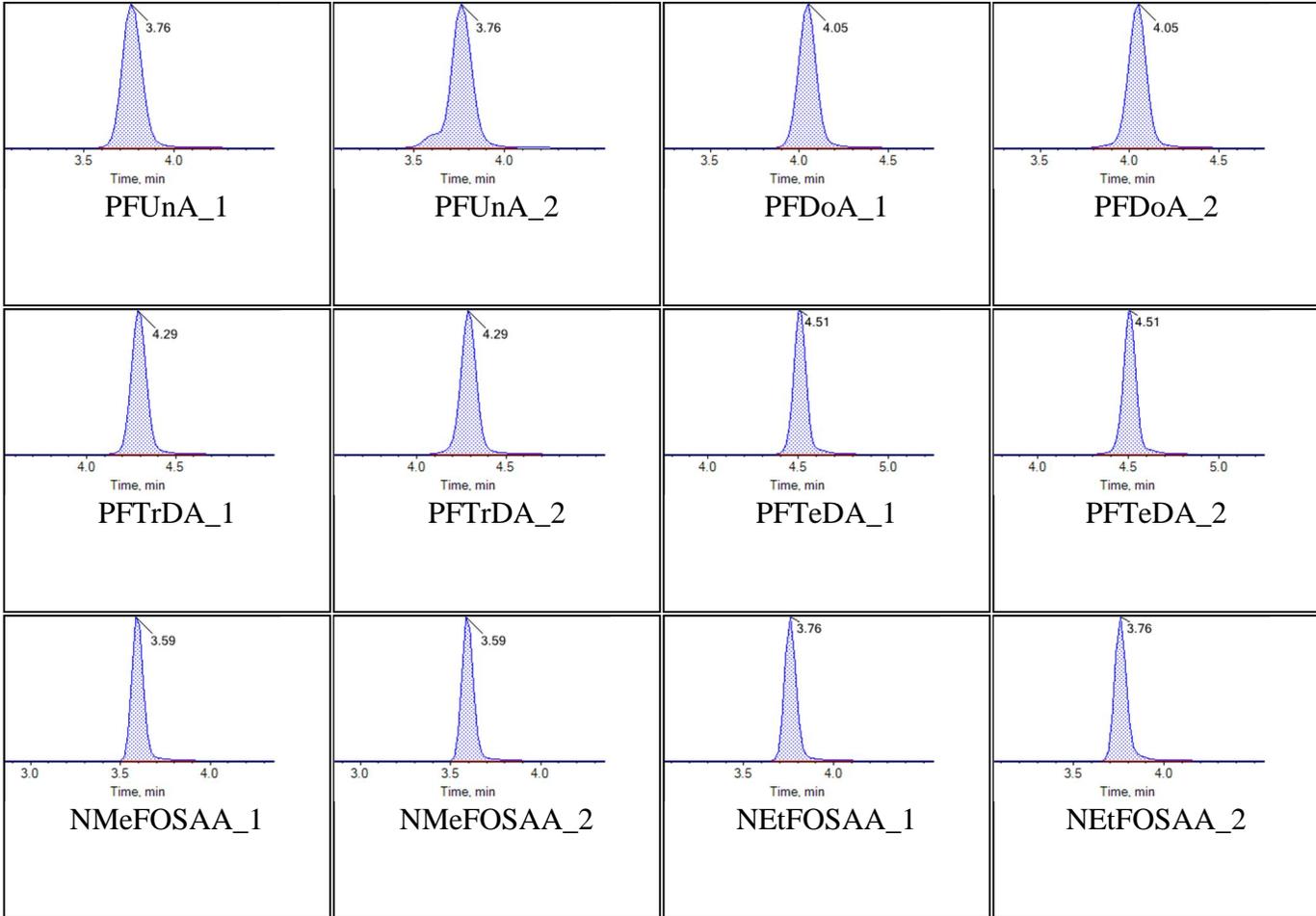


Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:36:39	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

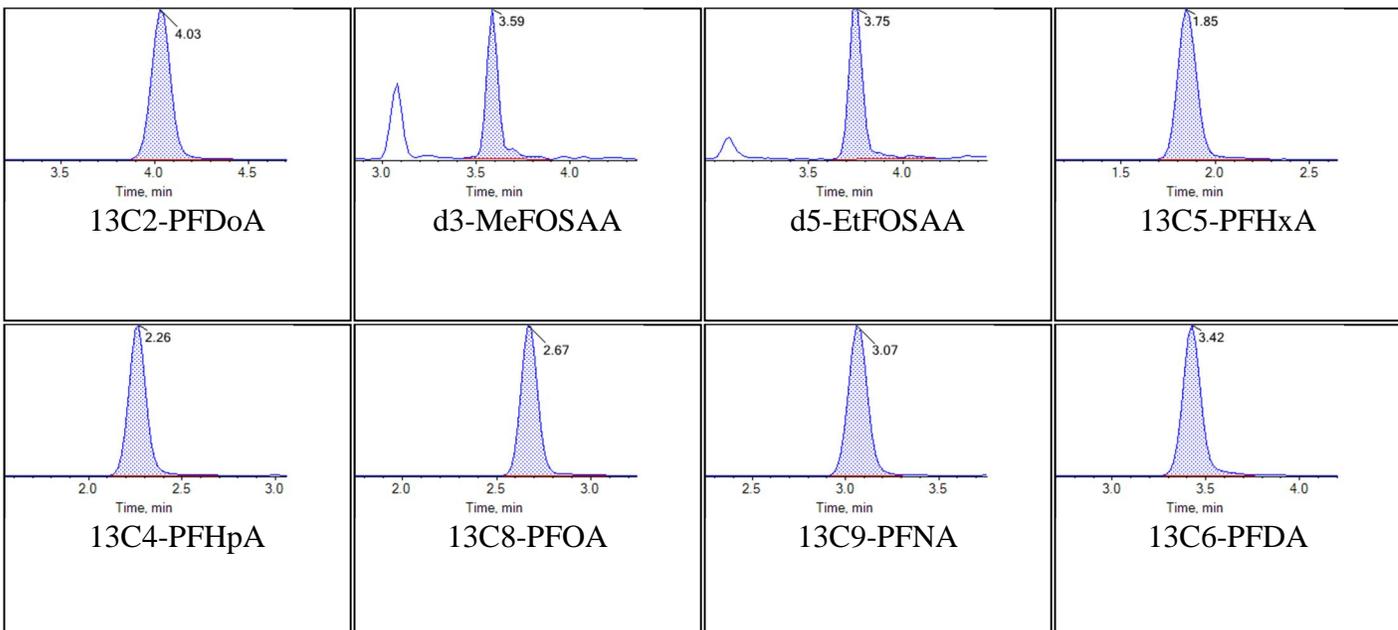
Chromatograms

Target Analytes:



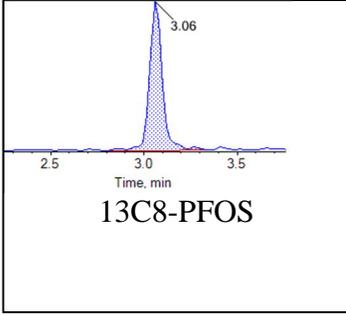
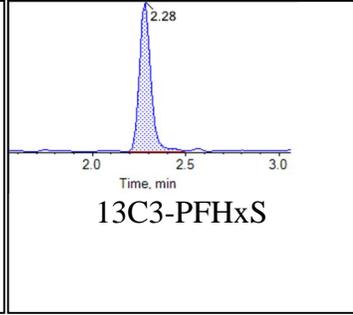
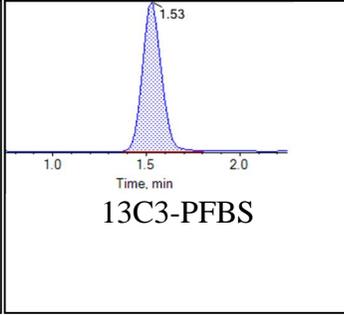
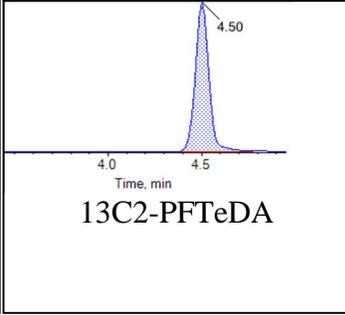
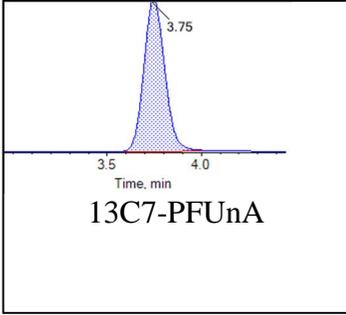


Internal Standards:



Chromatogram Report

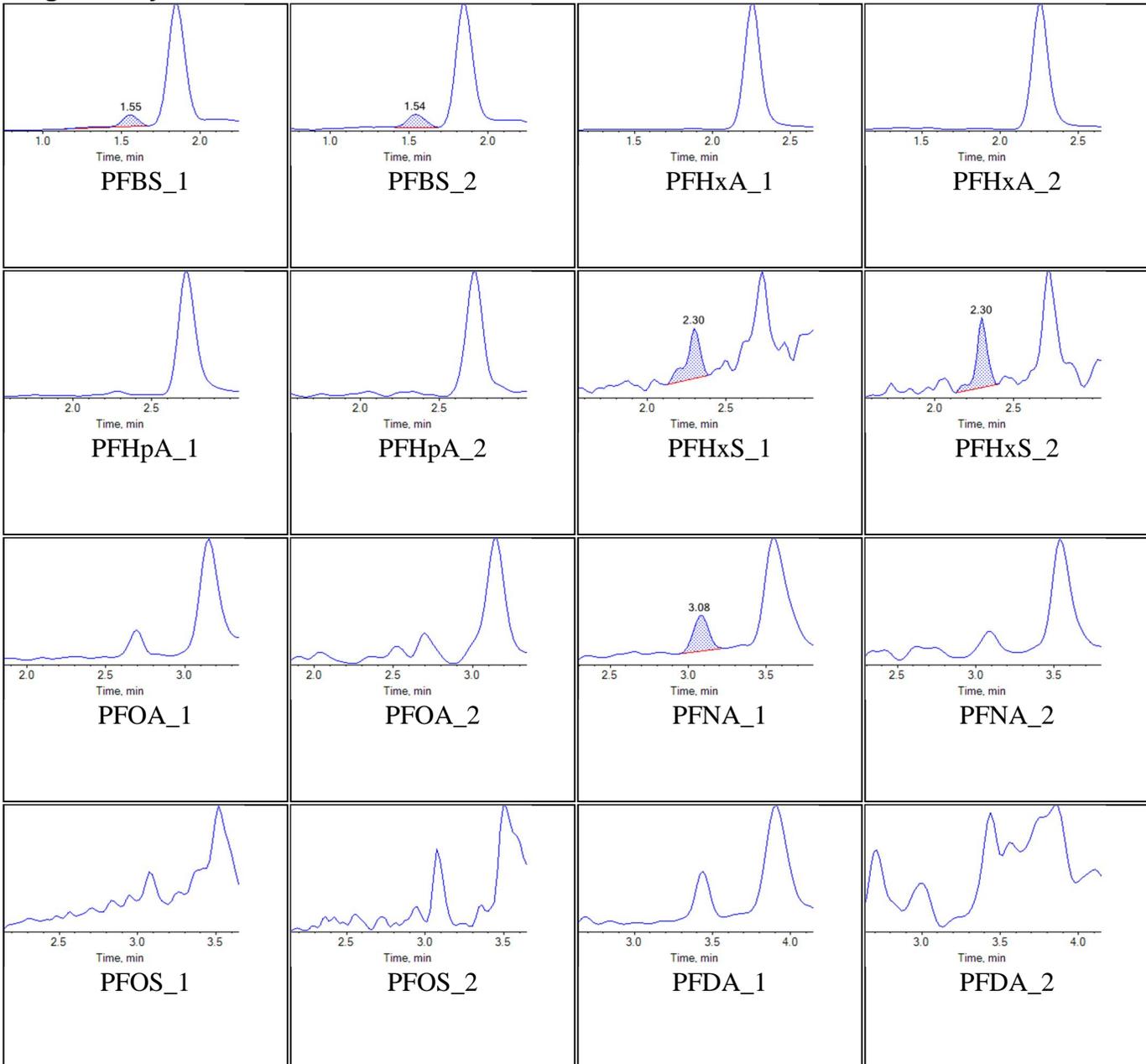
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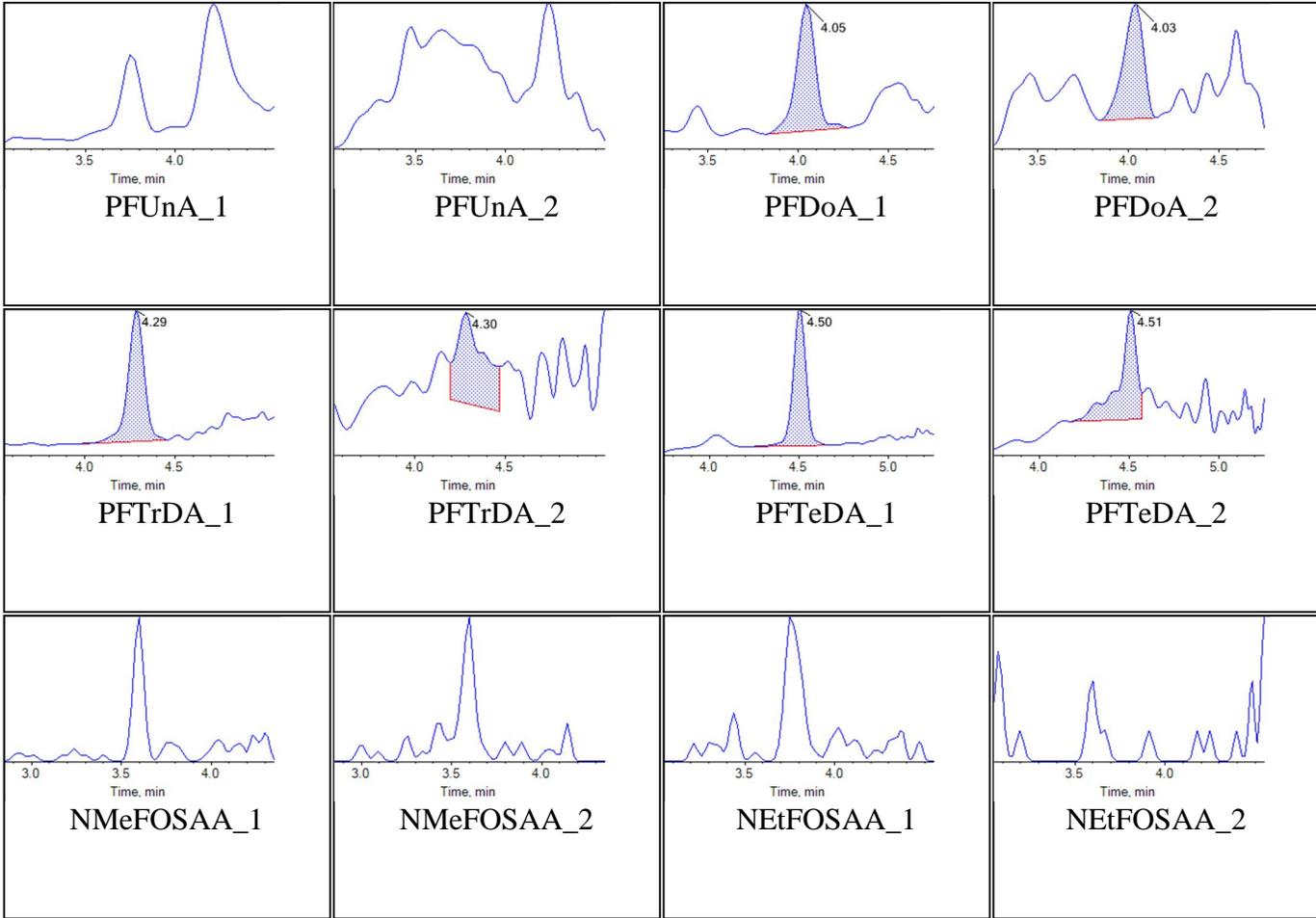


Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:47:30	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

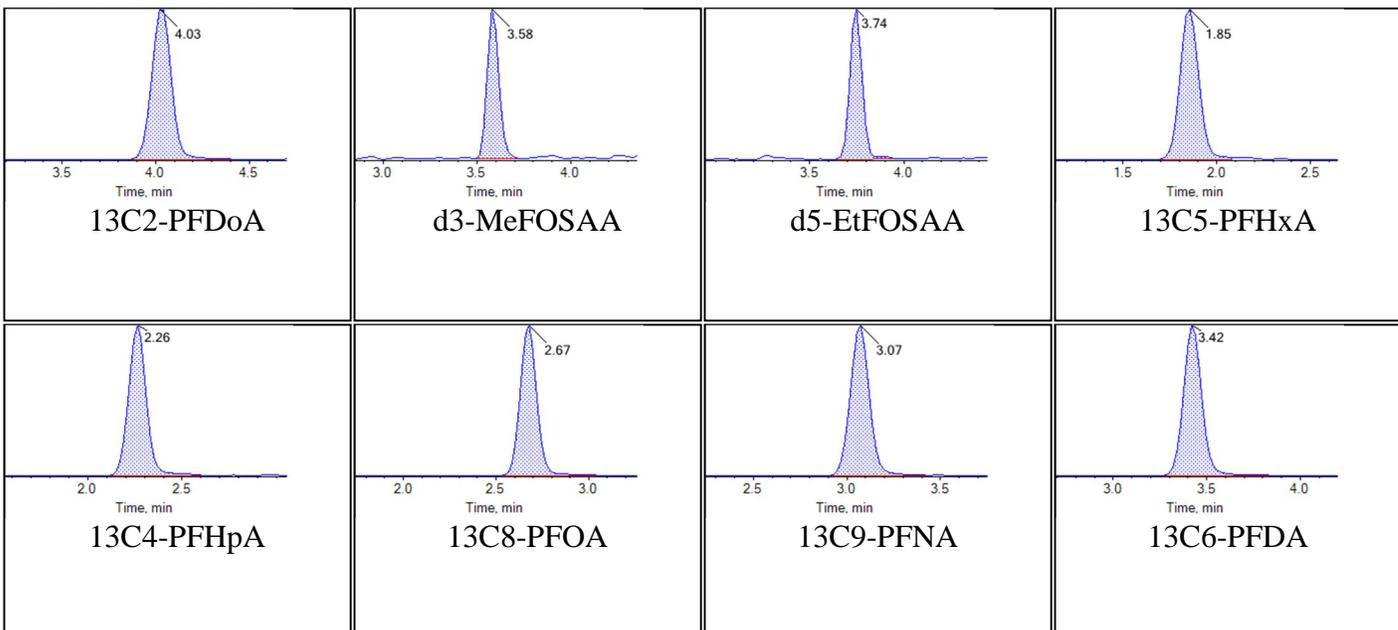
Chromatograms

Target Analytes:



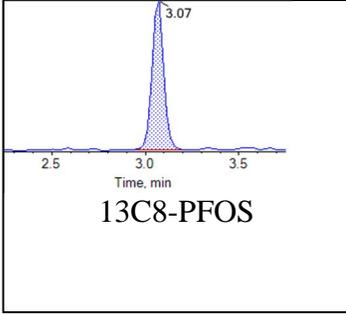
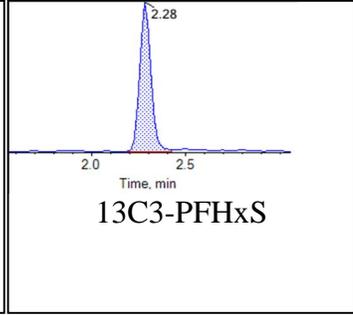
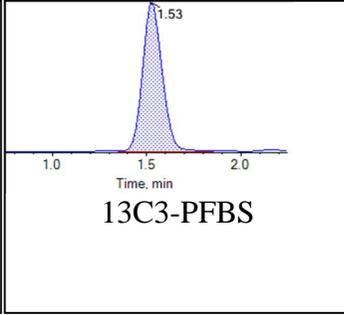
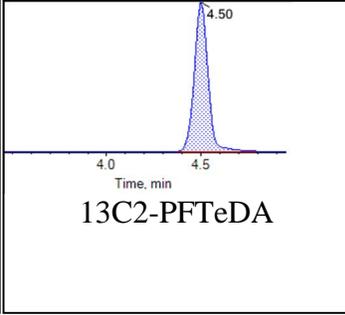
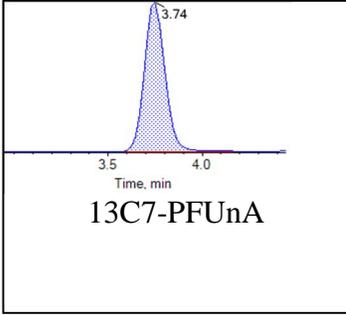


Internal Standards:



Chromatogram Report

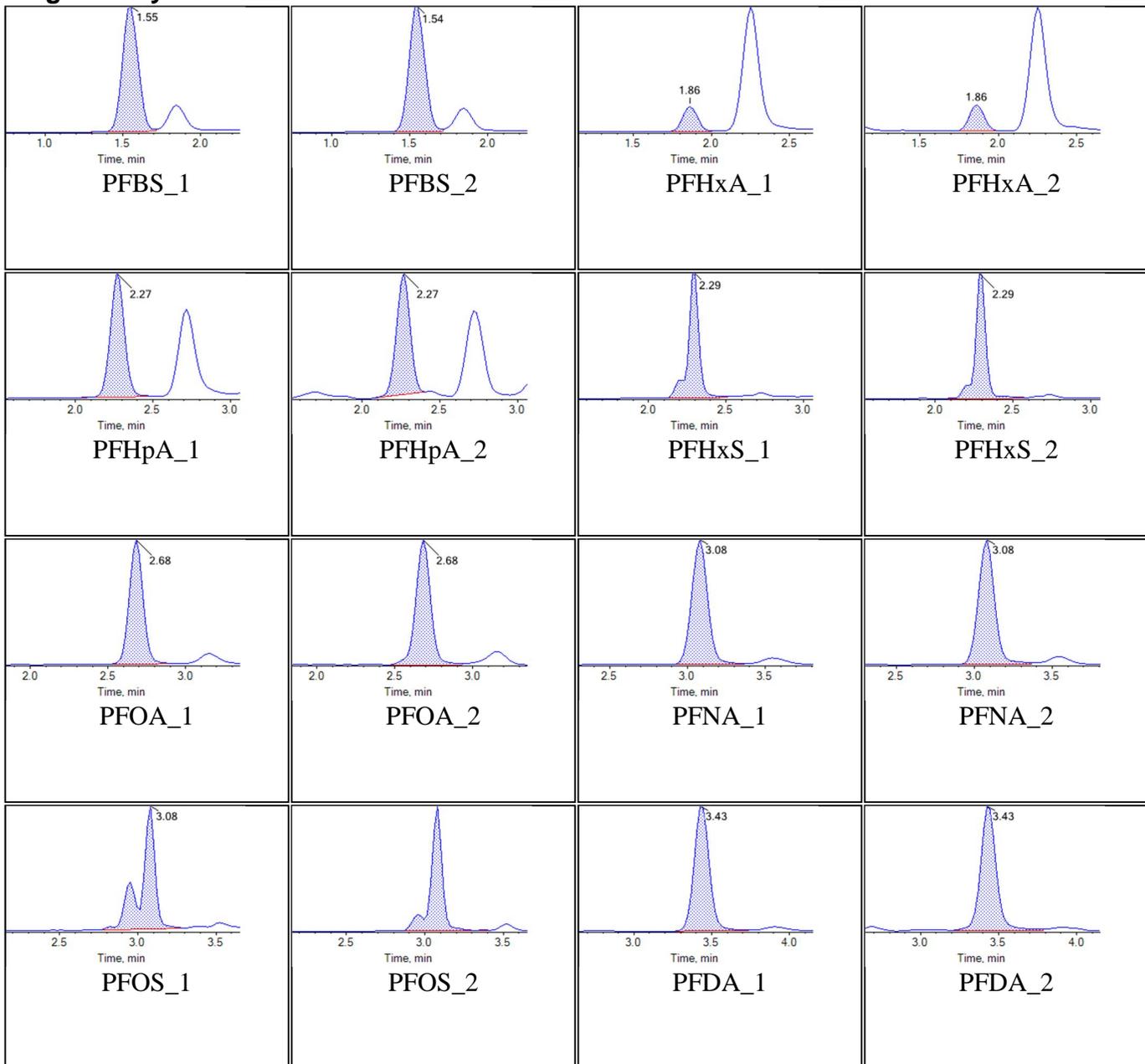
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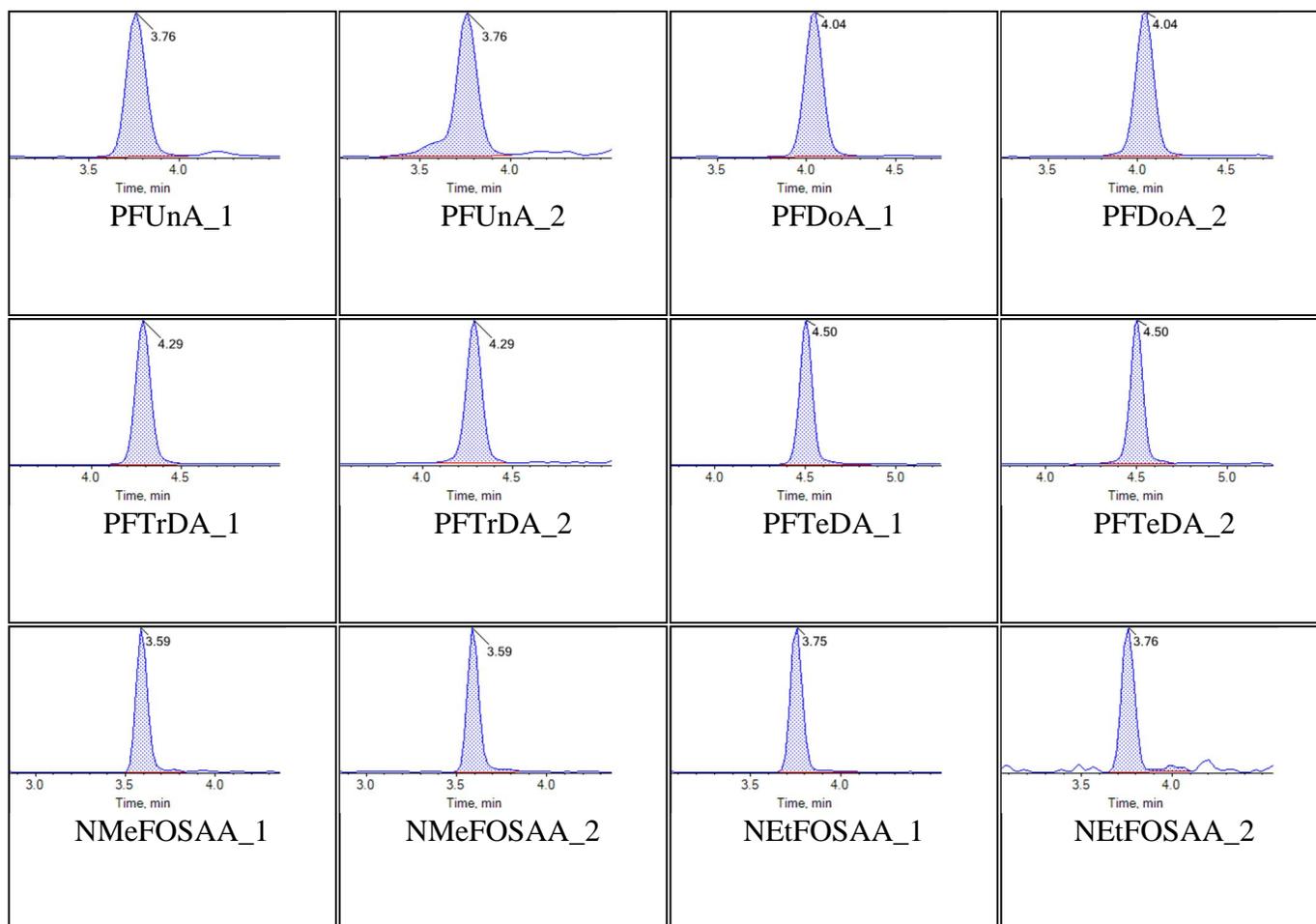
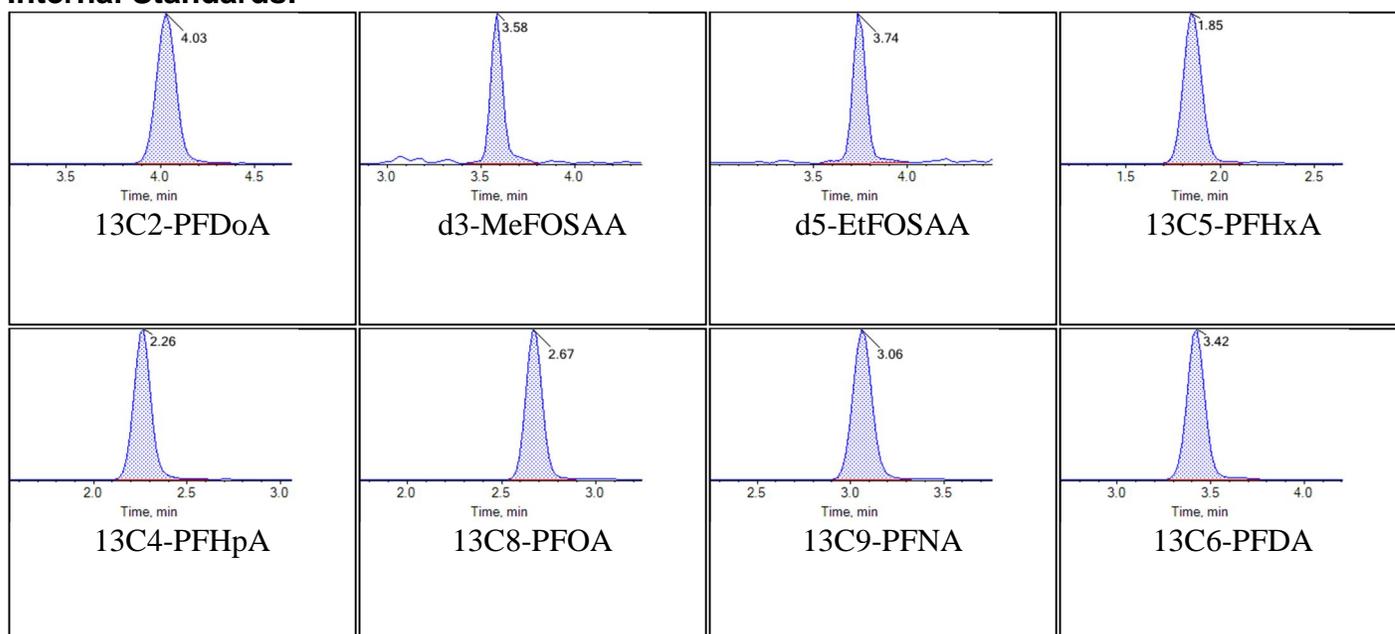


Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:58:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Chromatograms

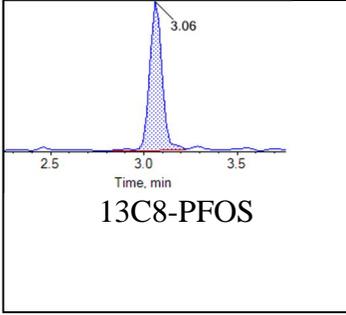
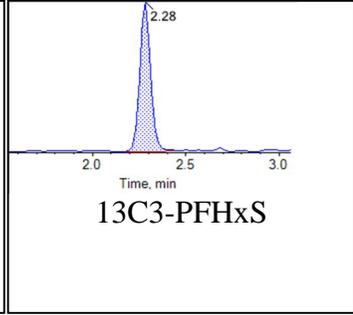
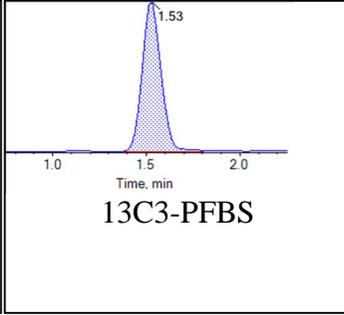
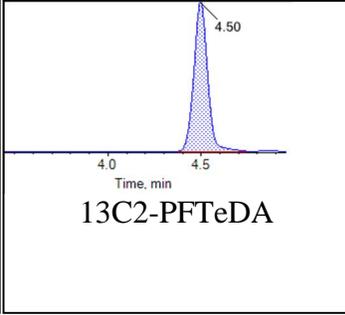
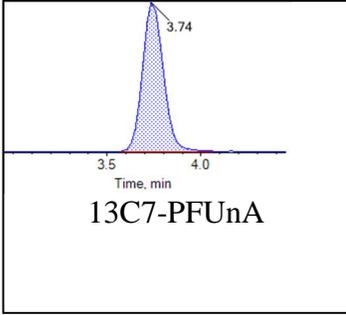
Target Analytes:



**Internal Standards:**

Chromatogram Report

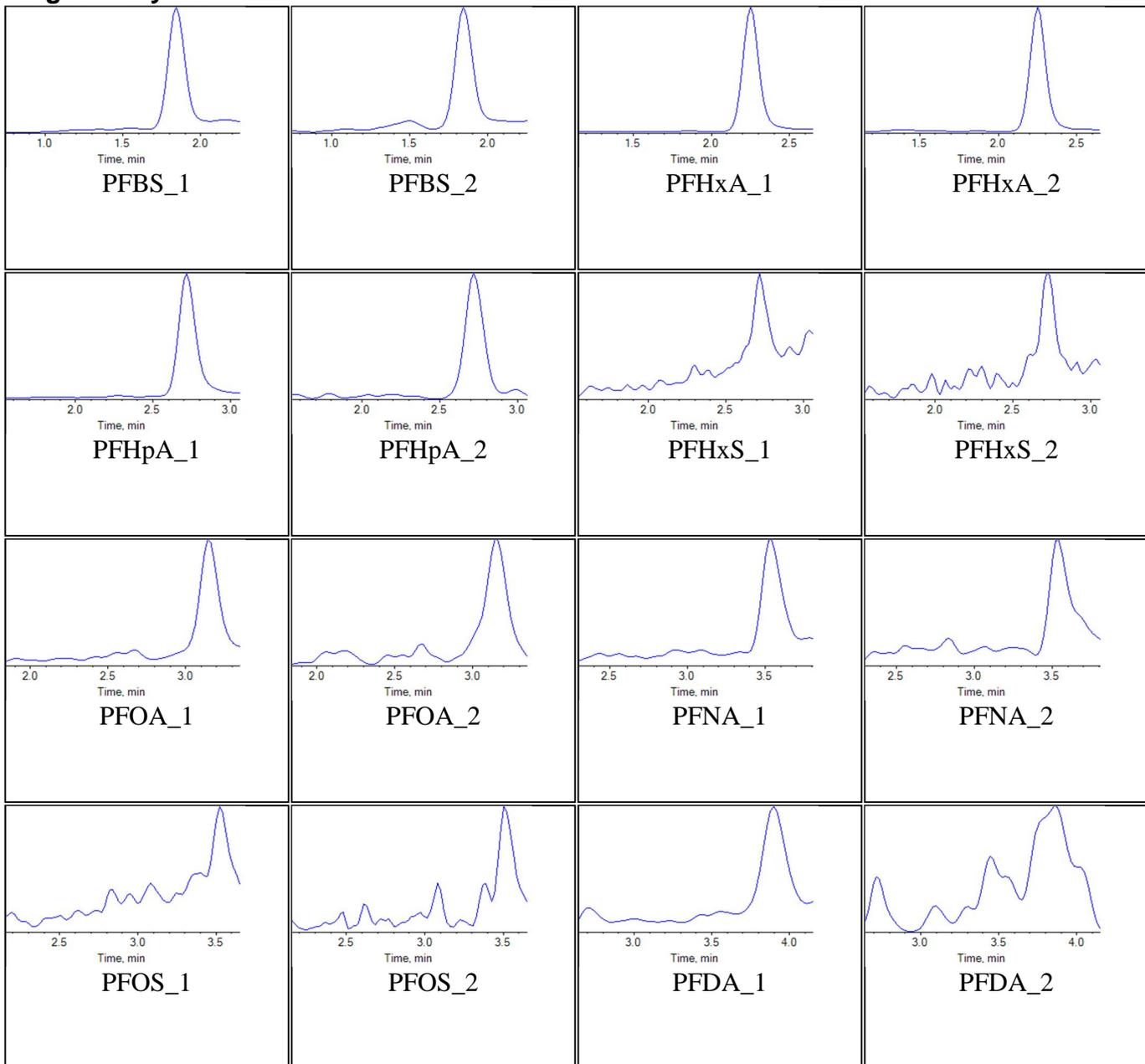
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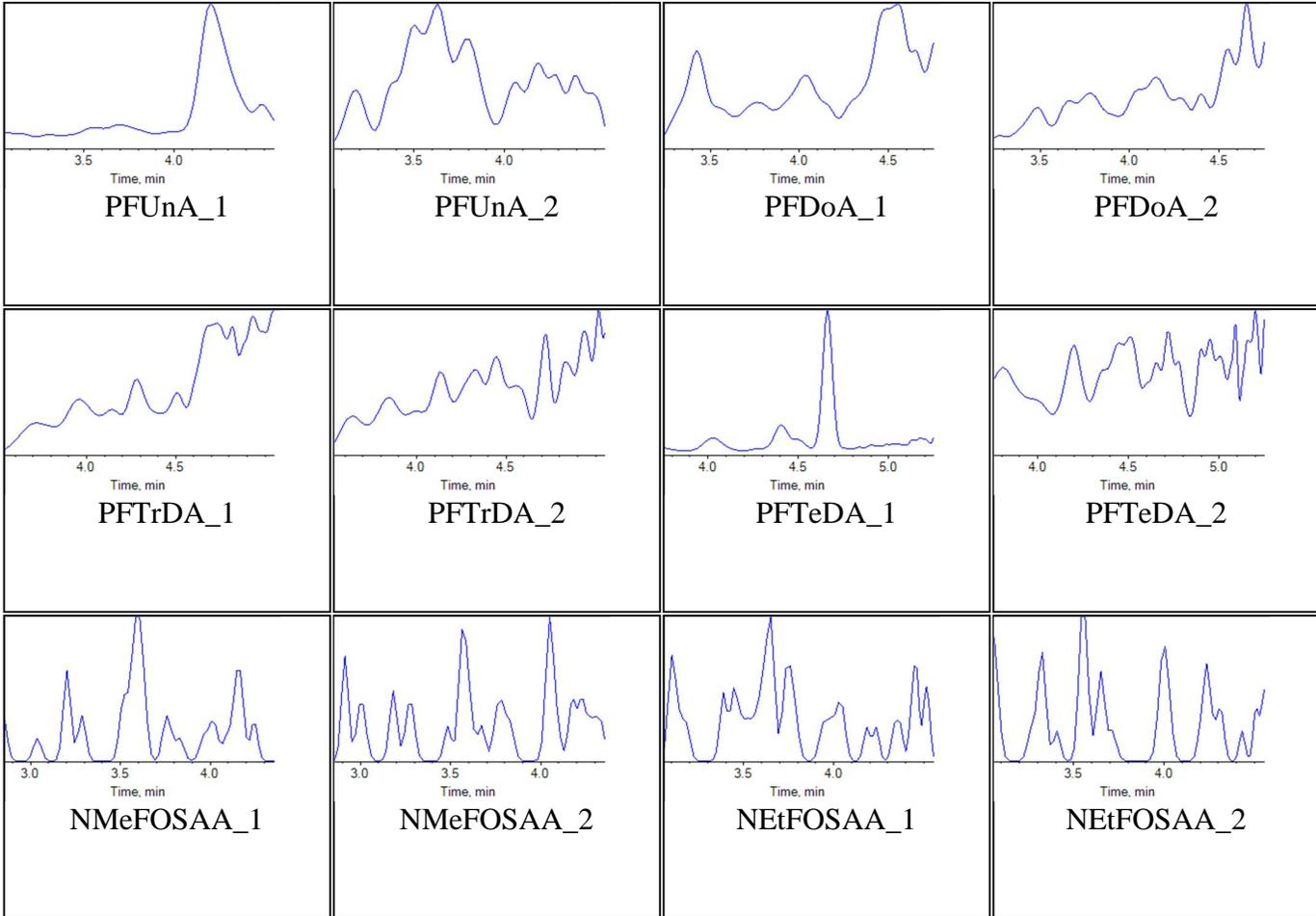


Sample Name	CR851PB-FS(3)	Injection Vial	13
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:30:59	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

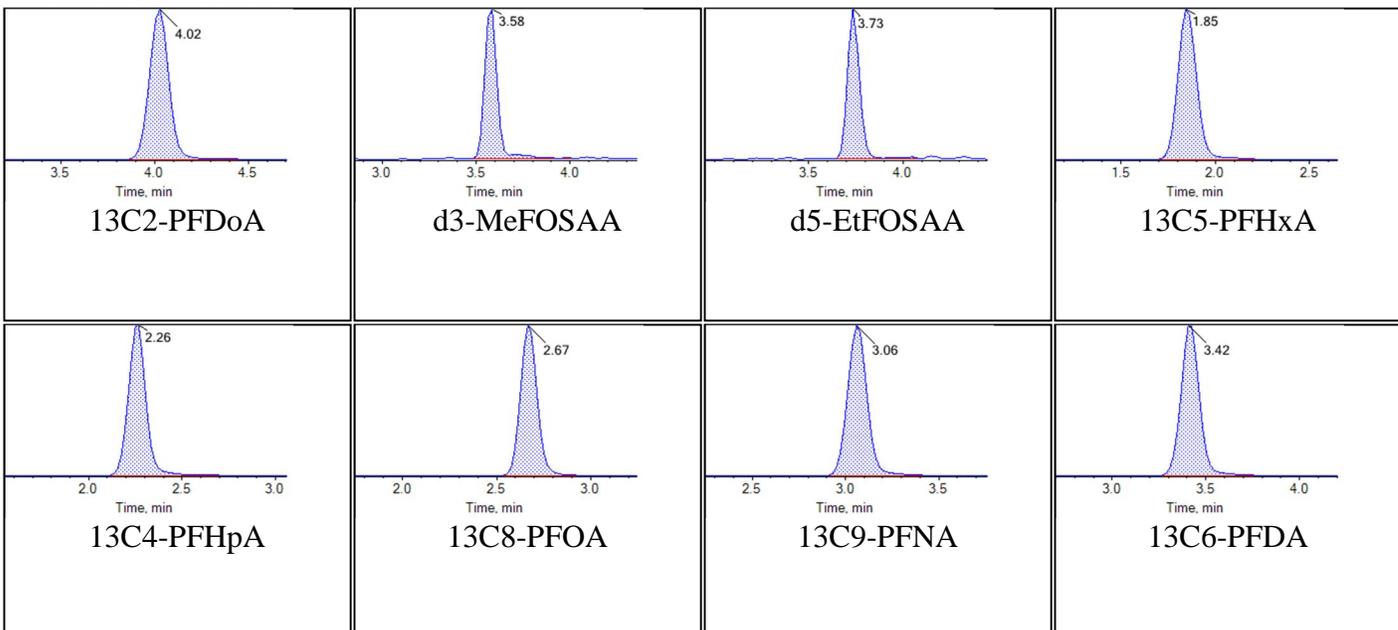
Chromatograms

Target Analytes:



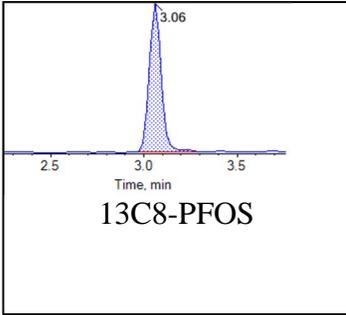
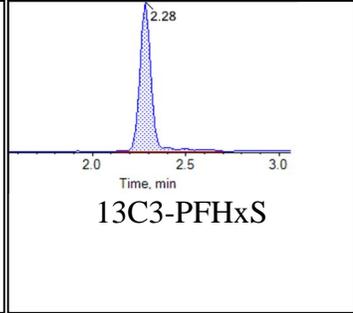
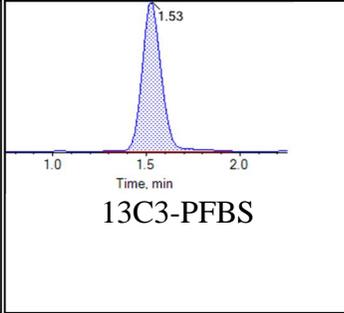
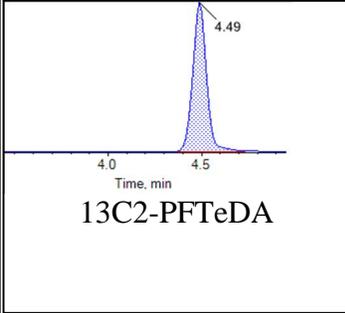
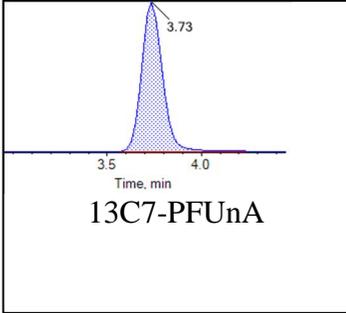


Internal Standards:



Chromatogram Report

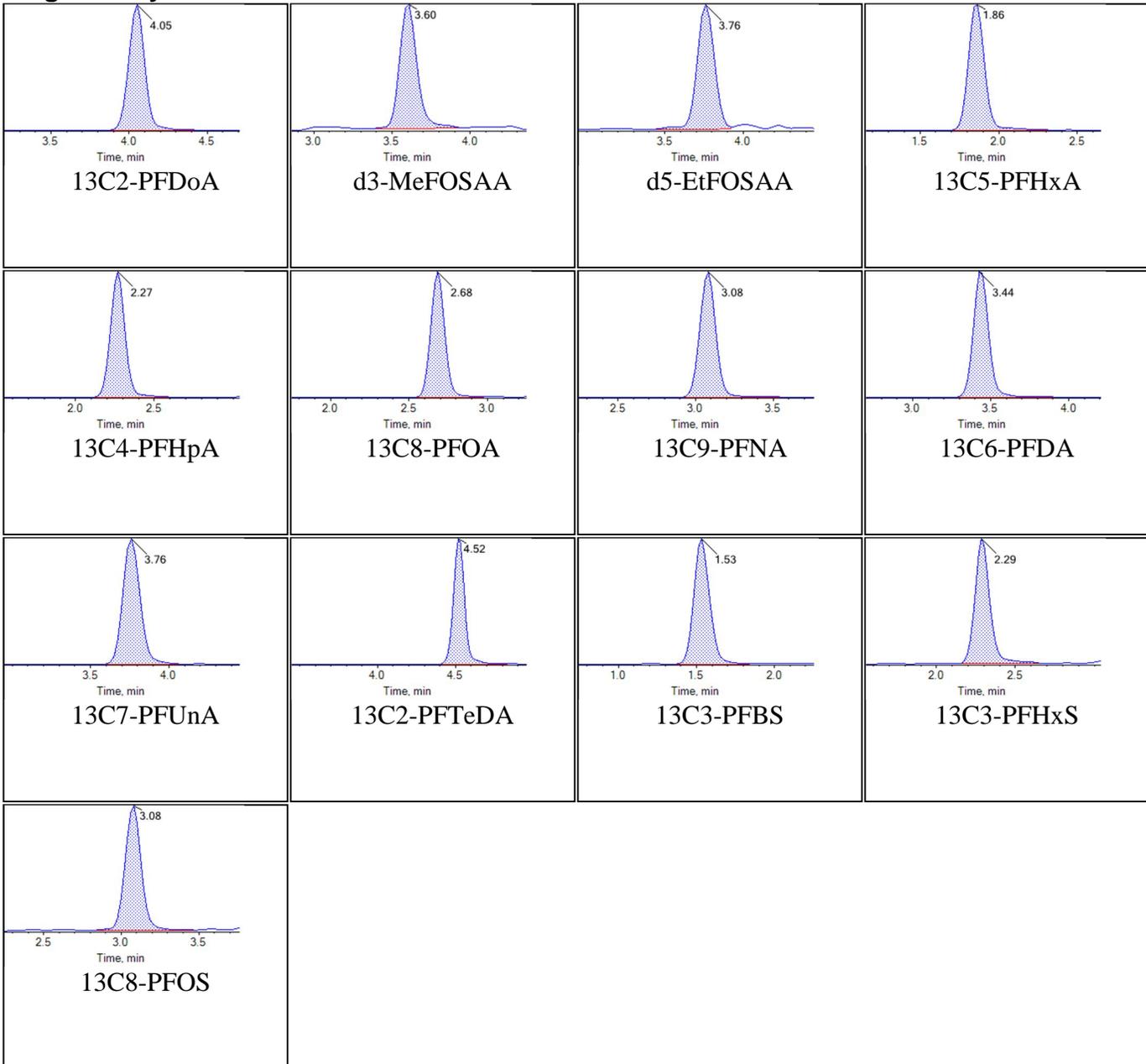
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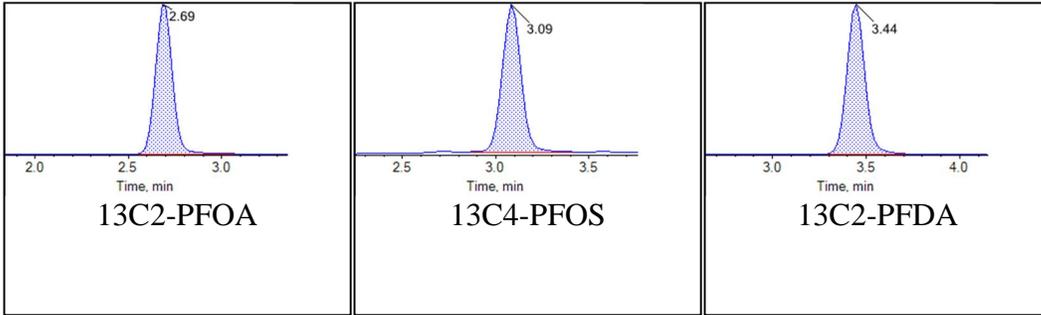
Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:42:17	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



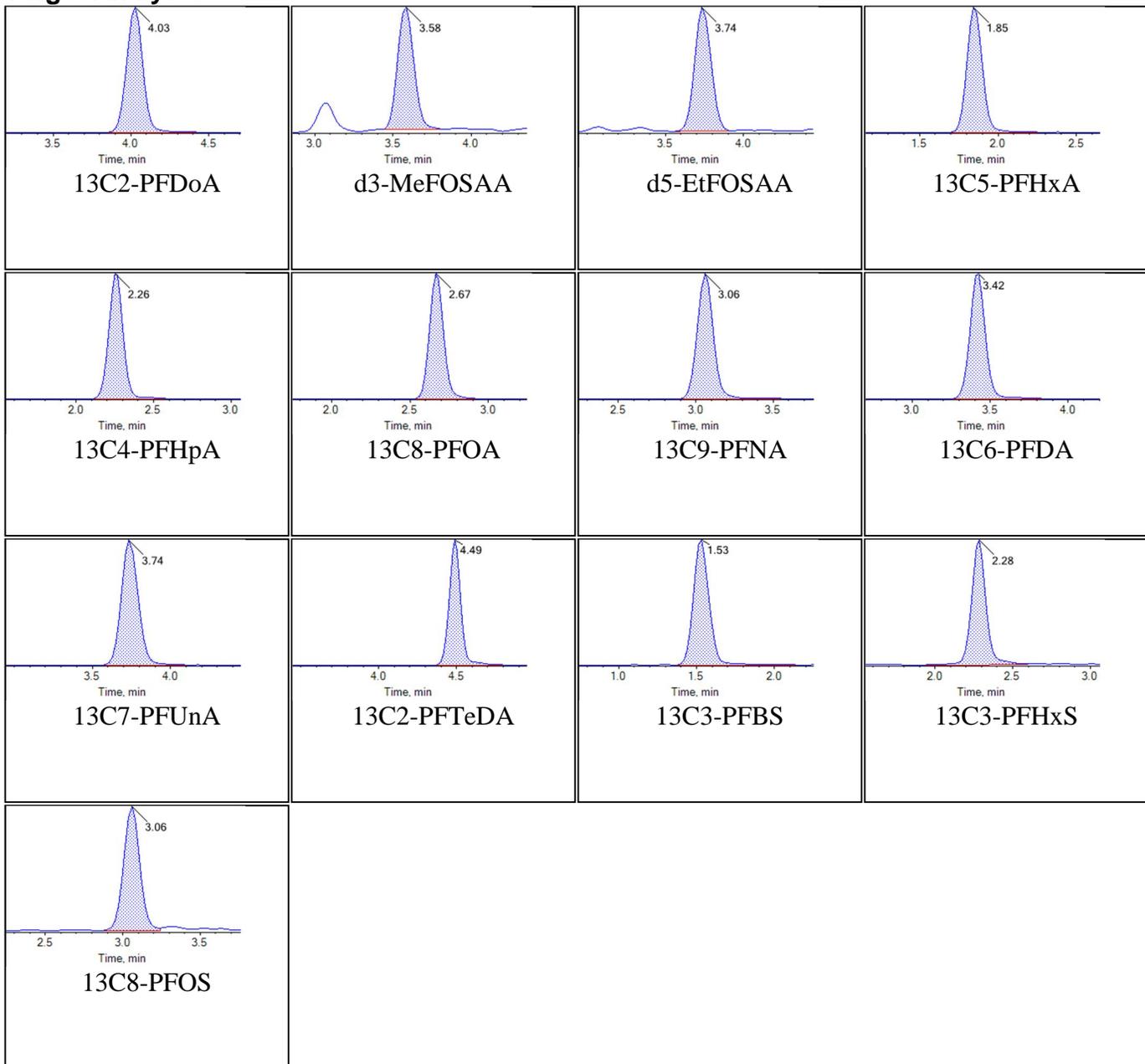
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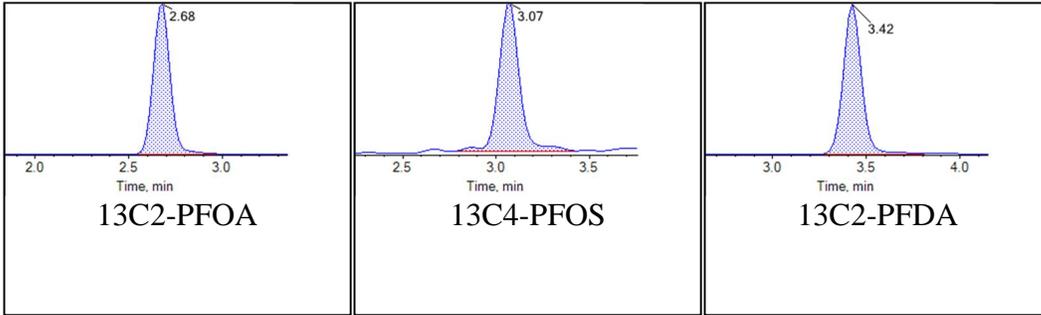
Sample Name	CR852LCS-FS(3)	Injection Vial	14
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:41:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



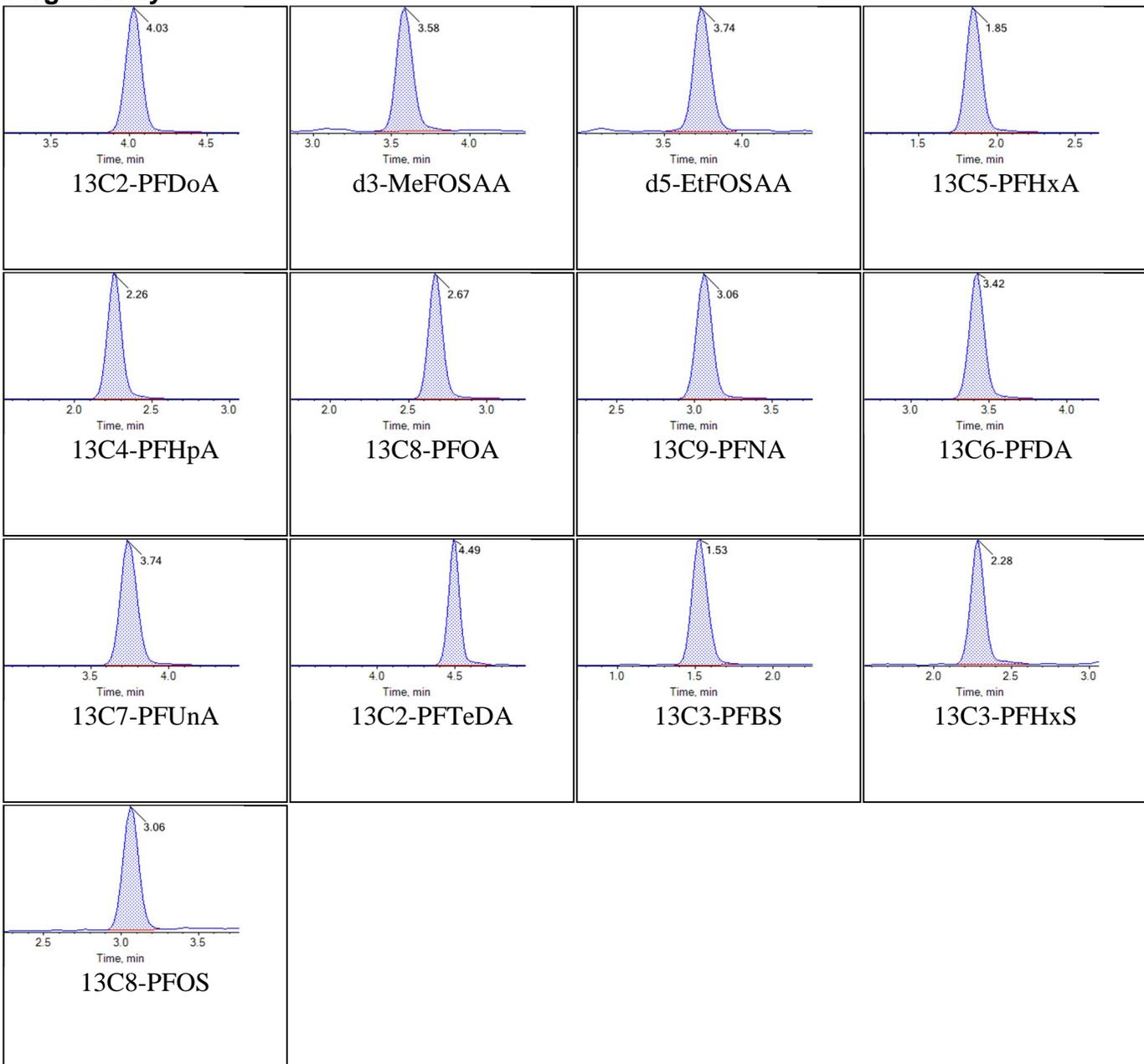
Internal Standards:



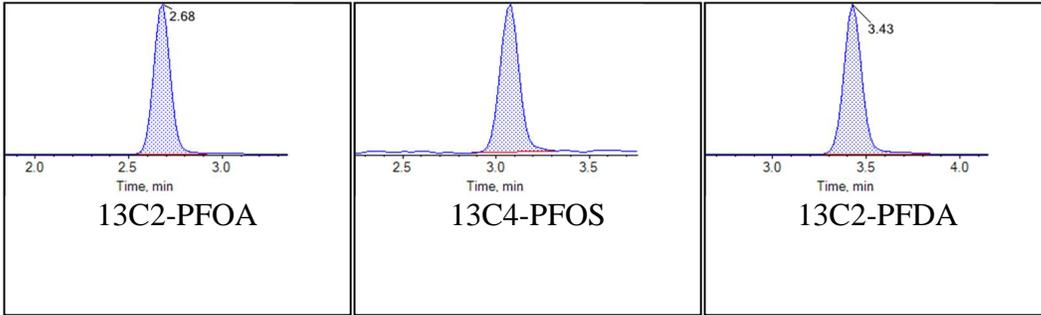
Sample Name	J8230-FS(3)	Injection Vial	16
Sample ID	VC-PM649-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:03:33	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



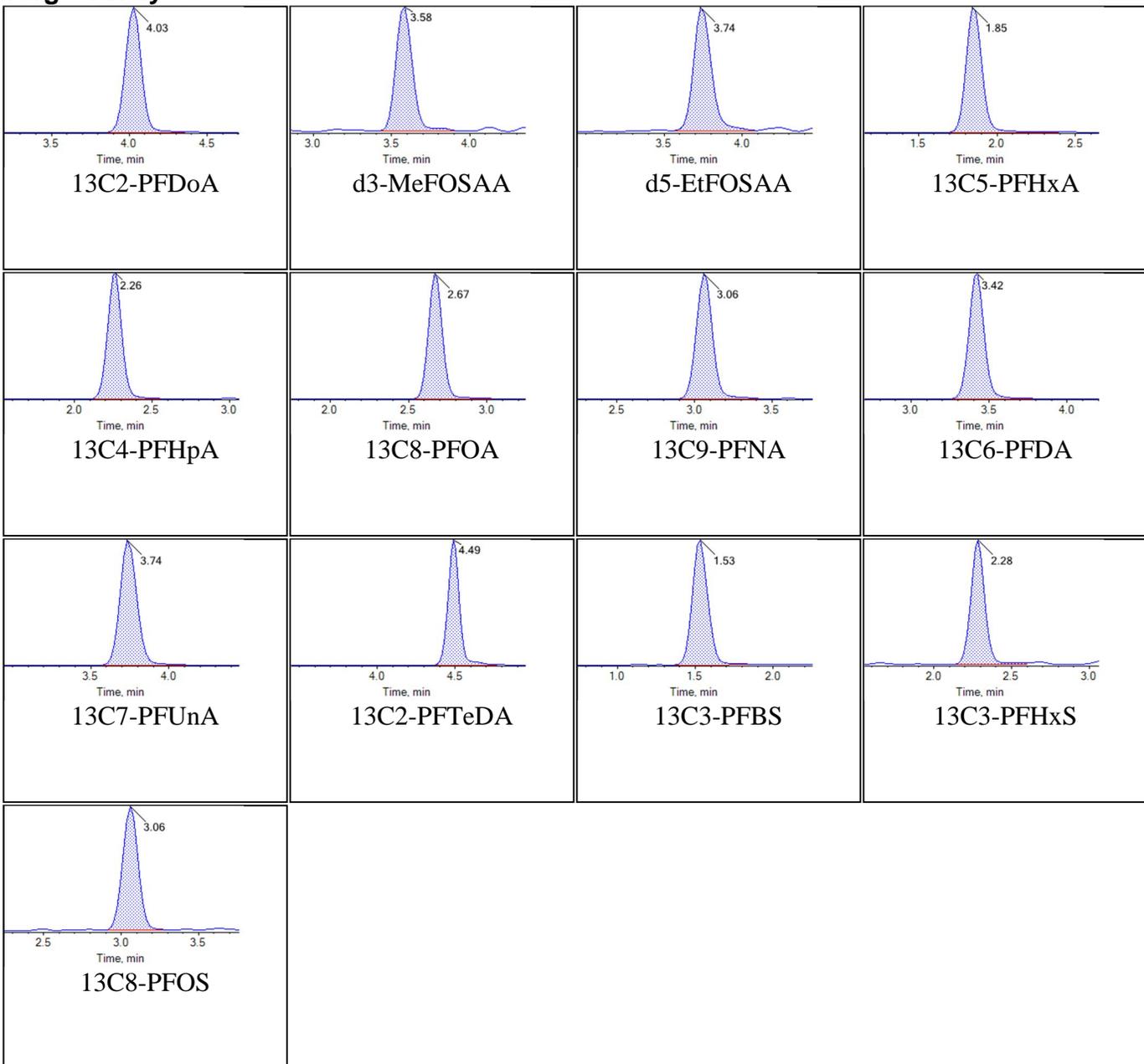
Internal Standards:



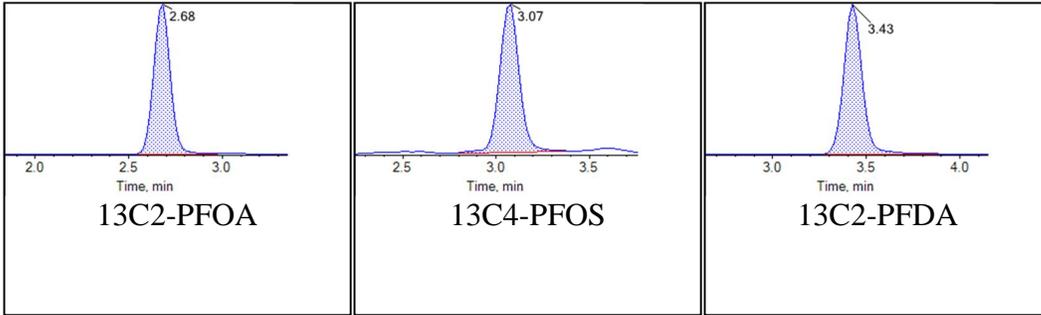
Sample Name	J8231-FS(3)	Injection Vial	17
Sample ID	VC-PM649-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:14:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



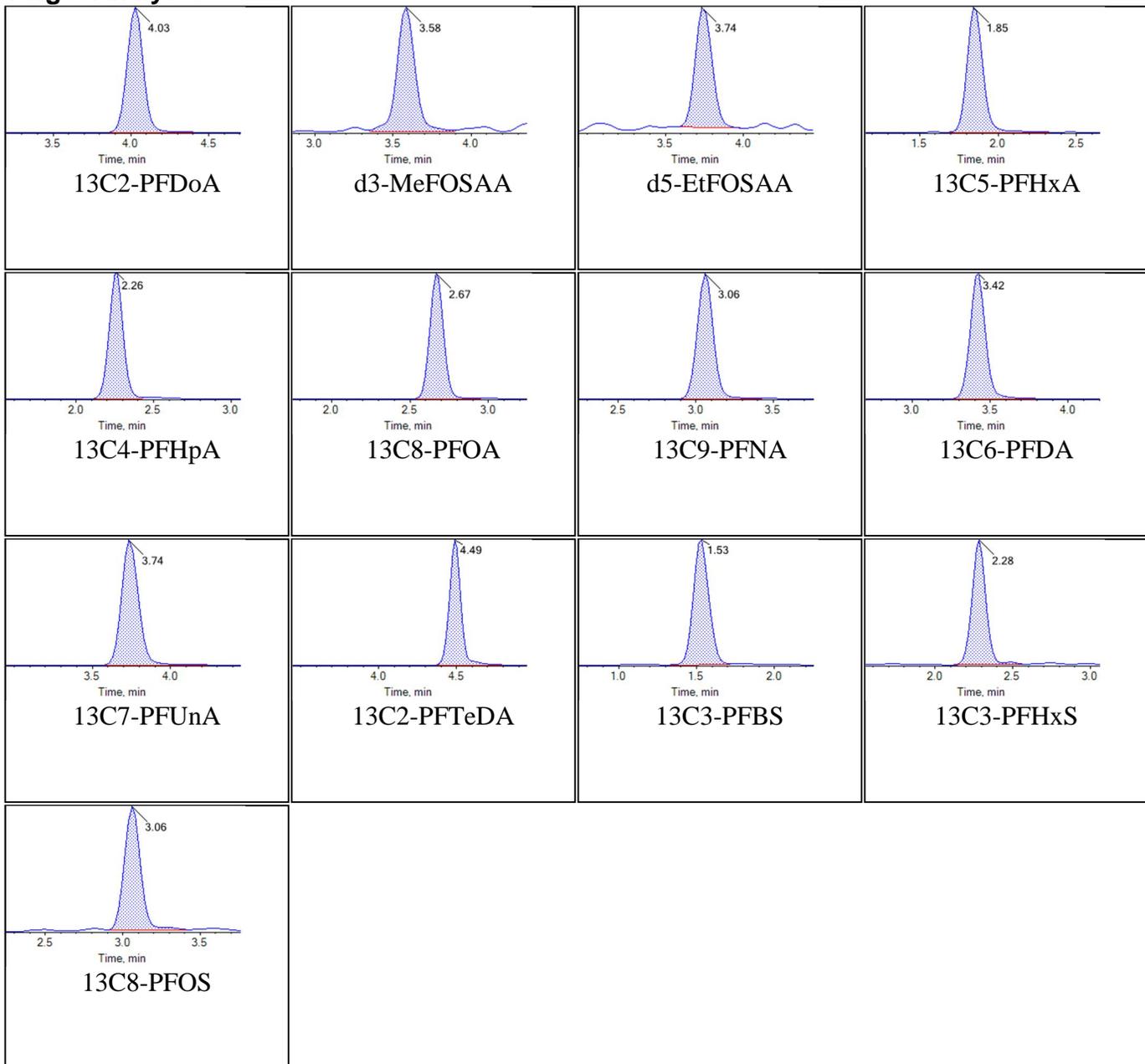
Internal Standards:



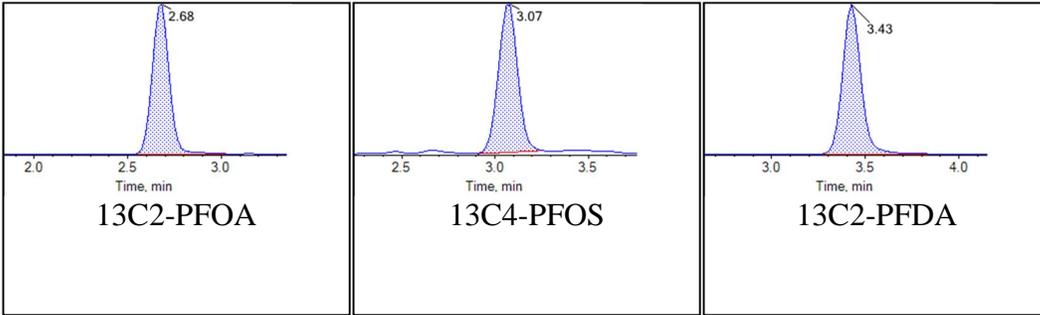
Sample Name	J8232-FS(3)	Injection Vial	18
Sample ID	VC-PM649-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:25:14	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



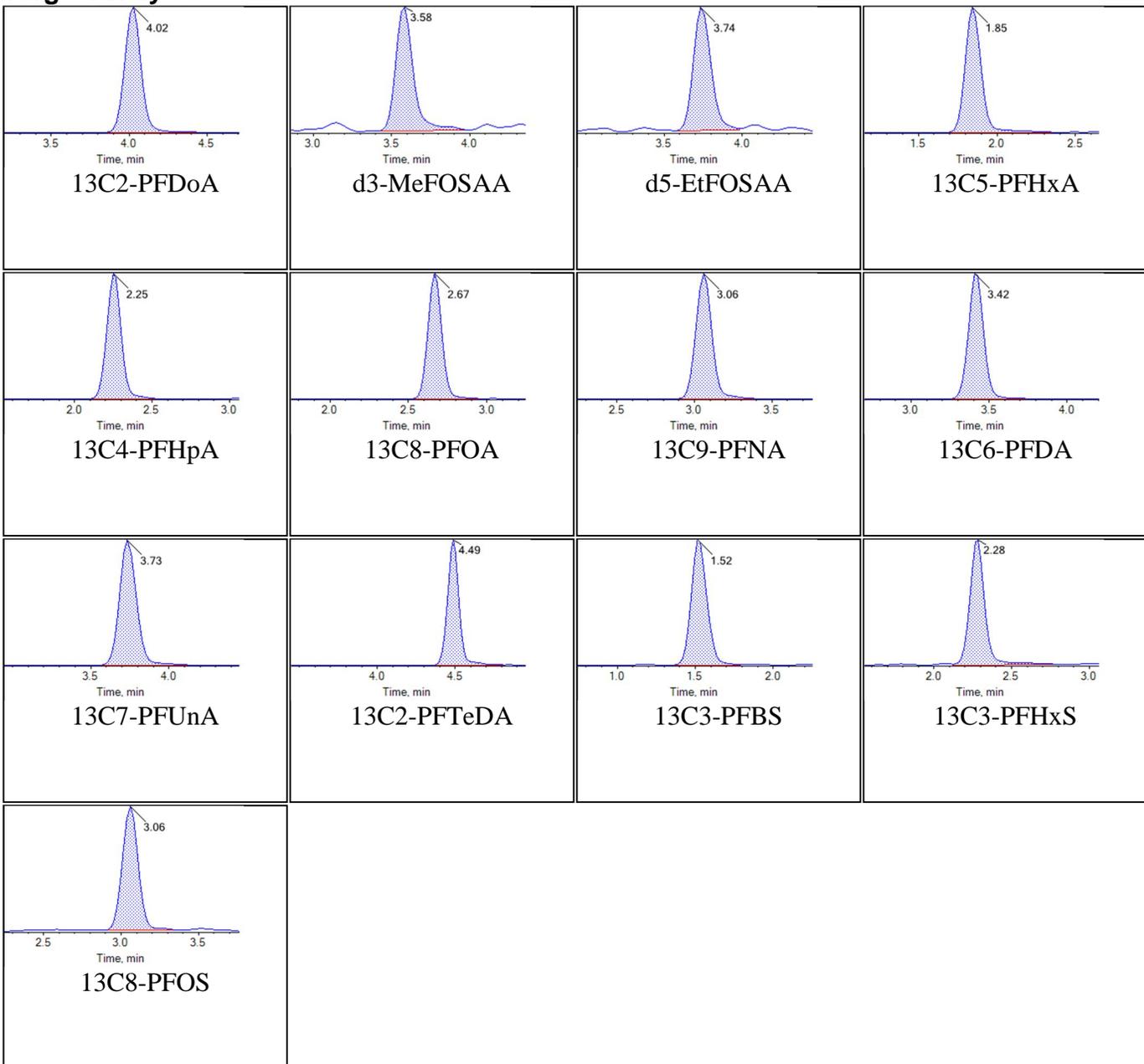
Internal Standards:



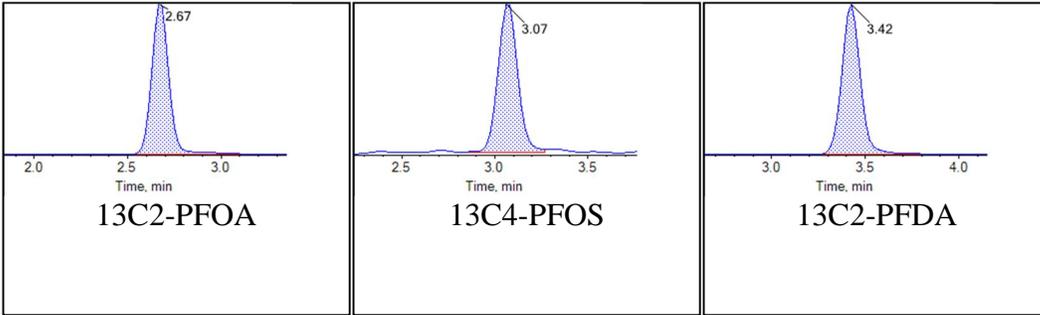
Sample Name	J8233-FS(3)	Injection Vial	19
Sample ID	VC-PM649-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:36:06	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



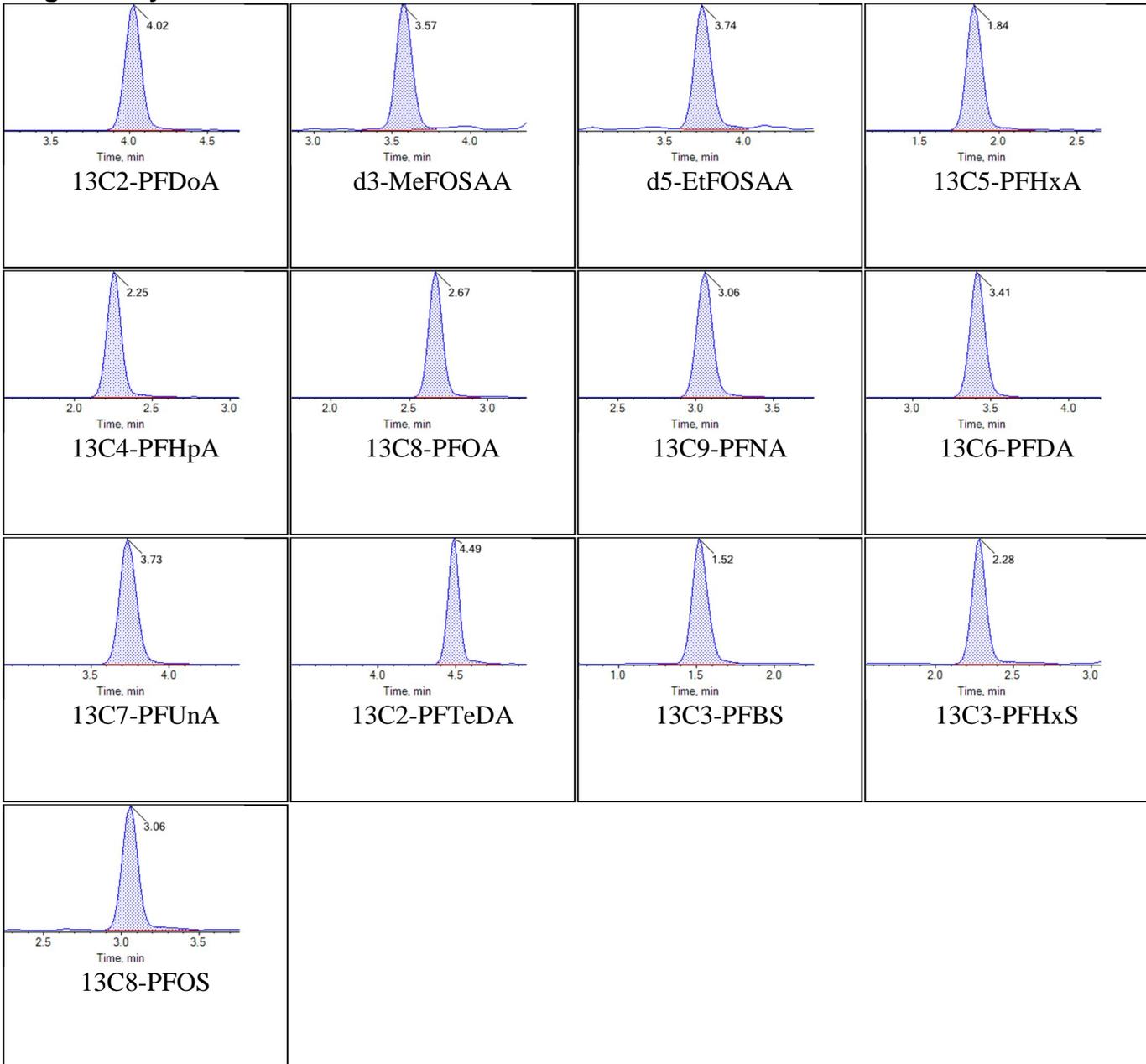
Internal Standards:



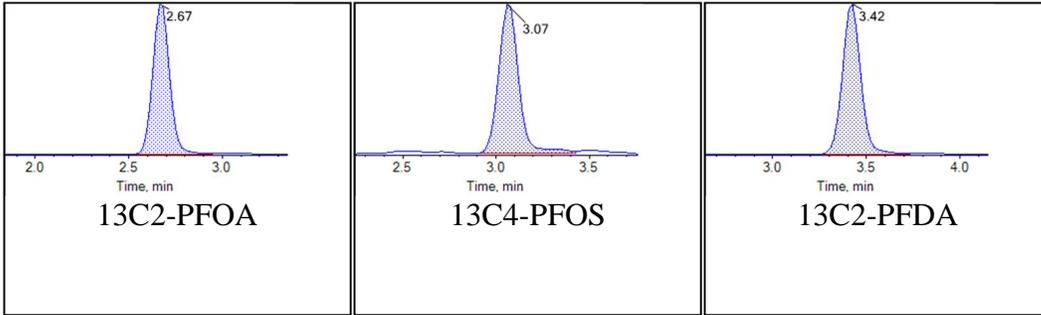
Sample Name	J8234-FS(3)	Injection Vial	20
Sample ID	VC-PM649-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:46:58	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



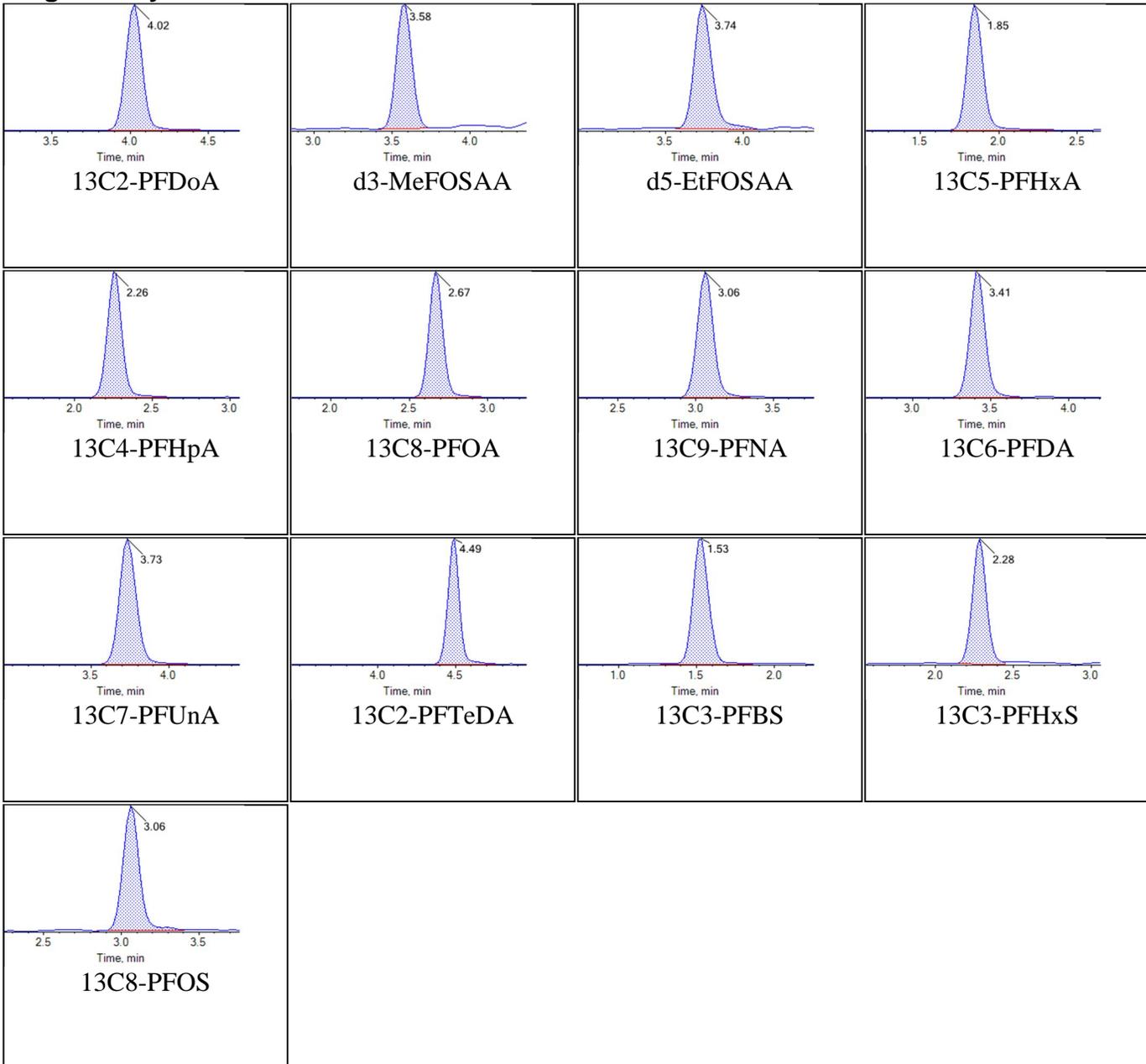
Internal Standards:



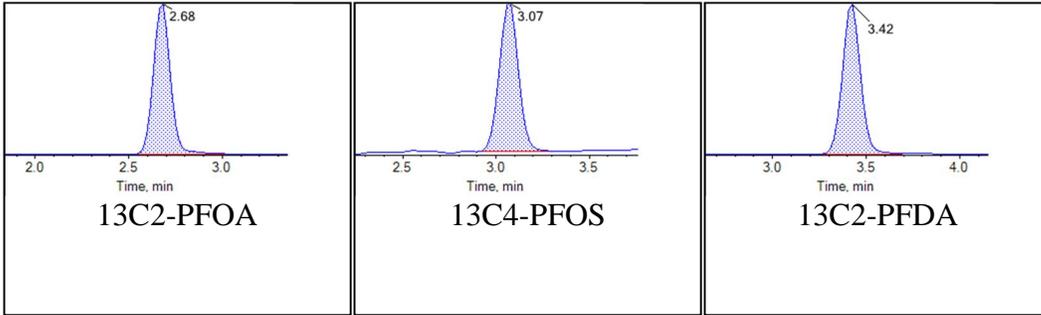
Sample Name	J8235-FS(3)	Injection Vial	21
Sample ID	VC-PM649-SS03-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T15:57:50	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



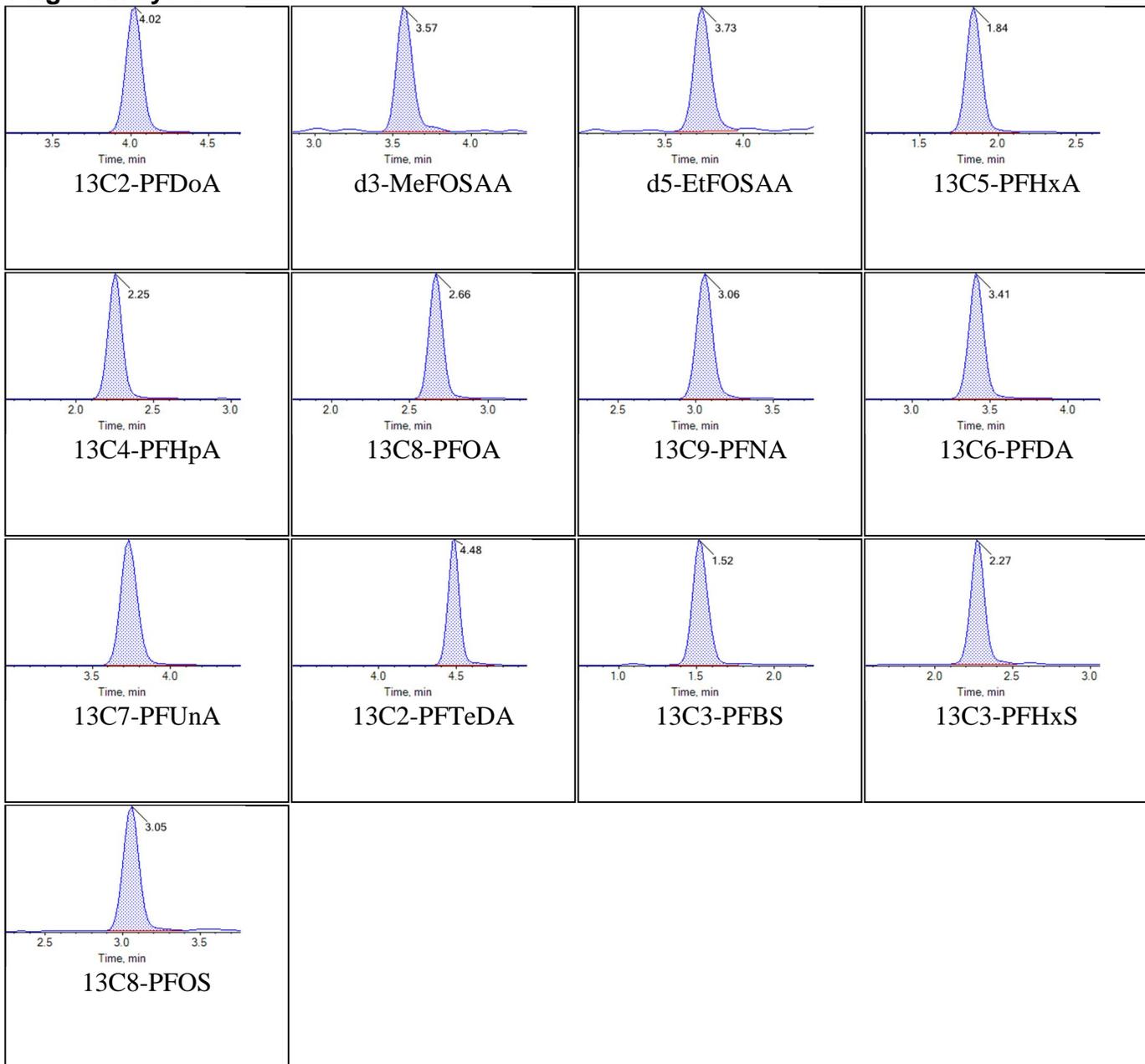
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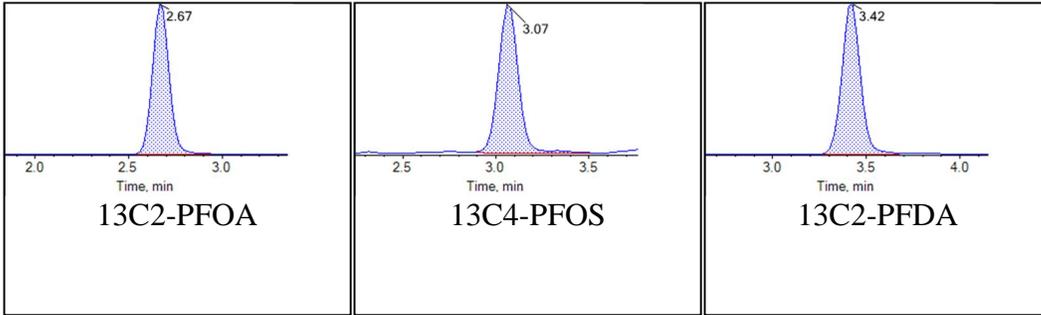
Sample Name	J8236-FS(3)	Injection Vial	22
Sample ID	VC-PM649-SB03-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:08:42	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



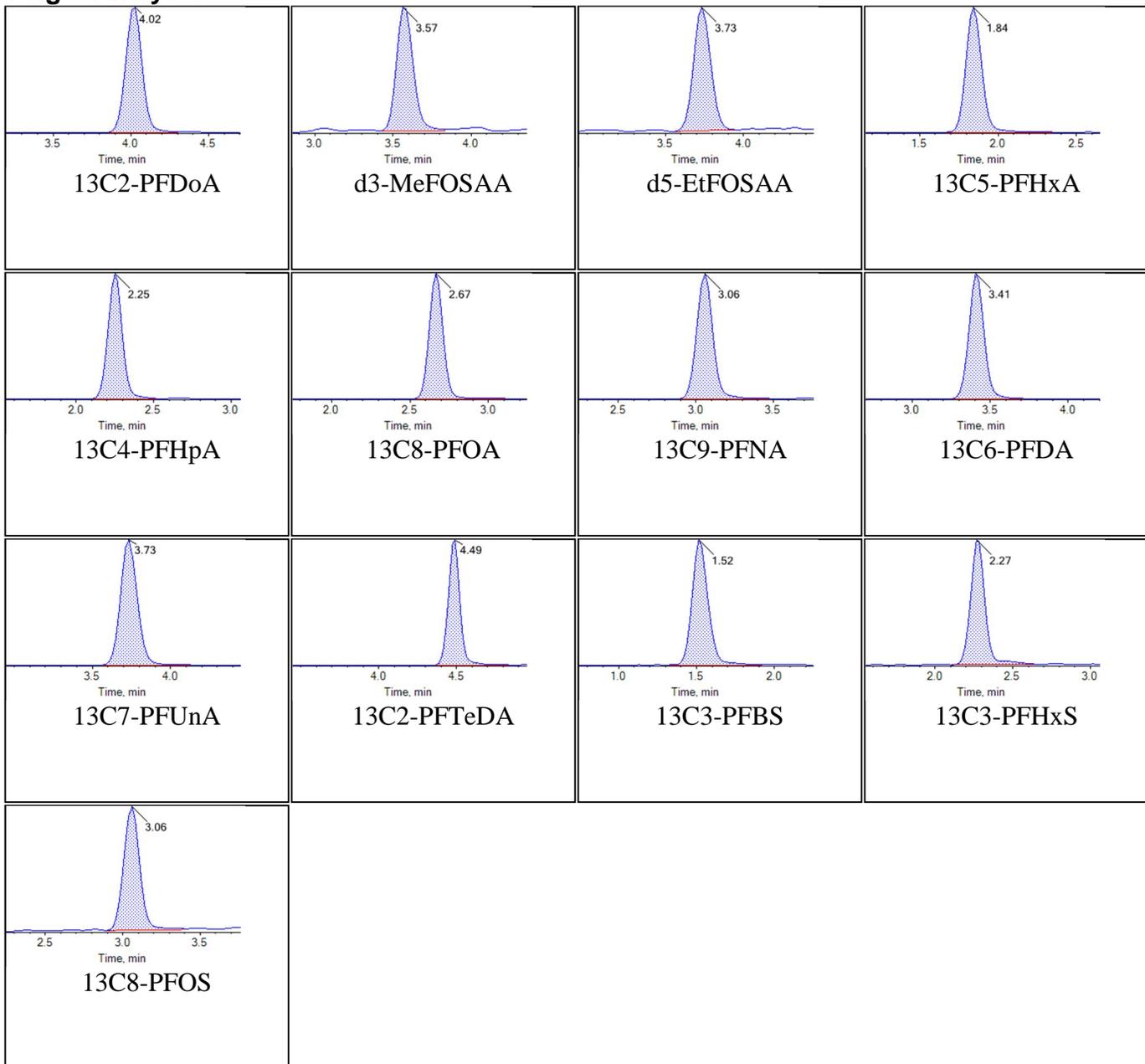
Internal Standards:



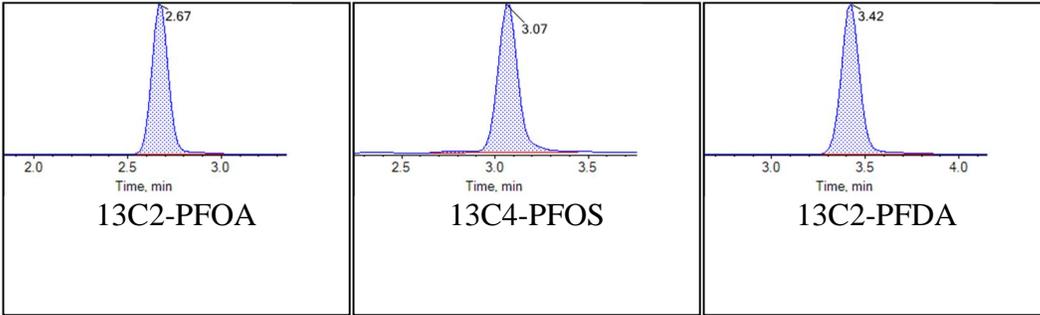
Sample Name	KB85 CCV	Injection Vial	23
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:19:34	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



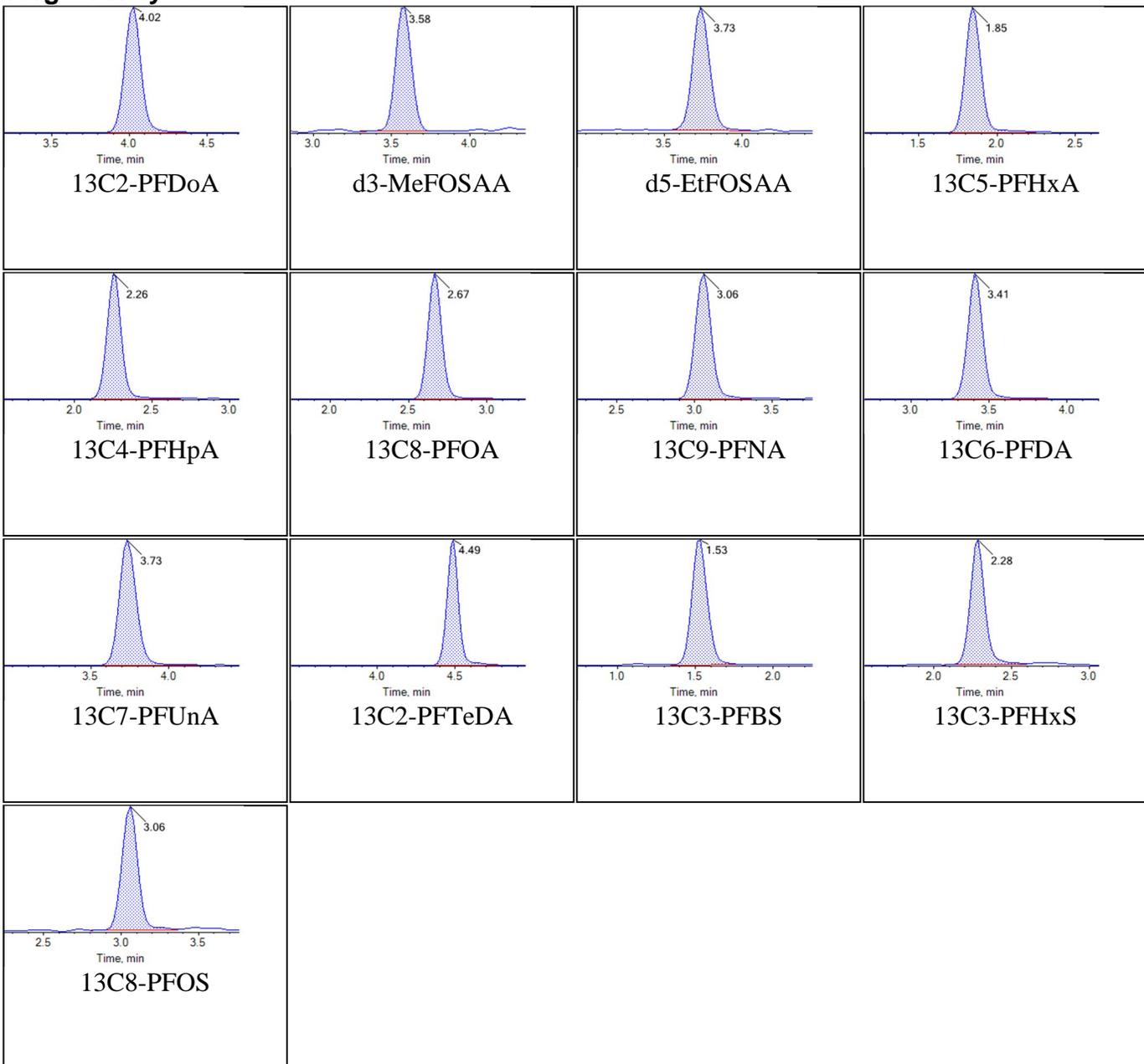
Internal Standards:



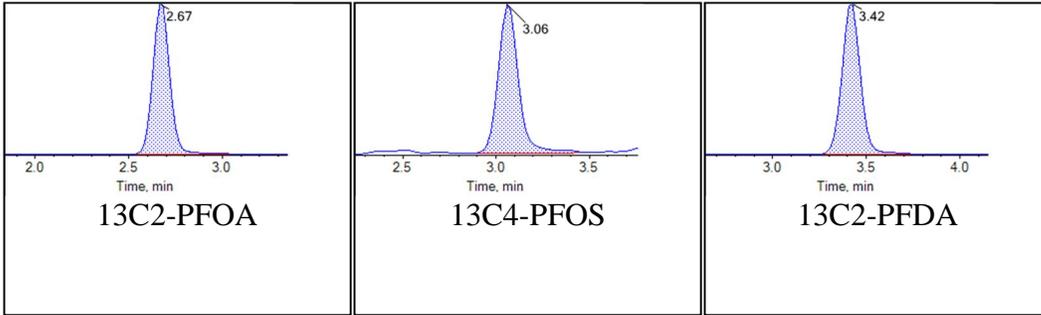
Sample Name	J8237-FS(3)	Injection Vial	25
Sample ID	VC-PM649-SB03-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:41:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



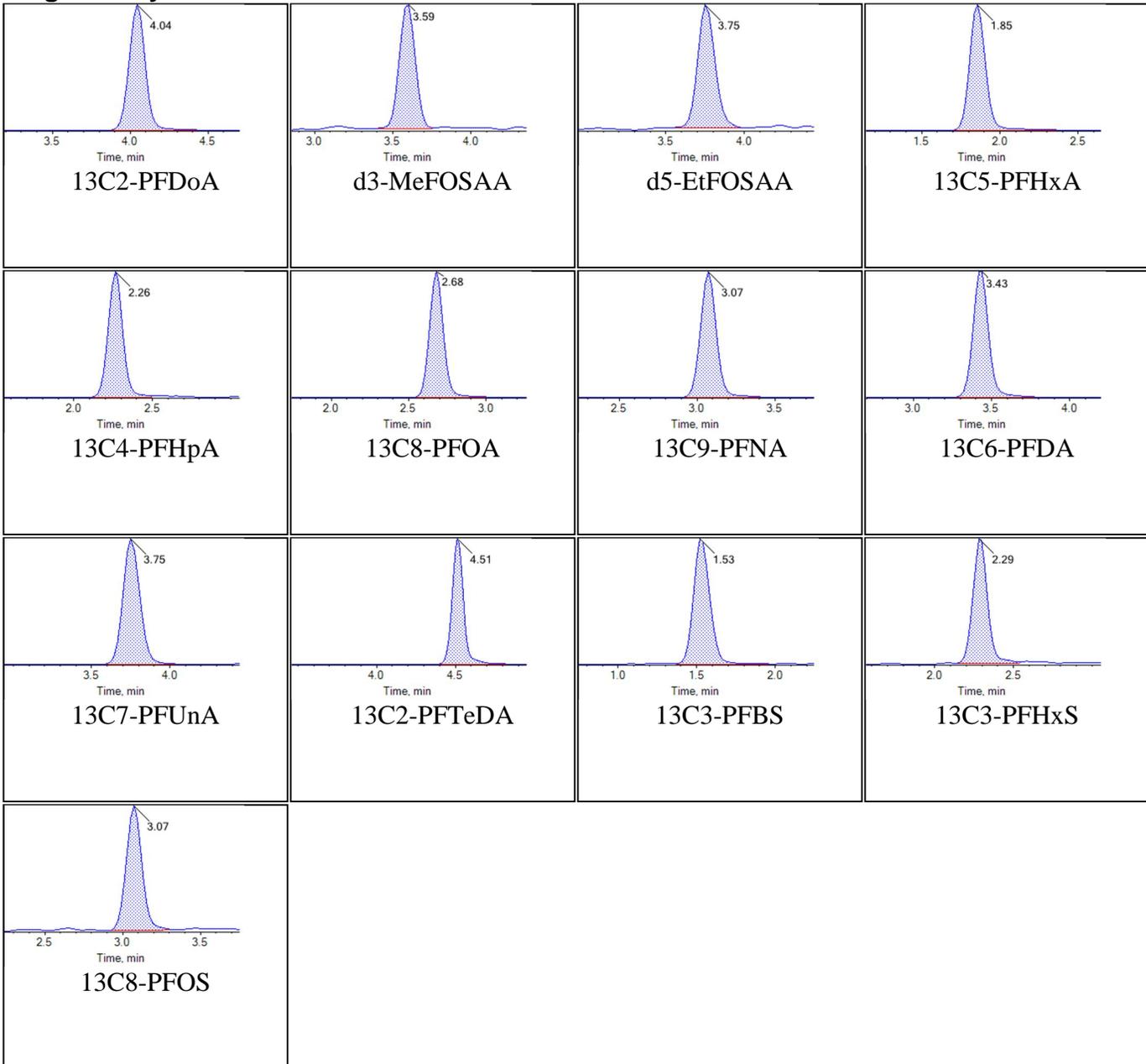
Internal Standards:



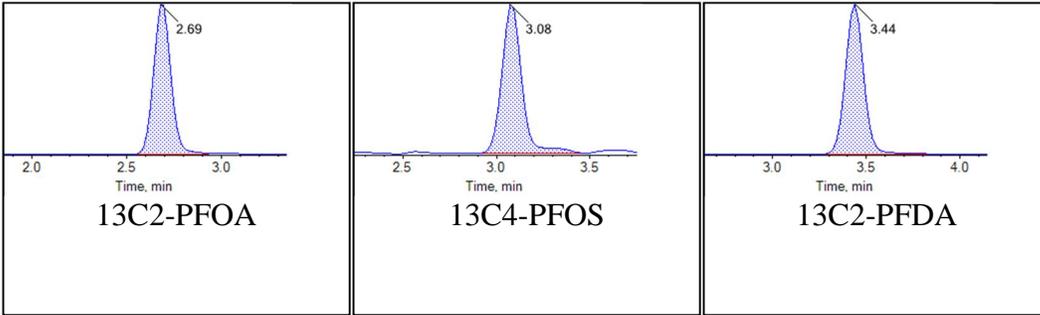
Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T12:53:10	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



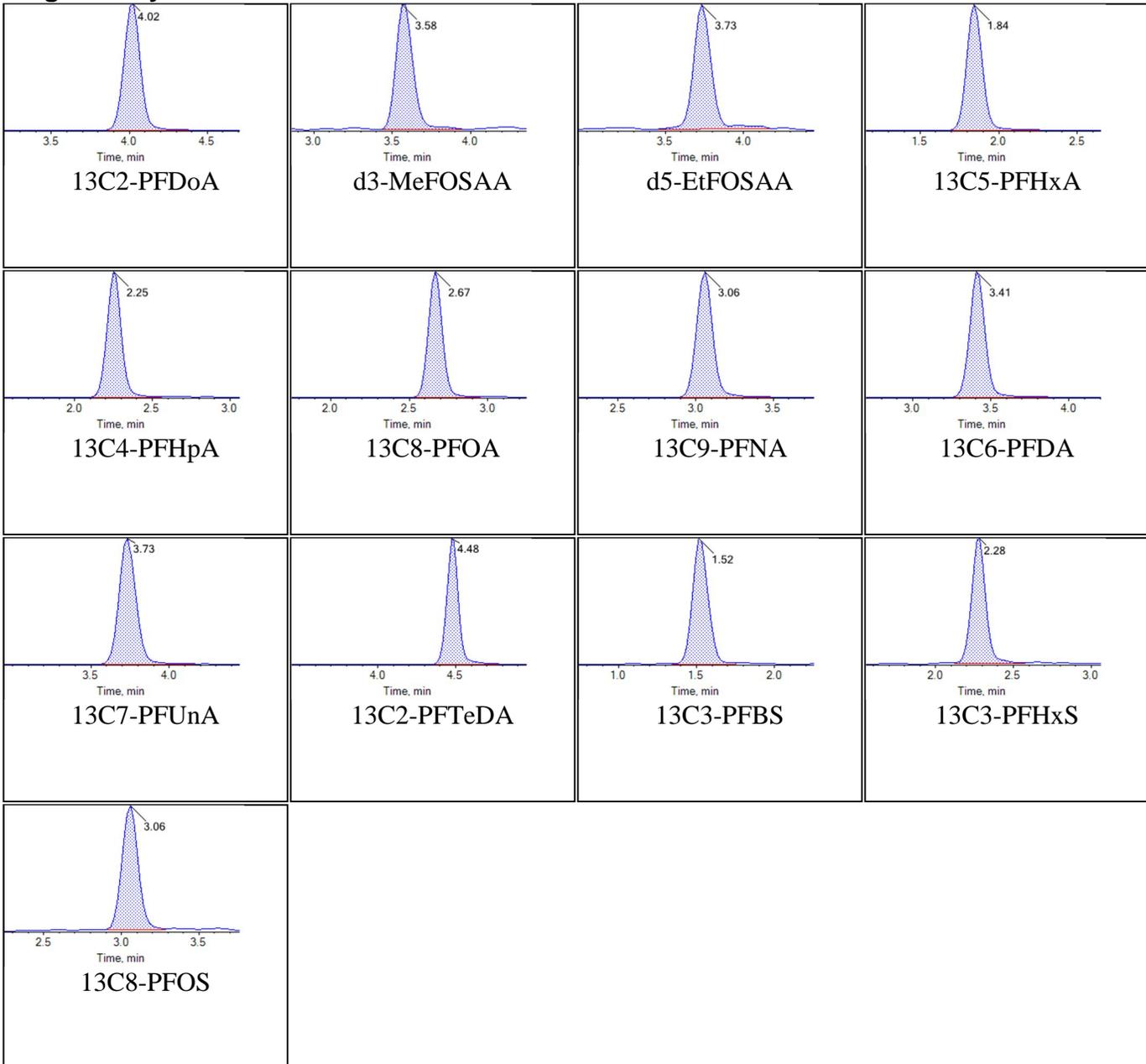
Internal Standards:



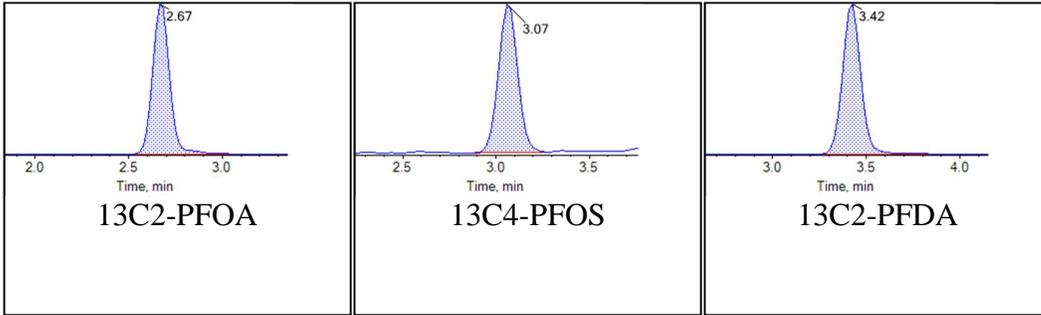
Sample Name	J8238-FS(3)	Injection Vial	26
Sample ID	VC-PM649-SS04-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T16:52:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



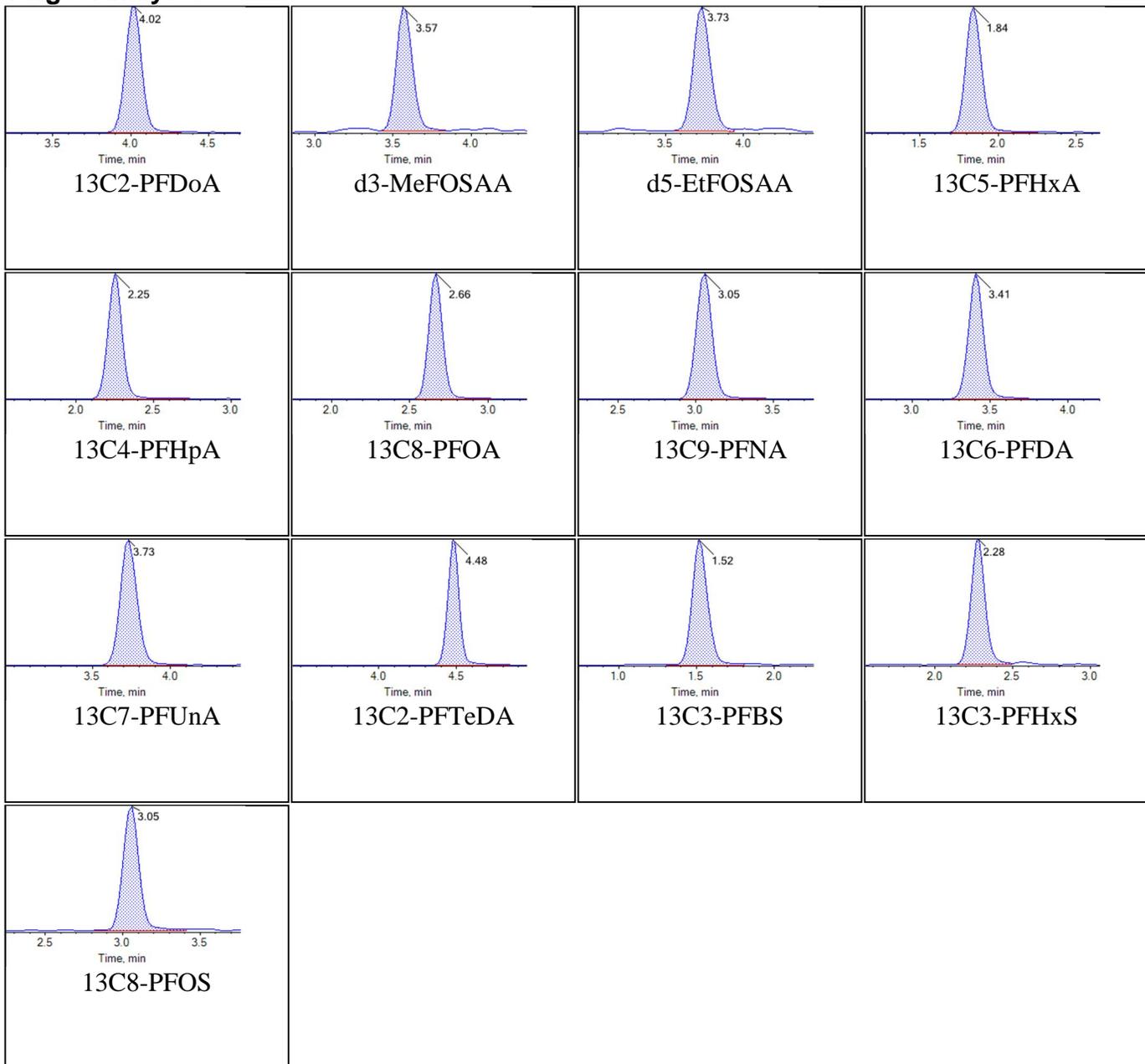
Internal Standards:



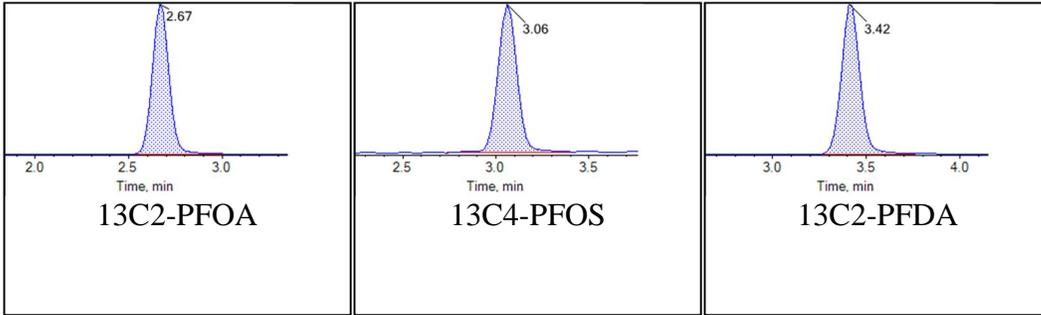
Sample Name	J8240-FS(3)	Injection Vial	28
Sample ID	VC-PM649-SB04-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:13:51	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



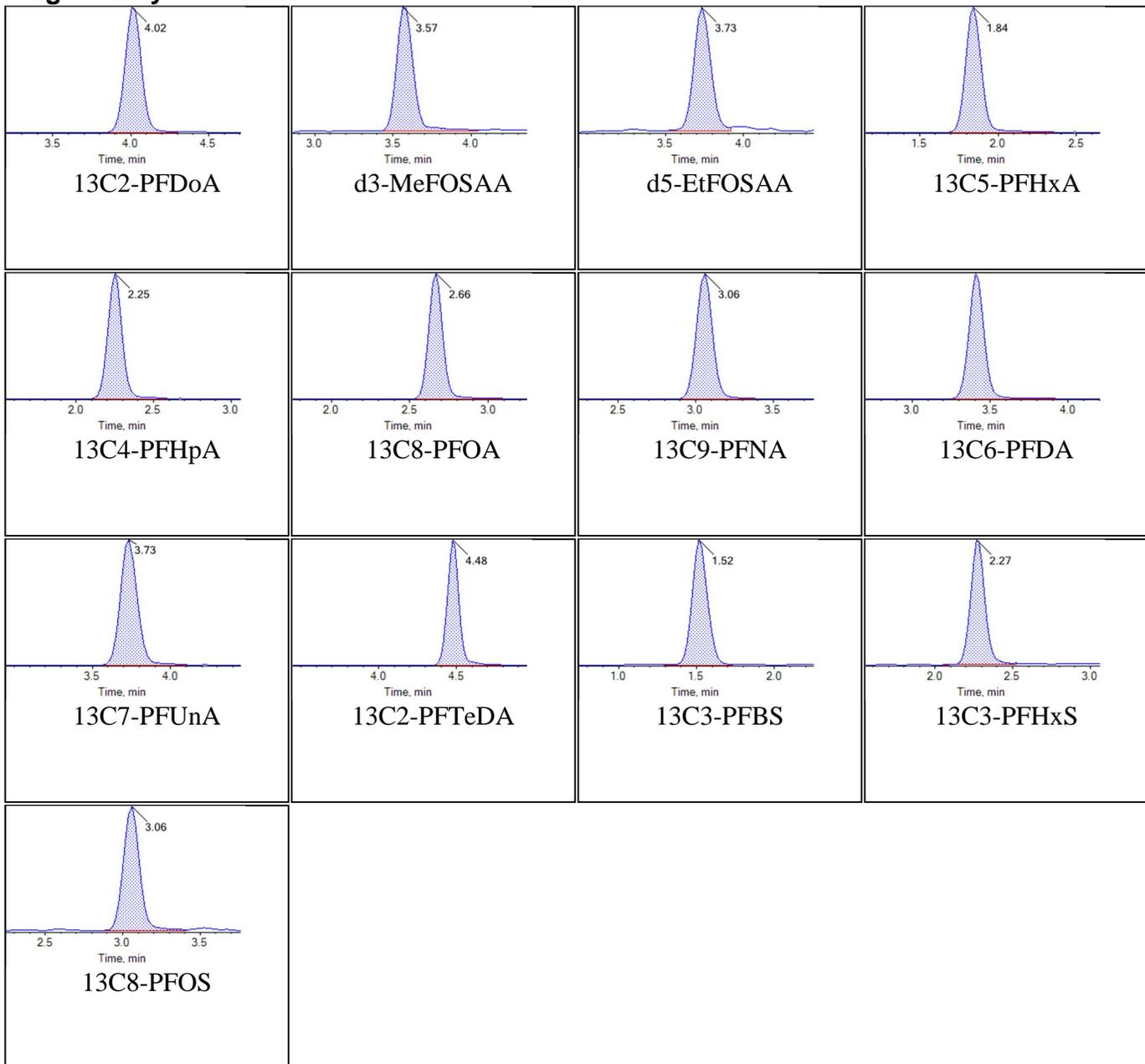
Internal Standards:



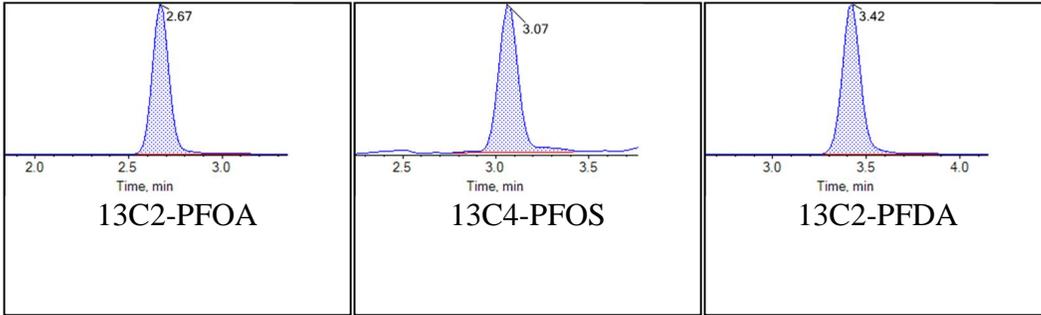
Sample Name	J8248-FS(3)	Injection Vial	29
Sample ID	VC-PM365-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:24:43	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



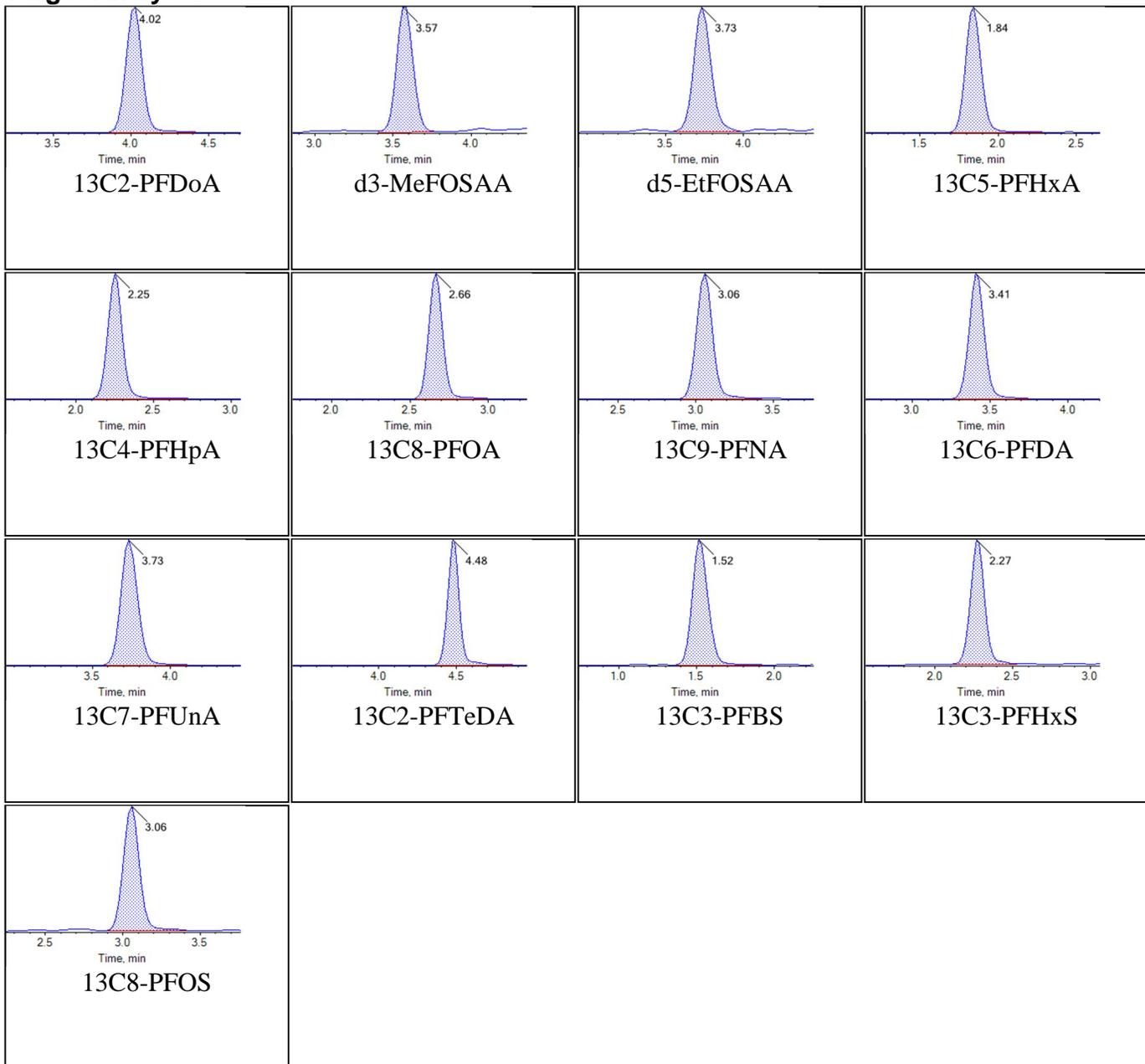
Internal Standards:



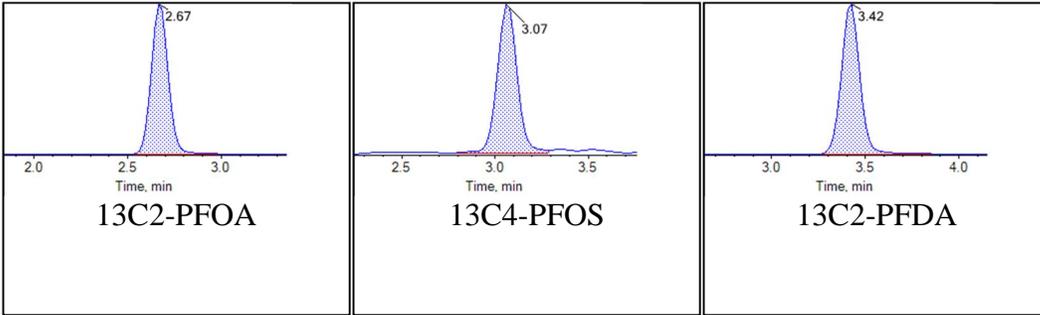
Sample Name	J8249-FS(3)	Injection Vial	30
Sample ID	VC-PM365-SB01-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:35:35	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



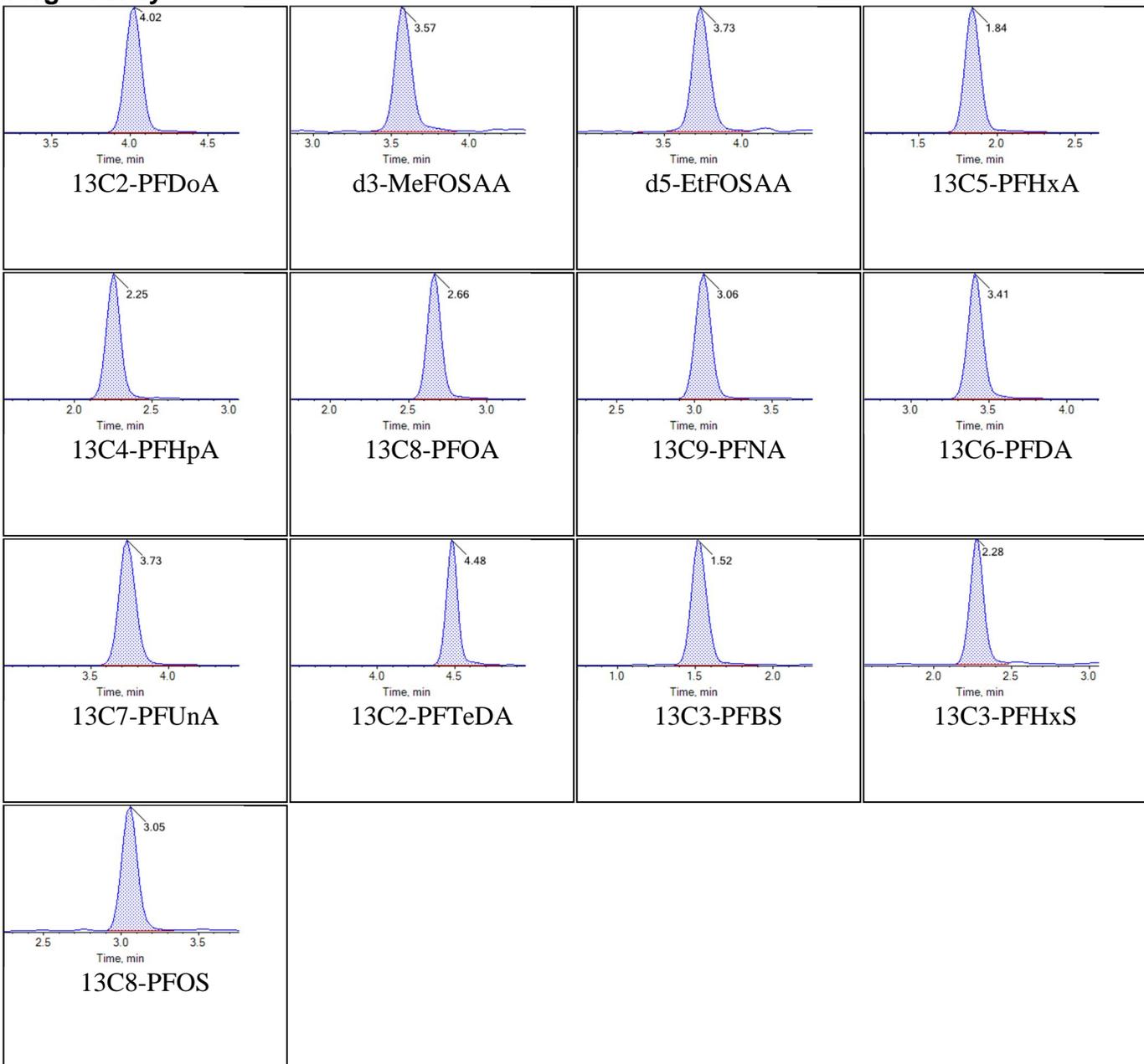
Internal Standards:



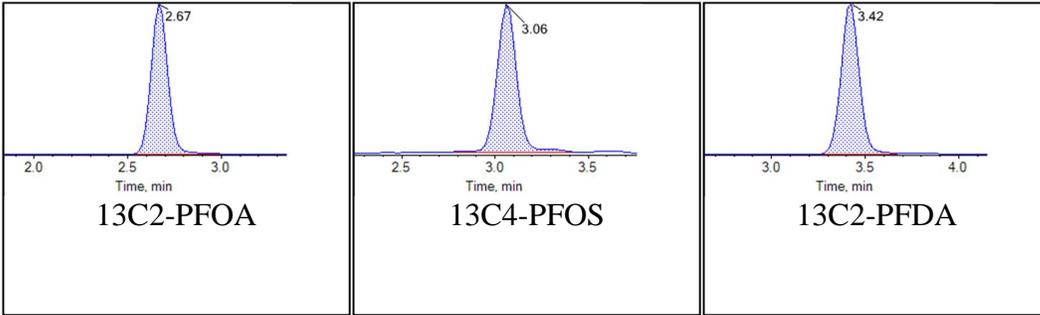
Sample Name	J8250-FS(3)	Injection Vial	31
Sample ID	VC-PM365-SB01-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:46:27	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



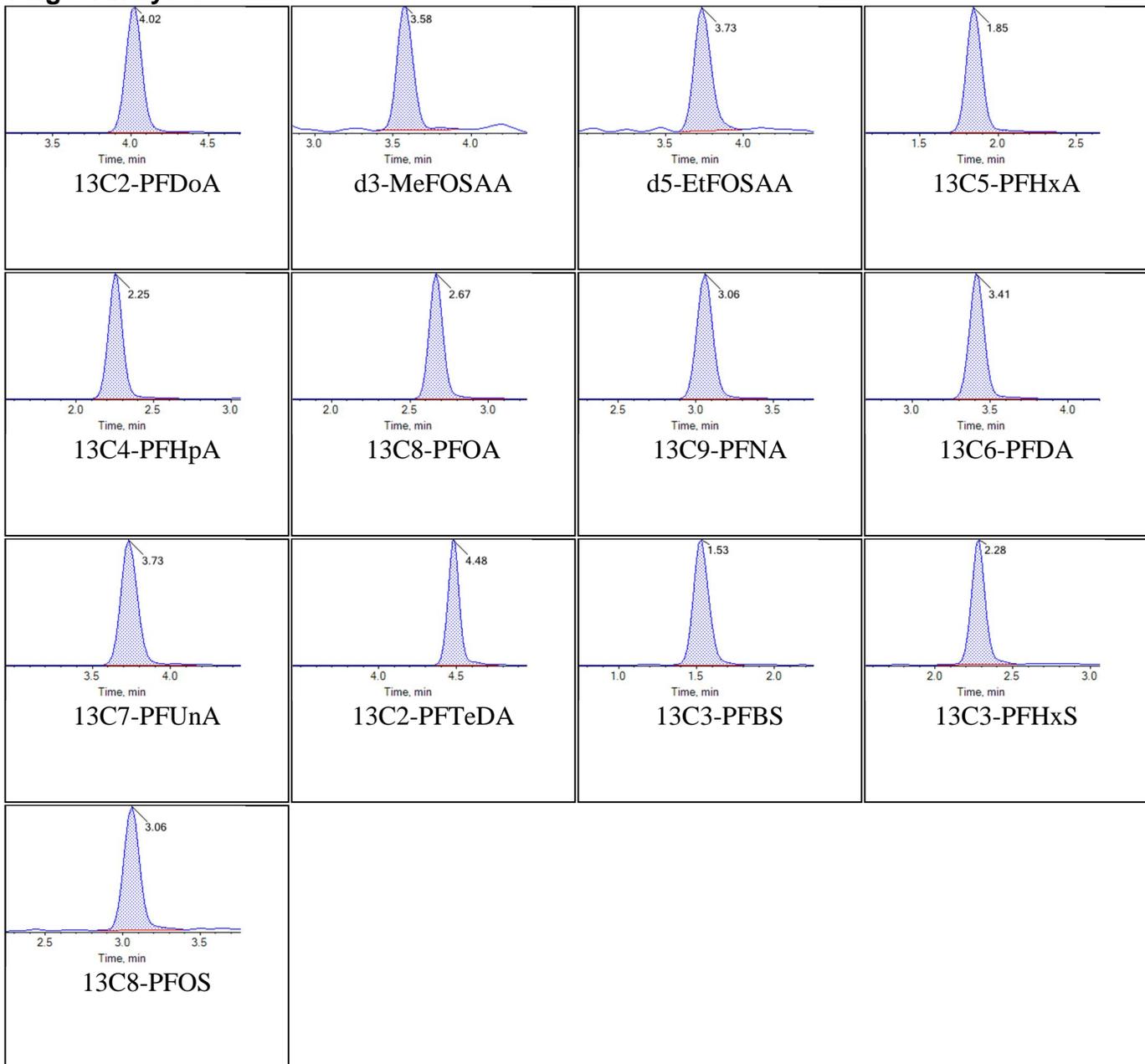
Internal Standards:



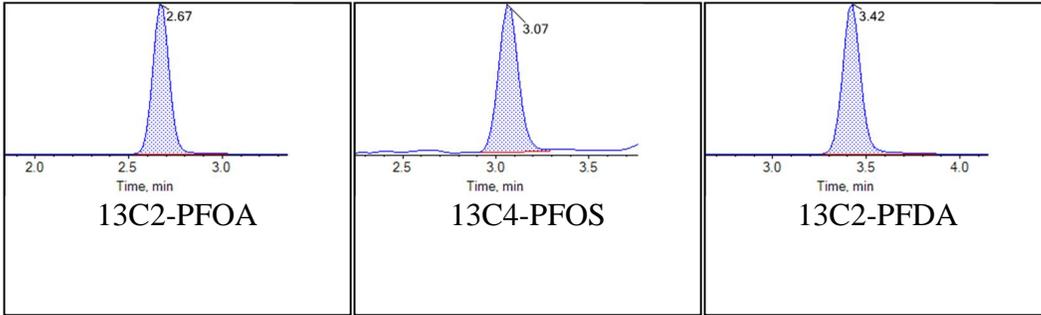
Sample Name	J8251-FS(3)	Injection Vial	32
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:57:18	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



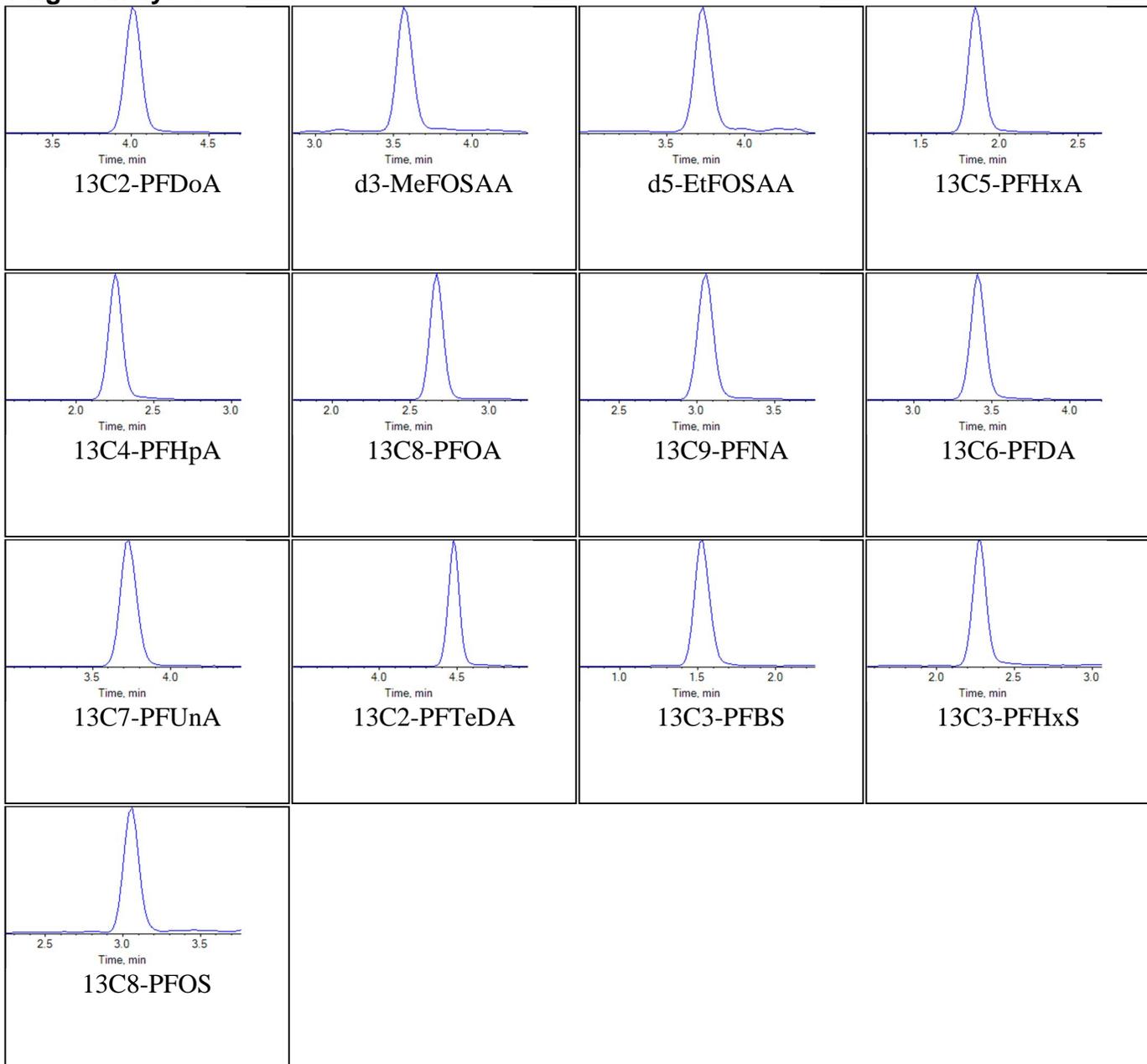
Internal Standards:



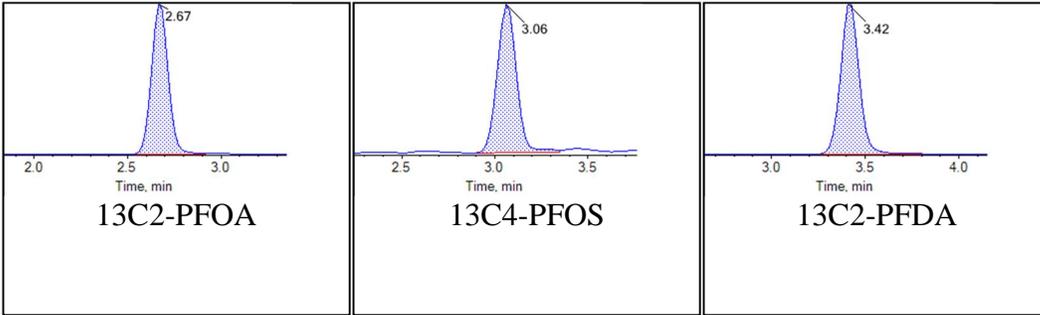
Sample Name	J8251-FS-D(5)	Injection Vial	33
Sample ID	VC-PM365-SS02-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:08:09	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



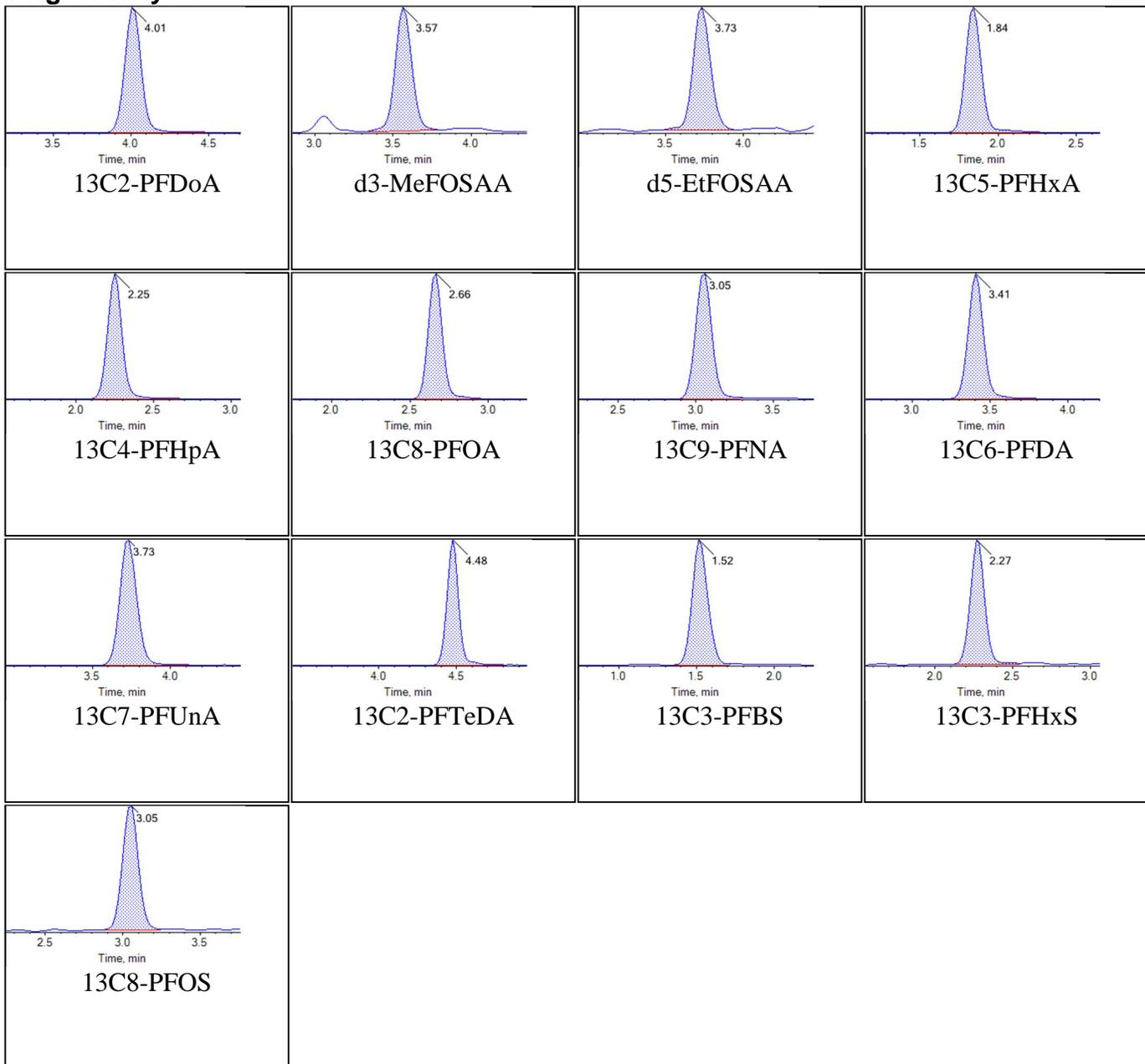
Internal Standards:



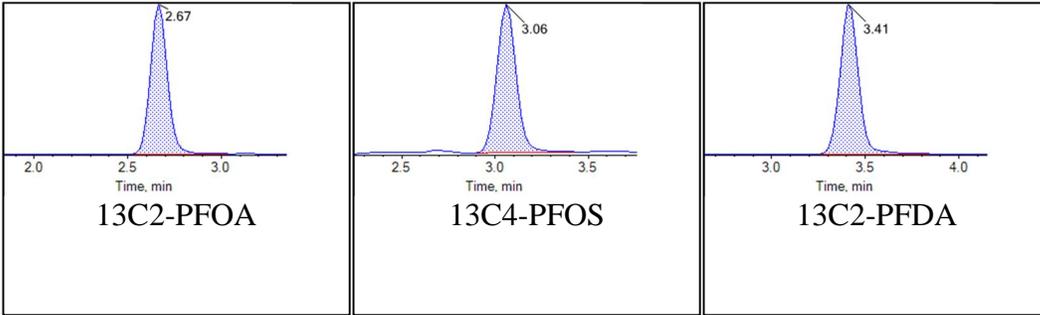
Sample Name	KB69 CCV	Injection Vial	34
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:19:01	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



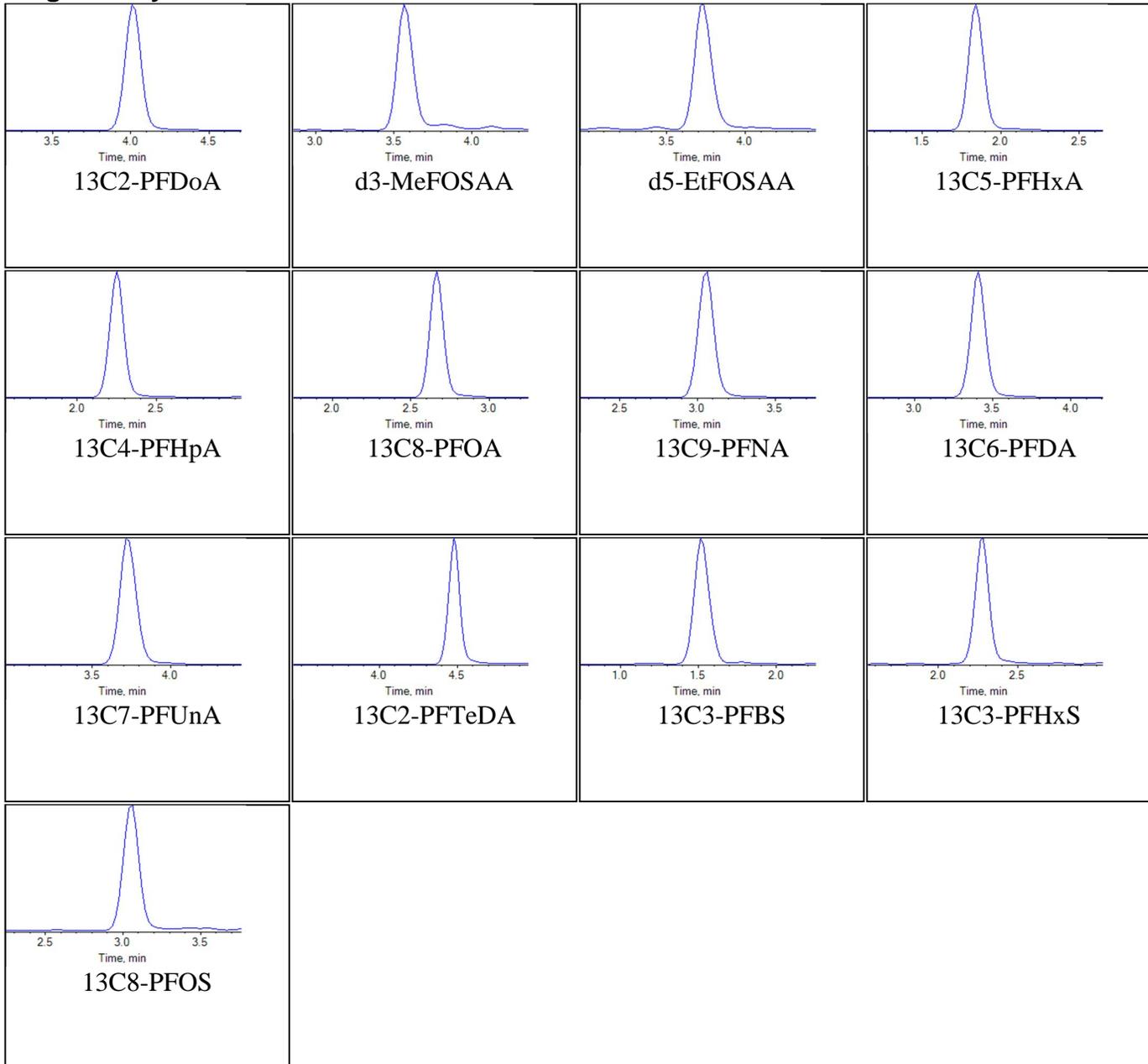
Internal Standards:



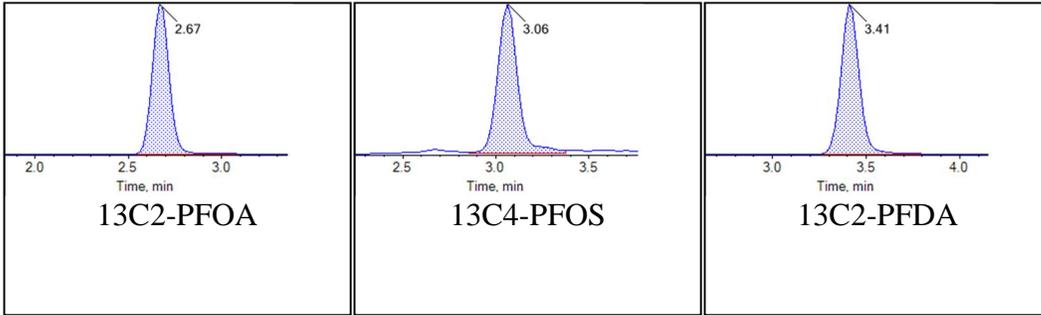
Sample Name	J8252-FS-D(5)	Injection Vial	37
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:51:37	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



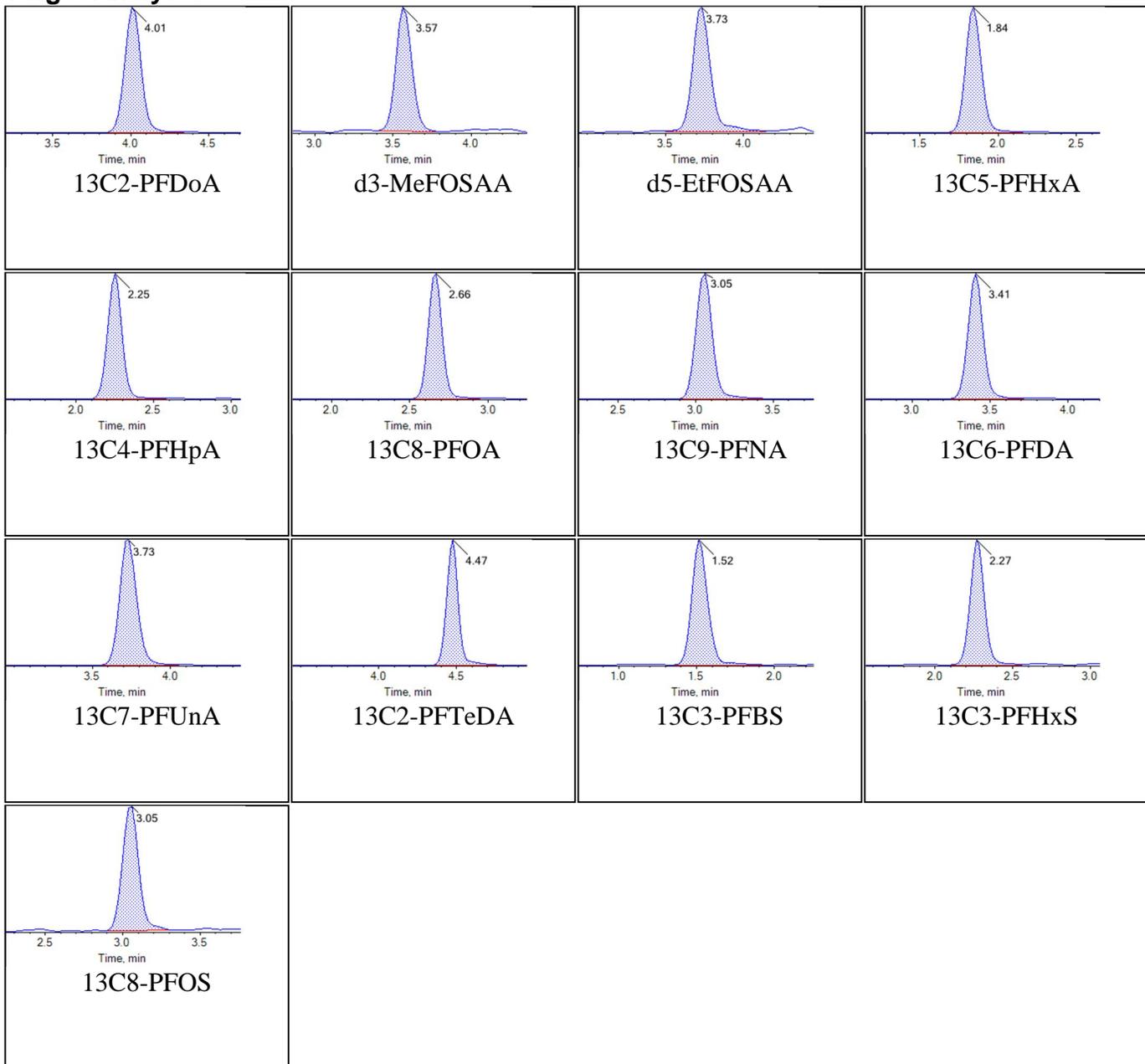
Internal Standards:



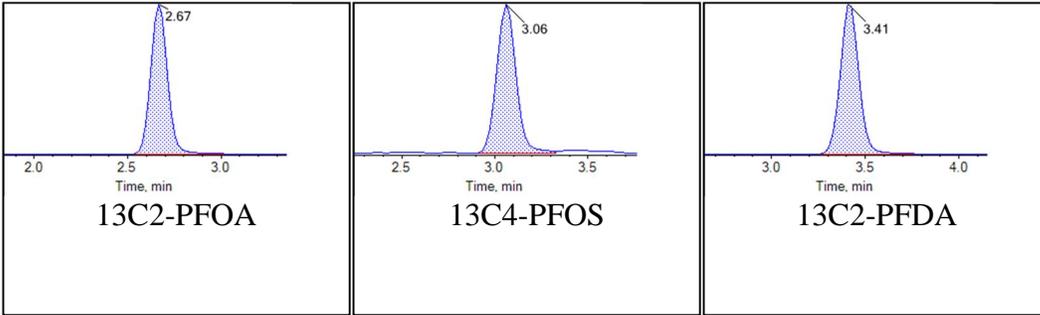
Sample Name	J8253-FS(3)	Injection Vial	38
Sample ID	VC-PM365-SB02-0506	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:02:28	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



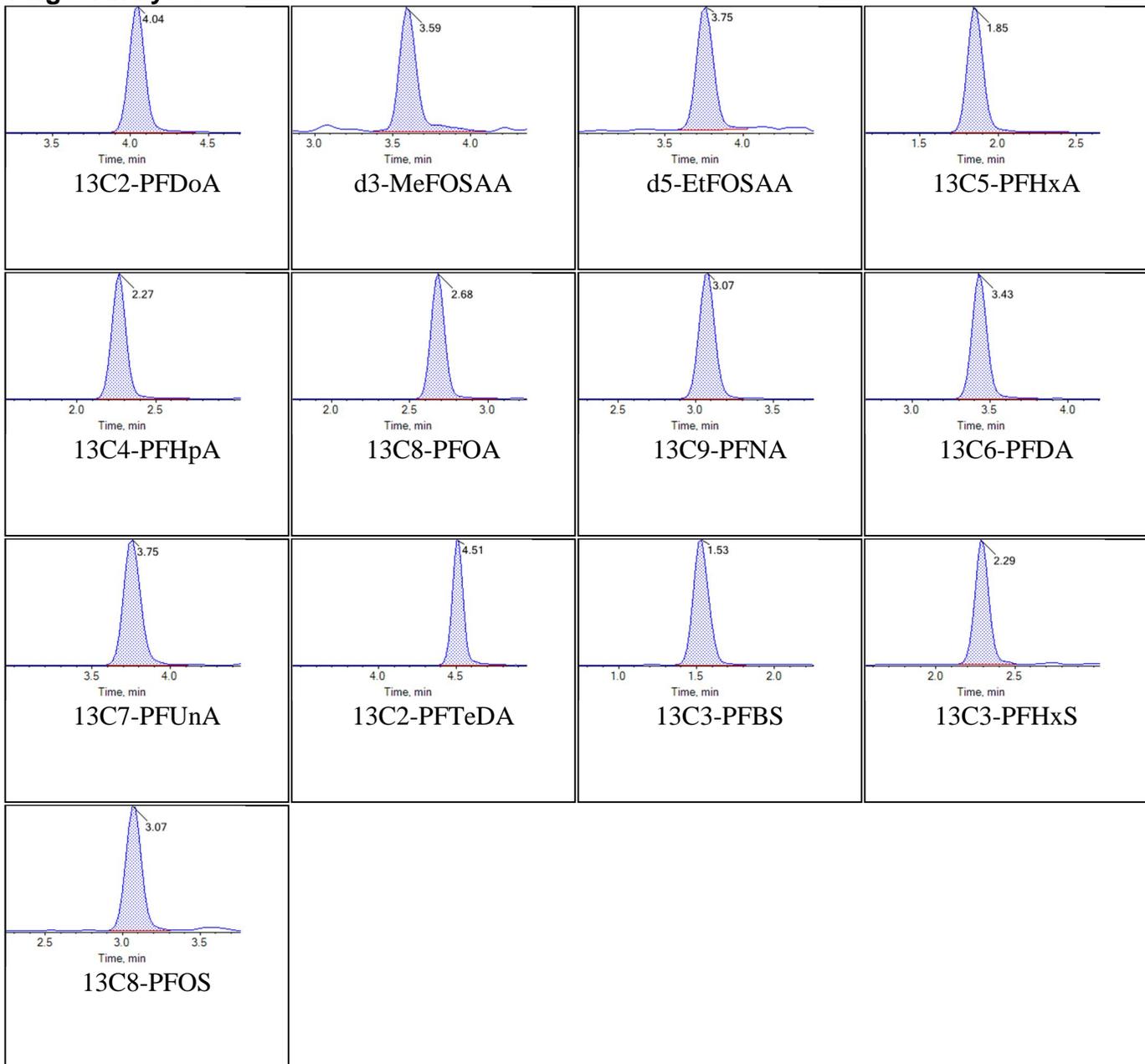
Internal Standards:



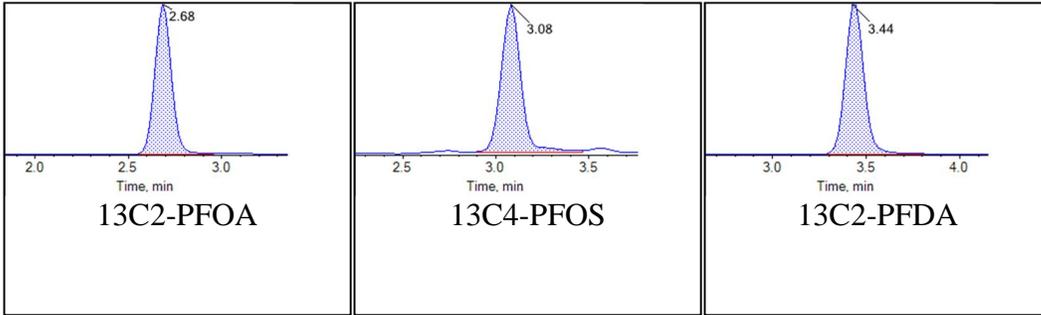
Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:04:02	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



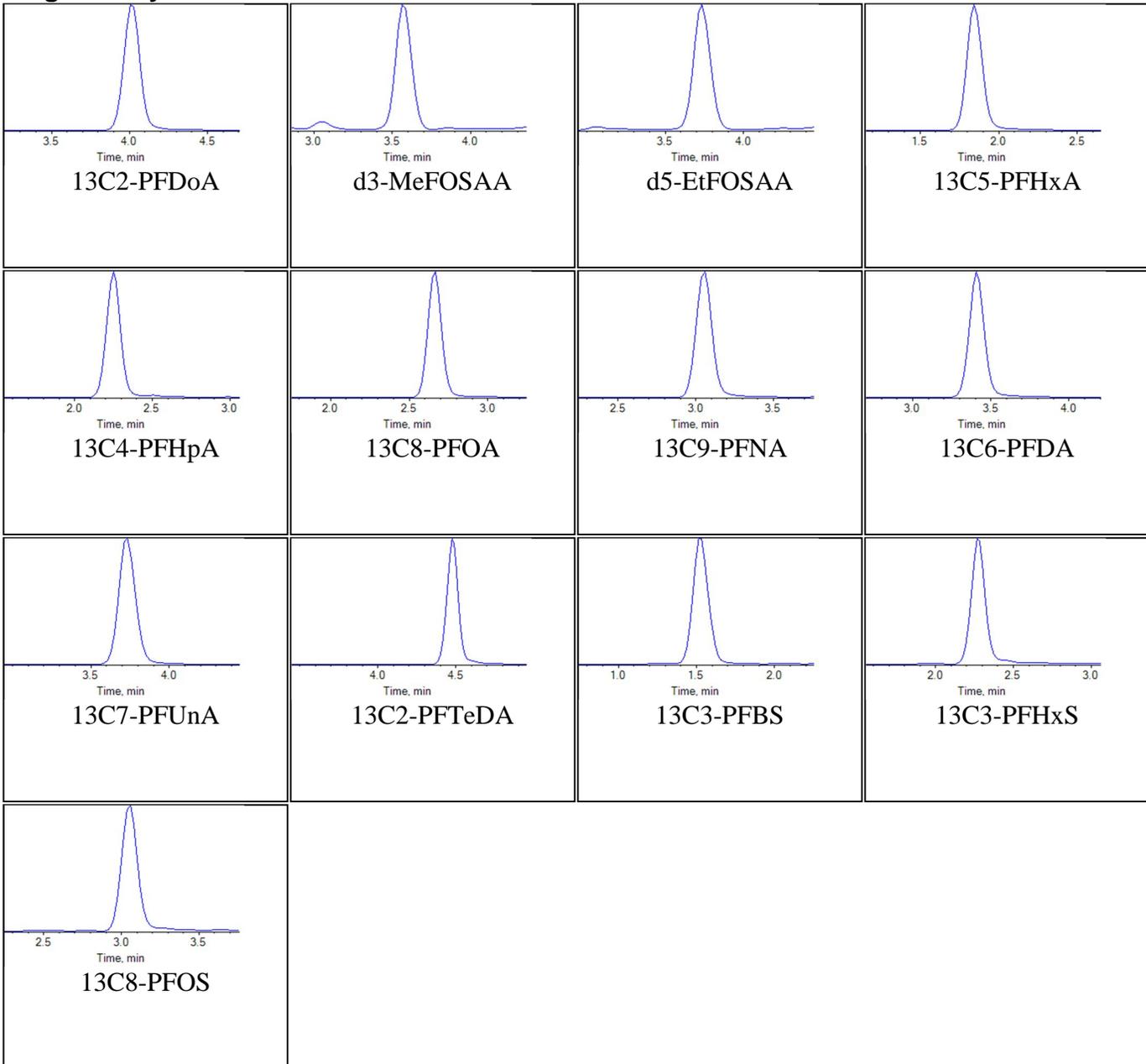
Internal Standards:



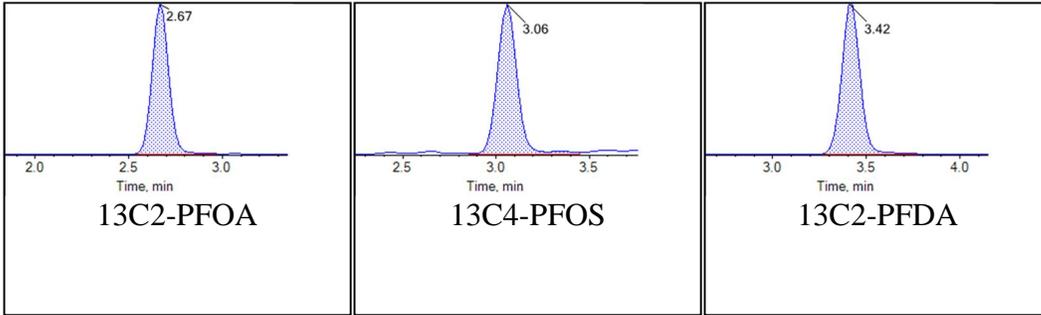
Sample Name	J8257MS-D(5)	Injection Vial	40
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:24:13	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



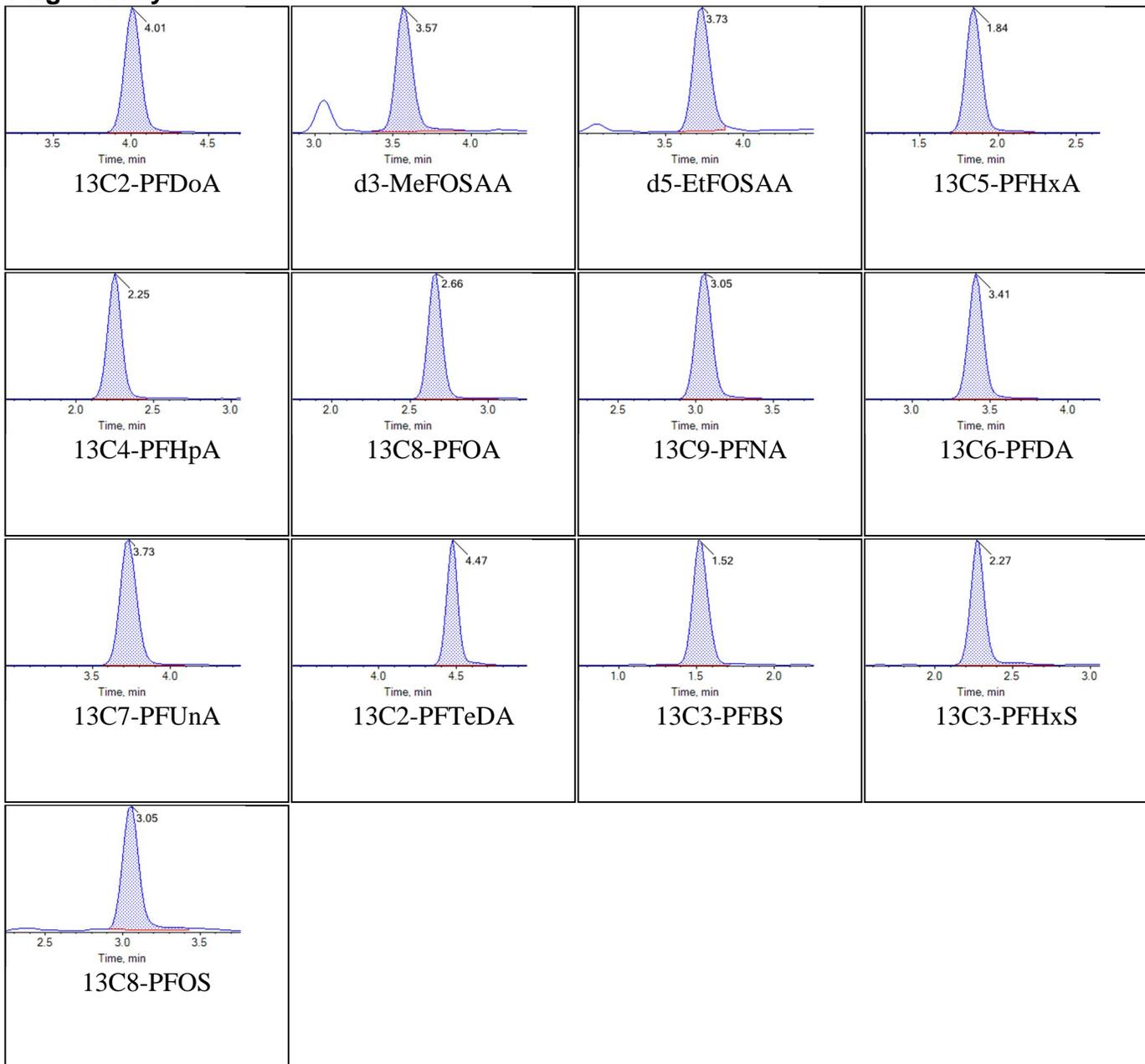
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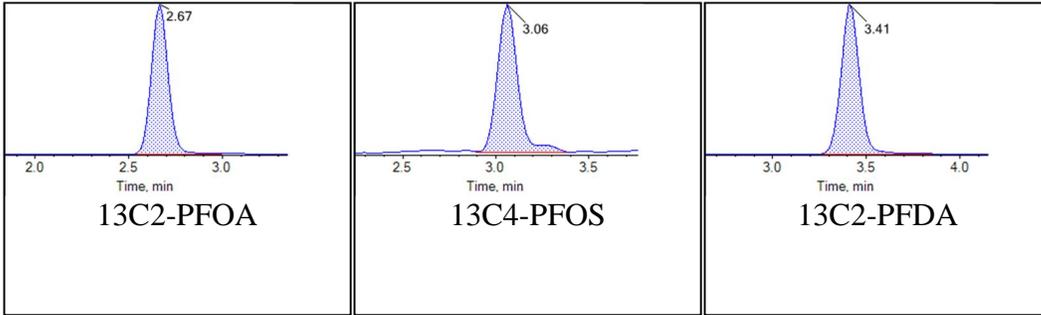
Sample Name	J8258MSD-FS(3)	Injection Vial	41
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:35:05	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



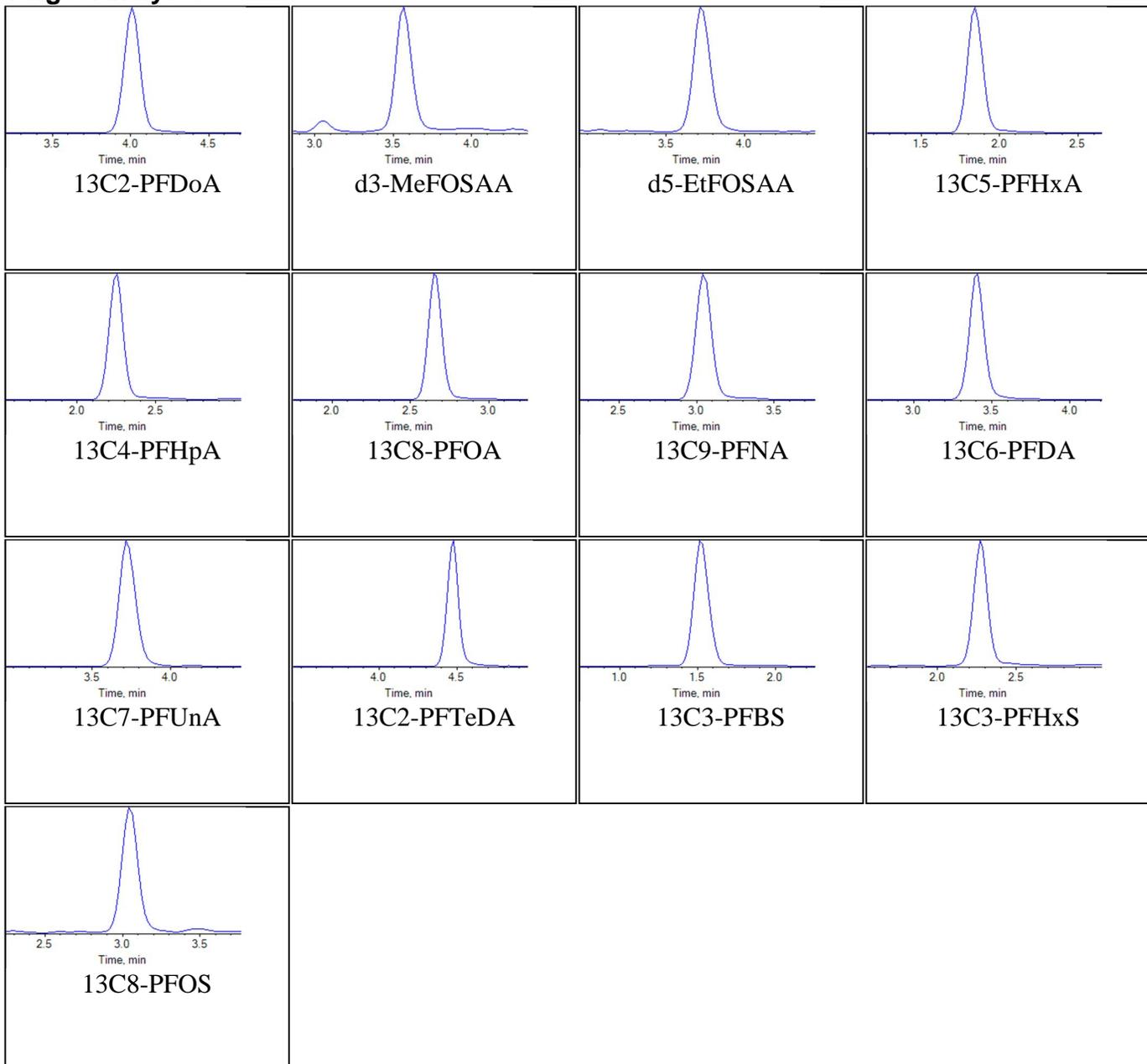
Internal Standards:



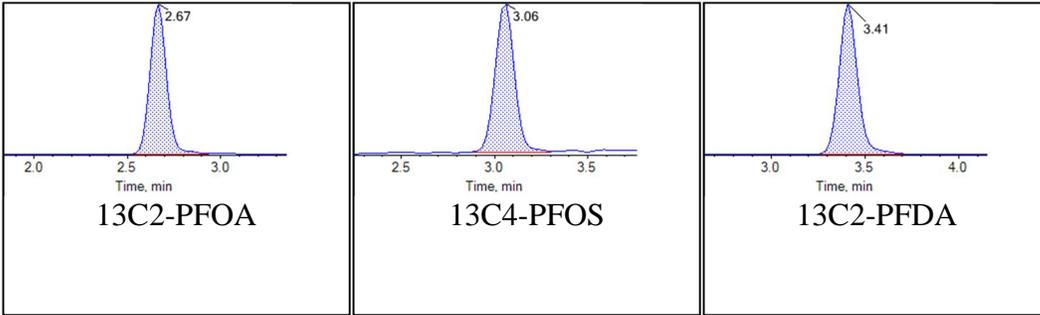
Sample Name	J8258MSD-FS-D(5)	Injection Vial	42
Sample ID	VC-PM365-SB02-0102-MSD	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:45:56	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



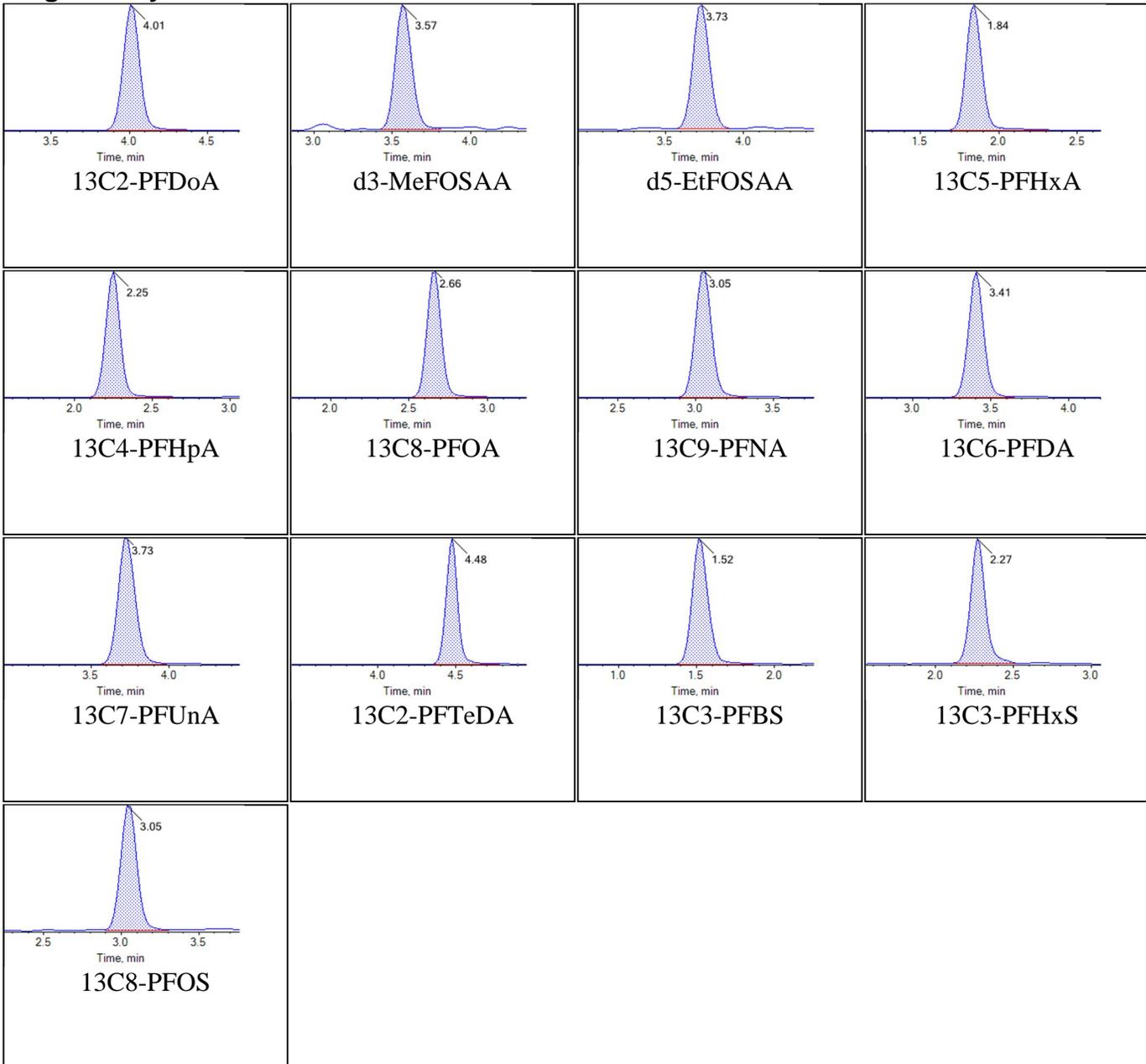
Internal Standards:



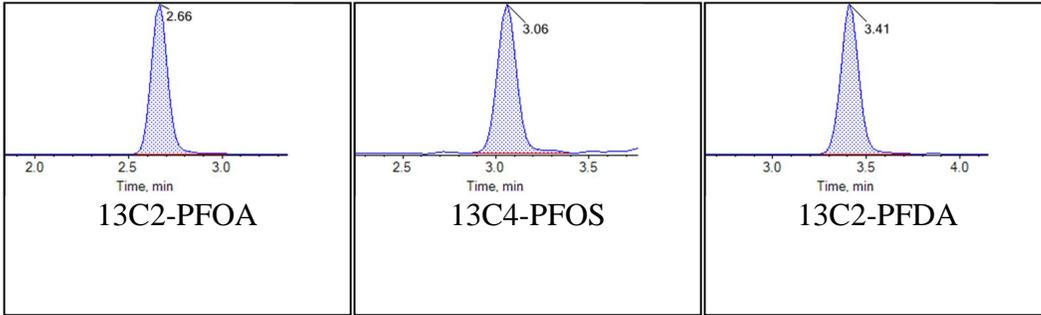
Sample Name	KB85 CCV	Injection Vial	43
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:56:48	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



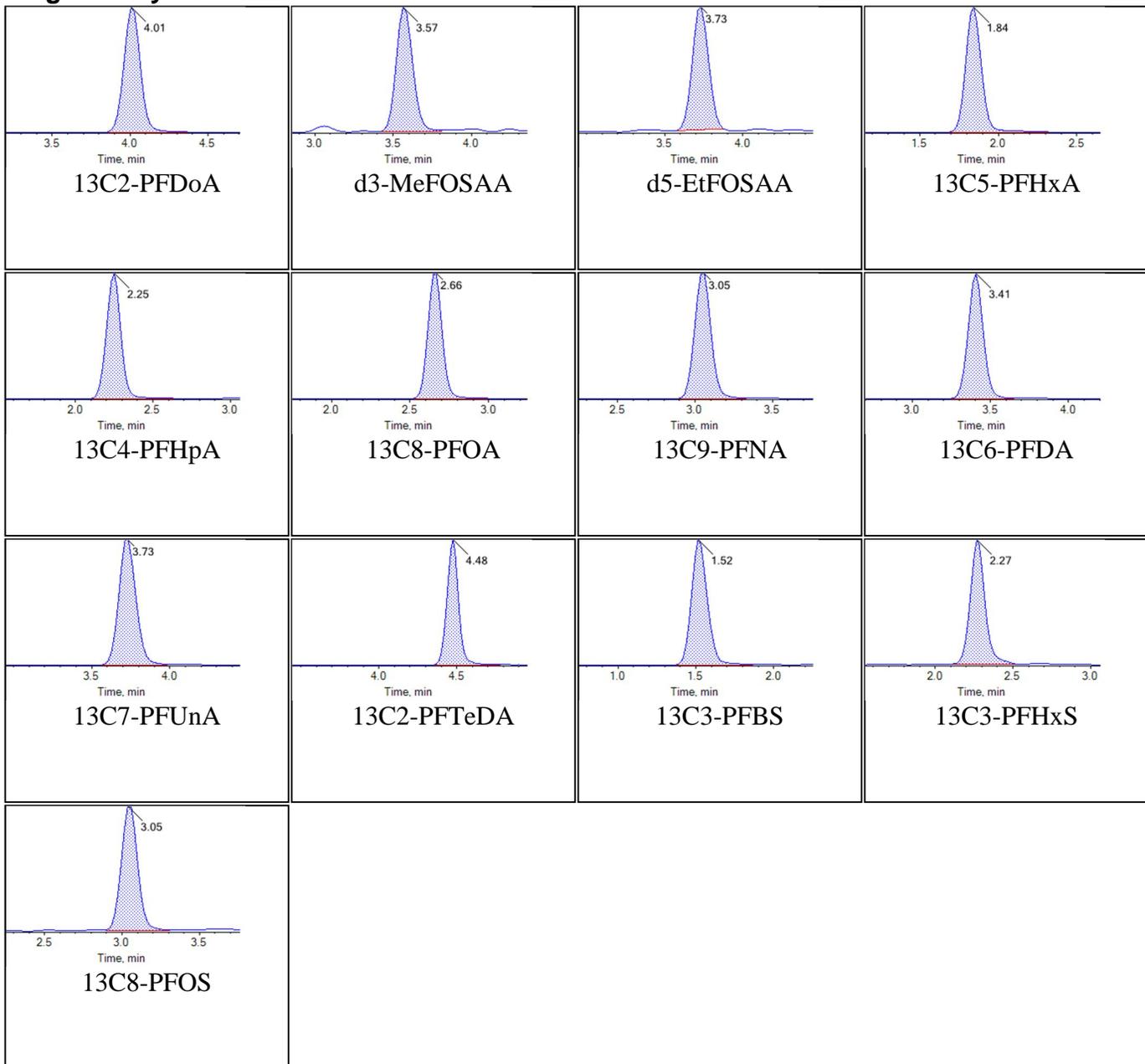
Internal Standards:



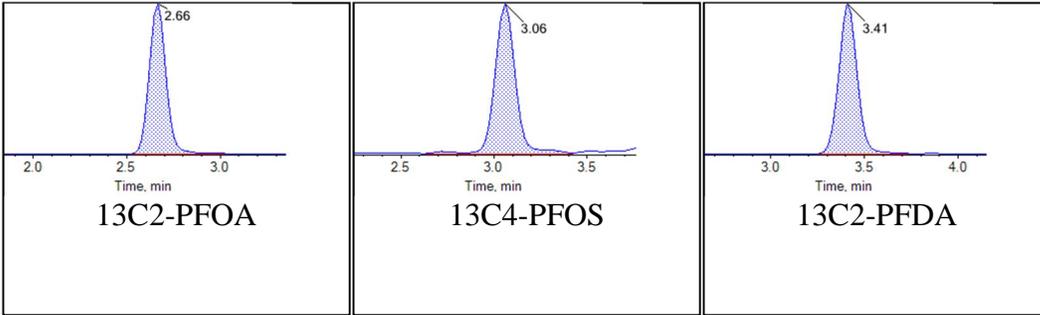
Sample Name	KB85 CCV	Injection Vial	43
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:56:48	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



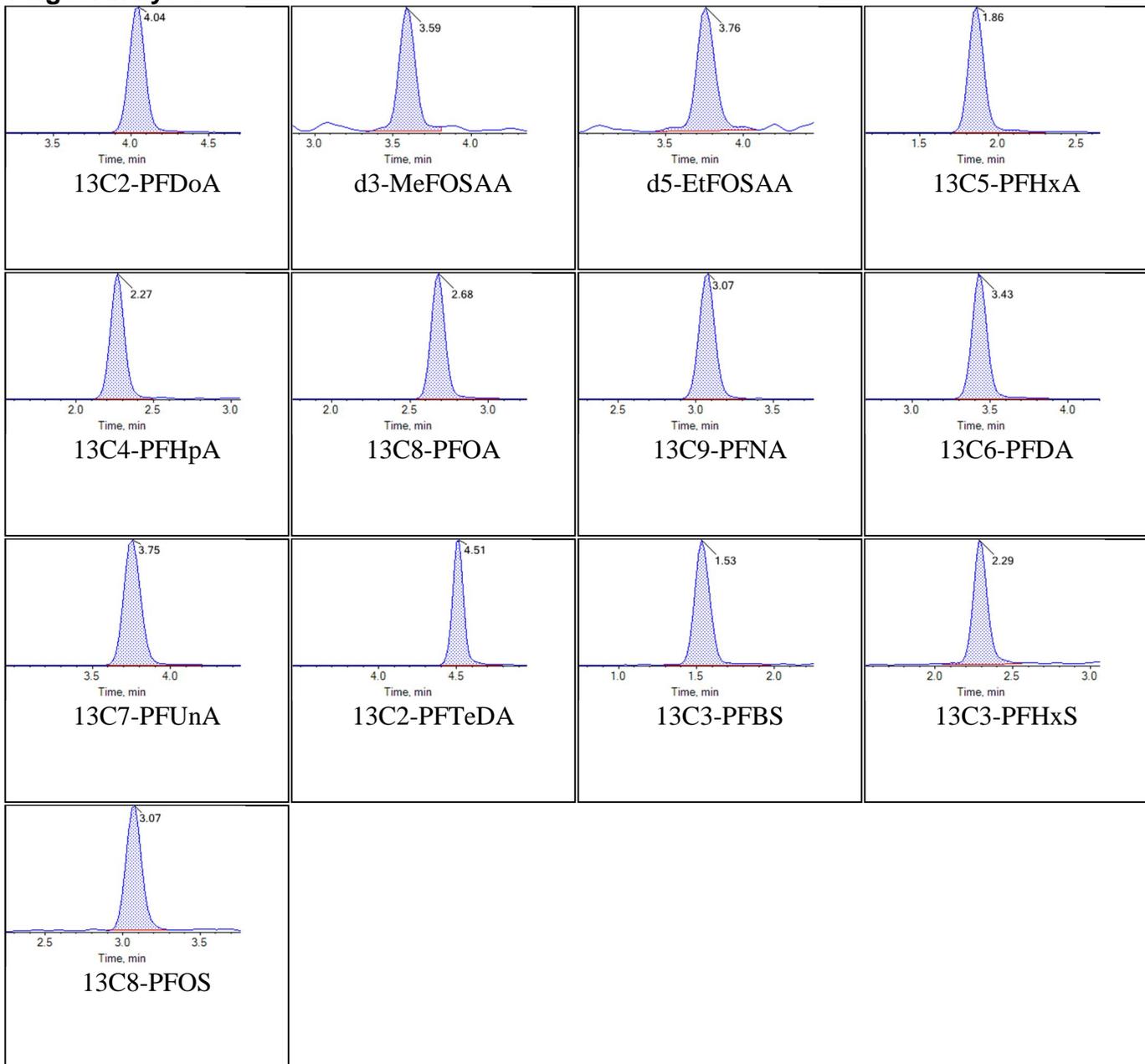
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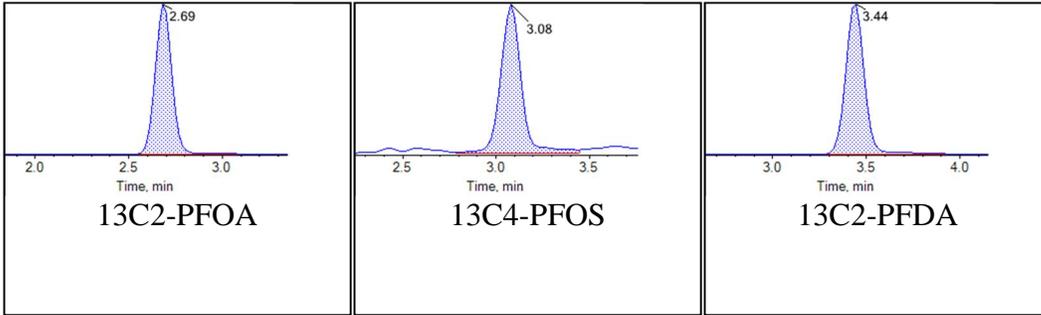
Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:14:55	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



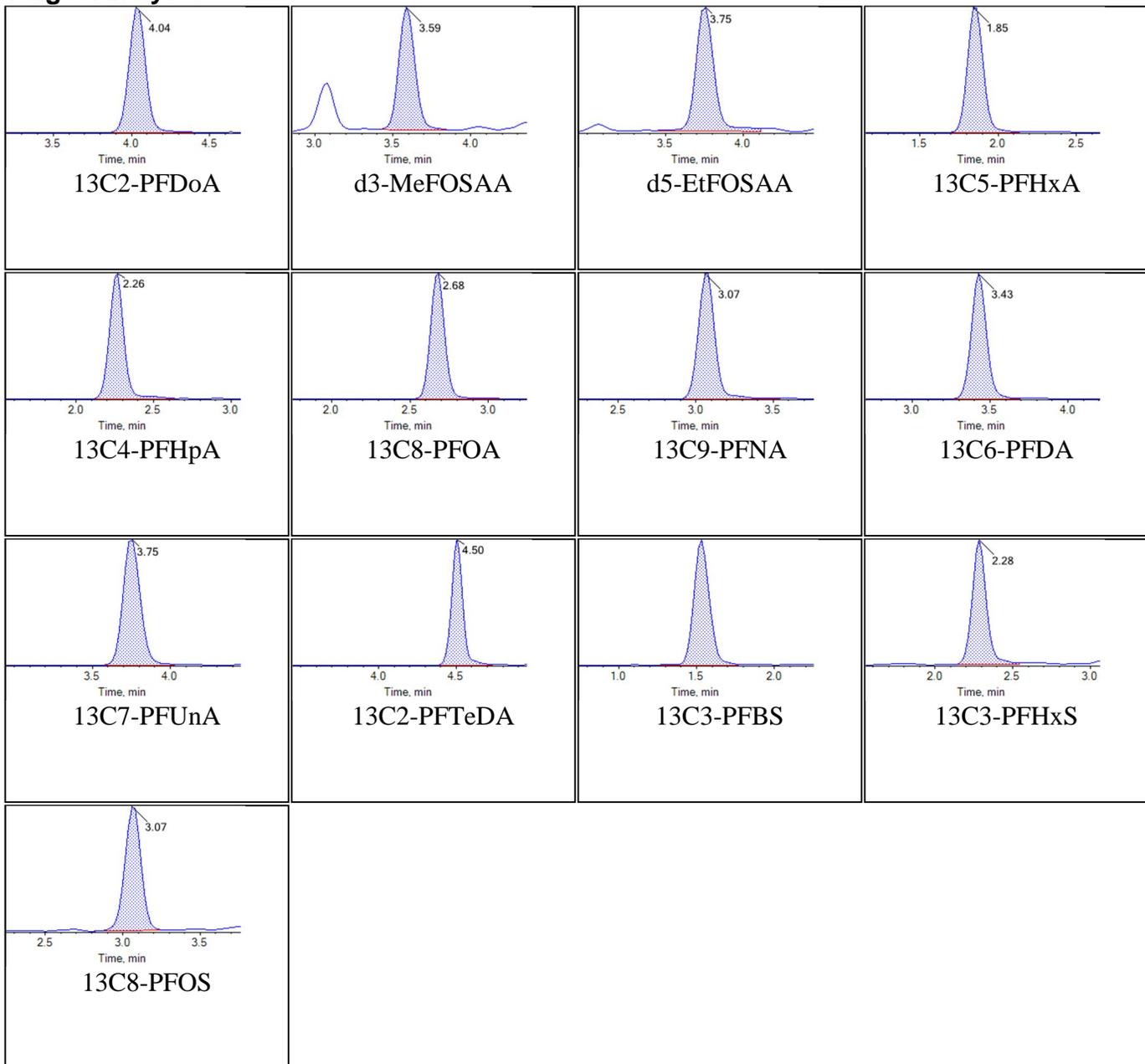
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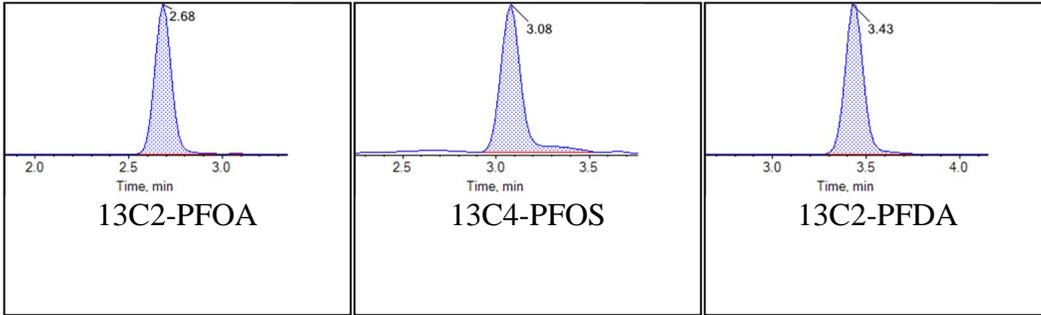
Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:25:46	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



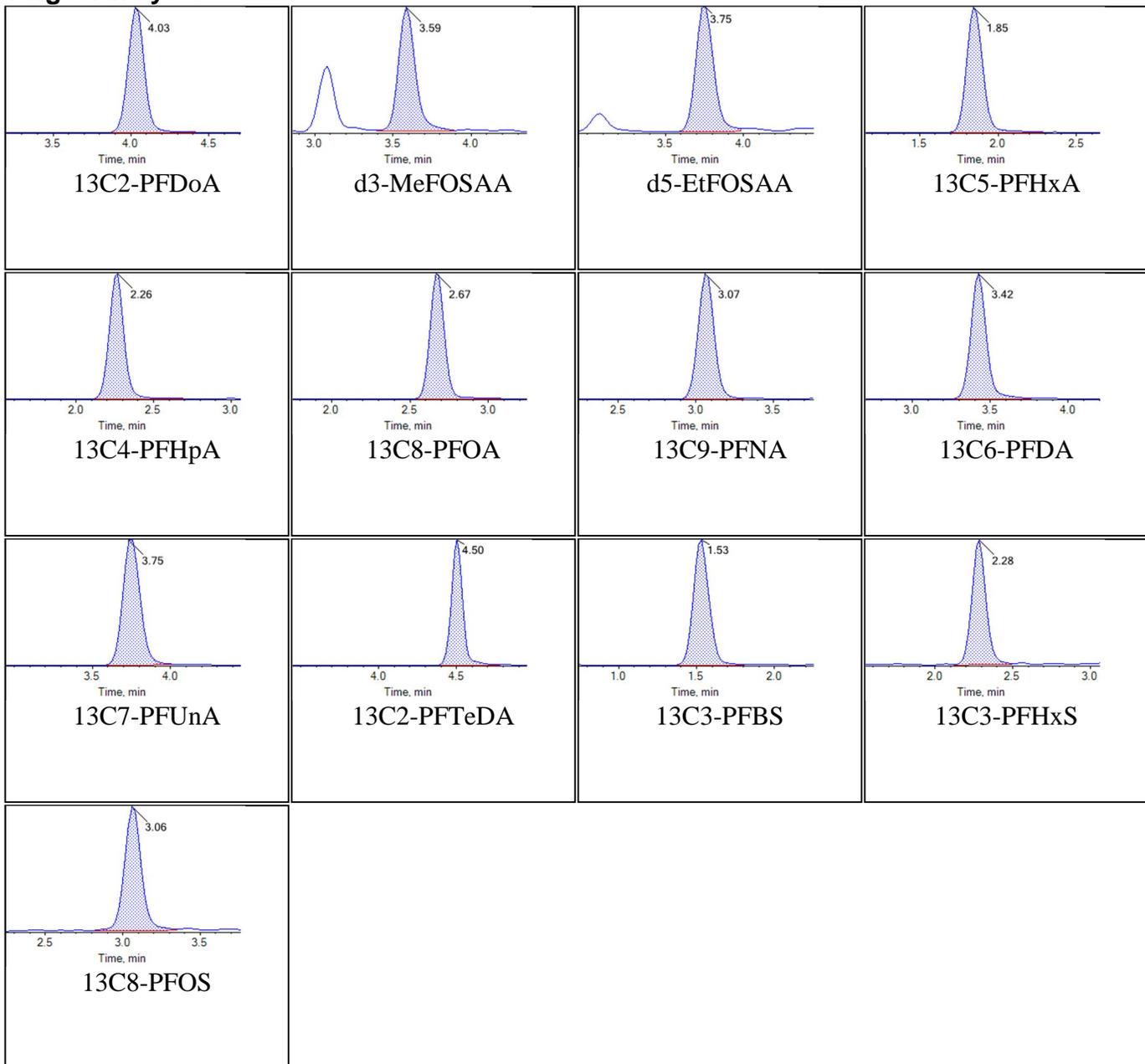
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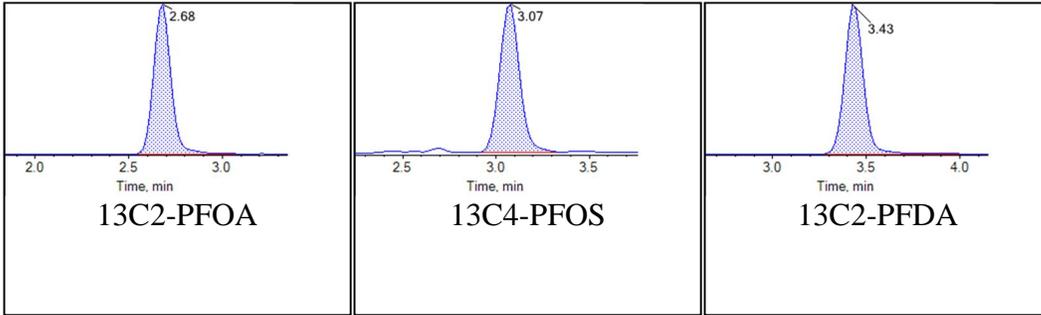
Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:36:39	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



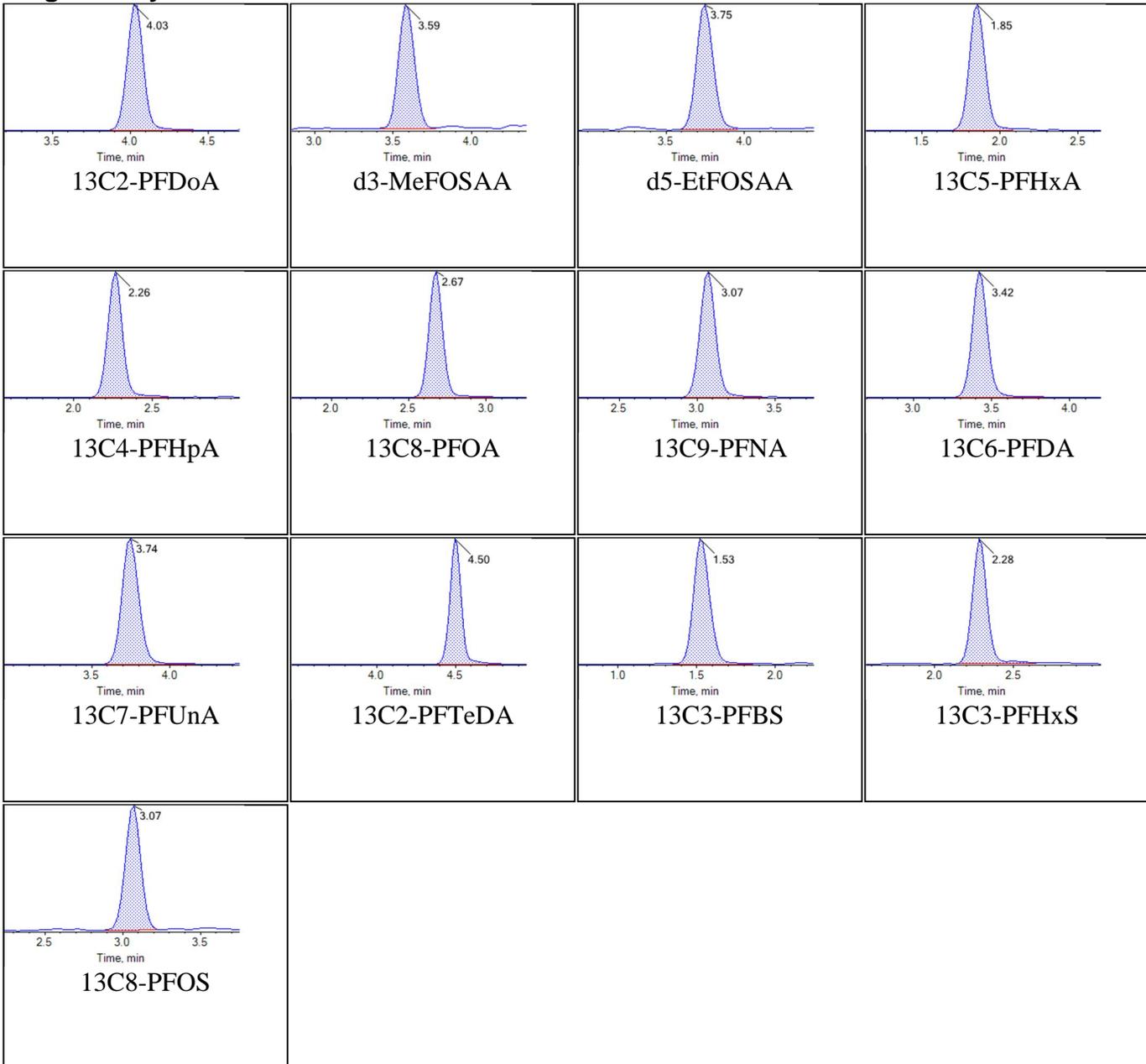
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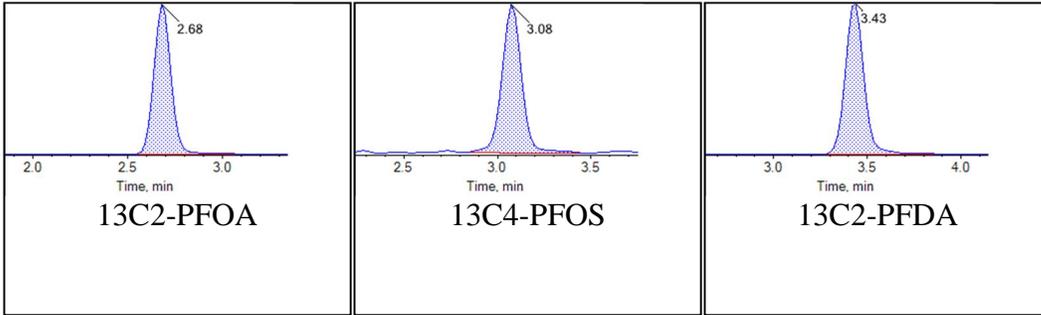
Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:47:30	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



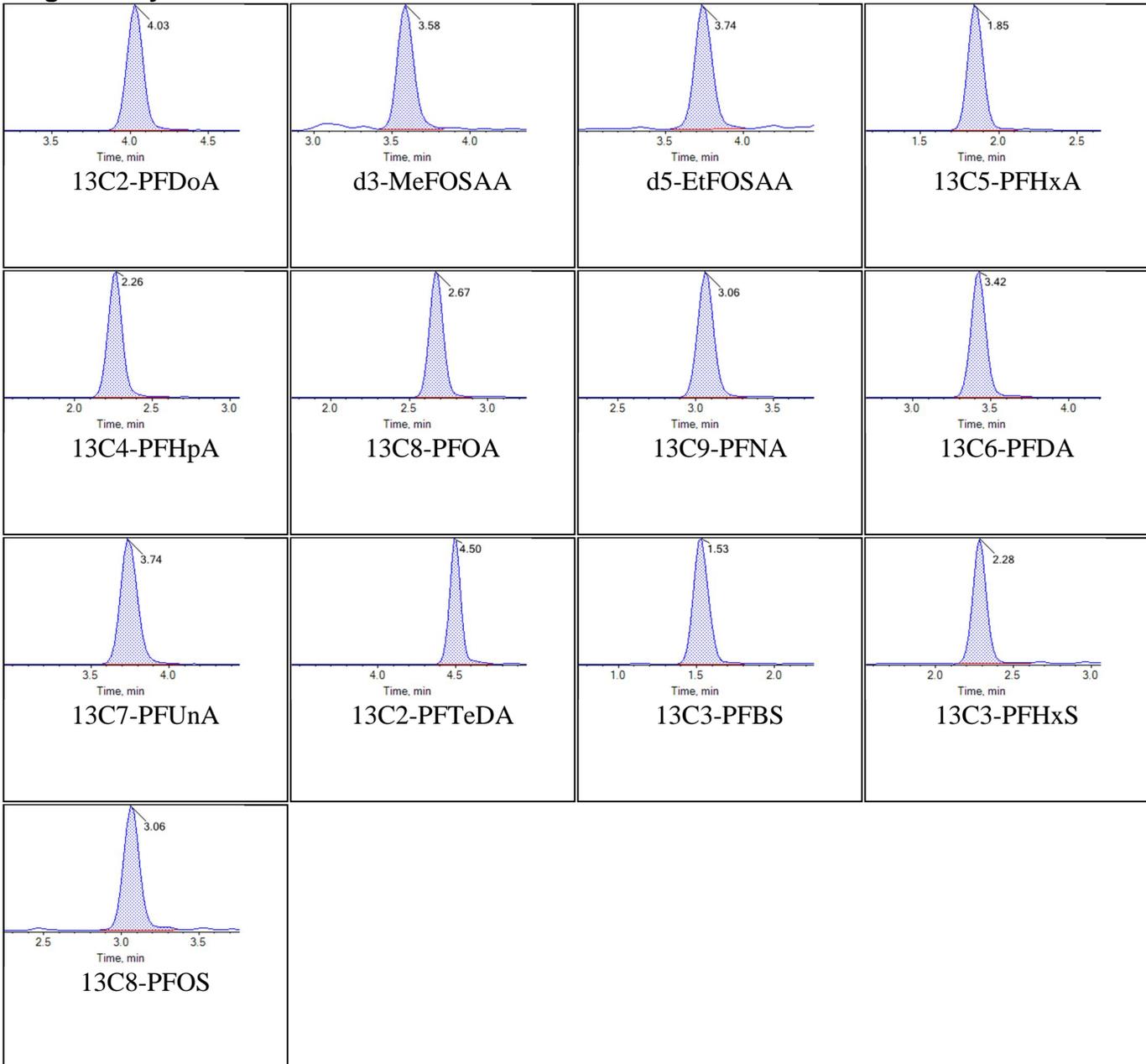
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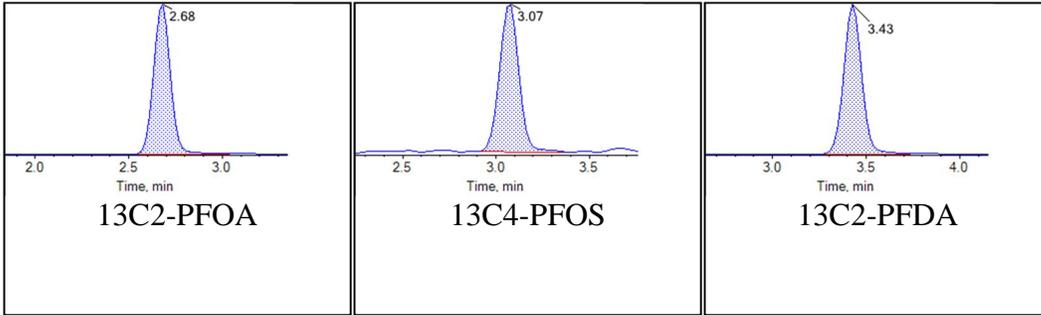
Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T13:58:23	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



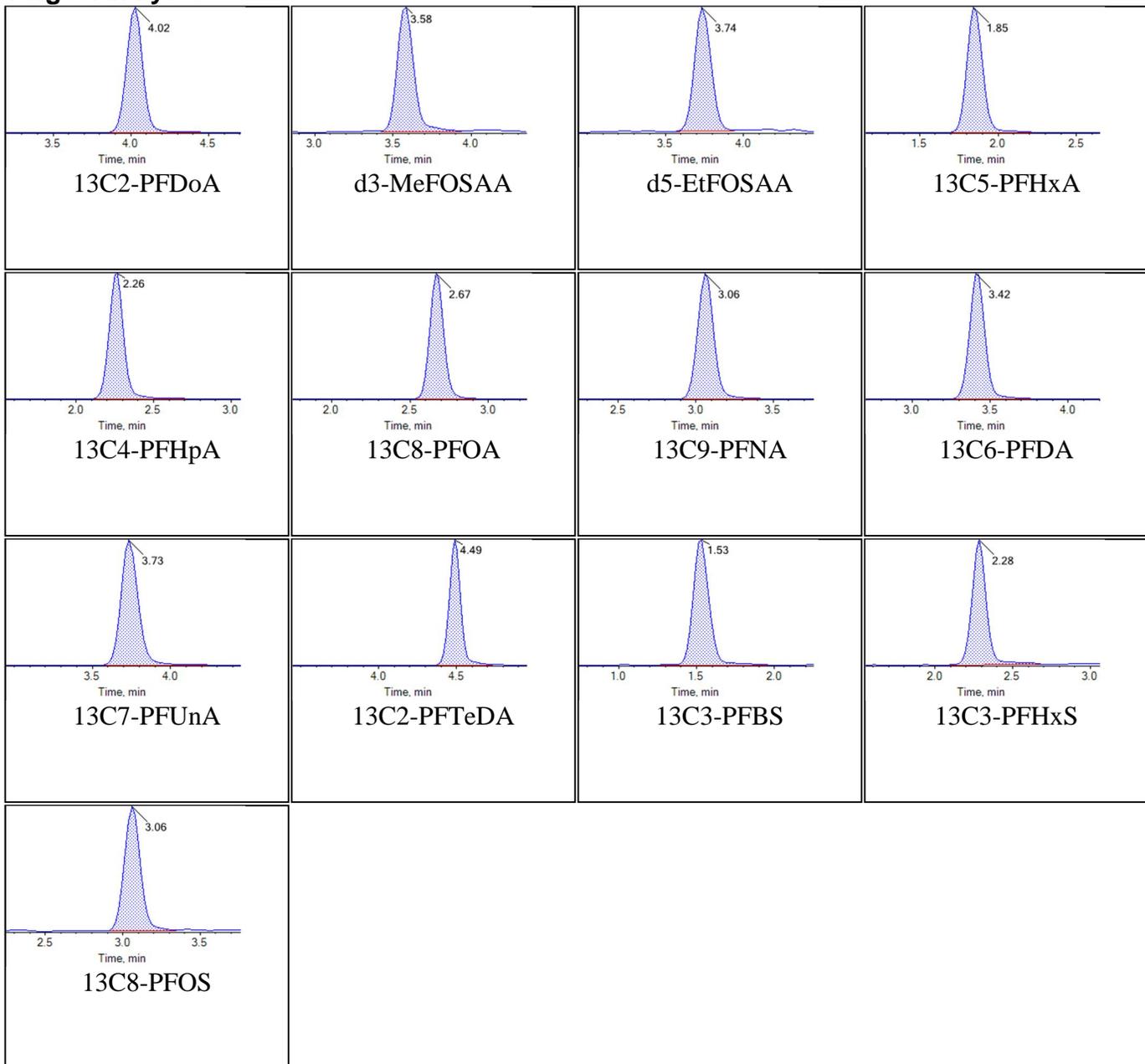
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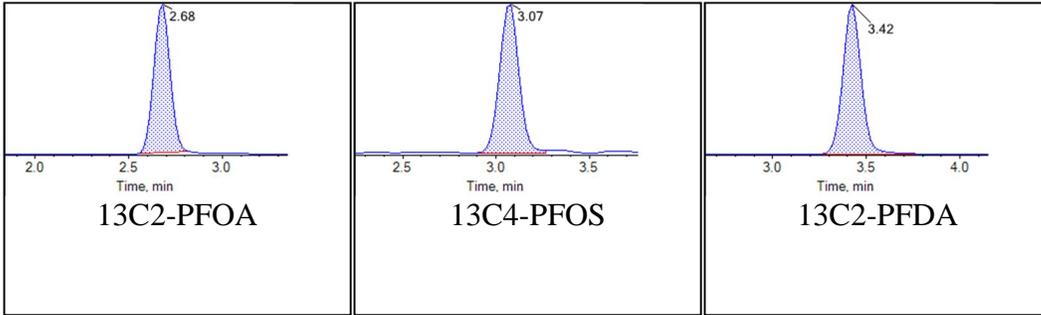
Sample Name	CR851PB-FS(3)	Injection Vial	13
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:30:59	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Chromatograms

Target Analytes:



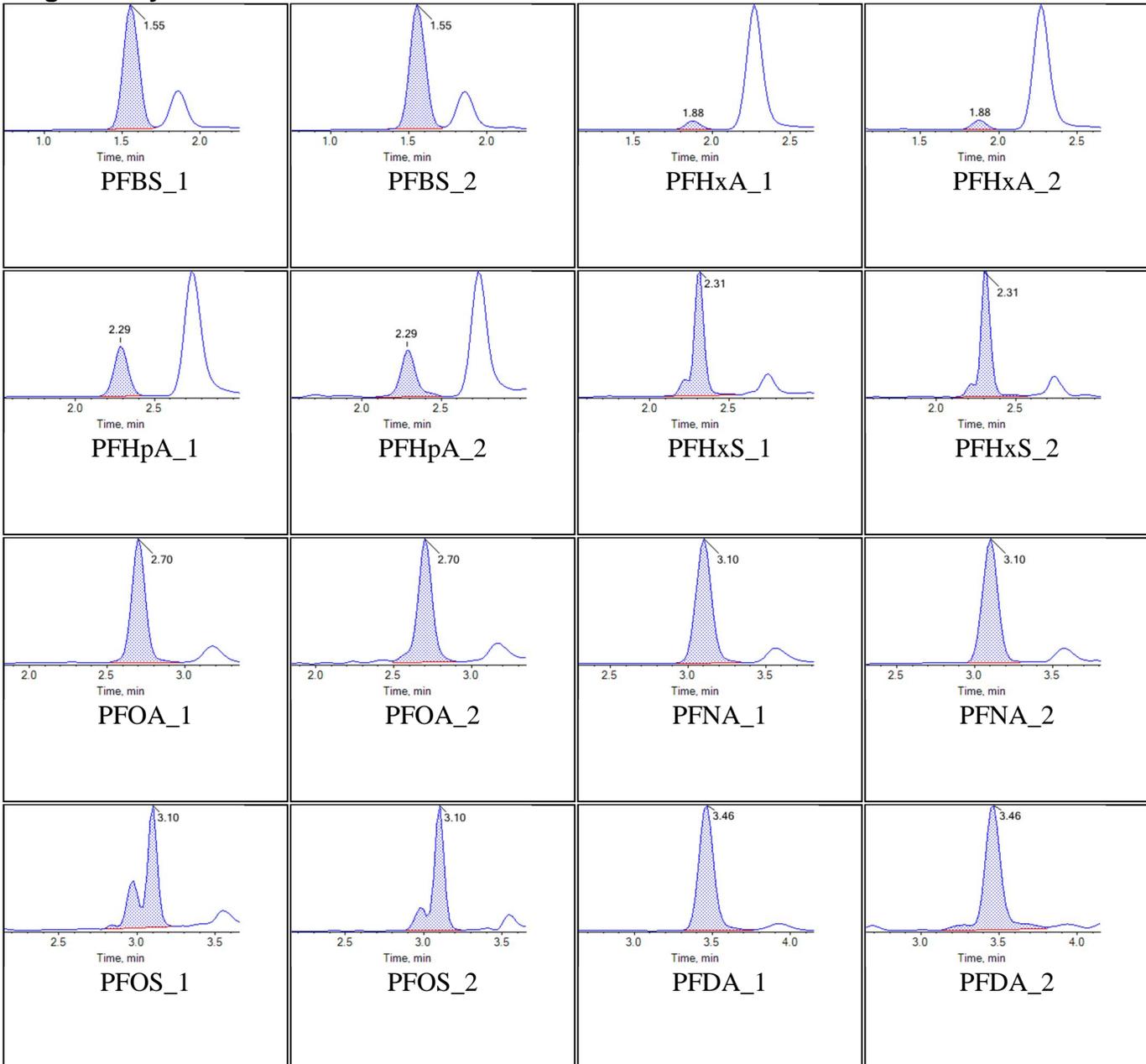
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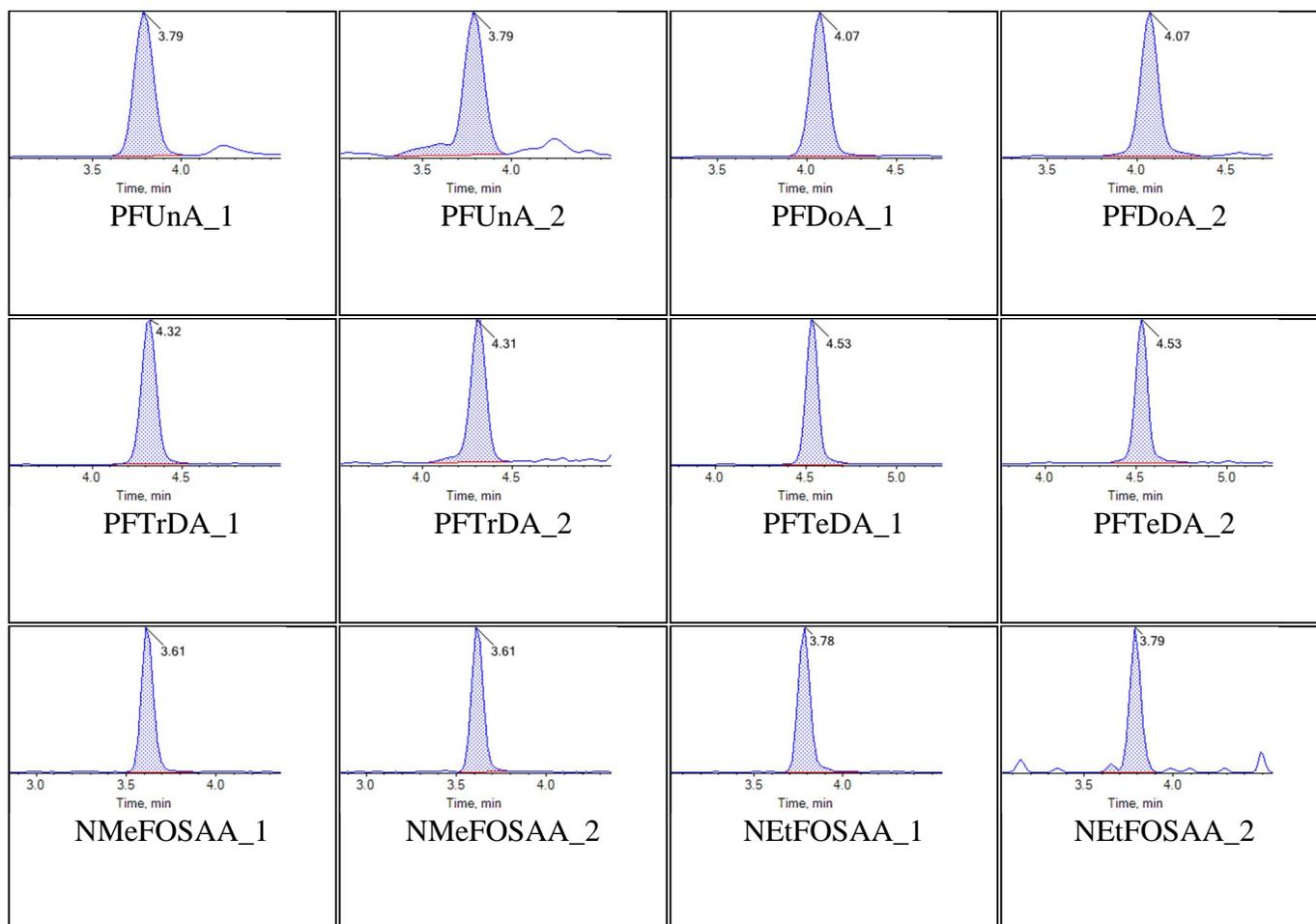
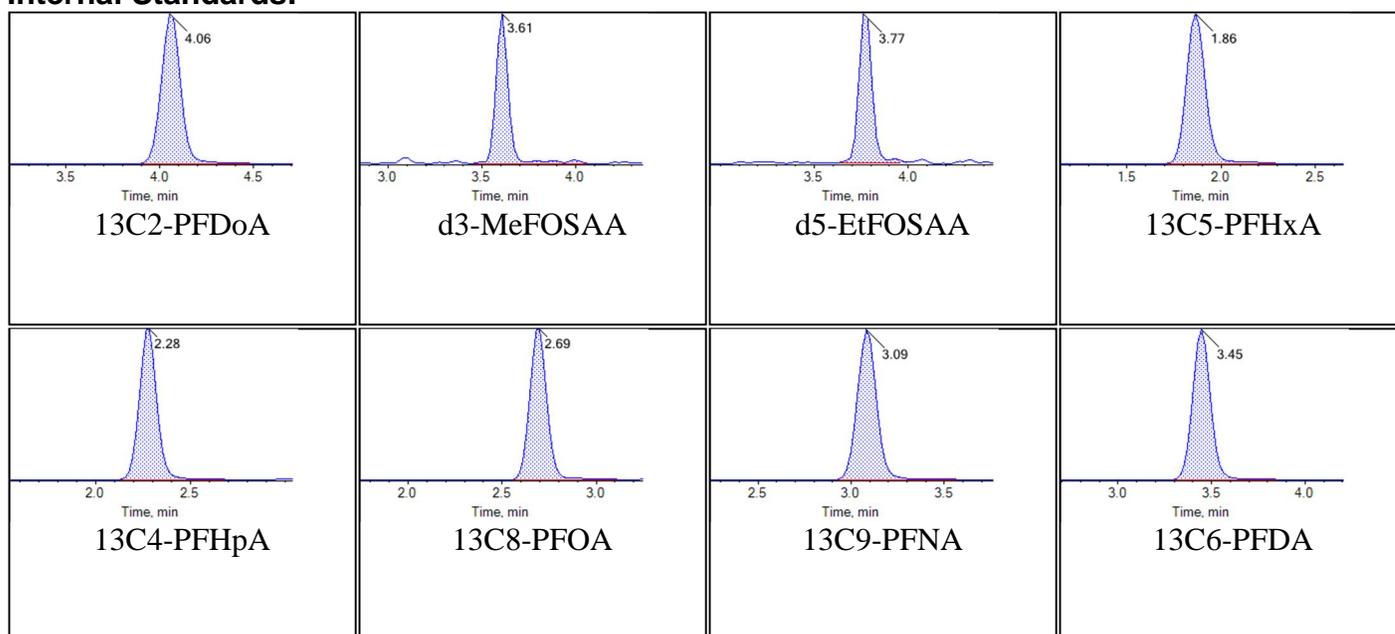


Sample Name	KA88 ISC	Injection Vial	1
Sample ID	Instrument Sensitivity Check	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T15:57:14	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Chromatograms

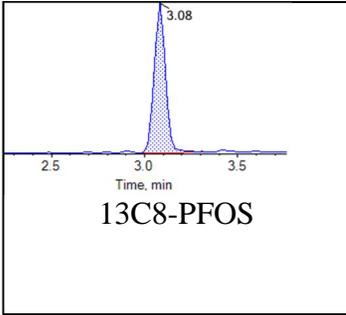
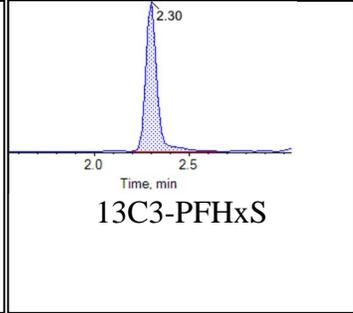
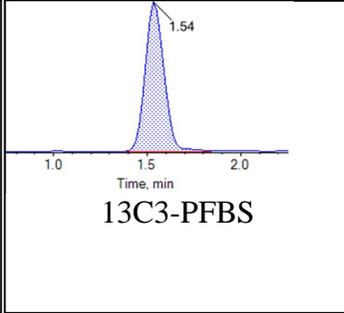
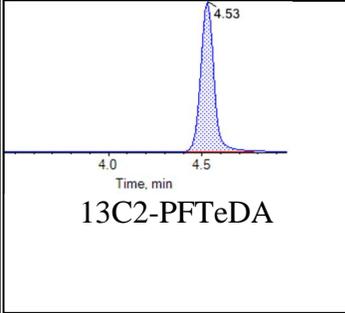
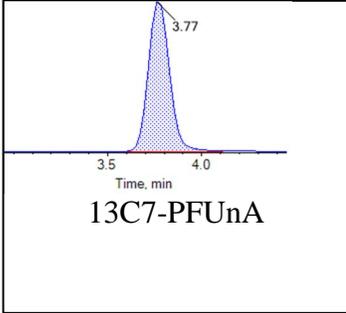
Target Analytes:



**Internal Standards:**

Chromatogram Report

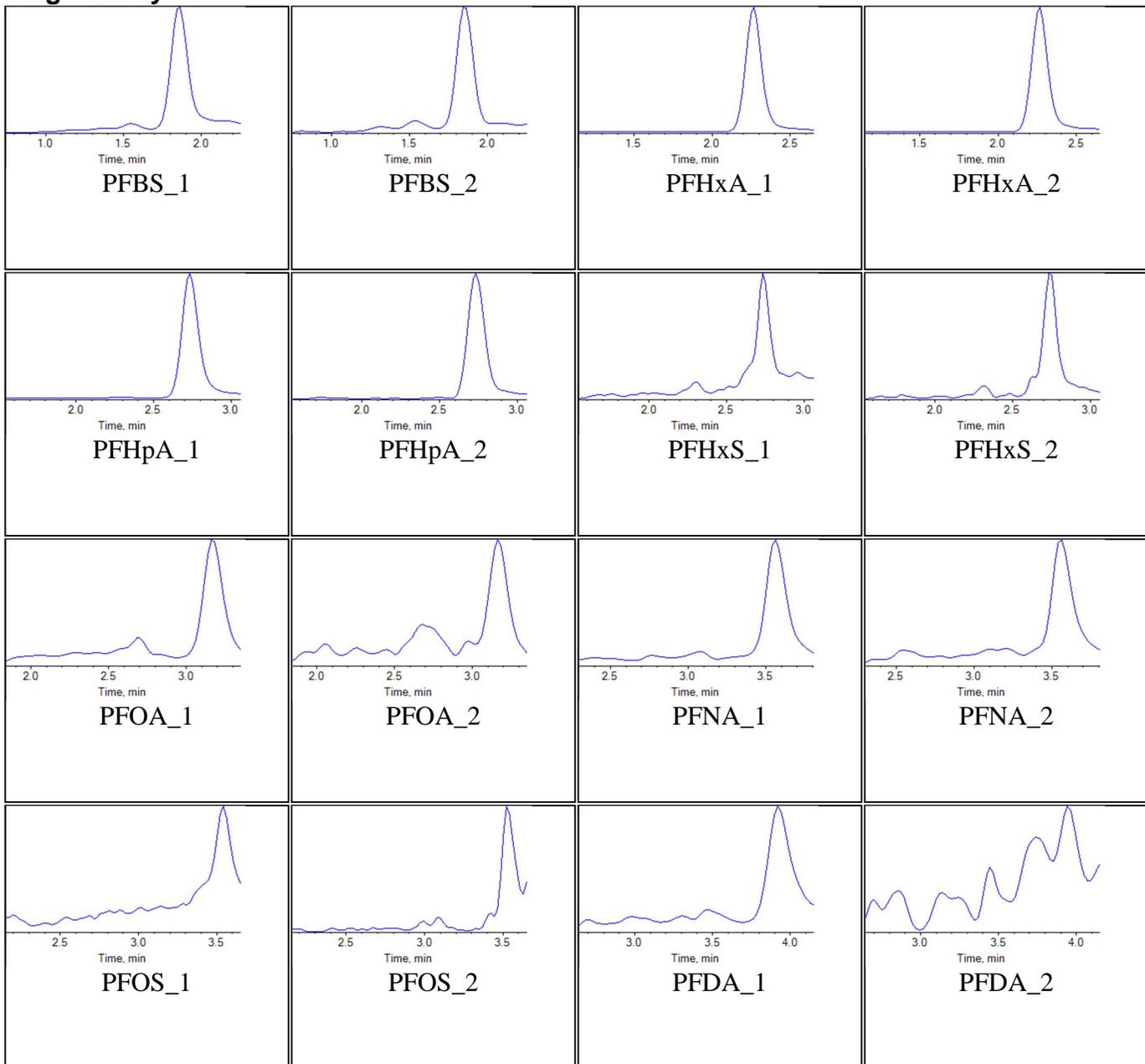
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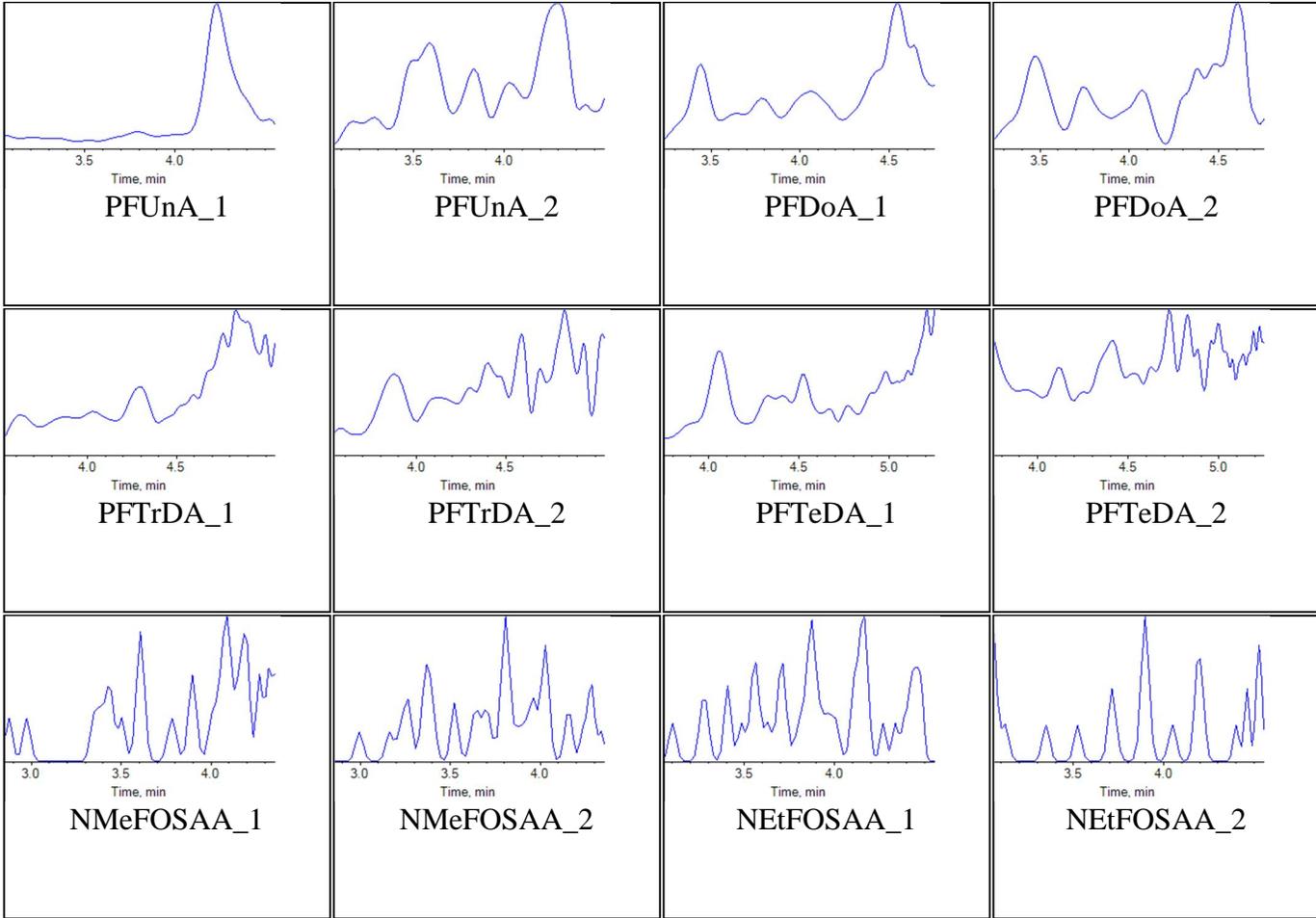


Sample Name	KB35 IB	Injection Vial	2
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T16:08:06	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

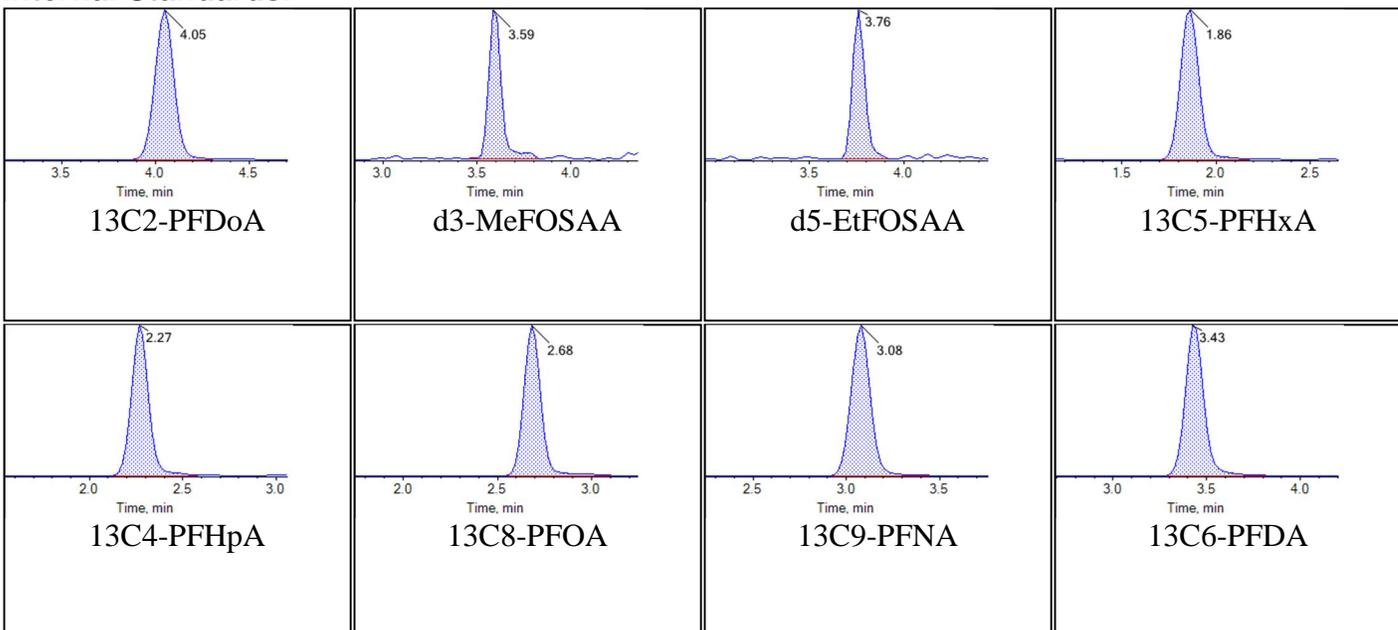
Chromatograms

Target Analytes:



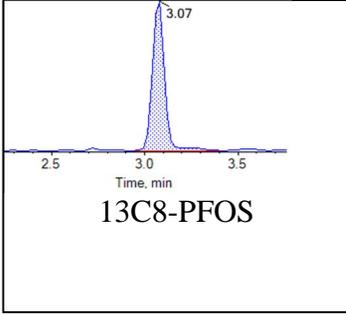
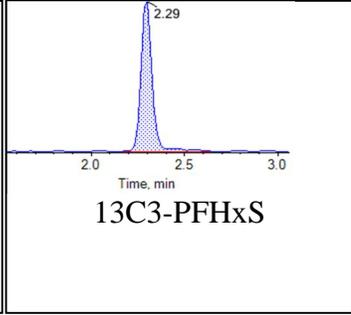
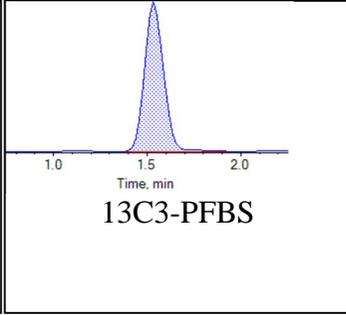
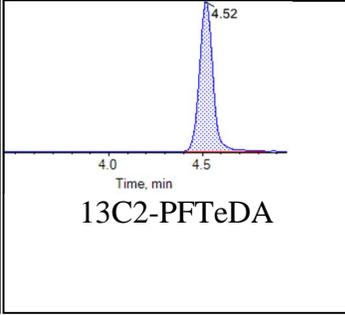
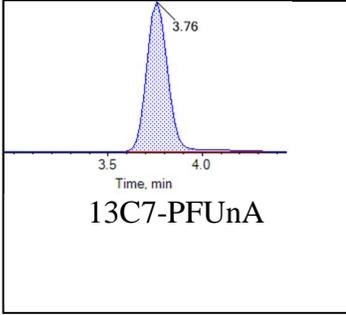


Internal Standards:



Chromatogram Report

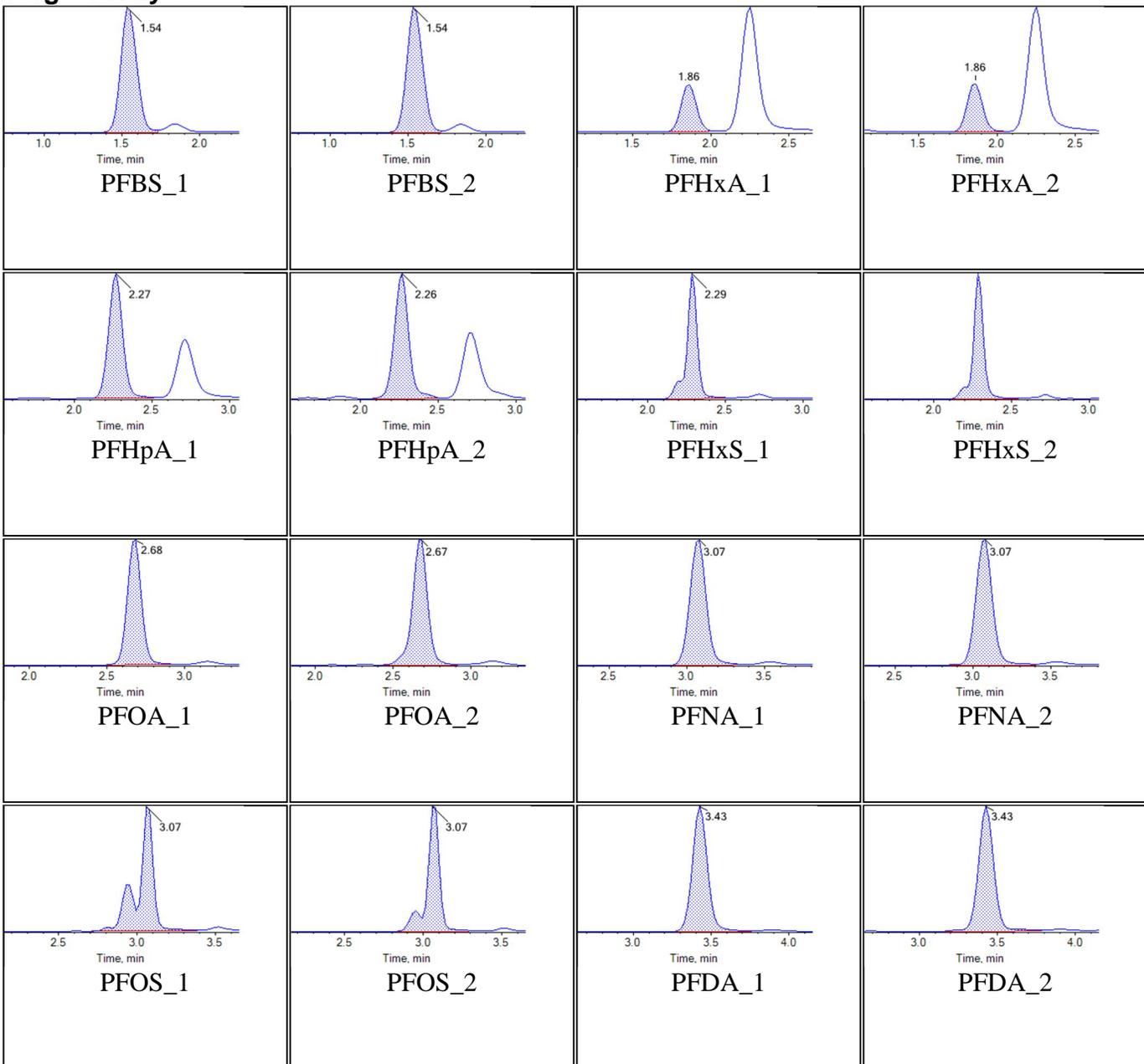
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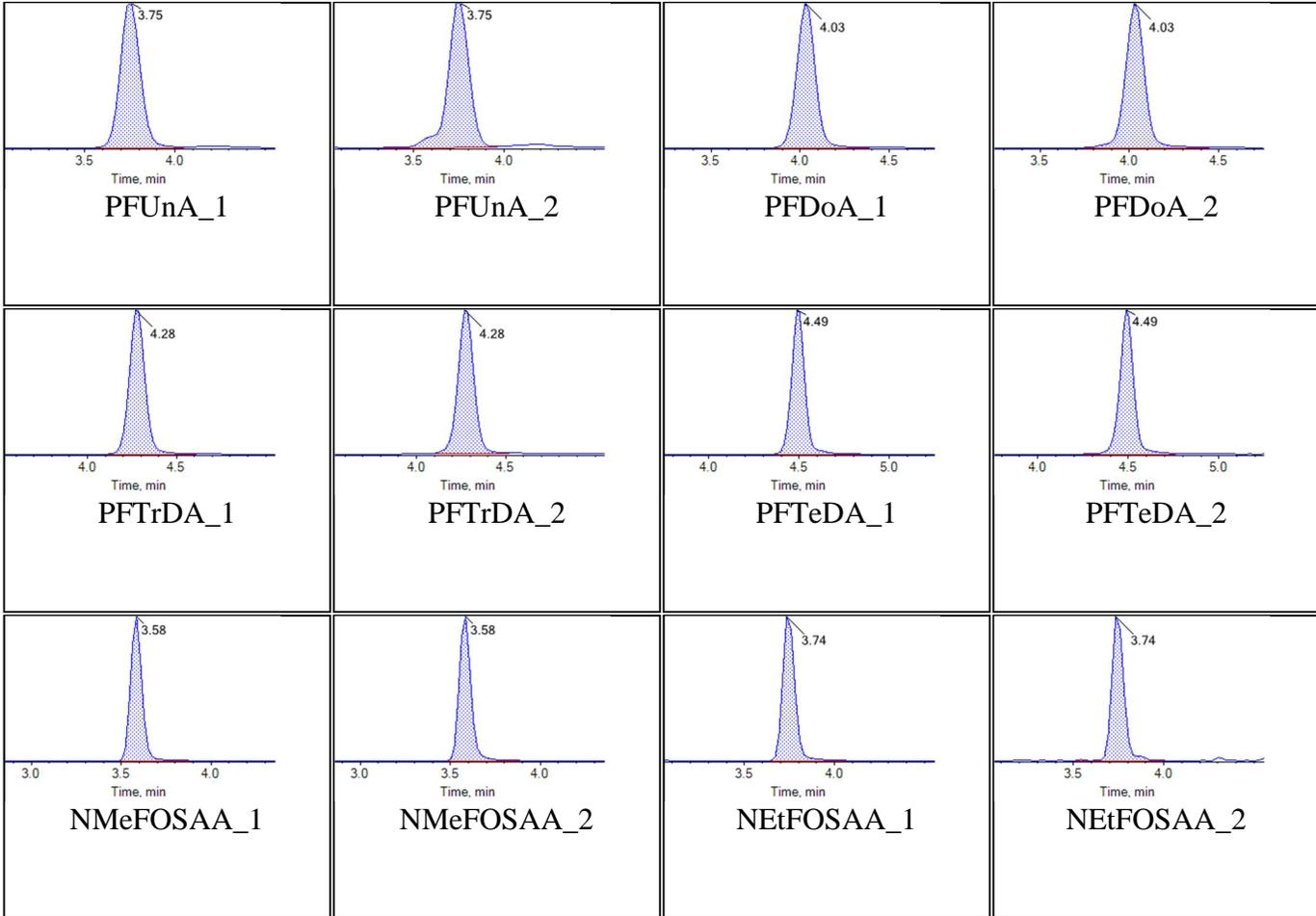


Sample Name	KB69 CCV	Injection Vial	9
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:24:13	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

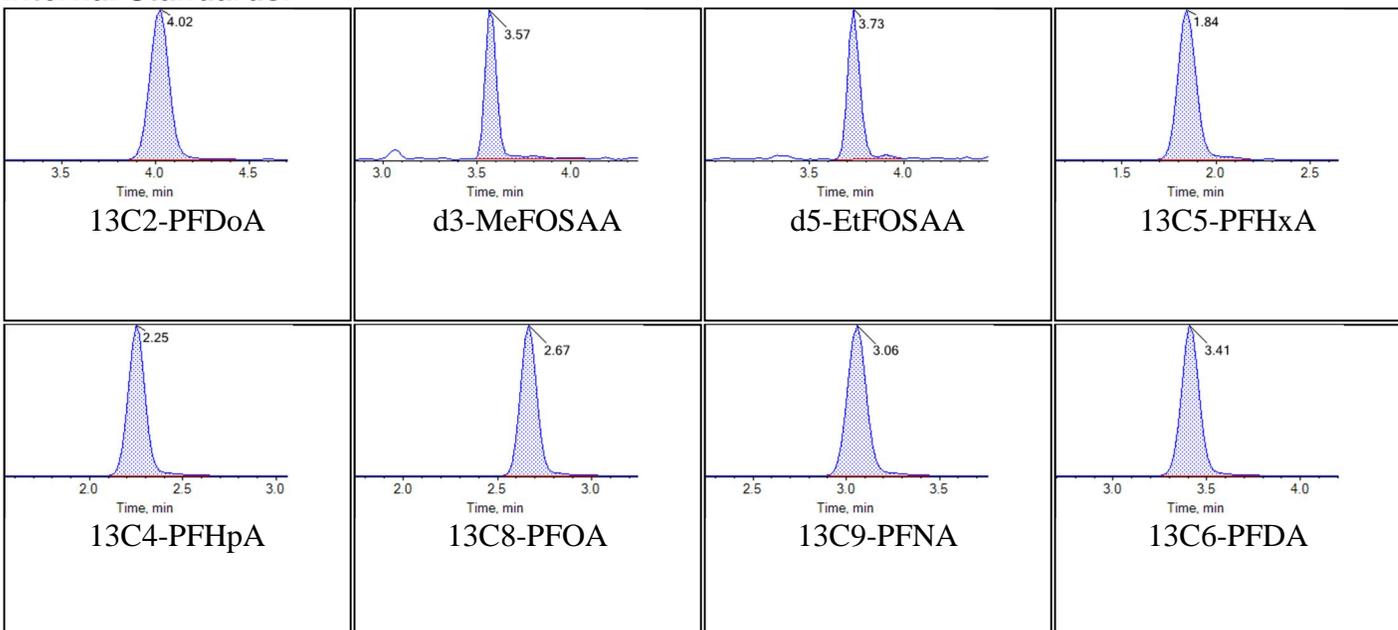
Chromatograms

Target Analytes:



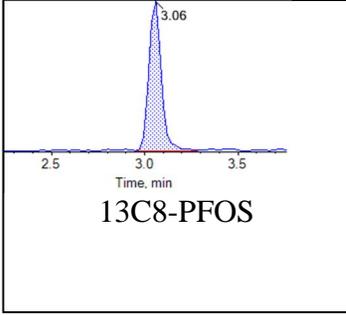
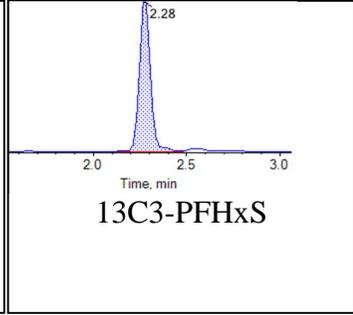
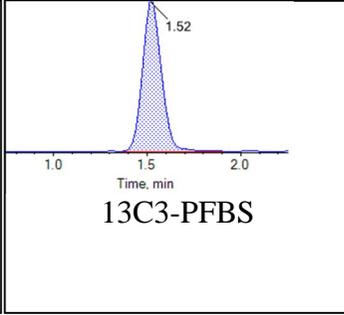
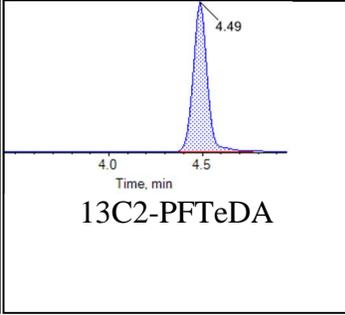
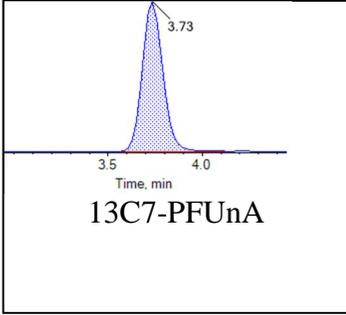


Internal Standards:



Chromatogram Report

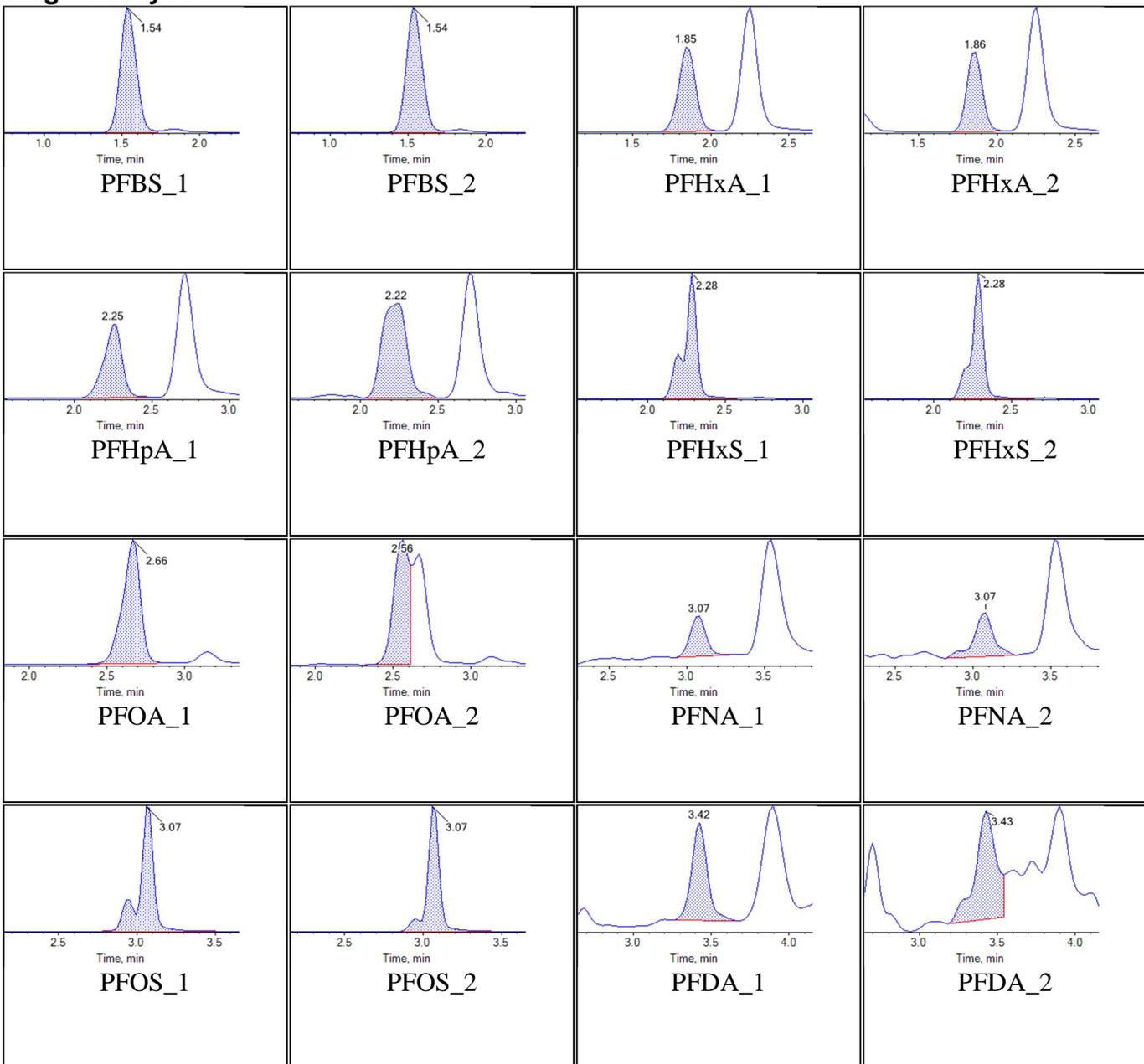
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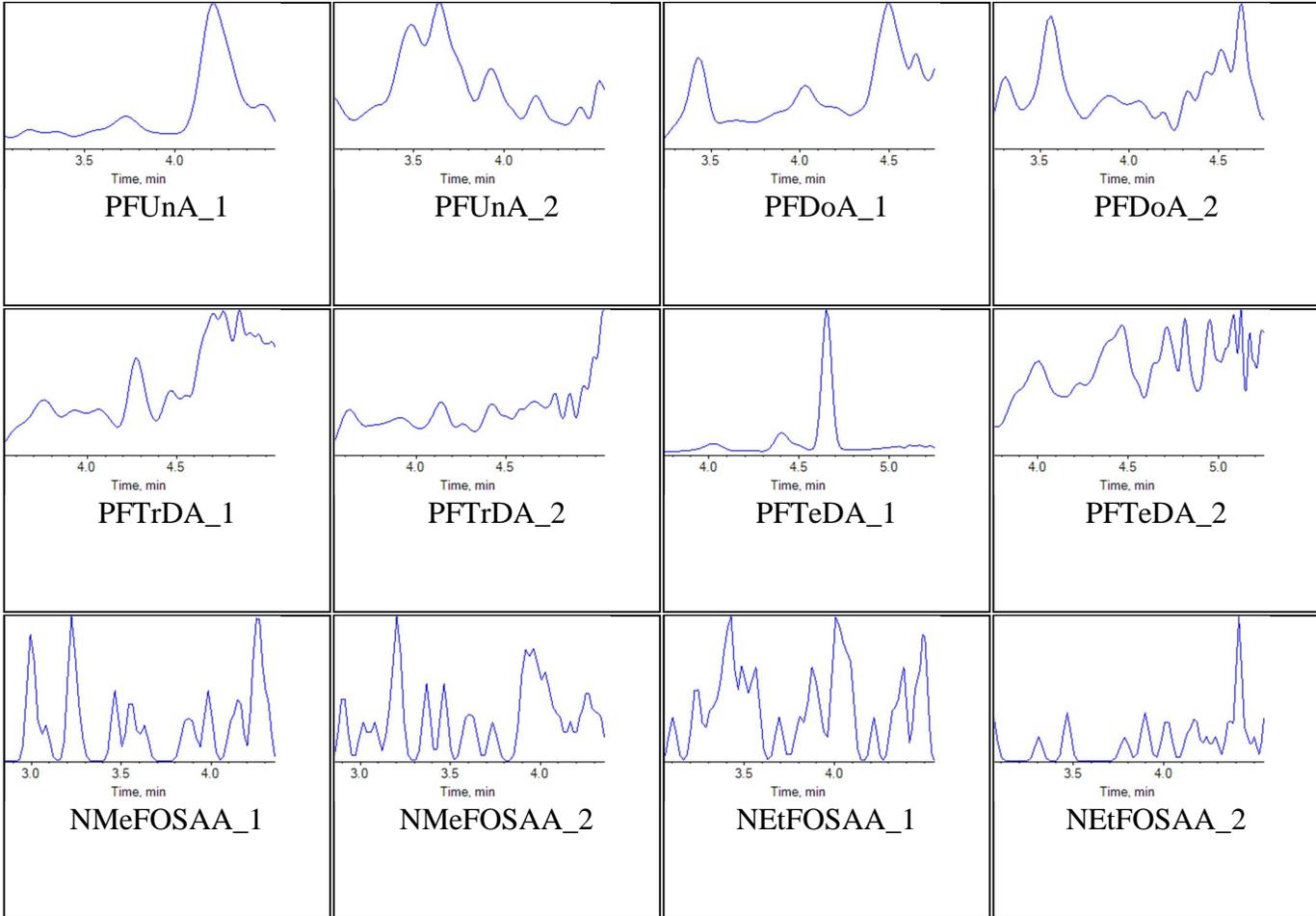


Sample Name	J8252-FS(3)	Injection Vial	11
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:45:59	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

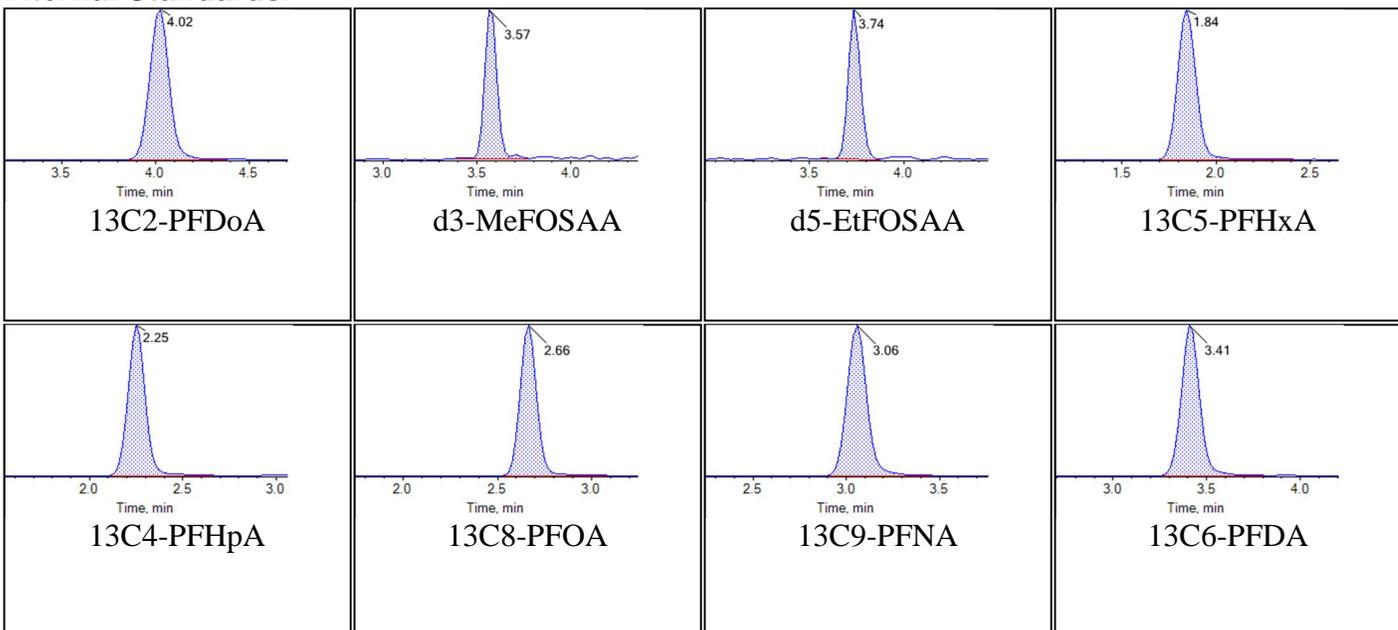
Chromatograms

Target Analytes:



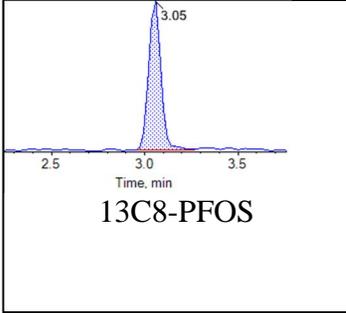
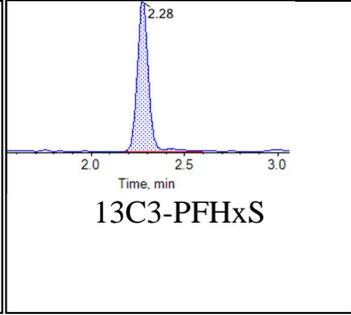
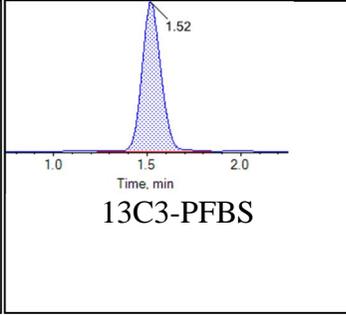
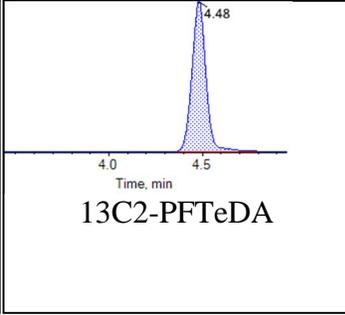
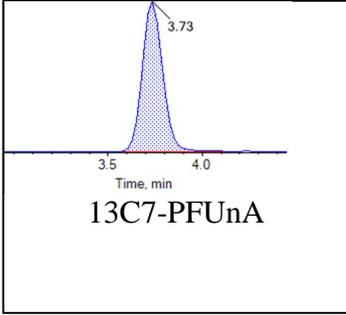


Internal Standards:



Chromatogram Report

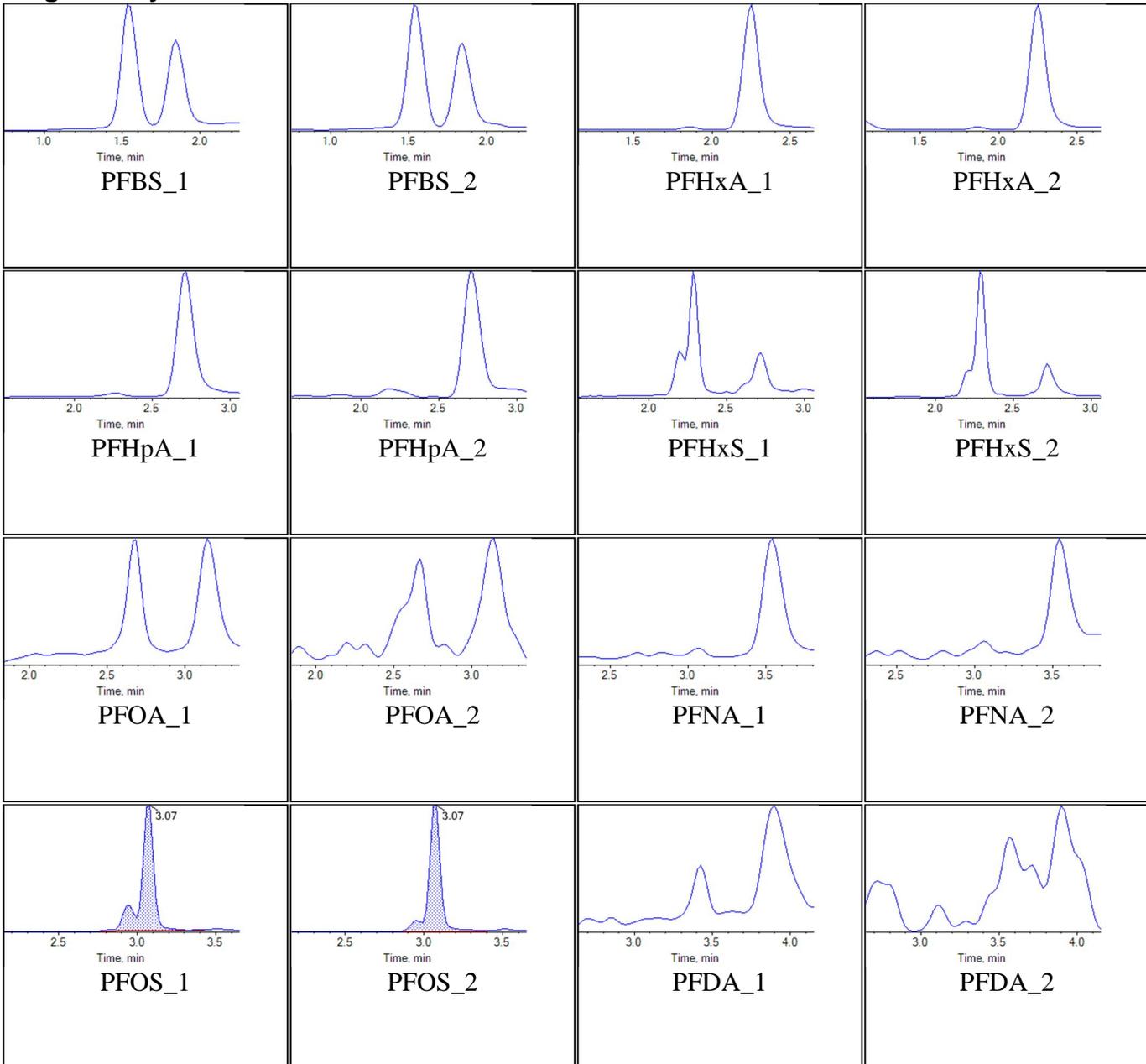
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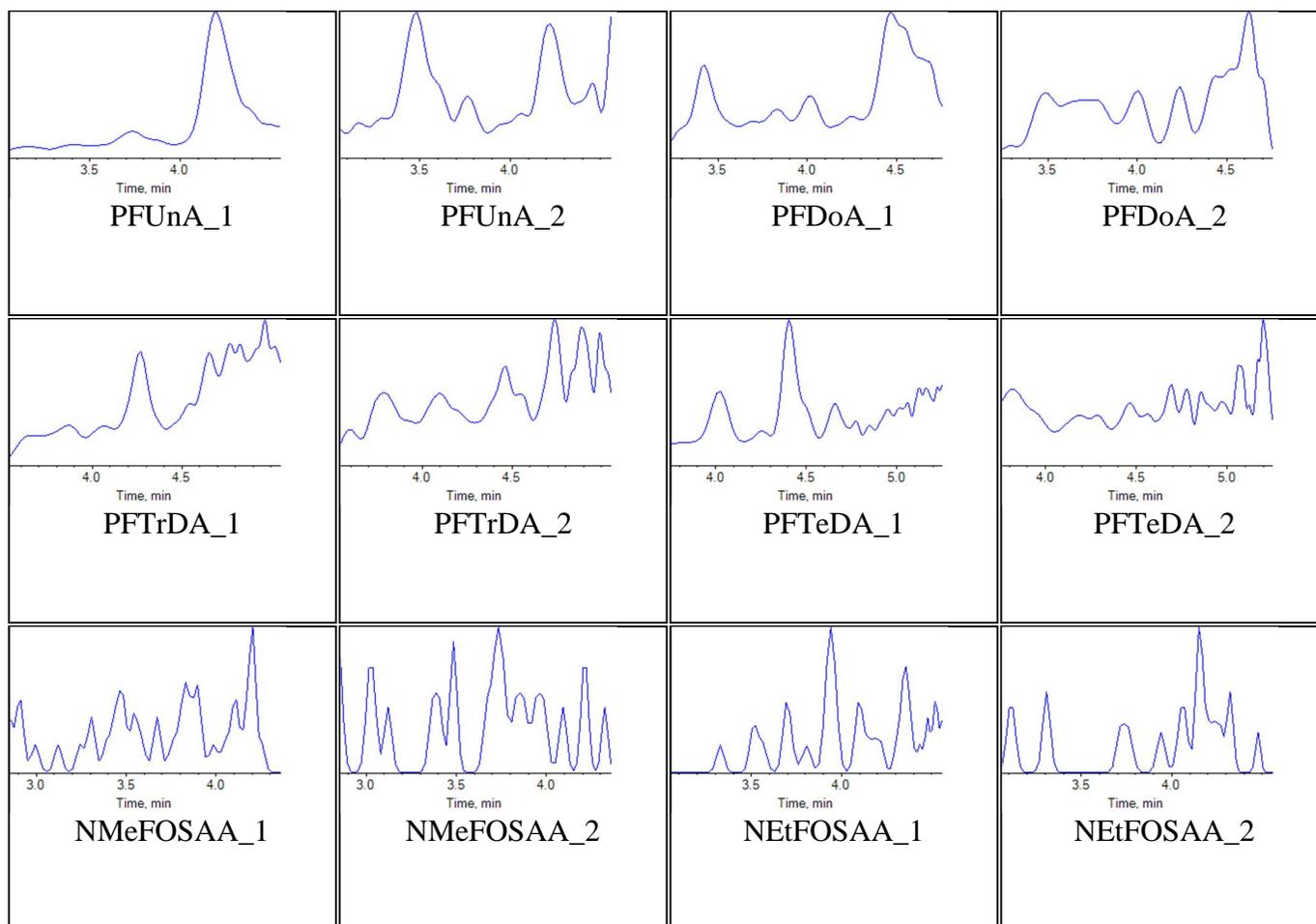
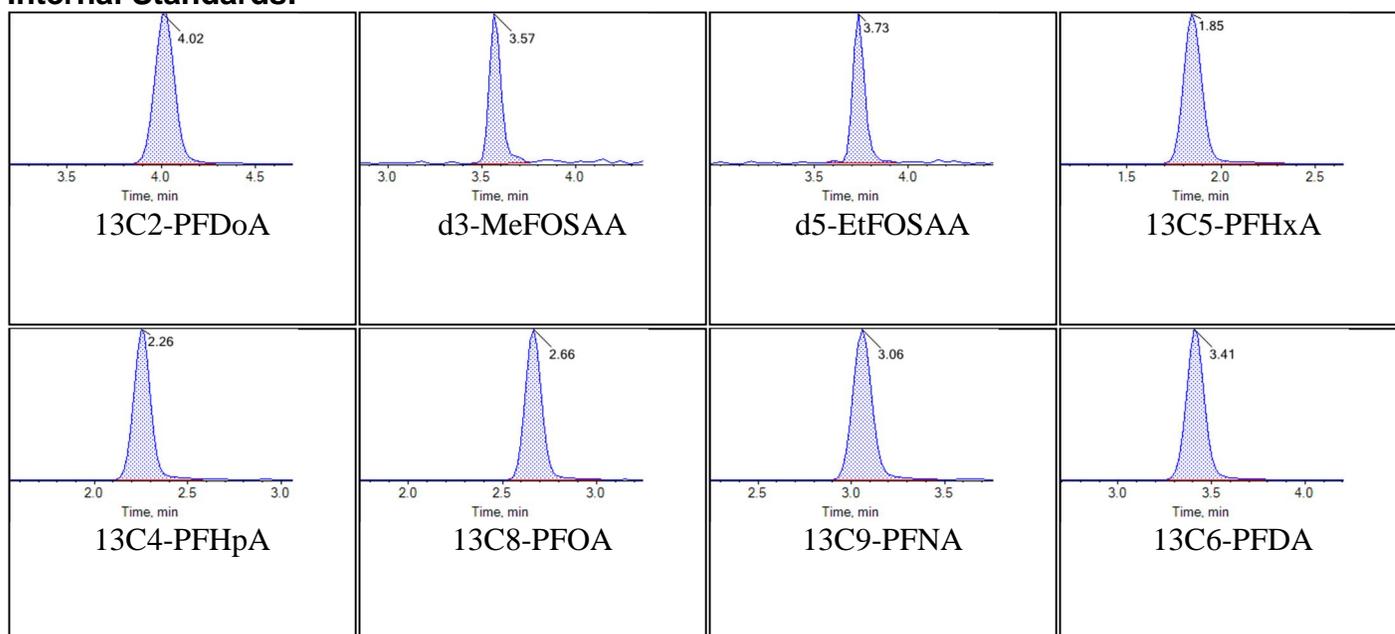


Sample Name	J8252-FS-D(7)	Injection Vial	12
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:56:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Chromatograms

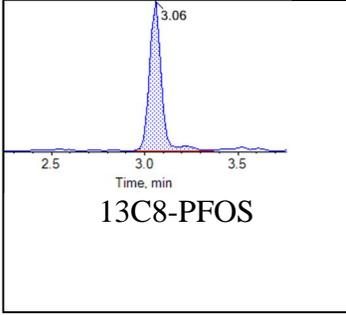
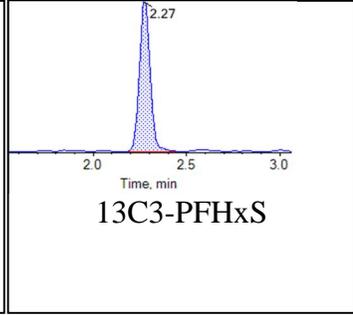
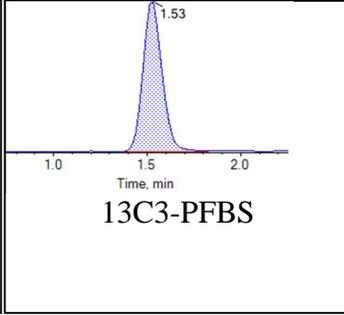
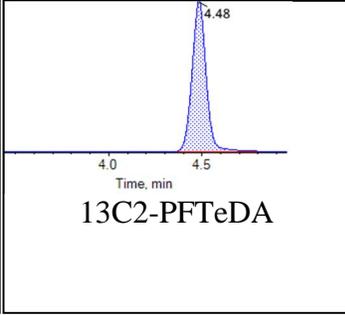
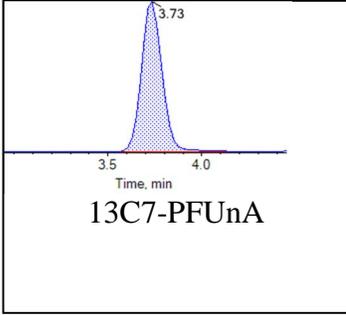
Target Analytes:



**Internal Standards:**

Chromatogram Report

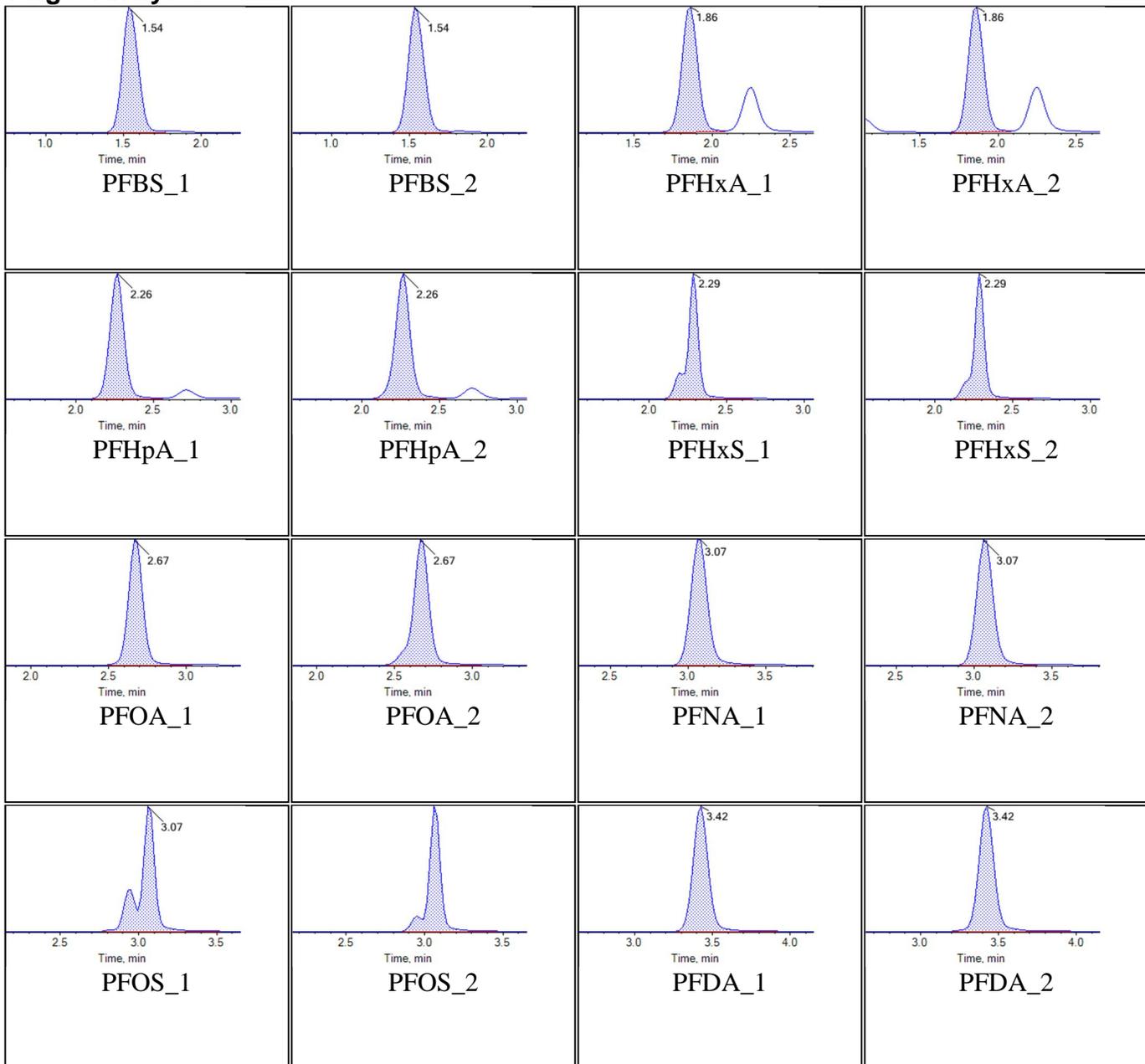
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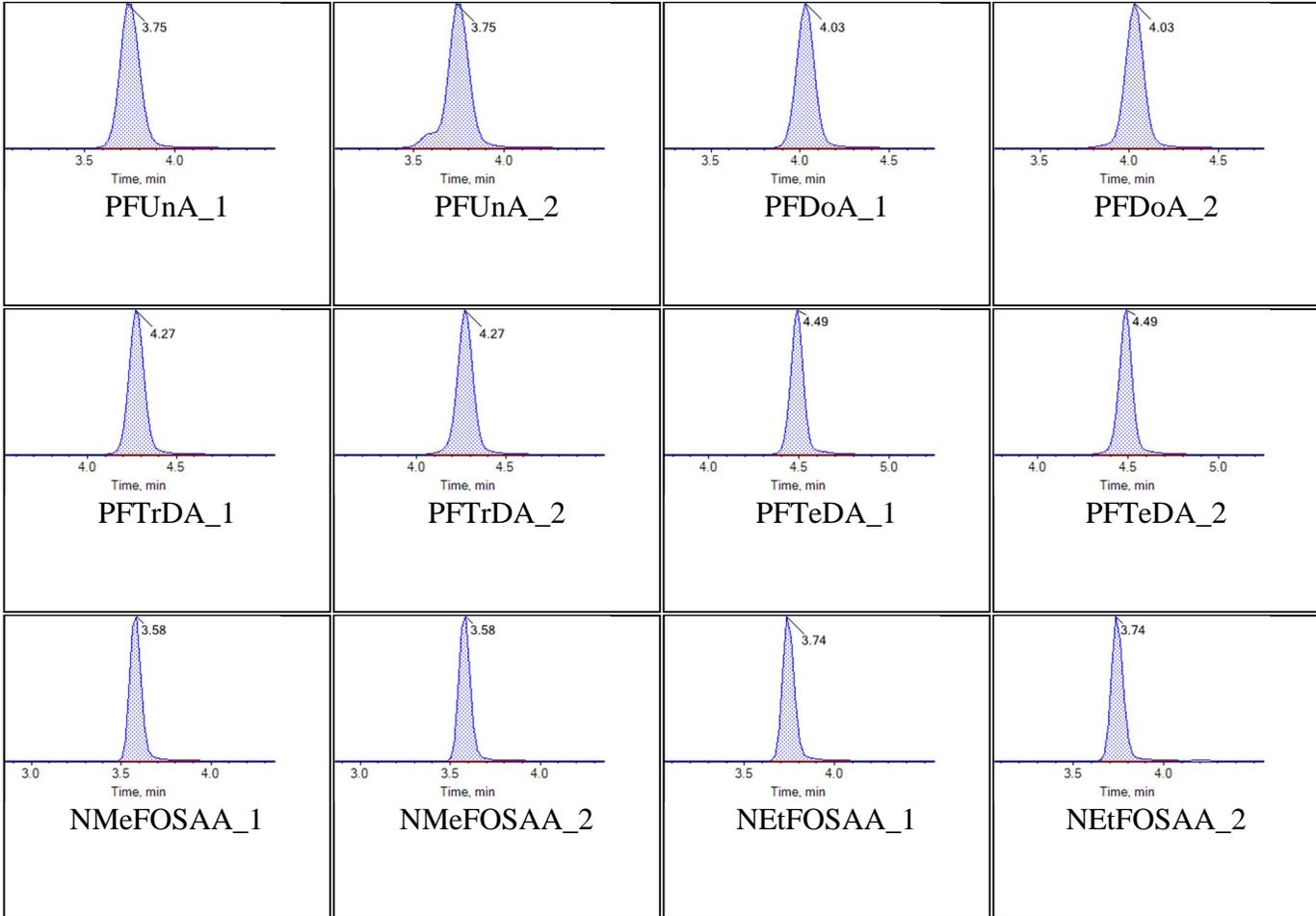


Sample Name	J8257MS-FS(3)	Injection Vial	13
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:07:46	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

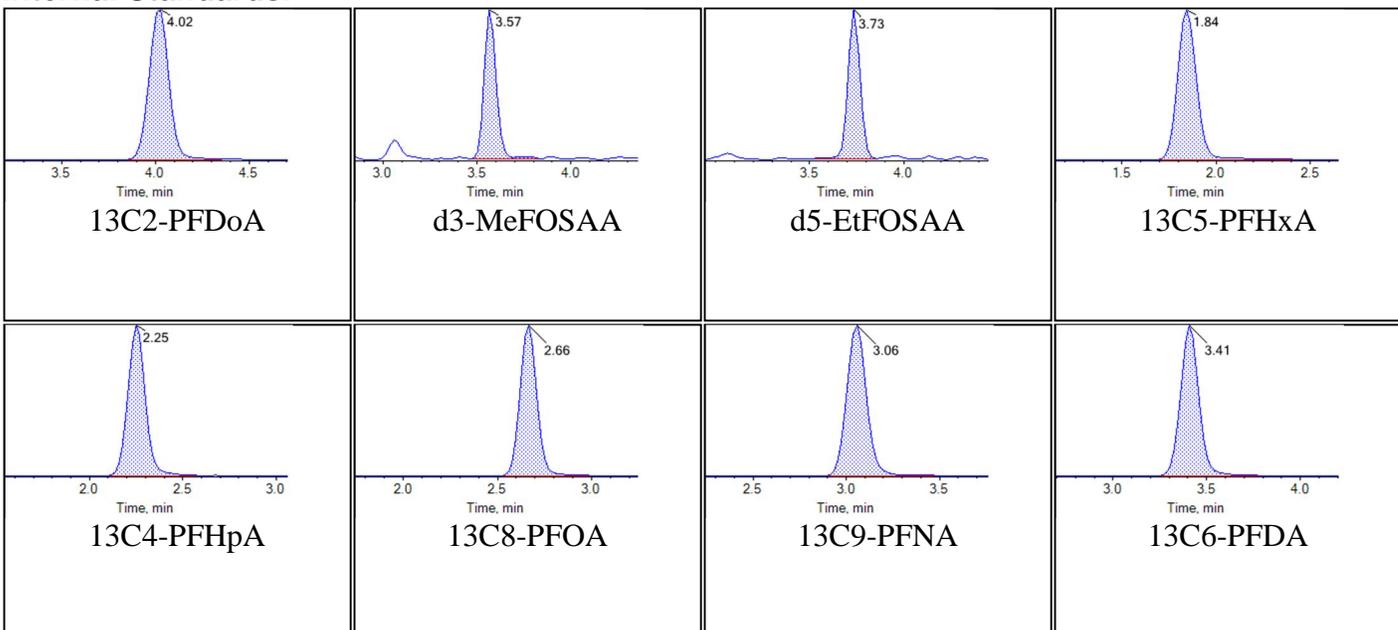
Chromatograms

Target Analytes:



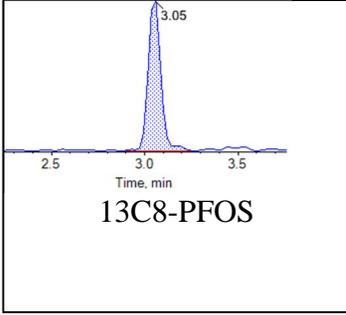
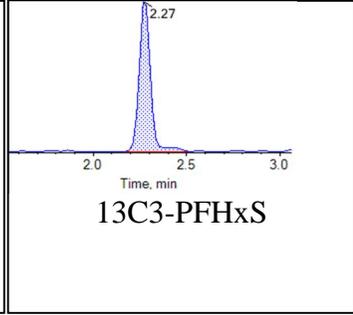
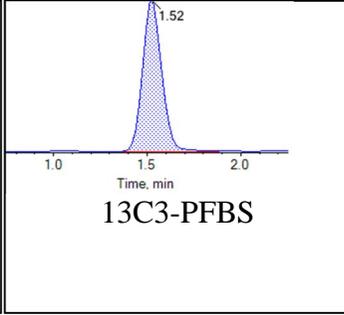
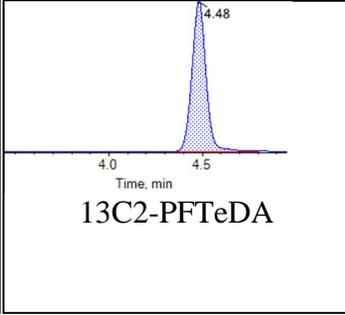
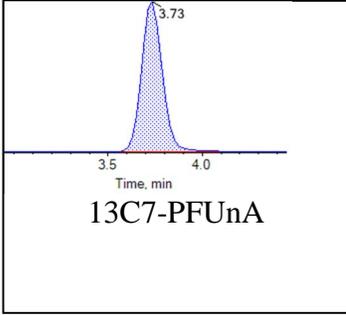


Internal Standards:



Chromatogram Report

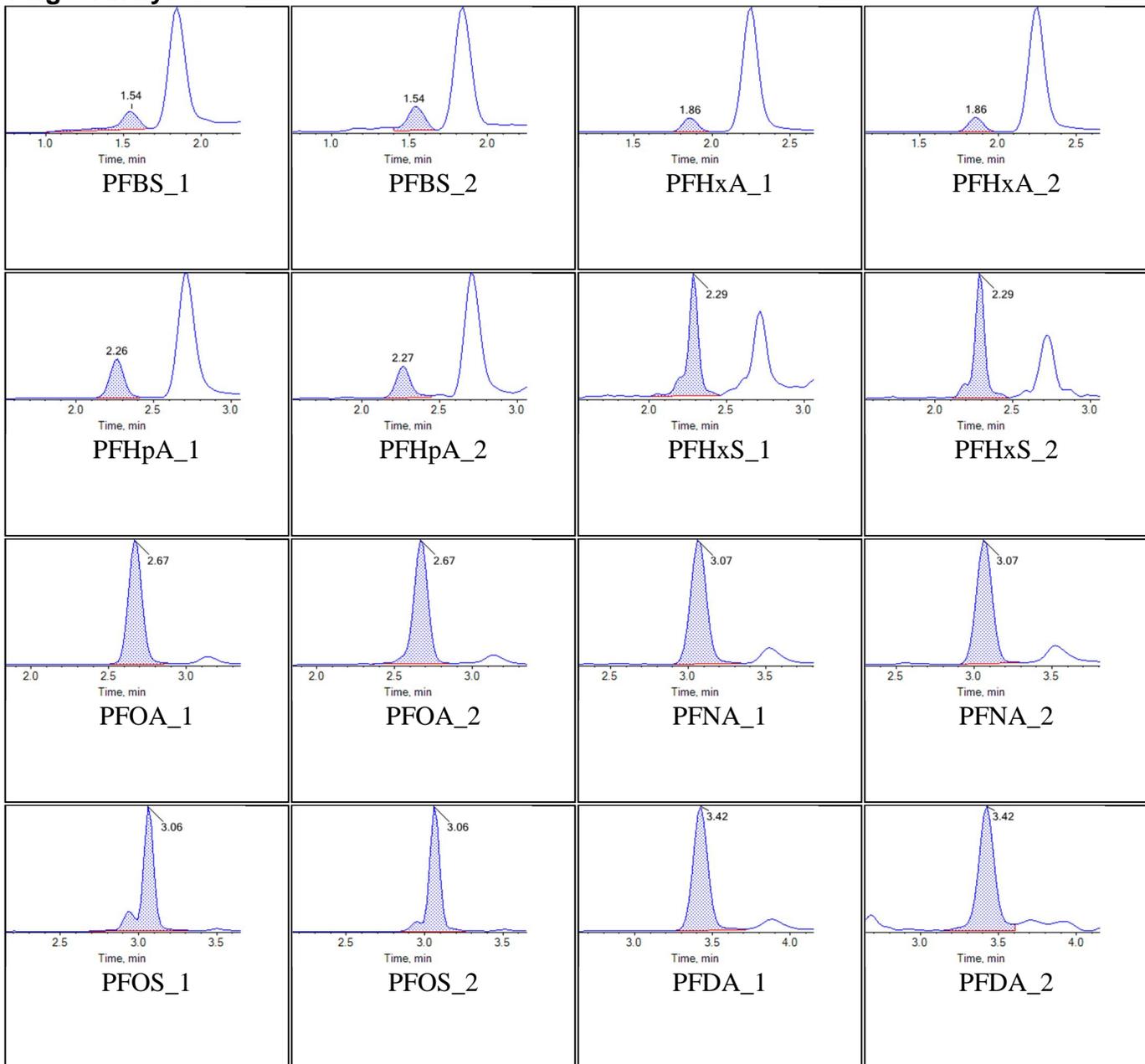
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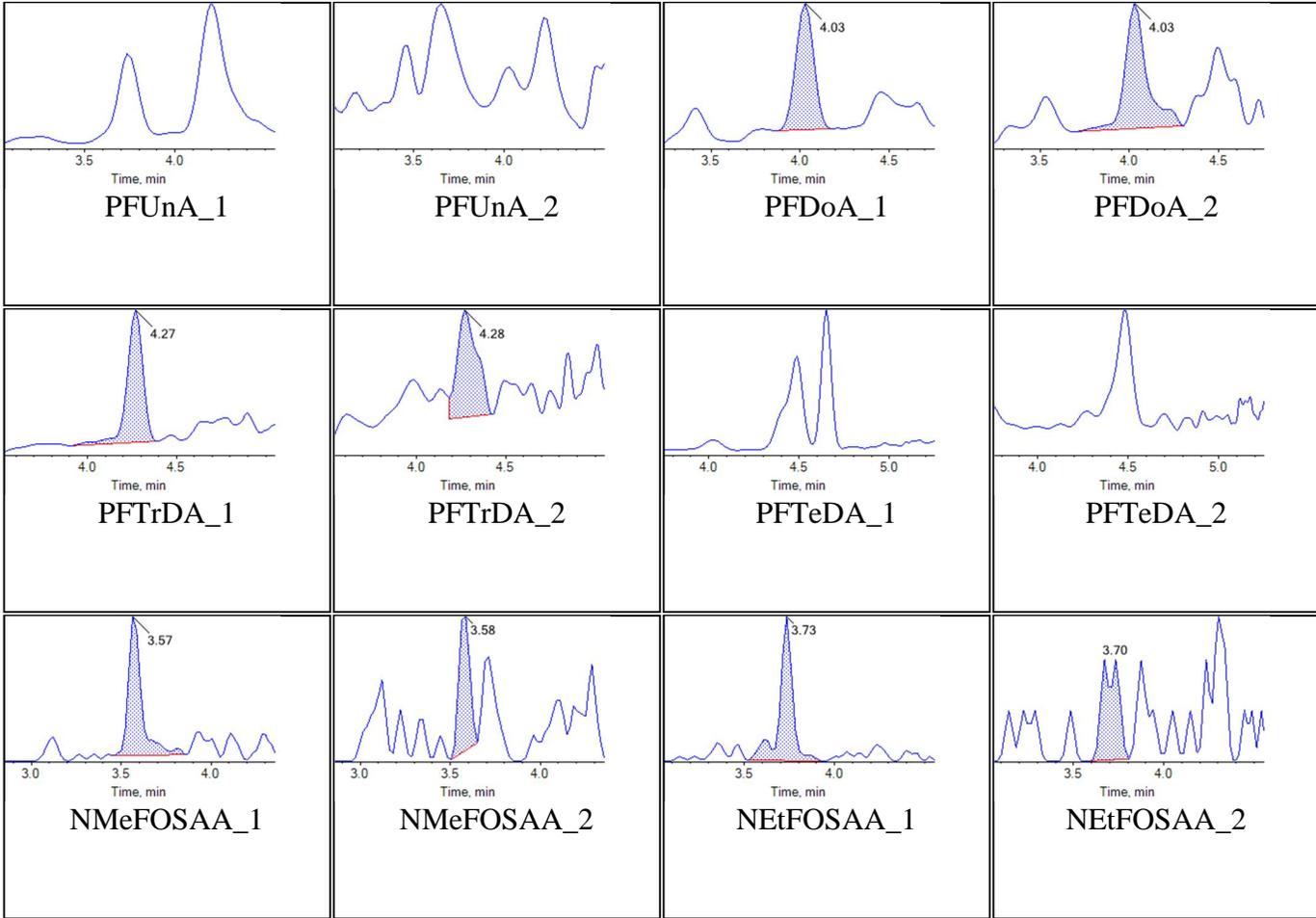


Sample Name	J8229-FS(3)	Injection Vial	14
Sample ID	VC-PM649-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:18:39	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

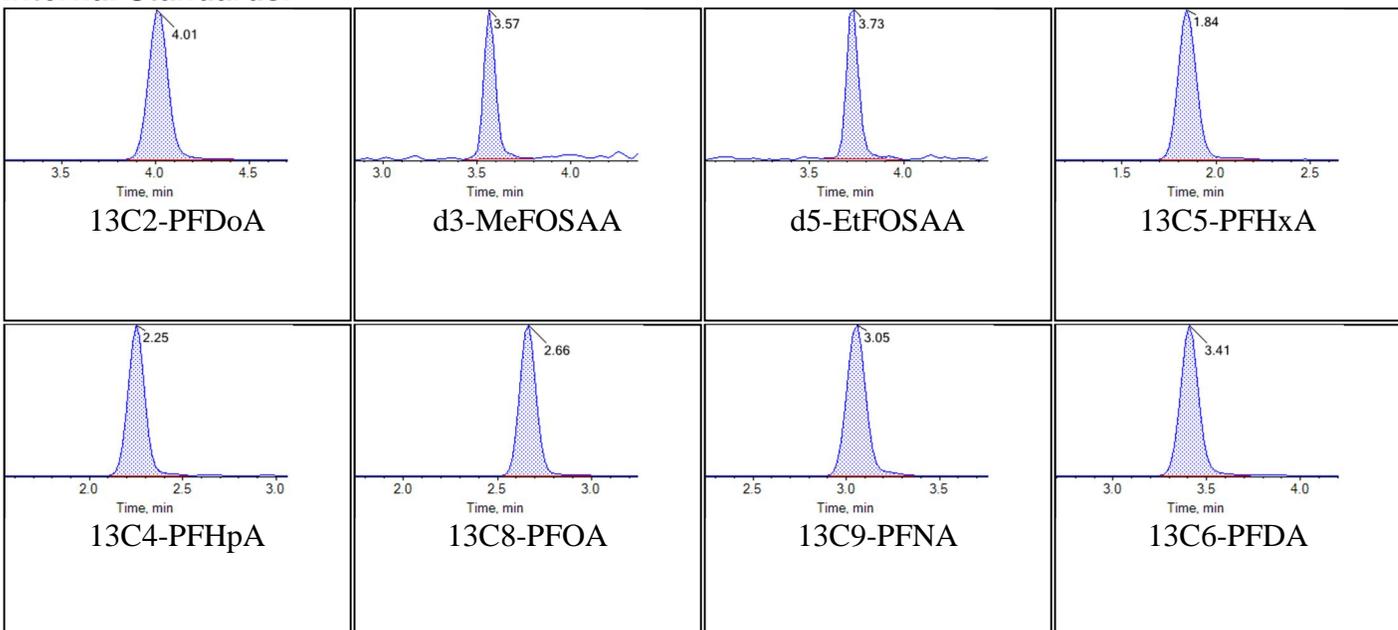
Chromatograms

Target Analytes:



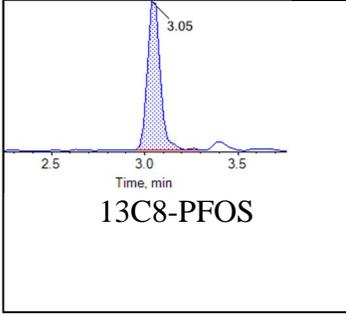
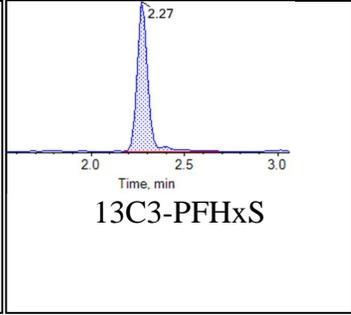
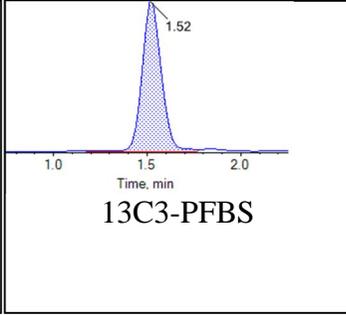
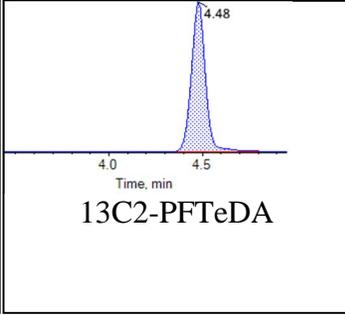
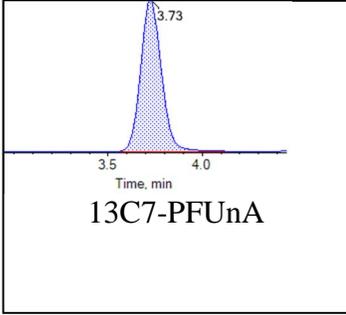


Internal Standards:



Chromatogram Report

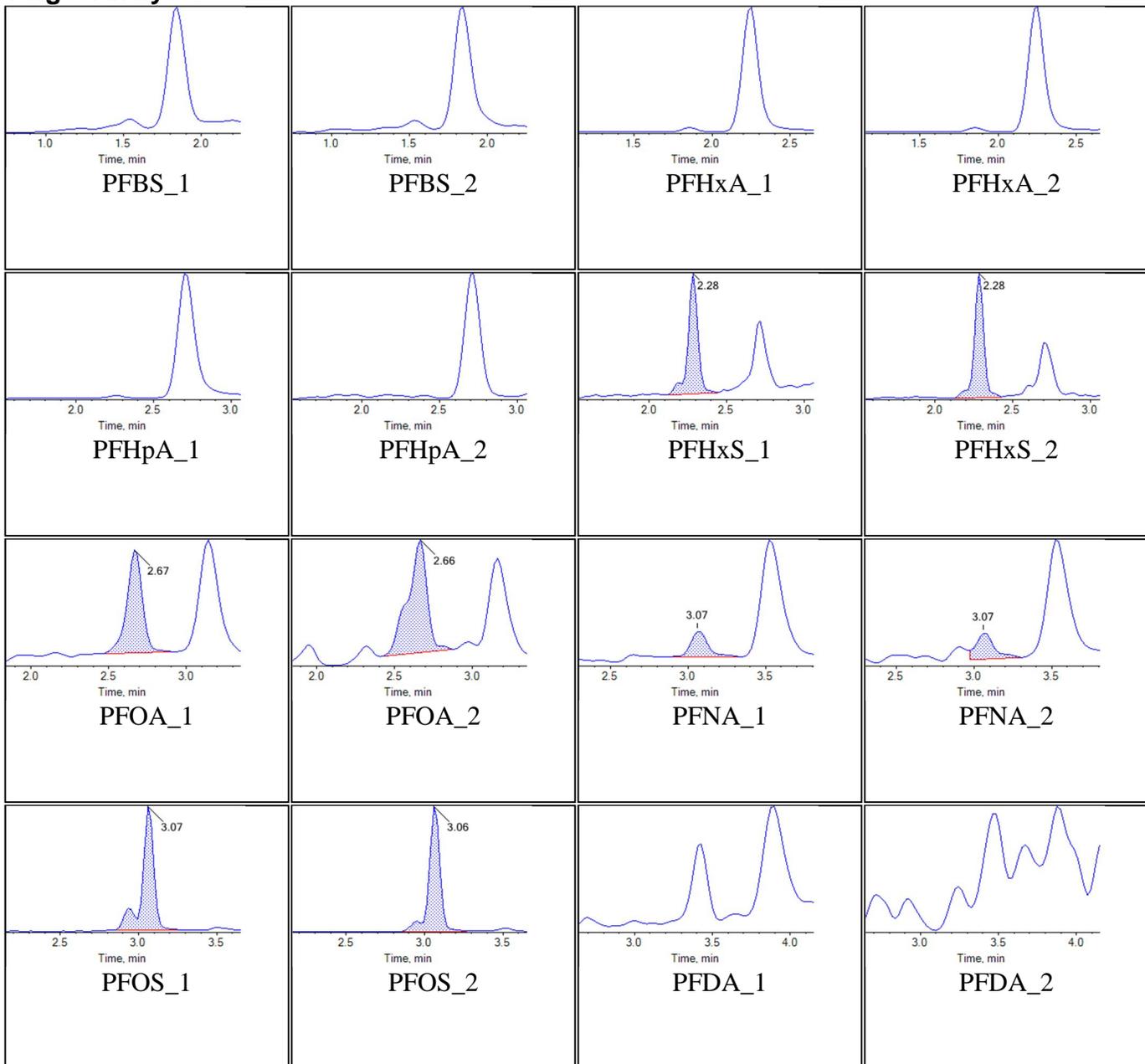
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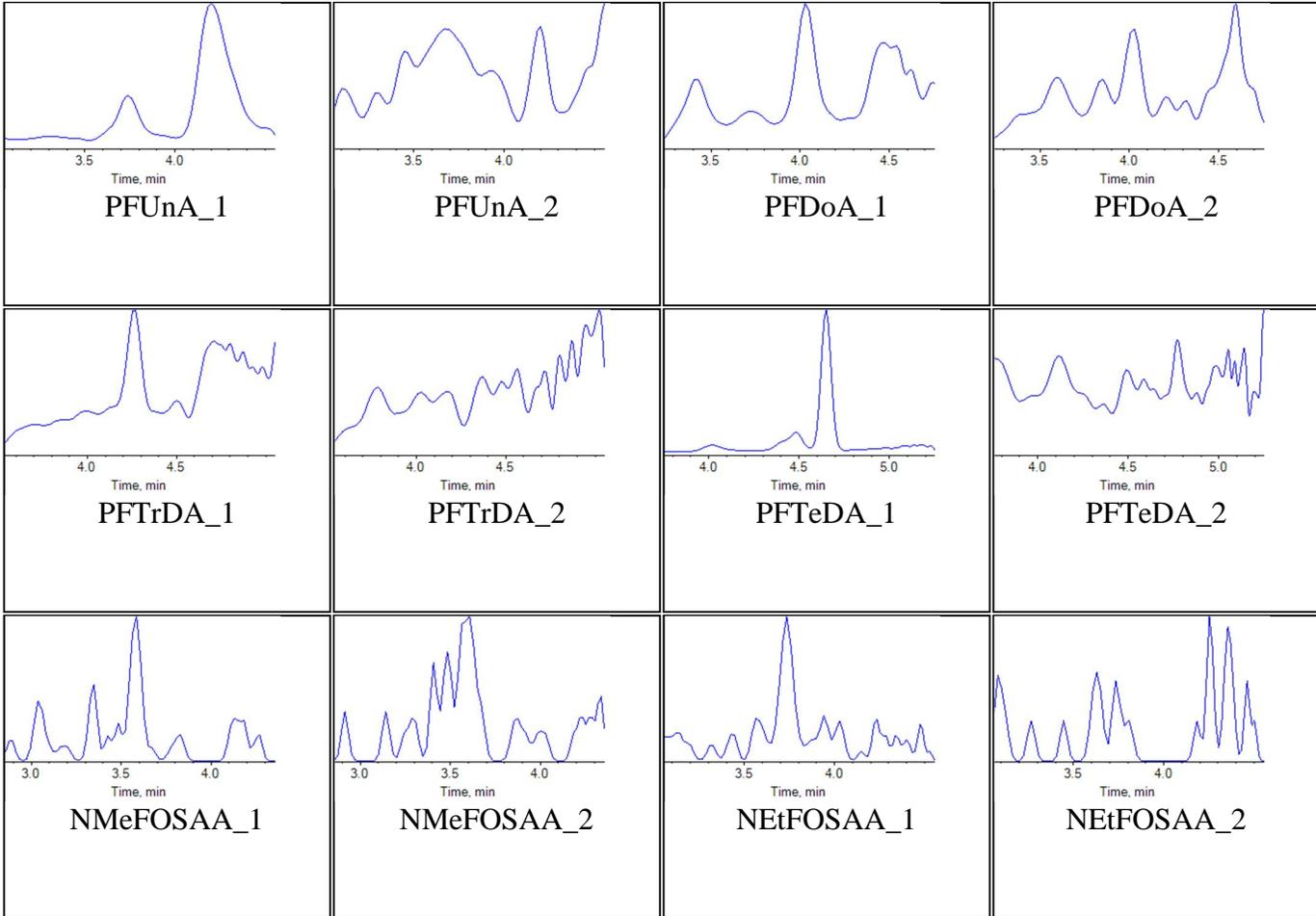


Sample Name	J8239-FS(3)	Injection Vial	15
Sample ID	VC-PM649-SB04-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:29:32	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

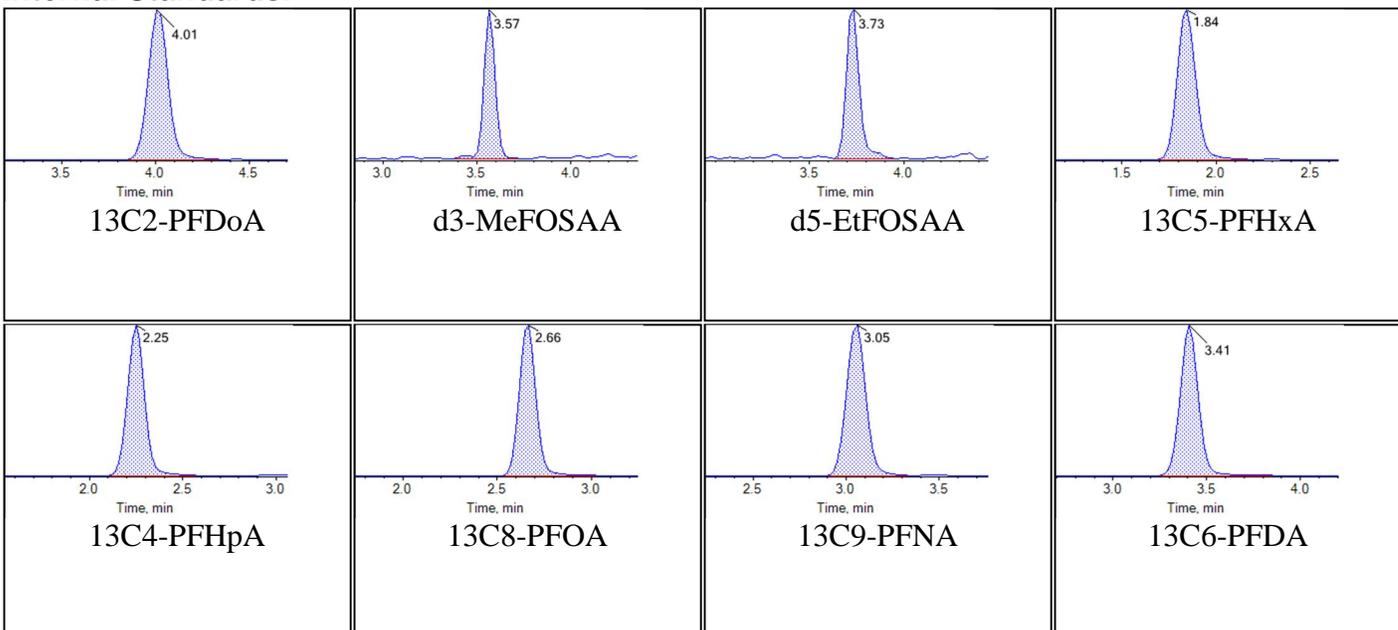
Chromatograms

Target Analytes:



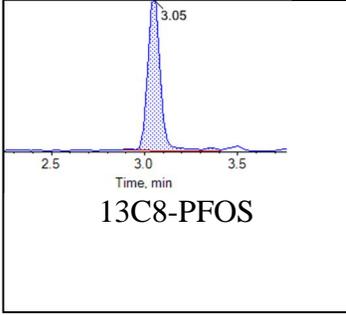
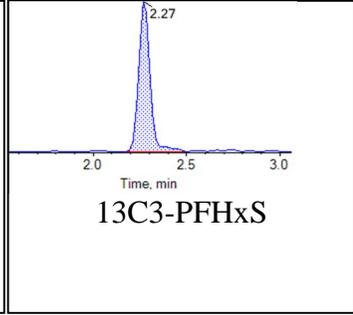
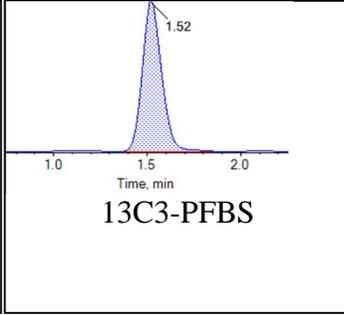
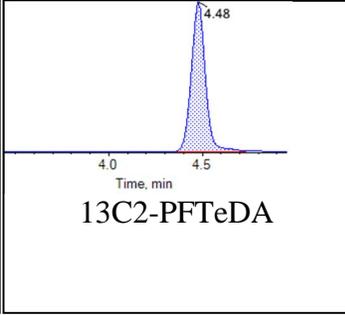
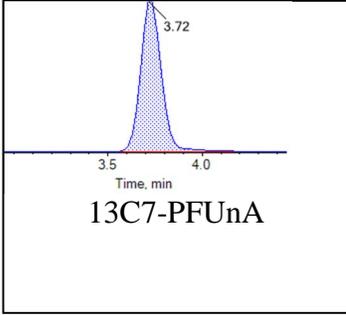


Internal Standards:



Chromatogram Report

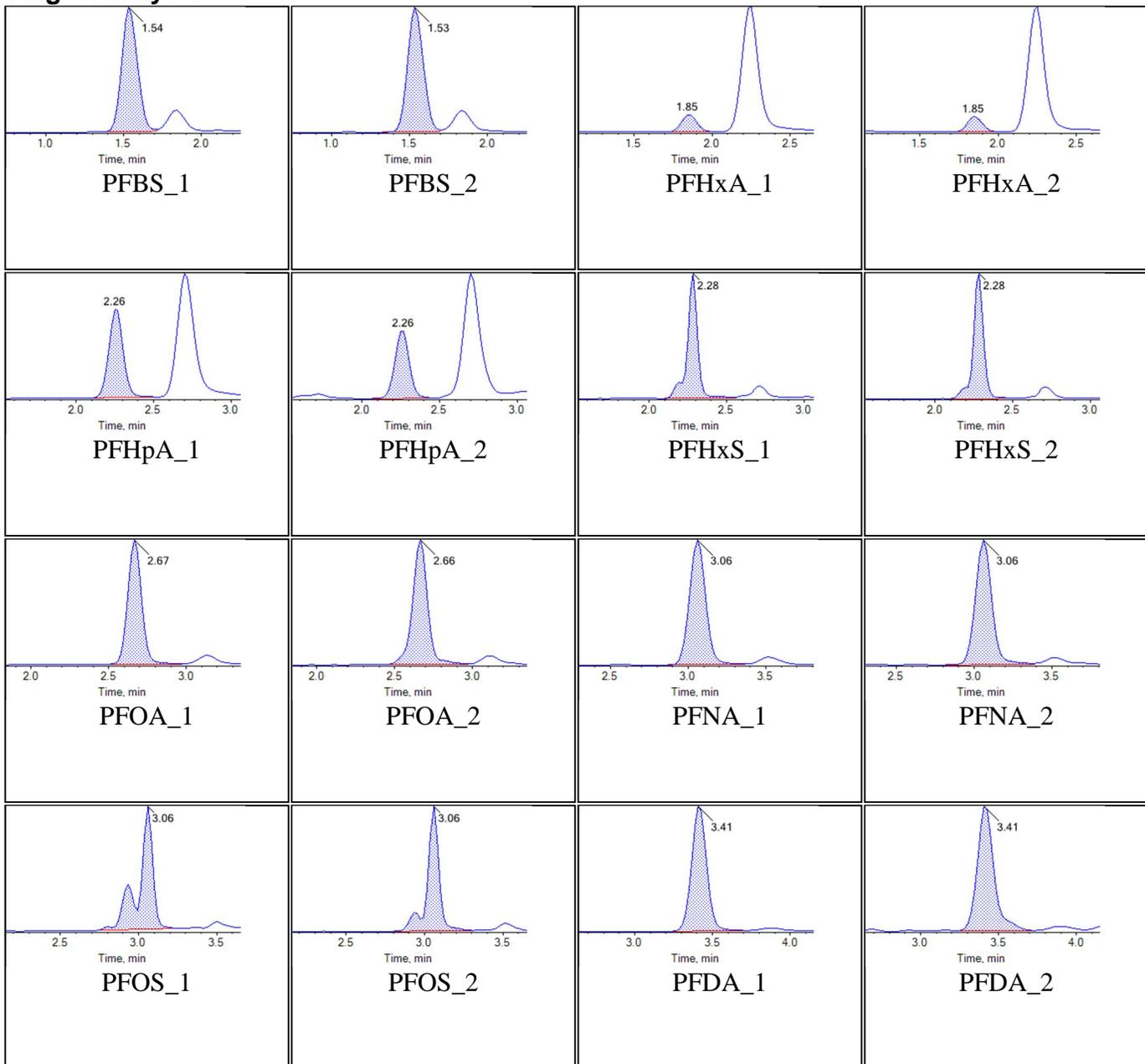
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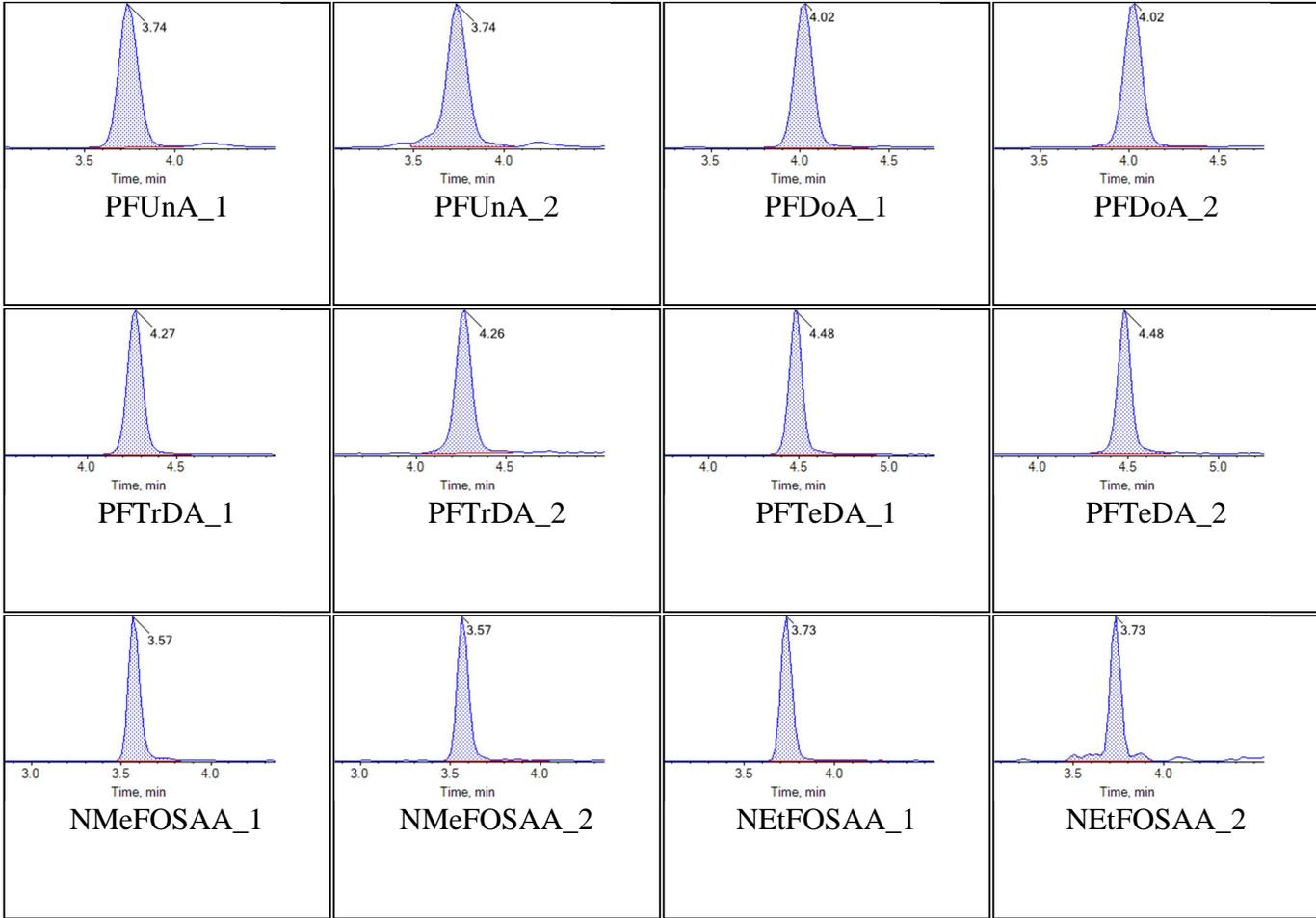


Sample Name	KB85 CCV	Injection Vial	17
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:51:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

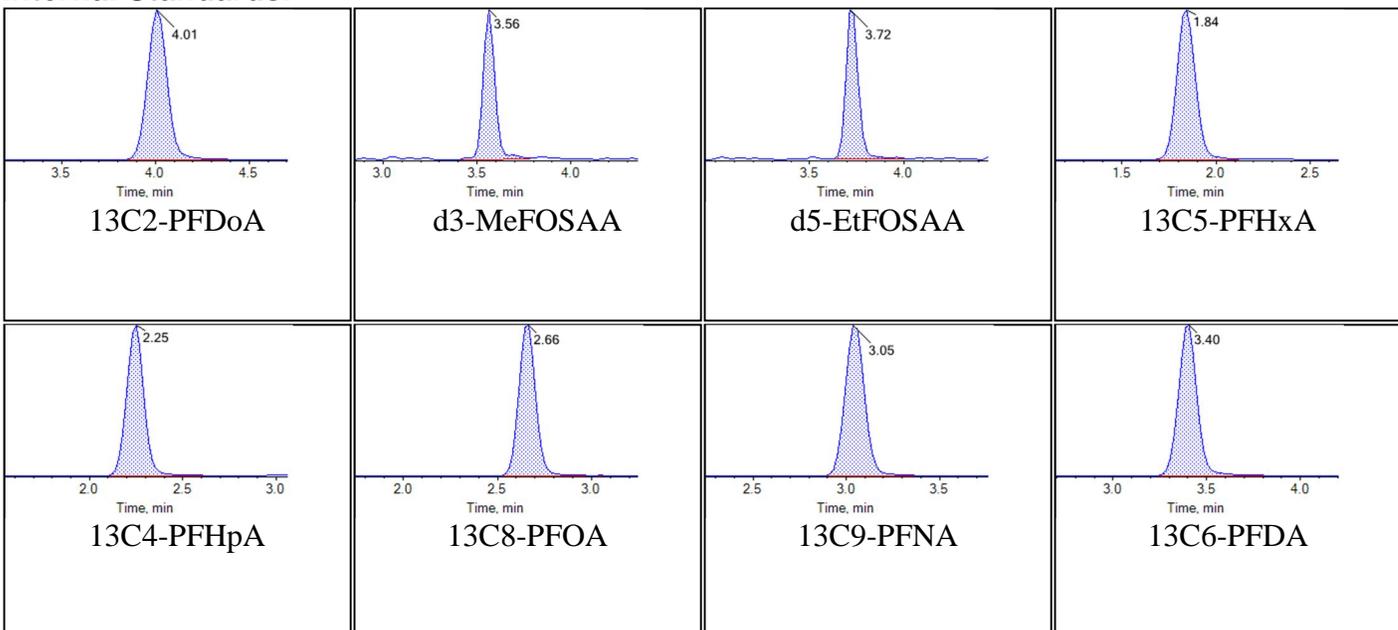
Chromatograms

Target Analytes:



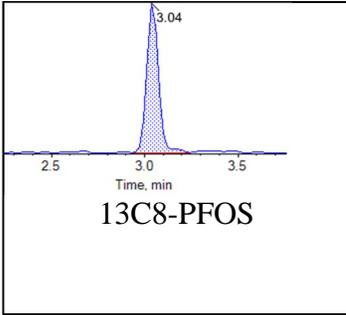
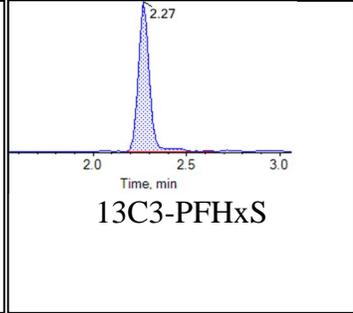
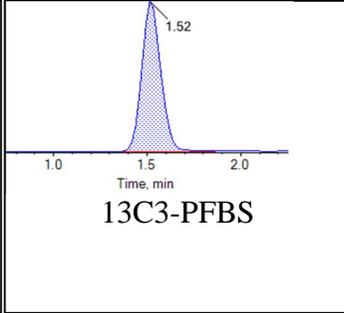
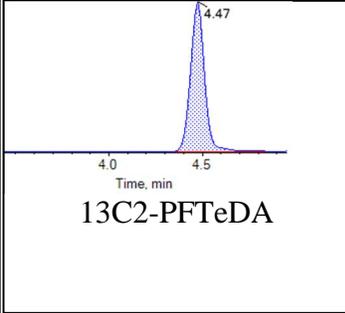
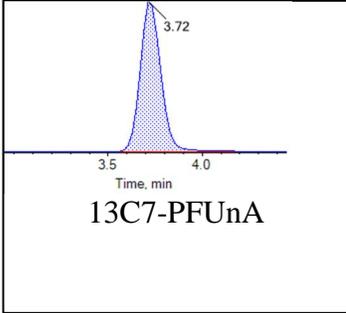


Internal Standards:



Chromatogram Report

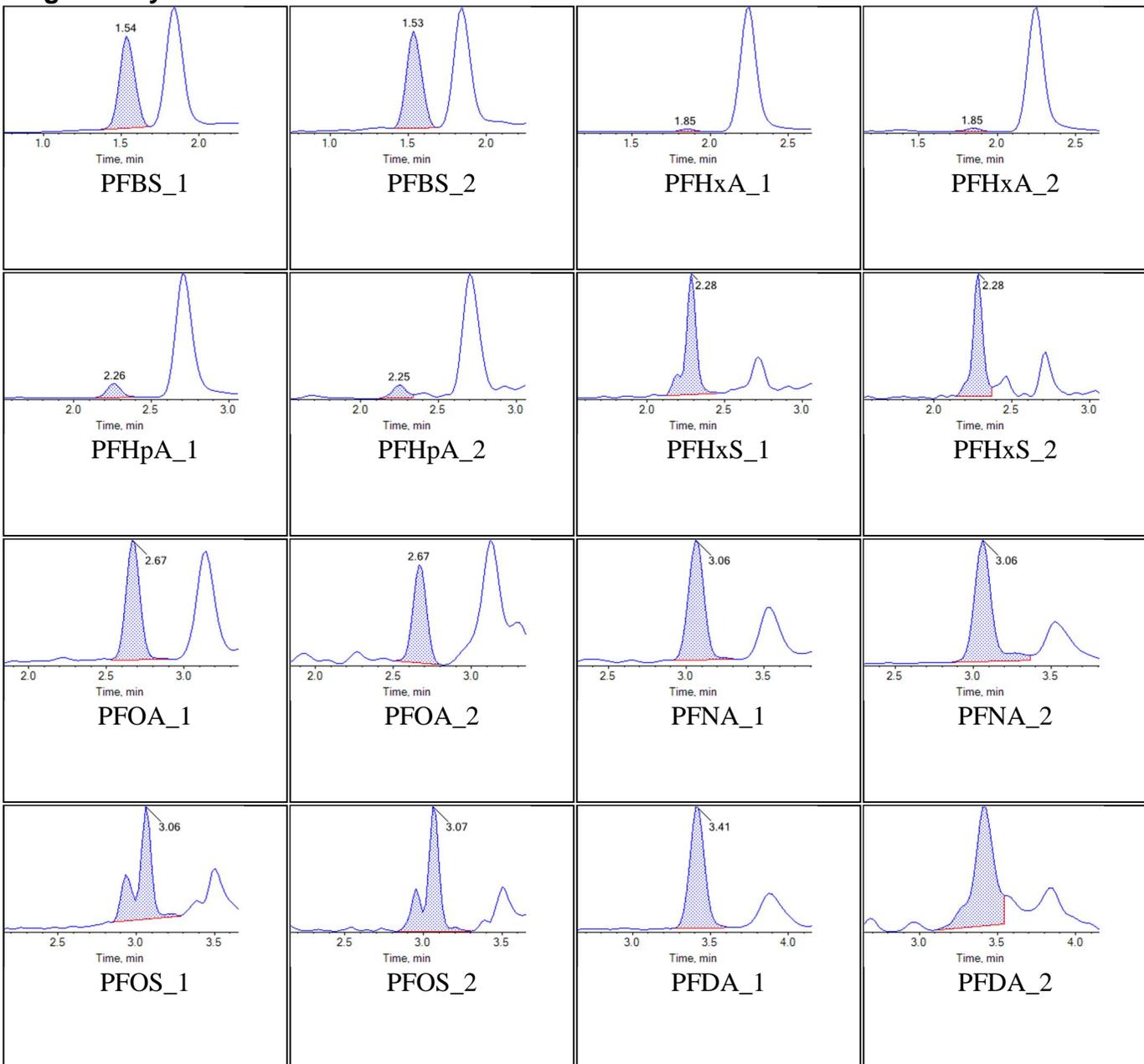
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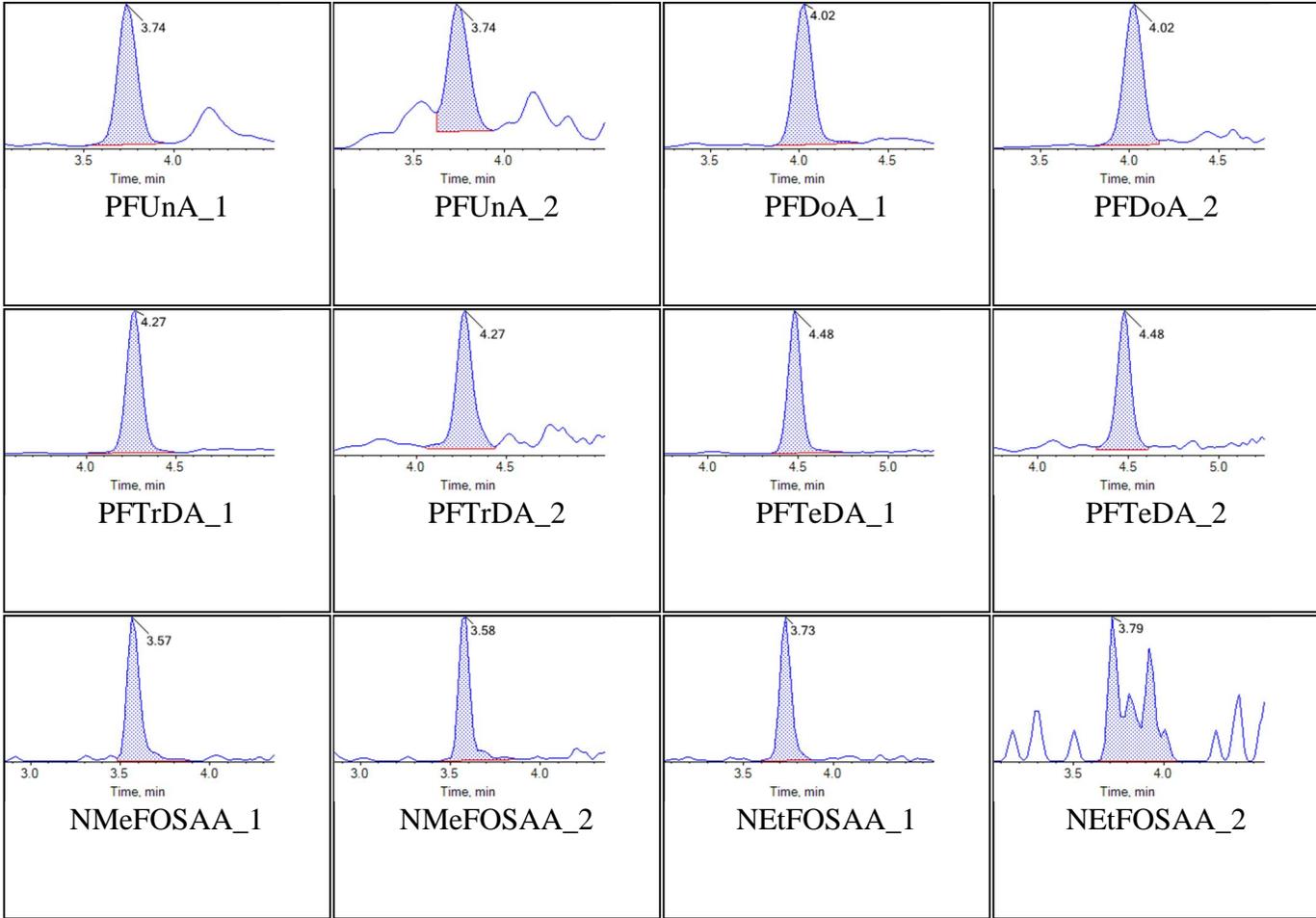


Sample Name	KA86	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:29:24	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

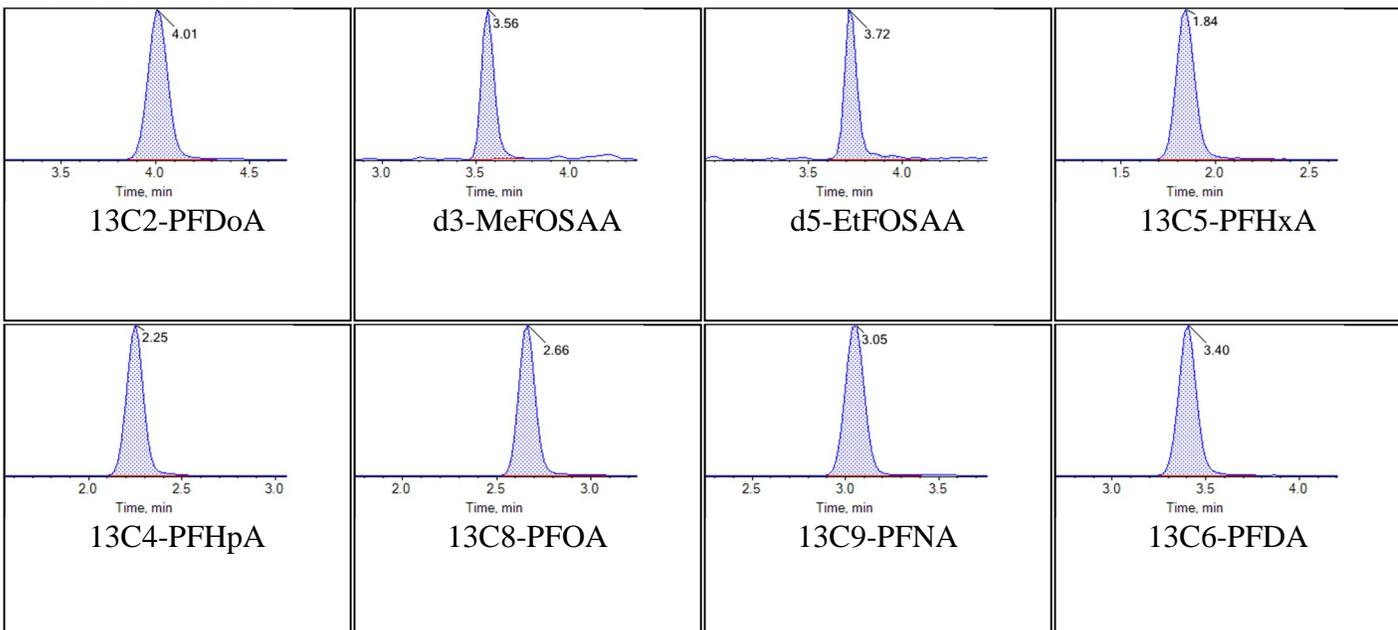
Chromatograms

Target Analytes:



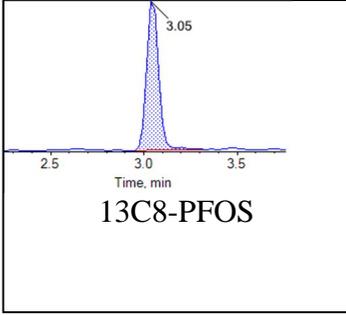
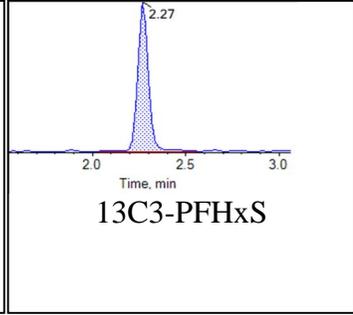
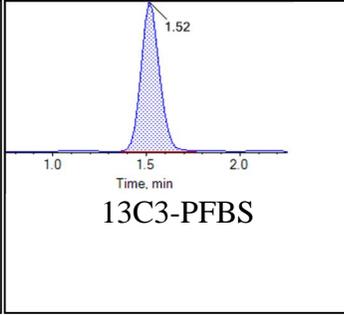
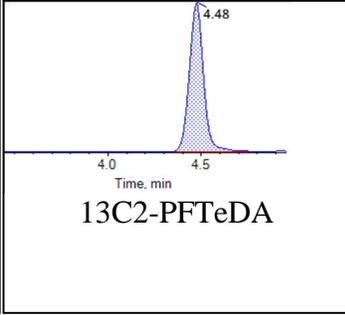
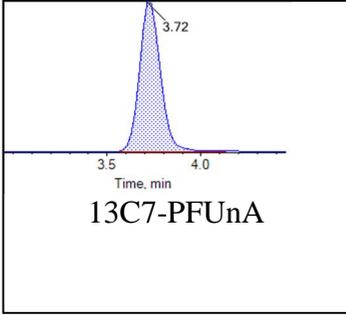


Internal Standards:



Chromatogram Report

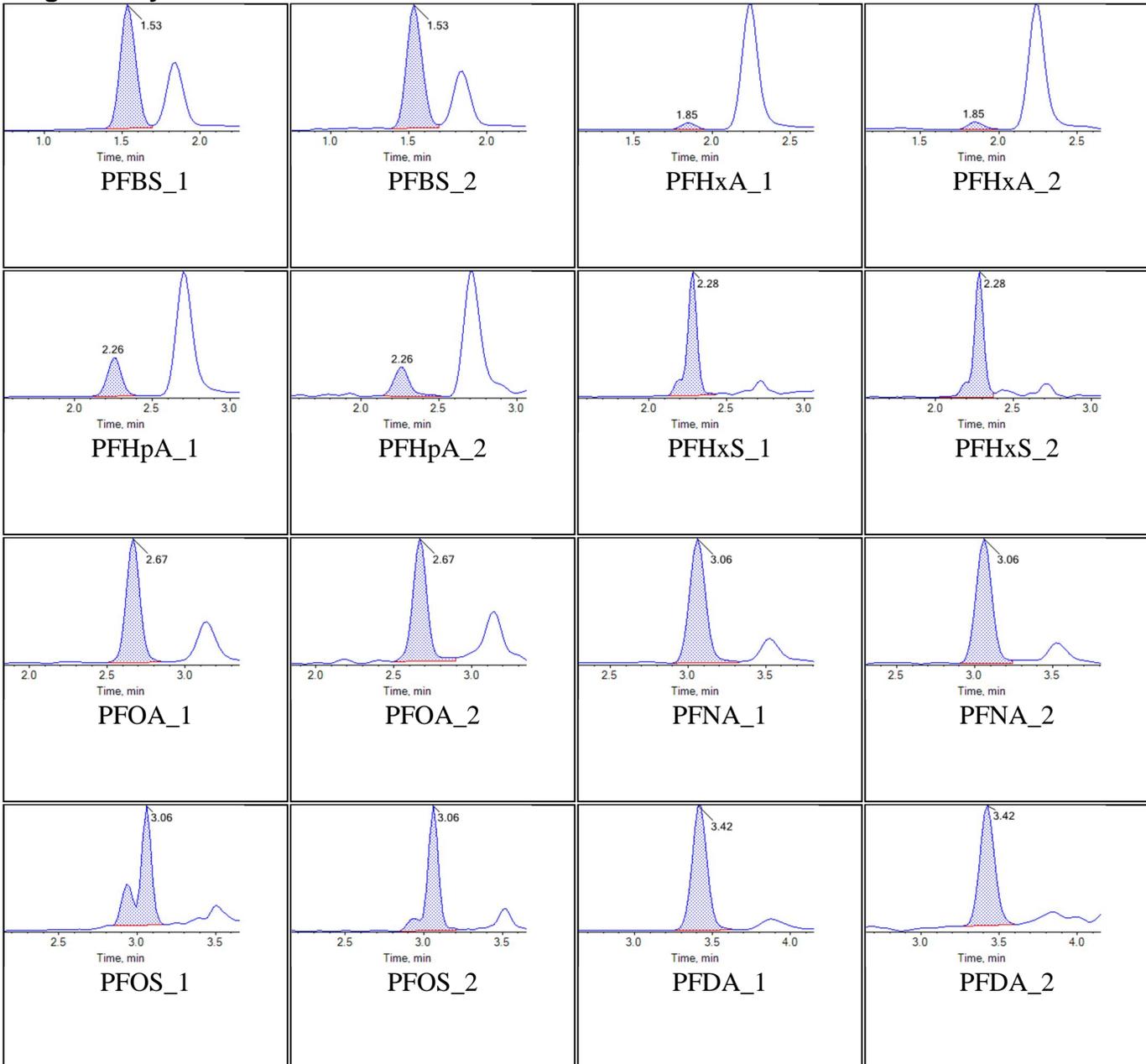
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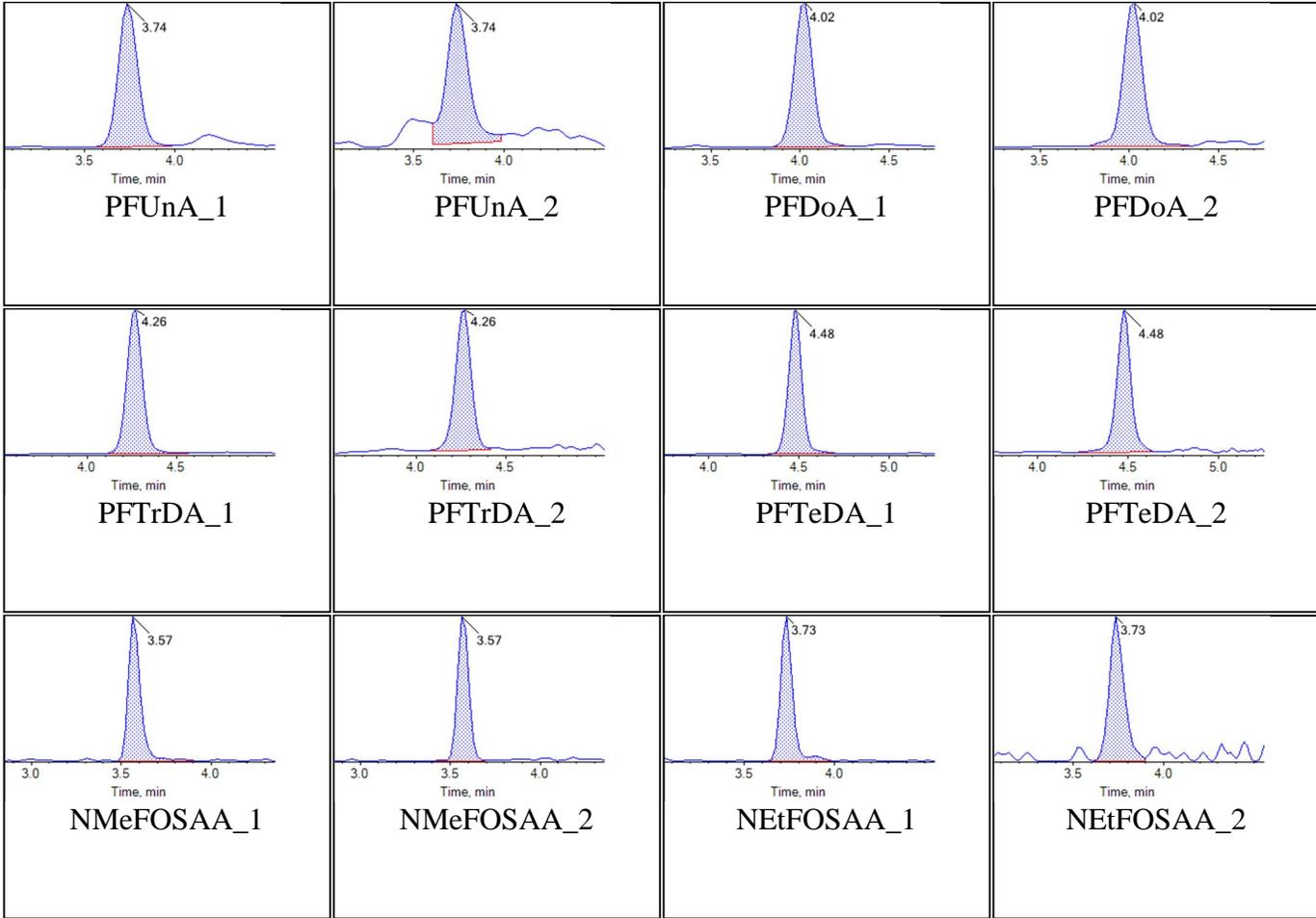


Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:40:16	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

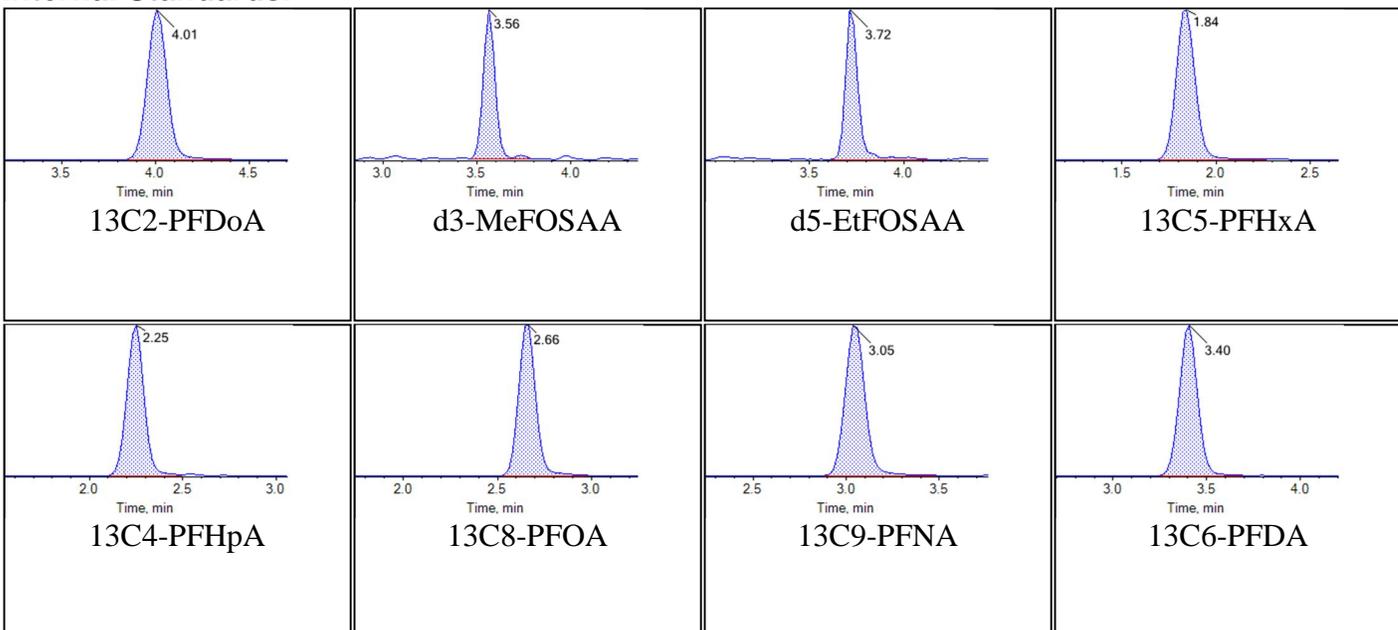
Chromatograms

Target Analytes:



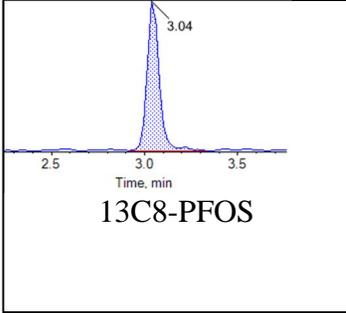
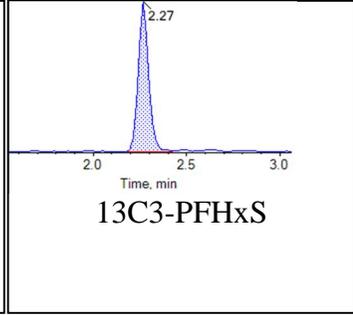
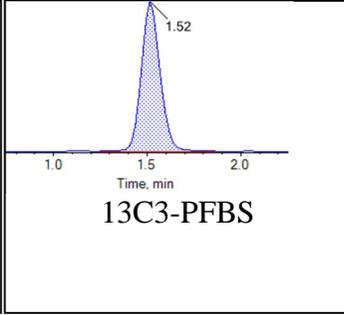
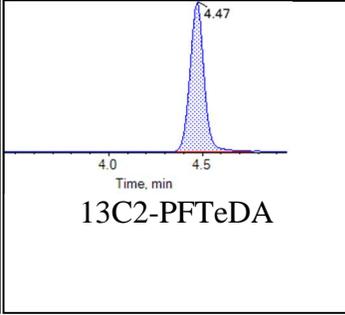
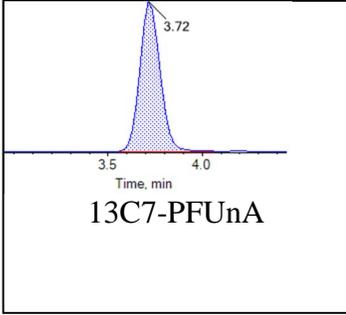


Internal Standards:



Chromatogram Report

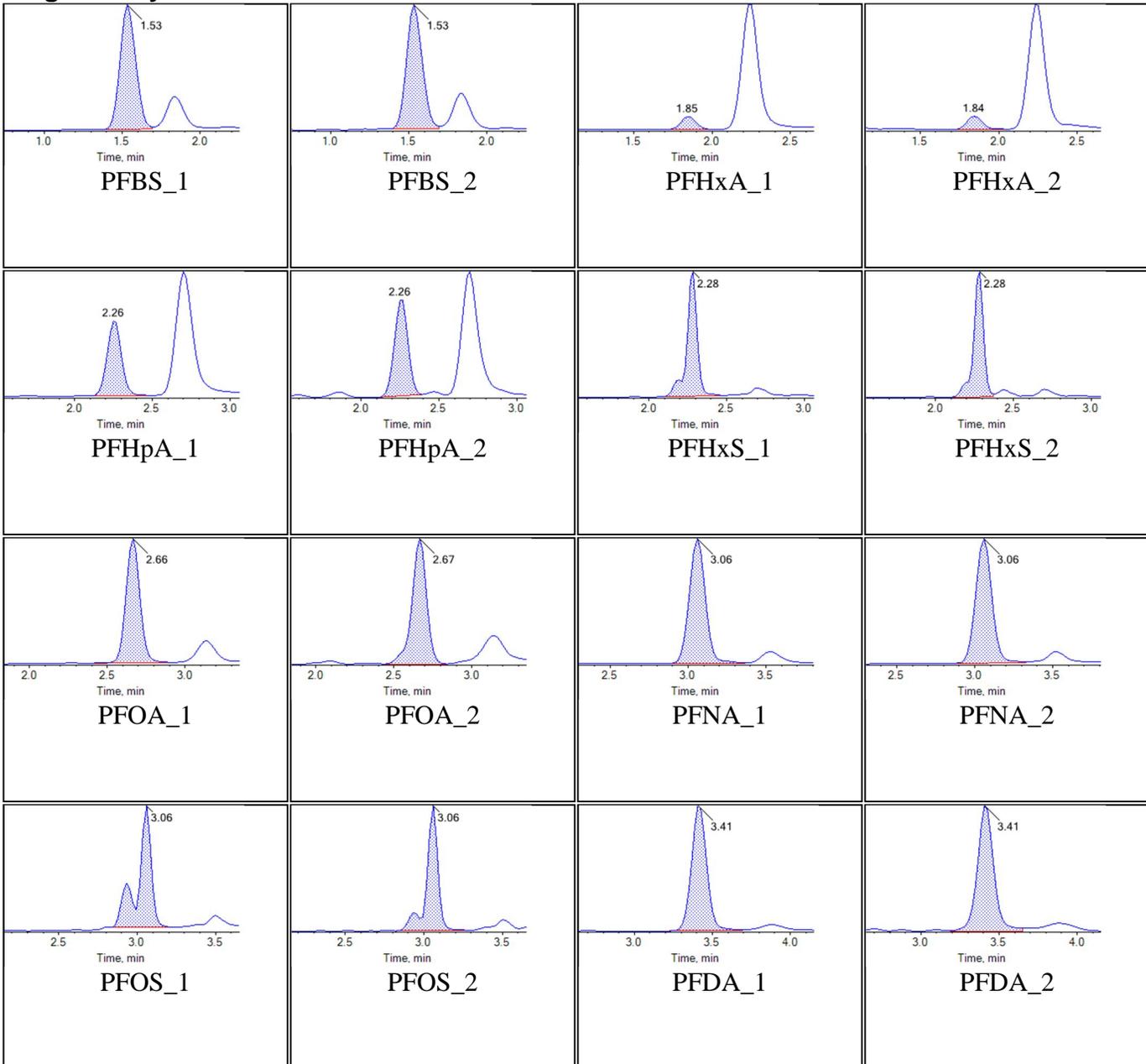
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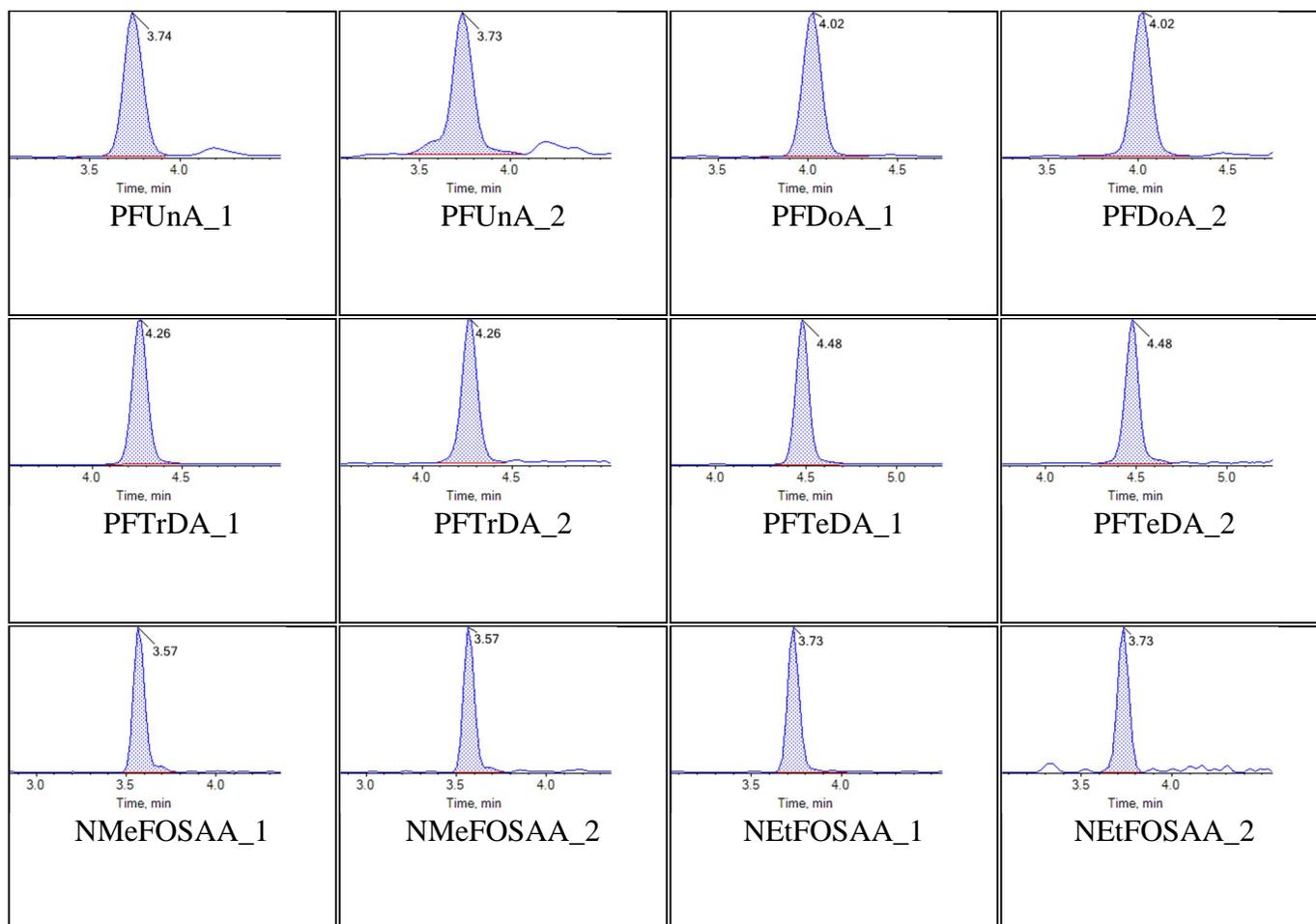
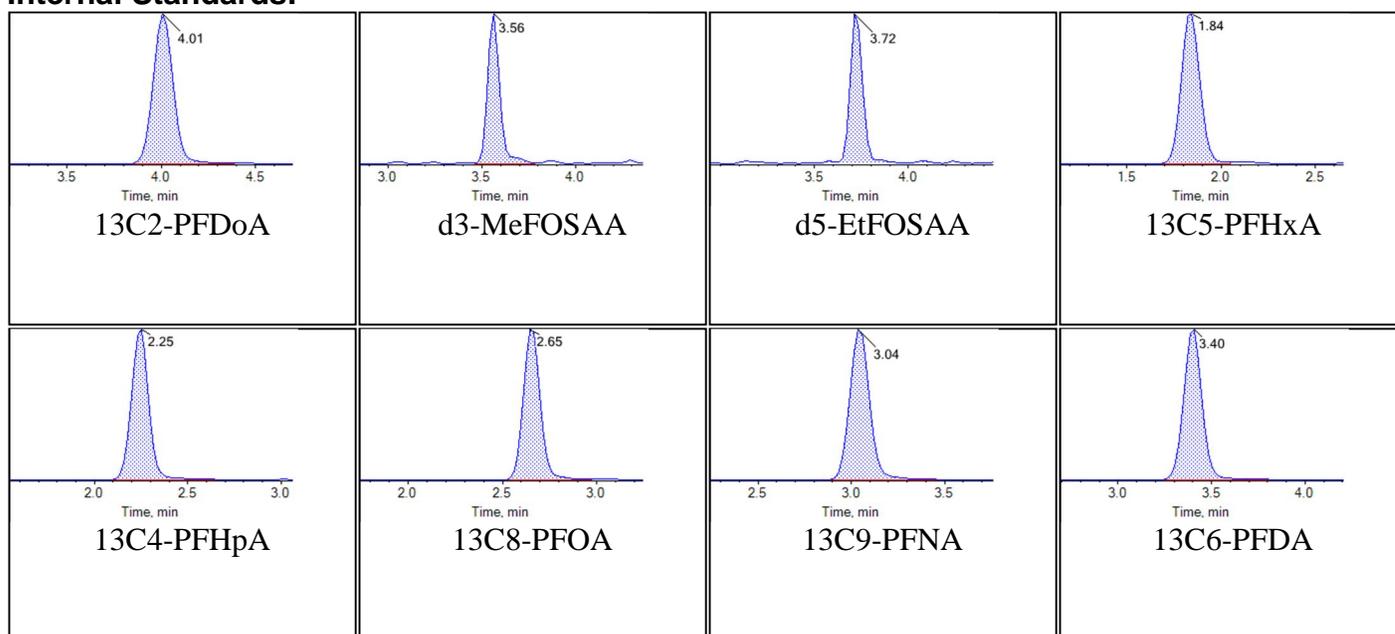


Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:51:08	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Chromatograms

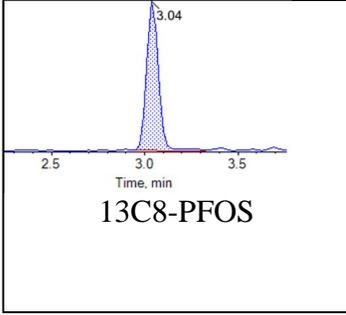
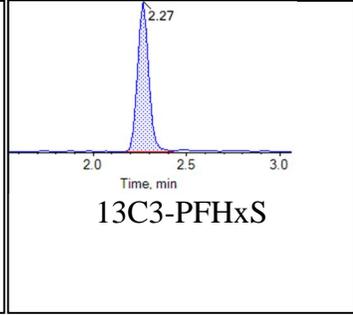
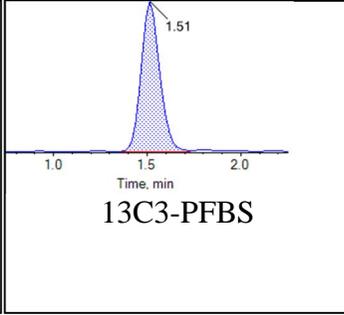
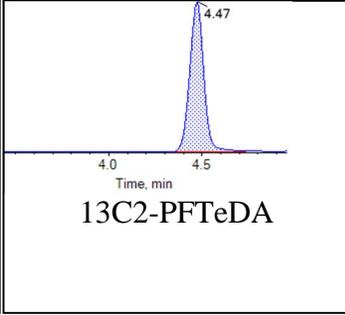
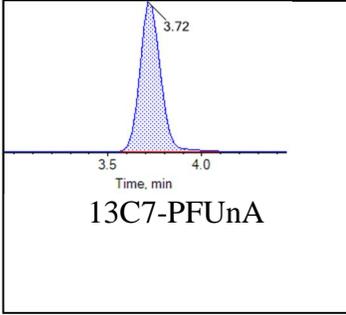
Target Analytes:



**Internal Standards:**

Chromatogram Report

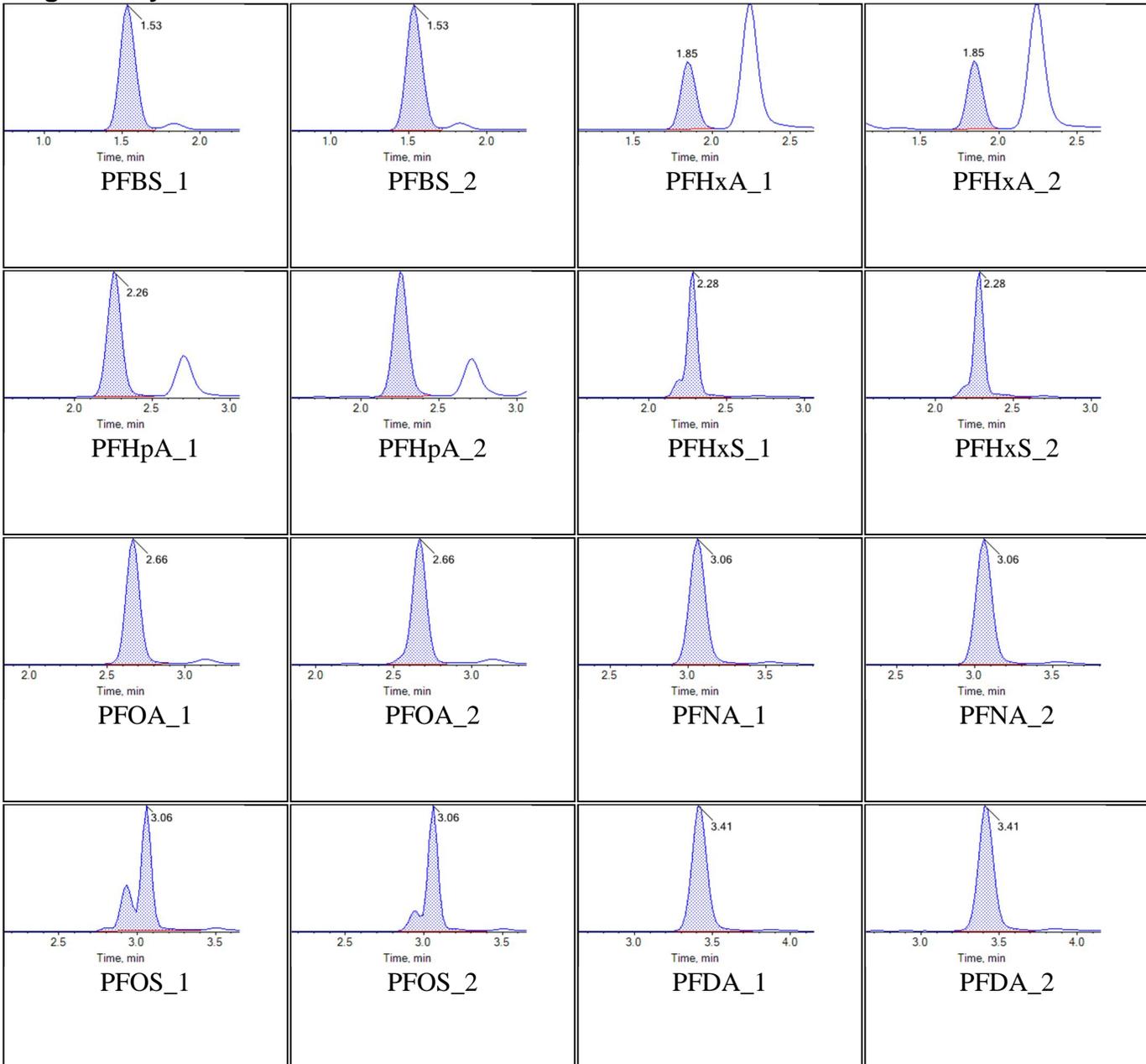
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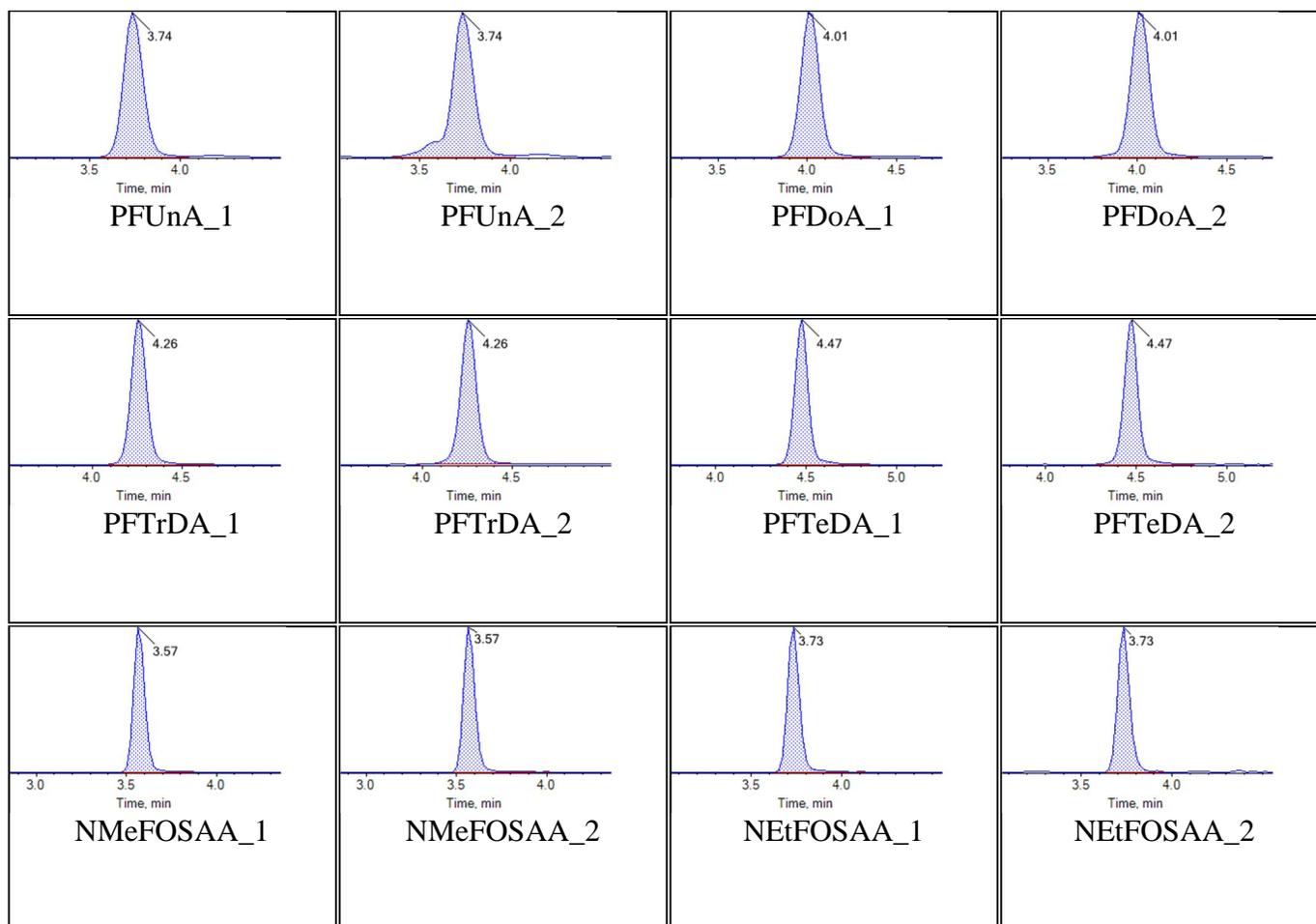
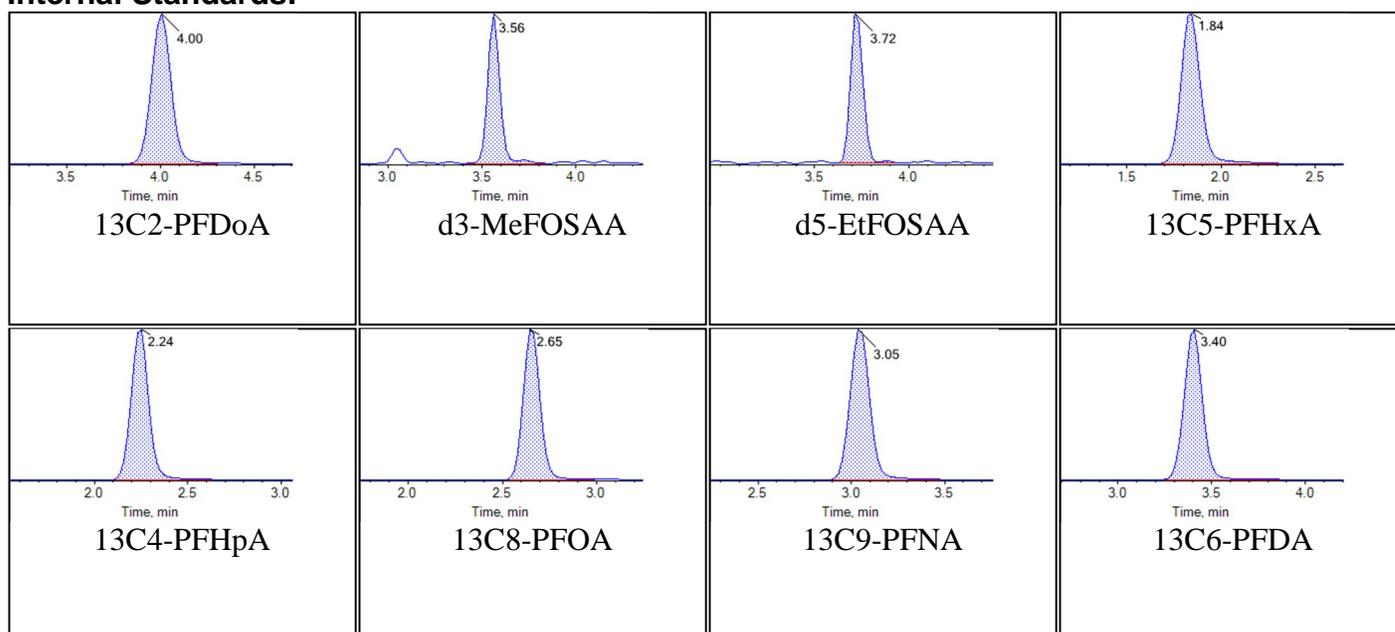


Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:12:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Chromatograms

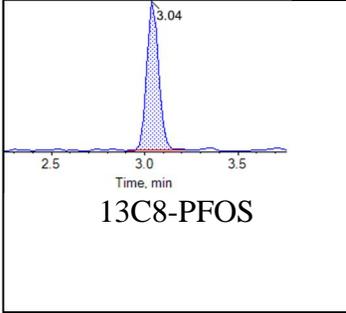
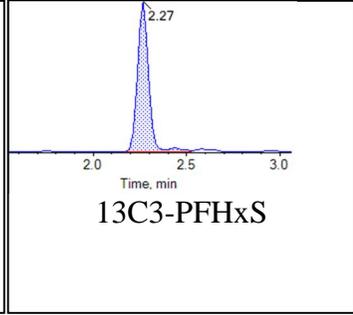
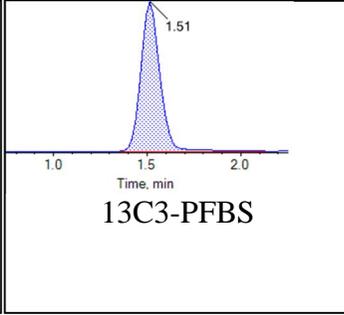
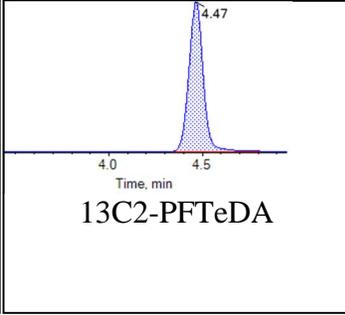
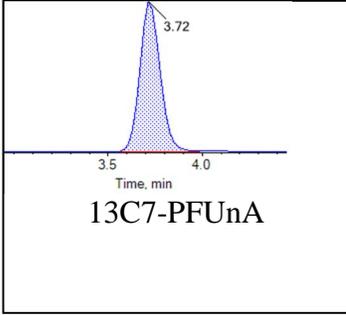
Target Analytes:



**Internal Standards:**

Chromatogram Report

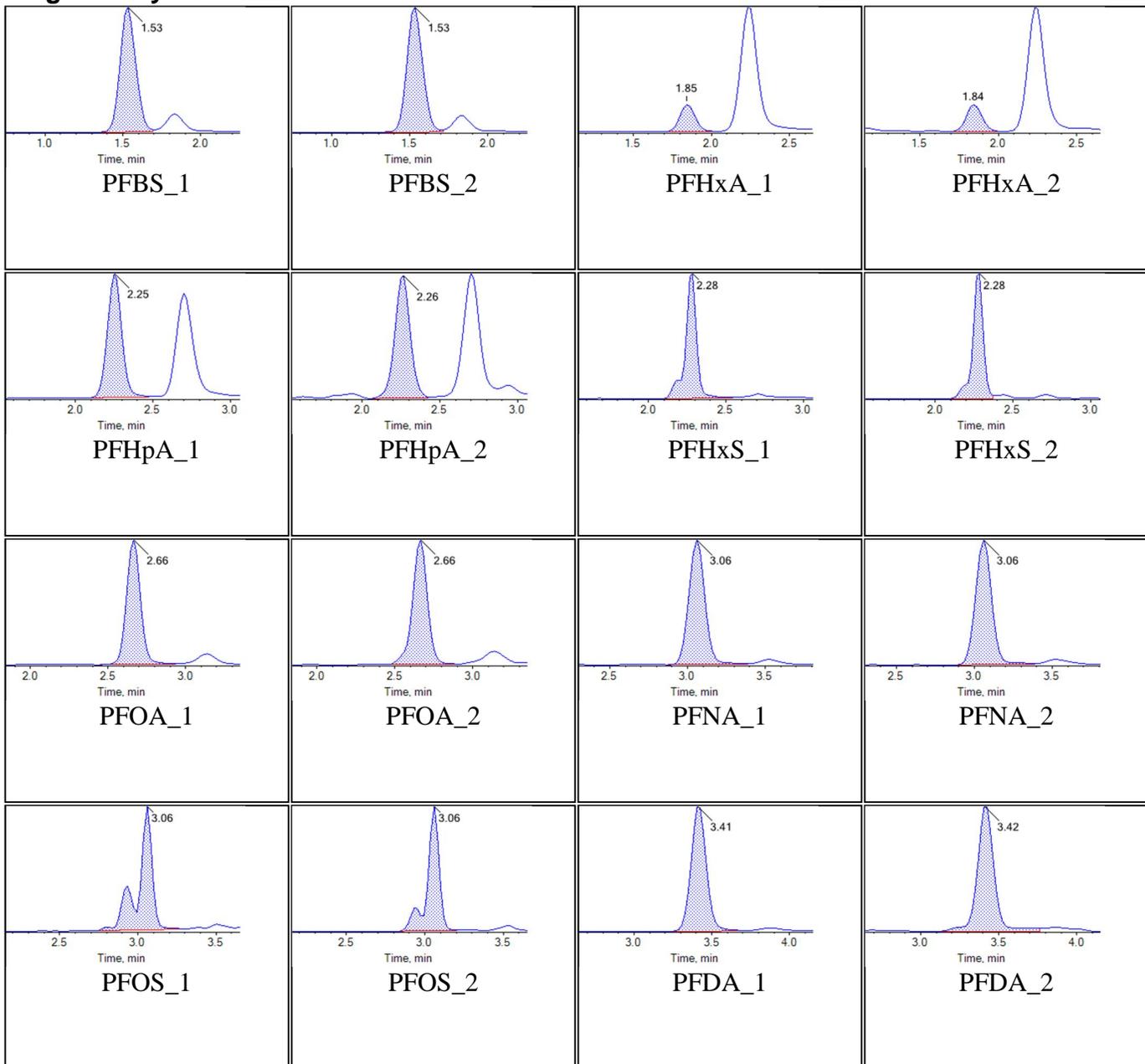
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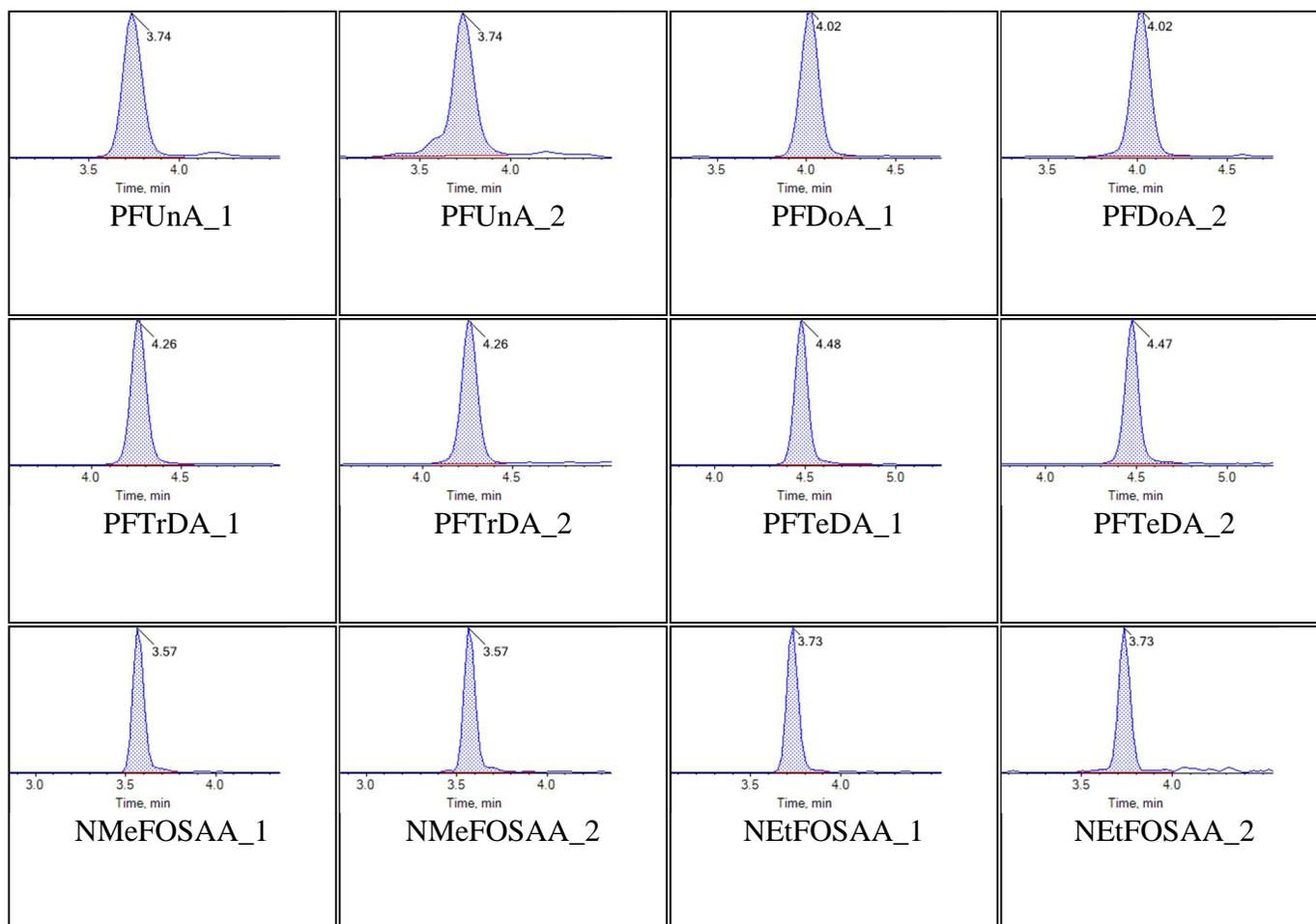
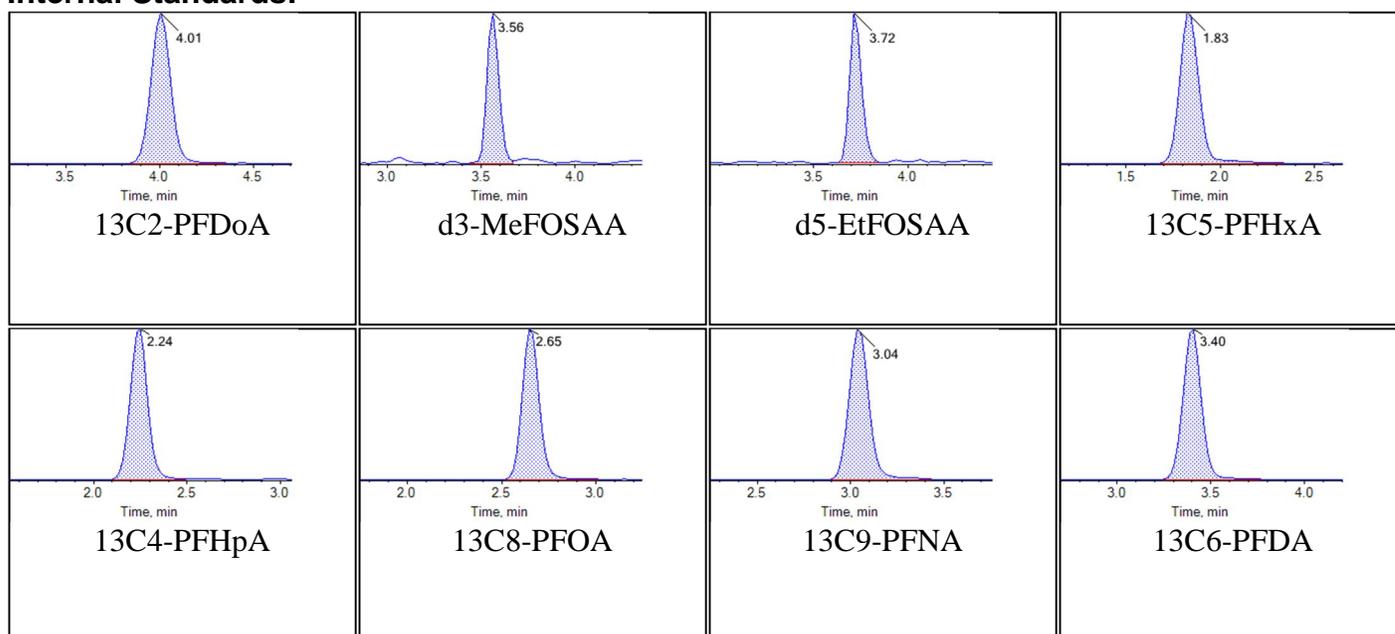


Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:02:00	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Chromatograms

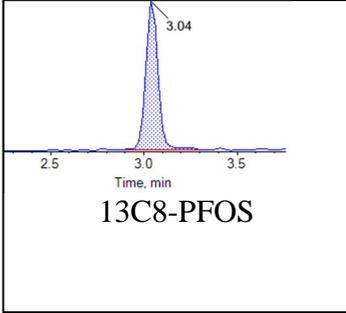
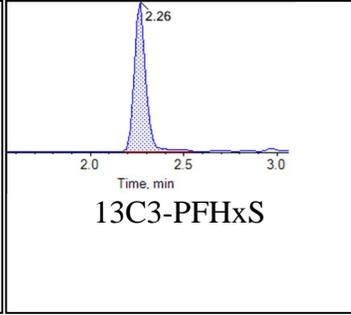
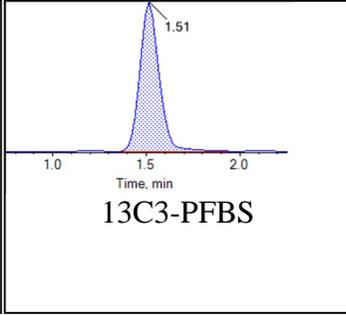
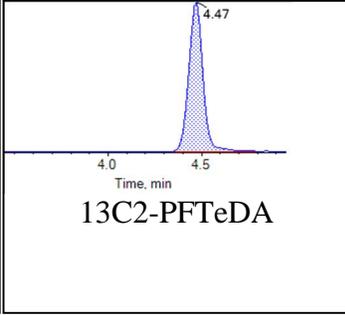
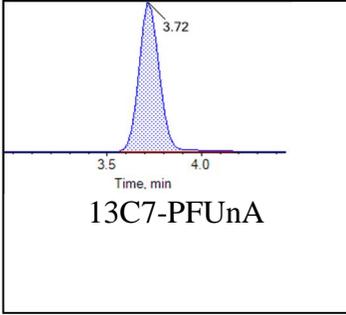
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**Internal Standards:**

Chromatogram Report

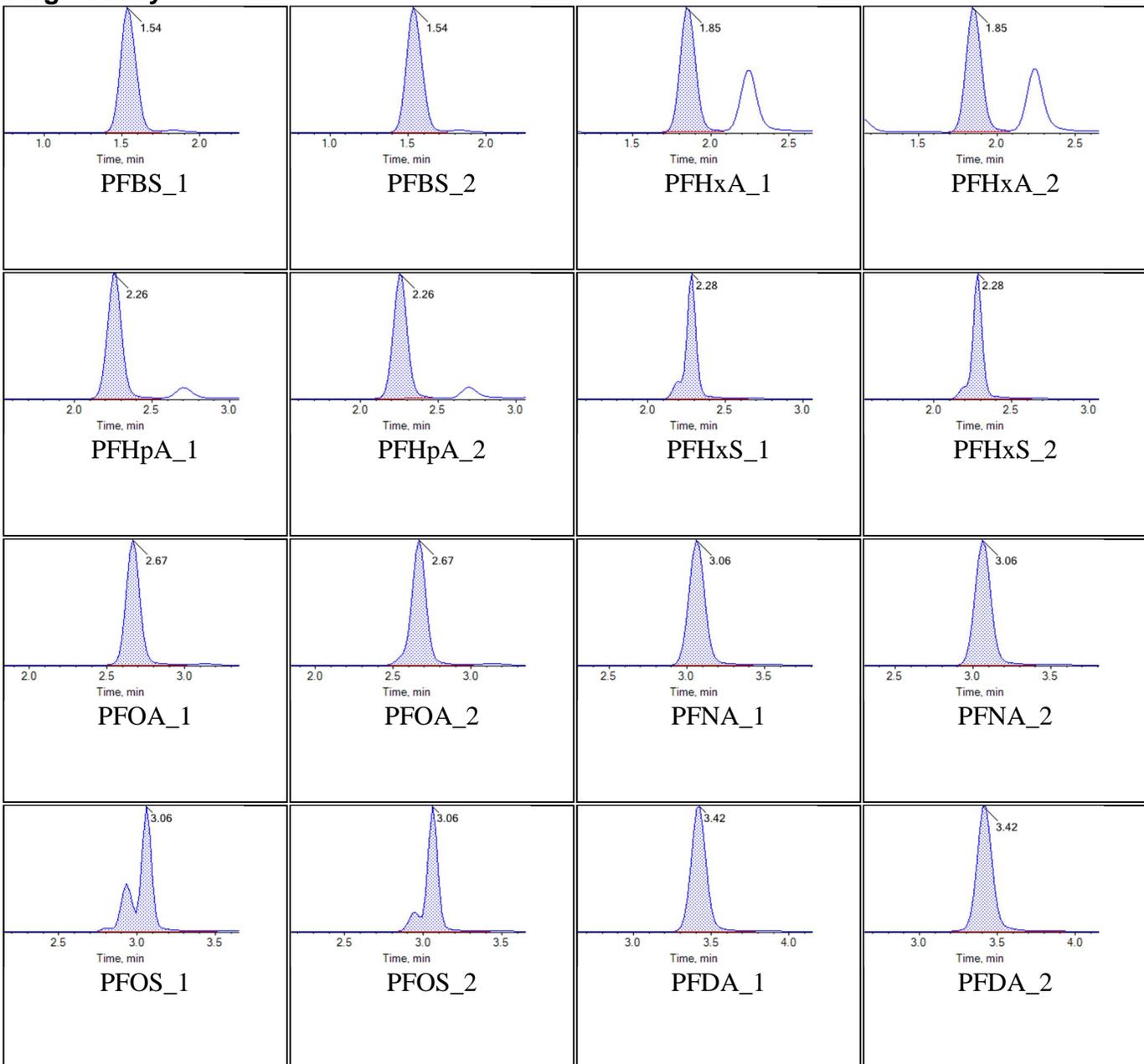
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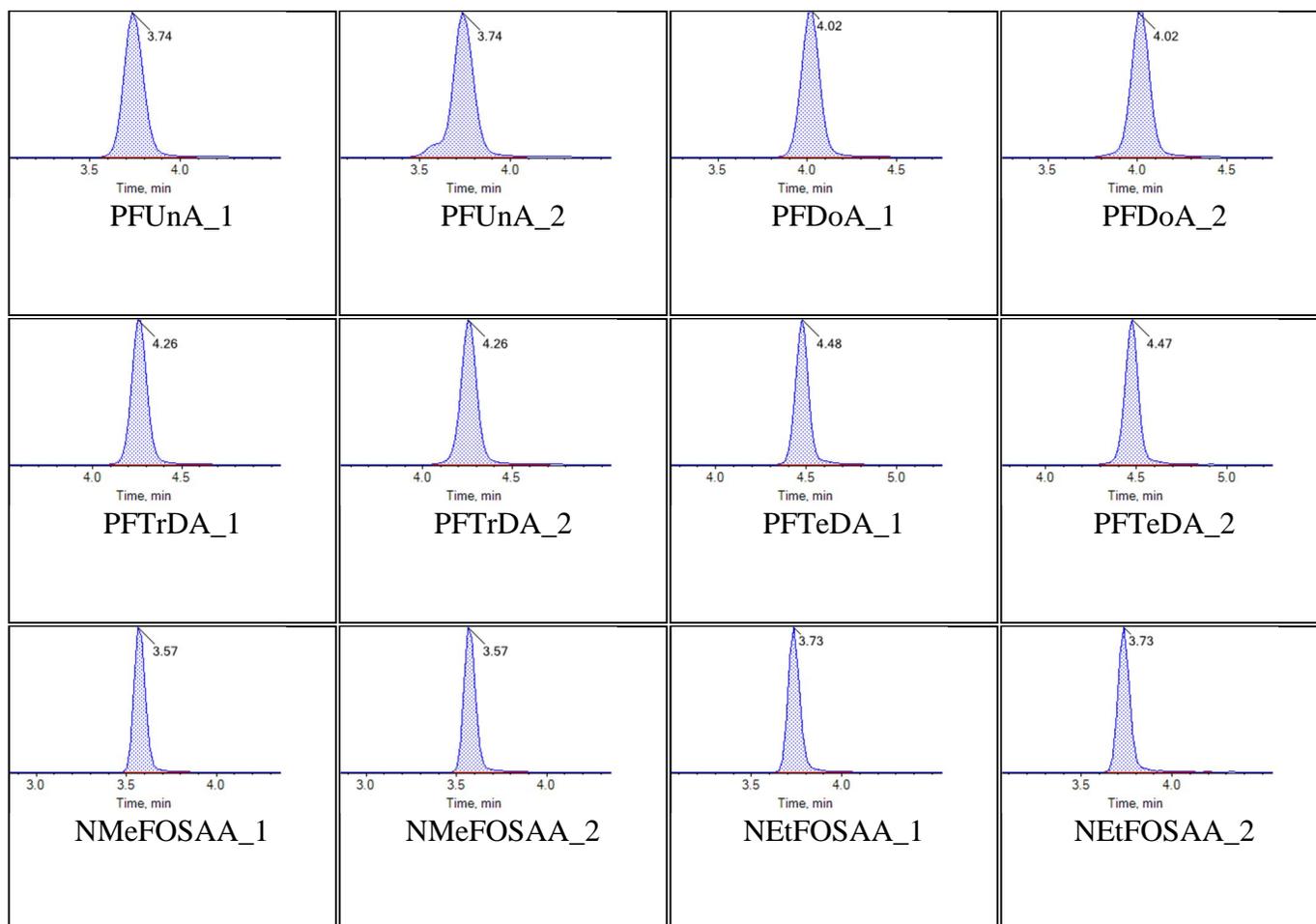
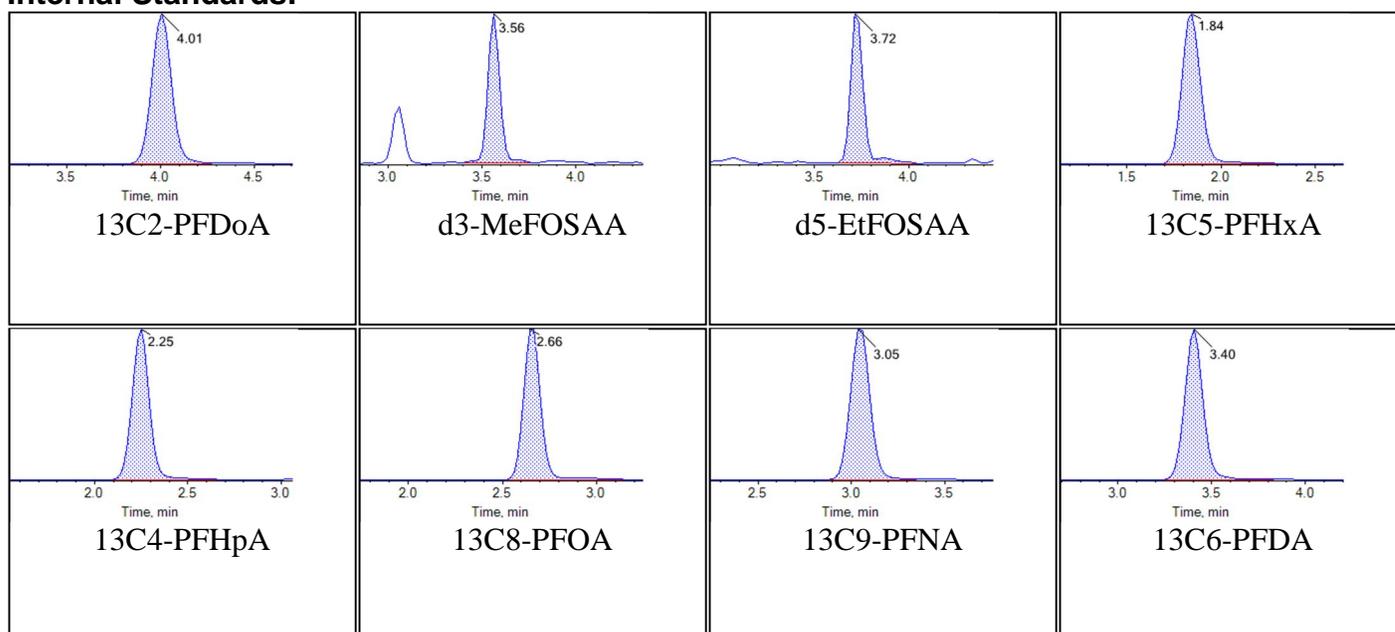


Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:23:43	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Chromatograms

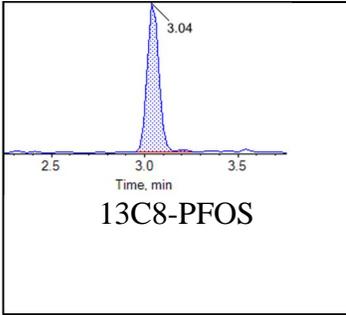
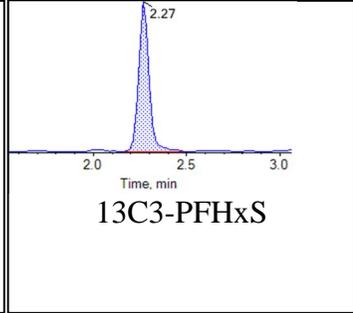
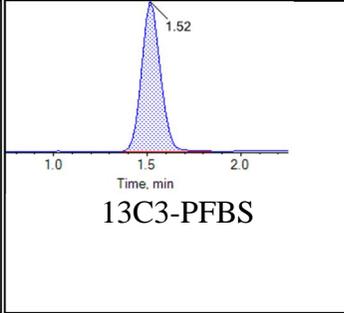
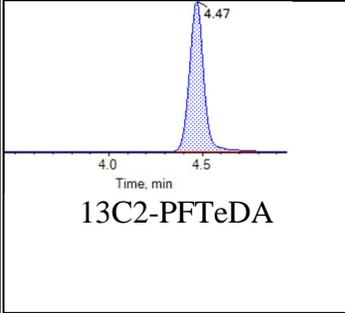
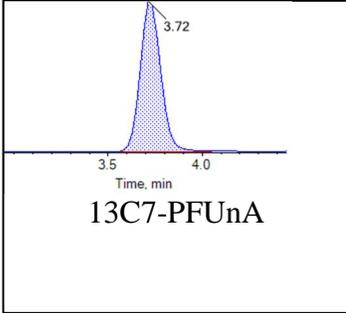
Target Analytes:



**Internal Standards:**

Chromatogram Report

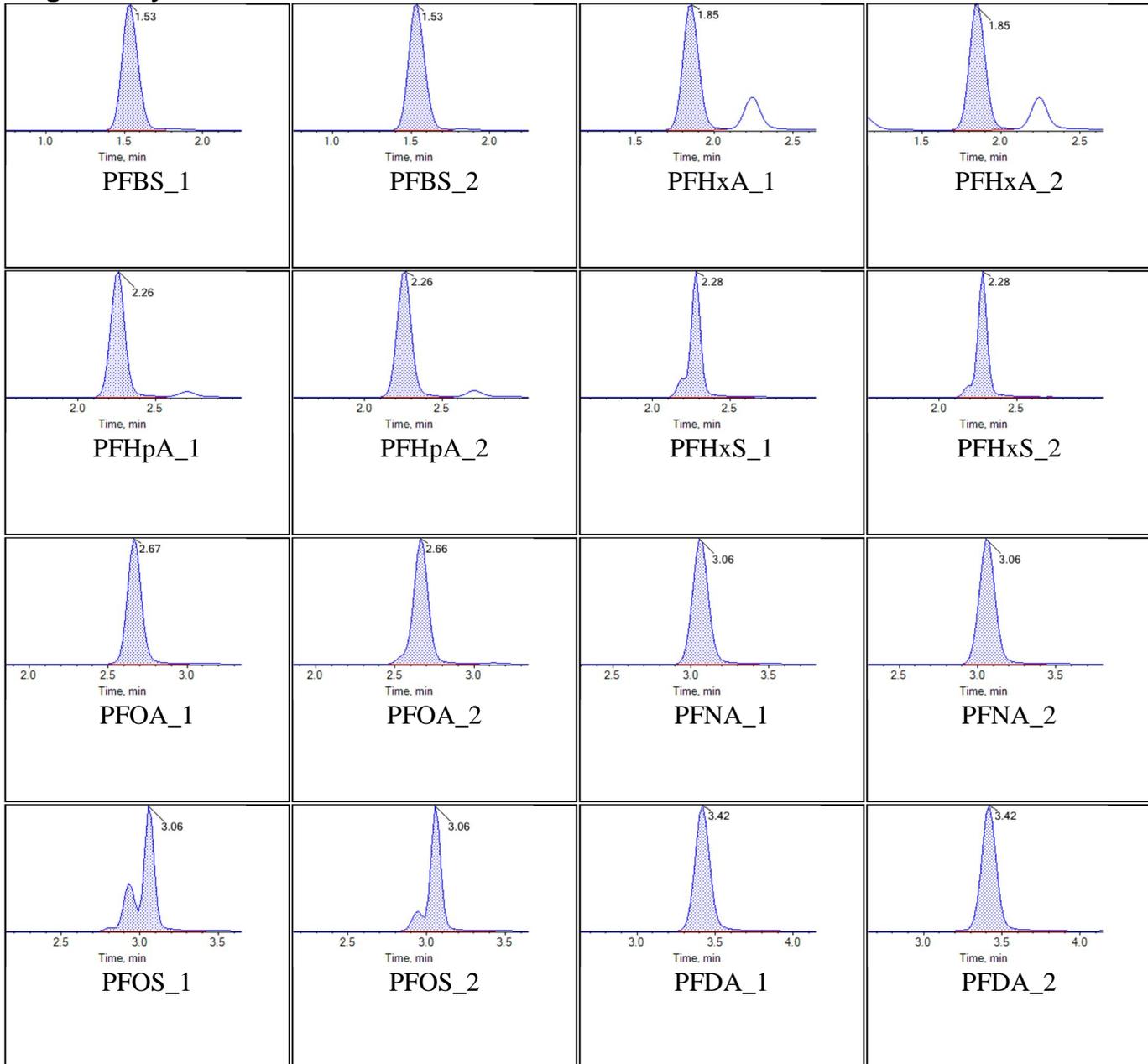
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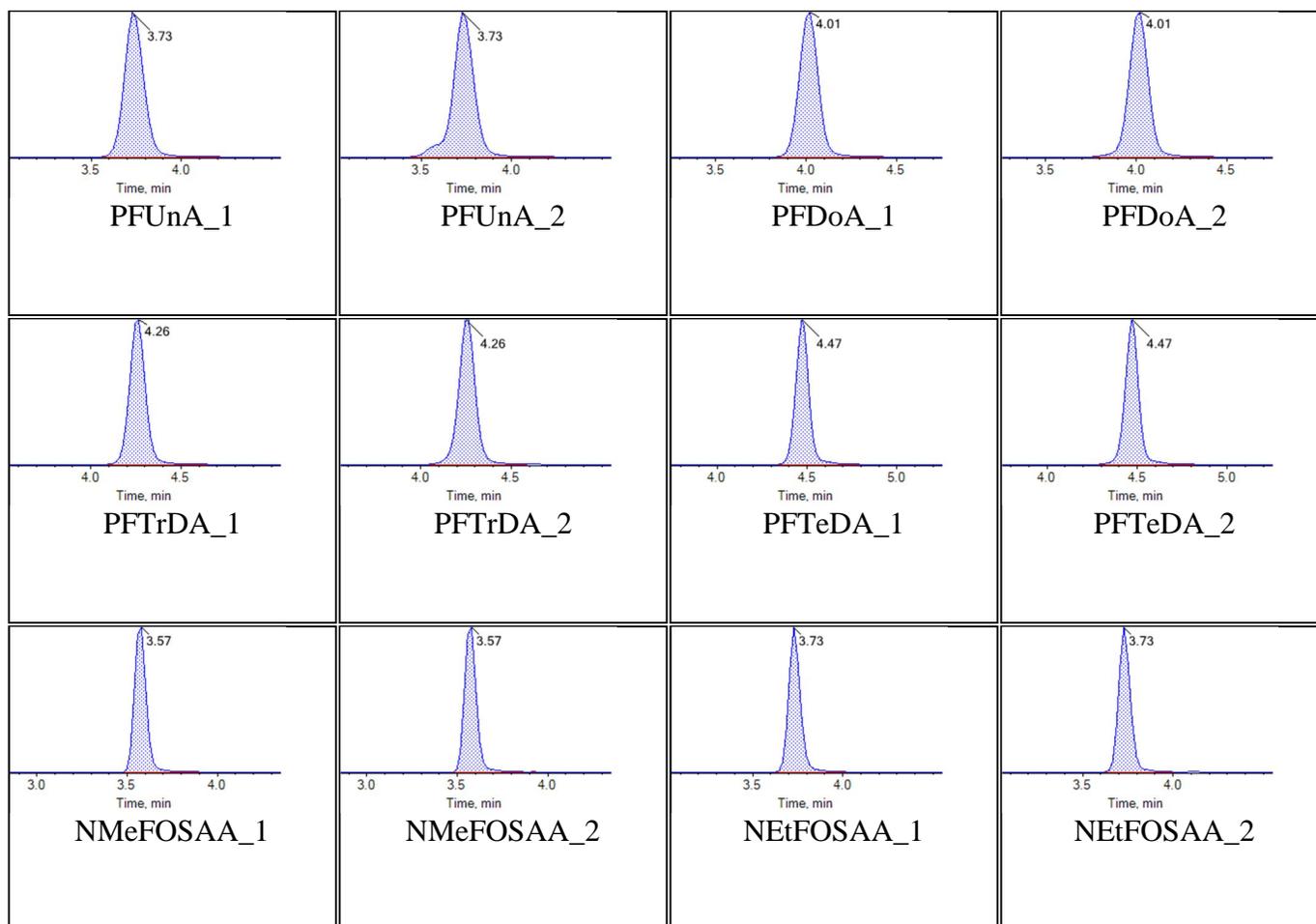
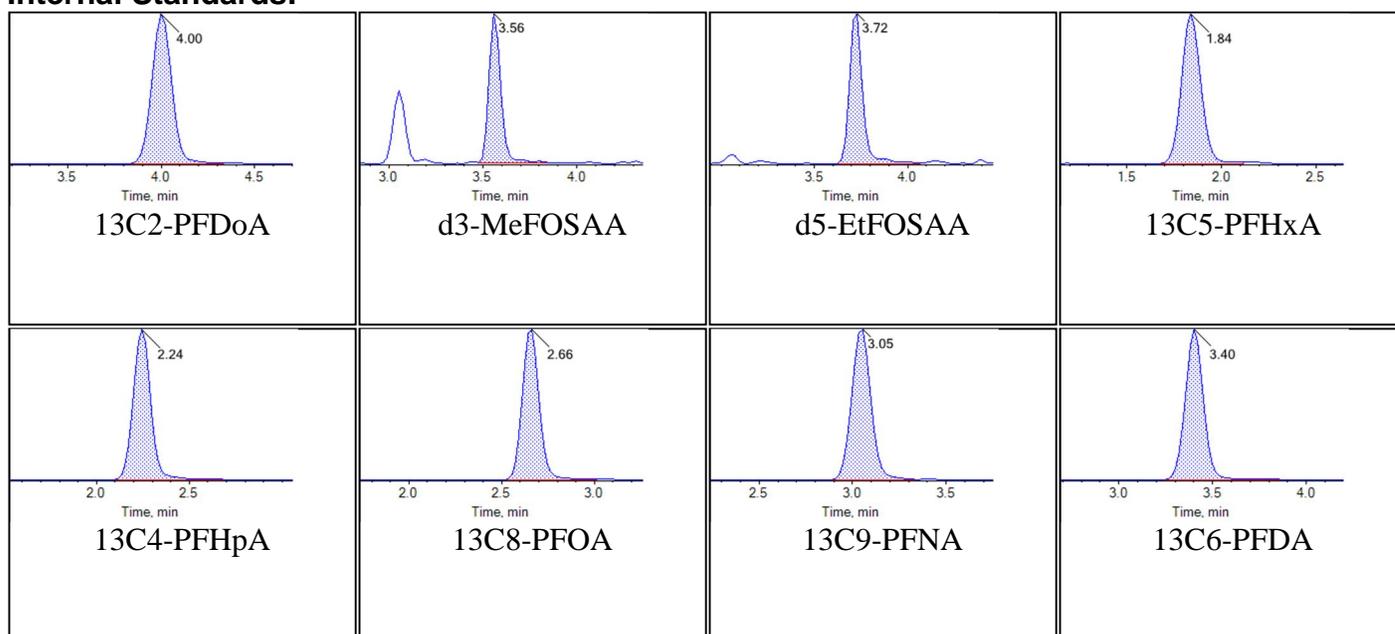


Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:34:34	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Chromatograms

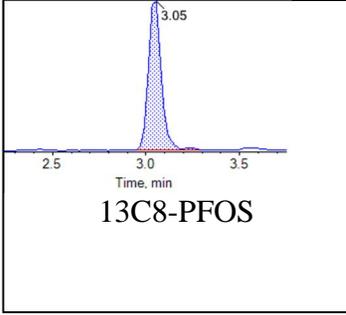
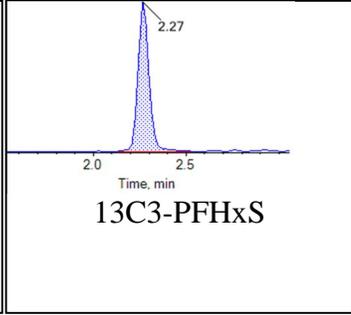
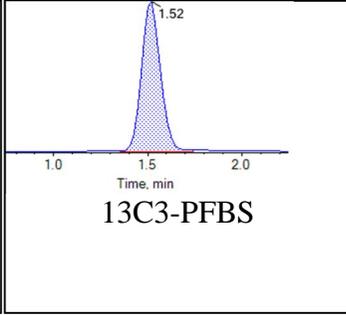
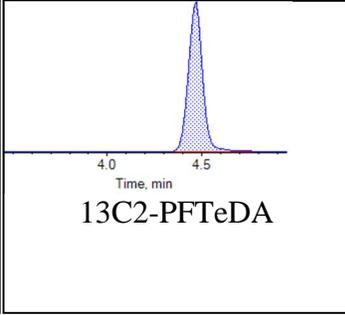
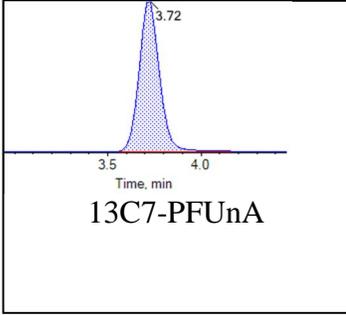
Target Analytes:



**Internal Standards:**

Chromatogram Report

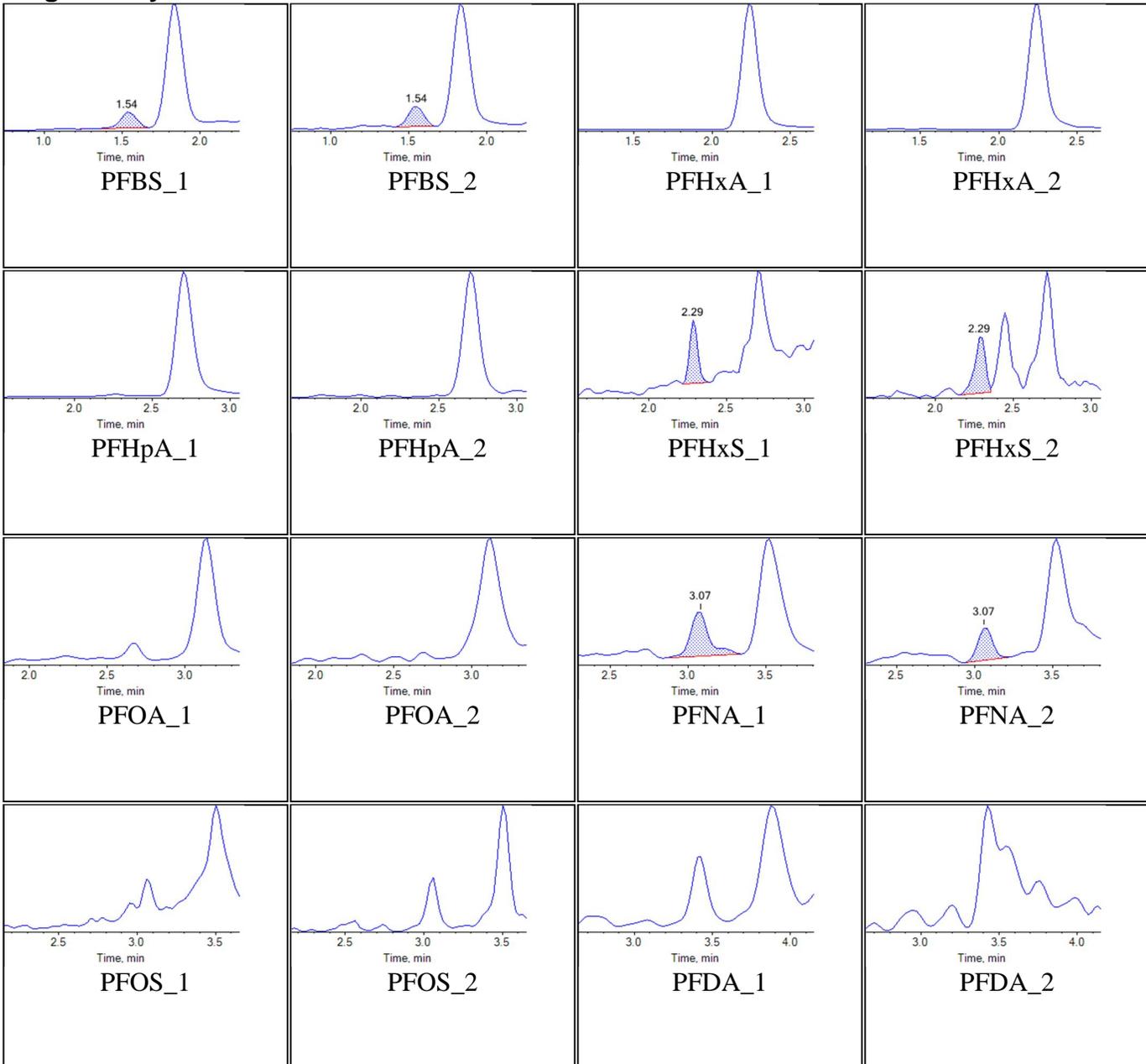
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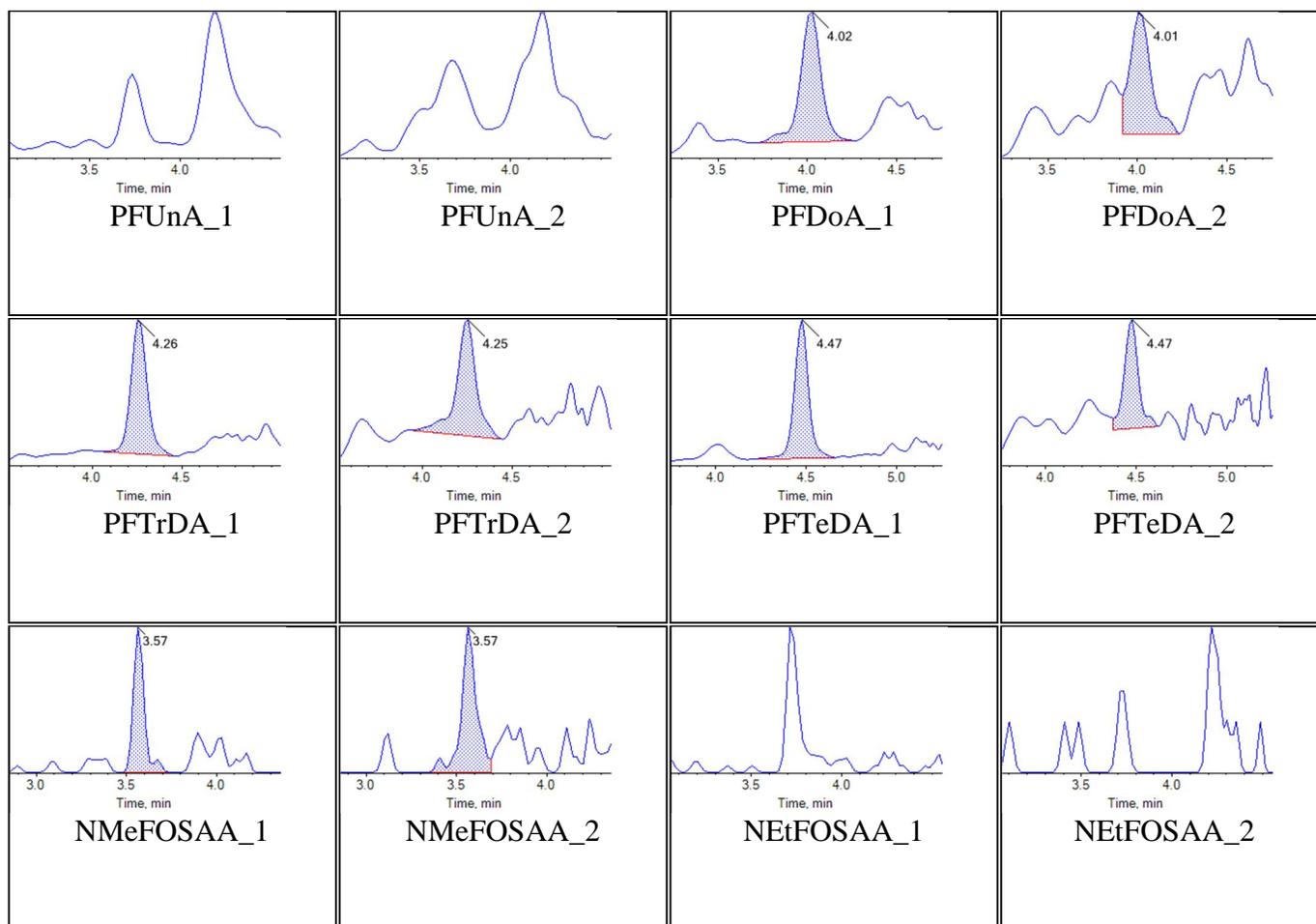
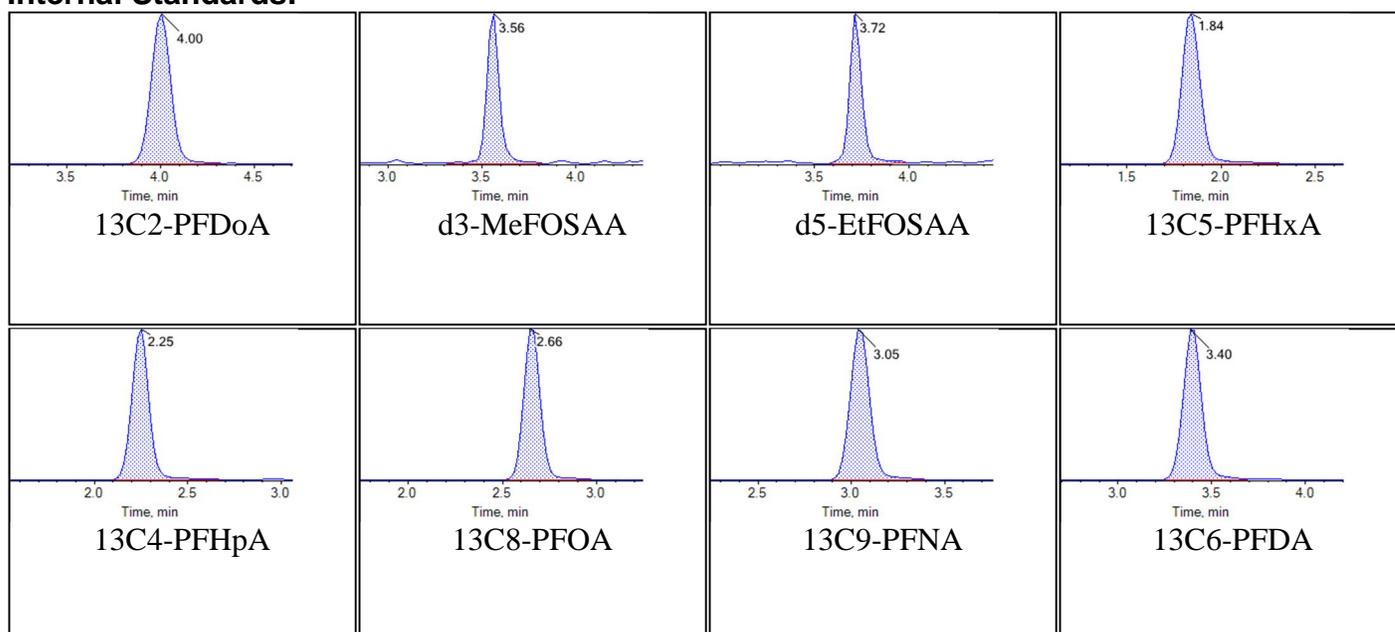


Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:45:25	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

Chromatograms

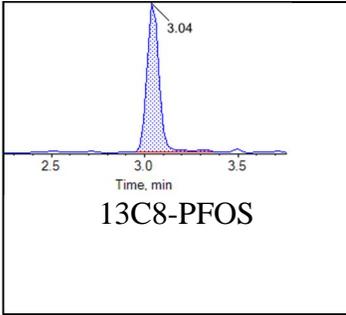
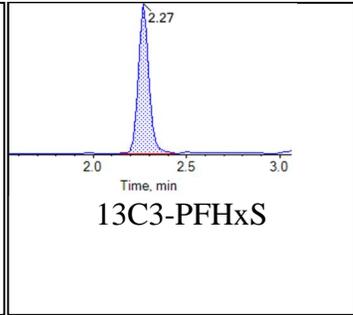
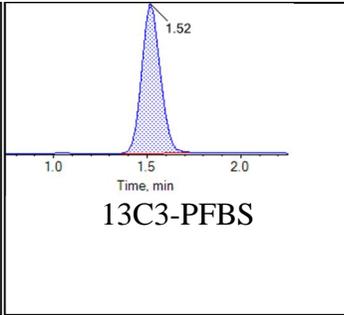
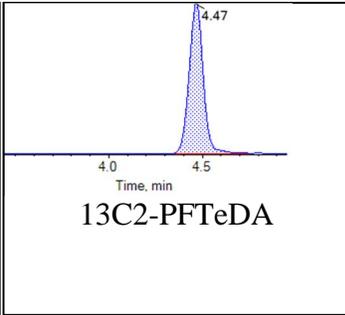
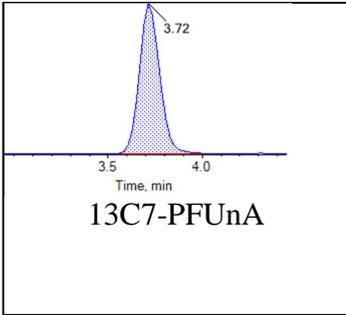
Target Analytes:



**Internal Standards:**

Chromatogram Report

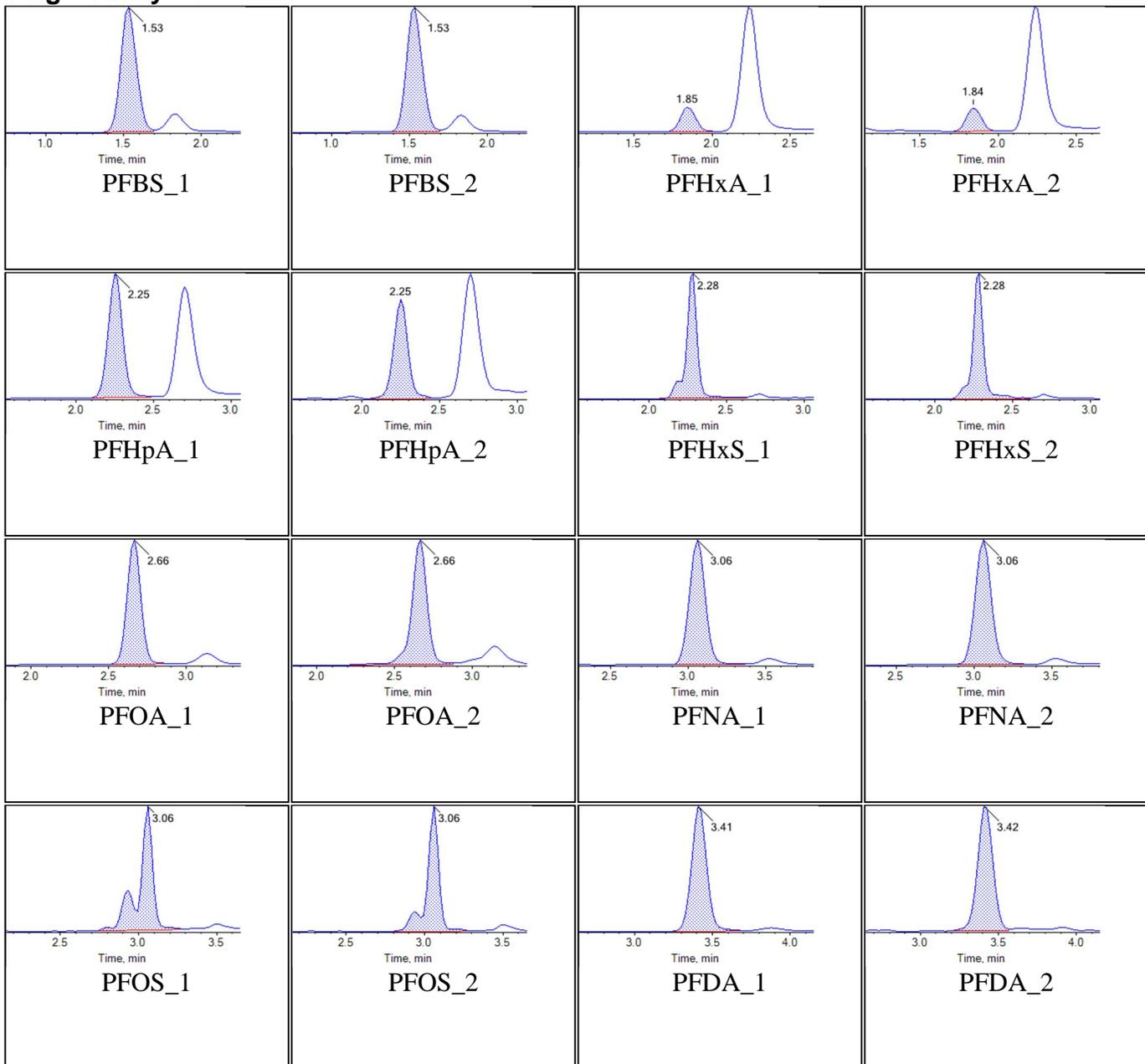
Created with Analyst Reporter
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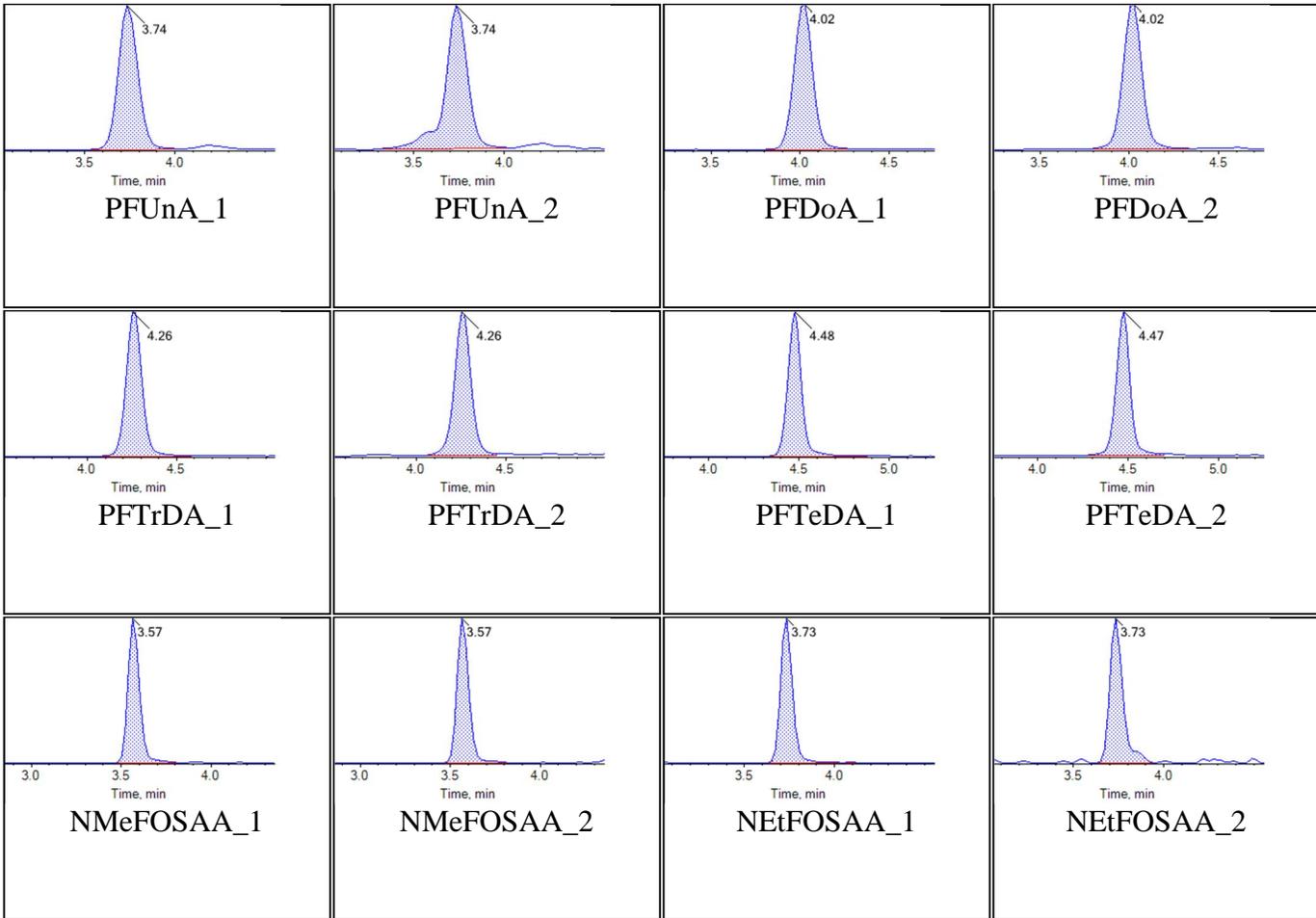


Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:56:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE_A
Sample Comment			

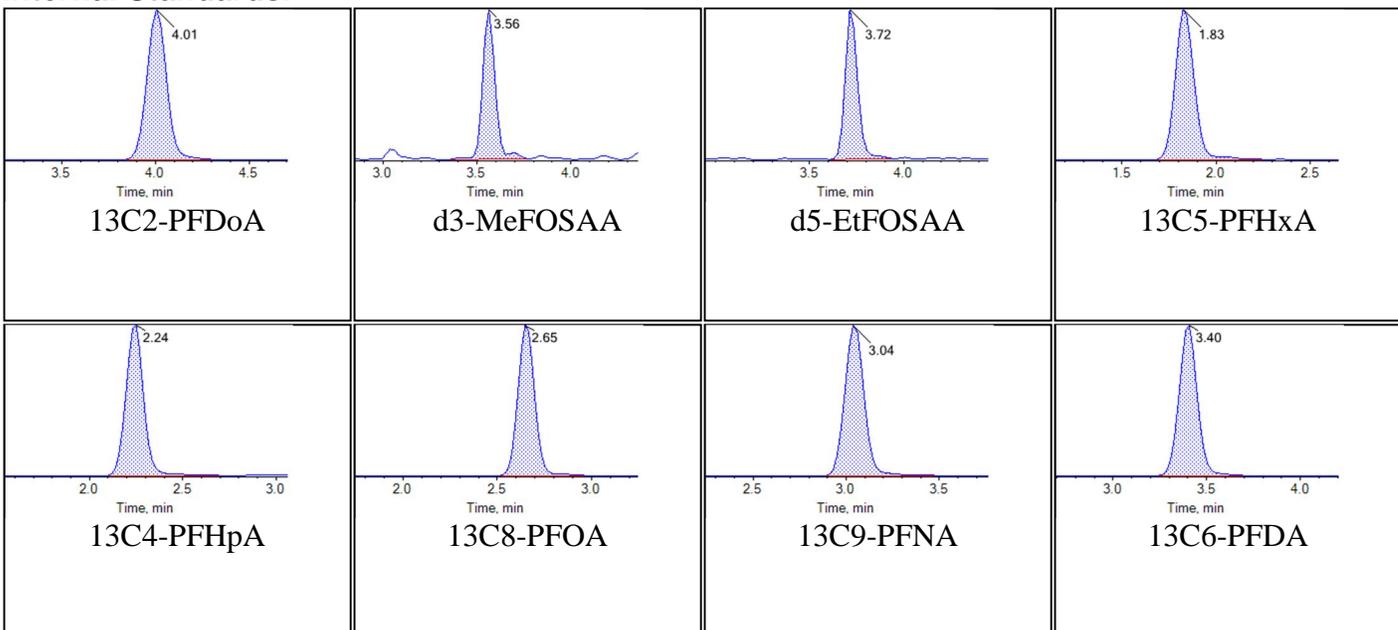
Chromatograms

Target Analytes:



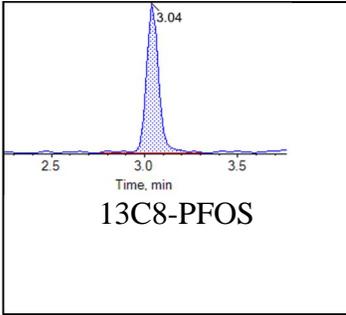
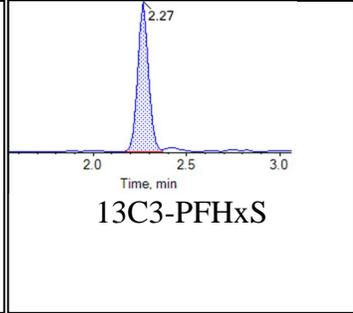
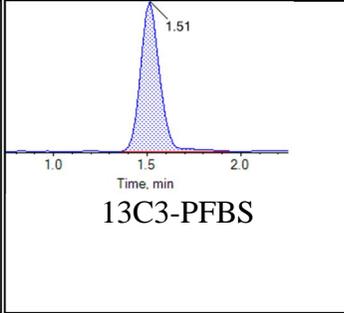
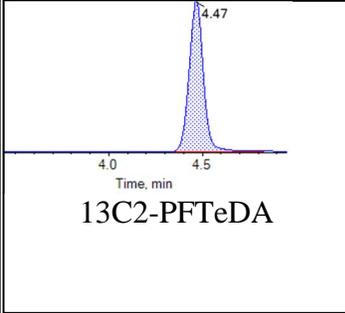
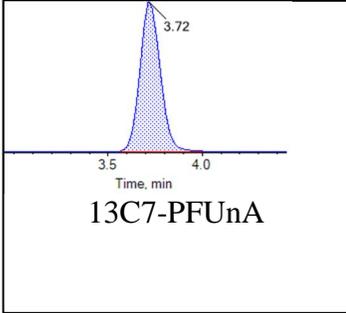


Internal Standards:



Chromatogram Report

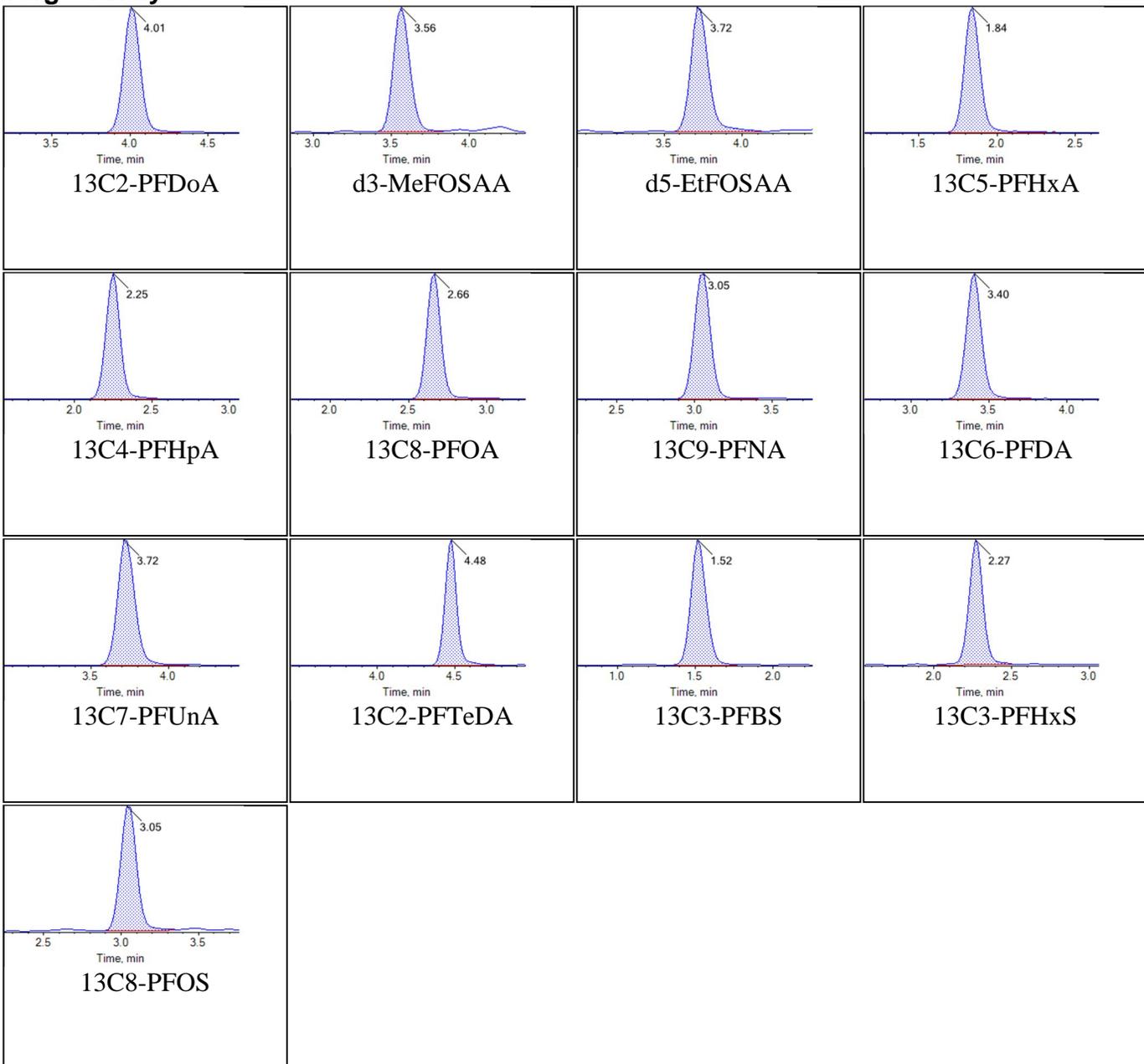
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Printed: 05/10/2018 6:20:42 PM



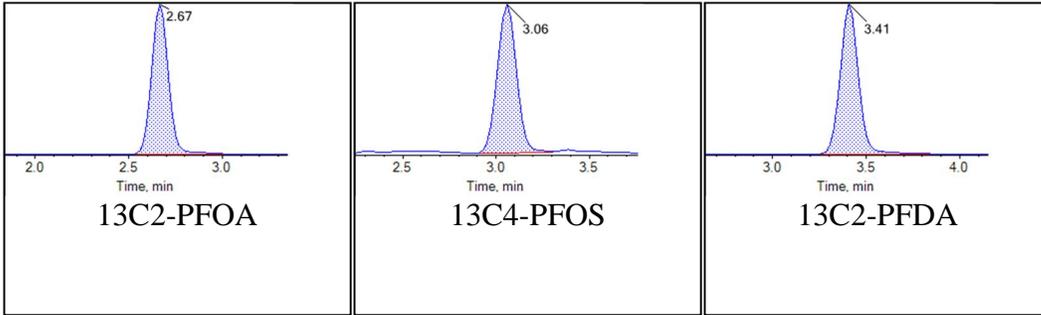
Sample Name	KA86	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:29:24	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



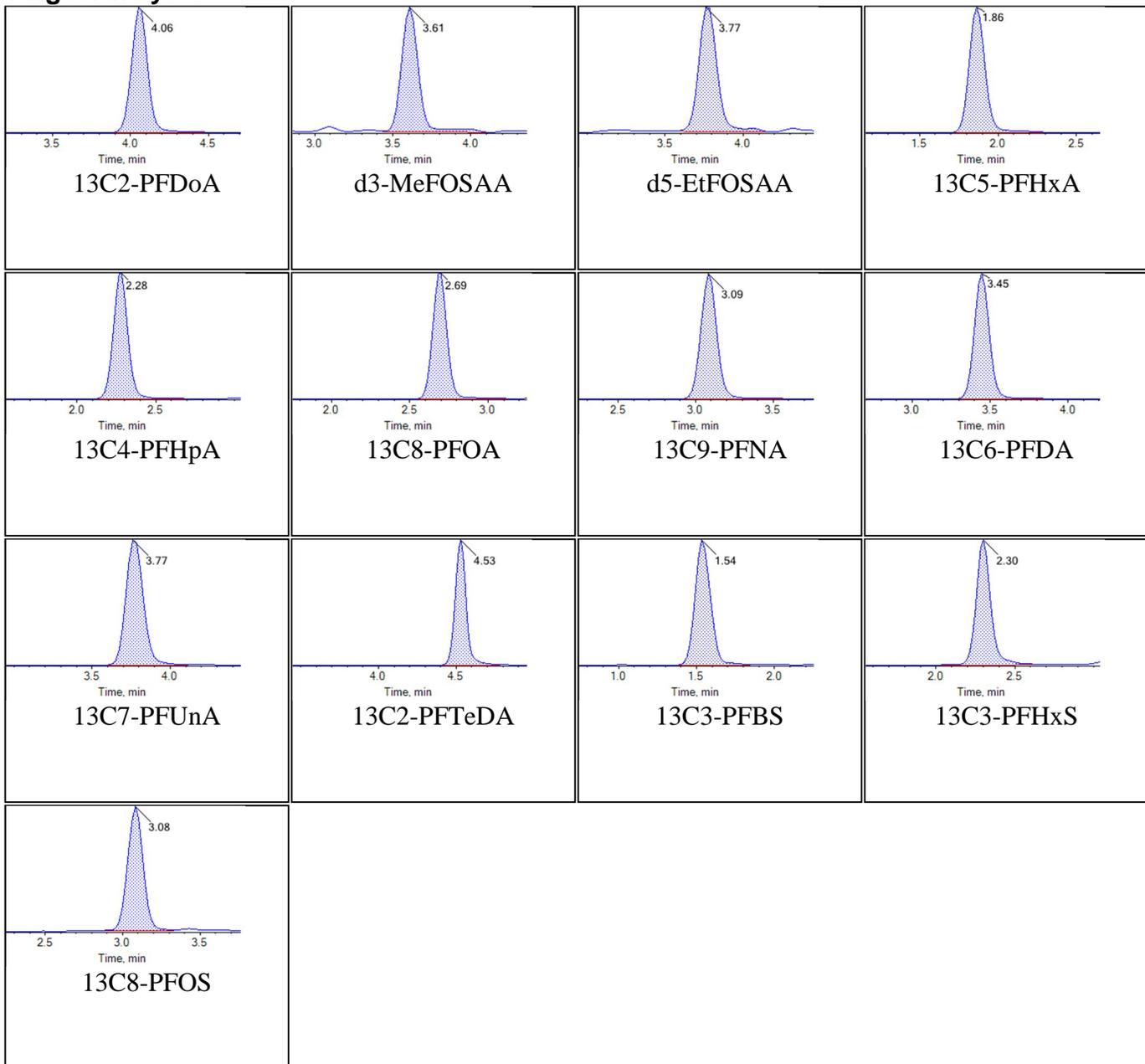
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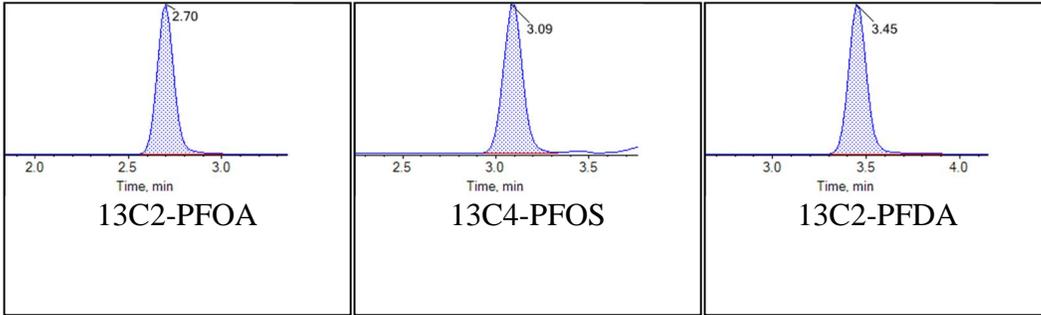
Sample Name	KA88 ISC	Injection Vial	1
Sample ID	Instrument Sensitivity Check	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T15:57:14	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



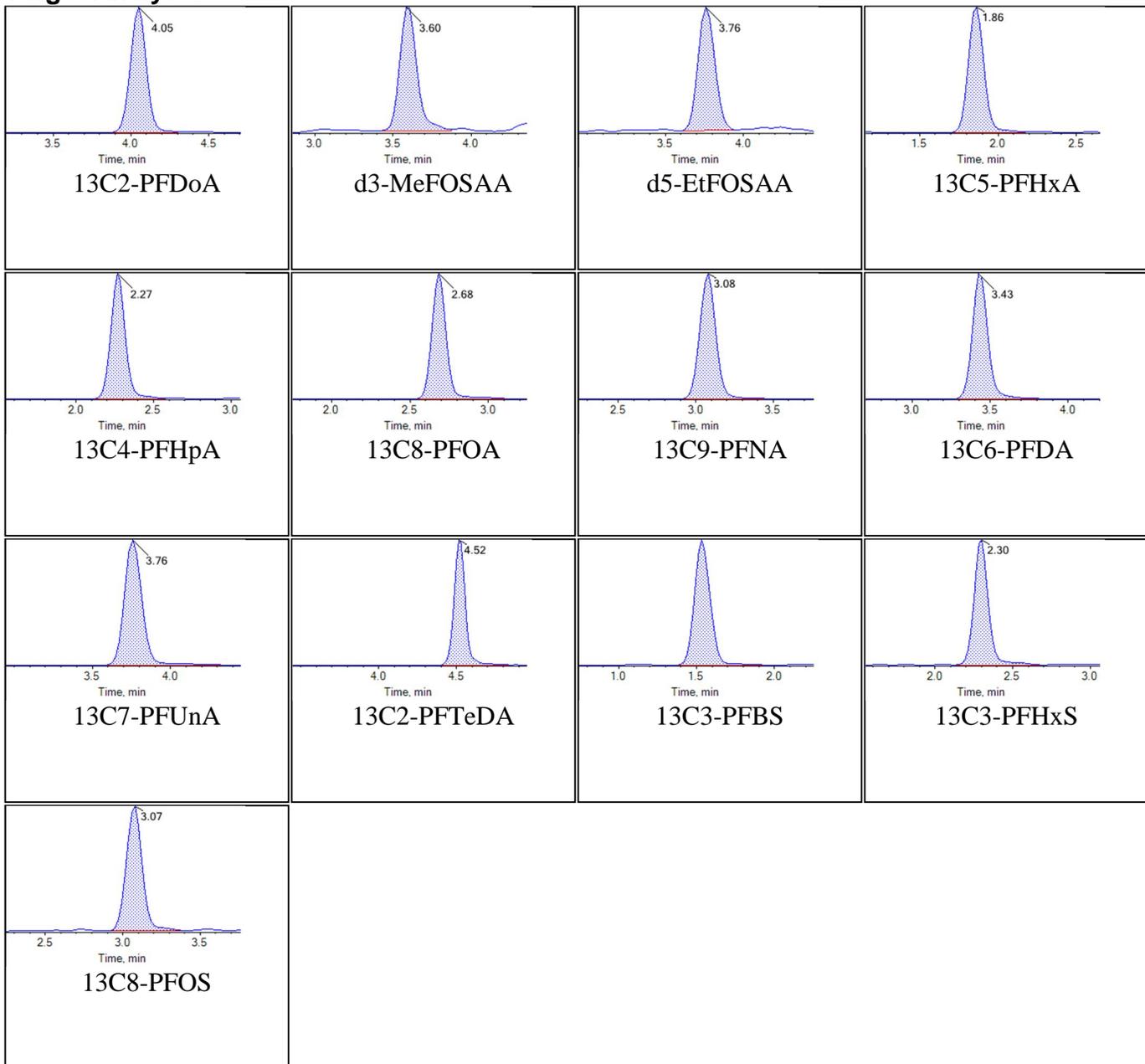
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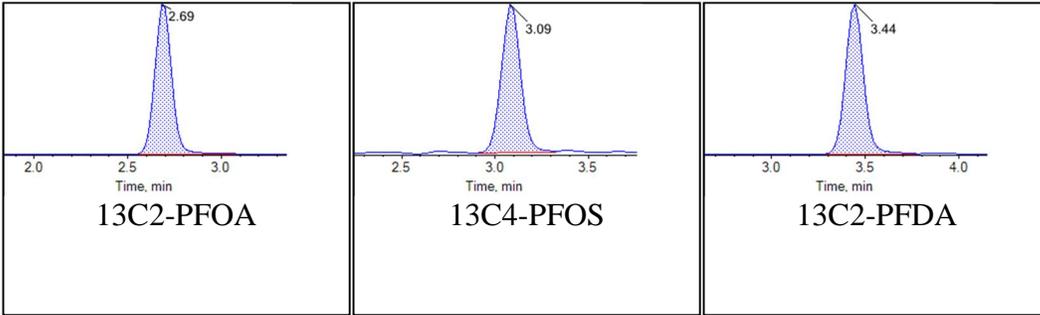
Sample Name	KB35 IB	Injection Vial	2
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T16:08:06	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



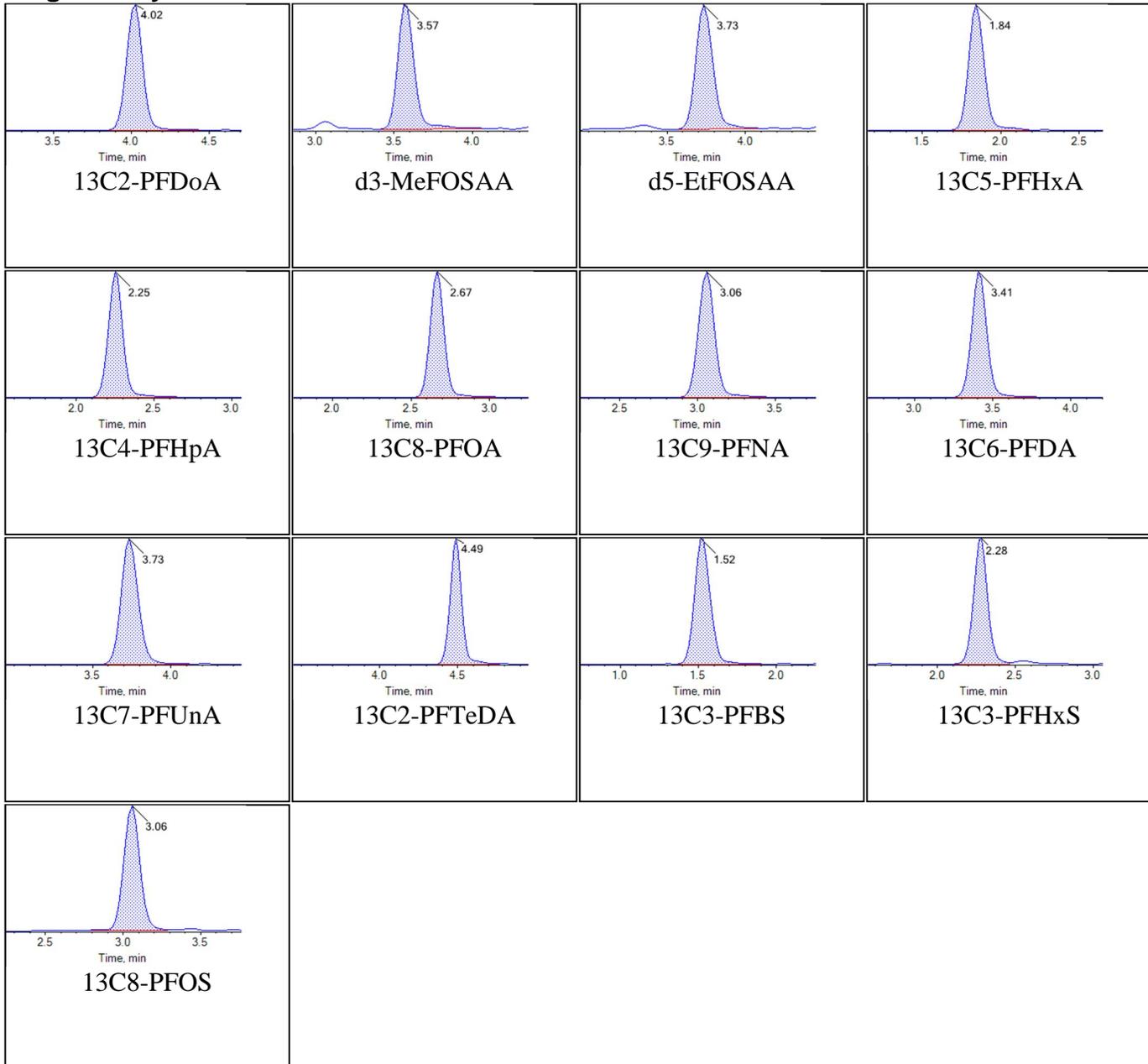
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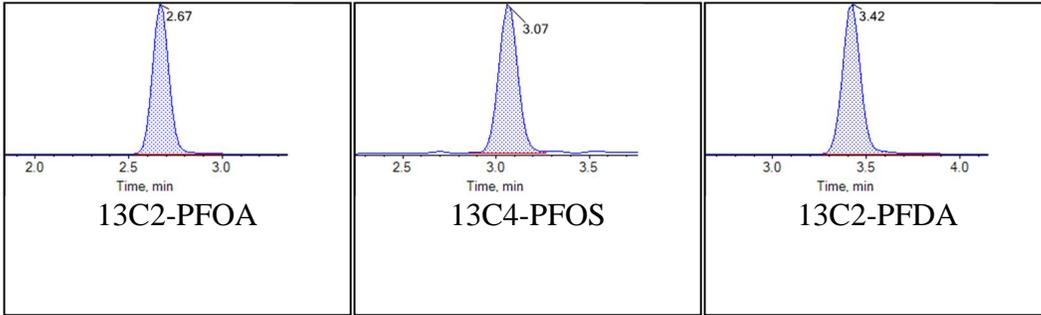
Sample Name	KB69 CCV	Injection Vial	9
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:24:13	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



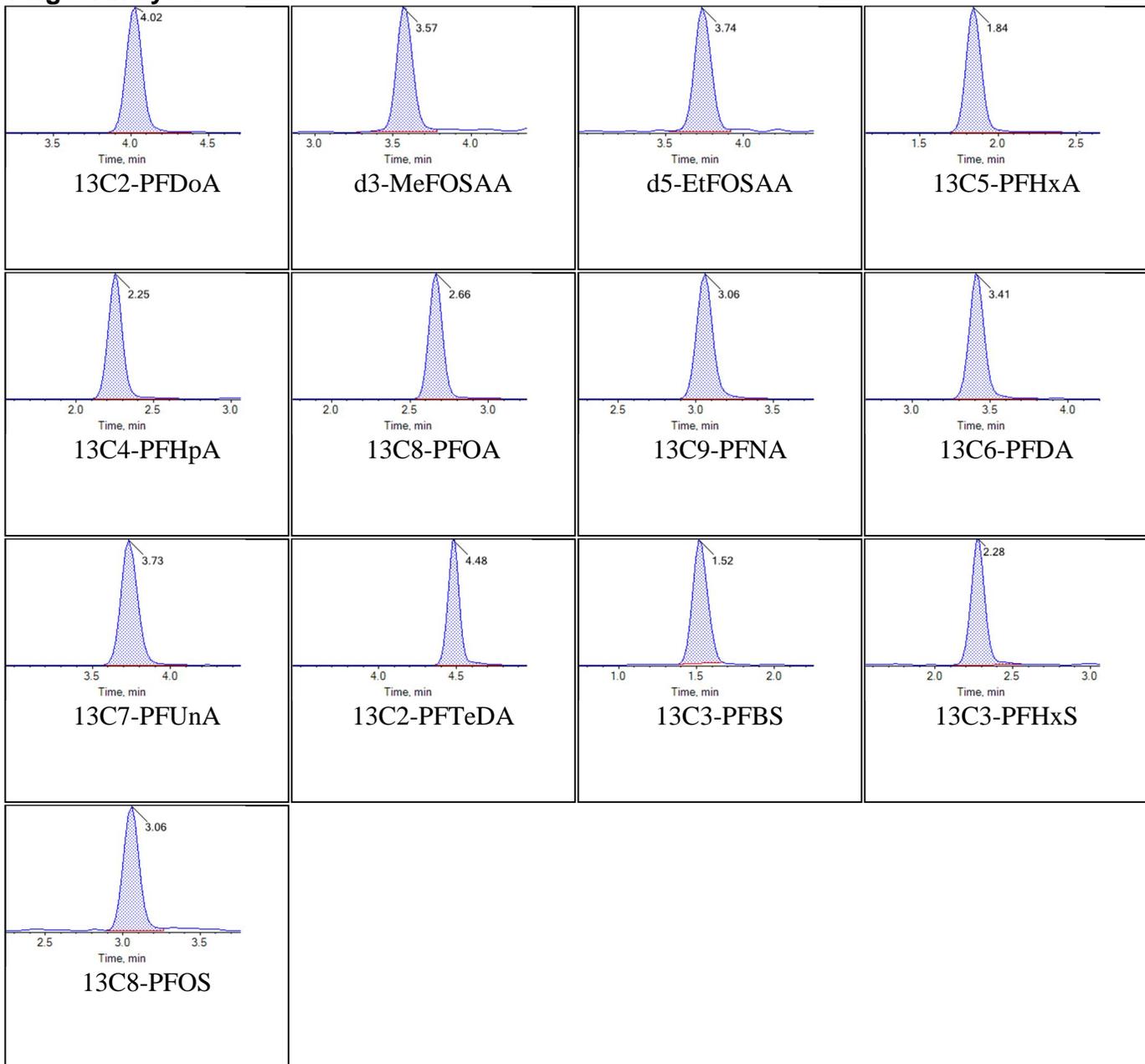
Internal Standards:



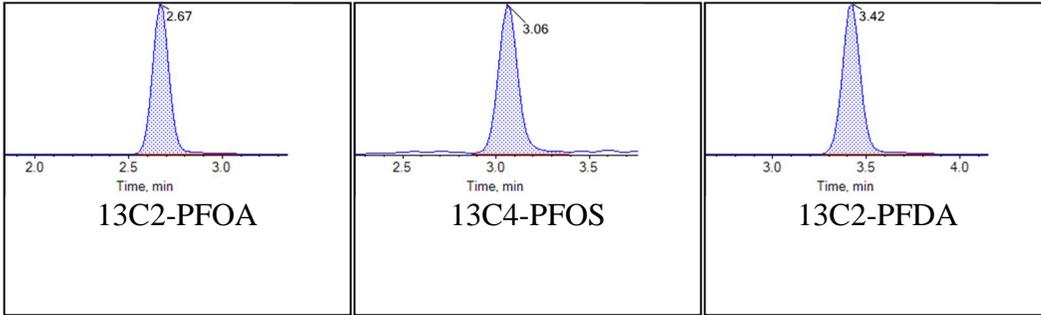
Sample Name	J8252-FS(3)	Injection Vial	11
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:45:59	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



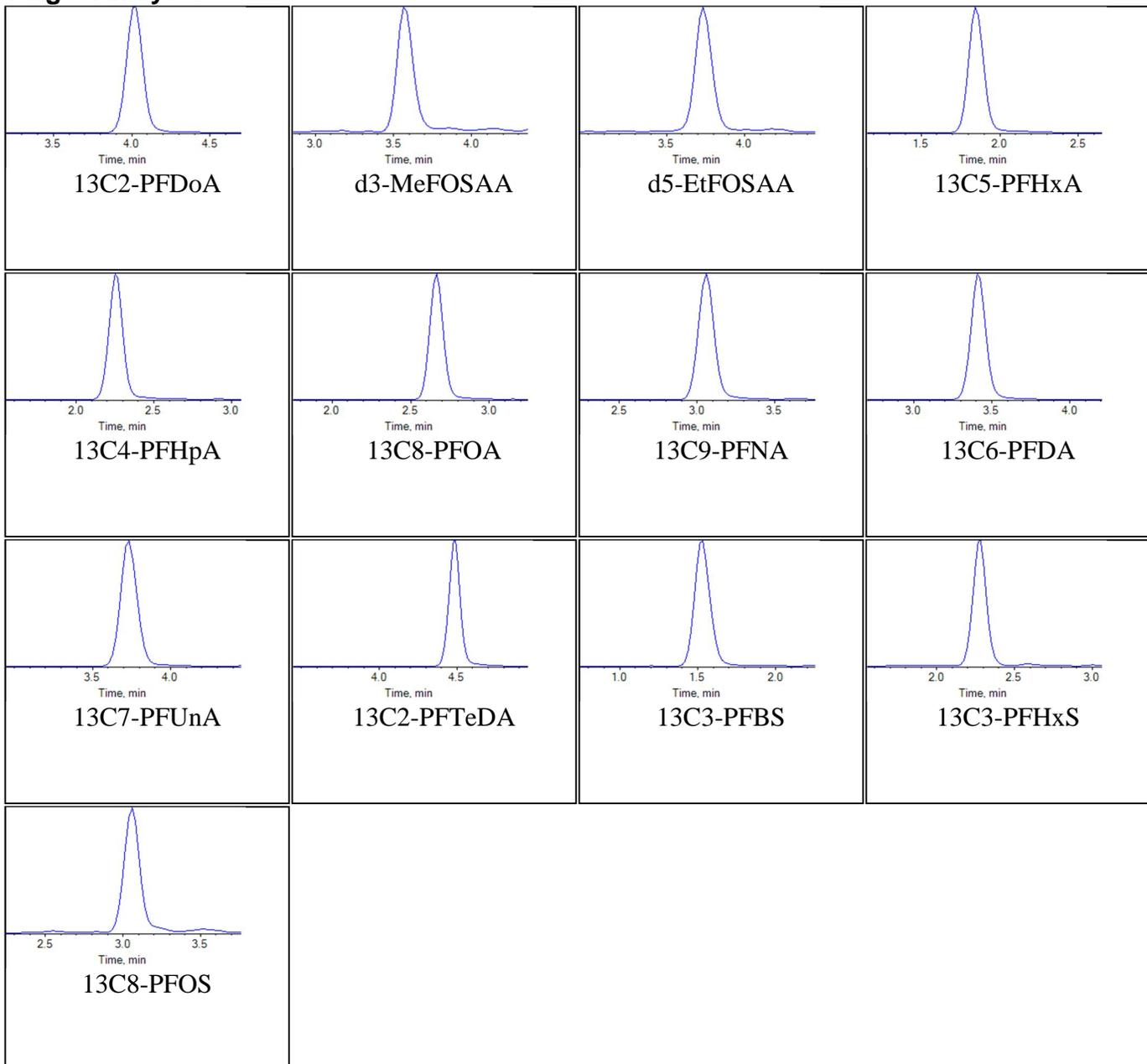
Internal Standards:



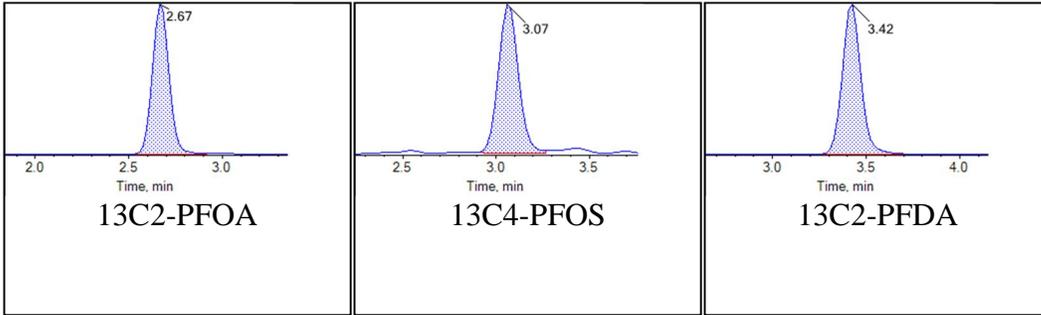
Sample Name	J8252-FS-D(7)	Injection Vial	12
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T17:56:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



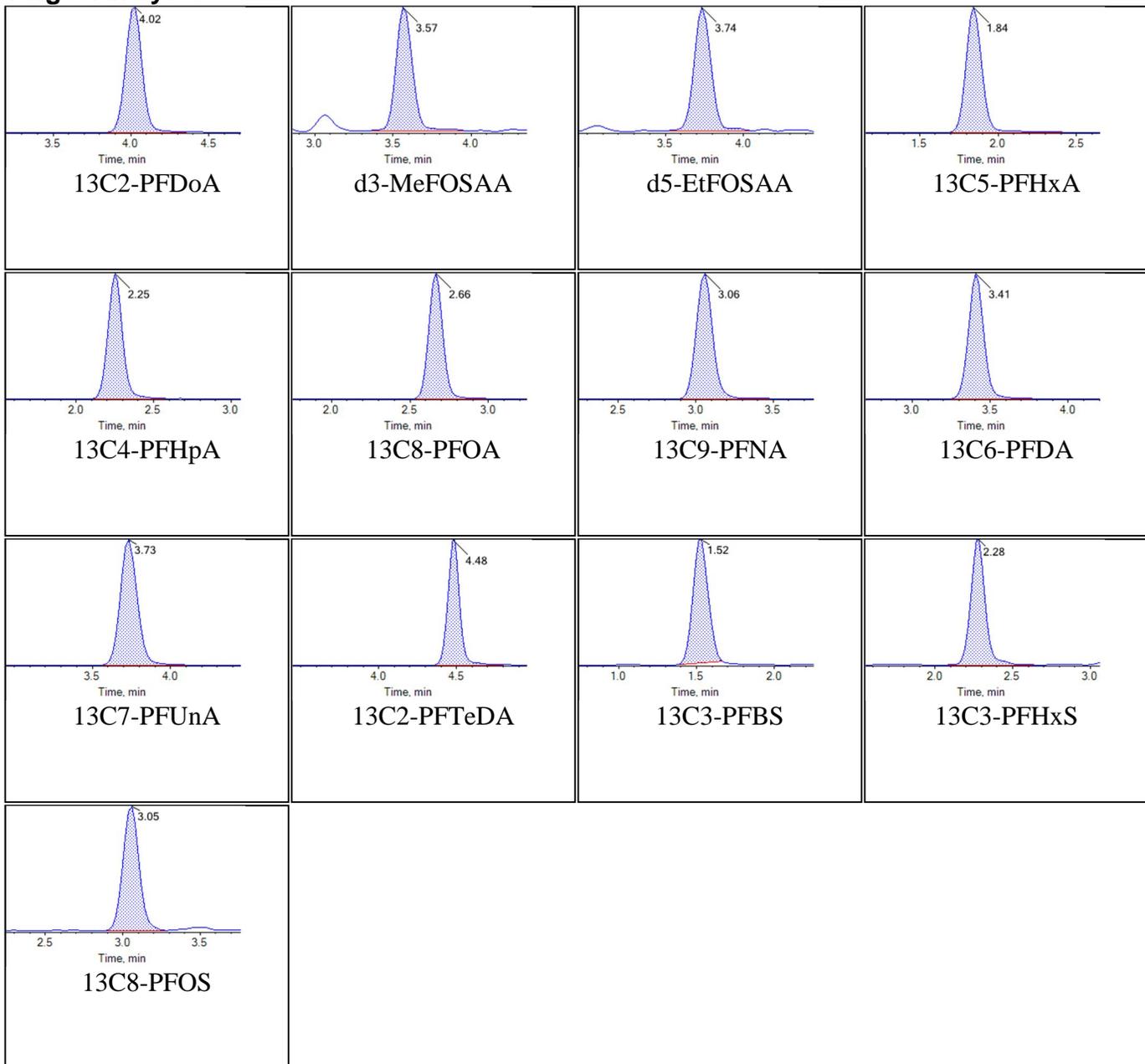
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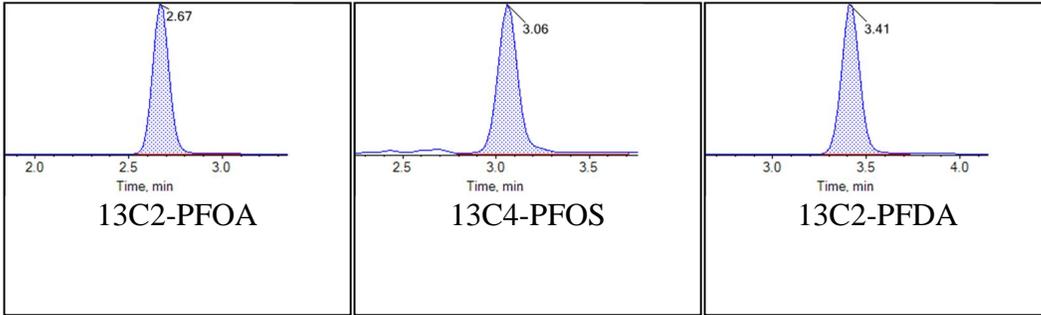
Sample Name	J8257MS-FS(3)	Injection Vial	13
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:07:46	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



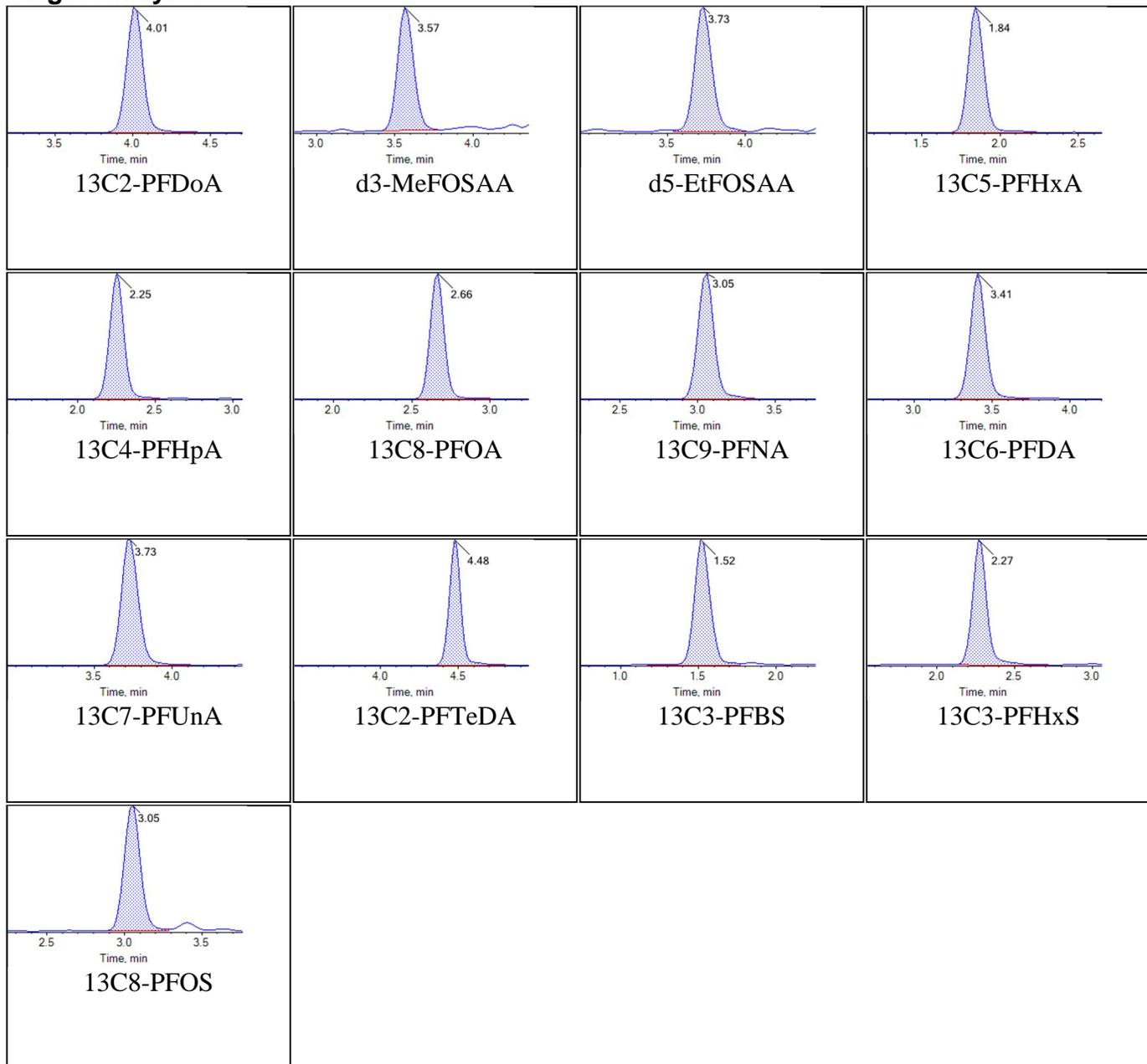
Internal Standards:



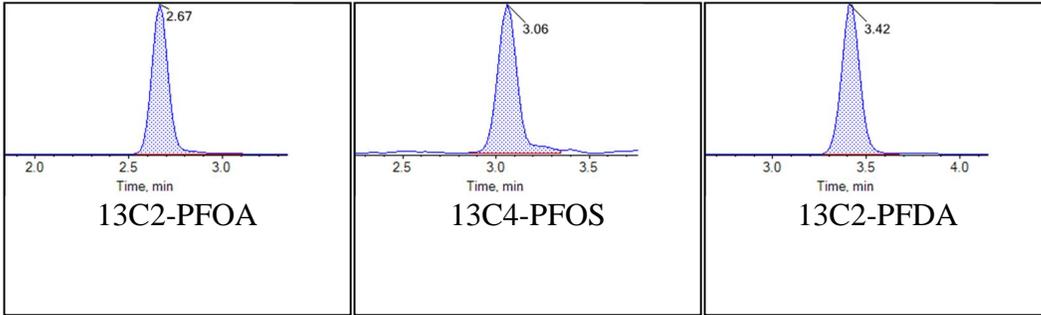
Sample Name	J8229-FS(3)	Injection Vial	14
Sample ID	VC-PM649-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:18:39	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



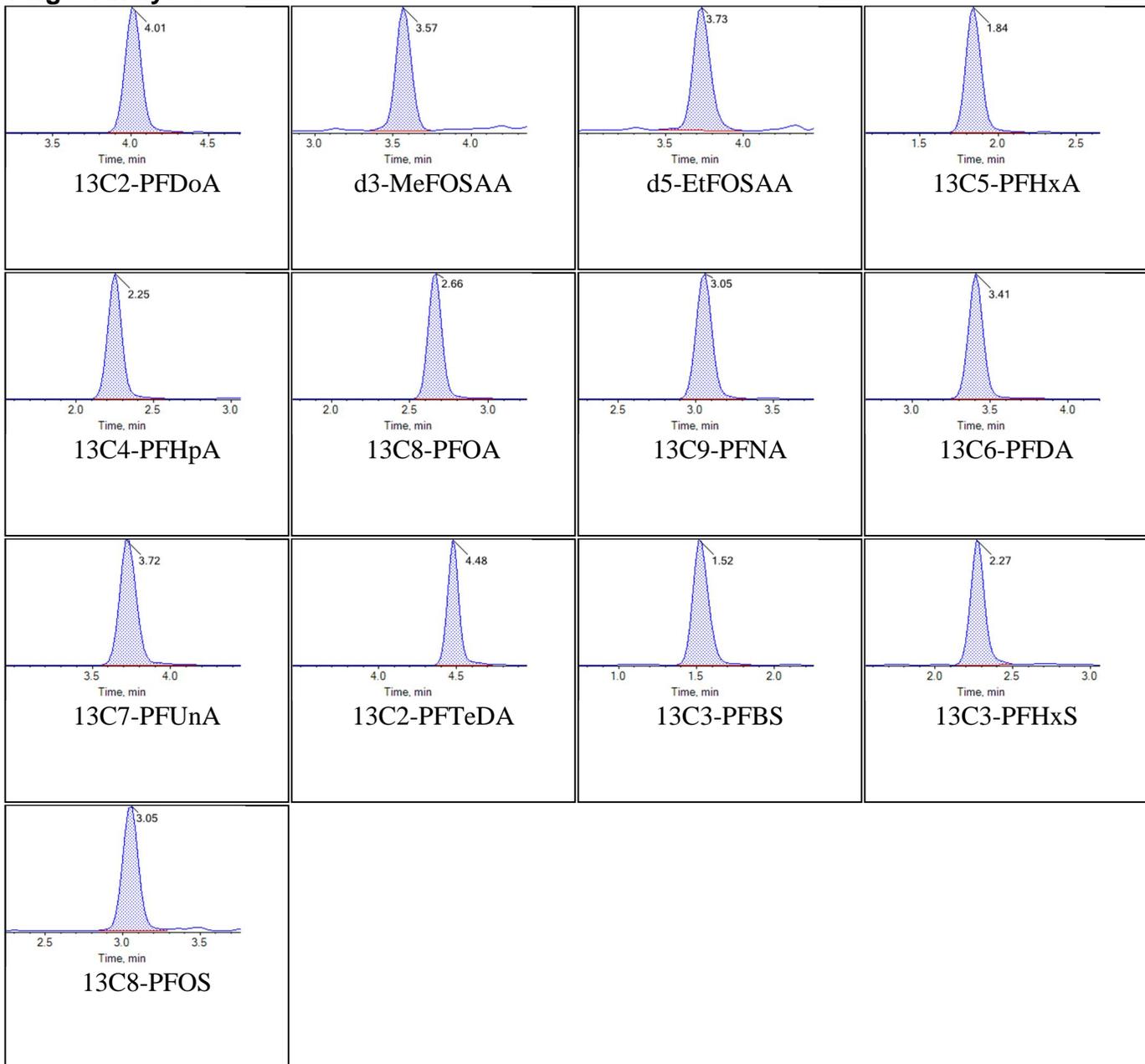
Internal Standards:



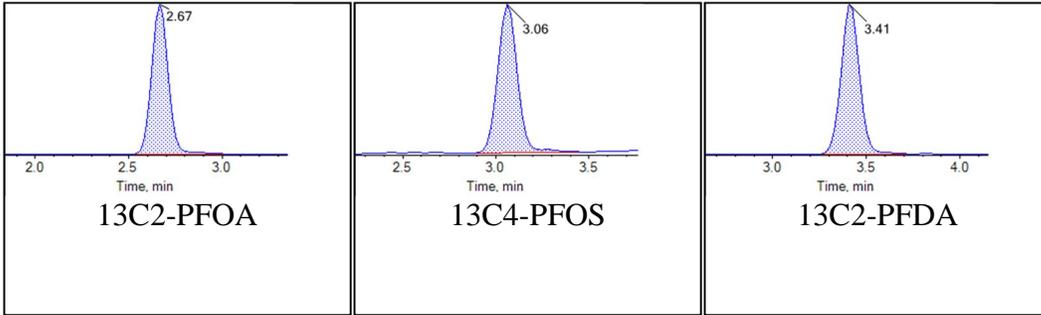
Sample Name	J8239-FS(3)	Injection Vial	15
Sample ID	VC-PM649-SB04-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:29:32	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



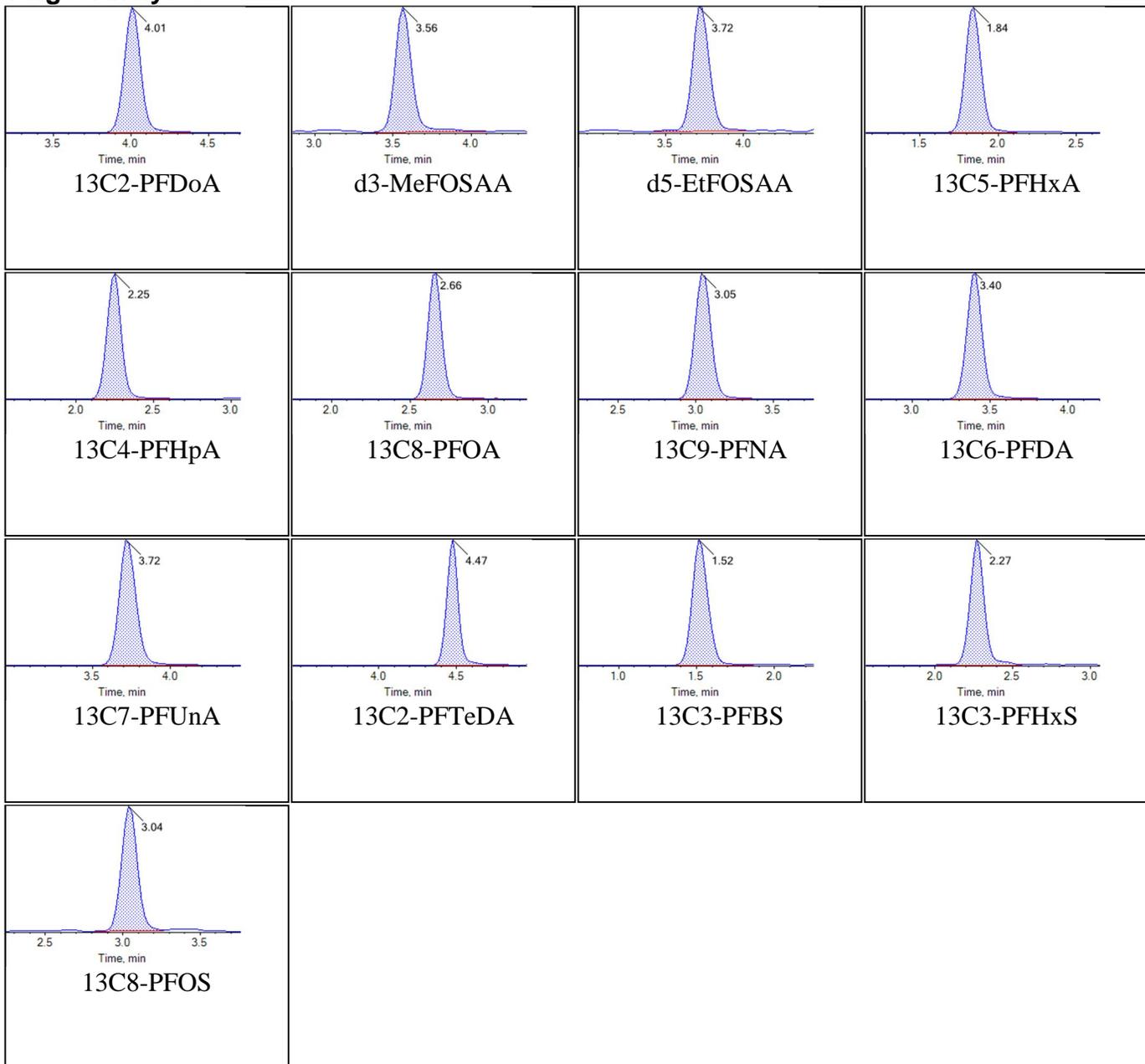
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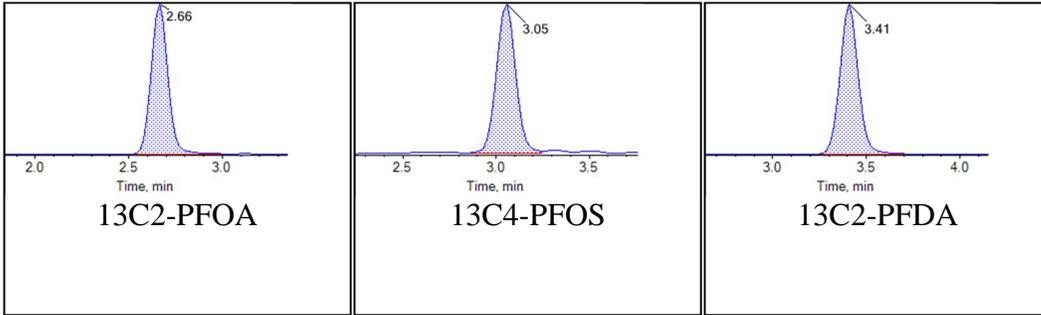
Sample Name	KB85 CCV	Injection Vial	17
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-03T18:51:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



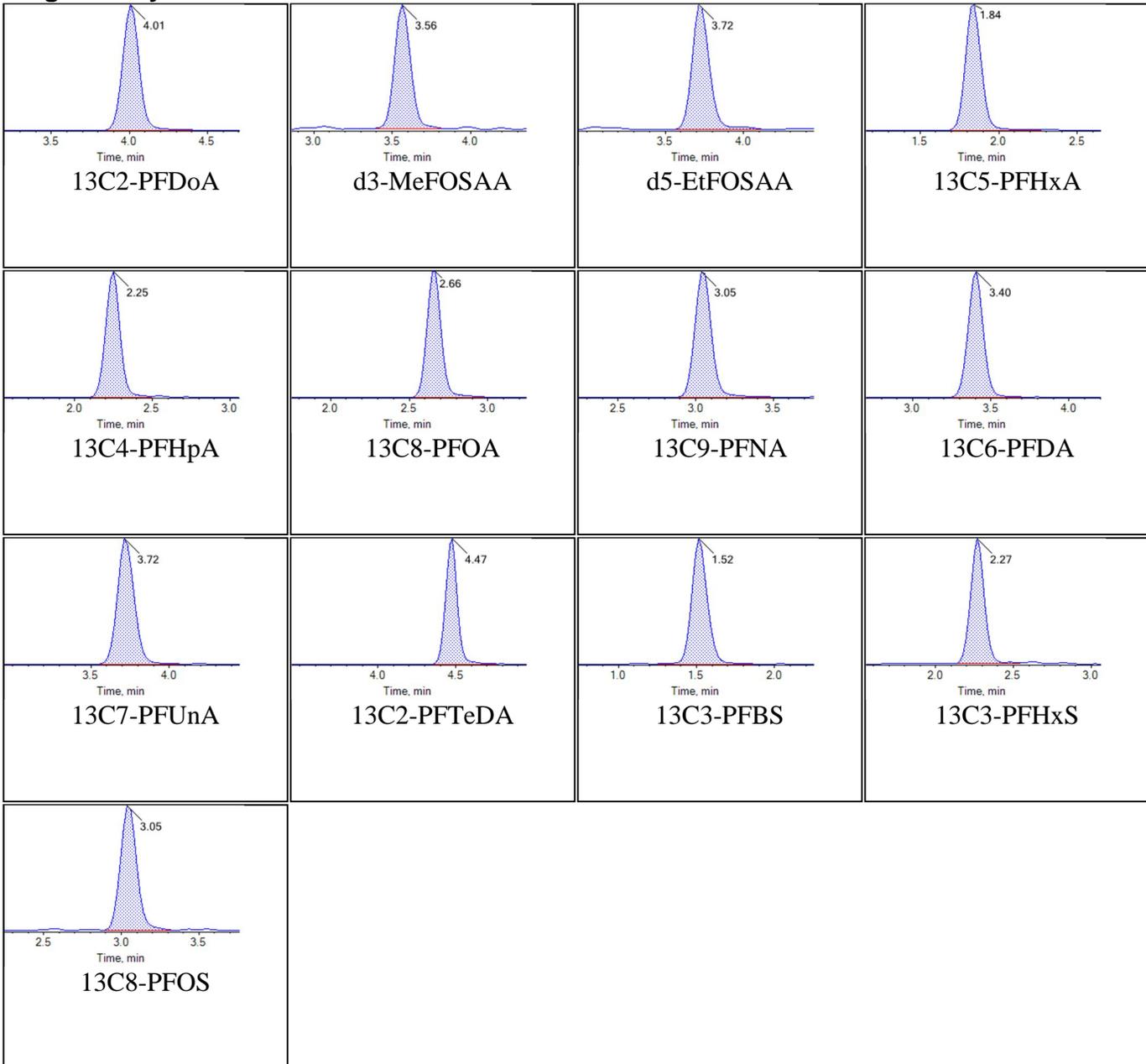
Internal Standards:



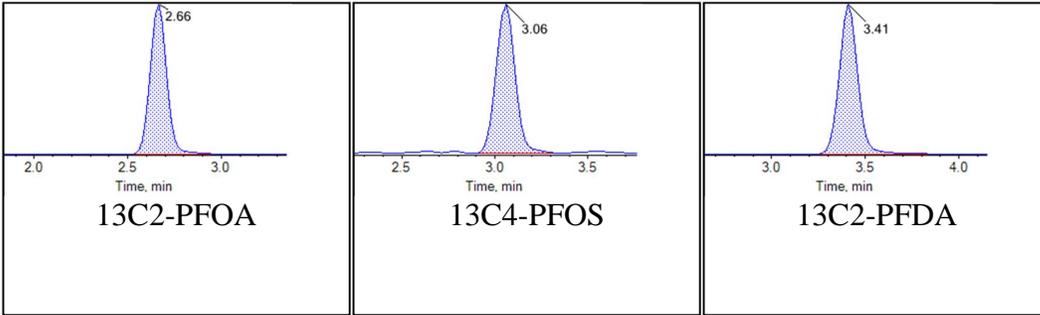
Sample Name	KA87	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:40:16	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



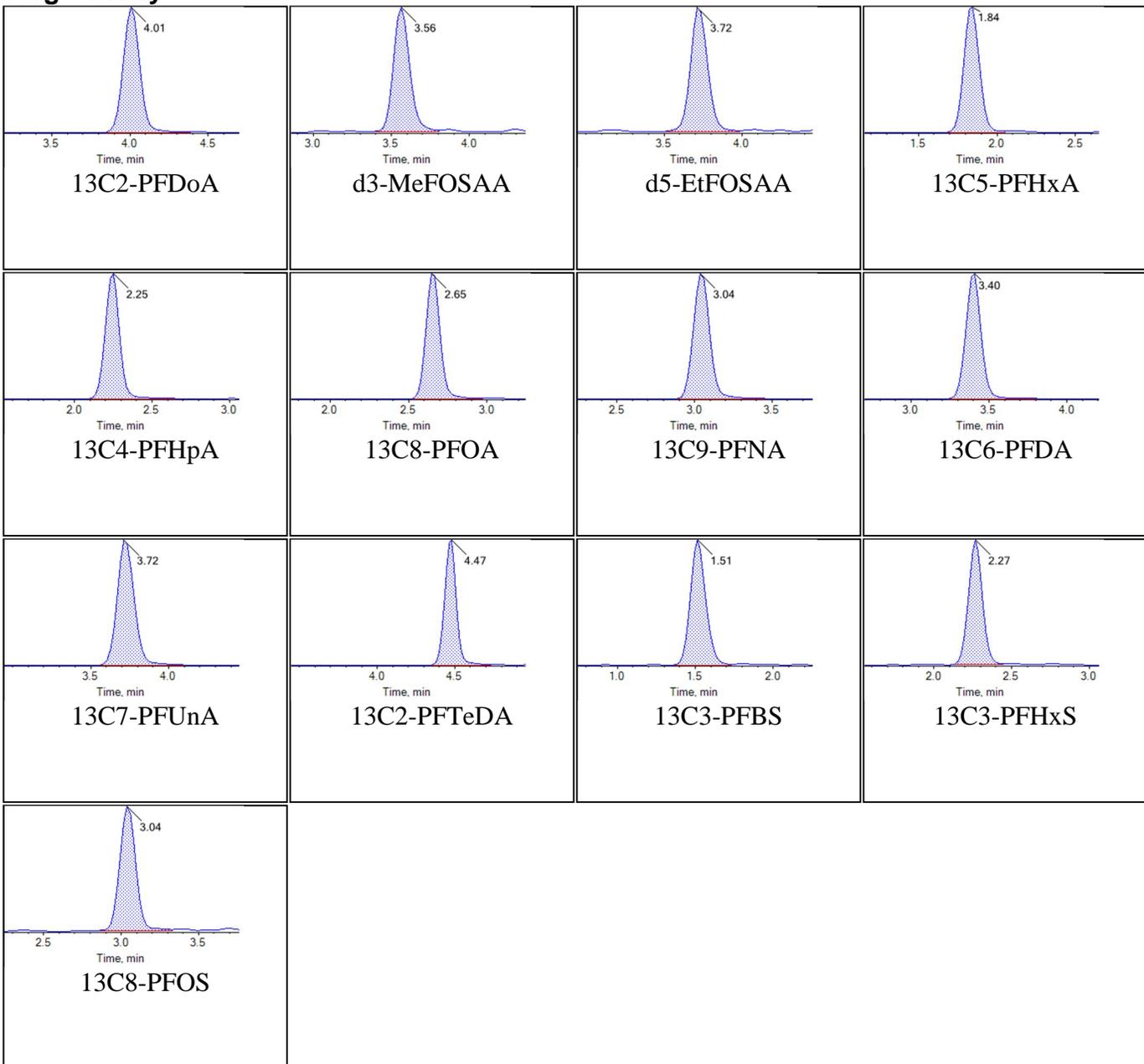
Internal Standards:



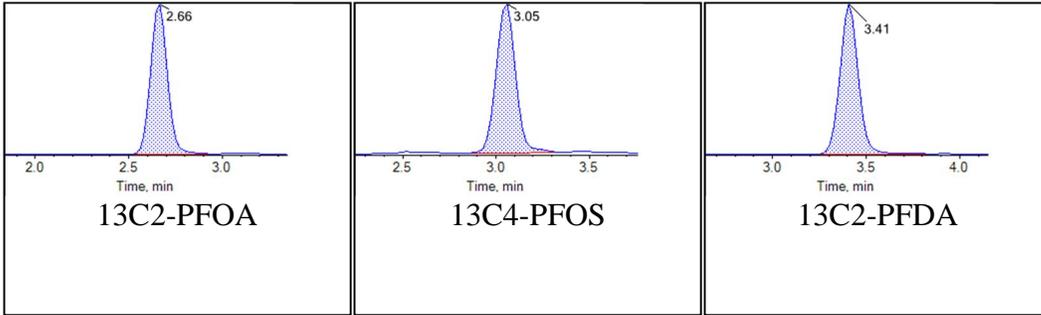
Sample Name	KA88	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T20:51:08	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



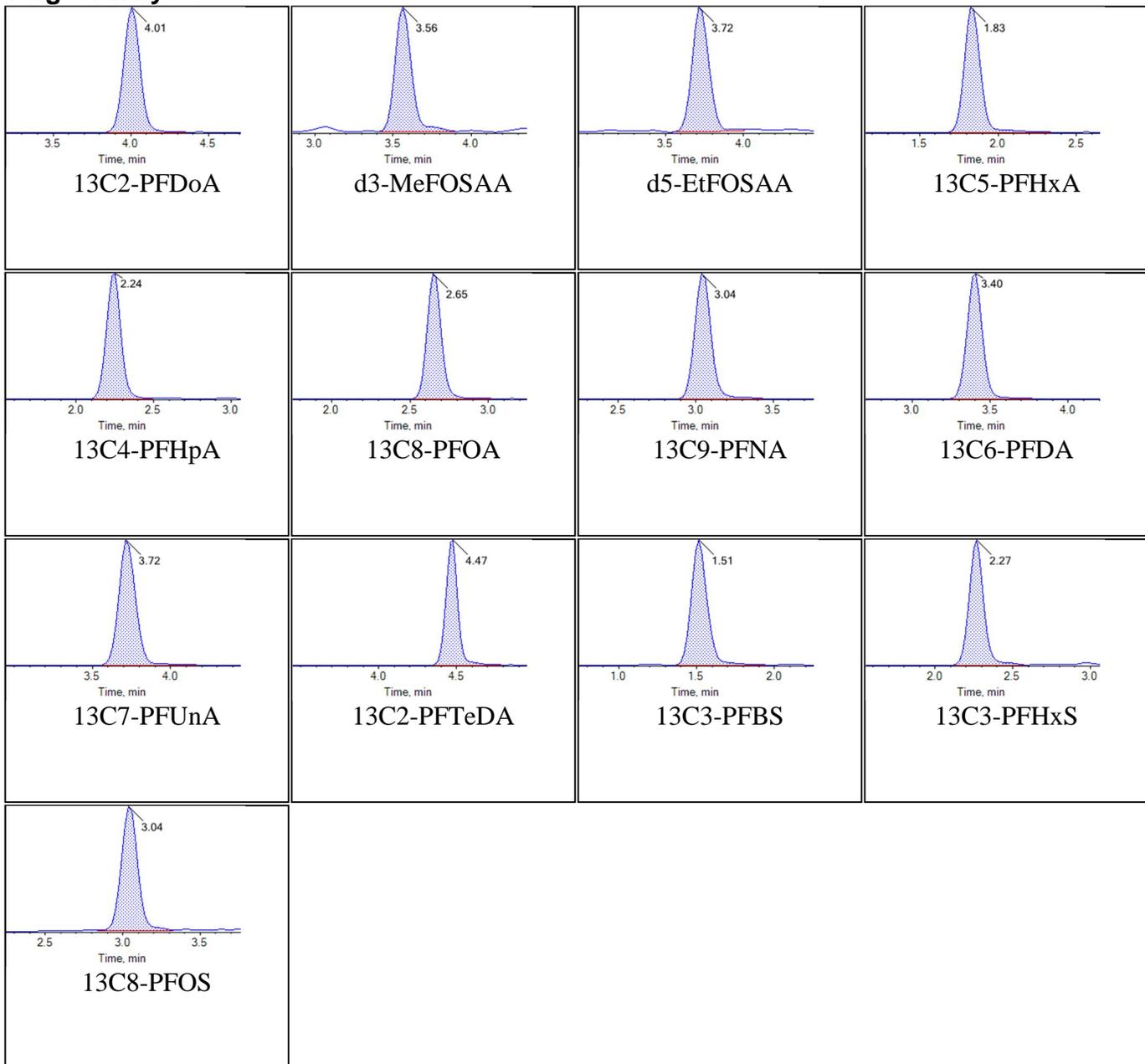
Internal Standards:



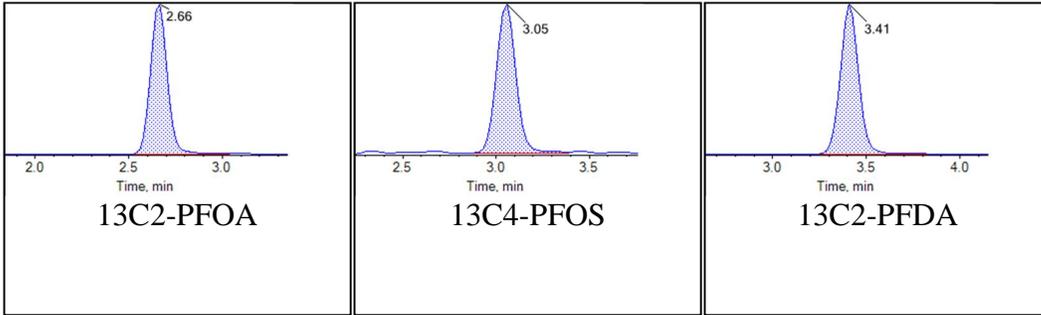
Sample Name	KB85	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:02:00	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



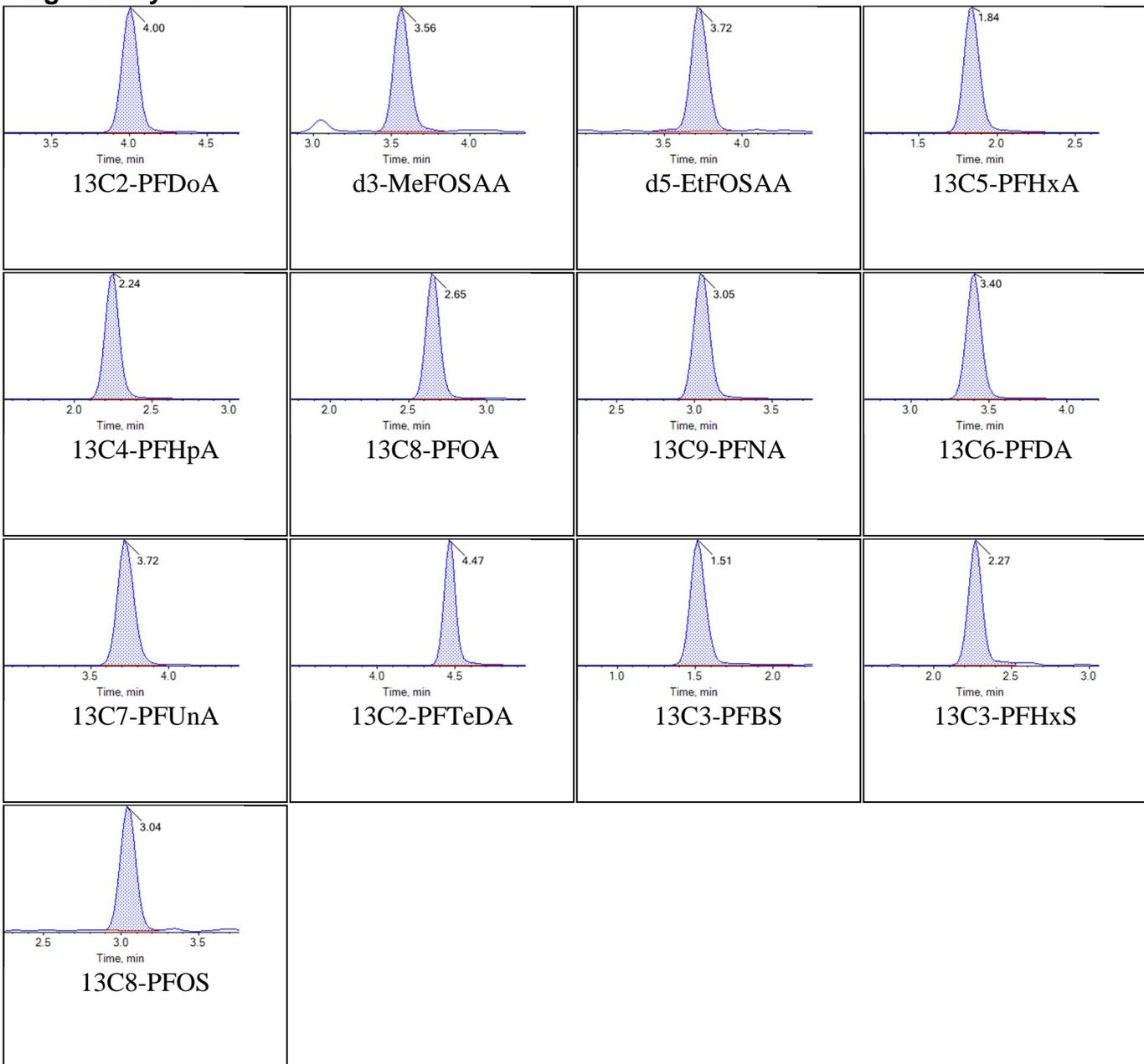
Internal Standards:



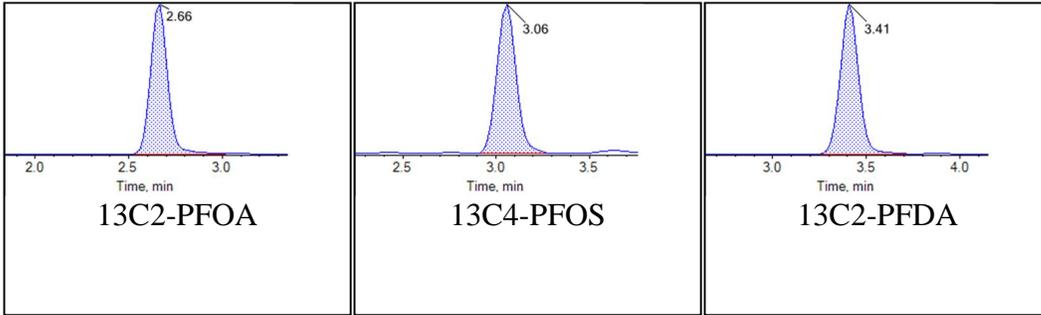
Sample Name	KB69	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:12:52	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



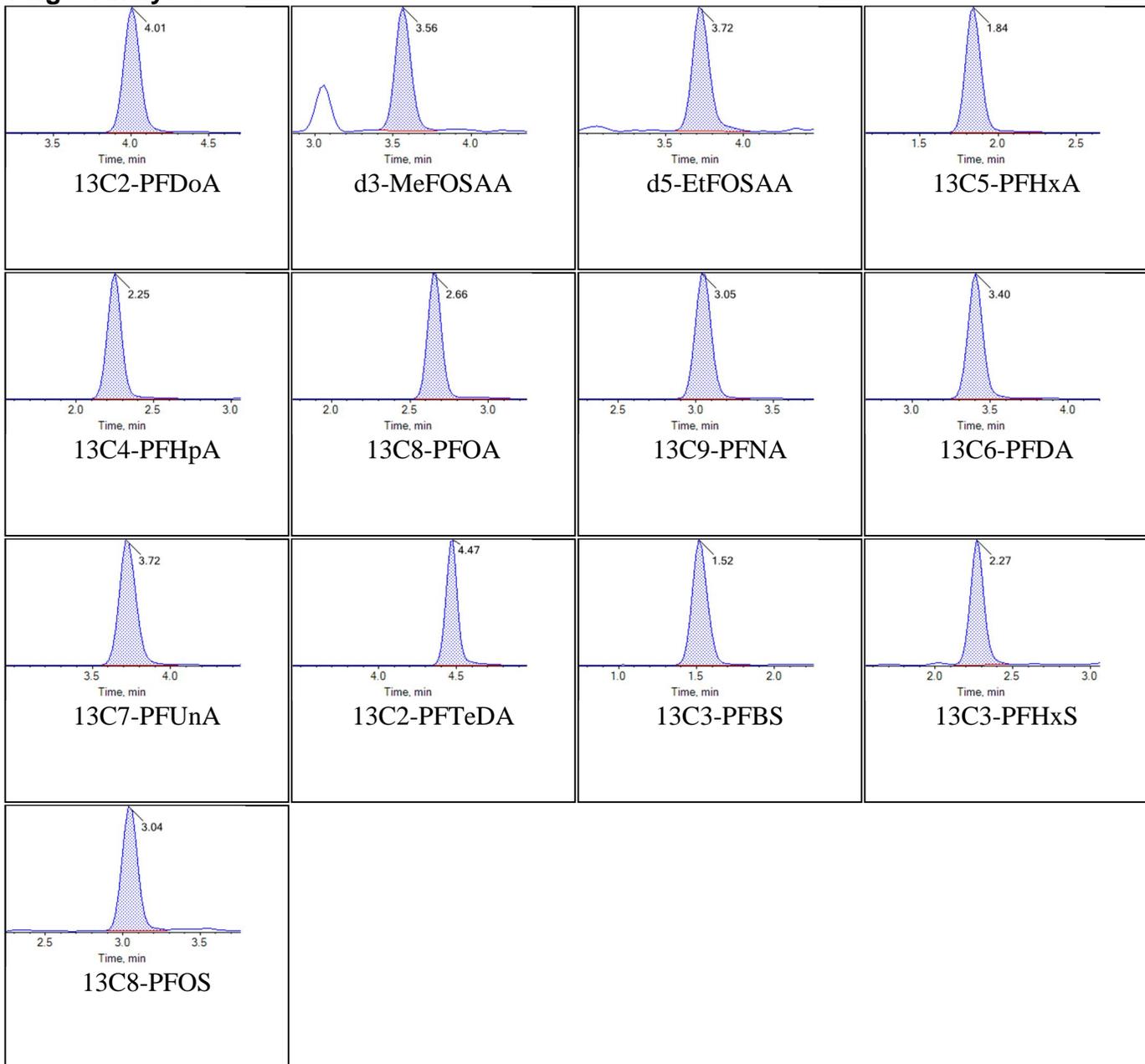
Internal Standards:



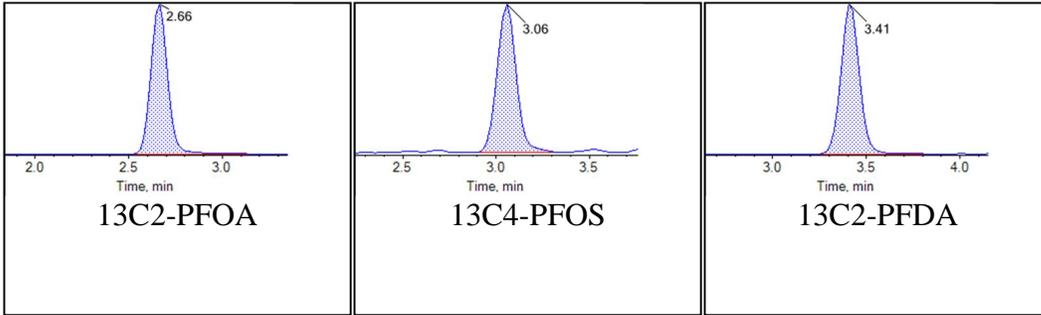
Sample Name	KB64	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:23:43	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



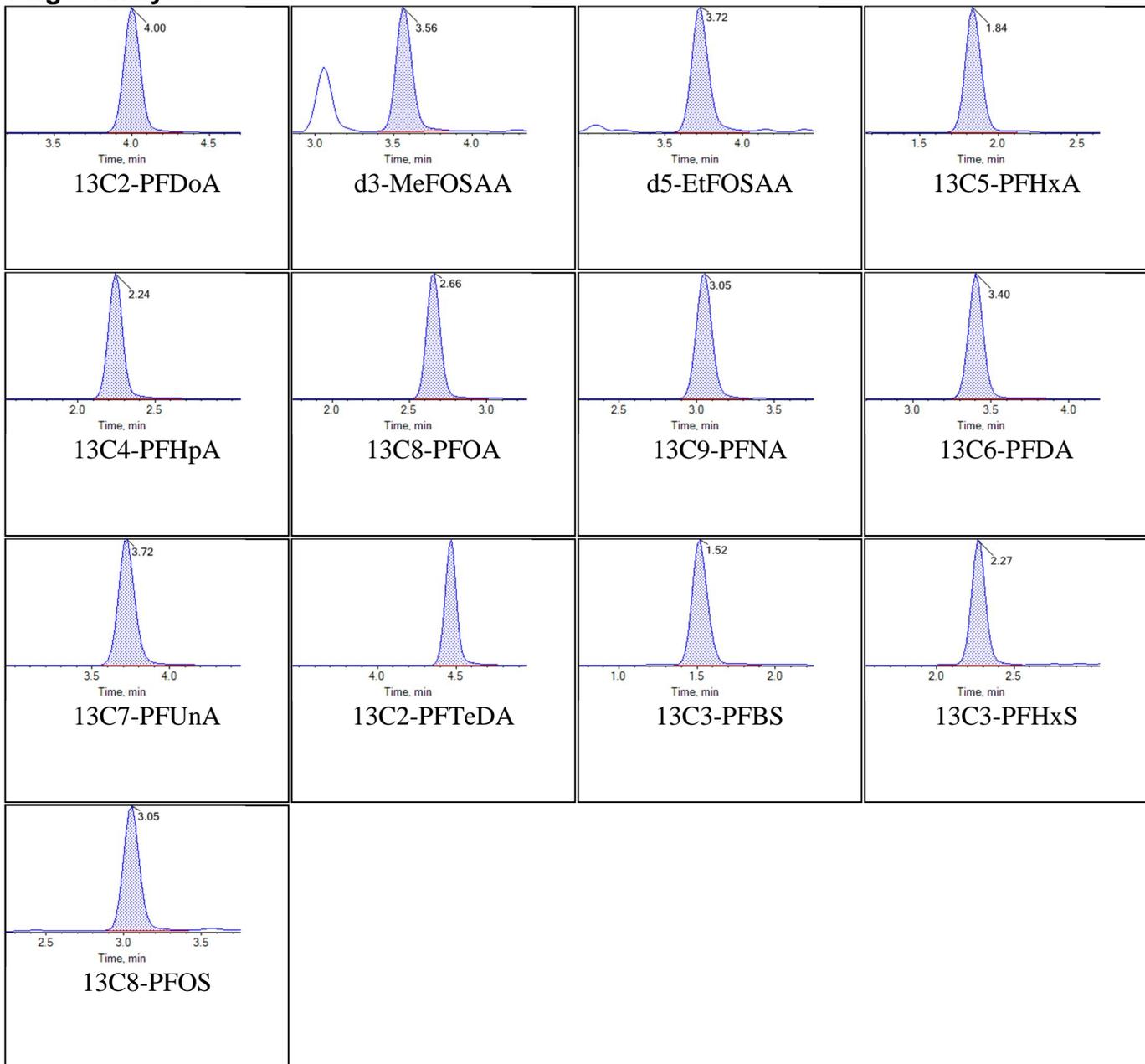
Internal Standards:



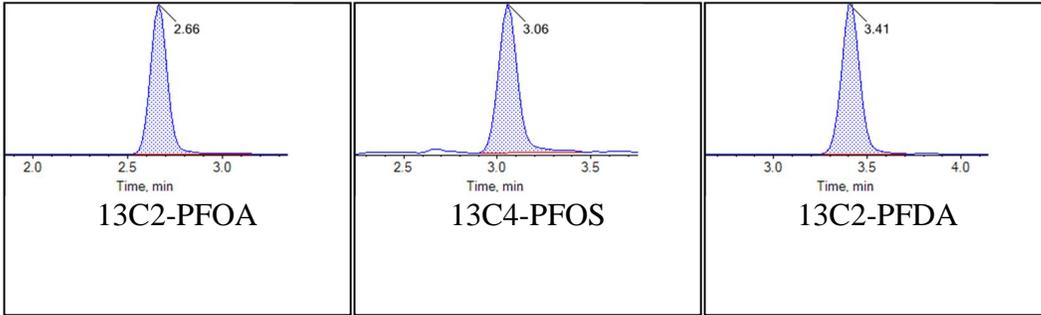
Sample Name	KB65	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:34:34	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



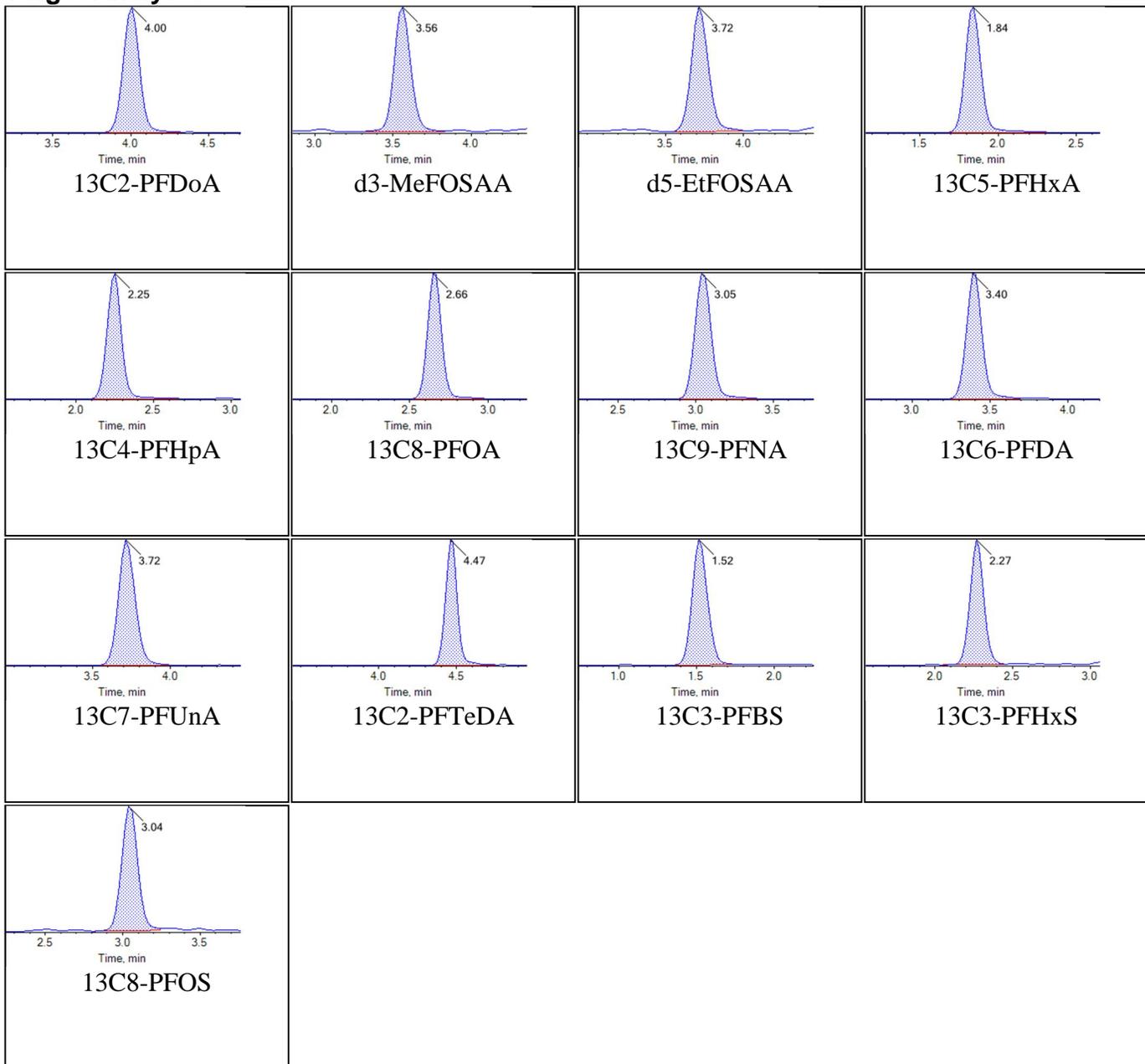
Internal Standards:



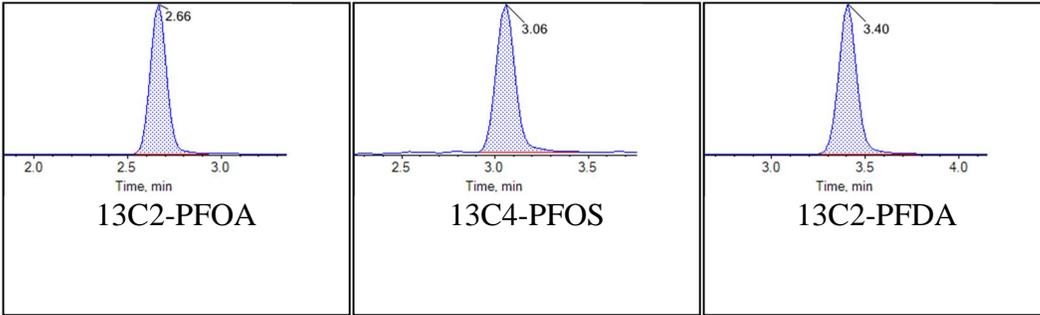
Sample Name	KB35 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:45:25	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



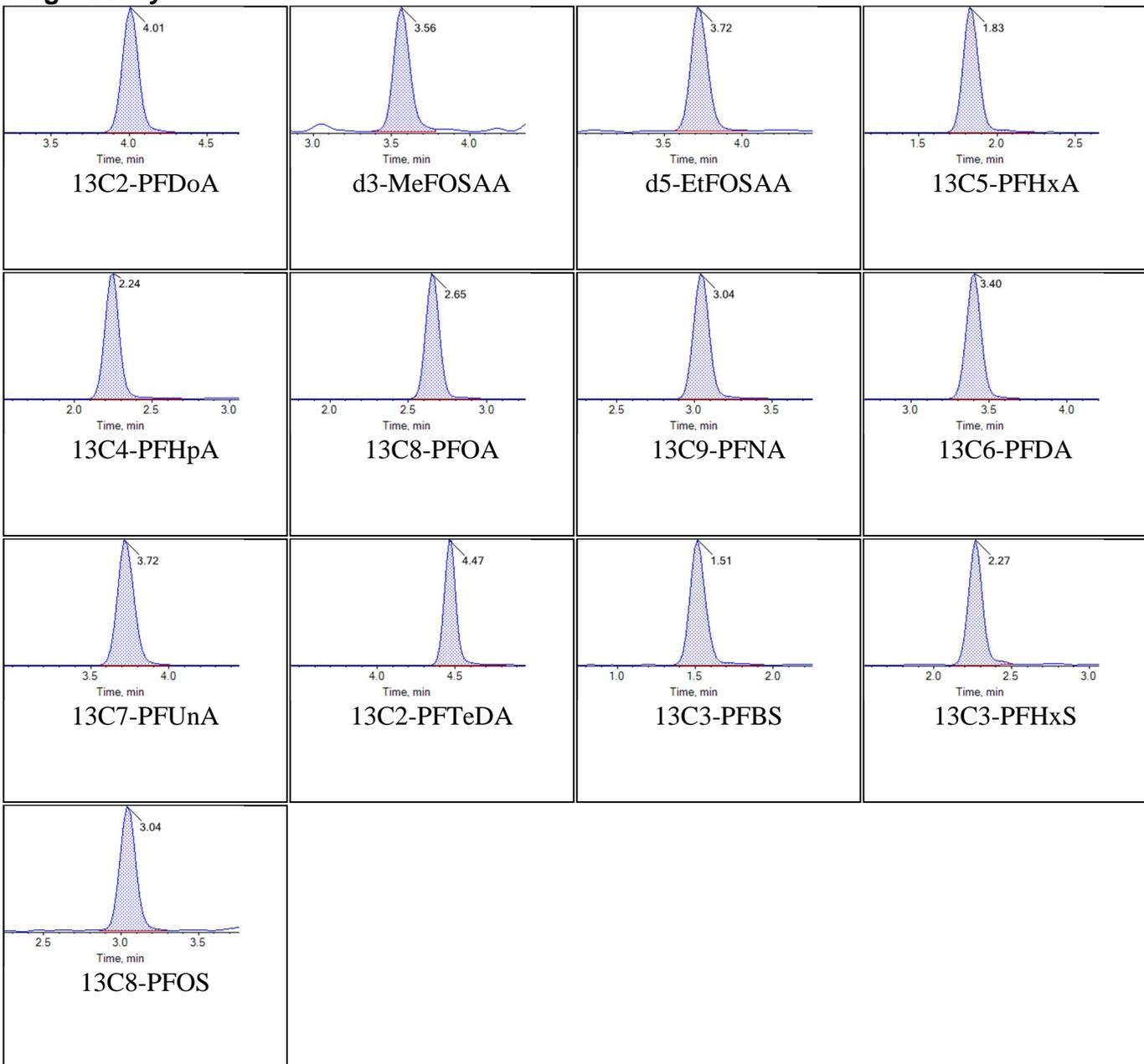
Internal Standards:



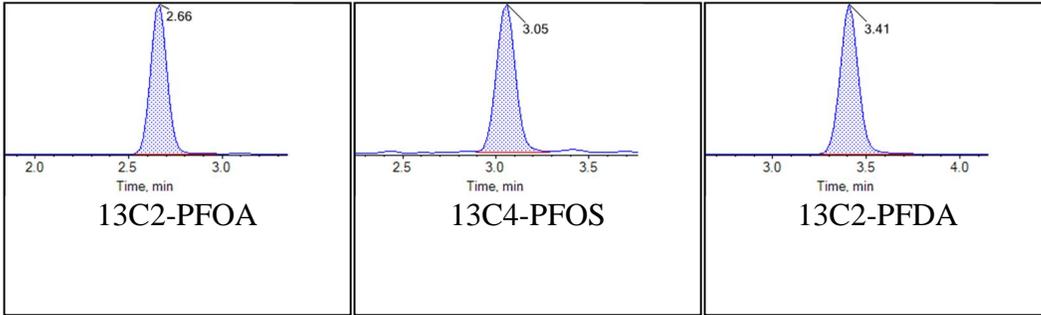
Sample Name	KB36 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T21:56:17	Data File	18-0567.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



Internal Standards:



Unused Data

Sample Name	J8229-FS(3)	Injection Vial	15
Sample ID	VC-PM649-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:52:42	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	1.86	367509.98	853.052793	46.2	false
PFHxA_2	313.0 / 119.0	1.86	24605.55	767.729818	36.0	false
PFHpA_1	363.0 / 319.0	2.27	162580.57	398.835344	87.0	false
PFHpA_2	363.0 / 169.0	2.27	4099.22	516.994066	59.5	false
PFHxS_1	399.0 / 80.0	2.29	65391.45	103.114551	88.3	false
PFHxS_2	399.0 / 99.0	2.29	20237.44	100.119375	105.0	false
PFOA_1	413.0 / 369.0	2.68	593850.71	1024.278271	371.2	false
PFOA_2	413.0 / 169.0	2.68	37247.67	999.463827	307.8	false
PFNA_1	463.0 / 419.0	3.08	213312.71	400.166756	231.0	false
PFNA_2	463.0 / 219.0	3.08	68309.81	413.988857	221.5	true
PFOS_1	499.0 / 80.0	3.08	2422744.29	2850.111226	423.0	false
PFOS_2	499.0 / 99.0	3.08	481065.49	3235.186695	659.0	false
PFDA_1	513.0 / 469.0	3.43	189358.16	367.997940	249.8	false
PFDA_2	513.0 / 219.0	3.43	8852.65	362.963840	121.3	false
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.03	5444.30	< 0	46.6	false
PFDoA_2	613.0 / 319.0	4.03	1068.85	< 0	28.0	false
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8239-FS(3)	Injection Vial	27
Sample ID	VC-PM649-SB04-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:03:00	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	1.86	90559.10	265.352885	17.0	false
PFHxA_2	313.0 / 119.0	1.86	6619.01	253.711230	15.2	false
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.29	68215.47	125.386988	89.9	false
PFHxS_2	399.0 / 99.0	2.29	18858.11	109.743898	96.0	false
PFOA_1	413.0 / 369.0	2.67	33398.77	81.681602	55.5	true
PFOA_2	413.0 / 169.0	2.63	3063.40	107.858517	54.5	true
PFNA_1	463.0 / 419.0	3.07	6730.43	41.143782	21.8	true
PFNA_2	463.0 / 219.0	3.05	1549.93	24.229168	15.0	true
PFOS_1	499.0 / 80.0	3.07	1574052.40	2146.813292	286.3	false
PFOS_2	499.0 / 99.0	3.07	305764.08	2379.369473	539.6	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8252-FS(3)	Injection Vial	36
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:40:45	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	2683959.03	5701.853491	1291.8	false
PFBS_2	298.9 / 99.0	1.53	860362.73	6208.255398	934.1	false
PFHxA_1	313.0 / 269.0	1.84	1653234.06	5228.505960	90.1	false
PFHxA_2	313.0 / 119.0	1.85	98219.37	4225.957303	68.3	false
PFHpA_1	363.0 / 319.0	2.25	266932.44	873.418131	98.0	false
PFHpA_2	363.0 / 169.0	2.21	9783.17	1576.512672	77.4	false
PFHxS_1	399.0 / 80.0	2.28	4248391.90	9384.004801	497.4	false
PFHxS_2	399.0 / 99.0	2.28	1498172.95	11618.584359	1063.3	false
PFOA_1	413.0 / 369.0	2.66	346731.86	764.147093	251.2	false
PFOA_2	413.0 / 169.0	2.61	36928.85	1255.611764	146.6	false
PFNA_1	463.0 / 419.0	3.06	10021.31	52.957021	38.7	true
PFNA_2	463.0 / 219.0	3.07	2481.61	34.943014	26.0	true
PFOS_1	499.0 / 80.0	3.06	57714307.47	107462.460454	1552.1	false
PFOS_2	499.0 / 99.0	3.06	11605957.22	124237.555576	1924.7	false
PFDA_1	513.0 / 469.0	3.42	14627.32	29.193003	56.0	false
PFDA_2	513.0 / 219.0	3.42	931.46	8.450534	19.4	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

Sample Name	J8257MS-FS(3)	Injection Vial	39
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:13:20	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	10051226.01	19765.095142	2587.0	false
PFBS_2	298.9 / 99.0	1.54	3007969.30	20159.679502	1549.7	false
PFHxA_1	313.0 / 269.0	1.85	6408895.34	19468.387299	225.6	false
PFHxA_2	313.0 / 119.0	1.85	456224.92	18898.103222	174.1	false
PFHpA_1	363.0 / 319.0	2.26	5196419.88	15396.602674	468.9	false
PFHpA_2	363.0 / 169.0	2.26	98914.90	14204.382253	359.6	false
PFHxS_1	399.0 / 80.0	2.28	11846751.70	26834.956045	885.7	false
PFHxS_2	399.0 / 99.0	2.28	3607852.85	28710.678755	1155.6	false
PFOA_1	413.0 / 369.0	2.67	6724943.41	15996.718209	1122.6	false
PFOA_2	413.0 / 169.0	2.67	446825.98	16559.608100	856.6	false
PFNA_1	463.0 / 419.0	3.07	5083317.76	13441.472816	1080.5	false
PFNA_2	463.0 / 219.0	3.07	1515063.91	13402.143699	1109.3	true
PFOS_1	499.0 / 80.0	3.06	66947729.84	115654.661327	1037.8	false
PFOS_2	499.0 / 99.0	3.06	13497346.27	134053.778648	1690.3	false
PFDA_1	513.0 / 469.0	3.42	6713508.23	13914.080327	1026.2	false
PFDA_2	513.0 / 219.0	3.42	295299.66	14090.952736	625.4	false
PFUnA_1	563.0 / 519.0	3.74	7274969.69	14108.682733	790.4	false
PFUnA_2	563.0 / 269.0	3.74	375528.24	14246.729927	683.8	false
PFDoA_1	613.0 / 569.0	4.02	6865537.40	15039.180537	836.9	false
PFDoA_2	613.0 / 319.0	4.02	1056385.72	14954.671685	794.6	false
PFTrDA_1	663.0 / 619.0	4.27	6142896.20	14236.420510	1385.2	false
PFTrDA_2	663.0 / 169.0	4.26	390515.44	14077.852796	893.2	false
PFTeDA_1	713.0 / 669.0	4.48	6651959.43	14024.311796	1650.3	false
PFTeDA_2	713.0 / 169.0	4.48	310511.61	13772.666378	1620.5	false
NMeFOSAA_1	570.0 / 419.0	3.57	1117728.16	13866.394430	1095.2	false
NMeFOSAA_2	570.0 / 512.0	3.57	605131.44	13813.865033	1348.9	false
NEtFOSAA_1	584.0 / 419.0	3.73	1069333.46	16430.578465	1016.2	false
NEtFOSAA_2	584.0 / 483.0	3.73	65143.35	16037.321085	679.1	false

Sample Name	J8229-FS(3)	Injection Vial	15
Sample ID	VC-PM649-SS01-000H	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T14:52:42	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	148162.47	324.088132	763.1	false
d3-MeFOSAA	573.0 / 419.0	3.58	15358.09	197.832306	141.0	false
d5-EtFOSAA	589.0 / 419.0	3.74	22170.87	288.792272	161.5	false
13C5-PFHxA	318.0 / 273.0	1.85	110535.30	272.836839	677.0	false
13C4-PFHpA	367.0 / 322.0	2.26	125791.46	271.041881	858.7	false
13C8-PFOA	421.0 / 376.0	2.67	147341.11	271.656556	1016.7	false
13C9-PFNA	472.0 / 427.0	3.06	150926.54	278.456062	1206.8	false
13C6-PFDA	519.0 / 474.0	3.42	127882.67	268.263257	1125.1	false
13C7-PFUnA	570.0 / 525.0	3.74	146685.96	342.063808	643.6	false
13C2-PFTeDA	715.0 / 670.0	4.49	114850.41	324.951713	1646.2	false
13C3-PFBS	302.0 / 99.0	1.53	52088.79	265.720312	572.2	false
13C3-PFHxS	402.0 / 99.0	2.28	44489.40	266.715197	271.1	false
13C8-PFOS	507.0 / 99.0	3.06	44880.08	246.388710	292.0	false

Sample Name	J8239-FS(3)	Injection Vial	27
Sample ID	VC-PM649-SB04-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T17:03:00	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	127701.05	240.852373	1035.1	false
d3-MeFOSAA	573.0 / 419.0	3.57	10991.54	137.781215	141.7	false
d5-EtFOSAA	589.0 / 419.0	3.73	13443.02	170.400666	136.4	false
13C5-PFHxA	318.0 / 273.0	1.85	85912.37	214.670158	569.0	false
13C4-PFHpA	367.0 / 322.0	2.25	103527.39	225.815875	873.0	false
13C8-PFOA	421.0 / 376.0	2.66	127293.65	237.583880	1275.4	false
13C9-PFNA	472.0 / 427.0	3.06	112967.46	210.988311	950.4	false
13C6-PFDA	519.0 / 474.0	3.41	124265.18	224.765933	1016.6	false
13C7-PFUnA	570.0 / 525.0	3.73	126128.02	253.607271	795.5	false
13C2-PFTeDA	715.0 / 670.0	4.48	94480.67	230.494614	2255.1	false
13C3-PFBS	302.0 / 99.0	1.52	44060.98	218.728962	366.1	false
13C3-PFHxS	402.0 / 99.0	2.28	37956.02	221.433561	300.3	false
13C8-PFOS	507.0 / 99.0	3.05	38917.68	207.914958	215.1	false

Sample Name	J8252-FS(3)	Injection Vial	36
Sample ID	VC-PM365-SB02-0102	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T18:40:45	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	117917.89	244.215702	642.9	false
d3-MeFOSAA	573.0 / 419.0	3.57	17806.55	394.790232	174.7	true
d5-EtFOSAA	589.0 / 419.0	3.73	20578.87	461.371845	227.9	false
13C5-PFHxA	318.0 / 273.0	1.84	81719.74	236.199001	641.4	false
13C4-PFHpA	367.0 / 322.0	2.25	93802.33	236.672552	677.7	false
13C8-PFOA	421.0 / 376.0	2.66	115942.04	250.314622	982.5	false
13C9-PFNA	472.0 / 427.0	3.05	96245.00	207.930542	1686.4	false
13C6-PFDA	519.0 / 474.0	3.40	128247.62	254.722748	858.6	false
13C7-PFUnA	570.0 / 525.0	3.72	122836.58	271.215947	939.5	false
13C2-PFTeDA	715.0 / 670.0	4.48	95698.74	256.366616	1659.7	false
13C3-PFBS	302.0 / 99.0	1.52	39555.79	347.309969	432.9	false
13C3-PFHxS	402.0 / 99.0	2.27	31851.58	328.661561	345.3	false
13C8-PFOS	507.0 / 99.0	3.05	28517.24	269.464418	204.4	false

Sample Name	J8257MS-FS(3)	Injection Vial	39
Sample ID	VC-PM365-SB02-0102-MS	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-10-02T19:13:20	Data File	10022018_18-0570.wiff
Acquisition Method	5-0369.dam	Result Table	18-0570_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.01	129976.90	282.475914	799.6	false
d3-MeFOSAA	573.0 / 419.0	3.56	19340.15	387.245599	141.1	true
d5-EtFOSAA	589.0 / 419.0	3.73	18148.28	367.455746	172.2	true
13C5-PFHxA	318.0 / 273.0	1.84	85167.98	268.644853	651.7	false
13C4-PFHpA	367.0 / 322.0	2.25	103149.33	284.021905	894.0	false
13C8-PFOA	421.0 / 376.0	2.66	105268.95	248.025728	1039.8	false
13C9-PFNA	472.0 / 427.0	3.05	100483.66	236.911800	1089.2	false
13C6-PFDA	519.0 / 474.0	3.40	119622.28	249.317003	889.1	false
13C7-PFUnA	570.0 / 525.0	3.72	122482.43	283.780598	1043.8	false
13C2-PFTeDA	715.0 / 670.0	4.47	108208.21	304.184337	1266.4	false
13C3-PFBS	302.0 / 99.0	1.52	41070.43	325.669024	465.2	true
13C3-PFHxS	402.0 / 99.0	2.27	30988.65	288.775649	309.9	false
13C8-PFOS	507.0 / 99.0	3.05	30860.69	263.353804	257.5	false

**DATA VALIDATION SUMMARY REPORT
NAVAL BASE VENTURA COUNTY, CALIFORNIA**

Client: CH2M HILL, Inc., Corvallis, Oregon
 SDG: 18-0570
 Laboratory: Battelle Norwell Operations, Norwell, Massachusetts
 Site: Naval Base Ventura County, CTO-4164, California
 Date: December 12, 2018

PFCs			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	VC-PM649-SS01-000H	J8229-FS	Soil
2	VC-PM649-SB01-0102	J8230-FS	Soil
3	VC-PM649-SB01-0506	J8231-FS	Soil
4	VC-PM649-SS02-000H	J8232-FS	Soil
5	VC-PM649-SB02-0102	J8233-FS	Soil
6	VC-PM649-SB02-0506	J8234-FS	Soil
7	VC-PM649-SS03-000H	J8235-FS	Soil
8	VC-PM649-SB03-0102	J8236-FS	Soil
9	VC-PM649-SB03-0506	J8237-FS	Soil
10	VC-PM649-SS04-000H	J8238-FS	Soil
11	VC-PM649-SB04-0102	J8239-FS	Soil
12	VC-PM649-SB04-0506	J8240-FS	Soil
13	VC-PM365-SS01-000H	J8248-FS	Soil
14	VC-PM365-SB01-0102	J8249-FS	Soil
15	VC-PM365-SB01-0506	J8250-FS	Soil
16	VC-PM365-SS02-000H	J8251-FS	Soil
17	VC-PM365-SB02-0102	J8252-FS	Soil
17MS	VC-PM365-SB02-0102MS	J8257-FSMS	Soil
17MSD	VC-PM365-SB02-0102MSD	J8258-FSMSD	Soil
18	VC-PM365-SB02-0506	J8253-FS	Soil

A full data validation was performed on the analytical data for eighteen soil samples collected on September 18-19, 2018 by CH2M HILL at the Naval Base Ventura County site in California. The samples were analyzed under the Battelle SOP Method for “Analysis of Perfluoroalkyl Substances in Environmental Samples by Liquid Chromatography and Tandem Mass Spectrometry (LC-MS/MS)”.

Specific method references are as follows:

Analysis
PFCs

Method References
SOP 5-369

The data have been validated according to the protocols and quality control (QC) requirements of the analytical method, the DoD Quality Systems Manual for Environmental Laboratories, Version 5.1, February 2018, the Final Sampling and Analysis Plan Basewide Preliminary Assessments/Site

Inspections of Per- and Polyfluoroalkyl Substances, August 2018, and the USEPA National Functional Guidelines for Organic Data Review as follows:

- The USEPA “Contract Laboratories Program National Functional Guidelines for Organic Superfund Methods Data Review,” January 2017;
- and the reviewer's professional judgment.

The following data quality indicators were reviewed for this report:

Organics

- Date Completeness, Case Narrative & Custody Documentation
- Holding times
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Field Duplicate sample precision

A full (Level IV) data validation was performed with this review including a recalculation of 10% of the detected results in the samples.

Data Usability Assessment

There were no rejections of data.

Overall the data is acceptable for the intended purposes as qualified for the deficiencies detailed in this report.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of QC criteria.

Perfluorinated Compounds (PFCs)

Data Completeness, Case Narrative & Custody Documentation

- The case narrative and chain-of-custody documentation were included in the data package as required. All criteria were met.

Holding Times

- All samples were extracted within 28 days for soil samples and analyzed within 30 days.

LC/MS Tuning

- All criteria were met.

Initial Calibration

- All relative standard deviation (%RSD) and/or correlation coefficients criteria were met.

Continuing Calibration

- All percent recovery (%R) criteria were met.

Method Blank

- The method blanks were free of contamination.

Field QC Blank

- Field QC samples are summarized below.

Blank ID	Compound	Conc. ng/L	Qualifier	Affected Samples
VC-AQ-EB01-0918	PFDoA	0.19	None	All Associated ND
	PFTTrDA	0.31	None	
	PFTeDA	0.38	None	
	PFHxS	0.11	U	1-2, 5-8, 10-11
	PFOS	8.59	U	1-12
VC-AQ-FB01-0918	PFDoA	0.23	None	All Associated ND
	PFTTrDA	0.44	None	
	PFTeDA	0.53	None	
VC-SO-FB02-0918	PFDA	0.16	None	All Associated ND
	PFUnA	0.39	None	
	PFDoA	0.46	None	
	PFTTrDA	0.74	None	
	PFTeDA	0.66	None	
VC-SO-EB02-0918	PFDA	0.21	None	All Associated ND
	PFUnA	0.37	None	
	PFDoA	0.49	None	
	PFTTrDA	0.69	None	
	PFTeDA	0.59	None	
	PFHxS	0.52	U	
	PFOS	2.52	U	13-15

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples exhibited acceptable percent recoveries (%R) and RPD values except for the following.

EDS Sample ID	Compound	MS %R/MSD %R/RPD	Qualifier
17	PFOS	240%/202%/OK	None - 4X Rule Applies

Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries (%R).

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Target Compound Identification

- All mass spectra and quantitation criteria were met.

Compound Quantitation

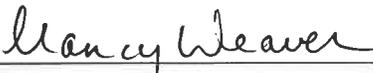
- Several samples were analyzed at various dilutions due to high concentrations of target compounds. The reporting limits were adjusted accordingly. No action was required.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:


Nancy Weaver
Senior Chemist

Dated: 12/27/18

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limits is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.



Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SS01-000H				
Battelle ID	J8229-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/03/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	11.51				
Matrix	SS				
Sample Size	1.760				
Size Unit-Basis	g				
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	4.92 J	0.38	1.14	5.68
PFHpA	375-85-9	2.23 J	0.50	1.14	5.68
PFOA	335-67-1	5.68	0.57	1.14	5.68
PFNA	375-95-1	2.46 J	0.49	1.14	5.68
PFDA	335-76-2	2.10 J	0.31	1.14	5.68
PFUnA	2058-94-8	1.14 U	0.47	1.14	5.68
PFDoA	307-55-1	0.57 U	0.27	0.57	5.68
PFTeDA	72629-94-8	1.14 U	0.32	1.14	5.68
PFTeDA	376-06-7	2.27 U	0.72	2.27	5.68
NMeFOSAA	2355-31-9	2.84 U	1.27	2.84	5.68
NEtFOSAA	2991-50-6	2.27 U	0.65	2.27	5.68
PFBS	375-73-5	1.14 U	0.41	1.14	5.68
PFHxS	355-46-4	0.79 U	0.25	0.57	5.68
PFOS	1763-23-1	15.79 U	0.31	1.14	5.68

EBL
EBL

Surrogate Recoveries (%)

13C5-PFHxA	116
13C4-PFHpA	125
13C8-PFOA	115
13C9-PFNA	105
13C6-PFDA	110
13C7-PFUnA	120
13C2-PFDoA	131
13C2-PFTeDA	123
d3-MeFOSAA	76
d5-EtFOSAA	108
13C3-PFBS	119
13C3-PFHxS	112
13C8-PFOS	111



2

Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB01-0102				
Battelle ID	J8230-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	14.47				
Matrix	SB				
Sample Size	1.710				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	8.86	0.39	1.17	5.85
PFHpA	375-85-9	2.20 J	0.51	1.17	5.85
PFOA	335-67-1	8.62	0.58	1.17	5.85
PFNA	375-95-1	2.58 J	0.50	1.17	5.85
PFDA	335-76-2	1.17 U	0.32	1.17	5.85
PFUnA	2058-94-8	1.17 U	0.48	1.17	5.85
PFDoA	307-55-1	0.58 U	0.28	0.58	5.85
PFTeDA	72629-94-8	1.17 U	0.33	1.17	5.85
PFTeDA	376-06-7	2.34 U	0.74	2.34	5.85
NMeFOSAA	2355-31-9	2.92 U	1.31	2.92	5.85
NEtFOSAA	2991-50-6	2.34 U	0.67	2.34	5.85
PFBS	375-73-5	1.17 U	0.42	1.17	5.85
PFHxS	355-46-4	0.66 ru	0.26	0.58	5.85
PFOS	1763-23-1	15.77 u	0.32	1.17	5.85

EBL
EBL

Surrogate Recoveries (%)

13C5-PFHxA	110
13C4-PFHpA	120
13C8-PFOA	106
13C9-PFNA	109
13C6-PFDA	107
13C7-PFUnA	114
13C2-PFDoA	104
13C2-PFTeDA	104
d3-MeFOSAA	102
d5-EtFOSAA	116
13C3-PFBS	127
13C3-PFHxS	112
13C8-PFOS	108



3

Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB01-0506				
Battelle ID	J8231-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	28.40				
Matrix	SB				
Sample Size	1.440				
Size Unit-Basis	g				
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	2.32 J	0.46	1.39	6.94
PFHpA	375-85-9	0.82 J	0.61	1.39	6.94
PFOA	335-67-1	2.23 J	0.69	1.39	6.94
PFNA	375-95-1	1.39 U	0.60	1.39	6.94
PFDA	335-76-2	1.39 U	0.38	1.39	6.94
PFUnA	2058-94-8	1.39 U	0.57	1.39	6.94
PFDoA	307-55-1	0.69 U	0.33	0.69	6.94
PFTTrDA	72629-94-8	1.39 U	0.39	1.39	6.94
PFTeDA	376-06-7	2.78 U	0.88	2.78	6.94
NMeFOSAA	2355-31-9	3.47 U	1.56	3.47	6.94
NEtFOSAA	2991-50-6	2.78 U	0.79	2.78	6.94
PFBS	375-73-5	1.39 U	0.50	1.39	6.94
PFHxS	355-46-4	4.92 J	0.31	0.69	6.94
PFOS	1763-23-1	39.41 U	0.38	1.39	6.94

EBL

Surrogate Recoveries (%)

13C5-PFHxA	103
13C4-PFHpA	106
13C8-PFOA	107
13C9-PFNA	102
13C6-PFDA	113
13C7-PFUnA	114
13C2-PFDoA	105
13C2-PFTeDA	105
d3-MeFOSAA	97
d5-EtFOSAA	115
13C3-PFBS	100
13C3-PFHxS	106
13C8-PFOS	96



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID VC-PM649-SS02-000H

Battelle ID J8232-FS
 Sample Type SA
 Collection Date 09/18/2018
 Extraction Date 09/26/2018
 Analysis Date 10/02/2018
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture 10.22
 Matrix SS
 Sample Size 1.780
 Size Unit-Basis g
 Units ng/g_Dry MDL LOD LOQ

			MDL	LOD	LOQ
PFHxA	307-24-4	1.12 U	0.37	1.12	5.62
PFHpA	375-85-9	1.12 U	0.49	1.12	5.62
PFOA	335-67-1	1.12 U	0.56	1.12	5.62
PFNA	375-95-1	1.12 U	0.48	1.12	5.62
PFDA	335-76-2	1.12 U	0.30	1.12	5.62
PFUnA	2058-94-8	1.12 U	0.46	1.12	5.62
PFDoA	307-55-1	0.56 U	0.27	0.56	5.62
PFTeDA	72629-94-8	1.12 U	0.31	1.12	5.62
PFTeDA	376-06-7	2.25 U	0.71	2.25	5.62
NMeFOSAA	2355-31-9	2.81 U	1.26	2.81	5.62
NEtFOSAA	2991-50-6	2.25 U	0.64	2.25	5.62
PFBS	375-73-5	1.12 U	0.40	1.12	5.62
PFHxS	355-46-4	0.56 U	0.25	0.56	5.62
PFOS	1763-23-1	8.38 U	0.30	1.12	5.62

EBL

Surrogate Recoveries (%)

13C5-PFHxA	97
13C4-PFHpA	99
13C8-PFOA	105
13C9-PFNA	99
13C6-PFDA	104
13C7-PFUnA	107
13C2-PFDoA	99
13C2-PFTeDA	99
d3-MeFOSAA	52
d5-EtFOSAA	50
13C3-PFBS	102
13C3-PFHxS	105
13C8-PFOS	99



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB02-0102				
Battelle ID	J8233-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	8.58				
Matrix	SB				
Sample Size	1.830				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.09 U	0.36	1.09	5.46
PFHpA	375-85-9	1.09 U	0.48	1.09	5.46
PFOA	335-67-1	1.09 U	0.55	1.09	5.46
PFNA	375-95-1	1.09 U	0.47	1.09	5.46
PFDA	335-76-2	1.09 U	0.30	1.09	5.46
PFOA	2058-94-8	1.09 U	0.45	1.09	5.46
PFOA	307-55-1	0.55 U	0.26	0.55	5.46
PFOA	72629-94-8	1.09 U	0.31	1.09	5.46
PFOA	376-06-7	2.19 U	0.69	2.19	5.46
NMeFOSAA	2355-31-9	2.73 U	1.22	2.73	5.46
NEtFOSAA	2991-50-6	2.19 U	0.62	2.19	5.46
PFBS	375-73-5	1.09 U	0.39	1.09	5.46
PFHxS	355-46-4	0.55 U	0.24	0.55	5.46
PFOS	1763-23-1	3.62 U	0.30	1.09	5.46

Surrogate Recoveries (%)

13C5-PFHxA	88
13C4-PFHpA	91
13C8-PFOA	95
13C9-PFNA	92
13C6-PFDA	96
13C7-PFOA	96
13C2-PFDoA	89
13C2-PFTeDA	89
d3-MeFOSAA	57
d5-EtFOSAA	73
13C3-PFBS	125
13C3-PFHxS	124
13C8-PFOS	120

Analyzed by: Schumitz, Denise

Printed: 10/19/2018

MW 12/26/18

Isotope Dilution

S18-0570_Master_369.xlsm



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB02-0506				
Battelle ID	J8234-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	24.46				
Matrix	SB				
Sample Size	1.480				
Size Unit-Basis	g				
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	1.35 U	0.45	1.35	6.76
PFHpA	375-85-9	1.35 U	0.59	1.35	6.76
PFOA	335-67-1	1.35 U	0.68	1.35	6.76
PFNA	375-95-1	1.35 U	0.58	1.35	6.76
PFDA	335-76-2	1.35 U	0.36	1.35	6.76
PFUnA	2058-94-8	1.35 U	0.55	1.35	6.76
PFDoA	307-55-1	0.68 U	0.32	0.68	6.76
PFTeDA	72629-94-8	1.35 U	0.38	1.35	6.76
PFTeDA	376-06-7	2.70 U	0.85	2.70	6.76
NMeFOSAA	2355-31-9	3.38 U	1.51	3.38	6.76
NEtFOSAA	2991-50-6	2.70 U	0.77	2.70	6.76
PFBS	375-73-5	1.35 U	0.49	1.35	6.76
PFHxS	355-46-4	0.84 ✓ u	0.30	0.68	6.76
PFOS	1763-23-1	4.25 ✓ u	0.36	1.35	6.76

EBL
EBL

Surrogate Recoveries (%)

13C5-PFHxA	111
13C4-PFHpA	114
13C8-PFOA	121
13C9-PFNA	118
13C6-PFDA	112
13C7-PFUnA	127
13C2-PFDoA	113
13C2-PFTeDA	115
d3-MeFOSAA	93
d5-EtFOSAA	123
13C3-PFBS	113
13C3-PFHxS	112
13C8-PFOS	106



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SS03-000H				
Battelle ID	J8235-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	14.15				
Matrix	SS				
Sample Size	1.700				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.18 U	0.39	1.18	5.88
PFHpA	375-85-9	1.18 U	0.52	1.18	5.88
PFOA	335-67-1	1.18 U	0.59	1.18	5.88
PFNA	375-95-1	1.18 U	0.51	1.18	5.88
PFDA	335-76-2	1.18 U	0.32	1.18	5.88
PFUnA	2058-94-8	1.18 U	0.48	1.18	5.88
PFDoA	307-55-1	0.59 U	0.28	0.59	5.88
PFTeDA	72629-94-8	1.18 U	0.33	1.18	5.88
PFTeDA	376-06-7	2.35 U	0.74	2.35	5.88
NMeFOSAA	2355-31-9	2.94 U	1.32	2.94	5.88
NEtFOSAA	2991-50-6	2.35 U	0.67	2.35	5.88
PFBS	375-73-5	1.18 U	0.42	1.18	5.88
PFHxS	355-46-4	0.59 U	0.26	0.59	5.88
PFOS	1763-23-1	9.95 U	0.32	1.18	5.88

Surrogate Recoveries (%)

13C5-PFHxA	108
13C4-PFHpA	104
13C8-PFOA	107
13C9-PFNA	104
13C6-PFDA	111
13C7-PFUnA	118
13C2-PFDoA	107
13C2-PFTeDA	110
d3-MeFOSAA	87
d5-EtFOSAA	116
13C3-PFBS	108
13C3-PFHxS	107
13C8-PFOS	109

Analyzed by: Schumitz, Denise

Printed: 10/19/2018

M/12/26/18



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SB03-0102				
Battelle ID	J8236-FS				
Sample Type	SA				
Collection Date	09/18/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	11.27				
Matrix	SB				
Sample Size	1.770				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	1.13 U	0.37	1.13	5.65
PFHpA	375-85-9	1.13 U	0.50	1.13	5.65
PFOA	335-67-1	1.13 U	0.56	1.13	5.65
PFNA	375-95-1	1.13 U	0.49	1.13	5.65
PFDA	335-76-2	1.13 U	0.31	1.13	5.65
PFUnA	2058-94-8	1.13 U	0.46	1.13	5.65
PFDoA	307-55-1	0.56 U	0.27	0.56	5.65
PFTeDA	72629-94-8	1.13 U	0.32	1.13	5.65
PFTeDA	376-06-7	2.26 U	0.71	2.26	5.65
NMeFOSAA	2355-31-9	2.82 U	1.27	2.82	5.65
NEtFOSAA	2991-50-6	2.26 U	0.64	2.26	5.65
PFBS	375-73-5	1.13 U	0.41	1.13	5.65
PFHxS	355-46-4	0.71 U	0.25	0.56	5.65
PFOS	1763-23-1	6.15 U	0.31	1.13	5.65

EBL
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Surrogate Recoveries (%)

13C5-PFHxA	104
13C4-PFHpA	112
13C8-PFOA	109
13C9-PFNA	101
13C6-PFDA	108
13C7-PFUnA	116
13C2-PFDoA	103
13C2-PFTeDA	107
d3-MeFOSAA	82
d5-EtFOSAA	97
13C3-PFBS	113
13C3-PFHxS	108
13C8-PFOS	99



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID VC-PM649-SB03-0506

Battelle ID J8237-FS
 Sample Type SA
 Collection Date 09/18/2018
 Extraction Date 09/26/2018
 Analysis Date 10/02/2018
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture 18.64
 Matrix SB
 Sample Size 1.680

Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	3.08 J	0.39	1.19	5.95
PFHpA	375-85-9	0.79 J	0.52	1.19	5.95
PFOA	335-67-1	0.77 J	0.60	1.19	5.95
PFNA	375-95-1	1.19 U	0.51	1.19	5.95
PFDA	335-76-2	1.19 U	0.32	1.19	5.95
PFUnA	2058-94-8	1.19 U	0.49	1.19	5.95
PFDoA	307-55-1	0.60 U	0.29	0.60	5.95
PFTeDA	72629-94-8	1.19 U	0.33	1.19	5.95
PFTeDA	376-06-7	2.38 U	0.75	2.38	5.95
NMeFOSAA	2355-31-9	2.98 U	1.33	2.98	5.95
NEtFOSAA	2991-50-6	2.38 U	0.68	2.38	5.95
PFBS	375-73-5	1.59 J	0.43	1.19	5.95
PFHxS	355-46-4	2.56 J	0.26	0.60	5.95
PFOS	1763-23-1	25.99 U	0.32	1.19	5.95

EBL

Surrogate Recoveries (%)

13C5-PFHxA	85
13C4-PFHpA	92
13C8-PFOA	95
13C9-PFNA	91
13C6-PFDA	96
13C7-PFUnA	109
13C2-PFDoA	95
13C2-PFTeDA	98
d3-MeFOSAA	93
d5-EtFOSAA	97
13C3-PFBS	94
13C3-PFHxS	94
13C8-PFOS	89



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM649-SS04-000H					
Battelle ID	J8238-FS					
Sample Type	SA					
Collection Date	09/18/2018					
Extraction Date	09/26/2018					
Analysis Date	10/02/2018					
Analytical Instrument	Sciex 5500 LC/MS/MS					
% Moisture	1.84					
Matrix	SS					
Sample Size	1.960					
Size Unit-Basis	g					
Units	ng/g_Dry	MDL	LOD	LOQ		
PFHxA	307-24-4	1.75 J	0.34	1.02	5.10	
PFHpA	375-85-9	1.02 U	0.45	1.02	5.10	
PFOA	335-67-1	1.02 U	0.51	1.02	5.10	
PFNA	375-95-1	1.02 U	0.44	1.02	5.10	
PFDA	335-76-2	1.02 U	0.28	1.02	5.10	
PFUnA	2058-94-8	1.02 U	0.42	1.02	5.10	
PFDoA	307-55-1	0.51 U	0.24	0.51	5.10	
PFTeDA	72629-94-8	1.02 U	0.29	1.02	5.10	
PFTeDA	376-06-7	2.04 U	0.64	2.04	5.10	
NMeFOSAA	2355-31-9	2.55 U	1.14	2.55	5.10	
NEtFOSAA	2991-50-6	2.04 U	0.58	2.04	5.10	
PFBS	375-73-5	1.02 U	0.37	1.02	5.10	
PFHxS	355-46-4	1.08 <i>u</i>	0.22	0.51	5.10	<i>EBL</i>
PFOS	1763-23-1	16.66 <i>u</i>	0.28	1.02	5.10	<i>EBL</i>

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	100
13C8-PFOA	104
13C9-PFNA	101
13C6-PFDA	110
13C7-PFUnA	117
13C2-PFDoA	107
13C2-PFTeDA	102
d3-MeFOSAA	95
d5-EtFOSAA	127
13C3-PFBS	115
13C3-PFHxS	111
13C8-PFOS	105



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID VC-PM649-SB04-0102

Battelle ID J8239-FS
 Sample Type SA
 Collection Date 09/18/2018
 Extraction Date 09/26/2018
 Analysis Date 10/03/2018
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture 7.02
 Matrix SB
 Sample Size 1.900

Size Unit-Basis					
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	1.05 U	0.35	1.05	5.26
PFHpA	375-85-9	1.05 U	0.46	1.05	5.26
PFOA	335-67-1	1.05 U	0.53	1.05	5.26
PFNA	375-95-1	1.05 U	0.45	1.05	5.26
PFDA	335-76-2	1.05 U	0.28	1.05	5.26
PFUnA	2058-94-8	1.05 U	0.43	1.05	5.26
PFDoA	307-55-1	0.53 U	0.25	0.53	5.26
PFTeDA	72629-94-8	1.05 U	0.29	1.05	5.26
PFTeDA	376-06-7	2.11 U	0.66	2.11	5.26
NMeFOSAA	2355-31-9	2.63 U	1.18	2.63	5.26
NEtFOSAA	2991-50-6	2.11 U	0.60	2.11	5.26
PFBS	375-73-5	1.05 U	0.38	1.05	5.26
PFHxS	355-46-4	0.68 U	0.23	0.53	5.26
PFOS	1763-23-1	10.95 U	0.28	1.05	5.26

EBL
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Surrogate Recoveries (%)

13C5-PFHxA	100
13C4-PFHpA	101
13C8-PFOA	98
13C9-PFNA	90
13C6-PFDA	88
13C7-PFUnA	88
13C2-PFDoA	91
13C2-PFTeDA	89
d3-MeFOSAA	50
d5-EtFOSAA	63
13C3-PFBS	116
13C3-PFHxS	104
13C8-PFOS	97



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID VC-PM649-SB04-0506

Battelle ID J8240-FS
 Sample Type SA
 Collection Date 09/18/2018
 Extraction Date 09/26/2018
 Analysis Date 10/02/2018
 Analytical Instrument Sciex 5500 LC/MS/MS
 % Moisture 19.33
 Matrix SB
 Sample Size 1.590

Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	1.38 J	0.42	1.26	6.29
PFHpA	375-85-9	1.26 U	0.55	1.26	6.29
PFOA	335-67-1	1.26 U	0.63	1.26	6.29
PFNA	375-95-1	1.26 U	0.54	1.26	6.29
PFDA	335-76-2	1.26 U	0.34	1.26	6.29
PFUnA	2058-94-8	1.26 U	0.52	1.26	6.29
PFDoA	307-55-1	0.63 U	0.30	0.63	6.29
PFTeDA	72629-94-8	1.26 U	0.35	1.26	6.29
PFTeDA	376-06-7	2.52 U	0.79	2.52	6.29
NMeFOSAA	2355-31-9	3.14 U	1.41	3.14	6.29
NEtFOSAA	2991-50-6	2.52 U	0.72	2.52	6.29
PFBS	375-73-5	1.26 U	0.45	1.26	6.29
PFHxS	355-46-4	1.29 J	0.28	0.63	6.29
PFOS	1763-23-1	8.36 u	0.34	1.26	6.29

EBL

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	103
13C8-PFOA	109
13C9-PFNA	102
13C6-PFDA	103
13C7-PFUnA	118
13C2-PFDoA	103
13C2-PFTeDA	105
d3-MeFOSAA	88
d5-EtFOSAA	100
13C3-PFBS	101
13C3-PFHxS	98
13C8-PFOS	99



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID		VC-PM365-SS01-000H			
Battelle ID		J8248-FS			
Sample Type		SA			
Collection Date		09/19/2018			
Extraction Date		09/26/2018			
Analysis Date		10/02/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		5.69			
Matrix		SS			
Sample Size		1.910			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	1.25 J	0.35	1.05	5.24
PFHpA	375-85-9	1.05 U	0.46	1.05	5.24
PFOA	335-67-1	1.05 U	0.52	1.05	5.24
PFNA	375-95-1	1.05 U	0.45	1.05	5.24
PFDA	335-76-2	1.05 U	0.28	1.05	5.24
PFUnA	2058-94-8	1.05 U	0.43	1.05	5.24
PFDoA	307-55-1	0.52 U	0.25	0.52	5.24
PFTeDA	72629-94-8	1.05 U	0.29	1.05	5.24
PFTeDA	376-06-7	2.09 U	0.66	2.09	5.24
NMeFOSAA	2355-31-9	2.62 U	1.17	2.62	5.24
NEtFOSAA	2991-50-6	2.09 U	0.60	2.09	5.24
PFBS	375-73-5	0.51 J	0.38	1.05	5.24
PFHxS	355-46-4	1.59 J U	0.23	0.52	5.24
PFOS	1763-23-1	5.14 J U	0.28	1.05	5.24
EBL					
EBC					
Surrogate Recoveries (%)					
13C5-PFHxA		105			
13C4-PFHpA		105			
13C8-PFOA		109			
13C9-PFNA		107			
13C6-PFDA		106			
13C7-PFUnA		111			
13C2-PFDoA		111			
13C2-PFTeDA		105			
d3-MeFOSAA		97			
d5-EtFOSAA		107			
13C3-PFBS		112			
13C3-PFHxS		108			
13C8-PFOS		117			



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID		VC-PM365-SB01-0102			
Battelle ID		J8249-FS			
Sample Type		SA			
Collection Date		09/19/2018			
Extraction Date		09/26/2018			
Analysis Date		10/02/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		6.15			
Matrix		SB			
Sample Size		1.860			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	1.00 J	0.35	1.08	5.38
PFHpA	375-85-9	1.08 U	0.47	1.08	5.38
PFOA	335-67-1	1.08 U	0.54	1.08	5.38
PFNA	375-95-1	1.08 U	0.46	1.08	5.38
PFDA	335-76-2	1.08 U	0.29	1.08	5.38
PFUnA	2058-94-8	1.08 U	0.44	1.08	5.38
PFDoA	307-55-1	0.54 U	0.26	0.54	5.38
PFTTrDA	72629-94-8	1.08 U	0.30	1.08	5.38
PFTeDA	376-06-7	2.15 U	0.68	2.15	5.38
NMeFOSAA	2355-31-9	2.69 U	1.20	2.69	5.38
NEtFOSAA	2991-50-6	2.15 U	0.61	2.15	5.38
PFBS	375-73-5	0.39 J	0.39	1.08	5.38
PFHxS	355-46-4	2.43 J U	0.24	0.54	5.38
PFOS	1763-23-1	1.08 0.40 U	0.29	1.08	5.38
Surrogate Recoveries (%)					
13C5-PFHxA		108			
13C4-PFHpA		111			
13C8-PFOA		109			
13C9-PFNA		106			
13C6-PFDA		111			
13C7-PFUnA		116			
13C2-PFDoA		105			
13C2-PFTTrDA		110			
d3-MeFOSAA		96			
d5-EtFOSAA		121			
13C3-PFBS		118			
13C3-PFHxS		117			
13C8-PFOS		114			

EBL
EBL



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SB01-0506				
Battelle ID	J8250-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	11.53				
Matrix	SB				
Sample Size	1.780				
Size Unit-Basis	g				
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	0.91 J	0.37	1.12	5.62
PFHpA	375-85-9	1.12 U	0.49	1.12	5.62
PFOA	335-67-1	1.12 U	0.56	1.12	5.62
PFNA	375-95-1	1.12 U	0.48	1.12	5.62
PFDA	335-76-2	1.12 U	0.30	1.12	5.62
PFUnA	2058-94-8	1.12 U	0.46	1.12	5.62
PFDoA	307-55-1	0.56 U	0.27	0.56	5.62
PFTeDA	72629-94-8	1.12 U	0.31	1.12	5.62
PFTeDA	376-06-7	2.25 U	0.71	2.25	5.62
NMeFOSAA	2355-31-9	2.81 U	1.26	2.81	5.62
NEtFOSAA	2991-50-6	2.25 U	0.64	2.25	5.62
PFBS	375-73-5	1.12 U	0.40	1.12	5.62
PFHxS	355-46-4	1.63 U	0.25	0.56	5.62
PFOS	1763-23-1	1.12 U	0.31 U	0.30	5.62

EBL
EBL

Surrogate Recoveries (%)

13C5-PFHxA	103
13C4-PFHpA	99
13C8-PFOA	107
13C9-PFNA	95
13C6-PFDA	115
13C7-PFUnA	112
13C2-PFDoA	114
13C2-PFTeDA	102
d3-MeFOSAA	102
d5-EtFOSAA	122
13C3-PFBS	99
13C3-PFHxS	100
13C8-PFOS	96

MW 12/26/18



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SS02-000H				
Battelle ID	J8251-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	5.14				
Matrix	SS				
Sample Size	1.930				
Size Unit-Basis	g				
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	43.83	0.34	1.04	5.18
PFHpA	375-85-9	10.56	0.46	1.04	5.18
PFOA	335-67-1	15.10	0.52	1.04	5.18
PFNA	375-95-1	1.04 U	0.45	1.04	5.18
PFDA	335-76-2	1.04 U	0.28	1.04	5.18
PFUnA	2058-94-8	1.04 U	0.42	1.04	5.18
PFDoA	307-55-1	0.52 U	0.25	0.52	5.18
PFTeDA	72629-94-8	1.04 U	0.29	1.04	5.18
PFTeDA	376-06-7	2.07 U	0.65	2.07	5.18
NMeFOSAA	2355-31-9	2.59 U	1.16	2.59	5.18
NEtFOSAA	2991-50-6	2.07 U	0.59	2.07	5.18
PFBS	375-73-5	17.83	0.37	1.04	5.18
PFHxS	355-46-4	110.82 ✓	1.14	2.59	25.91
PFOS	1763-23-1	456.33 ✓	1.40	5.18	25.91

Surrogate Recoveries (%)

13C5-PFHxA	97
13C4-PFHpA	101
13C8-PFOA	95
13C9-PFNA	92
13C6-PFDA	94
13C7-PFUnA	97
13C2-PFDoA	95
13C2-PFTeDA	90
d3-MeFOSAA	83
d5-EtFOSAA	98
13C3-PFBS	137
13C3-PFHxS	128
13C8-PFOS	110



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SB02-0102				
Battelle ID	J8252-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/03/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	6.47				
Matrix	SB				
Sample Size	1.890				
Size Unit-Basis	g				
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	27.91	0.35	1.06	5.29
PFHpA	375-85-9	4.27 J	0.47	1.06	5.29
PFOA	335-67-1	3.83 J	0.53	1.06	5.29
PFNA	375-95-1	1.06 U	0.46	1.06	5.29
PFDA	335-76-2	1.06 U	0.29	1.06	5.29
PFUnA	2058-94-8	1.06 U	0.43	1.06	5.29
PFDoA	307-55-1	0.53 U	0.25	0.53	5.29
PFTeDA	72629-94-8	1.06 U	0.30	1.06	5.29
PFTeDA	376-06-7	2.12 U	0.67	2.12	5.29
NMeFOSAA	2355-31-9	2.65 U	1.19	2.65	5.29
NEtFOSAA	2991-50-6	2.12 U	0.60	2.12	5.29
PFBS	375-73-5	28.51	0.38	1.06	5.29
PFHxS	355-46-4	48.05	0.23	0.53	5.29
PFOS	1763-23-1	480.02 <i>✓</i>	7.14	26.46	132.28

Surrogate Recoveries (%)

13C5-PFHxA	112
13C4-PFHpA	121
13C8-PFOA	108
13C9-PFNA	92
13C6-PFDA	108
13C7-PFUnA	97
13C2-PFDoA	102
13C2-PFTeDA	99
d3-MeFOSAA	126
d5-EtFOSAA	128
13C3-PFBS	150
13C3-PFHxS	130
13C8-PFOS	112



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Project Client: CH2M
 Project Name: CTO-4164 Naval Base Ventura County, California
 Project No.: 100110125-01

Client ID	VC-PM365-SB02-0506				
Battelle ID	J8253-FS				
Sample Type	SA				
Collection Date	09/19/2018				
Extraction Date	09/26/2018				
Analysis Date	10/02/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	3.78				
Matrix	SB				
Sample Size	1.900				
Size Unit-Basis	g				
Units	ng/g_Dry	MDL	LOD	LOQ	
PFHxA	307-24-4	4.95 J	0.35	1.05	5.26
PFHpA	375-85-9	0.89 J	0.46	1.05	5.26
PFOA	335-67-1	5.69	0.53	1.05	5.26
PFNA	375-95-1	1.05 U	0.45	1.05	5.26
PFDA	335-76-2	1.05 U	0.28	1.05	5.26
PFUnA	2058-94-8	1.05 U	0.43	1.05	5.26
PFDoA	307-55-1	0.53 U	0.25	0.53	5.26
PFTeDA	72629-94-8	1.05 U	0.29	1.05	5.26
PFTeDA	376-06-7	2.11 U	0.66	2.11	5.26
NMeFOSAA	2355-31-9	2.63 U	1.18	2.63	5.26
NEtFOSAA	2991-50-6	2.11 U	0.60	2.11	5.26
PFBS	375-73-5	3.99 J	0.38	1.05	5.26
PFHxS	355-46-4	26.72	0.23	0.53	5.26
PFOS	1763-23-1	66.69	0.28	1.05	5.26

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	94
13C8-PFOA	104
13C9-PFNA	106
13C6-PFDA	110
13C7-PFUnA	117
13C2-PFDoA	104
13C2-PFTeDA	106
d3-MeFOSAA	99
d5-EtFOSAA	135
13C3-PFBS	93
13C3-PFHxS	107
13C8-PFOS	97

LOCATION_NAME	SITE_NAME	INSTALLATION_ID	LOCATION_TYPE	LOCATION_TYPE_DESC	SDG	COORD_X	COORD_Y	ANALYTICAL_METHOD_GRP_DESC	SAMPLE_NAME	SAMPLE_MATRIX	SAMPLE_MATRIX_DESC	COLLECT_DATE
VC-PM365-SO01	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6222279.3	1866193.1	Perfluoroalkyl Compounds	VC-PM365-SB01-0102	SBS	Sub-surface soil (> 6)	19-Sep-18
VC-PM365-SO01	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6222279.3	1866193.1	Perfluoroalkyl Compounds	VC-PM365-SB01-0506	SBS	Sub-surface soil (> 6)	19-Sep-18
VC-PM365-SO01	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6222279.3	1866193.1	Perfluoroalkyl Compounds	VC-PM365-SS01-000H	SU	Surface soil (less than 6 inches)	19-Sep-18
VC-PM365-SO02	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6222463.8	1866218.9	Perfluoroalkyl Compounds	VC-PM365-SB02-0102	SBS	Sub-surface soil (> 6)	19-Sep-18
VC-PM365-SO02	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6222463.8	1866218.9	Perfluoroalkyl Compounds	VC-PM365-SB02-0506	SBS	Sub-surface soil (> 6)	19-Sep-18
VC-PM365-SO02	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6222463.8	1866218.9	Perfluoroalkyl Compounds	VC-PM365-SS02-000H	SU	Surface soil (less than 6 inches)	19-Sep-18
VC-PM649-SO01	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6228998.7	1864509.4	Perfluoroalkyl Compounds	VC-PM649-SB01-0102	SBS	Sub-surface soil (> 6)	18-Sep-18
VC-PM649-SO01	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6228998.7	1864509.4	Perfluoroalkyl Compounds	VC-PM649-SB01-0506	SBS	Sub-surface soil (> 6)	18-Sep-18
VC-PM649-SO01	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6228998.7	1864509.4	Perfluoroalkyl Compounds	VC-PM649-SS01-000H	SU	Surface soil (less than 6 inches)	18-Sep-18
VC-PM649-SO02	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6229055.4	1864514.3	Perfluoroalkyl Compounds	VC-PM649-SB02-0102	SBS	Sub-surface soil (> 6)	18-Sep-18
VC-PM649-SO02	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6229055.4	1864514.3	Perfluoroalkyl Compounds	VC-PM649-SB02-0506	SBS	Sub-surface soil (> 6)	18-Sep-18
VC-PM649-SO02	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6229055.4	1864514.3	Perfluoroalkyl Compounds	VC-PM649-SS02-000H	SU	Surface soil (less than 6 inches)	18-Sep-18
VC-PM649-SO03	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6229092	1864482.2	Perfluoroalkyl Compounds	VC-PM649-SB03-0102	SBS	Sub-surface soil (> 6)	18-Sep-18
VC-PM649-SO03	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6229092	1864482.2	Perfluoroalkyl Compounds	VC-PM649-SB03-0506	SBS	Sub-surface soil (> 6)	18-Sep-18
VC-PM649-SO03	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6229092	1864482.2	Perfluoroalkyl Compounds	VC-PM649-SS03-000H	SU	Surface soil (less than 6 inches)	18-Sep-18
VC-PM649-SO04	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6229045.2	1864475.7	Perfluoroalkyl Compounds	VC-PM649-SB04-0102	SBS	Sub-surface soil (> 6)	18-Sep-18
VC-PM649-SO04	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6229045.2	1864475.7	Perfluoroalkyl Compounds	VC-PM649-SB04-0506	SBS	Sub-surface soil (> 6)	18-Sep-18
VC-PM649-SO04	BASEWIDE PFAS	POINT_MUGU_NA S	DP	Direct Push/Geoprobe	18-0570	6229045.2	1864475.7	Perfluoroalkyl Compounds	VC-PM649-SS04-000H	SU	Surface soil (less than 6 inches)	18-Sep-18